Water Resources Data Ohio Water Year 1982

Volume 2. St. Lawrence River Basin Statewide Project Data

U.S. GEOLOGICAL SURVEY WATER-DATA REPORT OH-82-2
Prepared in cooperation with the State of Ohio
and with other agencies

CALENDAR FOR WATER YEAR 1982

1981

OCTOBER

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1982

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AUGUST

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SEPTEMBER

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Water Resources Data
Ohio
Water Year 1982

Volume 2. St. Lawrence River Basin
Statewide Project Data

by Harold L. Shindel, Lawrence L. Stewart, and James R. Kolva

U.S. GEOLOGICAL SURVEY WATER-DATA REPORT OH-82-2
Prepared in cooperation with the State of Ohio
and with other agencies

UNITED STATES DEPARTMENT OF THE INTERIOR

JAMES G. WATT, Secretary

GEOLOGICAL SURVEY

Dallas L. Peck, Director

For information on the water program in Ohio write to
District Chief, Water Research Division
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Columbus, Ohio 43212

1983

PREFACE

This volume of the annual hydrologic data report of Ohio is one of the series of annual reports that document hydrologic data gathered from the U.S. Geological Survey's surface- and ground-water data-collection networks in each State, Puerto Rico, and the Trust Territories. These records of streamflow, ground-water levels, and quality of water provides the hydrologic information needed by State, local, and Federal agencies, and the private sector for developing and managing our Nation's land and water resources. Hydrologic data for Ohio are contained in 2 volumes:

Volume 1. Ohio River Basin
Volume 2. St. Lawrence River Basin - Statewide Project Data

This report is the culmination of a concerted effort by dedicated personnel of the U.S. Geological Survey who collected, compiled, analyzed, verified, and organized the data, and who typed, edited, and assembled the report.

This report was prepared in cooperation with the State of Ohio and with other agencies under the general supervision of S.M. Hindall District Chief, Ohio.

REPORT DOCUMENTATION PAGE	1. REPORT NO. USGS/WRD/HD-83041	2.	3. Recipient's Accession No.
4. Title and Subtitle Water Resources Data for Ohio, 1982 Volume 2. St. Lawrence Basin - Statewide Project Data			5. Report Date March 1983 6.
7. Author(s) H. L. Shindel, L. L. Stewart, J. R. Kolva			8. Performing Organization Rept. No. USGS-WRD-OH-82-2
9. Performing Organization Name and Address U.S. Geological Survey, Water Resources Division 975 West Third Avenue Columbus, Ohio 43212			10. Project/Task/Work Unit No. 11. Contract(C) or Grant(G) No. (C) (G)
12. Sponsoring Organization Name and Address U.S. Geological Survey, Water Resources Division 975 West Third Avenue Columbus, Ohio 43212			13. Type of Report & Period Covered 14.

15. Supplementary Notes

Prepared in cooperation with the State of Ohio and with other agencies.

16. Abstract (Limit: 200 words)

Water resources data for the 1982 water year for Ohio consist of records of stage, discharge, and water quality of streams; stage and contents, and water quality of lakes and reservoirs; and water levels and water quality of ground-water wells. This report in two volumes contains records for water discharge at 135 gaging stations; stage and contents at 39 lakes and reservoirs; water quality at 21 gaging stations and 92 wells; and water levels at 194 observation wells. Also included are data from 100 crest-stage partial-record stations; 118 low-flow partial-record stations, and 275 coal hydrology synoptic sites. Additional water data were collected at various sites not involved in the systematic data-collection program and are published as miscellaneous measurements and analyses. These data represent that part of the National Water Data System collected by the U.S. Geological Survey and cooperating State and Federal agencies in Ohio.

17. Document Analysis a. Descriptors

*Ohio, *Hydrologic data, *Surface water, *Ground water, *Water quality, Flow rates, Gaging stations, Lakes, Reservoirs, Chemical analyses, Sediments, Water temperature, Sampling sites, Water levels, Water analyses, Streamflow, Water wells, Benthic fauna.

b. Identifiers/Open-Ended Terms

c. COSATI Field/Group

18. Availability Statement: No restriction on distribution. This report may be purchased from: National Technical Information Service, Springfield, VA 22161	19. Security Class (This Report)	21. No. of Pages 288
	20. Security Class (This Page)	22. Price

CONTENTS

ILLUSTRATIONS

(Letter after station name designates type of data: (b) biological, (c) chemical, (d) discharge, (e) contents and (or) elevation, (HBM) hydrologic bench mark, (m) microbiological, (NASQAN) National stream-quality accounting network, (r) radiochemical, (s) sediment, (t) temperature.)

ST. LAWRENCE RIVER BASIN

(Letter after station location designates type of data: (c) chemical, (l) water level.)

WATER RESOURCES DATA FOR OHIO, 1982

INTRODUCTION

Water resources data for the 1982 water year for Ohio consist of records of stage, discharge, and water quality of streams; stage, contents, and water quality of lakes and reservoirs; and water levels and water quality of ground-water wells. This two-volume report, contains records for water discharge at 135 gaging stations; stage stations and contents for 39 lakes and reservoirs; water quality for 21 gaging stations and 92 wells; and water levels for 194 observation wells. Also included are 100 crest-stage stations, 118 low-flow stations, and 69 water-quality partial-record stations, and 275 coal hydrology synoptic sites. Locations of these sites are shown on figures 3a-3d. Additional water data which were collected at various sites not involved in the systematic data-collection program are published as miscellaneous measurements. Data collected for short-term projects are presented in volume 2. These data represent that part of the National Water Data System operated by the U.S. Geological Survey and cooperating State, local, and Federal agencies in Ohio.

Records of discharge and stage of streams, and contents or stage of lakes and reservoirs were first published in a series of U.S. Geological Survey water-supply papers entitled, "Surface Water Supply of the United States." Through September 30, 1960, these water-supply papers were in an annual series and then in a 5-year series for 1961-65 and 1966-70. Records of chemical quality, water temperatures, and suspended sediment were published from 1941 to 1970 in an annual series of water-supply papers entitled "Quality of Surface Waters of the United States." Records of ground-water levels were published from 1935 to 1974 in a series of water-supply papers entitled "Ground-Water levels in the United States." Water-supply papers may be consulted in the libraries of the principal cities in the United States or may be purchased from the Branch of Distribution, U.S. Geological Survey, 604 South Pickett Street, Alexandria, Virginia, 22304.

For water years 1961 through 1974, streamflow data were released by the Geological Survey in annual reports on a State-boundary basis. Water-quality records for water years 1964 through 1974 were similarly released either in separate reports or in conjunction with streamflow records.

Beginning with the 1975 water year, water data for streamflow, water quality, and ground water are published in official Survey reports on a State-boundary basis. These official Survey reports carry an identification number consisting of the two-letter State abbreviation, the last two digits of the water year, and the volume number. For example, this volume is identified as "U.S. Geological Survey Water-Data Report OH-82-2." These water-data reports are for sale, in paper copy or in microfiche, by the National Technical Information Service, U.S. Department of Commerce, Springfield, Virginia, 22161.

COOPERATION

The U.S. Geological Survey and organizations of the State of Ohio have had cooperative agreements for the systematic collection of streamflow records since 1898, for ground-water levels since 1936, and for water-quality records since 1946. Organizations that assisted in collecting data through cooperative agreement with the Survey are:

Ohio Department of Natural Resources, R.W. Teater, director.

Ohio Environmental Protection Agency, W. F. Nichols, director.

Ohio Department of Transportation, D.L. Weir, director.

Miami Conservancy District, L.B. Coy, general manager and secretary.

City of Columbus Department of Public Service, R.C. Parkinson, director.

City of Canton Water Department, J.D. Williams, superintendent.

Assistance in the form of funds or services was given by the Corps of Engineers, U.S. Army, in collecting records for 130 hydrologic-data stations in this report.

Organizations that supplied data are acknowledged in station descriptions.

ACKNOWLEDGMENT

The water-resources data for Ohio were processed and prepared for publication under the supervision of Harold L. Shindel, Hydrologic Records Section; by R. V. Swisshelm (project information), Hydrologic Studies Section; C. G. Angelo and M. K. Katzenbach (water quality); A.C. Sedam (ground water); and C. M. Eberle (Publications Unit). Most of the data were collected, computed, and processed from the Columbus District Office and the New Philadelphia Subdistrict Office. Technicians and Hydrologists in charge of the various areas are as follows:

J. H. Klingler, Columbus, central and southeast area
J. P. Mangus, Columbus, north-central and northwest area
L. L. Stewart, Columbus, southwest area and Miami Conservancy District
J. R. Kolva, New Philadelphia,
L. E. Trimble, New Philadelphia
A. C. Razem, QW Studies
W. P. Bartlett, Jr., SW Studies,

The data were collected, computed, and processed by other personnel as follows:

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SUMMARY OF HYDROLOGIC CONDITIONS

Surface Water

At the start of the 1982 water year streamflow was excessive in southwestern Ohio and in the normal range throughout the rest of the state. November and December streamflow was normal throughout the state. January streamflow was normal, except in northwest Ohio where it was excessive. Streamflow throughout the entire state was excessive during February.

Rain totaling less than 2 inches fell in northwest Ohio March 11-13, triggering snowmelt that caused major flooding. Discharges in the Maumee River basin exceeded the 100-year recurrence interval. Streamflow in western Ohio was excessive for March, whereas it was normal for the rest of the state. April and May were normal, except in northwestern Ohio where streamflow was deficient.

June streamflow was normal in most of the state, except in western Ohio where it was excessive. It remained excessive in the northwest part of the state during July, but fell to the normal range in southwest Ohio. Streamflow was normal throughout the state in August and September.

Figure 2 compares the 1982 mean discharges at four selected long-term stations with median discharges for the base period 1951-1980.

Water Quality

The chemical quality of surface waters statewide showed very little change from previous years. All four of National Pesticide Network stations, Cuyahoga River at Independence, Great Miami River at New Baltimore, Muskingum River at McConnelsville, and the Hocking River at Athens; were above the alert limit set by the USGS Central Laboratory System for total pesticides in water during the spring sampling. The first three of these stations were above limits for PCB in bottom material for May 1982.

In addition, the Hocking River below Athens was above the limit for dissolved manganese in October and December 1981 and in May and June 1982. Grand River at Painesville was over the limit for total chromium in May 1982.

Two of the four major basins in the state that have U.S. Geological Survey monitors at NASQAN sites showed slight improvement in water quality (dissolved oxygen). The Great Miami basin and the Scioto basin showed improved quality partly because of the closing of industrial plants that discharged into them. Water quality from ground-water observation wells showed little change.

Ground-Water Levels in Ohio: 1982 Water Year

Most of the observation wells in Ohio are located in sand and gravel aquifers in buried-valley or watercourse systems associated with the State's principal streams. The observation network also includes some bedrock wells in areas where deeper aquifers are important water supplies, such as the carbonate rock region of northwestern Ohio and various sandstone units of Eastern Ohio. The yearly low for most wells occurs during the winter months, especially in colder, drier years. Otherwise, the low is likely to occur toward the end of the growing season. Highs for the year usually occur between March and June when recharge from snowmelt and springtime storms is greatest. The normal yearly water level fluctuation for both water-table and confined-aquifer wells is 3 to 5 feet.

As the 1982 water year ended, ground-water levels were fairly normal in the northwest half of the state. In contrast, the rest of the state was deficient in rainfall; a number of wells approaced or reached record lows.

Overall, the range between the 1982 high and low extremes throughout the observation well network was greater than in 1981. Water levels for two-thirds of the observation well network were lower than in the 1981 water year. Nevertheless, some wells reached highs that exceeded those recorded in 1981. There was recharge for the states' aquifers during the winter months culminating in 1982 water-year highs for most wells in late March or early April. Despite the excessive rainfall and melting snow that caused severe flooding in the Maumee basin in late March, only one well in the area reached a record high. The lowest water levels for the water year in southwestern Ohio occured before the end of December 1981, when cumulative precipitation for that region was still deficient. Elsewhere in Ohio the annual lows generally were recorded near the end of the water year.

DEFINITION OF TERMS

Terms related to streamflow, water quality, and other hydrologic data, as used in this report, are defined below. See also the table for converting inch-pound units to International System of units (SI) on the inside of the back cover.

Acre-foot (AC-FT, acre-ft) is the quantity of water required to cover 1 acre to a depth of 1 foot and is equivalent to 43,560 cubic feet or about 326,000 gallons or 1,233 cubic meters.

Aquifer is a geologic formation, group of formations, or part of a formation that contains sufficient saturated permeable material to yield significant quantities of water to wells and springs.

Artesian means confined and is used to describe a well in which the water level stands above the top of the aquifer, tapped by the well. A flowing artesian well is one in which the water level is above the land surface.

Bacteria are microscopic unicellular organisms, typically spherical, rodlike, or spiral and threadlike in shape, often clumped into colonies. Some bacteria cause disease, others perform an essential role in nature in the recycling of materials; for example, by decomposing organic matter into a form available for reuse by plants.

Total coliform bacteria are a particular group of bacteria that are used as indicators of possible sewage pollution. They are characterized as aerobic or facultative anaerobic, gram-negative, nonspore-forming, rod-shaped bacteria which ferment lactose with gas formation within 48 hours at 35°C. In the laboratory these bacteria are defined as the organisms which produce colonies within 24 hours when incubated at 35°C ± 1.0°C on M-Endo medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

Fecal coliform bacteria are bacteria that are present in the intestines or feces of warm-blooded animals. They are often used as indicators of the sanitary quality of the water. In the laboratory they are defined as all organisms which produce blue colonies within 24 hours when incubated at 44.5°C ± 0.2°C on M-FC medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

Fecal streptococcal bacteria are bacteria found also in intestines of warm-blooded animals. Their presence in water is considered to verify fecal pollution. They are characterized as gram-positive, cocci bacteria which are capable of growth in brain-heart infusion broth. In the laboratory they are defined as all the organisms which produce red or pink colonies within 48 hours at 35°C ± 1.0°C on M-enterrococcus medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

Bed material is the unconsolidated material of which a streambed, lake, pond, reservoir, or estuary bottom is composed.

Biochemical oxygen demand (BOD) is a measure of the quantity of dissolved oxygen, in milligrams per liter, necessary for the decomposition of organic matter by microorganisms, such as bacteria.

Biomass is the amount of living matter present at any given time, expressed as the mass per unit area or volume of habitat.

Ash mass is the mass or amount of residue present after the residue from the dry mass determination has been ashed in a muffle furnace at a temperature of 500°C for 1 hour. The ash mass values of zooplankton and phytoplankton are expressed in grams per cubic meter (g/m^3), and periphyton and benthic organisms in grams per square meter (g/m^2).

Bottom material: See Bed material.

Cells/volume refers to the number of cells of any organism which is counted by using a microscope and grid or counting cell. Many planktonic organisms are multicelled and are counted according to the number of contained cells per sample, usually milliliters (mL) or liters (L).

Cfs-day is the volume of water represented by flow of 1 cubic foot per second for 24 hours. It is equivalent to 86,400 cubic feet, approximately 1.9835 acre-feet, about 646,000 gallons or 2,447 cubic meters.

Chemical oxygen demand (COD) is a measure of the chemically oxidizable material in the water and furnishes an approximation of the amount of organic and reducing material present. The determined value may correlate with natural water color or with carbonaceous organic pollution from sewage or industrial wastes.

Chlorophyll refers to the green pigments of plants. Chlorophyll a and b are the two most common pigments in plants.

Contents is the volume of water in a reservoir or lake. Unless otherwise indicated, volume is computed on the basis of a level pool and does not include bank storage.

Control designates a feature downstream from the gage that determines the stage-discharge relation at the gage. This feature may be a natural constriction of the channel, an artificial structure, or a uniform cross section over a long reach of the channel.

Control structure as used in this report is a structure on a stream or canal that is used to regulate the flow or stage of the stream or to prevent the intrusion of salt water.

Cubic feet per second per square mile (CFSM) is the average number of cubic feet of water flowing per second from each square mile of area drained, assuming that the runoff is distributed uniformly in time and area.

Cubic foot per second (FT^3/s, ft^3/s) is the rate of discharge representing a volume of 1 cubic foot passing a given point during 1 second and is equivalent to approximately 7.48 gallons per second or 448.8 gallons per minute or 0.02832 cubic meters per second.

Discharge is the volume of water (or more broadly, volume of fluid plus suspended sediment), that passes a given point within a given period of time.

Mean discharge (MEAN) is the arithmetic mean of individual daily mean discharges during a specific period.

Instantaneous discharge is the discharge at a particular instant of time.

Dissolved: That material in a representative water sample which passes through a 0.45-micrometer membrane filter. This is a convenient operational definition used by Federal agencies that collect water data. Determinations of "dissolved" constituents are made on subsamples of the filtrate.

Drainage area of a stream at a specific location is that area, measured in a horizontal plane, enclosed by a topographic divide from which direct surface runoff from precipitation normally drains by gravity into the river above the specified point. Figures of drainage area given herein include all closed basins, or noncontribution area, within the area unless otherwise noted.

Drainage basin is a part of the surface of the earth that is occupied by a drainage system, which consists of a surface stream or a body of impounded surface water together with all tributary surface stream and bodies of impounded surface water.

Gage height (G.H.) is the water-surface elevation referred to some arbitrary gage datum. Gage height is often used interchangeably with the more general term "stage," although gage height is more appropriate when used with a reading on a gage.

Gaging station is a particular site on a stream, canal, lake, or reservoir where systematic observations of hydrologic data are obtained.

Hardness of water is a physical-chemical characteristic that is commonly recognized by the increased quantity of soap required to produce lather. It is attributable to the presence of alkaline earths (principally calcium and magnesium) and is expressed as equivalent calcium carbonate ($CaCO_3$).

Hydrologic unit is a geographic area representing part or all of a surface drainage basin or distinct hydrologic feature as delineated by the Office of Water Data Coordination on the State Hydrologic Unit Maps; each hydrologic unit is identified by an 8-digit number.

Methylene blue active substance (MBAS) is a measure of apparent detergents. This determination depends on the formation of a blue color when methylene blue dye reacts with synthetic detergent compounds.

Micrograms per gram (UG/G, ug/g) is a unit expressing the concentration of a chemical element as the mass (micrograms) of the element sorbed per unit mass (gram) of sediment.

Microgram per kilogram (UG/KG, ug/kg) is a unit expressing the concentration of a chemical element as the mass (micrograms) of the element sorbed per unit mass (kilogram) of bottom material.

Micrograms per liter (UG/L, ug/L) is a unit expressing the concentration of chemical constituents in solution as mass (micrograms) of solute per unit volume (liter) of water. One thousand micrograms per liter is equivalent to one milligram per liter.

Milligrams per liter (MG/L, mg/L) is a unit for expressing the concentration of chemical constituents in solution. Milligrams per liter represent the mass of solute per unit volume (liter) of water. Concentration of suspended sediment also is expressed in mg/L, and is based on the mass of sediment per liter of water-sediment mixture.

National Geodetic Vertical Datum of 1929 (NGVD of 1929) is a geodetic datum derived from a general adjustment of the first order level nets of both the United States and Canada. It was formerly called "Sea Level Datum of 1929" or "mean sea level" in this series of reports. Although the datum was derived from the average sea level over a period of many years at 26 tide stations along the Atlantic, Gulf of Mexico, and Pacific Coasts, it does not necessarily represent local mean sea level at any particular place.

Organism is any living entity, such as an insect, phytoplankter, or zooplankter.

Organism count/area refers to the number of organisms collected and enumerated in a sample and adjusted to the number per area habitat, usually square meters (m^2), acres, or hectares. Periphyton benthic organisms, and macrophytes are expressed in these terms.

Organism count/volume refers to the number of organisms collected and enumerated in a sample and adjusted to the number per sample volume, usually milliliters (mL) or liters (L). Numbers of planktonic organisms can be expressed in these terms.

Total organism count is the total number of organisms collected and enumerated in any particular sample.

Partial-record station is a particular site where limited streamflow and/or water-quality data are collected systematically over a period of years for use in hydrologic analyses.

Particle-size is the diameter, in millimeters (mm), of suspended sediment or bed material determined by either sieve or sedimentation methods. Sedimentation methods (pipet, bottom-withdrawal tube, visual-accumulation tube) determine fall diameter of particles in either distilled water (chemically dispersed) or in native water (the river water at the time and point of sampling).

Particle-size classification used in this report agrees with recommendations made by the American Geophysical Union Subcommittee on Sediment Terminology.

The classification is as follows:

Classification	Size (mm)	Method of analysis
Clay.....	0.00024 - 0.004	Sedimentation.
Silt.....	0.004 - 0.062	Sedimentation.
Sand.....	0.062 - 2.0	Sedimentation or sieve.
Gravel.....	2.0 - 64.0	Sieve.

The particle-size distributions given in this report are not necessarily representative of all particles in transport in the stream. Most of the organic material is removed and the sample is subjected to mechanical and chemical dispersion before analysis in distilled water. Chemical dispersion is not used for native water analysis.

Percent composition is a unit for expressing the ratio of a particular part of a sample or population to the total sample or population, in terms of types, number, mass or volume.

Periphyton is the assemblage of microorganisms attached to and growing upon solid surfaces. While primarily consisting of algae, they also include bacteria, fungi, protozoa, rotifers, and other small organisms. Periphyton is a useful indicator of water quality.

Pesticides are chemical compounds used to control undesirable plants and animals. Major categories of pesticides include insecticides, miticides, fungicides, herbicides, and rodenticides. Insecticides and herbicides, which control insects and plants respectively, are the two categories reported.

Picocurie (PC,pCi) is one trillionth (1×10^{12}) of the amount of radioactivity represented by a curie (Ci). A curie is the amount of radioactivity that yields 3.7×10^{10} radioactive disintegrations per second. A picocurie yields 2.22 dpm (disintegrations per minute).

Plankton is the community of suspended, floating, or weakly swimming organisms that live in the open water of lakes and rivers.

Phytoplankton is the plant part of the plankton. They are usually microscopic and their movement is subject to the water currents. Phytoplankton growth is dependent upon solar radiation and nutrient substances. Because they are able to incorporate as well as release materials to the surrounding water, the phytoplankton have a profound effect upon the quality of the water. They are the primary food producers in the aquatic environment, and are commonly known as algae.

Recoverable from bottom material.--The amount of a given constituent that is in solution after a representative sample of bottom material has been digested by a method (usually using an acid or mixture of acids) that results in dissolution of only readily soluble substances. Complete dissolution of all bottom material is not achieved by the digestion treatment and thus the determination represents less than the total amount (that is, less than 95 percent) of the constituent in the sample. To achieve comparability of analytical data, equivalent digestion procedures would be required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

Runoff in inches (IN., in.) shows the depth to which the drainage area would be covered if all the runoff for a given time period were uniformly distributed on it.

Sediment is solid material that originates mostly from disintegrated rocks and is transported by, suspended in, or deposited from water; it includes chemical and biochemical precipitates and decomposed organic material, such as humus. The quantity, characteristics, and cause of the occurrence of sediment in streams are influenced by environmental factors. Some major factors are degree of slope, length of slope, soil characteristics, land usage, and quantity and intensity of precipitation.

Suspended sediment is the sediment that at any given time is maintained in suspension by the upward components of turbulent currents or that exists in suspension as a colloid.

Suspended-sediment concentration is the velocity-weighted concentration of suspended sediment in the sampled zone (from the water surface to a point approximately 0.3 ft above the bed) expressed as milligrams of dry sediment per liter of water-sediment mixture (mg/L).

Suspended-sediment discharge (tons/day) is the rate at which dry weight of sediment passes a section of a stream or is the quantity of sediment, as measured by dry weight or volume, that passes a section in a given time. It is computed by multiplying discharge times mg/L times 0.0027.

Suspended-sediment load is the quantity of suspended sediment passing a section in a specified period.

Total sediment discharge (tons/day) is the sum of the suspended-sediment discharge and the bed-load discharge. It is the total quantity of sediment, as measured by dry weight or volume, that passes a section during a given time.

Mean concentration is the time-weighted concentration of suspended sediment passing a stream section during a 24-hour day.

Solute is any substance derived from the atmosphere, vegetation, soil, or rocks that is dissolved in water.

Specific conductance is a measure of the ability of a water to conduct an electrical current. It is expressed in micromhos per centimeter at 25°C. Specific conductance is related to the type and concentration of ions in solution and can be used for approximating the dissolved-solids content of the water. Commonly, the concentration of dissolved solids (in milligrams per liter) is about 65 percent of the specific conductance (in micromhos). This relation is not constant from stream to stream, and it may vary in the same source with changes in the composition of the water.

Stage-discharge relation is the relation between gage height (stage) and volume of water per unit of time, flowing in a channel.

Streamflow is the discharge that occurs in a natural channel. Although the term "discharge" can be applied to the flow of a canal, the word "streamflow" uniquely describes the discharge in a surface stream course. The term "streamflow" is more general than "runoff" as streamflow may be applied to discharge whether or not it is affected by diversion or regulation.

Suspended (as used in tables of chemical analyses) refers to the amount (concentration) of the total concentration in a water-sediment mixture. The water-sediment mixture is associated with (or sorbed on) that material retained on a 0.45-micrometer filter.

Suspended, recoverable is the amount of a given constituent that is in solution after the part of a representative water-suspended sediment sample that is retained on a 0.45-micrometer membrane filter has been digested by a method (usually using a dilute acid solution) that results in dissolution of only readily soluble substances. Complete dissolution of all the particulate matter is not achieved by the digestion treatment and thus the determination represents something less than the "total" amount (that is, less than 95 percent) of the constituent present in the sample. To achieve comparability of analytical data, equivalent digestion procedures would be required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

Determinations of "suspended, recoverable" constituents are made either by analyzing portions of the material collected on the filter or, more commonly, by difference, based on determinations of (1) dissolved and (2) total recoverable concentrations of the constituent.

Suspended, total is the total amount of a given constituent in the part of a representative water-suspended sediment sample that is retained on a 0.45-micrometer membrane filter. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent determined. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to determine when the results should be reported as "suspended, total."

Determinations of "suspended, total" constituents are made either by analyzing portions of the material collected on the filter or, more commonly, by difference, based on determinations of (1) dissolved and (2) total concentrations of the constituent.

Time-weighted average is computed by multiplying the number of days in the sampling period by the concentrations of individual constituents for the corresponding period and dividing the sum of the products by the total number of days. A time-weighted average represents the composition of water that would be contained in a vessel or reservoir that had received equal quantities of water from the stream each day for the year.

Tons per day is the quantity of substance in solution or suspension that passes a stream section during a 24-hour day.

Total is the total amount of a given constituent in a representative water-suspended sediment sample, regardless of the constituent's physical or chemical form. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent present in both the dissolved and suspended phases of the sample. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to judge when the results should be reported as "total." (Note that the word "total" does double duty here, indicating both that the sample consists of a water-suspended sediment mixture and that the analytical method determines all of the constituent in the sample.)

Total in bottom material is the total amount of a given constituent in a representative sample of bottom material. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent determined. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to judge when the results should be reported as "total in bottom material."

Total load (tons) is the total quantity of any individual constituent, as measured by dry mass or volume, that is dissolved in a specific amount of water (discharge) during a given time. It is computed by multiplying the total discharge, times the mg/L of the constituent, times the factor 0.0027, times the number of days.

Total recoverable is the amount of a given constituent that is in solution after a representative water-suspended sediment sample has been digested by a method (usually using a dilute acid solution) that results in dissolution of only readily soluble substances. Complete dissolution of all particulate matter is not achieved by the digestion treatment, and thus the determination represents something less than the "total" amount (that is, less than 95 percent) of the constituent present in the dissolved and suspended phases of the sample. To achieve comparability of analytical data, equivalent digestion procedures would be required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

WDR is used as an abbreviation for "Water-Data Report" in the REVISED RECORDS paragraph to refer to State annual basic-data reports published after 1975.

WRD is used as an abbreviation for "Water-Resources Data" in the REVISED RECORDS paragraph to refer to State annual basic-data reports published before 1975.

WSP is used as an abbreviation for "Water-Supply Paper" in references to previously published reports.

DOWNSTREAM ORDER AND STATION NUMBER

Since October 1, 1950, the order of listing hydrologic-station records in Survey reports is in a downstream direction along the main stream. All stations on a tributary entering upstream from a main-stream station are listed before that station. A station on a tributary that enters between two main-stream stations is listed between them. A similar order is followed in listing stations on first rank, second rank, and other ranks of tributaries. The rank of any tributary on which a station is situated with respect to the stream to which it is immediately tributary is indicated by an indention in a list of stations in the front of the report. Each indention represents one rank. This downstream order and system of indention show which stations are on tributaries between any two stations and the rank of the tributary on which each station is situated.

As an added means of identification, each hydrologic station and partial-record station has been assigned a station number. These are in the same downstream order used in this report. In assigning station numbers no distinction is made between partial-record stations and other stations; therefore, the station number for a partial-record station indicates downstream-order position in a list made up of both types of stations. Gaps are left in the series of numbers to allow for new stations that may be established; hence, the numbers are not consecutive. The complete 8-digit number for each station such as 04041000, which appears just to the left of the station name, includes the 2-digit part number "04" plus the 6-digit downstream order number "041000".

NUMBERING SYSTEM FOR WELLS AND MISCELLANEOUS SITES

The 8-digit downstream order station numbers are not assigned to wells and miscellaneous sites where only random water-quality samples or discharge measurements are taken.

The well and miscellaneous site numbering system of the U.S. Geological Survey is based on the grid system of latitude and longitude. The system provides the geographic location of the well or miscellaneous site and a unique number for each site. The number consists of 15 digits. The first 6 digits denote the degrees, minutes, and seconds of latitude, the next 7 digits denote degrees, minutes, and seconds of longitude, and the last 2 digits (assigned sequentially) identify the wells or other sites within a 1-second grid. See figure 1.

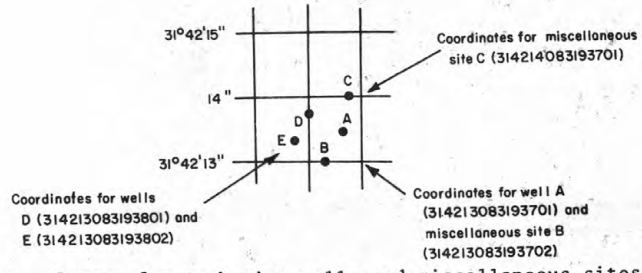

Figure 1 System for numbering wells and miscellaneous sites (latitude and longitude)

SPECIAL NETWORKS AND PROGRAMS

Hydrologic bench-mark station is one that provides hydrologic data for a basin in which the hydrologic regimen will likely be governed solely by natural conditions. Data collected at a bench-mark station may be used to separate effects of natural from manmade changes in other basins which have been developed and in which the physiography, climate, and geology are similar to those in the undeveloped bench-mark basin.

National stream-quality accounting network (NASQAN) is a data collection network designed by the U.S. Geological Survey to meet many of the information demands of agencies or groups involved in national or regional water-quality planning and management. Both accounting and broad-scale monitoring objectives have been incorporated into the network design. Areal configuration of the network is based on river-basin accounting units (identified by 8-digit hydrologic-unit numbers) designated by the Office of Water Data Coordination in consultation with the Water Resources Council. Primary objectives of the network are (1) to depict areal variability of streamflow and water-quality conditions nationwide on a year-by-year basis and (2) to detect and assess long-term changes in streamflow and stream quality.

Pesticide program is a network of regularly sampled water-quality stations where samples are collected to determine the concentration and distribution of pesticides in streams where potential contamination could result from the application of commonly used insecticides and herbicides. Operation of the network is a Federal interagency activity.

EXPLANATION OF STAGE AND WATER-DISCHARGE RECORDS

Collection and computation of data

The base data collected at gaging stations consist of records of stage and measurements of discharge of streams or canals, and stage, surface area, and contents of lakes or reservoirs. In addition, observations of factors affecting the stage-discharge relation or the stage-capacity relation, weather records, and other information are used to supplement base data in determining the daily flow or volume of water in storage. Records of stage are obtained from either direct readings on a nonrecording gage or from a water-stage recorder that gives either a continuous graph of the fluctuations or a tape punched at selected time intervals. Measurements of discharge are made with a current meter, using the general methods adopted by the Geological Survey. These methods are described in standard text-books, in Water-Supply Paper 888, and in U.S. Geological Survey Techniques of Water Resources Investigations, book 3, chapter A6.

For stream-gaging stations, rating tables giving the discharge for any stage are prepared from stage-discharge relation curves. If extensions to the rating curves are necessary to express discharge greater than measured, they are made on the basis of indirect measurements of peak discharge (such as slope-area or contracted-opening measurements, computation of flow over dams or weirs), step-back water techniques, velocity-area studies, and logarithmic plotting. The daily mean discharge is computed from gage height and rating tables, then the monthly and yearly mean discharge are computed from the daily figures. If the stage-discharge relation is subject to change because of frequent or continual change in the physical features that form the control, the daily mean discharge is computed by the shifting-control method, in which correction factors based on individual discharge measurements and notes by engineers and observers are used in applying the gage heights to the rating tables. If the stage-discharge relation for a station is temporarily changed by the presence of aquatic growth or debris on the control, the daily mean discharge is computed by what is basically the shifting-control method.

At some stream-gaging stations, the stage-discharge relation is affected by the backwater from reservoirs, tributary streams, or other sources. This necessitates the use of the slope method in which the slope or fall in a reach of the stream is a factor in computing discharge. The slope or fall is obtained by means of an auxiliary gage set at some distance from the base gage. At some stations the stage-discharge relation is affected by changing stage; at these stations the rate of change in stage is used as a factor in computing discharge.

At some northern stream-gaging stations, the stage-discharge relation is affected by ice in the winter, and it becomes impossible to compute the discharge in the usual manner. Discharge for periods of ice effect is computed on the basis of gage-height record and occasional winter discharge measurements. Consideration is given to the available information on temperature and precipitation, notes by gage observers and hydrologists, and comparable records of discharge for other stations in the same or nearby basins.

For a lake or reservoir station, capacity tables giving the contents for any stage are prepared from stage-area relation curves defined by surveys. The application of the stage to the capacity table gives the contents, from which the daily, monthly, or yearly change in contents is computed.

If the stage-capacity curve is subject to changes because of deposition of sediment in the reservoir, periodic resurveys of the reservoir are necessary to define new stage-capacity curves. During the period between reservoir surveys the computed contents may be increasingly in error due to the gradual accumulation of sediment.

For some gaging stations there are periods when no gage-height record is obtained or the recorded gage height is so faulty that it cannot be used to compute daily discharge or contents. This happens when the recorder stops or otherwise fails to operate properly, intakes are plugged, the float is frozen in the well, or for various other reasons. For such periods the daily discharges are estimated on the basis of recorded range in stage, prior and subsequent records, discharge measurements, weather records, and comparison with records for other stations in the same or nearby basins. Likewise daily contents may be estimated on the basis of operator's log, prior and subsequent records, inflow-outflow studies, and other information.

The data in this report generally comprise a description of the station and tabulations of daily and monthly figures. For gaging stations on streams or canals a table showing the daily discharge and monthly and yearly discharge is given. For gaging stations on lakes and reservoirs, a monthly summary table of stage and contents is given. Records are published for the water year, which begins on October 1 and ends on September 30.

The description of the gaging station gives the location, drainage area, period of record, notations of revisions of previously published records, type and history of gages, general remarks, average discharge and extremes of discharge or contents. The location of the gaging station and the drainage area are obtained from the most accurate maps available. Periods for which there are published records for the present station or for stations generally equivalent to the present one are given under "PERIOD OF RECORD."

Previously published streamflow records of some stations have been found to be in error on the basis of data or information later obtained. Revisions of such records are usually published along with the current records in one of the annual or compilation reports. In order to make it easier to find such revised records, a paragraph headed "REVISED RECORDS" has been added to the description of all stations for which revised records have been published. Listed therein are all the reports in which revisions have been published, each followed by the water years for which figures are revised in that report. In listing the water years only one number is given; for instance, 1965 stands for the water year October 1, 1964, to September 30, 1965. If no daily, monthly, or annual figures of discharge are affected by the revision, the fact is brought out by notations after the year dates as follows: "(M)" means that only the instantaneous maximum discharge was revised; "(m)" that only the instantaneous minimum was revised; and "(P)" that only peak discharges were revised. If the drainage area has been revised, the report in which the revised figure was first published is given. It should be noted that for all stations for which cubic feet per second per square mile and runoff in inches are published, a revision of the drainage area necessitates corresponding revision of all figures based on the drainage area. Revised figures of cubic feet per second per square mile and runoff in inches resulting from a revision of the drainage area only are usually not published in the annual series of reports.

The type of gage currently in use, the datum of the present gage referred to National Geodetic Vertical Datum; and a condensed history of the types, locations, and datums of previous gages used during the period of record are given under "GAGE." National Geodetic Vertical Datum is explained in "DEFINITION OF TERMS" on page

Information pertaining to the accuracy of the discharge records and to conditions which affect the natural flow of the gaging station is given under "REMARKS." For reservoir stations information on the dam forming the reservoir, the capacity, outlet works and spillway, and purpose and use of the reservoir is given under "REMARKS."

The average discharge for the number of years indicated is given under "AVERAGE DISCHARGE"; it is not given for stations having fewer than 5 complete years of record or for stations where changes in water development during the period of record cause the figure to have little significance. Under "EXTREMES" are given first, the extremes for period of record, second, information available outside the period of record, and last, those for the current year. Unless otherwise qualified, the maximum discharge (or contents) is the instantaneous maximum corresponding to the crest stage obtained by use of a water-stage recorder (graphic or digital), a crest-stage gage, or a nonrecording gage read at the time of the crest. If the maximum gage height did not occur on the same day as the maximum discharge (or contents), it is given separately. Similarly, the minimum is the instantaneous minimum unless otherwise qualified. For some stations peak discharges are listed with "EXTREMES FOR THE CURRENT YEAR"; if they are, all independent peaks, including the maximum for the year, above the selected base with the time of occurrence and corresponding gage heights are published in tabular format. The base discharge, which is given in the table heading, is selected so that an average of about three peaks a year will be presented. Peak discharges are not published for any canals, ditches, drains, or for any stream for which the peaks are subject to substantial control by man. Time of day is expressed in 24-hour local standard time; for example, 12:30 a.m. is 0030, 1:30 p.m. is 1330. The minimums for these stations are published in a separate paragraph following the table of peaks.

The daily table for stream-gaging stations gives the mean discharge for each day and is followed by monthly and yearly summaries. In the monthly summary below the daily table, the line headed "TOTAL" gives the sum of the daily figures. The line headed "MEAN" gives the average flow in cubic feet per second during the month. The lines headed "MAX" and "MIN" give the maximum and minimum daily discharges, respectively, for the month. Discharge for the month also may be expressed in cubic feet per second per square mile (line headed "CFSM"), or in inches (line headed "IN"). Figures for cubic feet per second per square mile and runoff in inches are omitted if there is extensive regulation or diversion. In the yearly summary, below the monthly summary the figures shown are the appropriate daily discharges for the calendar and water years.

Footnotes to the table of daily discharge are introduced by the word "NOTE." Footnotes are used to indicate periods for which the discharge is computed or estimated by special methods because of no gage-height record, backwater from various sources, or other unusual conditions. Periods of no gage-height record are indicated if the period is continuous for a month or more or includes the maximum discharge for the year. Periods of backwater from an unusual source, of indefinite stage-relation, or of any other unusual condition at the gage site are indicated only if they are a month or more in length and the accuracy of the records is affected. Days on which the stage-discharge relation is affected by ice are not indicated. The methods used in computing discharge for various unusual conditions have been explained in preceding paragraphs.

Data collected at partial-record stations follow the information for continuous record sites. Data for partial-record stations are presented in two tables. The first is a table of discharge measurements at low-flow partial-record stations, and the second is a table of annual maximum stage and discharge at crest-stage stations. The tables of partial-record stations are followed by a listing of discharge measurements made at sites other than continuous-record or partial-record stations. Occasionally, a series of discharge measurements are made or water-quality samples are taken to investigate the seepage gains or losses along a reach of a stream or to determine the low-flow characteristics of an area. Such measurements and chemical analyses are also given in special tables following the tables of partial-record stations.

For gaging stations on lakes and reservoirs the data presented comprise a description of the station and a monthly summary table of stage and contents.

Accuracy of field data and computed results

The accuracy of streamflow data depends primarily on (1) the stability of the stage-discharge relation or, if the control is unstable, the frequency of discharge measurements, and (2) the accuracy of observations of stage, measurements of discharge, and interpretations of records.

The station description under "REMARKS" states the degree of accuracy of the records. "Excellent" means that about 95 percent of the daily discharges are within 5 percent; "good", within 10 percent; and "fair" within 15 percent. "Poor" means that daily discharges have less than "fair" accuracy.

Figures of daily mean discharge in this report are shown to the nearest hundredth of a cubic foot per second for discharges of less than 1 ft^3/s; to tenths between 1.0 and 10 ft^3/s; to whole numbers between 10 and 1,000 ft^3/s; and to 3 significant figures above 1,000 ft^3/s. The number of significant figures used is based solely on the magnitude of the figure. The same rounding rules apply to discharge figures listed for partial-record stations.

Discharge at many stations, as indicated by the monthly mean, may not reflect natural runoff due to the effects of diversion, consumption, regulation by storage, increase or decrease in evaporation due to artificial causes, or to other factors. For such stations, figures of cubic feet per second per square mile and of runoff in inches are not published unless satisfactory adjustments can be made for diversions, for changes in contents of reservoirs, or for other changes incident to use and control. Evaporation from a reservoir is not included in the adjustments for changes in reservoir contents, unless it is so stated. Even at those stations where adjustments are made, large errors in computed runoff may occur if adjustments or losses are large in comparison with the observed discharge.

Other data available

Information of a more detailed nature than that published for most of the gaging stations such as observations of water temperatures, discharge measurements, gage-height records, and rating tables is on file in the district office. Also most gaging-station records are available in computer-usable form and many statistical analyses have been made.

Information on the availability of unpublished data or statistical analyses may be obtained from the district office.

Records of discharge collected by agencies other than the Geological Survey

Records of discharge not published by the Geological Survey were collected during water year 1978 at many sites in Ohio by the National Weather Service, NOAA, U.S. Department of Commerce, by the Corps of Engineers, U.S. Army and by other agencies. The National Water Data Exchange, Water Resources Division, U.S. Geological Survey, National Center, Reston, Va. 22092, maintains an index of such sites. Information on records available at specific sites can be obtained upon request.

EXPLANATION OF WATER-QUALITY RECORDS

Collection and examination of data

Surface water samples for analyses usually are collected at or near gaging stations. The quality-of-water records are given immediately following the discharge records at these stations.

The descriptive heading for water-quality records gives the period of record for all water-quality data; the period of daily record for parameters that are measured on a daily basis (specific conductance, pH, dissolved oxygen, water temperature, sediment discharge, etc.); extremes for the period of daily record; extremes for the current year; and general remarks.

For ground-water records, descriptive statements are given; the well number, depth of well, date of sampling and/or other pertinent data are given in the table containing the chemical analyses of the ground water.

Water analysis

Most methods for collecting and analyzing water samples are described in the U.S. Geological Survey Techniques of Water-Resources Investigations listed on a following page.

One sample can define adequately the water quality at a given time if the mixture of solutes throughout the stream cross section is homogeneous. However, the concentration of solutes at different locations in the cross section may vary widely with different rates of water discharge, depending on the source of material and the turbulence and mixing of the stream. Some streams must be sampled through several vertical sections to obtain a representative sample needed for an accurate mean concentration and for use in calculating load.

Chemical-quality data published in this report are considered to be the most representative values available for the stations listed. The values reported represent water-quality conditions at the time of sampling as much as possible, consistent with available sampling techniques and methods of analysis. In the rare case where an apparent inconsistency exists between a reported pH value and the relative abundance of carbon dioxide species (carbonate and bicarbonate), the inconsistency is the result of a slight uptake of carbon dioxide from the air by the sample between measurement of pH in the field and determination of carbonate and bicarbonate in the laboratory.

For chemical-quality stations equipped with digital monitors, the records consist of daily maximum and minimum values for each constituent measured and are based upon hourly punches beginning at 0100 hours and ending at 2400 hours for the day of record. More detailed records (hourly values) may be obtained from the district office.

Water temperature

Water temperatures are measured at most of the water-quality stations. In addition, water temperatures are taken at time of discharge measurements for water-discharge stations. For stations where water temperatures are taken manually once or twice daily, the water temperatures are taken at about the same time each day. Large streams have a small daily temperature change; shallow streams may have a daily range of several degrees and may follow closely the changes in air temperature. Some streams may be affected by waste-heat discharges.

At stations where recording instruments are used, maximum and minimum temperatures for each day are published.

Sediment

Suspended-sediment concentrations are determined from samples collected by using depth-integrating samplers. Samples usually are obtained at several verticals in the cross section, or a single sample may be obtained at a fixed point and a coefficient applied to determine the mean concentration in the cross sections.

During periods of rapidly changing flow or rapidly changing concentration, samples may have been collected more frequently (twice daily or, in some instances, hourly). The published sediment discharges for days of rapidly changing flow or concentration were computed by the subdivided day method (time-discharge weighted average). Therefore, for those days when the published sediment discharge value differs from the value computed as the product of discharge times mean concentration times 0.0027, the reader can assume that the sediment discharge for that day was computed by the subdivided day method. For periods when no samples were collected, daily loads of suspended sediment were estimated on the basis of water discharge, sediment concentrations observed immediately before and after the periods, and suspended-sediment loads for other periods of similar discharge.

At other stations, suspended-sediment samples were collected periodically at many verticals in the stream cross section. Although data collected periodically may represent conditions only at the time of observations, such data are useful in establishing seasonal relations between quality and streamflow in predicting long-term sediment-discharge characteristics of the stream.

In addition to the records of the quantities of suspended sediment, records of the periodic measurements of the particle-size distribution of the suspended sediment and bed material are included.

EXPLANATION OF GROUND-WATER LEVEL RECORDS

Collection of the data

Ground-water level data from a basic network of observation wells are published herein. This basic network contains observation wells so located that the most significant data are obtained from the fewest wells in the most important aquifers.

Each well is identified by means of (1) a 15-digit number that is based on latitude and longitude and (2) a local number that is provided for local needs. See figure 2.

Measurements are made in many types of wells, under varying conditions of access and at different temperatures, hence, neither the method of measurement nor the equipment can be standardized. At each observation well, however, the equipment and techniques used are those that will ensure that measurements at each well are consistent.

Water-level measurements in this report are given in feet with reference to land-surface datum (lsd). Land-surface datum is a datum plane that is approximately at land surface at each well; National Geodetic Vertical Datum of 1929 is the datum plane on which the national network of precise levels is based. If known, the altitude of the land-surface datum above National Geodetic Vertical Datum of 1929 is given in the well description. The height of the measuring point (MP) above or below land-surface datum is given in each well description.

Water levels are reported to as many significant figures as can be justified by the local conditions. For example, in a measurement of a depth to water of several hundred feet, the error in determining the absolute value of the total depth to water may be a few tenths of a foot, whereas the error in determining the net change of water level between sucessive measurements may be only a hundredth or a few hundredths of a foot. For lesser depths to water the accuracy is greater. Accordingly, most measurements are reported to a hundredth of a foot, but some are given only to a tenth of a foot or a larger unit.

PUBLICATIONS ON TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS

Thirty-seven manuals by the U.S. Geological Survey have been published to date in the series on techniques describing procedures for planning and executing specialized work in water-resources investigations. The material is grouped under major subject headings called books and is further divided into sections and chapters. For example, Section A of Book 3 (Applications of Hydraulics) is on surface water. The chapter, the unit of publication, is limited to a narrow field of subject matter. This format permits flexibility in revision and publication as the need arises. The reports listed below are for sale by the U.S. Geological Survey, Branch of Distribution, 604 South Pickett St., Alexandria, VA 22304 (authorized agent of the Superintendent of Documents, Government Printing Office).

NOTE: When ordering any of these publications, please give the title, book number, chapter number, and "U.S. Geological Survey Techniques of Water-Resources Investigations".

1-D1. *Water temperature--influential factors, field measurement, and data presentation*, by H. H. Stevens, Jr., J. F. Ficke, and G. F. Smoot: USGS--TWRI Book 1, Chapter D1. 1975. 65 pages.

1-D2. *Guidelines for collection and field analysis of ground-water samples for selected unstable constituents*, by W. W. Wood: USGS--TWRI Book 1, Chapter D2. 1976. 24 pages.

2-D1. *Application of surface geophysics to ground-water investigations*, by A. A. R. Zohdy, G. P. Eaton, and D. R. Mabey: USGS--TWRI Book 2, Chapter D1. 1974. 116 pages.

2-E1. *Application of borehole geophysics to water-resources investigations*, by W. S. Keys and L. M. MacCary: USGS--TWRI Book 2, Chapter E1. 1971. 126 pages.

3-A1. *General field and office procedures for indirect discharge measurements*, by M. A. Benson and Tate Dalrymple: USGS--TWRI Book 3, Chapter A1. 1967. 30 pages.

3-A2. *Measurement of peak discharge by the slope-area method*, by Tate Dalrymple and M. A. Benson: USGS--TWRI Book 3, Chapter A2. 1967. 12 pages.

3-A3. *Measurement of peak discharge at culverts by indirect methods*, by G. L. Bodhaine: USGS--TWRI Book 3, Chapter A3. 1968. 60 pages.

3-A4. *Measurement of peak discharge at width contractions by indirect methods*, by H. F. Matthai: USGS--TWRI Book 3, Chapter A4. 1967. 44 pages.

3-A5. *Measurement of peak discharge at dams by indirect methods*, by Harry Hulsing: USGS--TWRI Book 3, Chapter A5. 1967. 29 pages.

3-A6. *General procedure for gaging streams*, by R. W. Carter and Jacob Davidian: USGS--TWRI Book 3, Chapter A6. 1968. 13 pages.

3-A7. *Stage measurements at gaging stations*, by T. J. Buchanan and W. P. Somers: USGS--TWRI Book 3, Chapter A7. 1968. 28 pages.

3-A8. *Discharge measurements at gaging stations*, by T. J. Buchanan and W. P. Somers: USGS--TWRI Book 3, Chapter A8. 1969. 65 pages.

3-A9. *Measurement of time of travel and dispersion in streams by dye tracing*, by E. F. Hubbard, F. A. Kilpatrick, L. A. Martens, and J. F. Wilson, Jr.: USGS--TWRI Book 3, Chapter A9. 1982. 44 pages.

3-A11. *Measurement of discharge by moving-boat method*, by G. F. Smoot and C. E. Novak: USGS--TWRI Book 3, Chapter A11. 1969. 22 pages.

3-B1. *Aquifer-test design, observation, and data analysis*, by R. W. Stallman: USGS--TWRI Book 3, Chapter B1. 1971. 26 pages.

3-B2. *Introduction to ground-water hydraulics, a programed text for self-instruction*, by G. D. Bennett: USGS--TWRI Book 3, Chapter B2. 1976. 172 pages.

3-B3. *Type curves for selected problems of flow to wells in confined aquifers*, by J. E. Reed: USGS--TWRI Book 3, Chapter B3. 1980. 106 pages.

3-C1. *Fluvial sediment concepts*, by H. P. Guy: USGS--TWRI Book 3, Chapter C1. 1970. 55 pages.

3-C2. *Field methods for measurement of fluvial sediment*, by H. P. Guy and V. W. Norman: USGS--TWRI Book 3, Chapter C2. 1970. 59 pages.

3-C3. *Computation of fluvial-sediment discharge*, by George Porterfield: USGS--TWRI Book 3, Chapter C3. 1972. 66 pages.

4-A1. *Some statistical tools in hydrology*, by H. C. Riggs: USGS--TWRI Book 4, Chapter A1. 1968. 39 pages.

4-A2. *Frequency curves*, by H. C. Riggs: USGS--TWRI Book 4, Chapter A2. 1968. 15 pages.

4-B1. *Low-flow investigations*, by H. C. Riggs: USGS--TWRI Book 4, Chapter B1. 1972. 18 pages.

4-B2. *Storage analyses for water supply*, by H. C. Riggs and C. H. Hardison: USGS--TWRI Book 4, Chapter B2. 1973. 20 pages.

4-B3. *Regional analyses of streamflow characteristics*, by H. C. Riggs: USGS--TWRI Book 4, Chapter B3. 1973. 15 pages.

4-D1. *Computation of rate and volume of stream depletion by wells*, by C. T. Jenkins: USGS--TWRI Book 4, Chapter D1. 1970. 17 pages.

5-A1. *Methods for determination of inorganic substances in water and fluvial sediments*, by M. W. Skougstad and others, editors: USGS--TWRI Book 5, Chapter A1. 1979. 626 pages.

5-A2. *Determination of minor elements in water by emission spectroscopy*, by P. R. Barnett and E. C. Mallory, Jr.: USGS--TWRI Book 5, Chapter A2. 1971. 31 pages.

5-A3. *Methods for analysis of organic substances in water*, by D. F. Goerlitz and Eugene Brown: USGS--TWRI Book 5, Chapter A3. 1972. 40 pages.

5-A4. *Methods for collection and analysis of aquatic biological and microbiological samples*, edited by P. E. Greeson, T. A. Ehlke, G. A. Irwin, B. W. Lium, and K. V. Slack: USGS--TWRI Book 5, Chapter A4. 1977. 332 pages.

5-A5. *Methods for determination of radioactive substances in water and fluvial sediments*, by L. L. Thatcher, V. J. Janzer, and K. W. Edwards: USGS--TWRI Book 5, Chapter A5. 1977. 95 pages.

5-C1. *Laboratory theory and methods for sediment analysis*, by H. P. Guy: USGS--TWRI Book 5, Chapter C1. 1969. 58 pages.

7-C1. *Finite difference model for aquifer simulation in two dimensions with results of numerical experiments*, by P. C. Trescott, G. F. Pinder, and S. P. Larson: USGS--TWRI Book 7, Chapter C1. 1976. 116 pages.

7-C2. *Computer model of two-dimensional solute transport and dispersion in ground water*, by L. F. Konikow and J. D. Bredehoeft: USGS--TWRI Book 7, Chapter C2. 1978. 90 pages.

7-C3. *A model for simulation of flow in singular and interconnected channels*, by R. W. Schaffranek, R. A. Baltzer, and D. E. Goldberg: USGS--TWRI Book 7, Chapter C3. 1981. 110 pages.

8-A1. *Methods of measuring water levels in deep wells*, by M. S. Garber and F. C. Koopman: USGS--TWRI Book 8, Chapter A1. 1968. 23 pages

8-B2. *Calibration and maintenance of vertical-axis type current meters*, by G. F. Smoot and C. E. Novak: USGS--TWRI Book 8, Chapter B2. 1968. 15 pages.

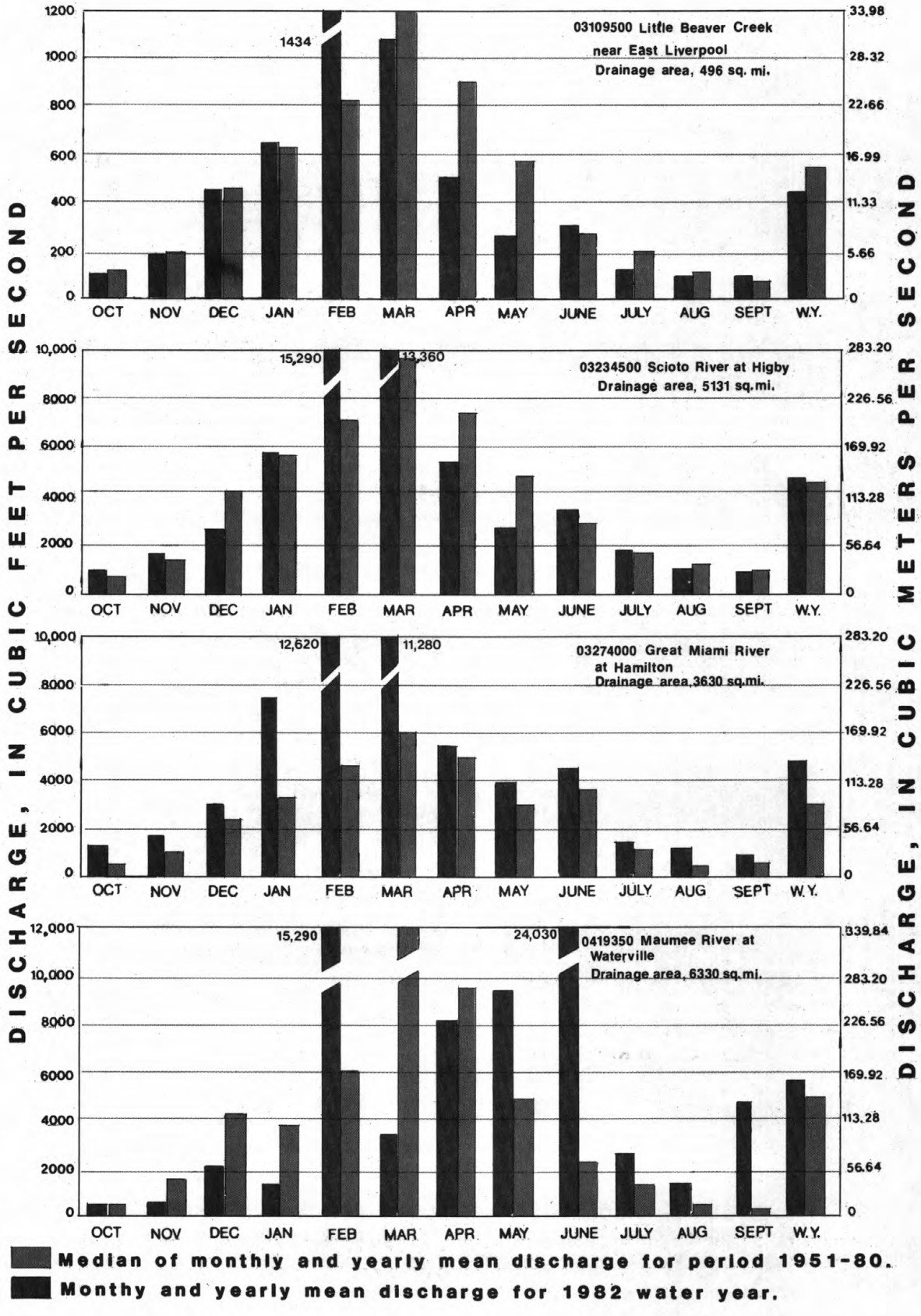

Figure 2.--Runoff during 1982 water year compared with median runoff for period 1951-80 for four representative gaging stations.

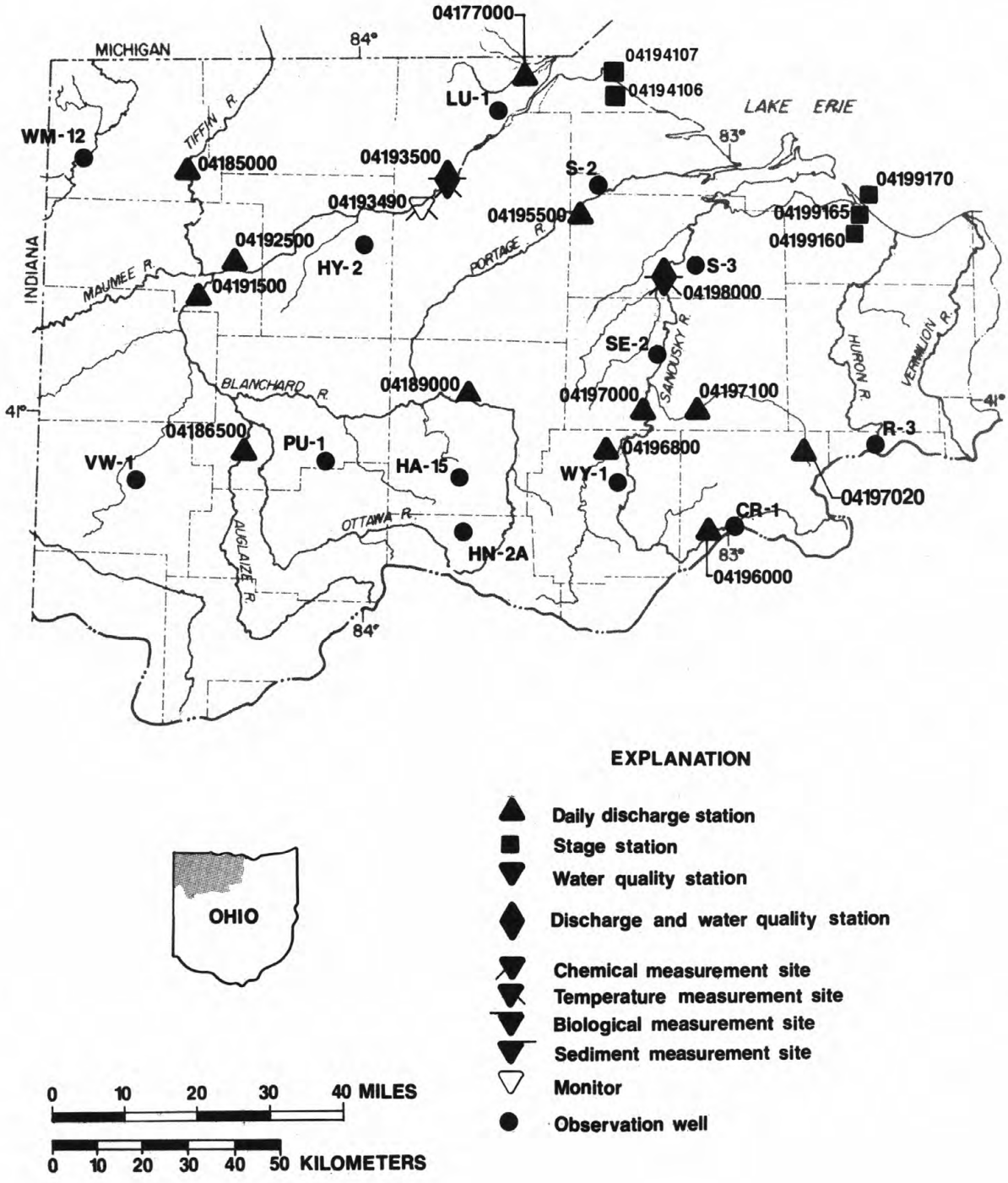

Figure 3a.--Location of data-collection stations excluding crest-stage and low-flow partial record sites.

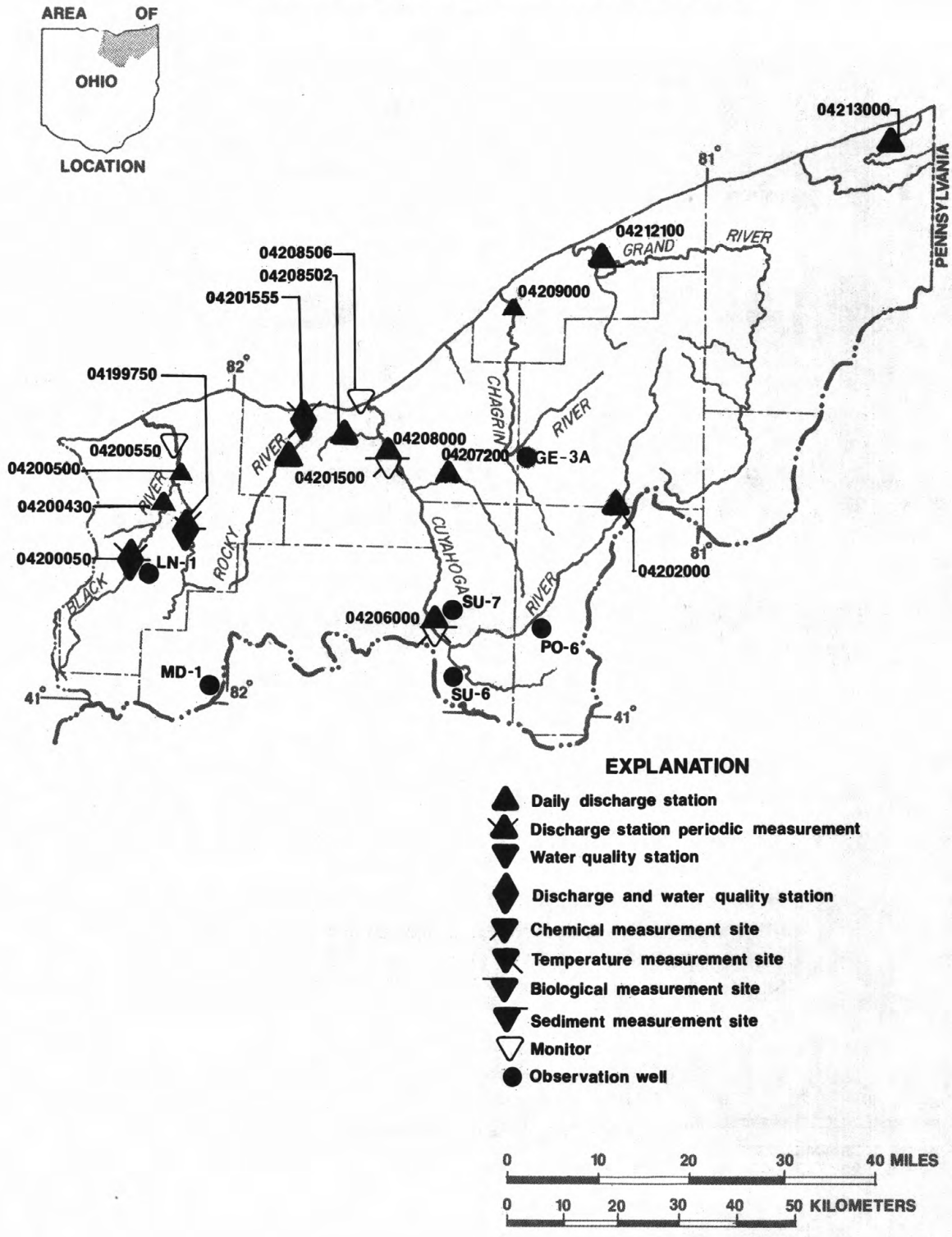

Figure 3b.--Location of data-collection stations excluding crest-stage and low-flow partial record sites.

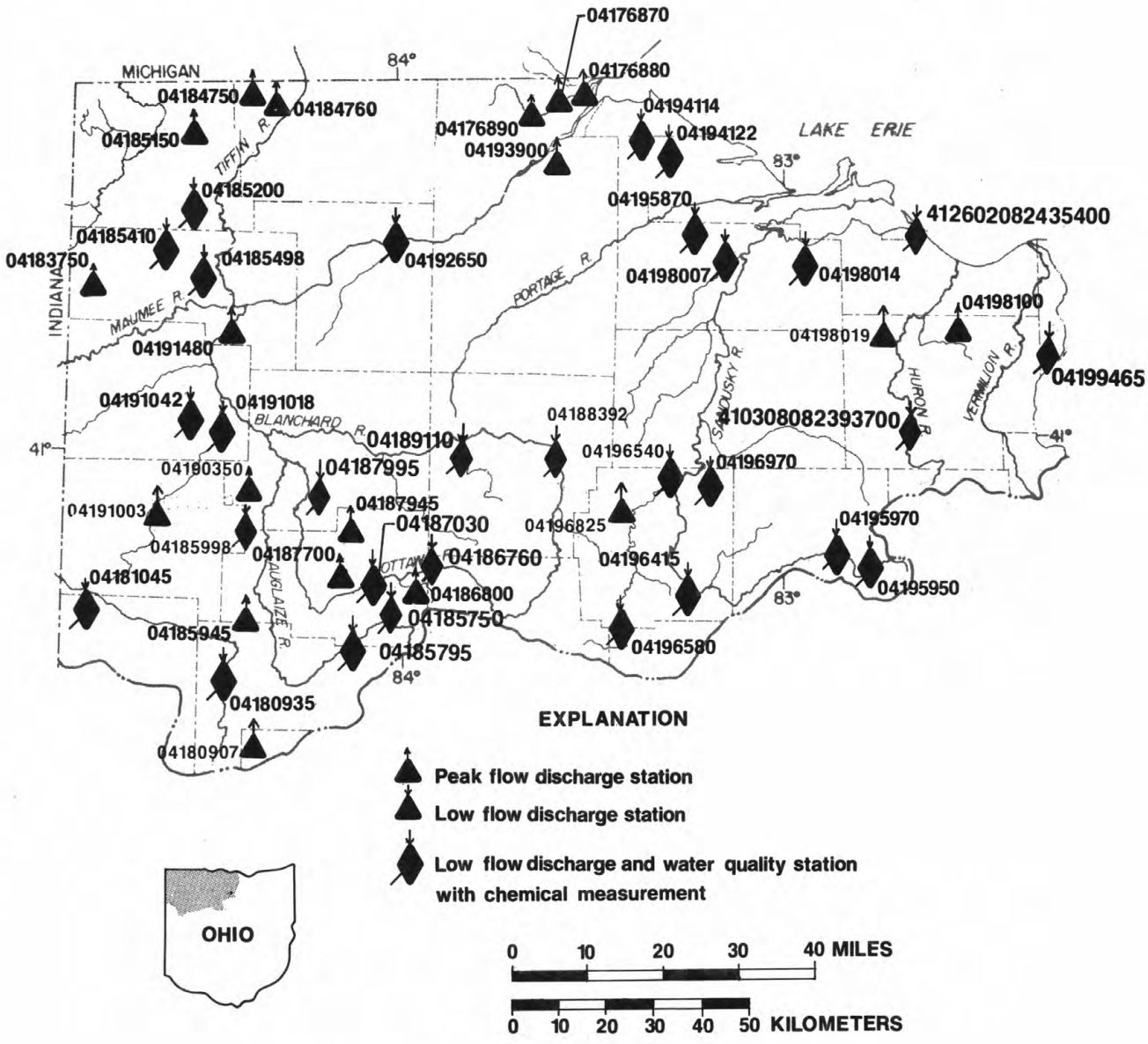

Figure 3c.--Location of crest-stage and low-flow partial record sites.

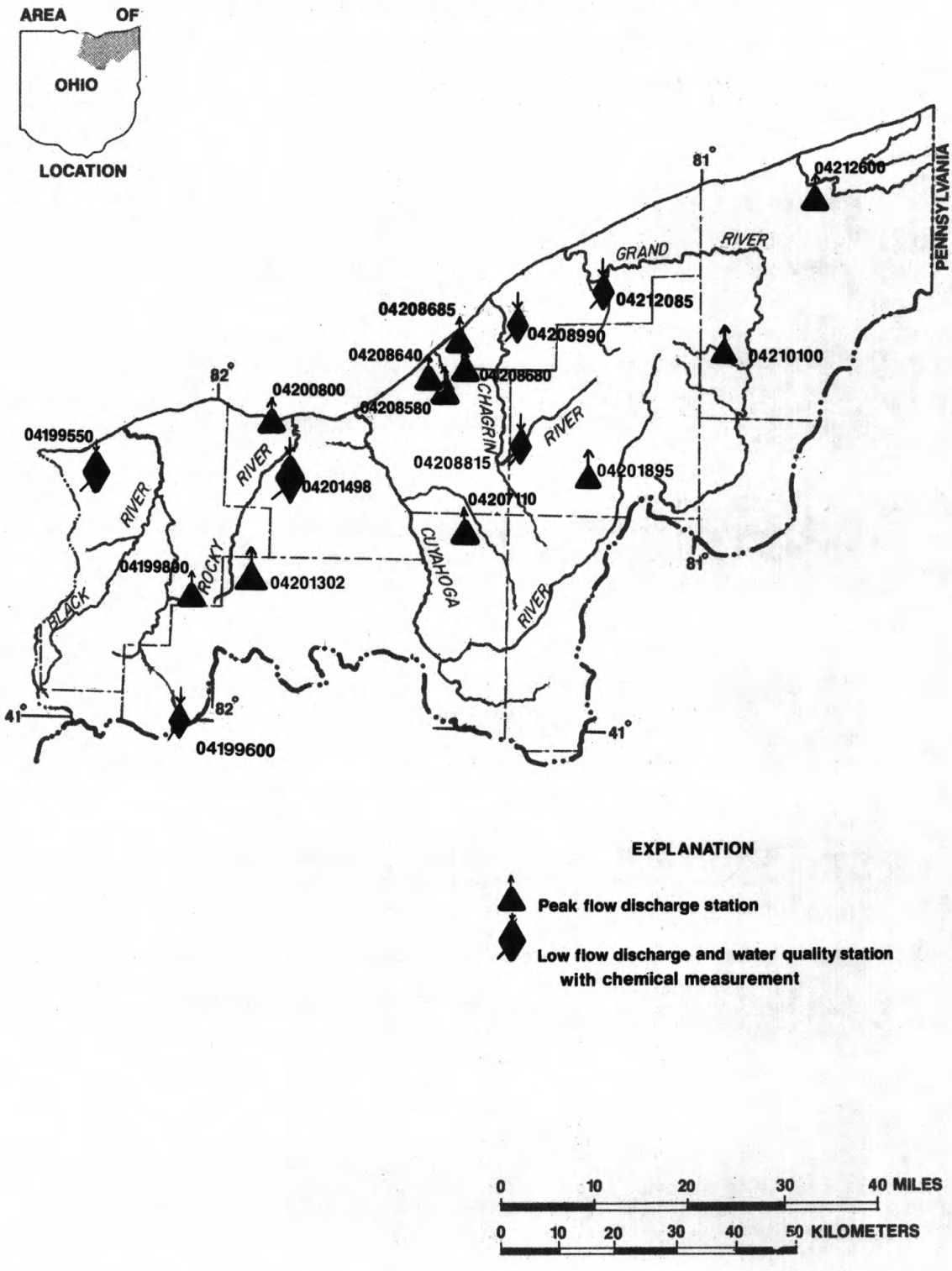

Figure 3d.--Location of crest-stage and low-flow partial record sites.

STREAMS TRIBUTARY TO LAKE ERIE

04177000 OTTAWA RIVER AT TOLEDO UNIVERSITY, TOLEDO, OH

LOCATION.--Lat 41°39'36", long 83°36'44", in NE 1/4 sec. 32, T.9 S., R.7 E., Lucas County, Hydrologic Unit 04100001, on left bank at auto bridge at Toledo University, Toledo, Ohio., 0.4 mi (0.6 km) downstream from Deline Ditch, 5.6 mi (9.0 km) upstream from Sibley Creek, and 10.9 mi (17.5 km) upstream from mouth.

DRAINAGE AREA.--150 mi² (388 km²). Area at site used prior to Sept. 30, 1948, 150 mi² (388 km²), revised.

PERIOD OF RECORD.--March 1945 to September 1948 (published as "Tenmile Creek at Toledo"), August 1976 to current year.

REVISED RECORDS.--WSP 1307: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 576.28 ft (175.650 m) National Geodetic Vertical Datum of 1929. (From Aug. 1976 to July, 1979 at site 500 ft (152.4 m) downstream. Prior to Sept. 30, 1948 water-stage recorder at site 2,500 ft (762 m) upstream at datum 3.72 ft (1.134 m) higher.

REMARKS.--Records poor. Water-quality data collected at this site 1977.

AVERAGE DISCHARGE.--9 years(1946-48, 1977-82) 124 ft³/s (3.512 m³/s) 11.23 in/yr 285 mm/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,950 ft³/s (112 m³/s) Mar. 14, 1982, gage height, 14.54 ft (4.432 m); minimum, no flow Aug. 24 to Sept. 19, 1945, July 7-15, Aug. 12-15, Sept. 1-9, 16-22, Oct. 5-10, 1946.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 1, 1943 reached a stage of 15.1 ft (4.602 m) present datum, from floodmark, Lucas County Sanitary Engineers, discharge, 3,400 ft³/s (96.3 m³/s). Flood of Apr. 25, 1950 reached a stage of 15.0 ft (4.572 m) present datum, from floodmark, discharge, 3,300 ft³/s (93.5 m³/s).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1150 ft³/s (32.6 m³/s) "revised" and maximums (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Oct. 28	----	2300	65.1	----	----	Mar. 18	----	2400	68.0	----	-----
Jan. 6	----	1600	45.3	----	----	Apr. 12	----	1600	45.3	----	-----
Mar. 14	0830	*3950	112	*14.54	4.432	May 29	0830	1230	34.8	9.53	2.905

Minimum daily discharge, 6.1 ft³/s (0.17 m³/s) Sept. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	450	860	64	49	170	175	580	44	142	44	15	11
2	200	480	77	64	120	204	340	49	101	39	14	13
3	140	310	67	116	94	194	300	48	80	96	14	19
4	76	190	71	369	80	267	400	43	66	53	14	17
5	58	130	75	856	70	253	450	39	59	45	13	16
6	120	100	77	1370	62	176	220	38	55	37	12	21
7	250	88	74	760	58	139	150	49	50	37	16	25
8	170	76	74	350	54	120	160	50	47	32	27	17
9	110	70	66	210	50	103	190	43	44	24	43	13
10	68	64	58	120	47	88	210	37	47	35	11	11
11	52	60	50	68	45	381	1200	35	47	40	8.6	14
12	41	58	52	96	43	1100	1400	37	44	30	8.6	13
13	37	56	50	140	42	2430	500	37	39	24	8.0	12
14	35	56	49	70	41	3500	230	30	37	21	7.5	12
15	32	56	49	39	40	1800	162	27	45	20	8.0	19
16	31	56	47	36	64	1300	136	27	73	19	10	24
17	29	56	46	33	120	1800	320	25	57	17	12	28
18	72	56	44	31	120	2100	407	26	45	21	11	37
19	119	58	41	30	130	660	221	35	51	39	6.9	10
20	86	110	38	29	146	860	149	36	46	126	51	8.3
21	68	178	37	29	199	1000	105	59	55	69	22	6.7
22	50	117	44	27	269	740	80	47	45	42	12	7.7
23	140	88	109	272	418	450	63	46	41	37	13	11
24	510	78	79	125	472	270	60	69	37	28	11	11
25	330	71	68	64	376	210	66	50	33	20	11	12
26	230	64	62	54	302	220	58	40	33	15	9.6	10
27	899	64	58	46	247	240	55	222	34	14	7.5	49
28	1980	61	54	42	184	190	56	676	36	13	7.5	19
29	2130	53	52	35	---	180	51	1090	47	11	12	11
30	1800	50	49	373	---	170	48	396	57	13	12	6.1
31	1200	---	47	230	---	420	---	179	---	20	11	---
TOTAL	11513	3814	1828	6133	4063	21740	8367	3629	1593	1081	439.2	483.8
MEAN	371	127	59.0	198	145	701	279	117	53.1	34.9	14.2	16.1
MAX	2130	860	109	1370	472	3500	1400	1090	142	126	51	49
MIN	29	50	37	27	40	88	48	25	33	11	6.9	6.1
CFSM	2.47	.85	.39	1.32	.97	4.67	1.86	.78	.35	.23	.10	.11
IN.	2.86	.95	.45	1.52	1.01	5.39	2.08	.90	.40	.27	.11	.12

CAL YR 1981 TOTAL 64785.0 MEAN 177 MAX 3030 MIN 12 CFSM 1.18 IN 16.07
WTR YR 1982 TOTAL 64684.0 MEAN 177 MAX 3500 MIN 6.1 CFSM 1.18 IN 16.04

04185000 TIFFIN RIVER AT STRYKER, OH

LOCATION.--Lat 41°30'16", long 84°25'47", in SW 1/4 sec. 5, T.6 N., R.4 E., Williams County, Hydrologic Unit 04100006, on left bank 0.5 mi (0.8 km) downstream from bridge on State Highway 191 at west edge of Stryker, 0.6 mi (1.0 km) upstream from Penn Central bridge, and 1.6 mi (2.6 km) downstream from Leatherwood Creek.

DRAINAGE AREA.--410 mi^2 (1,060 km^2).

PERIOD OF RECORD.--September 1921 to September 1928 (published as "near Stryker"), October 1940 to current year.

REVISED RECORDS.--WSP 1144: 1922-28. WSP 1387: 1925. WSP 1912: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 685.1 ft (208.82 m) National Geodetic Vertical Datum of 1929. Prior to Sept. 30, 1928, nonrecording gage at site 3.5 mi (5.6 km) downstream at different datum. Oct. 13, 1940, to Jan. 17, 1941, nonrecording gage and Jan. 18, 1941, to Sept. 30, 1953, water-stage recorder, at site 0.5 mi (0.8 km) downstream at same datum.

REMARKS.--Records fair except those for the winter period, which are poor. Small diversion 12.5 mi (20.1 km) upstream from gage for municipal supply of Archbold. Diversion averaged 1.88 ft^3/s (0.053 m^3/s) is returned as sewage to Brush Creek which flows into Tiffin River about 15 mi (24 km) downstream from station. Water-quality data collected at this site 1965 to 1977. Sediment data collected 1969 to 1974.

AVERAGE DISCHARGE.--49 years, 319 ft^3/s (9.034 m^3/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,800 ft^3/s (221 m^3/s) Mar. 15, 1982, gage height, 18.36 ft (5.600 m); minimum daily discharge, 3.9 ft^3/s (0.11 m^3/s) Aug. 30, 31, Sept. 1, 1953.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1913 reached a stage of 16.0 ft (4.88 m), from floodmarks, discharge, 7,600 ft^3/s (215 m^3/s). Flood in 1937 reached a stage of 15.0 ft (4.57 m), from information by local resident, discharge, 6,000 ft^3/s (170 m^3/s).

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 1,850 ft^3/s (52.4 m^3/s) and maximums (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Mar. 15	0500	*7800	221	*18.36	5.600	Apr. 1	1600	1900	53.8	12.15	3.703

Minimum daily discharge, 16 ft^3/s (0.45 m^3/s) Sept. 13, 14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	568	1010	222	135	750	500	1800	210	373	528	47	22
2	810	527	220	160	820	400	1680	204	301	521	45	22
3	1090	348	220	195	680	330	1490	199	319	355	45	22
4	1150	293	222	370	500	285	1260	192	290	305	43	22
5	937	264	253	1500	400	260	1090	185	242	288	41	19
6	596	248	300	1400	330	240	970	180	210	236	40	17
7	413	233	306	1100	260	225	786	176	185	195	39	17
8	334	215	290	850	220	220	628	185	167	166	38	17
9	275	198	261	560	190	210	608	204	157	145	42	19
10	236	181	234	300	170	200	700	217	157	131	41	20
11	209	172	187	150	155	443	844	201	169	154	41	19
12	191	165	186	125	150	1410	983	187	197	184	38	17
13	178	159	187	140	135	3900	1090	174	170	166	35	16
14	168	155	176	150	130	6600	1060	166	148	140	34	16
15	162	152	171	160	120	7640	962	163	134	121	32	18
16	157	149	228	150	120	7100	774	160	129	114	30	20
17	156	148	163	135	135	6760	705	155	142	131	29	20
18	159	145	144	120	155	5810	698	151	174	115	28	22
19	179	143	119	115	170	4680	659	150	160	105	27	27
20	184	153	115	110	230	4490	568	150	155	106	28	25
21	182	245	115	105	310	4200	459	139	212	126	32	24
22	224	331	110	105	596	3580	386	141	230	124	33	23
23	583	328	125	130	952	3080	338	227	212	103	32	21
24	699	287	140	175	1190	2760	305	277	177	86	30	21
25	621	249	135	255	1210	2570	279	274	154	74	28	20
26	437	231	135	350	1160	2460	264	236	138	67	28	20
27	488	230	135	300	1000	2240	250	220	127	62	27	21
28	1260	245	135	235	702	1980	236	615	125	58	26	26
29	1460	255	130	200	---	1720	224	752	161	54	25	28
30	1580	236	125	235	---	1470	216	769	378	51	24	25
31	1440	---	125	345	---	1700	---	596	---	49	23	---
TOTAL	17126	7695	5614	10360	12940	79463	22312	7855	5893	5060	1051	626
MEAN	552	257	181	334	462	2563	744	253	196	163	33.9	20.9
MAX	1580	1010	306	1500	1210	7640	1800	769	378	528	47	28
MIN	156	143	110	105	120	200	216	139	125	49	23	16

CAL YR 1981 TOTAL 176176 MEAN 483 MAX 3570 MIN 50
WTR YR 1982 TOTAL 175995 MEAN 482 MAX 7640 MIN 16

04186500 AUGLAIZE RIVER NEAR FORT JENNINGS, OH

LOCATION.--Lat 40°56'55", long 84°15'58", in SE 1/4 sec. 15, T.1 S., R.5 E., Putnam County, Hydrologic Unit 04100007, on left bank 200 ft (61 m) upstream from bridge on U. S. Highway 224, 3.5 mi (5.6 km) northeast of Fort Jennings, 6 mi (10 km) upstream from Ottawa River, and 7.3 mi (11.7 km) downstream from Jennings Creek.

DRAINAGE AREA.--332 mi² (860 km²).

PERIOD OF RECORD.--August 1921 to December 1935. October 1940 to current year.

REVISED RECORDS.--WSP 744: 1932. WSP 974: 1930(M). WSP 1307: 1922-24(M), 1926-27(M), 1929(M). WSP 1912: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 713.6 ft (217.51 m) National Geodetic Vertical Datum of 1929. Prior to Oct. 6, 1930, nonrecording gage at same site and datum.

REMARKS.--Records good except those for winter periods, which are poor. Beginning Jan. 4, 1971, water was diverted at a point 24.3 mi (39.1 km) upstream from station into Lake Bresler. Storage in Lake Bresler is available for low-flow augmentation and water supply of city of Lima, in Ottawa River basin. Net withdrawal totaled 1,967 mil gal (7.45 hm³), equivalent to a mean withdrawal of 8.3 ft³/s (0.24 m³/s). No releases have been made for low-flow augmentation. Some diversion from Grand Lake to Auglaize River basin through Miami and Erie Canal into Jennings Creek at a point 9.2 mi (14.8 km) upstream from station. Annual figures of runoff are considered to be within 10 percent of natural yield. Sediment data collected at this site 1970 to 1974. Water-quality data collected at this site 1968 to 1978.

AVERAGE DISCHARGE.--56 years, 286 ft³/s (8.100 m³/s), 11.70 in/yr (297 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, about 12,000 ft³/s (340 m³/s) Jan. 23, 1959; maximum gage height, 20.30 ft (6.187 m) Jan. 23, 1959, from floodmark (ice jam); minimum daily discharge, 4.9 ft³/s (0.14 m³/s) Oct. 7, 1956.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2700 ft /s (76.5 m /s) Revised, and maximums (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Jan. 5	----	3500	99.1	ice jam		Mar. 13	1900	*5850	166	*15.05	4.587
Feb.24	----	3400	96.3	ice jam		Mar. 17	2030	4080	116	12.84	3.914

Minimum Daily Discharge, 14 ft³/s (0.40 m³/s) Sept. 24,25.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26	169	130	235	1150	740	1320	65	700	442	38	20
2	25	124	103	300	480	950	666	84	500	218	36	21
3	25	99	144	720	300	860	509	84	370	174	36	22
4	24	85	129	2570	210	990	596	81	280	140	34	19
5	23	76	92	3250	160	1200	448	78	210	106	32	37
6	28	69	72	1400	135	1400	312	74	130	91	32	37
7	27	61	66	740	120	1600	262	85	100	83	37	30
8	20	58	65	370	110	900	279	143	76	70	44	29
9	18	54	88	220	98	600	351	255	65	80	44	26
10	43	51	80	180	88	480	472	192	474	63	38	21
11	35	47	70	160	82	1100	1120	121	509	79	33	20
12	29	45	66	135	75	4700	2160	81	283	85	32	19
13	26	46	59	110	70	5540	1950	68	175	71	30	19
14	22	45	54	95	66	4700	1140	62	125	55	27	24
15	19	44	52	82	370	2520	594	54	102	52	23	40
16	18	42	51	74	720	1690	413	75	125	48	22	24
17	18	39	53	68	1960	3550	411	70	634	45	21	31
18	22	38	55	64	2150	3210	606	66	642	44	21	41
19	30	40	49	63	2000	1140	480	64	328	136	20	31
20	29	48	44	63	1900	1670	340	62	227	94	21	25
21	28	84	40	64	2200	2250	255	65	242	94	29	19
22	30	91	46	70	2400	1230	198	73	182	67	29	17
23	39	111	587	84	2600	676	165	245	148	54	38	16
24	38	105	1720	300	3000	491	147	267	121	47	43	14
25	35	246	1200	380	1350	394	136	128	87	53	43	14
26	31	348	700	270	995	482	139	86	72	59	36	18
27	52	310	500	220	620	536	140	126	66	49	32	66
28	454	357	477	175	450	392	114	1310	69	44	28	63
29	807	282	320	140	---	302	79	1990	778	42	27	56
30	533	179	250	760	---	274	69	1310	1010	45	23	53
31	218	---	205	1650	---	711	---	862	---	42	21	---
TOTAL	2772	3393	7567	15012	25859	47278	15871	8326	8830	2772	970	872
MEAN	89.4	113	244	484	924	1525	529	269	294	89.4	31.3	29.1
MAX	807	357	1720	3250	3000	5540	2160	1990	1010	442	44	66
MIN	18	38	40	63	66	274	69	54	65	42	20	14
CFSM	.27	.34	.74	1.46	2.78	4.59	1.59	.81	.89	.27	.09	.09
IN.	.31	.38	.85	1.68	2.90	5.30	1.78	.93	.99	.31	.11	.10

CAL YR 1981 TOTAL 95506 MEAN 262 MAX 7040 MIN 14 CFSM .79 IN 10.70
WTR YR 1982 TOTAL 139522 MEAN 382 MAX 5540 MIN 14 CFSM 1.15 IN 15.63

04189000 BLANCHARD RIVER NEAR FINDLAY, OH

LOCATION.--Lat 41°03'21", long 83°41'17", on east line of sec. 10, T.1 N., R.10 E., Hancock County, Hydrologic Unit 04100008, on left bank at upstream side of county road bridge, 2 mi (3 km) west of Findlay, 3 mi (5 km) downstream from Eagle Creek, and 3 mi (5 km) upstream from Aurand Run.

DRAINAGE AREA.--346 mi^2 (896 km^2).

PERIOD OF RECORD.--October 1923 to December 1935, October 1940 to current year. Monthly discharge only for October 1923, published in WSP 1307.

REVISED RECORDS.--WSP 974: 1942. WSP 1054: 1927-30, 1933(M), 1945. WSP 1387: 1926, 1928(M), 1930(M), 1952. WSP 1912: Drainage area. WRD-OH-81-2: 1959, 1975 (M).

GAGE.--Water-stage recorder. Datum of gage is 754.55 ft (229.987 m) National Geodetic Vertical Datum of 1929. Prior to July 24, 1930, nonrecording gage at same site and datum.

REMARKS.--Records good except for winter periods which are fair. Water is diverted upstream from station into Findlay Reservoir. Storage in Findlay Reservoir used for water supply of city of Findlay, and is available for low-flow augmentation. All water returns to stream upstream from station. No releases have been made for low-flow augmentation. Sediment data collected at this site 1970-74. Water-quality data collected at this site 1968 to 1980.

AVERAGE DISCHARGE.--54 years, 253 ft^3/s (7.165 m^3/s), 9.93 in/yr (252 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,000 ft^3/s (368 m^3/s) June14, 1981, gage height, 17.43 ft (5.313 m) from measurement made on peak; minimum daily, 0.4 ft^3/s (0.011 m^3/s) Aug. 27, Sept. 3, 1934.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1913 reached a stage of 18.5ft (5.64 m); discharge, 22,000 ft^3/s (623 m^3/s), from rating curve extended above 10,000 ft^3/s (283 m^3/s).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,800 ft^3/s (79.3 m^3/s) (Revised); and maximums (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Jan. 5	0100	3640	103	9.40	2.865	Mar. 17	0730	4500	127	10.61	3.234
Feb. 24	0030	4280	121	10.32	3.146	Apr. 13	0930	2820	79.9	8.00	2.438
Mar. 13	1330	*6320	179	*12.35	3.764						

Minimum daily discharge, 15 ft^3/s (0.42 m^3/s) Sept. 16,20,25,26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	60	270	333	315	931	757	1330	92	500	123	27	24
2	54	220	496	410	751	1270	612	91	280	82	27	26
3	49	179	385	532	413	682	687	88	214	1400	29	25
4	45	153	281	2800	276	597	811	82	169	1070	30	25
5	45	144	235	2980	212	1900	470	79	142	388	31	23
6	200	137	219	1840	174	2190	356	78	121	244	28	23
7	240	120	216	664	154	1230	316	89	107	196	25	24
8	160	105	248	374	134	540	322	107	96	169	49	25
9	112	94	276	272	121	393	424	92	108	127	57	22
10	86	84	219	160	104	430	488	84	202	107	40	22
11	71	79	159	214	95	3380	1100	77	450	96	32	22
12	62	74	147	167	85	5700	2070	71	280	77	28	21
13	58	69	129	137	78	5960	2610	68	148	64	26	22
14	51	66	114	115	75	4010	1340	67	112	60	25	28
15	51	64	112	100	103	2050	582	61	94	55	23	26
16	49	64	105	85	239	2380	419	59	333	51	24	15
17	46	64	98	74	681	4170	615	60	1050	46	24	22
18	86	63	85	60	1300	2850	659	62	720	45	22	22
19	63	72	72	53	1760	1200	422	64	302	53	21	22
20	52	185	75	47	1910	1630	318	61	206	48	28	15
21	46	439	68	47	2750	1940	253	78	265	45	21	16
22	68	362	104	51	3220	1050	202	83	271	39	22	17
23	80	248	1510	402	3720	602	166	219	177	39	22	16
24	60	241	2150	581	3680	464	148	157	119	35	21	16
25	51	442	1520	463	2120	399	138	104	94	33	18	15
26	52	427	712	305	1000	462	134	82	80	32	21	15
27	180	457	470	188	589	451	127	180	71	30	21	32
28	330	408	360	135	513	360	113	640	84	32	25	33
29	540	296	290	100	---	336	103	1950	111	30	21	25
30	430	227	280	1240	---	336	97	1400	194	29	21	23
31	330	---	275	1520	---	1470	---	880	---	28	20	---
TOTAL	3807	5853	11743	16431	27188	51189	17432	7305	7100	4873	829	662
MEAN	123	195	379	530	971	1651	581	236	237	157	26.7	22.1
MAX	540	457	2150	2980	3720	5960	2610	1950	1050	1400	57	33
MIN	45	63	68	47	75	336	97	59	71	28	18	15
CFSM	.36	.56	1.10	1.53	2.81	4.77	1.68	.68	.69	.45	.08	.06
IN.	.41	.63	1.26	1.77	2.92	5.50	1.87	.79	.76	.52	.09	.07

CAL YR 1981 TOTAL 142713 MEAN 391 MAX 12000 MIN 17 CFSM 1.13 IN 15.34
WTR YR 1982 TOTAL 154412 MEAN 423 MAX 5960 MIN 15 CFSM 1.22 IN 16.60

04191500 AUGLAIZE RIVER NEAR DEFIANCE, OH

LOCATION.--Lat 41°14'15", long 84°23'57", in NE 1/4 sec. 9, T.3 N. R.4 E., Defiance County, Hydrologic Unit 04100007, on right bank 125 ft (38 m) downstream from dam of Toledo Edison Co., 0.2 mi (0.3 km) upstream from Jackson ditch, and 3 mi (5 km) south of Defiance.

DRAINAGE AREA.--2,318 mi^2 (6,004 km^2).

PERIOD OF RECORD.--May to August 1903 (gage heights only), April 1915 to current year. Monthly discharges only for some periods, published in WSP 1307.

REVISED RECORDS.--WSP 954: 1941. WSP 1912: Drainage area. WRD OH-72-1: 1966 (M).

GAGE.--Water-stage recorder. Datum of gage is 659.70 ft (201.077 m) National Geodetic Vertical Datum of 1929. May 20 to Aug. 8, 1903, non-recording gage at site 1.8 mi (2.9 km) downstream at different datum. April 13, 1915, to Dec. 6, 1933, nonrecording gage near right bank on downstream side of dam at datum 6.00 ft (1.829 m) higher, and auxiliary tailwater staff gage near right bank on downstream side of dam at present datum.

REMARKS.--Records good except those for period missing record,Dec. 15 to Mar. 23, which are poor. Flow regulated by dam at former powerplant 125 ft (38 m) upstream from station; reservoir caacity, 9,800 acre-ft (12.1 hm^3), operation of plant discontinued Jan. 10, 1963; occasional gate operation subsequently. Some deversion by Miami and Erie Canal from Grand Lake into Jennings Creek, tributary to Auglaize River 70 mi (113 km) upstream from station. Water-quality data collected at this site 1966 to 1977.

AVERAGE DISCHARGE.--67 years, 1,720 ft^3/s (48.71 m^3/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 52,500 ft^3/s (1,490 m^3/s) Feb.16, 1950, Feb. 12, 1959, gage height, 26.4 ft (8.05 m),from graph based on hourly powerplant tailwater-gage readings, and gage readings respectively; maximum gage height, 27.65 ft (8.428 m) Feb. 13, 1959, from flood mark (ice jam). minimum daily discharg, 0.5 ft^3/s (0.014 m^3/s) Oct. 13, 14, 1952 during repair to powerplant dam.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of March 1913 reached a stage of 38.8 ft (11.83 m), from reasding on powerplant tailwater gage at present datum; discharge, 120,000 ft^3/s (3,400 m^3/s), from rating curve extended above 51,000 ft^3/s (1,440 m^3/s).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 52,300 ft^3/s (1,480 m^3/s) Mar. 15, gage height 27.39 ft (8.348 m); minimum daily, 35 ft^3/s (0.991 m^3/s) Dec. 16.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	236	1810	1690	2300	5800	4000	6340	472	5580	2150	125	85
2	181	720	1470	4500	4400	5000	6670	441	4380	1110	125	77
3	181	775	1300	6600	3300	5500	4180	434	1720	3590	122	72
4	166	800	1280	13000	2700	5700	3420	419	1460	2910	119	69
5	153	703	1150	32000	2100	7400	1800	405	1030	3910	102	77
6	236	603	970	21000	1800	12000	2190	391	803	2840	96	72
7	301	557	826	11500	1500	8800	1760	377	670	1300	99	77
8	527	527	729	6400	1300	5000	1490	434	557	784	112	77
9	587	444	685	3900	1150	3200	1840	704	496	645	112	74
10	467	428	651	2300	1050	2400	2850	766	565	653	119	80
11	363	370	635	1500	960	21000	5590	636	1320	748	119	77
12	282	334	611	1100	860	34000	11900	504	1320	604	125	74
13	242	314	557	870	800	42000	15100	426	1070	496	119	72
14	196	295	334	730	780	52300	11200	370	766	391	106	67
15	166	282	50	640	1700	39000	7110	342	588	308	93	67
16	140	259	35	540	4000	29000	4590	328	488	253	88	82
17	144	259	52	485	6200	24000	4340	328	1230	230	77	102
18	201	247	70	450	9000	20000	4470	321	4050	202	72	88
19	136	817	100	435	10400	17000	3770	295	2840	207	80	91
20	186	887	130	425	9500	14000	2590	302	1950	283	74	85
21	176	677	180	3000	9800	11500	1420	342	803	356	67	80
22	242	792	290	1750	11000	9500	670	412	1130	391	106	67
23	527	951	2500	1450	12000	7500	794	704	1350	349	119	69
24	603	942	7000	1250	14000	5180	888	1460	1010	271	109	62
25	542	942	13500	1100	15000	3930	812	1220	713	207	109	56
26	451	1120	9000	960	5500	3350	748	794	527	172	162	62
27	729	1140	5500	850	4300	3620	704	748	441	167	157	122
28	6050	2120	3600	800	3700	3270	678	4020	377	140	122	315
29	7860	2110	2300	710	---	2060	588	9240	645	140	106	370
30	5210	1600	1650	3500	---	1590	520	10600	3110	144	91	248
31	3480	---	1400	7600	---	3020	---	8850	---	129	77	---
TOTAL	30961	23825	60245	133645	144600	405820	111022	47085	42989	26080	3309	3016
MEAN	999	794	1943	4311	5164	13090	3701	1519	1433	841	107	101
MAX	7860	2120	13500	32000	15000	52300	15100	10600	5580	3910	162	370
MIN	136	247	35	425	780	1590	520	295	377	129	67	56

CAL YR 1981 TOTAL 583056 MEAN 1597 MAX 35000 MIN 35
WTR YR 1982 TOTAL 1032597 MEAN 2829 MAX 52300 MIN 35

04192500 MAUMEE RIVER NEAR DEFIANCE, OH

LOCATION.--Lat 41°17'30", long 84°16'52", in NW 1/4 sec. 22, T.4 N., R.5 E., Defiance County, Hydrologic Unit 04100009, on left bank 40 ft. (12 m) upstream from Independence Dam, 4 mi (6 km) downstream from mouth of Auglaize River, and 4.5 mi (7.2 km) east of Defiance.

DRAINAGE AREA.--5,545 mi^2 (14,362 km^2).

PERIOD OF RECORD.--October 1924 to December 1935, March 1939 to September 1974, October 1978 to current year.

REVISED RECORDS.--WSP 974: 1926-27, 1930. WSP 1387: 1925-28, 1946. WRD Ohio, 1970: Drainage Area.

GAGE.--Water-stage recorder. Datum of gage is 658.56 ft (200.729 m), National Geodetic Vertical Datum of 1929. Prior to Nov. 13, 1924, nonrecording gage at same site and datum.

REMARKS.--Records good. Flow affected by occasional regulation by Toledo Edison Co. dam on Auglaize River, 7 mi (11 km) upstream. Operation of hydroelectric plant there discontinued Jan. 10, 1963. Low flow slightly regulated by powerplant at Ft. Wayne, Indiana. Slight diversion 275 ft (83.8 m) upstream into Miami and Erie Canal through a 24 in (610 mm) conduit which bypasses station.

AVERAGE DISCHARGE.--50 years, 4,172 ft^3/s (118.2 m^3/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 104,000 ft^3/s (2,945 m^3/s) Mar. 15, 1982, gage height, 15.87 ft (4.837 m); minimum discharge, 2 ft^3/s (0.057 m^3/s) Sept. 3, 1925; minimum gage height, 1.09 ft (0.332 m) Sept. 26, 1928.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 23,000 ft^3/s (651 m^3/s) and maximums (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Jan. 5	1800	33,000	935	6.88	2.097	Mar. 15	0100	*104,000	2945	*15.87	4.837
Feb. 25	0900	52,200	1478	9.18	2.798	Apr. 13	2000	28,300	801	6.35	1.935

Minimum daily discharge, 262 ft^3/s (7.42 m^3/s) Sept. 13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1960	6320	3580	4070	13200	14800	17900	1990	12900	4850	543	306
2	2300	3890	3540	5720	13400	13600	15700	1710	12000	3250	575	323
3	2970	2590	3010	7430	11100	14600	12900	1680	8590	10100	506	295
4	2620	2480	2850	22500	8240	13500	11700	1660	6740	14500	770	275
5	2550	2160	2810	31800	6320	12200	9790	1590	5350	13000	621	297
6	3090	1870	2550	30500	5140	17900	8620	1520	4310	9510	499	303
7	3890	1650	2330	23800	4300	20600	7760	1480	3560	5370	474	292
8	3540	1530	2300	15000	3800	16700	7100	1510	2840	3370	513	302
9	3090	1280	2260	10600	3580	12400	7080	1970	2010	2820	474	304
10	2160	1250	2030	6040	3250	9670	8130	2080	2090	1970	725	414
11	1740	1180	1930	2260	2970	11600	11300	2020	3560	2480	606	335
12	1450	1100	1870	1990	2700	34500	19500	1950	4170	2320	520	293
13	1230	1010	1560	2200	2440	65500	26900	1930	3710	2670	508	262
14	1030	1010	1390	2620	2230	95300	24100	1860	3010	2190	485	282
15	959	936	913	2620	1990	98800	18100	1630	2630	1750	434	298
16	823	845	890	2400	1990	77800	13900	1550	2310	1390	384	306
17	823	845	890	2200	3210	72800	14900	1500	2770	1190	384	327
18	868	801	758	2050	5660	69900	16900	1480	5640	1030	344	343
19	780	1280	599	1900	10100	59500	14300	1460	5860	1050	364	324
20	823	1990	656	1750	14100	52600	10200	1570	4510	1370	389	335
21	913	1770	618	1700	16500	50900	7260	2000	3600	1370	322	338
22	1010	1960	780	1600	20800	43600	5540	3600	3820	1640	420	325
23	2620	2740	3250	2440	27500	34200	4300	5000	3900	1280	455	324
24	3410	2970	11000	3580	45100	27400	4020	5500	3080	1150	427	324
25	2930	2930	13200	5400	50700	22000	3510	4300	2490	1100	391	342
26	2480	3130	11800	6100	45200	19300	3120	3440	1840	972	385	318
27	2930	3500	8940	5400	29900	17300	2730	3990	1660	831	459	409
28	11200	4260	6960	4300	19400	15100	2590	14700	1470	680	480	506
29	13700	4780	5550	3330	---	12500	2390	22200	2160	752	365	701
30	12100	3980	4210	4780	---	10500	2100	20800	5120	781	357	650
31	8940	---	3670	10700	---	15200	---	16900	---	582	341	---
TOTAL	100929	68037	108694	228780	374820	1052270	314340	136570	127700	97318	14520	10453
MEAN	3256	2268	3506	7380	13390	33940	10480	4405	4257	3139	468	348
MAX	13700	6320	13200	31800	50700	98800	26900	22200	12900	14500	770	701
MIN	780	801	599	1600	1990	9670	2100	1460	1470	582	322	262

CAL YR 1981 TOTAL 2010170 MEAN 5507 MAX 72700 MIN 388
WTR YR 1982 TOTAL 2634431 MEAN 7218 MAX 98800 MIN 262

04193490 MAUMEE RIVER NEAR WATERVILLE, OH

LOCATION.--Lat 41°28'34", long 83°44'20", Lucas County, Hydrologic Unit 04100009, in Bowling Green water-treatment plant, 2.0 mi (3.2 km) upstream from discharge station at Waterville.

DRAINAGE AREA.--6,313 mi^2 (16,351 km^2).

PERIOD OF RECORD.--Water years 1950 to 1976 (published as Maumee River at Waterville). 1976 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: May 1963 to current year.
pH: May 1963 to current year.
WATER TEMPERATURES: March 1950 to current year.
DISSOLVED OXYGEN: May 1963 to current year.

INSTRUMENTATION.--Water-quality monitor since May 1963. Prior to June 1974 water-quality monitor located in water-treatment plant 2,500 ft (762 m) upstream from discharge station. Prior to May 1963 alcohol-actuated thermograph located at discharge station.

REMARKS.--Interruptions in the water-quality record were due to malfunction of the instrument. Prior to October 1976, records published as 04193500, Maumee River at Waterville, Ohio. See records of daily discharge for gaging station at Waterville (04193500).

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 1,260 micromhos Feb. 16, 1977; minimum, 156 micromhos Mar. 14, 1982.
pH: Maximum, 11.4 units Jan. 16, 1965; minimum, 5.0 units Nov. 24, 1968.
WATER TEMPERATURES: Maximum, 34.0°C July 1, 1963; minimum, 0.0°C on many days during winter periods.
DISSOLVED OXYGEN: Maximum, >20.0 mg/L Nov. 18-21, 1980, Mar. 27-29, 1981; minimum, 0.3 mg/L Nov. 10, 1965.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 801 micromhos Nov.27; minimum, 156 micromhos Mar. 14.
pH: Maximum recorded, 8.8 units Sept.9,10; minimum recorded, 7.3 units on several days during the year.
WATER TEMPERATURES: Maximum, 29.5°C July 17; minimum, 0.0°C on many days during winter periods.
DISSOLVED OXYGEN: Maximum recorded, 16.9 mg/L Dec. 21; minimum recorded, 2.9 mg/L Sept. 15.

04193490 MAUMEE RIVER NEAR WATERVILLE, OH--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	---	---	---	582	558	568	726	717	723	666	621	643
2	---	---	---	618	585	599	723	714	717	675	660	667
3	---	---	---	630	618	624	714	702	708	672	660	667
4	---	---	---	630	621	625	702	690	697	651	504	545
5	---	---	---	639	624	632	717	702	709	504	399	426
6	636	612	625	642	618	629	723	717	720	411	408	410
7	642	621	634	651	618	633	726	720	722	417	408	410
8	618	570	589	660	645	652	726	717	720	459	417	434
9	576	570	571	660	648	653	738	723	730	507	459	480
10	582	558	573	663	651	657	747	735	740	561	504	535
11	555	513	525	666	660	664	753	744	748	567	555	559
12	525	513	518	678	666	673	747	744	745	---	---	---
13	558	525	542	684	675	679	747	738	743	---	---	---
14	570	561	566	693	681	687	741	738	739	---	---	---
15	570	564	569	699	687	695	738	729	734	---	---	---
16	576	564	569	705	696	701	738	726	733	---	---	---
17	576	573	574	708	699	704	741	732	736	---	---	---
18	594	573	581	714	702	708	753	735	739	---	---	---
19	594	579	588	714	705	710	765	744	752	---	---	---
20	627	582	597	732	714	722	768	756	761	---	---	---
21	645	624	634	753	729	737	780	768	773	---	---	---
22	630	609	616	768	750	761	792	777	781	702	699	700
23	654	609	631	750	741	746	780	621	680	738	660	699
24	672	654	661	771	750	757	627	555	594	708	666	688
25	708	675	694	792	768	786	744	606	676	723	708	719
26	729	708	717	789	783	787	594	561	570	729	711	723
27	732	462	646	801	786	795	585	567	577	744	699	716
28	477	438	452	795	753	781	585	564	575	753	699	730
29	531	456	483	750	720	732	570	558	563	696	672	684
30	546	516	527	726	714	722	600	567	583	669	486	577
31	561	552	559	---	---	---	621	594	610	480	372	437
MONTH	732	438	586	801	558	694	792	555	697	753	372	593

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	369	351	360	---	---	---	480	453	462	618	585	607
2	357	315	325	---	---	---	507	453	474	585	558	575
3	333	318	328	---	---	---	507	486	495	573	561	568
4	318	306	309	---	---	---	495	480	490	576	561	569
5	---	---	---	---	---	---	489	480	484	588	543	578
6	---	---	---	---	---	---	498	471	484	594	582	588
7	---	---	---	---	---	---	525	489	506	597	582	592
8	---	---	---	---	---	---	537	510	519	606	588	595
9	---	---	---	---	---	---	561	546	553	612	594	603
10	---	---	---	---	---	---	576	558	567	609	591	604
11	489	453	481	360	276	303	564	528	551	615	600	608
12	510	492	500	270	201	248	531	510	524	618	606	612
13	525	510	519	195	162	181	504	441	473	621	597	610
14	543	528	535	171	156	162	441	411	417	612	588	602
15	---	---	---	204	171	186	429	414	421	621	606	614
16	---	---	---	231	207	221	456	429	441	636	621	630
17	---	---	---	252	225	239	477	456	467	648	633	644
18	630	603	616	279	255	268	462	447	455	660	648	655
19	648	633	642	297	279	288	471	453	462	660	648	655
20	696	582	657	321	300	313	504	471	488	657	645	653
21	567	357	444	339	318	329	525	495	516	666	657	662
22	351	288	320	354	339	346	534	525	529	702	666	683
23	288	252	274	369	354	360	555	501	539	705	681	694
24	267	231	244	390	366	379	573	555	565	702	669	688
25	228	222	224	423	393	402	597	573	582	693	660	678
26	234	222	228	444	423	437	603	585	596	687	642	666
27	234	234	234	450	441	445	600	579	591	645	564	604
28	---	---	---	474	450	460	606	594	602	567	504	527
29	---	---	---	495	474	485	609	597	604	549	489	516
30	---	---	---	519	471	506	618	597	609	531	465	514
31	---	---	---	477	450	467	---	---	---	501	474	485
MONTH	696	222	402	519	156	335	618	411	516	705	465	609

04193490 MAUMEE RIVER NEAR WATERVILLE, OH--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	519	483	502	---	---	---	477	441	455	600	591	595
2	555	513	537	750	627	662	489	441	457	600	594	595
3	570	552	561	633	564	588	486	429	450	603	594	599
4	576	561	568	585	435	500	471	438	456	603	594	602
5	576	558	571	453	429	438	507	471	492	606	603	605
6	579	540	570	---	---	---	528	507	517	609	606	608
7	612	573	589	---	---	---	534	504	521	615	609	612
8	618	594	603	---	---	---	534	513	525	615	612	614
9	606	594	599	---	---	---	552	537	542	618	606	613
10	621	582	604	---	---	---	552	537	550	618	612	615
11	624	597	610	465	438	451	561	537	552	621	615	618
12	621	594	608	465	432	450	573	552	565	621	618	620
13	648	621	633	456	441	447	567	543	557	627	621	623
14	672	648	659	468	450	457	558	546	552	636	627	630
15	702	660	676	489	465	475	558	543	553	651	636	641
16	714	639	655	504	426	488	564	546	552	645	639	641
17	699	645	672	504	489	499	564	552	558	702	639	645
18	720	672	703	525	501	508	570	555	562	648	642	645
19	666	594	622	528	510	520	576	564	570	648	642	645
20	630	591	608	573	513	534	579	570	576	657	648	652
21	663	627	642	561	528	547	585	573	577	687	600	662
22	675	654	664	576	552	566	582	576	579	684	666	675
23	702	651	661	564	543	554	582	576	581	735	681	692
24	663	651	653	552	531	544	585	576	579	714	693	696
25	651	621	648	534	513	523	588	579	581	723	696	703
26	---	---	---	540	498	525	591	582	587	717	705	709
27	---	---	---	549	516	530	612	579	587	717	693	702
28	---	---	---	537	522	533	594	585	588	708	684	691
29	---	---	---	537	519	531	600	585	591	696	687	693
30	---	---	---	543	516	530	603	588	593	717	699	705
31	---	---	---	519	453	493	603	591	597	---	---	---
MONTH	720	483	617	750	426	516	612	429	548	735	591	645
YEAR	801	156	575									

PH (STANDARD UNITS), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	---	---	---	7.6	7.3	7.5	8.0	7.7	7.8	7.7	7.6	7.6
2	---	---	---	7.6	7.5	7.6	8.0	7.9	7.9	7.7	7.6	7.6
3	---	---	---	7.8	7.5	7.7	8.0	7.8	7.9	7.7	7.6	7.7
4	---	---	---	7.8	7.8	7.8	7.9	7.9	7.9	7.7	7.5	7.6
5	---	---	---	7.9	7.8	7.8	7.9	7.8	7.8	7.7	7.4	7.5
6	8.5	8.4	8.5	8.0	7.8	7.8	7.9	7.7	7.8	7.5	7.4	7.5
7	8.4	8.1	8.4	8.0	7.8	7.9	7.9	7.8	7.8	7.4	7.4	7.4
8	8.4	8.3	8.3	8.0	7.9	8.0	7.9	7.8	7.8	7.6	7.4	7.5
9	8.3	7.9	8.2	8.1	8.0	8.0	7.9	7.7	7.8	7.7	7.5	7.6
10	8.2	8.1	8.1	8.2	8.0	8.1	7.8	7.7	7.8	---	---	---
11	8.1	8.0	8.0	8.2	8.1	8.1	7.8	7.6	7.7	---	---	---
12	8.1	8.0	8.0	8.2	8.1	8.1	7.8	7.6	7.7	---	---	---
13	8.2	8.1	8.1	8.2	8.0	8.1	7.8	7.6	7.7	---	---	---
14	8.3	8.1	8.2	8.2	8.1	8.1	7.8	7.6	7.7	---	---	---
15	8.4	8.3	8.3	8.3	8.1	8.2	7.8	7.6	7.7	---	---	---
16	8.5	8.4	8.4	8.3	8.1	8.2	7.8	7.5	7.6	---	---	---
17	8.6	8.5	8.6	8.3	8.1	8.2	7.8	7.5	7.7	---	---	---
18	8.6	8.4	8.5	8.2	8.1	8.2	7.9	7.7	7.8	---	---	---
19	8.5	8.4	8.5	8.4	8.1	8.2	8.0	7.7	7.9	---	---	---
20	8.7	8.5	8.6	8.3	8.2	8.2	8.0	7.7	7.9	---	---	---
21	8.6	8.5	8.5	8.3	8.2	8.3	8.0	7.9	7.9	---	---	---
22	8.7	8.4	8.5	8.3	8.2	8.2	7.9	7.8	7.9	---	---	---
23	8.4	8.0	8.2	8.4	8.2	8.3	7.9	7.6	7.7	---	---	---
24	8.2	8.0	8.1	8.4	8.3	8.3	7.8	7.5	7.7	---	---	---
25	8.4	8.2	8.3	8.4	8.2	8.3	7.8	7.5	7.7	---	---	---
26	8.3	8.3	8.3	8.3	8.2	8.3	7.6	7.5	7.5	---	---	---
27	8.3	7.6	8.0	8.3	8.1	8.2	7.5	7.5	7.5	---	---	---
28	7.6	7.4	7.4	8.1	8.0	8.0	7.5	7.5	7.5	---	---	---
29	7.5	7.4	7.5	8.0	7.9	7.9	7.5	7.5	7.5	---	---	---
30	7.6	7.5	7.5	7.9	7.8	7.9	7.5	7.4	7.5	---	---	---
31	7.6	7.6	7.6	---	---	---	7.7	7.5	7.6	---	---	---
MONTH	8.7	7.4	8.2	8.4	7.3	8.1	8.0	7.4	7.7	7.7	7.4	7.6

STREAMS TRIBUTARY TO LAKE ERIE

04193490 MAUMEE RIVER NEAR WATERVILLE, OH--Continued

PH (STANDARD UNITS), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1				---	---	---	7.5	7.3	7.4	---	---	---
2				---	---	---	7.4	7.3	7.4	---	---	---
3				---	---	---	7.6	7.3	7.4	---	---	---
4				---	---	---	---	---	---	---	---	---
5				---	---	---	---	---	---	---	---	---
6				---	---	---	---	---	---	---	---	---
7				---	---	---	8.1	7.8	7.9	---	---	---
8				---	---	---	8.0	7.8	7.9	---	---	---
9				---	---	---	8.0	7.8	7.9	---	---	---
10				---	---	---	8.0	7.8	7.9	---	---	---
11				8.2	7.7	8.1	7.9	7.7	7.8	---	---	---
12				8.3	8.1	8.2	7.8	7.6	7.7	8.2	8.1	7.8
13				8.6	8.3	8.4	7.9	7.8	7.9	8.2	7.9	8.1
14				8.5	8.0	8.3	7.9	7.7	7.8	8.0	7.8	7.9
15				8.0	7.9	8.0	7.8	7.6	7.7	8.1	7.8	7.9
16				7.9	7.8	7.9	7.7	7.6	7.6	8.1	7.9	8.0
17				7.7	7.7	7.7	7.6	7.5	7.5	7.9	7.6	7.8
18				7.7	7.6	7.7	7.6	7.5	7.5	7.8	7.6	7.7
19				7.7	7.5	7.7	7.5	7.4	7.5	7.9	7.6	7.7
20				7.7	7.6	7.7	7.5	7.4	7.4	7.9	7.5	7.6
21				7.7	7.6	7.7	7.7	7.5	7.6	7.7	7.3	7.6
22				7.8	7.7	7.7	7.8	7.6	7.7	7.7	7.4	7.6
23				7.8	7.6	7.7	7.7	7.6	7.6	7.7	7.4	7.6
24				7.7	7.5	7.7	7.7	7.6	7.6	7.6	7.4	7.5
25				7.7	7.6	7.7	7.6	7.5	7.6	7.6	7.4	7.5
26				7.8	7.7	7.8	---	---	---	7.6	7.5	7.6
27				8.0	7.8	7.9	---	---	---	7.6	7.3	7.5
28				7.9	7.8	7.9	---	---	---	7.3	7.3	7.3
29				7.9	7.7	7.8	---	---	---	7.4	7.3	7.3
30				7.8	7.5	7.7	---	---	---	7.4	7.3	7.4
31				7.5	7.3	7.4	---	---	---	7.4	7.3	7.4
MONTH				8.6	7.3	7.8	8.1	7.3	7.7	8.2	7.3	7.6

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	7.4	7.3	7.4	8.2	7.9	8.0	---	---	---	8.5	8.3	8.4
2	7.5	7.3	7.4	8.1	7.9	8.1	---	---	---	8.5	8.4	8.5
3	7.6	7.4	7.5	7.9	7.5	7.7	---	---	---	8.6	8.3	8.4
4	7.6	7.5	7.5	7.5	7.3	7.4	8.4	7.8	8.1	8.5	8.3	8.4
5	7.6	7.5	7.5	7.4	7.3	7.4	8.1	7.7	7.9	8.6	8.4	8.5
6	7.6	7.4	7.6	7.4	7.3	7.4	8.3	8.0	8.2	8.7	8.4	8.5
7	7.8	7.3	7.5	7.5	7.3	7.4	8.2	7.8	8.1	8.5	8.4	8.5
8	7.7	7.3	7.6	---	---	---	8.3	7.9	8.1	8.5	8.4	8.4
9	---	---	---	---	---	---	8.5	8.1	8.3	8.8	8.4	8.7
10	---	---	---	---	---	---	8.5	8.2	8.3	8.8	8.5	8.7
11	---	---	---	7.8	7.6	7.7	8.6	8.3	8.4	8.7	8.6	8.6
12	---	---	---	7.9	7.7	7.8	8.5	8.4	8.5	8.7	8.5	8.6
13	---	---	---	7.8	7.7	7.7	8.7	8.3	8.5	8.6	8.5	8.6
14	---	---	---	7.9	7.6	7.8	8.5	8.2	8.4	8.6	8.4	8.5
15	---	---	---	---	---	---	8.4	8.1	8.3	8.4	8.0	8.2
16	---	---	---	---	---	---	8.4	8.1	8.2	8.5	8.2	8.3
17	---	---	---	---	---	---	8.4	7.9	8.1	8.5	8.4	8.4
18	---	---	---	---	---	---	8.4	8.0	8.2	8.5	8.4	8.4
19	---	---	---	---	---	---	8.4	8.2	8.3	8.6	8.4	8.5
20	---	---	---	---	---	---	8.3	8.2	8.2	8.6	8.4	8.5
21	---	---	---	---	---	---	8.4	8.2	8.3	8.7	8.6	8.6
22	---	---	---	---	---	---	8.4	8.2	8.3	8.7	8.6	8.6
23	---	---	---	---	---	---	8.5	8.3	8.4	8.7	8.7	8.7
24	7.9	7.6	7.8	---	---	---	8.6	8.4	8.5	8.7	8.6	8.7
25	7.9	7.8	7.8	---	---	---	8.6	8.4	8.5	8.6	8.5	8.6
26	7.8	7.4	7.6	---	---	---	8.6	8.4	8.5	8.6	8.4	8.5
27	7.9	7.7	7.8	---	---	---	8.7	8.4	8.5	8.7	8.5	8.5
28	7.8	7.6	7.7	---	---	---	8.6	8.4	8.5	8.5	8.4	8.5
29	8.0	7.7	7.8	---	---	---	8.7	8.4	8.5	8.5	8.4	8.5
30	8.4	7.9	8.2	---	---	---	8.7	8.5	8.6	8.5	8.4	8.4
31	---	---	---	---	---	---	8.6	8.3	8.5	---	---	---
MONTH	8.4	7.3	7.7	8.2	7.3	7.7	8.7	7.7	8.3	8.8	8.0	8.5
YEAR	8.8	7.3	8.0									

NOTE: NUMBER OF MISSING DAYS OF RECORD EXCEEDED 20% OF YEAR

04193490 MAUMEE RIVER NEAR WATERVILLED, OH--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	---	---	---	12.0	11.0	11.5	4.0	2.5	3.0	.5	.5	.5
2	---	---	---	12.0	11.5	12.0	3.5	3.0	3.5	.5	.5	.5
3	---	---	---	12.0	11.0	11.5	3.5	2.5	3.0	1.5	.5	1.0
4	---	---	---	12.5	11.0	11.5	3.5	3.0	3.5	2.0	.5	1.5
5	---	---	---	12.5	12.0	12.0	3.0	3.0	3.0	1.0	.5	1.0
6	15.5	14.5	15.0	12.0	8.5	10.5	3.0	2.5	2.5	1.0	.5	1.0
7	14.5	13.0	13.5	8.5	7.5	8.0	3.0	2.5	3.0	.5	.5	.5
8	14.0	12.0	13.0	9.0	7.5	8.0	3.0	2.0	3.0	.5	.5	.5
9	13.5	12.0	13.0	8.5	7.0	8.0	2.0	1.0	1.5	.5	.0	.5
10	13.0	12.5	12.5	7.0	6.0	6.5	1.0	.5	1.0	.5	.0	.5
11	13.0	11.5	12.5	7.0	5.5	6.5	.5	.0	.0	---	---	---
12	13.5	12.0	13.0	7.0	6.0	6.5	1.0	.5	.5	---	---	---
13	13.5	12.0	13.0	6.5	5.5	6.0	1.0	1.0	1.0	---	---	---
14	13.5	12.5	13.0	6.5	6.0	6.5	1.5	1.0	1.0	---	---	---
15	14.0	13.5	13.5	6.5	6.0	6.5	1.0	1.0	1.0	---	---	---
16	14.0	13.0	13.5	6.5	6.0	6.0	1.0	.0	.5	---	---	---
17	13.5	12.5	13.0	6.0	5.5	5.5	.5	.0	.0	---	---	---
18	13.5	11.5	12.5	6.5	5.5	6.0	.5	.0	.0	---	---	---
19	11.5	9.5	10.5	6.5	6.0	6.0	.5	.0	.0	---	---	---
20	10.0	8.5	9.5	6.5	5.0	6.0	.5	.0	.0	---	---	---
21	10.5	10.0	10.5	5.0	3.5	4.0	.0	.0	.0	---	---	---
22	10.0	9.5	10.0	3.5	2.5	3.0	.0	.0	.0	.0	.0	.0
23	9.5	9.0	9.0	2.5	2.0	2.5	.5	.0	.0	.0	.0	.0
24	8.5	7.5	8.0	3.0	2.5	2.5	.5	.0	.5	.0	.0	.0
25	8.5	7.0	8.0	3.0	2.5	3.0	.5	.0	.0	.0	.0	.0
26	9.0	8.5	9.0	4.0	2.5	3.0	.5	.0	.5	.0	.0	.0
27	10.0	9.0	9.5	4.5	3.5	4.0	1.0	.0	.5	.0	.0	.0
28	10.5	9.5	10.0	3.5	3.0	3.0	.5	.0	.0	.0	.0	.0
29	10.5	9.5	10.0	3.0	2.5	3.0	.5	.0	.0	.0	.0	.0
30	11.0	9.5	10.0	2.5	2.0	2.5	.0	.0	.0	.0	.0	.0
31	11.5	10.0	11.0	---	---	---	1.0	.0	.0	.0	.0	.0
MONTH	15.5	7.0	11.5	12.5	2.0	6.5	4.0	.0	1.0	2.0	.0	.5

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	.0	.0	.0	---	---	---	8.0	6.5	7.0	15.5	13.0	14.0
2	.0	.0	.0	---	---	---	9.0	7.0	8.0	16.5	14.0	15.0
3	.0	.0	.0	---	---	---	9.0	6.5	8.0	17.0	15.0	16.0
4	.0	.0	.0	---	---	---	6.5	4.5	5.0	17.5	15.5	16.5
5	---	---	---	---	---	---	5.0	3.0	4.5	17.5	16.5	17.0
6	---	---	---	---	---	---	4.0	2.5	3.5	19.0	16.5	17.5
7	---	---	---	---	---	---	4.5	2.5	3.5	18.5	17.0	18.0
8	---	---	---	---	---	---	5.0	3.0	4.0	18.5	16.0	17.5
9	---	---	---	---	---	---	5.0	3.0	4.0	19.0	17.0	18.0
10	---	---	---	---	---	---	4.5	3.0	3.5	19.5	17.5	18.5
11	.0	.0	.0	.5	.5	.5	4.5	3.0	3.5	20.5	18.5	19.5
12	.0	.0	.0	.5	.5	.5	4.5	3.0	4.0	22.0	19.5	21.0
13	.0	.0	.0	1.0	.5	.5	5.5	4.5	5.0	23.0	21.0	22.0
14	.0	.0	.0	2.5	.5	1.5	7.0	5.0	6.0	23.5	21.5	22.5
15	.0	.0	.0	2.5	2.0	2.0	8.5	6.5	7.5	23.0	21.5	22.5
16	---	---	---	3.0	2.0	2.5	10.0	8.0	9.0	23.0	21.0	22.0
17	---	---	---	3.0	3.0	3.0	10.5	9.5	10.0	23.0	21.5	22.0
18	.0	.0	.0	3.5	3.0	3.5	11.0	9.0	10.0	23.5	22.0	23.0
19	.0	.0	.0	3.5	3.5	3.5	12.0	10.0	11.0	23.5	22.0	23.0
20	.0	.0	.0	3.5	3.0	3.0	12.0	11.0	11.5	23.0	22.0	22.5
21	.0	.0	.0	3.5	3.0	3.0	12.0	10.0	11.0	23.0	19.5	21.0
22	.0	.0	.0	3.5	3.0	3.5	12.0	9.5	11.0	20.0	19.0	19.5
23	.5	.0	.0	4.0	3.0	3.5	13.0	10.5	11.5	20.0	19.0	19.5
24	.5	.0	.5	4.5	3.5	4.0	14.0	11.0	12.5	19.0	18.5	18.5
25	.5	.0	.5	4.5	3.5	4.0	14.0	12.5	13.5	19.0	18.0	18.5
26	.5	.0	.5	3.5	3.0	3.5	15.5	13.5	14.0	19.5	18.0	18.5
27	.5	.5	.5	3.5	2.5	3.0	15.0	13.0	14.5	19.5	18.0	19.0
28	---	---	---	4.5	3.0	3.5	14.5	12.5	13.5	18.0	17.0	17.5
29	---	---	---	5.0	3.5	4.0	14.0	13.0	13.5	18.5	17.5	18.0
30	---	---	---	7.0	4.5	6.0	14.0	13.0	13.0	19.5	18.0	18.5
31	---	---	---	7.5	6.0	7.0	---	---	---	20.5	19.0	19.5
MONTH	.5	.0	.0	7.5	.5	3.0	15.5	2.5	8.5	23.5	13.0	19.0

STREAMS TRIBUTARY TO LAKE ERIE

04193490 MAUMEE RIVER NEAR WATERVILLE, HO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	20.5	19.5	20.0	25.0	21.5	23.5	26.5	25.0	26.0	22.5	20.5	21.5
2	21.0	18.5	19.5	24.5	23.0	24.0	26.0	25.0	25.5	24.0	21.5	22.5
3	20.0	18.5	19.0	24.0	21.0	22.5	27.5	25.0	26.0	22.5	20.5	21.5
4	18.5	17.0	18.0	21.0	19.5	20.5	27.0	26.0	26.0	23.0	20.0	21.0
5	18.5	17.0	18.0	22.0	19.5	20.5	26.0	25.5	25.5	22.0	19.5	20.5
6	20.0	17.0	18.5	24.0	21.0	22.5	26.0	25.0	25.0	22.0	20.0	20.5
7	21.0	19.0	20.0	25.5	23.0	24.0	26.5	25.5	26.0	20.0	19.0	19.5
8	25.5	20.0	22.0	25.0	24.5	25.0	27.0	25.5	26.5	19.0	18.0	18.5
9	25.0	21.5	22.5	25.0	24.5	25.0	27.0	25.5	26.0	20.5	18.0	19.0
10	23.0	21.5	22.0	27.0	25.0	26.0	25.0	24.0	24.5	22.5	18.5	20.5
11	22.5	20.5	21.5	25.5	24.5	25.0	24.5	22.5	23.0	22.5	20.5	21.5
12	22.5	21.0	22.0	26.0	23.5	25.0	23.5	22.5	22.5	24.5	21.5	23.0
13	23.0	21.5	22.0	27.0	24.5	25.5	25.5	22.5	23.5	25.0	23.0	24.0
14	23.5	21.0	22.5	27.0	25.5	26.5	25.0	22.5	23.5	25.5	24.0	24.5
15	23.5	21.5	23.0	28.0	26.5	27.0	26.0	23.0	24.0	24.5	23.0	23.5
16	24.0	20.5	22.0	28.5	27.0	28.0	26.5	23.5	25.0	23.0	21.0	22.0
17	22.0	19.5	21.0	29.5	27.5	28.5	26.5	24.5	25.5	21.0	20.0	20.5
18	23.5	21.0	22.0	29.0	28.0	28.5	26.5	23.5	24.5	21.5	19.5	20.0
19	23.0	21.5	22.0	28.0	26.5	27.5	26.0	23.5	24.5	20.0	18.5	19.5
20	22.5	20.0	21.5	27.5	26.0	26.5	25.5	23.5	24.0	19.5	18.0	18.5
21	22.0	19.5	20.5	27.5	25.5	26.5	24.0	23.0	23.5	18.0	16.5	17.0
22	21.5	19.5	20.5	27.0	25.0	26.0	22.5	21.0	21.5	17.0	16.0	16.0
23	21.5	19.0	20.5	26.0	24.0	24.5	22.5	20.5	21.0	17.5	15.5	16.5
24	23.0	19.5	21.0	26.5	25.0	25.5	23.5	21.0	22.0	16.5	15.5	16.0
25	23.0	21.0	22.0	27.0	25.5	26.0	25.0	21.5	23.0	16.0	15.5	16.0
26	23.5	22.0	23.0	27.5	26.5	27.0	23.0	21.0	22.0	16.5	16.0	16.0
27	23.5	21.5	22.0	28.5	27.0	27.5	24.5	21.5	22.5	16.5	16.0	16.0
28	24.0	23.0	23.5	28.0	26.5	27.0	22.5	21.0	21.5	17.0	15.5	16.0
29	24.0	22.5	23.0	27.5	26.5	26.5	21.0	19.5	20.5	17.5	15.5	16.0
30	24.5	23.0	24.0	27.0	25.5	26.5	21.5	19.5	20.5	17.5	16.5	17.0
31	---	---	---	26.5	25.0	25.5	21.5	20.5	21.0	---	---	---
MONTH	25.5	17.0	21.5	29.5	19.5	25.5	27.5	19.5	23.5	25.5	15.5	19.5
YEAR	29.5	.0	12.5									

OXYGEN, DISSOLVED (DO), MG/L, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	---	---	---	11.4	10.2	11.0	11.1	10.3	10.8	13.3	12.9	13.1
2	---	---	---	10.9	10.0	10.3	10.4	9.8	10.1	13.3	13.1	13.2
3	---	---	---	11.0	10.2	10.6	11.3	10.1	10.6	13.1	12.8	12.9
4	---	---	---	11.3	10.0	10.6	11.2	10.8	11.1	12.7	11.9	12.3
5	---	---	---	11.0	10.6	10.7	11.6	10.7	11.0	12.4	12.2	12.3
6	11.8	10.7	11.3	10.6	8.2	10.1	11.7	10.7	11.1	12.6	12.2	12.4
7	11.4	9.2	10.2	10.5	9.8	10.1	11.1	10.7	10.9	12.7	12.5	12.6
8	11.4	9.4	10.3	10.4	10.0	10.2	10.8	9.9	10.5	12.9	12.7	12.8
9	11.4	9.3	10.2	10.6	9.9	10.2	12.4	10.0	10.9	13.0	12.7	12.8
10	10.7	9.6	10.0	11.0	10.2	10.5	12.7	11.4	11.8	12.8	12.5	12.7
11	9.8	9.0	9.4	11.1	10.3	10.7	13.1	11.7	12.2	---	---	---
12	10.2	9.0	9.6	11.3	10.2	10.6	12.8	11.7	12.2	---	---	---
13	10.7	9.3	9.8	10.8	9.9	10.4	13.2	11.7	12.3	---	---	---
14	11.0	9.3	10.1	11.3	10.2	10.6	13.4	12.0	12.6	---	---	---
15	10.7	10.0	10.3	11.6	10.2	10.7	13.4	12.0	12.5	---	---	---
16	11.2	10.2	10.8	11.7	10.5	11.0	14.0	11.7	13.1	---	---	---
17	12.7	10.7	11.8	12.1	10.3	11.1	15.2	13.8	14.5	---	---	---
18	10.8	9.1	9.8	11.2	10.6	11.0	15.7	14.1	14.8	---	---	---
19	11.1	8.8	9.8	12.7	10.4	11.5	16.8	14.4	15.7	---	---	---
20	11.6	10.4	11.3	11.2	9.9	10.5	16.8	14.6	16.0	---	---	---
21	11.8	10.5	11.1	11.4	10.4	10.8	16.9	14.8	15.8	---	---	---
22	11.4	10.2	10.6	12.1	10.8	11.3	15.1	13.8	14.6	12.9	12.6	12.8
23	10.5	9.3	9.9	12.5	10.9	11.6	14.8	12.3	13.2	12.7	12.0	12.4
24	10.7	9.7	10.2	12.7	11.2	11.9	12.4	12.0	12.2	12.5	11.7	12.2
25	11.9	10.1	10.9	12.6	11.3	11.9	13.5	12.2	12.7	12.4	11.9	12.1
26	11.2	10.4	10.8	11.7	10.6	11.2	13.2	13.0	13.1	12.1	10.4	11.7
27	10.4	8.6	9.6	10.9	9.8	10.4	13.1	12.8	12.9	11.9	11.3	11.7
28	10.9	10.0	10.4	10.7	10.1	10.4	13.1	12.3	12.8	11.8	11.6	11.7
29	11.4	10.7	11.0	11.7	10.2	10.9	12.6	12.3	12.5	11.8	11.2	11.5
30	11.9	11.4	11.6	11.6	10.9	11.2	12.7	12.4	12.6	11.7	11.1	11.4
31	11.8	11.4	11.6	---	---	---	13.4	12.4	13.0	11.4	11.0	11.2
MONTH	12.7	8.6	10.5	12.7	8.2	10.8	16.9	9.8	12.6	13.3	10.4	12.3

04193490 MAUMEE RIVER NEAR WATERVILLE, OH--Continued

OXYGEN, DISSOLVED (DO), MG/L, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	11.2	11.0	11.1	---	---	---	10.7	8.6	9.9	---	---	---
2	11.1	10.5	10.8	---	---	---	10.9	9.3	10.1	---	---	---
3	10.9	10.4	10.6	---	---	---	10.8	9.4	10.1	---	---	---
4	10.9	10.6	10.7	---	---	---	11.4	10.5	11.0	---	---	---
5	---	---	---	---	---	---	10.3	7.3	8.7	---	---	---
6	---	---	---	---	---	---	9.4	7.6	8.3	---	---	---
7	---	---	---	---	---	---	10.6	8.5	9.2	---	---	---
8	---	---	---	---	---	---	10.4	8.6	9.5	---	---	---
9	---	---	---	---	---	---	11.4	9.2	10.4	---	---	---
10	---	---	---	---	---	---	11.7	10.1	11.1	---	---	---
11	11.4	11.2	11.3	12.2	12.1	12.1	10.9	8.8	10.1	---	---	---
12	11.3	11.1	11.2	12.3	11.5	12.1	10.7	9.3	10.1	8.8	7.3	8.2
13	11.2	11.1	11.2	11.9	11.2	11.6	10.8	8.8	10.0	8.7	7.2	7.8
14	11.3	11.2	11.2	11.4	10.2	10.8	11.2	8.7	9.9	7.9	6.1	7.0
15	---	---	---	10.3	9.9	10.2	11.2	9.0	10.1	7.3	5.1	6.3
16	---	---	---	10.5	9.6	10.0	---	---	---	7.4	5.6	6.5
17	---	---	---	10.5	9.1	9.8	---	---	---	6.5	3.9	5.2
18	11.4	11.2	11.2	10.4	9.3	10.0	---	---	---	5.7	3.7	4.9
19	12.1	11.2	11.5	12.1	9.5	10.9	---	---	---	5.7	3.3	4.5
20	12.2	12.1	12.2	11.1	9.5	10.6	---	---	---	---	---	---
21	12.3	12.1	12.2	10.5	8.7	10.0	---	---	---	---	---	---
22	12.2	12.0	12.1	10.8	9.5	10.1	---	---	---	---	---	---
23	---	---	---	10.6	8.8	9.8	---	---	---	---	---	---
24	12.1	10.9	11.3	11.7	9.6	10.5	---	---	---	---	---	---
25	11.2	10.7	11.0	10.9	8.9	9.8	---	---	---	---	---	---
26	11.2	11.0	11.1	11.0	8.7	9.7	---	---	---	5.0	3.7	4.3
27	---	---	---	11.2	9.7	10.5	---	---	---	5.2	3.7	4.5
28	---	---	---	10.8	9.4	10.2	---	---	---	6.4	3.9	4.7
29	---	---	---	11.2	8.8	9.5	---	---	---	5.1	3.7	4.7
30	---	---	---	11.1	9.5	10.4	---	---	---	5.9	4.3	5.1
31	---	---	---	10.8	8.5	9.7	---	---	---	5.8	3.6	4.8
MONTH	12.3	10.4	11.3	12.3	8.5	10.4	11.7	7.3	9.9	8.8	3.3	5.6
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	5.0	3.8	4.4	---	---	---	---	---	---	7.9	4.4	6.6
2	5.4	4.1	4.8	---	---	---	---	---	---	9.0	5.9	7.4
3	6.3	4.5	5.4	---	---	---	---	---	---	9.0	5.3	7.0
4	6.0	4.6	5.3	---	---	---	15.9	7.5	11.3	8.7	5.6	6.8
5	5.9	4.3	5.0	---	---	---	8.2	5.2	6.3	8.8	6.1	7.4
6	---	---	---	---	---	---	8.8	5.5	7.4	9.2	6.0	7.4
7	---	---	---	---	---	---	10.2	4.9	8.1	6.9	6.1	6.6
8	---	---	---	---	---	---	10.8	7.4	8.4	6.1	5.6	5.9
9	---	---	---	---	---	---	10.5	6.2	7.6	10.1	5.9	8.2
10	---	---	---	---	---	---	9.5	6.0	7.5	9.5	6.3	8.2
11	---	---	---	---	---	---	8.9	5.6	7.3	8.6	7.0	7.9
12	---	---	---	8.4	6.5	5.5	8.4	6.0	7.4	9.6	6.6	8.1
13	---	---	---	6.7	3.9	4.9	11.5	6.1	8.6	8.1	6.6	7.5
14	---	---	---	6.3	3.3	4.7	9.6	5.5	7.6	7.8	5.3	6.4
15	---	---	---	---	---	---	8.5	4.4	6.5	5.6	2.9	4.3
16	---	---	---	---	---	---	8.0	4.9	6.3	7.3	4.6	5.7
17	---	---	---	---	---	---	7.5	3.9	5.7	8.2	6.5	7.2
18	---	---	---	---	---	---	8.4	3.1	6.0	8.8	6.6	7.4
19	---	---	---	---	---	---	7.7	6.1	6.8	8.9	7.0	8.0
20	---	---	---	---	---	---	6.8	4.9	5.6	8.8	6.8	7.7
21	---	---	---	---	---	---	7.6	4.9	6.0	8.1	6.5	7.4
22	---	---	---	---	---	---	7.1	5.2	6.2	8.6	6.8	7.5
23	---	---	---	---	---	---	7.6	5.6	6.5	8.4	7.0	7.7
24	---	---	---	---	---	---	9.6	6.7	7.9	7.5	6.9	7.2
25	---	---	---	---	---	---	9.5	6.7	7.8	7.1	5.9	6.5
26	---	---	---	---	---	---	8.8	6.2	7.5	6.8	5.4	6.1
27	---	---	---	---	---	---	10.2	5.6	7.4	7.8	6.4	7.0
28	---	---	---	---	---	---	8.2	5.3	6.7	8.9	5.8	7.0
29	---	---	---	---	---	---	8.0	5.7	7.0	8.7	7.0	7.9
30	---	---	---	---	---	---	9.0	6.1	7.4	8.1	7.0	7.6
31	---	---	---	---	---	---	8.4	4.5	6.5	---	---	---
MONTH	6.3	3.8	5.0	8.4	3.3	5.0	15.9	3.1	7.2	10.1	2.9	7.1
YEAR	16.9	2.9	9.7									

NOTE: NUMBER OF MISSING DAYS OF RECORD EXCEEDED 20% OF YEAR

04193490 MAUMEE RIVER NEAR WATERVILLE, OH--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEDIAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	566	723	647	363	---	456	614	503	---	455	594
2	---	599	717	666	318	---	455	579	537	663	455	594
3	---	624	708	668	329	---	492	570	561	576	446	600
4	---	624	699	518	308	---	489	569	567	477	458	603
5	---	633	708	408	---	---	486	579	573	438	494	606
6	625	630	720	411	---	---	483	588	570	---	516	609
7	636	627	723	411	---	---	506	591	588	---	522	612
8	588	651	720	428	---	---	543	594	603	---	525	615
9	570	651	729	479	---	---	552	600	600	---	540	612
10	578	657	738	537	---	---	567	603	605	---	552	615
11	521	666	747	558	483	303	558	606	609	450	552	618
12	516	675	744	---	500	257	528	612	608	444	567	621
13	543	678	744	---	519	183	474	609	633	447	555	624
14	566	687	738	---	536	162	414	603	660	458	552	630
15	570	696	735	---	---	185	420	614	675	480	552	642
16	570	701	732	---	---	225	441	630	653	491	552	642
17	573	705	735	---	---	240	468	645	671	498	558	642
18	582	705	735	---	615	267	455	654	705	504	563	645
19	588	708	752	---	644	288	462	657	620	519	570	645
20	591	723	762	---	662	317	486	654	606	534	576	651
21	636	735	773	---	431	329	519	662	638	546	578	663
22	614	762	780	700	320	345	528	684	665	566	579	675
23	636	746	645	705	279	357	537	695	660	555	582	693
24	660	756	597	690	245	378	564	689	651	546	579	696
25	695	789	671	720	222	401	579	677	651	524	582	702
26	716	786	564	723	228	438	597	663	---	528	588	708
27	699	797	576	713	234	444	591	606	---	531	585	699
28	449	786	576	734	---	459	603	519	---	534	588	689
29	471	731	564	686	---	486	606	515	---	534	591	693
30	527	723	581	572	---	506	612	519	---	531	591	702
31	560	---	611	449	---	470	---	485	---	498	597	---
MEAN	588	694	695	592	412	335	516	609	616	515	548	645

WTR YR 1982 MEAN 576 MAX 797 MIN 162

PH (STANDARD UNITS), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEDIAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	7.6	7.8	7.6		---	7.4	---	7.4	8.0	---	8.5
2	---	7.6	7.9	7.6		---	7.4	---	7.4	8.1	---	8.5
3	---	7.7	7.8	7.7		---	7.4	---	7.5	7.8	---	8.4
4	---	7.8	7.9	7.6		---	---	---	7.5	7.4	8.1	8.4
5	---	7.8	7.8	7.5		---	---	---	7.5	7.4	7.9	8.5
6	8.5	7.8	7.8	7.5		---	---	---	7.6	7.4	8.2	8.5
7	8.4	7.9	7.8	7.4		---	7.9	---	7.4	7.4	8.1	8.5
8	8.3	8.0	7.8	7.5		---	7.9	---	7.6	---	8.1	8.4
9	8.2	8.0	7.8	7.6		---	7.9	---	---	---	8.2	8.7
10	8.2	8.1	7.8	---		---	7.9	---	---	---	8.3	8.7
11	8.0	8.1	7.7	---		8.1	7.8	---	---	7.7	8.5	8.6
12	8.0	8.1	7.7	---		8.2	7.7	8.1	---	7.8	8.5	8.6
13	8.1	8.1	7.7	---		8.4	7.9	8.1	---	7.7	8.5	8.6
14	8.2	8.1	7.8	---		8.3	7.8	7.9	---	7.8	8.4	8.5
15	8.3	8.1	7.7	---		8.0	7.7	7.9	---	---	8.3	8.2
16	8.4	8.2	7.6	---		7.9	7.6	7.9	---	---	8.2	8.3
17	8.6	8.2	7.8	---		7.7	7.5	7.7	---	---	8.1	8.4
18	8.5	8.2	7.8	---		7.7	7.5	7.8	---	---	8.2	8.4
19	8.5	8.3	7.9	---		7.7	7.5	7.8	---	---	8.3	8.5
20	8.6	8.2	7.9	---		7.7	7.4	7.6	---	---	8.2	8.6
21	8.5	8.3	7.9	---		7.7	7.6	7.6	---	---	8.3	8.6
22	8.5	8.2	7.9	---		7.7	7.7	7.6	---	---	8.3	8.6
23	8.2	8.2	7.7	---		7.8	7.6	7.6	---	---	8.4	8.7
24	8.0	8.3	7.6	---		7.7	7.6	7.5	7.8	---	8.5	8.7
25	8.2	8.3	7.8	---		7.7	7.6	7.5	7.8	---	8.5	8.6
26	8.3	8.3	7.5	---		7.8	---	7.6	7.6	---	8.5	8.5
27	8.1	8.2	7.5	---		7.9	---	7.5	7.8	---	8.5	8.5
28	7.4	8.0	7.5	---		7.9	---	7.3	7.8	---	8.5	8.5
29	7.5	7.9	7.5	---		7.8	---	7.3	7.8	---	8.6	8.5
30	7.5	7.9	7.5	---		7.7	---	7.4	8.1	---	8.6	8.4
31	7.6	---	7.6	---		7.4	---	7.4	---	---	8.5	---
MEAN	8.2	8.1	7.7	7.6		7.9	7.7	7.7	7.6	7.7	8.3	8.5

WTR YR 1982 MEAN 8.0 MAX 8.7 MIN 7.3

NOTE: NUMBER OF MISSING DAYS OF RECORD EXCEEDED 20% OF YEAR

04193490 MAUMEE RIVER NEAR WATERVILLE, OH--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEDIAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	11.0	2.5	.5	.0	---	7.0	13.5	20.0	23.5	26.0	21.0
2	---	12.0	3.5	.5	.0	---	8.0	15.0	19.0	24.0	25.5	22.0
3	---	12.0	3.0	1.0	.0	---	8.5	16.0	19.0	22.5	26.0	21.0
4	---	11.5	3.5	1.5	.0	---	5.0	17.0	18.0	20.5	26.0	20.0
5	---	12.0	3.0	.5	---	---	4.5	17.0	18.0	20.5	25.5	20.5
6	15.0	10.0	2.5	1.0	---	---	3.5	17.0	18.0	21.5	25.0	20.5
7	13.5	8.0	3.0	.5	---	---	3.5	18.0	20.0	23.5	26.0	19.5
8	13.0	8.0	3.0	.5	---	---	4.0	17.0	21.5	25.0	26.5	18.5
9	13.0	8.0	1.0	.5	---	---	4.0	18.0	22.5	25.0	25.5	18.5
10	12.5	6.5	1.0	.5	---	---	4.0	18.5	22.0	25.5	24.5	20.0
11	12.5	6.5	.0	---	.0	.5	4.0	19.0	21.5	25.0	23.0	21.5
12	13.0	6.5	.5	---	.0	.5	4.0	20.5	22.0	25.0	22.5	22.5
13	13.0	6.0	1.0	---	.0	.5	5.0	22.0	22.0	25.5	23.5	24.0
14	13.5	6.0	1.0	---	.0	1.5	6.0	22.5	22.5	26.5	23.0	24.0
15	13.5	6.5	1.0	---	.0	2.0	7.5	22.5	23.0	27.0	24.0	23.5
16	13.5	6.0	.5	---	---	2.5	9.5	22.0	22.0	28.0	25.0	22.0
17	13.0	6.0	.0	---	---	3.0	10.0	22.0	20.5	28.5	25.0	20.5
18	12.5	6.0	.0	---	.0	3.0	10.0	23.0	21.5	28.0	24.5	20.0
19	10.5	6.5	.0	---	.0	3.5	11.5	23.0	22.0	27.0	24.5	19.0
20	9.0	6.0	.0	---	.0	3.0	11.5	22.5	21.5	26.5	24.0	18.5
21	10.5	4.0	.0	---	.0	3.0	11.0	20.5	20.5	26.0	23.0	17.0
22	10.0	2.5	.0	.0	.0	3.5	10.5	19.5	20.5	26.5	21.5	16.0
23	9.0	2.5	.0	.0	.0	3.5	11.5	19.5	20.5	24.5	21.0	16.0
24	8.0	2.5	.5	.0	.5	4.0	12.5	18.5	21.0	25.5	21.5	15.5
25	8.0	3.0	.0	.0	.5	4.5	13.5	18.5	22.0	26.0	22.5	16.0
26	8.5	2.5	.5	.0	.5	3.5	14.0	18.5	22.5	27.0	22.5	16.0
27	9.5	4.0	.5	.0	.5	3.0	14.5	19.0	22.0	27.5	22.0	16.5
28	10.0	3.0	.0	.0	---	3.5	13.5	17.5	23.5	27.0	21.5	16.0
29	10.0	3.0	.0	.0	---	4.0	13.5	17.5	23.5	26.5	20.5	16.0
30	10.0	2.5	.0	.0	---	5.5	13.0	18.5	24.0	26.5	20.5	17.0
31	10.5	---	.5	.0	---	6.5	---	19.5	---	25.0	21.0	---
MEAN	11.5	6.5	1.0	.5	.0	3.0	8.5	19.0	21.0	25.5	23.5	19.5

WTR YR 1982 MEAN 12.5 MAX 28.5 MIN .0

OXYGEN, DISSOLVED (DO), MG/L, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEDIAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	11.4	10.8	13.1	11.1	---	10.0	---	4.5	---	---	7.0
2	---	10.2	10.1	13.2	10.7	---	10.1	---	4.8	---	---	7.3
3	---	10.5	10.5	12.9	10.5	---	10.1	---	5.3	---	---	6.7
4	---	10.3	11.1	12.2	10.7	---	11.1	---	5.3	---	11.0	6.4
5	---	10.6	10.9	12.3	---	---	8.5	---	5.1	---	6.2	7.7
6	11.3	9.9	10.9	12.5	---	---	8.1	---	---	---	7.7	7.3
7	10.2	10.0	10.9	12.6	---	---	9.1	---	---	---	8.4	6.6
8	10.3	10.1	10.5	12.8	---	---	9.6	---	---	---	8.0	6.0
9	10.0	10.2	10.2	12.9	---	---	10.4	---	---	---	7.3	8.4
10	10.0	10.5	11.6	12.7	---	---	11.3	---	---	---	7.5	8.3
11	9.4	10.7	12.0	---	11.3	12.1	10.3	---	---	---	7.3	7.9
12	9.7	10.6	12.2	---	11.2	12.1	10.2	8.6	---	6.6	7.5	8.1
13	9.8	10.3	12.3	---	11.2	11.7	10.2	7.9	---	4.7	8.6	7.7
14	10.0	10.5	12.6	---	11.3	10.8	9.7	7.1	---	4.6	7.5	6.3
15	10.3	10.6	12.3	---	---	10.2	10.2	6.3	---	---	6.4	4.3
16	10.8	10.9	13.1	---	---	10.0	---	6.5	---	---	6.2	5.6
17	11.7	11.0	14.5	---	---	9.9	---	5.3	---	---	5.6	7.2
18	9.7	11.0	14.7	---	11.2	10.1	---	5.1	---	---	5.9	7.3
19	9.3	11.5	15.7	---	11.2	10.8	---	4.6	---	---	6.7	8.1
20	11.4	10.5	16.0	---	12.2	10.6	---	---	---	---	5.7	7.5
21	11.2	10.8	15.8	---	12.3	10.2	---	---	---	---	6.1	7.5
22	10.6	11.2	14.7	12.8	12.1	10.1	---	---	---	---	6.2	7.4
23	10.1	11.5	12.6	12.5	---	9.7	---	---	---	---	6.4	7.7
24	10.1	11.7	12.2	12.3	11.1	10.5	---	---	---	---	7.4	7.2
25	10.5	11.9	12.5	12.1	11.1	9.8	---	---	---	---	7.6	6.4
26	10.9	11.2	13.1	11.8	11.2	9.4	---	4.1	---	---	7.6	6.2
27	9.5	10.5	12.9	11.7	---	10.5	---	4.5	---	---	7.3	6.8
28	10.5	10.5	13.0	11.8	---	10.1	---	4.7	---	---	6.5	6.5
29	10.9	10.5	12.5	11.5	---	9.4	---	4.7	---	---	7.4	8.0
30	11.7	11.1	12.6	11.4	---	10.3	---	5.2	---	---	7.2	7.6
31	11.6	---	13.2	11.1	---	9.7	---	4.9	---	---	6.3	---
MEAN	10.4	10.7	12.5	12.3	11.3	10.4	9.9	5.7	5.0	5.3	7.1	7.1

WTR YR 1982 MEAN 9.7 MAX 16.0 MIN 4.1

NOTE: NUMBER OF MISSING DAYS OF RECORD EXCEEDED 20% OF YEAR

STREAMS TRIBUTARY TO LAKE ERIE

04193500 MAUMEE RIVER AT WATERVILLE, OH

(National stream quality accounting network station)

LOCATION.--Lat 41°30'00", long 83°42'46", Lucas County, Hydrologic Unit 04100009, on downstream side of first pier from left end of bridge on State Highway 64 at Waterville, 3 mi (5 km) downstream from Tontogany Creek, and 20.7 mi (33.3 km) upstream from mouth.

DRAINAGE AREA.--6,330 mi² (16,395 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--November 1898 to December 1901, August 1921 to December 1935, March 1939 to current year.

REVISED RECORDS.--WSP 894: 1930(M). WSP 1084: 1946. WSP 1387: 1900(M), 1922-23, 1933. WDR OH-68-1: 1967. WDR OH-70-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 595.71 ft (181.572 m) National Geodetic Vertical Datum of 1929. Nov. 19, 1898, to Dec. 31, 1901, Aug. 26, 1921 to July 31, 1930, nonrecording gage Aug. 1, 1930 to Dec. 31, 1935, water-stage recorder, Mar. 14, 1939 to Mar. 12, 1940, nonrecording gage at same site and datum.

REMARKS.--Records fair. Low flow slightly regulated by powerplants upstream from station. Small diversion upstream from gage into Portage River basin (see station 04195500).

AVERAGE DISCHARGE.--57 years (1921-35, 1939-82) 4,919 ft³/s (139.3 m³/s), 10.55 in/yr (268 mm/yr): includes flow in Miami and Erie Canal at Waterville 1922-29; canal was abandoned in 1929 and was filled in prior to March 1939.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 121,000 ft³/s (3,427 m³/s) Mar. 14, 1982, gage height, 14.96 ft (4.560 m); recorder-manometer 17.18 ft (5.236 m) from floodmark. Practically no flow at times prior to June 30, 1929, when entire river flow was being diverted by canal; minimum daily since canal was abandoned, 26 ft³/s (0.74 m³/s) Oct. 24, 1964.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1913 reached a stage of 19.9 ft (6.07 m), from information by local resident, estimated discharge, 180,000 ft³/s (5,100 m³/s), from rating curve extended above 94,000 ft³/s (2,662 m³/s).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 121,000 ft³/s (3,427 m³/s) Mar. 14, gage height, 14.96 ft (4.060 m); recorded-manometer 17.18 ft (5.236 m); minimum daily, 200 ft³/s (5.664 m³/s) Sept. 4,5.

REVISIONS.--Revised figures of discharge of the Water Year 1981, superseding those published in WRD-OH-81-2 are given herein.

EXTREMES FOR 1981 WATER YEAR.--Maximum discharge 89,800 ft³/s (2,543 m³/s) June 16, 1981 gage height 13.31 ft (4.057 m); minimum daily 208 ft³/s (5.89 m³/s) Oct. 27, 1980.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	709	505	694	1010	3100	14000	1860	14200	5690	6210	3450	2410
2	663	546	1130	1000	4400	12000	1170	12300	6630	10100	3660	2300
3	2130	618	694	1010	3900	9500	1450	11100	4120	9190	3810	8940
4	842	709	878	1010	3100	7200	1690	10100	3810	5440	3720	21300
5	466	560	1150	1000	2400	5620	1710	8200	3480	3970	2940	25000
6	453	633	1320	1000	2100	4880	1590	7450	5260	2990	2430	20000
7	392	560	1390	1000	1850	4320	1760	8000	5440	2560	1930	14300
8	441	546	1640	980	1600	3630	1830	8530	5160	2200	1660	10200
9	404	709	4160	960	1400	3390	1660	7490	20600	1900	1430	5910
10	453	441	6220	940	1600	2910	1590	5760	33700	1600	1300	5190
11	574	466	6150	920	2900	2670	2030	8160	30800	1350	1210	3600
12	358	505	5510	890	4500	2530	2380	11200	22800	1000	1030	2510
13	304	519	4650	860	6400	2200	4880	9660	22500	900	951	1950
14	293	492	4100	830	7300	2200	18600	9020	58600	1000	878	1710
15	325	505	3450	810	7200	2100	36400	18600	79100	940	933	1340
16	314	519	3010	800	9800	1760	31100	28000	85400	920	741	1250
17	325	505	2450	790	16000	1810	22600	24600	67600	840	694	1270
18	404	589	2040	780	20700	1660	17700	18000	41200	760	757	1640
19	293	546	1600	770	28400	1640	13900	12600	25300	820	757	1950
20	325	479	1250	770	51700	1590	11200	9530	17500	760	678	1760
21	381	574	1160	770	49900	1250	8610	6940	14400	820	633	1910
22	273	429	1250	780	39600	1190	7380	5580	22600	1540	648	2130
23	235	466	949	800	32600	1360	6440	4320	27300	2030	678	1810
24	369	532	980	840	31900	1210	4980	3540	17900	2530	663	1500
25	896	589	1000	900	29300	1150	4000	3050	19700	3250	505	1250
26	492	505	987	1010	25500	1090	3750	2590	21400	3690	519	1170
27	208	466	980	1200	22000	1090	3600	2430	19500	2960	519	1250
28	492	694	960	2200	17000	1130	3930	2560	15800	2670	589	896
29	492	663	930	3500	---	1270	8610	3690	11000	2560	574	1090
30	546	574	970	4800	---	1410	12700	6670	6670	2830	546	1390
31	678	---	1000	3500	---	1170	---	4060	---	3220	1170	---
TOTAL	15530	16444	64652	38430	428150	100930	241100	287930	720960	83550	42003	148926
MEAN	501	548	2086	1240	15290	3256	8037	9288	24030	2695	1355	4964
MAX	2130	709	6220	4800	51700	14000	36400	28000	85400	10100	3810	25000
MIN	208	429	694	770	1400	1090	1170	2430	3480	760	505	896
CFSM	.08	.09	.33	.20	2.42	.51	1.27	1.47	3.80	.43	.21	.78
IN.	.09	.10	.38	.23	2.52	.59	1.42	1.69	4.24	.49	.25	.88

CAL YR 1980 TOTAL 1915509 MEAN 5234 MAX 44400 MIN 208 CFSM .83 IN 11.26
WTR YR 1981 TOTAL 2188605 MEAN 5996 MAX 85400 MIN 208 CFSM .95 IN 12.86

04193500 MAUMEE RIVER AT WATERVILLE, OH--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2200	8370	4220	5300	17800	16700	17900	2160	15000	5500	560	304
2	2080	5840	4510	6200	14500	14800	16500	1940	12700	4050	492	314
3	2560	3420	3810	7760	12000	15400	14300	1770	10800	6880	492	325
4	2670	3160	3510	22100	9500	14500	12000	1740	7490	19300	519	200
5	2430	2830	3650	38500	7800	12700	10800	1700	6410	16000	618	200
6	3270	2510	3380	34700	6100	16300	8910	1680	5160	11900	519	263
7	3930	2080	3230	27600	5000	23400	8010	1610	4230	7430	404	273
8	3750	1980	3170	19200	4500	23100	7230	1700	3520	4400	546	283
9	3570	1690	2980	11500	4000	14000	7520	1760	2660	3160	519	283
10	2690	1660	2820	6050	3600	10900	8000	2230	2300	2520	416	293
11	2100	1470	2450	3850	3300	11300	11000	2220	3070	2380	618	358
12	1690	1390	2400	2400	3100	28900	18100	2050	4050	2440	492	304
13	1500	1250	2190	2400	2850	80900	27500	2010	4390	2450	441	283
14	1250	1250	1960	2900	2650	113000	26100	1960	3430	2540	416	273
15	1150	1210	1640	2900	2450	111000	19800	1830	2930	1920	381	304
16	989	1110	1270	2850	2300	95400	14900	1770	2550	1560	347	304
17	914	1150	1130	2550	3800	85500	14800	1620	2660	1280	325	253
18	1430	1130	1270	2300	6200	80300	17800	1710	4270	1120	304	347
19	933	970	1070	2100	9000	68400	15500	1600	6570	1040	293	325
20	1050	2640	833	2000	12500	60600	12100	1600	5160	1210	347	314
21	951	2380	700	1850	16000	57300	8120	1890	4500	1360	325	283
22	1340	2430	1030	1850	21000	47000	6500	3640	3820	1590	253	263
23	3250	2910	3550	2600	26500	36700	4780	6080	4280	1470	369	304
24	4710	3600	12000	3800	33800	28700	4270	6380	3680	1150	381	244
25	4030	3540	15600	5400	41000	23300	3720	5600	2820	1190	381	263
26	3360	3810	13500	6400	35400	20700	3410	4620	2170	970	314	304
27	4480	4380	10900	5800	27500	17800	2900	4860	1760	807	336	453
28	16400	4410	8670	4500	22300	15600	2630	15800	1700	648	404	416
29	20000	5550	6900	3750	---	13300	2480	26400	1740	574	358	532
30	15800	4850	5600	6300	---	11100	2430	23800	3710	741	293	709
31	11300	---	4900	11000	---	15800	---	19900	---	633	293	---
TOTAL	127777	84970	134843	258410	356450	1184400	330010	155630	139530	110213	12756	9574
MEAN	4122	2832	4350	8336	12730	38210	11000	5020	4651	3555	411	319
MAX	20000	8370	15600	38500	41000	113000	27500	26400	15000	19300	618	709
MIN	914	970	700	1850	2300	10900	2430	1600	1700	574	253	200
CFSM	.65	.45	.69	1.32	2.01	6.04	1.74	.79	.74	.56	.07	.05
IN.	.75	.50	.79	1.52	2.09	6.96	1.94	.91	.82	.65	.07	.06

CAL YR 1981 TOTAL 2439569 MEAN 6684 MAX 85400 MIN 505 CFSM 1.06 IN 14.34
WTR YR 1982 TOTAL 2904563 MEAN 7958 MAX 113000 MIN 200 CFSM 1.26 IN 17.07

04193500 MAUMEE RIVER AT WATERVILLE, OH--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1950 to current year.

PERIOD OF DAILY RECORD.--
SUSPENDED SEDIMENT DISCHARGE: April 1950 to current year.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SEDIMENT CONCENTRATIONS: Maximum daily mean, 2,240 mg/L Mar. 26, 1954; minimum daily mean, 1 mg/L on many days during 1953, 1955, and 1963.
SEDIMENT LOADS: Maximum daily, 208,000 tons (189,000 tonnes) Feb. 12, 1959; minimum daily, 0.26 ton (0.24 tonne) Sept. 18, 1955.

EXTREMES FOR CURRENT YEAR.--
SEDIMENT CONCENTRATIONS: Maximum daily mean, 618 mg/L Mar. 14; minimum daily mean, 16 mg/L Nov. 17.
SEDIMENT LOADS: Maximum daily, 189,000 tons (171,000 tonnes) Mar. 14, minimum daily, 15 tons (14 tonnes) Sept. 4,5.

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (FTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L)
OCT									
27...	0915	3220	690	8.2	10.0	30	10.8	96	<10
DEC									
02...	1230	4480	675	8.0	4.0	34	11.8	90	29
MAR									
03...	1300	17100	365	7.6	1.0	30	11.4	80	11
MAY									
05...	0830	1760	565	8.6	16.0	7.8	11.8	120	--
JUN									
16...	1400	2530	560	8.2	19.5	38	8.4	90	--
AUG									
18...	1230	314	540	8.5	25.0	11	9.6	110	--

DATE	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)
OCT									
27...	220	250	310	87	23	24	4.6	90	43
DEC									
02...	70	160	280	77	21	20	3.8	85	44
MAR									
03...	220	820	160	45	12	10	2.9	40	18
MAY									
05...	7	100	240	60	22	18	2.7	77	32
JUN									
16...	1300	2500	250	68	19	18	3.1	66	28
AUG									
18...	30	76	220	52	21	26	4.0	75	41

DATE	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)
OCT								
27...	.5	5.6	441	410	.020	1.40	2.8	.160
DEC								
02...	.3	7.2	439	373	.170	1.20	5.1	.220
MAR								
03...	.2	4.9	231	199	.410	1.30	2.5	.190
MAY								
05...	.3	--	331	--	.060	1.60	1.8	.080
JUN								
16...	.3	6.6	383	310	.020	.70	5.2	.200
AUG								
18...	.4	.4	309	308	.020	2.90	<.10	.150

04193500 MAUMEE RIVER AT WATERVILLE, OH--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	BARIUM, DIS-SOLVED (UG/L AS BA)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)
OCT 27...	0915	4	3	100	60	<1	<1	10	<10
DEC 02...	1230	1	1	100	50	1	<1	40	10
MAY 05...	0830	4	2	<100	45	1	<1	20	10
JUN 16...	1400	2	2	100	57	<1	<1	20	10

DATE	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)
OCT 27...	2	1	9	5	990	28	4	1	60
DEC 02...	3	1	10	5	1400	19	7	2	20
MAY 05...	2	<1	6	7	520	<3	4	2	30
JUN 16...	3	3	13	11	2200	9	7	1	70

DATE	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY DIS-SOLVED (UG/L AS HG)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	SILVER, DIS-SOLVED (UG/L AS AG)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)
OCT 27...	3	.1	<.1	<1	<1	1	<1	60	5
DEC 02...	4	<.1	<.1	<1	<1	<1	<1	40	<4
MAY 05...	<1	.2	.1	<1	<1	<1	<1	10	<3
JUN 16...	6	.2	.2	<1	<1	<1	1	30	8

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE (DEG C)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)
OCT 27...	0915	3220	10.0	38	330
DEC 02...	1230	4480	4.0	46	556
MAR 03...	1300	17100	1.0	52	2400
MAY 05...	0830	1760	16.0	27	128
JUN 16...	1400	2530	19.5	62	424
AUG 18...	1230	314	25.0	24	20

04193500 MAUMEE RIVER AT WATERVILLE, OH--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		OCTOBER			NOVEMBER			DECEMBER	
1	2200	52	309	8370	59	1330	4220	29	330
2	2080	40	225	5840	74	1170	4510	40	487
3	2560	35	242	3420	50	462	3810	30	309
4	2670	32	231	3160	46	392	3510	27	256
5	2430	38	249	2830	53	405	3650	26	256
6	3270	36	318	2510	50	339	3380	25	228
7	3930	41	435	2080	40	225	3230	24	209
8	3750	47	476	1980	37	198	3170	23	197
9	3570	43	414	1690	34	155	2980	23	185
10	2690	43	312	1660	33	148	2820	22	168
11	2100	42	238	1470	32	127	2450	23	152
12	1690	42	192	1390	20	75	2400	24	156
13	1500	41	166	1250	20	67	2190	24	142
14	1250	41	138	1250	20	67	1960	25	132
15	1150	40	124	1210	19	62	1640	25	111
16	989	43	115	1110	18	54	1270	26	89
17	914	35	86	1150	16	50	1130	26	79
18	1430	27	104	1130	20	61	1270	27	93
19	933	31	78	970	32	84	1070	26	75
20	1050	48	136	2640	62	442	833	24	54
21	951	31	80	2380	66	424	700	23	43
22	1340	53	192	2430	58	381	1030	26	72
23	3250	47	412	2910	58	456	3550	50	479
24	4710	68	865	3600	63	612	12000	148	4800
25	4030	39	424	3540	44	421	15600	185	7790
26	3360	38	345	3810	28	288	13500	162	5900
27	4480	75	1110	4380	24	284	10900	136	4000
28	16400	212	9390	4410	19	226	8670	111	2600
29	20000	253	13700	5550	19	285	6900	91	1700
30	15800	188	8020	4850	23	301	5600	75	1130
31	11300	75	2290	---	---	---	4900	67	886
TOTAL	127777	---	41416	84970	---	9591	134843	---	33108
		JANUARY			FEBRUARY			MARCH	
1	5300	70	1000	17800	208	10000	16700	195	8790
2	6200	81	1360	14500	174	6810	14800	178	7110
3	7760	100	2100	12000	148	4800	15400	185	7690
4	22100	260	15500	9500	121	3100	14500	174	6810
5	38500	443	46000	7800	100	2110	12700	155	5310
6	34700	406	38000	6100	80	1320	16300	195	8580
7	27600	315	23500	5000	67	904	23400	277	17500
8	19200	231	12000	4500	60	729	23100	272	17000
9	11500	142	4410	4000	56	605	14000	169	6390
10	6050	80	1310	3600	50	486	10900	136	4000
11	3850	54	561	3300	48	428	11300	141	4300
12	2400	38	246	3100	45	377	28900	333	26000
13	2400	38	246	2850	42	323	80900	515	112000
14	2900	43	337	2650	41	293	113000	618	189000
15	2900	43	337	2450	39	258	111000	556	167000
16	2850	42	323	2300	37	230	95400	393	101000
17	2550	39	269	3800	53	544	85500	218	50300
18	2300	37	230	6200	82	1370	80300	157	34000
19	2100	35	198	9000	113	2750	68400	130	24000
20	2000	34	184	12500	154	5200	60600	121	19800
21	1850	33	165	16000	192	8290	57300	128	19800
22	1850	33	165	21000	247	14000	47000	158	20100
23	2600	40	281	26500	315	22500	36700	178	17600
24	3800	53	544	33800	411	37500	28700	170	13200
25	5400	74	1080	41000	461	51000	23300	162	10200
26	6400	83	1430	35400	413	39500	20700	155	8660
27	5800	77	1210	27500	330	24500	17800	148	7110
28	4500	62	753	22300	266	16000	15600	140	5900
29	3750	51	516	---	---	---	13300	135	4850
30	6300	76	1290	---	---	---	11100	140	4200
31	11000	138	4100	---	---	---	15800	188	8020
TOTAL	258410	---	159645	356450	---	255927	1184400	---	936220

04193500 MAUMEE RIVER AT WATERVILLE, OH--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		APRIL			MAY			JUNE	
1	17900	207	10000	2160	35	204	15000	180	7290
2	16500	198	8820	1940	33	173	12700	155	5310
3	14300	174	6720	1770	31	148	10800	158	4610
4	12000	148	4800	1740	32	150	7490	96	1940
5	10800	134	3910	1700	32	147	6410	84	1450
6	8910	112	2690	1680	31	141	5160	69	961
7	8010	104	2250	1610	30	130	4230	58	662
8	7230	95	1850	1700	31	142	3520	49	466
9	7520	96	1950	1760	31	147	2660	40	287
10	8000	102	2200	2230	37	223	2300	37	230
11	11000	135	4010	2220	37	222	3070	45	373
12	18100	215	10500	2050	34	188	4050	57	623
13	27500	330	24500	2010	34	185	4390	60	711
14	26100	284	20000	1960	34	180	3430	49	454
15	19800	238	12700	1830	32	158	2930	43	340
16	14900	179	7200	1770	31	148	2550	40	275
17	14800	180	7190	1620	30	131	2660	40	287
18	17800	212	10200	1710	31	143	4270	59	680
19	15500	184	7700	1600	30	130	6570	86	1530
20	12100	148	4840	1600	30	130	5160	70	975
21	8120	104	2280	1890	33	168	4500	61	741
22	6500	85	1490	3640	51	501	3820	53	547
23	4780	65	839	6080	79	1300	4280	59	682
24	4270	59	680	6380	84	1450	3680	50	497
25	3720	52	522	5600	76	1150	2820	42	320
26	3410	49	451	4620	63	786	2170	36	211
27	2900	43	337	4860	66	866	1760	32	152
28	2630	40	284	15800	183	7810	1700	31	142
29	2480	39	261	26400	309	22000	1740	32	150
30	2430	39	256	23800	280	18000	3710	51	511
31	---	---	---	19900	238	12800	---	---	---
TOTAL	330010	---	161430	155630	---	70051	139530	---	33407
		JULY			AUGUST			SEPTEMBER	
1	5500	73	1080	560	23	35	304	24	20
2	4050	57	623	492	23	31	314	25	21
3	6880	89	1650	492	23	31	325	24	21
4	19300	230	12000	519	23	32	200	28	15
5	16000	192	8290	618	23	38	200	28	15
6	11900	146	4690	519	23	32	263	25	18
7	7430	97	1950	404	23	25	273	24	18
8	4400	61	725	546	23	34	283	25	19
9	3160	46	392	519	23	32	283	25	19
10	2520	40	272	416	23	26	293	24	19
11	2380	38	244	618	23	38	358	24	23
12	2440	39	257	492	23	31	304	24	20
13	2450	39	258	441	23	27	283	25	19
14	2540	40	274	416	23	26	273	24	18
15	1920	33	171	381	23	24	304	24	20
16	1560	30	126	347	23	22	304	24	20
17	1280	27	93	325	24	21	253	26	18
18	1120	26	79	304	24	20	347	23	22
19	1040	26	73	293	24	19	325	24	21
20	1210	26	85	347	23	22	314	25	21
21	1360	29	106	325	24	21	283	25	19
22	1590	30	129	253	26	18	263	25	18
23	1470	29	115	369	27	27	304	24	20
24	1150	26	81	381	23	24	244	26	17
25	1190	26	84	381	23	24	263	25	18
26	970	25	65	314	25	21	304	24	20
27	807	24	52	336	24	22	453	23	28
28	648	23	40	404	21	23	416	23	26
29	574	23	36	358	24	23	532	23	33
30	741	23	46	293	24	19	709	24	46
31	633	23	39	293	24	19	---	---	---
TOTAL	110213	---	34125	12756	---	807	9574	---	632
YEAR	2904563		1736359						

04194107 LAKE ERIE AT RENO BEACH, OH

LOCATION.-- Lat 41°40'29", long 83°17'32", Lucus County, Hydrologic Unit 04100010, on right bank at mouth of Reno side cut (Coulee Canal) which is Cedar Creek drainage.

PERIOD OF RECORD.-- November 1981 to September 1982.

GAGE.--Water-stage recorder. Datum of gage is 560.00 ft (170.688 m) International Great Lakes Datum.

REMARKS.--Interruptions in record are due to malfunctions of the instruments.

EXTREMES FOR PERIOD OF RECORD.--Maximum recorded gage height, 13.86 ft (4.225 m) June 16, 1982; minimum recorded gage height 9.37 ft (2.856 m) Feb. 1, 1982.

EXTREMES FOR CURRENT YEAR.--Maximum recorded gage height during the period November 1981 to September 1982; 13.86 ft (4.225 m) June 16; minimun recorded gage height, 9.37 ft (2.856 m) Feb. 1.

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		---	12.07	---	10.86	11.24	---	12.55	12.35	12.50	12.09	11.73
2		---	10.51	---	11.65	11.69	---	12.54	12.55	12.41	12.06	11.41
3		---	11.39	---	11.63	11.69	---	12.56	13.22	12.60	12.31	11.11
4		---	11.73	---	11.49	11.77	---	12.67	12.83	12.64	12.00	11.57
5		---	11.40	---	11.59	---	---	12.64	12.70	12.57	12.30	11.55
6		---	11.42	---	11.17	---	---	12.52	12.70	12.55	12.42	11.53
7		---	11.22	---	11.05	---	---	12.47	12.79	12.29	12.21	12.18
8		---	10.98	---	11.40	---	---	12.55	12.66	12.47	11.99	11.68
9		---	11.14	---	11.48	---	---	12.60	12.83	12.50	11.92	11.57
10		---	11.14	---	11.34	---	---	12.63	12.41	12.51	12.02	11.60
11		---	11.34	---	11.50	---	---	12.56	12.65	12.08	12.09	11.59
12		---	11.59	---	11.49	---	---	12.50	12.57	12.02	12.12	11.63
13		---	11.45	11.46	11.44	---	---	12.56	12.38	12.47	12.02	11.61
14		---	11.56	11.46	11.51	---	12.63	12.70	12.52	12.51	11.94	11.52
15		---	11.44	11.23	11.47	---	12.75	12.67	12.13	12.40	12.02	11.60
16		---	11.08	10.66	11.55	---	12.65	12.48	12.69	12.40	11.98	11.31
17		---	11.86	10.79	12.35	---	12.13	12.55	12.45	12.20	11.98	11.65
18		---	11.09	11.47	11.56	---	12.56	12.54	12.56	12.12	11.96	11.16
19		12.09	10.99	11.49	11.27	---	12.68	12.30	12.36	12.28	11.60	11.56
20		10.41	11.02	11.42	11.39	---	12.45	12.45	12.29	12.47	11.58	11.13
21		10.90	10.82	11.82	11.41	---	12.20	12.94	12.12	12.43	12.04	11.36
22		11.24	11.46	11.81	11.41	---	12.52	13.03	12.48	12.45	11.60	11.43
23		11.69	11.20	10.65	11.53	---	12.38	12.51	12.46	12.45	11.56	11.29
24		12.02	10.84	10.13	12.05	---	12.49	12.40	12.52	12.36	11.91	11.19
25		11.86	11.26	11.37	11.52	---	12.59	12.50	12.36	12.13	11.46	11.52
26		11.84	11.75	11.38	11.45	---	12.61	12.54	12.61	12.22	11.66	11.60
27		10.23	10.95	11.50	11.57	---	12.69	12.62	12.58	12.51	11.68	11.52
28		11.25	11.62	10.90	11.65	---	12.78	12.58	12.50	12.16	11.86	11.51
29		11.39	11.16	11.37	---	---	12.72	12.57	12.54	12.35	11.78	11.59
30		11.76	11.29	11.41	---	---	12.66	12.59	12.55	12.21	11.68	11.54
31		---	---	12.45	---	---	---	12.65	---	12.02	11.76	---
MEAN		---	---	---	11.49	---	---	12.58	12.55	12.36	11.92	11.51
MAX		---	---	---	12.35	---	---	13.03	13.22	12.64	12.42	12.18
MIN		---	---	---	10.86	---	---	12.30	12.12	12.02	11.46	11.11

04195500 PORTAGE RIVER AT WOODVILLE, OH

LOCATION.--Lat 41°26'58", long 83°21'41", in sec. 28, T.6 N., R.13 E., Sandusky County, Hydrologic Unit 04100010, on left bank at upstream side of bridge on U.S. Highway 20 in Woodville, 600 ft (183 m) downstream from unnamed right bank tributary, and 10.3 mi (16.6 km) upstream from Sugar Creek.

DRAINAGE AREA.--428 mi² (1,109 km²).

PERIOD OF RECORD.--July 1928 to December 1935, October 1939 to current year.

REVISED RECORDS.--WSP 894: 1929-30. WSP 1207: 1933. WSP 1387: 1931, 1933. WSP 1912: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 614.75 ft (187.376 m) National Geodetic Vertical Datum of 1929. Prior to Oct. 8, 1933, nonrecording gage, Oct. 9, 1933 to Dec. 30 1935, water-stage recorder, Oct. 17 to Nov. 29, 1939, nonrecording gage, all at same site and datum.

REMARKS.--Records good except those for winter period, which are fair. Flow supplemented by water imported from Maumee River basin for municipal supply for city of Bowling Green 16 mi (26 km) upstream. The importation of this water began Sept. 1, 1951. Sediment data collected at this site 1950 to 1956. Water-quality data collected at this site 800 ft (244 m) downstream 1968 to 1980.

AVERAGE DISCHARGE (adjusted for diversion).--50 years, 321 ft³/s (9.091 m³/s), 10.19 in/yr (259 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,500 ft³/s (326 m³/s) Feb. 15, 1950, gage height, 14.51 ft (4.423 m); minimum daily (prior to diversion) 0.4 ft³/s (0.011 m³/s) Aug. 26, 1931; (subsequent to diversion) 1.8 ft³/s (0.051 m³/s) Sept. 22, 1955.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1913 reached a stage of 17 ft (5.2 m), from information by local residents, discharge, 17,000 ft³/s (481 m³/s), from rating curve extended above 11,500 ft³/s (326 m³/s).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 3,500 ft³/s (99.1 m³/s) and maximums (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Oct. 29	0430	6180	175	10.75	3.277	Mar. 14	0300	*10900	309	*13.97	4.258
Jan. 5	1030	4600	132	9.48	2.890	July 5	0030	3810	108	8.64	2.633
Feb. 24	0900	3860	109	8.69	2.649						

Minimum daily discharge, 10 ft³/s (0.28 m³/s) Aug. 18,19,30, Sept.2-6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982, MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	436	641	273	581	1300	831	712	87	514	217	14	11
2	360	452	593	823	960	1230	402	86	517	129	13	10
3	225	352	432	585	560	1000	334	85	294	971	13	10
4	150	287	317	2690	420	760	405	83	192	3480	13	10
5	118	246	364	4420	320	1530	303	82	144	2600	13	10
6	169	238	376	1920	250	2610	187	81	118	767	13	10
7	669	233	337	795	220	2300	169	91	97	392	12	11
8	400	191	373	466	140	1330	200	103	82	287	15	11
9	233	156	405	361	170	824	284	121	76	228	21	13
10	161	133	321	230	150	639	511	110	116	150	22	12
11	126	121	225	290	130	2380	1190	99	203	144	16	12
12	103	113	218	220	110	6590	2280	101	126	152	12	12
13	87	101	156	180	100	10000	2500	100	85	95	12	11
14	79	90	136	160	98	10400	1350	99	65	69	11	12
15	73	85	133	140	120	7870	671	93	54	56	11	12
16	70	85	127	120	250	4610	472	81	61	48	11	11
17	68	85	106	100	650	5500	491	71	346	41	11	15
18	125	83	100	84	902	3850	615	62	469	33	10	16
19	399	80	96	72	1250	1930	430	56	233	31	10	14
20	311	235	92	66	1440	2430	341	54	150	32	15	14
21	201	684	86	62	2150	2990	265	64	134	37	16	13
22	167	601	96	74	2580	1580	196	75	311	35	18	13
23	679	379	1220	240	3100	968	164	269	182	35	17	14
24	802	276	2850	530	3770	712	142	451	109	35	14	13
25	458	415	1400	640	3640	577	132	246	78	25	12	13
26	314	483	671	400	1500	781	126	150	64	21	11	15
27	1310	415	498	260	860	741	122	153	55	18	11	26
28	4960	435	601	190	680	526	108	1870	87	17	11	39
29	5740	311	524	130	---	432	93	2960	435	16	11	48
30	2270	238	355	330	---	412	88	1170	364	16	10	30
31	1040	---	340	2000	---	463	---	747	---	15	11	---
TOTAL	22303	8244	13821	19159	27820	78796	15283	9900	5761	10192	410	461
MEAN	719	275	446	618	994	2542	509	319	192	329	13.2	15.4
MAX	5740	684	2850	4420	3770	10400	2500	2960	517	3480	22	48
MIN	68	80	86	62	98	412	88	54	54	15	10	10
+	5.0	4.6	3.9	4.9	5.1	4.6	5.0	5.5	4.9	5.0	5.1	5.5
MEAN ≠	714	270	442	613	989	2537	504	314	187	324	8.1	9.9
CFSM ≠	1.67	.63	1.03	1.43	2.31	5.93	1.18	.73	.44	.76	.02	.02
IN ≠	1.92	.70	1.19	1.65	2.41	6.84	1.32	.85	.49	.87	.02	.03

CAL YR 1981 TOTAL 194809.4 MEAN 534 MAX 7470 MIN 8.2 (+) 4.6 MEAN ≠ 529 CFSM ≠ 1.24 IN ≠ 16.79
WTR YR 1982 TOTAL 212150.0 MEAN 581 MAX 10400 MIN 10 (+) 4.9 MEAN ≠ 576 CFSM ≠ 1.35 IN ≠ 18.28

\+ Diversion, in cubic feet per second, from Maumee River basin for municipal supply; furnished by city of Bowling Green.
≠ Adjusted for diversion.

04196800 TYMOCHTEE CREEK AT CRAWFORD, OH

LOCATION.--Lat 40°55'22", long 83°20'56", in SE 1/4 sec. 27, T.1 S., R.13 E., Wyandot County, Hydrologic Unit 04100011, on right bank at downstream side of bridge on State Highway 199 (formerly U.S. Highway 23), 0.4 mi (0.6 km) northwest of Crawford, 1.5 mi (2.4 km) downstream from Lick Run, 2.7 mi (4.3 km) upstream from Little Tymochtee Creek, and 3 mi (5 km) southeast of Carey.

DRAINAGE AREA.--229 mi² (593 km²).

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1961-63, and annual maximum, water years 1961-64, June 1964 to current year.

REVISED RECORDS.--WRD Ohio 1969: 1964(P), 1966(M), 1967(P).

GAGE.--Water-stage recorder. Datum of gage is 785.86 ft (239.530 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods ,which are fair. Beginning Mar. 9, 1972 water was diverted at a point 29.4 mi (47.3 km) upstream from station into Killdeer Reservoir. Storage is available for low-flow augmentation. No withdrawals or releases were made during the year.Water-quality data collected at this site 1968 to 1977. Sediment data collected 1970 to 1974.

AVERAGE DISCHARGE.--18 years, 179 ft³/s (5.069 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,390 ft³/s (181 m³/s) March17, 1978, gage height, 9.94 ft (3.030 m); maximum gage height, 11.21 ft (3.417 m) Mar. 6, 1963 (backwater from ice); no flow Aug. 10, Sept. 13-18, Oct. 23 to Nov. 4, 1964, Aug. 23-26, 1965.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in January 1959 reached a stage of 12.9 ft (3.93 m), from information by local resident.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 1,800 ft³/s (51.0 m³ /s)and maximums (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Jan. 6	1230	2150	60.9	6.31	1.923	Mar. 13	0900	*3900	110	7.89	2.405
Feb. 22	----	2500	70.8(a)	*9.83	2.996	Mar. 18	0630	2740	77.6	6.90	2.103
Mar. 6	----	1850	52.4	----	-----						

Minimum daily discharge 0.01 ft³/s (0.0003 m³/s) Sept. 11.

(a) Ice jam.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.9	68	162	175	650	470	1040	41	587	25	2.8	2.2
2	8.9	49	385	250	450	823	847	37	276	18	3.7	3.9
3	8.9	37	374	373	300	680	385	38	153	365	3.7	6.6
4	9.8	31	206	1120	210	410	412	35	100	230	3.2	4.2
5	8.1	27	157	1720	160	1050	316	34	76	65	3.1	1.9
6	26	25	145	2030	120	1500	187	33	59	29	3.4	1.1
7	58	24	118	976	105	900	151	33	47	20	2.5	.65
8	78	20	147	425	92	600	143	37	38	16	2.6	.34
9	68	18	143	160	84	402	198	34	32	13	2.1	.18
10	40	17	127	105	75	235	305	37	47	12	1.5	.03
11	26	16	92	140	66	1230	755	35	127	12	1.4	.01
12	18	14	63	105	60	2670	1340	32	137	12	1.8	.02
13	15	12	54	90	54	3630	1540	28	69	10	2.2	.18
14	12	11	44	78	50	2540	1020	25	43	8.8	2.4	.35
15	11	11	36	65	75	1850	423	25	31	7.3	1.8	.39
16	11	12	31	58	160	1330	247	24	130	5.8	1.0	.43
17	8.9	12	31	50	350	2040	216	19	371	5.3	.82	.56
18	12	11	28	41	800	2470	253	18	313	4.8	.70	.65
19	16	11	25	36	1050	1320	213	22	168	6.2	.55	.52
20	14	96	23	32	1300	1040	147	71	92	7.1	.79	.48
21	11	186	23	32	1700	1520	112	45	73	6.3	1.4	.44
22	9.8	258	22	38	2300	1350	90	23	109	6.4	1.0	.33
23	11	152	200	285	2100	561	71	57	125	6.2	1.3	.48
24	13	116	800	360	1600	348	58	85	68	6.4	1.2	.58
25	21	197	1250	300	1100	258	59	34	42	5.2	1.7	.58
26	19	227	600	270	760	227	57	27	28	4.1	2.0	.43
27	69	242	360	140	540	230	54	133	22	3.6	6.1	2.0
28	344	181	270	90	350	205	50	1210	28	3.9	4.1	2.3
29	347	124	220	70	---	163	46	1310	186	4.5	2.7	1.8
30	206	89	190	600	---	151	41	1040	63	3.5	2.3	1.7
31	106	---	155	1000	---	578	---	725	---	3.1	2.1	---
TOTAL	1615.3	2294	6481	11214	16661	32781	10776	5347	3640	925.5	67.96	35.33
MEAN	52.1	76.5	209	362	595	1057	359	172	121	29.9	2.19	1.18
MAX	347	258	1250	2030	2300	3630	1540	1310	587	365	6.1	6.6
MIN	8.1	11	22	32	50	151	41	18	22	3.1	.55	.01

CAL YR 1981 TOTAL 77049.50 MEAN 211 MAX 5310 MIN 4.7
WTR YR 1982 TOTAL 91838.09 MEAN 252 MAX 3630 MIN .01

04197000 SANDUSKY RIVER NEAR MEXICO, OH

LOCATION.--Lat 41°02'39", long 83°11'42", in sec. 13, T.1 N., R.14 E., Seneca County, Hydrologic Unit 04100011, on right bank at downstream side of county road bridge, 4.1 mi (6.6 km) upstream from Honey Creek, 4.2 mi (6.8 km) north of Mexico, 4.9 mi (7.9 km) south of Tiffin, and 8.3 mi (13.4 km) downstream from Mile Run.

DRAINAGE AREA.--774 mi^2 (2,005 km^2).

PERIOD OF RECORD.--November 1898 to November 1900 (gage height and discharge measurements only), March 1923 to December 1935, July 1938 to current year (discontinued). Discharge records for November 1898 to November 1900, published in 22nd Annual Report, Part 4, are unreliable and should not be used.

REVISED RECORDS.--WSP 714: 1929-30. WSP 874: 1927(M). WSP 1387: 1925, 1928-29, 1930(M), 1931. WSP 1912: Drainage area. See also Period of Record.

GAGE.--Water-stage recorder. Datum of gage is 733.1 ft (223.45 m) National Geodetic Vertical Datum of 1929. Prior to Aug. 15, 1929, nonrecording gage at same site and datum.

REMARKS.--Records good except those for winter periods, which are poor. Water-quality data collected at this site 1965, 1966, 1969, 1971 to 1973, 1976, 1977. Sediment data collected 1969 to 1974.

AVERAGE DISCHARGE.--56 years, 594 ft^3/s (16.82 m^3/s), 10.42 in/yr (265 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 18,900 ft^3/s (535 m^3/s) Jan. 23, 1959, gage height, 22.43 ft (6.837 m), from floodmark; minimum, 1.8 ft^3/s (0.051 m^3/s) Oct. 31, 1942, during repairs to small dam upstream from station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in June 1937 reached a stage of 22.5 ft (6.86 m), from information by local residents, discharge, 19,000 ft^3/s (538 m^3/s).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 4,200 ft^3/s (119 m^3/s) and maximums (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Dec. 24	0730	4380	124	10.85	3.307	Mar. 14	0500	9150	259	15.52	4.730
Jan. 4	1430	5430	154	12.09	3.685	Mar. 18	1830	6520	185	13.25	4.039
Jan. 31	1130	4710	133	11.25	3.429	Apr. 13	0600	4440	126	10.93	3.331
Feb. 23	0630	*9920	281	*16.17	4.929	May 29	0030	4400	125	10.88	3.316
Mar. 6	1830	5250	149	11.89	3.624						

Minimum daily discharge, 17 ft^3/s (0.48 m^3/s) Sept. 21.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	137	249	480	600	4480	1420	3530	214	1180	403	48	31
2	122	204	1050	800	4260	1870	2690	206	801	288	46	37
3	114	176	1080	1640	3410	1390	1520	197	502	1440	46	43
4	108	160	784	4990	2420	1100	1420	191	347	3060	45	53
5	104	149	614	5200	1500	4050	1210	184	271	2250	44	47
6	371	142	553	4260	1200	5170	800	175	231	1020	44	48
7	809	140	514	2390	1100	4530	635	170	198	506	44	37
8	783	136	598	1080	1000	2550	649	184	179	395	52	35
9	462	132	754	964	900	1230	796	195	165	261	53	28
10	300	130	741	1100	800	888	1110	182	176	220	49	28
11	225	124	517	920	700	3130	2140	180	194	187	45	28
12	185	116	381	820	660	6790	3760	168	258	156	43	26
13	160	107	314	700	620	8260	4310	150	216	136	51	24
14	146	101	252	620	580	8560	3410	136	162	113	49	21
15	129	95	226	540	540	6260	1710	132	132	99	44	23
16	119	92	209	490	800	4480	989	122	165	88	42	22
17	118	92	195	440	2000	5850	956	115	908	83	37	22
18	118	93	167	400	4000	6210	1070	112	975	80	35	23
19	117	94	160	370	6000	5170	940	113	642	84	36	21
20	111	253	155	330	7480	3370	701	173	371	100	37	18
21	110	703	150	310	8500	3750	559	389	310	83	43	17
22	110	880	150	300	9260	3200	462	353	290	96	36	19
23	106	622	1000	900	9370	1950	392	376	293	100	33	24
24	99	458	4290	1600	7450	1190	344	796	249	95	35	23
25	95	537	3430	2200	5410	920	310	476	175	86	32	21
26	100	612	2220	1500	3470	830	300	284	137	74	39	21
27	122	647	1250	1100	2110	807	286	353	122	66	40	37
28	623	654	991	900	1370	712	271	3490	141	56	42	49
29	658	518	620	720	---	652	251	3890	485	52	43	59
30	524	396	560	1370	---	612	232	2580	514	50	40	56
31	343	---	520	4450	---	2160	---	1680	---	48	42	---
TOTAL	7628	8812	24925	44004	91390	99061	37753	17966	10789	11775	1315	941
MEAN	246	294	804	1419	3264	3196	1258	580	360	380	42.4	31.4
MAX	809	880	4290	5200	9370	8560	4310	3890	1180	3060	53	59
MIN	95	92	150	300	540	612	232	112	122	48	32	17
CFSM	.32	.38	1.04	1.83	4.22	4.13	1.63	.75	.47	.49	.06	.04
IN.	.37	.42	1.20	2.11	4.39	4.76	1.81	.86	.52	.57	.06	.05

CAL YR 1981 TOTAL 308323 MEAN 845 MAX 13800 MIN 36 CFSM 1.09 IN 14.82
WTR YR 1982 TOTAL 356359 MEAN 976 MAX 9370 MIN 17 CFSM 1.26 IN 17.13

04197020 HONEY CREEK NEAR NEW WASHINGTON, OH

LOCATION.--Lat 40°57'37", long 82°47'19", in SE 1/4, sec. 7, T.22 N., R.20 W., Crawford County, Hydrologic Unit 04100011, on left bank 250 ft (76 m) downstream from State Route 103 bridge and 3.4 mi (5.5 km) east of New Washington.

DRAINAGE AREA.--17 mi^2 (44.0 km^2).

PERIOD OF RECORD.--June 1979 to current year.

GAGE.--Water-stage recorder. Datum of gage is 940.00 ft (286.512 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,810 ft^3/s (51.3 m^3/s) June 13, 1981, gage height, 20.13 ft (6.136 m), from rating curve extended above 325 ft^3/s (9.20 m^3/s) on basis of step backwater analysis; minimum, No flow Oct. 17, 1981.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 250 ft^3/s (7.08 m^3/s) and maximums (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Dec. 23	0745	276	7.82	13.71	4.179	Mar. 11	1630	421	11.9	14.83	4.520
Jan. 4	1115	274	7.76	13.69	4.173	Mar. 16	1600	328	9.29	14.19	4.325
Feb. 20	----	250	7.08	unknown		Mar. 31	0815	387	11.0	14.61	4.453
Mar. 4	2330	*592	16.8	*15.80	4.816						

Minimum discharge, 0.13 ft^3/s (0.004 m^3/s) Sept. 5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.1	3.4	26	19	50	29	72	3.5	2.0	14	.58	.43
2	1.0	3.2	20	24	34	30	39	3.2	1.5	5.5	.59	.47
3	.99	3.1	11	28	25	21	55	2.9	1.1	136	.63	.70
4	.99	2.8	9.2	194	19	118	38	2.7	.94	92	1.8	.24
5	.99	2.7	12	62	15	166	24	2.6	.98	37	1.3	.13
6	65	3.5	12	32	13	73	21	2.4	1.0	19	.89	.32
7	28	3.7	12	25	12	39	20	2.4	.81	23	.65	.36
8	12	3.3	32	17	10	28	21	3.4	.74	37	2.2	.39
9	7.5	2.8	15	15	9.0	22	32	2.7	.63	12	1.7	.36
10	5.8	2.5	9.1	13	8.2	26	40	2.2	.85	6.2	.80	.30
11	4.8	2.5	7.3	12	7.4	184	74	1.8	.63	4.5	.62	.28
12	3.9	2.4	5.3	9.8	6.8	120	90	1.4	.41	3.1	.52	.27
13	3.6	2.1	4.6	8.5	6.4	139	74	1.3	.29	2.2	.51	.21
14	3.3	2.0	4.6	7.6	6.0	73	31	1.2	.26	1.8	.48	.17
15	3.1	2.0	4.6	7.0	10	50	20	1.1	.24	1.5	.40	.19
16	2.7	2.0	4.3	6.2	35	142	15	.94	19	1.3	.31	.25
17	2.6	2.0	3.8	5.6	125	111	26	.94	29	1.1	.32	.19
18	2.6	2.0	3.6	5.4	180	59	27	.90	9.5	1.1	.44	.21
19	2.6	2.0	3.4	5.0	190	43	16	.90	4.4	1.4	.46	.23
20	2.6	66	3.3	4.8	200	89	14	.94	3.2	2.2	.68	.21
21	2.6	28	3.5	4.6	150	55	11	.94	11	1.4	1.3	.23
22	2.5	15	4.6	4.5	54	33	8.6	2.2	4.3	1.0	.66	.24
23	2.5	9.6	185	15	58	25	7.4	12	2.3	1.0	.59	.59
24	2.5	9.1	81	54	70	21	6.6	4.0	1.5	.87	.56	.49
25	2.3	14	34	40	37	17	5.8	2.4	1.2	.78	.52	.55
26	2.7	12	20	28	29	18	5.3	1.8	1.0	.71	.47	.53
27	4.2	11	16	22	22	19	5.2	2.4	.90	.68	.46	1.4
28	5.1	8.5	13	17	21	16	4.5	11	2.7	.67	.43	.96
29	4.9	6.8	12	15	---	20	4.0	4.0	72	.67	.36	.54
30	4.1	5.9	10	12	---	19	3.7	3.0	42	.61	.36	.37
31	3.5	---	12	84	---	190	---	2.4	---	.58	.40	---
TOTAL	192.07	235.9	594.2	797.0	1402.8	1995	811.1	85.56	216.38	410.87	21.99	11.81
MEAN	6.20	7.86	19.2	25.7	50.1	64.4	27.0	2.76	7.21	13.3	.71	.39
MAX	65	66	185	194	200	190	90	12	72	136	2.2	1.4
MIN	.99	2.0	3.3	4.5	6.0	16	3.7	.90	.24	.58	.31	.13
CFSM	.37	.46	1.13	1.51	2.95	3.79	1.59	.16	.42	.78	.04	.02
IN.	.42	.52	1.30	1.74	3.07	4.37	1.77	.19	.47	.90	.05	.03

CAL YR 1981 TOTAL 6527.34 MEAN 17.9 MAX 401 MIN .05 CFSM 1.05 IN 14.28
WTR YR 1982 TOTAL 6774.68 MEAN 18.6 MAX 200 MIN .13 CFSM 1.09 IN 14.82

04197100 HONEY CREEK AT MELMORE, OH

LOCATION.--Lat 41°01'20", long 83°06'35", Seneca County, Hydrologic Unit 04100011, at bridge on State Highways 67 and 100 at Melmore, 1.5 mi (2.4 km) upstream from Buckeye Creek.

DRAINAGE AREA.--149 mi^2 (386 km^2).

PERIOD OF RECORD.--Annual maximum, water years 1961-75, February 1976 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 818 ft (250 m) from topographic map.

REMARKS.--Records good except those for winter period and period of no gage-height record Oct. 31 to Dec. 1, which are fair. Water-quality data collected at this site 1976 to 1977.

AVERAGE DISCHARGE.--6 years, 144 ft^3/s (4.078 m^3/s), 13.12 in/yr (333 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,400 ft^3/s (125 m^3/s) June 13, 1981, gage height, 11.00 ft (3.353 m); minimum discharge 0.58 ft^3/s (0.016 m^3/s) Sept. 11, 28, 29, 30, 1978.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 1,500 ft^3/s (42.5 m^3/s) and maximums (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Feb. 21	1545	2050	58.1	8.07	2.460	Mar. 12	0230	*2490	70.5	*8.74	2.664
Mar. 6	0045	1760	49.8	7.59	2.313						

Minimum daily discharge 1.2 ft^3/s (0.03 m^3/s) Sept. 21.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	23	173	96	550	278	1100	25	101	368	2.8	1.4
2	15	21	229	120	300	392	523	24	65	142	2.6	2.0
3	14	19	182	160	200	223	339	23	47	608	2.6	2.0
4	13	17	123	276	160	365	341	21	35	824	2.6	1.8
5	12	16	120	686	130	1220	216	19	30	723	2.8	1.4
6	43	20	139	1360	110	1390	153	16	25	319	2.8	1.4
7	107	22	135	978	96	675	133	16	24	157	3.5	1.3
8	102	21	172	430	84	321	144	18	20	194	3.5	1.4
9	54	19	204	241	74	197	172	21	18	130	3.3	1.6
10	35	18	156	150	64	151	250	21	17	77	3.8	1.6
11	27	17	100	110	60	1320	491	17	16	50	5.8	1.6
12	21	16	89	94	54	2250	847	15	15	36	4.1	1.5
13	18	15	62	80	52	1920	930	15	14	27	3.0	1.5
14	17	14	50	66	47	1320	487	13	12	21	2.4	1.4
15	16	13	44	58	97	698	231	11	11	16	2.0	1.5
16	16	12	40	52	312	865	157	11	21	13	1.9	1.4
17	15	12	38	48	400	1350	270	9.7	136	12	1.7	1.4
18	16	13	36	44	1000	829	315	8.8	188	10	1.6	1.5
19	15	16	35	41	1140	446	184	8.8	94	9.3	1.5	1.6
20	14	32	34	39	1130	634	128	8.8	52	10	1.7	1.4
21	14	110	33	38	1360	685	104	9.3	76	15	1.9	1.2
22	14	150	33	37	1450	398	85	11	97	13	2.0	1.3
23	15	130	40	150	1110	241	67	73	65	9.3	1.9	2.4
24	14	120	658	410	1070	178	56	136	44	7.0	2.4	2.8
25	13	110	861	370	620	147	50	67	28	5.8	3.3	2.0
26	13	150	793	320	394	143	45	35	19	5.8	2.4	2.0
27	14	160	363	190	264	149	40	133	16	4.8	2.1	5.9
28	20	150	213	150	215	133	35	455	66	4.8	1.7	4.1
29	22	140	130	120	---	137	29	223	575	4.1	1.5	4.4
30	23	120	110	100	---	133	27	197	535	3.5	1.5	8.5
31	24	---	96	720	---	830	---	155	---	3.3	1.4	---
TOTAL	772	1696	5491	7734	12543	20018	7949	1816.4	2462	3822.7	78.1	65.3
MEAN	24.9	56.5	177	249	448	646	265	58.6	82.1	123	2.52	2.18
MAX	107	160	861	1360	1450	2250	1100	455	575	824	5.8	8.5
MIN	12	12	33	37	47	133	27	8.8	11	3.3	1.4	1.2
CFSM	.17	.38	1.19	1.67	3.01	4.34	1.78	.39	.55	.83	.02	.02
IN.	.19	.42	1.37	1.93	3.13	5.00	1.98	.45	.61	.95	.02	.02

CAL YR 1981 TOTAL 57392.3 MEAN 157 MAX 3490 MIN 2.6 CFSM 1.05 IN 14.33
WTR YR 1982 TOTAL 64447.5 MEAN 177 MAX 2250 MIN 1.2 CFSM 1.19 IN 16.09

04198000 SANDUSKY RIVER NEAR FREMONT, OH
(National stream quality accounting network station)

LOCATION.--Lat 41°18'28", long 83°09'32", in sec. 17, T.4 N., R.15 E., Sandusky County, Hydrologic Unit 04100011, on left bank at downstream side of county road bridge, 2.3 mi (3.7 km) upstream from Ballville diversion dam, 2.5 mi (4.0 km) downstream from Wolf Creek, and 3.5 mi (5.6 km) southwest of Fremont.

DRAINAGE AREA.--1,251 mi² (3,240 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--November 1898 to March 1901 (gage height and discharge measurements only, published at "at Fremont"), October 1923 to December 1935, July 1938 to current year. Monthly discharge only for October 1923, published in WSP 1307.

REVISED RECORDS.--WSP 744: 1931-32. WSP 874: 1938. WSP 1144: 1924-30. WSP 1387: 1925, 1928-29, 1931-35. WSP 1912: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 626.3 ft (190.90 m) National Geodetic Vertical Datum, adjustment of 1912. Nov. 18, 1898, to Mar. 10, 1901, nonrecording gage at site 4 mi (6 km) downstream at different datum. Nov. 8, 1923, to Sept. 5, 1930, nonrecording gage at present site and datum.

REMARKS.--Records good except those for winter periods, which are poor.

AVERAGE DISCHARGE.--56 years (1923-35, 1938-82), 984 ft³/s (27.87 m³/s), 10.69 in/yr (272 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 36,500 ft³/s (1034 m³/s) Mar. 16, 1978 gage height, 13.57 ft (4.136 m); maximum gage height, 16.14 ft (4.919 m) Feb. 24, 1979, (ice jam); minimum discharge, 4.4 ft³/s (0.12 m³/s) Feb. 29, 1964 (result of freezeup); minimum gage height, 0.78 ft (0.238 m) Oct. 20, 1963.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 10,000 ft³/s (283 m³/s) revised, and maximums(*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Jan. 5	0200	11000	314	6.35	1.935	Mar. 13	2130	*16400	464	8.03	2.448
Jan. 31	1300	ice	jam	*14.83	4.520	Mar. 17	0700	11600	329	6.52	1.987
Feb. 21	----	10000	283	----	-----	Mar. 28	1630	10200	289	6.04	1.841

Minimum daily discharge, 27 ft³/s (0,76 m³/s) Sept. 19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	373	617	785	1430	3000	2700	5930	346	1920	1290	63	38
2	321	501	1820	1800	2100	3300	4620	326	1370	829	63	38
3	269	427	1990	2320	1700	2900	2900	306	842	2410	63	37
4	242	377	1600	6380	1300	2500	2550	293	587	7170	63	42
5	222	353	1300	9740	1100	4400	2040	287	466	4570	67	55
6	306	340	1210	7360	980	8000	1550	281	396	2510	63	52
7	1170	324	1110	5100	860	4500	1140	281	339	1220	60	53
8	1350	309	1260	2640	760	2900	1080	319	306	895	57	49
9	900	293	1600	2000	700	2200	1240	326	275	673	67	46
10	587	287	1430	1500	640	1670	1710	326	306	508	67	40
11	444	278	1010	1000	560	6420	3290	319	300	434	67	37
12	362	270	720	820	520	14300	6250	319	300	353	60	35
13	305	252	540	700	480	15000	7580	306	353	281	57	34
14	267	239	450	620	470	14500	5520	287	293	240	57	29
15	245	233	420	560	600	10100	3240	275	229	207	57	43
16	227	229	380	520	1000	8190	1790	263	281	177	54	40
17	218	226	340	470	2500	11000	1790	251	1160	150	51	40
18	228	224	320	430	4500	9440	1990	234	1690	133	47	36
19	240	226	300	390	5200	7890	1690	223	1250	137	41	27
20	225	517	280	370	7400	6310	1290	223	742	145	47	34
21	214	1330	270	360	9700	6420	949	313	706	154	54	39
22	215	1820	270	360	9800	5110	742	516	718	133	47	32
23	238	1430	4780	600	9800	3560	615	778	542	145	43	29
24	235	1010	9100	1400	9400	2130	542	978	491	145	41	50
25	217	938	7010	3800	7400	1630	491	949	389	124	39	46
26	214	1150	4630	2500	5800	1510	466	525	287	106	40	43
27	524	1180	2920	2000	4500	1530	458	551	240	94	35	65
28	2290	1250	1940	1600	3400	1340	419	8450	223	86	37	125
29	1780	1050	1550	1450	---	1190	389	6770	1450	78	39	106
30	1180	813	1180	4600	---	1130	360	4270	1860	74	43	97
31	830	---	1000	5200	---	3330	---	2980	---	67	39	---
TOTAL	16438	18493	53515	70020	96170	167100	64621	32871	20311	25538	1628	1437
MEAN	530	616	1726	2259	3435	5390	2154	1060	677	824	52.5	47.9
MAX	2290	1820	9100	9740	9800	15000	7580	8450	1920	7170	67	125
MIN	214	224	270	360	470	1130	360	223	223	67	35	27
CFSM	.42	.49	1.38	1.81	2.75	4.31	1.72	.85	.54	.66	.04	.04
IN.	.49	.55	1.59	2.08	2.86	4.97	1.92	.98	.60	.76	.05	.04

CAL YR 1981 TOTAL 573054 MEAN 1570 MAX 21800 MIN 37 CFSM 1.26 IN 17.04
WTR YR 1982 TOTAL 568142 MEAN 1557 MAX 15000 MIN 27 CFSM 1.25 IN 16.89

04198000 SANDUSKY RIVER NEAR FREMONT, OH--Continued

SEDIMENT ANALYSES

PERIOD OF RECORD.--Water years 1951-56, 1978 to current year.

PERIOD OF DAILY RECORD.--
SUSPENDED SEDIMENT DISCHARGE: Water years 1951-1956, 1979 to current year.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SEDIMENT CONCENTRATIONS: Maximum daily mean, 2,420 mg/L June 9, 1981; minimum daily mean, 1 mg/L on many days during 1952-1956, 1980, 1981.
SEDIMENT LOADS: Maximum daily, 124,000 tons (112,000 tonnes) June 14, 1981; minimum daily, less than 0.05 ton (.045 tonne) on several days during 1952 and 1954.

EXTREMES FOR CURRENT YEAR.--
SEDIMENT CONCENTRATIONS: Maximum daily mean, 2,020 mg/L May 28; minimum daily mean, 1 mg/L Oct.25,26.
SEDIMENT LOADS: Maximum daily, 44,000 tons (39,000 tonnes) Mar. 12, May 28; minimum daily, 0.58 ton (0.53 tonne) Oct. 26.

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (FTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L)
OCT									
27...	1230	360	735	8.0	12.0	1.7	11.4	95	<10
DEC									
02...	0900	1830	675	8.0	5.0	20	11.0	86	<10
MAR									
03...	1000	2900	335	7.6	.5	75	13.1	90	0
MAY									
04...	1900	293	640	8.5	19.0	24	11.0	120	--
JUN									
16...	1030	245	795	8.3	19.5	32	8.7	94	--
AUG									
18...	0930	47	835	8.2	21.0	23	8.8	98	--

DATE	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)
OCT									
27...	2500	5200	360	95	29	16	3.9	130	38
DEC									
02...	3800	4700	290	79	22	12	3.2	110	36
MAR									
03...	1900	1400	150	42	12	6.0	2.7	43	14
MAY									
04...	28	19	300	71	30	17	2.6	130	28
JUN									
16...	470	700	350	93	29	31	4.2	120	50
AUG									
18...	230	160	330	73	35	37	4.8	160	66

DATE	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)
OCT								
27...	.4	2.5	485	447	.040	1.30	2.3	.070
DEC								
02...	.4	6.9	432	378	.070	.77	3.7	.160
MAR								
03...	.2	4.6	227	182	.280	.91	1.9	.180
MAY								
04...	.3	--	437	--	.020	1.10	1.1	.110
JUN								
16...	.4	6.5	553	446	<.010	.80	2.5	.150
AUG								
18...	.6	1.0	538	475	.020	.90	<.10	.140

04198000 SANDUSKY RIVER NEAR FREMONT, OH--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	BARIUM, DIS-SOLVED (UG/L AS BA)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)
OCT 27...	1230	1	1	100	60	<1	<1	10	<10
DEC 02...	0900	1	0	100	54	<1	<1	30	20
MAY 04...	1900	2	1	<100	55	1	<1	10	<10
JUN 16...	1030	2	2	200	74	<1	<1	20	10

DATE	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)
OCT 27...	1	<1	8	5	480	35	3	1	60
DEC 02...	3	<1	10	5	1700	21	15	<1	80
MAY 04...	3	<1	11	5	1000	<3	40	<1	70
JUN 16...	3	2	35	10	2000	13	20	1	90

DATE	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY DIS-SOLVED (UG/L AS HG)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	SILVER, DIS-SOLVED (UG/L AS AG)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)
OCT 27...	25	<.1	<.1	<1	<1	<1	<1	50	6
DEC 02...	17	<.1	<.1	<1	<1	<1	<1	40	<4
MAY 04...	2	.1	<.1	<1	<1	<1	<1	20	<3
JUN 16...	4	.2	.1	<1	<1	<1	<1	20	<4

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE (DEG C)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)
OCT 27...	1230	360	12.0	13	13
DEC 02...	0900	1830	5.0	38	188
MAR 03...	1000	2900	.5	122	955
MAY 04...	1900	293	19.0	42	33
JUN 16...	1030	245	19.5	63	42
AUG 18...	0930	47	21.0	45	5.7

04198000 SANDUSKY RIVER NEAR FREMONT, OH--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		OCTOBER			NOVEMBER			DECEMBER	
1	373	18	18	617	17	28	785	16	34
2	321	23	20	501	11	15	1820	54	1320
3	269	18	13	427	8	9.2	1990	78	419
4	242	9	5.9	377	6	6.1	1600	70	302
5	222	8	4.8	353	6	5.7	1300	52	183
6	306	20	18	340	8	7.3	1210	36	118
7	1170	40	126	324	6	5.2	1110	25	75
8	1350	39	142	309	5	4.2	1260	32	109
9	900	28	68	293	4	3.2	1600	28	121
10	587	21	33	287	6	4.6	1430	32	124
11	444	19	23	278	7	5.3	1010	22	60
12	362	18	18	270	6	4.4	720	15	29
13	305	18	15	252	7	4.8	540	16	23
14	267	17	12	239	3	1.9	450	10	12
15	245	10	6.6	233	5	3.1	420	8	9.1
16	227	8	4.9	229	6	3.7	380	6	6.2
17	218	7	4.1	226	3	1.8	340	6	5.5
18	228	5	3.1	224	3	1.8	320	6	5.2
19	240	3	1.9	226	3	1.8	300	6	4.9
20	225	2	1.2	517	17	30	280	5	3.8
21	214	2	1.2	1330	40	144	270	5	3.6
22	215	6	3.5	1820	27	133	270	5	3.6
23	238	6	3.9	1430	17	66	4780	142	1830
24	235	2	1.3	1010	23	63	9100	240	5900
25	217	1	.59	938	18	46	7010	168	3180
26	214	1	.58	1150	23	71	4630	76	991
27	524	36	90	1180	22	70	2920	51	402
28	2290	92	556	1250	21	71	1940	33	173
29	1780	37	178	1050	21	60	1550	26	109
30	1180	21	67	813	17	37	1180	20	64
31	830	24	54	---	---	---	1000	20	54
TOTAL	16438	---	1494.57	18493	---	908.1	53515	---	15673.9
		JANUARY			FEBRUARY			MARCH	
1	1430	168	649	3000	56	454	2700	42	306
2	1800	191	928	2100	55	312	3300	87	775
3	2320	252	1580	1700	55	252	2900	108	846
4	6380	493	8490	1300	54	190	2500	58	391
5	9740	624	16400	1100	53	157	4400	132	1570
6	7360	228	4530	980	52	138	8000	405	8750
7	5100	125	1720	860	51	118	4500	250	3040
8	2640	80	570	760	50	103	2900	240	1880
9	2000	79	427	700	49	93	2200	115	683
10	1500	78	316	640	48	83	1670	120	541
11	1000	77	208	560	47	71	6420	457	10000
12	820	76	168	520	46	65	14300	1140	44000
13	700	75	142	480	45	58	15000	765	31000
14	620	74	124	470	44	56	14500	560	21900
15	560	73	110	600	43	70	10100	340	9270
16	520	72	101	1000	42	113	8190	370	8180
17	470	71	90	2500	41	277	11000	685	20300
18	430	70	81	4500	40	486	9440	640	16300
19	390	69	73	5200	39	548	7890	535	11400
20	370	68	68	7400	38	759	6310	260	4430
21	360	67	65	9700	37	969	6420	330	5720
22	360	66	64	9800	36	953	5110	220	3040
23	600	65	105	9800	35	926	3560	164	1580
24	1400	64	242	9400	34	863	2130	118	679
25	3800	63	646	7400	33	659	1630	77	339
26	2500	62	418	5800	32	501	1510	50	204
27	2000	61	329	4500	31	377	1530	40	165
28	1600	60	259	3400	30	275	1340	35	127
29	1450	59	231	---	---	---	1190	27	87
30	4600	58	720	---	---	---	1130	40	122
31	5200	57	800	---	---	---	3330	485	6930
TOTAL	70020	---	40654	96170	---	9926	167100	---	214555

04198000 SANDUSKY RIVER NEAR FREMONT, OH--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		APRIL			MAY			JUNE	
1	5930	1080	17300	346	36	34	1920	350	1810
2	4620	850	10600	326	63	55	1370	245	905
3	2900	670	5250	306	43	36	842	157	357
4	2550	435	2990	293	61	48	587	125	198
5	2040	295	1620	287	46	36	466	91	114
6	1550	225	942	281	30	23	396	88	94
7	1140	95	292	281	52	39	339	80	73
8	1080	64	187	319	28	24	306	68	56
9	1240	40	134	326	32	28	275	66	49
10	1710	45	208	326	32	28	306	70	58
11	3290	104	1010	319	38	33	300	63	51
12	6250	218	3680	319	34	29	300	56	45
13	7580	238	4870	306	36	30	353	60	57
14	5520	198	2950	287	20	15	293	54	43
15	3240	143	1250	275	37	27	229	54	33
16	1790	114	551	263	33	23	281	76	58
17	1790	145	701	251	18	12	1160	142	445
18	1990	128	688	234	24	15	1690	134	611
19	1690	143	653	223	25	15	1250	148	499
20	1290	98	341	223	45	27	742	117	234
21	949	75	192	313	86	85	706	122	233
22	742	55	110	516	117	163	718	173	335
23	615	72	120	778	125	263	542	69	101
24	542	80	117	978	201	531	491	77	102
25	491	81	107	949	180	461	389	86	90
26	466	58	73	525	154	218	287	53	41
27	458	70	87	551	529	1500	240	37	24
28	419	83	94	8450	2020	44000	223	45	27
29	389	62	65	6770	1420	26000	1450	280	1430
30	360	33	32	4270	820	9450	1860	578	2900
31	---	---	---	2980	560	4510	---	---	---
TOTAL	64621	---	57214	32871	---	87758	20311	---	11074
		JULY			AUGUST			SEPTEMBER	
1	1290	255	888	63	34	5.8	38	19	1.9
2	829	165	369	63	36	6.1	38	21	2.2
3	2410	389	3880	63	33	5.6	37	18	1.8
4	7170	828	16000	63	34	5.8	42	25	2.8
5	4570	505	6230	67	43	7.8	55	22	3.3
6	2510	300	2030	63	35	6.0	52	24	3.4
7	1220	135	445	60	34	5.5	53	20	2.9
8	895	110	266	57	24	3.7	49	18	2.4
9	673	80	145	67	28	5.1	46	28	3.5
10	508	84	115	67	41	7.4	40	24	2.6
11	434	70	82	67	49	8.9	37	18	1.8
12	353	73	70	60	46	7.5	35	16	1.5
13	281	60	46	57	45	6.9	34	16	1.5
14	240	63	41	57	43	6.6	29	16	1.3
15	207	55	31	57	41	6.3	43	16	1.9
16	177	48	23	54	44	6.4	40	14	1.5
17	150	40	16	51	36	5.0	40	18	1.9
18	133	32	11	47	40	5.1	36	15	1.5
19	137	40	15	41	36	4.0	27	18	1.3
20	145	60	23	47	34	4.3	34	20	1.8
21	154	42	17	54	34	5.0	39	19	2.0
22	133	38	14	47	32	4.1	32	19	1.6
23	145	53	21	43	18	2.1	29	12	.94
24	145	34	13	41	22	2.4	50	20	2.7
25	124	30	10	39	25	2.6	46	15	1.9
26	106	37	11	40	27	2.9	43	16	1.9
27	94	29	7.4	35	24	2.3	65	18	3.2
28	86	32	7.4	37	16	1.6	125	78	26
29	78	29	6.1	39	20	2.1	106	30	8.6
30	74	29	5.8	43	24	2.8	97	13	3.4
31	67	24	4.3	39	16	1.7	---	---	---
TOTAL	25538	---	30843.0	1628	---	149.4	1437	---	95.04
YEAR	568142		470345.01						

04199160 OLD WOMAN'S CREEK ABOVE U.S. 6 AT HURON, OH

LOCATION.--Lat 41°22'37", long 82°30'37", Erie County, Hydrologic Unit 04100012, about 0.5 mi (0.8 km) south of bridge on U.S. Highway 6 and State Highway 2, 0.75 mi (1.2 km) east of Huron.

DRAINAGE AREA.--26.3 mi^2 (681 km^2).

PERIOD OF RECORD.--May 1980 to current year.

GAGE.-- Water-stage recorder. Datum of gage is 560.00 ft (170.688 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Interruptions in record are due to malfunctions of the instruments.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 17.56 ft (5.352 m) April 6, 1982; minimum gage height, 12.02 ft (3.664 m) Jan. 7, 1982.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 17.56 ft (5.3522 m) April 6; minimum gage height 12.02 ft. (12.02 m) Jan. 7.

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	14.76	---	12.84	13.03	12.75	13.54	14.17	13.16	13.81	13.44	13.06
2	---	14.75	15.31	13.24	12.95	13.07	14.04	14.08	13.10	13.70	13.40	12.94
3	---	14.75	15.33	13.25	12.97	12.89	13.27	14.02	14.21	13.86	13.62	12.83
4	---	14.77	15.39	12.82	12.86	13.20	12.92	13.98	13.52	13.88	13.35	13.05
5	---	14.77	15.49	12.89	12.88	13.86	14.35	14.02	13.82	13.86	13.69	12.82
6	14.75	14.78	15.56	12.56	12.78	13.32	15.47	14.06	14.24	13.79	13.64	12.88
7	14.76	14.77	15.61	12.50	12.73	12.90	13.90	14.05	14.48	13.60	---	13.54
8	14.76	14.77	15.58	12.33	12.75	12.86	13.86	14.05	14.57	13.73	---	13.05
9	14.76	14.76	13.28	12.12	12.79	12.75	14.12	14.05	14.09	13.75	---	12.90
10	14.76	14.76	12.99	12.55	12.70	12.87	13.58	14.04	13.96	13.74	---	12.88
11	14.76	14.76	13.02	12.70	12.71	13.40	13.67	14.07	13.94	13.50	---	12.86
12	14.75	14.76	12.94	12.51	12.73	13.13	13.91	14.11	13.85	13.46	13.38	12.90
13	14.74	14.76	12.89	12.46	12.71	12.74	13.73	14.13	13.78	13.74	13.33	12.89
14	14.74	14.76	12.88	12.15	12.71	12.90	13.93	14.15	13.80	13.72	13.29	12.87
15	14.73	14.75	13.37	12.60	12.78	13.49	14.00	14.16	13.71	13.67	13.31	12.98
16	14.73	14.89	13.58	12.65	13.07	13.31	13.88	14.17	13.91	13.64	13.25	12.98
17	14.71	15.03	13.62	12.77	13.23	13.18	13.81	14.18	14.24	13.51	13.33	13.01
18	14.70	15.09	13.66	12.80	13.08	13.32	13.88	14.18	13.89	13.44	13.32	13.04
19	14.69	15.12	13.86	12.79	13.20	13.42	13.92	14.20	13.85	13.57	13.00	13.04
20	14.71	15.15	13.20	12.68	13.22	13.75	13.84	14.34	13.85	13.78	13.00	13.04
21	14.70	15.17	12.60	12.65	13.64	13.18	13.90	14.45	13.74	13.68	13.55	13.03
22	14.70	15.18	12.92	12.56	13.20	13.28	13.93	14.66	13.85	13.69	12.99	13.04
23	14.71	15.18	12.71	12.51	13.15	13.45	13.79	14.23	14.28	13.77	12.94	13.11
24	14.72	15.18	12.99	---	13.44	13.49	13.79	12.81	13.89	13.64	13.12	13.12
25	---	15.21	12.81	---	12.88	13.61	13.89	12.89	13.69	13.45	13.12	13.13
26	---	15.28	---	---	12.73	13.44	13.91	12.85	13.87	13.49	12.98	13.13
27	14.73	---	---	---	12.74	13.64	14.34	12.99	13.91	13.70	13.09	13.19
28	14.75	---	---	12.42	12.81	13.51	14.47	13.25	14.09	13.71	13.21	13.26
29	14.75	---	---	12.49	---	13.62	14.39	13.06	14.54	13.64	13.04	13.28
30	14.76	---	12.76	12.80	---	13.51	14.28	13.18	14.00	13.52	12.92	13.28
31	14.76	---	12.76	12.99	---	13.61	---	13.13	---	13.48	13.05	---
MEAN	---	---	---	---	12.95	13.27	13.94	13.86	13.93	13.66	---	13.04
MAX	---	---	---	---	13.64	13.86	15.47	14.66	14.57	13.88	---	13.54
MIN	---	---	---	---	12.70	12.74	12.92	12.81	13.10	13.44	---	12.82

04199165 OLD WOMAN'S CREEK AT U.S. 6 AT HURON, OH

LOCATION.--Lat 41°22'51", long 82°30'53", Erie County, Hydrologic Unit 04100012, on left bank at U.S. Highway 6 and State Highway 2 bridge, 0.75 mi (1.2 km) east of Huron.

DRAINAGE AREA.--26.5 mi² (68.6 km²).

PERIOD OF RECORD.--May 1980 to current year.

GAGE.--Water-stage recorder. Datum of gage is 560.00 ft (170.688 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Interruptions in record are due to malfunctions of the instruments.

EXTREMES FOR PERIOD OF RECORD.--Maximum recorded gage height, 16.05 ft (4.892 m) June 29, 1982; minimum gage height, 10.88 ft (3.316 m) January 10,11, 1982.

EXTREMES FOR CURRENT YEAR.--Maximum recorded gage height, 16.05 ft (4.892 m) June 29; minimum gage height, 10.88 ft (3.316 m) January 10,11.

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	14.77	15.25	12.53	---	12.47	---	14.29	13.95	13.88	13.46	13.18
2	---	14.77	15.31	13.03	---	12.91	---	14.21	13.93	13.80	13.60	13.06
3	---	14.77	15.33	13.14	---	12.90	---	14.14	14.62	13.93	13.54	12.93
4	---	14.77	15.37	13.04	---	13.05	---	14.11	14.19	13.96	13.57	13.14
5	---	14.78	15.45	12.41	---	13.45	---	14.14	14.39	13.93	13.74	12.94
6	14.78	14.77	15.53	12.75	---	13.01	---	14.19	14.69	13.87	13.71	12.99
7	14.78	14.77	15.58	12.82	---	12.78	---	14.18	14.85	13.71	13.56	13.62
8	14.78	14.78	15.60	11.86	---	12.86	---	14.17	14.92	13.84	13.46	13.15
9	14.79	14.78	15.65	12.77	---	12.47	---	14.17	14.45	13.87	13.53	13.00
10	14.79	14.78	13.98	11.59	---	12.82	---	14.16	14.11	13.86	13.50	---
11	14.79	14.78	12.98	11.06	---	13.08	---	14.18	14.09	13.63	13.56	---
12	14.79	14.78	13.05	12.52	---	13.08	---	14.21	14.00	13.58	13.44	---
13	14.79	14.77	13.02	12.78	---	12.52	---	14.24	13.94	13.84	13.41	---
14	14.79	14.77	12.95	12.66	---	12.96	---	14.26	13.95	13.84	13.38	---
15	14.78	14.77	12.92	12.39	---	13.57	---	14.27	13.88	13.79	13.40	---
16	14.76	14.77	12.91	11.98	---	13.39	---	14.29	14.04	13.77	13.37	---
17	14.76	14.77	13.02	12.02	---	13.25	---	14.29	14.35	13.64	13.48	---
18	14.76	14.76	13.57	12.70	---	13.41	---	14.30	14.01	13.56	13.41	---
19	14.73	14.76	13.60	12.79	---	13.52	---	14.32	13.96	13.72	13.13	---
20	14.74	14.91	13.63	12.72	---	13.83	13.93	14.46	13.98	13.92	13.14	---
21	14.72	15.01	13.66	13.16	---	13.27	14.00	14.57	13.86	13.75	13.66	---
22	14.71	15.08	13.71	13.06	12.81	13.37	14.03	14.77	13.98	13.82	13.09	---
23	14.72	15.12	13.86	12.46	12.91	---	13.91	14.61	14.40	13.84	13.06	---
24	14.72	15.14	12.45	11.99	13.42	---	13.91	13.79	14.02	13.71	13.25	---
25	14.71	15.16	12.55	12.54	12.77	---	14.02	13.85	13.82	13.54	13.21	---
26	14.72	15.19	12.87	12.54	12.67	---	14.01	13.84	13.99	13.66	13.13	---
27	14.74	15.20	12.65	12.57	12.76	---	14.45	13.91	14.02	13.77	13.22	---
28	14.75	15.19	12.79	12.25	12.86	---	14.58	14.02	14.20	13.88	13.31	---
29	14.75	15.19	12.75	---	---	---	14.50	13.92	14.28	13.62	13.15	---
30	14.76	15.19	12.62	---	---	---	14.39	13.96	14.07	13.62	13.06	---
31	14.77	---	12.73	---	---	---	---	13.94	---	13.61	13.17	---
MEAN	---	14.90	13.79	---	---	---	---	14.19	14.16	13.77	13.38	---
MAX	---	15.20	15.65	---	---	---	---	14.77	14.92	13.96	13.74	---
MIN	---	14.76	12.45	---	---	---	---	13.79	13.82	13.54	13.06	---

04199170 LAKE ERIE AT HURON, OH

LOCATION.--Lat 41°23'09", long 82°30'49", Erie County, Hydrologic Unit 04100012, about 600 ft (183 m) off shore of mouth of Old Woman's Creek, 0.75 mi (1.2 km) east of Huron.

PERIOD OF RECORD.--May 1980 to current year.

GAGE.--Water-stage recorder. Datum of gage is 560.00 ft (170.688 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Interruptions in record are due to malfunctions of the instruments.

EXTREMES FOR PERIOD OF RECORD.--Maximum recorded gage height, 18.03 ft (5.496 m) July 29, 1981; minimum recorded gage height, 4.80 ft (1.463 m) Jan. 17, 1982.

EXTREMES FOR CURRENT YEAR.--Maximum recorded gage height, 17.13 ft (5.221 m) April 6; minimum recorded gage height, 4.80 ft (1.463 m) Jan. 17.

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	13.38	13.43	12.63	12.11	12.35	13.44	13.85	13.83	13.81	13.43	13.04
2	---	13.38	12.66	13.37	12.72	12.80	13.95	13.84	13.83	13.73	13.57	13.00
3	---	13.47	13.00	13.16	12.82	12.03	12.47	13.84	14.33	13.85	13.50	12.88
4	---	13.39	13.36	11.81	12.54	11.56	12.79	13.90	14.04	13.89	13.53	12.98
5	---	13.28	13.13	12.67	12.19	12.51	14.30	13.87	14.16	13.86	13.67	12.91
6	12.46	13.07	13.05	13.08	12.12	12.77	14.89	13.80	14.10	13.81	13.63	12.95
7	13.29	13.25	12.90	13.17	10.29	12.68	13.82	13.78	13.97	13.65	13.51	13.43
8	13.56	13.19	13.12	12.16	12.48	12.78	13.87	13.81	13.96	13.79	13.42	13.02
9	13.61	13.59	13.25	12.99	12.60	12.36	13.95	13.83	14.02	13.80	13.48	12.93
10	13.77	13.23	13.26	7.20	9.52	12.73	13.57	13.84	13.86	13.81	13.46	12.94
11	13.75	13.15	13.16	5.46	8.38	12.77	13.57	13.81	13.93	13.58	13.50	12.92
12	13.81	13.46	13.20	9.56	11.69	12.88	13.92	13.77	13.84	13.51	13.39	12.94
13	13.57	13.35	13.07	14.92	12.51	12.65	13.78	13.82	13.79	13.77	13.38	12.93
14	13.37	13.35	13.16	14.75	12.53	12.81	13.93	13.89	13.81	13.80	13.35	12.89
15	13.27	13.33	13.14	12.47	12.50	13.46	14.01	13.84	13.60	13.77	13.36	12.99
16	13.48	13.26	12.88	11.34	12.69	13.22	13.91	13.76	13.94	13.75	13.34	12.92
17	13.34	13.11	13.50	4.98	13.55	13.10	13.66	13.78	13.81	13.63	13.41	12.92
18	12.15	13.15	12.99	6.37	12.67	13.29	13.90	13.79	13.82	13.55	13.30	12.78
19	13.01	13.42	12.91	10.62	12.38	13.37	13.96	13.61	13.79	13.71	13.08	12.91
20	12.60	12.80	12.73	12.64	12.45	13.66	13.88	13.67	13.69	13.83	13.07	12.67
21	13.58	13.05	12.39	13.06	12.54	13.15	13.82	14.00	13.64	13.71	13.49	12.81
22	13.59	13.07	12.99	12.79	12.52	13.26	13.88	14.05	13.80	13.76	13.00	12.82
23	13.18	13.23	13.02	11.69	12.62	13.43	13.77	13.81	13.76	13.75	13.01	12.72
24	13.31	13.56	12.42	11.10	13.23	13.47	13.83	13.71	13.78	13.66	13.20	12.50
25	13.29	13.33	12.88	10.46	12.63	13.60	13.91	13.75	13.69	13.51	13.08	12.81
26	13.44	13.26	13.23	11.11	12.54	13.38	13.92	13.75	13.86	13.64	13.10	12.89
27	13.57	12.97	12.72	11.51	12.66	13.52	14.12	13.83	13.83	13.71	13.15	12.99
28	13.48	13.08	13.25	12.08	12.76	13.47	14.06	13.81	13.77	13.78	13.21	12.95
29	13.65	13.08	12.93	12.43	---	13.57	13.97	13.83	13.80	13.58	13.07	13.04
30	13.54	13.20	12.93	12.54	---	13.47	13.93	13.84	13.95	13.57	13.02	12.89
31	13.50	---	13.07	13.61	---	13.28	---	13.85	---	13.57	13.13	---
MEAN	---	13.25	13.02	11.54	12.22	13.01	13.83	13.82	13.87	13.71	13.32	12.91
MAX	---	13.59	13.50	14.92	13.55	13.66	14.89	14.05	14.33	13.89	13.67	13.43
MIN	---	12.80	12.39	4.98	8.38	11.56	12.47	13.61	13.60	13.51	13.00	12.50

04200430 WEST BRANCH BLACK RIVER ABOVE LAKE STREET AT ELYRIA, OH

LOCATION.--Lat 41°22'14", long 82°06'47", Lorain County, Hydrologic Unit 04110001, on right bank, 400 ft (120 m) upstream from Lake Street Bridge and 1,600 ft (500 m) upstream of confluence with East Branch Black River at Elyria, Ohio.

DRAINAGE AREA.--174 mi² (451 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1980 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 700 ft (213 m) from topographic map.

REMARKS.--Records good, except those for winter period which are fair. Some low-flow regulation for industrial use.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,320 ft³/s (94.0 m³/s) June 15, 1981, gage height, 8.58 ft (2.615 m), minimum daily discharge, 3.3 ft³/s (0.093 m³/s) July 4, 20, 1980.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,800 ft³/s (51.0 m³/s) and maximums (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Jan. 5	0345	2150	60.9	6.79	2.070	Mar. 17	0715	2070	58.6	6.67	2.033
Mar. 5	2245	1960	55.5	6.52	1.987	Mar. 31	2200	2150	60.9	6.79	2.070
Mar. 12	1600	*2490	70.5	*7.28	2.219						

Minimum daily discharge, 3.5 ft³/s (0.099 m³/s) Oct. 17, 18, Sept. 4-6, 11, 12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.8	11	43	205	746	204	1230	25	54	138	4.6	4.2
2	7.4	13	68	331	411	349	328	25	44	74	5.2	4.6
3	5.4	11	89	244	333	215	216	25	34	172	5.0	4.3
4	4.4	10	81	1220	281	212	235	23	25	812	28	3.5
5	4.6	12	117	1860	253	1410	188	21	31	486	19	3.5
6	15	20	151	465	225	1430	148	20	42	198	54	3.5
7	27	16	111	251	210	509	129	20	40	107	37	4.5
8	47	14	101	147	140	272	150	37	32	70	21	3.9
9	33	10	191	113	102	210	260	36	25	51	14	4.0
10	20	13	147	80	99	188	417	33	21	38	11	4.0
11	13	10	77	65	86	936	527	31	17	30	9.1	3.5
12	9.2	8.5	66	55	60	2350	636	25	13	25	8.2	3.5
13	7.8	6.8	48	48	210	1860	585	21	10	19	7.2	3.9
14	6.5	4.9	39	44	160	1330	336	19	9.7	17	5.7	22
15	5.4	6.5	35	40	120	459	184	15	14	14	5.2	12
16	5.4	8.5	32	38	95	651	137	13	43	12	5.1	7.9
17	3.5	8.1	31	36	75	1770	118	13	180	9.4	4.8	5.6
18	3.5	8.1	34	34	65	573	112	12	160	7.8	4.8	5.8
19	11	11	31	32	55	291	98	21	81	13	4.5	4.2
20	6.2	60	30	30	50	276	85	17	45	23	11	4.4
21	5.9	291	34	28	48	333	80	17	35	15	4.4	4.1
22	7.1	192	34	29	1170	234	72	21	54	15	4.5	8.0
23	9.2	113	464	123	800	162	60	705	246	12	5.5	9.9
24	5.4	77	1410	498	949	124	50	423	144	7.7	5.0	13
25	8.5	61	581	494	573	103	44	156	66	6.3	5.6	9.8
26	16	50	261	217	265	109	41	86	33	7.4	4.4	8.7
27	13	47	184	151	208	122	38	64	20	6.8	4.5	65
28	14	39	138	108	175	105	35	120	22	9.0	3.7	54
29	13	30	109	82	---	107	31	189	471	6.7	3.7	25
30	14	27	88	357	---	108	28	97	406	6.1	4.0	10
31	11	---	91	1200	---	1370	---	67	---	4.7	4.1	---
TOTAL	360.2	1189.4	4916	8625	7964	18372	6598	2397	2417.7	2412.9	313.8	320.3
MEAN	11.6	39.6	159	278	284	593	220	77.3	80.6	77.8	10.1	10.7
MAX	47	291	1410	1860	1170	2350	1230	705	471	812	54	65
MIN	3.5	4.9	30	28	48	103	28	12	9.7	4.7	3.7	3.5
CFSM	.07	.23	.91	1.60	1.63	3.41	1.26	.44	.46	.45	.06	.06
IN.	.08	.25	1.05	1.84	1.70	3.93	1.41	.51	.52	.52	.07	.07

CAL YR 1981 TOTAL 52879.9 MEAN 145 MAX 2640 MIN 3.5 CFSM .83 IN 11.31
WTR YR 1982 TOTAL 55886.3 MEAN 153 MAX 2350 MIN 3.5 CFSM .88 IN 11.95

04200500 BLACK RIVER AT ELYRIA, OH

LOCATION.--Lat 41°22'49", long 82°06'17", in T.6 N., R.17 W., Lorain County, Hydrologic Unit 04110001, on left bank in Cascade Park at Elyria, 0.8 mi (1.3 km) downstream from confluence of East and West Branches.

DRAINAGE AREA.--396 mi^2 (1,026 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1944 to current year. Records for May 1903 to July 1906 (published as "near Elyria") published in WSP 97, 129, and 205, are unreliable and should not be used.

REVISED RECORDS.--WSP 1912: Drainage area. See also PERIOD OF RECORD.

GAGE.--Water-stage recorder. Datum of gage is 620.83 ft (189.229 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods, which are fair. Some regulation at low flow for industrial use. Water-quality data collected at this site 1969 to 1974. Sediment data collected 1970 to 1974.

AVERAGE DISCHARGE.--38 years, 326 ft^3/s (9.232 m^3/s), 11.18 in/yr (284 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 51,700 ft^3/s (1,460 m^3/s) July 6, 1969, gage height, 26.4 ft (8.05 m), (from flood mark), from rating curve extended above 13,000 ft^3/s (368 m^3/s) on basis of slope-area measurement of peak flow; no flow for part of Oct. 10, 1956 (result of temporary storage at dam upstream).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 3,200 ft^3/s (90.6 m^3/s) and maximums (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Jan. 5	unknown	3600	102	unknown		Mar. 12	2100	*4960	140	*10.39	3.167
Feb. 17	1830	4130	117	9.43	2.874	Mar. 17	1000	3620	103	8.80	2.682
Mar. 6	0200	3540	100	8.70	2.652	Mar. 31	2045	3420	96.9	8.54	2.603

Minimum daily discharge, 6.7 ft^3/s (0.19 m^3/s) Sept. 6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	30	41	110	458	2190	420	2250	59	114	289	12	9.9
2	29	41	180	648	1650	645	755	57	93	147	13	13
3	25	39	188	534	1190	470	472	55	75	357	13	11
4	21	37	214	1870	855	480	616	53	60	1810	71	7.5
5	20	43	306	3130	702	2490	500	51	70	1580	71	6.8
6	44	50	338	1300	600	2870	345	49	94	713	232	6.7
7	73	44	271	583	470	1210	297	49	97	279	107	8.9
8	92	45	258	363	360	624	352	89	80	157	60	7.8
9	73	53	464	232	290	440	642	85	64	109	43	7.8
10	51	42	406	180	230	396	1020	119	51	80	32	8.4
11	41	39	208	150	190	1770	1220	93	42	63	26	7.6
12	33	36	148	130	170	4510	1300	74	35	53	25	7.5
13	27	31	124	120	160	3790	1180	62	31	45	22	8.1
14	23	28	99	110	150	2780	782	54	29	41	19	42
15	21	29	89	100	162	1080	418	46	38	35	16	33
16	20	30	81	95	1150	1290	287	41	90	31	16	18
17	16	30	74	85	3580	3310	239	39	405	27	15	12
18	17	28	82	80	3650	1480	221	35	400	25	14	14
19	33	34	75	80	2770	684	199	48	214	36	13	9.1
20	22	247	75	75	2200	607	174	38	114	40	27	8.6
21	20	593	86	75	2760	737	159	37	89	28	14	8.3
22	21	470	80	70	2250	569	137	43	118	28	13	15
23	31	277	1070	443	1550	372	117	1420	485	24	13	23
24	26	188	2320	1570	1730	278	101	1430	277	21	12	22
25	32	156	1580	2000	1260	233	93	423	121	18	15	21
26	39	131	669	1040	650	240	86	198	71	18	12	17
27	35	129	432	684	440	267	79	140	50	18	11	134
28	40	106	310	512	360	237	73	268	68	23	9.1	105
29	39	82	239	360	---	241	67	380	1340	17	7.9	47
30	41	70	190	1140	---	244	63	194	866	16	9.0	31
31	38	---	194	2510	---	2360	---	136	---	13	9.7	---
TOTAL	1073	3169	10960	20727	33719	37124	14244	5865	5681	6141	972.7	671.0
MEAN	34.6	106	354	669	1204	1198	475	189	189	198	31.4	22.4
MAX	92	593	2320	3130	3650	4510	2250	1430	1340	1810	232	134
MIN	16	28	74	70	150	233	63	35	29	13	7.9	6.7
CFSM	.09	.27	.89	1.69	3.04	3.03	1.20	.48	.48	.50	.08	.06
IN.	.10	.30	1.03	1.95	3.17	3.49	1.34	.55	.53	.58	.09	.06

CAL YR 1981 TOTAL 123137.0 MEAN 337 MAX 5990 MIN 13 CFSM .85 IN 11.57
WTR YR 1982 TOTAL 140346.7 MEAN 385 MAX 4510 MIN 6.7 CFSM .97 IN 13.18

04200550 BLACK RIVER BELOW ELYRIA, OH

LOCATION.--Lat 41°24'42", long 82°05'45", in T.6 N., R.17 W., Lorain County, Hydrologic Unit 04110001, at Ford Road bridge on north edge of Elyria, 0.7 mi (1.1 km) downstream from Elyria sewage disposal plant, and 5.2 mi (8.4 km) downstream from discharge station at Elyria.

DRAINAGE AREA.--412 mi^2 (1,067 km^2).

PERIOD OF RECORD.--January 1966 to September 1982 (discontinued).

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: January 1966 to September 1982 (discontinued).
pH: October 1976 to September 1982 (discontinued).
WATER TEMPERATURES: January 1966 to September 1982 (discontinued).
DISSOLVED OXYGEN: January 1966 to September 1982 (discontinued).

INSTRUMENTATION.--Water-quality monitor.

REMARKS.--Interruptions in the water-quality record were due to malfunction of the instrument. See records of discharge for station at Elyria (station 04200500).

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 2,900 micromhos Feb. 11, 1977; minimum, 117 micromhos Jan. 27, 1976.
pH: Maximum, 9.5 units Apr. 30, 1978; minimum, 6.0 units May 29, July 3, 1979.
WATER TEMPERATURES: Maximum, 33.0°C June 7, 1973; minimum, 0.0°C on many days during winter periods.
DISSOLVED OXYGEN: Maximum, 15.1 mg/L Jan. 12, 1980, Dec. 24, 1981; minimum, 0.0 mg/L June 3, 5, 6, July 3, 4, 1966, July 31, Aug. 1, 2, 22, 23, 1974, Aug. 27, 1977, Aug. 3, Sept. 14, 1978.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 1,430 micromhos Oct. 17; minimum, 165 micromhos Jan. 26.
pH: Maximum 8.9 units Apr. 25; minimum, 7.1 units Sept. 14.
WATER TEMPERATURES: Maximum, 28.8°C July 10, 13, 20; minimum, 0.0°C on many days during winter periods.
DISSOLVED OXYGEN: Maximum, 15.1 mg/L Dec. 24 minimum, 1.1 mg/L Sept. 13, 14.

04200550 BLACK RIVER BELOW ELYRIA, OH--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	---	---	---	1140	972	1060	813	657	701	807	591	701
2	---	---	---	1020	927	973	675	621	650	588	540	555
3	---	---	---	1060	921	999	669	627	651	573	516	544
4	---	---	---	1250	981	1100	678	633	654	558	456	515
5	---	---	---	1330	1100	1180	678	618	641	---	---	---
6	---	---	---	1160	1050	1100	627	606	617	---	---	---
7	831	783	809	1230	1050	1110	672	600	630	492	438	475
8	816	753	786	1100	990	1040	672	633	652	543	459	500
9	897	756	835	987	834	920	533	588	614	573	510	546
10	984	837	909	1080	909	992	636	582	610	579	570	574
11	945	819	883	1190	978	1080	702	621	649	582	576	580
12	1020	816	922	1150	1010	1070	726	645	677	---	---	---
13	1100	894	1010	1210	1000	1110	563	612	637	---	---	---
14	1160	939	1070	1320	1050	1170	590	615	647	---	---	---
15	1280	999	1150	1210	1040	1110	825	684	754	---	---	---
16	1300	1060	1180	1090	957	1020	855	786	823	---	---	---
17	1430	1080	1230	1130	933	1030	972	792	843	---	---	---
18	1250	1040	1130	1250	978	1110	1130	987	1060	---	---	---
19	1040	813	925	1280	954	1160	1090	921	1030	969	894	933
20	1210	822	1010	855	657	707	978	870	905	1300	792	980
21	1370	1030	1210	678	564	632	993	870	930	855	738	793
22	1280	1070	1190	579	537	556	1330	849	990	927	774	845
23	1130	849	1030	627	579	606	1260	438	771	1420	750	1120
24	1350	1060	1210	663	612	634	438	351	384	846	240	429
25	1250	1080	1140	660	633	647	372	348	355	237	186	205
26	1070	966	1000	660	618	637	---	---	---	219	165	188
27	1120	900	1070	636	612	619	---	---	---	261	195	221
28	1090	930	1020	660	606	632	---	---	---	330	231	272
29	1200	981	1080	675	624	646	717	669	698	366	321	341
30	1200	969	1080	723	621	667	696	651	676	546	369	412
31	1300	1040	1150	---	---	---	780	639	662	---	---	---
MONTH	1430	753	1040	1330	537	911	1330	348	711	1420	165	559

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	---	---	---	546	516	535	354	282	321	1070	940	980
2	---	---	---	528	468	492	---	---	---	920	850	881
3	528	444	487	504	474	485	---	---	---	890	820	853
4	495	426	452	552	513	538	---	---	---	1000	850	943
5	480	444	457	672	558	643	---	---	---	1110	930	1030
6	465	450	457	636	618	623	549	528	541	1080	900	948
7	477	453	466	618	477	571	726	534	607	980	830	908
8	540	465	501	474	387	432	711	588	637	1030	800	857
9	666	525	577	486	387	440	612	537	574	800	760	782
10	663	621	640	531	456	488	528	450	475	850	770	793
11	684	624	648	471	279	399	453	399	419	910	840	870
12	717	660	689	270	246	254	396	384	391	1000	880	929
13	768	702	729	282	258	271	396	375	385	1050	910	981
14	789	735	761	303	276	286	405	369	389	1070	940	1000
15	1270	759	967	---	---	---	441	396	417	1110	960	1040
16	1200	399	819	---	---	---	516	426	462	1030	890	931
17	---	---	---	---	---	---	528	486	510	940	850	885
18	---	---	---	---	---	---	531	510	522	1070	940	1000
19	---	---	---	---	---	---	609	528	560	1150	900	1060
20	---	---	---	---	---	---	654	594	623	1050	730	943
21	---	---	---	---	---	---	681	624	651	1100	930	1010
22	---	---	---	---	---	---	800	645	728	1140	980	1050
23	---	---	---	---	---	---	940	780	803	860	280	631
24	---	---	---	---	---	---	840	750	791	420	320	383
25	---	---	---	---	---	---	760	720	741	510	420	468
26	---	---	---	---	---	---	820	720	755	600	510	555
27	---	---	---	---	---	---	930	830	882	670	570	606
28	---	---	---	---	---	---	960	880	906	610	530	558
29	---	---	---	681	660	667	970	880	925	590	510	557
30	---	---	---	672	600	649	1000	900	955	540	490	518
31	---	---	---	681	288	445	---	---	---	590	540	563
MONTH	1270	399	618	681	246	483	1000	282	614	1150	280	823

04200550 BLACK RIVER BELOW ELYRIA, OH--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	670	570	619	470	400	433	990	950	969	1280	1040	1150
2	760	670	715	540	470	504	990	940	963	1380	1130	1230
3	800	730	773	570	430	486	960	930	951	1180	911	1060
4	870	780	824	480	370	410	940	550	756	1350	1090	1190
5	910	680	800	390	350	369	730	620	691	1120	966	1010
6	730	680	713	410	360	385	720	610	680	1010	943	967
7	770	700	735	490	410	443	660	550	595	1030	922	974
8	860	770	813	580	490	525	580	530	554	1350	1010	1170
9	950	820	880	660	560	601	690	580	629	1320	1140	1230
10	930	840	890	650	600	622	840	670	751	1380	1120	1270
11	980	860	918	610	560	588	888	780	805	1350	1160	1270
12	1050	910	967	720	590	643	857	760	812	1330	1080	1210
13	970	840	909	930	690	813	937	802	862	1330	1110	1230
14	860	830	844	960	800	872	1220	880	1020	1270	552	1150
15	900	810	859	1130	820	940	983	850	928	891	614	804
16	850	690	766	1110	910	977	946	861	908	1030	795	914
17	770	680	725	1050	880	950	966	841	899	1240	906	1070
18	710	590	618	890	800	848	945	841	920	1190	924	1050
19	750	620	694	800	580	729	1020	841	920	1150	947	1030
20	810	740	753	860	630	781	943	672	818	1060	934	1010
21	760	720	748	1030	830	905	908	800	862	1370	1070	1200
22	810	710	742	1120	840	953	920	827	867	1370	955	1260
23	740	560	678	1150	890	989	946	815	870	1110	807	895
24	550	500	520	1060	910	979	1120	891	986	1280	959	1050
25	610	520	558	970	880	910	1110	964	1000	1170	851	988
26	660	590	622	890	870	880	1120	922	1010	1100	932	1010
27	690	610	649	970	840	886	1110	970	1030	1110	566	823
28	680	550	635	1020	830	930	1250	997	1100	---	---	---
29	590	330	418	1170	970	1060	1200	1030	1130	---	---	---
30	420	330	375	1120	1010	1070	1290	1170	1200	---	---	---
31	---	---	---	1010	940	971	1210	1030	1120	---	---	---
MONTH	1050	330	725	1170	350	757	1290	530	891	1380	552	1080
YEAR	1430	165	789									

PH (STANDARD UNITS), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	---	---	---	8.0	7.7	7.8	8.0	7.8	7.9	8.1	7.9	8.0
2	---	---	---	7.9	7.8	7.8	8.2	7.9	8.1	8.0	7.9	8.0
3	---	---	---	7.9	7.8	7.9	8.2	8.1	8.2	8.0	7.9	8.0
4	---	---	---	8.2	7.9	8.0	8.3	8.1	8.2	7.9	7.8	7.8
5	---	---	---	8.0	7.8	7.9	8.3	8.2	8.2	---	---	---
6	---	---	---	8.0	7.8	7.8	8.3	8.2	8.2	---	---	---
7	---	---	---	8.1	7.8	7.9	8.4	8.1	8.2	8.1	8.0	8.0
8	---	---	---	8.1	7.8	7.9	8.3	8.1	8.1	8.1	7.9	8.0
9	---	---	---	8.0	7.8	7.9	8.3	8.2	8.2	8.0	8.0	8.0
10	---	---	---	8.0	7.9	7.9	8.3	8.2	8.2	---	---	---
11	---	---	---	8.0	7.9	7.9	8.3	8.2	8.3	---	---	---
12	---	---	---	7.9	7.7	7.8	8.3	8.2	8.3	---	---	---
13	---	---	---	7.9	7.6	7.8	8.3	8.2	8.2	---	---	---
14	---	---	---	7.9	7.5	7.7	8.2	8.1	8.2	---	---	---
15	---	---	---	7.8	7.4	7.6	8.2	8.1	8.1	---	---	---
16	---	---	---	8.0	7.7	7.8	8.2	8.0	8.1	---	---	---
17	---	---	---	7.9	7.7	7.8	8.2	8.1	8.1	---	---	---
18	---	---	---	7.7	7.7	7.7	8.2	8.0	8.1	---	---	---
19	---	---	---	7.8	7.5	7.6	8.1	8.0	8.0	8.0	7.9	8.0
20	---	---	---	8.3	7.6	8.0	8.1	8.0	8.0	8.0	7.8	7.9
21	---	---	---	8.3	8.1	8.3	8.0	7.8	8.0	8.0	7.9	7.9
22	---	---	---	8.3	8.2	8.3	8.2	7.9	8.0	8.0	7.9	7.9
23	---	---	---	8.3	8.2	8.3	8.1	7.7	7.9	8.0	7.8	7.9
24	---	---	---	8.3	8.1	8.2	7.8	7.7	7.7	8.0	7.8	7.9
25	---	---	---	8.4	8.1	8.3	7.8	7.7	7.7	7.8	7.7	7.7
26	---	---	---	8.3	7.9	8.1	---	---	---	7.7	7.6	7.7
27	7.9	7.7	7.8	8.2	8.0	8.1	---	---	---	7.7	7.6	7.7
28	7.8	7.7	7.7	8.2	8.1	8.1	---	---	---	7.8	7.7	7.7
29	8.0	7.8	7.9	8.2	8.1	8.2	---	---	---	7.8	7.8	7.8
30	7.9	7.7	7.7	8.1	7.9	8.0	8.0	7.9	7.9	7.8	7.6	7.7
31	7.8	7.7	7.7	---	---	---	8.0	7.9	7.9	7.8	7.7	7.7
MONTH	8.0	7.7	7.8	8.4	7.4	8.0	8.4	7.7	8.1	8.1	7.6	7.9

04200550 BLACK RIVER BELOW ELYRIA, OH--Continued

PH (STANDARD UNITS), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	---	---	---	8.0	7.9	8.0	8.3	8.2	8.2	8.3	7.9	8.1
2	---	---	---	8.0	7.8	7.9	---	---	---	8.4	8.1	8.2
3	7.9	7.8	7.9	8.0	7.8	7.9	---	---	---	8.3	8.1	8.2
4	7.9	7.8	7.8	8.1	8.0	8.1	---	---	---	8.1	7.8	7.9
5	7.9	7.8	7.9	8.1	8.0	8.1	---	---	---	7.8	7.6	7.7
6	8.0	7.9	7.9	8.2	8.1	8.2	8.2	8.1	8.2	7.9	7.6	7.7
7	8.1	7.9	8.0	8.2	8.0	8.1	8.3	8.2	8.2	7.9	7.6	7.7
8	8.1	8.0	8.1	8.1	7.9	8.0	8.4	8.2	8.3	7.6	7.5	7.5
9	8.1	8.1	8.1	7.9	7.8	7.9	8.4	8.3	8.3	7.6	7.5	7.5
10	8.1	8.1	8.1	8.0	7.9	7.9	8.3	8.2	8.2	8.3	7.6	7.8
11	8.2	8.1	8.1	8.0	7.8	7.9	8.2	8.2	8.2	8.1	7.8	7.9
12	8.2	8.1	8.1	7.8	7.7	7.8	8.4	8.2	8.3	8.3	7.7	7.9
13	8.2	8.2	8.2	7.9	7.7	7.8	8.4	8.2	8.3	8.0	7.6	7.8
14	8.2	8.2	8.2	7.9	7.8	7.9	8.3	8.2	8.2	8.0	7.6	7.8
15	8.4	8.2	8.3	---	---	---	8.4	8.1	8.2	7.8	7.6	7.7
16	8.3	7.9	8.2	---	---	---	8.2	8.1	8.2	7.8	7.6	7.7
17	---	---	---	---	---	---	8.3	8.1	8.2	7.8	7.6	7.7
18	---	---	---	---	---	---	8.5	8.2	8.3	7.7	7.5	7.6
19	---	---	---	---	---	---	8.6	8.3	8.4	7.6	7.3	7.5
20	---	---	---	---	---	---	8.4	8.2	8.3	7.5	7.3	7.4
21	---	---	---	---	---	---	8.6	8.1	8.4	7.5	7.4	7.4
22	---	---	---	---	---	---	8.6	8.3	8.3	7.6	7.3	7.5
23	---	---	---	---	---	---	8.7	8.1	8.4	7.8	7.2	7.6
24	---	---	---	---	---	---	8.7	8.3	8.5	7.6	7.5	7.6
25	---	---	---	---	---	---	8.9	8.5	8.7	7.6	7.6	7.6
26	---	---	---	---	---	---	8.7	8.4	8.6	7.6	7.6	7.6
27	---	---	---	---	---	---	8.4	8.2	8.3	7.6	7.3	7.5
28	---	---	---	---	---	---	8.5	8.1	8.3	7.6	7.4	7.5
29	---	---	---	---	---	---	8.5	8.0	8.3	7.8	7.7	7.7
30	---	---	---	---	---	---	8.4	7.9	8.1	7.7	7.6	7.6
31	---	---	---	8.5	8.2	8.3	---	---	---	7.6	7.6	7.6
MONTH	8.4	7.8	8.1	8.5	7.7	8.0	8.9	7.9	8.3	8.4	7.2	7.7
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	7.6	7.5	7.6	7.6	7.5	7.6	7.6	7.5	7.5	7.4	7.4	7.4
2	7.6	7.5	7.5	7.6	7.5	7.6	7.5	7.4	7.5	7.4	7.3	7.4
3	7.6	7.5	7.6	7.8	7.4	7.6	7.4	7.4	7.4	7.4	7.4	7.4
4	7.6	7.5	7.6	7.8	7.6	7.7	7.5	7.2	7.4	7.4	7.4	7.4
5	7.6	7.5	7.6	7.7	7.6	7.7	7.4	7.3	7.4	7.4	7.3	7.4
6	7.7	7.6	7.7	7.7	7.6	7.6	8.0	7.4	7.8	7.4	7.3	7.4
7	7.8	7.7	7.8	7.6	7.6	7.6	7.7	7.5	7.6	7.4	7.3	7.3
8	7.7	7.6	7.7	7.6	7.6	7.6	7.6	7.5	7.5	7.5	7.4	7.4
9	7.7	7.6	7.6	7.6	7.5	7.6	7.7	7.4	7.5	7.4	7.3	7.4
10	7.8	7.6	7.7	7.7	7.6	7.6	7.7	7.4	7.5	7.4	7.3	7.3
11	7.8	7.6	7.7	7.8	7.6	7.7	7.5	7.4	7.6	7.3	7.3	7.3
12	7.8	7.6	7.7	8.0	7.6	7.8	7.8	7.5	7.6	7.3	7.2	7.3
13	8.1	7.6	7.8	8.1	7.6	7.8	7.7	7.5	7.6	7.3	7.2	7.3
14	8.3	7.7	7.9	8.2	7.6	7.9	7.6	7.5	7.6	7.3	7.1	7.3
15	8.1	7.5	7.8	8.2	7.8	8.0	7.7	7.5	7.6	7.3	7.2	7.3
16	8.0	7.5	7.6	8.2	7.6	7.9	7.8	7.5	7.6	7.5	7.2	7.3
17	8.0	7.5	7.8	8.1	7.8	8.0	7.7	7.6	7.6	7.5	7.4	7.5
18	7.8	7.7	7.7	8.1	7.8	8.0	7.6	7.5	7.6	7.5	7.4	7.4
19	7.8	7.7	7.8	8.2	7.3	7.8	7.6	7.4	7.5	7.5	7.4	7.4
20	7.8	7.5	7.7	7.8	7.3	7.5	8.0	7.2	7.6	7.5	7.4	7.5
21	7.7	7.6	7.7	7.7	7.4	7.5	7.5	7.5	7.5	7.5	7.4	7.5
22	7.6	7.5	7.6	7.6	7.5	7.5	7.6	7.5	7.6	7.6	7.3	7.5
23	7.9	7.5	7.7	7.5	7.4	7.5	7.5	7.5	7.5	7.6	7.4	7.5
24	7.8	7.6	7.7	7.5	7.4	7.5	7.5	7.4	7.4	7.5	7.4	7.4
25	7.6	7.5	7.6	7.5	7.4	7.5	7.5	7.3	7.4	7.6	7.5	7.5
26	7.5	7.5	7.5	7.5	7.4	7.4	7.4	7.4	7.4	7.6	7.4	7.5
27	7.5	7.5	7.5	7.5	7.4	7.5	7.4	7.3	7.4	7.6	7.4	7.5
28	7.5	7.2	7.4	7.5	7.4	7.5	7.5	7.4	7.4	---	---	---
29	7.7	7.4	7.5	7.5	7.4	7.4	7.5	7.4	7.5	---	---	---
30	7.6	7.5	7.6	7.6	7.5	7.5	7.5	7.4	7.5	---	---	---
31	---	---	---	7.6	7.5	7.6	7.4	7.4	7.4	---	---	---
MONTH	8.3	7.2	7.7	8.2	7.3	7.7	8.0	7.2	7.5	7.6	7.1	7.4
YEAR	8.9	7.1	7.8									

NOTE: NUMBER OF MISSING DAYS OF RECORD EXCEEDED 20% OF YEAR

04200550 BLACK RIVER BELOW ELYRIA, OH--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	---	---	---	15.0	11.5	13.5	6.5	4.5	5.5	2.0	.5	1.0
2	---	---	---	15.5	13.0	14.0	6.0	5.5	5.5	.5	.0	.0
3	---	---	---	15.0	11.0	13.0	5.5	5.0	5.0	1.5	.5	1.0
4	---	---	---	14.5	10.5	12.5	5.5	4.5	5.0	2.0	1.5	2.0
5	---	---	---	15.0	12.0	13.5	5.0	4.5	4.5	---	---	---
6	---	---	---	14.0	10.5	12.0	4.5	4.0	4.0	---	---	---
7	14.0	13.5	14.0	11.5	8.5	10.0	5.0	4.0	4.0	1.0	.5	.5
8	13.5	12.0	13.0	12.0	7.5	10.0	5.0	4.0	4.5	.5	.0	.0
9	14.0	11.0	12.0	11.0	9.0	10.0	3.5	2.0	3.0	.0	.0	.0
10	13.5	11.0	12.5	10.5	8.0	9.5	2.0	1.5	1.5	.0	.0	.0
11	15.0	11.5	13.0	10.5	7.0	9.0	2.0	1.0	1.5	.0	.0	.0
12	15.5	11.5	13.5	10.5	7.5	9.0	2.5	1.5	2.0	---	---	---
13	15.5	11.0	13.5	10.0	6.0	8.0	3.0	1.5	2.5	---	---	---
14	15.5	11.5	13.5	10.5	6.0	8.5	3.0	2.0	2.5	---	---	---
15	16.0	13.0	14.5	10.5	6.5	8.5	3.0	2.0	2.5	---	---	---
16	16.0	13.5	15.0	11.0	7.5	9.5	3.0	2.0	2.5	---	---	---
17	16.0	11.5	14.0	10.0	6.5	8.5	2.5	1.5	2.0	---	---	---
18	15.5	14.0	14.5	11.0	8.0	9.5	3.0	1.0	1.5	---	---	---
19	13.5	9.5	11.5	12.0	7.5	9.5	2.0	1.0	1.5	---	---	---
20	14.0	8.0	11.0	9.5	6.0	7.5	2.0	.5	1.0	2.0	.5	1.5
21	16.0	12.0	14.0	6.0	4.0	4.5	2.5	1.0	1.5	2.0	1.0	1.5
22	15.5	13.0	14.5	4.0	3.5	3.5	4.0	1.5	2.5	2.0	.5	1.5
23	14.5	11.0	12.5	4.0	3.0	3.5	5.0	.5	2.0	4.0	.5	1.5
24	13.0	9.0	11.0	4.0	3.0	3.5	.5	.0	.5	.5	.0	.0
25	12.5	7.0	10.0	5.5	3.5	4.5	.5	.0	.5	.5	.0	.0
26	13.0	11.0	12.5	7.0	4.0	5.0	---	---	---	.5	.0	.0
27	14.5	12.5	14.0	6.5	6.0	6.5	---	---	---	.5	.0	.5
28	14.5	11.5	13.0	6.0	5.5	6.0	---	---	---	1.0	.5	.5
29	14.0	10.5	12.0	6.0	5.0	5.5	1.0	.5	.5	1.0	.5	1.0
30	14.5	9.5	12.0	6.0	4.5	5.0	1.0	.0	.5	2.0	.5	1.0
31	15.0	10.5	13.0	---	---	---	1.5	.5	.5	.5	.0	.0
MONTH	16.0	7.0	13.0	15.5	3.0	8.5	6.5	.0	2.5	4.0	.0	.5

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	---	---	---				---	---	---	18.5	13.0	15.5
2	---	---	---				---	---	---	19.0	13.5	16.5
3	.5	.5	.5				---	---	---	19.5	14.5	16.5
4	.5	.0	.5				---	---	---	19.5	14.0	16.5
5	.5	.0	.5				---	---	---	20.5	14.5	17.5
6	.5	.0	.0				3.0	1.5	2.5	21.0	16.5	18.5
7	.5	.0	.0				4.0	1.0	2.5	19.5	18.0	18.5
8	1.0	.0	.5				5.5	1.5	3.5	20.0	16.0	17.5
9	1.0	.5	.5				5.0	3.5	4.0	20.0	15.0	17.5
10	.5	.0	.0				4.5	3.0	4.0	19.0	15.5	17.0
11	1.0	.0	.5				4.0	3.5	4.0	21.5	15.5	18.0
12	1.5	.0	1.0				6.5	3.5	5.0	22.5	17.0	19.5
13	2.0	.5	1.0				7.5	6.5	7.0	23.0	19.0	20.5
14	2.0	1.0	1.0				9.5	7.0	8.0	23.5	19.0	21.0
15	3.0	1.0	2.0				11.5	7.5	9.5	20.5	18.5	19.5
16	1.0	.5	.5				14.5	10.0	12.5	22.0	18.0	19.5
17	---	---	---				14.5	13.0	14.0	22.5	17.5	19.5
18	---	---	---				15.5	12.0	13.5	23.5	18.0	20.5
19	---	---	---				16.0	12.0	14.0	22.0	19.5	20.5
20	---	---	---				14.0	12.5	13.5	22.0	18.5	20.5
21	---	---	---				15.0	11.0	12.5	20.0	18.5	19.0
22	---	---	---				14.0	11.0	11.5	20.0	17.5	18.5
23	---	---	---				15.0	9.5	12.0	18.5	16.0	17.5
24	---	---	---				16.0	11.0	13.5	19.0	16.0	17.5
25	---	---	---				17.0	12.0	14.5	18.5	17.0	17.5
26	---	---	---				16.5	14.0	15.0	19.5	17.0	18.0
27	---	---	---				15.0	12.0	13.5	21.5	17.5	19.0
28	---	---	---				16.0	10.5	13.0	21.0	18.5	19.5
29	---	---	---				16.0	10.5	13.0	20.5	19.0	20.0
30	---	---	---				17.0	11.5	14.0	20.5	19.0	20.0
31	---	---	---				---	---	---	22.5	19.0	20.5
MONTH	3.0	.0	.5				17.0	1.0	10.0	23.5	13.0	18.5

04200550 BLACK RIVER BELOW ELYRIA, OH--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	21.0	19.5	20.5	22.0	19.5	20.5	25.5	22.5	24.0	24.0	21.5	22.5
2	22.5	18.0	20.0	23.0	19.0	21.0	25.0	23.0	23.5	24.0	22.0	23.0
3	22.0	18.5	20.0	21.5	19.5	20.0	25.5	22.5	24.0	23.0	19.5	21.0
4	19.5	17.5	18.5	20.0	19.0	19.5	24.5	22.5	24.0	23.0	19.5	21.0
5	18.5	16.5	17.5	20.5	19.0	19.5	25.5	23.5	24.0	23.5	18.5	21.0
6	18.0	16.0	17.0	27.5	20.0	22.0	26.0	23.5	24.5	22.5	19.5	21.0
7	19.5	16.0	18.0	25.0	22.0	23.5	26.0	22.5	24.0	21.5	19.0	20.5
8	22.5	17.5	20.0	27.0	22.5	24.5	25.0	23.5	24.0	22.0	17.0	19.5
9	22.5	19.0	20.5	27.5	22.5	24.5	26.5	23.5	24.5	22.5	17.5	20.0
10	23.5	20.5	21.5	28.0	22.5	25.0	24.0	22.0	23.0	23.5	18.5	20.5
11	23.5	19.0	21.0	26.5	24.0	25.0	22.0	21.0	22.0	23.5	20.5	22.0
12	22.0	19.5	20.5	27.5	22.5	24.5	24.5	19.5	22.0	25.5	20.5	23.0
13	23.5	19.0	20.5	28.0	23.5	25.5	24.5	19.5	22.0	25.5	21.5	23.5
14	24.0	18.5	21.0	27.0	23.0	25.0	25.0	20.5	22.5	25.5	22.5	23.5
15	23.0	20.0	21.0	26.0	23.0	24.5	25.0	21.0	23.0	23.0	21.5	22.0
16	21.5	18.5	19.5	27.5	23.5	25.5	25.5	21.5	23.5	22.0	20.5	21.0
17	19.5	18.0	18.5	27.5	24.5	26.0	25.0	22.5	23.5	22.0	17.5	19.5
18	20.0	18.0	19.0	27.5	25.0	26.0	25.0	20.5	22.5	21.0	19.0	20.0
19	19.0	18.0	19.0	26.5	24.0	25.0	25.0	20.5	22.5	20.5	17.0	18.5
20	20.0	17.0	18.5	28.0	24.0	25.5	23.5	21.0	22.5	20.0	17.5	19.0
21	21.5	17.0	19.0	27.5	23.0	25.0	23.5	21.0	22.0	20.0	17.5	18.5
22	20.0	18.0	19.0	25.0	22.5	24.0	21.0	18.5	20.0	18.5	16.0	17.5
23	18.5	17.0	18.0	27.5	22.5	24.5	21.5	18.5	20.0	17.0	14.5	16.0
24	19.0	16.0	17.5	27.0	22.5	24.5	23.5	19.5	21.5	17.5	15.5	16.5
25	21.0	16.5	19.0	27.5	22.5	25.0	24.0	21.0	22.5	18.0	15.5	16.5
26	22.0	18.5	20.0	26.5	24.0	25.0	23.5	19.5	21.5	18.0	16.0	17.0
27	23.5	19.0	21.0	26.0	24.5	25.5	24.5	21.0	22.5	18.0	15.5	16.5
28	23.0	20.5	21.5	27.0	24.0	25.0	22.5	20.0	21.0	---	---	---
29	21.5	20.0	21.0	25.5	22.0	23.5	21.0	17.5	19.5	---	---	---
30	21.5	20.0	21.0	26.5	22.0	24.0	23.5	19.0	21.0	---	---	---
31	---	---	---	26.5	23.0	24.5	23.5	21.5	22.5	---	---	---
MONTH	24.0	16.0	19.5	28.0	19.0	24.0	26.5	17.5	22.5	25.5	14.5	20.0
YEAR	28.0	.0	14.0									

OXYGEN, DISSOLVED (DO), MG/L, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	---	---	---	7.7	5.3	6.3	11.8	10.7	11.4	14.4	13.3	13.8
2	---	---	---	7.3	5.2	6.1	11.6	11.1	11.4	14.6	14.2	14.4
3	---	---	---	8.3	5.6	6.6	12.3	11.4	11.8	14.2	13.7	13.9
4	---	---	---	8.1	5.6	6.6	12.3	11.9	12.1	13.7	13.5	13.6
5	---	---	---	7.5	3.7	5.6	12.9	12.2	12.6	---	---	---
6	---	---	---	6.7	4.4	5.5	13.1	12.8	12.9	---	---	---
7	7.9	7.6	7.7	7.9	5.5	6.4	12.9	12.0	12.6	14.0	13.9	14.0
8	9.5	7.7	8.7	8.0	6.2	7.0	12.6	12.0	12.2	14.3	13.7	14.0
9	9.9	8.5	9.1	8.9	6.5	7.5	13.5	12.6	13.1	13.8	13.6	13.7
10	10.0	8.4	9.0	9.0	7.2	7.8	13.7	13.5	13.6	---	---	---
11	10.0	8.1	8.9	8.6	6.4	7.2	13.5	13.1	13.4	---	---	---
12	10.3	8.0	8.7	8.9	6.0	7.1	13.3	13.1	13.2	---	---	---
13	10.4	7.6	8.3	8.5	6.5	7.2	13.4	13.0	13.2	---	---	---
14	10.1	7.0	8.0	8.4	6.5	7.2	13.1	12.4	12.9	---	---	---
15	7.6	5.6	6.5	8.9	6.4	7.4	12.5	12.2	12.4	---	---	---
16	7.8	5.3	6.0	8.7	6.5	7.5	12.7	12.2	12.5	---	---	---
17	7.1	5.7	6.1	9.4	6.8	7.9	12.6	12.3	12.5	---	---	---
18	8.5	6.2	7.6	8.8	6.5	7.4	12.7	12.3	12.5	---	---	---
19	8.1	4.8	6.7	7.1	4.6	6.3	12.8	12.6	12.7	12.3	11.9	12.2
20	7.2	5.6	6.5	9.5	5.3	8.3	12.9	12.7	12.8	12.4	11.7	12.0
21	5.6	4.3	5.1	11.0	9.5	10.6	12.8	12.2	12.6	12.0	11.7	11.9
22	4.5	1.8	3.9	11.3	10.9	11.1	12.3	11.1	12.0	12.5	11.9	12.2
23	5.4	3.0	4.7	11.4	10.8	11.1	14.6	11.2	12.9	13.5	10.9	12.3
24	5.2	4.2	4.9	12.0	11.1	11.7	15.1	14.6	14.9	14.5	13.6	14.1
25	5.3	3.6	4.7	12.4	11.9	12.1	15.0	14.1	14.7	14.6	14.2	14.5
26	5.8	4.2	4.9	12.3	11.3	12.0	---	---	---	14.2	13.8	14.0
27	4.4	3.7	4.1	11.9	11.6	11.7	---	---	---	14.0	13.3	13.6
28	5.9	3.4	4.6	12.0	11.7	11.8	---	---	---	13.4	12.9	13.2
29	5.8	4.0	4.8	12.0	11.7	11.9	14.0	13.8	14.0	13.4	12.8	13.2
30	6.6	4.3	5.6	12.2	11.5	11.9	14.1	13.9	14.0	14.2	12.6	13.1
31	7.0	4.8	5.7	---	---	---	13.9	13.4	13.7	14.5	13.6	13.9
MONTH	10.4	1.8	6.4	12.4	3.7	8.5	15.1	10.7	12.9	14.6	10.9	13.4

04200550 BLACK RIVER BELOW ELYRIA, OH--Continued

OXYGEN, DISSOLVED (DO), MG/L, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	---	---	---	---	---	---	11.6	10.5	11.2	11.2	8.1	9.3
2	---	---	---	---	---	---	---	---	---	11.3	7.9	9.5
3	13.8	13.6	13.7	---	---	---	---	---	---	10.8	7.9	9.2
4	14.1	13.9	14.0	---	---	---	---	---	---	9.0	6.7	8.0
5	14.2	12.9	13.8	---	---	---	---	---	---	7.8	5.9	6.9
6	13.9	12.8	13.0	---	---	---	12.4	12.4	12.4	9.5	5.9	7.6
7	13.9	13.5	13.7	---	---	---	12.5	12.2	12.3	9.2	6.2	7.5
8	13.9	13.2	13.7	---	---	---	12.4	12.0	12.2	7.2	4.9	6.1
9	13.2	12.6	13.0	---	---	---	12.3	11.9	12.1	8.8	6.3	7.3
10	13.4	13.0	13.3	---	---	---	12.6	12.1	12.3	8.9	6.3	7.5
11	13.3	12.4	12.9	---	---	---	12.4	12.2	12.3	9.2	6.7	7.7
12	12.9	12.4	12.8	---	---	---	12.5	11.6	12.2	9.5	6.1	7.5
13	12.9	12.3	12.7	---	---	---	11.7	11.2	11.4	9.1	6.0	7.3
14	12.9	12.4	12.7	---	---	---	11.4	10.7	11.1	8.9	5.6	7.0
15	12.7	11.8	12.3	---	---	---	10.9	10.2	10.7	7.8	5.4	6.5
16	13.6	11.3	12.9	---	---	---	10.3	9.2	10.0	8.4	5.8	7.0
17	---	---	---	---	---	---	9.4	9.2	9.3	8.4	6.2	7.2
18	---	---	---	---	---	---	10.3	9.3	9.8	7.9	5.6	6.7
19	---	---	---	---	---	---	10.7	9.2	9.9	7.1	4.2	5.8
20	---	---	---	---	---	---	9.6	9.0	9.3	6.6	4.9	5.8
21	---	---	---	---	---	---	11.6	8.8	10.0	6.8	5.0	5.8
22	---	---	---	---	---	---	12.3	9.6	9.8	7.1	4.5	6.0
23	---	---	---	---	---	---	13.2	9.3	10.9	8.7	3.6	6.8
24	---	---	---	---	---	---	13.7	8.8	11.0	8.5	7.0	8.0
25	---	---	---	---	---	---	14.1	9.0	11.2	7.9	7.2	7.7
26	---	---	---	---	---	---	12.5	8.5	10.2	7.4	6.9	7.2
27	---	---	---	---	---	---	11.0	8.1	9.3	7.0	5.8	6.7
28	---	---	---	---	---	---	11.4	8.9	10.1	6.9	6.2	6.6
29	---	---	---	---	---	---	12.1	8.7	10.1	7.5	7.0	7.4
30	---	---	---	11.9	10.6	11.3	11.5	8.3	9.7	7.3	7.0	7.1
31	---	---	---	11.8	10.5	11.2	---	---	---	7.2	6.8	7.0
MONTH	14.2	11.3	13.2	11.9	10.5	11.3	14.1	8.1	10.8	11.3	3.6	7.2

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	6.8	6.0	6.6	8.1	7.6	7.8	6.4	4.3	5.3	2.6	1.7	2.2
2	6.7	6.2	6.5	8.0	7.3	7.7	5.9	3.7	4.8	2.8	1.7	2.2
3	6.9	6.2	6.5	8.3	6.6	7.6	5.6	3.8	4.6	3.7	2.3	3.2
4	7.0	6.3	6.6	8.5	7.5	8.1	4.0	1.4	2.9	2.9	2.0	2.4
5	6.8	5.5	6.4	7.6	6.8	7.2	5.7	2.7	4.4	2.7	2.0	2.3
6	7.2	7.0	7.1	7.9	7.0	7.5	7.9	4.8	6.6	2.6	1.8	2.1
7	7.5	6.9	7.3	7.7	7.1	7.5	7.2	5.7	6.5	2.9	1.6	2.3
8	7.2	6.1	6.8	7.3	6.8	7.1	6.6	5.3	5.9	2.7	1.9	2.3
9	6.4	5.1	5.8	7.2	6.7	7.0	7.2	5.2	5.9	2.8	2.0	2.4
10	6.4	4.8	5.4	7.3	6.6	6.9	7.5	4.7	5.9	2.5	1.7	2.2
11	6.4	4.9	5.6	7.6	6.4	6.9	7.9	4.7	5.8	2.2	1.4	1.8
12	6.3	4.5	5.3	8.6	6.5	7.4	8.3	5.1	6.4	1.9	1.2	1.5
13	7.9	4.6	6.0	9.6	6.2	7.6	8.0	5.1	6.3	2.1	1.1	1.4
14	9.6	5.1	6.8	10.4	5.8	7.7	7.4	5.1	6.1	4.3	1.1	2.1
15	10.8	5.0	7.0	10.0	5.8	7.8	7.8	4.8	6.0	5.5	4.4	4.9
16	6.5	4.5	5.4	10.7	5.1	7.6	7.9	4.7	6.2	5.0	3.6	4.1
17	8.4	5.4	7.3	9.8	5.0	7.1	6.4	4.4	5.3	4.3	3.6	3.8
18	8.2	7.5	7.8	9.1	4.9	6.8	5.0	3.9	4.8	6.0	3.0	4.4
19	7.8	7.4	7.6	7.1	2.5	5.4	5.8	3.5	4.5	5.3	4.4	4.9
20	8.0	6.5	7.6	8.3	4.3	5.9	5.1	2.7	4.2	5.5	4.5	5.0
21	7.9	7.0	7.5	7.7	4.3	5.8	6.1	3.7	4.8	5.5	4.4	5.0
22	7.1	6.4	6.9	6.7	4.7	5.6	6.1	4.2	5.1	5.6	2.2	4.7
23	8.7	6.6	8.0	6.3	4.5	5.2	5.9	4.1	5.0	7.1	5.1	6.0
24	8.7	7.8	8.3	6.3	4.5	5.2	5.3	2.8	4.5	6.2	4.6	5.5
25	8.1	6.9	7.6	5.8	4.4	5.0	5.9	2.1	4.1	7.1	5.7	6.3
26	7.2	6.7	7.0	6.1	4.4	5.1	5.2	3.2	4.1	7.3	5.6	6.4
27	7.3	6.7	7.1	7.6	6.6	5.5	4.3	2.6	3.4	7.3	4.8	6.3
28	7.3	6.5	6.7	6.1	1.8	4.4	4.5	2.5	3.5	---	---	---
29	---	---	---	6.3	4.4	5.3	4.8	3.4	4.1	---	---	---
30	8.4	7.2	7.7	7.5	4.6	5.9	4.5	3.2	3.9	---	---	---
31	---	---	---	7.4	4.5	5.9	3.1	2.1	2.4	---	---	---
MONTH	10.8	4.5	6.8	10.7	1.8	6.6	8.3	1.4	5.0	7.3	1.1	3.6
YEAR	15.1	1.1	8.2									

04200550 BLACK RIVER BELOW ELYRIA, OH--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEDIAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	1080	681	698	---	537	318	965	620	435	970	1140
2	---	975	656	551	---	492	---	875	730	515	960	1200
3	---	1010	654	536	492	483	---	860	790	470	955	1060
4	---	1080	654	512	440	543	---	985	830	390	705	1150
5	---	1170	635	---	455	650	---	1060	800	370	700	1010
6	---	1090	618	---	456	621	543	930	720	380	690	951
7	808	1090	633	484	470	615	549	910	730	445	595	967
8	792	1040	654	507	504	456	638	845	825	530	555	1160
9	873	941	615	558	567	465	572	790	885	605	625	1240
10	917	999	612	573	639	482	467	785	900	615	735	1300
11	894	1110	645	579	650	425	410	870	935	590	781	1300
12	938	1080	669	---	692	255	390	940	965	635	825	1230
13	1040	1120	639	---	734	272	384	990	920	845	860	1250
14	1100	1150	651	---	759	291	398	1020	840	870	1030	1190
15	1170	1100	771	---	873	---	420	1050	850	940	942	788
16	1190	1030	827	---	765	---	459	920	780	950	913	906
17	1180	1060	846	---	---	---	513	885	730	930	901	1080
18	1120	1140	1080	---	---	---	525	1020	600	850	897	1060
19	896	1160	1050	933	---	---	554	1040	695	760	910	990
20	1060	701	900	972	---	---	620	1010	750	820	779	1030
21	1240	636	938	806	---	---	647	1020	750	910	876	1140
22	1210	558	953	836	---	---	770	1060	735	945	864	1300
23	1060	609	774	1160	---	---	795	735	700	995	860	891
24	1250	630	377	389	---	---	790	395	520	985	986	979
25	1140	648	351	204	---	---	740	475	565	900	980	950
26	995	633	---	185	---	---	750	560	630	880	1010	1030
27	1030	618	---	219	---	---	890	605	660	870	1030	709
28	1040	641	---	267	---	---	890	555	640	930	1030	---
29	1070	645	712	336	---	666	930	570	400	1060	1130	---
30	1090	665	678	399	---	656	950	525	375	1070	1200	---
31	1130	---	651	---	---	413	---	570	---	970	1110	---
MEAN	1050	914	712	557	607	490	612	833	729	757	884	1070

WTR YR 1982 MEAN 790 MAX 1300 MIN 185

PH (STANDARD UNITS), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEDIAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	7.8	7.9	8.0	---	8.0	8.2	8.1	7.6	7.6	7.5	7.4
2	---	7.8	8.1	8.0	---	7.9	---	8.3	7.5	7.6	7.5	7.4
3	---	7.9	8.2	8.0	7.9	7.9	---	8.2	7.6	7.6	7.4	7.4
4	---	8.0	8.2	7.8	7.8	8.1	---	7.9	7.6	7.7	7.4	7.4
5	---	7.9	8.2	---	7.9	8.1	---	7.7	7.6	7.7	7.4	7.4
6	---	7.8	8.2	---	7.9	8.2	8.2	7.7	7.7	7.6	7.8	7.4
7	---	8.0	8.2	8.0	8.0	8.2	8.2	7.7	7.8	7.6	7.7	7.3
8	---	7.9	8.1	8.0	8.1	8.1	8.3	7.5	7.7	7.6	7.5	7.4
9	---	7.9	8.2	8.0	8.1	7.9	8.3	7.5	7.6	7.6	7.5	7.4
10	---	7.9	8.2	---	8.1	7.9	8.2	7.7	7.6	7.6	7.5	7.3
11	---	7.8	8.3	---	8.1	7.9	8.2	7.9	7.6	7.7	7.5	7.3
12	---	8.1	8.3	---	8.1	7.8	8.3	7.8	7.6	7.7	7.6	7.3
13	---	7.6	8.2	---	8.2	7.8	8.3	7.8	7.7	7.8	7.6	7.3
14	---	7.7	8.2	---	8.2	7.9	8.2	7.7	7.9	7.8	7.6	7.3
15	---	7.5	8.1	---	8.3	---	8.2	7.7	7.9	7.9	7.5	7.3
16	---	7.8	8.1	---	8.2	---	8.2	7.6	7.6	7.8	7.6	7.3
17	---	7.7	8.1	---	---	---	8.2	7.7	7.9	8.0	7.6	7.5
18	---	7.7	8.1	---	---	---	8.4	7.6	7.7	8.0	7.6	7.4
19	---	7.5	8.0	8.0	---	---	8.4	7.5	7.8	7.9	7.5	7.4
20	---	8.1	8.0	7.9	---	---	8.3	7.4	7.7	7.5	7.5	7.5
21	---	8.0	8.0	7.9	---	---	8.4	7.4	7.7	7.5	7.5	7.5
22	---	8.0	8.0	7.9	---	---	8.3	7.5	7.6	7.5	7.6	7.5
23	---	8.0	8.0	7.9	---	---	8.4	7.6	7.8	7.5	7.5	7.6
24	---	8.0	7.7	7.9	---	---	8.6	7.6	7.7	7.5	7.4	7.4
25	---	8.2	7.7	7.7	---	---	8.7	7.6	7.6	7.5	7.4	7.5
26	---	8.1	---	7.7	---	---	8.6	7.6	7.5	7.4	7.4	7.5
27	7.8	8.0	---	7.7	---	---	8.3	7.5	7.5	7.5	7.4	7.5
28	7.7	8.1	---	7.7	---	---	8.3	7.5	7.4	7.5	7.4	---
29	7.9	8.2	---	7.8	---	---	8.2	7.7	7.5	7.4	7.5	---
30	7.7	8.0	7.9	7.7	---	---	8.1	7.6	7.6	7.5	7.5	---
31	7.7	---	7.9	7.7	---	8.4	---	7.6	---	7.6	7.4	---
MEAN	7.8	7.9	8.1	7.9	8.1	8.0	8.3	7.7	7.7	7.6	7.5	7.4

WTR YR 1982 MEAN 7.8 MAX 8.7 MIN 7.3

NOTE: NUMBER OF MISSING DAYS OF RECORD EXCEEDED 20% OF YEAR

04200550 BLACK RIVER BELOW ELYRIA, OH--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEDIAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	13.5	6.0	1.0	---		---	15.5	20.5	20.5	24.0	22.5
2	---	14.0	5.5	.5	---		---	16.5	20.0	21.0	23.5	23.0
3	---	13.0	5.0	1.0	.5		---	16.5	19.5	20.0	23.5	21.5
4	---	12.5	5.5	1.5	.5		---	16.5	18.5	19.5	24.0	21.0
5	---	14.0	4.5	---	.5		---	17.5	17.5	19.5	24.0	20.5
6	---	12.0	4.0	---	.0		2.5	18.5	17.0	22.0	24.0	20.5
7	14.0	10.0	4.5	.5	.5		2.5	18.5	18.0	23.0	24.0	20.5
8	13.0	9.5	4.5	.0	.5		3.5	17.5	19.5	24.0	24.0	19.5
9	12.5	10.5	3.0	.0	.5		4.5	17.0	21.0	24.0	24.0	20.0
10	12.5	9.5	1.5	.0	.0		4.0	17.0	21.0	24.5	23.0	20.5
11	13.0	9.0	1.5	.0	.5		4.0	18.0	21.0	24.5	22.0	21.5
12	13.5	9.0	2.0	---	1.0		5.0	19.5	20.5	24.0	21.5	22.0
13	13.5	8.5	2.5	---	1.0		7.5	20.5	20.0	25.0	21.5	23.5
14	13.5	8.5	3.0	---	1.0		8.5	20.5	20.5	24.5	22.0	23.0
15	15.0	9.0	2.5	---	1.5		10.0	19.0	21.0	24.5	23.0	22.5
16	15.0	9.5	2.5	---	.5		13.5	19.0	19.0	25.0	23.5	21.0
17	14.0	9.0	2.0	---	---		14.0	19.5	18.5	25.5	23.5	19.5
18	15.0	9.5	1.5	---	---		13.5	20.0	19.0	26.0	22.5	20.0
19	11.0	9.5	1.5	---	---		14.0	20.5	19.0	25.0	22.5	18.5
20	11.5	7.5	1.0	1.5	---		13.5	20.5	18.5	25.0	22.5	19.0
21	14.5	4.5	2.0	1.5	---		12.0	19.0	18.5	24.5	21.5	18.5
22	14.5	3.5	2.5	2.0	---		11.5	18.5	19.0	24.0	20.5	17.5
23	12.5	3.5	1.5	1.5	---		12.5	17.5	18.0	24.0	20.0	16.0
24	11.5	3.5	.5	.0	---		13.5	17.5	17.5	24.5	21.0	16.5
25	10.5	4.5	.5	.0	---		14.5	17.5	19.0	24.5	22.0	16.5
26	12.5	5.0	---	.5	---		15.0	18.0	20.0	25.0	21.5	17.0
27	13.5	6.5	---	.5	---		13.0	19.0	21.0	25.0	22.0	16.5
28	13.0	6.0	---	.5	---		12.5	19.5	21.5	25.0	21.0	---
29	12.0	5.5	.5	1.0	---		13.5	20.0	21.0	23.5	20.0	---
30	12.0	5.5	.5	1.0	---		14.5	19.5	20.5	24.0	20.5	---
31	13.0	---	.5	.0	---		---	20.5	---	24.5	22.5	---
MEAN	13.0	8.5	2.5	.5	.5		10.0	18.5	19.5	23.5	22.5	20.0

WTR YR 1982 MEAN 14.0 MAX 26.0 MIN .0

OXYGEN, DISSOLVED (DO), MG/L, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEDIAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	6.0	11.5	13.8	---	---	11.3	9.1	6.8	7.8	5.4	2.2
2	---	6.0	11.4	14.4	---	---	---	9.3	6.5	7.8	4.9	2.2
3	---	6.4	11.9	14.0	13.6	---	---	9.0	6.4	7.6	4.5	3.3
4	---	6.2	12.1	13.6	14.0	---	---	7.9	6.6	8.4	3.1	2.5
5	---	5.3	12.7	---	14.0	---	---	6.8	6.6	7.3	4.4	2.3
6	---	5.4	12.9	---	13.0	---	12.1	7.7	7.1	7.6	6.6	2.2
7	7.7	6.4	12.7	14.0	13.7	---	12.4	7.1	7.3	7.6	6.4	2.3
8	8.7	6.8	12.1	14.1	13.7	---	12.3	6.3	6.8	7.2	5.8	2.3
9	8.9	7.5	13.3	13.7	13.0	---	12.1	7.3	5.9	7.0	5.7	2.3
10	8.8	7.6	13.6	---	13.3	---	12.3	7.2	5.3	6.9	5.7	2.2
11	8.7	7.0	13.5	---	13.0	---	12.3	7.4	5.5	6.9	5.5	1.7
12	8.3	6.8	13.2	---	12.9	---	12.3	7.2	5.2	7.2	6.2	1.4
13	7.7	6.9	13.3	---	12.8	---	11.4	6.9	5.7	7.3	6.2	1.3
14	7.6	7.0	13.1	---	12.7	---	11.2	6.9	6.2	7.3	6.0	2.0
15	6.4	7.3	12.4	---	12.3	---	10.7	6.5	6.3	7.5	5.8	4.7
16	5.6	7.3	12.4	---	12.8	---	10.2	7.0	5.3	7.3	6.0	4.0
17	6.0	7.6	12.5	---	---	---	9.3	7.0	7.7	6.9	5.3	3.8
18	7.7	7.1	12.5	---	---	---	9.8	6.6	7.8	6.6	4.5	4.0
19	6.7	6.4	12.7	12.2	---	---	9.8	5.6	7.6	5.3	4.3	5.0
20	6.6	8.5	12.9	12.0	---	---	9.3	5.8	7.6	5.5	4.6	5.1
21	5.3	10.9	12.6	11.9	---	---	9.8	5.7	7.5	5.7	4.7	4.9
22	4.0	11.1	12.0	12.3	---	---	9.7	5.9	6.9	5.5	5.2	5.0
23	4.8	11.0	12.4	12.4	---	---	10.5	6.5	8.5	5.0	5.0	5.9
24	4.9	11.7	15.0	14.1	---	---	10.7	8.0	8.5	5.2	4.7	5.6
25	4.7	12.1	14.8	14.5	---	---	10.8	7.7	7.9	5.1	4.3	6.1
26	4.9	12.1	---	14.0	---	---	9.8	7.3	7.1	5.0	4.1	6.3
27	4.1	11.7	---	13.7	---	---	9.3	6.9	7.0	5.5	3.5	6.3
28	4.6	11.8	---	13.2	---	---	10.0	6.6	6.6	4.3	3.4	---
29	4.6	11.9	14.0	13.2	---	---	9.8	7.4	---	5.3	4.1	---
30	5.5	12.0	14.0	13.1	---	11.3	9.4	7.1	7.6	5.7	3.9	---
31	5.4	---	13.8	13.9	---	11.2	---	7.1	---	5.9	2.4	---
MEAN	6.3	8.4	12.9	13.4	13.2	11.3	10.7	7.1	6.8	6.5	4.9	3.6

WTR YR 1982 MEAN 8.1 MAX 15.0 MIN 1.3

04201500 ROCKY RIVER NEAR BEREA, OH

LOCATION.--Lat 41°24'24", long 81°53'14", in T.6 N., R.15 W., Cuyahoga County, Hydrologic Unit 04110001, on right bank at downstream side of Cedar Point Road Bridge in Rocky River Reservation, just downstream from confluence of East and West Branches, and 3.0 mi (4.8 km) northwest of Berea.

DRAINAGE AREA.--267 mi^2 (692 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1923 to September 1935, September 1943 to current year. Monthly discharge only for October 1923, published in WSP 1307.

REVISED RECORDS.--WSP 1437: 1924, 1925(M), 1926, 1927(M), 1928-29, 1930-35(M), 1945. WSP 1912: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 649.90 ft (198.089 m) National Geodetic Vertical Datum of 1929 (Cuyahoga County bench mark). Prior to Sept. 30, 1935, nonrecording gage at same site and datum.

REMARKS.--Records good except those for the winter period, which are fair. Some regulation at low flow by small reservoirs on East Branch. Some inter-basin transfer of water from Lake Erie for municipal water supply by Cleveland Metro Water District. Water-quality data collected at this site 1964 to 1977.

AVERAGE DISCHARGE.--51 years, 264 ft^3/s (7.476 m^3/s), 13.43 in/yr (341 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 21,400 ft^3/s (606 m^3/s) Jan. 22, 1959, gage height, 14.10 ft (4.298 m), from rating curve extended above 11,000 ft^3/s (312 m^3/s) on basis of contracted-opening measurement of peak flow; maximum gage height, 18.6 ft (5.67 m) June 29, 1924 (backwater caused by tornado); minimum daily discharge, 0.2 ft^3/s (0.006 m^3/s) Sept. 2, 1932, Aug. 22, 27, 30, 1933.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1913 reached a stage of 20.9 ft (6.37 m).

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 4,000 ft^3/s (113 m^3/s) and maximums (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Dec. 23	1445	*4610	131	*5.18	1.579	Jan. 23	1515	4150	118	4.92	1.500
Jan. 4	1800	4440	126	5.08	1.548	Mar. 12	0015	4050	115	4.87	1.484

Minimum daily discharge, 22 ft^3/s (0.62 m^3/s) Aug. 19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	172	54	278	538	1990	348	967	68	146	278	24	24
2	120	52	470	494	1180	430	441	72	139	139	26	54
3	98	52	293	381	682	268	476	70	108	639	31	85
4	70	51	239	3010	813	513	590	65	83	1280	201	34
5	51	63	507	1790	639	2440	360	58	85	584	293	31
6	304	111	348	551	392	1080	315	58	326	249	90	29
7	258	126	215	436	239	507	337	58	229	149	52	31
8	114	103	465	268	190	315	403	436	123	103	44	30
9	72	78	570	220	160	278	674	425	88	81	39	29
10	54	65	315	200	150	254	846	168	74	68	36	25
11	49	56	215	190	140	1930	888	108	63	60	33	28
12	42	52	192	180	140	2440	704	88	54	52	29	25
13	39	51	172	170	130	2470	674	76	51	49	28	24
14	36	49	156	160	129	1330	441	68	47	44	26	63
15	34	49	146	150	210	611	288	58	49	40	25	184
16	34	46	132	140	1330	1260	229	54	436	37	25	88
17	34	47	117	140	2130	1690	219	51	1000	36	24	52
18	42	44	114	130	1820	660	210	51	331	34	23	56
19	90	65	117	120	1470	459	180	49	153	42	22	42
20	92	1130	132	120	1090	476	180	76	111	74	72	33
21	56	716	172	110	1620	494	176	70	206	49	85	33
22	52	419	160	110	905	354	142	70	315	40	49	36
23	106	293	3000	1130	813	269	117	2370	453	34	47	120
24	90	234	1950	1490	1190	224	103	1090	283	30	36	88
25	88	224	660	734	584	206	98	343	123	26	33	114
26	78	219	397	538	354	258	92	201	85	25	29	70
27	81	371	309	470	309	273	88	142	68	28	26	544
28	95	254	258	371	268	224	76	494	83	31	24	584
29	83	149	224	288	---	320	58	326	1740	29	23	192
30	70	111	184	931	---	326	54	215	922	25	23	92
31	60	---	168	2130	---	2180	---	197	---	25	23	---
TOTAL	2664	5334	12675	17690	21067	24887	10426	7675	7974	4380	1541	2840
MEAN	85.9	178	409	571	752	803	348	248	266	141	49.7	94.7
MAX	304	1130	3000	3010	2130	2470	967	2370	1740	1280	293	584
MIN	34	44	114	110	129	206	54	49	47	25	22	24
CFSM	.32	.67	1.53	2.14	2.82	3.01	1.30	.93	1.00	.53	.19	.36
IN.	.37	.74	1.77	2.46	2.94	3.47	1.45	1.07	1.11	.61	.21	.40

CAL YR 1981 TOTAL 116852 MEAN 320 MAX 5200 MIN 25 CFSM 1.20 IN 16.28
WTR YR 1982 TOTAL 119153 MEAN 326 MAX 3010 MIN 22 CFSM 1.22 IN 16.60

04202000 CUYAHOGA RIVER AT HIRAM RAPIDS, OH

LOCATION.--Lat 41°20'26", long 81°10'01", in T.5 N., R.7 W., Portage County, Hydrologic Unit 04110002, on left bank at downstream side of bridge on Winchell Road at Hiram Rapids, 0.6 mi (1.0 km) downstream from Black Brook.

DRAINAGE AREA.--151 mi^2 (391 km^2).

PERIOD OF RECORD.--August 1927 to December 1935 (published as "near Hiram"), October 1944 to current year.

REVISED RECORDS.--WSP 1054: 1945. WSP 1437: 1931. WSP 1912: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,087.46 ft (331.458 m) National Geodetic Vertical Datum of 1929, unadjusted. Prior to Aug. 26, 1927, nonrecording gage and Aug. 26, 1927, to Dec. 31, 1935, water-stage recorder, at site 2.8 mi (4.5 km) downstream at different datum. Oct. 20, 1944, to Oct. 22, 1946, nonrecording gage at present site and datum.

REMARKS.--Records good. Flow regulated by East Branch Reservoir. usable capacity, 4,140 acre-ft (5.10 hm^3), 14.6 mi (23.5 km) upstream since 1939 and by LaDue Reservoir, usable capacity, 18,110 acre-ft (22.3 hm^3), 9.8 mi (15.8 km) upstream since 1961. Water-quality data collected at this site 1965 to 1977.

AVERAGE DISCHARGE.--46 years, 206 ft^3/s (5.834 m^3/s), 18.53 in/yr (471 mm/yr), unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,670 ft^3/s (104 m^3/s) Jan. 23, 1959, gage height, 8.11 ft (2.472 m), from rating curve extended above 2,600 ft^3/s (73.6 m^3/s); minimum daily, 6.6 ft^3/s (0.19 m^3/s) Sept. 10, 1933.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,950 ft^3/s (55.2 m^3/s) Mar. 15, gage height, 5.48 ft (1.670 m); minimum daily, 17 ft^3/s (0.48 m^3/s) Sept. 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	70	128	434	337	669	320	489	99	109	403	50	74
2	150	125	408	320	981	300	658	94	103	408	50	50
3	214	143	379	310	1180	290	639	91	92	384	51	49
4	278	132	369	439	1220	400	584	86	79	355	53	48
5	324	130	365	645	1120	560	485	82	73	315	53	46
6	333	160	346	864	840	640	419	74	123	292	54	44
7	320	186	320	950	680	570	360	51	160	265	52	45
8	287	196	315	825	540	450	329	84	225	236	49	46
9	256	203	333	664	450	380	322	119	310	196	49	44
10	221	186	337	553	370	330	327	146	320	157	50	28
11	183	165	346	440	300	408	348	145	269	123	49	17
12	143	143	365	350	250	631	361	130	203	96	47	19
13	104	128	355	280	220	1020	375	102	145	68	46	22
14	76	121	329	240	330	1660	387	57	92	50	46	23
15	64	117	301	180	500	1890	371	39	56	44	44	27
16	58	116	274	155	620	1610	338	33	107	40	44	29
17	56	114	244	130	720	1480	290	30	162	38	45	30
18	70	112	217	120	720	1390	265	27	180	46	58	31
19	114	110	180	110	720	1170	218	24	200	65	93	33
20	132	196	160	110	720	924	186	24	200	75	99	33
21	150	282	150	110	710	745	166	25	190	110	104	31
22	130	351	170	110	680	598	141	26	175	130	107	31
23	117	408	337	278	620	479	121	60	152	119	107	39
24	126	413	479	379	540	384	112	117	134	80	105	49
25	130	393	635	469	470	309	113	131	114	47	101	55
26	141	360	772	479	420	256	132	134	90	34	96	55
27	157	360	751	439	380	224	125	122	65	43	96	65
28	167	365	650	398	350	206	121	105	54	53	92	96
29	170	418	542	346	---	201	114	109	256	56	88	102
30	162	449	449	337	---	209	105	111	365	56	85	85
31	148	---	374	469	---	307	---	111	---	53	82	---
TOTAL	5051	6710	11686	11836	17320	20341	9001	2588	4803	4437	2145	1346
MEAN	163	224	377	382	619	656	300	83.5	160	143	69.2	44.9
MAX	333	449	772	950	1220	1890	658	146	365	408	107	102
MIN	56	110	150	110	220	201	105	24	54	34	44	17
MEAN+	163	223	377	382	618	656	299	83.5	161	143	70.7	44.9
CFSM+	1.08	1.48	2.50	2.53	4.09	4.34	1.98	0.55	1.07	0.95	0.47	0.30
IN.+	1.24	1.65	2.88	2.92	4.26	5.01	2.21	0.64	1.19	1.09	0.54	0.33

CAL YR 1981 TOTAL 83590 MEAN 229 MAX 2970 MIN 27 MEAN+ 229 CFSM+ 1.52 IN.+ 20.58
WTR YR 1982 TOTAL 97264 MEAN 266 MAX 1890 MIN 17 MEAN+ 267 CFSM+ 1.77 IN.+ 23.94

+ Adjusted for change of contents of East Branch and LaDue Reservoirs.

04206000 CUYAHOGA RIVER AT OLD PORTAGE, OH

LOCATION.--Lat 41°08'08", long 81°32'50", Summit County, Hydrologic Unit 04110002, on right bank 230 ft (70 m) upstream from North Portage Path bridge at Old Portage, 1.2 mi (1.9 km) downstream from Little Cuyahoga River, and 4 mi (6 km) northwest of Akron City Hall.

DRAINAGE AREA.--404 mi^2 (1,046 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--September 1921 to December 1935, March 1939 to current year.

REVISED RECORDS.--WSP 1307: 1924(M). WSP 1912: Drainage area. WRD OH-79-2: 1974 (M), 1976 (M).

GAGE.--Water-stage recorder. Datum of gage is 740.11 ft (225.586 m) National Geodetic Vertical Datum of 1929, unadjusted. Prior to Dec. 21, 1923, nonrecording gage at same site and datum.

REMARKS.--Records good. Natural flow of stream affected by diversions, storage reservoirs and power plants. At Lake Rockwell, 17.7 mi (28.5 km) upstream from gage, an average of 75 ft^3/s (2.12 m^3/s) was diverted for municipal supply of city of Akron. Sewage from city enters river 2.9 mi (4.7 km) downstream from station. Some diversion from the Tuscarawas River basin drainage into this basin at Portage Lakes (see REMARKS for station 03116000 in volume 1 of this report). Sediment data collected at this site 1972-1981.

AVERAGE DISCHARGE.--57 years, 425 ft^3/s (12.04 m^3/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,500 ft^3/s (184 m^3/s) Jan. 21, 1959, gage height, 11.54 ft (3.517 m), from rating curve extended above 3,900 ft^3/s (110 m^3/s) on basis of contracted-opening estimate at gage height 11.54 ft (3.517 m), at site with drainage area of 488 mi (1,264 km) adjusted to gaging station by drainage-area relation; maximum gage height, 13.29 ft (4.051 m) Sept. 14, 1979; minimum daily, 26 ft^3/s (0.736 m^3/s) Sept. 2, 1945, July 5, 1954.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,430 ft^3/s (97.1 m^3/s) May 16, gage height, 9.21 ft (2.807 m); minimum daily, 57 ft^3/s (1.614 m^3/s) Aug. 19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	215	261	604	629	2190	595	965	118	246	667	62	62
2	186	240	585	567	1830	554	877	112	232	586	69	145
3	239	217	530	526	1850	485	1070	129	197	1100	84	128
4	291	234	508	942	2000	654	1070	120	173	902	258	114
5	324	413	524	1160	1680	1070	918	117	169	667	89	110
6	537	393	501	1040	1410	1030	845	114	260	568	77	99
7	472	353	463	1150	1130	927	765	110	256	487	71	99
8	432	336	556	1130	931	916	706	258	260	414	79	109
9	381	324	549	962	753	854	753	168	292	332	76	107
10	338	306	527	682	591	696	753	141	346	282	70	102
11	321	302	501	436	483	931	717	189	369	244	69	80
12	299	276	505	380	409	1250	679	221	344	215	67	77
13	263	257	504	330	370	1580	633	219	300	166	66	83
14	233	233	485	300	343	1900	604	183	228	136	62	138
15	196	233	465	270	493	2090	590	145	181	123	61	200
16	178	235	439	250	828	2720	565	117	729	115	59	94
17	145	230	413	240	997	2850	572	106	702	118	61	86
18	159	237	394	240	1120	2420	541	103	504	120	59	93
19	175	265	347	240	1270	2150	481	258	390	107	57	89
20	290	736	318	240	1280	1850	500	248	349	110	69	93
21	293	611	305	240	1270	1500	384	159	396	81	80	84
22	296	534	378	240	1150	1190	352	235	384	92	62	93
23	365	498	1380	774	1050	952	313	798	355	109	62	123
24	307	516	1330	797	1090	794	212	490	282	129	65	109
25	300	503	1060	665	969	679	226	381	228	110	65	133
26	372	482	1060	612	821	641	244	352	193	84	66	104
27	318	478	1100	579	769	572	405	300	173	81	76	263
28	220	476	991	574	686	507	292	387	139	97	74	162
29	248	468	846	530	---	487	280	295	790	92	79	125
30	262	482	681	958	---	517	248	282	733	80	80	118
31	261	---	607	1770	---	1020	---	258	---	62	74	---
TOTAL	8916	11129	19456	19453	29763	36381	17560	7113	10200	8476	2348	3422
MEAN	288	371	628	628	1063	1174	585	229	340	273	75.7	114
MAX	537	736	1380	1770	2190	2850	1070	798	790	1100	258	263
MIN	145	217	305	240	343	485	212	103	139	62	57	62

CAL YR 1981 TOTAL 180868 MEAN 496 MAX 4050 MIN 133
WTR YR 1982 TOTAL 174217 MEAN 477 MAX 2850 MIN 57

04206000 CUYAHOGA RIVER AT OLD PORTAGE, OH--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1966 to 1967, 1969 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1970 to current year.
pH: October 1970 to current year.
WATER TEMPERATURES: October 1970 to current year.
DISSOLVED OXYGEN: October 1970 to current year.
SUSPENDED SEDIMENT DISCHARGE: March 1972 to September 1981.

INSTRUMENTATION.--Water-quality monitor.

REMARKS.--Interruptions in the water-quality record were due to malfunction of the instrument.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 3,000 micromhos Aug. 4, 1977; minimum, 120 micromhos July 20, 1973.
pH: Maximum, 11.4 units Nov. 8, 1974; minimum, 6.2 units July 3, 1973.
WATER TEMPERATURES: Maximum, 34.5°C July 18, 1977; minimum, 0.0°C on several days during winter periods.
DESOLVED OXYGEN: Maximum, 16.8 mg/L May 2, 1982; minimum, 0.0 mg/L July 24, 29, 31, Aug. 1, 3-6, 1977.
SEDIMENT CONCENTRATIONS: Maximum daily mean, 1,060 mg/L July 14, 1978; minimum daily mean, 1 mg/L Sept. 10, 1973, July 31, Aug. 1, 2, 1978.
SEDIMENT LOADS: Maximum daily, 9,340 tons (8,470 tonnes) Sept. 14, 1979; minimum daily, 0.15 ton (0.14 tonne) Sept. 10, 1973.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 1,620 micromhos Jan. 23; minimum, 252 micromhos May 23.
PH: Maximum, 9.0 units Apr. 24, May 2, 3, 4; minimum, 7.1 units May 19, July 17.
WATER TEMPERATURES: Maximum, 31.0°C July 23; minimum, 0.0°C, Jan. 10.
DISSOLVED OXYGEN: Maximum, 16.8 mg/L May 2; minimum, 1.4 mg/L, May 19.

04206000 CUYAHOGA RIVER AT OLD PORTAGE, OH--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	807	669	735	597	588	591	495	429	449	522	483	498
2	810	765	791	612	567	593	447	429	440	495	462	474
3	807	780	797	594	561	580	441	426	434	486	453	469
4	780	720	752	585	558	577	459	435	444	507	462	489
5	726	582	645	630	291	536	450	444	447	465	402	426
6	579	417	501	606	534	565	450	324	441	444	402	417
7	501	486	491	546	525	535	447	438	444	438	402	425
8	504	489	498	537	528	533	468	429	444	408	369	389
9	504	492	500	561	525	538	575	480	574	405	363	383
10	510	501	506	549	540	544	654	579	628	393	387	390
11	567	510	530	561	528	548	582	546	561	---	---	---
12	603	519	565	567	549	556	615	540	566	---	---	---
13	621	582	600	582	555	568	585	540	557	---	---	---
14	651	597	633	597	579	584	543	501	518	---	---	---
15	747	657	690	600	582	590	507	495	499	---	---	---
16	753	657	710	609	597	604	504	492	497	---	---	---
17	735	672	698	624	597	612	627	492	537	---	---	---
18	789	549	686	627	609	621	720	588	649	---	---	---
19	705	663	688	630	417	611	717	624	669	---	---	---
20	681	651	663	567	339	501	690	651	674	---	---	---
21	657	591	631	525	465	492	675	627	645	663	645	652
22	615	543	573	477	456	469	1290	669	808	678	606	631
23	549	501	527	483	465	472	1120	624	760	1620	666	1070
24	540	531	537	486	474	480	609	426	480	855	588	742
25	543	534	539	477	450	464	447	429	438	579	495	524
26	546	483	512	465	450	459	444	429	438	525	492	504
27	546	513	529	465	456	461	510	426	453	513	459	479
28	591	549	574	462	447	455	453	420	437	483	465	470
29	594	561	576	489	450	470	465	438	456	---	---	---
30	606	579	589	483	462	475	450	435	446	---	---	---
31	606	594	598	---	---	---	525	426	448	---	---	---
MONTH	810	417	609	630	291	536	1290	324	525	1620	363	524

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	---	---	---	441	420	429	423	384	403	579	540	563
2	---	---	---	597	429	481	396	387	391	597	564	577
3	---	---	---	756	513	588	399	384	389	660	597	622
4	---	---	---	1020	618	793	402	384	392	672	630	655
5	---	---	---	735	600	687	387	372	381	693	630	670
6	---	---	---	591	420	473	489	378	441	723	666	695
7	---	---	---	495	414	431	537	456	492	735	702	719
8	---	---	---	429	402	412	498	465	479	735	528	650
9	---	---	---	438	405	423	543	456	490	777	720	735
10	---	---	---	477	426	445	492	444	461	780	711	743
11	---	---	---	531	471	493	444	423	432	717	696	705
12	---	---	---	480	396	431	435	405	426	708	678	692
13	---	---	---	459	366	392	438	396	418	687	630	656
14	---	---	---	360	315	334	429	414	420	663	624	637
15	---	---	---	315	297	306	435	417	423	663	627	645
16	---	---	---	333	291	304	450	420	430	675	660	665
17	---	---	---	294	261	276	468	429	448	714	675	687
18	---	---	---	273	261	267	462	450	457	720	696	708
19	---	---	---	273	261	267	465	438	452	729	372	633
20	---	---	---	282	264	277	462	438	451	711	492	600
21	---	---	---	294	282	288	498	459	477	720	588	688
22	---	---	---	321	288	309	519	480	496	729	312	679
23	---	---	---	339	321	328	513	480	496	558	252	461
24	474	420	458	354	336	346	537	504	520	582	498	558
25	507	438	460	417	354	370	540	504	524	561	552	556
26	504	435	454	471	405	433	567	540	551	558	522	540
27	447	423	434	627	465	520	561	498	521	534	519	526
28	441	414	428	546	498	518	534	483	506	537	468	495
29	---	---	---	516	483	491	507	492	501	528	504	518
30	---	---	---	483	465	472	534	483	501	528	510	522
31	---	---	---	510	399	448	---	---	---	540	522	534
MONTH	507	414	447	1020	261	420	567	372	459	780	252	624

04206000 CUYAHOGA RIVER AT OLD PORTAGE, OH--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	552	540	547	411	399	405	795	783	788	888	804	869
2	564	546	555	411	402	406	837	783	799	894	594	794
3	588	564	574	570	336	397	846	828	839	861	675	809
4	597	576	589	426	393	404	846	381	685	861	840	855
5	600	567	594	399	372	389	792	690	753	855	825	837
6	573	552	559	405	384	393	819	798	810	840	828	835
7	576	546	560	432	405	414	834	810	821	840	801	828
8	552	537	545	453	426	440	852	750	818	843	777	822
9	543	531	537	480	450	466	840	777	817	771	699	734
10	549	507	523	504	483	490	867	846	858	723	690	703
11	510	489	502	549	507	519	876	858	865	777	723	753
12	507	495	501	555	525	536	882	864	875	795	777	783
13	507	486	496	561	537	552	885	873	878	804	789	794
14	558	498	515	---	---	---	897	879	887	810	348	754
15	588	531	550	657	621	633	903	882	894	780	435	683
16	555	309	434	696	657	678	909	885	899	792	738	769
17	483	456	469	699	567	664	915	879	900	810	780	790
18	465	450	459	699	504	649	918	900	907	840	789	816
19	471	459	466	714	531	682	927	897	915	843	834	838
20	507	468	475	753	585	690	933	855	910	942	840	865
21	489	408	460	798	717	749	921	804	891	855	807	823
22	495	306	463	777	735	756	924	909	915	825	774	807
23	522	432	486	762	741	755	933	915	925	768	648	709
24	516	498	508	759	747	752	---	---	---	732	711	724
25	531	516	521	768	753	759	933	927	930	735	636	680
26	---	---	---	807	741	768	942	924	934	735	702	728
27	---	---	---	777	735	757	936	924	931	702	453	574
28	---	---	---	783	660	729	936	927	932	693	660	675
29	492	456	478	816	786	802	939	918	928	696	687	691
30	480	408	446	831	795	820	1010	897	935	690	669	679
31	---	---	---	798	786	791	987	822	905	---	---	---
MONTH	600	306	512	831	336	608	1010	381	871	942	348	767
YEAR	1620	252	587									

PH (STANDARD UNITS), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	7.9	7.5	7.6	8.4	7.8	8.0	8.2	7.9	8.0	7.9	7.8	7.9
2	7.9	7.6	7.7	8.3	7.8	7.9	8.0	7.9	7.9	8.0	7.9	7.9
3	7.9	7.7	7.8	8.4	7.8	8.0	8.1	7.9	8.0	7.9	7.9	7.9
4	7.9	7.7	7.8	8.4	7.8	8.0	8.0	7.9	7.9	7.9	7.8	7.9
5	7.9	7.7	7.8	8.1	7.6	7.8	8.0	7.9	7.9	7.9	7.9	7.9
6	7.8	7.4	7.7	8.0	7.8	7.9	8.1	7.9	7.9	8.1	7.8	7.9
7	7.9	7.7	7.8	8.1	7.9	7.9	8.1	7.8	7.9	8.0	7.9	7.9
8	7.9	7.8	7.8	8.1	7.8	7.9	8.2	7.8	7.9	7.9	7.8	7.9
9	8.0	7.7	7.9	8.2	7.8	8.0	8.1	7.9	8.0	7.9	7.8	7.8
10	8.1	7.7	7.9	8.3	7.9	8.0	8.1	7.9	8.0	7.8	7.8	7.8
11	8.1	7.7	7.9	8.3	7.9	8.0	8.1	7.9	8.0	---	---	---
12	8.2	7.7	7.9	8.3	7.9	8.0	8.1	7.9	8.0	---	---	---
13	8.3	7.7	7.9	8.3	7.9	8.0	8.1	7.9	7.9	---	---	---
14	8.3	7.7	7.9	8.3	7.9	8.0	8.1	7.9	8.0	---	---	---
15	8.2	7.6	7.8	8.4	7.9	8.1	8.0	7.9	7.9	---	---	---
16	8.3	7.6	7.8	8.4	7.9	8.1	8.1	7.9	7.9	---	---	---
17	8.2	7.6	7.8	8.5	7.9	8.1	8.1	7.8	7.9	---	---	---
18	7.8	7.4	7.6	8.4	7.9	8.0	8.1	7.9	8.0	---	---	---
19	8.2	7.6	7.8	8.0	7.8	7.9	8.2	7.9	8.0	---	---	---
20	8.2	7.7	7.9	8.0	7.7	7.9	8.2	7.9	8.0	---	---	---
21	8.1	7.7	7.8	8.0	7.9	8.0	8.2	7.9	8.0	8.0	7.9	8.0
22	8.1	7.6	7.8	8.1	7.9	8.0	8.3	7.8	7.9	8.1	7.8	7.9
23	8.0	7.6	7.8	8.2	8.0	8.1	8.0	7.7	7.9	8.0	7.8	7.9
24	8.1	7.7	7.8	8.2	8.0	8.1	7.9	7.9	7.9	8.0	7.9	8.0
25	8.1	7.7	7.8	8.2	8.0	8.0	7.9	7.9	7.9	8.0	7.9	7.9
26	7.8	7.6	7.6	8.1	8.0	8.0	7.9	7.9	7.9	8.2	7.9	8.0
27	8.0	7.6	7.8	8.1	8.0	8.0	7.9	7.9	7.9	8.1	7.9	7.9
28	8.2	7.7	7.9	8.1	8.0	8.0	7.9	7.8	7.9	8.0	7.9	7.9
29	8.2	7.8	7.9	8.1	8.0	8.0	7.9	7.8	7.8	---	---	---
30	8.2	7.8	7.9	8.1	8.0	8.0	7.9	7.8	7.9	---	---	---
31	8.3	7.8	8.0	---	---	---	7.9	7.8	7.8	---	---	---
MONTH	8.3	7.4	7.8	8.5	7.6	8.0	8.3	7.7	7.9	8.2	7.8	7.9

04206000 CUYAHOGA RIVER AT OLD PORTAGE, OH--Continued

PH (STANDARD UNITS), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	---	---	---	8.1	7.9	7.9	8.1	7.8	7.9	8.9	7.5	8.1
2	---	---	---	8.4	7.9	8.0	8.1	7.8	7.9	9.0	7.5	8.1
3	---	---	---	8.1	7.9	8.0	7.8	7.7	7.8	9.0	7.5	8.2
4	---	---	---	8.1	7.9	7.9	8.0	7.8	7.9	9.0	7.5	8.2
5	---	---	---	8.1	7.9	8.0	8.1	7.8	7.9	8.9	7.5	8.1
6	---	---	---	7.9	7.8	7.8	8.1	7.8	7.9	8.8	7.4	8.0
7	---	---	---	8.0	7.8	7.9	8.1	7.8	7.9	8.5	7.5	7.9
8	---	---	---	8.1	7.8	7.9	8.2	7.8	7.9	7.8	7.3	7.5
9	---	---	---	8.2	7.8	7.9	8.2	7.8	8.0	8.0	7.6	7.7
10	---	---	---	8.0	7.8	7.9	8.2	7.9	8.0	8.0	7.5	7.7
11	---	---	---	8.1	7.8	7.9	8.3	7.8	8.0	7.8	7.6	7.7
12	---	---	---	7.9	7.8	7.9	8.4	7.8	8.1	7.8	7.6	7.7
13	---	---	---	7.8	7.8	7.8	8.1	7.8	7.9	7.9	7.6	7.7
14	---	---	---	7.8	7.7	7.8	8.6	7.8	8.1	7.9	7.5	7.7
15	---	---	---	7.8	7.7	7.7	8.7	7.7	8.1	7.8	7.5	7.6
16	---	---	---	7.8	7.6	7.7	8.7	7.7	8.1	7.9	7.4	7.6
17	---	---	---	7.7	7.6	7.6	8.4	7.7	7.9	8.0	7.4	7.7
18	---	---	---	7.7	7.6	7.6	8.6	7.7	8.1	8.0	7.4	7.6
19	---	---	---	7.9	7.6	7.7	8.7	7.7	8.1	7.7	7.1	7.4
20	---	---	---	7.7	7.6	7.7	8.5	7.7	8.0	7.8	7.2	7.5
21	---	---	---	7.7	7.6	7.7	8.8	7.7	8.1	7.7	7.5	7.6
22	---	---	---	7.8	7.7	7.8	8.8	7.7	8.1	7.8	7.5	7.6
23	---	---	---	8.1	7.7	7.8	8.8	7.6	8.1	7.7	7.5	7.6
24	8.1	7.9	7.9	8.0	7.7	7.8	9.0	7.6	8.2	7.8	7.6	7.7
25	8.2	7.9	8.0	7.9	7.5	7.8	8.9	7.5	8.1	7.7	7.6	7.7
26	8.1	7.9	7.9	7.9	7.8	7.8	8.4	7.5	7.8	7.7	7.6	7.6
27	8.0	7.9	7.9	7.9	7.8	7.8	7.7	7.6	7.7	7.7	7.6	7.6
28	8.0	7.9	7.9	7.9	7.8	7.8	8.5	7.7	8.1	7.6	7.4	7.5
29	---	---	---	8.1	7.8	7.9	8.6	7.7	8.1	7.5	7.4	7.4
30	---	---	---	8.1	7.7	7.9	8.7	7.6	8.1	7.5	7.4	7.4
31	---	---	---	7.9	7.6	7.8	---	---	---	7.7	7.5	7.6
MONTH	8.2	7.9	7.9	8.4	7.5	7.8	9.0	7.5	8.0	9.0	7.1	7.7

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	7.8	7.5	7.6	7.9	7.7	7.8	8.2	7.6	7.9	8.0	7.6	7.8
2	7.8	7.6	7.7	7.9	7.7	7.8	8.0	7.6	7.7	7.9	7.7	7.8
3	8.0	7.6	7.8	8.2	7.6	7.7	8.1	7.6	7.8	8.0	7.6	7.8
4	8.0	7.7	7.8	7.8	7.7	7.8	7.7	7.2	7.5	8.0	7.8	7.9
5	7.9	7.7	7.8	7.9	7.8	7.8	7.8	7.5	7.6	8.0	7.8	7.9
6	7.9	7.7	7.8	7.9	7.7	7.8	7.8	7.6	7.6	8.1	7.8	7.9
7	8.0	7.8	7.9	7.9	7.6	7.8	7.9	7.6	7.7	7.8	7.7	7.8
8	8.1	7.7	7.9	8.1	7.7	7.8	7.8	7.5	7.6	8.1	7.7	7.9
9	8.0	7.7	7.8	8.0	7.7	7.8	7.7	7.6	7.6	8.0	7.7	7.9
10	8.1	7.7	7.9	8.2	7.7	7.9	7.8	7.6	7.7	8.1	7.7	7.8
11	8.2	7.8	7.9	8.1	7.6	7.8	7.9	7.6	7.7	8.1	7.6	7.9
12	8.1	7.8	7.9	8.2	7.6	7.9	7.9	7.7	7.8	8.2	7.6	7.9
13	8.2	7.7	7.9	---	---	---	8.1	7.7	7.8	8.3	7.7	7.9
14	8.3	7.7	7.9	---	---	---	8.2	7.6	7.9	8.2	7.3	7.8
15	8.3	7.3	7.9	8.2	7.6	8.0	8.5	7.6	8.0	7.9	7.5	7.7
16	7.7	7.3	7.5	8.2	7.5	7.8	8.4	7.7	8.0	7.9	7.6	7.7
17	7.8	7.8	7.8	8.1	7.1	7.6	8.4	7.6	7.9	7.9	7.7	7.8
18	7.9	7.7	7.8	7.9	7.2	7.6	8.4	7.7	8.0	7.9	7.7	7.8
19	7.8	7.7	7.8	7.8	7.3	7.6	8.4	7.6	7.9	8.0	7.7	7.8
20	7.9	7.6	7.8	7.8	7.4	7.6	7.8	7.5	7.6	8.0	7.7	7.8
21	7.9	7.5	7.8	7.8	7.6	7.7	8.1	7.5	7.8	8.0	7.7	7.8
22	8.1	7.6	7.8	8.4	7.6	7.8	8.2	7.7	7.9	8.0	7.7	7.8
23	7.9	7.6	7.8	8.1	7.6	7.8	8.0	7.6	7.8	7.8	7.6	7.7
24	8.1	7.7	7.9	8.2	7.7	7.9	---	---	---	7.9	7.6	7.7
25	8.1	7.7	7.8	8.3	7.7	7.9	8.1	7.8	8.0	7.9	7.6	7.7
26	---	---	---	8.1	7.6	7.9	8.2	7.7	7.9	7.9	7.6	7.7
27	---	---	---	8.1	7.3	7.7	8.3	7.7	7.9	7.7	7.6	7.7
28	---	---	---	7.9	7.2	7.5	8.3	7.8	8.0	7.9	7.7	7.8
29	7.8	7.7	7.8	8.0	7.6	7.7	8.3	7.8	8.0	7.9	7.7	7.8
30	7.8	7.7	7.8	8.0	7.6	7.7	8.2	7.8	7.9	8.0	7.7	7.8
31	---	---	---	8.1	7.5	7.8	8.3	7.6	7.8	---	---	---
MONTH	8.3	7.3	7.8	8.4	7.1	7.8	8.5	7.2	7.8	8.3	7.3	7.8
YEAR	9.0	7.1	7.9									

04206000 CUYAHOGA RIVER AT OLD PORTAGE, OH--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	19.5	17.5	18.0	14.0	12.0	13.0	5.0	4.5	5.0	3.0	2.0	2.5
2	17.0	15.0	15.5	14.0	12.0	13.0	5.0	5.0	5.0	2.5	1.5	2.0
3	16.0	15.0	15.5	15.0	12.0	13.0	5.0	4.5	5.0	3.0	2.0	2.5
4	15.5	14.5	14.5	15.5	12.0	13.0	5.0	4.5	5.0	4.0	3.0	3.5
5	16.5	14.0	15.0	14.5	12.0	13.0	5.0	4.5	4.5	3.0	2.5	2.5
6	17.5	16.0	16.5	14.0	12.0	12.5	4.5	4.0	4.5	3.0	2.0	2.5
7	16.5	14.5	15.0	12.5	11.0	11.5	5.0	4.0	4.5	3.0	2.5	2.5
8	14.5	13.0	13.5	12.5	10.5	11.5	5.5	4.5	5.0	2.0	1.0	1.5
9	15.0	12.5	13.5	11.5	10.0	11.0	4.5	3.5	4.0	1.5	.5	1.0
10	15.0	13.0	14.0	12.0	10.0	11.0	3.5	3.0	3.0	.5	.0	.5
11	14.5	13.0	13.5	12.0	10.0	11.0	3.5	2.0	2.5	---	---	---
12	15.5	12.0	13.5	11.5	9.5	10.5	2.5	2.0	2.5	---	---	---
13	16.0	13.0	14.5	11.0	8.5	9.5	2.5	2.5	2.5	---	---	---
14	16.0	13.5	14.5	11.0	8.5	9.5	4.0	2.5	3.0	---	---	---
15	16.0	14.5	15.0	10.5	8.0	9.0	4.5	3.5	4.0	---	---	---
16	16.5	15.0	15.5	11.0	8.0	9.5	4.5	4.0	4.5	---	---	---
17	17.0	13.5	15.0	11.5	9.0	10.0	4.5	4.0	4.5	---	---	---
18	16.0	13.5	15.5	11.5	10.5	11.0	4.5	3.5	4.0	---	---	---
19	13.5	12.0	12.5	11.5	10.5	11.0	4.5	3.5	4.0	---	---	---
20	15.5	13.0	14.5	11.0	9.0	10.0	4.0	2.5	3.5	---	---	---
21	15.5	13.5	14.5	9.0	7.0	7.5	4.5	3.0	3.5	4.5	3.5	4.0
22	15.0	13.0	14.5	7.5	6.0	6.5	5.0	4.5	5.0	4.5	3.5	4.0
23	15.0	12.5	13.5	7.0	5.0	6.0	4.5	2.0	3.0	5.0	2.0	3.5
24	14.5	12.5	13.0	6.0	5.0	5.5	2.5	1.5	1.5	2.0	.5	1.0
25	13.5	11.5	12.5	6.0	5.0	5.5	2.0	1.5	1.5	2.0	.5	1.0
26	14.0	12.5	13.0	6.0	5.0	5.5	2.0	1.5	2.0	2.5	.5	1.5
27	14.0	13.0	13.5	6.0	5.5	5.5	2.0	2.0	2.0	3.0	1.0	2.0
28	15.5	13.0	14.0	5.5	5.0	5.5	2.5	1.5	2.0	2.5	2.0	2.5
29	15.5	13.0	14.5	5.5	4.5	5.0	2.5	1.5	2.0	---	---	---
30	16.0	13.0	14.5	5.0	4.5	4.5	2.5	1.5	2.0	---	---	---
31	15.0	12.5	13.5	---	---	---	2.5	1.5	2.0	---	---	---
MONTH	19.5	11.5	14.5	15.5	4.5	9.5	5.5	1.5	3.5	5.0	.0	2.5

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	---	---	---	4.5	2.5	3.5	10.5	9.0	9.5	19.5	15.0	17.0
2	---	---	---	4.5	3.5	4.0	10.5	8.5	9.5	20.5	14.5	17.0
3	---	---	---	5.0	2.5	3.5	10.5	9.0	9.5	21.0	14.5	17.0
4	---	---	---	4.5	3.5	4.0	8.5	6.5	7.5	22.0	15.0	18.0
5	---	---	---	3.5	2.0	3.0	8.0	6.0	7.0	23.0	16.5	19.5
6	---	---	---	3.5	2.5	3.0	7.0	5.5	6.0	24.5	18.0	21.0
7	---	---	---	2.5	1.5	2.0	6.5	5.0	5.5	23.5	19.5	21.5
8	---	---	---	3.5	1.5	3.0	7.5	5.0	6.0	22.5	18.5	20.5
9	---	---	---	3.5	2.5	3.0	7.5	6.0	6.5	23.0	19.0	20.5
10	---	---	---	4.5	2.5	3.5	6.5	5.5	6.0	22.0	18.0	19.5
11	---	---	---	5.0	3.5	4.5	6.5	5.5	6.0	25.0	19.0	21.5
12	---	---	---	4.5	3.5	4.0	8.0	5.5	7.0	25.5	20.5	22.5
13	---	---	---	5.0	4.5	4.5	8.0	7.5	8.0	26.0	22.0	23.5
14	---	---	---	4.5	3.5	3.5	10.5	7.5	8.5	27.0	22.0	24.0
15	---	---	---	4.0	3.5	4.0	12.0	8.0	10.0	24.0	21.5	22.5
16	---	---	---	4.5	3.5	4.0	14.0	10.5	12.5	24.5	20.5	22.0
17	---	---	---	4.0	3.5	3.5	14.0	12.0	13.5	25.5	18.5	21.5
18	---	---	---	4.0	3.0	3.5	14.0	12.0	12.5	27.5	20.5	23.5
19	---	---	---	4.0	3.5	4.0	15.5	11.5	13.5	25.0	21.5	23.0
20	---	---	---	5.0	3.5	4.0	15.5	13.5	14.5	26.0	22.0	23.5
21	---	---	---	5.5	5.0	5.0	15.5	12.5	14.0	23.5	22.0	23.0
22	---	---	---	5.0	4.5	5.0	15.5	12.0	13.5	25.5	19.0	23.0
23	---	---	---	5.5	4.5	5.0	16.0	12.0	14.0	22.5	17.5	21.0
24	3.5	2.5	3.0	7.0	5.0	6.0	18.0	13.0	15.0	22.0	19.5	20.5
25	3.0	1.5	2.0	6.5	5.5	6.0	18.5	13.0	15.5	22.0	19.5	21.0
26	3.5	1.5	2.5	6.0	5.0	5.5	17.5	15.0	16.0	23.0	19.0	21.0
27	4.0	1.5	2.5	5.5	4.0	4.5	16.0	14.5	15.0	25.0	21.0	23.0
28	4.0	2.0	3.0	6.0	3.5	4.5	18.0	13.5	15.5	24.0	21.5	22.5
29	---	---	---	8.0	4.0	6.0	18.5	13.5	15.5	24.5	21.5	23.0
30	---	---	---	9.5	6.0	8.0	18.5	14.0	16.0	23.0	21.5	22.0
31	---	---	---	10.5	9.0	9.5	---	---	---	24.0	21.0	22.5
MONTH	4.0	1.5	2.5	10.5	1.5	4.5	18.5	5.0	11.0	27.5	14.5	21.5

04206000 CUYAHOGA RIVER AT OLD PORTAGE, OH--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	22.5	21.5	22.0	23.5	21.0	22.0	26.5	21.5	23.5	25.5	23.5	24.5
2	25.5	21.0	22.5	23.5	20.5	22.0	25.0	22.0	23.5	24.5	22.5	23.5
3	25.5	21.5	23.0	22.5	20.5	21.5	27.5	23.0	25.0	23.5	21.0	22.0
4	23.5	21.0	22.0	21.5	20.5	21.0	27.0	24.0	25.5	24.0	20.0	21.5
5	22.5	20.0	21.0	22.5	20.5	21.5	29.0	25.0	27.0	25.0	19.0	21.5
6	20.0	18.5	19.5	25.0	21.5	23.0	29.0	24.5	26.5	23.5	20.0	21.5
7	21.5	17.5	19.0	26.0	23.0	24.5	28.5	24.5	26.5	21.5	20.5	21.0
8	23.0	18.5	20.5	27.5	24.0	25.5	27.5	25.5	26.5	23.5	19.0	21.0
9	24.0	19.5	21.5	28.0	24.0	26.0	28.5	25.5	26.5	24.0	19.0	21.0
10	24.5	21.5	23.0	28.0	24.5	26.0	26.0	24.0	25.0	23.5	19.5	21.5
11	25.0	21.5	23.0	26.5	24.5	26.0	26.0	22.5	24.0	24.5	20.5	22.0
12	22.5	20.5	21.0	27.5	23.5	25.0	25.5	21.0	23.0	25.0	20.5	22.5
13	22.0	19.5	20.5	---	---	---	25.5	20.5	23.0	24.5	20.5	22.5
14	24.5	19.5	21.5	---	---	---	26.5	21.0	23.5	25.5	22.5	23.5
15	25.0	21.0	22.5	29.5	27.0	28.5	27.0	21.5	24.0	24.5	23.5	24.0
16	22.5	20.5	21.5	30.0	26.0	27.5	27.0	22.0	24.0	24.0	21.5	23.0
17	21.5	19.5	20.5	30.0	27.0	28.0	25.5	22.5	24.0	24.0	20.0	21.5
18	22.0	18.5	20.0	30.5	26.5	28.0	25.5	21.0	23.0	23.5	19.5	21.5
19	19.5	18.5	19.5	28.0	26.5	27.0	26.0	20.5	23.0	22.0	18.5	20.0
20	20.5	18.0	19.0	29.5	25.5	27.5	24.5	22.5	23.5	20.5	18.5	19.5
21	21.5	18.0	19.5	28.5	25.0	26.5	25.5	22.5	24.0	19.0	17.0	18.0
22	22.0	17.0	20.0	28.5	24.5	26.5	22.5	19.5	21.0	17.5	16.0	16.5
23	21.5	18.5	20.0	31.0	25.5	28.0	22.5	20.5	21.5	19.0	16.5	17.5
24	23.0	18.5	20.5	30.5	26.0	28.0	---	---	---	18.5	17.0	18.0
25	23.5	19.5	21.5	29.5	24.5	27.0	24.0	22.5	23.5	19.0	17.5	18.0
26	---	---	---	28.0	24.5	26.0	25.5	20.0	22.5	18.0	16.5	17.5
27	---	---	---	29.0	25.0	27.0	26.0	23.0	24.0	16.5	15.5	16.0
28	---	---	---	27.0	25.0	26.0	24.0	21.5	22.5	18.0	16.0	17.0
29	23.5	22.5	24.0	27.0	22.5	24.5	24.0	19.5	21.5	18.5	15.0	16.5
30	24.0	22.0	23.0	28.0	22.5	25.0	26.0	21.5	23.0	19.5	15.0	17.0
31	---	---	---	26.5	22.5	24.5	25.5	23.5	24.5	---	---	---
MONTH	25.5	17.0	21.0	31.0	20.5	25.5	29.0	19.5	24.0	25.5	15.0	20.5
YEAR	31.0	.0	14.5									

OXYGEN, DISSOLVED (DO), MG/L, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	---	---	---	13.2	10.0	11.2	12.8	9.5	12.2	12.9	12.5	12.7
2	8.6	7.3	7.9	12.7	9.5	10.7	12.6	10.6	12.3	13.3	11.4	12.9
3	8.5	7.4	7.8	13.1	9.2	10.6	12.6	8.1	12.1	13.0	12.3	12.8
4	8.6	7.5	7.8	12.7	9.2	10.3	12.5	9.9	12.1	12.5	11.9	12.3
5	9.5	7.5	8.0	10.7	8.3	9.8	12.7	10.4	12.1	12.9	12.4	12.8
6	7.9	5.7	7.5	11.0	9.8	10.3	12.9	8.7	12.2	13.0	12.4	12.7
7	8.6	7.3	8.1	11.5	10.1	10.7	13.0	8.4	12.1	12.9	12.5	12.7
8	8.4	7.6	8.1	11.7	10.3	10.9	12.5	8.3	11.9	13.2	12.7	12.9
9	9.4	7.5	8.5	12.2	10.7	11.2	13.2	10.8	12.6	13.1	12.7	12.9
10	9.2	8.5	8.7	11.2	10.8	11.0	13.4	9.0	12.8	12.9	12.7	12.8
11	---	---	---	---	---	---	13.6	12.7	13.2	---	---	---
12	---	---	---	---	---	---	13.7	10.6	13.2	---	---	---
13	---	---	---	---	---	---	13.7	13.0	13.3	---	---	---
14	11.0	8.0	9.7	---	---	---	13.6	9.7	12.8	---	---	---
15	10.2	7.4	8.6	---	---	---	13.1	12.4	12.6	---	---	---
16	10.4	7.4	8.4	---	---	---	13.1	11.4	12.3	---	---	---
17	10.5	7.4	8.5	---	---	---	13.2	11.8	12.3	---	---	---
18	---	---	---	---	---	---	13.1	11.9	12.4	---	---	---
19	---	---	---	---	---	---	13.0	11.7	12.2	---	---	---
20	---	---	---	---	---	---	13.2	11.8	12.3	---	---	---
21	---	---	---	---	---	---	13.3	11.4	12.2	12.8	11.5	12.1
22	---	---	---	---	---	---	12.5	11.2	11.7	12.7	11.2	11.8
23	---	---	---	---	---	---	12.9	11.6	12.5	12.4	11.2	11.9
24	---	---	---	13.0	12.5	12.8	13.4	12.6	13.1	13.0	12.3	12.7
25	---	---	---	13.4	12.0	12.7	13.2	12.9	13.1	12.9	12.2	12.6
26	---	---	---	13.3	11.2	12.6	13.2	12.5	12.9	12.9	12.4	12.7
27	10.2	8.5	9.2	13.0	9.7	12.4	12.9	12.5	12.8	13.0	12.3	12.6
28	11.9	8.0	9.8	12.9	9.4	12.4	13.0	12.4	12.6	12.9	12.3	12.6
29	11.8	9.3	10.2	13.2	10.6	12.5	13.0	12.6	12.8	---	---	---
30	12.1	9.2	10.4	13.2	11.4	12.7	12.7	10.5	12.4	---	---	---
31	12.7	9.7	10.8	---	---	---	13.3	11.9	12.7	---	---	---
MONTH	12.7	5.7	8.8	13.4	8.3	11.5	13.7	8.1	12.5	13.3	11.2	12.6

STREAMS TRIBUTARY TO LAKE ERIE

04206000 CUYAHOGA RIVER AT OLD PORTAGE, OH--Continued

OXYGEN, DISSOLVED (DO), MG/L, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	---	---	---	12.6	11.6	12.2	11.7	11.0	11.3	16.3	7.6	10.9
2	---	---	---	12.3	11.6	11.9	11.8	10.9	11.3	16.8	7.2	11.2
3	---	---	---	12.7	11.5	12.0	11.1	9.8	10.8	16.5	7.0	10.8
4	---	---	---	12.0	10.2	11.6	11.8	10.9	11.5	16.6	6.7	10.5
5	---	---	---	12.6	11.9	12.3	12.5	11.1	11.9	16.0	6.0	10.0
6	---	---	---	12.4	11.9	12.2	12.6	11.3	12.1	13.6	4.9	8.5
7	---	---	---	12.6	12.1	12.3	13.1	12.1	12.5	10.0	4.3	6.3
8	---	---	---	13.8	12.2	13.3	13.1	11.7	12.3	7.2	4.1	5.7
9	---	---	---	13.6	12.8	13.2	12.9	11.7	12.2	8.6	5.6	6.8
10	---	---	---	13.5	12.7	12.7	13.0	11.9	12.4	7.9	5.2	6.4
11	---	---	---	12.8	12.0	12.5	13.2	11.9	12.4	6.9	5.2	6.0
12	---	---	---	13.0	12.6	12.7	13.5	11.3	12.4	7.1	5.4	6.1
13	---	---	---	12.6	12.2	12.5	12.2	11.2	11.6	8.0	5.4	6.6
14	---	---	---	13.4	12.7	13.0	13.6	10.9	12.0	8.2	5.5	6.7
15	---	---	---	13.1	12.5	12.9	13.6	10.4	11.8	7.7	5.5	6.5
16	---	---	---	13.0	12.6	12.8	13.7	9.4	11.2	8.6	5.6	6.9
17	---	---	---	13.1	12.8	13.0	11.8	9.3	10.3	9.0	5.3	6.9
18	---	---	---	13.3	12.7	13.0	13.1	9.6	11.0	8.7	4.8	6.5
19	---	---	---	12.9	12.7	12.8	13.4	9.5	11.0	7.7	1.4	5.3
20	---	---	---	12.8	12.3	12.6	12.5	9.4	10.4	7.1	6.0	6.3
21	---	---	---	12.4	12.1	12.2	14.3	9.5	11.2	6.9	5.9	6.4
22	---	---	---	12.4	12.1	12.3	14.4	9.5	11.4	7.1	5.7	6.3
23	---	---	---	12.6	11.4	12.2	14.8	8.9	11.4	7.9	7.1	7.4
24	12.9	11.4	12.5	12.4	11.7	12.0	16.0	8.5	11.4	8.0	7.2	7.6
25	13.3	12.8	13.0	12.1	11.6	11.7	15.5	8.5	11.2	7.8	7.3	7.5
26	13.1	12.7	12.9	12.4	11.6	12.0	12.8	8.4	10.2	7.9	7.0	7.5
27	13.2	12.5	12.8	12.9	10.9	12.5	11.6	8.7	9.9	7.7	6.7	7.2
28	12.9	12.4	12.6	13.4	12.2	12.6	13.0	8.9	10.6	7.3	6.5	7.0
29	---	---	---	13.0	11.6	12.3	13.4	8.8	10.7	7.6	6.6	7.1
30	---	---	---	12.6	10.9	11.8	14.2	8.0	10.8	7.5	6.6	7.0
31	---	---	---	11.3	10.0	11.0	---	---	---	7.8	6.7	7.3
MONTH	13.3	11.4	12.8	13.8	10.0	12.4	16.0	8.0	11.4	16.8	1.4	7.4

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	7.4	6.6	6.9	8.3	7.5	7.9	10.0	5.7	7.5	7.4	5.1	6.3
2	7.8	6.4	7.1	8.5	7.3	8.0	8.5	5.8	7.0	6.6	2.9	5.9
3	8.4	6.4	7.2	8.1	7.0	7.7	8.8	6.0	7.2	7.6	5.4	6.8
4	8.3	6.7	7.4	8.4	6.7	8.1	7.0	3.9	6.0	7.9	6.4	7.1
5	7.9	6.7	7.3	8.4	7.3	8.1	7.6	5.7	6.4	8.3	6.5	7.3
6	8.5	7.4	8.0	8.3	6.6	7.8	7.0	5.7	6.2	8.4	5.9	7.0
7	9.1	7.7	8.4	8.0	6.4	7.4	7.6	5.7	6.6	7.3	5.8	6.6
8	9.0	7.6	8.3	7.9	5.9	7.1	7.0	5.0	5.9	8.5	6.5	7.2
9	9.0	7.2	8.0	7.8	6.2	7.1	6.9	5.4	6.0	8.2	6.4	7.3
10	8.4	7.2	7.8	8.2	6.1	7.0	7.2	5.6	6.5	8.4	6.1	7.3
11	9.0	7.3	8.0	8.2	6.1	6.9	7.5	6.3	6.9	8.6	6.2	7.2
12	9.0	7.3	8.1	9.6	5.7	7.6	8.8	6.8	7.5	8.9	6.0	7.3
13	9.3	7.6	8.4	---	---	---	8.9	6.7	7.6	9.6	5.9	7.4
14	9.5	6.8	8.2	---	---	---	9.7	6.5	7.9	9.1	1.7	6.7
15	9.3	3.5	7.6	9.9	6.4	8.8	11.1	6.4	8.3	6.3	4.9	6.0
16	7.9	4.9	7.1	9.8	6.3	7.6	10.7	6.4	8.2	7.0	5.8	6.2
17	8.4	7.9	8.2	9.0	2.5	6.1	11.2	6.2	8.2	7.5	5.9	6.5
18	8.6	8.0	8.3	8.3	4.1	6.2	11.1	6.4	8.3	7.4	6.0	6.5
19	8.3	7.8	8.1	7.2	4.7	6.2	11.6	6.4	8.4	8.1	6.3	7.1
20	8.9	7.6	8.4	7.2	5.3	6.2	8.2	6.0	6.8	8.4	6.3	7.2
21	8.7	7.5	8.2	8.1	5.7	6.9	9.1	6.0	7.3	8.9	6.7	7.7
22	8.6	7.4	8.0	8.3	5.0	6.7	9.7	6.6	8.0	8.3	7.0	7.5
23	8.8	7.8	8.2	---	---	---	9.1	6.8	7.7	7.6	6.8	7.2
24	9.0	7.4	8.2	---	---	---	---	---	---	8.9	6.9	7.8
25	9.2	7.1	8.1	---	---	---	8.6	5.8	7.6	10.7	8.1	9.5
26	---	---	---	8.3	7.7	8.0	9.1	5.6	7.2	11.9	9.5	10.7
27	---	---	---	8.7	3.1	7.8	9.0	6.1	7.1	11.5	10.2	11.0
28	---	---	---	7.4	2.5	5.4	9.5	6.3	7.6	11.8	10.7	11.1
29	7.8	7.3	7.5	8.2	5.5	6.7	9.8	6.9	7.9	12.3	10.5	11.3
30	7.9	7.3	7.7	8.5	5.4	6.5	8.6	6.4	7.4	12.6	10.1	11.2
31	---	---	---	8.9	5.4	6.9	7.7	5.0	6.5	---	---	---
MONTH	9.5	3.5	7.9	9.9	2.5	7.2	11.6	3.9	7.3	12.6	1.7	7.7
YEAR	16.8	1.4	9.6									

04206000 CUYAHOGA RIVER AT OLD PORTAGE, OH--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEDIAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	734	591	443	495	---	426	402	564	546	405	786	882
2	791	597	441	474	---	468	390	579	554	407	795	881
3	797	581	435	465	---	558	387	618	573	386	840	839
4	754	579	443	489	---	743	393	662	588	401	666	857
5	648	575	447	420	---	702	384	678	597	386	764	834
6	492	570	447	414	---	462	449	699	558	393	813	834
7	489	536	444	428	---	423	498	723	561	414	818	834
8	498	531	440	387	---	414	479	669	546	438	833	828
9	501	537	578	384	---	426	494	734	537	465	822	744
10	504	543	633	390	---	435	465	750	524	489	857	704
11	513	549	561	---	---	489	431	702	504	515	864	758
12	570	554	554	---	---	425	426	693	503	534	873	783
13	600	564	555	---	---	392	419	653	495	555	876	792
14	641	582	519	---	---	326	420	636	509	---	888	807
15	681	588	497	---	---	306	423	645	546	624	894	707
16	728	603	498	---	---	303	426	666	431	678	899	774
17	696	612	518	---	---	276	447	686	467	684	905	786
18	698	624	641	---	---	267	458	708	459	671	909	824
19	692	627	671	---	---	267	455	723	465	690	917	840
20	663	522	675	---	---	278	455	600	471	702	915	846
21	648	494	642	651	---	285	477	707	461	737	899	819
22	572	471	723	627	---	309	497	720	489	756	915	807
23	525	471	735	1040	---	330	498	485	491	756	926	708
24	537	480	449	774	462	345	521	566	507	753	---	726
25	540	465	438	519	456	362	527	555	519	758	930	686
26	507	459	441	503	453	426	549	546	---	773	936	732
27	527	462	456	476	432	518	504	525	---	759	932	578
28	579	455	438	---	432	521	510	494	---	737	933	672
29	576	474	458	---	---	486	501	519	472	801	924	690
30	588	477	447	---	---	471	501	522	453	822	927	677
31	597	---	440	---	---	447	---	534	---	791	894	---
MEAN	609	539	520	526	447	416	460	631	512	609	872	775

WTR YR 1982 MEAN 588 MAX 1040 MIN 267

PH (STANDARD UNITS), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEDIAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.6	7.9	8.0	7.9	---	7.9	7.8	7.9	7.7	7.8	7.8	7.8
2	7.7	7.8	7.9	7.9	---	7.9	7.8	8.1	7.7	7.8	7.7	7.8
3	7.8	7.9	7.9	7.9	---	8.0	7.8	8.1	7.8	7.7	7.8	7.9
4	7.8	7.9	7.9	7.9	---	7.9	7.9	8.1	7.8	7.8	7.6	7.9
5	7.7	7.8	7.9	7.9	---	7.9	7.9	8.1	7.8	7.8	7.6	7.9
6	7.7	7.9	7.9	7.9	---	7.8	7.9	8.0	7.8	7.8	7.6	7.9
7	7.8	7.9	7.9	7.9	---	7.9	7.9	7.7	7.9	7.8	7.7	7.8
8	7.8	7.9	7.9	7.9	---	7.9	7.9	7.5	7.8	7.8	7.6	7.9
9	7.8	7.9	7.9	7.8	---	7.9	7.9	7.7	7.8	7.8	7.6	7.8
10	7.8	8.0	8.0	7.8	---	7.9	8.0	7.8	7.9	7.8	7.7	7.8
11	7.8	7.9	8.0	---	---	7.9	8.0	7.7	7.9	7.8	7.7	7.8
12	7.9	8.0	8.0	---	---	7.9	8.0	7.6	7.8	7.8	7.8	7.9
13	7.8	8.0	7.9	---	---	7.8	7.9	7.7	7.9	---	7.7	7.8
14	7.8	7.9	7.9	---	---	7.8	7.9	7.6	7.9	---	7.8	7.7
15	7.7	8.0	7.9	---	---	7.7	8.0	7.6	7.8	8.0	7.9	7.7
16	7.7	8.0	7.9	---	---	7.7	7.9	7.6	7.5	7.8	7.9	7.7
17	7.7	7.9	7.9	---	---	7.6	7.8	7.6	7.8	7.6	7.9	7.8
18	7.5	7.9	7.9	---	---	7.6	7.9	7.6	7.8	7.5	7.9	7.8
19	7.7	7.9	7.9	---	---	7.7	8.0	7.4	7.8	7.6	7.8	7.8
20	7.8	8.0	7.9	---	---	7.7	7.8	7.5	7.8	7.6	7.6	7.8
21	7.8	8.0	7.9	8.0	---	7.7	7.9	7.6	7.8	7.7	7.8	7.8
22	7.8	8.0	7.9	7.9	---	7.8	8.0	7.6	7.8	7.8	7.8	7.8
23	7.7	8.1	7.9	7.9	---	7.8	8.0	7.6	7.7	7.7	7.7	7.7
24	7.7	8.1	7.9	8.0	7.9	7.8	8.0	7.7	7.8	7.8	---	7.7
25	7.7	8.0	7.9	7.9	8.0	7.8	7.9	7.7	7.8	7.9	8.0	7.7
26	7.6	8.0	7.9	7.9	7.9	7.7	7.7	7.6	---	7.8	7.9	7.7
27	7.8	8.0	7.9	7.9	7.9	7.8	7.9	7.6	---	7.6	7.9	7.7
28	7.8	8.0	7.9	7.9	7.9	7.8	8.0	7.5	---	7.5	8.0	7.7
29	7.8	8.0	7.8	---	---	7.9	8.0	7.4	7.8	7.7	8.0	7.8
30	7.8	8.0	7.9	---	---	7.9	7.9	7.4	7.8	7.7	7.9	7.8
31	7.9	---	7.8	---	---	7.8	---	7.6	---	7.7	7.8	---
MEAN	7.8	8.0	7.9	7.9	7.9	7.8	7.9	7.7	7.8	7.7	7.8	7.8

WTR YR 1982 MEAN 7.8 MAX 8.1 MIN 7.4

04206000 CUYAHOGA RIVER AT OLD PORTAGE, OH--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEDIAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18.0	13.0	5.0	2.5	---	3.5	9.5	16.5	22.0	22.5	23.5	24.5
2	15.5	13.0	5.0	2.0	---	3.5	10.0	16.5	22.5	22.0	23.5	23.5
3	15.5	13.0	5.0	2.5	---	3.5	10.0	16.5	22.5	21.5	24.5	22.0
4	15.0	12.5	5.0	3.5	---	3.5	7.5	17.5	22.0	21.0	25.5	21.0
5	15.5	13.0	5.0	2.5	---	3.0	7.0	18.5	21.5	21.5	26.0	21.0
6	16.5	12.0	4.5	2.5	---	3.0	6.5	20.5	19.5	23.5	26.0	21.5
7	14.5	11.5	4.5	2.5	---	2.0	5.5	21.0	19.0	24.5	26.5	20.5
8	13.5	11.5	5.0	1.5	---	3.0	6.0	20.5	20.5	25.5	26.5	20.5
9	13.5	11.0	4.0	1.0	---	3.0	6.0	20.0	21.5	26.0	26.0	21.0
10	14.0	11.0	3.0	.5	---	4.0	6.0	19.0	23.0	26.0	25.0	21.0
11	13.5	10.5	2.5	---	---	4.5	6.0	21.5	23.0	26.0	24.0	22.0
12	13.0	10.0	2.5	---	---	4.0	7.0	22.5	21.0	25.0	23.0	22.0
13	14.0	9.5	2.5	---	---	4.5	8.0	23.5	20.0	---	22.5	22.5
14	14.5	9.0	3.0	---	---	3.5	8.5	24.0	21.5	---	23.5	23.0
15	15.0	8.5	4.0	---	---	4.0	10.0	22.5	22.0	28.5	24.0	24.0
16	15.5	9.5	4.5	---	---	4.0	13.0	21.5	21.5	27.5	24.0	23.0
17	14.5	10.0	4.5	---	---	3.5	13.5	21.0	20.0	28.0	24.0	21.5
18	15.5	11.0	4.0	---	---	3.5	12.5	22.5	19.5	27.5	23.0	21.5
19	13.0	11.0	4.0	---	---	4.0	14.0	23.0	19.5	27.0	23.0	19.5
20	14.0	10.0	3.5	---	---	4.5	14.5	23.0	19.0	27.0	23.5	19.0
21	14.5	7.5	3.0	4.0	---	5.0	14.0	22.5	19.5	26.0	23.5	18.0
22	14.5	6.0	5.0	4.0	---	5.0	13.0	23.0	19.5	26.5	21.5	16.5
23	13.5	6.0	2.5	4.0	---	5.0	14.0	21.0	20.0	27.5	21.5	17.0
24	13.0	5.5	1.5	.5	3.0	6.0	15.0	20.5	20.5	27.5	---	17.5
25	12.5	5.5	1.5	1.0	2.0	6.0	15.5	20.5	21.0	26.5	23.5	18.0
26	13.0	5.5	2.0	2.0	2.5	5.5	16.0	21.0	---	26.0	22.0	17.5
27	14.0	5.5	2.0	2.0	2.5	5.0	15.0	23.0	---	26.5	23.5	16.0
28	14.0	5.5	2.0	---	3.0	4.5	15.0	22.5	---	26.0	22.5	16.5
29	14.0	5.0	2.0	---	---	6.0	15.0	23.0	24.0	24.5	21.5	16.5
30	14.0	4.5	2.0	---	---	8.5	15.5	22.0	23.0	24.5	22.0	16.5
31	13.5	---	2.0	---	---	10.0	---	22.0	---	24.5	24.5	---
MEAN	14.5	9.0	3.5	2.5	2.5	4.5	11.0	21.0	21.0	25.5	24.0	20.0

WTR YR 1982 MEAN 14.5 MAX 28.5 MIN .5

OXYGEN, DISSOLVED (DO), MG/L, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEDIAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	10.5	12.4	12.7	---	12.3	11.2	9.9	6.8	7.9	7.2	6.3
2	7.9	10.2	12.4	12.9	---	11.8	11.3	10.4	7.0	8.0	7.0	6.1
3	7.7	10.0	12.3	12.8	---	11.8	10.9	9.6	7.0	7.8	7.1	6.8
4	7.7	9.7	12.2	12.3	---	11.7	11.7	9.3	7.3	8.2	6.0	7.0
5	7.7	9.8	12.2	12.8	---	12.2	11.9	8.9	7.3	8.1	6.2	7.2
6	7.7	10.2	12.4	12.7	---	12.2	12.2	7.8	8.0	7.8	6.3	6.9
7	8.2	10.5	12.3	12.7	---	12.3	12.4	5.7	8.3	7.4	6.5	6.7
8	8.1	10.7	12.1	12.9	---	13.3	12.2	6.0	8.1	7.2	5.7	7.1
9	8.6	11.1	12.6	12.9	---	13.1	12.0	6.4	7.8	7.0	5.9	7.1
10	8.7	10.9	13.1	12.8	---	12.8	12.2	6.4	7.7	6.8	6.5	7.1
11	---	---	13.3	---	---	12.5	12.2	6.0	7.8	6.7	7.0	7.1
12	---	---	13.2	---	---	12.7	12.2	5.9	8.1	7.4	7.4	7.1
13	---	---	13.3	---	---	12.5	11.5	6.6	8.2	---	7.5	7.0
14	10.1	---	13.2	---	---	13.0	11.6	6.4	7.9	---	7.7	6.3
15	8.3	---	12.5	---	---	12.9	11.2	6.3	7.4	9.6	7.9	6.1
16	8.0	---	12.1	---	---	12.8	10.5	6.6	7.1	7.2	7.7	6.1
17	8.1	---	12.2	---	---	13.0	10.0	6.6	8.1	6.3	7.6	6.4
18	---	---	12.3	---	---	13.0	10.5	6.1	8.3	5.9	7.8	6.5
19	---	---	12.0	---	---	12.8	10.4	4.9	8.1	6.2	7.7	6.9
20	---	---	12.1	---	---	12.6	9.9	6.2	8.4	6.0	6.7	7.0
21	---	---	12.0	12.0	---	12.2	10.4	6.4	8.2	6.8	7.0	7.5
22	---	---	11.6	11.5	---	12.3	10.7	6.3	7.9	6.6	7.8	7.3
23	---	---	12.7	12.2	---	12.3	10.5	7.3	8.1	---	7.5	7.3
24	---	12.7	13.3	12.8	12.7	12.0	10.3	7.7	8.1	---	---	8.0
25	---	12.7	13.1	12.8	13.1	11.7	10.1	7.5	7.9	---	7.7	9.6
26	---	12.7	12.9	12.6	12.9	12.0	9.2	7.5	---	8.1	6.9	10.6
27	9.0	12.6	12.8	12.6	12.8	12.6	9.6	7.2	---	8.2	6.7	11.1
28	9.7	12.6	12.7	12.6	12.6	12.6	10.1	7.1	---	5.4	7.4	10.9
29	9.7	12.6	12.8	---	---	12.4	10.0	7.0	7.5	6.4	7.5	11.2
30	9.8	12.7	12.5	---	---	12.0	9.9	7.0	7.7	6.2	7.2	11.1
31	10.2	---	12.7	---	---	11.0	---	7.2	---	6.7	6.3	---
MEAN	8.6	11.3	12.6	12.6	12.8	12.4	11.0	7.1	7.8	7.2	7.1	7.7

WTR YR 1982 MEAN 9.5 MAX 13.3 MIN 4.9

04207200 TINKERS CREEK AT BEDFORD, OH

LOCATION.--Lat 41°23'04", long 81°31'39", in T.6 N., R.11 W., Cuyahoga County, Hydrologic Unit 04110002, on left bank at downstream side of bridge on State Highway 14 in Bedford, 5.5 mi (8.8 km) upstream from mouth.

DRAINAGE AREA.--83.9 mi^2 (217 km^2).

PERIOD OF RECORD.--November 1962 to current year.

REVISED RECORDS.--WSP 1912: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 876.18 ft (267.060 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods, which are fair. Water-quality data collected at this site 1965 to 1977. Sediment data collected at this site 1974 to 1979.

AVERAGE DISCHARGE.--19 years (1963-82), 127 ft^3/s (3.597 m^3/s), 20.56 in/yr (522 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,220 ft^3/s (204 m^3/s) July 20, 1969, gage height, 10.10 ft (3.078 m), from rating curve extended above 3,400 ft^3/s (96.3 m^3/s) on the basis of contracted-opening measurement of peak flow; minimum, 5.2 ft^3/s (0.15 m^3/s) Aug. 19, 1963.

EXTREMES FOR CURRENT YEAR.--Maximum discharge 1,600 ft^3/s (45.3 m^3/s) Dec. 23, gage height, 6.15 ft (1.875 m) above base of 1,500 ft^3/s (42.5 m^3/s); minimum discharge 14 ft^3/s (0.40 m^3/s) Aug. 16, 29, 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	206	46	233	236	830	71	384	31	50	175	15	16
2	253	44	214	165	780	73	202	29	44	66	39	39
3	155	42	137	163	634	59	207	29	33	305	23	61
4	80	39	170	911	399	232	188	28	29	220	45	31
5	51	55	215	658	294	422	152	28	96	140	22	19
6	221	173	162	463	183	306	143	27	160	74	18	19
7	315	175	120	233	153	174	158	27	71	53	17	20
8	147	117	309	146	130	97	190	277	46	43	33	20
9	86	82	251	106	110	81	259	90	38	35	21	19
10	60	64	192	96	100	100	282	47	31	29	17	19
11	47	54	160	85	95	563	243	37	27	31	17	17
12	41	48	152	75	85	517	195	33	26	31	16	17
13	37	43	139	70	75	685	179	30	35	26	16	17
14	34	39	131	65	70	468	129	28	25	25	16	51
15	31	36	122	60	179	272	99	26	30	24	15	69
16	33	36	112	60	401	356	83	25	242	23	15	29
17	29	36	99	55	526	398	83	25	193	22	16	22
18	34	35	91	50	370	305	84	25	111	19	16	40
19	133	57	82	48	366	157	74	29	57	71	16	21
20	74	562	89	46	325	140	76	31	47	29	52	19
21	53	435	91	46	306	120	55	28	97	21	40	27
22	53	346	124	46	236	95	55	28	118	19	21	20
23	144	213	1050	685	251	77	50	159	63	19	18	81
24	108	169	673	300	242	62	43	105	37	18	17	34
25	79	153	602	150	154	56	39	53	30	16	19	64
26	140	208	285	130	99	72	42	35	26	16	17	31
27	117	302	168	110	81	73	39	30	24	21	17	323
28	97	173	133	100	74	75	36	144	28	28	15	166
29	74	114	121	95	---	104	33	101	594	18	15	70
30	61	90	97	230	---	101	32	81	297	17	15	48
31	53	---	96	450	---	543	---	53	---	16	16	---
TOTAL	3046	3986	6620	6133	7548	6854	3844	1719	2705	1650	655	1429
MEAN	98.3	133	214	198	270	221	128	55.5	90.2	53.2	21.1	47.6
MAX	315	562	1050	911	830	685	384	277	594	305	52	323
MIN	29	35	82	46	70	56	32	25	24	16	15	16
CFSM	1.17	1.59	2.55	2.36	3.22	2.63	1.53	.66	1.08	.63	.25	.57
IN.	1.35	1.77	2.94	2.72	3.35	3.04	1.70	.76	1.20	.73	.29	.63

CAL YR 1981 TOTAL 54790 MEAN 150 MAX 1880 MIN 16 CFSM 1.79 IN 24.29
WTR YR 1982 TOTAL 46189 MEAN 127 MAX 1050 MIN 15 CFSM 1.51 IN 20.48

04208000 CUYAHOGA RIVER AT INDEPENDENCE, OH
(National stream quality accounting network station)

LOCATION.--Lat 41°23'43", long 81°37'48, in T.6 N., R.12 W., Cuyahoga County, Hydrologic Unit 04110002, on left bank 240 ft (73 m) downstream from bridge on Old Rockside Road, 0.8 mi (1.3 km) northeast of Independence, and 3.0 mi (4.8 km) downstream from Tinkers Creek.

DRAINAGE AREA.--707 mi^2 (1,831 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--September 1903 to December 1905 (fragmentary), January to July 1906 (gage heights and discharge measurements only), September 1921 to May 1923, September 1927 to December 1935, March 1940 to current year.

REVISED RECORDS.--WSP 1307: 1922-23(M), 1928-30(M), 1933(M), 1940(M), 1947(M), 1950(M). WSP 1912: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 583.57 ft (177.872 m) National Geodetic Vertical Datum of 1929. Sept. 21, 1903 to July 21, 1906, nonrecording gage at bridge 240 ft (73 m) upstream at present datum. Sept. 28, 1921 to May 30, 1923, nonrecording gage at bridge 240 ft (73 m) upstream at datum 2.42 ft (0.738 m) higher. Sept. 5, to Oct. 8, 1927, nonrecording gage, and Oct. 9, 1927, to Dec. 31, 1935, Mar. 5, 1940, to June 19, 1969, water-stage recorder, at site 100 ft (30 m) upstream at present datum.

REMARKS.--Records good. Natural flow of stream affected by diversion, storage reservoirs and power plants. Some diversion from the Tuscarawas River basin drainage into this basin at Portage Lakes (see REMARKS for station 03117000). Water diverted into Ohio Canal at Brecksville, 6 mi (10 km) upstream from station, bypasses station. These records do not include flow in canal except above about 15,000 ft^3/s (425 m^3/s), when channels merge.

AVERAGE DISCHARGE.--51 years (1921-22, 1927-35, 1940-82), 813 ft^3/s (23.02 m^3/s), not including flow in Ohio Canal.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 24,800 ft^3/s (702 m^3/s) Jan. 22, 1959, gage height, 22.41 ft (6.381 m), from rating curve extended above 17,000 ft^3/s (481 m^3/s) on basis of contracted-opening measurement of peak flow; minimum daily, 21 ft^3/s (0.59 m^3/s) Aug. 28, 1933; minimum combined daily discharge of river and canal, 55 ft^3/s (1.56 m^3/s) Aug. 28, 1933.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 6,960 ft^3/s (197 m^3/s) Dec. 23, gage height, 13.38 ft (4.078 m); minimum daily, 144 ft^3/s (4.08 m^3/s) Sept. 13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	774	441	1320	1540	5900	1130	2350	452	611	1300	177	181
2	782	423	1340	1270	3620	1100	1720	362	615	1020	231	220
3	638	417	1010	1120	3130	967	1980	318	516	2100	257	491
4	516	376	1010	4350	3350	1370	1990	333	442	2150	764	268
5	507	456	1280	3160	2570	3470	1650	318	482	1360	486	227
6	1300	979	1020	2250	2110	2390	1560	327	964	1040	268	205
7	1340	841	868	1940	1650	1750	1530	312	652	902	257	202
8	861	673	1400	1760	1480	1480	1560	1370	578	797	268	227
9	687	601	1340	1510	1230	1410	1890	716	560	677	260	223
10	585	545	1140	1090	995	1270	1980	474	594	578	227	205
11	507	511	1030	815	852	3410	1850	423	622	512	209	191
12	489	495	989	720	744	3680	1560	467	603	482	202	160
13	443	449	982	660	672	4620	1530	472	580	415	188	144
14	411	429	942	600	615	3580	1270	423	505	350	167	234
15	380	410	909	560	831	3050	1140	366	430	314	154	797
16	331	404	851	520	2610	3910	1050	308	1410	295	174	287
17	310	392	792	500	3230	5180	1040	278	2080	283	188	223
18	278	380	746	480	2730	3810	1080	275	1160	291	170	268
19	485	460	684	470	2810	2980	946	279	854	482	167	227
20	481	2640	641	460	2560	2720	956	648	740	403	253	195
21	502	1820	602	460	2790	2340	840	501	1010	306	298	234
22	479	1430	689	460	2270	1920	760	358	918	227	223	198
23	802	1110	5490	2710	2200	1600	690	1870	876	253	167	432
24	636	1010	3550	2370	2390	1370	604	1660	693	279	188	342
25	544	992	2510	1520	1860	1200	547	887	578	276	191	478
26	744	998	1890	1240	1480	1190	560	755	503	253	160	318
27	714	1320	1730	984	1320	1140	672	669	458	260	181	1440
28	575	950	1620	955	1240	1040	681	1040	467	272	188	1000
29	463	823	1420	880	---	1120	582	843	3520	260	184	495
30	477	757	1180	2400	---	1170	582	748	1770	220	170	378
31	454	---	1050	3880	---	3480	---	686	---	191	177	---
TOTAL	18495	23532	42025	43634	59239	70847	37150	18938	25791	18548	7194	10490
MEAN	597	784	1356	1408	2116	2285	1238	611	860	598	232	350
MAX	1340	2640	5490	4350	5900	5180	2350	1870	3520	2150	764	1440
MIN	278	376	602	460	615	967	547	275	430	191	154	144

CAL YR 1981 TOTAL 380930 MEAN 1044 MAX 9040 MIN 231
WTR YR 1982 TOTAL 375883 MEAN 1030 MAX 5900 MIN 144

04208000 CUYAHOGA RIVER AT INDEPENDENCE, OH--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1948 to September 1949, October 1950 to current year

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: July 1965 to current year.
pH: February 1973 to current year.
WATER TEMPERATURES: October 1948 to September 1949, October 1952 to current year.
DISSOLVED OXYGEN: July 1965 to current year.
SUSPENDED SEDIMENT DISCHARGE: Water years 1950-74, December 1976 to current year.

INSTRUMENTATION.--Alcohol-actuated thermograph October 1956 to June 1965, water-quality monitor since July 1965.

REMARKS.--Interruptions in the water-quality record were due to malfunction of the instrument.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 3,000 micromhos Feb. 12, 1977; minimum, 149 micromhos Nov. 23, 1974.
pH: Maximum, 8.9 units Aug. 27, 28, 1976; minimum, 5.9 units Jan. 26, 1976.
WATER TEMPERATURES: Maximum, 31.0°C Aug. 18, 1949, July 21, 1980; minimum, 0.0°C on many days during winter periods.
DISSOLVED OXYGEN: Maximum, 15.6 mg/L May 5,6 1982; minimum, 0.0 mg/L Oct. 23, 1965, Feb. 10-12, June 23, July 26, 1966.
SEDIMENT CONCENTRATIONS: Maximum daily mean, 4,800 mg/L Aug. 21, 1960; minimum daily mean, 1 mg/L Sept. 4, 10, 1955. Sept. 4, 10, 1955.
SEDIMENT LOADS: Maximum daily, 97,000 tons (88,000 tonnes) Sept. 14, 1979; minimum daily, 0.25 ton (0.23 tonne) Sept. 4, 1955.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 2,260 micromhos Mar. 4; minimum, 402 micromhos Mar. 18.
pH: Maximum, 8.6 Aug. 30; minimum, 6.6 units Nov. 7.
WATER TEMPERATURES: Maximum, 28.0°C July 18; minimum, 0.0°C on several days during winter period.
DISSOLVED OXYGEN: Maximum recorded, 15.6 mg/L May 5,6; minimum, 3.6 mg/L Aug.3.
SEDIMENT CONCENTRATIONS: Maximum daily mean, 1,280 mg/L Nov.20; minimum daily mean, 4 mg/L, Nov 2.
SEDIMENT LOADS: Maximum daily, 11,800 tons (10,700 tonnes) Mar. 13; minimum daily, 3.2 tons (2.9 tonnes) Aug. 18,19.

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DISSOLVED (UG/L AS AS)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	BARIUM, DISSOLVED (UG/L AS BA)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, DISSOLVED (UG/L AS CR)
OCT 28...	1430	2	2	100	40	<1	<1	<10	<10
DEC 01...	1130	2	0	100	36	3	1	30	<10
MAY 04...	1100	3	2	<100	52	1	<1	30	20
JUN 15...	1130	3	3	100	59	1	1	10	<10

DATE	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COBALT, DISSOLVED (UG/L AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, DISSOLVED (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, DISSOLVED (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)
OCT 28...	1	1	14	7	560	18	6	6	110
DEC 01...	8	<1	67	8	4900	12	68	5	190
MAY 04...	4	<1	6	6	490	26	4	4	150
JUN 15...	3	3	12	9	750	130	6	6	110

DATE	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY DISSOLVED (UG/L AS HG)	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, DISSOLVED (UG/L AS SE)	SILVER, TOTAL RECOVERABLE (UG/L AS AG)	SILVER, DISSOLVED (UG/L AS AG)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, DISSOLVED (UG/L AS ZN)
OCT 28...	79	.1	.1	<1	<1	1	<1	60	15
DEC 01...	69	.1	.1	<1	<1	1	<1	240	20
MAY 04...	110	.1	.1	<1	<1	<1	<1	40	7
JUN 15...	42	.1	.1	<1	<1	2	2	30	4

04208000 CUYAHOGA RIVER AT INDEPENDENCE, OH--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (FTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L)
OCT									
28...	1430	542	715	7.5	14.0	3.4	8.5	82	--
DEC									
01...	1130	1500	640	7.5	5.0	37	11.6	91	22
MAR									
02...	1100	1080	670	7.6	3.5	16	13.4	100	8
MAY									
04...	1100	334	870	8.2	16.0	1.4	10.1	100	--
JUN									
15...	1130	423	690	8.0	21.0	3.0	9.5	100	--
AUG									
17...	1100	216	930	8.0	23.0	2.9	8.0	92	--

DATE	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)
OCT									
28...	45000	2200	210	60	14	54	4.6	130	38
DEC									
01...	13000	5800	170	51	11	41	3.9	67	83
MAR									
02...	16000	8000	180	51	12	53	3.6	68	96
MAY									
04...	6000	260	250	70	18	80	4.7	110	110
JUN									
15...	430	110	220	62	15	57	3.7	80	82
AUG									
17...	2900	80	250	73	17	82	5.5	94	130

DATE	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)
OCT								
28...	.4	7.8	406	387	.490	1.80	2.4	.390
DEC								
01...	.3	6.7	369	330	.560	1.40	2.0	.520
MAR								
02...	.2	6.6	397	351	1.50	2.10	1.1	.220
MAY								
04...	.4	3.0	533	481	.240	.74	4.2	.350
JUN								
15...	.3	6.5	437	387	.090	.70	2.4	.370
AUG								
17...	.6	7.5	522	498	3.10	4.90	3.1	.410

04208000 CUYAHOGA RIVER AT INDEPENDENCE, OH--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	ALDRIN, TOTAL (UG/L)	ALDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	CHLORDANE, TOTAL (UG/L)	CHLORDANE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDD, TOTAL (UG/L)	DDD, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDE, TOTAL (UG/L)	DDE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDT, TOTAL (UG/L)	DDT, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT											
28...	1430	--	<.1	--	8.0	--	2.6	--	<.1	--	3.9
MAR											
02...	1100	<.01	--	<.10	--	<.01	--	<.01	--	<.01	--
MAY											
04...	1100	<.01	<.1	<.10	12	<.01	2.0	.08	<.1	<.01	16

DATE	DIAZINON, TOTAL (UG/L)	DIELDRIN TOTAL (UG/L)	DIELDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDRIN, TOTAL (UG/L)	ENDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ETHION, TOTAL (UG/L)	HEPTACHLOR, TOTAL (UG/L)	HEPTACHLOR, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR EPOXIDE TOTAL (UG/L)	HEPTACHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL (UG/L)
OCT											
28...	--	--	.4	--	<.1	--	--	<.1	--	<.1	--
MAR											
02...	.02	<.01	--	<.01	--	<.01	<.01	--	<.01	--	<.01
MAY											
04...	.07	<.01	4.8	<.01	<.1	<.01	<.01	<.1	<.01	<.1	<.01

DATE	LINDANE TOTAL IN BOTTOM MATERIAL (UG/KG)	MALATHION, TOTAL (UG/L)	METHYL PARATHION, TOTAL (UG/L)	METHYL TRITHION, TOTAL (UG/L)	PARATHION, TOTAL (UG/L)	TOXAPHENE, TOTAL (UG/L)	TOXAPHENE, TOTAL IN BOTTOM MATERIAL (UG/KG)	TOTAL TRITHION (UG/L)	2,4-D, TOTAL (UG/L)	2,4,5-T TOTAL (UG/L)	SILVEX, TOTAL (UG/L)
OCT											
28...	1.9	--	--	--	--	--	<1.0	--	--	--	--
MAR											
02...	--	<.01	<.01	<.01	<.01	__	--	<.01	.01	<.01	<.01
MAY											
04...	<.1	<.01	<.01	<.01	<.01	<1	<10	<.01	.12	<.01	.01

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	TEMPERATURE (DEG C)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY)
OCT					
28...	1430	542	14.0	10	15
DEC					
01...	1130	1500	5.0	120	486
MAR					
02...	1100	1080	3.5	43	125
MAY					
04...	1100	334	16.0	6	5.4
JUN					
15...	1130	423	21.0	16	18
AUG					
17...	1100	216	23.0	19	11
SEP					
14...	0745	--	22.1	--	--
14...	0955	181	--	--	--
14...	1130	--	22.2	--	--
14...	1530	--	23.4	--	--
14...	1815	--	23.5	--	--
15...	0745	--	19.8	--	--

04208000 CUYAHOGA RIVER AT INDEPENDENCE, OH--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		OCTOBER			NOVEMBER			DECEMBER	
1	774	226	498	441	5	6.0	1320	84	323
2	782	134	310	423	4	4.6	1340	35	127
3	638	56	106	417	7	7.9	1010	30	82
4	516	18	25	376	5	5.1	1010	35	95
5	507	10	14	456	36	57	1280	59	212
6	1300	299	1230	979	177	466	1020	27	74
7	1340	248	907	841	53	130	868	19	45
8	861	36	84	673	17	31	1400	152	580
9	687	24	45	601	7	11	1340	48	174
10	585	17	27	545	7	10	1140	33	102
11	507	13	18	511	7	9.7	1030	23	64
12	489	8	11	495	6	8.0	989	17	45
13	443	7	8.4	449	5	6.1	982	17	45
14	411	7	7.8	429	5	5.8	942	16	41
15	380	8	8.2	410	6	6.6	909	16	39
16	331	7	6.3	404	7	7.6	851	22	51
17	310	7	5.9	392	8	8.5	792	22	47
18	278	8	6.0	380	7	7.2	746	14	28
19	485	22	29	460	17	21	684	16	30
20	481	20	26	2640	1280	9220	641	15	26
21	502	11	15	1820	280	1420	602	19	31
22	479	7	9.1	1430	52	201	689	23	43
23	802	44	97	1110	44	132	5490	572	9240
24	636	17	29	1010	32	87	3550	258	2530
25	544	14	21	992	27	72	2510	113	766
26	744	89	214	998	56	167	1890	103	526
27	714	50	96	1320	154	599	1730	86	402
28	575	11	17	950	26	67	1620	66	289
29	463	6	7.5	823	25	56	1420	55	211
30	477	7	9.0	757	23	47	1180	45	143
31	454	8	9.8	---	---	---	1050	39	111
TOTAL	18495	---	3897.0	23532	---	12877.1	42025	---	16522
		JANUARY			FEBRUARY			MARCH	
1	1540	174	754	5900	555	9100	1130	43	131
2	1270	75	257	3620	283	2770	1100	40	119
3	1120	48	145	3130	226	1910	967	38	99
4	4350	666	8780	3350	200	1810	1370	195	1120
5	3160	272	2480	2570	167	1160	3470	635	6090
6	2250	112	680	2110	132	752	2390	185	1190
7	1940	79	414	1650	123	548	1750	74	350
8	1760	65	309	1480	118	472	1480	68	272
9	1510	62	253	1230	79	262	1410	57	217
10	1090	28	82	995	65	175	1270	55	189
11	815	12	26	852	40	92	3410	1010	10600
12	720	5	9.7	744	39	78	3680	487	4990
13	660	8	14	672	41	74	4620	910	11800
14	600	17	28	615	27	45	3580	370	3680
15	560	32	48	831	96	304	3050	200	1650
16	520	26	37	2610	473	3360	3910	453	5590
17	500	18	24	3230	245	2140	5180	548	7890
18	480	8	10	2730	182	1340	3810	280	2880
19	470	24	30	2810	230	1750	2980	200	1610
20	460	53	66	2560	147	1020	2720	165	1210
21	460	32	40	2790	168	1270	2340	157	992
22	460	13	16	2270	98	601	1920	137	710
23	2710	570	5690	2200	132	812	1600	104	449
24	2370	339	2370	2390	147	949	1370	82	303
25	1520	39	160	1860	73	367	1200	75	243
26	1240	20	67	1480	58	232	1190	58	186
27	984	32	85	1320	58	207	1140	58	179
28	955	33	85	1240	50	167	1040	52	146
29	880	32	76	---	---	---	1120	46	139
30	2400	365	3330	---	---	---	1170	54	171
31	3880	483	5010	---	---	---	3480	932	9610
TOTAL	43634	---	31375.7	59239	---	33767	70847	---	74805

04208000 CUYAHOGA RIVER AT INDEPENDENCE, OH--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		APRIL			MAY			JUNE	
1	2350	235	1490	452	16	20	611	33	54
2	1720	124	576	362	9	8.8	615	27	45
3	1980	177	943	318	6	5.2	516	30	42
4	1990	85	457	333	6	5.4	442	25	30
5	1650	65	290	318	7	6.0	482	29	44
6	1560	55	232	327	8	7.1	964	75	195
7	1530	55	227	312	9	7.6	652	32	56
8	1560	57	240	1370	410	1700	578	24	37
9	1890	144	767	716	50	109	560	22	33
10	1980	95	522	474	12	15	594	21	34
11	1850	45	225	423	13	15	622	21	35
12	1560	43	181	467	12	15	603	28	46
13	1530	41	169	472	11	14	580	54	85
14	1270	31	106	423	10	11	505	27	37
15	1140	23	71	366	12	12	430	17	20
16	1050	21	60	308	12	10	1410	400	2110
17	1040	22	62	278	12	9.0	2080	340	2250
18	1080	17	50	275	11	8.2	1160	89	279
19	946	16	41	279	9	6.8	854	62	143
20	956	18	46	648	101	197	740	50	100
21	840	30	68	501	34	46	1010	201	566
22	760	27	55	358	18	17	918	57	141
23	690	23	43	1870	574	3370	876	47	111
24	604	24	39	1660	468	2320	693	29	54
25	547	23	34	887	92	220	578	17	27
26	560	17	26	755	63	128	503	12	16
27	672	8	15	669	33	60	458	13	16
28	681	12	22	1040	427	1280	467	23	29
29	582	13	20	843	109	248	3520	1150	11300
30	582	14	22	748	67	135	1770	194	965
31	---	---	---	686	54	100	---	---	---
TOTAL	37150	---	7099	18938	---	10106.1	25791	---	18900
		JULY			AUGUST			SEPTEMBER	
1	1300	108	379	177	12	5.7	181	7	3.4
2	1020	66	182	231	17	11	220	15	11
3	2100	486	3530	257	23	16	491	90	138
4	2150	285	1770	764	383	1090	268	19	14
5	1360	113	415	486	176	276	227	16	9.8
6	1040	71	199	268	43	31	205	17	9.4
7	902	63	153	257	31	22	202	15	8.2
8	797	62	133	268	27	20	227	20	12
9	677	44	80	260	39	27	223	20	12
10	578	32	50	227	31	19	205	18	10
11	512	28	39	209	26	15	191	13	6.7
12	482	23	30	202	20	11	160	10	4.3
13	415	22	25	188	19	9.6	144	10	3.9
14	350	17	16	167	13	5.9	234	29	34
15	314	14	12	154	11	4.6	797	148	342
16	295	13	10	174	10	4.7	287	33	26
17	283	12	9.2	188	8	4.1	223	22	13
18	291	12	9.4	170	7	3.2	268	18	13
19	482	75	123	167	7	3.2	227	15	9.2
20	403	74	81	253	44	34	195	24	13
21	306	26	21	298	49	40	234	33	21
22	227	18	11	223	43	26	198	27	14
23	253	16	11	167	33	15	432	66	91
24	279	17	13	188	16	8.1	342	44	41
25	276	16	12	191	16	8.3	478	45	58
26	253	11	7.5	160	29	13	318	52	45
27	260	13	9.1	181	13	6.4	1440	493	2040
28	272	25	18	188	12	6.1	1000	165	485
29	260	23	16	184	14	7.0	495	37	49
30	220	13	7.7	170	14	6.4	378	22	22
31	191	11	5.7	177	11	5.3	---	---	---
TOTAL	18548	---	7377.6	7194	---	1754.6	10490	---	3558.9
YEAR	375883		222040.0						

04208000 CUYAHOGA RIVER AT INDEPENDENCE, OH--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	846	705	771	813	648	674	669	531	590	1100	804	957
2	861	660	770	711	675	686	531	507	515	864	744	792
3	768	654	711	744	660	691	546	513	531	801	738	760
4	831	774	797	876	654	707	579	516	550	816	492	617
5	858	822	839	900	672	785	615	486	535	567	522	556
6	843	609	711	891	585	756	483	459	470	621	558	576
7	636	567	605	798	630	677	678	456	645	684	630	651
8	813	624	659	783	585	688	771	624	665	627	594	607
9	702	654	680	762	705	736	849	753	788	615	582	596
10	723	678	701	804	714	753	1100	834	1010	663	600	640
11	723	696	710	822	780	798	1190	1090	1140	690	651	676
12	753	690	719	816	783	801	1080	1020	1050	720	690	702
13	765	726	748	828	771	809	1050	960	1020	705	669	688
14	798	765	781	1080	813	919	957	873	924	771	681	725
15	834	801	820	1080	870	936	891	798	855	801	762	788
16	855	819	833	888	786	849	813	756	793	852	777	823
17	891	843	866	891	786	840	858	762	807	879	831	854
18	918	867	885	861	771	832	1110	867	984	876	834	851
19	891	732	816	879	768	831	1310	1090	1180	897	801	825
20	1050	741	991	849	468	671	1250	1170	1210	1060	900	951
21	1120	1010	1050	774	594	688	1180	1080	1130	1160	1090	1140
22	1130	945	1040	867	777	819	1560	1090	1190	1130	1070	1090
23	924	759	818	873	621	700	1650	789	1060	1900	1070	1370
24	750	675	714	681	621	658	---	---	---	1170	960	1020
25	822	720	770	747	606	698	---	---	---	984	783	870
26	783	630	687	627	582	599	---	---	---	816	774	795
27	615	579	590	591	534	568	---	---	---	825	789	811
28	660	612	632	702	522	636	---	---	---	804	783	793
29	891	636	781	639	576	606	---	---	---	852	777	817
30	843	678	760	639	564	590	---	---	---	1150	801	921
31	696	681	690	---	---	---	816	795	803	900	687	775
MONTH	1130	567	772	1080	468	733	1650	456	852	1900	492	808

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	810	594	639	687	663	676	621	585	601	885	846	859
2	660	573	612	819	684	733	609	594	599	930	855	899
3	930	582	735	1140	795	928	657	609	629	972	894	920
4	939	690	771	2260	1110	1450	672	597	628	1020	939	972
5	711	639	684	1260	807	948	696	627	656	954	936	945
6	639	609	626	807	672	736	696	630	655	984	948	963
7	627	594	609	675	645	654	960	705	822	1000	960	980
8	648	618	632	684	633	659	975	897	941	999	717	859
9	735	651	693	690	651	661	969	798	855	882	795	830
10	795	720	760	951	699	795	801	723	763	954	888	924
11	801	768	780	921	582	738	717	642	668	1030	954	986
12	816	777	793	612	570	602	681	642	657	1030	978	994
13	846	798	830	555	483	522	666	648	657	993	957	974
14	1020	828	896	534	489	511	675	654	665	975	930	950
15	1480	984	1120	486	438	454	675	648	665	954	897	931
16	1210	837	1020	516	432	456	678	645	668	957	921	942
17	828	729	783	450	411	432	714	660	682	978	948	963
18	900	699	756	417	402	406	714	669	691	978	954	967
19	915	780	833	420	405	414	711	669	696	1000	975	991
20	801	729	758	462	417	444	747	693	720	1000	753	884
21	741	672	696	465	447	457	777	705	747	1060	768	917
22	693	657	674	492	465	474	774	744	761	969	879	911
23	738	663	692	546	498	516	804	762	787	978	513	713
24	720	636	671	573	549	562	828	768	796	663	540	613
25	696	684	691	606	573	591	900	828	864	861	669	772
26	783	669	726	930	609	747	870	834	846	798	768	779
27	798	666	725	990	903	937	981	828	875	849	756	793
28	684	657	675	1020	894	963	870	774	830	825	678	773
29	---	---	---	1010	852	907	879	819	855	771	681	729
30	---	---	---	888	738	795	885	810	836	816	747	761
31	---	---	---	774	558	633	---	---	---	771	735	749
MONTH	1480	573	746	2260	402	671	981	585	737	1060	513	879

04208000 CUYAHOGA RIVER AT INDEPENDENCE, OH--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	807	732	771	732	564	653	942	897	929	942	891	916
2	915	789	838	582	567	575	918	801	876	945	723	896
3	876	801	842	630	537	577	855	795	834	837	732	799
4	867	831	847	564	528	539	861	573	777	807	723	762
5	858	801	842	588	546	557	560	534	599	918	813	878
6	975	744	854	624	549	586	816	666	737	942	882	901
7	963	813	890	603	564	584	1080	828	983	975	858	922
8	1010	891	945	612	561	582	972	825	902	903	849	869
9	927	843	881	627	561	601	879	843	861	996	852	888
10	834	774	790	624	588	608	858	816	839	1040	849	946
11	768	744	752	645	609	627	897	822	873	990	840	902
12	738	720	731	678	639	656	939	900	926	870	852	863
13	777	705	729	690	657	675	945	915	935	894	855	876
14	780	723	748	714	690	702	954	924	943	867	636	815
15	837	750	784	903	714	777	933	912	924	834	555	693
16	822	630	751	921	825	878	915	897	909	741	540	633
17	636	543	597	900	810	849	903	888	893	798	750	784
18	654	636	647	897	813	845	924	882	902	819	786	810
19	699	654	681	831	606	757	921	900	913	858	822	847
20	732	690	715	768	567	683	909	783	858	855	840	847
21	711	639	679	795	774	787	894	807	855	849	822	838
22	717	654	683	825	765	801	1120	903	1020	897	852	878
23	741	624	687	873	825	858	933	888	899	882	699	802
24	756	660	724	894	852	873	888	873	884	801	768	791
25	786	735	761	870	840	857	903	879	892	831	732	780
26	813	765	786	990	843	915	954	903	935	828	744	773
27	849	789	818	870	852	860	915	891	901	741	573	649
28	828	684	803	888	828	860	915	891	906	681	564	616
29	552	420	485	1090	858	950	942	903	928	765	687	727
30	693	519	603	996	891	941	948	909	934	828	768	801
31	---	---	---	921	897	910	903	894	899	---	---	---
MONTH	1010	420	755	1090	528	739	1120	534	886	1040	540	817
YEAR	2260	402	782									

PH (STANDARD UNITS), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	7.4	7.3	7.4	7.2	7.0	7.1	7.4	7.3	7.4	7.4	7.4	7.4
2	7.4	7.2	7.4	7.1	7.0	7.0	7.4	7.3	7.4	7.4	7.4	7.4
3	7.5	7.4	7.4	7.2	7.0	7.1	7.4	7.3	7.4	7.4	7.4	7.4
4	7.6	7.5	7.5	7.2	7.0	7.1	7.4	7.3	7.4	7.4	6.9	7.2
5	7.6	7.5	7.5	7.1	7.0	7.0	7.4	7.3	7.3	7.0	6.9	6.9
6	7.4	7.1	7.3	7.0	6.8	6.9	7.4	7.3	7.4	7.0	6.9	6.9
7	7.3	7.1	7.2	7.2	6.6	7.1	7.4	7.4	7.4	7.0	7.0	7.0
8	7.3	7.2	7.2	7.1	7.0	7.0	7.4	7.2	7.4	7.0	7.0	7.0
9	7.2	7.2	7.2	7.2	6.9	7.1	7.4	7.3	7.3	7.3	7.0	7.1
10	7.2	7.2	7.2	7.2	7.0	7.2	7.4	7.4	7.4	7.1	7.0	7.1
11	7.5	7.2	7.3	7.3	7.0	7.1	7.4	7.4	7.4	7.1	7.1	7.1
12	7.4	7.3	7.4	7.2	7.0	7.1	7.4	7.4	7.4	7.1	7.0	7.1
13	7.4	7.3	7.3	7.2	7.0	7.1	7.4	7.4	7.4	7.1	6.9	7.0
14	7.3	7.2	7.3	7.2	7.0	7.1	8.0	7.4	7.6	7.3	7.0	7.2
15	7.3	7.2	7.2	7.1	7.0	7.1	7.8	7.5	7.7	7.3	7.3	7.3
16	7.3	7.2	7.2	7.0	6.9	7.0	7.5	7.5	7.5	7.3	7.3	7.3
17	7.4	7.2	7.3	7.1	6.9	7.0	7.5	7.5	7.5	7.3	7.3	7.3
18	7.3	7.2	7.2	7.2	6.9	7.0	7.5	7.4	7.5	7.3	7.2	7.2
19	7.3	7.1	7.2	7.1	7.0	7.1	7.5	7.5	7.5	7.3	7.2	7.2
20	7.5	7.2	7.3	---	---	---	7.5	7.5	7.5	7.3	7.3	7.3
21	7.4	7.3	7.3	---	---	---	7.5	7.5	7.5	7.3	7.2	7.3
22	7.3	7.2	7.3	---	---	---	7.6	7.5	7.5	7.3	7.3	7.3
23	7.2	7.1	7.2	7.3	7.1	7.3	7.5	7.2	7.3	7.3	7.2	7.3
24	7.2	7.1	7.2	7.4	7.3	7.3	---	---	---	7.3	7.2	7.2
25	7.2	7.2	7.2	7.4	7.4	7.4	---	---	---	7.3	7.2	7.2
26	7.1	7.0	7.1	7.4	7.4	7.4	---	---	---	7.3	7.2	7.2
27	7.0	7.0	7.0	7.4	7.4	7.4	---	---	---	7.3	7.3	7.3
28	7.3	7.0	7.2	7.4	7.4	7.4	---	---	---	7.3	7.2	7.3
29	7.2	7.1	7.1	7.4	7.4	7.4	---	---	---	7.3	7.3	7.3
30	7.2	7.1	7.2	7.5	7.4	7.4	---	---	---	7.3	7.1	7.2
31	7.1	7.1	7.1	---	---	---	7.4	7.4	7.4	7.2	7.1	7.1
MONTH	7.6	7.0	7.3	7.5	6.6	7.2	8.0	7.2	7.4	7.4	6.9	7.2

04208000 CUYAHOGA RIVER AT INDEPENDENCE, OH--Continued

PH (STANDARD UNITS), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	7.1	7.0	7.0	7.3	7.3	7.3	7.6	7.5	7.5	7.7	7.3	7.5
2	7.0	7.0	7.0	7.3	7.3	7.3	7.5	7.5	7.5	7.8	7.4	7.6
3	7.1	7.0	7.0	7.3	7.3	7.3	7.6	7.5	7.5	8.0	7.5	7.7
4	7.1	7.0	7.1	7.4	7.3	7.3	7.6	7.5	7.5	8.1	7.5	7.8
5	7.0	7.0	7.0	7.3	7.2	7.2	7.6	7.5	7.5	8.3	7.6	8.0
6	7.1	7.0	7.1	7.3	7.3	7.3	7.6	7.5	7.6	8.4	7.8	8.1
7	7.1	7.1	7.1	7.3	7.3	7.3	7.6	7.5	7.5	8.3	7.8	8.1
8	7.3	7.1	7.1	7.4	7.3	7.3	7.6	7.5	7.6	7.9	7.2	7.4
9	7.2	7.1	7.1	7.4	7.3	7.3	7.6	7.6	7.6	7.8	7.1	7.4
10	7.2	7.1	7.2	7.5	7.3	7.4	8.1	7.6	7.8	7.8	7.4	7.6
11	7.3	7.2	7.2	7.5	7.5	7.5	8.1	8.1	8.1	7.9	7.4	7.6
12	7.2	7.2	7.2	7.4	7.3	7.4	8.1	8.0	8.0	7.7	7.4	7.6
13	7.2	7.2	7.2	7.5	7.4	7.4	8.0	7.8	7.8	7.8	7.3	7.5
14	7.2	7.2	7.2	7.4	7.3	7.3	7.8	7.6	7.7	7.7	7.3	7.5
15	7.3	7.2	7.2	7.4	7.3	7.3	7.8	7.6	7.7	7.6	7.2	7.5
16	7.3	7.1	7.1	7.4	7.3	7.3	7.8	7.6	7.7	7.7	7.3	7.5
17	7.1	7.1	7.1	7.4	7.4	7.4	7.7	7.5	7.6	7.7	7.4	7.5
18	7.1	7.0	7.1	7.4	7.3	7.4	7.9	7.5	7.6	7.6	7.4	7.5
19	7.1	7.1	7.1	7.4	7.3	7.4	7.8	7.5	7.7	7.6	7.3	7.4
20	7.1	7.1	7.1	7.4	7.4	7.4	7.7	7.5	7.5	7.5	7.1	7.2
21	7.1	7.1	7.1	7.5	7.5	7.5	7.7	7.4	7.4	7.2	7.1	7.2
22	7.1	7.1	7.1	7.5	7.5	7.5	7.6	7.4	7.5	7.4	7.1	7.2
23	7.2	7.1	7.1	7.6	7.5	7.5	7.6	7.4	7.5	7.3	7.0	7.1
24	7.1	7.1	7.1	7.7	7.5	7.6	7.6	7.3	7.5	7.3	7.1	7.1
25	7.2	7.2	7.2	7.9	7.6	7.7	7.6	7.3	7.4	7.4	7.3	7.3
26	7.2	7.2	7.2	7.8	7.6	7.7	7.5	7.3	7.4	7.4	7.3	7.4
27	7.2	7.2	7.2	7.6	7.5	7.6	7.5	7.3	7.4	7.5	7.3	7.4
28	7.3	7.2	7.3	7.6	7.5	7.6	7.6	7.4	7.5	7.4	7.3	7.3
29	---	---	---	7.7	7.6	7.6	7.5	7.3	7.4	7.4	7.3	7.4
30	---	---	---	7.7	7.6	7.6	7.6	7.3	7.4	7.4	7.4	7.4
31	---	---	---	7.6	7.5	7.6	---	---	---	7.5	7.3	7.4
MONTH	7.3	7.0	7.1	7.9	7.2	7.4	8.1	7.3	7.6	8.4	7.0	7.5

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	7.4	7.4	7.4	7.6	7.3	7.4	7.8	7.5	7.7	8.2	7.9	8.0
2	7.5	7.4	7.4	7.6	7.5	7.5	7.7	7.6	7.6	8.1	7.7	7.9
3	7.5	7.4	7.4	7.6	7.5	7.4	7.7	7.6	7.6	8.0	7.8	7.9
4	7.5	7.4	7.4	7.6	7.3	7.4	7.7	7.3	7.5	8.0	7.7	7.8
5	7.5	7.4	7.4	7.6	7.5	7.6	7.5	7.3	7.4	8.1	7.9	8.0
6	7.4	7.3	7.4	7.7	7.5	7.6	7.7	7.5	7.6	8.1	7.9	8.0
7	7.6	7.4	7.5	7.7	7.5	7.6	7.7	7.6	7.6	8.0	7.9	8.0
8	7.6	7.5	7.5	8.0	7.5	7.8	7.7	7.5	7.6	8.2	7.9	8.0
9	7.6	7.4	7.5	8.1	7.8	7.9	7.7	7.6	7.6	8.2	7.9	8.1
10	7.6	7.4	7.5	8.1	7.8	8.0	7.7	7.6	7.6	8.3	7.9	8.0
11	7.7	7.5	7.6	8.2	7.9	8.0	7.7	7.6	7.7	8.1	7.9	8.0
12	7.6	7.5	7.6	8.2	7.9	8.1	7.9	7.7	7.8	8.3	7.8	8.1
13	7.7	7.5	7.6	8.1	7.9	8.0	8.0	7.8	7.9	8.3	7.8	8.0
14	7.8	7.5	7.6	8.1	7.8	7.9	8.2	7.8	8.0	8.2	7.8	7.9
15	7.8	7.5	7.7	8.1	7.8	8.0	8.2	7.9	8.0	7.7	7.5	7.6
16	7.6	7.2	7.4	8.2	7.7	8.0	8.3	7.9	8.1	7.7	7.5	7.6
17	7.4	7.1	7.2	8.3	7.8	8.1	8.4	7.8	8.1	7.8	7.6	7.7
18	7.4	7.3	7.4	8.4	7.9	8.1	8.3	7.8	8.1	7.8	7.6	7.7
19	7.4	7.3	7.4	8.1	7.6	7.9	8.3	7.8	8.0	7.8	7.6	7.7
20	7.5	7.3	7.4	8.0	7.6	7.8	8.1	7.7	7.8	7.8	7.7	7.7
21	7.5	7.3	7.4	7.9	7.7	7.8	8.0	7.7	7.9	7.8	7.6	7.7
22	7.4	7.4	7.4	7.9	7.6	7.8	8.1	7.9	8.0	7.7	7.6	7.7
23	7.4	7.3	7.4	8.0	7.6	7.8	8.0	7.8	7.9	7.9	7.7	7.8
24	7.7	7.4	7.5	8.0	7.6	7.8	8.0	7.8	7.9	7.9	7.8	7.9
25	7.6	7.4	7.5	8.0	7.6	7.8	8.1	7.7	7.9	7.8	7.8	7.8
26	7.6	7.4	7.5	7.9	7.6	7.7	8.1	7.8	7.9	7.8	7.7	7.8
27	7.8	7.4	7.6	7.9	7.5	7.7	8.2	7.9	8.0	7.8	7.6	7.7
28	7.7	7.5	7.6	7.8	7.5	7.6	8.3	8.0	8.2	7.9	7.7	7.8
29	7.4	7.1	7.2	7.7	7.5	7.6	8.5	8.2	8.3	8.0	7.8	7.9
30	7.4	7.2	7.3	7.8	7.4	7.6	8.6	8.2	8.4	7.9	7.7	7.8
31	---	---	---	7.8	7.5	7.7	8.4	8.1	8.3	---	---	---
MONTH	7.8	7.1	7.5	8.4	7.3	7.8	8.6	7.3	7.9	8.3	7.5	7.9
YEAR	8.6	6.6	7.5									

04208000 CUYAHOGA RIVER AT INDEPENDENCE, OH--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	16.5	14.5	15.0	14.0	12.5	13.0	6.0	5.0	5.5	3.0	2.5	3.0
2	15.5	12.0	14.0	14.5	13.5	14.0	6.0	5.5	6.0	2.5	1.5	2.0
3	12.0	11.5	12.0	14.0	12.5	13.5	6.0	5.0	5.5	3.5	2.5	3.0
4	13.0	11.0	12.0	13.0	11.5	12.5	5.5	5.0	5.5	3.5	3.0	3.5
5	16.0	13.0	14.5	13.5	12.0	12.5	5.5	5.0	5.0	2.5	2.0	2.5
6	16.5	15.0	15.5	13.5	11.0	12.5	5.0	4.5	4.5	3.0	2.0	2.5
7	15.5	13.5	13.5	11.0	9.0	10.0	5.5	4.5	5.0	3.0	2.0	2.5
8	13.5	13.0	13.0	10.5	8.5	9.5	5.5	3.5	5.0	2.0	1.5	1.5
9	13.5	12.0	13.0	11.0	10.5	10.5	3.5	2.5	3.0	1.5	.0	1.0
10	13.5	12.0	13.0	10.0	9.0	9.5	2.5	2.0	2.5	.0	.0	.0
11	14.5	13.0	13.5	9.5	8.5	9.0	3.0	2.0	2.5	.0	.0	.0
12	14.5	13.0	13.5	10.0	9.0	9.0	3.5	3.0	3.0	.5	.0	.5
13	14.0	12.0	13.0	9.0	8.0	8.5	3.5	3.0	3.5	.5	.5	.5
14	14.0	12.0	13.0	9.0	7.5	8.5	3.5	3.5	3.5	1.0	.5	.5
15	14.0	13.5	13.5	9.0	8.0	8.5	4.0	3.5	3.5	1.5	1.0	1.0
16	14.5	13.5	14.0	9.0	8.0	8.5	4.0	3.5	4.0	1.0	.0	1.0
17	14.0	12.0	13.0	9.5	8.0	8.5	3.5	3.0	3.0	.0	.0	.0
18	14.5	13.0	13.5	9.5	9.0	9.0	3.5	2.5	3.0	.5	.0	.5
19	13.0	9.0	11.0	9.0	8.5	9.0	2.5	2.0	2.5	.5	.0	.5
20	11.0	8.5	10.0	8.5	7.5	8.0	2.5	1.5	2.0	.5	.5	.5
21	14.0	11.5	13.0	7.5	6.0	6.5	1.5	1.0	1.5	3.0	1.0	2.5
22	14.0	13.5	14.0	6.5	6.5	6.5	3.0	1.5	2.5	2.0	1.5	2.0
23	13.5	12.0	13.0	6.5	5.0	5.5	3.0	2.0	2.0	2.5	1.0	1.5
24	12.0	10.0	10.5	6.0	5.0	5.5	---	---	---	1.0	.0	.5
25	11.0	8.5	10.0	6.0	5.5	5.5	---	---	---	.5	.0	.0
26	13.0	11.0	12.0	6.5	5.0	5.5	---	---	---	.5	.0	.5
27	14.5	13.0	13.5	7.0	6.0	6.5	---	---	---	1.5	.0	1.0
28	14.5	13.0	13.5	6.0	5.5	5.5	---	---	---	3.5	1.5	2.0
29	13.0	12.0	12.5	5.5	5.0	5.5	---	---	---	2.5	1.5	2.0
30	13.0	11.5	12.5	5.5	5.0	5.0	---	---	---	2.5	1.0	2.0
31	13.5	12.0	13.0	---	---	---	3.0	2.0	2.5	1.5	1.0	1.0
MONTH	16.5	8.5	13.0	14.5	5.0	8.5	6.0	1.0	3.5	3.5	.0	1.5

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	1.0	.5	.5	3.5	3.0	3.5	11.0	9.0	10.0	18.5	15.5	17.0
2	1.5	.5	1.0	3.5	2.5	3.0	11.0	8.5	10.0	18.5	15.5	17.0
3	2.0	1.5	1.5	3.5	1.5	2.5	11.5	9.0	10.5	18.5	15.5	17.0
4	1.5	1.0	1.5	3.0	2.0	2.5	8.5	6.0	6.5	18.5	15.0	17.0
5	1.5	.5	1.0	3.5	2.0	2.5	7.5	5.5	6.5	19.5	16.0	18.0
6	1.5	.0	1.0	2.5	2.0	2.5	7.0	4.0	5.0	21.0	17.5	19.5
7	1.0	.0	.5	3.0	2.5	2.5	6.0	4.0	5.0	20.5	19.0	19.5
8	1.5	.5	1.0	3.5	1.5	2.5	6.5	4.0	5.5	19.0	14.5	17.0
9	2.0	1.5	1.5	4.0	2.5	3.0	7.0	5.0	6.0	19.0	15.5	17.5
10	1.5	.5	1.0	4.5	2.5	3.5	7.0	5.0	6.0	17.5	16.0	17.0
11	1.5	.5	1.0	4.0	3.0	3.5	6.5	5.5	6.0	19.5	15.5	17.5
12	2.0	1.0	1.5	5.0	3.0	4.0	8.5	5.0	6.5	22.0	18.5	20.0
13	3.0	1.5	2.5	6.5	5.0	5.5	8.5	8.5	8.5	23.5	20.5	22.0
14	3.5	2.5	3.0	5.5	4.5	5.0	10.5	7.5	9.0	23.5	21.0	22.5
15	5.0	3.0	4.0	5.0	4.0	4.5	12.0	8.5	10.0	23.0	20.5	21.5
16	4.0	2.5	3.0	5.0	4.5	4.5	14.5	11.0	12.5	22.0	19.5	20.5
17	2.5	2.0	2.5	5.0	4.0	4.5	14.5	13.5	14.5	22.5	19.0	21.0
18	2.5	2.0	2.5	5.0	4.0	4.5	14.0	12.0	13.0	23.5	19.5	21.5
19	2.5	2.5	2.5	5.0	4.5	5.0	14.0	12.0	13.0	23.5	21.0	22.0
20	3.0	2.5	2.5	6.0	4.5	5.0	14.5	13.5	14.0	22.5	20.5	21.5
21	3.0	2.5	2.5	6.5	5.5	6.0	14.0	11.5	13.0	21.5	21.0	21.0
22	3.0	2.5	3.0	6.0	5.5	5.5	14.0	11.5	12.5	21.0	19.5	20.5
23	4.0	2.5	3.0	6.0	5.0	5.5	14.5	11.0	12.5	20.5	18.0	19.5
24	2.5	2.5	2.5	7.5	5.0	6.5	16.0	12.5	14.5	20.5	19.0	19.5
25	2.5	1.5	2.5	7.0	5.5	6.5	16.5	13.5	15.0	20.0	18.5	19.5
26	2.5	1.0	2.0	5.5	5.0	5.5	16.5	15.0	16.0	21.0	18.0	19.5
27	3.5	2.0	2.5	5.0	4.0	4.5	15.5	13.0	14.0	23.0	20.0	21.5
28	4.0	2.5	3.0	5.5	3.0	4.0	15.0	12.0	13.5	22.5	20.5	21.5
29	---	---	---	7.0	4.0	5.5	16.0	12.5	14.0	22.5	20.5	21.5
30	---	---	---	10.0	6.0	8.0	17.0	14.0	15.5	22.0	21.0	21.5
31	---	---	---	11.0	9.5	10.5	---	---	---	23.0	20.5	21.5
MONTH	5.0	.0	2.0	11.0	1.5	4.5	17.0	4.0	10.5	23.5	14.5	20.0

04208000 CUYAHOGA RIVER AT INDEPENDENCE, OH--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	22.5	20.0	21.5	22.5	20.0	21.5	24.5	22.0	23.5	23.5	21.5	22.5
2	21.5	18.5	20.0	23.0	20.0	21.5	24.0	22.5	23.5	23.0	21.0	22.5
3	21.5	20.0	21.0	22.5	20.0	21.0	23.0	21.5	22.0	21.5	20.0	20.5
4	20.5	19.0	19.5	22.0	20.0	20.5	24.0	23.0	23.5	21.0	19.5	20.5
5	19.5	16.5	18.5	22.5	20.5	21.5	25.5	23.0	24.0	21.5	18.0	20.0
6	17.5	16.0	17.0	24.0	21.0	22.5	26.5	24.0	25.0	21.0	18.5	20.0
7	20.0	17.0	18.0	26.0	23.5	24.5	26.0	23.5	25.0	20.5	19.0	20.0
8	22.5	18.5	20.5	26.0	24.0	25.0	25.5	24.5	25.0	20.5	17.5	19.0
9	23.0	20.5	21.5	26.5	24.0	25.0	25.5	23.5	24.5	21.0	18.0	19.5
10	23.0	21.5	22.0	26.5	23.5	25.0	24.5	22.5	23.5	21.5	19.0	20.0
11	23.5	20.5	22.0	26.0	25.0	25.5	23.0	20.5	22.0	22.5	20.0	21.0
12	22.0	21.0	21.5	25.5	24.0	24.5	22.5	19.5	21.0	23.5	20.5	22.0
13	21.5	19.5	20.5	25.5	23.5	24.5	22.5	19.5	21.0	24.0	21.5	23.0
14	22.5	19.5	21.0	25.5	23.5	24.5	23.0	20.0	21.5	23.5	22.5	23.0
15	22.0	20.5	21.5	27.0	24.0	25.5	23.5	20.5	22.0	22.5	21.5	22.0
16	21.0	18.5	20.0	27.5	25.0	26.0	24.5	21.5	23.0	22.0	20.5	21.5
17	20.5	18.5	19.5	27.5	25.0	26.0	24.0	22.0	23.0	20.5	18.5	19.5
18	21.5	19.0	20.0	28.0	25.5	26.5	23.5	21.0	22.5	20.0	19.0	19.5
19	21.0	18.5	19.5	27.0	24.5	25.5	23.0	20.0	22.0	19.0	17.0	18.0
20	20.0	17.5	18.5	26.5	24.0	25.0	23.0	21.0	21.5	18.5	17.0	17.5
21	20.0	17.5	19.0	26.5	23.5	25.0	21.5	20.0	20.5	17.5	16.0	17.0
22	19.0	18.0	18.5	25.0	23.0	24.5	20.5	18.0	19.0	16.5	15.0	15.5
23	20.5	18.5	19.5	26.0	22.5	24.5	20.0	18.5	19.0	15.0	14.5	14.5
24	21.5	18.0	19.5	26.5	23.0	24.5	22.0	19.0	20.0	15.5	14.5	15.0
25	22.5	19.0	20.5	27.0	23.5	25.5	22.5	21.0	22.0	17.0	15.0	16.0
26	22.5	20.5	21.5	26.5	25.0	25.5	22.5	19.5	21.0	17.0	16.5	17.0
27	23.5	21.0	22.5	26.5	24.0	25.0	23.0	21.0	22.0	16.5	15.0	15.5
28	23.5	22.0	23.0	26.0	24.5	25.0	22.0	20.0	21.0	17.0	15.0	16.0
29	21.5	20.0	20.5	24.5	22.5	23.5	20.0	17.5	19.0	18.0	15.5	16.5
30	23.5	21.0	22.0	25.5	22.0	24.0	21.5	18.0	19.5	18.5	16.0	17.5
31	---	---	---	25.5	23.0	24.5	23.0	20.5	21.5	---	---	---
MONTH	23.5	16.0	20.5	28.0	20.0	24.5	26.5	17.5	22.0	24.0	14.5	19.0
YEAR	28.0	.0	12.5									

OXYGEN, DISSOLVED (DO), MG/L, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1				---	---	---	12.5	11.7	12.0	13.7	12.8	13.3
2				---	---	---	12.3	11.8	12.1	14.1	13.8	13.9
3				---	---	---	12.5	12.2	12.3	13.8	13.4	13.5
4				---	---	---	12.5	12.3	12.4	13.5	13.3	13.4
5				---	---	---	12.8	12.2	12.5	14.1	13.5	14.0
6				---	---	---	13.0	12.6	12.8	14.1	13.7	13.9
7				---	---	---	12.8	12.4	12.6	14.1	13.7	13.9
8				---	---	---	12.9	11.5	12.2	14.4	14.1	14.3
9				---	---	---	13.4	12.6	13.0	14.3	14.1	14.2
10				---	---	---	13.5	13.2	13.3	14.4	14.2	14.3
11				---	---	---	13.5	13.3	13.4	14.4	14.0	14.2
12				---	---	---	13.5	13.3	13.4	14.0	13.4	13.8
13				---	---	---	13.5	13.2	13.3	13.5	13.1	13.3
14				---	---	---	13.4	13.1	13.3	13.3	11.8	13.1
15				---	---	---	13.1	12.8	12.9	13.7	13.4	13.6
16				---	---	---	13.1	12.8	12.9	13.8	13.6	13.6
17				---	---	---	13.2	12.9	13.1	14.2	13.8	14.1
18				---	---	---	13.3	13.0	13.1	14.1	13.8	13.9
19				---	---	---	13.4	13.1	13.2	14.0	13.5	13.7
20				---	---	---	13.5	13.3	13.4	13.5	13.0	13.1
21				---	---	---	13.5	13.2	13.3	13.5	13.0	13.4
22				---	---	---	13.2	12.6	13.0	13.9	13.5	13.7
23				11.7	11.4	11.5	13.3	12.6	12.9	14.1	13.5	13.8
24				11.5	11.2	11.3	---	---	---	14.7	14.1	14.4
25				11.4	11.2	11.3	---	---	---	14.8	14.6	14.7
26				11.4	11.1	11.2	---	---	---	14.6	14.3	14.5
27				11.2	10.9	11.0	---	---	---	14.6	14.3	14.4
28				11.4	11.2	11.3	---	---	---	14.3	12.8	14.0
29				11.7	11.3	11.4	---	---	---	14.3	14.0	14.1
30				12.1	11.4	11.6	---	---	---	14.5	13.9	14.1
31				---	---	---	13.7	13.4	13.6	14.5	14.3	14.4
MONTH				12.1	10.9	11.3	13.7	11.5	12.9	14.8	11.8	13.9

04208000 CUYAHOGA RIVER AT INDEPENDENCE, OH--Continued

OXYGEN, DISSOLVED (DO), MG/L, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	14.9	14.3	14.7	13.8	13.6	13.7	12.1	11.5	11.8	11.2	8.3	9.7
2	15.0	14.7	14.9	13.7	13.3	13.5	12.3	11.6	12.0	11.7	8.4	10.1
3	14.7	14.4	14.5	13.8	13.7	13.7	11.7	10.5	11.4	12.8	8.6	10.7
4	15.0	14.4	14.8	13.9	13.5	13.6	13.2	11.8	12.7	13.9	8.6	11.3
5	14.9	14.6	14.8	14.2	13.7	14.0	13.4	12.7	13.2	15.6	8.9	12.1
6	14.8	14.6	14.7	14.2	14.0	14.1	13.6	12.6	13.2	15.6	8.6	11.9
7	14.9	14.6	14.7	14.0	13.9	14.0	13.5	12.9	13.2	13.9	8.0	10.7
8	14.7	14.4	14.6	14.4	13.9	14.2	13.1	12.5	12.8	10.0	7.5	9.0
9	14.3	14.1	14.2	14.1	13.8	14.0	12.9	12.5	12.6	11.3	7.6	9.6
10	14.6	14.2	14.4	14.1	13.6	13.9	13.1	12.5	12.8	12.1	9.0	10.3
11	14.5	14.3	14.4	14.2	13.6	13.8	13.0	12.6	12.8	12.3	9.1	10.6
12	14.3	14.2	14.3	13.9	13.6	13.8	13.3	12.1	12.9	11.7	8.2	9.7
13	14.1	13.8	14.0	13.6	13.1	13.4	12.2	11.8	12.0	11.2	7.6	9.1
14	13.8	13.6	13.7	13.8	13.2	13.6	12.5	11.6	12.1	10.8	7.5	8.9
15	13.8	13.5	13.6	13.9	13.7	13.8	12.2	11.1	11.7	9.8	7.3	8.4
16	14.2	13.1	13.8	13.7	13.1	13.6	11.3	10.1	10.9	10.2	7.6	8.8
17	14.3	14.1	14.2	13.8	13.1	13.5	10.3	9.8	10.0	10.6	7.7	9.0
18	14.2	14.1	14.1	13.9	13.6	13.8	11.2	10.0	10.5	10.0	7.8	8.8
19	14.2	14.1	14.1	13.6	13.6	13.6	11.2	10.1	10.6	9.2	6.9	7.9
20	14.2	14.0	14.1	13.6	13.2	13.5	10.3	9.7	10.0	8.0	6.0	6.7
21	14.1	13.9	14.0	13.1	13.0	13.1	11.0	9.2	10.4	7.8	6.6	7.1
22	14.1	13.9	14.0	13.4	13.1	13.3	11.2	10.1	10.6	8.6	6.8	7.7
23	14.1	13.8	13.9	13.4	13.1	13.3	11.0	10.0	10.5	8.3	4.0	7.1
24	14.0	13.9	14.0	13.2	12.5	13.0	10.4	9.3	9.9	8.6	7.9	8.2
25	14.5	14.3	14.4	12.9	12.5	12.7	10.1	8.9	9.4	8.8	8.5	8.7
26	14.4	14.2	14.3	13.2	12.8	13.0	9.5	8.6	9.0	9.1	8.5	8.8
27	14.2	13.9	14.0	13.7	13.0	13.4	10.1	8.8	9.5	8.9	8.1	8.5
28	14.1	13.8	13.9	14.0	13.5	13.8	11.0	9.7	10.3	8.3	7.3	8.0
29	---	---	---	13.7	12.9	13.5	11.0	9.0	10.0	8.5	7.9	8.3
30	---	---	---	13.0	11.8	12.7	11.0	8.6	9.6	8.5	8.1	8.3
31	---	---	---	12.2	11.3	11.7	---	---	---	8.8	8.0	8.5
MONTH	15.0	13.1	14.3	14.4	11.3	13.5	13.6	8.6	11.3	15.6	4.0	9.1

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	8.4	7.9	8.2	9.0	8.5	8.7	6.3	4.1	5.1	9.2	5.3	7.1
2	9.3	8.4	8.9	9.0	8.4	8.7	6.0	5.0	5.5	8.0	4.7	6.2
3	9.4	8.3	8.8	8.6	7.2	8.3	4.8	4.8	5.7	7.3	4.6	6.2
4	9.6	8.1	8.9	8.7	7.8	8.4	---	---	---	7.6	4.6	6.0
5	9.3	8.6	8.9	8.9	8.5	8.7	---	---	---	7.8	5.7	6.8
6	9.7	9.1	9.4	9.0	8.2	8.6	---	---	---	7.9	5.6	6.8
7	10.0	9.2	9.6	8.7	7.8	8.2	---	---	---	6.9	5.8	6.2
8	9.9	8.1	9.0	8.3	7.2	7.8	---	---	---	8.4	6.0	7.1
9	9.9	8.2	8.9	8.3	7.0	7.6	---	---	---	8.6	6.2	7.3
10	9.5	8.0	8.7	8.6	6.9	7.7	6.0	5.0	5.5	8.3	6.1	7.2
11	10.1	8.2	9.1	8.8	6.7	7.6	6.5	5.3	5.8	8.3	5.6	6.9
12	9.8	8.2	8.9	8.9	6.8	7.8	7.0	5.4	6.1	9.3	5.1	7.1
13	10.1	8.5	9.2	8.6	6.8	7.6	8.4	5.3	6.7	9.3	5.0	7.0
14	10.5	8.5	9.4	8.4	6.4	7.4	9.2	5.6	7.3	9.4	4.7	6.5
15	11.2	8.1	9.4	8.6	6.1	7.4	10.1	5.6	7.8	5.6	4.2	4.7
16	8.6	7.6	8.2	9.6	5.7	7.6	11.3	5.5	8.3	6.4	4.5	5.4
17	8.9	7.5	8.5	9.4	6.0	7.7	11.3	5.1	8.2	7.2	5.3	6.1
18	9.1	8.7	8.9	9.6	6.0	7.8	11.1	5.0	8.0	6.3	5.3	5.8
19	9.1	8.4	8.8	7.7	5.3	6.6	11.4	4.9	7.9	6.9	5.5	6.1
20	9.6	9.1	9.3	8.0	5.7	6.8	8.6	4.9	5.9	6.5	5.5	6.0
21	9.3	8.7	9.0	8.2	6.0	7.1	7.6	5.3	6.2	6.9	5.7	6.3
22	9.3	8.9	9.1	8.1	6.1	7.1	7.9	5.8	6.9	6.4	5.7	6.1
23	9.2	8.8	8.9	8.2	6.1	7.1	7.6	5.9	6.7	7.1	5.9	6.5
24	9.7	8.8	9.2	8.4	5.6	7.0	8.4	5.6	6.8	6.9	6.6	6.7
25	9.7	8.5	9.0	8.5	5.4	6.8	8.1	4.9	6.4	6.9	6.2	6.6
26	9.7	8.2	8.9	7.2	4.9	6.0	8.7	5.0	6.7	6.6	5.3	6.0
27	10.3	7.9	9.0	7.0	4.4	5.5	9.3	5.6	7.3	7.1	6.0	6.6
28	10.2	7.9	8.9	6.6	4.1	5.3	9.6	5.4	7.5	7.5	7.0	7.4
29	8.7	7.1	8.0	6.5	4.7	5.6	10.5	6.8	8.5	7.7	6.8	7.3
30	8.6	7.8	8.4	7.1	4.5	5.8	11.2	7.4	9.2	7.1	6.3	6.6
31	---	---	---	6.6	4.2	5.3	10.5	6.8	8.4	---	---	---
MONTH	11.2	7.1	8.9	9.6	4.1	7.3	11.4	4.1	7.0	9.4	4.2	6.5
YEAR	15.6	4.0	10.5									

04208000 CUYAHOGA RIVER AT INDEPENDENCE, OH--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEDIAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	758	674	576	962	626	677	603	854	783	656	933	921
2	767	684	513	779	609	731	597	897	831	576	890	930
3	719	692	531	758	713	899	626	920	846	573	852	804
4	797	681	554	572	726	1320	627	957	848	539	774	770
5	836	798	543	558	689	875	650	944	846	552	599	884
6	690	744	471	570	624	740	651	957	851	588	741	894
7	602	650	660	650	608	651	809	984	879	585	989	923
8	653	653	659	603	630	659	945	861	939	576	903	855
9	681	740	782	590	704	657	848	827	875	611	858	876
10	696	750	1030	644	759	801	770	920	785	611	846	947
11	711	797	1140	680	780	752	665	968	752	629	885	890
12	714	801	1050	699	786	606	653	990	732	653	929	864
13	750	810	1020	686	840	525	657	974	729	675	939	881
14	779	861	929	737	870	510	663	945	752	702	947	843
15	819	900	863	789	1020	449	668	935	767	746	924	695
16	827	858	801	834	992	449	671	944	789	885	911	626
17	864	840	798	854	792	434	681	962	602	851	894	788
18	882	843	981	851	723	405	690	971	648	836	897	812
19	809	831	1160	825	815	416	699	992	681	762	915	849
20	999	689	1210	944	755	446	720	933	719	678	875	846
21	1050	698	1140	1140	690	456	758	935	681	789	860	839
22	1010	806	1140	1090	674	471	765	894	684	810	1020	876
23	807	720	966	1370	686	515	795	593	689	860	894	807
24	716	665	---	995	666	563	795	612	740	870	885	795
25	771	708	---	863	693	588	869	767	764	861	890	780
26	672	597	---	797	714	758	845	777	782	912	939	765
27	594	570	---	810	714	930	846	777	822	858	902	645
28	630	662	---	794	678	984	843	779	809	869	906	611
29	833	602	---	812	---	890	863	732	485	927	935	725
30	756	588	---	872	---	789	828	755	578	939	935	801
31	693	---	802	761	---	591	---	750	---	912	900	---
MEAN	770	730	847	803	735	662	737	874	756	738	889	818

WTR YR 1982 MEAN 779 MAX 1370 MIN 405

PH (STANDARD UNITS), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEDIAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.4	7.1	7.4	7.4	7.0	7.3	7.5	7.4	7.4	7.4	7.7	8.0
2	7.4	7.0	7.4	7.4	7.0	7.3	7.5	7.6	7.4	7.5	7.6	7.9
3	7.4	7.2	7.4	7.4	7.0	7.3	7.5	7.8	7.5	7.5	7.6	7.9
4	7.5	7.1	7.4	7.3	7.1	7.3	7.5	7.9	7.4	7.4	7.6	7.8
5	7.5	7.0	7.3	6.9	7.0	7.2	7.5	8.1	7.4	7.6	7.4	8.0
6	7.4	6.9	7.4	6.9	7.1	7.3	7.6	8.2	7.4	7.6	7.6	8.0
7	7.2	7.1	7.4	7.0	7.1	7.3	7.5	8.1	7.5	7.6	7.6	8.0
8	7.2	7.0	7.4	7.0	7.1	7.3	7.6	7.3	7.5	7.8	7.6	8.0
9	7.2	7.2	7.3	7.1	7.1	7.3	7.6	7.3	7.5	7.9	7.6	8.1
10	7.2	7.2	7.4	7.1	7.2	7.3	8.0	7.5	7.5	7.9	7.6	8.0
11	7.3	7.0	7.4	7.1	7.2	7.5	8.1	7.6	7.6	8.0	7.7	8.0
12	7.4	7.1	7.4	7.1	7.2	7.4	8.0	7.5	7.6	8.1	7.8	8.0
13	7.3	7.0	7.4	7.0	7.2	7.4	7.8	7.5	7.6	8.0	7.8	8.0
14	7.3	7.2	7.4	7.3	7.2	7.3	7.7	7.5	7.6	7.9	7.9	7.9
15	7.2	7.1	7.8	7.3	7.2	7.3	7.7	7.5	7.6	8.0	8.1	7.6
16	7.2	7.0	7.5	7.3	7.1	7.3	7.6	7.5	7.4	8.0	8.1	7.6
17	7.3	6.9	7.5	7.3	7.1	7.4	7.6	7.5	7.2	8.1	8.1	7.7
18	7.2	7.0	7.5	7.2	7.1	7.4	7.6	7.5	7.4	8.1	8.1	7.7
19	7.2	7.1	7.5	7.2	7.1	7.4	7.6	7.4	7.4	7.9	8.0	7.7
20	7.4	---	7.5	7.3	7.1	7.4	7.5	7.1	7.4	7.8	7.8	7.7
21	7.3	---	7.5	7.3	7.1	7.5	7.4	7.2	7.4	7.8	7.8	7.7
22	7.3	---	7.5	7.3	7.1	7.5	7.5	7.2	7.4	7.8	8.0	7.7
23	7.2	7.3	7.3	7.3	7.1	7.5	7.5	7.1	7.4	7.8	7.9	7.8
24	7.2	7.3	---	7.2	7.1	7.6	7.5	7.1	7.5	7.8	7.9	7.9
25	7.2	7.4	---	7.2	7.2	7.7	7.4	7.3	7.5	7.8	7.9	7.8
26	7.1	7.4	---	7.2	7.2	7.6	7.4	7.4	7.5	7.7	7.9	7.8
27	7.0	7.4	---	7.3	7.2	7.6	7.3	7.4	7.6	7.7	8.1	7.8
28	7.2	7.4	---	7.3	7.3	7.6	7.5	7.3	7.7	7.6	8.1	7.8
29	7.1	7.4	---	7.3	---	7.6	7.5	7.4	7.2	7.6	8.3	7.9
30	7.2	7.4	---	7.3	---	7.6	7.4	7.4	7.3	7.6	8.3	7.8
31	7.1	---	7.4	7.1	---	7.6	---	7.4	---	7.6	8.3	---
MEAN	7.3	7.2	7.4	7.2	7.1	7.4	7.6	7.5	7.5	7.8	7.9	7.9

WTR YR 1982 MEAN 7.5 MAX 8.3 MIN 6.9

04208000 CUYAHOGA RIVER AT INDEPENDENCE, OH--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEDIAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15.0	13.0	5.0	3.0	1.0	3.5	10.0	16.5	21.5	21.5	24.0	22.5
2	13.5	14.0	6.0	2.0	1.0	3.5	10.0	17.0	20.0	21.5	23.0	22.5
3	12.0	13.5	5.5	3.0	1.5	2.5	11.0	17.0	20.5	20.5	22.0	21.0
4	11.5	12.5	5.5	3.5	1.5	2.5	6.5	17.0	19.5	20.5	23.5	20.5
5	14.5	12.5	5.0	2.5	1.5	2.5	6.0	17.5	19.0	21.0	24.0	20.0
6	15.5	12.5	4.5	2.5	1.0	2.5	4.5	19.0	16.5	22.0	25.0	20.0
7	13.5	10.0	5.0	3.0	.5	2.5	4.5	19.5	18.0	24.5	25.0	20.0
8	13.0	9.5	5.5	1.5	1.0	2.5	5.0	17.0	20.0	25.0	24.5	19.0
9	13.0	10.5	3.0	1.0	1.5	3.0	6.0	17.0	21.5	25.5	24.0	19.5
10	13.0	9.5	2.5	.0	1.0	3.5	6.0	17.0	22.5	25.0	23.0	20.5
11	13.5	9.0	2.5	.0	1.0	4.0	6.0	17.0	22.0	25.5	22.0	21.0
12	14.0	9.0	3.5	.5	1.5	4.0	6.0	19.5	21.5	24.5	21.5	22.0
13	13.5	8.5	3.5	.5	2.5	5.5	8.5	21.5	20.5	24.5	21.0	23.0
14	13.0	8.5	3.5	.5	3.0	5.0	8.5	22.0	20.5	24.5	21.5	23.0
15	13.5	8.5	3.5	1.0	3.5	4.5	10.0	21.0	21.0	25.0	22.0	22.0
16	14.0	8.5	4.0	1.0	3.0	4.5	12.0	20.5	20.0	26.0	23.0	21.5
17	13.5	8.5	3.0	.0	2.5	4.5	14.5	21.0	19.0	26.0	23.5	20.0
18	13.5	9.5	3.0	.5	2.5	4.5	13.0	21.5	20.0	26.5	22.5	19.5
19	10.5	9.0	2.5	.5	2.5	5.0	13.0	22.5	20.0	26.0	22.0	18.5
20	9.5	8.5	1.5	.5	2.5	5.0	14.0	21.5	18.5	24.5	21.5	17.5
21	13.0	6.5	1.5	2.5	2.5	6.0	13.0	21.0	18.5	25.0	20.5	17.0
22	14.0	6.5	3.0	2.0	3.0	5.5	13.0	20.0	19.0	24.5	19.0	15.5
23	13.0	5.5	2.0	1.5	3.0	6.0	12.5	19.5	19.5	24.0	19.0	14.5
24	10.5	5.5	---	.5	2.5	6.5	14.0	19.5	19.5	24.5	19.5	15.0
25	9.5	5.5	---	.0	2.5	6.5	15.0	19.5	20.5	25.0	22.0	16.0
26	12.0	5.5	---	.5	2.0	5.5	16.0	19.0	21.5	25.5	21.0	17.0
27	13.5	7.0	---	1.0	2.5	4.5	14.0	21.0	22.0	25.0	22.0	15.5
28	13.5	5.5	---	2.5	3.0	4.0	13.0	22.0	23.0	25.0	21.0	15.5
29	12.5	5.5	---	2.0	---	5.0	14.0	21.5	20.5	23.5	19.0	16.5
30	12.5	5.0	---	2.0	---	7.0	15.0	21.5	21.5	23.5	19.0	17.0
31	13.0	---	2.5	1.0	---	10.5	---	21.0	---	24.5	21.5	---
MEAN	13.0	9.0	3.5	1.5	2.0	4.5	10.5	19.5	20.5	24.0	22.0	19.0

WTR YR 1982 MEAN 12.5 MAX 26.5 MIN .0

OXYGEN, DISSOLVED (DO), MG/L, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEDIAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		---	11.8	13.4	14.8	13.8	11.9	9.7	8.3	8.7	5.1	7.1
2		---	12.1	13.9	14.9	13.5	12.0	10.3	8.9	8.7	5.5	6.0
3		---	12.3	13.5	14.5	13.7	11.4	10.9	8.9	8.3	4.1	6.1
4		---	12.4	13.3	14.9	13.6	12.9	11.6	8.9	8.6	---	6.0
5		---	12.5	14.1	14.9	14.1	13.2	12.3	8.9	8.7	---	6.7
6		---	12.8	14.0	14.7	14.1	13.4	11.7	9.4	8.6	---	6.9
7		---	12.7	13.8	14.7	14.0	13.2	10.8	9.6	8.2	---	6.3
8		---	12.3	14.3	14.6	14.2	12.9	9.3	9.0	7.8	---	7.2
9		---	13.1	14.2	14.2	14.0	12.6	9.9	8.8	7.5	---	7.2
10		---	13.3	14.3	14.4	14.0	12.8	10.2	8.8	7.6	5.7	7.1
11		---	13.4	14.3	14.4	13.8	12.8	10.5	9.1	7.4	5.7	7.0
12		---	13.4	13.9	14.3	13.8	12.9	9.6	9.0	7.7	6.0	7.1
13		---	13.3	13.3	14.0	13.5	12.0	9.0	9.3	7.6	6.1	6.9
14		---	13.3	13.2	13.7	13.7	12.0	8.7	9.3	7.4	7.3	6.2
15		---	13.0	13.6	13.6	13.8	11.6	8.3	9.2	7.5	7.6	4.7
16		---	12.9	13.6	14.0	13.6	10.9	8.8	8.1	7.5	8.2	5.4
17		---	13.0	14.2	14.2	13.5	9.9	8.8	8.6	7.8	8.3	6.2
18		---	13.1	13.9	14.1	13.8	10.4	8.7	9.0	7.8	8.1	5.9
19		---	13.2	13.7	14.2	13.6	10.5	8.0	8.8	6.6	7.8	6.0
20		---	13.3	13.1	14.1	13.6	10.0	6.5	9.3	7.0	5.7	6.1
21		---	13.3	13.4	14.0	13.1	10.5	7.2	9.0	7.3	6.0	6.3
22		---	13.0	13.7	14.0	13.3	10.6	7.9	9.1	7.1	6.9	6.2
23		11.6	12.9	13.7	13.9	13.3	10.5	7.4	8.9	7.0	6.7	6.8
24		11.3	---	14.3	14.0	13.1	9.9	8.2	9.2	7.0	6.6	6.7
25		11.3	---	14.7	14.4	12.7	9.4	8.7	9.0	6.7	6.3	6.6
26		11.3	---	14.5	14.3	13.0	9.0	8.8	8.8	5.9	6.9	6.1
27		11.1	---	14.4	14.0	13.4	9.7	8.4	9.1	5.4	7.3	6.6
28		11.4	---	14.0	13.9	13.7	10.3	8.0	8.7	5.3	7.5	7.4
29		11.4	---	14.1	---	13.6	9.9	8.3	8.0	5.6	8.8	7.3
30		11.6	---	14.1	---	12.9	9.3	8.4	8.5	5.6	9.0	6.7
31		---	13.6	14.4	---	11.7	---	8.4	---	5.2	8.3	---
MEAN		11.4	12.9	13.9	14.3	13.5	11.3	9.1	8.9	7.3	6.9	6.5

WTR YR 1982 MEAN 10.5 MAX 14.9 MIN 4.1

04208502 BIG CREEK AT CLEVELAND, OH

LOCATION.--Lat 41°27'01", long 81°43'18", Cuyahoga County, Hydrologic Unit 04110002, on right bank 8 ft (2 m) downstream from footbridge in Brookside park, 0.2 mi (0.3 km) upstream from bridge on Fulton Road and 2.5 mi (4.0 km) upstream from mouth.

DRAINAGE AREA.--35.3 mi^2 (91.4 km^2).

PERIOD OF RECORD.--October 1972 to current year.

GAGE.--Water-stage recorder. Datum of gage is 720.7 ft (189.19 m) National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers).

REMARKS.--Records poor. Flow slightly regulated by industry upstream from station. Water-quality data collected at this site 1972 to 1977.

AVERAGE DISCHARGE.--10 years, 55.9 ft^3/s (1.583 m^3/s), 21.50 in/yr (546 mm/yr). The figures published in the 1977-1981 reports were in error. The correct figures are as follows:

Water Year	Year	Average Discharge (ft^3/s)	(m^3/s)	Inches (in/yr)	(mm/yr)
1977	5	55.9	1.583	21.50	546
1978	6	56.2	1.592	21.62	549
1979	7	56.3	1.594	21.66	550
1980	8	56.5	1.600	21.74	552
1981	9	55.5	1.572	21.35	542

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,100 ft^3/s (258 m^3/s) Aug. 24, 1975, gage height, 16.20 ft (4.938 m) (from floodmarks), from rating curve extended above 500 ft^3/s (14.2 m^3/s) on basis of slope-area measurement of peak flow; minimum daily, 2.3 ft^3/s (0.065 m^3/s) Sept 16-17, 1973.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,720 ft^3/s (77.0 m^3/s) June 29, gage height, 8.41 ft (2.563 m); above base of 2,700 ft^3/s (76.5 m^3/s) revised; minimum daily 5.0 ft^3/s (0.14 m^3/s) Sept. 12.

REVISIONS.--Revised peak discharges for water years 1973-81 and, revised daily discharges, in cubic feet per second, for high-water periods in these years, are given below. These figures supersede those published in the reports for 1973-81.

Water Year	Date	Time	Discharge (ft^3/s)	(m^3/s)	Gage height (ft)	(m)
1973	June 5,1973	----	3000	85.0	----	-----
	June 16	0815	2850	80.7	8.68	2.647
	July 20	----	*3920	111	*10.77	3.283
	Sept.29	1230	3290	93.2	9.58	2.920
1974	Apr. 4,1974	0500	*3120	88.4	*9.25	2.819
1975	May 21,1975	1730	3750	106	10.46	3.188
	June 22	1930	5960	169	13.55	4.130
	Aug. 24	----	*9100	258	*16.20	4.938
	Aug. 31	2100	5680	161	13.21	4.026
1976	Feb. 16,1976	0800	4890	138	12.24	3.731
	July 10	1030	4050	115	11.00	3.353
	Sept.17	1845	*6850	194	*14.44	4.401
1977	June 30,1977		*2660	75.3	*8.27	2.521
1978	Dec. 14, 1977	0545	*3600	102	*10.19	3.106
	Mar. 14, 1978	0430	2710	76.7	8.38	2.554
1979	Feb. 23, 1979	1245	*3290	93.2	*9.58	2.920
	Sept.14	0900	3190	90.3	9.38	2.859
1980	Dec. 25, 1979	1245	*3670	104	*10.31	3.142
	Aug. 2, 1980	1815	3400	96.3	9.80	2.987
	Sept. 14	0545	3650	103	10.28	3.133
1981	Apr. 11,1981	1900	3120	88.4	9.23	2.813
	June 9	0345	*4370	124	*11.50	3.505
	July 13	0845	3560	101	10.12	3.085
	Aug. 7	1745	3380	95.7	9.75	2.972
	Sept. 2	1630	4300	122	11.39	3.472
	Sept. 3	2115	3100	87.8	9.21	2.807

Water Year	Date	Discharge (ft^3/s)
1973	Nov. 14,1972	789
	Mar. 14,1973	742
	Apr. 27,1973	663
	June 16,1973	787
1974	Apr. 4,1974	720
	May 12,1974	641
1975	Feb. 23,1975	605
	Feb. 24,1975	534
	Aug. 24,1975	1490
	Aug. 26,1975	632
	Aug. 29,1975	621
	Aug. 30,1975	1040
	Aug. 31,1975	1650
	Sept. 1,1975	879
1976	Dec. 15,1975	555
	Dec. 31,1975	517
	Jan. 26,1976	962
	Feb. 16,1976	1990
	Feb. 20,1976	422
1976	July 10,1976	630
	Sept.17,1976	1670
1977	Feb. 23,1977	621
	Feb. 24,1977	619
	Mar. 18,1977	1150
	Apr. 2,1977	529
	Aug. 12,1977	445
	Aug. 14,1977	847
1978	Dec. 14,1977	2190
	Dec. 15,1977	373
	Jan. 8,1978	593
	Jan. 26,1978	584
	Mar. 13,1978	281
	Mar. 14,1978	1500
	Mar. 15,1978	310
	Mar. 21,1978	418
1979	Dec. 31,1978	258
	Jan. 1,1979	539
	Feb. 23,1979	961
1979	Feb. 24,1979	278
	May 24,1979	285
	May 25,1979	1590
	May 26,1979	857
	Sept.14,1979	1170
1980	Dec. 24,1979	457
	Dec. 25,1979	1340
	Aug. 2,1980	662
	Sept.14,1980	526
1981	Feb. 19,1981	739
	Feb. 20,1981	346
	Apr. 11,1981	554
	Apr. 14,1981	536
	June 9,1981	875
	July 13,1981	494
	Aug. 7,1981	689
	Sept. 2,1981	592
	Sept. 3,1981	796
	Sept. 4,1981	274

04208502 BIG CREEK AT CLEVELAND, OH--Continued

Month		Total	Mean	Max.	Min.	CFSM	IN.
November	1972	2648	88.3	789	19	2.50	2.79
March	1973	2618	84.5	742	20	2.39	2.76
April	1973	2001	66.7	663	11	1.89	2.11
June	1973	2346	78.2	787	10	2.22	2.47
WTR YR	1973	18099.3	49.6	789	2.3	1.41	19.08
April	1974	2321	77.4	720	20	2.19	2.45
May	1974	2012	64.9	641	11	1.84	2.12
CAL YR	1973	17342.8	47.5	787	2.3	1.35	18.28
WTR YR	1974	17791.6	48.7	720	7.0	1.38	18.75
February	1975	2312	82.6	605	18	2.34	2.43
August	1975	6704.9	216	1650	8.4	6.12	7.07
September	1975	2498	83.3	879	18	2.36	2.63
CAL YR	1974	18804.9	51.5	720	7.4	1.46	19.82
WTR YR	1975	25747.9	70.5	1650	6.1	2.00	27.14
December	1975	2424	78.2	555	11	2.22	2.55
January	1976	2018	65.1	962	12	1.84	2.13
February	1976	4129	142	1990	11	4.02	4.35
July	1976	1398.7	45.1	630	4.2	1.28	1.47
September	1976	3355	112	1670	10	3.17	3.54
CAL YR	1975	24646.6	67.5	1650	6.1	1.91	25.98
WTR YR	1976	21102.1	57.7	1990	4.2	1.63	22.24
February	1977	1962	70.1	621	13	1.99	2.07
March	1977	3349	108	1150	21	3.06	3.53
April	1977	2220	74.0	529	21	2.10	2.34
August	1977	3257	105	847	14	2.97	3.43
CAL YR	1976	19364.1	52.9	1990	4.2	1.50	20.41
WTR YR	1977	19415.5	53.2	1150	8.0	1.51	20.46
December	1977	4205	136	2190	16	3.85	4.43
January	1978	2256	72.8	593	16	2.06	2.38
March	1978	4604	149	1500	20	4.22	4.85
CAL YR	1977	23225	63.6	2190	8.0	1.80	24.48
WTR YR	1978	20884	57.2	2190	9.5	1.62	22.01
December	1978	1552	50.1	258	13	1.42	1.64
January	1979	1446	46.6	539	13	1.32	1.52
February	1979	1865	66.6	961	12	1.89	1.97
May	1979	3587	116	1590	14	3.29	3.78
September	1979	1865	62.2	1170	13	1.76	1.97
CAL YR	1978	18249	50.0	1500	9.5	1.42	19.23
WTR YR	1979	20760	56.9	1590	8.8	1.61	21.89
December	1979	2777	89.6	1340	11	2.54	2.93
August	1980	2030	65.5	662	18	1.86	2.14
September	1980	1442	48.1	526	11	1.36	1.52
CAL YR	1979	21989	60.2	1590	8.8	1.71	23.17
WTR YR	1980	21310	58.2	1340	9.8	1.65	22.46
February	1981	2398	85.6	739	14	2.42	2.53
April	1981	2493	83.1	554	14	2.35	2.63
June	1981	2071	69.0	875	9.9	1.95	2.18
July	1981	1373	44.3	494	7.3	1.25	1.45
August	1981	1607	51.8	689	7.6	1.47	1.69
September	1981	2789	93.0	796	7.6	2.63	2.94
CAL YR	1980	18609	50.8	662	8.3	1.44	19.61
WTR YR	1981	17465.2	47.8	875	7.3	1.35	18.41

04208502 BIG CREEK AT CLEVELAND, OH--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	132	14	110	212	221	42	53	30	37	27	10	6.7
2	65	12	48	46	61	43	32	30	15	27	46	58
3	19	12	24	61	170	33	78	28	9.2	329	16	25
4	11	12	88	605	89	488	36	27	7.7	51	159	7.3
5	9.5	56	80	86	51	315	28	27	71	32	14	5.8
6	157	110	30	58	34	61	45	26	75	25	9.2	5.5
7	69	29	27	60	28	40	68	27	13	21	7.7	12
8	15	15	126	32	26	32	75	221	9.2	18	13	7.3
9	12	13	47	27	24	31	93	18	8.0	17	9.2	6.1
10	12	12	29	28	22	38	82	11	8.0	17	6.7	7.7
11	11	11	25	26	22	494	73	9.6	7.3	16	6.4	6.1
12	11	12	29	22	20	125	58	9.6	7.0	15	6.1	5.0
13	9.9	11	26	22	20	276	50	12	6.7	15	6.4	6.1
14	9.5	12	24	20	20	60	32	12	7.0	16	6.7	86
15	9.5	11	21	20	250	40	24	11	25	14	6.4	58
16	11	11	18	19	348	195	23	10	343	14	6.7	12
17	9.9	11	17	18	388	69	27	9.2	47	14	7.0	7.7
18	28	11	16	17	148	42	19	10	16	13	6.7	47
19	177	74	16	17	216	34	17	19	14	35	6.4	9.2
20	42	331	16	16	159	51	47	27	23	17	76	7.0
21	17	172	18	16	152	34	22	19	42	13	27	8.0
22	22	78	76	15	84	26	16	34	60	12	9.2	15
23	95	56	1020	622	98	22	14	71	17	11	7.7	109
24	34	44	152	86	73	20	14	12	12	11	7.3	29
25	17	40	58	30	48	28	13	11	11	10	18	40
26	36	57	41	29	51	61	14	9.6	11	30	9.2	15
27	19	76	53	26	34	33	14	12	10	24	6.7	876
28	67	29	35	26	34	35	18	106	31	32	6.4	109
29	19	21	37	23	---	43	27	12	836	12	5.8	27
30	16	19	27	777	---	46	27	41	46	11	6.1	17
31	14	---	35	230	---	656	---	12	---	13	6.1	---
TOTAL	1176.3	1372	2369	3292	2891	3513	1149	914.0	1825.1	912	535.1	1630.5
MEAN	37.9	45.7	76.4	106	103	113	38.3	29.5	60.8	29.4	17.3	54.4
MAX	177	331	1020	777	388	656	93	221	836	329	159	876
MIN	9.5	11	16	15	20	20	13	9.2	6.7	10	5.8	5.0
CFSM	1.07	1.30	2.16	3.00	2.92	3.20	1.09	.84	1.72	.83	.49	1.54
IN.	1.24	1.45	2.50	3.47	3.05	3.70	1.21	.96	1.92	.96	.56	1.72

CAL YR 1981 TOTAL 18112.5 MEAN 49.6 MAX 1020 MIN 7.3 CFSM 1.41 IN 19.09
WTR YR 1982 TOTAL 21579.0 MEAN 59.1 MAX 1020 MIN 5.0 CFSM 1.67 IN 22.74

04208506 CUYAHOGA RIVER AT WEST THIRD STREET BRIDGE, IN CLEVELAND, OH

LOCATION.--Lat 41°29'17", long 81°41'07", in T.7 N., R.12 W., Cuyahoga County, Hydrologic Unit 04110002, on left bank just upstream from bridge on West Third Street in Cleveland, 3.0 mi (4.8 km) upstream from mouth, and 1.2 mi (1.9 km) downstream from turning basin.

DRAINAGE AREA.--798 mi^2 (2,067 km^2).

PERIOD OF RECORD.--November 1966 to current year.

PERIOD OF RECORD.--
SPECIFIC CONDUCTANCE: November 1966 to current year.
pH: November 1966 to current year.
WATER TEMPERATURES: November 1966 to current year.
DISSOLVED OXYGEN: November 1966 to current year.

INSTRUMENTATION.--Water-quality monitor.

REMARKS.--Interruptions in the water-quality record were due to malfunction of the instrument. No discharge records available.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 3,000 micromhos July 16, 17, 1977; minimum, 318 micromhos July 12, 1976.
pH: Maximum, 9.3 units Sept. 14, 1969; minimum, 4.3 units May 16, 1969.
WATER TEMPERATURES: Maximum, 35.0°C July 24, 1967; minimum, 1.0°C Jan. 1, 1969.
DISSOLVED OXYGEN: Maximum, 15.0 mg/L on several days during 1968, 1970; minimum, 0.0 mg/L on many days during 1967, 1968, 1971 to 1974, 1977 to 1982.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 2,570 micromhos Jan. 23; minimum, 420 micromhos June 29.
pH: Maximum, 8.2 units Dec. 23; minimum, 6.9 units Oct. 30.
WATER TEMPERATURES: Maximum, 28.5°C July 17, 18, 19, 20; minimum, 1.5°C Jan. 10, 11, Feb. 1.
DISSOLVED OXYGEN: Maximum, 13.4 mg/L Feb. 2, 4, 5; minimum, 0.0 mg/L on several days during year.

04208506 CUYAHOGA RIVER AT WEST THIRD STREET BRIDGE, IN CLEVELAND, OH--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	987	684	813	849	834	843	726	678	705	1310	945	1100
2	735	690	716	849	834	842	678	597	641	1160	876	992
3	750	717	729	834	822	826	654	606	634	867	795	836
4	762	717	728	843	825	834	687	654	670	885	561	759
5	---	---	---	861	840	853	732	633	679	603	552	582
6	---	---	---	861	798	838	666	633	655	618	594	603
7	642	576	596	795	657	704	684	657	672	843	621	728
8	663	573	607	732	672	716	723	663	687	858	726	788
9	696	669	681	747	726	736	870	666	757	726	690	711
10	747	702	721	753	720	741	963	873	922	732	759	713
11	753	708	739	783	720	764	1150	966	1070	771	690	741
12	777	750	769	813	783	791	1280	1160	1240	801	759	779
13	786	750	770	831	813	821	1240	1110	1200	798	780	789
14	828	789	806	831	813	822	1100	993	1070	852	750	803
15	846	825	832	834	822	830	978	918	946	936	852	892
16	861	843	854	927	834	889	918	879	894	969	936	948
17	888	867	878	921	864	890	873	861	865	1010	759	976
18	933	888	908	867	816	848	1130	861	949	1010	957	981
19	942	873	924	867	852	862	1430	1160	1300	960	927	946
20	852	750	790	831	486	577	1470	1430	1450	1020	930	967
21	855	765	800	810	513	613	1470	1400	1430	1210	1020	1130
22	909	849	885	891	825	855	1520	1350	1390	1260	690	1230
23	981	897	942	834	807	819	2300	849	1290	2570	1240	1610
24	912	798	832	843	810	832	843	765	815	1370	993	1120
25	834	810	820	825	801	812	759	678	698	993	897	943
26	897	834	866	864	750	835	705	690	697	888	798	838
27	888	750	815	801	678	753	705	669	689	831	798	818
28	771	720	744	723	675	706	795	723	776	846	810	833
29	771	750	765	720	693	706	921	801	856	843	831	835
30	819	750	795	747	690	721	1040	927	1010	1140	768	910
31	849	819	840	---	---	---	999	948	980	927	684	729
MONTH	987	573	792	927	486	789	2300	597	924	2570	552	891

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	1090	594	733	840	810	826	660	609	644	897	834	882
2	705	639	681	846	819	830	663	651	655	903	873	875
3	1110	636	768	1080	849	981	735	663	689	921	888	911
4	1090	804	901	2520	1070	1470	702	645	667	930	918	923
5	825	804	814	2330	924	1270	771	690	738	942	900	928
6	810	690	753	933	819	865	780	720	758	960	942	948
7	753	654	698	819	750	784	963	783	840	963	939	944
8	702	597	681	807	780	797	1250	987	1170	996	687	834
9	750	690	718	807	777	789	1180	945	1080	816	690	762
10	861	759	829	888	804	860	942	813	866	843	813	822
11	897	840	875	1060	672	942	816	735	776	909	846	868
12	873	846	861	681	636	661	738	690	720	966	915	940
13	885	858	870	681	534	614	741	708	725	1030	969	1000
14	987	885	922	573	555	564	732	690	723	1000	969	981
15	1660	990	1100	555	513	532	750	720	736	966	951	959
16	1960	933	1290	606	501	532	738	720	730	963	945	955
17	960	759	856	519	450	484	759	675	738	948	939	944
18	831	690	733	468	450	459	810	720	765	960	909	948
19	993	816	899	489	450	474	753	720	742	951	936	942
20	855	777	808	522	480	502	771	720	749	975	942	960
21	861	690	762	540	519	525	804	750	788	972	927	940
22	729	690	716	561	540	544	822	750	785	915	732	863
23	759	669	731	585	564	575	825	813	808	939	600	827
24	786	645	712	636	591	611	837	753	814	600	549	577
25	906	768	835	672	639	658	855	771	837	687	594	639
26	999	855	928	930	675	771	879	855	864	810	687	740
27	987	906	949	1280	951	1170	891	822	887	816	738	807
28	909	810	862	1190	1020	1110	894	864	875	816	690	782
29	---	---	---	1130	1040	1090	900	843	869	762	690	739
30	---	---	---	1030	888	953	882	864	873	762	513	714
31	---	---	---	891	600	700	---	---	---	756	711	734
MONTH	1960	594	832	2520	450	772	1250	609	797	1030	513	861

04208506 CUYAHOGA RIVER AT WEST THIRD STREET BRIDGE, IN CLEVELAND, OH--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	762	720	742	711	597	656	1020	990	1000	999	981	989
2	771	690	738	729	672	710	1030	993	1020	999	996	997
3	810	750	775	675	534	618	990	918	958	1020	894	971
4	858	816	842	603	537	573	951	771	874	951	816	860
5	894	837	877	624	576	592	786	702	737	888	828	860
6	831	624	703	627	615	619	786	720	757	894	885	890
7	858	693	756	678	633	666	810	750	775	912	897	904
8	885	864	866	690	666	682	903	801	864	930	912	921
9	951	894	930	711	675	690	930	867	901	942	930	937
10	951	909	921	756	690	723	984	948	963	957	939	945
11	912	810	873	765	756	760	948	924	936	1020	963	991
12	849	792	824	771	747	761	939	933	935	1020	990	1010
13	807	750	790	771	753	762	966	939	954	999	936	987
14	792	750	770	816	777	794	1010	969	990	963	864	948
15	783	750	774	843	819	831	1030	990	1020	897	579	735
16	801	764	786	861	843	847	1030	1010	1010	741	621	679
17	672	558	603	933	861	897	---	---	---	801	720	788
18	666	585	639	954	927	945	---	---	---	861	795	818
19	708	663	688	954	924	948	---	---	---	885	858	875
20	741	690	718	918	822	869	---	---	---	858	804	819
21	750	684	722	819	780	791	---	---	---	894	816	859
22	708	672	688	831	792	812	---	---	---	918	894	906
23	708	690	697	912	837	882	912	864	885	960	864	906
24	741	708	728	930	912	920	1000	915	968	855	681	743
25	801	732	763	945	933	939	1010	993	1000	837	690	791
26	813	798	802	948	912	935	1010	990	999	834	795	812
27	828	813	821	930	888	914	999	975	985	846	480	661
28	840	825	833	927	906	920	984	978	980	642	588	628
29	822	420	551	927	921	925	996	987	993	771	645	706
30	588	456	515	927	918	920	999	993	995	870	741	809
31	---	---	---	990	927	964	993	981	985	---	---	---
MONTH	951	420	758	990	534	802	1030	702	939	1020	480	858
YEAR	2570	420	834									

PH (STANDARD UNITS), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	7.3	7.1	7.2	7.3	7.2	7.2	7.5	7.3	7.4	7.8	7.7	7.8
2	7.3	7.2	7.2	7.3	7.2	7.2	7.6	7.4	7.5	7.7	7.5	7.6
3	7.3	7.2	7.2	7.2	7.1	7.2	7.6	7.5	7.5	7.9	7.7	7.8
4	7.3	7.2	7.3	7.2	7.0	7.1	7.6	7.4	7.5	8.1	7.7	7.9
5	---	---	---	7.2	7.1	7.2	7.7	7.5	7.6	7.9	7.5	7.8
6	---	---	---	7.2	7.1	7.2	7.5	7.4	7.5	8.0	7.8	7.9
7	7.5	7.2	7.4	7.1	7.0	7.0	7.7	7.4	7.6	7.8	7.7	7.8
8	7.5	7.4	7.5	7.4	7.0	7.3	7.6	7.5	7.6	7.7	7.5	7.6
9	7.5	7.3	7.4	7.4	7.3	7.4	7.6	7.4	7.5	7.7	7.6	7.6
10	7.4	7.3	7.4	7.4	7.3	7.3	7.8	7.6	7.7	7.6	7.5	7.5
11	7.5	7.4	7.4	7.3	7.2	7.2	7.8	7.7	7.8	7.5	7.4	7.4
12	7.4	7.3	7.4	7.3	7.2	7.3	7.8	7.8	7.8	7.4	7.2	7.3
13	7.4	7.2	7.3	7.3	7.2	7.2	7.8	7.7	7.8	7.5	7.1	7.3
14	7.2	7.0	7.1	7.2	7.1	7.2	7.8	7.7	7.7	7.6	7.2	7.4
15	7.2	7.0	7.1	7.2	7.1	7.2	7.8	7.7	7.7	7.6	7.4	7.5
16	7.2	7.1	7.1	7.3	7.1	7.2	7.8	7.7	7.7	7.6	7.4	7.5
17	7.1	7.0	7.1	7.3	7.2	7.3	7.9	7.6	7.8	7.5	7.3	7.4
18	7.1	7.0	7.0	7.3	7.2	7.3	7.9	7.7	7.9	7.4	7.4	7.4
19	7.2	7.0	7.1	7.3	7.2	7.2	7.7	7.6	7.6	7.6	7.4	7.5
20	7.2	7.1	7.1	7.3	7.2	7.3	7.7	7.5	7.6	7.6	7.5	7.5
21	7.3	7.1	7.2	7.4	7.2	7.3	7.8	7.6	7.7	7.6	7.5	7.5
22	7.2	7.0	7.1	7.4	7.3	7.3	8.0	7.8	8.0	7.5	7.4	7.5
23	7.2	7.1	7.2	7.8	7.3	7.6	8.2	7.9	8.0	8.0	7.4	7.7
24	7.2	7.1	7.2	7.8	7.5	7.7	8.0	7.7	7.9	7.8	7.6	7.7
25	7.2	7.1	7.2	7.8	7.7	7.8	8.0	7.8	7.9	7.6	7.3	7.6
26	7.2	7.0	7.1	7.8	7.8	7.8	8.0	7.9	7.9	7.7	7.5	7.6
27	7.3	7.2	7.3	7.9	7.6	7.8	7.9	7.8	7.9	7.7	7.5	7.6
28	7.2	7.1	7.2	7.8	7.8	7.8	7.9	7.8	7.8	7.9	7.8	7.9
29	7.1	7.0	7.0	7.8	7.6	7.8	7.8	7.7	7.8	7.9	7.7	7.8
30	7.0	6.9	7.0	7.6	7.3	7.5	7.8	7.6	7.7	8.0	7.8	7.9
31	7.4	7.0	7.2	---	---	---	7.8	7.6	7.7	8.0	7.7	7.8
MONTH	7.5	6.9	7.2	7.9	7.0	7.4	8.2	7.3	7.7	8.1	7.1	7.6

04208506 CUYAHOGA RIVER AT WEST THIRD STREET BRIDGE, IN CLEVELAND, OH--Continued

PH (STANDARD UNITS), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	7.9	7.6	7.8	7.6	7.1	7.4	7.6	7.4	7.5	7.4	7.3	7.3
2	7.9	7.7	7.8	7.4	7.3	7.4	7.6	7.4	7.5	7.3	7.2	7.2
3	7.8	7.8	7.8	7.4	7.2	7.3	7.6	7.5	7.5	7.3	7.2	7.3
4	7.9	7.6	7.8	7.8	7.3	7.5	7.6	7.5	7.5	7.4	7.2	7.3
5	7.9	7.5	7.7	7.9	7.4	7.7	7.6	7.6	7.6	7.4	7.3	7.3
6	7.8	7.6	7.7	7.7	7.4	7.6	7.7	7.6	7.6	7.4	7.2	7.2
7	7.8	7.6	7.7	7.6	7.4	7.5	7.7	7.6	7.6	7.4	7.3	7.3
8	8.1	7.8	7.9	7.8	7.5	7.6	7.6	7.4	7.5	7.5	7.2	7.3
9	8.0	7.8	7.9	7.7	7.4	7.6	7.6	7.4	7.5	7.3	7.2	7.3
10	7.8	7.6	7.7	7.6	7.4	7.5	7.7	7.6	7.6	7.3	7.2	7.2
11	7.9	7.6	7.8	7.7	7.4	7.5	7.7	7.6	7.7	7.4	7.2	7.3
12	7.8	7.5	7.6	7.5	7.4	7.5	7.8	7.6	7.7	7.4	7.3	7.4
13	7.7	7.6	7.6	7.5	7.3	7.4	7.7	7.6	7.6	7.3	7.2	7.3
14	7.7	7.6	7.7	7.4	7.4	7.4	7.6	7.6	7.6	7.3	7.2	7.2
15	7.7	7.4	7.5	7.7	7.4	7.5	7.6	7.4	7.5	7.2	7.2	7.2
16	7.7	7.4	7.6	7.7	7.4	7.6	7.6	7.5	7.5	7.2	7.1	7.2
17	7.7	7.4	7.6	7.6	7.4	7.4	7.5	7.3	7.4	7.3	7.1	7.2
18	7.5	7.4	7.4	7.5	7.4	7.4	7.4	7.2	7.3	7.3	7.2	7.2
19	7.6	7.4	7.5	7.7	7.3	7.5	7.5	7.3	7.4	7.3	7.2	7.2
20	7.6	7.4	7.5	7.6	7.5	7.6	7.5	7.4	7.5	7.3	7.2	7.2
21	7.5	7.5	7.5	7.6	7.5	7.5	7.4	7.3	7.3	7.3	7.2	7.3
22	7.6	7.4	7.5	7.7	7.4	7.6	7.4	7.3	7.4	7.2	7.2	7.2
23	7.6	7.4	7.4	7.7	7.5	7.6	7.5	7.3	7.4	7.3	7.1	7.2
24	7.4	7.3	7.3	7.6	7.5	7.6	7.6	7.4	7.5	7.4	7.2	7.3
25	7.7	7.3	7.5	7.6	7.5	7.5	7.4	7.2	7.3	7.3	7.2	7.2
26	7.8	7.6	7.7	7.6	7.4	7.5	7.3	7.1	7.2	7.3	7.2	7.2
27	7.6	7.3	7.5	7.6	7.4	7.5	7.2	7.0	7.1	7.4	7.2	7.3
28	7.4	7.3	7.4	7.7	7.5	7.6	7.4	7.2	7.3	7.4	7.3	7.3
29	---	---	---	7.8	7.6	7.6	7.4	7.3	7.3	7.3	7.2	7.2
30	---	---	---	7.8	7.6	7.6	7.4	7.3	7.3	7.3	7.2	7.2
31	---	---	---	7.6	7.5	7.6	---	---	---	7.3	7.1	7.2
MONTH	8.1	7.3	7.6	7.9	7.1	7.5	7.8	7.0	7.5	7.5	7.1	7.3

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	7.3	7.2	7.3	7.5	7.3	7.4	7.4	7.2	7.3	7.4	7.4	7.4
2	7.3	7.2	7.3	7.5	7.2	7.3	7.3	7.2	7.2	7.4	7.4	7.4
3	7.4	7.3	7.3	7.5	7.3	7.4	7.3	7.2	7.2	7.4	7.3	7.4
4	7.3	7.2	7.3	7.5	7.3	7.4	7.3	7.1	7.3	7.4	7.4	7.4
5	7.3	7.1	7.2	7.4	7.3	7.3	7.4	7.3	7.3	7.4	7.4	7.4
6	7.4	7.2	7.3	7.3	7.2	7.3	7.4	7.2	7.3	7.5	7.4	7.4
7	7.4	7.3	7.4	7.3	7.2	7.2	7.3	7.2	7.2	7.5	7.4	7.5
8	7.6	7.4	7.4	7.2	7.2	7.2	7.3	7.2	7.3	7.5	7.5	7.5
9	7.5	7.3	7.4	7.3	7.1	7.2	7.3	7.2	7.3	7.5	7.5	7.5
10	7.3	7.2	7.3	7.2	7.1	7.2	7.4	7.3	7.3	7.5	7.5	7.5
11	7.4	7.2	7.3	7.4	7.2	7.3	7.4	7.3	7.4	7.5	7.5	7.5
12	7.4	7.2	7.3	7.4	7.2	7.3	7.4	7.1	7.2	7.5	7.5	7.5
13	7.5	7.2	7.3	7.5	7.2	7.4	7.2	7.0	7.1	7.5	7.5	7.5
14	7.5	7.3	7.4	7.4	7.2	7.3	7.1	7.0	7.0	7.5	7.5	7.5
15	7.6	7.4	7.5	7.4	7.2	7.3	7.1	7.0	7.1	7.5	7.4	7.4
16	7.4	7.3	7.4	7.3	7.2	7.3	7.4	7.2	7.4	7.5	7.4	7.4
17	7.5	7.4	7.5	7.3	7.2	7.3	---	---	---	7.5	7.5	7.5
18	7.5	7.4	7.4	7.3	7.2	7.3	---	---	---	7.5	7.4	7.5
19	7.5	7.3	7.4	7.4	7.3	7.3	---	---	---	7.5	7.5	7.5
20	7.5	7.3	7.4	7.3	7.2	7.3	---	---	---	7.5	7.5	7.5
21	7.5	7.4	7.4	7.2	7.1	7.2	---	---	---	7.6	7.5	7.5
22	7.4	7.3	7.4	7.2	7.1	7.2	---	---	---	7.6	7.5	7.6
23	7.4	7.2	7.3	7.3	7.2	7.2	7.4	7.1	7.3	7.6	7.5	7.6
24	7.4	7.3	7.3	7.3	7.2	7.2	7.5	7.2	7.3	7.6	7.5	7.6
25	7.3	7.2	7.3	7.3	7.2	7.3	7.4	7.3	7.4	7.7	7.6	7.6
26	7.3	7.2	7.3	7.3	7.2	7.3	7.4	7.3	7.3	7.6	7.6	7.6
27	7.3	7.2	7.2	7.4	7.2	7.3	7.3	7.3	7.3	7.9	7.6	7.7
28	7.4	7.2	7.3	7.3	7.3	7.3	7.4	7.3	7.3	7.9	7.7	7.8
29	7.6	7.3	7.5	7.3	7.2	7.3	7.4	7.3	7.4	7.7	7.7	7.7
30	7.4	7.3	7.4	7.3	7.2	7.3	7.4	7.3	7.4	7.7	7.6	7.7
31	---	---	---	7.4	7.2	7.3	7.4	7.4	7.4	---	---	---
MONTH	7.6	7.1	7.4	7.5	7.1	7.3	7.5	7.0	7.3	7.9	7.3	7.5
YEAR	8.2	6.9	7.4									

04208506 CUYAHOGA RIVER AT WEST THIRD STREET BRIDGE, IN CLEVELAND, OH--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	21.0	17.0	18.5	16.0	16.0	16.0	8.5	7.0	8.0	5.5	4.5	5.0
2	17.5	17.0	17.0	16.5	16.0	16.5	8.0	7.0	8.0	4.5	4.0	4.5
3	17.0	15.5	16.0	17.5	16.5	17.0	8.0	7.5	8.0	5.0	4.0	4.5
4	16.0	15.0	15.5	17.0	17.0	17.0	8.5	8.0	8.5	6.0	4.5	5.0
5	---	---	---	17.0	16.5	17.0	8.5	7.0	8.0	4.0	3.5	5.5
6	---	---	---	17.0	14.0	15.5	7.5	7.0	7.0	4.5	4.0	4.0
7	16.0	15.0	15.5	14.0	12.0	13.0	7.5	7.0	7.0	5.0	4.5	4.5
8	15.5	15.0	15.0	12.5	12.0	12.0	8.0	7.0	7.5	4.5	3.5	4.0
9	16.5	15.5	16.0	12.5	12.0	12.0	7.0	5.0	6.0	3.5	2.5	3.0
10	16.5	15.5	16.0	13.0	12.5	13.0	5.5	4.5	5.0	3.0	1.5	2.5
11	16.5	16.0	16.5	13.5	12.5	13.0	5.0	4.5	4.5	2.0	1.5	2.0
12	17.5	16.0	16.5	13.0	12.5	12.5	6.0	5.0	5.5	3.0	2.0	2.5
13	17.5	17.0	17.5	13.0	12.5	12.5	6.5	6.0	6.0	3.5	2.5	3.5
14	17.5	17.0	17.0	13.0	12.5	12.5	6.5	6.0	6.0	3.5	3.5	3.5
15	18.0	17.0	17.5	12.5	12.0	12.5	6.5	6.0	6.5	3.5	3.5	3.5
16	18.0	17.5	17.5	13.0	12.0	12.5	7.0	6.0	6.5	4.0	3.5	4.0
17	18.5	17.5	18.0	13.0	12.0	12.5	6.5	6.5	6.5	3.5	2.5	3.5
18	18.5	17.5	18.0	13.0	12.5	13.0	6.5	6.0	6.0	3.0	2.0	2.5
19	18.0	15.5	17.0	13.5	12.5	13.0	6.0	5.5	5.5	4.5	2.0	3.5
20	15.5	13.0	14.0	13.5	9.5	10.5	5.5	5.0	5.0	5.0	4.5	4.5
21	14.0	12.5	13.0	9.5	7.5	8.5	5.0	4.5	4.5	5.0	4.5	5.0
22	16.0	14.0	15.0	7.5	7.0	7.5	5.0	4.5	5.0	5.5	4.5	5.0
23	16.5	16.0	16.5	7.5	7.0	7.0	5.5	3.5	4.0	6.0	2.5	4.5
24	15.5	14.5	14.5	8.0	7.0	7.5	3.5	3.5	3.5	2.5	2.0	2.0
25	14.5	13.5	14.0	8.5	8.0	8.0	3.5	3.0	3.0	2.0	1.5	2.0
26	14.5	13.5	14.0	8.5	8.0	8.5	3.5	3.5	3.5	2.5	2.0	2.5
27	15.0	14.5	15.0	9.0	8.0	8.5	4.0	4.0	4.0	3.0	2.0	3.0
28	16.0	15.0	15.5	9.0	8.5	8.5	4.5	4.0	4.0	4.0	2.5	3.5
29	16.5	16.0	16.5	8.5	7.5	8.0	4.5	4.0	4.5	4.5	4.0	4.5
30	16.5	16.0	16.0	8.5	8.0	8.0	4.5	4.0	4.5	5.0	3.0	4.0
31	16.0	16.0	16.0	---	---	---	4.5	4.0	4.5	3.0	2.0	2.5
MONTH	21.0	12.5	16.0	17.5	7.0	12.0	8.5	3.0	5.5	6.0	1.5	3.5

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	2.5	1.5	2.0	5.5	5.0	5.5	11.0	10.0	10.5	17.0	16.0	16.5
2	2.5	2.0	2.0	5.5	5.0	5.5	11.0	10.5	10.5	18.0	17.0	17.5
3	3.5	2.5	3.0	5.0	4.5	5.0	11.5	10.5	11.0	18.5	17.5	18.5
4	3.5	2.5	3.0	5.5	4.5	5.0	10.5	7.0	8.5	19.0	18.5	18.5
5	3.5	2.5	2.5	4.5	3.0	3.5	7.5	6.5	7.0	19.0	18.5	18.5
6	3.5	2.5	3.0	4.5	3.5	4.0	7.5	6.0	7.0	19.5	19.0	19.0
7	3.0	2.0	2.5	4.0	3.5	4.0	6.0	5.5	5.5	20.5	19.5	19.5
8	3.5	2.5	3.0	4.5	4.0	4.5	7.0	6.0	7.0	20.5	14.5	17.5
9	4.0	3.5	3.5	5.0	4.5	4.5	7.5	7.0	7.5	17.5	15.5	16.5
10	4.0	3.0	3.5	5.5	5.0	5.0	7.5	6.5	7.0	18.0	17.0	17.5
11	3.5	3.0	3.5	6.0	4.5	5.5	7.5	7.0	7.5	19.0	18.0	18.5
12	4.0	3.0	3.5	6.0	4.0	4.5	7.5	7.0	7.0	19.5	18.5	19.0
13	4.5	4.0	4.5	6.5	6.0	6.5	9.5	7.5	9.0	21.5	19.5	20.5
14	5.5	4.5	5.0	6.5	5.5	6.0	10.5	9.5	10.0	23.0	21.5	22.0
15	6.5	5.5	6.0	6.5	5.5	6.0	12.0	10.0	11.0	23.0	22.5	22.5
16	5.5	4.5	4.5	6.0	5.5	6.0	13.5	11.0	12.5	22.5	21.5	22.5
17	4.5	3.5	4.0	6.0	5.5	5.5	15.0	13.5	14.5	22.0	21.5	22.0
18	4.0	3.5	4.0	6.0	5.0	5.5	15.0	14.0	14.5	22.5	21.5	22.0
19	4.0	4.0	4.0	6.0	6.0	6.0	14.5	13.5	14.0	23.0	22.0	22.5
20	4.5	4.0	4.0	6.5	6.0	6.0	14.5	14.0	14.0	23.5	22.5	23.0
21	4.5	4.0	4.0	7.0	6.5	7.0	14.5	14.0	14.0	22.5	22.0	22.0
22	4.5	4.0	4.0	7.0	6.5	7.0	14.5	13.5	14.0	22.5	21.0	22.0
23	5.0	4.5	4.5	7.5	6.5	7.0	14.0	13.5	14.0	22.0	19.0	20.5
24	5.5	4.0	4.5	7.5	7.0	7.5	15.0	13.5	14.0	19.5	19.0	19.5
25	4.0	3.5	4.0	9.0	7.5	8.5	16.0	15.0	15.5	20.5	19.5	20.0
26	4.0	3.5	4.0	8.5	6.5	7.5	17.0	16.0	16.5	20.5	19.5	20.0
27	4.5	4.0	4.0	7.0	6.0	6.5	17.0	16.0	16.5	21.5	20.5	21.0
28	5.0	4.5	5.0	6.5	6.0	6.5	16.0	14.5	15.5	22.5	21.0	21.5
29	---	---	---	7.5	6.0	7.0	15.5	14.0	14.5	22.5	21.0	21.5
30	---	---	---	9.0	7.0	8.5	16.0	15.5	15.5	22.5	21.5	22.5
31	---	---	---	11.0	9.0	10.0	---	---	---	23.0	21.5	22.0
MONTH	6.5	1.5	4.0	11.0	3.0	6.0	17.0	5.5	11.5	23.5	14.5	20.0

04208506 CUYAHOGA RIVER AT WEST THIRD STREET BRIDGE, IN CLEVELAND, OH--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	23.0	22.0	22.5	23.0	21.5	22.0	28.0	27.0	27.5	25.5	24.5	25.0
2	22.5	21.0	21.5	22.5	21.5	22.0	27.5	27.0	27.0	26.0	25.5	25.5
3	21.5	20.0	21.0	22.5	20.0	21.5	27.0	26.5	26.5	26.0	24.5	25.0
4	22.0	21.5	21.5	20.5	20.0	20.0	27.0	24.5	26.0	24.5	23.0	23.5
5	22.0	20.5	21.5	22.0	21.0	21.5	24.5	24.0	24.0	24.0	23.0	23.5
6	20.0	16.5	17.5	23.0	22.0	22.5	26.0	24.0	25.0	24.0	23.5	24.0
7	18.5	17.0	18.0	25.5	23.0	24.5	27.5	26.0	26.5	24.0	23.5	24.0
8	20.5	19.0	19.5	26.5	25.0	25.5	28.0	27.0	27.5	23.5	23.5	23.5
9	22.5	20.5	22.0	27.0	25.5	26.0	27.0	26.5	27.0	23.5	23.0	23.5
10	23.5	23.0	23.0	27.0	26.0	26.5	27.0	26.5	27.0	24.0	23.5	23.5
11	24.0	23.0	23.0	27.0	26.5	26.5	27.0	26.5	26.5	24.5	24.0	24.0
12	23.5	23.0	23.5	27.0	26.5	26.5	26.5	26.0	26.0	26.0	24.5	25.0
13	24.0	23.0	23.0	27.0	26.5	26.5	26.0	25.5	25.5	26.5	25.0	25.5
14	23.5	22.5	23.0	26.5	26.0	26.5	26.0	25.5	25.5	27.0	25.0	26.0
15	23.5	23.0	23.0	27.0	26.5	26.5	26.0	25.5	26.0	26.0	23.5	24.5
16	23.5	22.5	23.0	28.0	26.5	27.0	26.5	26.0	26.5	23.5	23.0	23.0
17	19.5	18.5	19.0	28.5	27.5	28.0	---	---	---	24.0	23.0	23.5
18	21.0	19.5	20.5	28.5	27.5	28.0	---	---	---	24.0	23.0	23.5
19	21.5	20.5	21.0	28.5	28.0	28.5	---	---	---	23.0	22.5	22.5
20	21.5	20.5	21.0	28.5	26.5	27.5	---	---	---	22.5	21.5	22.0
21	20.5	19.5	20.0	27.5	26.5	27.0	---	---	---	22.0	21.5	21.5
22	20.5	19.5	20.0	27.0	26.5	27.0	---	---	---	21.5	21.0	21.0
23	20.5	19.5	20.0	27.5	27.0	27.0	23.5	23.5	23.5	21.0	19.0	20.0
24	21.5	20.0	21.0	27.5	27.0	27.5	24.5	23.5	23.5	18.5	17.5	18.0
25	22.5	21.0	21.5	27.5	27.0	27.5	24.0	23.5	24.0	18.5	17.5	18.0
26	23.5	22.0	22.5	28.0	27.5	27.5	25.5	24.0	24.5	19.0	18.5	18.5
27	25.0	23.5	24.0	28.5	27.0	27.5	25.0	24.5	25.0	19.5	15.5	17.5
28	25.5	24.5	25.0	27.5	27.0	27.5	25.5	24.5	25.0	16.5	16.0	16.5
29	24.5	20.0	21.5	27.5	27.0	27.0	25.0	24.5	25.0	18.5	16.5	17.5
30	21.5	20.5	21.0	27.5	26.5	27.0	25.0	24.5	24.5	20.0	17.5	18.5
31	---	---	---	27.5	26.5	27.0	25.0	24.5	24.5	---	---	---
MONTH	25.5	16.5	21.5	28.5	20.0	26.0	28.0	23.5	25.5	27.0	15.5	22.5
YEAR	28.5	1.5	14.5									

OXYGEN, DISSOLVED (DO), MG/L, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	4.4	1.9	3.1	5.4	4.3	4.9	10.5	8.1	9.7	12.4	11.8	12.1
2	5.8	4.2	5.2	4.5	3.2	3.9	10.5	9.4	10.0	12.6	12.1	12.3
3	6.2	5.1	5.6	5.6	3.8	4.8	10.2	9.5	9.9	12.7	12.2	12.4
4	6.3	5.8	6.1	4.7	4.1	4.4	10.1	9.0	9.6	12.2	11.8	12.0
5	---	---	---	5.2	4.1	4.6	10.1	9.5	9.9	12.9	12.6	12.8
6	---	---	---	6.7	5.1	6.1	10.2	9.6	10.0	12.9	12.6	12.7
7	6.6	5.7	6.1	7.7	5.0	6.5	10.1	9.3	9.8	12.7	12.4	12.5
8	6.9	6.3	6.6	8.8	7.8	8.5	10.3	9.2	9.7	12.9	12.6	12.7
9	6.6	5.9	6.2	9.1	8.5	8.8	10.7	9.9	10.3	12.9	12.8	12.9
10	6.2	5.8	6.0	8.9	8.1	8.4	11.3	10.6	11.1	12.9	12.7	12.8
11	6.6	5.0	6.0	8.1	7.6	7.8	11.2	10.8	11.0	12.9	12.6	12.7
12	6.1	4.8	5.5	8.6	7.9	8.2	11.2	10.6	11.0	12.7	12.4	12.6
13	6.0	5.2	5.6	8.4	7.6	8.1	11.3	10.6	11.0	12.5	12.2	12.3
14	5.1	2.9	4.6	7.7	6.7	7.2	11.3	10.5	11.0	12.2	11.9	12.1
15	5.1	3.8	4.4	7.7	6.6	7.3	11.1	10.8	11.0	12.0	10.0	11.8
16	4.7	3.4	3.9	7.7	7.1	7.3	12.9	10.8	11.7	12.0	11.7	11.9
17	3.8	.3	2.2	7.5	6.1	7.0	12.1	11.7	11.9	12.2	11.9	12.0
18	.9	.0	.2	7.6	6.8	7.2	11.9	11.5	11.7	12.2	11.9	12.2
19	4.9	.7	2.8	7.7	6.6	7.1	11.7	11.4	11.5	12.1	11.7	11.9
20	5.1	4.3	4.6	8.7	5.3	7.7	11.6	11.0	11.4	11.7	10.6	11.1
21	7.5	5.2	6.4	10.5	8.2	9.7	11.8	11.6	11.7	11.5	10.8	11.3
22	6.9	5.8	6.5	10.7	10.4	10.5	11.8	11.5	11.7	11.4	11.0	11.2
23	6.0	4.6	5.5	10.8	10.1	10.4	12.2	11.4	11.8	12.1	11.0	11.5
24	6.8	4.8	6.1	10.7	8.8	9.8	12.9	12.1	12.5	12.7	12.2	12.6
25	6.7	5.4	6.0	10.3	9.6	9.9	13.1	12.8	13.0	12.9	12.6	12.8
26	7.1	6.1	6.5	10.2	9.1	9.8	13.0	12.8	12.8	12.8	12.6	12.7
27	7.1	6.1	6.7	10.2	8.5	9.4	12.8	12.4	12.5	12.8	12.5	12.7
28	6.4	4.8	5.6	9.8	9.1	9.5	12.5	12.2	12.4	12.5	12.2	12.3
29	4.8	3.6	4.1	9.9	9.3	9.7	12.6	12.4	12.5	12.3	11.9	12.1
30	5.0	4.0	4.4	10.0	9.5	9.8	12.7	12.4	12.6	12.7	12.0	12.3
31	5.7	4.6	5.2	---	---	---	12.7	12.4	12.6	12.8	12.6	12.7
MONTH	7.5	.0	5.1	10.8	3.2	7.8	13.1	8.1	11.3	12.9	10.0	12.3

04208506 CUYAHOGA RIVER AT WEST THIRD STREET BRIDGE, IN CLEVELAND, OH--Continued

OXYGEN, DISSOLVED (DO), MG/L, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	13.3	12.8	13.0	12.5	12.0	12.2	10.8	9.9	10.4	5.0	1.8	4.4
2	13.4	13.2	13.3	12.1	11.9	12.0	10.7	10.3	10.5	4.0	2.8	3.5
3	13.2	12.7	13.0	12.1	11.7	11.9	10.5	9.5	10.0	5.2	1.7	3.7
4	13.4	12.5	13.0	12.1	11.6	11.9	11.5	10.0	10.7	4.1	2.6	3.3
5	13.4	13.2	13.3	12.4	11.9	12.1	11.8	11.4	11.6	3.2	2.2	2.9
6	13.3	13.0	13.2	12.5	12.4	12.4	11.7	11.0	11.3	4.1	3.1	3.2
7	13.3	12.8	13.1	12.4	12.2	12.3	11.9	11.3	11.7	5.4	3.0	3.6
8	13.2	12.6	12.9	12.5	12.1	12.3	11.8	11.4	11.6	5.8	1.4	3.8
9	12.9	12.5	12.7	12.5	12.1	12.3	11.6	11.0	11.3	5.8	4.4	5.3
10	12.6	12.3	12.4	12.4	11.9	12.1	11.6	11.0	11.3	5.4	4.5	4.9
11	12.6	12.4	12.5	12.3	11.5	11.9	11.6	11.0	11.2	5.9	2.5	4.4
12	12.6	12.3	12.4	12.3	11.9	12.1	11.6	11.3	11.4	3.6	2.2	3.0
13	12.3	11.9	12.1	11.9	11.6	11.7	11.6	9.9	10.5	4.1	2.0	3.3
14	12.0	11.6	11.8	12.2	11.5	11.8	10.2	9.6	9.9	4.3	2.9	3.7
15	11.7	11.2	11.5	12.3	12.1	12.2	10.3	9.0	9.6	3.0	2.1	2.7
16	12.2	11.0	11.9	12.3	11.7	12.0	9.5	8.2	8.8	2.6	1.6	2.1
17	12.7	12.2	12.5	12.1	11.6	11.8	8.8	6.5	7.6	3.0	1.2	2.0
18	12.8	12.4	12.6	12.3	12.2	12.2	7.3	.3	5.2	2.1	1.4	1.7
19	12.6	12.4	12.5	12.3	12.1	12.1	8.3	7.3	7.7	1.6	1.2	1.2
20	12.6	12.2	12.5	12.3	12.0	12.2	7.9	6.9	7.5	3.9	1.2	2.2
21	12.4	12.2	12.3	12.2	11.7	11.8	7.1	5.9	6.5	4.2	2.6	3.4
22	12.5	12.3	12.4	11.8	11.7	11.7	7.7	5.9	7.1	2.8	2.0	2.3
23	12.5	12.1	12.3	11.8	11.5	11.7	6.9	6.6	6.8	5.8	2.6	4.2
24	12.6	12.3	12.5	11.7	11.3	11.5	7.1	6.1	6.8	6.2	3.5	5.5
25	12.7	12.6	12.7	11.6	10.8	11.1	6.0	.6	3.0	5.6	4.8	5.2
26	12.7	12.4	12.6	11.3	10.6	10.9	4.1	.0	2.3	5.2	4.6	5.0
27	12.6	12.2	12.5	11.5	11.2	11.3	5.3	.8	3.5	5.5	4.6	5.0
28	12.5	12.2	12.4	11.9	11.5	11.6	6.4	4.4	5.7	5.0	2.5	4.1
29	---	---	---	12.2	11.6	11.9	6.7	5.8	6.2	4.8	3.3	4.2
30	---	---	---	12.0	11.0	11.5	6.0	5.1	5.5	4.5	3.3	4.0
31	---	---	---	11.2	9.3	10.4	---	---	---	4.2	1.5	2.5
MONTH	13.4	11.0	12.6	12.5	9.3	11.8	11.9	.0	8.4	6.2	1.2	3.6

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	4.1	2.0	3.2	6.9	4.7	5.9	3.3	.8	2.2	3.0	1.7	2.2
2	4.2	1.6	2.4	7.3	4.2	5.4	1.2	.2	.5	3.1	1.0	1.8
3	4.3	1.2	3.2	8.5	4.3	6.9	.4	.0	.0	1.5	.5	1.1
4	4.1	2.6	3.5	8.5	7.5	7.9	1.3	.0	.5	1.2	.2	.6
5	3.8	2.2	2.7	8.5	7.4	8.0	1.7	.2	.7	2.7	1.1	1.9
6	5.6	3.3	4.1	7.9	5.4	7.0	3.0	.8	1.7	2.6	.8	1.6
7	6.0	4.6	5.2	5.7	4.6	5.3	2.5	.5	1.6	3.3	.9	1.9
8	5.9	3.9	5.1	5.0	1.7	3.9	2.3	.0	1.0	3.4	1.8	2.3
9	5.2	2.3	4.4	4.4	.7	2.1	1.2	.0	.4	2.5	1.7	2.1
10	3.6	2.6	3.2	2.6	1.3	1.8	3.1	.4	1.8	3.0	1.6	2.4
11	3.5	2.8	3.2	2.4	.7	1.6	1.5	.2	.6	3.9	1.7	2.7
12	3.5	2.6	3.1	2.4	1.2	1.9	2.0	.4	.8	3.6	2.8	3.1
13	6.2	2.8	3.8	5.1	1.2	2.5	1.6	.6	1.1	3.2	1.4	2.5
14	6.1	3.2	4.6	3.4	1.0	2.0	2.4	1.3	1.9	3.4	.7	1.9
15	5.6	3.3	4.5	3.7	.6	1.6	3.0	1.5	2.1	2.4	.0	.7
16	5.6	2.4	3.8	4.2	.2	1.1	4.0	2.2	3.2	2.5	.0	1.0
17	7.4	5.7	6.6	3.9	1.3	2.6	---	---	---	2.2	.2	1.4
18	7.2	6.3	6.7	2.7	.4	1.2	---	---	---	1.3	.0	.6
19	7.1	5.3	6.3	3.9	.7	1.5	---	---	---	1.7	1.0	1.3
20	6.0	4.3	5.0	2.3	.0	.7	---	---	---	2.1	1.3	1.7
21	7.4	4.6	5.6	.8	.0	.1	---	---	---	3.0	1.8	2.4
22	7.5	4.4	5.7	.2	.0	.0	---	---	---	2.3	1.4	1.7
23	4.4	2.7	3.3	1.0	.0	.4	2.0	.0	.8	5.3	1.8	3.5
24	4.6	2.6	3.7	1.1	.0	.5	5.2	1.7	3.2	5.0	2.8	4.0
25	3.1	1.3	2.3	.4	.0	.0	4.2	1.6	2.7	5.5	3.6	4.9
26	2.4	.3	1.2	1.6	.0	.5	2.6	1.1	1.9	6.2	2.3	4.4
27	3.2	.9	2.0	1.7	.2	.7	1.7	.5	.8	8.9	4.9	7.2
28	4.8	1.9	3.4	1.1	.0	.2	3.5	.4	1.4	8.8	6.8	7.6
29	7.8	1.6	5.7	.9	.0	.2	2.9	.5	1.5	7.7	5.5	6.8
30	7.0	6.0	6.6	.8	.0	.0	2.0	.6	1.0	6.4	4.6	5.3
31	---	---	---	2.9	.2	1.1	4.0	1.6	2.7	---	---	---
MONTH	7.8	.3	4.1	8.5	.0	2.4	5.2	.0	1.4	8.9	.0	2.8
YEAR	13.4	.0	7.0									

04208506 CUYAHOGA RIVER AT WEST THIRD STREET BRIDGE, IN CLEVELAND, OH--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEDIAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	767	843	707	1060	665	828	648	884	741	663	998	987
2	720	842	642	980	683	830	654	878	744	720	1020	996
3	726	825	632	840	684	990	681	915	777	656	962	968
4	720	836	674	800	903	1340	666	924	843	569	869	842
5	---	855	680	585	813	1130	744	930	882	588	737	867
6	---	843	657	600	750	854	762	948	666	618	756	891
7	588	692	675	726	689	779	828	944	732	671	777	905
8	599	729	687	786	684	798	1180	819	867	686	864	921
9	681	738	726	714	711	786	1100	768	933	690	899	936
10	719	741	921	711	842	872	851	818	921	720	960	942
11	744	767	1080	750	881	983	783	864	870	762	930	990
12	771	788	1260	774	864	659	717	938	822	764	933	1010
13	771	824	1220	789	870	630	726	1010	791	762	954	999
14	807	822	1080	798	911	564	726	981	771	797	993	957
15	828	825	947	884	1010	528	735	960	780	831	1020	725
16	855	896	893	942	1140	513	729	957	786	846	1010	677
17	879	885	864	969	854	479	740	944	603	897	---	795
18	902	846	909	978	726	461	764	951	645	948	---	818
19	927	863	1320	951	885	477	747	942	687	951	---	875
20	779	530	1450	965	812	503	746	957	720	869	---	810
21	792	590	1420	1150	743	525	789	933	729	789	---	863
22	897	849	1380	1230	717	540	780	864	689	813	---	906
23	941	818	1090	1450	732	573	819	855	698	882	884	911
24	825	833	825	1100	711	606	815	579	731	918	974	716
25	819	810	687	938	840	660	840	630	762	939	999	804
26	863	848	696	836	924	750	863	734	801	936	999	810
27	810	768	690	821	947	1210	888	810	822	918	984	621
28	744	711	777	840	860	1110	875	797	834	920	978	627
29	768	702	837	834	---	1100	870	741	478	924	993	710
30	797	720	1020	863	---	960	876	726	510	921	996	806
31	843	---	990	722	---	674	---	734	---	972	984	---
MEAN	789	788	917	883	816	765	798	862	755	805	939	856

WTR YR 1982 MEAN 830 MAX 1450 MIN 461

PH (STANDARD UNITS), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEDIAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.2	7.2	7.3	7.8	7.8	7.4	7.6	7.3	7.3	7.4	7.3	7.4
2	7.2	7.2	7.5	7.6	7.8	7.4	7.5	7.2	7.3	7.3	7.2	7.4
3	7.2	7.2	7.5	7.8	7.8	7.3	7.5	7.3	7.3	7.4	7.2	7.4
4	7.3	7.1	7.5	7.8	7.8	7.4	7.5	7.3	7.3	7.4	7.3	7.4
5	---	7.2	7.6	7.8	7.6	7.6	7.6	7.3	7.2	7.3	7.3	7.4
6	---	7.2	7.5	7.9	7.7	7.6	7.6	7.3	7.3	7.3	7.3	7.4
7	7.4	7.0	7.6	7.8	7.6	7.5	7.6	7.3	7.4	7.2	7.2	7.5
8	7.5	7.2	7.6	7.6	7.9	7.7	7.5	7.3	7.5	7.2	7.3	7.5
9	7.4	7.4	7.5	7.6	7.8	7.6	7.5	7.3	7.4	7.2	7.3	7.5
10	7.4	7.3	7.7	7.5	7.7	7.5	7.6	7.2	7.3	7.2	7.3	7.5
11	7.4	7.2	7.8	7.4	7.8	7.5	7.7	7.3	7.3	7.3	7.4	7.5
12	7.4	7.3	7.8	7.3	7.6	7.5	7.7	7.4	7.3	7.3	7.2	7.5
13	7.3	7.2	7.8	7.3	7.6	7.4	7.6	7.3	7.3	7.4	7.1	7.5
14	7.1	7.2	7.7	7.5	7.7	7.4	7.6	7.2	7.4	7.3	7.0	7.5
15	7.1	7.1	7.7	7.5	7.5	7.4	7.5	7.2	7.5	7.3	7.1	7.4
16	7.1	7.2	7.7	7.5	7.6	7.5	7.5	7.2	7.4	7.3	7.4	7.4
17	7.1	7.3	7.8	7.4	7.7	7.4	7.4	7.2	7.5	7.3	---	7.5
18	7.0	7.3	7.9	7.4	7.4	7.4	7.3	7.2	7.4	7.3	---	7.5
19	7.1	7.2	7.6	7.5	7.6	7.6	7.4	7.2	7.4	7.3	---	7.5
20	7.1	7.3	7.6	7.5	7.5	7.6	7.5	7.2	7.4	7.3	---	7.5
21	7.2	7.3	7.7	7.5	7.5	7.5	7.3	7.3	7.4	7.2	---	7.5
22	7.1	7.3	8.0	7.5	7.5	7.6	7.4	7.2	7.4	7.2	---	7.6
23	7.2	7.7	8.0	7.7	7.4	7.6	7.4	7.2	7.3	7.2	7.3	7.6
24	7.2	7.7	7.9	7.7	7.3	7.6	7.5	7.3	7.3	7.2	7.4	7.6
25	7.2	7.8	7.9	7.6	7.4	7.5	7.3	7.2	7.3	7.3	7.4	7.6
26	7.1	7.8	7.9	7.5	7.7	7.5	7.2	7.2	7.3	7.3	7.3	7.6
27	7.3	7.8	7.9	7.6	7.6	7.5	7.2	7.3	7.2	7.3	7.3	7.7
28	7.2	7.8	7.8	7.9	7.4	7.7	7.3	7.3	7.4	7.3	7.3	7.8
29	7.0	7.8	7.8	7.8	---	7.7	7.4	7.2	7.5	7.3	7.4	7.7
30	7.0	7.5	7.7	7.9	---	7.6	7.3	7.2	7.4	7.3	7.4	7.7
31	7.1	---	7.7	7.8	---	7.6	---	7.2	---	7.3	7.4	---
MEAN	7.2	7.4	7.7	7.6	7.6	7.5	7.5	7.3	7.4	7.3	7.3	7.5

WTR YR 1982 MEAN 7.4 MAX 8.0 MIN 7.0

04208506 CUYAHOGA RIVER AT WEST THIRD STREET BRIDGE, IN CLEVELAND, OH--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEDIAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18.5	16.0	8.0	5.0	2.0	5.5	10.5	16.0	22.5	22.0	27.5	25.0
2	17.0	16.5	8.0	4.5	2.0	5.5	10.5	17.5	21.5	22.0	27.5	25.5
3	16.0	17.0	8.0	4.5	3.0	5.0	11.5	18.5	21.5	22.0	26.5	25.0
4	15.5	17.0	8.5	5.0	3.0	5.0	8.5	18.5	21.5	20.0	26.0	23.5
5	---	17.0	8.0	4.0	2.5	3.5	7.0	19.0	21.5	22.0	24.0	23.5
6	---	15.5	7.0	4.0	3.0	3.5	7.5	19.0	17.0	22.5	25.0	24.0
7	15.5	13.0	7.0	4.5	2.5	4.0	5.5	19.5	17.5	24.5	26.5	24.0
8	15.0	12.0	7.5	4.0	3.0	4.5	7.0	17.0	20.0	25.5	27.5	23.5
9	16.0	12.0	6.0	3.5	3.5	4.5	7.5	17.0	21.5	26.0	27.0	23.5
10	16.0	13.0	5.0	2.5	3.5	5.0	7.0	17.5	23.0	26.5	27.0	23.5
11	16.5	13.0	4.5	2.0	3.5	6.0	7.5	18.5	23.5	26.5	26.5	24.5
12	17.0	12.5	5.5	2.5	4.0	4.5	7.0	18.5	23.5	26.5	26.0	25.0
13	17.5	12.5	6.0	3.5	4.5	6.5	9.0	20.5	23.0	26.5	25.5	25.5
14	17.0	12.5	6.0	3.5	5.0	6.0	10.0	22.0	23.0	26.5	25.5	25.5
15	17.5	12.0	6.5	3.5	5.5	6.0	11.0	22.5	23.0	26.5	26.0	24.5
16	17.5	12.5	6.5	4.0	4.5	6.0	12.5	22.5	22.5	27.0	26.5	23.0
17	18.0	12.5	6.5	3.5	4.0	5.5	15.0	22.0	19.0	28.0	---	23.5
18	18.0	13.0	6.0	2.5	3.5	5.5	14.5	22.0	20.5	28.0	---	23.5
19	17.0	13.0	6.0	3.5	4.0	6.0	14.0	22.5	21.5	28.5	---	22.5
20	14.0	10.0	5.0	4.5	4.0	6.0	14.0	23.0	21.0	27.0	---	22.0
21	13.0	8.5	4.5	5.0	4.0	7.0	14.0	22.5	20.0	27.0	---	21.5
22	15.5	7.5	5.0	5.0	4.0	7.0	14.0	22.0	20.0	27.0	---	21.0
23	16.5	7.0	3.5	4.5	4.5	7.0	14.0	20.0	20.0	27.0	23.5	20.0
24	14.5	7.5	3.5	2.0	4.5	7.5	14.0	19.5	21.0	27.5	23.5	17.5
25	13.5	8.0	3.0	2.0	4.0	8.5	15.5	20.0	21.5	27.5	24.0	18.0
26	14.0	8.5	3.5	2.5	4.0	7.5	16.5	20.0	22.5	27.5	24.5	18.5
27	15.0	8.5	4.0	3.0	4.0	6.5	16.5	21.0	24.0	27.5	25.0	17.0
28	16.0	8.5	4.0	3.5	5.0	6.0	15.5	21.5	25.0	27.5	25.0	16.5
29	16.5	8.0	4.5	4.5	---	7.0	14.5	22.0	20.5	27.0	24.5	17.5
30	16.0	8.0	4.5	4.0	---	8.5	15.5	22.5	21.0	27.0	24.5	18.5
31	16.0	---	4.5	2.5	---	10.5	---	22.0	---	27.0	24.5	---
MEAN	16.0	12.0	5.5	3.5	3.5	6.0	11.5	20.0	21.5	26.0	25.5	22.0

WTR YR 1982 MEAN 14.5 MAX 28.5 MIN 2.0

OXYGEN, DISSOLVED (DO), MG/L, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEDIAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.1	4.9	9.9	12.1	13.0	12.1	10.4	4.5	3.3	5.9	2.5	2.2
2	5.4	4.0	10.1	12.4	13.3	12.0	10.5	3.5	2.5	5.0	.5	1.7
3	5.6	4.8	9.9	12.4	13.0	11.9	10.0	3.7	3.6	6.9	.0	1.2
4	6.0	4.4	9.8	12.1	13.0	11.8	10.7	3.4	3.6	7.8	.6	.7
5	---	4.5	9.9	12.8	13.3	12.1	11.6	3.0	2.6	8.1	.6	2.1
6	---	6.1	10.0	12.7	13.2	12.4	11.2	3.3	4.1	7.0	1.5	1.4
7	6.1	6.7	9.9	12.5	13.1	12.3	11.7	3.5	5.1	5.4	1.7	2.1
8	6.6	8.5	9.9	12.7	12.9	12.3	11.6	3.6	5.0	4.1	.8	2.3
9	6.1	8.9	10.4	12.9	12.6	12.3	11.2	5.4	4.6	2.0	.4	2.1
10	6.1	8.4	11.2	12.9	12.4	12.0	11.2	4.8	3.2	1.8	1.6	2.4
11	6.2	7.8	11.0	12.7	12.5	11.8	11.2	4.6	3.1	1.8	.6	2.5
12	5.5	8.3	11.1	12.6	12.5	12.1	11.3	3.2	3.1	1.9	.7	3.0
13	5.6	8.2	11.0	12.3	12.0	11.8	10.2	3.6	3.6	2.0	1.1	2.5
14	4.7	7.3	11.0	12.0	11.8	11.8	9.9	3.9	4.6	1.9	1.9	1.8
15	4.2	7.0	11.0	11.9	11.5	12.2	9.6	2.8	4.6	1.6	2.0	.2
16	3.9	7.3	12.1	11.9	12.0	12.1	8.6	2.1	4.4	1.0	3.3	.8
17	2.3	7.1	12.0	12.0	12.6	11.8	7.4	2.0	6.6	2.7	---	1.6
18	.0	7.2	11.7	12.2	12.6	12.2	5.7	1.6	6.7	1.2	---	.8
19	2.3	7.2	11.5	12.0	12.5	12.2	7.6	1.2	6.3	1.4	---	1.4
20	4.6	7.9	11.4	11.0	12.5	12.2	7.5	1.9	4.9	.5	---	1.7
21	6.7	9.9	11.8	11.4	12.3	11.8	6.4	3.3	5.1	.0	---	2.5
22	6.6	10.5	11.7	11.2	12.4	11.7	7.2	2.2	5.5	.0	---	1.7
23	5.6	10.5	11.8	11.4	12.4	11.6	6.7	4.2	3.3	.4	.5	3.8
24	6.3	9.9	12.6	12.6	12.4	11.4	6.8	5.6	3.9	.4	3.1	4.1
25	5.9	9.9	13.0	12.8	12.7	11.1	2.8	5.2	2.4	.0	2.0	5.1
26	6.5	9.9	12.8	12.7	12.6	10.9	2.5	5.0	1.2	.5	1.8	4.4
27	6.8	9.3	12.5	12.6	12.6	11.3	3.9	4.9	2.1	.8	.8	7.8
28	5.6	9.6	12.4	12.3	12.3	11.7	5.8	4.4	3.8	.0	1.3	7.6
29	4.0	9.7	12.5	12.1	---	11.9	6.2	4.3	6.7	.0	.9	6.9
30	4.4	9.8	12.6	12.2	---	11.3	5.5	4.0	6.6	.0	1.0	5.2
31	5.3	---	12.6	12.7	---	10.6	---	2.3	---	.8	2.6	---
MEAN	5.1	7.9	11.3	12.3	12.6	11.8	8.4	3.6	4.2	2.4	1.4	2.8

WTR YR 1982 MEAN 7.0 MAX 13.3 MIN .0

04209000 CHAGRIN RIVER AT WILLOUGHBY, OH

LOCATION.--Lat 41°37'51", long 81°24'13", in T.9 N., R.10 W., Lake County, Hydrologic Unit 04110003, on left bank, 150 ft (46 m) downstream from city waterworks dam, 800 ft (244 m) downstream from East Branch, 1.0 mi (1.6 km) southeast of Willoughby, and 5.0 mi (8.0 km) upstream from mouth.

DRAINAGE AREA.--246 mi^2 (637 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1925 to November 1935, October 1939 to current year (July 1925 to September 1932 monthly run-off in inches, adjusted for diversion, published in WSP 1307; previously published run-off was unadjusted and should not be used).

REVISED RECORDS.--WSP 1084: 1929(M), 1931(M). WSP 1307: 1926-28(M), 1930(M), 1932-35(M), 1942(M). WSP 1912: Drainage area. See also PERIOD OF RECORD.

GAGE.--Water-stage recorder. Datum of gage is 594.57 ft (181.225 m) National Geodetic Vertical Datum of 1929. Prior to Dec. 20, 1939, nonrecording gage at site 150 ft (46 m) upstream at datum 7 ft (2 m) higher.

REMARKS.--Records fair except those for winter periods, which are poor. Water diverted 200 ft (61 m) upstream from station for municipal supply of city of Willoughby. Water-quality data collected at this site 1965 to 1977. Sediment data collected at this site 1969 to 1981.

AVERAGE DISCHARGE.--53 years, 332 ft^3/s (9.402 m^3/s), 18.33 in/yr (466 mm/yr), adjusted for diversion.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 28,000 ft^3/s (793 m^3 s) Mar. 22, 1948, gage height, 17.95 ft (5.471 m) (from high-water mark in well), from rating curve extended above 14,000 ft^3/s (393 m^3/s) on basis of contracted-opening measurements of peak flow; minimum daily, 3.0 ft^3/s (0.085 m^3/s) July 25, 1934.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1913 reached a stage of 10.3 ft (3.14 m), from floodmark, former site and datum, discharge, 24,500 ft^3/s (694 m^3/s).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 4,000 ft^3/s (113 m^3/s) and maximums (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Dec. 23	0900	5060	143	7.80	2.377	Feb. 17	----	4700	133	ice	jam
Jan. 4	1500	5540	157	8.20	2.499	Mar. 11	1830	4640	131	7.44	2.268
Feb. 1	----	*5600	159	ice	jam	Mar. 13	1100	5240	148	7.95	2.423
Feb. 4	2230	ice	jam	*10.35	3.155	Mar. 31	0300	4780	135	7.56	2.304

Minimum daily discharge, 40 ft^3/s (1.13 m^3/s) Aug. 18, 19, Sept. 13.

04209000 CHAGRIN RIVER AT WILLOUGHBY, OH--Continued.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	697	124	618	532	4000	378	732	120	267	428	68	46
2	875	117	935	433	3800	394	535	120	231	203	73	48
3	624	108	470	370	2500	335	439	132	124	746	150	58
4	281	114	359	3400	1500	578	383	120	102	796	108	55
5	184	157	651	1860	1000	1770	400	108	469	346	108	46
6	486	405	437	727	760	842	411	102	1990	217	95	46
7	462	486	330	575	500	535	492	98	541	184	70	48
8	291	235	898	367	350	400	637	788	320	157	62	46
9	171	157	882	278	300	367	704	405	207	117	91	48
10	140	140	530	250	270	351	611	212	164	95	65	48
11	120	132	433	230	240	2190	704	150	143	91	58	46
12	108	117	395	220	220	2480	534	132	114	85	55	42
13	102	105	358	210	210	3820	534	120	117	76	53	40
14	91	102	330	200	200	2000	451	108	140	68	42	72
15	91	98	316	190	780	1060	389	98	112	65	42	156
16	91	95	292	190	2000	1390	315	91	438	76	42	73
17	91	98	241	180	3000	2180	300	79	637	60	42	53
18	98	98	213	180	2000	950	305	76	312	68	40	85
19	262	97	229	170	2000	711	258	98	222	409	40	79
20	267	1530	251	170	1900	598	300	154	168	300	73	53
21	154	1170	267	160	1800	559	276	85	264	147	132	50
22	128	684	365	160	1780	480	203	70	217	114	73	55
23	222	511	3610	1800	985	428	171	222	203	91	58	140
24	240	424	1830	1000	976	400	168	217	143	70	55	150
25	164	377	811	400	528	411	161	150	114	70	60	150
26	175	381	534	340	405	433	157	108	102	68	58	98
27	267	1560	391	280	390	416	157	95	91	76	53	521
28	244	709	326	270	383	422	147	224	124	76	50	428
29	171	410	297	250	---	559	143	207	1920	95	46	175
30	143	290	208	660	---	753	132	180	897	65	46	117
31	132	---	246	1700	---	2690	---	171	---	65	46	---
TOTAL	7572	11031	18053	17752	34777	30880	11149	5040	10893	5524	2054	3072
MEAN	244	368	582	573	1242	996	372	163	363	178	66.3	102
MAX	875	1560	3610	3400	4000	3820	732	788	1990	796	150	521
MIN	91	95	208	160	200	335	132	70	91	60	40	40
MEAN+	248	371	586	577	1246	1000	376	167	367	182	70.9	107
CFSM+	1.01	1.51	2.38	2.35	5.07	4.07	1.53	0.68	1.49	0.74	0.29	0.43
IN.+	1.16	1.68	2.74	2.70	5.27	4.68	1.70	0.78	1.66	0.85	0.33	0.48

CAL YR 1981 TOTAL 149757 MEAN 410 MAX 7270 MIN 65 MEAN+ 414 CFSM+ 1.68 IN.+ 22.84
WTR YR 1982 TOTAL 157797 MEAN 432 MAX 4000 MIN 40 MEAN+ 436 CFSM+ 1.77 IN.+ 24.06

+ Adjusted for municipal supply diversion of city of Willoughby.

04212100 GRAND RIVER NEAR PAINESVILLE, OH

LOCATION.--Lat 41°43'08", long 81°13'41", Lake County, Hydrologic Unit 04110004, on downstream left abutment of bridge on State Highway 84 (Walnut Avenue), 0.9 mi (1.4 km) downstream from Big Creek in Painesville.

DRAINAGE AREA.--685 mi^2 (1,774 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1974 to current year.

GAGE.--Water-stage recorder. Datum of gage is 620.37 ft (189.089 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair except those for winter periods, which are poor.

AVERAGE DISCHARGE.--8 years, 1,051 ft^3/s (29.76 m^3/s), 20.83 in/yr (529 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 16,900 ft^3/s (479 m^3/s) Dec. 25, 1979, gage height, 13.16 ft (4.011 m); minimum, 11 ft^3/s (0.31 m^3/s) Sept. 14, 1978.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 6,500 ft^3/s (184 m^3/s) and maximums (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Oct. 1	0930	6980	198	7.53	2.295	Mar. 6	0830	7940	225	8.02	2.444
Dec. 24	1900	6700	192	7.42	2.262	Mar. 13	2300	*13500	382	*10.73	3.270
Jan. 5	1830	8600	244	8.37	2.551	Mar. 31	0730	8160	231	8.14	2.481
Feb. 2	----	9200	261	ice	jam	June 6	0600	7700	218	7.90	2.408

Minimum discharge, 13 ft^3/s (0.368 m^3/s) Sept. 14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4440	420	920	859	5600	840	4520	143	859	3060	39	17
2	6120	340	1680	1160	8000	680	2420	136	951	1590	37	17
3	5460	293	1620	1270	6200	720	1600	132	712	1570	35	16
4	4440	259	1200	3750	4000	879	1480	125	413	2010	34	16
5	2020	297	1150	8260	4300	1910	1230	119	1050	1750	32	16
6	1210	571	1100	5890	3600	3430	1110	115	6820	1130	29	15
7	1360	961	972	3180	2900	2660	1040	111	4950	765	27	14
8	1200	1440	1700	2500	2300	2020	994	302	2490	491	30	13
9	840	1050	2740	1690	1900	1410	1350	352	1380	293	38	13
10	605	695	2290	1400	1500	1220	2020	340	920	217	33	13
11	420	491	1720	1100	1200	2620	2620	318	543	174	29	13
12	307	369	1450	900	980	6290	2310	247	335	141	27	13
13	243	302	1260	740	800	10900	1800	195	267	117	25	13
14	198	263	1150	620	640	10700	1390	163	224	98	23	13
15	165	235	1090	540	500	7280	1040	136	192	87	22	25
16	150	220	1030	480	1000	6200	756	115	243	79	22	19
17	136	207	930	430	2000	6070	580	100	508	70	20	18
18	128	195	830	390	3500	4430	508	89	1190	81	20	16
19	160	186	756	360	3200	3240	483	81	1000	100	20	17
20	198	1170	720	340	3000	2490	475	98	783	210	32	15
21	267	3550	765	320	3200	1860	467	86	517	125	57	14
22	313	3280	869	310	2600	1270	428	84	358	113	42	13
23	340	2340	3870	1100	2200	930	358	174	289	136	37	24
24	508	1820	5840	4300	2000	712	289	153	243	105	33	39
25	756	1450	5240	3900	2200	598	247	534	204	76	32	35
26	756	1170	3490	2100	1700	562	224	686	174	61	29	30
27	1080	1900	2790	1000	1300	553	204	653	153	52	27	121
28	1250	1820	2370	860	1000	526	180	598	155	46	25	139
29	1090	1350	1760	700	---	653	163	621	2460	46	21	84
30	811	909	1080	2500	---	1340	155	1340	5000	41	19	68
31	580	---	756	3800	---	5060	---	951	---	39	17	---
TOTAL	37551	29553	55138	56749	73320	90053	32441	9297	35383	14873	913	879
MEAN	1211	985	1779	1831	2619	2905	1081	300	1179	480	29.5	29.3
MAX	6120	3550	5840	8260	8000	10900	4520	1340	6820	3060	57	139
MIN	128	186	720	310	500	526	155	81	153	39	17	13
CFSM	1.77	1.44	2.60	2.67	3.82	4.24	1.58	.44	1.72	.70	.04	.04
IN.	2.04	1.60	2.99	3.08	3.98	4.89	1.76	.50	1.92	.81	.05	.05

CAL YR 1981 TOTAL 421551 MEAN 1155 MAX 15200 MIN 29 CFSM 1.69 IN 22.89
WTR YR 1982 TOTAL 436150 MEAN 1195 MAX 10900 MIN 13 CFSM 1.75 IN 23.69

04212100 GRAND RIVER NEAR PAINESVILLE, OHIO--Continued

SEDIMENT ANALYSIS

PERIOD OF RECORD.--November 1978 to current year.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SEDIMENT CONCENTRATIONS: Maximum daily mean, 1,350 mg/L Jan. 1, 1979; minimum daily mean, 1 mg/L Nov. 18, 1982.
SEDIMENT LOADS: Maximum daily, 38,800 tons (35,200 tonnes) Dec. 25, 1979; minimum daily, 0.11 ton (0.10 tonne) Sept. 22, 1982.

EXTREMES FOR CURRENT YEAR.--
SEDIMENT CONCENTRATIONS: Maximum daily mean, 635 mg/L Mar. 31; minimum daily mean, 1 mg/L Nov. 18.
SEDIMENT LOADS: Maximum daily, 11,400 tons (10,300 tonnes) June 6; minimum daily, 0.11 ton (0.10 tonne) Sept. 22.

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		OCTOBER			NOVEMBER			DECEMBER	
1	4440	594	6860	420	6	6.8	920	33	98
2	6120	195	3220	340	3	2.8	1680	28	127
3	5460	93	1370	293	3	2.4	1620	18	79
4	4440	72	863	259	3	2.1	1200	13	42
5	2020	52	284	297	17	16	1150	12	37
6	1210	47	154	571	49	87	1100	8	24
7	1360	37	136	961	31	80	972	7	18
8	1200	28	91	1440	37	144	1700	45	239
9	840	23	52	1050	18	51	2740	58	429
10	605	18	29	695	11	21	2290	35	216
11	420	15	17	491	7	9.3	1720	27	125
12	307	9	7.5	369	4	4.0	1450	21	82
13	243	6	3.9	302	5	4.1	1260	17	58
14	198	6	3.2	263	2	1.4	1150	13	40
15	165	7	3.1	235	2	1.3	1090	12	35
16	150	7	2.8	220	2	1.2	1030	12	33
17	136	7	2.6	207	2	1.1	930	8	20
18	128	8	2.8	195	1	.53	830	11	25
19	160	7	3.0	186	2	1.0	756	11	22
20	198	5	2.7	1170	130	449	720	10	19
21	267	7	5.0	3550	158	1460	765	10	21
22	313	10	8.5	3280	64	567	869	14	33
23	340	7	6.4	2340	30	190	3870	202	2430
24	508	16	22	1820	21	103	5840	180	2840
25	756	21	43	1450	16	63	5240	80	1130
26	756	18	37	1170	13	41	3490	54	509
27	1080	32	93	1900	114	609	2790	42	316
28	1250	28	94	1820	23	113	2370	32	205
29	1090	18	53	1350	13	47	1760	22	105
30	811	10	22	909	10	25	1080	12	35
31	580	13	20	---	---	---	756	12	24
TOTAL	37551	---	13511.5	29553	---	4104.03	55138	---	9416

04212100 GRAND RIVER NEAR PAINESVILLE. OH--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		JANUARY			FEBRUARY			MARCH	
1	859	18	42	5600	146	2210	840	30	68
2	1160	12	38	8000	278	6000	680	17	31
3	1270	18	62	6200	161	2700	720	12	23
4	3750	378	5210	4000	104	1120	879	15	36
5	8260	268	5930	4300	103	1200	1910	17	88
6	5890	100	1680	3600	88	855	3430	94	822
7	3180	50	429	2900	74	579	2660	38	273
8	2500	30	202	2300	48	298	2020	28	153
9	1690	54	246	1900	57	292	1410	22	84
10	1400	45	170	1500	47	190	1220	33	109
11	1100	37	110	1200	40	130	2620	374	4060
12	900	31	75	980	34	90	6290	401	6480
13	740	28	56	800	29	63	10900	180	5300
14	620	25	42	640	25	43	10700	146	4220
15	540	23	34	500	12	16	7280	126	2480
16	480	22	29	1000	51	138	6200	104	1740
17	430	21	24	2000	42	227	6070	90	1480
18	390	19	20	3500	43	406	4430	83	993
19	360	19	18	3200	45	389	3240	78	682
20	340	17	16	3000	37	300	2490	65	437
21	320	19	16	3200	56	484	1860	51	256
22	310	19	16	2600	72	505	1270	38	130
23	1100	37	110	2200	40	238	930	30	75
24	4300	103	1200	2000	58	313	712	27	52
25	3900	95	1000	2200	55	327	598	25	40
26	2100	60	340	1700	40	184	562	15	23
27	1000	34	92	1300	28	98	553	14	21
28	860	30	70	1000	25	67	526	17	24
29	700	26	49	---	---	---	653	42	97
30	2500	67	452	---	---	---	1340	126	518
31	3800	94	964	---	---	---	5060	635	10100
TOTAL	56749	---	18742	73320	---	19462	90053	---	40895
		APRIL			MAY			JUNE	
1	4520	243	3130	143	8	3.1	859	37	86
2	2420	108	706	136	12	4.4	951	50	128
3	1600	65	281	132	10	3.6	712	32	62
4	1480	46	184	125	9	3.0	413	20	22
5	1230	37	123	119	9	2.9	1050	363	3280
6	1110	29	87	115	9	2.8	6820	591	11400
7	1040	25	70	111	18	5.4	4950	162	2300
8	994	22	59	302	57	57	2490	75	504
9	1350	32	132	352	27	26	1380	59	220
10	2020	67	395	340	18	17	920	44	109
11	2620	56	413	318	16	14	543	33	48
12	2310	34	212	247	20	13	335	23	21
13	1800	24	117	195	15	7.9	267	20	14
14	1390	20	75	163	11	4.8	224	14	8.5
15	1040	18	51	136	10	3.7	192	16	8.3
16	756	15	31	115	12	3.7	243	26	17
17	580	12	19	100	12	3.2	508	42	69
18	508	8	11	89	12	2.9	1190	100	320
19	483	7	9.1	81	14	3.1	1000	40	108
20	475	7	9.0	98	17	4.5	783	30	63
21	467	8	10	86	17	3.9	517	20	28
22	428	8	9.2	84	13	2.9	358	15	14
23	358	7	6.8	174	36	17	289	11	8.6
24	289	7	5.5	153	17	7.0	243	10	6.6
25	247	7	4.7	534	65	92	204	9	5.0
26	224	8	4.8	686	52	96	174	11	5.2
27	204	7	3.9	653	40	71	153	10	4.1
28	180	5	2.4	598	57	92	155	8	3.3
29	163	5	2.2	621	84	180	2460	305	2210
30	155	6	2.5	1340	108	408	5000	234	3230
31	---	---	---	951	47	121	---	---	---
TOTAL	32441	---	6166.1	9297	---	1276.8	35383	---	24302.6

04212100 GRAND RIVER NEAR PAINESVILLE. OH--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		JULY			AUGUST			SEPTEMBER	
1	3060	97	801	39	14	1.5	17	16	.73
2	1590	66	283	37	13	1.3	17	23	1.1
3	1570	94	454	35	13	1.2	16	20	.86
4	2010	84	477	34	15	1.4	16	16	.69
5	1750	66	312	32	22	1.9	16	15	.65
6	1130	52	159	29	20	1.6	15	15	.61
7	765	39	81	27	13	.95	14	15	.57
8	491	35	46	30	18	1.5	13	13	.45
9	293	32	25	38	15	1.5	13	15	.53
10	217	39	23	33	12	1.1	13	14	.49
11	174	27	13	29	11	.86	13	12	.42
12	141	18	6.9	27	11	.80	13	13	.46
13	117	21	6.6	25	14	.95	13	15	.53
14	98	13	3.4	23	15	.93	13	16	.56
15	87	10	2.3	22	16	.95	25	30	1.9
16	79	11	2.3	22	20	1.2	19	15	.77
17	70	13	2.5	20	19	1.0	18	13	.63
18	81	22	8.6	20	23	1.2	16	13	.56
19	100	47	16	20	20	1.1	17	13	.60
20	210	189	115	32	32	2.8	15	11	.45
21	125	37	12	57	35	5.4	14	6	.23
22	113	23	7.0	42	15	1.7	13	3	.11
23	136	15	5.5	37	17	1.7	24	25	2.3
24	105	8	2.3	33	17	1.5	39	11	1.2
25	76	7	1.4	32	16	1.4	35	7	.65
26	61	14	2.3	29	13	1.0	30	8	.65
27	52	17	2.4	27	12	.87	121	79	28
28	46	17	2.1	25	15	1.0	139	28	11
29	46	16	2.0	21	17	.96	84	12	2.7
30	41	17	1.9	19	13	.67	68	10	1.8
31	39	21	2.2	17	14	.64	---	---	---
TOTAL	14873	---	2878.7	913	---	42.58	879	---	62.22
YEAR	436150		140859.53						

04212200 GRAND RIVER AT PAINESVILLE, OH
(National stream-quality accounting network station)

LOCATION.--Lat 41°44'09", long 81°15'59", in T.11 N., R.8 W., Lake County, Hydrologic Unit 04110004, at bridge on State Highway 535 in Painesville, 2.2 mi (3.5 km) upstream from mouth, and 8.0 mi (12.9 km) downstream from Kellogg Creek.

DRAINAGE AREA.--701 mi^2 (1,816 km^2).

PERIOD OF RECORD.--March 1950 to February 1952, October 1962 to current year.

REMARKS.--Water temperatures available for Mar. 1950 to February 1952, October 1962 to December 1966. Four parameter (Specific Conductance, pH, Water Temperature, and Dissolved Oxygen) Water quality monitor at site from December 1966 to September 1981.

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (FTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L)
OCT									
28...	1000	1290	460	7.6	11.0	16	10.6	96	17
DEC									
01...	1430	951	660	7.5	3.5	12	13.2	99	<10
MAR									
02...	1400	680	670	7.4	.5	8.0	13.0	90	96
MAY									
04...	1430	117	1830	8.0	18.0	2.5	8.6	90	--
JUN									
15...	1500	183	1160	7.9	22.5	7.0	8.8	100	--
AUG									
17...	1400	18	2320	8.1	24.0	12	10.4	120	--

DATE	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)
OCT									
28...	270	310	150	46	7.8	35	4.1	39	86
DEC									
01...	400	350	180	60	7.2	40	3.1	37	140
MAR									
02...	140	190	180	59	7.2	50	2.7	37	150
MAY									
04...	28	10	470	170	11	170	3.6	59	500
JUN									
15...	5600	1900	280	100	8.3	100	2.9	43	280
AUG									
17...	6200	4200	720	270	11	220	4.4	60	640

DATE	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)
OCT								
28...	.1	6.1	298	277	.080	.92	.26	.050
DEC								
01...	.1	6.1	430	325	.080	.50	.49	.070
MAR								
02...	.1	5.4	458	338	.180	.61	.51	.070
MAY								
04...	.2	1.3	1120	968	.340	1.00	.31	.040
JUN								
15...	.2	4.9	756	580	.100	.60	.63	.070
AUG								
17...	.3	1.3	1710	1260	.630	2.40	.74	.180

04212200 GRAND RIVER AT PAINESVILLE, OH--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	BARIUM, DIS-SOLVED (UG/L AS BA)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)
OCT 28...	1000	2	1	<100	40	3	3	10	10
DEC 01...	1430	1	0	<100	38	<1	<1	30	10
MAY 04...	1430	2	1	<100	78	6	6	60	30
JUN 15...	1500	1	1	<100	60	1	<1	20	10

DATE	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)
OCT 28...	2	<1	11	8	1100	100	5	5	50
DEC 01...	1	<1	10	8	800	85	3	1	40
MAY 04...	2	2	10	6	590	3	5	2	90
JUN 15...	2	2	14	15	1100	48	5	2	80

DATE	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY DIS-SOLVED (UG/L AS HG)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	SILVER, DIS-SOLVED (UG/L AS AG)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)
OCT 28...	20	.3	.1	<1	<1	<1	<1	50	8
DEC 01...	39	<.1	<.1	<1	<1	<1	<1	50	5
MAY 04...	57	.2	.2	<1	<1	<1	<1	10	4
JUN 15...	38	.1	.1	<1	<1	<1	<1	10	4

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE (DEG C)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)
OCT 28...	1000	1290	11.0	20	70
DEC 01...	1430	951	3.5	18	46
MAR 02...	1400	680	.5	12	22
MAY 04...	1430	117	18.0	16	5.1
JUN 15...	1500	183	22.5	18	8.9
AUG 17...	1400	18	24.0	22	1.1

04213000 CONNEAUT CREEK AT CONNEAUT, OH

LOCATION.--Lat 41°55'37", long 80°36'15", Ashtabula County, Hydrologic Unit 04120101, on right bank at downstream side of Keefus Road bridge at Conneaut, and 6.4 mi (10.3 km) upstream from mouth.

DRAINAGE AREA.--175 mi^2 (453 km^2).

PERIOD OF RECORD.--July 1922 to December 1935, March 1950 to September 1961 (published as "at Amboy"), October 1961 to current year.

REVISED RECORDS.--WSP 714: 1926. WSP 784: 1933. WSP 1437: 1923-25(M), 1926-30, 1931-32(M), 1933, 1935(M). WSP 1912: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 610.30 ft (186.019 m) National Geodetic Vertical Datum of 1929, unadjusted. Prior to Aug. 17, 1924, nonrecording gage at same site and datum.

REMARKS.--Records fair except those for periods of no gage-height record Feb. 16 to Mar. 17, May 19, 20, Aug. 7-8, 12-20, Aug. 24 to Sept. 27, which are poor. Water-quality data collected at this site 1965 to 1977. Sediment data collected 1970 to 1974.

AVERAGE DISCHARGE.--45 years, 267 ft^3/s (7.561 m^3/s), 20.72 in/yr (526 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 17,000 ft^3/s (481 m^3/s) Jan. 22, 1959, gage height, 11.70 ft (3.566 m); maximum gage height, 12.94 ft (3.944 m) Mar. 4, 1934 (backwater from ice); minimum discharge, 0.2 ft^3/s (0.006 m^3/s) July 31, Aug. 1, 1933, Aug. 1, 2, 1934.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,900 ft^3/s (82.1 m^3/s) and maximums (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Oct. 2	1800	4370	124	7.05	2.149
Dec. 24	2400	3080	87.2	6.25	1.905
Jan. 5	2000	3600	102	6.59	2.009
Feb. 2	----	*4800	136	ice	jam
Feb. 3	1200	ice	jam	*11.70	3.566

Minimum daily discharge, 12 ft^3/s (0.34 m^3/s) Sept. 6-14, 22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	639	155	190	205	1600	230	2240	58	168	267	40	14
2	3280	128	433	350	4000	220	638	54	153	113	40	14
3	2140	112	413	314	2200	200	322	51	134	72	40	13
4	894	100	257	851	1100	300	319	47	85	56	40	13
5	316	94	213	2920	560	540	307	45	211	56	38	13
6	229	100	225	1230	370	1000	322	43	1550	51	36	12
7	715	556	194	392	300	780	292	42	1330	43	33	12
8	765	842	314	288	250	580	289	71	397	40	31	12
9	448	334	1110	240	210	450	350	155	203	49	35	12
10	249	206	517	200	190	350	477	155	126	42	52	12
11	161	152	288	180	170	860	599	93	90	41	37	12
12	119	125	234	160	150	1800	595	69	75	42	30	12
13	97	107	207	140	130	3500	544	56	62	50	26	12
14	89	96	191	140	120	3300	508	47	52	44	24	12
15	70	89	185	130	150	2500	337	42	49	40	22	19
16	65	84	170	120	200	2000	218	40	80	41	21	18
17	58	81	160	120	280	1510	175	36	466	41	20	16
18	57	80	150	110	500	939	229	35	432	41	20	15
19	62	77	150	110	1000	548	264	33	177	42	20	16
20	139	297	140	110	1100	407	182	35	109	42	31	14
21	142	1180	140	110	800	331	239	36	144	69	45	13
22	102	1060	300	110	900	283	229	43	170	42	45	12
23	104	507	1580	230	740	226	155	50	113	38	34	15
24	323	330	2570	560	900	182	121	208	75	38	27	29
25	332	254	1640	1100	540	159	100	281	56	40	23	28
26	269	224	528	1000	320	150	90	136	46	41	21	27
27	444	351	327	600	280	140	82	77	42	41	19	38
28	676	639	242	380	250	140	75	164	40	42	17	85
29	631	305	199	200	---	179	69	1230	470	51	16	60
30	310	198	176	250	---	393	63	608	707	49	15	37
31	202	---	160	800	---	1570	---	237	---	38	15	---
TOTAL	14127	8863	13603	13650	19310	25767	10430	4277	7812	1702	913	617
MEAN	456	295	439	440	690	831	348	138	260	54.9	29.5	20.6
MAX	3280	1180	2570	2920	4000	3500	2240	1230	1550	267	52	85
MIN	57	77	140	110	120	140	63	33	40	38	15	12
CFSM	2.61	1.69	2.51	2.51	3.94	4.75	1.99	.79	1.49	.31	.17	.12
IN.	3.00	1.88	2.89	2.90	4.10	5.48	2.22	.91	1.66	.36	.19	.13

CAL YR 1981 TOTAL 127141 MEAN 348 MAX 7370 MIN 32 CFSM 1.99 IN 27.03
WTR YR 1982 TOTAL 121071 MEAN 332 MAX 4000 MIN 12 CFSM 1.90 IN 25.74

As the number of streams on which discharge and chemical quality data information is likely to be desired far exceeds the number of stations feasible to operate at one time, the Geological Survey collects limited data at sites other than regular stations. When limited data are collected on a systematic basin over a period of years for use in hydrologic analyses, the site at which the data are collected is called a partial-record station. Data collected at these partial-record stations are useable in low-flow or floodflow analyses, depending on the type data collected. In addition, discharge measurements are made at othersites not included in the partial-record program. These measurements are generally made in times of drought or flood to give better areal coverage to those events. Those measurements and others collected for some special reason are called measurements at miscellaneous sites.

Records collected at partial-record stations are presented in two parts. Given first are records of discharge measurements and chemical-quality data made at low flow sites followed by a table of annual maximum stage and discharge at crest-stage stations. Discharge measurements made at miscellaneous sites for both low flow and high flow are given in a second table.

LOW-FLOW PARTIAL-RECORD STATIONS

Measurements of streamflow and chemical quality data in the area covered by this report made at low-flow partial-record stations are given in the following section. These measurements were made during periods of base flow when streamflow is primarily from ground-water storage. These measurements, when correlated with the simultaneous discharge of a nearby stream where continuous records are available, will give a picture of the low-flow potentiality of a stream. The "PERIOD OF RECORD" paragraph shows the water years in which measurements were made at the same, or practically the same, site.

04180935 ST. MARYS RIVER AT ST. MARYS, OH

LOCATION.--Lat 40°32'35", long 84°23'18", in SW 1/4 sec. 3, T.6 S., R.4 E., Auglaize County, Hydrologic Unit 04100004, at bridge on State Highway 29 in St. Mary's, 0.8 mi (1.3 km) downstream from Kopp Creek.
DRAINAGE AREA.--147 mi^2 (381 km^2).
PERIOD OF RECORD.--Discharge, water years 1978, 1980 to current year (discontinued); chemical analyses, water years 1980 to current year (discontinued).

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE FET-FLD (MG/L AS HCO3)	CAR-BONATE FET-FLD (MG/L AS CO3)
AUG 03...	1500	13	1040	7.9	24.5	6.8	73	28	110	9.8	250	0

DATE	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHO, TOTAL (MG/L AS P)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
AUG 03...	160	140	.6	4.3	682	.57	.160	1.3	.770	.690	35	77

STREAMS TRIBUTARY TO LAKE ERIE

04181045 BLACK CREEK NEAR ROCKFORD, OH

LOCATION.--Lat 40°43'36", long 84°44'16", Mercer County, Hydrologic Unit 04100004, at bridge on State Route 33, 0.9 mi (1.4 km) upstream from mouth 5.4 mi (8.7 km) northwest of Rockford.
DRAINAGE AREA.--53.9 mi² (139.6 km²).
PERIOD OF RECORD.--Discharge, water years 1980 to current year (discontinued); chemical analyses, water years 1980 to current year (discontinued).

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE FET-FLD (MG/L AS HCO3)	CAR-BONATE FET-FLD (MG/L AS CO3)
MAY												
04...	1249	5.1	--	--	--	--	--	--	--	--	--	--
AUG												
03...	1345	1.1	660	7.7	24.0	8.5	83	26	26	2.2	210	0

DATE	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHO, TOTAL (MG/L AS P)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
MAY												
04...	--	--	--	--	--	--	--	--	--	--	--	--
AUG												
03...	150	39	.4	2.8	483	.19	.040	.46	.070	.030	67	27

04185200 BEAVER CREEK NEAR STRYKER, OH

LOCATION.--Lat 41°27'23", long 84°26'09", Williams County, Hydrologic Unit 04100006, at bridge on township road, 0.3 mi (0.5 km) upstream from mouth, 3.1 mi (5.0 km) southwest of Stryker.
DRAINAGE AREA.--44.8 mi² (116.0 km²).
PERIOD OF RECORD.--Discharge, water years 1980 to current year (discontinued); chemical analyses, water years 1980 to current year (discontinued).

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE FET-FLD (MG/L AS HCO3)	CAR-BONATE FET-FLD (MG/L AS CO3)
MAY												
05...	1121	11	--	--	--	--	--	--	--	--	--	--
AUG												
05...	1100	2.3	650	7.9	22.0	7.8	62	30	36	3.3	340	0

DATE	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHO, TOTAL (MG/L AS P)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
MAY												
05...	--	--	--	--	--	--	--	--	--	--	--	--
AUG												
05...	57	33	.9	10	407	.31	.040	.66	.190	.140	34	19

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04185410 LICK CREEK NEAR BRUNERSBURG, OH

LOCATION.--Lat 41°22'08", long 84°26'17", Defiance County, Hydrologic Unit 04100006, at bridge on Trinity Road, 1.2 mi (1.9 km) upstream from mouth, 5.0 mi (8.0 km) northwest of Brunersburg.
DRAINAGE AREA.--105 mi^2 (272 km^2).
PERIOD OF RECORD.--Discharge, water years 1980 to current year (discontinued); chemical analyses, water years 1980 to current year (discontinued)

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE FET-FLD (MG/L AS HCO3)	CAR-BONATE FET-FLD (MG/L AS CO3)
MAY 02...	1010	16	--	--	--	--	--	--	--	--	--	--
AUG 04...	1815	5.3	1040	8.3	24.5	8.9	69	33	120	5.8	350	5

DATE	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHO, TOTAL (MG/L AS P)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
MAY 02...	--	--	--	--	--	--	--	--	--	--	--	--
AUG 04...	72	150	.9	5.9	646	.50	.060	1.4	.760	.680	34	42

04185498 MUD CREEK NEAR BRUNERSBURG, OH

LOCATION.--Lat 41°20'34", long 84°26'51", Defiance County, Hydrologic Unit 04100006, at bridge on State Route 15, 2.4 mi (3.9 km) upstream from mouth, 4.0 mi (6.4 km) northwest of Brunersburg.
DRAINAGE AREA.--58.0 mi^2 (150.2 km^2).
PERIOD OF RECORD.--Discharge, water years 1980 to current year (discontinued); chemical analyses, water years 1980 to current year (discontinued).

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE FET-FLD (MG/L AS HCO3)	CAR-BONATE FET-FLD (MG/L AS CO3)
MAY 05...	0815	11	--	--	--	--	--	--	--	--	--	--
AUG 04...	1745	4.5	638	8.0	24.0	8.0	83	31	16	2.8	340	0

DATE	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHO, TOTAL (MG/L AS P)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
MAY 05...	--	--	--	--	--	--	--	--	--	--	--	--
AUG 04...	85	11	.6	9.7	451	.18	.050	.35	.080	.060	15	13

STREAMS TRIBUTARY TO LAKE ERIE

04185795 AUGLAIZE RIVER NEAR UNIOPOLIS, OH

LOCATION.--Lat 40°37'11", long 84°07'19", in SW 1/4 sec. 12, T.5 S., R.6 E., Auglaize County, Hydrologic Unit 04100007, at bridge on Mud Sock Road, 0.4 mi (0.6 km) upstream from Blackhorse Creek, 2.2 mi (3.5 km) northwest of Uniopolis.
DRAINAGE AREA.--89.3 mi^2 (231.3 km^2).
PERIOD OF RECORD.--Discharge, water years 1979 to current year; chemical analyses, water years 1980 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE FET-FLD (MG/L AS HCO3)	CAR-BONATE FET-FLD (MG/L AS CO3)
APR												
29...	1045	28	--	--	--	--	--	--	--	--	--	--
AUG												
03...	1030	5.1	700	7.7	20.0	7.2	85	34	18	2.9	340	0

DATE	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHO, TOTAL (MG/L AS P)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
APR												
29...	--	--	--	--	--	--	--	--	--	--	--	--
AUG												
03...	93	31	.6	5.7	506	.20	.050	.75	.200	.070	33	69

04187030 OTTAWA RIVER AT D.T. & I. RAILWAY BRIDGE, LIMA, OH

LOCATION.--Lat 40°44'53", long 84°05'22", in SE 1/4 sec. 30, T.3 S., R.7 E., Allen County, Hydrologic Unit 04100007, at bridge on the Detroit, Toledo, and Ironton Railway just upstream from Sugar Street in Lima, 1.7 mi (2.7 km) downstream from Lost Creek.
DRAINAGE AREA.--124 mi^2 (321 km^2).
PERIOD OF RECORD.--Discharge, water years 1980 to current year (discontinued); chemical analyses, water years 1980 to current year (discontinued).

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE FET-FLD (MG/L AS HCO3)	CAR-BONATE FET-FLD (MG/L AS CO3)
MAY												
11...	1140	26	--	--	--	--	--	--	--	--	--	--
AUG												
04...	0900	7.1	1000	7.9	22.0	7.5	110	53	33	5.0	310	0

DATE	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHO, TOTAL (MG/L AS P)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
MAY												
11...	--	--	--	--	--	--	--	--	--	--	--	--
AUG												
04...	290	38	1.1	6.9	788	<.10	.060	.44	.120	.070	14	9

STREAMS TRIBUTARY TO LAKE ERIE

04191018 MIDDLE CREEK NEAR MELROSE, OH

LOCATION.--Lat 41°02'55", long 84°24'34", Paulding County, Hydrologic Unit 04100007, at bridge on Township Road 60, 1.0 mi (1.6 km) upstream from mouth, 2.9 mi (4.7 km) south of Melrose.
DRAINAGE AREA.--102 mi² (264 km²).
PERIOD OF RECORD.--Discharge, water years 1980 to current year (discontinued); chemical analysis, water years 1980 to current year (discontinued).

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE FET-FLD (MG/L AS HCO3)	CAR-BONATE FET-FLD (MG/L AS CO3)
APR 29...	1645	18	--	--	--	--	--	--	--	--	--	--
AUG 04...	1400	4.2	717	8.9	33.0	12.5	69	25	56	6.2	150	24

DATE	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHO, TOTAL (MG/L AS P)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
APR 29...	--	--	--	--	--	--	--	--	--	--	--	--
AUG 04...	160	68	.7	.5	516	.29	.050	.75	.710	.650	51	11

04191042 PRAIRIE CREEK NEAR MELROSE, OH

LOCATION.--Lat 41°03'18", long 84°26'18", Paulding County, Hydrologic Unit 04100007, at bridge on Township Road 165, 0.2 mi (0.3 km) downstream from West Branch, 2.7 mi (4.3 km) southwest of Melrose, 3.6 mi (5.8 km) upstream from mouth.
DRAINAGE AREA.--105 mi² (272 km²).
PERIOD OF RECORD.--Discharge, water years 1980 to current year (discontinued); chemical analyses, water years 1980 to current year (discontinued).

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE FET-FLD (MG/L AS HCO3)	CAR-BONATE FET-FLD (MG/L AS CO3)
APR 29...	1743	14	--	--	--	--	--	--	--	--	--	--
AUG 04...	1335	.74	728	8.0	29.0	7.4	67	33	46	3.7	140	0

DATE	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHO, TOTAL (MG/L AS P)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
APR 29...	--	--	--	--	--	--	--	--	--	--	--	--
AUG 04...	200	64	.5	.9	530	<.10	.050	.85	.070	<.010	23	19

STREAMS TRIBUTARY TO LAKE ERIE

04192650 NORTH TURKEYFOOT CREEK NEAR LIBERTY CENTER, OH

LOCATION.--Lat 41°24'50", long 84°00'34", in sec. 12, T.5 N., R.7 E., Henry County, Hydrologic Unit 04100009, at bridge on State Route 109, 2.0 mi (3.2 km) south of Liberty Center, 2.2 mi (3.5 km) upstream from mouth.
DRAINAGE AREA.--74.2 mi^2 (192.2 km^2).
PERIOD OF RECORD.--Discharge, water years 1979 to current year; chemical analyses, water years 1980 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE FET-FLD (MG/L AS HCO3)	CAR-BONATE FET-FLD (MG/L AS CO3)
MAY 05...	1415	9.1	--	--	--	--	--	--	--	--	--	--
AUG 05...	1530	.89	1370	8.6	25.0	7.9	70	20	210	17	240	18

DATE	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHO, TOTAL (MG/L AS P)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
MAY 05...	--	--	--	--	--	--	--	--	--	--	--	--
AUG 05...	150	250	.5	2.8	840	<.10	.080	1.2	.980	.940	26	95

04194114 CEDAR CREEK AT CURTICE, OH

LOCATION.--Lat 41°37'27", long 83°21'04", Lucas County, Hydrologic Unit 04100010, at bridge on Brown Road, 1.0 mi (1.6 km) northeast of Curtice, 6.9 mi (11.1 km) upstream from mouth.
DRAINAGE AREA.--48.5 mi^2 (125.6 km^2).
PERIOD OF RECORD.--Discharge, water years 1980 to current year (discontinued); chemical analyses, water years 1980 to current year (discontinued).

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE FET-FLD (MG/L AS HCO3)	CAR-BONATE FET-FLD (MG/L AS CO3)
MAY 04...	1805	7.3	--	--	--	--	--	--	--	--	--	--
AUG 03...	1400	2.0	1100	7.9	23.5	5.3	89	33	100	8.0	320	0

DATE	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHO, TOTAL (MG/L AS P)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
MAY 04...	--	--	--	--	--	--	--	--	--	--	--	--
AUG 03...	200	140	.9	7.2	740	.50	9.50	24	2.50	2.60	64	420

STREAMS TRIBUTARY TO LAKE ERIE

04194122 CRANE CREEK NEAR CURTICE, OH

LOCATION.--Lat 41°37'04", long 83°19'48", Ottawa County, Hydrologic Unit, 04100010, at bridge on Curtice Road, 2.0 mi (3.2 km) east of Curtice.
DRAINAGE AREA.--39.2 mi^2 (101.5 km^2).
PERIOD OF RECORD.--Discharge, water years 1980 to current year (discontinued); chemical analyses, water years 1980 to current year (discontinued).

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE FET-FLD (MG/L AS HCO3)	CAR-BONATE FET-FLD (MG/L AS CO3)
MAY 04...	1650	4.1	--	--	--	--	--	--	--	--	--	--
AUG 03...	--	E.15	1700	8.5	25.0	10.8	120	39	190	5.9	300	24

DATE	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHO, TOTAL (MG/L AS P)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
MAY 04...	--	--	--	--	--	--	--	--	--	--	--	--
AUG 03...	260	290	.8	3.0	1090	.47	.830	1.2	.890	.870	39	350

04195870 MUDDY CREEK AT LINDSEY, OH

LOCATION.--Lat 41°24'50", long 80°13'12", Sandusky County, Hydrologic Unit 04100011, at bridge on Kingsway Road, 0.4 mi (0.6 km) south of Lindsey.
DRAINAGE AREA.--68.1 mi^2 (176.4 km^2).
PERIOD OF RECORD.--Discharge, water years 1980 to current year (discontinued); chemical analyses, water years 1980 to current year (discontinued).

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE FET-FLD (MG/L AS HCO3)	CAR-BONATE FET-FLD (MG/L AS CO3)
MAY 05...	0745	12	--	--	--	--	--	--	--	--	--	--
AUG 03...	1600	1.8	1000	8.6	30.0	10.6	76	51	44	26	200	20

DATE	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHO, TOTAL (MG/L AS P)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
MAY 05...	--	--	--	--	--	--	--	--	--	--	--	--
AUG 03...	280	77	.6	2.1	662	<.10	.050	.75	.070	.030	10	35

STREAMS TRIBUTARY TO LAKE ERIE

04195950 PARAMOUR CREEK NEAR LEESVILLE, OH

LOCATION.--Lat 40°48'07", long 82°46'03", Crawford County, Hydrologic Unit 04100011, at bridge on U.S. Highway 30 N, 1.1 mi (1.8 km) northeast of Leesville, 1.2 mi (1.9 km) upstream from mouth.
DRAINAGE AREA.--27.2 mi^2 (70.4 km^2).
PERIOD OF RECORD.--Discharge, water years 1979 to current year; chemical analyses, water years 1980 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE FET-FLD (MG/L AS HCO3)	CAR-BONATE FET-FLD (MG/L AS CO3)
MAY 07...	0950	4.3	--	--	--	--	--	--	--	--	--	--
AUG 12...	1130	2.1	970	7.7	16.5	2.3	79	24	60	6.6	340	0

DATE	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHO, TOTAL (MG/L AS P)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
MAY 07...	--	--	--	--	--	--	--	--	--	--	--	--
AUG 12...	130	80	.5	13	591	.43	5.00	.10	1.70	1.50	54	160

04195970 SANDUSKY RIVER NEAR NORTH ROBINSON, OH

LOCATION.--Lat 40°50'10", long 82°49'39", in T.2 S., R.21 W., Crawford County, Hydrologic Unit 04100011, at bridge on Cox Road, 0.3 mi (0.5 km) upstream from Loss Creek, 3.3 mi (5.3 km) northeast of North Robinson.
DRAINAGE AREA.--39.7 mi^2 (102.8 km^2).
PERIOD OF RECORD.--Discharge, water years 1978, 1980 to current year; chemical analyses, water years 1980 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE FET-FLD (MG/L AS HCO3)	CAR-BONATE FET-FLD (MG/L AS CO3)
MAY 07...	1030	6.0	--	--	--	--	--	--	--	--	--	--
AUG 12...	1200	2.7	525	8.4	20.5	10.5	51	16	28	4.0	170	4

DATE	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHO, TOTAL (MG/L AS P)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
MAY 07...	--	--	--	--	--	--	--	--	--	--	--	--
AUG 12...	64	34	.4	6.2	298	1.3	.080	.92	.350	.260	14	26

STREAMS TRIBUTARY TO LAKE ERIE

04196415 LITTLE SANDUSKY RIVER AT LITTLE SANDUSKY, OH

LOCATION.--40°44'18", long 83°12'50", Wyandot County, Hydrologic Unit 04100011,at bridge on State Route 294 at Little Sandusky, 0.7 mi (1.1 km) downstream from Honey Run.
DRAINAGE AREA.--37.8 mi^2 (97.9 km^2).
PERIOD OF RECORD.--Discharge, water years 1980 to current year (discontinued); chemical analyses, water years 1980 to current year (discontinued).

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE FET-FLD (MG/L AS HCO3)	CAR-BONATE FET-FLD (MG/L AS CO3)
MAY 05...	1250	11	--	--	--	--	--	--	--	--	--	--
AUG 12...	1440	.70	870	8.1	18.0	8.9	110	36	19	3.4	350	0

DATE	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHO, TOTAL (MG/L AS P)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
MAY 05...	--	--	--	--	--	--	--	--	--	--	--	--
AUG 12...	170	23	.6	11	619	.20	.040	.36	.060	.050	39	46

04196540 SANDUSKY RIVER NEAR MC CUTCHENVILLE, OH

LOCATION.--Lat 40°56'56", long 83°15'24", in T.1 S., R.14 E., Wyandot County, Hydrologic Unit 04100011, at bridge on State Route 103, 1.2 mi (1.9 km) upstream from Tymochtee Creek, 3.0 mi (4.8 km) south of McCutchenville.
DRAINAGE AREA.--352 mi^2 (912 km^2).
PERIOD OF RECORD.--Discharge, water years 1980 to current year (discontinued); chemical analyses, water years 1980 to current year (discontinued).

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WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE FET-FLD (MG/L AS HCO3)	CAR-BONATE FET-FLD (MG/L AS CO3)
AUG 16...	1240	18	870	8.3	24.5	10.2	102	32	37	5.0	170	8

DATE	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHO, TOTAL (MG/L AS P)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
AUG 16...	170	38	.7	.9	594	<.10	.060	1.5	.290	.080	13	22

STREAMS TRIBUTARY TO LAKE ERIE

04196580 LITTLE TYMOCHTEE CREEK NEAR MARSEILLES, OH

LOCATION.--Lat 40°41'13", long 83°24'44", in NW 1/4 sec. 19, T.4 S., R.13 E., Marion County, Hydrologic Unit 04100011, at bridge on County Road 22, 1.3 mi (2.1 km) upstream from mouth, 1.4 mi (2.2 km) southwest of Marseilles.
DRAINAGE AREA.--43.7 mi^2 (113.2 km^2).
PERIOD OF RECORD.--Discharge, water years 1978, 1980 to current year (discontinued); chemical analyses, water years 1980 to current year (discontinued).

(Creek was dry on scheduled sampling dates)

04196970 SYCAMORE CREEK AT MEXICO, OH

LOCATION.--Lat 40°58'59", long 83°11'43", Wyandot County, Hydrologic Unit 04100011, at bridge on County Road 37, 0.4 mi (0.6 km) southwest of Mexico, 0.4 mi (0.6 km) upstream from mouth.
DRAINAGE AREA.--64.0 mi^2 (165.8 km^2).
PERIOD OF RECORD.--Discharge, water years 1980 to current year (discontinued); chemical analyses, water years 1980 to current year (discontinued).

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE FET-FLD (MG/L AS HCO3)	CAR-BONATE FET-FLD (MG/L AS CO3)
MAY 05...	1045	9.9	--	--	--	--	--	--	--	--	--	--
AUG 11...	1100	2.6	800	8.0	19.0	8.5	95	31	14	3.0	310	0

DATE	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHO, TOTAL (MG/L AS P)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
MAY 05...	--	--	--	--	--	--	--	--	--	--	--	--
AUG 11...	150	21	.6	6.5	509	1.1	.040	.36	.070	.030	20	32

STREAMS TRIBUTARY TO LAKE ERIE

04198007 MUSKELLUNGE CREEK NEAR FREMONT, OH

LOCATION.--Lat 41°22'21", long 83°08'46", Sandusky County, Hydrologic Unit 04100011, at bridge on Christy Road, 1.8 mi (2.9 km) northwest of Fremont, 1.8 mi (2.9 km) upstream from mouth.
DRAINAGE AREA.--41.8 mi^2 (108.3 km^2).
PERIOD OF RECORD.--Discharge, water years 1980 to current year; chemical analyses, water years 1980 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE FET-FLD (MG/L AS HCO3)	CAR-BONATE FET-FLD (MG/L AS CO3)
MAY												
05...	0920	7.3	--	--	--	--	--	--	--	--	--	--
AUG												
03...	1700	1.2	740	8.9	29.0	13.0	63	32	42	3.3	198	24

DATE	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHO, TOTAL (MG/L AS P)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
MAY												
05...	--	--	--	--	--	--	--	--	--	--	--	--
AUG												
03...	150	53	.9	2.4	460	.15	.140	.36	.110	.090	36	17

04198014 PICKEREL CREEK NEAR VICKERY, OH

LOCATION.--Lat 41°23'13", long 82°57'31", Sandusky County, Hydrologic Unit 04100011, at bridge on Township Road 247, 1.2 mi (1.9 km) northwest of Vickery, 3.4 mi (5.5 km) upstream from mouth.
DRAINAGE AREA.--44.3 mi^2 (114.7 km^2).
PERIOD OF RECORD.--Discharge, water years 1980 to current year (discontinued); chemical analyses, water years 1980 to current year (discontinued).

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE FET-FLD (MG/L AS HCO3)	CAR-BONATE FET-FLD (MG/L AS CO3)
AUG												
04...	0800	E2.5	2400	8.0	17.0	7.4	540	45	43	4.5	330	0

DATE	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHO, TOTAL (MG/L AS P)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
AUG												
04...	1500	75	1.2	9.3	2300	1.7	.280	.12	.160	.150	80	50

STREAMS TRIBUTARY TO LAKE ERIE

04199550 BEAVER CREEK AT AMHERST, OH

LOCATION.--Lat 41°25'35", long 82°13'58", Lorain County, Hydrologic Unit 04110001, at bridge on Longbrook Road, 0.2 mi (0.3 km) west of northern city limits of Amherst, 0.3 mi (0.5 km) downstream from unnamed creek "A", 1.8 mi (2.9 km) upstream from mouth.
DRAINAGE AREA.--43.4 mi^2 (112.4 km^2).
PERIOD OF RECORD.--Discharge, water years 1980 to current year; chemical analyses, water years 1980 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE FET-FLD (MG/L AS HCO3)	CAR-BONATE FET-FLD (MG/L AS CO3)
MAY 05...	1330	5.6	--	--	--	--	--	--	--	--	--	--
SEP 01...	1415	2.4	840	7.7	22.0	7.1	59	15	82	10	160	0

DATE	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHO, TOTAL (MG/L AS P)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
MAY 05...	--	--	--	--	--	--	--	--	--	--	--	--
SEP 01...	84	120	.7	5.8	520	5.7	3.20	1.3	1.60	1.60	94	58

04201498 EAST BRANCH ROCKY RIVER NEAR BEREA, OH

LOCATION.--Lat 41°24'21", long 81°53'10", Cuyahoga County, Hydrologic Unit 04110001, at bridge on park road in Rocky River Reservation, 0.1 mi (0.2 km) upstream from mouth 3.0 mi (4.8 km)northwest of Berea.
DRAINAGE AREA.--76.9 mi^2 (199.2 km^2).
PERIOD OF RECORD.--Discharge, water years 1980 to current year; chemical analyses, water years 1980 to current year.

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WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE FET-FLD (MG/L AS HCO3)	CAR-BONATE FET-FLD (MG/L AS CO3)
MAY 05...	1120	24	--	--	--	--	--	--	--	--	--	--
AUG 30...	1330	6.8	870	7.8	21.0	9.3	59	16	84	9.3	150	0

DATE	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHO, TOTAL (MG/L AS P)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
MAY 05...	--	--	--	--	--	--	--	--	--	--	--	--
AUG 30...	130	110	.7	4.7	509	3.5	3.90	1.9	2.40	2.30	33	36

Discharge Measurements made at low-flow partial-record stations during water year 1982

Station Number	Station name	Location	Drainage area (mi^2)	Period of Record	Measurements Date	Measurements Discharge (ft^3/s)
04184500	Bean Creek nr Powers, Oh	Lat 41°39'34", long 84°14'55" Fulton County, Hydrologic Unit 04100006, at bridge on County Highway 20, 5.2 mi (8.4 km) east of Fayette.	206	1940-81#	10-22-81 05-05-82 08-05-82	128 133 33.8
04185750	Auglaize River near Lima, OH	Lat 40°39'22", long 84°03'13", Allen County, Hydrologic Unit 04100007, at bridge on Amherst Road, 1.0 mi (1.6 km) upstream from Wrestle Creek, 1.1 mi (1.8 km) east of South Warsaw, 6.5 mi (10.5 km) southeast of courthouse in Lima.	41.8	1981-82, 1981*	04-30-82 08-10-82	12.6 1.92
04185998	Jennings Creek at Delphos, OH	Lat 40°51'08", long 84°20'58", Van Wert County, Hydrologic Unit 04100007, at bridge on street south of sewage treatment plant, Delphos, 2.0 mi (3.2 km) upstream from West Jennings Creek.	41.8	1981-82, 1981*	04-30-82 08-03-82	11.4 1.70
04186760	Hog Creek near Lafayette, OH	Lat 40°46'15", long 83°57'06", Allen County, Hydrologic Unit 04100007, at bridge on Swaney Road, 0.2 mi (0.3 km) upstream from Little Hog Creek, 0.8 mi (1.3 km) north of Lafayette.	67.7	1981-82, 1981*	04-29-82 08-03-82	14.3 2.74
04187500	Ottawa River at Allentown, Oh	Lat 40°45'18", long 84°11'41", Allen County, Hydrologic Unit 04100007, at bridge on State Highway 81 at Allentown, 0.3 mi (0.05 km) downstream from Kessler Run.	160	1923-35 1943-81#	10-15-81 04-29-82	29.2 54.0
04187995	Sugar Creek near Kalida, OH	Lat 40°57'16", long 84°10'45", Putnam County, Hydrologic Unit 04100007, at bridge on Putnam County Road 16P, 0.6 mi (1.0 km) upstream from mouth, 2.2 mi (3.5 km) southeast from Kalida.	64.2	1981-82, 1981*	04-29-82 08-04-82	13.2 1.44
04188392	Blanchard River above the outlet (2) near Findlay, OH	Lat 41°01'17", long 83°33'25", Hancock County, Hydrologic Unit 04100008, at bridge on Township Road 207, 0.2 mi (0.3 km) east of Findlay Reservoir, 4.0 mi (6.4 km) southeast of Findlay.	188	1981-82, 1981*	10-14-81 04-28-82 08-06-82	14.4 41.2 4.72
04189110	Ottawa Creek near Benton Ridge, OH	Lat 41°01'47", long 83°47'42", Hancock County, Hydrologic Unit 04100008, at bridge on Hancock County Road 86, 0.9 mi (1.4 km) upstream from mouth, 1.7 mi (2.7 km) north of Benton Ridge.	63.1	1981-82, 1981*	10-14-81 04-28-82 08-06-82	4.93 12.9 2.41

* Period of record for Water Quality Data
# Operated as a continuous record gaging station
NOTE--All sites in above table were discontinued in 1982.

LOW-FLOW PARTIAL RECORD STATIONS--Continued

Discharge Measurements made at low-flow partial-record stations during water year 1982

Station Number	Station name	Location	Drainage area (mi^2)	Period of Record	Measurements Date	Measurements Discharge (ft^3/s)
04196000	Sandusky River at Bucyrus Oh	Lat 40°48'13", long 83°00'21", Crawford County, Hydrologic Unit 04100011, at bridge on Township Road, 12 mi (19 km) downstream from Loss Creek, 1.5 mi (2.4 km) west of Bucyrus.	88.8	1925-35 1938-51 1963-81#	04-28-82 05-04-82 08-03-82 08-12-82	36.5 20.2 6.58 5.67
412602-082435400	Mills Creek at Sandusky, OH	Lat 41°26'02", long 82°43'54", Erie County, Hydrologic Unit 04100011, at bridge on Perkins Avenue in Sandusky, 1.3 mi (2.1 km) upstream from mouth.	40.3	1981-82, 1981*	05-04-82 08-03-82	11.8 4.24
410308-082393700	West Branch Huron River near New Haven, OH	Lat 41°03'08", long 82°39'37", Huron County, Hydrologic Unit 04100012, at bridge on Boughtonville Road, 0.5 mi (0.8 km) downstream from Marsh Run, 1.7 mi (2.7 km) northeast of New Haven, 3.3 mi (5.3 km) east of Willard.	69.4	1981-82, 1981*	05-03-82	20.6
04199465	East Fork Vermilion River near Birmingham, OH	Lat 41°18'14", long 82°20'40", Erie County, Hydrologic Unit 04100012, at bridge on Green Road, 1.9 mi (3.1 km) south of Birmingham, 2.3 mi (3.7 km) upstream from mouth.	32.8	1981-82, 1981*	05-03-82	4.03
04199600	West Fork East Branch Black River near Lodi, OH	Lat 41°01'10", long 82°03'07", Medina County, Hydrologic Unit 04110001, at bridge on U.S. Highway 42, 0.3 mi (0.5 km) upstream from Clear Creek, 0.4 mi (0.6 km) south of U.S. Highway 224, 2.3 mi (3.7 km) southwest of Lodi.	28.0	1981-82, 1981*	05-05-82	1.25
04208815	Chagrin River at Chagrin Falls, OH	Lat 41°25'33", long 81°23'52", Geauga County, Hydrologic Unit 04110003, at bridge on Miles Road, at west city limits of Chagrin Falls.	57.3	1981-82, 1981*	10-19-81 05-05-82	94.8 31.8
04208990	East Branch Chagrin River at Kirtland, OH	Lat 41°37'50", long 81°21'50", Lake County, Hydrologic Unit 04110003, at bridge on SR 306 in Kirtland.	45.6	1981-82, 1981*	10-19-81 05-05-82	66.1 24.2
04212085	Big Creek at Painesville, OH	Lat 41°41'50", long 81°13'47", Lake County, Hydrologic Unit 04110004, at bridge on Fry Road, 1.1 mi (1.8 km) upstream from mouth, 0.5 mi (0.8 km) south of south city limits of Painesville.	36.4	1981-82, 1981*	10-20-81 05-06-82	36.6 11.8

* Period of record for Water Quality Data
\# Operated as a continuous record gaging station
NOTE--All sites in above table were discontinued in 1982.

CREST-STAGE PARTIAL-RECORD STATIONS

The following table contains annual maximum discharge for crest-stage stations. A crest-stage is a device which will register the peak stage occurring between inspections of the gage. A stage-discharge relation for each gage is developed from discharge measurements made by indirect measurements of peak flow or by current meter. The date of the maximum discharge is not always certain but is usually determined by comparison with nearby continuous-record stations, weather records, or local inquiry. Only the maximum discharge for each water year is given. Information on some lower floods may have been obtained, and discharge measurements may have been made for purposes of establishing the stage-discharge relation, but these are not published herein. The years given in the period of record represent water years for which the annual maximum has been determined.

Annual maximum discharge at crest-stage partial-record stations during water year 1982

Station No.	Station name	Location	Drainage area (mi^2)	Period of record	Annual maximum: Date	Annual maximum: Gage height (feet)	Annual maximum: Discharge (ft^3/s)
		Streams tributary to Lake Erie					
04176870 (c)	Ketcham Ditch at Rowland Road at Toledo, OH	Lat 41°42'39", long 83°35'45", Lucas County, Hydrologic Unit 04100001, at culvert on Rowland Road, 0.3 mi (0.48 km) north of Laskey Road at Toledo.	0.84	1980-82	7-19-82	---	45
04176880 (c)	Silver Creek on Jackman Road at Toledo, OH	Lat 41°42'58", long 83°35'08", Lucas County, Hydrologic Unit 04100001, at culvert on Jackman Road, 0.3 mi (0.48 km) south of Alexis Road, at Toledo.	3.96	1980-82	10-27-81	---	176
04176890 (c)	Tifft Ditch on Foxglove Road at Toledo, OH	Lat 41°41'55", long 83°37'53", Lucas County, Hydrologic Unit 04100001, at culvert on Foxglove Road, 150 ft (46 m) south of Quintin Avenue at Toledo.	0.80	1980-82	5-27-82	---	68
04180907 (d)	Carter Creek near New Bremen, OH	Lat 40°26'16", long 84°19'34", Shelby County, Hydrologic Unit 04100004, at culvert on State Route 274, .58 mi west of State Route 29, .82 mi upstream of an unnamed tributary and 2.27 mi east of New Bremen	0.72	1982	5-27-82	11.49	34
04183750 (d)	Middle Fork Gordon Creek tributary at Hicksville, OH	Lat 41°18'58", long 84°46'00", Defiance County, Hydrologic Unit 04100005, at culvert on Hicksville-Edgerton Road, 0.2 mi (0.3 km) south of Middle Fork Gordon Creek, 0.9 mi (1.4 km) north of Hicksville.	0.34	1978-82	5-27-82	14.75	82
04184750	Spring Creek at Fayette, OH	Lat 41°40'32", long 84°19'47", Fulton County, Hydrologic Unit 04100006, at culvert on Gorham Street, 800 ft (240 km) north of U.S. Highway 20 in Fayette.	2.58	1978-82	3-13-82	98.63	395
04184760	Bean Creek tributary near Fayette, OH	Lat 41°39'08", long 84°17'34", Fulton County, Hydrologic Unit 04100006, at culvert on Fulton County Highway N, 1.5 mi (2.4 km) south of U.S. Highway 20, and 2.3 mi (3.7 km) southeast of Fayette.	0.56	1978-82	No valid peak this year		
04185150	Beaver Creek tributary near Montpelier, OH	Lat 41°34'19", long 84°31'03", Williams County, Hydrologic Unit 04100006 on Williams County Road K, 2.0 mi (3.2 km) east of State Highway 15, and 4.7 mi (7.6 km) east of Montpelier.	0.40	1978-82	No valid peak this year		
04185945	Auglaize River tributary near Spencerville, OH	Lat 40°42'27", long 84°19'06", Allen County, Hydrologic Unit 04100007, at culvert on State Highway 117, 1.8 mi (2.9 km) east of Spencerville.	0.51	1978-82	5-28-82	99.60	136
04186800 (d)	King Run near Harrod, OH	Lat 40°43'57", long 83°53'47", Allen County, Hydrologic Unit 04100007, at culvert on State Route 309, 0.9 mi (1.4 km) west of Allen-Hardin County line, 2.2 mi (3.5 km) northeast of Harrod.	0.53	1966-82	5-27-82	22.68	166

CREST-STAGE PARTIAL-RECORD STATIONS--Continued

Station No.	Station Name	Location	Drainage area (mi^2)	Period of record	Annual maximum Date	Gage height (feet)	Discharge (ft^3/s)
04187700 (c)	Pike Run at Lima, OH	Lat 40°46'06", long 84°06'57", Allen County, Hydrologic Unit 04100007, at culvert on Metcalf Road between Burch Avenue and Brower Road at Lima.	1.18	1980-82	5-27-82	14.73	272
04187945	Rattlesnake Creek near Cairo, OH	Lat 40°49'20", long 84°04'16", Allen County, Hydrologic Unit 04100007, at culvert on Stewart Road, 1.2 mi southeast of Cairo.	1.45	1978-82	No valid peak this year		
04190350	Little Auglaize River tributary at Ottoville, OH	Lat 40°55'05", long 84°20'47", Putnam County, Hydrologic Unit 04100007, at culvert on State Highway 66, 1.0 mi (1.6 km) south of Ottoville.	1.04	1978-82	No valid peak this year		
04191003 (d)	Stripe Creek near Van Wert, OH	Lat 40°54'29", long 84°33'43", Van Wert County, Hydrologic Unit 04100007, at culvert on State Route 224, .76 mi northeast of State Route 127, 700 ft upstream of Town Creek and 1.87 mi north of Van Wert.	1.50	1982	1- 4-82	14.00	98
04191480	Beetree Run near Junction, OH	Lat 41°13'26", long 84°24'33, Defiance County, Hydrologic Unit 04100007, at culvert on private drive from Bowman Road 12, near Sponseller Road 158, 3.2 mi (5.1 km) northeast of Junction.	1.66	1978-82	3-14-82	101.74	139
04193900 (c)	Grassy Creek at Perrysburg, OH	Lat 41°33'20", long 83°36'45", Wood County, Hydrologic Unit 04100009, at culvert on East Boundry Street, 1/2 block northwest of Sandusky Street at Perrysburg.	1.83	1980-82	10-27-81	---	210
04196825 (d)	Browns Run near Crawford, OH	Lat 40°53'13", long 83°20'15", Wyandot County, Hydrologic Unit 04100011, at culvert on U.S. Highway 23, 5.9 mi north of U.S. Highway 30N, 1.29 mi upstream of Little Tymochtee Creek and 2.3 mi south of Crawford.	2.00	1982	3-11-82	15.00	176
04198019 (d)	Sandhill Creek near Monroeville, OH	Lat 41°12'13", long 82°42'56", Huron County, Hydrologic Unit 04100012, at culvert on State Route 99, 1,200 ft upstream of Slate Runm 1.1 mi north of Pontiac, and 2.4 mi south of Monroeville.	1.76	1982	7- 3-82	12.70	77
04198100	Norwalk Creek near Norwalk, OH	Lat 41°13'58", long 82°32'28", Huron County, Hydrologic Unit 04100012, at bridge on county road, 300 ft (91 m) south of junction of State Highways 601 and 18, 4.0 mi (6.4 km) southeast of Norwalk, 6.0 mi (9.7 km) upstream from mouth.	4.92	1947-82 (discontinued)	1-31-82	13.16	332
04199800	Neff Run near Litchfield, OH	Lat 41°12'33", long 82°01'26", Lorain County, Hydrologic Unit 041100001, at culvert on State Highway 83, 0.7 mi (1.1 km) north of county line, 2.8 mi (4.5 km) north of Litchfield.	0.76	1966-82 (discontinued)	3-31-82	18.76	58
04200800 (c)	Glen Park Creek at Bay Village, OH	Lat 41°29'09", long 81°54'46", Cuyahoga County, Hydrologic Unit 04110001, at culvert on Short Street, 350 ft (107 m) north of Wolf Road, 150 ft (46 m) west of Glen Park Road, at Bay Village.	1.60	1980-82	6-29-82	13.86	149

CREST-STAGE PARTIAL-RECORD STATIONS--Continued

Station No.	Station Name	Location	Drainage area (mi^2)	Period of record	Annual maximum Date	Gage height (feet)	Discharge (ft^3/s)
04201302 (d)	Delwood Run at Valley City, OH	Lat 41°14'15", long 81°55'18", Medina County, Hydrologic Unit 04110001, at culvert on State Route 303, 250 ft east of State Route 252, 400 ft upstream of West Branch Rocky River, and about .5 mi east of Valley City.	0.45	1982	6-28-82	11.97	27
04201895 (d)	Fire Run at Auburn Corners, OH	Lat 41°23'36", long 81°12'56", Geauga County, Hydrologic Unit 04110002, at culvert on State Route 44, .6 mi upstream of LaDue Reservoir, and .4 mi north of U.S. Highway 422 in Auburn Corners.	0.30	1982	6-29-82	11.26	17
04207110 (c)	Tinkers Creek tributary at Twinsburg, OH	Lat 41°19'30", long 81°28'47", Summit County, Hydrologic Unit 04110002, at culvert on Chamberlin Road about 1.5 mi (2.4 km) north of Rt. 82 at Twinsburg.	0.07	1980-82	6-29-82	10.90	26
04208580 (c)	North Fork Doan Brook at Shaker Heights, OH	Lat 41°28'57", long 81°32'34", Cuyahoga County, Hydrologic Unit 04110003, at culvert on Courtland Boulevard between Fairmount Boulevard and South Woodland Road at Shaker Heights.	1.10	1980-82	9-14-82	13.72	180
04208640 (c)	Dugway Brook at Cleveland Heights, OH	Lat 41°30'35", long 81°34'06", Cuyahoga County, Hydrologic Unit 04110003, at culvert on Euclid Heights Boulevard, between Superior Road and Lee Road at Cleveland Heights.	2.20	1980-82 (discontinued)	11-20-82	15.21	274
04208680 (c)	Euclid Creek tributary at Lyndhurst, OH	Lat 41°31'52", long 81°30'14", Cuyahoga County, Hydrologic Unit 04110003, at culvert on Ridgebury Boulevard between Richmond Road and Anderson Road at Lyndhurst.	1.70	1980-82 (discontinued)	7-19-82	14.47	781
04208685 (c)	Mall Run at Richmond Heights, OH	Lat 41°32'35", long 81°29'54", Cuyahoga County, Hydrologic Unit 04110003, at culvert behind St. Gregory of Narek Armenian Church, 666 Richmond Road, Richmond Heights.	0.11	1980-82 (discontinued)	9-14-82	13.87	93
04210100	Hoskins Creek at Hartsgrove, OH	Lat 41°36'00", long 80°57'12", Ashtabula County, Hydrologic Unit 04110004, at culvert on State Route 534, 0.4 mi south of Hartsgrove.	5.42	1982	6- 6-82	7.76	172
04212600	Hubbard Run tributary at Ashtabula, OH	Lat 41°50'38", long 80°46'42", Ashtabula County, Hydrologic Unit 04110003, at culvert on Seven Hills Road, 0.5 mi (0.8 km) upstream from mouth, 1.6 mi (2.6 km) south of center of Ashtabula.	0.88	1966-82	3-31-82	99.91	15

c Operated as an urban hydrology site where additional data may be available.
d Operated as a rural flood volume site where additional data may be available.

CRAWFORD COUNTY

404838082563100. Local number, CR-1.
LOCATION.--Lat 40°48'38", long 82°56'31", Hydrologic Unit 04100011, Timken Roller Bearing Co., U.S. 30 in Bucyrus.
Owner: Timken Roller Bearing Co.
AQUIFER.--Sand and gravel of Pleistocene Age.
WELL CHARACTERISTICS.--Drilled test water-table well, diameter 6 in (0.15 m), depth 54 ft (15.5 m), cased.
DATUM.--Altitude of land-surface datum is 1039.13 ft (316.727 m). Measuring point: Floor of instrument shelter 3.50 ft (1.067 m) above land-surface datum.
REMARKS.--Station operated by Ohio Department of Natural Resources, Division of water.
PERIOD OF RECORD.--April 1962 to current year.
EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 37.64 ft (11.473 m) Dec. 11, 1962; minimum daily low, 17.31 ft (5.276 m) May 21, 1969.
EXTREMES FOR CURRENT YEAR.--Maximum daily low, 25.56 ft (7.791 m) Sep. 18; minimum daily low, 18.64 ft (5.681 m) Apr. 25.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19.34	20.10	19.88	19.70	24.04	21.57	19.72	18.86	19.46	20.91	20.96	23.22
2	19.52	20.09	20.04	19.68	23.73	21.54	19.67	18.90	19.46	20.71	21.70	23.24
3	19.59	20.12	20.06	19.49	23.46	21.59	19.36	18.94	19.50	20.64	22.37	23.55
4	19.57	20.08	20.18	19.18	23.47	21.39	19.62	18.99	19.47	20.65	22.72	23.70
5	19.56	20.01	20.22	19.28	23.26	21.49	19.59	18.97	19.44	20.19	23.18	23.82
6	19.54	20.02	20.20	19.12	23.15	21.37	19.70	18.95	19.50	20.09	23.29	23.97
7	19.57	20.10	19.96	19.28	23.03	21.32	19.74	18.92	19.51	20.01	23.14	24.23
8	19.62	20.15	20.05	19.27	22.95	21.42	19.59	19.02	19.53	20.00	22.62	24.33
9	19.66	20.28	20.20	18.97	22.80	21.41	19.46	19.09	19.52	19.98	22.94	24.18
10	19.66	20.26	20.17	20.26	22.84	21.27	19.46	19.11	19.60	19.93	23.46	23.97
11	19.73	20.25	20.06	21.04	22.75	21.09	19.28	19.08	19.65	19.92	23.91	23.74
12	19.76	20.30	20.14	21.37	22.75	21.08	19.17	19.09	19.61	20.01	24.06	23.62
13	19.81	20.29	20.12	21.71	22.63	20.88	18.91	19.14	19.62	20.03	23.81	23.97
14	19.78	20.23	20.28	22.03	22.53	20.90	18.91	19.16	19.65	21.05	23.33	24.50
15	19.70	20.13	20.24	22.28	22.48	20.74	18.81	19.18	19.58	21.77	23.09	24.88
16	19.78	20.09	20.18	22.78	22.43	20.57	18.77	19.22	19.53	21.10	23.04	25.19
17	19.76	20.16	20.14	23.03	22.27	20.41	18.78	19.24	19.57	20.73	23.13	25.34
18	19.74	20.22	20.17	23.29	22.25	20.36	18.82	19.24	19.61	20.59	23.19	25.56
19	19.88	20.21	20.21	23.55	22.19	20.27	18.66	19.24	19.59	20.50	23.22	25.37
20	19.89	20.10	20.24	23.70	22.09	20.08	18.72	19.24	19.60	20.49	23.25	24.94
21	19.93	20.20	20.10	24.07	21.97	20.07	18.83	19.32	19.61	20.51	23.20	24.76
22	19.92	20.22	19.98	24.08	22.02	20.05	18.83	19.30	19.69	20.43	23.11	24.55
23	20.00	20.21	19.99	24.18	21.88	20.01	18.82	19.28	19.74	20.53	22.96	24.43
24	20.00	20.23	19.90	24.41	21.92	19.93	18.70	19.30	19.76	20.58	22.92	24.33
25	19.90	20.24	19.72	24.64	21.98	19.95	18.64	19.30	19.74	20.51	22.91	24.21
26	19.87	20.10	19.60	24.76	21.91	20.06	18.68	19.26	19.76	20.48	22.85	24.19
27	19.97	20.17	19.59	24.80	21.75	20.17	18.89	19.30	19.76	21.17	22.73	24.07
28	20.06	20.23	19.67	25.16	21.71	20.21	18.93	19.28	20.97	21.17	22.76	24.11
29	20.05	20.24	19.80	25.18	---	20.10	18.92	19.27	21.86	21.15	22.75	24.02
30	20.09	20.20	19.82	24.53	---	19.97	18.91	19.27	21.36	21.19	22.61	23.97
31	20.11	---	19.63	24.19	---	19.82	---	19.26	---	21.11	22.96	---
MAX	20.11	20.30	20.28	25.18	24.04	21.59	19.74	19.32	21.86	21.77	24.06	25.56

WTR YR 1982 MEAN 20.93 HIGH 18.64 LOW 25.56

GEAUGA COUNTY

412518081221500. Local number, GE-3A.
LOCATION.--Lat 41°25'18", long 81°22'15", Hydrologic Unit 04110003, 1.2 mi (1.9 km) southeast of Chagrin Falls. Owner: City of Chagrin Falls.
AQUIFER.--Sandstone of Pennsylvanian Age.
WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 6 in (0.15 m), depth drilled 120 ft (36.6 m), present depth 89 ft (27.1 m), cased.
DATUM.--Altitude of land-surface datum is 1130 ft (344 m), from topographic map. Measuring point: Floor of instrument shelter 3.00 ft (0.914 m) above land-surface datum.
PERIOD OF RECORD.--September 1951 to current year.
REMARKS.--Water level affected by pumping wells nearby for Chagrin Falls municipal supply.
EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 52.85 ft (16.109 m) Oct. 2, 1965; minimum daily low, 8.70 ft (2.652 m) May 17, 1973.
EXTREMES FOR CURRENT YEAR.--Maximum daily low low, 16.69 ft (5.087 m) Sept. 30; minimum daily low, 10.33 ft (3.149 m) Apr. 3.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15.88	15.98	14.60	13.67	12.92	12.04	11.20	10.91	11.97	12.52	13.77	14.98
2	16.32	15.87	14.60	13.76	12.82	11.82	11.21	10.93	12.17	12.53	13.94	14.83
3	16.26	15.90	14.65	13.36	12.31	11.86	10.33	10.98	12.29	12.22	14.03	15.09
4	16.46	15.77	14.80	12.93	12.69	---	11.03	11.06	12.32	12.25	14.17	15.33
5	16.19	15.60	14.89	13.31	12.58	---	11.03	11.03	12.20	12.29	14.41	15.40
6	16.39	15.31	14.87	12.99	12.42	---	10.99	10.91	12.39	12.31	14.45	15.46
7	16.24	15.52	14.43	13.25	12.34	---	11.16	10.79	12.43	12.19	14.46	15.54
8	16.24	15.63	14.41	13.26	12.31	---	11.08	10.99	12.31	12.24	14.36	15.58
9	16.27	15.95	14.52	12.74	12.02	---	10.77	11.11	12.29	12.24	14.35	15.57
10	16.22	15.93	14.39	---	12.25	---	10.86	11.14	12.29	12.25	14.59	15.50
11	16.19	15.83	14.41	---	12.35	---	10.74	11.07	12.41	12.18	14.63	15.57
12	16.25	15.92	14.56	---	12.43	---	10.80	11.04	12.33	12.44	14.68	15.65
13	16.32	15.89	14.54	---	12.23	---	10.66	11.12	12.32	12.56	14.62	15.71
14	16.23	15.75	14.37	---	12.14	---	10.79	11.17	12.35	12.61	14.59	15.69
15	16.10	15.48	14.09	---	12.03	---	10.73	11.22	12.27	12.69	14.61	15.72
16	15.97	15.28	14.24	---	12.06	---	10.65	11.26	12.12	12.72	14.62	15.92
17	15.94	15.18	14.21	---	11.89	---	10.62	---	12.27	12.68	14.65	15.97
18	15.39	15.33	14.14	13.01	11.96	---	10.79	---	12.29	12.67	14.72	15.91
19	16.02	15.33	14.16	13.00	11.92	---	10.71	---	12.19	12.64	14.74	15.97
20	15.92	14.97	14.26	13.22	11.86	---	10.69	---	12.20	12.87	14.61	15.99
21	16.03	15.32	14.09	13.41	11.77	---	10.94	---	12.23	13.00	14.81	16.12
22	16.00	15.40	13.68	13.41	11.97	---	11.03	---	12.34	12.98	14.78	16.15
23	15.92	15.43	13.94	12.59	11.93	---	11.01	---	12.49	13.13	14.66	16.23
24	16.07	15.32	14.02	12.76	12.11	10.90	10.82	---	12.54	13.22	14.76	16.23
25	15.89	15.39	13.94	12.88	12.52	10.89	10.73	---	12.46	13.23	14.81	16.30
26	15.74	15.23	13.75	13.11	12.51	11.12	10.57	11.64	12.46	13.28	14.90	16.33
27	15.59	15.09	13.45	13.12	12.32	11.57	10.95	11.69	12.45	13.29	14.91	16.30
28	16.00	15.21	13.50	13.06	12.28	11.68	11.05	11.77	12.30	13.38	15.17	16.64
29	16.00	15.23	13.89	13.20	---	11.57	11.10	11.79	12.14	13.51	15.25	16.68
30	16.05	15.15	13.94	12.74	---	11.28	11.06	11.84	12.38	13.52	15.05	16.69
31	16.08	---	13.65	12.74	---	10.99	---	11.90	---	13.60	15.06	---
MAX	16.46	15.98	14.89	13.76	12.92	12.04	11.21	11.90	12.54	13.60	15.25	16.69

WTR YR 1982 MEAN 13.54 HIGH 10.33 LOW 16.69

405332083421700. Local number, HA-15.
LOCATION.--Lat 40°53'32", long 83°42'17", Hydrologic Unit 04100008, 1.3 mi (2.1 km) southeast of Jenera.
Owner: Edgar Wilson.
AQUIFER.--Limestone of Silurian Age.
WELL CHARACTERISTICS.--Drilled test artesian well, diameter 12 in (0.3 m), depth drilled 280 ft (85.3 m), present depth 278 ft (84.7 m), cased to 7 ft (2.1 m).
DATUM.--Altitude of land-surface datum is 850 ft (259 m), from topographic map.
Measuring point: Floor of instrument shelter 3.00 ft (0.914 m) above land-surface datum.
PERIOD OF RECORD.--October 1975 to current year.
EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 3.47 ft (1.058 m) Jan. 12, 1977; minimum daily low, 0.82 ft (0.250 m) above land-surface datum Mar. 15, 1978.
EXTREMES FOR CURRENT YEAR.--Maximum recorded daily low, 2.60 ft (0.792 m) Sept. 30; minimum daily low, 0.38 ft (0.116 m) above land-surface datum May 28.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	0.83	0.59	0.49	0.48	0.52	0.13	0.76	0.23	1.06	1.57	2.15
2	---	0.85	0.61	0.50	0.56	0.43	0.15	0.78	0.38	1.07	1.58	2.15
3	---	0.86	0.62	0.44	0.66	0.50	0.10	0.80	0.48	0.97	1.61	2.20
4	---	0.86	0.68	0.08	0.75	0.44	0.28	0.82	0.55	0.85	1.65	2.24
5	---	0.84	0.70	0.22	0.73	0.29	0.30	0.83	0.63	0.90	1.70	2.25
6	---	0.87	0.68	0.36	0.77	0.33	0.35	0.83	0.71	0.92	1.72	2.28
7	---	0.90	0.60	0.53	0.76	0.47	0.39	0.84	0.73	0.95	1.73	2.29
8	---	0.94	0.59	0.52	0.76	0.53	0.36	0.85	0.76	0.97	1.72	2.30
9	---	1.01	0.64	0.54	0.76	0.58	0.28	0.90	0.79	1.00	1.66	2.31
10	---	0.99	0.66	0.59	0.78	0.55	0.29	0.91	0.82	0.99	1.71	2.31
11	---	1.03	0.70	0.60	0.80	0.18	0.16	0.91	0.86	1.01	1.74	2.34
12	---	1.04	0.73	0.63	0.82	-0.20	0.13	0.94	0.84	1.07	1.77	2.37
13	---	1.04	0.73	0.63	0.80	-0.24	0.21	0.98	0.89	1.10	1.78	2.39
14	---	1.03	0.72	0.65	0.78	-0.10	0.28	1.00	0.92	1.12	1.81	2.41
15	---	1.00	0.72	0.69	0.77	-0.01	0.31	1.04	0.91	1.14	1.84	2.39
16	---	0.98	0.77	0.80	0.68	-0.01	0.34	1.07	0.85	1.17	1.88	2.43
17	---	1.01	0.76	0.80	0.35	-0.18	0.33	1.08	0.70	1.19	1.92	2.43
18	---	1.04	0.79	0.79	0.18	-0.04	0.37	1.09	0.73	1.20	1.95	2.45
19	---	1.01	0.82	0.84	0.30	0.01	0.39	1.10	0.78	1.19	1.98	2.46
20	---	0.81	0.84	0.87	0.30	-0.12	0.49	1.12	0.80	1.24	1.97	2.50
21	---	0.81	0.79	0.94	0.23	0.08	0.55	1.14	0.79	1.28	1.97	2.52
22	---	0.84	0.76	0.94	0.28	0.19	0.59	1.10	0.84	1.28	1.97	2.53
23	---	0.84	0.37	0.66	0.25	0.24	0.60	0.95	0.90	1.31	1.97	2.55
24	---	0.78	0.45	0.37	0.32	0.32	0.60	0.97	0.91	1.34	1.99	2.55
25	---	0.72	0.48	0.60	0.49	0.33	0.59	0.98	0.91	1.38	2.03	2.57
26	---	0.66	0.49	0.75	0.53	0.34	0.63	0.97	0.94	1.40	2.05	2.58
27	---	0.70	0.49	0.76	0.55	0.43	0.70	0.96	0.94	1.41	2.08	2.54
28	0.68	0.74	0.54	0.89	0.58	0.45	0.72	-0.38	0.95	1.45	2.15	2.59
29	0.74	0.74	0.59	0.90	---	0.42	0.74	-0.31	0.93	1.48	2.16	2.59
30	0.80	0.73	0.60	0.80	---	0.37	0.75	-0.12	1.03	1.50	2.15	2.60
31	0.83	---	0.54	0.21	---	-0.01	---	0.02	---	1.53	2.17	---
MAX	0.68	0.66	0.37	0.08	0.18	-0.24	0.10	-0.38	0.23	0.85	1.57	2.15

WTR YR 1982 MEAN 0.94 MAX -0.38 MIN 2.60

HARDIN COUNTY

404648083412600. Local number, HN-2A.
LOCATION.--Lat 40°46'48", long 83°41'26", Hydrologic Unit 04100007, at southeast edge of Dola.
Owner. Ohio Power Company
AQUIFER.--Limestone of Silurian Age.
WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 6 in (0.15 m), depth 51 ft (15.5 m) cased.
DATUM.--Altitude of land-surface datum is 945 ft (288 m), from topographic map. Measuring point: Floor of instrument shelter 2.88 ft (0.878 m) above land-surface datum.
REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.
PERIOD OF RECORD.--December 1954 to current year.
EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 15.86 ft (4.834 m) Jan. 20, 21, 1965; minimum daily low, 5.65 ft (1.722 m) Apr. 3, 1982.
EXTREMES FOR CURRENT YEAR.--Maximum daily low, 9.47 ft (2.886 m) Sep. 30; minimum daily low, 5.65 ft (1.722 m) Apr. 3.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.15	7.45	6.74	6.72	6.96	6.35	6.12	6.30	6.35	6.53	6.96	8.08
2	7.44	7.37	6.54	6.71	6.95	6.22	6.12	6.34	6.45	6.50	6.96	7.99
3	7.55	7.33	6.70	6.41	6.57	6.38	5.65	6.39	6.46	6.32	7.01	8.23
4	7.50	7.24	6.72	6.28	6.96	6.23	6.16	6.41	6.46	6.42	7.05	8.39
5	7.45	7.12	7.04	6.50	7.00	6.44	6.24	6.40	6.37	6.49	7.23	8.43
6	7.40	6.89	7.04	6.31	6.75	6.43	6.23	6.34	6.42	6.47	7.26	8.49
7	7.45	7.02	6.96	6.64	6.75	6.45	6.40	6.34	6.43	6.46	7.26	8.55
8	7.50	7.03	6.62	6.64	6.61	6.60	6.39	6.46	6.38	6.50	7.23	8.60
9	7.53	7.33	6.88	6.20	6.51	6.62	6.06	6.55	6.40	6.49	7.19	8.56
10	7.50	7.37	6.87	6.46	6.61	6.48	6.15	6.53	6.41	6.44	7.42	8.50
11	7.59	7.22	6.81	6.47	6.47	6.25	6.14	6.50	6.46	6.43	7.49	8.51
12	7.65	7.33	6.91	6.57	6.54	6.25	6.09	6.50	6.37	6.61	7.55	8.58
13	7.71	7.32	6.92	6.36	6.46	6.26	5.90	6.56	6.30	6.66	7.52	8.61
14	7.67	7.28	6.89	6.26	6.51	6.38	6.17	6.58	6.38	6.65	7.51	8.61
15	7.57	7.14	6.65	6.42	6.50	6.24	6.16	6.59	6.32	6.67	7.54	8.65
16	7.57	6.95	6.79	6.78	6.51	6.05	6.03	6.62	6.15	6.56	7.58	8.80
17	7.54	6.80	6.81	6.82	6.38	6.24	5.97	6.62	6.21	6.60	7.63	8.82
18	7.27	6.95	6.85	6.59	6.36	6.24	6.25	6.57	6.21	6.57	7.72	8.75
19	7.56	6.94	6.93	6.65	6.43	6.20	6.24	6.53	6.19	6.53	7.75	8.75
20	7.56	6.73	7.00	6.80	6.35	5.90	6.01	6.52	6.19	6.71	7.72	8.84
21	7.68	7.06	6.99	6.98	6.36	6.03	6.39	6.62	6.19	6.76	7.82	8.92
22	7.69	7.12	6.50	6.98	6.49	6.08	6.38	6.56	6.31	6.73	7.83	8.97
23	7.71	7.12	6.68	6.31	6.38	6.08	6.38	6.59	6.40	6.80	7.73	9.03
24	7.77	7.06	6.83	6.58	6.62	5.98	6.30	6.64	6.40	6.86	7.80	8.97
25	7.66	7.15	6.80	6.74	6.81	6.05	6.17	6.62	6.33	6.87	7.88	9.03
26	7.53	7.09	6.64	6.90	6.81	6.24	6.06	6.53	6.32	6.88	7.95	9.06
27	7.51	6.99	6.40	6.88	6.61	6.44	6.34	6.48	6.32	6.87	7.92	9.24
28	7.63	7.10	6.45	6.95	6.50	6.45	6.44	6.44	6.23	6.89	8.14	9.41
29	7.61	7.11	6.67	7.01	---	6.28	6.43	6.40	6.20	6.94	8.25	9.46
30	7.54	7.06	6.88	6.67	---	6.07	6.38	6.33	6.47	6.92	8.14	9.47
31	7.51	---	6.65	6.54	---	6.03	---	6.34	---	6.89	8.12	---
MAX	7.77	7.45	7.04	7.01	7.00	6.62	6.44	6.64	6.47	6.94	8.25	9.47

WTR YR 1982 MEAN 6.91 HIGH 5.65 LOW 9.47

HENRY COUNTY

412123083574000. Local number, HY-2.
LOCATION.--Lat 41°21'23", long 83°57'40", Hydrologic Unit 04100009, 1.4 mi (2.3 km) southwest of McClure.
Owner: State of Ohio.
AQUIFER.--Limestone of Silurian Age.
WELL CHARACTERISTICS.--Drilled test artesian well, diameter 12 in (0.3 m), depth 300 ft (91.4 m), cased to 43 ft (13.1 m).
DATUM.--Altitude of land-surface datum is 680 ft (207 m), from topographic map. Measuring point: Floor of instrument shelter 3.00 ft (0.914 m) above land-surface datum.
PERIOD OF RECORD.--June 1971 to current year.
EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 22.76 ft (6.937 m) May 30, 1977; minimum daily low, 14.55 ft (4.435 m) Mar. 22, 1978.
EXTREMES FOR CURRENT YEAR.--Maximum daily low, 21.09 ft (6.428 m) Aug. 7; minimum daily low, 16.71 ft (5.093 m) Apr. 16.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20.06	19.10	18.49	18.16	19.37	17.12	17.32	18.57	19.12	20.33	20.96	20.81
2	20.00	19.05	18.96	18.12	19.29	17.05	17.26	18.72	19.02	20.34	20.88	20.78
3	20.03	18.97	19.12	17.79	19.28	17.15	16.85	18.72	18.88	20.09	20.88	20.88
4	20.00	18.84	19.39	17.61	19.45	17.28	17.11	18.84	18.93	19.85	20.95	20.99
5	19.89	18.71	19.62	17.67	19.35	17.69	17.06	18.88	19.06	19.51	21.08	20.96
6	19.81	18.67	19.60	17.52	19.44	17.75	16.96	18.74	19.20	19.20	21.05	21.03
7	19.84	18.72	19.39	17.67	19.40	18.00	17.07	18.64	19.24	18.96	21.09	21.03
8	19.87	18.74	19.59	17.61	19.36	18.08	17.00	18.70	19.28	19.10	20.95	21.02
9	19.89	18.88	19.52	17.31	19.24	18.22	16.85	18.75	19.44	19.38	20.82	20.99
10	19.74	18.79	19.39	17.30	19.15	18.16	16.87	18.71	19.64	19.54	20.79	20.92
11	19.50	18.81	19.39	17.38	18.76	18.13	16.85	18.66	19.62	19.65	20.56	20.92
12	19.29	18.81	19.40	17.40	18.48	18.14	16.80	18.69	19.39	19.86	20.33	20.96
13	19.48	18.77	19.38	17.25	18.15	17.89	16.77	18.71	19.20	20.00	20.14	20.99
14	19.58	18.69	19.22	17.16	17.91	17.89	16.84	18.82	19.23	20.06	20.03	20.98
15	19.58	18.60	18.84	17.15	17.69	17.79	16.81	19.01	19.09	20.28	19.99	20.97
16	19.44	18.49	18.57	17.36	17.64	17.75	16.71	19.15	19.11	20.42	19.93	21.00
17	19.31	18.44	18.41	17.37	17.50	17.97	16.77	19.25	19.42	20.55	19.93	20.79
18	18.99	18.49	18.28	17.37	17.45	18.04	16.83	19.29	19.57	20.61	20.26	20.15
19	19.10	18.39	18.56	17.32	17.43	18.03	16.74	19.38	19.68	20.64	20.40	19.90
20	19.08	18.32	18.73	17.36	17.31	17.91	16.82	19.47	19.61	20.77	20.47	19.56
21	19.12	18.48	18.64	17.92	17.36	18.05	16.92	19.52	19.27	20.86	20.64	19.44
22	19.10	18.52	18.62	17.97	17.34	18.14	17.11	19.53	19.02	20.77	20.63	19.31
23	19.04	18.45	18.93	18.19	17.28	18.12	17.49	19.58	18.91	20.80	20.63	19.20
24	19.10	18.49	19.01	18.54	17.36	18.12	17.81	19.65	18.85	20.91	20.66	19.56
25	18.98	18.46	18.98	18.78	17.50	18.11	17.99	19.64	19.20	20.85	20.75	19.99
26	18.90	18.31	18.93	18.98	17.47	18.23	18.12	19.60	19.58	20.83	20.79	20.20
27	19.16	18.41	18.93	18.97	17.37	18.42	18.29	19.55	19.74	20.69	20.81	20.41
28	19.51	18.53	18.97	19.18	17.30	18.35	18.35	19.38	19.84	20.58	20.97	20.66
29	19.45	18.51	19.01	19.21	---	17.99	18.35	19.31	19.95	20.71	20.98	20.79
30	19.26	18.48	18.95	19.13	---	17.64	18.44	19.18	20.13	20.78	20.85	20.86
31	19.15	---	18.49	19.15	---	17.28	---	19.19	---	20.86	20.86	---
MAX	20.06	19.10	19.62	19.21	19.45	18.42	18.44	19.65	20.13	20.91	21.09	21.03

WTR YR 1982 MEAN 19.03 HIGH 16.71 LOW 21.09

LORAIN COUNTY

411545082072400. Local number, LN-1.
LOCATION.--Lat 41°15'45", long 82°07'24", Hydrologic Unit 04110001, 1.7 mi (2.7 km) north of LaGrange.
Owner: LaGrange Water Department.
AQUIFER.--Sandstone of Mississippian Age.
WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 6 in (0.15 m), depth 47 ft (14.3 m), cased.
DATUM.--Altitude of land-surface datum is 795 ft (242 m), from topographic map. Measuring point: Floor of instrument shelter 1.50 ft (0.457 m) above land-surface datum.
PERIOD OF RECORD.--September 1946 to current year.
EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 35.60 ft (10.851 m) Oct. 25, 1952; minimum daily low, 0.13 ft (0.040 m) Jan. 8, 1975.
EXTREMES FOR CURRENT YEAR.--Maximum daily low, 7.04 ft (2.146 m) Sept. 29; minimum daily low, 0.78 ft (0.238 m) Apr. 3.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.32	5.72	4.94	2.75	2.99	2.26	1.23	2.09	2.22	2.36	3.49	5.43
2	4.62	5.69	5.11	2.73	2.91	2.13	1.25	2.14	2.35	2.35	3.56	5.43
3	4.77	5.73	5.15	2.33	2.71	2.26	.78	2.21	2.42	2.11	3.78	5.74
4	4.75	5.64	5.21	1.99	2.95	2.01	1.37	2.27	2.43	2.05	3.79	5.93
5	4.70	5.51	5.16	2.26	2.85	2.21	1.37	2.27	2.38	2.08	3.74	5.99
6	4.67	5.40	5.03	1.99	2.80	2.13	1.43	2.21	2.48	2.05	3.69	6.07
7	4.76	5.56	4.53	2.28	2.74	2.07	1.56	2.19	2.50	2.02	3.99	6.15
8	4.90	5.70	4.48	2.28	2.76	2.28	1.44	2.35	2.41	2.07	3.99	6.20
9	4.97	5.93	4.53	1.85	2.62	2.26	1.17	2.44	2.43	2.13	---	6.18
10	4.97	5.90	4.40	2.03	2.81	2.13	1.23	2.47	2.52	2.14	---	6.12
11	5.10	5.86	4.37	2.21	2.89	1.79	1.07	2.42	2.60	2.19	4.06	6.20
12	5.18	5.94	4.45	2.36	2.96	1.80	1.11	2.44	2.56	2.42	4.14	6.27
13	5.25	5.91	4.43	2.18	2.84	1.60	1.12	2.51	2.62	2.54	---	6.35
14	5.21	5.79	4.31	2.11	2.75	1.71	1.23	2.54	2.66	2.58	---	6.35
15	5.08	5.59	4.15	2.30	2.72	1.62	1.21	2.59	2.62	2.65	---	6.40
16	5.16	5.47	4.33	2.63	2.74	1.39	1.20	2.63	2.55	2.67	---	6.58
17	5.16	5.49	4.32	2.73	2.56	1.46	1.36	2.68	2.58	2.66	---	6.61
18	4.97	5.62	4.33	2.66	2.61	1.48	1.50	2.63	2.54	2.67	---	6.55
19	5.28	5.57	4.41	2.68	2.62	1.43	1.44	2.63	2.41	2.75	---	6.60
20	5.33	5.47	4.50	2.86	2.53	1.19	1.58	2.69	2.42	2.84	---	6.64
21	5.45	5.66	4.31	3.08	2.48	1.21	1.76	2.81	2.41	2.91	---	6.77
22	5.44	5.72	4.06	3.08	2.61	1.31	1.84	2.80	2.46	2.94	---	6.79
23	5.52	5.69	4.07	2.36	2.48	1.33	1.83	2.70	2.52	2.96	---	6.82
24	5.60	5.59	4.03	2.59	2.61	1.25	1.74	2.55	2.46	3.06	---	6.81
25	5.45	5.62	3.68	2.69	2.83	1.26	1.70	2.45	2.34	3.08	5.00	6.84
26	5.35	5.34	3.31	2.86	2.79	1.39	1.70	2.31	2.32	3.11	5.08	6.85
27	5.41	5.39	2.93	2.86	2.57	1.63	2.02	2.24	2.31	3.12	5.19	6.84
28	5.67	5.52	2.94	2.91	2.49	1.68	2.11	2.19	2.25	3.12	5.45	7.03
29	5.67	5.55	3.13	3.01	---	1.55	2.16	2.17	2.13	3.27	5.52	7.04
30	5.71	5.45	3.12	2.65	---	1.29	2.15	2.12	2.27	3.31	5.38	7.02
31	5.76	---	2.79	2.65	---	1.08	---	2.14	---	3.40	5.45	---
MAX	5.76	5.94	5.21	3.08	2.99	2.28	2.16	2.81	2.66	3.40	5.52	7.04

WTR YR 1982 MEAN 3.44 HIGH .78 LOW 7.04

LUCAS COUNTY

413704083362200. Local number, LU-1.
LOCATION.--Lat 41°37'04", long 83°36'22", Hydrologic Unit 04100001, at Toledo State Hospital.
Owner: State of Ohio.
AQUIFER.--Limestone of Silurian Age.
WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 12 in (0.3 m), depth drilled 525 ft (160 m), present depth 523.0 ft (159 m), cased to 93 ft (28.3 m).
DATUM.--Altitude of land-surface datum is 624 ft (190 m), from topographic map. Measuring point: Floor of instrument shelter 2.98 ft (0.908 m) above land-surface datum (Revised from 1978 and 1979).
REMARKS.--Prior to Aug. 23, 1978, measuring point was 3.10 ft (0.945 m) above land-surface datum. Reported in 1979 as 3.00 ft (0.914 m) above land-surface datum.
PERIOD OF RECORD.--March 1946 to current year.
EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 117.25 ft (35.738 m) Sept. 18, 1957; minimum daily low, 66.88 ft (20.385 m) Apr. 23, 1981.
EXTREMES FOR CURRENT YEAR.--Maximum daily low, 68.60 ft (20.910 m) Oct. 3; minimum daily low, 64.13 ft (19.547 m) May. 7.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	68.32	67.68	66.34	66.54	66.27	65.59	64.89	64.48	65.36	66.30	68.07	68.08
2	68.51	67.60	66.49	66.56	66.19	65.44	64.89	64.47	65.42	66.33	68.10	67.85
3	68.60	67.62	66.55	66.24	65.98	65.58	64.19	64.49	65.46	66.18	68.13	67.99
4	68.48	67.47	66.82	65.97	66.26	65.31	64.79	64.47	65.39	66.45	68.12	68.08
5	68.33	67.26	66.94	66.26	66.19	65.45	64.79	64.38	65.20	66.58	68.29	67.96
6	68.19	67.12	66.93	66.10	66.07	65.41	64.83	64.24	65.15	66.62	68.32	67.81
7	68.25	67.20	66.48	66.46	66.01	65.41	64.96	64.13	65.14	66.75	68.31	67.79
8	68.30	67.29	66.69	66.46	65.95	65.59	64.85	64.26	65.00	66.83	68.20	67.68
9	68.34	67.55	66.79	65.98	65.76	65.62	64.57	64.40	65.10	66.92	68.24	67.50
10	68.27	67.55	66.73	66.11	65.93	65.50	64.60	64.38	65.43	66.89	68.45	67.26
11	68.35	67.42	66.74	66.16	65.99	65.19	64.56	64.27	65.56	66.91	68.52	67.11
12	68.38	67.49	66.83	66.30	66.05	65.20	64.58	64.22	65.49	67.18	68.59	67.05
13	68.40	67.45	66.83	66.05	65.88	65.08	64.54	64.41	65.34	67.30	68.47	66.94
14	68.29	67.32	66.70	65.88	65.69	65.29	64.66	64.47	65.32	67.35	68.28	66.86
15	68.11	67.08	66.50	65.94	65.57	65.20	64.59	64.73	65.18	67.44	68.29	66.89
16	68.14	66.87	66.64	66.23	65.60	64.97	64.42	64.93	65.17	67.45	68.34	66.93
17	68.04	66.77	66.62	66.29	65.48	65.13	64.48	65.09	65.21	67.42	68.40	66.91
18	67.66	66.85	66.65	66.11	65.48	65.15	64.63	65.07	65.15	67.41	68.46	66.61
19	67.91	66.76	66.69	66.10	65.54	65.14	64.52	65.16	64.98	67.41	68.47	66.61
20	67.85	66.61	66.75	66.28	65.47	64.88	64.55	65.16	64.98	67.63	68.39	66.46
21	68.00	66.85	66.50	66.48	65.47	64.86	64.74	65.19	64.85	67.73	68.58	66.50
22	67.97	66.94	66.15	66.47	65.59	64.92	64.82	65.08	65.06	67.72	68.58	66.45
23	67.96	66.94	66.50	65.54	65.54	64.92	64.79	64.97	65.38	67.84	68.42	66.38
24	67.97	66.96	66.54	65.86	65.82	64.74	64.54	64.96	65.49	67.89	68.45	66.26
25	67.74	66.99	66.51	66.03	66.09	64.75	64.42	64.91	65.46	67.90	68.31	66.16
26	67.62	66.74	66.42	66.20	66.08	64.97	64.29	64.77	65.53	67.92	68.34	66.16
27	67.61	66.82	66.22	66.20	65.90	65.28	64.63	64.60	65.57	67.92	68.11	66.06
28	67.77	67.00	66.37	66.20	65.87	65.34	64.73	64.63	65.58	67.98	68.35	66.25
29	67.77	67.04	66.68	66.29	---	65.21	64.69	64.67	65.71	68.04	68.41	66.25
30	67.74	66.95	66.72	65.90	---	64.92	64.61	64.94	66.10	68.00	68.25	66.20
31	67.74	---	66.42	65.92	---	64.71	---	65.04	---	68.01	68.25	---
MAX	68.60	67.68	66.94	66.56	66.27	65.62	64.96	65.19	66.10	68.04	68.59	68.08

WTR YR 1982 MEAN 66.36 HIGH 64.13 LOW 68.60

MEDINA COUNTY

410142082005900. Local number, MD-1.
LOCATION.--Lat 41°01'42", long 82°00'59", Hydrologic Unit 04110001. Waterworks plant at Lodi.
Owner: Lodi Water Dept.
AQUIFER.--Sand and gravel of Pleistocene Age.
WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 6 in (0.15 m), depth 65 ft (19.9 m), cased.
DATUM.--Altitude of land-surface datum is 910 ft (277 m), from topographic map. Measuring point: Floor of instrument shelter 1.90 ft (0.579 m) above land-surface datum.
REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.
PERIOD OF RECORD.--September 1946 to current year.
EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 31.50 ft (9.601 m) July 16, 1971; minimum daily low, 7.60 ft (2.316 m) July 6, 1969.
EXTREMES FOR CURRENT YEAR.--Maximum recirded daily low, 31.41 ft (9.574 m) Sep 20; minimum daily low, 18.79 ft (5.727 m) Apr. 11.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22.17	22.22	21.54	20.12	20.30	20.40	20.37	21.85	21.42	22.18	23.38	28.36
2	22.01	24.89	21.69	20.20	21.14	20.52	20.31	21.28	21.65	22.18	23.10	---
3	21.98	25.54	21.81	19.86	20.39	20.50	19.87	21.58	21.78	21.69	27.63	---
4	21.28	22.77	21.49	---	20.40	20.52	19.42	23.94	21.89	21.28	23.51	---
5	21.96	25.36	21.24	---	20.22	20.46	19.96	22.33	21.62	21.20	27.18	---
6	21.95	23.01	20.64	20.64	20.16	20.20	19.77	22.14	21.00	21.61	22.96	---
7	22.18	22.32	21.37	20.78	19.68	19.70	20.00	22.17	21.49	21.89	22.63	---
8	22.22	22.03	21.34	20.53	20.13	20.26	20.17	21.84	21.60	22.02	22.08	---
9	22.11	22.45	21.46	20.34	20.16	20.34	20.14	21.10	21.85	22.10	22.35	---
10	21.94	22.62	21.49	19.88	20.43	20.39	20.01	21.64	21.89	22.17	22.62	---
11	21.48	22.88	21.23	19.98	20.35	20.31	18.79	21.74	21.98	21.90	22.59	---
12	22.12	22.85	---	20.67	20.32	20.24	19.95	21.85	21.67	22.01	22.69	---
13	22.30	22.67	20.63	20.87	20.23	20.01	20.19	22.04	21.34	22.28	22.73	---
14	25.68	22.61	21.35	21.13	19.48	19.41	22.85	22.08	21.73	26.25	22.70	---
15	25.28	21.95	---	23.39	20.25	20.10	22.51	22.23	24.07	26.59	22.06	---
16	24.27	25.49	---	21.33	20.30	20.03	20.69	22.01	22.06	22.85	22.39	---
17	25.42	24.45	---	20.87	20.25	20.04	20.36	22.13	22.32	22.80	25.93	---
18	23.70	22.88	21.38	21.26	20.33	20.11	19.75	25.26	22.21	22.28	26.51	---
19	23.64	22.70	20.91	22.76	20.32	20.03	20.36	25.24	22.03	22.44	22.78	---
20	23.75	22.32	---	21.70	20.21	19.74	20.62	22.78	21.54	22.69	22.78	31.41
21	23.58	22.06	---	24.54	19.64	19.38	20.79	22.27	21.90	22.74	22.28	30.12
22	24.30	21.42	21.22	21.48	20.25	19.97	20.90	21.97	22.10	22.84	21.94	---
23	23.13	22.07	21.13	21.21	20.34	20.04	22.23	21.18	22.20	22.83	26.26	---
24	22.71	22.08	20.94	20.61	20.36	20.09	21.10	21.73	22.33	22.87	27.16	---
25	21.85	22.21	---	21.23	20.52	20.23	20.37	21.88	22.39	22.52	27.90	---
26	22.35	20.88	---	23.15	20.29	20.20	20.93	21.83	22.26	22.71	30.39	---
27	22.55	21.47	---	21.31	20.46	20.21	24.35	21.92	21.64	23.00	25.97	---
28	22.71	20.96	---	20.99	19.84	19.83	24.62	21.89	21.96	26.85	---	---
29	22.69	20.93	20.11	21.25	---	20.25	22.12	21.70	22.02	23.32	---	---
30	22.43	21.55	---	20.76	---	20.34	22.15	20.77	22.07	23.25	28.45	---
31	22.49	---	---	20.01	---	20.36	---	20.97	---	23.36	27.47	---
MAX	25.68	25.54	21.81	24.54	21.14	20.52	24.62	25.26	24.07	26.85	30.39	31.41

WTR YR 1982 MEAN 21.95 HIGH 18.79 LOW 31.41

PORTAGE COUNTY

410920081192000. Local number, PO-6.
LOCATION.--Lat 41°09'20", long 81°19'20", Hydrologic Unit 04110002, State Rt 59, east of Kent.
Owner: Brown Derby Restaurant.
AQUIFER.--Sand and gravel of Pleistocene Age.
WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 8 in (0.2 m), depth 72 ft (21.9 m), cased.
DATUM.--Altitude of land-surface datum is 1040 ft (317 m), from topographic Map. Measuring point: Top of platform 4.50 ft (1.372 m) below land-surface datum.
REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.
PERIOD OF RECORD.--April 1977 to current year.
EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 25.37 ft (7.733 m) Feb. 22, 1977; minimum daily low, 14.28 ft (4.352 m) May 5, 1980.
EXTREMES FOR CURRENT YEAR.--Maximum recorced daily low, 22.30 ft (6.797 m) Sep. 30; minimum recorded daily low, 19.71 ft (6.008 m) Jul. 11.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19.73	20.89							---	19.96	20.16	21.10
2	19.79	20.93							---	19.95	20.18	21.13
3	19.84	20.95							---	19.89	20.21	21.16
4	19.86	20.99							---	19.89	20.25	21.20
5	19.90	20.99							---	19.89	20.28	21.24
6	19.94	21.04							---	19.86	20.29	21.28
7	19.97	21.09							---	19.82	20.30	21.32
8	20.03	21.10							---	19.80	20.35	21.36
9	20.07	---							---	19.77	20.42	21.41
10	20.11	---							---	19.76	20.44	21.44
11	20.16	---							---	19.71	20.46	21.48
12	20.21	---							---	19.72	20.50	21.53
13	20.24	---							---	19.73	20.53	21.57
14	20.26	---							---	19.72	20.56	21.61
15	20.29	---							19.78	19.73	20.60	21.64
16	20.34	---							19.81	19.75	20.62	21.70
17	20.36	---							19.84	19.75	20.65	21.75
18	20.41	---							19.84	19.78	20.68	21.77
19	20.45	---							19.85	19.84	20.72	21.83
20	20.49	---							19.85	19.86	20.75	21.86
21	20.53	---							19.86	19.88	20.78	21.92
22	20.54	---							19.88	19.92	20.80	21.96
23	20.62	---							19.90	19.95	20.83	22.00
24	20.63	---							19.90	19.97	20.85	22.05
25	20.65	---							19.89	19.99	20.88	22.09
26	20.68	---							19.91	19.99	20.91	22.14
27	20.73	---							19.90	20.04	20.95	22.16
28	20.78	---							19.89	20.06	20.98	22.24
29	20.81	---							19.91	20.07	21.01	22.28
30	20.85	---							19.95	20.10	21.05	22.30
31	20.87	---							---	20.12	21.07	---
MAX	20.87	21.10							19.95	20.12	21.07	22.30

WTR YR 1982 MEAN 20.56 HIGH 19.71 LOW 22.30

NOTE: NUMBER OF MISSING DAYS OF RECORD EXCEEDED 20% OF YEAR

PUTNAM COUNTY

405505084032900. Local number, PU-1.
LOCATION.--Lat 40°55'05", long 84°03'29", Hydrologic Unit 04100007, Center and Broadway Streets, Columbus Grove.
Owner: Columbus Grove Water Department.
AQUIFER.--Limestone of Silurian Age.
WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 6 in (0.15 m), depth 110 ft (33.5 m), cased.
DATUM.--Altitude of land-surface datum is 770 ft (235 m), from topographic map. Measuring point: Floor of instrument shelter 3.00 ft (0.914 m) above land-surface datum.
REMARKS.--Station operated by Ohio Department of Natural Resource, Division of Water.
PERIOD OF RECORD.--July 1946 to current year.
EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 24.30 ft (7.407 m) Aug. 24, 1962; minimum daily low, 9.50 ft (2.896 m) Jan. 5, 1950.
EXTREMES FOR CURRENT YEAR.--Maximum daily low, 15.35 ft (4.679 m) Sep. 30; minimum daily low, 9.87 ft (3.008 m) Mar. 19.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13.09	12.26	12.28	11.86	11.45	10.60	11.84	12.51	12.34	12.84	13.98	12.44
2	13.16	10.78	11.06	12.65	10.50	11.95	10.96	11.43	11.37	12.34	12.73	14.69
3	12.03	12.42	12.14	10.32	13.07	10.91	10.45	10.62	10.47	11.56	13.95	13.81
4	13.71	11.50	11.52	11.75	11.93	9.95	11.67	12.98	12.29	12.41	12.72	13.65
5	12.67	10.58	10.75	10.93	11.66	11.59	10.87	13.78	11.37	12.19	12.75	14.60
6	12.63	12.02	11.90	9.89	12.70	11.40	10.17	11.74	10.59	10.67	14.14	14.54
7	13.51	11.48	12.07	11.42	12.21	10.03	11.82	10.57	12.73	12.59	12.96	13.62
8	12.48	11.15	10.56	11.30	10.77	12.06	10.98	12.52	12.63	11.67	12.99	14.74
9	12.07	12.65	12.34	10.23	13.80	10.97	10.27	11.38	10.80	11.71	14.21	13.66
10	13.72	12.36	11.95	11.87	13.98	10.83	11.94	10.59	12.77	12.93	13.06	13.03
11	12.21	10.92	11.53	11.36	11.84	11.66	10.94	12.75	11.77	12.43	12.13	15.05
12	12.45	12.29	12.45	11.04	12.85	10.70	10.08	12.29	11.35	10.85	14.31	14.65
13	13.90	12.53	11.54	12.52	12.59	9.94	11.81	10.79	12.79	13.03	14.24	13.81
14	13.25	11.12	11.13	11.50	10.90	11.53	11.15	13.10	12.41	12.01	12.22	15.03
15	11.88	12.58	12.60	11.38	12.63	10.42	10.10	11.89	11.96	11.31	14.32	14.89
16	13.43	12.46	11.47	12.58	11.46	10.23	11.71	11.95	12.74	13.28	13.68	12.99
17	13.42	10.92	11.61	12.66	11.05	11.20	10.67	13.57	11.46	13.24	13.25	15.04
18	11.60	12.52	12.38	11.04	12.28	10.46	9.97	12.06	10.55	12.27	15.01	13.91
19	13.28	12.07	11.73	12.71	11.24	9.87	12.10	11.59	12.52	13.33	13.77	12.86
20	12.69	10.86	11.75	11.76	10.16	11.77	10.70	13.18	11.15	12.22	12.66	15.12
21	12.36	12.46	11.86	11.59	11.69	10.47	10.17	12.89	10.48	12.26	14.79	13.92
22	13.44	11.57	10.89	12.68	11.25	10.26	12.12	10.80	12.41	13.53	14.21	13.10
23	12.64	11.38	12.22	11.65	10.94	11.42	11.01	12.95	11.58	13.03	12.14	15.04
24	11.90	12.53	11.51	11.55	11.70	11.38	10.21	11.63	10.68	12.31	14.66	14.86
25	13.53	12.25	11.40	12.67	11.39	10.33	12.24	10.82	12.62	13.69	14.11	12.96
26	13.10	10.99	12.34	11.70	10.15	11.64	11.19	12.66	11.62	12.51	12.23	14.92
27	11.81	12.20	12.13	11.55	12.01	11.29	10.38	11.37	11.54	12.52	14.50	13.70
28	13.56	11.78	10.52	12.80	10.91	10.13	12.49	10.58	12.92	13.68	14.12	13.82
29	12.63	10.65	12.14	11.74	---	12.22	11.27	12.48	11.41	14.02	13.32	15.35
30	10.98	12.18	11.42	11.31	---	11.51	10.47	11.04	10.62	12.54	14.71	15.03
31	12.54	---	10.52	12.20	---	10.26	---	10.29	---	14.02	13.75	---
MAX	13.90	12.65	12.60	12.80	13.98	12.22	12.49	13.78	12.92	14.02	15.01	15.35

WTR YR 1982 MEAN 12.13 HIGH 9.87 LOW 15.35

RICHLAND COUNTY

405753082360800. Local number, R-3.
LOCATION.--Lat 40°57'53", long 82°36'08", Hydrologic Unit 04100012, Voisard plant in Shiloh.
Owner: Voisard Corp.
AQUIFER.--Sand and gravel of Pleistocene Age.
WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 8 in (0.2 m), depth 150 ft (45.7 m), cased.
DATUM.--Altitude of land-surface datum is 1080 ft (329 m), from topographic map. Measuring point: Floor of instrument shelter 3.17 ft (0.966 m) above land-surface datum.
REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.
PERIOD OF RECORD.--April 1946 to current year.
EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 35.90 ft (10,942 m) Feb. 12, 1981; minimum daily low, 23.68 ft (7.218 m) June 15, 23, 1947.
EXTREMES FOR CURRENT YEAR.--Maximum daily low, 33.88 ft (10.327 m) Feb. 25; minimum daily low, 30.96 ft (9.437 m) May 7.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	31.88	32.67	32.13	32.42	33.34	33.30	31.84	31.21	31.19	31.59	31.88	32.45
2	32.20	32.66	32.35	32.51	33.21	33.35	31.77	31.19	31.26	31.55	31.95	32.32
3	32.29	32.63	32.37	32.13	32.99	33.50	31.41	31.19	31.31	31.26	31.98	32.49
4	32.19	32.51	32.57	31.95	33.30	33.30	31.96	31.20	31.28	31.30	31.99	32.66
5	32.17	32.32	32.65	32.30	33.18	33.59	31.96	31.16	31.17	31.39	32.08	32.74
6	32.12	32.35	32.61	32.06	33.21	33.55	32.15	31.05	31.22	31.38	32.13	32.85
7	32.15	32.44	32.31	32.36	33.11	33.54	32.32	30.96	31.19	31.39	32.04	32.90
8	32.22	32.51	32.53	32.32	33.19	33.75	32.21	31.14	31.22	31.39	31.92	32.87
9	32.31	32.75	32.59	31.91	33.04	33.85	31.80	31.21	31.32	31.38	31.89	32.83
10	32.29	32.73	32.59	32.11	33.25	33.83	31.80	31.21	31.40	31.27	32.04	32.67
11	32.39	32.66	32.46	32.08	33.32	33.63	31.64	31.21	31.47	31.15	32.10	32.68
12	32.47	32.71	32.63	32.20	33.34	33.65	31.54	31.29	31.30	31.43	32.06	32.71
13	32.53	32.66	32.56	31.91	33.20	33.36	31.55	31.35	31.30	31.48	32.03	32.72
14	32.44	32.54	32.54	31.96	33.05	33.51	31.60	31.37	31.37	31.47	31.98	32.67
15	32.33	32.37	32.31	32.13	33.06	33.46	31.60	31.60	31.25	31.51	31.99	32.67
16	32.45	32.27	32.54	32.48	33.08	32.99	31.37	31.67	31.20	31.56	32.11	32.75
17	32.34	32.27	32.55	32.56	32.96	33.01	31.44	31.68	31.29	31.53	32.15	32.71
18	32.12	32.48	32.47	32.54	33.08	32.96	31.52	31.66	31.28	31.52	32.34	32.66
19	32.48	32.37	32.50	32.54	33.18	32.80	31.30	31.66	31.22	31.49	32.38	32.61
20	32.37	32.17	32.51	32.71	32.94	32.42	31.41	31.54	31.23	31.54	32.26	32.70
21	32.51	32.42	32.38	32.89	33.22	32.32	31.57	31.55	31.19	31.66	32.31	32.82
22	32.45	32.54	32.05	32.85	33.36	32.47	31.58	31.42	31.31	31.57	32.29	32.85
23	32.53	32.49	32.38	32.22	33.33	32.52	31.39	31.40	31.49	31.60	32.17	32.83
24	32.54	32.53	32.47	32.56	33.56	32.14	31.43	31.45	31.41	31.58	32.16	32.78
25	32.38	32.60	32.40	32.83	33.88	32.05	31.27	31.39	31.43	31.65	32.35	32.80
26	32.33	32.44	32.34	33.07	33.85	32.12	31.11	31.31	31.40	31.69	32.38	32.75
27	32.47	32.60	32.11	33.00	33.65	32.39	31.38	31.27	31.37	31.70	32.39	32.84
28	32.67	32.68	32.28	33.15	33.56	32.38	31.51	31.26	31.25	31.79	32.56	33.05
29	32.59	32.70	32.55	33.26	---	32.17	31.41	31.16	31.19	31.82	32.56	33.11
30	32.68	32.62	32.55	32.90	---	32.02	31.32	31.13	31.47	31.77	32.47	33.06
31	32.66	---	32.33	32.88	---	31.83	---	31.13	---	31.81	32.46	---
MAX	32.68	32.75	32.65	33.26	33.88	33.85	32.32	31.68	31.49	31.82	32.56	33.11

WTR YR 1982 MEAN 32.22 HIGH 30.96 LOW 33.88

SANDUSKY COUNTY

411914083045300. Local number, S-3.
LOCATION.--Lat 41°19'14", long 83°04'53", Hydrologic Unit 04100011, 2.6 mi (4.2 km) southeast of Fremont Post Office.
Owner: State of Ohio.
AQUIFER.--Limestone of Silurian Age.
WELL CHARACTERISTICS.--Drilled test artesian well, diameter 12 in (0.30 m), depth 121 ft (36.9 m), cased to 93 ft (28.3 m).
DATUM.--Altitude of land-surface datum is 627 ft (191 m), from topographic map. Measuring point: Floor of instrument shelter 3.00 ft (0.914 m) above land-surface datum.
PERIOD OF RECORD.--December 1974 to current year.
EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 24.18 ft (7.370 m) Aug. 2, 1975; minimum daily low, 14.02 ft (4.273 m) Mar. 24, 1975.
EXTREMES FOR CURRENT YEAR.--Maximum daily low, 23.58 ft (7.187 m) Aug. 18; minimum recorded daily low, 14.75 ft (4.496 m) Apr. 30.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16.39	16.10	15.48	15.39	15.62		---	14.78	15.88	16.22	21.25	23.58
2	16.45	16.09	15.50	15.42	15.52		---	14.82	15.97	16.19	22.32	22.09
3	16.53	16.08	15.54	15.19	15.43		---	14.93	15.98	15.99	23.06	21.06
4	16.53	15.98	15.64	15.02	15.61		---	14.97	15.93	15.97	23.15	20.56
5	16.46	15.85	15.74	15.19	15.49		---	14.96	15.84	16.08	21.81	20.20
6	16.33	15.71	15.73	15.10	15.53		---	15.11	15.88	16.08	20.96	21.47
7	16.39	15.80	15.51	15.31	15.48		---	15.04	15.90	16.08	21.78	22.13
8	16.42	15.83	15.68	15.29	15.47		---	15.10	16.83	16.07	22.17	21.17
9	16.45	15.99	15.71	15.00	15.36		---	15.22	17.67	16.09	21.68	20.34
10	16.42	15.95	15.67	15.07	15.45		---	15.23	16.78	16.03	22.59	19.81
11	16.46	15.86	15.66	15.21	15.47		---	15.20	16.48	15.94	21.73	19.44
12	16.52	15.88	15.71	15.28	15.51		---	15.27	16.29	16.07	20.78	19.26
13	16.51	15.87	15.75	15.18	15.42		---	16.58	16.18	16.13	21.06	19.13
14	16.47	15.82	15.72	15.09	15.31		---	17.69	16.17	17.41	22.37	19.00
15	16.37	15.68	15.61	15.12	15.29		---	16.85	16.07	19.01	22.56	18.80
16	16.33	15.56	15.62	15.35	15.29		---	16.37	15.90	19.96	23.18	18.72
17	16.30	15.49	15.63	15.37	15.17		---	17.95	15.94	19.58	22.96	18.62
18	16.02	15.55	15.61	15.34	---		---	18.82	17.06	20.41	23.58	18.38
19	16.24	15.48	15.64	15.32	---		---	18.37	17.63	20.80	22.50	18.33
20	16.23	15.39	15.67	15.39	---		---	19.45	16.89	19.62	21.61	18.14
21	16.30	15.64	15.53	15.52	---		---	19.03	16.55	18.82	23.01	18.16
22	16.23	15.70	15.35	15.48	---		---	17.85	16.41	18.23	23.19	18.10
23	16.22	15.69	15.48	15.08	---		---	17.27	16.42	17.85	21.69	17.97
24	16.26	15.69	15.54	15.32	---		---	17.01	16.33	17.64	20.92	17.87
25	16.14	15.70	15.53	15.46	---		---	16.77	16.21	17.48	20.28	17.76
26	16.08	15.61	15.47	15.58	---		---	16.56	16.25	18.78	20.07	17.75
27	16.00	15.69	15.35	15.59	---		---	16.37	16.15	20.11	19.70	17.60
28	16.14	15.78	15.39	15.57	---		14.79	16.10	16.08	21.09	21.15	17.77
29	16.14	15.82	15.53	15.64	---		14.77	16.05	15.97	21.76	22.26	17.74
30	16.09	15.80	15.59	15.38	---		14.75	15.94	16.10	22.05	22.98	17.67
31	16.13	---	15.36	15.38	---		---	15.94	---	20.76	23.49	---
MAX	16.53	16.10	15.75	15.64	15.62		14.79	19.45	17.67	22.05	23.58	23.58

WTR YR 1982 MEAN 17.10 HIGH 14.75 LOW 23.58

SANDUSKY COUNTY--Continued

412703083213600. Local number, S-2.
LOCATION.--Lat 41°27'03", long 83°21'36", Hydrologic Unit 04100010, at water works in Woodville.
Owner: Woodville Water department.
AQUIFER.--Limestone of Silurian Age.
WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 8 in (0.2 m) depth 198 ft (60.4 m) cased.
DATUM.--Altitude of land-surface datum is 635 ft (194 m) from topographic map. Measuring point: Top of casing at land-surface datum.
REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.
PERIOD OF RECORD.--June 1976 to current year.
EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 100.97 ft (30.776 m) Jan. 29, 1982; minimum daily low, 18.60 ft (5.669 m) May 6, 1977.
EXTREMES FOR CURRENT YEAR.--Maximum daily low, 100.97 ft (30.776 m) Jan. 29; minimum daily low, 20.64 ft (6.291 m) Apr. 15.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	59.58	53.32	65.64	55.29			---	23.72	25.32	26.36		
2	59.58	56.77	61.41	60.52			---	23.26	25.00	25.97		
3	59.58	50.49	62.66	53.36			---	23.68	24.96	25.68		
4	59.58	35.61	64.84	56.52			---	23.94	24.83	26.69		
5	59.58	55.75	63.16	55.28			---	24.01	24.63	26.78		
6	59.58	57.16	57.89	---			---	24.13	25.87	25.03		
7	59.58	38.01	62.03	---			---	23.63	24.53	26.03		
8	68.43	58.78	67.79	---			---	23.71	24.63	25.49		
9	72.63	62.88	62.75	---			---	23.59	24.60	26.64		
10	62.36	62.37	62.81	---			---	23.91	25.42	25.66		
11	71.22	69.86	64.87	---			---	23.40	26.52	24.59		
12	75.26	59.79	62.46	---			---	23.70	25.67	26.32		
13	76.95	60.22	64.56	---			21.42	25.21	26.80	26.54		
14	69.68	63.39	62.30	---			21.32	25.99	26.20	26.86		
15	65.69	62.99	62.40	---			20.64	26.72	26.10	26.91		
16	71.40	63.71	59.79	---			25.13	26.26	24.61	27.24		
17	72.30	64.80	68.71	---			25.31	26.48	25.11	26.90		
18	58.58	68.14	52.82	---			24.98	26.31	26.30	27.12		
19	67.08	64.94	53.77	---			23.78	27.00	25.83	26.23		
20	69.59	64.05	51.11	60.39			24.77	27.28	24.88	27.72		
21	74.58	69.96	53.29	54.88			26.06	27.11	25.92	28.89		
22	72.48	69.53	59.52	58.88			27.02	27.98	25.42	28.61		
23	69.16	70.13	58.17	45.42			25.41	27.95	25.79	29.65		
24	73.40	68.72	56.93	43.15			25.91	26.70	26.06	30.19		
25	70.11	66.30	55.48	82.00			24.36	28.75	25.21	30.45		
26	70.18	67.12	50.69	75.28			23.42	27.62	26.02	---		
27	65.08	62.16	53.05	80.37			25.24	27.22	26.49	---		
28	65.95	58.70	52.25	91.63			24.32	27.15	26.86	---		
29	58.94	60.89	52.98	100.97			23.86	26.39	26.01	---		
30	52.58	61.00	59.67	76.03			23.52	24.99	26.63	---		
31	41.95	---	59.96	---			---	24.67	---	---		
MAX	76.95	70.13	68.71	100.97			27.02	28.75	26.86	30.45		

WTR YR 1982 MEAN 44.47 HIGH 20.64 LOW 100.97

NOTE: NUMBER OF MISSING DAYS OF RECORD EXCEEDED 20% OF YEAR

SENECA COUNTY

410802083093900. Local number, SE-2.
LOCATION.--Lat 41°08'02", long 83°09'39", Hydrologic Unit 04100011, Tiffin State Hospital, Tiffin.
Owner: State of Ohio.
AQUIFER.--Limestone of Silurian Age.
WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 12 in (0.3 m) depth 250 ft (76.2 m), cased.
DATUM.--Altitude of land-surface datum is 740 ft (226 m), from topographic map. Measuring point: Floor of instrument shelter 0.50 ft (0.152 m) above land-surface datum.
REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.
PERIOD OF RECORD.--July 1962 to current year.
EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 23.76 ft (7.242 m) Nov. 22, 1965; minimum daily low, 14.71 ft (4.484 m) Mar. 20, 1982.
EXTREMES FOR CURRENT YEAR.--Maximum daily low, 21.30 ft (6.492 m) Sep. 28; minimum daily low, 14.71 ft (4.484 m) Mar. 20.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16.81	18.77	18.42	17.46	17.58	16.42	16.27	17.80	17.57	18.56	19.55	20.49
2	17.30	18.71	18.49	17.47	17.47	16.39	16.25	17.92	17.71	18.54	19.56	20.47
3	17.47	18.78	18.54	17.03	17.21	16.60	15.66	18.05	17.84	18.27	19.64	20.73
4	17.50	18.69	18.75	16.64	17.63	16.43	16.51	18.16	17.90	17.74	19.70	20.87
5	17.57	18.57	18.82	16.71	17.58	16.11	16.50	18.17	17.91	17.75	19.88	20.81
6	17.55	18.59	18.80	16.33	17.65	16.01	16.74	18.13	18.06	17.63	19.87	20.86
7	17.63	18.74	18.36	16.85	17.65	15.90	16.93	18.19	18.13	17.61	19.85	20.89
8	17.75	18.85	18.51	16.87	17.72	16.19	16.81	18.37	18.11	17.74	19.75	20.91
9	17.89	19.14	18.56	16.53	17.73	16.53	16.54	18.57	18.19	17.84	19.79	20.85
10	17.97	19.13	18.51	16.88	17.94	16.48	16.58	18.57	18.30	17.80	19.96	20.76
11	18.17	19.06	18.45	16.98	18.03	16.13	16.33	18.51	18.43	17.90	20.01	20.81
12	18.28	19.11	18.53	17.28	18.18	15.73	16.19	18.55	18.34	18.18	20.07	20.89
13	18.37	19.12	18.57	17.21	18.12	15.09	15.69	18.64	18.44	18.31	20.02	20.95
14	18.34	19.05	18.46	17.15	18.02	15.20	15.87	18.69	18.54	18.36	20.02	20.94
15	18.28	18.89	18.30	17.08	18.01	15.09	15.85	18.78	18.45	18.49	20.08	20.96
16	18.38	18.79	18.50	17.25	17.84	14.95	15.93	18.86	18.41	18.57	20.16	21.07
17	18.42	18.84	18.50	17.48	17.42	14.91	16.12	18.93	18.31	18.60	20.19	21.05
18	18.27	18.96	18.53	17.71	17.12	14.91	16.35	18.86	18.29	18.65	20.28	21.02
19	18.61	18.95	18.63	17.93	16.97	14.89	16.25	18.88	18.21	18.71	20.27	21.02
20	18.64	18.82	18.69	18.21	16.80	14.71	16.59	18.94	18.27	18.87	20.18	21.08
21	18.81	19.01	18.59	18.53	16.40	14.81	16.90	19.09	18.19	19.00	20.32	21.14
22	18.82	19.02	18.24	18.51	16.45	15.01	17.05	19.03	18.16	18.94	20.30	21.16
23	18.94	19.00	18.05	17.63	16.25	15.07	17.07	19.01	18.35	19.03	20.20	21.15
24	18.97	18.99	18.03	17.61	16.20	15.29	17.01	19.01	18.33	19.10	20.27	21.09
25	18.80	18.99	17.61	17.71	16.60	15.52	16.98	18.94	18.25	19.11	20.37	21.11
26	18.76	18.84	17.26	17.83	16.60	15.98	17.07	18.83	18.33	19.16	20.46	21.15
27	18.79	18.86	17.06	17.87	16.45	16.49	17.58	18.81	18.36	19.19	20.47	21.12
28	18.91	18.94	17.24	18.08	16.59	16.60	17.73	18.22	18.31	19.29	20.68	21.30
29	18.90	18.98	17.60	18.15	---	16.53	17.77	17.64	18.14	19.40	20.74	21.25
30	18.79	18.90	17.63	17.71	---	16.30	17.79	17.40	18.40	19.38	20.54	21.20
31	18.83	---	17.39	17.50	---	16.17	---	17.42	---	19.44	20.58	---
MAX	18.97	19.14	18.82	18.53	18.18	16.60	17.79	19.09	18.54	19.44	20.74	21.30

WTR YR 1982 MEAN 18.24 HIGH 14.71 LOW 21.30

SUMMIT COUNTY

410330081282000. Local number, SU-6.
LOCATION.--Lat 41°03'30", long 81°28'20", Hydrologic Unit 04110002, Seiberling St, Akron.
Owner: Goodyear Tire and Rubber Co.
AQUIFER.--Sand and gravel of Pleistocene Age.
WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 24 in (0.6 m), depth 89 ft (27.1 m), cased.
DATUM.--Altitude of land-surface datum is 1000 ft (305 m) from topographic map. Measuring point: Floor of instrument shelter 2.63 ft (0.802 m) above land-surface datum.
REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.
PERIOD OF RECORD.--March 1944 to current year. Records for May 14-Sept. 30, 1980, published in USGS-WRD-OH-80-1, are unreliable and should not be used.
EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 59.47 ft (18.126 m) Oct. 18, 1947; minimum daily low, 11.95 ft (3.642 m) April 9, 1980.
EXTREMES FOR CURRENT YEAR.--Maximum daily low, 25.66 ft (7.821 m) Oct. 22; minimum daily low, 12.29 ft (3.746 m) Mar. 29.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	25.26	21.51	14.03	12.41	12.65	12.52	19.29	22.70	24.00	24.03	24.90
2	---	25.31	19.89	13.99	12.42	12.70	12.52	19.52	22.85	24.08	24.06	24.95
3	---	25.34	19.18	13.85	12.48	12.74	12.43	19.77	22.98	24.08	24.12	23.29
4	---	25.37	18.74	13.75	12.56	12.70	12.46	19.99	23.10	20.72	24.15	20.48
5	---	25.37	18.38	13.68	12.58	12.60	12.46	20.15	23.17	18.77	24.18	19.61
6	---	25.13	18.05	13.63	12.60	12.59	12.52	20.37	23.22	21.44	24.24	22.31
7	---	25.01	17.75	13.67	12.58	12.51	12.56	20.48	23.42	22.21	24.26	23.25
8	---	24.69	17.50	13.67	12.62	12.59	12.56	20.56	23.62	22.53	24.26	23.65
9	---	24.91	17.30	13.58	12.67	12.70	12.54	20.67	23.77	22.72	24.28	23.91
10	---	24.97	17.15	13.54	12.74	12.67	12.54	20.83	23.80	22.84	24.34	24.08
11	---	24.88	16.97	13.52	12.80	12.63	12.44	20.98	23.69	22.90	24.42	24.15
12	---	24.87	16.82	13.53	12.81	12.58	12.41	21.14	23.68	22.99	24.46	24.23
13	---	24.87	16.62	13.53	12.81	12.50	12.49	21.30	23.61	23.09	24.49	24.37
14	---	24.77	16.41	13.48	12.75	12.45	12.52	21.42	23.66	23.17	24.49	24.50
15	---	24.66	16.23	13.46	12.72	12.44	12.53	21.51	23.72	23.25	24.47	24.55
16	---	24.55	16.09	13.44	12.64	12.43	12.53	21.54	23.72	23.35	24.48	24.62
17	---	24.50	15.99	13.41	12.55	12.32	12.51	21.59	23.63	23.38	24.53	24.69
18	---	24.58	15.85	13.41	12.51	12.34	12.48	21.70	23.67	23.39	24.59	24.74
19	---	24.80	15.75	13.41	12.52	12.34	12.44	21.78	23.68	23.46	24.61	24.76
20	25.54	24.85	15.64	13.32	12.51	12.29	12.51	21.81	23.69	23.52	24.63	24.84
21	25.65	24.93	15.44	13.38	12.42	12.30	12.57	21.91	23.77	23.60	24.64	24.91
22	25.66	24.95	15.30	13.37	12.53	12.41	12.61	21.99	23.82	23.67	24.64	24.99
23	25.53	24.85	15.13	13.25	12.58	12.47	12.61	21.98	23.86	23.75	24.37	25.07
24	25.01	24.88	14.85	13.00	12.65	12.50	12.57	22.01	23.92	23.79	24.54	25.12
25	24.74	24.92	14.69	13.05	12.74	12.53	12.50	22.11	23.97	23.79	24.63	25.13
26	24.73	24.92	14.53	13.07	12.74	12.58	16.17	22.23	23.98	23.81	24.69	25.14
27	24.95	24.88	14.40	13.07	12.74	12.58	17.43	22.35	23.98	23.86	24.77	25.16
28	25.03	24.87	14.32	13.16	12.64	12.56	18.06	22.44	24.00	23.91	24.81	25.17
29	25.09	24.87	14.31	13.16	---	12.52	18.51	22.49	24.00	23.96	24.81	24.82
30	25.14	24.89	14.27	13.09	---	12.51	18.96	22.55	23.92	24.02	24.82	24.68
31	25.21	---	14.18	12.84	---	12.49	---	22.58	---	24.03	24.86	---
MAX	25.66	25.37	21.51	14.03	12.81	12.74	18.96	22.58	24.00	24.08	24.86	25.17

WTR YR 1982 MEAN 19.34 HIGH 12.29 LOW 25.66

SUMMIT COUNTY--Continued

410846081271600. Local number, SU-7.
LOCATION.--Lat 41°08'46", long 81°27'16", Hydrologic Unit 04110002, Monroe Falls Road, Cuyahoga Falls.
Owner: Cuyahoga Falls Water Dept.
AQUIFER.--Sand and gravel of Pleistocene Age.
WELL CHARACTERISTICS.--Drilled unused water-table, diameter 6 in (0.15 m), depth 100 ft (30.5 m), cased.
DATUM.--Altitude of land-surface datum is 994 ft (303 m), from topographic map. Measuring point: Floor of instrument shelter 5.00 ft (1.524 m) above land-surface datum.
REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.
PERIOD OF RECORD.--August 1968 to current year.
EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 44.19 ft (13.469 m) Sept. 7, 1971; minimum daily low, 0.34 ft (0.104 m) Mar. 17, 1982.
EXTREMES FOR CURRENT YEAR.--Maximum daily low, 29.87 ft (9.104 m) Nov. 20; minimum daily low, 0.34 ft (0.104 m) Mar. 17.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26.23	28.45	27.63	---	15.62	11.46	9.91	16.84	21.95	22.18	25.50	21.51
2	26.43	28.55	27.47	---	12.65	12.08	9.13	17.13	22.08	21.71	25.72	21.52
3	26.55	28.66	27.39	---	10.35	12.66	8.90	17.54	22.19	21.47	25.05	21.33
4	26.63	28.73	27.16	---	8.68	13.14	7.84	18.09	22.18	21.10	22.97	21.48
5	26.72	28.85	27.17	---	7.31	13.22	8.42	18.60	22.17	20.36	21.27	21.48
6	26.74	28.92	27.07	---	6.52	12.79	8.86	18.96	22.19	19.97	19.74	21.52
7	26.40	29.01	27.02	---	7.14	11.82	9.57	19.46	22.16	19.88	19.90	21.68
8	26.03	29.08	27.03	---	8.46	11.51	9.77	19.69	22.21	20.10	19.93	21.80
9	25.82	29.12	27.00	---	9.28	11.25	10.27	19.81	22.29	20.42	19.68	21.93
10	25.73	29.16	26.98	---	10.08	11.39	10.61	20.04	22.31	20.61	19.70	22.11
11	25.75	29.22	26.82	---	10.79	11.46	10.74	20.20	22.31	20.87	19.93	22.37
12	25.82	29.23	26.69	---	11.57	11.02	11.23	20.32	22.24	21.05	20.09	22.62
13	26.03	29.25	26.45	---	12.21	9.92	11.51	20.70	22.22	21.57	20.47	23.08
14	26.34	29.29	26.34	13.22	12.94	8.12	11.78	21.00	22.39	22.01	20.77	23.31
15	26.55	29.38	27.15	13.90	13.62	4.15	12.23	21.32	22.59	22.47	20.97	23.33
16	26.72	29.46	27.35	14.79	13.85	2.21	12.53	21.55	22.62	22.93	21.36	23.38
17	26.86	29.57	27.56	15.31	13.80	.34	12.82	21.86	22.62	23.29	21.70	23.51
18	26.99	29.67	23.28	15.91	13.33	.36	12.96	22.22	22.31	23.44	21.76	23.68
19	27.17	29.76	23.41	16.56	12.39	.66	13.28	22.44	22.02	23.58	21.94	23.77
20	27.30	29.87	23.45	16.98	11.82	.68	13.47	22.66	21.87	23.72	21.96	23.94
21	27.48	29.83	23.64	17.50	10.89	1.37	13.80	22.76	21.77	23.72	21.58	24.11
22	27.58	29.31	23.77	17.90	10.34	3.44	14.05	22.74	21.80	23.84	21.22	24.13
23	27.69	29.00	23.83	18.27	10.25	4.91	14.40	22.64	21.84	24.17	20.95	24.16
24	27.77	28.72	23.51	18.27	10.23	5.60	14.68	22.52	21.86	24.35	20.98	24.27
25	27.84	28.34	21.54	17.71	10.35	6.55	14.95	22.39	21.95	24.69	20.98	24.48
26	27.94	28.12	---	16.94	10.46	7.31	15.59	22.13	22.15	24.90	21.05	24.62
27	28.01	28.02	---	16.58	10.41	8.39	15.78	22.10	22.33	25.20	21.08	24.73
28	28.08	27.81	---	16.65	10.85	8.76	15.87	22.07	22.38	25.42	21.04	24.75
29	28.16	27.78	---	16.77	---	9.64	16.25	21.95	22.56	25.45	21.15	24.85
30	28.25	27.74	---	16.94	---	10.15	16.51	21.94	22.56	25.45	21.18	24.97
31	28.35	---	---	16.89	---	10.15	---	21.92	---	25.15	21.37	---
MAX	28.35	29.87	27.63	18.27	15.62	13.22	16.51	22.76	22.62	25.45	25.72	24.97

WTR YR 1982 MEAN 20.06 HIGH .34 LOW 29.87

VAN WERT COUNTY

405215084335400. Local number, VW-1.
LOCATION.--Lat 40°52'15", long 84°33'54", Hydrologic Unit 04100007, Ridge Road near Van Wert.
Owner: Marsh Foundation.
AQUIFER.--Limestone of Silurian Age.
WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 8 in (0.2 m), depth 340 ft (103.6 m), cased.
DATUM.--Altitude of land-surface datum is 790.37 ft (240.905 m). Measuring point: Floor of instrument shelter 6.15 ft (1.874 m) above land-surface datum.
REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.
PERIOD OF RECORD.--August 1957 to current year.
EXTREMES FOR PERIOD OF RECORD.--Maximum daily low 32.81 ft (10.00 m) Mar. 2, 1977; minimum daily low, 18.85 ft (5.745 m) Mar. 6, 1959.
EXTREMES FOR CURRENT YEAR.--Maximum daily low 27.00 ft (8.230 m) Dec. 5; minimum daily low 24.95 ft (7.605 m) Jun. 29, Jul. 11.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26.55	26.80	26.40	26.60	26.55	26.15	25.50	25.35	24.95	25.30	25.40	25.35
2	26.60	26.80	26.50	26.65	26.55	25.95	25.55	25.35	25.15	25.25	25.35	25.45
3	26.75	26.85	26.60	26.40	26.35	26.00	25.05	25.30	25.20	25.10	25.35	25.60
4	26.70	26.75	26.90	26.35	26.55	25.95	25.35	25.30	25.20	25.05	25.40	25.60
5	26.60	26.60	27.00	26.55	26.60	25.85	25.50	25.25	25.20	25.15	25.50	25.60
6	26.55	26.50	26.95	26.25	26.50	25.95	25.40	25.20	25.20	25.10	25.55	25.65
7	26.65	26.65	26.65	26.55	26.50	25.80	25.65	25.05	25.20	25.05	25.55	25.65
8	26.70	26.60	26.85	26.70	26.35	26.00	25.55	25.20	25.15	25.10	25.35	25.65
9	26.70	26.95	26.95	26.40	26.25	26.15	25.25	25.30	25.10	25.15	25.45	25.55
10	26.70	26.95	26.90	26.30	26.35	26.05	25.35	25.25	25.15	25.10	25.55	25.50
11	26.75	26.85	26.85	26.45	26.35	25.75	25.30	25.20	25.25	24.95	25.60	25.55
12	26.80	26.90	26.90	26.55	26.40	25.75	25.30	25.20	25.25	25.15	25.65	25.55
13	26.85	26.90	26.90	26.35	26.35	25.60	25.30	25.25	25.20	25.25	25.55	25.55
14	26.80	26.80	26.75	26.25	26.20	25.70	25.40	25.25	25.25	25.20	25.55	25.55
15	26.70	26.60	26.65	26.30	26.05	25.60	25.35	25.25	25.15	25.25	25.55	25.65
16	26.75	26.45	26.75	26.60	26.05	25.35	25.25	25.30	25.00	25.20	25.55	25.60
17	26.70	26.50	26.70	26.65	25.90	25.55	25.30	25.35	25.10	25.20	25.65	25.50
18	26.40	26.60	26.75	26.45	25.90	25.60	25.45	25.25	25.10	25.15	25.60	25.55
19	26.60	26.45	26.85	26.50	25.95	25.60	25.30	25.25	25.05	25.10	25.50	25.55
20	26.60	26.50	26.85	26.65	25.95	25.40	25.40	25.25	25.10	25.20	25.65	25.60
21	26.75	26.70	26.65	26.75	25.90	25.45	25.55	25.35	25.00	25.25	25.65	25.60
22	26.75	26.80	26.45	26.85	26.00	25.50	25.65	25.30	25.05	25.20	25.45	25.60
23	26.80	26.75	26.55	26.25	25.90	25.50	25.60	25.35	25.25	25.25	25.50	25.65
24	26.85	26.85	26.65	26.30	26.05	25.35	25.40	25.40	25.25	25.30	25.45	25.55
25	26.65	26.85	26.65	26.35	26.40	25.40	25.25	25.30	25.15	25.30	25.50	25.55
26	26.55	26.60	26.55	26.65	26.45	25.50	25.10	25.25	25.15	25.35	25.45	25.60
27	26.55	26.80	26.30	26.60	26.25	25.80	25.35	25.10	25.15	25.30	25.65	25.55
28	26.70	26.95	26.45	26.55	26.25	25.85	25.45	25.05	25.05	25.35	25.70	25.80
29	26.75	26.95	26.80	26.70	---	25.75	25.40	25.05	24.95	25.35	25.55	25.80
30	26.80	26.90	26.85	26.65	---	25.55	25.40	25.00	25.10	25.35	25.55	25.80
31	26.85	---	26.70	26.25	---	25.40	---	25.00	---	25.35	25.45	---
MAX	26.85	26.95	27.00	26.85	26.60	26.15	25.65	25.40	25.25	25.35	25.70	25.80

WTR YR 1982 MEAN 25.89 HIGH 24.95 LOW 27.00

WILLIAMS COUNTY

413108084415300. Local number, WM-12.
LOCATION.--Lat 41°31'08", long 84°41'53", Hydrologic Unit 04100003, 1.7 mi (2.7 km) east of Blakeslee.
Owner: State of Ohio.
AQUIFER.--Sand and gravel of Pleistocene Age.
WELL CHARACTERISTICS.--Drilled test artesian well, diameter 10 in (0.25 m), depth 115 ft (35.1 m), cased to 115 ft (35.1 m), screened 85 ft to 115 ft (25.9 m to 35.1 m).
DATUM.--Altitude of land-surface datum is 830 ft (253 m), from topographic map. Measuring point: Floor of instrument shelter 1.50 ft (0.457 m) above land-surface datum.
PERIOD OF RECORD.--1974 to current year.
EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 10.56 ft (3.219 m) Feb. 6-7, 1977; minimum daily low, 3.83 ft (1.167 m) Mar. 17, 1982.
EXTREMES FOR CURRENT YEAR.--Maximum daily low, 10.09 ft (3.075 m) Sept. 16; minimum daily low, 3.83 ft (1.167 m) Mar. 17.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.60	8.56	8.39	9.01	8.60	7.72	5.75	7.75	7.46	8.34	9.32	9.84
2	8.65	8.61	8.59	9.00	8.52	7.80	5.75	7.82	7.55	8.22	9.32	9.87
3	8.61	8.64	8.62	8.83	8.37	7.92	5.50	7.89	7.61	8.10	9.35	9.97
4	8.54	8.62	8.70	8.43	8.49	7.82	5.88	7.94	7.60	8.16	9.40	10.01
5	8.60	8.59	8.70	8.12	8.42	8.06	5.88	7.97	7.72	8.20	9.46	9.99
6	8.65	8.68	8.65	7.72	8.37	8.04	6.02	7.97	7.85	8.25	9.47	10.02
7	8.70	8.72	8.41	7.72	8.33	8.14	6.15	8.01	7.91	8.37	9.47	10.02
8	8.75	8.80	8.61	7.69	8.36	8.21	6.18	8.08	8.01	8.46	9.43	10.01
9	8.79	8.92	8.65	7.66	8.33	8.27	6.28	8.13	8.06	8.52	9.46	9.99
10	8.84	8.89	8.63	7.82	8.41	8.21	6.30	8.11	8.00	8.52	9.51	9.97
11	8.91	8.92	8.70	8.01	8.45	8.07	6.26	8.10	8.06	8.50	9.53	10.01
12	8.94	8.95	8.75	8.09	8.49	7.75	6.19	8.18	8.04	8.59	9.55	10.04
13	8.97	8.95	8.75	8.03	8.45	6.83	5.98	8.24	8.14	8.64	9.54	10.05
14	8.93	8.92	8.72	8.07	8.40	5.64	6.07	8.28	8.20	8.67	9.57	10.05
15	8.98	8.88	8.72	8.17	8.42	4.57	6.09	8.35	8.19	8.70	9.61	10.05
16	8.99	8.83	8.82	8.39	8.42	4.00	6.17	8.40	8.29	8.73	9.65	10.09
17	8.95	8.92	8.84	8.41	8.32	3.83	6.22	8.44	8.33	8.77	9.68	10.08
18	8.97	8.97	8.88	8.42	8.29	3.93	6.33	8.42	8.35	8.80	9.71	10.03
19	9.04	8.92	8.90	8.48	8.30	3.97	6.32	8.43	8.31	8.83	9.71	10.03
20	9.02	8.82	8.92	8.57	8.22	3.92	6.59	8.48	8.30	8.92	9.72	10.04
21	9.07	8.81	8.82	8.69	8.17	4.00	6.78	8.53	8.25	8.91	9.78	10.06
22	9.06	8.73	8.79	8.67	8.16	4.12	6.94	8.50	8.19	8.88	9.76	10.05
23	8.85	8.68	8.95	8.36	7.94	4.19	6.98	8.39	8.26	8.94	9.72	10.04
24	8.84	8.70	8.95	8.54	7.84	4.34	7.07	8.37	8.29	8.99	9.74	10.00
25	8.73	8.71	8.94	8.63	7.90	4.45	7.14	8.33	8.33	9.05	9.80	10.05
26	8.73	8.60	8.91	8.69	7.82	4.71	7.30	8.29	8.41	9.09	9.82	10.05
27	8.69	8.64	8.92	8.68	7.71	5.04	7.52	8.29	8.43	9.10	9.86	10.00
28	8.61	8.66	9.00	8.77	7.76	5.19	7.59	7.89	8.45	9.17	9.93	10.07
29	8.50	8.66	9.09	8.79	---	5.32	7.64	7.44	8.45	9.20	9.93	10.05
30	8.49	8.61	9.07	8.57	---	5.32	7.69	7.32	8.42	9.23	9.85	10.03
31	8.54	---	8.96	8.52	---	5.57	---	7.35	---	9.28	9.89	---
MAX	9.07	8.97	9.09	9.01	8.60	8.27	7.69	8.53	8.45	9.28	9.93	10.09

WTR YR 1982 MEAN 8.34 HIGH 3.83 LOW 10.09

WYANDOT COUNTY

405009083172600. Local number, WY-1.
LOCATION.--Lat 40°50'09", long 83°17'26", Hydrologic Unit 04100011, State Rt 199, Upper Sandusky.
Owner: Karg Supply Co.
AQUIFER.--Limestone of Silurian Age.
WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 5 in (0.13 m), depth 90 ft (27.4 m), cased.
DATUM.--Altitude of land-surface datum is 850 ft (259 m), from topographic map. Measuring point: Floor of instrument shelter 3.00 ft (0.914 m) above land-surface datum.
REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.
PERIOD OF RECORD.--September 1951 to current year.
EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 40.90 ft (12.466 m) July 12, 15, 17, 21, Aug. 26, 1961; minimum daily low, 25.75 ft (8.123 m) Apr. 16, 1980.
EXTREMES FOR CURRENT YEAR.--Maximum daily low, 29.43 ft (8.970 m) Aug. 19; minimum recorded daily low, 25.45 ft (7.757 m) Apr. 21.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26.95	27.05	26.35	26.10	25.75	---	---	25.90	25.87	26.64	27.27	27.67
2	26.85	27.05	26.20	---	25.70	---	---	25.90	26.04	26.67	27.16	27.74
3	26.90	26.95	26.25	---	25.65	---	---	25.95	26.12	26.67	27.33	27.83
4	26.95	26.95	26.30	---	25.75	---	---	26.00	26.15	26.45	27.40	27.83
5	26.90	26.85	26.35	---	25.85	---	---	26.05	26.14	26.30	27.92	27.74
6	26.80	26.70	26.35	---	25.90	---	---	26.05	26.10	26.34	27.84	27.47
7	26.85	26.65	26.25	---	25.90	---	---	26.07	26.08	26.54	27.81	27.36
8	26.95	26.60	26.10	---	25.85	---	---	26.05	26.19	26.60	27.53	27.65
9	26.95	26.60	26.25	---	25.85	---	---	26.00	26.25	26.67	27.24	27.76
10	26.95	26.60	26.30	---	25.90	---	---	25.96	26.26	26.70	27.46	27.79
11	26.85	26.65	26.30	---	25.95	---	---	26.10	26.34	26.66	27.57	27.81
12	26.80	26.75	26.30	---	26.00	---	---	26.27	26.34	26.65	27.61	27.75
13	26.90	26.75	26.30	---	26.05	---	---	26.39	26.29	26.82	27.65	27.62
14	26.95	26.75	26.25	---	26.05	---	---	26.42	26.24	26.93	27.65	27.84
15	26.95	26.70	26.15	---	25.90	---	---	26.43	26.27	27.03	27.60	28.08
16	27.00	26.55	26.20	---	25.85	---	---	26.40	26.23	27.09	27.73	28.16
17	27.00	26.50	26.25	---	25.85	---	---	26.41	26.24	27.09	28.54	28.13
18	26.75	26.55	26.25	---	---	---	---	26.49	26.27	27.00	29.35	28.01
19	26.70	26.55	26.30	---	---	---	---	26.56	26.27	26.83	29.43	27.92
20	26.90	26.55	26.30	25.95	---	---	---	26.51	26.21	26.99	28.82	27.72
21	27.10	26.50	26.25	26.05	---	---	25.45	26.48	26.13	27.09	28.17	27.89
22	27.10	26.50	26.10	26.10	---	---	25.55	26.48	26.22	27.10	27.76	28.07
23	27.10	26.50	26.05	26.00	---	---	25.55	26.40	26.36	27.18	27.40	28.05
24	27.05	26.50	26.10	25.85	---	25.80	25.55	26.31	26.49	27.21	27.52	28.00
25	26.95	26.55	26.10	25.85	25.85	25.65	25.55	26.37	26.69	27.19	27.55	27.93
26	26.75	26.55	26.00	25.95	25.90	25.45	25.55	26.38	26.62	27.11	27.64	27.84
27	26.95	26.45	25.95	25.95	25.90	25.55	25.85	26.37	26.53	27.22	27.68	27.64
28	27.05	26.35	---	26.00	25.85	25.60	26.00	26.32	26.61	27.26	27.69	27.85
29	27.05	26.35	---	26.05	---	25.70	26.00	26.20	26.66	27.35	27.63	27.96
30	27.05	26.35	26.05	26.05	---	25.65	25.90	26.03	26.61	27.37	27.46	27.98
31	27.05	---	26.10	25.90	---	25.55	---	25.87	---	27.37	27.63	---
MAX	27.10	27.05	26.35	26.10	26.05	25.80	26.00	26.56	26.69	27.37	29.43	28.16

WTR YR 1982 MEAN 26.67 HIGH 25.45 LOW 29.43

The following table contains water level measurements and chemical analyses from observation wells located in three small watersheds associated with different coal seams. The data will be used to document ground-water flow and water quality during pre- and post- mining conditions.

COSHOCTON COUNTY

402213081481700. Local number, A06 W1-1.
LOCATION.--Lat 40°22'13", long 81°48'17", Hydrologic Unit 05040003, near Coshocton.
AQUIFER.--Shales of Middle Pennsylvanian Age.
WELL CHARACTERISTICS.--Drilled observation water well, diameter 6 in (0.15 m), depth 90 ft (27.4 m) cased to 18.8 ft (5.7 m).
DATUM.--Altitude of land-surface datum is 1,207.84 ft (368.150 m). Measuring point: Top of casing, 1.2 ft 0.37 m) above land-surface datum.
PERIOD OF RECORD.--May 1976 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water-level measured, 27.77 ft (8.46 m) below land-surface datum, Mar.16, 1982; lowest measured, 85.04 ft (25.92 m) below land-surface datum, Oct. 20, 1976.

HIGHEST WATER LEVEL 27.77 FEET BELOW LAND SURFACE DATUM MAR 16, 1982.

LOWEST WATER LEVEL 60.32 FEET BELOW LAND SURFACE DATUM NOV 18, 1981.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 12, 1981	58.52	DEC 17, 1981	59.07	FEB 15, 1982	45.79	MAR 16, 1982	27.77
NOV 18	60.32	JAN 28, 1982	39.48				

402213081481701. Local number, A06 W2-2.
LOCATION.--Lat 40°22'13", long 81°48'17", Hydrologic Unit 05040003, near Coshocton.
AQUIFER.--Sand, shales and coals of Middle Pennsylvanian Age.
WELL CHARACTERISTICS.--Drilled observation water well, diameter 6 in (0.15 m), depth 169 ft (51.5 m), cased to 98.8 ft (30.1 m).
DATUM.--Altitude of land-surface datum is 1,207.29 ft (367.982 m). Measuring point: Top of casing, 2.2 ft (0.67 m) above land-surface datum.
PERIOD OF RECORD.--May 1976 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water-level measured, 110.76 ft (33.76 m) below land-surface datum, Mar. 16, 1982; lowest measured, 162.76 ft (49.61 m) below land-surface datum, Feb. 17, 1977.

HIGHEST WATER LEVEL 110.76 FEET BELOW LAND SURFACE DATUM MAR 16, 1982.

LOWEST WATER LEVEL 117.32 FEET BELOW LAND SURFACE DATUM OCT 12, 1981.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 12, 1981	117.32	DEC 17, 1981	114.73	FEB 15, 1982	112.24	MAR 16, 1982	110.76
NOV 18	115.89	JAN 18, 1982	113.04				

402210081480700. Local number, A06 W3-1.
LOCATION.--Lat 40°22'10", long 81°48'07", Hydrologic Unit 05040003, near Coshocton.
AQUIFER.--Sand, shales and coals of Middle Pennsylvanian Age.
WELL CHARACTERISTICS.--Drilled observation well, diameter 6 in (0.15 m), depth 75 ft (22.9 m), cased to 18.5 ft (5.6 m).
DATUM.--Altitude of land-surface datum is 1,206.26 ft (367.688 m). Measuring point: Top of casing, 1.5 ft (0.46 m) above land-surface datum.
PERIOD OF RECORD.--May 1976 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water-level measured, 54.48 ft (16.61 m) below land-surface datum, Feb. 27, 1979; lowest measured, 67.49 ft (20.57 m) below land-surface datum, June 25, 1976.

HIGHEST WATER LEVEL 58.32 FEET BELOW LAND SURFACE DATUM MAR 16, 1982.

LOWEST WATER LEVEL 64.28 FEET BELOW LAND SURFACE DATUM DEC 17, 1981.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 12, 1981	64.04	DEC 17, 1981	64.28	FEB 15, 1982	62.16	MAR 16, 1982	58.32
NOV 18	64.00	JAN 28, 1982	63.60				

COSHOCTON COUNTY--Continued

402210081480701. Local number, A06 W4-2.
LOCATION.--Lat 40°22'10", long 81°48'07", Hydrologic Unit 05040003, near Coshocton.
AQUIFER.--Shales and sands of Middle Pennsylvanian Age.
WELL CHARACTERISTICS.--Drilled observation water well, diameter 6 in (0.15 m), depth 170 ft (51.8 m) cased to 78.9 ft (24.0 m). After Oct. 18, 1976, 4 in (0.10 m) slotted casing to bottom of well.
DATUM.--Altitude of land-surface datum is 1,206.07 ft (367.610 m). Measuring point: Top of casing, 2.1 ft (0.64 m) above land-surface datum.
REMARKS.--Well redrilled Oct. 18, 1976 after cave-in.
PERIOD OF RECORD.--May 1976 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water-level measured, 87.12 ft (26.55 m) below land-surface datum, May 14, 1981; lowest measured, 93.31 ft (28.44 m) below land-surface datum, Feb 17, 1977.

HIGHEST WATER LEVEL 87.18 FEET BELOW LAND SURFACE DATUM MAR 16, 1982.

LOWEST WATER LEVEL 87.97 FEET BELOW LAND SURFACE DATUM NOV 16, 1981.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 12, 1981	87.77	DEC 17, 1981	87.97	FEB 15, 1982	87.60	MAR 16, 1982	87.18
NOV 16	87.97	JAN 28, 1982	87.91				

402208081481000. Local number, A06 W5-1.
LOCATION.--Lat 40°:22'08", long 81°48'10", Hydrologic Unit 05040003, near Coshocton.
AQUIFER.--Sand, shales and coals of Middle Pennsylvanian Age.
WELL CHARACTERISTICS.--Drilled observation water well, diameter 6 in (0.15 m), depth 10 ft (3.0 m), cased to 9.3 ft (2.8 m).
DATUM.--Altitude of land-surface datum is 1,136.82 ft (346.503 m). Measuring point: Top of casing, 1.7 ft (0.52 m) above land-surface datum.
PERIOD OF RECORD.--May 1976 to current year.
REMARKS.--Dry since construction.

HIGHEST WATER LEVEL CANNOT BE DETERMINED BECAUSE OF SITE STATUS.

LOWEST WATER LEVEL WELL DRY OCT 12, 1981; NOV 18, 1981; DEC 17, 1981; JAN 28, 1982; FEB 15, 1982; MAR 16, 1982

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 12, 1981	DRY	DEC 17, 1981	DRY	FEB 15, 1982	DRY	MAR 16, 1982	DRY
NOV 18	DRY	JAN 28, 1982	DRY				

402208081481001. Local number, A06 W6-2.
LOCATION.--Lat 40°22'08", long 81°48'10", Hydrologic Unit 05040003, near Coshocton.
AQUIFER.--Sand, shales and coals of Middle Pennsylvanian Age.
WELL CHARACTERISTICS.--Drilled observation water well, diameter 6 in (0.15 m), depth 98 ft (29.9 m), cased to 18.7 ft (5.7 m).
DATUM.--Altitude of land-surface datum is 1,136.32 ft (346.350 m). Measuring point: Top of casing, 2.3 ft (0.70 m) above land-surface datum.
PERIOD OF RECORD.--May 1976 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water-level measured, 24.41 ft (7.44 m) below land-surface datum, Apr. 21, 1980; lowest measured, 29.80 ft (9.08 m) below land-surface datum, Sept. 14, 1977.

HIGHEST WATER LEVEL 24.83 FEET BELOW LAND SURFACE DATUM MAR 16, 1982.

LOWEST WATER LEVEL 28.47 FEET BELOW LAND SURFACE DATUM NOV 18, 1981.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 12, 1981	28.34	DEC 17, 1981	28.36	FEB 15, 1982	25.62	MAR 16, 1982	24.83
NOV 18	28.47	JAN 28, 1982	26.33				

COSHOCTON COUNTY--Continued

402210081481600. Local number, A06 W7-1.
LOCATION.--Lat 40°22'10", long 81°48'16", Hydrologic Unit 05040003, near Coshocton.
AQUIFER.--Sand, shales and coals of Middle Pennsylvanian Age.
WELL CHARACTERISTICS.--Drilled observation water well, diameter 6 in (0.15 m), depth 12 ft (3.6 m), cased to 9.7 ft (3.0 m).
DATUM.--Altitude of land-surface datum is 1,138.28 ft (346.948 m). Measuring point: Top of casing, 2.3 ft (0.70 m) above land-surface datum.
PERIOD OF RECORD.--May 1976 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water-level measured, 0.05 ft (0.02 m) above land-surface datum, Apr. 4, 1979; lowest measured, 11.26 ft (3.43 m) below land-surface datum, Feb. 17, 1977.

HIGHEST WATER LEVEL 0.50 FEET BELOW LAND SURFACE DATUM MAR 16, 1982.

LOWEST WATER LEVEL 10.13 FEET BELOW LAND SURFACE DATUM OCT 12, 1981.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 12, 1981	10.13	DEC 17, 1981	9.84	FEB 15, 1982	1.56	MAR 16, 1982	0.50
NOV 16	10.13	JAN 28, 1982	0.94				

402210081481601. Local number, A06 W8-2.
LOCATION.--Lat 40°22'10", long 81°48'16", Hydrologic Unit 05040003, near Coshocton.
AQUIFER.--Sand, shales and coals of Middle Pennsylvanian Age.
WELL CHARACTERISTICS.--Drilled observation water well, diameter 6 in (0.15 m), depth 101 ft (30.8 m), cased to 18.6 ft (5.7 m).
DATUM.--Altitude of land-surface datum is 1,138.64 ft (347.057 m). Measuring point: Top of casing, 1.4 f""t (0.43 m) above land-surface datum.
PERIOD OF RECORD.--May 1976 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water-level measured, 26.68 ft (8.13 m) below land-surface datum, June 15, 1981; lowest measured, 40.11 ft (12.23 m) below land-surface datum, Mar. 17, 1977.

HIGHEST WATER LEVEL 29.46 FEET BELOW LAND SURFACE DATUM MAR 16, 1982.

LOWEST WATER LEVEL 31.48 FEET BELOW LAND SURFACE DATUM DEC 17, 1981.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 12, 1981	30.39	DEC 17, 1981	31.48	FEB 15, 1982	30.71	MAR 16, 1982	29.46
NOV 18	31.11	JAN 28, 1982	31.40				

402210081481602. Local number, A06 W9-3.
LOCATION.--Lat 40°22'10", long 81°48'16", Hydrologic Unit 05040003, near Coshocton.
AQUIFER.--Sand, shales and coals of Middle Pennsylvanian Age.
WELL CHARACTERISTICS.--Drilled observation water well, diameter 6 in (0.15 m), depth 183 ft (55.8 m), cased to 114.5 ft (34.9 m). After Oct. 18, 1976, 4 in (0.10 m) slotted casing to bottom of well.
DATUM.--Altitude of land-surface datum is 1,138.35 ft (346.969 m). Measuring point: Top of casing, 1.5 ft (0.46 m) above land-surface datum.
REMARKS.--Well redrilled October 18, 1976 after cave-in.
PERIOD OF RECORD.--May 1976 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water-level measured, 107.58 ft (32.79 m) below land-surface datum; May 13, 1980; lowest measured, 112.39 ft (34.26 m) below land-surface datum, May 25, 1976.

HIGHEST WATER LEVEL 108.23 FEET BELOW LAND SURFACE DATUM MAR 16, 1982.

LOWEST WATER LEVEL 108.60 FEET BELOW LAND SURFACE DATUM OCT 12, 1981.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 12, 1981	108.60	DEC 17, 1981	108.43	FEB 15, 1982	108.42	MAR 16, 1982	108.23
NOV 18	108.38	JAN 28, 1982	108.41				

COSHOCTON COUNTY--Continued

402156081481300. Local number, A06 W10-3.
LOCATION.--Lat 40°21'56", long 81°48'13", Hydrologic Unit 05040003, near Coshocton.
AQUIFER.--Sand, shale, and coals of Middle Pennsylvanian Age.
WELL CHARACTERISTICS.--Drilled observation water well, diameter 6 in (0.15 m), depth 66 ft (20.1 m), cased to 17.4 ft (5.3 m).
DATUM.--Altitude of land-surface datum is 1,011.87 ft (308.418 m). Measuring point: Top of casing, 2.58 ft (0.786 m) above land-surface datum.
PERIOD OF RECORD.--May 1976 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water-level measured, 10.43 ft (3.18 m) below land-surface datum, June 15, 1981; lowest measured, 11.56 ft (3.52 m) below land-surface datum, Jan. 18, 1977.

HIGHEST WATER LEVEL 10.58 FEET BELOW LAND SURFACE DATUM MAR 16, 1982.

LOWEST WATER LEVEL 11.10 FEET BELOW LAND SURFACE DATUM OCT 12, 1981.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 12, 1981	11.10	DEC 17, 1981	11.09	FEB 15, 1982	10.88	MAR 16, 1982	10.58
NOV 18	11.08	JAN 28, 1982	10.88				

402208081481300. Local number, A06 W11-2.
LOCATION.--Lat 40°22'08", long 81°48'13", Hydrologic Unit 05040003, near Coshocton.
AQUIFER.--Sand, shales and coals of Middle Pennsylvanian Age.
WELL CHARACTERISTICS.--Drilled observation water well, diameter 6 in (0.15 m), depth 56 ft (17.1 m), cased to 18.4 ft (5.6 m).
DATUM.--Altitude of land-surface datum is 1092.35 ft (332.948 m). Measuring point: Top of casing, 1.6 ft (0.49 m) above land-surface datum.
PERIOD OF RECORD.--May 1976 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water-level measured, 14.52 ft (4.43 m) below land-surface datum, May 25, 1976; lowest measured, 18.63 ft (5.68 m) below land-surface datum, Oct. 12, 1981.

HIGHEST WATER LEVEL 16.17 FEET BELOW LAND SURFACE DATUM MAR 16, 1982.

LOWEST WATER LEVEL 18.63 FEET BELOW LAND SURFACE DATUM OCT 12, 1981.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 12, 1981	18.63	DEC 17, 1981	18.19	FEB 15, 1982	16.90	MAR 16, 1982	16.17
NOV 18	18.62	JAN 28, 1982	17.04				

402208081481200. Local number, A06 W157.
LOCATION.--Lat 40°22'08", long 81°48'12", Hydrologic Unit 05040003, near Coshocton.
AQUIFER.--Sand, shales and coals of Middle Pennsylvanian Age.
WELL CHARACTERISTICS.--Hand-dug well, diameter 3 ft (0.9 m), depth 13.9 ft (4.2 m).
DATUM.--Altitude of land-surface datum is 1,115.45 ft (339.989 m). Measuring point: Top of casing, at land-surface datum.
PERIOD OF RECORD.--August 1976 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water-level measured, 5.93 ft (1.81 m) below land-surface datum, June 15, 1981; lowest measured, 11.16 ft (3.40 m) below land-surface datum, Jan. 18, 1977.

HIGHEST WATER LEVEL 6.26 FEET BELOW LAND SURFACE DATUM MAR 16, 1982.

LOWEST WATER LEVEL 9.58 FEET BELOW LAND SURFACE DATUM DEC 17, 1981.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 12, 1981	8.70	DEC 17, 1981	9.58	FEB 15, 1982	7.13	MAR 16, 1982	6.26
NOV 18	9.25	JAN 28, 1982	7.68				

JEFFERSON COUNTY

401011080521602. Local number, J11 P1-1.
LOCATION.--Lat 40°10'11", long 80°52'16", Hydrologic unit 05030106, near Harrisville.
AQUIFER.--Overburden spoils, replaced after mining.
WELL CHARACTERISTICS.--Drilled observation water well, diameter 5 in (0.13 m), depth 39 ft (11.9 m), cased to 39 ft (11.9 m), bottom 10 ft (3.0 m) slotted.
DATUM.--Altitude of land-surface datum is 1,236.2 ft (376.79 m). Measuring point: Top of casing, 3.0 ft (0.91 m) above land-surface datum.
PERIOD OF RECORD.--March 1981 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 35.32 ft (10.77 m) below land-surface datum, Apr. 25-26, 1982; lowest measured, dry, Mar. 13, 1981 and Mar. 16, 1981.

HIGHEST WATER LEVEL 35.33 FEET BELOW LAND SURFACE DATUM APR 19, 1982.

LOWEST WATER LEVEL 37.40 FEET BELOW LAND SURFACE DATUM DEC 28, 1981.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 15, 1981	36.88	JAN 28, 1982	37.17	FEB 25, 1982	36.73	APR 19, 1982	35.33
NOV 18	37.21	FEB 03	37.11	MAR 29	35.50	AUG 03	35.76
DEC 28	37.40						

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	36.77	37.09	37.33	37.39	---	36.61	35.43	35.35			35.79	36.26
10	36.82	37.14	37.35	37.33	---	36.42	35.39	35.36			35.85	36.32
15	36.88	37.19	37.37	37.30	---	36.15	35.36	35.37			35.94	36.38
20	36.93	37.23	37.39	---	36.92	35.78	35.33	---			36.02	36.44
25	36.98	37.27	37.40	---	36.78	35.58	35.32	---			36.09	36.51
EOM	37.05	37.30	37.39	37.13	36.71	35.48	35.34	---			36.19	36.58
MAX	37.05	37.30	37.41	37.39	37.12	36.68	35.48	35.38			36.19	36.58

WTR YR 1982 MEAN 36.48 HIGH 35.32 APR 25 AND OTHERS LOW 37.41 DEC 23 AND OTHERS

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	SPECIFIC CONDUCTANCE (UMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	NITROGEN DISSOLVED (MG/L AS N)	HYDROGEN SULFIDE TOTAL (MG/L AS H2S)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)
FEB 17...	1100	1210	6.8	11.0	2	.84	.0	610	220	165	49	30
MAY 19...	1130	1500	7.0	14.5	<1	1.8	.0	770	440	208	61	31
AUG 03...	1300	1400	7.0	14.0	<1	--	.0	760	410	210	57	28

DATE	PERCENT SODIUM	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE FET-FLD (MG/L AS HCO3)	CARBONATE FET-FLD (MG/L AS CO3)	ALKALINITY FIELD (MG/L AS CACO3)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)
FEB 17...	10	.6	3.4	480	0	394	122	230	73	.2	11	801
MAY 19...	8	.5	3.6	400	0	328	64	460	92	.1	11	1070
AUG 03...	7	.5	3.4	430	0	353	69	430	87	.2	11	1040

DATE	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	PHOSPHORUS, DISSOLVED (MG/L AS P)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	STRONTIUM, DISSOLVED (UG/L AS SR)	CARBON, ORGANIC TOTAL (MG/L AS C)	PHENOLS (UG/L)
FEB 17...	.24	.190	.41	.040	65000	11	8300	810	760	26	1
MAY 19...	1.5	.200	.11	<.010	34000	200	820	330	1000	1.3	1
AUG 03...	--	--	--	--	5900	67	550	410	970	1.8	<1

JEFFERSON COUNTY--Continued

401011080521603. Local number, J11 P2-2.
LOCATION.--Lat 40°10'11", long 80°52'16", Hydrologic unit 05030106, near Harrisville.
AQUIFER.--Sand, shales and coals of Middle Pennsylvanian Age.
WELL CHARACTERISTICS.--Drilled observation water well, diameter 6 in (0.15 m), depth 187 ft (57.0 m), cased to 46 ft (14.0 m).
DATUM.--Altitude of land-surface datum is 1,236.2 ft (376.79 m). Measuring point: Top of casing, 2.7 ft (0.82 m) above land-surface datum.
PERIOD OF RECORD.--March 1981 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 36.58 ft (11.15 m) below land-surface datum, August 8, 1981; lowest measured, 40.40 ft (12.31 m) below land-surface datum, Mar. 13, 1981.

HIGHEST WATER LEVEL 35.68 FEET BELOW LAND SURFACE DATUM APR 19, 1982.

LOWEST WATER LEVEL 37.68 FEET BELOW LAND SURFACE DATUM DEC 28, 1981.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 15, 1981	37.09	JAN 28, 1982	37.44	FEB 25, 1982	36.98	APR 19, 1982	35.68
NOV 18	37.44	FEB 03	37.44	MAR 29	35.86	AUG 04	36.18
DEC 28	37.68						

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	36.99	37.32	37.60	37.66	37.30	36.84	35.79	35.73	35.80	36.03	36.22	36.70
10	37.05	37.38	37.62	37.61	37.23	36.68	35.75	35.75	35.84	35.97	36.29	36.76
15	37.10	37.42	37.64	37.57	37.21	36.45	35.72	35.76	35.88	35.98	36.37	36.83
20	37.16	37.47	37.67	37.55	37.10	36.09	35.69	35.72	35.93	36.01	36.45	36.89
25	37.21	37.52	37.69	37.47	36.99	35.91	35.70	35.73	35.99	36.07	36.52	36.97
EOM	37.28	37.56	37.67	37.41	36.92	35.85	35.72	35.77	36.04	36.10	36.62	37.07
MAX	37.28	37.56	37.70	37.67	37.40	36.90	35.85	35.77	36.04	36.10	36.62	37.07

WTR YR 1982 MEAN 36.66 HIGH 35.69 APR 20 AND OTHERS LOW 37.70 DEC 23

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	SPECIFIC CONDUCTANCE (UMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	NITROGEN DISSOLVED (MG/L AS N)	HYDROGEN SULFIDE TOTAL (MG/L AS H2S)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)
FEB 17...	1400	1240	6.8	--	1	.73	.0	600	260	156	51	32
MAY 19...	1300	1600	7.0	14.0	<1	1.5	.0	810	470	216	66	31
AUG 04...	1500	1140	7.0	15.0	<1	--	.0	700	350	190	55	32

DATE	PERCENT SODIUM	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE FET-FLD (MG/L AS HCO3)	CARBONATE FET-FLD (MG/L AS CO3)	ALKALINITY FIELD (MG/L AS CACO3)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)
FEB 17...	10	.6	3.4	420	0	344	107	220	68	.2	12	754
MAY 19...	8	.5	3.5	410	0	336	66	500	86	.1	12	1120
AUG 04...	9	.6	3.0	430	0	353	69	360	86	.2	13	955

DATE	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	PHOSPHORUS, DISSOLVED (MG/L AS P)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	STRONTIUM, DISSOLVED (UG/L AS SR)	CARBON, ORGANIC TOTAL (MG/L AS C)	PHENOLS (UG/L)
FEB 17...	.15	.340	.24	.030	32000	1500	500	260	1700	5.2	<1
MAY 19...	1.0	.460	.00	<.010	870	220	480	440	2000	1.2	<1
AUG 04...	--	--	--	--	2800	1300	310	240	2000	1.2	<1

JEFFERSON COUNTY--Continued

401010080521801. Local number, J11 P3-1.
LOCATION.--Lat 40°10'10", long 80°52'18", Hydrologic Unit 05030106, near Harrisville.
AQUIFER.--Overburden spoils, replaced after mining.
WELL CHARACTERISTICS.--Drilled observation water well, diameter 5 in (0.13 m), depth 35.6 ft (10.9 m), cased to 38.0 ft (11.6 m).
DATUM.--Altitude of land-surface datum is 1,236.7 ft (376.95 m). Measuring point: Top of casing, 3.0 ft (0.91 m) above land-surface datum.
REMARKS.--Dry since construction.
PERIOD OF RECORD.--March 1981 to current year.

HIGHEST WATER LEVEL CANNOT BE DETERMINED BECAUSE OF SITE STATUS.

LOWEST WATER LEVEL WELL DRY OCT 15, 1981; NOV 18, 1981; DEC 28, 1981; JAN 28, 1982; FEB 25, 1982; MAR 25, 1982; APR 19, 1982; AUG 03, 1982.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 15, 1981	DRY	DEC 28, 1981	DRY	FEB 25, 1982	DRY	APR 19, 1982	DRY
NOV 18	DRY	JAN 28, 1982	DRY	MAR 25	DRY	AUG 03	DRY

JEFFERSON COUNTY--Continued

401002080521800. Local number, J11 W4-1.
LOCATION.--Lat 40°10'02", long 80°52'18", Hydrologic Unit 05030106, near Harrisville.
AQUIFER.--Sand, shales and coals of Middle Pennsylvanian Age.
WELL CHARACTERISTICS.--Drilled observation water well, diameter 6 in (0.15 m), depth 60 ft (18.3 m), cased to 18.80 ft (5.73 m).
DATUM.--Altitude of land-surface datum is 1251.37 ft (381.418 m). Measuring point: Top of casing, 1.2 ft (0.37 m) above land-surface datum.
PERIOD OF RECORD.--May 1976 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water-level measured, 42.88 ft (13.07 m) below land-surface datum, May 29, 1979; lowest, 56.51 ft (17.22 m) below land-surface datum, Nov. 18, 1980.

HIGHEST WATER LEVEL 50.88 FEET BELOW LAND SURFACE DATUM MAR 29, 1982.

LOWEST WATER LEVEL 55.29 FEET BELOW LAND SURFACE DATUM NOV 18, 1981.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 15, 1981	54.97	DEC 28, 1981	54.22	FEB 25, 1982	51.19	APR 19, 1982	51.25
NOV 18	55.29	JAN 21, 1982	54.55	MAR 29	50.88	AUG 05	54.14

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	54.74	55.26	54.73	53.81	51.96	52.34	50.66	52.80	53.48	52.61	54.20	54.30
10	54.81	55.09	54.36	53.62	53.22	50.62	50.99	52.15	53.56	53.37	54.13	54.61
15	54.96	55.17	54.73	54.12	53.87	49.22	50.92	52.75	53.70	53.65	54.22	54.74
20	55.03	55.35	54.97	54.50	51.51	48.36	51.41	---	53.76	53.84	54.35	54.81
25	54.96	54.88	54.01	52.06	51.34	49.43	52.06	53.27	53.99	53.97	54.42	54.85
EOM	55.00	55.21	54.32	53.70	52.02	51.14	52.58	53.21	53.58	54.12	54.51	54.56
MAX	55.09	55.35	55.23	54.62	53.87	52.53	52.58	53.39	54.09	54.12	54.51	54.87

WTR YR 1982 MEAN 53.45 HIGH 47.23 MAR 17 LOW 55.35 NOV 19 AND OTHERS

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	SPECIFIC CONDUCTANCE (UMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	NITROGEN DISSOLVED (MG/L AS N)	HYDROGEN SULFIDE TOTAL (MG/L AS H2S)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)
FEB 03...	1300	697	6.6	10.0	15	10	.6	270	75	79	18	15
MAY 19...	0900	575	7.1	14.5	<1	--	.0	260	63	78	15	9.8

DATE	PERCENT SODIUM	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE FET-FLD (MG/L AS HCO3)	CARBONATE FET-FLD (MG/L AS CO3)	ALKALINITY FIELD (MG/L AS CACO3)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)
FEB 03...	11	.4	3.6	238	0	195	96	94	44	<.1	16	405
MAY 19...	8	.3	1.7	240	0	197	31	84	21	.1	13	345

DATE	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	PHOSPHORUS, DISSOLVED (MG/L AS P)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	STRONTIUM, DISSOLVED (UG/L AS SR)	CARBON, ORGANIC TOTAL (MG/L AS C)	PHENOLS (UG/L)
FEB 03...	.09	10.0	.00	.680	27000	4300	410	190	310	9.9	20
MAY 19...	<.10	1.30	.00	.140	3200	2500	49	39	270	1.2	2

JEFFERSON COUNTY--Continued

401002080521801. Local number, J11 W5-3.
LOCATION.--Lat 40°10'02", long 80°52'18", Hydrologic Unit 05030106, near Harrisville.
AQUIFER.--Sand, shales and coals of Middle Pennsylvanian Age.
WELL CHARACTERISTICS.--Drilled observation water well, diameter 6 in (0.15 m), depth 280 ft (85.3 m), cased to 218 ft (66.4 m).
DATUM.--Altitude of land-surface datum is 1,251.74 ft (381.530 m). Measuring point: Top of casing, 1.76 ft (0.54 m) above land-surface datum.
REMARKS.--Dry since construction.
PERIOD OF RECORD.--June 1976 to current year.

HIGHEST WATER LEVEL CANNOT BE DETERMINED BECAUSE OF SITE STATUS.

LOWEST WATER LEVEL WELL DRY OCT 15, 1981; FEB 03, 1982.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 15, 1981	DRY	FEB 03, 1982	DRY

JEFFERSON COUNTY--Continued

401004080521900. Local number, J11 W6-1.
LOCATION.--Lat 40°10'04", long 80°52'19", Hydrologic Unit 05030106, near Harrisville.
AQUIFER.--Sand, shales and coals of Middle Pennsylvanian Age.
WELL CHARACTERISTICS.--Drilled observation water well, diameter 6 in (0.15 m), depth 46 ft (14.0 m), cased to 17.8 ft (5.4 m).
DATUM.--Altitude of land-surface datum is 1237.36 ft (377.147 m). Measuring point: Top of casing, 3.2 ft (0.98 m) above land-surface datum.
PERIOD OF RECORD.--May 1976 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 28.60 ft (8.72 m) below land-surface datum, Feb. 26, 1979; lowest, 45.61 ft (13.90 m) below land-surface datum, Jan. 19-28, 1981.

HIGHEST WATER LEVEL 38.80 FEET BELOW LAND SURFACE DATUM APR 19, 1982.

LOWEST WATER LEVEL 42.82 FEET BELOW LAND SURFACE DATUM JAN 21, 1982.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 15, 1981	42.04	NOV 28, 1981	42.78	FEB 25, 1982	41.82	APR 19, 1982	38.80
NOV 18	42.41	JAN 21, 1982	42.82	MAR 29	39.45	AUG 05	40.72

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	41.92	42.25	42.59	42.77	42.60	41.67	39.00	39.20	39.69	---	40.75	41.33
10	41.97	42.31	42.63	42.76	---	40.87	38.95	38.99	39.81	---	40.86	41.42
15	42.04	42.36	42.69	42.78	---	39.90	38.75	39.15	39.90	---	40.96	41.50
20	42.08	42.43	42.76	42.81	42.11	39.10	38.79	39.32	40.04	---	41.05	41.56
25	42.13	42.48	42.76	42.58	41.82	39.14	38.94	39.46	40.17	---	41.14	41.63
EOM	42.19	42.53	42.80	42.58	41.76	39.35	39.10	39.56	40.03	---	41.27	41.71
MAX	42.19	42.53	42.80	42.82	42.64	41.75	39.29	39.56	40.19	40.06	41.27	41.71

WTR YR 1982 MEAN 41.13 HIGH 38.71 APR 17 LOW 42.82 JAN 21 AND OTHERS

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	SPECIFIC CONDUCTANCE (UMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	NITROGEN DISSOLVED (MG/L AS N)	HYDROGEN SULFIDE TOTAL (MG/L AS H2S)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)
FEB 03...	1100	736	6.9	10.0	3	.42	.6	350	280	107	19	12
AUG 05...	1030	620	7.1	14.0	<1	--	.7	320	240	100	16	9.7

DATE	PERCENT SODIUM	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE FET-FLD (MG/L AS HCO3)	CARBONATE FET-FLD (MG/L AS CO3)	ALKALINITY FIELD (MG/L AS CACO3)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)
FEB 03...	7	.3	1.8	88	0	72	18	270	22	.1	18	496
AUG 05...	6	.2	1.4	98	0	80	12	180	14	.1	19	390

DATE	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	PHOSPHORUS, DISSOLVED (MG/L AS P)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	STRONTIUM, DISSOLVED (UG/L AS SR)	CARBON, ORGANIC TOTAL (MG/L AS C)	PHENOLS (UG/L)
FEB 03...	.17	.110	.14	<.010	9500	490	1100	910	640	3.8	<1
AUG 05...	--	--	--	--	23000	150	1100	580	510	7.8	<1

JEFFERSON COUNTY--Continued

401004080521901. Local number, J11 W7-2.
LOCATION.--Lat 40°10'04", long 80°52'19", Hydrologic Unit 05030106, near Harrisville.
AQUIFER.--Sand, shales and coals of Middle Pennsylvanian Age.
WELL CHARACTERISTICS.--Drilled observation water well, diameter 6 in (0.15 m), depth 192 ft (58.5 m), cased to 53.8 ft (16.4 m).
DATUM.--Altitude of land-surface datum is 1,237.25 ft (377.114 m). Measuring point: Top of casing, 3.0 ft (0.91 m) above land-surface datum.
PERIOD OF RECORD.--May 1976 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water-level measured, 60.45 ft (18.43 m) below land-surface datum, Jan. 16, 1980; lowest measured, 170.11 ft (51.85 m) below land-surface datum, Nov. 19, 1979.

HIGHEST WATER LEVEL 145.65 FEET BELOW LAND SURFACE DATUM NOV 18, 1981.

LOWEST WATER LEVEL 170.03 FEET BELOW LAND SURFACE DATUM AUG 05, 1982.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 15, 1981	167.26	JAN 21, 1982	146.27	FEB 25, 1982	159.60	APR 19, 1982	153.62
NOV 18	145.65	FEB 03	145.84	MAR 29	158.99	AUG 05	170.03
DEC 28	163.57						

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	SPECIFIC CONDUCTANCE (UMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	NITROGEN DISSOLVED (MG/L AS N)	HYDROGEN SULFIDE TOTAL (MG/L AS H2S)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)
FEB 03...	0930	965	7.8	9.5	100	.50	.0	37	0	9.3	3.2	220

DATE	PERCENT SODIUM	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE FET-FLD (MG/L AS HCO3)	CARBONATE FET-FLD (MG/L AS CO3)	ALKALINITY FIELD (MG/L AS CACO3)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)
FEB 03...	93	17	1.2	550	0	451	14	22	45	2.8	8.3	583

DATE	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	PHOSPHORUS, DISSOLVED (MG/L AS P)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	STRONTIUM, DISSOLVED (UG/L AS SR)	CARBON, ORGANIC TOTAL (MG/L AS C)	PHENOLS (UG/L)
FEB 03...	.05	.070	.38	<.010	24000	<3	440	20	430	4.0	<1

JEFFERSON COUNTY--Continued

401007080522400. Local number J11 W8-2.
LOCATION.--Lat 40°10'07", long 80°52'24", Hydrologic Unit 05030106, near Harrisville.
AQUIFER.--Sand, shales and coals of Middle Pennsylvanian Age.
WELL CHARACTERISTICS.--Drilled observation water well, diameter 6 in (0.15 m), depth 105 ft (32.0 m), cased to 20.43 ft (6.23 m).
DATUM.--Altitude of land-surface datum is 1,156.67 ft (352.553 m). Measuring point: Top of casing, 0.57 ft (0.174 m) above land-surface datum.
PERIOD OF RECORD.--May 1976 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 28.61 ft (8.72 m) below land-surface datum, Feb. 3, 1982; lowest measured, 37.23 ft (11.35 m) below land-surface datum, June 18, 1976.

HIGHEST WATER LEVEL 28.61 FEET BELOW LAND SURFACE DATUM FEB 03, 1982.

LOWEST WATER LEVEL 30.25 FEET BELOW LAND SURFACE DATUM NOV 18, 1981.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 15, 1981	30.21	DEC 14, 1981	29.58	FEB 03, 1982	28.61	APR 19, 1982	28.86
NOV 18	30.25	JAN 21, 1982	29.92	MAR 25	28.68	AUG 03	29.75

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	SPECIFIC CONDUCTANCE (UMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	NITROGEN DISSOLVED (MG/L AS N)	HYDROGEN SULFIDE TOTAL (MG/L AS H2S)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)
FEB 18...	1200	1230	6.9	--	1	.31	<.1	660	100	172	56	11
MAY 18...	1300	1250	7.1	12.5	<1	--	.0	680	89	178	56	14

DATE	PERCENT SODIUM	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE FET-FLD (MG/L AS HCO3)	CARBONATE FET-FLD (MG/L AS CO3)	ALKALINITY FIELD (MG/L AS CACO3)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)
FEB 18...	3	.2	2.2	680	0	558	137	180	12	.1	14	785
MAY 18...	4	.3	2.2	720	0	591	92	200	2.4	.1	14	824

DATE	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	PHOSPHORUS, DISSOLVED (MG/L AS P)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	STRONTIUM, DISSOLVED (UG/L AS SR)	CARBON, ORGANIC TOTAL (MG/L AS C)	PHENOLS (UG/L)
FEB 18...	.04	.110	.16	.040	3500	11	1700	1500	1500	1.6	<1
MAY 18...	<.10	.150	.08	.060	110	16	560	490	1800	--	<1

JEFFERSON COUNTY--Continued

401009080521500. Local number, J11 P10-1.
LOCATION.--Lat 40°10'09", long 80°52'15", Hydrologic Unit 05010306, near Harrisville.
AQUIFER.--Overburden spoils, replaced after mining.
WELL CHARACTERISTICS.--Drilled observation water well, diameter 5 in (0.13 m), depth 39.3 ft (12.0 m), cased to 39.0 ft (11.9 m).
DATUM.--Altitude of land-surface datum is 1236.1 ft (376.76 m). Measuring point: Top of casing, 3.0 ft 0.91 m) above land-surface datum.
PERIOD OF RECORD.--March 1981 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water-level measured, 35.66 ft (10.87 m) below land-surface datum, Apr. 19, 1982; lowest measured, dry, Mar. 17, 1981 to Dec. 28, 1981.

HIGHEST WATER LEVEL 35.66 FEET BELOW LAND SURFACE DATUM APR 19, 1982.

LOWEST WATER LEVEL WELL DRY OCT 15, 1981: NOV 18, 1981: DEC 28, 1981.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 15, 1981	DRY	DEC 28, 1981	DRY	FEB 25, 1982	37.79	APR 19, 1982	35.66
NOV 18	DRY	JAN 28, 1982	38.46	MAR 25	36.45	AUG 03	36.63

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	SPECIFIC CONDUCTANCE (UMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	NITROGEN DISSOLVED (MG/L AS N)	HYDROGEN SULFIDE TOTAL (MG/L AS H2S)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)
MAY 18...	1500	1050	6.8	13.5	<1	1.8	.0	490	230	139	34	16
AUG 03...	1430	1150	6.9	14.0	2	--	.0	630	290	180	43	20

DATE	PERCENT SODIUM	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE FET-FLD (MG/L AS HCO3)	CARBONATE FET-FLD (MG/L AS CO3)	ALKALINITY FIELD (MG/L AS CACO3)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)
MAY 18...	7	.3	2.9	320	0	262	81	260	42	.2	11	670
AUG 03...	6	.4	2.5	410	0	336	83	300	53	.2	12	814

DATE	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	PHOSPHORUS, DISSOLVED (MG/L AS P)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	STRONTIUM, DISSOLVED (UG/L AS SR)	CARBON, ORGANIC TOTAL (MG/L AS C)	PHENOLS (UG/L)
MAY 18...	1.3	.200	.28	.010	16000	26	630	400	460	5.4	1
AUG 03...	--	--	--	--	780	32	600	380	600	2.8	<1

MUSKINGUM COUNTY

394859081462803. Local number, M09 P2-2.
LOCATION.--Lat 39°48'59", long 81°46'28", Hydrologic Unit 05040004, near Chandlersville.
AQUIFER.--Sand, shales and coals of Middle Pennsylvanian Age.
WELL CHARACTERISTICS.--Drilled observation water well, diameter 7 in (0.18 m), depth 117 ft (35.7 m) cased to 40.0 ft (12.2 m).
DATUM.--Altitude of land-surface datum is 1,038.56 ft (316.553 m). Measuring point: Top of casing, 3.0 ft (0.91 m) above land-surface datum.
PERIOD OF RECORD.--September 1978 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water-level measured, 37.08 ft (11.30 m) below land-surface datum, Mar. 23, Apr. 13, 1982; lowest measured, 42.75 ft (13.03 m) below land-surface datum, September 27, 1978.

HIGHEST WATER LEVEL 37.08 FEET BELOW LAND SURFACE DATUM MAR 23, 1982; APR 13, 1982.

LOWEST WATER LEVEL 37.89 FEET BELOW LAND SURFACE DATUM JAN 15, 1982.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 14, 1981	37.63	DEC 15, 1981	37.78	FEB 16, 1982	37.51	APR 13, 1982	37.08
NOV 17	37.67	JAN 15, 1982	37.89	MAR 23	37.08	MAY 18	37.52

394855081462702. Local number, M09 P3-1.
LOCATION.--Lat 39°48'55", long 81°46'27", Hydrologic Unit 05040004, near Chandlersville.
AQUIFER.--Overburden spoils, replaced after mining.
WELL CHARACTERISTICS.--Drilled observation water well, diameter 7 in (0.18 m), depth 24 ft (7.3 m), cased to 24.0 ft (7.3 m), bottom 10 ft (3.0 m) slotted.
DATUM.--Altitude of land-surface datum is 1023.06 ft (311.829 m). Measuring point: Top of casing, 2.5 ft (0.76 m) above land-surface datum.
PERIOD OF RECORD.--September 1978 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water-level, 16.29 ft (4.97 m) below land-surface datum, Feb. 20, 1981; lowest measured, dry, Sept. 26, 1978 to Nov. 15, 1978.

HIGHEST WATER LEVEL 16.59 FEET BELOW LAND SURFACE DATUM MAR 23, 1982.

LOWEST WATER LEVEL 18.55 FEET BELOW LAND SURFACE DATUM NOV 17, 1981.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 14, 1981	18.09	DEC 15, 1981	18.49	FEB 16, 1982	16.76	APR 13, 1982	17.11
NOV 17	18.55	JAN 15, 1982	17.28	MAR 23	16.59		

394845081462600. Local number, M09 W5-2.
LOCATION.--Lat 39°48'45", long 81°46'26", Hydrologic Unit 05040004, near Chandlersville.
AQUIFER.--Sand, shales and coals of Middle Pennsylvanian Age.
WELL CHARACTERISTICS.--Drilled observation water well, diameter 6 in (0.15 m), depth 49 ft (14.9 m), cased to 17.3 ft (5.3 m).
DATUM.--Altitude of land-surface datum is 973.03 ft (296.580 m). Measuring point: Top of casing, 3.7 ft (1.13 m) above land-surface datum.
PERIOD OF RECORD.--March 1976 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 11.54 ft (4.13 m) below land-surface datum, Mar. 23, 1982; lowest measured, 21.70 ft (6.61 m) below land-surface datum, Jan. 4, 1977.

HIGHEST WATER LEVEL 13.54 FEET BELOW LAND SURFACE DATUM MAR 23, 1982.

LOWEST WATER LEVEL 15.98 FEET BELOW LAND SURFACE DATUM OCT 14, 1981.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 14, 1981	15.98	DEC 15, 1981	15.39	FEB 16, 1982	14.18	APR 13, 1982	13.66
NOV 17	15.77	JAN 15, 1982	14.99	MAR 23	13.54	MAY 18	15.14

MUSKINGUM COUNTY--Continued

394845081462601. Local number, M09 P5-2a.
LOCATION.--Lat 39°48'45", long 81°46'26", Hydrologic Unit 05040004, near Chandlersville.
AQUIFER.--Sand, shales and coals of Middle Pennsylvanian Age.
WELL CHARACTERISTICS.--Drilled observation water well, diameter 6 in (0.15 m), depth 50 ft (15.2 m), cased to 16.5 ft (5.0 m).
DATUM.--Altitude of land-surface datum is 974.17 ft (296.927 m). Measuring point: Top of casing, 3.0 ft (0.91 m) above land-surface datum.
PERIOD OF RECORD.--September 1978 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water-level measured, 3.91 ft (1.19 m) below land-surface datum, Aug. 19, 1980; lowest measured, 9.48 ft (2.89 m) below land-surface datum, Sept. 26, 1978.

HIGHEST WATER LEVEL 4.57 FEET BELOW LAND SURFACE DATUM MAR 23, 1982.

LOWEST WATER LEVEL 7.81 FEET BELOW LAND SURFACE DATUM OCT 14, 1981.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 14, 1981	7.81	DEC 15, 1981	6.69	FEB 16, 1982	5.01	APR 13, 1982	4.72
NOV 17	7.62	JAN 15, 1982	5.83	MAR 23	4.57	MAY 18	6.78

394845081462602. Local number, M09 P5-2b.
LOCATION.--Lat 39°48'45", long 81°46'26", Hydrologic Unit 05040004, near Chandlersville.
AQUIFER.--Sand, shales and coals of Middle Pennsylvanian Age.
WELL CHARACTERISTICS.--Drilled observation water well, diameter 6 in (0.15 m), depth 50 ft (15.2 m), cased to 17.5 ft (5.3 m).
DATUM.--Altitude of land-surface datum is 973.98 ft (296.869 m). Measuring point: Top of casing, 2.0 ft (0.61 m) above land-surface datum.
PERIOD OF RECORD.--September 1978 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water-level measured, 14.41 ft (4.39 m) below land-surface datum, Mar. 23, 1982; lowest measured, 18.68 ft (5.69 m) below land-surface datum, Sept. 26, 1978.

HIGHEST WATER LEVEL 14.41 FEET BELOW LAND SURFACE DATUM MAR 23, 1982.

LOWEST WATER LEVEL 16.83 FEET BELOW LAND SURFACE DATUM OCT 14, 1981.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 14, 1981	16.83	DEC 15, 1981	16.30	FEB 16, 1982	15.10	APR 13, 1982	14.67
NOV 17	16.65	JAN 15, 1982	15.70	MAR 23	14.41	MAY 18	16.17

394855081461603 (revised). Local number, M09 P6-1.
LOCATION.--Lat 39°48'55", long 81°46'16", Hydrologic Unit 05040004, near Chandlersville.
AQUIFER.--Overburden spoils, replaced after mining.
WELL CHARACTERISTICS.--Drilled observation water well, diameter 6 in (0.15 m), depth 56 ft (17.1 m) cased to 56.0 ft (17.1 m), bottom 10 ft (3.0 m) slotted.
DATUM.--Altitude of land-surface datum is 1059.91 ft (323.061 m). Measuring point: Top of casing, 3.0 ft (0.91 m) above land-surface datum.
PERIOD OF RECORD.--October 1978 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water-level measured, 48.16 ft (14.68 m) below land-surface datum, Aug. 11, 1981; lowest measured, dry, Oct. 24, 1978 to Apr. 23, 1980.

HIGHEST WATER LEVEL 49.22 FEET BELOW LAND SURFACE DATUM OCT 14, 1981.

LOWEST WATER LEVEL 50.82 FEET BELOW LAND SURFACE DATUM FEB 16, 1982.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 14, 1981	49.22	DEC 15, 1981	50.20	FEB 16, 1982	50.82	APR 13, 1982	50.24
NOV 17	49.67	JAN 15, 1982	50.66	MAR 23	50.56	MAY 18	50.32

MUSKINGUM COUNTY--Continued

394855081461604. Local number, M09 P7-2.
LOCATION.--Lat 39°48'55", long 81°46'16", Hydrologic Unit 05040004, near Chandlersville.
AQUIFER.--Sand, shales and coals of Middle Pennsylvanian Age.
WELL CHARACTERISTICS.--Drilled observation water well, diameter 6 in (0.15 m), depth 170 ft (51.8 m), cased to 72.0 ft (21.9 m) (revised)
DATUM.--Altitude of land-surface datum is 1060.54 ft (323.253 m). Measuring point: Top of casing, 2.5 ft (0.76 m) above land-surface datum.
PERIOD OF RECORD.--November 1978 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water-level measured, 94.80 ft (28.90 m) below land-surface datum, Sept. 25, 1980; lowest measured, 105.71 ft (32.22 m) below land-surface datum, May 20, 1980.

HIGHEST WATER LEVEL 99.41 FEET BELOW LAND SURFACE DATUM OCT 14, 1981.

LOWEST WATER LEVEL 100.11 FEET BELOW LAND SURFACE DATUM DEC 15, 1981.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 14, 1981	99.41	DEC 15, 1981	100.11	FEB 16, 1982	100.10	APR 13, 1982	99.50
NOV 17	99.91	JAN 15, 1982	100.07	MAR 24	99.64	MAY 18	99.91

394852081462002. Local number. M09 P8-1.
LOCATION.--Lat 39°48'52", long 81°46'20", Hydrologic Unit 05040004, near Chandlersville.
AQUIFER.--Overburden spoils, replaced after mining.
WELL CHARACTERISTICS.--Drilled observation water well, diameter 6 in (0.15 m), depth 37 ft (11.3 m), cased to 37.0 ft (11.3 m), bottom 10 ft (3.0 m) slotted.
DATUM.--Altitude of land-surface datum is 1039.42 ft (316.815 m). Measuring point: Top of casing, 2.5 ft (0.76 m) above land-surface datum.
PERIOD OF RECORD.--September 1978 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water-level measured, 30.09 ft (9.17 m) below land-surface datum, Oct. 14, 1981; lowest measured, intermittently dry.

HIGHEST WATER LEVEL 30.09 FEET BELOW LAND SURFACE DATUM OCT 14, 1981.

LOWEST WATER LEVEL 31.92 FEET BELOW LAND SURFACE DATUM NOV 17, 1981.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 14, 1981	30.09	DEC 15, 1981	30.24	FEB 16, 1982	30.64	APR 13, 1982	30.80
NOV 17	31.92	JAN 15, 1982	30.67	MAR 23	30.84	MAY 18	30.96

394852081462003. Local number, M09 P9-2.
LOCATION.--Lat 39°48'52", long 81°46'20", Hydrologic Unit 05040004, near Chandlersville.
AQUIFER.--Sand, shales and coals of Middle Pennsylvanian Age.
WELL CHARACTERISTICS.--Drilled observation water well, diameter 6 in (0.15 m), depth 119 ft (36.3 m), cased to 60.0 ft (18.3 m).
DATUM.--Altitude of land-surface datum is 1039.24 ft (316.760 m). Measuring point: Top of casing, 3.0 ft (0.91 m) above land-surface datum.
PERIOD OF RECORD.--October 1978 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 54.62 ft (16.65 m) below land-surface datum, April 15, 1980; lowest measured, 67.45 ft (20.56 m) below land-surface datum, Aug. 2, 1979.

HIGHEST WATER LEVEL 58.55 FEET BELOW LAND SURFACE DATUM MAR 23, 1982.

LOWEST WATER LEVEL 66.78 FEET BELOW LAND SURFACE DATUM DEC 15, 1981.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 14, 1981	65.87	DEC 15, 1981	66.78	FEB 16, 1982	61.32	APR 13, 1982	60.44
NOV 17	66.76	JAN 15, 1982	61.22	MAR 23	58.55	MAY 18	64.71

394841081463200. Local number, M09 W10-3.
LOCATION.--Lat 39°48'41", long 81°46'32", Hydrologic Unit 05040004, near Chandlersville.
AQUIFER.--Sand, shales and coals of Middle Pennsylvanian Age.
WELL CHARACTERISTICS.--Drilled observation water well, diameter 6 in (0.15 m), depth 190 ft (57.9 m), cased to 41 ft (12.5 m). After Sept. 29, 1976, slotted casing from 140 ft (42.7 m) to bottom of well.
DATUM.--Altitude of land-surface datum is 941.51 ft (286.972 m). Measuring point: Top of casing, 0.98 ft (0.30 m) above land-surface datum. Prior to September 29, 1976, top of casing 2.8 ft (0.84 m) above land-surface datum.
REMARKS.--Well redrilled September 29, 1976 because well collapsed.
PERIOD OF RECORD.--March 1976 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water-level measured, 31.16 ft (9.50 m) below land-surface datum, Mar. 23, 1982; lowest measured, 37.79 ft (11.52 m) below land-surface datum, Oct. 20, 1981.

HIGHEST WATER LEVEL 31.16 FEET BELOW LAND SURFACE DATUM MAR 23, 1982.

LOWEST WATER LEVEL 37.79 FEET BELOW LAND SURFACE DATUM OCT 20, 1981.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 20, 1981	37.79	FEB 01, 1982	32.47	MAR 23, 1982	31.16	MAY 18, 1982	34.55
NOV 17	36.01	16	32.77	APR 13	32.22		

394853081462803. Local number, M09 P11-2.
LOCATION.--Lat 39°48'53", long 81°46'28", Hydrologic Unit 05040004, near Chandlersville.
AQUIFER.--Sand, shales and coals of Middle Pennsylvanian Age.
WELL CHARACTERISTICS.--Drilled observation water well, diameter 6 in (0.15 m), depth 97 ft (29.6 m) cased to 26.8 ft (8.2 m).
DATUM.--Altitude of land-surface datum is 1022.15 ft (311.551 m). Measuring point: Top of casing, 2.5 ft (0.76 m) above land-surface datum.
PERIOD OF RECORD.--September 1978 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water-level measured, 24.39 ft (7.43 m) below land-surface datum, Mar. 23, 1982; lowest measured, 28.97 ft (8.83 m) below land-surface datum, Sept. 27. 1978.

HIGHEST WATER LEVEL 24.39 FEET BELOW LAND SURFACE DATUM MAR 23, 1982.

LOWEST WATER LEVEL 25.79 FEET BELOW LAND SURFACE DATUM JAN 15, 1982.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 14, 1981	25.70	DEC 15, 1981	25.74	FEB 16, 1982	25.19	APR 13, 1982	24.65
NOV 17	25.65	JAN 15, 1982	25.79	MAR 23	24.39	MAY 18	25.49

394858081462801. Local number, M09 P12-1.
LOCATION.--Lat 39°48'58", long 81°46'28", Hydrologic Unit 05040004, near Chandlersville.
AQUIFER.--Overburden spoils, replaced after mining.
WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in (0.10 m), depth 62.2 ft (19.0 m) cased to 62.0 ft (18.9 m), bottom 10 ft (3.0 m) slotted.
DATUM.--Altitude of land-surface datum is 1,071.07 ft (326.462 m). Measuring point: Top of casing, 2.2 ft (0.67 m) above land-surface datum.
PERIOD OF RECORD.--Aug. 1980 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water-level measured, 56.38 ft (17.18 m) below land-surface datum, July 16, 1981; lowest measured, 60.76 ft (18.52 m) below land-surface datum, Jan. 15, 1982.

HIGHEST WATER LEVEL 58.86 FEET BELOW LAND SURFACE DATUM OCT 14, 1981.

LOWEST WATER LEVEL 60.76 FEET BELOW LAND SURFACE DATUM JAN 15, 1982.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 14, 1981	58.86	DEC 15, 1981	60.37	FEB 16, 1982	60.26	APR 13, 1982	59.74
NOV 17	59.75	JAN 15, 1982	60.76	MAR 23	59.90	MAY 18	60.04

MUSKINGUM COUNTY--Continued

394855081462802. Local number, M09 P13-1.
LOCATION.--Lat 39°48'55", long 81°46'28", Hydrologic Unit 05040004, near Chandlersville.
AQUIFER.--Overburden spoils, replaced after mining.
WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in (0.10 m), depth 53.2 ft (16.2 m), cased to 53.2 ft (16.2 m), bottom 10 ft (3.0 m) slotted.
DATUM.--Altitude of land-surface datum is 1,059.98 ft (323.082 m). Measuring point: Top of casing, 3.0 ft (.91 m) above land-surface datum.
PERIOD OF RECORD.--August 1980 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water-level measured, 45.50 ft (13.87 m) below land-surface datum, July 16, 1981; lowest measured, 49.50 ft (15.09 m) below land-surface datum, Jan. 15, 1982.

HIGHEST WATER LEVEL 47.76 FEET BELOW LAND SURFACE DATUM OCT 14, 1981.

LOWEST WATER LEVEL 49.50 FEET BELOW LAND SURFACE DATUM JAN 15, 1982.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 14, 1981	47.76	DEC 15, 1981	49.09	FEB 16, 1982	49.24	APR 13, 1982	48.59
NOV 17	48.47	JAN 15, 1982	49.50	MAR 23	48.68	MAY 18	48.86

394851081462803. Local number. M09 P14-1.
LOCATION.--Lat 39°48'51", long 81°46'28", Hydrologic Unit 05040004, near Chandlersville.
AQUIFER.--Overburden spoils, replaced after mining.
WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in (0.10 m), depth 56.0 ft (17.1 m), cased to 56.0 ft (17.1 m), bottom 10 ft (3.0 m) slotted.
DATUM.--Altitude of land-surface datum is 1,046.03 ft (318.830 m). Measuring point: Top of casing, 3.0 ft (0.91 m) above land-surface datum.
PERIOD OF RECORD.--August 1980 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water-level measured, 19.87 ft (6.06 m) below land-surface datum, Feb. 25, 1981; lowest measured, 54.44 ft (16.59 m) below land-surface datum, Aug. 30, 1980.

HIGHEST WATER LEVEL 26.45 FEET BELOW LAND SURFACE DATUM MAR 23, 1982.

LOWEST WATER LEVEL 27.64 FEET BELOW LAND SURFACE DATUM MAY 18, 1982.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 14, 1981	26.94	DEC 15, 1981	26.96	FEB 16, 1982	27.02	APR 13, 1982	26.67
NOV 17	26.82	JAN 15, 1982	26.75	MAR 23	26.45	MAY 18	27.64

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The following table contains discharge measurements, water-quality measurements, and water sample analysis from streams draining abandoned surface mined lands in southeastern Ohio. ★ Indicates additional data are listed in the next table.

ANALYSES OF MISCELLANEOUS STATIONS

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	ACIDITY (MG/L AS H)	ACIDITY (MG/L AS CACO3)	BICAR-BONATE FET-FLD (MG/L AS HCO3)	CAR-BONATE FET-FLD (MG/L AS CO3)	ALKA-LINITY FIELD (MG/L AS CACO3)
383317082405100 - 051 L STORMS C (1-2) NR TRENTON OH (LAT 38 33 17 LONG 082 40 51)											
MAR , 1982											
17...	1730	24	--	4.7	13.0	10.4	.7	35	2	--	2
AUG											
23...	1200	.15	750	4.8	20.0	8.6	.8	40	--	--	--
383337082430500 - 051 OSBORNE RN (1-1) NR IRONTON OH (LAT 38 33 37 LONG 082 43 05)											
MAR , 1982											
18...	0945	10	--	4.5	7.5	11.8	1.1	52	--	--	--
AUG											
23...	1300	.10	1110	6.6	23.0	7.8	--	--	18	0	15
383711082443900 - 051 SPERRY F (4-3) NR PINE GROVE OH (LAT 38 37 11 LONG 082 44 39)											
AUG , 1982											
23...	1430	.10	990	4.0	22.0	7.5	1.5	24	0	0	0
383735082445700 - 051 SPERRY F (4-2) NR PINE GROVE OH (LAT 38 37 35 LONG 082 44 57)											
AUG , 1982											
23...	1500	.08	675	6.7	21.5	10.4	--	--	8	0	7
383750082435400 - 041 L PINE C NR PEDRO OH (LAT 38 37 50 LONG 082 43 54)											
MAR , 1982											
18...	1130	63	--	7.1	8.5	11.2	--	--	36	--	30
AUG											
23...	1630	3.3	700	7.2	21.0	8.6	--	--	83	0	68
383805082405400 - 051 ELLISONVILLE C (4-5) AT PEDRO OH (LAT 38 38 05 LONG 082 40 54)											
AUG , 1982											
24...	0930	1.2	770	5.8	20.0	--	.6	10	16	0	13
383806082464100 - 051 PINE C (4-1) NR POWELLSVILLE OH (LAT 38 38 06 LONG 082 46 41)											
AUG , 1982											
24...	0800	5.9	536	7.3	20.5	7.4	--	--	86	0	71
383833082402800 - 051 L PINE C (4-6) AT PEDRO OH (LAT 38 38 33 LONG 082 40 28)											
AUG , 1982											
24...	1030	2.2	715	7.8	20.0	7.6	--	--	170	0	139
384034082422100 - 051 PINE C (4-7) NR PEDRO OH (LAT 38 40 34 LONG 082 42 21)											
MAR , 1982											
18...	1330	364	--	7.3	11.5	9.8	--	--	27	--	22
AUG											
24...	1130	2.2	620	8.0	20.5	7.1	--	--	130	0	107
384146082424600 - 051 PINE C (4-8) NR BARTLES OH (LAT 38 41 46 LONG 082 42 46)											
MAR , 1982											
18...	1500	286	--	7.3	11.0	10.0	--	--	24	--	20
AUG											
24...	1200	.83	340	7.5	21.5	6.6	--	--	66	0	54
384206082161600 - 051 BULLSKIN C (5-6) NR MERCERVILLE OH (LAT 38 42 06 LONG 082 16 16)											
AUG , 1982											
23...	1620	.16	975	7.2	20.5	8.5	--	--	120	0	98

ANALYSES OF MISCELLANEOUS STATIONS

DATE	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	NICKEL, DIS-SOLVED (UG/L AS NI)	ZINC, DIS-SOLVED (UG/L AS ZN)
383317082405100 - 051 L STORMS C (1-2) NR TRENTON OH (LAT 38 33 17 LONG 082 40 51)											
MAR , 1982											
17...	--	--	--	--	--	--	--	--	--	--	--
AUG											
23...	360	11	617	4300	1100	4600	1900	6200	5600	100	760
383337082430500 - 051 OSBORNE RN (1-1) NR IRONTON OH (LAT 38 33 37 LONG 082 43 05)											
MAR , 1982											
18...	--	--	--	--	--	--	--	--	--	--	--
AUG											
23...	570	3.8	940	--	--	--	--	--	--	--	--
383711082443900 - 051 SPERRY F (4-3) NR PINE GROVE OH (LAT 38 37 11 LONG 082 44 39)											
AUG , 1982											
23...	490	16	795	7000	1100	1300	920	5800	5800	200	240
383735082445700 - 051 SPERRY F (4-2) NR PINE GROVE OH (LAT 38 37 35 LONG 082 44 57)											
AUG , 1982											
23...	320	13	560	--	--	--	--	--	--	--	--
383750082435400 - 041 L PINE C NR PEDRO OH (LAT 38 37 50 LONG 082 43 54)											
MAR , 1982											
18...	--	--	--	--	--	--	--	--	--	--	--
AUG											
23...	270	8.4	492	--	--	--	--	--	--	--	--
383805082405400 - 051 ELLISONVILLE C (4-5) AT PEDRO OH (LAT 38 38 05 LONG 082 40 54)											
AUG , 1982											
24...	360	8.8	663	--	--	--	--	--	--	--	--
383806082464100 - 051 PINE C (4-1) NR POWELLSVILLE OH (LAT 38 38 06 LONG 082 46 41)											
AUG , 1982											
24...	170	9.1	390	--	--	--	--	--	--	--	--
383833082402800 - 051 L PINE C (4-6) AT PEDRO OH (LAT 38 38 33 LONG 082 40 28)											
AUG , 1982											
24...	190	2.4	572	--	--	--	--	--	--	--	--
384034082422100 - 051 PINE C (4-7) NR PEDRO OH (LAT 38 40 34 LONG 082 42 21)											
MAR , 1982											
18...	--	--	--	--	--	--	--	--	--	--	--
AUG											
24...	170	9.0	479	--	--	--	--	--	--	--	--
384146082424600 - 051 PINE C (4-8) NR BARTLES OH (LAT 38 41 46 LONG 082 42 46)											
MAR , 1982											
18...	--	--	--	--	--	--	--	--	--	--	--
AUG											
24...	77	7.0	222	--	--	--	--	--	--	--	--
384206082161600 - 051 BULLSKIN C (5-6) NR MERCERVILLE OH (LAT 38 42 06 LONG 082 16 16)											
AUG , 1982											
23...	420	17	793	--	--	--	--	--	--	--	--

ANALYSES OF MISCELLANEOUS STATIONS

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	ACIDITY (MG/L AS H)	ACIDITY (MG/L AS CACO3)	BICAR-BONATE FET-FLD (MG/L AS HCO3)	CAR-BONATE FET-FLD (MG/L AS CO3)	ALKA-LINITY FIELD (MG/L AS CACO3)
* 385442082080800 - 051 KYGER C (7-11) NR ADDISON OH (LAT 38 54 42 LONG 082 08 08)											
JUL , 1982 28...	1045	42	1040	9.0	27.0	7.3	--	--	50	24	81
385504082105400 - 051 L CAMPAIGN C (7-3) NR ADDISON OH (LAT 38 55 04 LONG 082 10 54)											
JUL , 1982 20...	1130	.53	1380	4.1	24.5	7.8	2.8	139	--	--	--
385513082081400 - 051 L KYGER C (7-5) NR ADDISON OH (LAT 38 55 13 LONG 082 08 14)											
JUL , 1982 27...	0830	.25	1600	4.3	22.5	8.3	2.0	99	0	0	0
* 385520082322000 - 051 UNAM TR TO SYMMES C (2-2) AT PYRO OH (LAT 38 55 20 LONG 082 32 20)											
AUG , 1982 24...	1100	<.01	1040	8.0	22.5	6.7	--	--	160	0	131
385612082095900 - 051 L KYGER C (7-6) NR KYGER OH (LAT 38 56 12 LONG 082 09 59)											
JUL , 1982 27...	0930	.40	1710	3.9	24.0	7.8	2.9	144	0	0	0
385711082215600 - 051 L RACCOON C (10-1) NR VINTON OH (LAT 38 57 11 LONG 082 21 56)											
MAR , 1982 24...	1340	488	--	4.9	8.0	12.0	.3	15	4	--	3
AUG 24...	1830	13	640	4.8	20.5	--	.6	30	0	0	0
* 385735082315700 - 051 SYMMES C (2-1) NR PYRO OH (LAT 38 57 35 LONG 082 31 57)											
AUG , 1982 25...	1015	<.10	780	7.7	21.0	4.5	--	--	130	0	107
* 385804082095000 - 051 KYGER C (7-10) AT KYGER OH (LAT 38 58 04 LONG 082 09 50)											
JUL , 1982 27...	1230	.17	765	7.0	26.0	7.0	--	--	80	0	66
385848082082900 - 051 JESSIE C (7-9) AT KYGER OH (LAT 38 58 48 LONG 082 08 29)											
JUL , 1982 27...	1100	.26	975	4.0	25.5	7.6	1.1	55	0	0	0
385900082051900 - 051 STORYS RN (7-12) NR MIDDLEPORT OH (LAT 38 59 00 LONG 082 05 19)											
AUG , 1982 24...	0900	.21	1420	4.0	20.5	--	2.0	32	0	0	0
* 385924082295300 - 051 DIXON RN (10-2) NR WINCHESTER OH (LAT 38 59 24 LONG 082 29 53)											
AUG , 1982 25...	1000	.16	780	5.9	19.5	--	.4	6.0	8	0	7
* 385933082042800 - 051 LEADING C (12-1) AT MIDDLEPORT OH (LAT 38 59 33 LONG 082 04 28)											
AUG , 1982 24...	1000	--	1340	6.7	21.0	--	--	--	48	0	39

DATA COLLECTED AT OHIO ABANDONED MINE LAND SITES PROJECT--Continued

ANALYSES OF MISCELLANEOUS STATIONS

DATE	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	NICKEL, DIS-SOLVED (UG/L AS NI)	ZINC, DIS-SOLVED (UG/L AS ZN)
385442082080800 - 051 KYGER C (7-11) NR ADDISON OH (LAT 38 54 42 LONG 082 08 08)											
JUL , 1982											
28...	470	42	834	--	--	--	--	--	--	--	--
385504082105400 - 051 L CAMPAIGN C (7-3) NR ADDISON OH (LAT 38 55 04 LONG 082 10 54)											
JUL , 1982											
20...	870	9.4	1310	12000	12000	1900	620	22000	21000	400	580
385513082081400 - 051 L KYGER C (7-5) NR ADDISON OH (LAT 38 55 13 LONG 082 08 14)											
JUL , 1982											
27...	990	6.0	1470	11000	11000	1000	830	25000	25000	300	410
385520082322000 - 051 UNAM TR TO SYMMES C (2-2) AT PYRO OH (LAT 38 55 20 LONG 082 32 20)											
AUG , 1982											
24...	420	8.7	847	--	--	--	--	--	--	--	--
385612082095900 - 051 L KYGER C (7-6) NR KYGER OH (LAT 38 56 12 LONG 082 09 59)											
JUL , 1982											
27...	1000	1.7	1720	16000	16000	1000	850	24000	24000	400	530
385711082215600 - 051 L RACCOON C (10-1) NR VINTON OH (LAT 38 57 11 LONG 082 21 56)											
MAR , 1982											
24...	--	--	--	--	--	--	--	--	--	--	--
AUG											
24...	270	18	452	1900	1900	240	84	3900	3800	<100	120
385735082315700 - 051 SYMMES C (2-1) NR PYRO OH (LAT 38 57 35 LONG 082 31 57)											
AUG , 1982											
25...	270	34	570	--	--	--	--	--	--	--	--
385804082095000 - 051 KYGER C (7-10) AT KYGER OH (LAT 38 58 04 LONG 082 09 50)											
JUL , 1982											
27...	360	3.1	621	--	--	--	--	--	--	--	--
385848082082900 - 051 JESSIE C (7-9) AT KYGER OH (LAT 38 58 48 LONG 082 08 29)											
JUL , 1982											
27...	530	8.8	804	5100	4800	1000	550	13000	13000	200	220
385900082051900 - 051 STORYS RN (7-12) NR MIDDLEPORT OH (LAT 38 59 00 LONG 082 05 19)											
AUG , 1982											
24...	720	10	1160	14000	14000	1600	1000	12000	12000	200	450
385924082295300 - 051 DIXON RN (10-2) NR WINCHESTER OH (LAT 38 59 24 LONG 082 29 53)											
AUG , 1982											
25...	400	3.5	600	--	--	--	--	--	--	--	--
385933082042800 - 051 LEADING C (12-1) AT MIDDLEPORT OH (LAT 38 59 33 LONG 082 04 28)											
AUG , 1982											
24...	380	180	858	--	--	--	--	--	--	--	--

DATA COLLECTED AT OHIO ABANDONED MINE LAND SITES PROJECT--Continued

ANALYSES OF MISCELLANEOUS STATIONS

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	ACIDITY (MG/L AS H)	ACIDITY (MG/L AS CACO3)	BICAR-BONATE FET-FLD (MG/L AS HCO3)	CAR-BONATE FET-FLD (MG/L AS CO3)	ALKA-LINITY FIELD (MG/L AS CACO3)
384333082150500 - 051 BULLSKIN C (5-2) NR MERCERVILLE OH (LAT 38 43 33 LONG 082 15 05)											
AUG , 1982											
23...	1325	.15	800	7.6	19.0	8.2	--	--	92	0	75
384347082164400 - 051 L BULLSKIN C (5-7) NR MERCERVILLE OH (LAT 38 43 47 LONG 082 16 44)											
AUG , 1982											
23...	1515	--	660	7.5	20.5	6.9	--	--	170	0	139
384412082144600 - 051 RACCOON C (5-1) NR EUREKA OH (LAT 38 44 12 LONG 082 14 46)											
MAR , 1982											
17...	1500	3370	--	6.9	11.0	10.8	--	--	18	--	15
AUG											
24...	0900	<.01	540	6.7	21.5	--	--	--	20	0	16
384657082421300 - 051 HALES C (4-9) NR S WEBSTER OH (LAT 38 46 57 LONG 082 42 13)											
AUG , 1982											
24...	1550	<.10	320	7.9	21.5	6.5	--	--	93	0	76
* 384821082221900 - 051 RACCOON C (5-4) NR PATRIOT OH (LAT 38 48 21 LONG 082 22 19)											
MAR , 1982											
25...	1015	2680	--	6.4	8.0	11.0	.1	4.0	8	--	7
AUG											
24...	1245	30	640	6.5	21.0	--	--	--	16	0	13
* 384839082403100 - 051 HALES C (4-10) NR EIFORT OH (LAT 38 48 39 LONG 082 40 31)											
AUG , 1982											
24...	1515	<.01	410	7.6	25.0	4.6	--	--	110	0	90
* 385029082311900 - 051 BLACK F (2-5) AT GALLIA OH (LAT 38 50 29 LONG 082 31 19)											
AUG , 1982											
24...	1415	<.10	420	7.5	21.0	3.8	--	--	94	0	77
* 385124082321400 - 051 BLACK F (2-4) NR GALLIA OH (LAT 38 51 24 LONG 082 32 14)											
AUG , 1982											
24...	1330	.17	410	7.2	23.0	7.6	--	--	92	0	75
* 385343082293600 - 051 SYMMES C (2-3) NR THURMAN OH (LAT 38 53 43 LONG 082 29 36)											
AUG , 1982											
25...	0830	.14	430	7.5	20.5	--	--	--	130	0	107
* 385349082113100 - 051 CAMPAIGN C (7-1) NR ADDISON OH (LAT 38 53 49 LONG 082 11 31)											
JUL , 1982											
26...	1630	1.0	370	7.8	27.5	8.5	--	--	130	0	107
* 385404082204200 - 051 RACCOON C (5-5) NR RIO GRANDE OH (LAT 38 54 04 LONG 082 20 42)											
MAR , 1982											
24...	1515	3000	--	6.2	8.0	11.2	.1	4.0	6	--	5
AUG											
24...	1600	24	645	6.3	21.0	--	--	--	8	0	7

ANALYSES OF MISCELLANEOUS STATIONS

DATE	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	NICKEL, DIS-SOLVED (UG/L AS NI)	ZINC, DIS-SOLVED (UG/L AS ZN)
384333082150500 - 051 BULLSKIN C (5-2) NR MERCERVILLE OH (LAT 38 43 33 LONG 082 15 05)											
AUG , 1982											
23...	350	12	614	--	--	--	--	--	--	--	--
384347082164400 - 051 L BULLSKIN C (5-7) NR MERCERVILLE OH (LAT 38 43 47 LONG 082 16 44)											
AUG , 1982											
23...	200	9.9	466	--	--	--	--	--	--	--	--
384412082144600 - 051 RACCOON C (5-1) NR EUREKA OH (LAT 38 44 12 LONG 082 14 46)											
MAR , 1982											
17...	--	--	--	--	--	--	--	--	--	--	--
AUG											
24...	170	49	394	--	--	--	--	--	--	--	--
384657082421300 - 051 HALES C (4-9) NR S WEBSTER OH (LAT 38 46 57 LONG 082 42 13)											
AUG , 1982											
24...	56	11	220	--	--	--	--	--	--	--	--
384821082221900 - 051 RACCOON C (5-4) NR PATRIOT OH (LAT 38 48 21 LONG 082 22 19)											
MAR , 1982											
25...	--	--	--	--	--	--	--	--	--	--	--
AUG											
24...	190	53	450	--	--	--	--	--	--	--	--
384839082403100 - 051 HALES C (4-10) NR EIFORT OH (LAT 38 48 39 LONG 082 40 31)											
AUG , 1982											
24...	84	13	249	--	--	--	--	--	--	--	--
385029082311900 - 051 BLACK F (2-5) AT GALLIA OH (LAT 38 50 29 LONG 082 31 19)											
AUG , 1982											
24...	100	11	293	--	--	--	--	--	--	--	--
385124082321400 - 051 BLACK F (2-4) NR GALLIA OH (LAT 38 51 24 LONG 082 32 14)											
AUG , 1982											
24...	88	12	263	--	--	--	--	--	--	--	--
385343082293600 - 051 SYMMES C (2-3) NR THURMAN OH (LAT 38 53 43 LONG 082 29 36)											
AUG , 1982											
25...	110	7.7	322	--	--	--	--	--	--	--	--
385349082113100 - 051 CAMPAIGN C (7-1) NR ADDISON OH (LAT 38 53 49 LONG 082 11 31)											
JUL , 1982											
26...	100	6.6	256	--	--	--	--	--	--	--	--
385404082204200 - 051 RACCOON C (5-5) NR RIO GRANDE OH (LAT 38 54 04 LONG 082 20 42)											
MAR , 1982											
24...	--	--	--	--	--	--	--	--	--	--	--
AUG											
24...	180	50	471	--	--	--	--	--	--	--	--

ANALYSES OF MISCELLANEOUS STATIONS

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	ACIDITY (MG/L AS H)	ACIDITY (MG/L AS CACO3)	BICAR-BONATE FET-FLD (MG/L AS HCO3)	CAR-BONATE FET-FLD (MG/L AS CO3)	ALKA-LINITY FIELD (MG/L AS CACO3)
390012082283000 - 051 DIXON RN (10-3) NR EWINGTON OH (LAT 39 00 12 LONG 082 28 30)											
JUL , 1982 22...	1200	.26	925	3.5	22.0	7.1	1.3	65	0	0	0
390021082071700 - 051 LEADING C (12-2) NR RUTLAND OH (LAT 39 00 21 LONG 082 07 17)											
JUL , 1982 28...	0900	6.5	875	7.5	23.0	7.4	--	--	120	0	98
390031082271900 - 051 DICKASON RN (10-4) NR EWINGTON OH (LAT 39 00 31 LONG 082 27 19)											
JUL , 1982 22...	1315	.98	480	6.2	24.5	7.0	.2	10	12	0	10
390038082270800 - 051 L RACCOON C (10-5) NR EWINGTON OH (LAT 39 00 38 LONG 082 27 08)											
JUL , 1982 22...	1415	15	745	3.7	23.5	7.4	1.0	16	0	0	0
* 390052082210900 - 051 RACCOON C (11-1) AT EWINGTON OH (LAT 39 00 52 LONG 082 21 09)											
JUL , 1982 22...	1530	100	415	6.6	24.5	7.5	--	--	12	0	10
390110082050700 - 051 THOMAS F (12-5) NR MIDDLEPORT OH (LAT 39 01 10 LONG 082 05 07)											
JUL , 1982 27...	1430	4.5	1520	3.9	27.0	7.3	1.7	84	0	0	0
390201082034300 - 051 THOMAS F (12-7) NR POMEROY OH (LAT 39 02 01 LONG 082 03 43)											
JUL , 1982 27...	1600	2.9	1410	3.8	28.0	7.5	2.2	109	0	0	0
* 390222082092200 - 051 LEADING C (12-3) NR LANGSVILLE OH (LAT 39 02 22 LONG 082 09 22)											
AUG , 1982 23...	1500	3.7	1420	7.0	21.5	--	--	--	74	0	61
* 390224082282300 - 051 TARCAMP RN (10-7) NR ROADS OH (LAT 39 02 24 LONG 082 28 23)											
JUL , 1982 22...	1030	.18	145	6.6	23.0	7.7	--	--	6	0	5
* 390240082075000 - 051 L LEADING C (12-6) AT RUTLAND OH (LAT 39 02 40 LONG 082 07 50)											
AUG , 1982 23...	1400	.36	1700	7.6	20.0	--	--	--	120	0	98
390341082270700 - 051 BUFFER RN (10-9) NR ROADS OH (LAT 39 03 41 LONG 082 27 07)											
APR , 1982 03...	1400	11	--	3.4	11.5	9.2	3.3	161	--	--	--
JUL 12...	1530	.40	2550	2.5	27.5	6.0	14	695	0	0	0
390452082292800 - 051 UNAM TR TO RACCOON C (10-10) NR ROADS OH (LAT 39 04 52 LONG 082 29 28)											
APR , 1982 03...	1230	8.1	--	3.3	12.0	9.5	4.7	233	--	--	--
JUL 12...	1200	.38	1650	2.9	20.5	8.0	8.6	427	0	0	0

ANALYSES OF MISCELLANEOUS STATIONS

DATE	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	NICKEL, DIS-SOLVED (UG/L AS NI)	ZINC, DIS-SOLVED (UG/L AS ZN)
390012082283000 - 051 DIXON RN (10-3) NR EWINGTON OH (LAT 39 00 12 LONG 082 28 30)											
JUL , 1982 22...	430	2.6	716	5300	4900	3600	3400	6100	6000	100	120
390021082071700 - 051 LEADING C (12-2) NR RUTLAND OH (LAT 39 00 21 LONG 082 07 17)											
JUL , 1982 28...	200	110	573	--	--	--	--	--	--	--	--
390031082271900 - 051 DICKASON RN (10-4) NR EWINGTON OH (LAT 39 00 31 LONG 082 27 19)											
JUL , 1982 22...	180	4.0	366	--	--	--	--	--	--	--	--
390038082270800 - 051 L RACCOON C (10-5) NR EWINGTON OH (LAT 39 00 38 LONG 082 27 08)											
JUL , 1982 22...	320	13	530	4000	4000	1700	1100	3600	3600	--	110
390052082210900 - 051 RACCOON C (11-1) AT EWINGTON OH (LAT 39 00 52 LONG 082 21 09)											
JUL , 1982 22...	110	35	286	--	--	--	--	--	--	--	--
390110082050700 - 051 THOMAS F (12-5) NR MIDDLEPORT OH (LAT 39 01 10 LONG 082 05 07)											
JUL , 1982 27...	540	200	978	9800	9000	1900	1200	5800	5600	200	280
390201082034300 - 051 THOMAS F (12-7) NR POMEROY OH (LAT 39 0_ 01 LONG 082 03 43)											
JUL , 1982 27...	580	130	1010	13000	13000	4400	2700	4700	4600	200	300
390222082092200 - 051 LEADING C (12-3) NR LANGSVILLE OH (LAT 39 02 22 LONG 082 09 22)											
AUG , 1982 23...	350	130	939	--	--	--	--	--	--	--	--
390224082282300 - 051 TARCAMP RN (10-7) NR ROADS OH (LAT 39 02 24 LONG 082 28 23)											
JUL , 1982 22...	52	1.4	119	--	--	--	--	--	--	--	--
390240082075000 - 051 L LEADING C (12-6) AT RUTLAND OH (LAT 39 02 40 LONG 082 07 50)											
AUG , 1982 23...	120	340	1090	--	--	--	--	--	--	--	--
390341082270700 - 051 BUFFER RN (10-9) NR ROADS OH (LAT 39 03 41 LONG 082 27 07)											
APR , 1982 03...	--	--	--	--	--	--	--	--	--	--	--
JUL 12...	1400	8.0	2190	38000	37000	160000	160000	13000	13000	400	530
390452082292800 - 051 UNAM TR TO RACCOON C (10-10) NR ROADS OH (LAT 39 04 52 LONG 082 29 28)											
APR , 1982 03...	--	--	--	--	--	--	--	--	--	--	--
JUL 12...	760	11	1310	42000	41000	25000	23000	18000	17000	600	890

ANALYSES OF MISCELLANEOUS STATIONS

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	ACIDITY (MG/L AS H)	ACIDITY (MG/L AS CACO3)	BICAR-BONATE FET-FLD (MG/L AS HCO3)	CAR-BONATE FET-FLD (MG/L AS CO3)	ALKA-LINITY FIELD (MG/L AS CACO3)
390509082281900 - 051 L RACCOON C (10-11) NR ROADS OH (LAT 39 05 09 LONG 082 28 19)											
JUL , 1982											
12...	1330	19	428	6.6	24.5	7.0	--	--	49	0	40
390622082230400 - 051 RACCOON C (11-2) NR WILKESVILLE OH (LAT 39 06 22 LONG 082 23 04)											
AUG , 1982											
25...	1145	14	495	5.0	21.0	--	7.5	120	--	--	--
390733082080300 - 051 UNAM TR TO L LEADING C (12-9) AT HARRISON OH (LAT 39 07 33 LONG 082 08 03)											
JUL , 1982											
20...	1530	.30	510	8.0	28.0	8.3	--	--	120	0	98
* 390748082213100 - 051 RACCOON C (11-3) NR RADCLIFF OH (LAT 39 07 48 LONG 082 21 31)											
APR , 1982											
05...	1100	1020	--	6.3	8.0	11.0	.1	6.0	8	--	7
JUL											
20...	1100	57	389	6.0	24.0	6.5	.1	5.0	54	0	44
* 390801082302800 - 051 L RACCOON C (10-12) NR WELLSTON OH (LAT 39 08 01 LONG 082 30 28)											
JUL , 1982											
23...	1100	1.5	302	6.7	24.0	7.2	--	--	31	0	25
* 390900082100900 - 051 MUD F (12-10) NR HARRISONVILLE OH (LAT 39 09 00 LONG 082 10 09)											
JUL , 1982											
26...	1230	.08	685	7.2	30.5	7.7	--	--	60	0	49
390924082303100 - 051 SUGAR RN (10-13) AT HAMDEN OH (LAT 39 09 24 LONG 082 30 31)											
APR , 1982											
03...	1530	36	--	4.4	10.5	9.5	.5	25	--	--	--
JUL											
20...	1330	.28	1900	2.8	24.5	7.5	4.6	228	0	0	0
* 390936082011400 - 051 W B SHADE R (14-3) AT BURLINGHAM OH (LAT 39 09 36 LONG 082 01 14)											
JUL , 1982											
19...	1200	3.6	485	7.2	22.5	8.2	--	--	54	0	44
390940082243000 - 051 PIERCE RN (11-5) NR RADCLIFF OH (LAT 39 09 40 LONG 082 24 30)											
APR , 1982											
03...	1700	32	--	6.8	9.5	9.5	.1	6.0	6	--	5
JUL											
20...	1215	.66	635	4.2	22.0	8.1	.5	25	0	0	0
* 390941082212200 - 051 ELK F (11-4) NR RADCLIFF OH (LAT 39 09 41 LONG 082 21 22)											
JUL , 1982											
20...	0930	6.3	320	6.9	23.0	6.6	--	--	50	0	41
* 391009082053600 - 051 W B SHADE R (14-2) NR BURLINGHAM OH (LAT 39 10 09 LONG 082 05 36)											
JUL , 1982											
19...	1530	.40	385	6.6	26.5	7.2	--	--	24	0	20

ANALYSES OF MISCELLANEOUS STATIONS

DATE	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	NICKEL, DIS-SOLVED (UG/L AS NI)	ZINC, DIS-SOLVED (UG/L AS ZN)
390509082281900 - 051 L RACCOON C (10-11) NR ROADS OH (LAT 39 05 09 LONG 082 28 19)											
JUL , 1982											
12...	140	12	294	--	--	--	--	--	--	--	--
390622082230400 - 051 RACCOON C (11-2) NR WILKESVILLE OH (LAT 39 06 22 LONG 082 23 04)											
AUG , 1982											
25...	170	23	366	6000	200	780	500	3700	3600	100	47
390733082080300 - 051 UNAM TR TO L LEADING C (12-9) AT HARRISON OH (LAT 39 07 33 LONG 082 08 03)											
JUL , 1982											
20...	140	8.5	377	--	--	--	--	--	--	--	--
390748082213100 - 051 RACCOON C (11-3) NR RADCLIFF OH (LAT 39 07 48 LONG 082 21 31)											
APR , 1982											
05...	--	--	--	--	--	--	--	--	--	--	--
JUL											
20...	100	38	287	--	--	--	--	--	--	--	--
390801082302800 - 051 L RACCOON C (10-12) NR WELLSTON OH (LAT 39 08 01 LONG 082 30 28)											
JUL , 1982											
23...	84	11	212	--	--	--	--	--	--	--	--
390900082100900 - 051 MUD F (12-10) NR HARRISONVILLE OH (LAT 39 09 00 LONG 082 10 09)											
JUL , 1982											
26...	310	9.7	552	--	--	--	--	--	--	--	--
390924082303100 - 051 SUGAR RN (10-13) AT HAMDEN OH (LAT 39 09 24 LONG 082 30 31)											
APR , 1982											
03...	--	--	--	--	--	--	--	--	--	--	--
JUL											
20...	900	55	1420	19000	19000	7100	7100	21000	21000	500	680
390936082011400 - 051 W B SHADE R (14-3) AT BURLINGHAM OH (LAT 39 09 36 LONG 082 01 14)											
JUL , 1982											
19...	160	9.5	348	--	--	--	--	--	--	--	--
390940082243000 - 051 PIERCE RN (11-5) NR RADCLIFF OH (LAT 39 09 40 LONG 082 24 30)											
APR , 1982											
03...	--	--	--	--	--	--	--	--	--	--	--
JUL											
20...	300	10	497	1500	1400	2100	1200	2900	2900	100	73
390941082212200 - 051 ELK F (11-4) NR RADCLIFF OH (LAT 39 09 41 LONG 082 21 22)											
JUL , 1982											
20...	81	13	215	--	--	--	--	--	--	--	--
391009082053600 - 051 W B SHADE R (14-2) NR BURLINGHAM OH (LAT 39 10 09 LONG 082 05 36)											
JUL , 1982											
19...	150	3.5	301	--	--	--	--	--	--	--	--

DATA COLLECTED AT OHIO ABANDONED MINE LAND SITES PROJECT--Continued

ANALYSES OF MISCELLANEOUS STATIONS

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	ACIDITY (MG/L AS H)	ACIDITY (MG/L AS CACO3)	BICAR-BONATE FET-FLD (MG/L AS HCO3)	CAR-BONATE FET-FLD (MG/L AS CO3)	ALKA-LINITY FIELD (MG/L AS CACO3)
* 391403082261600 - 051 ELK F (11-7) NR MCARTHUR OH (LAT 39 14 03 LONG 082 26 16)											
APR , 1982											
04...	1000	72	--	6.2	5.5	11.5	.1	5.0	11	--	9
JUL											
19...	1215	2.4	468	6.9	24.5	7.3	--	--	53	0	43
* 391416082255500 - 051 UNAM TR TO ELK F (11-8) NR PRATTSVILLE OH (LAT 39 14 16 LONG 082 25 55)											
APR , 1982											
04...	0830	8.0	--	6.0	5.5	12.0	.8	40	7	--	6
JUL											
19...	1315	.55	990	7.6	24.0	7.6	--	--	21	0	17
* 391430082284600 - 051 PUNCHEON F (11-10) AT MCARTHUR OH (LAT 39 14 30 LONG 082 28 46)											
APR , 1982											
04...	1145	17	--	6.2	6.0	11.7	.2	7.0	12	--	10
JUL											
19...	1100	.18	325	6.8	23.5	5.2	--	--	50	0	41
391552082171900 - 051 RACCOON C (16-1) NR MINERAL OH (LAT 39 15 52 LONG 082 17 19)											
SEP , 1982											
07...	1300	<2.0	680	4.4	20.0	--	.9	14	0	0	0
* 391637082291400 - 051 ELK F (11-9) NR MCARTHUR OH (LAT 39 16 37 LONG 082 29 14)											
APR , 1982											
04...	1430	20	--	6.9	7.5	11.7	--	--	1	--	0
JUL											
13...	1145	3.8	195	6.9	22.0	8.1	--	--	32	0	26
391642082232700 - 051 RACCOON C (16-3) NR ZALESKI OH (LAT 39 16 42 LONG 082 23 27)											
JUL , 1982											
13...	0900	57	410	5.3	21.5	7.0	.4	20	2	0	2
391830082262300 - 051 BRUSHY C (16-4) NR CREOLA OH (LAT 39 18 30 LONG 082 26 23)											
APR , 1982											
04...	1630	79	--	5.2	6.5	11.3	.3	16	2	--	2
JUL											
19...	1430	6.3	690	3.5	25.0	7.0	1.3	65	0	0	0
391901082210400 - 051 RACCOON C (16-2) NR ZALESKI OH (LAT 39 19 01 LONG 082 21 04)											
JUL , 1982											
20...	1800	23	515	4.8	25.0	7.6	.4	20	0	0	0
391913082250500 - 051 RACCOON C (16-5) NR ZALESKI OH (LAT 39 19 13 LONG 082 25 05)											
APR , 1982											
04...	1800	140	--	5.0	7.5	11.0	.4	20	4	--	3
JUL											
19...	1530	14	565	3.1	25.5	7.7	.5	25	0	0	0
* 392201081524600 - 051 FEDERAL C (22-1) AT BROADWELL OH (LAT 39 22 01 LONG 081 52 46)											
JUL , 1982											
15...	0830	14	635	7.6	22.0	7.7	--	--	200	0	164
392216082160800 - 051 HEWETT F (16-6) NR MINERAL OH (LAT 39 22 16 LONG 082 16 08)											
JUL , 1982											
20...	1430	7.6	734	3.5	24.5	7.6	1.4	70	0	0	0

ANALYSES OF MISCELLANEOUS STATIONS

DATE	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	NICKEL, DIS-SOLVED (UG/L AS NI)	ZINC, DIS-SOLVED (UG/L AS ZN)
391403082261600 - 051 ELK F (11-7) NR MCARTHUR OH (LAT 39 14 03 LONG 082 26 16)											
APR , 1982											
04...	--	--	--	--	--	--	--	--	--	--	--
JUL											
19...	140	27	330	--	--	--	--	--	--	--	--
391416082255500 - 051 UNAM TR TO ELK F (11-8) NR PRATTSVILLE OH (LAT 39 14 16 LONG 082 25 55)											
APR , 1982											
04...	--	--	--	--	--	--	--	--	--	--	--
JUL											
19...	150	49	647	--	--	--	--	--	--	--	--
391430082284600 - 051 PUNCHEON F (11-10) AT MCARTHUR OH (LAT 39 14 30 LONG 082 28 46)											
APR , 1982											
04...	--	--	--	--	--	--	--	--	--	--	--
JUL											
19...	86	11	220	--	--	--	--	--	--	--	--
391552082171900 - 051 RACCOON C (16-1) NR MINERAL OH (LAT 39 15 52 LONG 082 17 19)											
SEP , 1982											
07...	300	26	483	6200	6200	280	160	4400	4400	100	140
391637082291400 - 051 ELK F (11-9) NR MCARTHUR OH (LAT 39 16 37 LONG 082 29 14)											
APR , 1982											
04...	--	--	--	--	--	--	--	--	--	--	--
JUL											
13...	31	9.7	130	--	--	--	--	--	--	--	--
391642082232700 - 051 RACCOON C (16-3) NR ZALESKI OH (LAT 39 16 42 LONG 082 23 27)											
JUL , 1982											
13...	130	34	298	500	400	1200	940	2700	2700	100	62
391830082262300 - 051 BRUSHY C (16-4) NR CREOLA OH (LAT 39 18 30 LONG 082 26 23)											
APR , 1982											
04...	--	--	--	--	--	--	--	--	--	--	--
JUL											
19...	160	96	416	5300	4700	3000	960	2900	2800	100	140
391901082210400 - 051 RACCOON C (16-2) NR ZALESKI OH (LAT 39 19 01 LONG 082 21 04)											
JUL , 1982											
20...	150	55	375	1300	1000	490	30	3900	3600	100	70
391913082250500 - 051 RACCOON C (16-5) NR ZALESKI OH (LAT 39 19 13 LONG 082 25 05)											
APR , 1982											
04...	--	--	--	--	--	--	--	--	--	--	--
JUL											
19...	190	41	432	1700	1500	560	140	4800	4600	100	98
392201081524600 - 051 FEDERAL C (22-1) AT BROADWELL OH (LAT 39 22 01 LONG 081 52 46)											
JUL , 1982											
15...	120	33	459	--	--	--	--	--	--	--	--
392216082160800 - 051 HEWETT F (16-6) NR MINERAL OH (LAT 39 22 16 LONG 082 16 08)											
JUL , 1982											
20...	310	4.8	554	4800	4800	4900	3900	3200	3000	100	140

DATA COLLECTED AT OHIO ABANDONED MINE LAND SITES PROJECT--Continued

ANALYSES OF MISCELLANEOUS STATIONS

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	ACIDITY (MG/L AS H)	ACIDITY (MG/L AS CACO3)	BICAR-BONATE FET-FLD (MG/L AS HCO3)	CAR-BONATE FET-FLD (MG/L AS CO3)	ALKA-LINITY FIELD (MG/L AS CACO3)
* 392240082275000 - 051 BRUSHY F (16-8) NR MT PLEASANT OH (LAT 39 22 40 LONG 082 27 50)											
JUL , 1982 27...	1400	.11	241	6.3	26.0	7.3	.1	5.0	8	0	7
392325082150300 - 051 HEWETT F (16-7) NR KIMBERLY OH (LAT 39 23 25 LONG 082 15 03)											
JUL , 1982 20...	1530	4.0	476	4.5	24.0	7.7	.3	15	0	0	0
392342082072000 - 051SUNDAY C (21-1) AT CHAUNCEY OH (LAT 39 23 42 LONG 082 07 20)											
JUL , 1982 19...	1645	26	1270	3.2	27.0	7.6	1.3	65	0	0	0
392349082214000 - 051 E B RACCOON C (16-9) AT STARR OH (LAT 39 23 49 LONG 082 21 40)											
JUL , 1982 21...	1330	5.6	1470	3.4	22.5	8.5	3.4	169	0	0	0
* 392407081554700 - 051 SHARPS F (22-2) NR AMESVILLE OH (LAT 39 24 07 LONG 081 55 47)											
JUL , 1982 15...	1100	6.3	665	7.9	24.0	8.7	--	--	210	0	172
392427082200300 - 051 E B RACCOON C (16-10) NR STARR OH (LAT 39 24 27 LONG 082 20 03)											
JUL , 1982 21...	1300	1.7	1400	3.4	21.5	8.2	4.3	214	0	0	0
392504082195100 - 051 UNAM TR TO E B RACCOON C (16-11) NR STARR OH (LAT 39 25 04 LONG 082 19 51)											
JUL , 1982 21...	1200	.68	1610	3.3	20.5	8.6	5.5	273	0	0	0
* 392535081251800 - 051 DUCK C (25-1) AT MARIETTA OH (LAT 39 25 35 LONG 081 25 18)											
MAR , 1982 23...	0830	719	--	7.5	5.5	9.8	--	--	92	--	75
JUL 23...	0830	47	680	7.6	23.5	7.1	--	--	68	0	56
392606082112800 - 051 MONDAY C (20-1) AT DOANVILLE OH (LAT 39 26 06 LONG 082 11 28)											
JUL , 1982 20...	1000	33	1050	3.2	22.5	8.2	1.9	94	0	0	0
* 392612081545700 - 051 SHARPS F (22-4) AT SHARPSBURG OH (LAT 39 26 12 LONG 081 54 57)											
APR , 1982 03...	1630	84	--	8.0	11.0	9.4	--	--	118	--	97
JUL 15...	1400	3.9	570	7.8	23.5	9.2	--	--	210	0	172
392733082120700 - 051 MONDAY C (20-2) NR BUCHTEL OH (LAT 39 27 33 LONG 082 12 07)											
JUL , 1982 20...	1200	17	930	4.1	24.0	7.5	.8	40	0	0	0

ANALYSES OF MISCELLANEOUS STATIONS

DATE	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	NICKEL, DIS-SOLVED (UG/L AS NI)	ZINC, DIS-SOLVED (UG/L AS ZN)
392240082275000 - 051 BRUSHY F (16-8) NR MT PLEASANT OH (LAT 39 22 40 LONG 082 27 50)											
JUL , 1982											
27...	86	8.0	191	--	--	--	--	--	--	--	--
392325082150300 - 051 HEWETT F (16-7) NR KIMBERLY OH (LAT 39 23 25 LONG 082 15 03)											
JUL , 1982											
20...	170	3.2	359	900	300	460	74	2700	2600	100	80
392342082072000 - 051SUNDAY C (21-1) AT CHAUNCEY OH (LAT 39 23 42 LONG 082 07 20)											
JUL , 1982											
19...	540	32	926	1000	600	7000	3900	2900	2800	100	86
392349082214000 - 051 E B RACCOON C (16-9) AT STARR OH (LAT 39 23 49 LONG 082 21 40)											
JUL , 1982											
21...	830	13	1280	24000	18000	2000	1300	21000	20000	400	570
392407081554700 - 051 SHARPS F (22-2) NR AMESVILLE OH (LAT 39 24 07 LONG 081 55 47)											
JUL , 1982											
15...	150	24	459	--	--	--	--	--	--	--	--
392427082200300 - 051 E B RACCOON C (16-10) NR STARR OH (LAT 39 24 27 LONG 082 20 03)											
JUL , 1982											
21...	640	14	1030	18000	14000	3400	2800	13000	13000	300	460
392504082195100 - 051 UNAM TR TO E B RACCOON C (16-11) NR STARR OH (LAT 39 25 04 LONG 082 19 51)											
JUL , 1982											
21...	890	24	1510	29000	19000	2300	1900	25000	23000	500	700
392535081251800 - 051 DUCK C (25-1) AT MARIETTA OH (LAT 39 25 35 LONG 081 25 18)											
MAR , 1982											
23...	--	--	--	--	--	--	--	--	--	--	--
JUL											
23...	280	10	525	--	--	--	--	--	--	--	--
392606082112800 - 051 MONDAY C (20-1) AT DOANVILLE OH (LAT 39 26 06 LONG 082 11 28)											
JUL , 1982											
20...	430	60	734	8600	8400	2600	1700	3900	3600	200	210
392612081545700 - 051 SHARPS F (22-4) AT SHARPSBURG OH (LAT 39 26 12 LONG 081 54 57)											
APR , 1982											
03...	--	--	--	--	--	--	--	--	--	--	--
JUL											
15...	110	12	423	--	--	--	--	--	--	--	--
392733082120700 - 051 MONDAY C (20-2) NR BUCHTEL OH (LAT 39 27 33 LONG 082 12 07)											
JUL , 1982											
20...	350	90	711	3500	3300	1000	270	3900	3500	100	150

ANALYSES OF MISCELLANEOUS STATIONS

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	ACIDITY (MG/L AS H)	ACIDITY (MG/L AS CACO3)	BICAR-BONATE FET-FLD (MG/L AS HCO3)	CAR-BONATE FET-FLD (MG/L AS CO3)	ALKA-LINITY FIELD (MG/L AS CACO3)
* 392802081562100 - 051 SHARPS F (22-5) NR SHARPSBURG OH (LAT 39 28 02 LONG 081 56 21)											
APR , 1982											
03...	1500	44	--	8.0	12.0	10.2	--	--	126	--	103
JUL											
14...	1600	3.0	420	7.8	23.5	8.8	--	--	220	0	180
* 392853081594300 - 051 MINERS F (22-6) NR SHARPSBURG OH (LAT 39 28 53 LONG 081 59 43)											
APR , 1982											
03...	1130	50	--	7.7	13.5	8.4	--	--	62	--	51
JUL											
14...	1115	.78	515	7.4	21.5	8.6	--	--	120	0	98
* 392909081593600 - 051 MINERS F (22-7) NR SHARPSBURG OH (LAT 39 29 09 LONG 081 59 36)											
APR , 1982											
03...	1245	20	--	7.8	13.5	9.5	--	--	74	--	61
JUL											
14...	1415	.52	505	7.7	25.5	8.2	--	--	150	0	123
392944082100100 - 051 BRUSH F (20-3) AT ORBISTON OH (LAT 39 29 44 LONG 082 10 01)											
JUL , 1982											
28...	1300	3.5	1750	3.0	19.0	9.0	.7	35	0	0	0
393004082050900 - 051 SUNDAY C (21-3) AT GLOUSTER OH (LAT 39 30 04 LONG 082 05 09)											
JUL , 1982											
29...	0900	.78	1510	5.3	20.5	6.8	4.5	223	14	0	11
393004082052300 - 051 MUD F (21-4) AT GLOUSTER OH (LAT 39 30 04 LONG 082 05 23)											
JUL , 1982											
29...	1045	1.6	5480	4.5	16.0	6.2	32	1590	0	0	0
393051082095500 - 051 SNOW F (20-4) AT MURRAY CITY OH (LAT 39 30 51 LONG 082 09 55)											
JUL , 1982											
21...	1100	4.4	1160	3.7	20.0	8.2	2.4	119	0	0	0
* 393237082061300 - 051 JOHNSON RN (21-6) NR GLOUSTER OH (LAT 39 32 37 LONG 082 06 13)											
JUL , 1982											
28...	1200	.09	368	7.1	22.5	6.0	--	--	64	0	52
393241082034300 - 051 SUNDAY C (21-5) NR OAKDALE OH (LAT 39 32 41 LONG 082 03 43)											
JUL , 1982											
26...	1145	4.9	1380	3.8	23.5	7.4	1.0	50	0	0	0
* 393339081234500 - 051 E F DUCK C (33-1) AT LOWER SALEM OH (LAT 39 33 39 LONG 081 23 45)											
MAR , 1982											
23...	1047	337	--	7.6	5.5	11.8	--	--	84	--	69
JUL											
14...	0830	24	650	7.9	22.5	7.6	--	--	140	0	115
* 393344081243400 - 051 W F DUCK C (25-2) AT WARNER OH (LAT 39 33 44 LONG 081 24 34)											
MAR , 1982											
22...	1700	279		7.7	7.0	12.0	--	--	108	--	89
JUL											
15...	0845	14	750	8.1	23.5	8.8	--	--	170	0	139

ANALYSES OF MISCELLANEOUS STATIONS

DATE	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	NICKEL, DIS-SOLVED (UG/L AS NI)	ZINC, DIS-SOLVED (UG/L AS ZN)
392802081562100 - 051 SHARPS F (22-5) NR SHARPSBURG OH (LAT 39 28 02 LONG 081 56 21)											
APR , 1982											
03...	--	--	--	--	--	--	--	--	--	--	--
JUL											
14...	37	6.9	280	--	--	--	--	--	--	--	--
392853081594300 - 051 MINERS F (22-6) NR SHARPSBURG OH (LAT 39 28 53 LONG 081 59 43)											
APR , 1982											
03...	--	--	--	--	--	--	--	--	--	--	--
JUL											
14...	160	3.1	375	--	--	--	--	--	--	--	--
392909081593600 - 051 MINERS F (22-7) NR SHARPSBURG OH (LAT 39 29 09 LONG 081 59 36)											
APR , 1982											
03...	--	--	--	--	--	--	--	--	--	--	--
JUL											
14...	140	2.7	390	--	--	--	--	--	--	--	--
392944082100100 - 051 BRUSH F (20-3) AT ORBISTON OH (LAT 39 29 44 LONG 082 10 01)											
JUL , 1982											
28...	840	46	1340	31000	31000	170000	16000	7000	6400	300	590
393004082050900 - 051 SUNDAY C (21-3) AT GLOUSTER OH (LAT 39 30 04 LONG 082 05 09)											
JUL , 1982											
29...	840	50	1450	2300	1100	98000	98000	3600	3400	100	150
393004082052300 - 051 MUD F (21-4) AT GLOUSTER OH (LAT 39 30 04 LONG 082 05 23)											
JUL , 1982											
29...	4100	26	4620	26000	21000	710000	1000	18000	18000	600	820
393051082095500 - 051 SNOW F (20-4) AT MURRAY CITY OH (LAT 39 30 51 LONG 082 09 55)											
JUL , 1982											
21...	100	6.5	830	13000	13000	8000	6300	4200	4200	200	260
393237082061300 - 051 JOHNSON RN (21-6) NR GLOUSTER OH (LAT 39 32 37 LONG 082 06 13)											
JUL , 1982											
28...	61	39	240	--	--	--	--	--	--	--	--
393241082034300 - 051 SUNDAY C (21-5) NR OAKDALE OH (LAT 39 32 41 LONG 082 03 43)											
JUL , 1982											
26...	560	37	951	2200	2200	6100	3100	4700	4700	100	180
393339081234500 - 051 E F DUCK C (33-1) AT LOWER SALEM OH (LAT 39 33 39 LONG 081 23 45)											
MAR , 1982											
23...	--	--	--	--	--	--	--	--	--	--	--
JUL											
14...	270	8.2	501	--	--	--	--	--	--	--	--
393344081243400 - 051 W F DUCK C (25-2) AT WARNER OH (LAT 39 33 44 LONG 081 24 34)											
MAR , 1982											
22...	--	--	--	--	--	--	--	--	--	--	--
JUL											
15...	160	55	533	--	--	--	--	--	--	--	--

ANALYSES OF MISCELLANEOUS STATIONS

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	ACIDITY (MG/L AS H)	ACIDITY (MG/L AS CACO3)	BICAR-BONATE FET-FLD (MG/L AS HCO3)	CAR-BONATE FET-FLD (MG/L AS CO3)	ALKA-LINITY FIELD (MG/L AS CACO3)
393453082162800 - 051 MONDAY C (20-5) AT OREVILLE OH (LAT 39 34 53 LONG 082 16 28)											
MAR , 1982											
31...	1300	88	--	4.7	14.6	9.2	.7	35	--	--	--
JUL											
22...	1230	4.1	1290	3.8	22.0	8.9	1.2	60	0	0	0
* 393528081222600 - 051 E F DUCK C (33-2) NR LOWER SALEM OH (LAT 39 35 28 LONG 081 22 26)											
MAR , 1982											
23...	1200	230	--	7.4	6.0	11.5	--	--	96	--	79
JUL											
14...	1030	23	670	7.8	23.0	8.5	--	--	150	0	123
* 393528081251000 - 051 W F DUCK C (25-3) NR ELBA OH (LAT 39 35 28 LONG 081 25 10)											
MAR , 1982											
22...	1523	280	--	7.7	6.5	11.2	--	--	100	--	82
JUL											
15...	1030	15	750	7.4	25.0	9.5	--	--	150	0	123
393532082073200 - 051 W B SUNDAY C (21-9) NR HEMLOCK OH (LAT 39 35 32 LONG 082 07 32)											
JUL , 1982											
19...	1430	5.4	870	5.1	22.0	8.4	.2	10	4	0	3
393546082095600 - 051 PINE RN (21-10) AT HEMLOCK OH (LAT 39 35 46 LONG 082 09 56)											
JUL , 1982											
19...	1145	1.7	1260	3.7	18.5	8.8	1.7	84	0	0	0
* 393604081424300 - 051 MEIGS C (31-1) NR NEELYSVILLE OH (LAT 39 36 04 LONG 081 42 43)											
AUG , 1982											
04...	0830	8.1	1200	8.1	23.5	7.9	--	--	200	0	164
393609082051900 - 051 SUNDAY C (21-7) AT CORNING OH (LAT 39 36 09 LONG 082 05 19)											
JUL , 1982											
26...	1315	3.0	1720	5.2	17.5	8.5	--	--	12	0	10
* 393610082124400 - 051 SHAWNEE C (20-8) AT SHAWNEE OH (LAT 39 36 10 LONG 082 12 44)											
JUL , 1982											
21...	1230	.51	1100	7.6	24.0	8.8	--	--	120	0	98
393622082150500 - 051 MONDAY C (20-6) NR SHAWNEE OH (LAT 39 36 22 LONG 082 15 05)											
MAR , 1982											
31...	1415	56	--	4.1	14.0	7.4	1.1	55	--	--	--
JUL											
22...	1430	2.6	1430	3.6	23.5	8.1	1.6	79	0	0	0
393627082145700 - 051 UNAM TR TO MONDAY C (20-7) NR SHAWNEE OH (LAT 39 36 27 LONG 082 14 57)											
JUL , 1982											
22...	1530	.22	1240	5.1	22.0	7.8	.4	20	1	0	1
* 393632081245600 - 051 UNAM TR TO WF DUCK C (25-4) AT ELBA OH (LAT 39 36 32 LONG 081 24 56)											
MAR , 1982											
31...	1713	13	--	6.3	12.5	10.5	.2	7.0	8	--	7
JUL											
15...	1200	.54	840	6.1	21.5	8.5	.1	5.0	4	0	3

ANALYSES OF MISCELLANEOUS STATIONS

DATE	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	NICKEL, DIS-SOLVED (UG/L AS NI)	ZINC, DIS-SOLVED (UG/L AS ZN)
393453082162800 - 051 MONDAY C (20-5) AT OREVILLE OH (LAT 39 34 53 LONG 082 16 28)											
MAR , 1982											
31...	--	--	--	--	--	--	--	--	--	--	--
JUL											
22...	490	130	993	5700	5600	1200	810	4700	4600	100	230
393528081222600 - 051 E F DUCK C (33-2) NR LOWER SALEM OH (LAT 39 35 28 LONG 081 22 26)											
MAR , 1982											
23...	--	--	--	--	--	--	--	--	--	--	--
JUL											
14...	170	7.5	489	--	--	--	--	--	--	--	--
393528081251000 - 051 W F DUCK C (25-3) NR ELBA OH (LAT 39 35 28 LONG 081 25 10)											
MAR , 1982											
22...	--	--	--	--	--	--	--	--	--	--	--
JUL											
15...	170	42	544	--	--	--	--	--	--	--	--
393532082073200 - 051 W B SUNDAY C (21-9) NR HEMLOCK OH (LAT 39 35 32 LONG 082 07 32)											
JUL , 1982											
19...	420	50	732	700	700	2000	1000	2100	2000	100	110
393546082095600 - 051 PINE RN (21-10) AT HEMLOCK OH (LAT 39 35 46 LONG 082 09 56)											
JUL , 1982											
19...	420	76	811	5200	4900	9200	7000	4200	4000	100	230
393604081424300 - 051 MEIGS C (31-1) NR NEELYSVILLE OH (LAT 39 36 04 LONG 081 42 43)											
AUG , 1982											
04...	560	31	1020	--	--	--	--	--	--	--	--
393609082051900 - 051 SUNDAY C (21-7) AT CORNING OH (LAT 39 36 09 LONG 082 05 19)											
JUL , 1982											
26...	770	20	1230	35000	2100	83000	83000	5900	5900	100	250
393610082124400 - 051 SHAWNEE C (20-8) AT SHAWNEE OH (LAT 39 36 10 LONG 082 12 44)											
JUL , 1982											
21...	320	140	820	--	--	--	--	--	--	--	--
393622082150500 - 051 MONDAY C (20-6) NR SHAWNEE OH (LAT 39 36 22 LONG 082 15 05)											
MAR , 1982											
31...	--	--	--	--	--	--	--	--	--	--	--
JUL											
22...	520	42	1050	6600	6500	4500	2400	4600	4300	100	180
393627082145700 - 051 UNAM TR TO MONDAY C (20-7) NR SHAWNEE OH (LAT 39 36 27 LONG 082 14 57)											
JUL , 1982											
22...	530	120	1060	1200	1200	490	240	5200	5200	100	78
393632081245600 - 051 UNAM TR TO WF DUCK C (25-4) AT ELBA OH (LAT 39 36 32 LONG 081 24 56)											
MAR , 1982											
31...	--	--	--	--	--	--	--	--	--	--	--
JUL											
15...	83	2.4	664	--	--	--	--	--	--	--	--

DATA COLLECTED AT OHIO ABANDONED MINE LAND SITES PROJECT--Continued

ANALYSES OF MISCELLANEOUS STATIONS

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	ACIDITY (MG/L AS H)	ACIDITY (MG/L AS CACO3)	BICAR-BONATE FET-FLD (MG/L AS HCO3)	CAR-BONATE FET-FLD (MG/L AS CO3)	ALKA-LINITY FIELD (MG/L AS CACO3)
393640081223400 - 051 UNAM TR (33-3) TO E F DUCK C NR ELBA OH (LAT 39 36 40 LONG 081 22 34)											
APR , 1982											
01...	0845	8.5	--	4.9	5.5	13.0	.7	35	2	--	2
JUL											
14...	1200	.72	1230	4.0	25.5	8.4	1.2	60	0	0	0
* 393646081222000 - 051 E F DUCK C (33-4) NR HARRIETSVILLE OH (LAT 39 36 46 LONG 081 22 20)											
MAR , 1982											
23...	1330	227	--	7.6	7.0	11.3	--	--	96	--	79
JUL											
14...	1300	22	660	7.8	25.0	9.0	--	--	160	0	131
393649082135300 - 051 MONDAY C (20-12) NR SHAWNEE OH (LAT 39 36 49 LONG 082 13 53)											
JUL , 1982											
21...	1445	1.3	1680	3.3	27.0	8.5	2.6	129	0	0	0
* 393720081212100 - 041 M F DUCK C NR GERMANTOWN OH (LAT 39 37 20 LONG 081 21 21)											
MAR , 1982											
23...	1430	57	--	6.7	9.5	11.2	--	--	36	--	30
JUL											
14...	1430	3.9	1080	6.6	27.0	8.2	--	--	20	0	16
393739082140600 - 051 UNAM TR TO MONDAY C (20-9) AT MCCUNEVILLE OH (LAT 39 37 39 LONG 082 14 06)											
JUL , 1982											
29...	1530	.13	1250	3.7	22.5	8.5	2.2	109	0	0	0
393742082135800 - 051 MONDAY C (20-10) AT MCCUNEVILLE OH (LAT 39 37 42 LONG 082 13 58)											
JUL , 1982											
29...	1400	.60	2020	3.1	22.0	9.3	4.0	199	0	0	0
393743082183600 - 051 L MONDAY C (20-11) NR MAXVILLE OH (LAT 39 37 43 LONG 082 18 36)											
MAR , 1982											
31...	1010	22	--	7.1	11.2	10.4	--	--	32	--	26
JUL											
30...	1330	.18	1660	5.3	21.0	9.3	.3	15	4	0	3
* 393745081431000 - 051 DYES F (31-2) NR HACKNEY OH (LAT 39 37 45 LONG 081 43 10)											
AUG , 1982											
04...	1045	3.2	1600	8.1	24.0	7.7	--	--	170	0	139
* 393754081274000 - 051 W F DUCK C (25-6) AT MACKSBURG OH (LAT 39 37 54 LONG 081 27 40)											
MAR , 1982											
22...	1400	188	--	7.7	7.5	10.2	--	--	128	--	105
JUL											
15...	1330	11	750	8.4	26.0	11.0	--	--	180	4	154
* 393906081215800 - 051 M F DUCK C (33-6) NR HARRIETSVILLE OH (LAT 39 39 06 LONG 081 21 58)											
APR , 1982											
01...	1515	41	--	7.3	15.5	10.8	--	--	54	--	44
JUL											
14...	1545	3.5	930	7.3	30.5	7.4	--	--	52	0	43

DATA COLLECTED AT OHIO ABANDONED MINE LAND SITES PROJECT--Continued

ANALYSES OF MISCELLANEOUS STATIONS

DATE	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	NICKEL, DIS-SOLVED (UG/L AS NI)	ZINC, DIS-SOLVED (UG/L AS ZN)
393640081223400 - 051 UNAM TR (33-3) TO E F DUCK C NR ELBA OH (LAT 39 36 40 LONG 081 22 34)											
APR , 1982											
01...	--	--	--	--	--	--	--	--	--	--	--
JUL											
14...	710	2.0	1060	8300	5700	8600	490	9300	8900	200	200
393646081222000 - 051 E F DUCK C (33-4) NR HARRIETSVILLE OH (LAT 39 36 46 LONG 081 22 20)											
MAR , 1982											
23...	--	--	--	--	--	--	--	--	--	--	--
JUL											
14...	230	6.9	504	--	--	--	--	--	--	--	--
393649082135300 - 051 MONDAY C (20-12) NR SHAWNEE OH (LAT 39 36 49 LONG 082 13 53)											
JUL , 1982											
21...	560	210	1230	8500	8400	3400	2700	6000	6000	200	270
393720081212100 - 041 M F DUCK C NR GERMANTOWN OH (LAT 39 37 20 LONG 081 21 21)											
MAR , 1982											
23...	--	--	--	--	--	--	--	--	--	--	--
JUL											
14...	550	12	911	--	--	--	--	--	--	--	--
393739082140600 - 051 UNAM TR TO MONDAY C (20-9) AT MCCUNEVILLE OH (LAT 39 37 39 LONG 082 14 06)											
JUL , 1982											
29...	470	100	872	11000	11000	920	910	4900	4900	100	200
393742082135800 - 051 MONDAY C (20-10) AT MCCUNEVILLE OH (LAT 39 37 42 LONG 082 13 58)											
JUL , 1982											
29...	740	200	1290	17000	17000	5400	940	8000	8000	200	360
393743082183600 - 051 L MONDAY C (20-11) NR MAXVILLE OH (LAT 39 37 43 LONG 082 18 36)											
MAR , 1982											
31...	--	--	--	--	--	--	--	--	--	--	--
JUL											
30...	460	310	1300	1800	800	1100	210	10000	9300	200	140
393745081431000 - 051 DYES F (31-2) NR HACKNEY OH (LAT 39 37 45 LONG 081 43 10)											
AUG , 1982											
04...	780	17	1460	--	--	--	--	--	--	--	--
393754081274000 - 051 W F DUCK C (25-6) AT MACKSBURG OH (LAT 39 37 54 LONG 081 27 40)											
MAR , 1982											
22...	--	--	--	--	--	--	--	--	--	--	--
JUL											
15...	160	47	543	--	--	--	--	--	--	--	--
393906081215800 - 051 M F DUCK C (33-6) NR HARRIETSVILLE OH (LAT 39 39 06 LONG 081 21 58)											
APR , 1982											
01...	--	--	--	--	--	--	--	--	--	--	--
JUL											
14...	460	14	783	--	--	--	--	--	--	--	--

ANALYSES OF MISCELLANEOUS STATIONS

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	ACIDITY (MG/L AS H)	ACIDITY (MG/L AS CACO3)	BICAR-BONATE FET-FLD (MG/L AS HCO3)	CAR-BONATE FET-FLD (MG/L AS CO3)	ALKA-LINITY FIELD (MG/L AS CACO3)
393943082080800 - 051 MOXAHALA C (29-11) AT MOXAHALA OH (LAT 39 39 43 LONG 082 08 08)											
MAY , 1982											
08...	1300	10	--	6.7	16.6	9.1	.5	25	12	--	10
JUL											
26...	1430	1.1	1640	4.9	24.0	8.2	.8	40	4	0	3
* 393946081282300 - 051 W F DUCK C (25-7) AT DEXTER CITY OH (LAT 39 39 46 LONG 081 28 23)											
MAR , 1982											
22...	1215	193	--	8.0	8.0	9.5	--	--	136	--	112
JUL											
21...	1600	7.9	630	8.8	27.0	10.4	--	--	200	8	177
* 393947081182500 - 051 E F DUCK C (33-10) NR HARRIETSVILLE OH (LAT 39 39 47 LONG 081 18 25)											
APR , 1982											
01...	0945	132	--	7.9	9.0	12.3	--	--	140	--	115
JUL											
21...	1045	9.4	610	8.1	23.5	7.8	--	--	180	0	148
394006082080400 - 051 UNAM TR TO MOXAHALA C (29-10) AT MOXAHALA OH (LAT 39 40 06 LONG 082 08 04)											
JUL , 1982											
20...	1300	4.0	2860	3.1	32.0	6.6	8.8	437	0	0	0
* 394007081285800 - 051 WARREN RN (25-8) AT SOUTH OLIVE OH (LAT 39 40 07 LONG 081 28 58)											
MAR , 1982											
31...	1320	7.0	--	7.2	16.0	10.6	--	--	56	--	46
JUL											
22...	1440	.21	1300	8.1	34.0	7.8	--	--	100	0	82
* 394014081232100 - 051 M F DUCK C (33-7) AT MIDDLEBURG OH (LAT 39 40 14 LONG 081 23 21)											
APR , 1982											
01...	1430	32	--	7.2	15.5	11.0	--	--	72	--	59
JUL											
13...	1600	3.2	900	7.5	30.5	7.8	--	--	72	0	59
* 394053081415500 - 051 DYES F (31-6) NR REINERSVILLE OH (LAT 39 40 53 LONG 081 41 55)											
AUG , 1982											
03...	1300	4.4	1460	8.0	23.5	8.9	--	--	170	0	139
* 394110081245700 - 051 M F DUCK C (33-8) NR MIDDLEBURG OH (LAT 39 41 10 LONG 081 24 57)											
MAR , 1982											
31...	1600	51	--	6.2	15.0	11.0	.4	20	32	--	26
JUL											
13...	1500	2.4	880	7.4	31.5	7.8	--	--	96	0	79
* 394117081452200 - 051 MANS F (31-3) NR MEIGS OH (LAT 39 41 17 LONG 081 45 22)											
AUG , 1982											
04...	1245	.49	1100	8.0	22.0	7.5	--	--	240	0	197
394129082065100 - 051 MOXAHALA C (29-9) NR MOXAHALA OH (LAT 39 41 29 LONG 082 06 51)											
MAY , 1982											
08...	1415	31	--	4.2	18.1	8.9	2.0	99	--	--	--
JUL											
20...	1450	8.0	2250	3.2	27.0	7.4	4.9	243	0	0	0

ANALYSES OF MISCELLANEOUS STATIONS

DATE	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	NICKEL, DIS-SOLVED (UG/L AS NI)	ZINC, DIS-SOLVED (UG/L AS ZN)
393943082080800 - 051 MOXAHALA C (29-11) AT MOXAHALA OH (LAT 39 39 43 LONG 082 08 08)											
MAY , 1982											
08...	--	--	--	--	--	--	--	--	--	--	--
JUL											
26...	770	33	1260	2400	2400	1000	430	10000	10000	100	160
393946081282300 - 051 W F DUCK C (25-7) AT DEXTER CITY OH (LAT 39 39 46 LONG 081 28 23)											
MAR , 1982											
22...	--	--	--	--	--	--	--	--	--	--	--
JUL											
21...	110	37	448	--	--	--	--	--	--	--	--
393947081182500 - 051 E F DUCK C (33-10) NR HARRIETSVILLE OH (LAT 39 39 47 LONG 081 18 25)											
APR , 1982											
01...	--	--	--	--	--	--	--	--	--	--	--
JUL											
21...	170	8.4	446	--	--	--	--	--	--	--	--
394006082080400 - 051 UNAM TR TO MOXAHALA C (29-10) AT MOXAHALA OH (LAT 39 40 06 LONG 082 08 04)											
JUL , 1982											
20...	1500	66	2420	1500	1400	68000	58000	34000	34000	400	730
394007081285800 - 051 WARREN RN (25-8) AT SOUTH OLIVE OH (LAT 39 40 07 LONG 081 28 58)											
MAR , 1982											
31...	--	--	--	--	--	--	--	--	--	--	--
JUL											
22...	610	16	1200	--	--	--	--	--	--	--	--
394014081232100 - 051 M F DUCK C (33-7) AT MIDDLEBURG OH (LAT 39 40 14 LONG 081 23 21)											
APR , 1982											
01...	--	--	--	--	--	--	--	--	--	--	--
JUL											
13...	420	15	779	--	--	--	--	--	--	--	--
394053081415500 - 051 DYES F (31-6) NR REINERSVILLE OH (LAT 39 40 53 LONG 081 41 55)											
AUG , 1982											
03...	750	13	1290	--	--	--	--	--	--	--	--
394110081245700 - 051 M F DUCK C (33-8) NR MIDDLEBURG OH (LAT 39 41 10 LONG 081 24 57)											
MAR , 1982											
31...	--	--	--	--	--	--	--	--	--	--	--
JUL											
13...	410	16	734	--	--	--	--	--	--	--	--
394117081452200 - 051 MANS F (31-3) NR MEIGS OH (LAT 39 41 17 LONG 081 45 22)											
AUG , 1982											
04...	410	54	930	--	--	--	--	--	--	--	--
394129082065100 - 051 MOXAHALA C (29-9) NR MOXAHALA OH (LAT 39 41 29 LONG 082 06 51)											
MAY , 1982											
08...	--	--	--	--	--	--	--	--	--	--	--
JUL											
20...	1100	50	1700	11000	9800	31000	25000	21000	21000	300	470

ANALYSES OF MISCELLANEOUS STATIONS

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	ACIDITY (MG/L AS H)	ACIDITY (MG/L AS CACO3)	BICAR-BONATE FET-FLD (MG/L AS HCO3)	CAR-BONATE FET-FLD (MG/L AS CO3)	ALKA-LINITY FIELD (MG/L AS CACO3)
* 394130081450700 - 051 MEIGS C (31-4) NR MEIGS OH (LAT 39 41 30 LONG 081 45 07)											
AUG , 1982											
04...	1345	.74	1000	8.0	24.0	7.8	--	--	260	0	213
* 394140081211000 - 051 E F DUCK C (33-11) NR MIDDLEBURG OH (LAT 39 41 40 LONG 081 21 10)											
APR , 1982											
01...	1050	98	--	8.0	6.5	12.8	--	--	160	--	131
JUL											
22...	1245	6.2	510	8.2	24.5	7.2	--	--	180	0	148
394153082180700 - 051 DRY RN (28-2) NR JUNCTION CITY OH (LAT 39 41 53 LONG 082 18 07)											
APR , 1982											
03...	1045	15	--	6.8	12.1	10.0	--	--	20	--	16
JUL											
12...	1040	.30	820	7.0	22.0	7.8	--	--	40	0	33
* 394214081270500 - 051 M F DUCK C (33-9) NR SOUTH OLIVE OH (LAT 39 42 14 LONG 081 27 05)											
MAR , 1982											
31...	1450	32	--	7.6	15.0	10.5	--	--	120	--	98
JUL											
13...	1400	1.4	630	8.0	27.0	8.4	--	--	190	0	156
394214082160900 - 051 TURKEY RN (28-3) NR JUNCTION CITY OH (LAT 39 42 14 LONG 082 16 09)											
APR , 1982											
03...	1200	18	--	4.9	12.0	10.2	.7	32	--	--	--
JUL											
20...	0900	1.1	1360	4.0	21.5	8.2	2.0	99	0	0	0
394306082121900 - 051 RUSH C (28-5) AT NEW LEXINGTON OH (LAT 39 43 06 LONG 082 12 19)											
MAY , 1982											
08...	1130	24	--	3.1	15.5	9.0	7.1	353	--	--	--
JUL											
22...	0915	2.9	3690	2.8	20.0	6.9	17	844	0	0	0
* 394311081425700 - 041 HORSE RN NR MCCONNELSVILLE OH (LAT 39 43 11 LONG 081 42 57)											
AUG , 1982											
03...	1415	.56	1200	8.0	27.0	9.2	--	--	190	0	156
* 394313082130600 - 051 UNAM TR TO RUSH C (28-4) AT NEW LEXINGTON OH (LAT 39 43 13 LONG 082 13 06)											
JUL , 1982											
28...	1100	.59	1000	6.7	22.0	8.0	--	--	46	0	38
* 394317081401300 - 051 DYES C (31-8) NR REINERSVILLE OH (LAT 39 43 17 LONG 081 40 13)											
AUG , 1982											
03...	1100	1.6	1100	8.0	23.5	8.5	--	--	180	0	148
394317082164300 - 051 RUSH C (28-1) NR JUNCTION CITY OH (LAT 39 43 17 LONG 082 16 43)											
JUL , 1982											
20...	1110	15	2450	2.9	22.5	7.3	9.3	462	0	0	0
* 394327081452200 - 051 MEIGS C (31-5) NR MEIGS OH (LAT 39 43 27 LONG 081 45 22)											
AUG , 1982											
04...	1500	.27	880	7.8	22.5	7.0	--	--	270	0	221

ANALYSES OF MISCELLANEOUS STATIONS

DATE	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	NICKEL, DIS-SOLVED (UG/L AS NI)	ZINC, DIS-SOLVED (UG/L AS ZN)
394130081450700 - 051 MEIGS C (31-4) NR MEIGS OH (LAT 39 41 30 LONG 081 45 07)											
AUG , 1982											
04...	350	20	797	--	--	--	--	--	--	--	--
394140081211000 - 051 E F DUCK C (33-11) NR MIDDLEBURG OH (LAT 39 41 40 LONG 081 21 10)											
APR , 1982											
01...	--	--	--	--	--	--	--	--	--	--	--
JUL											
22...	100	5.7	365	--	--	--	--	--	--	--	--
394153082180700 - 051 DRY RN (28-2) NR JUNCTION CITY OH (LAT 39 41 53 LONG 082 18 07)											
APR , 1982											
03...	--	--	--	--	--	--	--	--	--	--	--
JUL											
12...	180	110	636	--	--	--	--	--	--	--	--
394214081270500 - 051 M F DUCK C (33-9) NR SOUTH OLIVE OH (LAT 39 42 14 LONG 081 27 05)											
MAR , 1982											
31...	--	--	--	--	--	--	--	--	--	--	--
JUL											
13...	180	10	497	--	--	--	--	--	--	--	--
394214082160900 - 051 TURKEY RN (28-3) NR JUNCTION CITY OH (LAT 39 42 14 LONG 082 16 09)											
APR , 1982											
03...	--	--	--	--	--	--	--	--	--	--	--
JUL											
20...	530	77	1050	11000	9600	1200	690	12000	12000	300	330
394306082121900 - 051 RUSH C (28-5) AT NEW LEXINGTON OH (LAT 39 43 06 LONG 082 12 19)											
MAY , 1982											
08...	--	--	--	--	--	--	--	--	--	--	--
JUL											
22...	1900	130	3280	38000	37000	160000	140000	52000	52000	700	810
394311081425700 - 041 HORSE RN NR MCCONNELSVILLE OH (LAT 39 43 11 LONG 081 42 57)											
AUG , 1982											
03...	590	11	1060	--	--	--	--	--	--	--	--
394313082130600 - 051 UNAM TR TO RUSH C (28-4) AT NEW LEXINGTON OH (LAT 39 43 13 LONG 082 13 06)											
JUL , 1982											
28...	260	120	757	--	--	--	--	--	--	--	--
394317081401300 - 051 DYES C (31-8) NR REINERSVILLE OH (LAT 39 43 17 LONG 081 40 13)											
AUG , 1982											
03...	520	15	953	--	--	--	--	--	--	--	--
394317082164300 - 051 RUSH C (28-1) NR JUNCTION CITY OH (LAT 39 43 17 LONG 082 16 43)											
JUL , 1982											
20...	1200	110	1960	17000	16000	53000	53000	30000	30000	400	670
394327081452200 - 051 MEIGS C (31-5) NR MEIGS OH (LAT 39 43 27 LONG 081 45 22)											
AUG , 1982											
04...	260	23	644	--	--	--	--	--	--	--	--

ANALYSES OF MISCELLANEOUS STATIONS

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	ACIDITY (MG/L AS H)	ACIDITY (MG/L AS CACO3)	BICAR-BONATE FET-FLD (MG/L AS HCO3)	CAR-BONATE FET-FLD (MG/L AS CO3)	ALKA-LINITY FIELD (MG/L AS CACO3)
* 394338081305400 - 051 W F DUCK C (25-9) NR CALDWELL OH (LAT 39 43 38 LONG 081 30 54)											
JUL , 1982											
22...	1315	5.1	680	8.5	26.5	11.2	--	--	190	4	162
394426082113600 - 051 UNAM TR TO RUSH C (28-6) AT REHOBOTH OH (LAT 39 44 26 LONG 082 11 36)											
JUL , 1982											
12...	1430	.73	2750	2.8	23.5	8.2	8.8	437	0	0	0
394430082070900 - 051 MCLUNEY C (29-7) NR ROSE FARM OH (LAT 39 44 30 LONG 082 07 09)											
JUL , 1982											
20...	1615	4.8	2100	3.1	28.0	6.8	4.6	228	0	0	0
* 394439081413500 - 051 BRANNONS F (31-9) NR REINERSVILLE OH (LAT 39 44 39 LONG 081 41 35)											
AUG , 1982											
03...	1600	.41	1500	8.0	27.0	9.7	--	--	170	0	139
* 394443081215300 - 051 E F DUCK C (33-12) AT CARLISLE OH (LAT 39 44 43 LONG 081 21 53)											
APR , 1982											
01...	1245	59	--	8.2	10.0	12.0	--	--	158	--	130
JUL											
22...	1425	5.0	510	8.4	26.0	9.7	--	--	230	4	195
394451082074200 - 051 UNAM TR TO MCLUNEY C (29-8) NR ROSE FARM OH (LAT 39 44 51 LONG 082 07 42)											
JUL , 1982											
12...	1540	.25	3160	2.6	29.0	6.0	12	596	0	0	0
394519082051600 - 051 BLACK F (29-6) NR CROOKSVILLE OH (LAT 39 45 19 LONG 082 05 16)											
JUL , 1982											
21...	1115	6.5	960	3.6	21.5	8.4	2.4	119	0	0	0
* 394547081393700 - 051 DYES F (31-10) NR ZENO OH (LAT 39 45 47 LONG 081 39 37)											
JUL , 1982											
12...	1020	3.3	1260	8.2	23.0	9.5	--	--	180	0	148
394611082054700 - 051 MOXAHALA C (29-5) AT CROOKSVILLE OH (LAT 39 46 11 LONG 082 05 47)											
JUL , 1982											
21...	1330	24	1790	3.1	26.0	7.8	3.7	184	0	0	0
* 394614082163000 - 051 CTR B RUSH C (28-7) NR SOMERSET OH (LAT 39 46 14 LONG 082 16 30)											
APR , 1982											
03...	0915	45	--	6.9	11.1	10.0	--	--	52	--	43
JUL											
28...	1245	11	2900	7.0	23.0	8.6	--	--	64	0	52
* 394641081342500 - 051 UNAM TR TO W F DUCK C (25-10) NR BELLEVLY OH (LAT 39 46 41 LONG 081 34 25)											
MAR , 1982											
31...	1215	18	--	8.1	14.0	11.1	--	--	206	--	169
JUL											
13...	1140	1.5	750	8.1	23.0	8.5	--	--	240	0	197

ANALYSES OF MISCELLANEOUS STATIONS

DATE	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	NICKEL, DIS-SOLVED (UG/L AS NI)	ZINC, DIS-SOLVED (UG/L AS ZN)
394338081305400 - 051 W F DUCK C (25-9) NR CALDWELL OH (LAT 39 43 38 LONG 081 30 54)											
JUL , 1982											
22...	110	60	465	--	--	--	--	--	--	--	--
394426082113600 - 051 UNAM TR TO RUSH C (28-6) AT REHOBOTH OH (LAT 39 44 26 LONG 082 11 36)											
JUL , 1982											
12...	1500	120	1860	21000	21000	18000	18000	44000	44000	700	800
394430082070900 - 051 MCLUNEY C (29-7) NR ROSE FARM OH (LAT 39 44 30 LONG 082 07 09)											
JUL , 1982											
20...	1200	24	1890	13000	13000	13000	13000	18000	18000	300	350
394439081413500 - 051 BRANNONS F (31-9) NR REINERSVILLE OH (LAT 39 44 39 LONG 081 41 35)											
AUG , 1982											
03...	870	15	1430	--	--	--	--	--	--	--	--
394443081215300 - 051 E F DUCK C (33-12) AT CARLISLE OH (LAT 39 44 43 LONG 081 21 53)											
APR , 1982											
01...	--	--	--	--	--	--	--	--	--	--	--
JUL											
22...	80	6.7	343	--	--	--	--	--	--	--	--
394451082074200 - 051 UNAM TR TO MCLUNEY C (29-8) NR ROSE FARM OH (LAT 39 44 51 LONG 082 07 42)											
JUL , 1982											
12...	1900	15	2980	35000	35000	30000	30000	37000	37000	700	760
394519082051600 - 051 BLACK F (29-6) NR CROOKSVILLE OH (LAT 39 45 19 LONG 082 05 16)											
JUL , 1982											
21...	320	58	417	6600	6600	26000	24000	2100	1900	100	100
394547081393700 - 051 DYES F (31-10) NR ZENO OH (LAT 39 45 47 LONG 081 39 37)											
JUL , 1982											
12...	560	11	1100	--	--	--	--	--	--	--	--
394611082054700 - 051 MOXAHALA C (29-5) AT CROOKSVILLE OH (LAT 39 46 11 LONG 082 05 47)											
JUL , 1982											
21...	890	58	1410	11000	10000	19000	14000	16000	15000	200	350
394614082163000 - 051 CTR B RUSH C (28-7) NR SOMERSET OH (LAT 39 46 14 LONG 082 16 30)											
APR , 1982											
03...	--	--	--	--	--	--	--	--	--	--	--
JUL											
28...	300	750	1930	--	--	--	--	--	--	--	--
394641081342500 - 051 UNAM TR TO W F DUCK C (25-10) NR BELLEVLY OH (LAT 39 46 41 LONG 081 34 25)											
MAR , 1982											
31...	--	--	--	--	--	--	--	--	--	--	--
JUL											
13...	170	16	563	--	--	--	--	--	--	--	--

ANALYSES OF MISCELLANEOUS STATIONS

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	ACIDITY (MG/L AS H)	ACIDITY (MG/L AS CACO3)	BICAR-BONATE FET-FLD (MG/L AS HCO3)	CAR-BONATE FET-FLD (MG/L AS CO3)	ALKA-LINITY FIELD (MG/L AS CACO3)
394712082101700 - 051 UNAM TR TO BUCKEYE (35-8) AT REDFIELD OH (LAT 39 47 12 LONG 082 10 17)											
JUL , 1982 20...	1400	1.2	1420	3.1	24.0	5.8	3.7	184	0	0	0
394739082084900 - 051 BUCKEYE F (35-7) AT SALTILLO OH (LAT 39 47 39 LONG 082 08 49)											
JUL , 1982 20...	1530	6.1	1790	3.3	25.0	7.3	4.3	214	0	0	0
394751082050000 - 051 UNAM TR TO MOXAHALA C (29-4) AT ROSEVILLE OH (LAT 39 47 51 LONG 082 05 00)											
JUL , 1982 21...	0950	2.6	1920	4.2	17.5	8.9	.8	40	0	0	0
* 394837081361300 - 051 COAL RN (25-11) NR COAL RIDGE OH (LAT 39 48 37 LONG 081 36 13)											
MAR , 1982 31...	1100	9.2	--	8.1	13.5	10.5	--	--	190	--	156
JUL 21...	1115	.38	1420	8.4	22.0	9.4	--	--	190	2	159
394856082092200 - 051 UNAM TR TO BUTCHERKNIFE (35-6) NR SALTILO OH (LAT 39 48 56 LONG 082 09 22)											
JUL , 1982 21...	1715	.52	1320	4.1	25.0	7.2	1.8	89	0	0	0
* 394901082043800 - 051 PORTER RN (29-3) AT ROSEVILLE OH (LAT 39 49 01 LONG 082 04 38)											
JUL , 1982 26...	1615	.30	1060	7.2	26.0	7.9	--	--	18	0	15
394905081591600 - 051 BRUSH C (30-5) AT CHANNELVILLE OH (LAT 39 49 05 LONG 081 59 16)											
JUL , 1982 21...	1500	1.9	1110	3.9	25.5	6.9	2.2	109	0	0	0
394919082082000 - 051 BUTCHERKNIFE C (35-5) NR FULTONHAM OH (LAT 39 49 19 LONG 082 08 20)											
JUL , 1982 20...	1655	2.9	1070	4.2	25.5	7.2	1.1	55	0	0	0
* 394947081421200 - 051 COLLINS F (37-6) NR CUMBERLAND OH (LAT 39 49 47 LONG 081 42 12)											
JUL , 1982 12...	1245	3.6	1790	7.8	22.5	6.8	--	--	230	0	189
394951081591200 - 051 TURKEY RN (30-4) AT STOVERTOWN OH (LAT 39 49 51 LONG 081 59 12)											
JUL , 1982 21...	1550	.60	2240	2.8	26.5	7.8	7.9	392	0	0	0
* 395018082035800 - 051 UNAM TR TO MOXAHALA C (29-2) NR ROSEVILLE OH (LAT 39 50 18 LONG 082 03 58)											
JUL , 1982 27...	0830	.46	1320	6.8	21.0	7.4	--	--	52	0	43
395029081590700 - 041 BRUSH C NR PHILO OH (LAT 39 50 29 LONG 081 59 07)											
JUL , 1982 21...	1320	5.0	1240	3.4	24.5	8.0	2.3	114	0	0	0

ANALYSES OF MISCELLANEOUS STATIONS

DATE	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	NICKEL, DIS-SOLVED (UG/L AS NI)	ZINC, DIS-SOLVED (UG/L AS ZN)
394712082101700 - 051 UNAM TR TO BUCKEYE (35-8) AT REDFIELD OH (LAT 39 47 12 LONG 082 10 17)											
JUL , 1982											
20...	620	17	1120	11000	11000	11000	10000	15000	15000	300	470
394739082084900 - 051 BUCKEYE F (35-7) AT SALTILLO OH (LAT 39 47 39 LONG 082 08 49)											
JUL , 1982											
20...	950	35	1550	11000	11000	8900	6100	22000	22000	500	650
394751082050000 - 051 UNAM TR TO MOXAHALA C (29-4) AT ROSEVILLE OH (LAT 39 47 51 LONG 082 05 00)											
JUL , 1982											
21...	920	54	1450	3500	3100	1700	780	5400	5000	100	120
394837081361300 - 051 COAL RN (25-11) NR COAL RIDGE OH (LAT 39 48 37 LONG 081 36 13)											
MAR , 1982											
31...	--	--	--	--	--	--	--	--	--	--	--
JUL											
21...	670	16	1230	--	--	--	--	--	--	--	--
394856082092200 - 051 UNAM TR TO BUTCHERKNIFE (35-6) NR SALTILO OH (LAT 39 48 56 LONG 082 09 22)											
JUL , 1982											
21...	640	37	1090	7700	5600	32000	880	13000	12000	200	310
394901082043800 - 051 PORTER RN (29-3) AT ROSEVILLE OH (LAT 39 49 01 LONG 082 04 38)											
JUL , 1982											
26...	470	17	794	--	--	--	--	--	--	--	--
394905081591600 - 051 BRUSH C (30-5) AT CHANNELVILLE OH (LAT 39 49 05 LONG 081 59 16)											
JUL , 1982											
21...	490	42	865	8200	8100	8400	7400	3800	3800	100	170
394919082082000 - 051 BUTCHERKNIFE C (35-5) NR FULTONHAM OH (LAT 39 49 19 LONG 082 08 20)											
JUL , 1982											
20...	530	3.6	905	4700	4200	2100	1300	9700	9300	200	270
394947081421200 - 051 COLLINS F (37-6) NR CUMBERLAND OH (LAT 39 49 47 LONG 081 42 12)											
JUL , 1982											
12...	770	14	1480	--	--	--	--	--	--	--	--
394951081591200 - 051 TURKEY RN (30-4) AT STOVERTOWN OH (LAT 39 49 51 LONG 081 59 12)											
JUL , 1982											
21...	950	9.8	1840	20000	14000	39000	39000	15000	15000	300	440
395018082035800 - 051 UNAM TR TO MOXAHALA C (29-2) NR ROSEVILLE OH (LAT 39 50 18 LONG 082 03 58)											
JUL , 1982											
27...	620	11	1030	--	--	--	--	--	--	--	--
395029081590700 - 041 BRUSH C NR PHILO OH (LAT 39 50 29 LONG 081 59 07)											
JUL , 1982											
21...	580	32	916	7600	7500	3500	2900	6500	6500	100	170

ANALYSES OF MISCELLANEOUS STATIONS

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	ACIDITY (MG/L AS H)	ACIDITY (MG/L AS CACO3)	BICAR-BONATE FET-FLD (MG/L AS HCO3)	CAR-BONATE FET-FLD (MG/L AS CO3)	ALKA-LINITY FIELD (MG/L AS CACO3)
* 395049082122600 - 051 TURKEY RN (35-9) NR MT PERRY OH (LAT 39 50 49 LONG 082 12 26)											
JUL , 1982 28...	1515	.56	2000	6.8	26.0	8.6	--	--	30	0	25
* 395052081401500 - 051 MILLER C (37-5) AT CUMBERLAND OH (LAT 39 50 52 LONG 081 40 15)											
JUL , 1982 14...	1100	2.2	2150	8.0	23.5	9.1	--	--	190	0	156
* 395059081392500 - 051 BUFFALO F (37-4) AT CUMBERLAND OH (LAT 39 50 59 LONG 081 39 25)											
AUG , 1982 03...	1530	4.2	2030	8.1	24.0	8.6	--	--	220	0	180
395109082063700 - 051 BUCKEYE F (35-3) NR WHITE COTTAGE OH (LAT 39 51 09 LONG 082 06 37)											
JUL , 1982 29...	1100	--	1790	4.5	21.0	9.3	2.0	99	0	0	0
* 395111081542300 - 051 DUNCAN RN (30-6) AT PHILO OH (LAT 39 51 11 LONG 081 54 23)											
JUL , 1982 19...	1230	1.5	445	7.6	22.0	8.4	--	--	140	0	115
* 395117081413700 - 051 MAYS F (37-8) NR CUMBERLAND OH (LAT 39 51 17 LONG 081 41 37)											
JUL , 1982 14...	1300	.55	2300	8.0	25.0	9.8	--	--	150	0	123
395117082032400 - 051 MOXAHALA C (29-1) NR AVONDALE OH (LAT 39 51 17 LONG 082 03 24)											
MAR , 1982 31...	1400	515	--	3.9	12.8	9.2	2.3	114	--	--	--
JUL 27...	1015	17	1980	3.2	24.0	8.4	3.8	189	0	0	0
* 395120082073400 - 051 JONATHAN C (35-4) AT FULTONHAM OH (LAT 39 51 20 LONG 082 07 34)											
JUL , 1982 29...	0945	8.8	682	7.8	21.0	8.2	--	--	192	0	157
395144081591500 - 051 UNAM TR TO BRUSH C (30-2) NR STOVERTOWN OH (LAT 39 51 44 LONG 081 59 15)											
JUL , 1982 21...	0945	.63	1680	2.8	17.0	7.2	5.0	248	0	0	0
* 395155081374200 - 051 BUFFALO F (37-3) NR CUMBERLAND OH (LAT 39 51 55 LONG 081 37 42)											
AUG , 1982 03...	1330	3.8	1950	8.2	24.0	10.2	--	--	210	0	172
* 395204081190400 - 051 UNAM TR SENECA F WILLS C (38-2) NR CALAIS OH (LAT 39 52 04 LONG 081 19 04)											
JUL , 1982 13...	1520	.15	620	8.2	26.5	8.7	--	--	280	0	230
395211081543200 - 051 MUSKINGUM R (30-7) AT DUNCAN FALLS OH (LAT 39 52 11 LONG 081 54 32)											
MAR , 1982 17...	1300	23900	--	7.5	9.0	13.8	--	--	74	--	61

ANALYSES OF MISCELLANEOUS STATIONS

DATE	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	NICKEL, DIS- SOLVED (UG/L AS NI)	ZINC, DIS- SOLVED (UG/L AS ZN)
395049082122600 - 051 TURKEY RN (35-9) NR MT PERRY OH (LAT 39 50 49 LONG 082 12 26)											
JUL , 1982											
28...	38	400	1450	--	--	--	--	--	--	--	--
395052081401500 - 051 MILLER C (37-5) AT CUMBERLAND OH (LAT 39 50 52 LONG 081 40 15)											
JUL , 1982											
14...	1300	31	1950	--	--	--	--	--	--	--	--
395059081392500 - 051 BUFFALO F (37-4) AT CUMBERLAND OH (LAT 39 50 59 LONG 081 39 25)											
AUG , 1982											
03...	950	11	1770	--	--	--	--	--	--	--	--
395109082063700 - 051 BUCKEYE F (35-3) NR WHITE COTTAGE OH (LAT 39 51 09 LONG 082 06 37)											
JUL , 1982											
29...	880	50	1490	13000	13000	1000	420	18000	18000	400	510
395111081542300 - 051 DUNCAN RN (30-6) AT PHILO OH (LAT 39 51 11 LONG 081 54 23)											
JUL , 1982											
19...	69	29	319	--	--	--	--	--	--	--	--
395117081413700 - 051 MAYS F (37-8) NR CUMBERLAND OH (LAT 39 51 17 LONG 081 41 37)											
JUL , 1982											
14...	1600	26	2400	--	--	--	--	--	--	--	--
395117082032400 - 051 MOXAHALA C (29-1) NR AVONDALE OH (LAT 39 51 17 LONG 082 03 24)											
MAR , 1982											
31...	--	--	--	--	--	--	--	--	--	--	--
JUL											
27...	1000	58	1650	12000	12000	8600	990	18000	18000	200	280
395120082073400 - 051 JONATHAN C (35-4) AT FULTONHAM OH (LAT 39 51 20 LONG 082 07 34)											
JUL , 1982											
29...	150	45	477	--	--	--	--	--	--	--	--
395144081591500 - 051 UNAM TR TO BRUSH C (30-2) NR STOVERTOWN OH (LAT 39 51 44 LONG 081 59 15)											
JUL , 1982											
21...	820	5.2	1340	13000	12000	19000	19000	7500	7200	200	230
395155081374200 - 051 BUFFALO F (37-3) NR CUMBERLAND OH (LAT 39 51 55 LONG 081 37 42)											
AUG , 1982											
03...	970	10	1790	--	--	--	--	--	--	--	--
395204081190400 - 051 UNAM TR SENECA F WILLS C (38-2) NR CALAIS OH (LAT 39 52 04 LONG 081 19 04)											
JUL , 1982											
13...	130	8.1	475	--	--	--	--	--	--	--	--
395211081543200 - 051 MUSKINGUM R (30-7) AT DUNCAN FALLS OH (LAT 39 52 11 LONG 081 54 32)											
MAR , 1982											
17...	--	--	--	--	--	--	--	--	--	--	--

ANALYSES OF MISCELLANEOUS STATIONS

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	ACIDITY (MG/L AS H)	ACIDITY (MG/L AS CACO3)	BICAR-BONATE FET-FLD (MG/L AS HCO3)	CAR-BONATE FET-FLD (MG/L AS CO3)	ALKA-LINITY FIELD (MG/L AS CACO3)
* 395214082054700 - 051 JONATHAN C (35-2) AT WHITE COTTAGE OH (LAT 39 52 14 LONG 082 05 47)											
JUL , 1982											
27...	1415	.91	1160	7.8	28.0	8.4	--	--	100	0	82
* 395216081373100 - 051 YOKER C (37-2) NR CUMBERLAND OH (LAT 39 52 16 LONG 081 37 31)											
JUL , 1982											
21...	1120	.88	2000	7.5	22.0	9.8	--	--	170	0	139
* 395312081391600 - 051 YOKER C (37-9) NR CUMBERLAND OH (LAT 39 53 12 LONG 081 39 16)											
JUL , 1982											
21...	1000	2.1	2090	7.3	21.5	8.0	--	--	49	0	40
* 395328081415000 - 051 YOKER C (37-10) NR CUMBERLAND OH (LAT 39 53 28 LONG 081 41 50)											
JUL , 1982											
21...	0830	1.2	1280	7.7	19.5	10.4	--	--	190	0	156
395337082011100 - 051 MOXAHALA C (35-1) NR DARLINGTON OH (LAT 39 53 37 LONG 082 01 11)											
MAR , 1982											
31...	1030	870	--	6.7	11.6	--	--	--	48	--	39
JUL											
27...	--	39	1610	4.3	26.0	8.5	1.1	18	0	0	0
* 395404081191000 - 051 BEAVER C (38-3) NR BATESVILLE OH (LAT 39 54 04 LONG 081 19 10)											
MAR , 1982											
16...	1200	355	--	7.4	6.5	12.2	--	--	132	--	108
JUL											
13...	1700	2.5	610	8.7	27.0	8.8	--	--	240	--	197
* 395410081330200 - 051 BUFFALO C (37-1) AT PLEASANT CITY OH (LAT 39 54 10 LONG 081 33 02)											
JUL , 1982											
14...	0815	6.6	480	7.7	23.0	8.4	--	--	190	0	156
* 395507081200200 - 051 YOKER C (38-4) NR BATESVILLE OH (LAT 39 55 07 LONG 081 20 02)											
MAR , 1982											
16...	1400	44	--	7.6	8.0	12.2	--	--	84	--	69
AUG											
26...	1035	.28	530	8.3	15.5	--	--	--	240	--	197
* 395508081315200 - 051 WILLS C (38-1) AT BUFFALO OH (LAT 39 55 08 LONG 081 31 52)											
JUL , 1982											
21...	1300	33	1250	7.8	25.0	9.1	--	--	180	0	148
* 395527081261700 - 051 SENECA F WILLS C (38-5) NR SENECAVILLE OH (LAT 39 55 27 LONG 081 26 17)											
JUL , 1982											
13...	1230	4.7	350	8.0	26.5	8.5	--	--	150	0	123
* 395738081133500 - 051 LEATHERWOOD C (43-1) AT BAILEYS MILLS OH (LAT 39 57 38 LONG 081 13 35)											
AUG , 1982											
12...	1330	2.0	850	7.8	20.0	9.2	--	--	170	0	139

ANALYSES OF MISCELLANEOUS STATIONS

DATE	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	NICKEL, DIS-SOLVED (UG/L AS NI)	ZINC, DIS-SOLVED (UG/L AS ZN)
395214082054700 - 051 JONATHAN C (35-2) AT WHITE COTTAGE OH (LAT 39 52 14 LONG 082 05 47)											
JUL , 1982											
27...	380	59	756	--	--	--	--	--	--	--	--
395216081373100 - 051 YOKER C (37-2) NR CUMBERLAND OH (LAT 39 52 16 LONG 081 37 31)											
JUL , 1982											
21...	1100	9.8	1960	--	--	--	--	--	--	--	--
395312081391600 - 051 YOKER C (37-9) NR CUMBERLAND OH (LAT 39 53 12 LONG 081 39 16)											
JUL , 1982											
21...	1200	6.8	2090	--	--	--	--	--	--	--	--
395328081415000 - 051 YOKER C (37-10) NR CUMBERLAND OH (LAT 39 53 28 LONG 081 41 50)											
JUL , 1982											
21...	550	8.4	1110	--	--	--	--	--	--	--	--
395337082011100 - 051 MOXAHALA C (35-1) NR DARLINGTON OH (LAT 39 53 37 LONG 082 01 11)											
MAR , 1982											
31...	--	--	--	--	--	--	--	--	--	--	--
JUL											
27...	630	79	1200	6300	6200	520	130	9000	8500	200	150
395404081191000 - 051 BEAVER C (38-3) NR BATESVILLE OH (LAT 39 54 04 LONG 081 19 10)											
MAR , 1982											
16...	--	--	--	--	--	--	--	--	--	--	--
JUL											
13...	160	8.7	457	--	--	--	--	--	--	--	--
395410081330200 - 051 BUFFALO C (37-1) AT PLEASANT CITY OH (LAT 39 54 10 LONG 081 33 02)											
JUL , 1982											
14...	97	9.2	267	--	--	--	--	--	--	--	--
395507081200200 - 051 YOKER C (38-4) NR BATESVILLE OH (LAT 39 55 07 LONG 081 20 02)											
MAR , 1982											
16...	--	--	--	--	--	--	--	--	--	--	--
AUG											
26...	87	4.5	339	--	--	--	--	--	--	--	--
395508081315200 - 051 WILLS C (38-1) AT BUFFALO OH (LAT 39 55 08 LONG 081 31 52)											
JUL , 1982											
21...	500	12	988	--	--	--	--	--	--	--	--
395527081261700 - 051 SENECA F WILLS C (38-5) NR SENECAVILLE OH (LAT 39 55 27 LONG 081 26 17)											
JUL , 1982											
13...	62	6.6	252	--	--	--	--	--	--	--	--
395738081133500 - 051 LEATHERWOOD C (43-1) AT BAILEYS MILLS OH (LAT 39 57 38 LONG 081 13 35)											
AUG , 1982											
12...	340	9.4	654	--	--	--	--	--	--	--	--

ANALYSES OF MISCELLANEOUS STATIONS

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	ACIDITY (MG/L AS H)	ACIDITY (MG/L AS CACO3)	BICAR-BONATE FET-FLD (MG/L AS HCO3)	CAR-BONATE FET-FLD (MG/L AS CO3)	ALKA-LINITY FIELD (MG/L AS CACO3)
* 395748081162000 - 051 LEATHERWOOD C (43-2) AT SPENCER STATION OH (LAT 39 57 48 LONG 081 16 20)											
MAR , 1982											
16...	1530	333	--	7.4	8.5	13.3	--	--	116	--	95
AUG											
03...	0945	4.3	950	7.7	20.5	8.9	--	--	150	0	123
* 395805081184800 - 051 LEATHERWOOD C (43-3) AT QUAKER CITY OH (LAT 39 58 05 LONG 081 18 48)											
MAR , 1982											
16...	1730	467	--	7.5	9.0	12.4	--	--	68	--	56
AUG											
03...	1115	3.0	975	7.7	21.0	8.0	--	--	140	0	115
* 395840081215900 - 051 LEATHERWOOD C (43-4) NR SALESVILLE OH (LAT 39 58 40 LONG 081 21 59)											
MAR , 1982											
17...	0930	224	--	7.5	7.5	12.7	--	--	78	--	64
AUG											
03...	1215	3.8	1050	8.0	23.5	9.4	--	--	150	0	123
* 400023080532000 - 051 MCMAHON C (50-7) AT GLENCOE OH (LAT 40 00 23 LONG 080 53 20)											
JUL , 1982											
28...	1400	3.9	715	8.2	25.0	8.7	--	--	200	0	164
* 400039080454600 - 051 MCMAHON C (50-1) AT BELLAIRE OH (LAT 40 00 39 LONG 080 45 46)											
JUL , 1982											
28...	1145	21	1100	8.0	25.0	8.0	--	--	180	0	148
* 400056081151200 - 051 SALT F (48-2) NR BARNESVILLE OH (LAT 40 00 56 LONG 081 15 12)											
AUG , 1982											
05...	1345	.28	1100	7.6	27.0	9.6	--	--	110	0	90
* 400123080594500 - 051 MCMAHON C (50-10) NR WARNOCK OH (LAT 40 01 23 LONG 080 59 45)											
JUL , 1982											
29...	1130	.88	550	8.0	20.5	8.2	--	--	190	0	156
* 400124080473700 - 051 MCMAHON C (50-2) NR BELLAIRE OH (LAT 40 01 24 LONG 080 47 37)											
JUL , 1982											
28...	1440	23	960	8.0	25.0	9.0	--	--	170	0	139
* 400129080492400 - 051 MCMAHON C (50-4) AT NEFFS OH (LAT 40 01 29 LONG 080 49 24)											
AUG , 1982											
17...	1400	4.8	970	8.0	21.5	10.8	--	--	180	0	148
* 400138080490900 - 051 L MCMAHON C (50-3) AT NEFFS OH (LAT 40 01 38 LONG 080 49 09)											
AUG , 1982											
06...	1200	3.4	1300	7.5	22.0	9.7	--	--	140	0	115
* 400155080571100 - 051 BRUSH RN (50-9) NR WARNOCK OH (LAT 40 01 55 LONG 080 57 11)											
JUL , 1982											
29...	0915	.84	1550	8.2	17.5	9.9	--	--	280	0	230

ANALYSES OF MISCELLANEOUS STATIONS

DATE	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	NICKEL, DIS-SOLVED (UG/L AS NI)	ZINC, DIS-SOLVED (UG/L AS ZN)
395748081162000 - 051 LEATHERWOOD C (43-2) AT SPENCER STATION OH (LAT 39 57 48 LONG 081 16 20)											
MAR , 1982											
16...	--	--	--	--	--	--	--	--	--	--	--
AUG											
03...	410	8.3	781	--	--	--	--	--	--	--	--
395805081184800 - 051 LEATHERWOOD C (43-3) AT QUAKER CITY OH (LAT 39 58 05 LONG 081 18 48)											
MAR , 1982											
16...	--	--	--	--	--	--	--	--	--	--	--
AUG											
03...	410	9.5	766	--	--	--	--	--	--	--	--
395840081215900 - 051 LEATHERWOOD C (43-4) NR SALESVILLE OH (LAT 39 58 40 LONG 081 21 59)											
MAR , 1982											
17...	--	--	--	--	--	--	--	--	--	--	--
AUG											
03...	430	13	824	--	--	--	--	--	--	--	--
400023080532000 - 051 MCMAHON C (50-7) AT GLENCOE OH (LAT 40 00 23 LONG 080 53 20)											
JUL , 1982											
28...	170	22	475	--	--	--	--	--	--	--	--
400039080454600 - 051 MCMAHON C (50-1) AT BELLAIRE OH (LAT 40 00 39 LONG 080 45 46)											
JUL , 1982											
28...	380	31	873	--	--	--	--	--	--	--	--
400056081151200 - 051 SALT F (48-2) NR BARNESVILLE OH (LAT 40 00 56 LONG 081 15 12)											
AUG , 1982											
05...	520	2.3	921	--	--	--	--	--	--	--	--
400123080594500 - 051 MCMAHON C (50-10) NR WARNOCK OH (LAT 40 01 23 LONG 080 59 45)											
JUL , 1982											
29...	70	29	332	--	--	--	--	--	--	--	--
400124080473700 - 051 MCMAHON C (50-2) NR BELLAIRE OH (LAT 40 01 24 LONG 080 47 37)											
JUL , 1982											
28...	310	24	870	--	--	--	--	--	--	--	--
400129080492400 - 051 MCMAHON C (50-4) AT NEFFS OH (LAT 40 01 29 LONG 080 49 24)											
AUG , 1982											
17...	330	27	653	--	--	--	--	--	--	--	--
400138080490900 - 051 L MCMAHON C (50-3) AT NEFFS OH (LAT 40 01 38 LONG 080 49 09)											
AUG , 1982											
06...	570	43	1020	--	--	--	--	--	--	--	--
400155080571100 - 051 BRUSH RN (50-9) NR WARNOCK OH (LAT 40 01 55 LONG 080 57 11)											
JUL , 1982											
29...	570	45	1210	--	--	--	--	--	--	--	--

ANALYSES OF MISCELLANEOUS STATIONS

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	ACIDITY (MG/L AS H)	ACIDITY (MG/L AS CACO3)	BICAR-BONATE FET-FLD (MG/L AS HCO3)	CAR-BONATE FET-FLD (MG/L AS CO3)	ALKA-LINITY FIELD (MG/L AS CACO3)
400219080501700 - 051 L MCMAHON C (50-5) NR NEFFS OH (LAT 40 02 19 LONG 080 50 17)											
AUG , 1982 06...	1430	2.7	1800	5.5	27.5	9.1	2.5	40	28	0	23
* 400238081212200 - 051 SALT F (48-1) NR MIDDLEBOURNE OH (LAT 40 02 38 LONG 081 21 22)											
AUG , 1982 05...	1145	.91	820	7.3	24.5	7.7	--	--	170	0	139
* 400308080540600 - 051 L MCMAHON C (50-8) NR ST CLAIRSVILLE OH (LAT 40 03 08 LONG 080 54 06)											
JUL , 1982 28...	1120	.63	2000	8.1	23.0	8.1	--	--	190	0	156
* 400400080483100 - 051 WHEELING C (55-2) AT BLAINE OH (LAT 40 04 00 LONG 080 48 31)											
JUL , 1982 26...	1230	41	1960	7.9	24.5	9.5	--	--	250	0	205
400506081073900 - 051 STILLWATER C (49-5) NR HENDRYSBURG OH (LAT 40 05 06 LONG 081 07 39)											
JUL , 1982 27...	1030	7.6	1440	8.1	24.0	6.4	--	--	260	0	213
* 400547080501700 - 051 WHEELING C (55-3) AT BARTON OH (LAT 40 05 47 LONG 080 50 17)											
JUL , 1982 27...	1115	35	1800	7.9	24.0	12.8	--	--	230	0	189
400620081163000 - 051 SKULL F (49-4) NR ANTRIM OH (LAT 40 06 20 LONG 081 16 30)											
AUG , 1982 12...	1100	2.3	1720	4.6	19.0	9.0	1.4	22	0	0	0
* 400634080581100 - 051 WHEELING C (55-12) AT BANNOCK OH (LAT 40 06 34 LONG 080 58 11)											
MAR , 1982 16...	1335	524	--	7.9	6.0	12.3	--	--	292	--	239
AUG 03...	1250	7.1	1800	8.0	21.0	9.8	--	--	290	0	238
* 400635081011000 - 051 WHEELING C (55-14) AT LAFFERTY OH (LAT 40 06 35 LONG 081 01 10)											
AUG , 1982 04...	1530	3.1	1750	8.1	22.0	10.8	--	--	240	0	197
* 400644080513200 - 051 WHEELING C (55-4) NR BARTON OH (LAT 40 06 44 LONG 080 51 32)											
JUL , 1982 27...	1445	33	1970	7.8	25.5	9.0	--	--	270	0	221
* 400656080441100 - 051 GLENNS RN (55-1) NR FLORENCE OH (LAT 40 06 56 LONG 080 44 11)											
AUG , 1982 05...	1530	2.0	2800	7.0	27.0	6.6	--	--	180	0	148
* 400700080572000 - 051 CRABAPPLE C (55-11) NR FAIRPOINT OH (LAT 40 07 00 LONG 080 57 20)											
MAR , 1982 16...	1230	59	--	8.0	7.0	11.8	--	--	260	--	213
AUG 03...	1015	10	2450	7.9	20.0	9.4	--	--	340	0	279

ANALYSES OF MISCELLANEOUS STATIONS

DATE	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	NICKEL, DIS-SOLVED (UG/L AS NI)	ZINC, DIS-SOLVED (UG/L AS ZN)
400219080501700 - 051 L MCMAHON C (50-5) NR NEFFS OH (LAT 40 02 19 LONG 080 50 17)											
AUG , 1982											
06...	810	46	1420	2900	200	13000	13000	400	400	100	120
400238081212200 - 051 SALT F (48-1) NR MIDDLEBOURNE OH (LAT 40 02 38 LONG 081 21 22)											
AUG , 1982											
05...	260	24	600	--	--	--	--	--	--	--	--
400308080540600 - 051 L MCMAHON C (50-8) NR ST CLAIRSVILLE OH (LAT 40 03 08 LONG 080 54 06)											
JUL , 1982											
28...	810	65	1660	--	--	--	--	--	--	--	--
400400080483100 - 051 WHEELING C (55-2) AT BLAINE OH (LAT 40 04 00 LONG 080 48 31)											
JUL , 1982											
26...	920	16	1710	--	--	--	--	--	--	--	--
400506081073900 - 051 STILLWATER C (49-5) NR HENDRYSBURG OH (LAT 40 05 06 LONG 081 07 39)											
JUL , 1982											
27...	620	32	1220	--	--	--	--	--	--	--	--
400547080501700 - 051 WHEELING C (55-3) AT BARTON OH (LAT 40 05 47 LONG 080 50 17)											
JUL , 1982											
27...	930	14	1330	--	--	--	--	--	--	--	--
400620081163000 - 051 SKULL F (49-4) NR ANTRIM OH (LAT 40 06 20 LONG 081 16 30)											
AUG , 1982											
12...	1100	--	--	--	--	170	170	12000	9700	--	--
400634080581100 - 051 WHEELING C (55-12) AT BANNOCK OH (LAT 40 06 34 LONG 080 58 11)											
MAR , 1982											
16...	--	--	--	--	--	--	--	--	--	--	--
AUG											
03...	820	16	1410	--	--	--	--	--	--	--	--
400635081011000 - 051 WHEELING C (55-14) AT LAFFERTY OH (LAT 40 06 35 LONG 081 01 10)											
AUG , 1982											
04...	850	22	1540	--	--	--	--	--	--	--	--
400644080513200 - 051 WHEELING C (55-4) NR BARTON OH (LAT 40 06 44 LONG 080 51 32)											
JUL , 1982											
27...	920	16	1840	--	--	--	--	--	--	--	--
400656080441100 - 051 GLENNS RN (55-1) NR FLORENCE OH (LAT 40 06 56 LONG 080 44 11)											
AUG , 1982											
05...	1000	140	2120	--	--	--	--	--	--	--	--
400700080572000 - 051 CRABAPPLE C (55-11) NR FAIRPOINT OH (LAT 40 07 00 LONG 080 57 20)											
MAR , 1982											
16...	--	--	--	--	--	--	--	--	--	--	--
AUG											
03...	1300	17	2110	--	--	--	--	--	--	--	--

DATA COLLECTED AT OHIO ABANDONED MINE LAND SITES PROJECT--Continued

ANALYSES OF MISCELLANEOUS STATIONS

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	ACIDITY (MG/L AS H)	ACIDITY (MG/L AS CACO3)	BICAR-BONATE FET-FLD (MG/L AS HCO3)	CAR-BONATE FET-FLD (MG/L AS CO3)	ALKA-LINITY FIELD (MG/L AS CACO3)
* 400716080530900 - 051 COX RN (55-8) AT MAYNARD OH (LAT 40 07 16 LONG 080 53 09)											
AUG , 1982											
04...	1020	3.0	1750	8.1	17.5	9.5	--	--	410	0	336
* 400716080560400 - 051 WHEELING C (55-10) AT FAIRPOINT OH (LAT 40 07 16 LONG 080 56 04)											
MAR , 1982											
17...	1030	225	--	7.9	6.5	13.0	--	--	192	--	157
AUG											
02...	1015	18	2310	8.0	19.5	9.6	--	--	310	0	254
* 400719080514400 - 051 FALL RN (55-5) NR BARTON OH (LAT 40 07 19 LONG 080 51 44)											
MAR , 1982											
16...	1130	225	--	7.4	6.0	13.6	--	--	516	--	423
JUL											
29...	1120	1.3	2000	7.2	19.5	9.0	--	--	190	0	156
* 400728080524300 - 051 WHEELING C (55-7) AT MAYNARD OH (LAT 40 07 28 LONG 080 52 43)											
MAR , 1982											
17...	1200	303	--	8.0	7.5	12.2	--	--	220	--	180
AUG											
04...	1200	24	2180	8.1	20.5	8.6	--	--	310	0	254
* 400815080592700 - 051 CRABAPPLE C (55-15) AT UNIONTOWN OH (LAT 40 08 15 LONG 080 59 27)											
AUG , 1982											
10...	1500	4.6	2000	8.0	23.5	9.0	--	--	260	0	213
* 400835080540900 - 051 COX RN (55-9) NR MAYNARD OH (LAT 40 08 35 LONG 080 54 09)											
AUG , 1982											
17...	1045	1.7	1600	8.4	19.0	9.9	--	--	310	8	268
* 400915080581900 - 051 CAMPBELL RN (55-13) NR UNIONTOWN OH (LAT 40 09 15 LONG 080 58 19)											
AUG , 1982											
10...	1110	2.7	2550	7.9	23.0	8.8	--	--	300	0	246
* 400943081081500 - 051 TRAIL RN (49-3) AT HOLLOWAY OH (LAT 40 09 43 LONG 081 08 15)											
JUL , 1982											
26...	1145	2.0	1900	8.2	24.0	12.2	--	--	260	0	213
* 400944080442900 - 051 L SHORT C (56-9) NR TILTONSVILLE OH (LAT 40 09 44 LONG 080 44 29)											
AUG , 1982											
05...	1305	3.0	1600	7.8	25.0	8.4	--	--	240	0	197
* 401021081075500 - 051 BOGGS F (49-2) AT HOLLOWAY OH (LAT 40 10 21 LONG 081 07 55)											
JUL , 1982											
26...	1430	3.4	1750	8.2	25.0	10.0	-	--	220	0	180
* 401038081510300 - 051 WILLS C (47-3) NR CONESVILLE OH (LAT 40 10 38 LONG 081 51 03)											
AUG , 1982											
03...	1000	109	580	7.4	25.5	7.8	--	--	110	0	90

ANALYSES OF MISCELLANEOUS STATIONS

DATE	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	NICKEL, DIS-SOLVED (UG/L AS NI)	ZINC, DIS-SOLVED (UG/L AS ZN)
400716080530900 - 051 COX RN (55-8) AT MAYNARD OH (LAT 40 07 16 LONG 080 53 09)											
AUG , 1982											
04...	680	9.3	1400	--	--	--	--	--	--	--	--
400716080560400 - 051 WHEELING C (55-10) AT FAIRPOINT OH (LAT 40 07 16 LONG 080 56 04)											
MAR , 1982											
17...	--	--	--	--	--	--	--	--	--	--	--
AUG											
02...	1100	12	2080	--	--	--	--	--	--	--	--
400719080514400 - 051 FALL RN (55-5) NR BARTON OH (LAT 40 07 19 LONG 080 51 44)											
MAR , 1982											
16...	--	--	--	--	--	--	--	--	--	--	--
JUL											
29...	980	18	1760	--	--	--	--	--	--	--	--
400728080524300 - 051 WHEELING C (55-7) AT MAYNARD OH (LAT 40 07 28 LONG 080 52 43)											
MAR , 1982											
17...	--	--	--	--	--	--	--	--	--	--	--
AUG											
04...	950	19	1790	--	--	--	--	--	--	--	--
400815080592700 - 051 CRABAPPLE C (55-15) AT UNIONTOWN OH (LAT 40 08 15 LONG 080 59 27)											
AUG , 1982											
10...	920	9.9	1780	--	--	--	--	--	--	--	--
400835080540900 - 051 COX RN (55-9) NR MAYNARD OH (LAT 40 08 35 LONG 080 54 09)											
AUG , 1982											
17...	620	8.3	1290	--	--	--	--	--	--	--	--
400915080581900 - 051 CAMPBELL RN (55-13) NR UNIONTOWN OH (LAT 40 09 15 LONG 080 58 19)											
AUG , 1982											
10...	1300	16	2350	--	--	--	--	--	--	--	--
400943081081500 - 051 TRAIL RN (49-3) AT HOLLOWAY OH (LAT 40 09 43 LONG 081 08 15)											
JUL , 1982											
26...	880	18	1660	--	--	--	--	--	--	--	--
400944080442900 - 051 L SHORT C (56-9) NR TILTONSVILLE OH (LAT 40 09 44 LONG 080 44 29)											
AUG , 1982											
05...	660	34	1480	--	--	--	--	--	--	--	--
401021081075500 - 051 BOGGS F (49-2) AT HOLLOWAY OH (LAT 40 10 21 LONG 081 07 55)											
JUL , 1982											
26...	950	11	1560	--	--	--	--	--	--	--	--
401038081510300 - 051 WILLS C (47-3) NR CONESVILLE OH (LAT 40 10 38 LONG 081 51 03)											
AUG , 1982											
03...	160	24	404	--	--	--	--	--	--	--	--

ANALYSES OF MISCELLANEOUS STATIONS

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	ACIDITY (MG/L AS H)	ACIDITY (MG/L AS CACO3)	BICAR-BONATE FET-FLD (MG/L AS HCO3)	CAR-BONATE FET-FLD (MG/L AS CO3)	ALKA-LINITY FIELD (MG/L AS CACO3)
* 401120080425100 - 051 SHORT C (56-8) NR RAYLAND OH (LAT 40 11 20 LONG 080 42 51)											
AUG , 1982 05...	1045	59	2190	8.2	22.0	9.2	--	--	230	0	189
* 401122081585400 - 051 MOSCOW BK (46-3) NR NEW MOSCOW OH (LAT 40 11 22 LONG 081 58 54)											
JUL , 1982 20...	1100	2.3	1980	7.2	25.5	10.0	--	--	74	0	61
* 401126081121400 - 051 BOGGS F (49-1) AT PIEDMONT OH (LAT 40 11 26 LONG 081 12 14)											
JUL , 1982 26...	0945	5.1	1730	7.8	24.5	7.2	--	--	200	0	164
* 401144080472700 - 051 SHORT C (56-7) AT DILLONVALE OH (LAT 40 11 44 LONG 080 47 27)											
AUG , 1982 18...	0930	27	3580	7.2	17.0	9.2	--	--	200	0	164
* 401201081573500 - 051 MILL F (46-2) NR NEW MOSCOW OH (LAT 40 12 01 LONG 081 57 35)											
JUL , 1982 20...	1215	5.1	1750	6.7	23.5	9.6	--	--	--	--	--
* 401211080462100 - 041 PINEY F AT DILLONVALE OH (LAT 40 12 11 LONG 080 46 21)											
AUG , 1982 18...	1130	4.6	1450	8.2	19.5	10.6	--	--	250	0	205
* 401216081425200 - 051 WILLS C (47-2) AT PLAINFIELD OH (LAT 40 12 16 LONG 081 42 52)											
AUG , 1982 26...	1240	<.01	895	8.6	21.0	--	--	--	140	4	121
401247081512900 - 051 ROBINSON RN (41-1) NR TYNDALL OH (LAT 40 12 47 LONG 081 51 29)											
JUL , 1982 20...	1430	1.9	1170	3.9	23.0	--	1.3	65	0	0	0
* 401253081564300 - 051 MILL F (46-1) NR NEW MOSCOW OH (LAT 40 12 53 LONG 081 56 43)											
JUL , 1982 20...	1315	2.0	1640	7.2	23.5	7.8	--	--	52	0	43
* 401311081463100 - 051 BACON RN (47-1) NR PLAINFIELD OH (LAT 40 13 11 LONG 081 46 31)											
JUL , 1982 20...	1545	1.0	1260	6.4	25.0	10.2	.1	5.0	14	0	11
* 401348080413700 - 051 RUSH RN (61-6) AT RUSH RN OH (LAT 40 13 48 LONG 080 41 37)											
AUG , 1982 06...	0930	2.1	1550	8.2	19.5	9.1	--	--	240	0	197
* 401430080534300 - 051 N F SHORT C (56-3) NR ROBYVILLE OH (LAT 40 14 30 LONG 080 53 43)											
AUG , 1982 09...	1435	10	1700	7.9	22.0	8.8	--	--	180	0	148

ANALYSES OF MISCELLANEOUS STATIONS

DATE	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	NICKEL, DIS-SOLVED (UG/L AS NI)	ZINC, DIS-SOLVED (UG/L AS ZN)
401120080425100 - 051 SHORT C (56-8) NR RAYLAND OH (LAT 40 11 20 LONG 080 42 51)											
AUG , 1982											
05...	1000	28	1910	--	--	--	--	--	--	--	--
401122081585400 - 051 MOSCOW BK (46-3) NR NEW MOSCOW OH (LAT 40 11 22 LONG 081 58 54)											
JUL , 1982											
20...	1200	14	1930	--	--	--	--	--	--	--	--
401126081121400 - 051 BOGGS F (49-1) AT PIEDMONT OH (LAT 40 11 26 LONG 081 12 14)											
JUL , 1982											
26...	860	11	1500	--	--	--	--	--	--	--	--
401144080472700 - 051 SHORT C (56-7) AT DILLONVALE OH (LAT 40 11 44 LONG 080 47 27)											
AUG , 1982											
18...	1400	39	2310	--	--	--	--	--	--	--	--
401201081573500 - 051 MILL F (46-2) NR NEW MOSCOW OH (LAT 40 12 01 LONG 081 57 35)											
JUL , 1982											
20...	1000	7.3	1670	--	--	--	--	--	--	--	--
401211080462100 - 041 PINEY F AT DILLONVALE OH (LAT 40 12 11 LONG 080 46 21)											
AUG , 1982											
18...	590	14	1120	--	--	--	--	--	--	--	--
401216081425200 - 051 WILLS C (47-2) AT PLAINFIELD OH (LAT 40 12 16 LONG 081 42 52)											
AUG , 1982											
26...	290	40	610	--	--	--	--	--	--	--	--
401247081512900 - 051 ROBINSON RN (41-1) NR TYNDALL OH (LAT 40 12 47 LONG 081 51 29)											
JUL , 1982											
20...	580	23	949	3700	3100	16000	6500	6400	6200	100	98
401253081564300 - 051 MILL F (46-1) NR NEW MOSCOW OH (LAT 40 12 53 LONG 081 56 43)											
JUL , 1982											
20...	920	5.0	1570	--	--	--	--	--	--	--	--
401311081463100 - 051 BACON RN (47-1) NR PLAINFIELD OH (LAT 40 13 11 LONG 081 46 31)											
JUL , 1982											
20...	690	7.7	1100	--	--	--	--	--	--	--	--
401348080413700 - 051 RUSH RN (61-6) AT RUSH RN OH (LAT 40 13 48 LONG 080 41 37)											
AUG , 1982											
06...	700	12	1140	--	--	--	--	--	--	--	--
401430080534300 - 051 N F SHORT C (56-3) NR ROBYVILLE OH (LAT 40 14 30 LONG 080 53 43)											
AUG , 1982											
09...	880	13	1490	--	--	--	--	--	--	--	--

ANALYSES OF MISCELLANEOUS STATIONS

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	ACIDITY (MG/L AS H)	ACIDITY (MG/L AS CACO3)	BICAR-BONATE FET-FLD (MG/L AS HCO3)	CAR-BONATE FET-FLD (MG/L AS CO3)	ALKA-LINITY FIELD (MG/L AS CACO3)
* 401437080580700 - 051 SALLY BUFFALO C (56-1) NR CADIZ OH (LAT 40 14 37 LONG 080 58 07)											
AUG , 1982 09...	1115	1.5	1350	7.6	21.0	4.2	--	--	210	0	172
* 401444080433000 - 051 RUSH RN (61-5) NR RUSH RN OH (LAT 40 14 44 LONG 080 43 30)											
AUG , 1982 06...	1230	1.5	1710	8.2	21.0	8.7	--	--	280	0	230
* 401445080393000 - 051 SALT RN (61-7) NR RUSH RN OH (LAT 40 14 45 LONG 080 39 30)											
AUG , 1982 24...	1345	1.0	1050	8.4	22.0	9.7	--	--	220	4	187
* 401619080510000 - 051 PINEY F (56-4) NR PINEY FORK OH (LAT 40 16 19 LONG 080 51 00)											
AUG , 1982 16...	1300	1.9	1700	8.2	18.5	9.8	--	--	250	0	205
* 401621080553600 - 051 N F SHORT C (56-2) AT UNIONVALE OH (LAT 40 16 21 LONG 080 55 36)											
AUG , 1982 13...	1330	2.1	1700	7.7	20.0	9.6	--	--	130	0	107
* 401716080451300 - 051 MCINTYRE C (61-4) NR SMITHFIELD OH (LAT 40 17 16 LONG 080 45 13)											
AUG , 1982 16...	1015	4.3	2100	8.2	19.5	9.7	--	--	260	0	213
* 401801080373200 - 051 GEORGES RN (61-9) NR MINGO JUNCTION OH (LAT 40 18 01 LONG 080 37 32)											
AUG , 1982 12...	1115	.57	1400	8.3	19.0	9.2	--	--	310	--	254
* 401817080404800 - 051 CROSS C (61-3) NR NEW ALEXANDER OH (LAT 40 18 17 LONG 080 40 48)											
AUG , 1982 12...	1345	12	980	8.8	23.0	11.6	--	--	170	--	139
* 401857080391700 - 051 CROSS C (61-2) NR MINGO JUNCTION OH (LAT 40 18 57 LONG 080 39 17)											
AUG , 1982 12...	1600	21	1450	8.6	23.0	10.4	--	--	130	16	133
* 402140080444900 - 051 CROSS C (61-8) NR WINTERSVILLE OH (LAT 40 21 40 LONG 080 44 49)											
AUG , 1982 13...	1000	5.5	930	8.2	18.0	8.8	--	--	180	0	148
* 402430081310400 - 051 OLDTOWN C (59-15) NR STONE CREEK OH (LAT 40 24 30 LONG 081 31 04)											
JUL , 1982 30...	1300	.32	440	8.0	24.0	9.2	--	--	120	0	98
* 402535081215700 - 051 STILLWATER C (59-1) NR UHRICHSVILLE OH (LAT 40 25 35 LONG 081 21 57)											
AUG , 1982 13...	1130	60	985	7.6	22.0	6.1	--	--	170	0	139

ANALYSES OF MISCELLANEOUS STATIONS

DATE	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	NICKEL, DIS-SOLVED (UG/L AS NI)	ZINC, DIS-SOLVED (UG/L AS ZN)
401437080580700 - 051 SALLY BUFFALO C (56-1) NR CADIZ OH (LAT 40 14 37 LONG 080 58 07)											
AUG , 1982 09...	570	49	1110	--	--	--	--	--	--	--	--
401444080433000 - 051 RUSH RN (61-5) NR RUSH RN OH (LAT 40 14 44 LONG 080 43 30)											
AUG , 1982 06...	890	25	1810	--	--	--	--	--	--	--	--
401445080393000 - 051 SALT RN (61-7) NR RUSH RN OH (LAT 40 14 45 LONG 080 39 30)											
AUG , 1982 24...	420	16	780	--	--	--	--	--	--	--	--
401619080510000 - 051 PINEY F (56-4) NR PINEY FORK OH (LAT 40 16 19 LONG 080 51 00)											
AUG , 1982 16...	770	19	1500	--	--	--	--	--	--	--	--
401621080553600 - 051 N F SHORT C (56-2) AT UNIONVALE OH (LAT 40 16 21 LONG 080 55 36)											
AUG , 1982 13...	850	30	1540	--	--	--	--	--	--	--	--
401716080451300 - 051 MCINTYRE C (61-4) NR SMITHFIELD OH (LAT 40 17 16 LONG 080 45 13)											
AUG , 1982 16...	960	9.7	1800	--	--	--	--	--	--	--	--
401801080373200 - 051 GEORGES RN (61-9) NR MINGO JUNCTION OH (LAT 40 18 01 LONG 080 37 32)											
AUG , 1982 12...	530	25	1130	--	--	--	--	--	--	--	--
401817080404800 - 051 CROSS C (61-3) NR NEW ALEXANDER OH (LAT 40 18 17 LONG 080 40 48)											
AUG , 1982 12...	360	26	735	--	--	--	--	--	--	--	--
401857080391700 - 051 CROSS C (61-2) NR MINGO JUNCTION OH (LAT 40 18 57 LONG 080 39 17)											
AUG , 1982 12...	690	19	1270	--	--	--	--	--	--	--	--
402140080444900 - 051 CROSS C (61-8) NR WINTERSVILLE OH (LAT 40 21 40 LONG 080 44 49)											
AUG , 1982 13...	340	23	698	--	--	--	--	--	--	--	--
402430081310400 - 051 OLDTOWN C (59-15) NR STONE CREEK OH (LAT 40 24 30 LONG 081 31 04)											
JUL , 1982 30...	110	11	333	--	--	--	--	--	--	--	--
402535081215700 - 051 STILLWATER C (59-1) NR UHRICHSVILLE OH (LAT 40 25 35 LONG 081 21 57)											
AUG , 1982 13...	63	74	706	--	--	--	--	--	--	--	--

DATA COLLECTED AT OHIO ABANDONED MINE LAND SITES PROJECT--Continued
ANALYSES OF MISCELLANEOUS STATIONS

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	ACIDITY (MG/L AS H)	ACIDITY (MG/L AS CACO3)	BICAR-BONATE FET-FLD (MG/L AS HCO3)	CAR-BONATE FET-FLD (MG/L AS CO3)	ALKA-LINITY FIELD (MG/L AS CACO3)
* 402552081281100 - 051 OLDTOWN C (59-16) NR WAINWRIGHT OH (LAT 40 25 52 LONG 081 28 11)											
JUL , 1982 23...	1450	1.5	1250	7.6	29.0	11.0	--	--	120	0	98
402602081224100 - 051 PIKE RN (59-2) AT MIDVALE OH (LAT 40 26 02 LONG 081 22 41)											
JUL , 1982 23...	1040	1.3	2400	2.7	21.0	13.1	13	646	0	0	0
* 402715081300800 - 051 STONE C (59-13) NR NEW PHILADELPHIA OH (LAT 40 27 15 LONG 081 30 08)											
JUL , 1982 30...	0915	2.4	635	7.3	18.5	8.5	--	--	100	0	82
402815080532100 - 051 WOLF RN (66-7) NR AMSTERDAM OH (LAT 40 28 15 LONG 080 53 21)											
AUG , 1982 16...	1230	.36	3650	2.7	22.0	8.5	21	335	0	0	0
* 402823080552300 - 051 YELLOW C (66-8) AT AMSTERDAM OH (LAT 40 28 23 LONG 080 55 23)											
AUG , 1982 16...	1130	1.8	590	7.6	19.0	8.3	--	--	150	0	123
* 402841081285900 - 051 STONE C (59-14) NR NEW PHILADELPHIA OH (LAT 40 28 41 LONG 081 28 59)											
AUG , 1982 19...	0945	1.6	570	7.6	16.0	9.0	--	--	130	0	107
* 402857081220300 - 051 BEAVERDAM C (59-17) NR MIDVALE OH (LAT 40 28 57 LONG 081 22 03)											
JUL , 1982 30...	1030	.44	1100	7.2	18.0	10.2	--	--	90	0	74
* 402950080493400 - 051 LONG RN (66-3) NR E SPRINGFIELD OH (LAT 40 29 50 LONG 080 49 34)											
AUG , 1982 18...	1415	.02	430	7.7	25.0	8.7	--	--	170	0	139
* 403003081250600 - 051 BEAVERDAM C (59-12) NR NEW PHILADELPHIA OH (LAT 40 30 03 LONG 081 25 06)											
MAR , 1982 17...	1300	137	--	6.6	6.5	10.5	--	--	20	--	16
JUL 21...	0915	1.8	1150	7.6	19.0	8.6	--	--	76	0	62
* 403045081291900 - 051 SUGAR C (59-3) AT DOVER OH (LAT 40 30 45 LONG 081 29 19)											
JUL , 1982 20...	1030	55	950	8.0	23.5	7.8	--	--	180	0	148
* 403049081163000 - 051 CONOTTON C (64-9) NR NEW CUMBERLAND OH (LAT 40 30 49 LONG 081 16 30)											
JUL , 1982 22...	0945	48	340	7.7	19.5	7.3	--	--	95	0	78
* 403103080453400 - 051 YELLOW C (66-4) NR NEW SOMERSET OH (LAT 40 31 03 LONG 080 45 34)											
AUG , 1982 18...	1130	6.6	640	7.1	20.5	9.2	--	--	93	0	76

DATA COLLECTED AT OHIO ABANDONED MINE LAND SITES PROJECT--Continued

ANALYSES OF MISCELLANEOUS STATIONS

DATE	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	NICKEL, DIS-SOLVED (UG/L AS NI)	ZINC, DIS-SOLVED (UG/L AS ZN)
402552081281100 - 051 OLDTOWN C (59-16) NR WAINWRIGHT OH (LAT 40 25 52 LONG 081 28 11)											
JUL , 1982											
23...	560	33	1020	--	--	--	--	--	--	--	--
402602081224100 - 051 PIKE RN (59-2) AT MIDVALE OH (LAT 40 26 02 LONG 081 22 41)											
JUL , 1982											
23...	1100	28	1740	32000	32000	170000	170000	5500	4800	100	370
402715081300800 - 051 STONE C (59-13) NR NEW PHILADELPHIA OH (LAT 40 27 15 LONG 081 30 08)											
JUL , 1982											
30...	180	31	450	--	--	--	--	--	--	--	--
402815080532100 - 051 WOLF RN (66-7) NR AMSTERDAM OH (LAT 40 28 15 LONG 080 53 21)											
AUG , 1982											
16...	1400	36	2310	110000	82000	120000	120000	11000	9800	400	860
402823080552300 - 051 YELLOW C (66-8) AT AMSTERDAM OH (LAT 40 28 23 LONG 080 55 23)											
AUG , 1982											
16...	140	33	379	--	--	--	--	--	--	--	--
402841081285900 - 051 STONE C (59-14) NR NEW PHILADELPHIA OH (LAT 40 28 41 LONG 081 28 59)											
AUG , 1982											
19...	160	31	417	--	--	--	--	--	--	--	--
402857081220300 - 051 BEAVERDAM C (59-17) NR MIDVALE OH (LAT 40 28 57 LONG 081 22 03)											
JUL , 1982											
30...	490	23	840	--	--	--	--	--	--	--	--
402950080493400 - 051 LONG RN (66-3) NR E SPRINGFIELD OH (LAT 40 29 50 LONG 080 49 34)											
AUG , 1982											
18...	74	8.6	--	--	--	--	--	--	--	--	--
403003081250600 - 051 BEAVERDAM C (59-12) NR NEW PHILADELPHIA OH (LAT 40 30 03 LONG 081 25 06)											
MAR , 1982											
17...	--	--	--	--	--	--	--	--	--	--	--
JUL											
21...	490	21	918	--	--	--	--	--	--	--	--
403045081291900 - 051 SUGAR C (59-3) AT DOVER OH (LAT 40 30 45 LONG 081 29 19)											
JUL , 1982											
20...	280	49	680	--	--	--	--	--	--	--	--
403049081163000 - 051 CONOTTON C (64-9) NR NEW CUMBERLAND OH (LAT 40 30 49 LONG 081 16 30)											
JUL , 1982											
22...	55	17	226	--	--	--	--	--	--	--	--
403103080453400 - 051 YELLOW C (66-4) NR NEW SOMERSET OH (LAT 40 31 03 LONG 080 45 34)											
AUG , 1982											
18...	190	27	452	--	--	--	--	--	--	--	--

ANALYSES OF MISCELLANEOUS STATIONS

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	ACIDITY (MG/L AS H)	ACIDITY (MG/L AS CACO3)	BICAR-BONATE FET-FLD (MG/L AS HCO3)	CAR-BONATE FET-FLD (MG/L AS CO3)	ALKA-LINITY FIELD (MG/L AS CACO3)
* 403112081282400 - 051 TUSCARAWAS R (59-4) AT DOVER OH (LAT 40 31 12 LONG 081 28 24)											
MAR , 1982											
18...	1000	5630	--	7.4	5.5	12.4	--	--	78	--	64
AUG											
26...	0930	382	1170	8.2	19.5	9.2	--	--	190	0	156
* 403114080513900 - 051 YELLOW C (66-5) NR BERGHOLZ OH (LAT 40 31 14 LONG 080 51 39)											
AUG , 1982											
17...	1345	5.6	555	7.5	25.5	9.3	--	--	79	0	65
* 403124081272600 - 051 UNAM TR (59-5) TO TUSCARAWAS R AT DOVER OH (LAT 40 31 24 LONG 081 27 26)											
JUL , 1982											
19...	1300	.41	1050	7.5	23.5	8.5	--	--	72	0	59
* 403128080402700 - 051 HOLLOW ROCK RN (66-2) NR NEW SOMERSET OH (LAT 40 31 28 LONG 080 40 27)											
AUG , 1982											
20...	1245	.61	1250	8.2	17.5	10.2	--	--	200	0	164
403229081290600 - 051 GOETTGE RN (59-11) AT DOVER OH (LAT 40 32 29 LONG 081 29 06)											
MAR , 1982											
11...	1345	34	--	4.1	6.5	13.9	11	569	--	--	--
JUL											
19...	1030	.65	2200	4.0	23.0	8.0	1.6	79	0	0	0
* 403230081182701 - 051 CONOTTON C (64-4) AT NEW CUMBERLAND OH (LAT 40 32 30 LONG 081 18 27)											
MAR , 1982											
17...	1440	1020	--	6.7	6.5	11.8	--	--	33	--	27
AUG											
16...	1530	24	530	7.4	23.0	9.9	--	--	110	0	90
* 403237081185200 - 051 DOG RN (64-7) AT NEW CUMBERLAND OH (LAT 40 32 37 LONG 081 18 52)											
MAR , 1982											
17...	1110	25	--	6.6	6.5	12.4	--	--	37	--	30
JUL											
22...	1230	.56	940	8.2	23.5	8.8	--	--	100	0	82
* 403304081191600 - 051 UNAM TR (64-6) CONOTTON C NR NW CUMBRLND OH (LAT 40 33 04 LONG 081 19 16)											
MAR , 1982											
17...	1000	73	--	6.6	6.0	12.0	--	--	20	--	16
JUL											
21...	1500	.92	1100	7.6	26.5	9.2	--	--	47	0	39
* 403312080412900 - 051 YELLOW C (66-9) AT HAMMONDSVILLE OH (LAT 40 33 12 LONG 080 41 29)											
AUG , 1982											
24...	1000	11	660	7.6	19.5	7.9	--	--	98	0	80
* 403316080403100 - 051 HOLLOW ROCK RN (66-10) NR HAMMONDSVILLE OH (LAT 40 33 16 LONG 080 40 31)											
AUG , 1982											
20...	1030	.82	1100	7.9	15.5	9.8	--	--	140	0	115
* 403345080423300 - 051 N F YELLOW C (66-1) AT HAMMONDSVILLE OH (LAT 40 33 45 LONG 080 42 33)											
AUG , 1982											
18...	1430	2.3	605	8.4	23.0	11.9	--	--	78	--	64

ANALYSES OF MISCELLANEOUS STATIONS

DATE	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	NICKEL, DIS-SOLVED (UG/L AS NI)	ZINC, DIS-SOLVED (UG/L AS ZN)
403112081282400 - 051 TUSCARAWAS R (59-4) AT DOVER OH (LAT 40 31 12 LONG 081 28 24)											
MAR , 1982											
18...	--	--	--	--	--	--	--	--	--	--	--
AUG											
26...	200	180	713	--	--	--	--	--	--	--	--
403114080513900 - 051 YELLOW C (66-5) NR BERGHOLZ OH (LAT 40 31 14 LONG 080 51 39)											
AUG , 1982											
17...	190	27	370	--	--	--	--	--	--	--	--
403124081272600 - 051 UNAM TR (59-5) TO TUSCARAWAS R AT DOVER OH (LAT 40 31 24 LONG 081 27 26)											
JUL , 1982											
19...	420	37	832	--	--	--	--	--	--	--	--
403128080402700 - 051 HOLLOW ROCK RN (66-2) NR NEW SOMERSET OH (LAT 40 31 28 LONG 080 40 27)											
AUG , 1982											
20...	560	22	1010	--	--	--	--	--	--	--	--
403229081290600 - 051 GOETTGE RN (59-11) AT DOVER OH (LAT 40 32 29 LONG 081 29 06)											
MAR , 1982											
11...	--	--	--	--	--	--	--	--	--	--	--
JUL											
19...	1000	130	1880	2600	2600	1100	410	31000	31000	400	350
403230081182701 - 051 CONOTTON C (64-4) AT NEW CUMBERLAND OH (LAT 40 32 30 LONG 081 18 27)											
MAR , 1982											
17...	--	--	--	--	--	--	--	--	--	--	--
AUG											
16...	130	24	359	--	--	--	--	--	--	--	--
403237081185200 - 051 DOG RN (64-7) AT NEW CUMBERLAND OH (LAT 40 32 37 LONG 081 18 52)											
MAR , 1982											
17...	--	--	--	--	--	--	--	--	--	--	--
JUL											
22...	390	13	728	--	--	--	--	--	--	--	--
403304081191600 - 051 UNAM TR (64-6) CONOTTON C NR NW CUMBRLND OH (LAT 40 33 04 LONG 081 19 16)											
MAR , 1982											
17...	--	--	--	--	--	--	--	--	--	--	--
JUL											
21...	450	23	808	--	--	--	--	--	--	--	--
403312080412900 - 051 YELLOW C (66-9) AT HAMMONDSVILLE OH (LAT 40 33 12 LONG 080 41 29)											
AUG , 1982											
24...	180	31	470	--	--	--	--	--	--	--	--
403316080403100 - 051 HOLLOW ROCK RN (66-10) NR HAMMONDSVILLE OH (LAT 40 33 16 LONG 080 40 31)											
AUG , 1982											
20...	490	22	901	--	--	--	--	--	--	--	--
403345080423300 - 051 N F YELLOW C (66-1) AT HAMMONDSVILLE OH (LAT 40 33 45 LONG 080 42 33)											
AUG , 1982											
18...	200	33	400	--	--	--	--	--	--	--	--

ANALYSES OF MISCELLANEOUS STATIONS

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	ACIDITY (MG/L AS H)	ACIDITY (MG/L AS CACO3)	BICAR-BONATE FET-FLD (MG/L AS HCO3)	CAR-BONATE FET-FLD (MG/L AS CO3)	ALKA-LINITY FIELD (MG/L AS CACO3)
* 403420081181000 - 051 BEGGAR RN (64-5) NR NEW CUMBERLAND OH (LAT 40 34 20 LONG 081 18 10)											
MAR , 1982											
17...	1320	13	--	6.8	6.5	12.4	--	--	44	--	36
JUL											
21...	1130	.39	2500	7.7	17.5	9.7	--	--	150	0	123
* 403437081234300 - 051 TUSCARAWAS R (59-6) AT ZOARVILLE OH (LAT 40 34 37 LONG 081 23 43)											
JUL , 1982											
22...	1315	394	1300	8.5	24.5	11.2	--	--	200	6	174
403446081194800 - 051 UNAM TR (64-3) TO CONOTTON C NR SOMERDALE OH (LAT 40 34 46 LONG 081 19 48)											
MAR , 1982											
16...	1530	9.2	--	5.8	5.0	12.4	.7	32	12	--	10
JUL											
19...	1530	.41	5600	4.9	23.5	8.5	1.9	30	0	0	0
* 403457081231200 - 051 CONOTTON C (64-1) AT ZOARVILLE OH (LAT 40 34 57 LONG 081 23 12)											
JUL , 1982											
22...	0930	101	440	7.3	20.0	8.5	--	--	84	0	69
403458081254900 - 051 UNAM TR (59-10) TO SM MIDDLE RN NR ZOAR OH (LAT 40 34 58 LONG 081 25 49)											
MAR , 1982											
16...	1220	16	--	5.3	5.0	10.9	.9	45	8	--	7
JUL											
20...	1510	.35	1700	4.3	29.5	8.1	1.3	65	0	0	0
403600081244900 - 051 UNAM TR (59-7) TO TUSCARAWAS R NR ZOAR OH (LAT 40 36 00 LONG 081 24 49)											
AUG , 1982											
19...	1345	.34	1300	4.0	18.0	8.7	1.4	22	0	0	0
* 403614081180700 - 051 HUFF RN (64-8) NR MINERAL CITY OH (LAT 40 36 14 LONG 081 18 07)											
MAR , 1982											
16...	1345	83	--	6.5	13.5	12.2	.6	30	22	--	18
JUL											
19...	1030	1.8	1000	6.8	21.0	8.7	--	--	70	0	57
403614081202100 - 051 HUFF RN (64-2) NR MINERAL CITY OH (LAT 40 36 14 LONG 081 20 21)											
MAR , 1982											
16...	1130	54	--	4.7	6.0	12.6	1.3	65	2	--	2
JUL											
19...	1400	3.3	1700	4.2	21.5	8.8	1.7	84	0	0	0
403619081254300 - 051 MIDDLE RN (59-8) AT ZOAR OH (LAT 40 36 19 LONG 081 25 43)											
JUL , 1982											
21...	1445	.46	1300	3.6	25.0	8.3	1.1	55	0	0	0
* 403639080472200 - 051 N F YELLOW C (66-6) NR SALINEVILLE OH (LAT 40 36 39 LONG 080 47 22)											
AUG , 1982											
17...	1045	1.7	590	7.8	19.0	8.5	--	--	130	0	107
403706081262900 - 051 WOLF RN (59-9) NR ZOAR OH (LAT 40 37 06 LONG 081 26 29)											
MAR , 1982											
17...	1015	19	--	3.8	6.0	11.0	.8	40	--	--	--
JUL											
21...	1315	1.4	2200	3.1	25.0	8.9	3.4	169	0	0	0

ANALYSES OF MISCELLANEOUS STATIONS

DATE	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	NICKEL, DIS-SOLVED (UG/L AS NI)	ZINC, DIS-SOLVED (UG/L AS ZN)
403420081181000 - 051 BEGGAR RN (64-5) NR NEW CUMBERLAND OH (LAT 40 34 20 LONG 081 18 10)											
MAR , 1982											
17...	--	--	--	--	--	--	--	--	--	--	--
JUL											
21...	1300	42	2400	--	--	--	--	--	--	--	--
403437081234300 - 051 TUSCARAWAS R (59-6) AT ZOARVILLE OH (LAT 40 34 37 LONG 081 23 43)											
JUL , 1982											
22...	140	220	813	--	--	--	--	--	--	--	--
403446081194800 - 051 UNAM TR (64-3) TO CONOTTON C NR SOMERDALE OH (LAT 40 34 46 LONG 081 19 48)											
MAR , 1982											
16...	--	--	--	--	--	--	--	--	--	--	--
JUL											
19...	450	950	4850	19000	19000	1100	360	44000	44000	300	120
403457081231200 - 051 CONOTTON C (64-1) AT ZOARVILLE OH (LAT 40 34 57 LONG 081 23 12)											
JUL , 1982											
22...	99	27	287	--	--	--	--	--	--	--	--
403458081254900 - 051 UNAM TR (59-10) TO SM MIDDLE RN NR ZOAR OH (LAT 40 34 58 LONG 081 25 49)											
MAR , 1982											
16...	--	--	--	--	--	--	--	--	--	--	--
JUL											
20...	1100	2.2	1700	2800	2300	6100	2800	32000	32000	300	220
403600081244900 - 051 UNAM TR (59-7) TO TUSCARAWAS R NR ZOAR OH (LAT 40 36 00 LONG 081 24 49)											
AUG , 1982											
19...	780	6.8	1130	3000	3000	1000	790	19000	19000	200	150
403614081180700 - 051 HUFF RN (64-8) NR MINERAL CITY OH (LAT 40 36 14 LONG 081 18 07)											
MAR , 1982											
16...	--	--	--	--	--	--	--	--	--	--	--
JUL											
19...	360	67	776	--	--	--	--	--	--	--	--
403614081202100 - 051 HUFF RN (64-2) NR MINERAL CITY OH (LAT 40 36 14 LONG 081 20 21)											
MAR , 1982											
16...	--	--	--	--	--	--	--	--	--	--	--
JUL											
19...	860	50	1500	2900	2200	13000	9700	21000	20000	200	250
403619081254300 - 051 MIDDLE RN (59-8) AT ZOAR OH (LAT 40 36 19 LONG 081 25 43)											
JUL , 1982											
21...	660	18	1040	2600	2200	2200	1700	20000	18000	200	160
403639080472200 - 051 N F YELLOW C (66-6) NR SALINEVILLE OH (LAT 40 36 39 LONG 080 47 22)											
AUG , 1982											
17...	190	23	404	--	--	--	--	--	--	--	--
403706081262900 - 051 WOLF RN (59-9) NR ZOAR OH (LAT 40 37 06 LONG 081 26 29)											
MAR , 1982											
17...	--	--	--	--	--	--	--	--	--	--	--
JUL											
21...	1200	14	1910	6600	6500	7800	7800	30000	33000	300	300

The following table lists the results of chemical analysis of bed material collected from streams draining abandoned surface mine lands in Southeastern Ohio. Bed material samples were seperated to contain only the < 20 Micron size fraction.

ANALYSES OF MISCELLANEOUS STATIONS

DATE	TIME	ALUMINUM, RECOV. FM BOTTOM MATERIAL (UG/G AS FE)	IRON, RECOV. FM BOTTOM MATERIAL (UG/G AS FE)	MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G AS FE)	NICKEL, RECOV. FM BOTTOM MATERIAL (UG/G AS NI)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN)
383735082445700 - 051 SPERRY F (4-2) NR PINE GROVE OH (LAT 38 37 35 LONG 082 44 57)						
AUG , 1982 23...	1500	10000	7100	150	10	73
383750082435400 - 041 L PINE C NR PEDRO OH (LAT 38 37 50 LONG 082 43 54)						
AUG , 1982 23...	1630	2400	4200	820	30	80
383805082405400 - 051 ELLISONVILLE C (4-5) AT PEDRO OH (LAT 38 38 05 LONG 082 40 54)						
AUG , 1982 24...	0930	8300	5900	120	20	86
383806082464100 - 051 PINE C (4-1) NR POWELLSVILLE OH (LAT 38 38 06 LONG 082 46 41)						
AUG , 1982 24...	0800	4300	6200	870	20	76
383833082402800 - 051 L PINE C (4-6) AT PEDRO OH (LAT 38 38 33 LONG 082 40 28)						
AUG , 1982 24...	1030	15000	85000	19000	90	480
384034082422100 - 051 PINE C (4-7) NR PEDRO OH (LAT 38 40 34 LONG 082 42 21)						
AUG , 1982 24...	1130	3200	24000	5200	20	93
384146082424600 - 051 PINE C (4-8) NR BARTLES OH (LAT 38 41 46 LONG 082 42 46)						
AUG , 1982 24...	1200	4300	17000	990	20	57
384206082161600 - 051 BULLSKIN C (5-6) NR MERCERVILLE OH (LAT 38 42 06 LONG 082 16 16)						
AUG , 1982 23...	1620	3000	5400	300	10	43
384333082150500 - 051 BULLSKIN C (5-2) NR MERCERVILLE OH (LAT 38 43 33 LONG 082 15 05)						
AUG , 1982 23...	1325	3400	8500	1300	30	75
384347082164400 - 051 L BULLSKIN C (5-7) NR MERCERVILLE OH (LAT 38 43 47 LONG 082 16 44)						
AUG , 1982 23...	1515	6700	5400	4000	40	60
384412082144600 - 051 RACCOON C (5-1) NR EUREKA OH (LAT 38 44 12 LONG 082 14 46)						
AUG , 1982 24...	0900	4400	12000	1100	30	69
384657082421300 - 051 HALES C (4-9) NR S WEBSTER OH (LAT 38 46 57 LONG 082 42 13)						
AUG , 1982 24...	1550	2800	11000	860	20	75

ANALYSES OF MISCELLANEOUS STATIONS

DATE	TIME	ALUMINUM, RECOV. FM BOTTOM MATERIAL (UG/G)	IRON, RECOV. FM BOT-TOM MATERIAL (UG/G AS FE)	MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G)	NICKEL, RECOV. FM BOTTOM MATERIAL (UG/G AS NI)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN)
384821082221900 - 051 RACCOON C (5-4) NR PATRIOT OH (LAT 38 48 21 LONG 082 22 19)						
AUG , 1982						
24...	1245	3600	11000	770	30	94
384839082403100 - 051 HALES C (4-10) NR EIFORT OH (LAT 38 48 39 LONG 082 40 31)						
AUG , 1982						
24...	1515	2700	15000	1500	20	100
385029082311900 - 051 BLACK F (2-5) AT GALLIA OH (LAT 38 50 29 LONG 082 31 19)						
AUG , 1982						
24...	1415	2700	12000	1500	20	120
385124082321400 - 051 BLACK F (2-4) NR GALLIA OH (LAT 38 51 24 LONG 082 32 14)						
AUG , 1982						
24...	1330	4200	19000	800	20	130
385343082293600 - 051 SYMMES C (2-3) NR THURMAN OH (LAT 38 53 43 LONG 082 29 36)						
AUG , 1982						
25...	0830	2400	8600	1300	20	65
385349082113100 - 051 CAMPAIGN C (7-1) NR ADDISON OH (LAT 38 53 49 LONG 082 11 31)						
JUL , 1982						
26...	1630	2400	11000	740	10	32
385404082204200 - 051 RACCOON C (5-5) NR RIO GRANDE OH (LAT 38 54 04 LONG 082 20 42)						
AUG , 1982						
24...	1600	5400	15000	970	30	97
385442082080800 - 051 KYGER C (7-11) NR ADDISON OH (LAT 38 54 42 LONG 082 08 08)						
JUL , 1982						
28...	1045	14000	15000	2000	70	170
385520082322000 - 051 UNAM TR TO SYMMES C (2-2) AT PYRO OH (LAT 38 55 20 LONG 082 32 20)						
AUG , 1982						
24...	1100	1900	11000	2000	20	3000
385735082315700 - 051 SYMMES C (2-1) NR PYRO OH (LAT 38 57 35 LONG 082 31 57)						
AUG , 1982						
25...	1015	1800	8100	560	10	57
385804082095000 - 051 KYGER C (7-10) AT KYGER OH (LAT 38 58 04 LONG 082 09 50)						
JUL , 1982						
27...	1230	14000	11000	1900	60	150
385924082295300 - 051 DIXON RN (10-2) NR WINCHESTER OH (LAT 38 59 24 LONG 082 29 53)						
AUG , 1982						
25...	1000	13000	17000	570	70	94

ANALYSES OF MISCELLANEOUS STATIONS

DATE	TIME	ALUMINUM, RECOV. FM BOTTOM MATERIAL (UG/G)	IRON, RECOV. FM BOTTOM MATERIAL (UG/G AS FE)	MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G)	NICKEL, RECOV. FM BOTTOM MATERIAL (UG/G AS NI)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN)
385933082042800 - 051 LEADING C (12-1) AT MIDDLEPORT OH (LAT 38 59 33 LONG 082 04 28)						
AUG , 1982						
24...	1000	1400	16000	230	20	110
390021082071700 - 051 LEADING C (12-2) NR RUTLAND OH (LAT 39 00 21 LONG 082 07 17)						
JUL , 1982						
28...	0900	2700	10000	750	20	44
390031082271900 - 051 DICKASON RN (10-4) NR EWINGTON OH (LAT 39 00 31 LONG 082 27 19)						
JUL , 1982						
22...	1315	7800	30000	650	30	71
390052082210900 - 051 RACCOON C (11-1) AT EWINGTON OH (LAT 39 00 52 LONG 082 21 09)						
JUL , 1982						
22...	1530	6300	18000	1500	50	100
390222082092200 - 051 LEADING C (12-3) NR LANGSVILLE OH (LAT 39 02 22 LONG 082 09 22)						
AUG , 1982						
23...	1500	10000	15000	3200	30	58
390224082282300 - 051 TARCAMP RN (10-7) NR ROADS OH (LAT 39 02 24 LONG 082 28 23)						
JUL , 1982						
22...	1030	2600	15000	380	10	36
390240082075000 - 051 L LEADING C (12-6) AT RUTLAND OH (LAT 39 02 40 LONG 082 07 50)						
AUG , 1982						
23...	1400	9900	7100	9800	40	80
390509082281900 - 051 L RACCOON C (10-11) NR ROADS OH (LAT 39 05 09 LONG 082 28 19)						
JUL , 1982						
12...	1330	980	6500	22	<10	12
390733082080300 - 051 UNAM TR TO L LEADING C (12-9) AT HARRISON OH (LAT 39 07 33 LONG 082 08 03)						
JUL , 1982						
20...	1530	2400	5200	2500	10	37
390748082213100 - 051 RACCOON C (11-3) NR RADCLIFF OH (LAT 39 07 48 LONG 082 21 31)						
JUL , 1982						
20...	1100	6300	13000	470	20	100
390801082302800 - 051 L RACCOON C (10-12) NR WELLSTON OH (LAT 39 08 01 LONG 082 30 28)						
JUL , 1982						
23...	1100	8800	26000	850	50	170
390900082100900 - 051 MUD F (12-10) NR HARRISONVILLE OH (LAT 39 09 00 LONG 082 10 09)						
JUL , 1982						
26...	1230	3200	14000	130	10	28

ANALYSES OF MISCELLANEOUS STATIONS

DATE	TIME	ALUMINUM, RECOV. FM BOTTOM MATERIAL (UG/G)	IRON, RECOV., FM BOTTOM MATERIAL (UG/G AS FE)	MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G)	NICKEL, RECOV. FM BOTTOM MATERIAL (UG/G AS NI)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN)
390936082011400 - 051 W B SHADE R (14-3) AT BURLINGHAM OH (LAT 39 09 36 LONG 082 01 14)						
JUL , 1982 19...	1200	41000	8600	160	10	37
390941082212200 - 051 ELK F (11-4) NR RADCLIFF OH (LAT 39 09 41 LONG 082 21 22)						
JUL , 1982 20...	0930	4600	17000	1200	40	88
391009082053600 - 051 W B SHADE R (14-2) NR BURLINGHAM OH (LAT 39 10 09 LONG 082 05 36)						
JUL , 1982 19...	1530	12000	19000	260	20	100
391403082261600 - 051 ELK F (11-7) NR MCARTHUR OH (LAT 39 14 03 LONG 082 26 16)						
JUL , 1982 19...	1215	6800	19000	480	90	120
391416082255500 - 051 UNAM TR TO ELK F (11-8) NR PRATTSVILLE OH (LAT 39 14 16 LONG 082 25 55)						
JUL , 1982 19...	1315	3100	7300	220	10	51
391430082284600 - 051 PUNCHEON F (11-10) AT MCARTHUR OH (LAT 39 14 30 LONG 082 28 46)						
JUL , 1982 19...	1100	3600	8300	450	20	64
391637082291400 - 051 ELK F (11-9) NR MCARTHUR OH (LAT 39 16 37 LONG 082 29 14)						
JUL , 1982 13...	1145	320	1100	160	20	5
392201081524600 - 051 FEDERAL C (22-1) AT BROADWELL OH (LAT 39 22 01 LONG 081 52 46)						
JUL , 1982 15...	0830	2700	6500	850	10	31
392240082275000 - 051 BRUSHY F (16-8) NR MT PLEASANT OH (LAT 39 22 40 LONG 082 27 50)						
JUL , 1982 27...	1400	4700	8300	920	20	120
392407081554700 - 051 SHARPS F (22-2) NR AMESVILLE OH (LAT 39 24 07 LONG 081 55 47)						
JUL , 1982 15...	1100	3400	11000	2800	30	65
392535081251800 - 051 DUCK C (25-1) AT MARIETTA OH (LAT 39 25 35 LONG 081 25 18)						
JUL , 1982 23...	0830	4600	5800	1100	20	36
392612081545700 - 051 SHARPS F (22-4) AT SHARPSBURG OH (LAT 39 26 12 LONG 081 54 57)						
JUL , 1982 15...	1400	2700	7000	610	10	34

ANALYSES OF MISCELLANEOUS STATIONS

DATE	TIME	ALUMINUM, RECOV. FM BOTTOM MATERIAL (UG/G)	IRON, RECOV. FM BOTTOM MATERIAL (UG/G AS FE)	MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G)	NICKEL, RECOV. FM BOTTOM MATERIAL (UG/G AS NI)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN)
392802081562100 - 051 SHARPS F (22-5) NR SHARPSBURG OH (LAT 39 28 02 LONG 081 56 21)						
JUL , 1982 14...	1600	2200	4700	990	<10	18
392853081594300 - 051 MINERS F (22-6) NR SHARPSBURG OH (LAT 39 28 53 LONG 081 59 43)						
JUL , 1982 14...	1115	5700	14000	3400	40	83
392909081593600 - 051 MINERS F (22-7) NR SHARPSBURG OH (LAT 39 29 09 LONG 081 59 36)						
JUL , 1982 14...	1415	2200	4700	600	<10	20
393237082061300 - 051 JOHNSON RN (21-6) NR GLOUSTER OH (LAT 39 32 37 LONG 082 06 13)						
JUL , 1982 28...	1200	2000	8000	1400	10	31
393339081234500 - 051 E F DUCK C (33-1) AT LOWER SALEM OH (LAT 39 33 39 LONG 081 23 45)						
JUL , 1982 14...	0830	3800	5800	750	10	64
393344081243400 - 051 W F DUCK C (25-2) AT WARNER OH (LAT 39 33 44 LONG 081 24 34)						
JUL , 1982 15...	0845	5300	11000	3200	50	96
393528081222600 - 051 E F DUCK C (33-2) NR LOWER SALEM OH (LAT 39 35 28 LONG 081 22 26)						
JUL , 1982 14...	1030	4100	12000	1200	30	140
393528081251000 - 051 W F DUCK C (25-3) NR ELBA OH (LAT 39 35 28 LONG 081 25 10)						
JUL , 1982 15...	1030	2600	5100	1000	20	44
393604081424300 - 051 MEIGS C (31-1) NR NEELYSVILLE OH (LAT 39 36 04 LONG 081 42 43)						
AUG , 1982 04...	0830	2700	6300	520	10	36
393610082124400 - 051 SHAWNEE C (20-8) AT SHAWNEE OH (LAT 39 36 10 LONG 082 12 44)						
JUL , 1982 21...	1230	3000	11000	580	30	240
393632081245600 - 051 UNAM TR TO WF DUCK C (25-4) AT ELBA OH (LAT 39 36 32 LONG 081 24 56)						
JUL , 1982 15...	1200	1200	5600	180	10	30
393646081222000 - 051 E F DUCK C (33-4) NR HARRIETSVILLE OH (LAT 39 36 46 LONG 081 22 20)						
JUL , 1982 14...	1300	1100	6800	310	20	23

DATA COLLECTED AT OHIO ABANDONED MINE LAND SITES PROJECT--Continued

ANALYSES OF MISCELLANEOUS STATIONS

DATE	TIME	ALUMINUM, RECOV. FM BOTTOM MATERIAL (UG/G)	IRON, RECOV. FM BOTTOM MATERIAL (UG/G AS FE)	MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G)	NICKEL, RECOV. FM BOTTOM MATERIAL (UG/G AS NI)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN)
393720081212100 - 041 M F DUCK C NR GERMANTOWN OH (LAT 39 37 20 LONG 081 21 21)						
JUL , 1982						
14...	1430	8400	13000	310	20	160
393745081431000 - 051 DYES F (31-2) NR HACKNEY OH (LAT 39 37 45 LONG 081 43 10)						
AUG , 1982						
04...	1045	1900	9500	1200	10	28
393754081274000 - 051 W F DUCK C (25-6) AT MACKSBURG OH (LAT 39 37 54 LONG 081 27 40)						
JUL , 1982						
15...	1330	6300	13000	1700	20	100
393906081215800 - 051 M F DUCK C (33-6) NR HARRIETSVILLE OH (LAT 39 39 06 LONG 081 21 58)						
JUL , 1982						
14...	1545	18000	5200	310	40	35
393946081282300 - 051 W F DUCK C (25-7) AT DEXTER CITY OH (LAT 39 39 46 LONG 081 28 23)						
JUL , 1982						
21...	1600	3500	5900	750	10	44
393947081182500 - 051 E F DUCK C (33-10) NR HARRIETSVILLE OH (LAT 39 39 47 LONG 081 18 25)						
JUL , 1982						
21...	1045	2100	10000	310	10	25
394007081285800 - 051 WARREN RN (25-8) AT SOUTH OLIVE OH (LAT 39 40 07 LONG 081 28 58)						
JUL , 1982						
22...	1440	2700	5200	250	<10	32
394014081232100 - 051 M F DUCK C (33-7) AT MIDDLEBURG OH (LAT 39 40 14 LONG 081 23 21)						
JUL , 1982						
13...	1600	4400	10000	920	30	140
394053081415500 - 051 DYES F (31-6) NR REINERSVILLE OH (LAT 39 40 53 LONG 081 41 55)						
AUG , 1982						
03...	1300	2900	9200	4300	20	43
394110081245700 - 051 M F DUCK C (33-8) NR MIDDLEBURG OH (LAT 39 41 10 LONG 081 24 57)						
JUL , 1982						
13...	1500	8400	11000	1200	80	230
394117081452200 - 051 MANS F (31-3) NR MEIGS OH (LAT 39 41 17 LONG 081 45 22)						
AUG , 1982						
04...	1245	2200	6200	1000	20	21
394130081450700 - 051 MEIGS C (31-4) NR MEIGS OH (LAT 39 41 30 LONG 081 45 07)						
AUG , 1982						
04...	1345	2600	6400	1500	20	21

ANALYSES OF MISCELLANEOUS STATIONS

DATE	TIME	ALUMINUM, RECOV. FM BOTTOM MATERIAL (UG/G)	IRON, RECOV. FM BOTTOM MATERIAL (UG/G AS FE)	MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G)	NICKEL, RECOV. FM BOTTOM MATERIAL (UG/G AS NI)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN)
394140081211000 - 051 E F DUCK C (33-11) NR MIDDLEBURG OH (LAT 39 41 40 LONG 081 21 10)						
JUL , 1982 22...	1245	2800	7200	810	10	34
394214081270500 - 051 M F DUCK C (33-9) NR SOUTH OLIVE OH (LAT 39 42 14 LONG 081 27 05)						
JUL , 1982 13...	1400	640	1400	220	20	9
394311081425700 - 041 HORSE RN NR MCCONNELSVILLE OH (LAT 39 43 11 LONG 081 42 57)						
AUG , 1982 03...	1415	1500	4000	3300	10	12
394313082130600 - 051 UNAM TR TO RUSH C (28-4) AT NEW LEXINGTON OH (LAT 39 43 13 LONG 082 13 06)						
JUL , 1982 28...	1100	5400	11000	1500	30	96
394317081401300 - 051 DYES C (31-8) NR REINERSVILLE OH (LAT 39 43 17 LONG 081 40 13)						
AUG , 1982 03...	1100	5000	15000	3000	20	40
394327081452200 - 051 MEIGS C (31-5) NR MEIGS OH (LAT 39 43 27 LONG 081 45 22)						
AUG , 1982 04...	1500	1400	3200	960	10	14
394338081305400 - 051 W F DUCK C (25-9) NR CALDWELL OH (LAT 39 43 38 LONG 081 30 54)						
JUL , 1982 22...	1315	2200	8700	1000	10	40
394439081413500 - 051 BRANNONS F (31-9) NR REINERSVILLE OH (LAT 39 44 39 LONG 081 41 35)						
AUG , 1982 03...	1600	6000	18000	2000	20	44
394443081215300 - 051 E F DUCK C (33-12) AT CARLISLE OH (LAT 39 44 43 LONG 081 21 53)						
JUL , 1982 22...	1425	3900	8400	1100	20	41
394547081393700 - 051 DYES F (31-10) NR ZENO OH (LAT 39 45 47 LONG 081 39 37)						
JUL , 1982 12...	1020	3200	8300	5400	20	44
394614082163000 - 051 CTR B RUSH C (28-7) NR SOMERSET OH (LAT 39 46 14 LONG 082 16 30)						
JUL , 1982 28...	1245	2200	8800	1300	20	59
394641081342500 - 051 UNAM TR TO W F DUCK C (25-10) NR BELLEVLY OH (LAT 39 46 41 LONG 081 34 25)						
JUL , 1982 13...	1140	100	10	60	<10	10

ANALYSES OF MISCELLANEOUS STATIONS

DATE	TIME	ALUMINUM, RECOV. FM BOTTOM MATERIAL (UG/G)	IRON, RECOV. FM BOTTOM MATERIAL (UG/G AS FE)	MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G)	NICKEL, RECOV. FM BOTTOM MATERIAL (UG/G AS NI)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN)
394837081361300 - 051 COAL RN (25-11) NR COAL RIDGE OH (LAT 39 48 37 LONG 081 36 13)						
JUL , 1982 21...	1115	4400	6600	3800	50	81
394901082043800 - 051 PORTER RN (29-3) AT ROSEVILLE OH (LAT 39 49 01 LONG 082 04 38)						
JUL , 1982 26...	1615	3800	13000	2300	30	63
394947081421200 - 051 COLLINS F (37-6) NR CUMBERLAND OH (LAT 39 49 47 LONG 081 42 12)						
JUL , 1982 12...	1245	1600	6400	1300	10	38
395018082035800 - 051 UNAM TR TO MOXAHALA C (29-2) NR ROSEVILLE OH (LAT 39 50 18 LONG 082 03 58)						
JUL , 1982 27...	0830	3300	5200	270	40	86
395049082122600 - 051 TURKEY RN (35-9) NR MT PERRY OH (LAT 39 50 49 LONG 082 12 26)						
JUL , 1982 28...	1515	2300	5400	1300	40	79
395052081401500 - 051 MILLER C (37-5) AT CUMBERLAND OH (LAT 39 50 52 LONG 081 40 15)						
JUL , 1982 14...	1100	58000	9900	6400	50	130
395059081392500 - 051 BUFFALO F (37-4) AT CUMBERLAND OH (LAT 39 50 59 LONG 081 39 25)						
AUG , 1982 03...	1530	5000	14000	2000	30	50
395111081542300 - 051 DUNCAN RN (30-6) AT PHILO OH (LAT 39 51 11 LONG 081 54 23)						
JUL , 1982 19...	1230	2200	6200	1300	10	35
395117081413700 - 051 MAYS F (37-8) NR CUMBERLAND OH (LAT 39 51 17 LONG 081 41 37)						
JUL , 1982 14...	1300	7800	18000	4200	80	200
395120082073400 - 051 JONATHAN C (35-4) AT FULTONHAM OH (LAT 39 51 20 LONG 082 07 34)						
JUL , 1982 29...	0945	2400	6600	1600	20	49
395155081374200 - 051 BUFFALO F (37-3) NR CUMBERLAND OH (LAT 39 51 55 LONG 081 37 42)						
AUG , 1982 03...	1330	6600	18000	1600	40	83
395204081190400 - 051 UNAM TR SENECA F WILLS C (38-2) NR CALAIS OH (LAT 39 52 04 LONG 081 19 04)						
JUL , 1982 13...	1520	880	2300	190	20	10

DATA COLLECTED AT OHIO ABANDONED MINE LAND SITES PROJECT--Continued

ANALYSES OF MISCELLANEOUS STATIONS

DATE	TIME	ALUMINUM, RECOV. FM BOTTOM MATERIAL (UG/G)	IRON, RECOV. FM BOTTOM MATERIAL (UG/G AS FE)	MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G)	NICKEL, RECOV. FM BOTTOM MATERIAL (UG/G AS NI)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN)
395214082054700 - 051 JONATHAN C (35-2) AT WHITE COTTAGE OH (LAT 39 52 14 LONG 082 05 47)						
JUL , 1982 27...	1415	4500	6000	6200	120	310
395216081373100 - 051 YOKER C (37-2) NR CUMBERLAND OH (LAT 39 52 16 LONG 081 37 31)						
JUL , 1982 21...	1120	2600	5300	3400	20	31
395312081391600 - 051 YOKER C (37-9) NR CUMBERLAND OH (LAT 39 53 12 LONG 081 39 16)						
JUL , 1982 21...	1000	3600	5300	5100	30	68
395328081415000 - 051 YOKER C (37-10) NR CUMBERLAND OH (LAT 39 53 28 LONG 081 41 50)						
JUL , 1982 21...	0830	4400	4700	4300	50	100
395404081191000 - 051 BEAVER C (38-3) NR BATESVILLE OH (LAT 39 54 04 LONG 081 19 10)						
JUL , 1982 13...	1700	3600	7600	850	10	46
395410081330200 - 051 BUFFALO C (37-1) AT PLEASANT CITY OH (LAT 39 54 10 LONG 081 33 02)						
JUL , 1982 14...	0815	3400	10000	1700	20	48
395507081200200 - 051 YOKER C (38-4) NR BATESVILLE OH (LAT 39 55 07 LONG 081 20 02)						
AUG , 1982 26...	1035	1600	3900	820	<10	20
395508081315200 - 051 WILLS C (38-1) AT BUFFALO OH (LAT 39 55 08 LONG 081 31 52)						
JUL , 1982 21...	1300	2100	5200	1800	10	27
395527081261700 - 051 SENECA F WILLS C (38-5) NR SENECAVILLE OH (LAT 39 55 27 LONG 081 26 17)						
JUL , 1982 13...	1230	4700	11000	1800	10	48
395738081133500 - 051 LEATHERWOOD C (43-1) AT BAILEYS MILLS OH (LAT 39 57 38 LONG 081 13 35)						
AUG , 1982 12...	1330	3700	11000	4800	40	84
395748081162000 - 051 LEATHERWOOD C (43-2) AT SPENCER STATION OH (LAT 39 57 48 LONG 081 16 20)						
AUG , 1982 03...	0945	2300	4800	1500	10	52
395805081184800 - 051 LEATHERWOOD C (43-3) AT QUAKER CITY OH (LAT 39 58 05 LONG 081 18 48)						
AUG , 1982 03...	1115	4100	9400	3400	30	79

ANALYSES OF MISCELLANEOUS STATIONS

DATE	TIME	ALUMINUM, RECOV. FM BOTTOM MATERIAL (UG/G)	IRON, RECOV. FM BOTTOM MATERIAL (UG/G AS FE)	MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G)	NICKEL, RECOV. FM BOTTOM MATERIAL (UG/G AS NI)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN)
395840081215900 - 051 LEATHERWOOD C (43-4) NR SALESVILLE OH (LAT 39 58 40 LONG 081 21 59)						
AUG , 1982 03...	1215	7500	23000	5000	60	93
400023080532000 - 051 MCMAHON C (50-7) AT GLENCOE OH (LAT 40 00 23 LONG 080 53 20)						
JUL , 1982 28...	1400	3300	6900	590	20	31
400039080454600 - 051 MCMAHON C (50-1) AT BELLAIRE OH (LAT 40 00 39 LONG 080 45 46)						
JUL , 1982 28...	1145	4400	15000	640	30	78
400056081151200 - 051 SALT F (48-2) NR BARNESVILLE OH (LAT 40 00 56 LONG 081 15 12)						
AUG , 1982 05...	1345	10000	32000	630	40	69
400123080594500 - 051 MCMAHON C (50-10) NR WARNOCK OH (LAT 40 01 23 LONG 080 59 45)						
JUL , 1982 29...	1130	5600	8800	950	20	43
400124080473700 - 051 MCMAHON C (50-2) NR BELLAIRE OH (LAT 40 01 24 LONG 080 47 37)						
JUL , 1982 28...	1440	4200	15000	770	20	58
400129080492400 - 051 MCMAHON C (50-4) AT NEFFS OH (LAT 40 01 29 LONG 080 49 24)						
AUG , 1982 17...	1400	960	11000	770	20	150
400138080490900 - 051 L MCMAHON C (50-3) AT NEFFS OH (LAT 40 01 38 LONG 080 49 09)						
AUG , 1982 06...	1200	8700	32000	3600	50	82
400155080571100 - 051 BRUSH RN (50-9) NR WARNOCK OH (LAT 40 01 55 LONG 080 57 11)						
JUL , 1982 29...	0915	2000	8500	1100	20	43
400238081212200 - 051 SALT F (48-1) NR MIDDLEBOURNE OH (LAT 40 02 38 LONG 081 21 22)						
AUG , 1982 05...	1145	3100	7700	5000	30	41
400308080540600 - 051 L MCMAHON C (50-8) NR ST CLAIRSVILLE OH (LAT 40 03 08 LONG 080 54 06)						
JUL , 1982 28...	1120	3700	15000	1100	30	55
400400080483100 - 051 WHEELING C (55-2) AT BLAINE OH (LAT 40 04 00 LONG 080 48 31)						
JUL , 1982 26...	1230	4500	20000	800	30	75

ANALYSES OF MISCELLANEOUS STATIONS

DATE	TIME	ALUMINUM, RECOV. FM BOTTOM MATERIAL (UG/G)	IRON, RECOV. FM BOTTOM MATERIAL (UG/G AS FE)	MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G)	NICKEL, RECOV. FM BOTTOM MATERIAL (UG/G AS NI)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN)
400547080501700 - 051 WHEELING C (55-3) AT BARTON OH (LAT 40 05 47 LONG 080 50 17)						
JUL , 1982 27...	1115	3500	20000	1300	30	67
400634080581100 - 051 WHEELING C (55-12) AT BANNOCK OH (LAT 40 06 34 LONG 080 58 11)						
AUG , 1982 03...	1250	2200	13000	1600	30	39
400635081011000 - 051 WHEELING C (55-14) AT LAFFERTY OH (LAT 40 06 35 LONG 081 01 10)						
AUG , 1982 04...	1530	7100	25000	3100	50	87
400644080513200 - 051 WHEELING C (55-4) NR BARTON OH (LAT 40 06 44 LONG 080 51 32)						
JUL , 1982 27...	1445	5000	21000	1300	30	57
400656080441100 - 051 GLENNS RN (55-1) NR FLORENCE OH (LAT 40 06 56 LONG 080 44 11)						
AUG , 1982 05...	1530	7600	70000	120	20	110
400700080572000 - 051 CRABAPPLE C (55-11) NR FAIRPOINT OH (LAT 40 07 00 LONG 080 57 20)						
AUG , 1982 03...	1015	3700	33000	2900	60	140
400716080530900 - 051 COX RN (55-8) AT MAYNARD OH (LAT 40 07 16 LONG 080 53 09)						
AUG , 1982 04...	1020	2600	14000	1100	30	68
400716080560400 - 051 WHEELING C (55-10) AT FAIRPOINT OH (LAT 40 07 16 LONG 080 56 04)						
AUG , 1982 02...	1015	2800	39000	2000	40	72
400719080514400 - 051 FALL RN (55-5) NR BARTON OH (LAT 40 07 19 LONG 080 51 44)						
JUL , 1982 29...	1120	3300	22000	600	10	40
400728080524300 - 051 WHEELING C (55-7) AT MAYNARD OH (LAT 40 07 28 LONG 080 52 43)						
AUG , 1982 04...	1200	6700	29000	1800	50	77
400815080592700 - 051 CRABAPPLE C (55-15) AT UNIONTOWN OH (LAT 40 08 15 LONG 080 59 27)						
AUG , 1982 10...	1500	2900	7300	3000	40	57
400835080540900 - 051 COX RN (55-9) NR MAYNARD OH (LAT 40 08 35 LONG 080 54 09)						
AUG , 1982 17...	1045	2700	8200	1000	40	71

ANALYSES OF MISCELLANEOUS STATIONS

DATE	TIME	ALUMINUM, RECOV. FM BOTTOM MATERIAL (UG/G AS FE)	IRON, RECOV. FM BOTTOM MATERIAL (UG/G AS FE)	MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G AS FE)	NICKEL, RECOV. FM BOTTOM MATERIAL (UG/G AS NI)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN)
400915080581900 - 051 CAMPBELL RN (55-13) NR UNIONTOWN OH (LAT 40 09 15 LONG 080 58 19)						
AUG , 1982						
10...	1110	1900	6200	4600	70	70
400943081081500 - 051 TRAIL RN (49-3) AT HOLLOWAY OH (LAT 40 09 43 LONG 081 08 15)						
JUL , 1982						
26...	1145	3500	15000	1900	20	83
400944080442900 - 051 L SHORT C (56-9) NR TILTONSVILLE OH (LAT 40 09 44 LONG 080 44 29)						
AUG , 1982						
05...	1305	11000	43000	470	60	130
401021081075500 - 051 BOGGS F (49-2) AT HOLLOWAY OH (LAT 40 10 21 LONG 081 07 55)						
JUL , 1982						
26...	1430	2600	7500	3200	10	36
401038081510300 - 051 WILLS C (47-3) NR CONESVILLE OH (LAT 40 10 38 LONG 081 51 03)						
AUG , 1982						
03...	1000	9100	35000	5100	50	98
401120080425100 - 051 SHORT C (56-8) NR RAYLAND OH (LAT 40 11 20 LONG 080 42 51)						
AUG , 1982						
05...	1045	5100	2100	1200	40	100
401122081585400 - 051 MOSCOW BK (46-3) NR NEW MOSCOW OH (LAT 40 11 22 LONG 081 58 54)						
JUL , 1982						
20...	1100	4400	9400	2800	50	88
401126081121400 - 051 BOGGS F (49-1) AT PIEDMONT OH (LAT 40 11 26 LONG 081 12 14)						
JUL , 1982						
26...	0945	4100	18000	5100	40	98
401144080472700 - 051 SHORT C (56-7) AT DILLONVALE OH (LAT 40 11 44 LONG 080 47 27)						
AUG , 1982						
18...	0930	4700	19000	220	10	46
401201081573500 - 051 MILL F (46-2) NR NEW MOSCOW OH (LAT 40 12 01 LONG 081 57 35)						
JUL , 1982						
20...	1215	4100	15000	510	20	47
401211080462100 - 041 PINEY F AT DILLONVALE OH (LAT 40 12 11 LONG 080 46 21)						
AUG , 1982						
18...	1130	1500	5900	1400	30	39
401216081425200 - 051 WILLS C (47-2) AT PLAINFIELD OH (LAT 40 12 16 LONG 081 42 52)						
AUG , 1982						
26...	1240	3100	12000	1300	20	110

ANALYSES OF MISCELLANEOUS STATIONS

DATE	TIME	ALUMINUM, RECOV. FM BOTTOM MATERIAL (UG/G)	IRON, RECOV. FM BOTTOM MATERIAL (UG/G AS FE)	MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G)	NICKEL, RECOV. FM BOTTOM MATERIAL (UG/G AS NI)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN)
401253081564300 - 051 MILL F (46-1) NR NEW MOSCOW OH (LAT 40 12 53 LONG 081 56 43)						
JUL , 1982						
20...	1315	3300	14000	3200	20	74
401311081463100 - 051 BACON RN (47-1) NR PLAINFIELD OH (LAT 40 13 11 LONG 081 46 31)						
JUL , 1982						
20...	1545	6800	23000	690	10	46
401348080413700 - 051 RUSH RN (61-6) AT RUSH RN OH (LAT 40 13 48 LONG 080 41 37)						
AUG , 1982						
06...	0930	3800	14000	1000	30	89
401430080534300 - 051 N F SHORT C (56-3) NR ROBYVILLE OH (LAT 40 14 30 LONG 080 53 43)						
AUG , 1982						
09...	1435	12000	51000	3600	70	130
401437080580700 - 051 SALLY BUFFALO C (56-1) NR CADIZ OH (LAT 40 14 37 LONG 080 58 07)						
AUG , 1982						
09...	1115	2800	11000	1100	30	71
401444080433000 - 051 RUSH RN (61-5) NR RUSH RN OH (LAT 40 14 44 LONG 080 43 30)						
AUG , 1982						
06...	1230	3400	4900	2000	30	49
401445080393000 - 051 SALT RN (61-7) NR RUSH RN OH (LAT 40 14 45 LONG 080 39 30)						
AUG , 1982						
24...	1345	2200	4300	670	20	30
401619080510000 - 051 PINEY F (56-4) NR PINEY FORK OH (LAT 40 16 19 LONG 080 51 00)						
AUG , 1982						
16...	1300	5000	18000	4000	30	32
401621080553600 - 051 N,F SHORT C (56-2) AT UNIONVALE OH (LAT 40 16 21 LONG 080 55 36)						
AUG , 1982						
13...	1330	3700	16000	6500	60	100
401716080451300 - 051 MCINTYRE C (61-4) NR SMITHFIELD OH (LAT 40 17 16 LONG 080 45 13)						
AUG , 1982						
16...	1015	4600	16000	4800	60	93
401801080373200 - 051 GEORGES RN (61-9) NR MINGO JUNCTION OH (LAT 40 18 01 LONG 080 37 32)						
AUG , 1982						
12...	1115	2900	7500	410	20	82
401817080404800 - 051 CROSS C (61-3) NR NEW ALEXANDER OH (LAT 40 18 17 LONG 080 40 48)						
AUG , 1982						
12...	1345	3600	7700	1200	30	63

ANALYSES OF MISCELLANEOUS STATIONS

DATE	TIME	ALUMINUM, RECOV. FM BOTTOM MATERIAL (UG/G)	IRON, RECOV. FM BOTTOM MATERIAL (UG/G AS FE)	MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G)	NICKEL, RECOV. FM BOTTOM MATERIAL (UG/G AS NI)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN)
401857080391700 - 051 CROSS C (61-2) NR MINGO JUNCTION OH (LAT 40 18 57 LONG 080 39 17)						
AUG , 1982						
12...	1600	8700	13000	3700	60	210
402140080444900 - 051 CROSS C (61-8) NR WINTERSVILLE OH (LAT 40 21 40 LONG 080 44 49)						
AUG , 1982						
13...	1000	2300	7800	1500	20	33
402430081310400 - 051 OLDTOWN C (59-15) NR STONE CREEK OH (LAT 40 24 30 LONG 081 31 04)						
JUL , 1982						
30...	1300	3000	14000	2300	20	40
402535081215700 - 051 STILLWATER C (59-1) NR UHRICHSVILLE OH (LAT 40 25 35 LONG 081 21 57)						
AUG , 1982						
13...	1130	2700	9600	1600	10	53
402552081281100 - 051 OLDTOWN C (59-16) NR WAINWRIGHT OH (LAT 40 25 52 LONG 081 28 11)						
JUL , 1982						
23...	1450	3000	12000	2900	30	68
402715081300800 - 051 STONE C (59-13) NR NEW PHILADELPHIA OH (LAT 40 27 15 LONG 081 30 08)						
JUL , 1982						
30...	0915	5200	17000	810	20	85
402823080552300 - 051 YELLOW C (66-8) AT AMSTERDAM OH (LAT 40 28 23 LONG 080 55 23)						
AUG , 1982						
16...	1130	6700	11000	1500	20	110
402841081285900 - 051 STONE C (59-14) NR NEW PHILADELPHIA OH (LAT 40 28 41 LONG 081 28 59)						
AUG , 1982						
19...	0945	2500	21000	4900	20	49
402857081220300 - 051 BEAVERDAM C (59-17) NR MIDVALE OH (LAT 40 28 57 LONG 081 22 03)						
JUL , 1982						
30...	1030	2400	24000	1400	20	50
402950080493400 - 051 LONG RN (66-3) NR E SPRINGFIELD OH (LAT 40 29 50 LONG 080 49 34)						
AUG , 1982						
18...	1415	4900	5100	1800	10	21
403003081250600 - 051 BEAVERDAM C (59-12) NR NEW PHILADELPHIA OH (LAT 40 30 03 LONG 081 25 06)						
JUL , 1982						
21...	0915	4100	26000	2400	40	100
403045081291900 - 051 SUGAR C (59-3) AT DOVER OH (LAT 40 30 45 LONG 081 29 19)						
JUL , 1982						
20...	1030	8200	35000	12000	110	170

ANALYSES OF MISCELLANEOUS STATIONS

DATE	TIME	ALUMINUM, RECOV. FM BOTTOM MATERIAL (UG/G)	IRON, RECOV. FM BOTTOM MATERIAL (UG/G AS FE)	MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G)	NICKEL, RECOV. FM BOTTOM MATERIAL (UG/G AS NI)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN)
403049081163000 - 051 CONOTTON C (64-9) NR NEW CUMBERLAND OH (LAT 40 30 49 LONG 081 16 30)						
JUL , 1982						
22...	0945	3500	24000	2300	10	63
403103080453400 - 051 YELLOW C (66-4) NR NEW SOMERSET OH (LAT 40 31 03 LONG 080 45 34)						
AUG , 1982						
18...	1130	2100	31000	2200	40	100
403112081282400 - 051 TUSCARAWAS R (59-4) AT DOVER OH (LAT 40 31 12 LONG 081 28 24)						
AUG , 1982						
26...	0930	3400	20000	1400	70	570
403114080513900 - 051 YELLOW C (66-5) NR BERGHOLZ OH (LAT 40 31 14 LONG 080 51 39)						
AUG , 1982						
17...	1345	5700	22000	4000	30	98
403124081272600 - 051 UNAM TR (59-5) TO TUSCARAWAS R AT DOVER OH (LAT 40 31 24 LONG 081 27 26)						
JUL , 1982						
19...	1300	7700	38000	4800	70	120
403128080402700 - 051 HOLLOW ROCK RN (66-2) NR NEW SOMERSET OH (LAT 40 31 28 LONG 080 40 27)						
AUG , 1982						
20...	1245	4200	7200	1400	20	36
403230081182701 - 051 CONOTTON C (64-4) AT NEW CUMBERLAND OH (LAT 40 32 30 LONG 081 18 27)						
AUG , 1982						
16...	1530	6600	21000	660	30	130
403237081185200 - 051 DOG RN (64-7) AT NEW CUMBERLAND OH (LAT 40 32 37 LONG 081 18 52)						
JUL , 1982						
22...	1230	2500	18000	5300	30	57
403304081191600 - 051 UNAM TR (64-6) CONOTTON C NR NW CUMBRLND OH (LAT 40 33 04 LONG 081 19 16)						
JUL , 1982						
21...	1500	4200	42000	9300	60	85
403312080412900 - 051 YELLOW C (66-9) AT HAMMONDSVILLE OH (LAT 40 33 12 LONG 080 41 29)						
AUG , 1982						
24...	1000	2100	16000	1600	20	62
403316080403100 - 051 HOLLOW ROCK RN (66-10) NR HAMMONDSVILLE OH (LAT 40 33 16 LONG 080 40 31)						
AUG , 1982						
20...	1030	3200	6400	670	20	32
403345080423300 - 051 N F YELLOW C (66-1) AT HAMMONDSVILLE OH (LAT 40 33 45 LONG 080 42 33)						
AUG , 1982						
18...	1430	7000	21000	600	90	460

DATA COLLECTED AT OHIO ABANDONED MINE LAND SITES PROJECT--Continued

ANALYSES OF MISCELLANEOUS STATIONS

DATE	TIME	ALUMINUM, RECOV. FM BOTTOM MATERIAL (UG/G AS FE)	IRON, RECOV. FM BOTTOM MATERIAL (UG/G AS FE)	MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G)	NICKEL, RECOV. FM BOTTOM MATERIAL (UG/G AS NI)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN)
403420081181000 - 051 BEGGAR RN (64-5) NR NEW CUMBERLAND OH (LAT 40 34 20 LONG 081 18 10)						
JUL , 1982						
21...	1130	3200	7000	190000	80	90
403437081234300 - 051 TUSCARAWAS R (59-6) AT ZOARVILLE OH (LAT 40 34 37 LONG 081 23 43)						
JUL , 1982						
22...	1315	8300	26000	4700	140	750
403457081231200 - 051 CONOTTON C (64-1) AT ZOARVILLE OH (LAT 40 34 57 LONG 081 23 12)						
JUL , 1982						
22...	0930	8600	36000	850	50	94
403614081180700 - 051 HUFF RN (64-8) NR MINERAL CITY OH (LAT 40 36 14 LONG 081 18 07)						
JUL , 1982						
19...	1030	3200	34000	2000	30	70
403639080472200 - 051 N F YELLOW C (66-6) NR SALINEVILLE OH (LAT 40 36 39 LONG 080 47 22)						
AUG , 1982						
17...	1045	7600	11000	1100	50	130

The following tables contain chemical analyses from wells on South Bass Island. The data was collected as part of a cooperative study with the National Park Service.

413913082484600. Local number, O-21.
LOCATION.--Lat 41°39'13", long 82°48'46", Hydrologic Unit 04100010, at Perry's Monument on South Bass Island.
AQUIFER.--Limestone of Silurian Age.
WELL CHARACTERISTICS.--Drilled test well, diameter 8 in (0.20 m), depth 80 ft (24 m), cased to 8 ft (2.4 m).
DATUM.--Altitude of land-surface datum is 578 ft (176 m), from topographic map.

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	SPECIFIC CONDUCTANCE (UMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	HYDROGEN SULFIDE TOTAL (MG/L AS H2S)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	PERCENT SODIUM
JUN 11...	1130	940	7.3	11.5	.0	430	3	100	43	28	12

DATE	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE FET-FLD (MG/L AS HCO3)	ALKALINITY FIELD (MG/L AS CACO3)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)
JUN 11...	.6	11	520	427	42	100	34	.3	8.5	620	581

DATE	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS NO3)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS TOTAL (MG/L AS PO4)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, DISSOLVED (UG/L AS MN)	CARBON, ORGANIC TOTAL (MG/L AS C)
JUN 11...	.60	<.010	.40	1.0	4.4	.360	1.1	15	28	5.4

413916082484600. Local number O-20.
LOCATION.--Lat 41°39'16", long 82°48'46", Hydrologic Unit 04100010, at Perry's Monument on South Bass Island.
AQUIFER.--Limestone of Silurian Age.
WELL CHARACTERISTICS.--Drilled test well, diameter 6 in (0.15 m), depth 100 ft (30 m), cased to 25 ft (7.6 m).
DATUM.--Altitude of land-surface datum is 575 ft (175 m), from topographic map.

DATE	TIME	SPECIFIC CONDUCTANCE (UMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	HYDROGEN SULFIDE TOTAL (MG/L AS H2S)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	PERCENT SODIUM
JUN 10...	1500	1020	7.1	11.5	.0	430	0	90	49	53	21

DATE	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE FET-FLD (MG/L AS HCO3)	ALKALINITY FIELD (MG/L AS CACO3)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)
JUN 10...	1.2	3.4	530	435	67	120	49	.9	9.9	726

DATE	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS TOTAL (MG/L AS PO4)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, DISSOLVED (UG/L AS MN)	CARBON, ORGANIC TOTAL (MG/L AS C)
JUN 10...	636	<.10	.630	.07	.70	.020	.06	41	10	2.5

395123083003306. Local number, FR-121, M7.
LOCATION.--Lat 39°51'23", long 83°00'33", Hydrologic Unit 05060001, near Columbus.
AQUIFER.--Glacial clay, sand, and gravel of Quaternary Age.
WELL CHARACTERISTICS.--Drilled observation well, diameter 2 in (0.05 m), depth 45 ft (13.72 m).
DATUM.--Altitude of land-surface datum is 692 ft (210.92 m).

HIGHEST WATER LEVEL 6.71 FEET BELOW LAND SURFACE DATUM MAR 02, 1982.

LOWEST WATER LEVEL 15.15 FEET BELOW LAND SURFACE DATUM NOV 18, 1981.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 08, 1981	12.53	DEC 02, 1981	13.96	JAN 27, 1982	10.43	JUN 09, 1982	9.88
21	12.78	21	13.08	MAR 02	6.71	JUL 02	10.70
NOV 04	15.03	31	12.36	APR 02	7.08	AUG 09	12.18
18	15.15	JAN 14, 1982	10.14	MAY 04	9.54	SEP 07	12.86

395131082592400. Local number, FR-123, M9.
LOCATION.--LAT 39°51'31", long 82°59'24", Hydrologic Unit 05060001, near Hamilton Meadows.
AQUIFER.--Glacial sand and gravel of Quaternary Age.
WELL CHARACTERISTICS.--Drilled observation well, diameter 2 in (0.05 m), depth 36.5 ft (11.13 m).
DATUM.--Altitude of land-surface datum is 710 ft (216.41 m).

HIGHEST WATER LEVEL 7.06 FEET BELOW LAND SURFACE DATUM JUN 09, 1982.

LOWEST WATER LEVEL 8.59 FEET BELOW LAND SURFACE DATUM SEP 07, 1982.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
APR 13, 1982	7.15	JUN 09, 1982	7.06	AUG 09, 1982	8.16	SEP 07, 1982	8.59
MAY 04	7.36	JUL 02	7.57				

395008082593100. Local number, FR-126, M13.
LOCATION.--Lat 39°50'08", long 82°59'31", Hydrological Unit 05060001, near Shadeville.
AQUIFER.--Glacial clay and sand of Quaternary Age.
WELL CHARACTERISTICS.--Drilled observation well, diameter 2 in (0.05 m), depth 122 ft (37.18 m).
DATUM.--Altitude of land-surface datum is 695 ft (211.84 m).

HIGHEST WATER LEVEL 7.53 FEET BELOW LAND SURFACE DATUM OCT 06, 1981.

LOWEST WATER LEVEL 20.43 FEET BELOW LAND SURFACE DATUM JUN 09, 1982.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 06, 1981	7.53	DEC 02, 1981	9.81	JAN 27, 1982	11.61	JUN 09, 1982	20.43
21	8.15	21	10.47	MAR 02	12.30	JUL 02	18.55
NOV 04	8.73	31	10.78	APR 02	12.72	AUG 09	18.82
18	9.29	JAN 14, 1982	11.20	MAY 03	17.82	SEP 07	19.09

395059083000900. Local number, FR-122, M8.
LOCATION.--Lat 39°50'59", long 83°00'09", Hydrologic Unit 05060002 near Shadeville.
AQUIFER.--Glacial clay and sand of Quaternary Age.
WELL CHARACTERISTICS.--Drilled observation well, diameter 2 in (0.05 m), depth 104 ft (31.7 m).
DATUM.--Altitude of land-surface datum is 730 ft (222.5 m).

HIGHEST WATER LEVEL 37.30 FEET BELOW LAND SURFACE DATUM SEP 07, 1982.

LOWEST WATER LEVEL 94.64 FEET BELOW LAND SURFACE DATUM MAR 02, 1982.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 06, 1981	54.45	DEC 02, 1981	59.21	JAN 27, 1982	49.60	JUN 09, 1982	42.85
21	49.33	21	66.47	MAR 02	94.64	JUL 02	40.24
NOV 04	45.71	31	60.14	APR 02	64.36	AUG 09	38.04
18	43.14	JAN 14, 1982	53.79	MAY 04	50.38	SEP 07	37.30

395130083005700. Local number, FR-147.
LOCATION.--Lat 39°51'30", long 83°00'57", Hydrologic Unit 05060001, near Columbus.
AQUIFER.--Glacial sand and gravel of Quaternary Age.
WELL CHARACTERISTICS.--Drilled observation well, diameter 6 in (0.15 m), depth 79 ft (24.08 m).
DATUM.--Altitude of land-surface datum is 685 ft (208.79 m).

HIGHEST WATER LEVEL 4.42 FEET BELOW LAND SURFACE DATUM APR 02, 1982.

LOWEST WATER LEVEL 13.01 FEET BELOW LAND SURFACE DATUM SEP 09, 1982.

WATER LEVELS IN FFET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 06, 1981	9.48	DEC 21, 1981	9.57	APR 02, 1982	4.42	SEP 07, 1982	9.74
21	9.61	31	7.86	MAY 04	8.00	09	13.01
NOV 04	9.30	JAN 14, 1982	7.27	JUN 09	7.72		
18	9.55	27	6.17	JUL 02	8.09		
DEC 02	8.76	MAR 02	4.76	AUG 09	9.42		

395027082585600. Local number, TH-83, M15
LOCATION.--Lat 39°50'27", long 82°58'56", Hydrologic Unit 05060001, near Hamilton Meadows.
AQUIFER.--Glacial sand and gravel of Quaternary Age.
WELL CHARACTERISTICS.--Drilled observation well, diameter 8 in (0.20 m), depth 64 ft (19.74 m).
DATUM.--Altitude of land-surface datum is 707 ft (218.03 m).

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17.55	18.22				---	14.74	16.12	16.34	16.36	16.88	---
2	17.62	18.24				16.08	14.78	16.18	16.34	16.36	16.92	---
3	17.65	18.26				16.12	14.73	16.22	16.30	16.27	16.97	---
4	17.66	18.27				16.12	14.87	16.28	16.32	16.11	17.00	---
5	17.69	18.28				16.13	14.88	16.31	16.32	16.06	17.00	---
6	17.72	18.31				16.07	14.99	16.34	16.32	16.12	17.03	---
7	17.74	18.34				16.05	15.04	16.39	16.34	16.14	17.06	17.11
8	17.77	18.37				16.11	15.04	16.42	16.31	16.10	17.09	17.15
9	17.79	18.40				16.17	15.15	16.44	16.29	16.07	17.12	17.18
10	17.82	18.40				16.15	15.16	16.47	16.26	16.04	17.16	17.23
11	17.85	18.41				16.17	15.21	16.50	16.26	16.13	17.19	17.28
12	17.88	18.43				16.10	15.23	16.54	16.23	16.21	17.22	17.33
13	17.90	18.44				15.81	15.34	16.58	16.31	16.26	17.25	17.36
14	17.91	18.45				15.69	15.37	16.62	16.34	16.30	17.29	17.39
15	17.94	18.46				15.61	15.40	16.65	16.36	16.33	17.32	17.37
16	17.97	18.49				15.43	15.43	16.69	16.37	16.37	18.74	17.36
17	17.97	18.52				15.06	15.51	16.72	16.35	16.42	17.67	17.37
18	18.01	18.54				15.00	15.54	16.75	16.32	16.44	22.42	17.42
19	18.04	---				14.86	15.53	16.78	16.35	16.44	---	17.45
20	18.04	---				14.56	15.64	16.79	16.35	16.51	---	17.51
21	18.06	---				14.30	15.68	16.78	16.36	16.55	---	17.54
22	18.03	---				14.24	15.73	16.77	16.39	16.57	---	17.57
23	18.04	---				14.16	15.75	16.74	16.42	16.59	---	17.61
24	18.05	---				14.09	15.77	16.62	16.43	16.60	---	17.61
25	18.07	---				14.17	15.80	16.64	16.43	16.64	---	17.53
26	18.08	---				14.24	15.86	16.68	16.44	16.67	---	17.27
27	18.12	---				14.40	15.96	16.71	16.44	16.70	---	16.97
28	18.14	---				14.44	16.00	16.75	16.41	16.68	---	16.77
29	18.16	---				14.49	16.04	16.77	16.38	16.72	---	16.67
30	18.19	---				14.53	16.07	16.51	16.35	16.77	---	17.15
31	18.20	---				14.67	---	16.39	---	16.82	---	---
MAX	18.20	18.54				16.17	16.07	16.79	16.44	16.82	22.42	17.61

WTR YR 1982 MEAN 16.66 HIGH 14.09 LOW 22.42

395042082585800. Local number, FR 115, TH 74.
LOCATION.--Lat 39°50'42", long 82°58'58", Hydrologic Unit 05060001, near Hamilton Meadows.
AQUIFER.--Glacial sand and gravel of Quaternary Age.
WELL CHARACTERISTICS.--Drilled observation well, diameter 6 in (0.15 m), depth 120 ft (36.58 m).
DATUM.--Altitude of land-surface datum is 730 ft (222.50 m).

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1								---	43.10	43.38	43.71	44.04
2								---	43.10	43.36	43.74	---
3								---	43.07	43.16	43.76	---
4								43.65	43.09	43.05	43.83	---
5								43.68	43.11	43.07	43.79	---
6								43.70	43.14	43.11	43.84	---
7								43.08	43.16	43.13	43.86	---
8								42.68	43.13	43.09	43.89	---
9								42.68	43.17	43.04	43.93	---
10								42.68	43.13	42.99	43.95	---
11								43.15	43.13	43.12	43.99	---
12								43.30	43.08	43.17	44.02	---
13								43.43	43.19	43.20	44.05	---
14								43.44	43.20	43.24	44.09	---
15								43.50	43.20	43.30	44.12	---
16								43.54	43.20	43.34	44.54	---
17								43.55	43.15	43.36	44.37	---
18								43.56	43.12	43.37	46.10	---
19								43.57	43.19	43.36	46.64	---
20								43.57	43.19	43.43	45.63	---
21								43.57	43.24	43.47	45.07	---
22								43.56	43.31	43.50	44.86	---
23								43.54	43.37	43.52	44.69	---
24								43.42	43.38	43.52	44.63	---
25								43.44	43.38	43.54	44.51	---
26								43.50	43.40	43.55	44.44	---
27								43.52	43.40	43.57	44.25	---
28								43.55	43.38	43.53	44.19	---
29								43.55	43.35	43.57	44.10	---
30								43.10	43.38	43.64	44.02	---
31								43.12	---	43.68	44.04	---
MAX								43.70	43.40	43.68	46.64	44.04

WTR YR 1982 MEAN 43.58 HIGH 42.68 LOW 46.64

395117083011600. Local number, FR-120, M6.
LOCATION.--Lat 39°51'17", long 83°01'16", Hydrologic Unit 05060001, near Columbus.
AQUIFER.--Glacial sand and gravel of Quaternary Age.
WELL CHARACTERISTICS.--Drilled observation well, diameter 2 in (0.05 m), depth 72 ft (21.94 m).
DATUM. --Altitude of land-surface datum is 685 ft (208.79 m).

WATER LEVEL, IN FEET ABOVE OR BELOW (-) LAND SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	-5.30	-5.47	-5.11	---		---	-1.04	---	-2.00	-4.10	-5.21	-5.59
2	-5.39	-5.45	-5.10	---		---	-0.79	---	-2.09	-4.01	-5.23	-5.59
3	-5.40	-5.50	-5.08	---		---	-0.32	-3.59	-2.37	-4.01	-5.27	-5.43
4	-5.40	-5.51	-4.99	-3.96		---	-0.31	-3.65	-2.57	-4.09	-5.28	-5.48
5	-5.43	-5.49	-5.04	-3.55		-0.12	-0.41	-3.71	-2.76	-4.16	-5.22	-5.55
6	-5.48	-5.52	-5.07	-1.18		.18	-0.67	-3.77	-2.97	-4.06	-5.27	-5.59
7	-5.50	-5.54	-5.07	-1.11		1.13	-0.85	-3.84	-3.12	-4.02	-5.29	-5.62
8	-5.53	-5.55	-5.22	-1.33		.71	-1.05	-3.85	-3.26	-4.07	-5.30	---
9	-5.52	-5.60	-5.27	-1.91		-0.03	-1.16	-3.89	-3.38	-4.18	-5.35	---
10	-5.43	-5.60	-5.72	-2.53		-0.46	-1.15	-3.94	-3.39	-4.27	-5.37	---
11	-5.50	-5.62	-5.73	-3.06		-0.66	-1.02	-3.98	-3.37	-4.40	-5.37	---
12	-5.53	-5.65	-5.75	-3.21		-0.42	-0.81	-4.01	-3.34	-4.48	-5.41	---
13	-5.56	-5.65	---	-3.38		-0.19	-0.70	-4.06	-3.24	-4.52	-5.42	---
14	-5.57	-5.65	---	-3.56		.66	-0.69	-4.11	-3.29	-4.59	-5.43	---
15	-5.57	-5.65	---	-3.73		.67	-0.89	-4.16	-3.40	-4.63	-5.44	---
16	-5.58	-5.66	---	-4.04		.37	-1.16	-4.22	-3.41	-4.68	-5.46	-6.13
17	-5.54	-5.71	---	-4.19		---	-1.52	-4.27	-3.27	-4.72	-5.49	-7.33
18	-5.58	-5.75	---	-4.21		---	-1.62	-4.33	-2.95	-4.75	-5.49	-6.23
19	-5.65	-5.74	---	-4.37		---	-1.80	-4.35	-2.58	-4.78	-5.52	-6.20
20	-5.65	-5.57	---	-4.45		---	-2.09	-4.34	-2.73	-4.87	-5.52	-10.06
21	-5.70	-5.55	-5.16	-4.60		---	-2.24	-4.17	-3.04	-4.89	-5.56	-10.54
22	-5.68	-5.55	-4.67	-4.60		---	-2.44	-4.15	-3.22	-4.93	-5.56	-7.65
23	-5.72	-5.50	-3.94	-4.32		---	-2.57	-3.37	-3.36	-4.95	-5.57	-7.10
24	-5.72	-5.43	-3.67	-2.88		---	-2.68	-3.06	-3.44	-4.98	-5.58	-6.83
25	-5.70	-5.43	-3.77	-2.72		---	-2.82	-3.09	-3.59	-5.01	-5.53	-6.68
26	-5.70	-5.38	-4.05	-2.72		---	-3.00	-3.28	-3.74	-5.04	-5.53	-6.63
27	-5.70	-5.41	-4.13	-2.66		---	-3.10	-3.39	-3.85	-5.05	-5.53	-6.53
28	-5.73	-5.40	-3.99	---		---	-3.20	-3.41	-3.90	-5.09	-5.58	-6.47
29	-5.73	-5.35	---	---		-1.05	-3.52	-3.25	-3.93	-5.12	-5.58	-6.44
30	-5.72	-5.25	---	---		-1.14	-3.54	-2.01	-4.09	-5.13	-5.58	-6.42
31	-5.58	---	---	---		-1.18	---	-1.94	---	-5.17	-5.59	---
MAX	-5.30	-5.25	-3.67	-1.11		1.13	-0.31	-1.94	-2.00	-4.01	-5.21	-5.43

WTR YR 1982 MEAN -4.18 MAX 1.13 MIN -10.54

395020083003700. Local number, FR 104, TM 73.
LOCATION.--Lat 39°50'20", long 83°00'37", Hydrological Unit 05060001, near Shadeville.
AQUIFER.--Glacial sand and gravel of Quaternary Age.
WELL CHARACTERISTICS.--Drilled observation well, diameter 6 in (0.15 m), depth 68 ft (20.7 m).
DATUM.--Altitude of land-surface datum is 685 ft (208.79 m).

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1											---	9.59
2											---	9.60
3											---	9.45
4											---	9.51
5											---	9.57
6											---	9.61
7											---	9.69
8											---	9.99
9											---	11.00
10											---	10.13
11											---	10.10
12											---	10.06
13											---	10.05
14											---	16.08
15											---	16.94
16											---	11.90
17											9.57	11.17
18											9.57	10.83
19											9.59	10.66
20											9.59	10.51
21											9.60	10.41
22											9.62	10.33
23											9.62	10.27
24											9.62	10.21
25											9.57	10.17
26											9.53	10.13
27											9.52	10.09
28											9.51	10.02
29											9.53	10.00
30											9.57	10.13
31											9.59	---
MAX											9.62	16.94

WTR YR 1982 MEAN 10.26 HIGH 9.45 LOW 16.94

395058083002400. Local number Fr-119, M5.
LOCATION.--Lat 39°50'58", long 83°00'24", Hydrologic Unit 05060001, near Shadeville.
AQUIFER.--Glacial clay, sand, and gravel of Quaternary Age.
WELL CHARACTERISTICS.--Drilled observation well, diameter 2 in (0.05 m), depth 85 ft (25.9 m).
DATUM.--Altitude of land-surface datum is 700 ft (213.36 m).

HIGHEST WATER LEVEL 12.97 FEET BELOW LAND SURFACE DATUM MAR 02, 1982.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 06, 1981	18.74	NOV 18, 1981	18.97	DEC 31, 1981	18.10	MAR 02, 1982	12.97
21	18.89	DEC 02	18.78	JAN 14, 1982	16.69	APR 05	13.56
NOV 04	18.87	21	18.92	27	16.71	26	15.32

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1							---	15.89	16.16	16.94	18.08	18.81
2							---	16.00	16.07	17.01	18.12	18.87
3							---	16.07	16.01	17.00	18.12	18.87
4							---	16.20	15.99	17.04	18.17	18.87
5							---	16.26	16.03	17.08	18.19	18.88
6							---	16.33	16.10	17.10	18.21	18.89
7							---	16.40	16.16	17.11	18.23	19.27
8							---	16.48	16.21	17.12	18.26	20.88
9							---	16.54	16.31	17.15	18.30	21.09
10							---	16.58	16.36	17.19	18.32	21.04
11							---	16.64	16.37	17.24	18.35	20.74
12							---	16.69	16.39	17.30	18.36	20.47
13							---	16.74	16.39	17.36	18.39	20.27
14							---	16.79	16.39	17.41	18.42	20.14
15							---	16.87	16.43	17.46	18.44	20.02
16							---	16.89	16.43	17.50	18.46	19.97
17							---	16.96	16.43	17.55	18.48	19.94
18							---	17.01	16.43	17.59	18.52	19.90
19							---	17.06	16.41	17.63	18.56	19.90
20							---	17.11	16.35	17.68	18.61	19.86
21							---	17.14	16.35	17.71	18.65	19.85
22							---	17.14	16.42	17.74	18.66	19.85
23							---	17.05	16.49	17.78	18.69	19.85
24							---	16.86	16.55	17.82	18.69	19.85
25							---	16.83	16.59	17.82	18.72	19.85
26							15.42	16.77	16.63	17.89	18.73	19.85
27							15.50	16.75	16.72	17.93	18.73	19.84
28							15.62	16.75	16.78	17.95	18.75	19.84
29							15.70	16.75	16.84	17.99	18.77	19.82
30							15.79	16.40	16.89	18.02	18.77	19.81
31							---	16.30	---	18.05	18.79	---
MAX							15.79	17.14	16.89	18.05	18.79	21.09

WTR YR 1982 MEAN 17.69 LOW 21.09

NOTE: NUMBER OF MISSING DAYS OF RECORD EXCEEDED 20% OF YEAR

395006083013600. Local number, FR-116, M1.
LOCATION.--Lat 39°50'06", long 83°01'36", Hydrologic Unit 05060001, near Shadeville.
AQUIFER.--Glacial sand and gravel of Quaternary Age.
WELL CHARACTERISTICS.--Drilled observation well, diameter 2 in (0.05 m), depth 62 ft (18.90 m).
DATUM.--Altitude of land-surface datum is 725 ft (220.98 m).

HIGHEST WATER LEVEL 22.18 FEET BELOW LAND SURFACE DATUM APR 14, 1982.

LOWEST WATER LEVEL 24.61 FEET BELOW LAND SURFACE DATUM SEP 07, 1982.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
APR 14, 1982	22.18	JUN 09, 1982	22.99	AUG 09, 1982	24.19	SEP 07, 1982	24.61
MAY 04	23.08	JUL 02	23.41				

395016083010300. Local number, FR-117, M2
LOCATION.--Lat 39°50'16", long 83°01'03", Hydrologic Unit 05060001, near Shadeville.
AQUIFER.--Glacial clay, sand, and gravel of Quaternary Age.
WELL CHARACTERISTICS.--Drilled observation well, diameter 2 in (0.05 m), depth 45 ft (13.72 m).
DATUM.--Altitude of land-surface datum is 700 ft (213.36 m).

HIGHEST WATER LEVEL 13.84 FEET BELOW LAND SURFACE DATUM APR 02, 1982.

LOWEST WATER LEVEL 16.65 FEET BELOW LAND SURFACE DATUM DEC 21, 1981.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 06, 1981	16.00	DEC 21, 1981	16.65	APR 02, 1982	13.84	AUG 09, 1982	15.36
21	16.26	31	16.03	26	14.22	SEP 07	15.81
NOV 04	16.29	JAN 14, 1982	16.09	MAY 04	14.63		
18	16.45	27	15.73	JUN 09	14.38		
DEC 02	16.14	MAR 02	14.17	JUL 02	14.72		

395126083014000. Local number, FR-131, M18.
LOCATION.--Lat 39°51'26", long 83°01'40", Hydrologic Unit 05060001, near Columbus.
AQUIFER.--Glacial Clay, sand, and gravel of Quaternary Age.
WELL CHARACTERISTICS.--Drilled observation well, diameter 2 in (0.05 m), depth 53 ft (16.15 m).
DATUM.--Altitude of land-surface datum is 727 ft (221.59 m).

HIGHEST WATER LEVEL 40.83 FEET BELOW LAND SURFACE DATUM APR 02, 1982.

LOWEST WATER LEVEL 43.87 FEET BELOW LAND SURFACE DATUM JAN 27, 1982.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 06, 1981	42.33	DEC 02, 1981	43.61	JAN 27, 1982	43.87	JUN 09, 1982	41.35
21	42.79	21	43.80	MAR 02	42.23	JUL 02	41.65
NOV 04	43.10	31	43.80	APR 02	40.83	AUG 09	42.58
18	43.38	JAN 14, 1982	43.70	MAY 03	41.11	SEP 07	43.34

395132083001200. Local number, FR-73.
LOCATION.--Lat 39°51'32", long 83°00'12", Hydrological Unit 05060001, near Columbus.
AQUIFER.--Glacial sand and gravel of Quaternary Age.
WELL CHARACTERISTICS.--Drilled water-supply well, diameter 12 in (0.30 m), depth unknown.
DATUM.--Altitude of land-surface datum is 735 ft (224.03 m).

HIGHEST WATER LEVEL 41.02 FEET BELOW LAND SURFACE DATUM OCT 06, 1981.

LOWEST WATER LEVEL 42.59 FEET BELOW LAND SURFACE DATUM JAN 27, 1982.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 06, 1981	41.02	DEC 02, 1981	41.96	JAN 27, 1982	42.59	JUN 09, 1982	41.08
21	41.27	21	42.36	MAR 02	41.88	JUL 02	41.29
NOV 04	41.53	31	42.40	APR 02	41.42	AUG 09	41.77
18	41.84	JAN 14, 1982	42.57	MAY 04	41.26	SEP 07	42.23

395153083002900. Local number, FR-74.
LOCATION.--Lat 39°51'53", long 83°00'29", Hydrological Unit 05060001, near Columbus.
AQUIFER.--Glacial sand and gravel of Quaternary Age.
WELL CHARACTERISTICS.--Drilled water-supply well, diameter 8 in (0.20 m), depth 80 ft (24.38 m).
DATUM.--Altitude of land-surface datum is 730 ft (222.50 m).

HIGHEST WATER LEVEL 27.38 FEET BELOW LAND SURFACE DATUM APR 02, 1982.

LOWEST WATER LEVEL 34.62 FEET BELOW LAND SURFACE DATUM DEC 21, 1981.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 06, 1981	33.15	DEC 02, 1981	34.45	JAN 27, 1982	32.54	JUN 09, 1982	30.44
21	33.58	21	34.62	MAR 02	27.84	JUL 02	31.18
NOV 04	33.95	31	34.45	APR 02	27.38	AUG 09	33.85
18	34.24	JAN 14, 1982	32.85	MAY 04	29.27	SEP 07	33.82

394954083002800. Local number, FR-106.
LOCATION.--Lat 39°49'54", long 83°00'28", Hydrological Unit 05060001, near Shadeville.
AQUIFER.--Glacial sand and gravel of Quaternary Age.
WELL CHARACTERISTICS.--Drilled observation well, diameter 6 in (0.15 m), depth 75 ft (22.86 m).
DATUM.--Altitude of land-surface datum is 687 ft (209.4 m).

HIGHEST WATER LEVEL 1.28 FEET BELOW LAND SURFACE DATUM MAR 24, 1982.

LOWEST WATER LEVEL 7.82 FEET BELOW LAND SURFACE DATUM DEC 21, 1981.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 06, 1981	7.13	DEC 21, 1981	7.82	MAR 24, 1982	1.28	AUG 09, 1982	7.24
21	7.37	31	6.73	APR 02	2.60	SEP 07	7.61
NOV 04	7.39	JAN 14, 1982	6.53	MAY 04	5.30		
18	7.60	27	6.00	JUN 09	5.82		
DEC 02	7.22	MAR 02	3.26	JUL 02	6.03		

The following tables contain water-level measurements from a network of wells in southern Franklin County. The data was collected as part of a cooperative study with the city of Columbus for evaluating ground-water resources.

395037082591600. Local number, FR-36.
LOCATION.--Lat 39°50'37", long 82°59'16", Hydrologic Unit 05060001, near Hamilton Meadows.
AQUIFER.--Glacial sand and gravel of Quaternary Age.
WELL CHARACTERISTICS.--Drilled observation well, diameter 4 in (0.10 m), depth 31 ft (9.56m).
DATUM.--Altitude of land-surface datum is 717 ft (221.12 m).

HIGHEST WATER LEVEL 12.66 FEET BELOW LAND SURFACE DATUM APR 02, 1982.

LOWEST WATER LEVEL 15.16 FEET BELOW LAND SURFACE DATUM NOV 18, 1981.

WATER LEVELS IN FFET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 06, 1981	14.20	DEC 02, 1981	15.14	JAN 27, 1982	13.79	JUN 09, 1982	13.31
21	14.52	21	14.57	MAR 02	12.90	JUL 02	13.21
NOV 04	15.03	31	14.20	APR 02	12.66	AUG 09	13.57
18	15.16	JAN 14, 1982	14.13	MAY 04	13.40	SEP 07	13.74

395114082592600. Local number, FR-46.
LOCATION.--Lat 39°51'14", long 82°59'26", Hydrologic Unit 05060001, near Hamilton Meadows.
AQUIFER.--Glacial sand and gravel of Quaternary Age.
WELL CHARACTERISTICS.--Drilled domestic well, diameter 6 in (0.15 m), depth 38 ft (11.58 m).
DATUM.--Altitude of land-surface datum is 724 ft (220.68 m).

HIGHEST WATER LEVEL 22.51 FEET BELOW LAND SURFACE DATUM JUN 09, 1982.

LOWEST WATER LEVEL 24.70 FEET BELOW LAND SURFACE DATUM JAN 14, 1982.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 06, 1981	22.88	DEC 02, 1981	24.21	JAN 27, 1982	24.18	JUN 09, 1982	22.51
21	23.25	21	24.55	MAR 02	23.34	JUL 02	22.93
NOV 04	23.59	31	24.58	APR 02	22.63	AUG 09	23.42
18	23.90	JAN 14, 1982	24.70	MAY 04	22.68	SEP 07	23.99

FRANKLIN COUNTY

The following tables contain water-level measurements and chemical analyses from a network of wells, and miscellaneous surface-water quality analyses in Southern Franklin County. The data was collected as part of a cooperative study with the City of Columbus to evaluate the effects of several landfills on the chemical quality of the ground-water and surface-water systems just south of Columbus, Ohio.

GROUND-WATER RECORDS

FRANKLIN COUNTY

395218083023900. Local number, FR-133.
LOCATION.--Lat 39°52'18", long 83°02'39", Hydrologic Unit 0506001, on White Road near Grove City, Ohio
Owner: City of Columbus.
AQUIFER.--Gravel of Quaternary Age.
WELL CHARACTERISTICS.--Drilled observation water well, diameter 2 in (5.08 cm), depth 82 ft (24.9 m), cased to 82 ft (24.9 m), finish: 4.0 ft (1.22 m) of 0.80 in (2.0 cm) well screen.
DATUM.--Altitude of land-surface datum is 680 ft (207.26 m). Measuring point: Top of casing, 0.0 ft (0.0 m) above land-surface datum.
PERIOD OF RECORD.--April 1977 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level 49.05 ft (14.95 m) below land surface datum, April 1, 1980; lowest, 55.5 ft (16.92 m) below land-surface datum, Sept 16, 1982.

HIGHEST WATER LEVEL 53.61 FEET BELOW LAND SURFACE DATUM JUN 08, 1982.

LOWEST WATER LEVEL 55.50 FEET BELOW LAND SURFACE DATUM SEP 16, 1982.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JUN 08, 1982	53.61	JUL 14, 1982	54.37	AUG 12, 1982	55.05	SEP 16, 1982	55.50

395238083015500. Local number, FR-204
LOCATION.--Lat 39°52'38", long 83°01'55", Hydrologic Unit 05060001, on Stringtown Road near Grove City, Ohio.
Owner: C Evans.
AQUIFER.--Sand and Gravel of Quaternary Age.
WELL CHARACTERISTICS.--Drilled domestic water well, diameter 5 in (12.7 cm), depth 73.7 ft (22.46 m).
DATUM.--Altitude of land-surface datum is 740 ft (225.55 m). Measuring point: Top of casing, 0.0 ft (0.0 m) above land-surface datum.
PERIOD OF RECORD.--June 1979 to current year.
EXTREMES FOR PERIOD OF RECORD.-- Highest water level, 68.06 ft (20.74 m) below land-surface datum, June 25, 1979; lowest, 72.27 ft (22.03 m) below land-surface datum, Sept. 16, 1982.

HIGHEST WATER LEVEL 69.91 FEET BELOW LAND SURFACE DATUM JUN 09, 1982.

LOWEST WATER LEVEL 72.27 FEET BELOW LAND SURFACE DATUM SEP 16, 1982.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JUN 09, 1982	69.91	JUL 14, 1982	70.72	AUG 12, 1982	71.60	SEP 16, 1982	72.27

395206083014501. Local number, FR-209.
LOCATION.--Lat 39°52'06", long 83°01'45", Hydrologic Unit 05060001, on White Road near Grove City, Ohio.
Owner: M. Davis.
AQUIFER.--Sand and gravel of Quaternary Age.
WELL CHARACTERISTICS.--Drilled domestic water well, diameter 5 in (12.7 cm) depth unknown.
DATUM.-- Altitude of land-surface datum is 700 ft (213.36 m). Measuring point: Top of casing, 0.72 ft (0.22 m) above land-surface datum.
PERIOD OF RECORD.--June 1979 to current year.
EXTREMES FOR PERIOD OF RECORD.-- Highest water level, 13.51 ft (4.12 m) below land-surface datum, June 8, 1982; lowest, 15.52 ft (4.73 m) below land-surface datum, Sept. 17, 1982.

HIGHEST WATER LEVEL 13.51 FEET BELOW LAND SURFACE DATUM JUN 08, 1982.

LOWEST WATER LEVEL 15.52 FEET BELOW LAND SURFACE DATUM SEP 17, 1982.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JUN 08, 1982	13.51	JUL 14, 1982	14.26	AUG 12, 1982	15.00	SEP 17, 1982	15.52

FRANKLIN COUNTY

395314083015600. Local number, FR-201
LOCATION.--Lat 39°53'14", long 83°01'56", Hydrologic Unit 05060001, on Thrailkill Road near Columbus, Ohio.
Owner: Mason-Dixon Truck Lines
AQUIFER.--Glacial Gravel of Quaternary Age.
WELL CHARACTERISTICS.--Drilled commercial water well, diameter 4.25 in (10.79 cm), depth 84 ft (25.60 m), cased to 84 ft (25.60 m).
DATUM.--Altitude of land-surface datum is 731 ft (222.80 m).!Measuring point: Top of casing, 1.03 ft (0.31 m) above land surface datum.
PERIOD OF RECORD.--June 1979 to curent year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 66.97 ft (20.41 m) below land-surface datum, June 25, 1979; lowest, 73.18 ft (22.30 m) below land-surface datum, Sept. 16, 1982.

HIGHEST WATER LEVEL 72.02 FEET BELOW LAND SURFACE DATUM JUN 08, 1982.

LOWEST WATER LEVEL 73.18 FEET BELOW LAND SURFACE DATUM SEP 16, 1982.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JUN 08, 1982	72.02	JUL 14, 1982	72.35	AUG 12, 1982	72.73	SEP 16, 1982	73.18

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	SPECIFIC CONDUCTANCE (UMHOS)	PH (UNITS)	TEMPERATURE, AIR (DEG C)	TEMPERATURE (DEG C)	HYDROGEN SULFIDE TOTAL (MG/L AS H2S)	OXYGEN DEMAND, CHEMICAL (HIGH LEVEL) (MG/L)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)
APR 09...	0955	860	7.1	5.0	12.0	.0	12	.0	430	69	103

DATE	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE FET-FLD (MG/L AS HCO3)	ALKALINITY FIELD (MG/L AS CACO3)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)
APR 09...	42	27	12	.6	2.1	440	361	53	200	3.6	1.6

DATE	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS NH4)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	PHOSPHORUS, DISSOLVED (MG/L AS P)	ARSENIC DISSOLVED (UG/L AS AS)	CADMIUM DISSOLVED (UG/L AS CD)
APR 09...	14	637	599	.10	.610	.79	.00	.61	.010	7	<1

DATE	CHROMIUM, HEXAVALENT, DIS. (UG/L AS CR)	IRON, DISSOLVED (UG/L AS FE)	LEAD, DISSOLVED (UG/L AS PB)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	NICKEL, DISSOLVED (UG/L AS NI)	ZINC, DISSOLVED (UG/L AS ZN)	CARBON, ORGANIC DISSOLVED (MG/L AS C)	CYANIDE TOTAL (MG/L AS CN)	PHENOLS (UG/L)	METHYLENE BLUE ACTIVE SUBSTANCE (MG/L)
APR 09...	8	1600	1	35	.1	3	36	1.3	<.01	<1	<1.0

FRANKLIN COUNTY

395314083021900. Local number FR-202
LOCATION.--Lat.39°53'14", long 83°02'19", Hydrologic Unit 05060001, on Thrailkill Road near Columbus, Ohio
Owner: D.W. Himes
AQUIFER.--Limestone of Silurian age.
WELL CHARACTERISTICS.-- Drilled domestic water well, diameter 5 in (12.7 cm), depth 220 ft (67.06 m), cased to 139 ft (42.37 m).
DATUM.--Altitude of land-surface datum is 752 ft(229.21 m). Measuring point: Top of casing, 1.17 ft (0.36 m) above land-surface datum.
PERIOD OF RECORD.--June 1979 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 66.17 ft (20.17 m) below land-surface datum, June 25, 1979; lowest, 73.56 ft (22.42 m) below land-surface datum, Sept. 16, 1982.

HIGHEST WATER LEVFL 71.58 FEET BELOW LAND SURFACE DATUM JUN 08, 1982.

LOWEST WATER LEVEL 73.56 FEET BELOW LAND SURFACE DATUM SEP 16, 1982.

WATER LEVELS IN FFET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JUN 08, 1982	71.58	JUL 14, 1982	72.29	AUG 12, 1982	73.00	SEP 16, 1982	73.56

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	SPECIFIC CONDUCTANCE (UMHOS)	PH (UNITS)	TEMPERATURE, AIR (DEG C)	TEMPERATURE (DEG C)	HYDROGEN SULFIDE TOTAL (MG/L AS H2S)	OXYGEN DEMAND, CHEMICAL (HIGH LEVEL) (MG/L)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)
APR 09...	1200	901	6.8	5.0	11.5	.3	25	.0	430	100	101

DATE	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE FET-FLD (MG/L AS HCO3)	ALKALINITY FIELD (MG/L AS CACO3)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)
APR 09...	43	28	12	.6	2.4	400	328	96	220	2.3	1.8

DATE	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS NH4)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	PHOSPHORUS, DISSOLVED (MG/L AS P)	ARSENIC DISSOLVED (UG/L AS AS)	CADMIUM DISSOLVED (UG/L AS CD)
APR 09...	11	661	597	.10	.740	.95	.00	.74	.010	1	<1

DATE	CHROMIUM, HEXAVALENT, DIS. (UG/L AS CR)	IRON, DISSOLVED (UG/L AS FE)	LEAD, DISSOLVED (UG/L AS PB)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	NICKEL, DISSOLVED (UG/L AS NI)	ZINC, DISSOLVED (UG/L AS ZN)	CARBON, ORGANIC DISSOLVED (MG/L AS C)	CYANIDE TOTAL (MG/L AS CN)	PHENOLS (UG/L)	METHYLENE BLUE ACTIVE SUBSTANCE (MG/L)
APR 09...	<1	1300	3	11	.1	2	5	1.1	<.01	1	<1.0

FRANKLIN COUNTY

395206083014901. Local number FR-210
LOCATION.--Lat 39°52'06", long 83°01'49", Hydrologic Unit 05060001, on White Road near Grove City, Ohio.
Owner: J. Carducci.
AQUIFER.--Sand and gravel of Quaternary age.
WELL CHATERISTICS.--Drilled domestic water well, diameter 5 in (12.7 cm) depth unknown.
DATUM.-- Altitude of land-surface datum is 707 ft (215.49 m). Measuring point: Top of casing, 0.45 ft. (0.14 m) above land-surface datum.
PERIOD OF RECORD.-- June 1979 to current year.
EXTREMES FOR PERIOD OF RECORD.-- Highest water level, 20.72 ft; (6.32 m) below land-surface datum, June 27, 1979; lowest, 23.15 ft (7.06 m) below land-surface datum, Sept. 16,1982.

HIGHEST WATER LEVEL 21.07 FEET BELOW LAND SURFACE DATUM JUN 14, 1982.

LOWEST WATER LEVEL 23.15 FEET BELOW LAND SURFACE DATUM SEP 16, 1982.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JUN 14, 1982	21.07	JUL 14, 1982	21.84	AUG 22, 1982	22.47	SEP 16, 1982	23.15

395213083022101. Local number FR-212
LOCATION.--Lat 39°52'13", long 83°02'21", Hydrologic Unit 05060001, on White Road near Grove City, Ohio.
Owner: J. Seidenschmidt.
AQUIFER.--Sand and gravel of Quaternary Age.
WELL CHARACTERISTICS.--Drilled domestic water well, diameter 4.25 in (10.8 cm) depth unknown
DATUM.--Altitude of land surface datum is 752 ft (229.21 m).Measuring point: Top of casing, 0.8 ft (0.24 m) above land-surface datum.
PERIOD OF RECORD.--June 1979 to current year.
EXTREMES FOR PERIOD OF RECORD.-- Highest water level, 62.82 ft (19.15 m) below land-surface datum; June 27, 1979; lowest, 67.24 ft (20.49 m) below land-surface datum, Sept. 16, 1982.

HIGHEST WATER LEVEL 65.26 FEET BELOW LAND SURFACE DATUM JUN 08, 1982.

LOWEST WATER LEVEL 67.24 FEET BELOW LAND SURFACE DATUM SEP 16, 1982.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JUN 08, 1982	65.26	JUL 14, 1982	65.93	AUG 12, 1982	66.64	SEP 16, 1982	67.24

FRANKLIN COUNTY

395315083020002. Local number FR-213
LOCATION.--Lat 39°53'15", long 83°02'00", Hydrologic Unit 05060001, on Thrailkill Road near Columbus, Ohio.
Owner: Tom Cannon Co.
AQUIFER.--Gravel of Quaternary Age.
WELL CHARACTERISTICS.--Drilled domestic water well, diameter 5 in (12.7 cm), depth 97 ft (29.56 m), cased to 97 ft (29.56 m).
DATUM.--Altitude of land-surface datum is 731 ft (222.80 m). Measuring point: Top of casing, 0.8 ft (0.24 m) above land-surface datum.
PERIOD OF RECORD.--June 1982
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 71.38 ft (21.75 m) below land-surface datum, June 8, 1982; lowest, 72.60 ft (22.13 m) below land-surface datun, Sept. 16, 1982.

HIGHEST WATER LEVEL 71.38 FEET BELOW LAND SURFACE DATUM JUN 08, 1982.

LOWEST WATER LEVEL 72.60 FEET BELOW LAND SURFACE DATUM SEP 16, 1982.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JUN 08, 1982	71.38	JUL 14, 1982	71.75	AUG 12, 1982	72.10	SEP 16, 1982	72.60

395409083013201. Local number FR-217
LOCATION.--Lat 39°54'09", long 83°01'32", Hydrologic Unit 05060001, on Dyer Road near Columbus, Ohio
Owner: J.Strawser
AQUIFER.--Sand and Gravel of Quaternary Age.
WELL CHARACTERISTICS.--Drilled domestic water well, diameter 4.25 in (10.8 cm), depth 93 ft (28.34 m), cased to 93 ft (28.34 m).
DATUM.--Altitude of land-surface is 712 ft (217.02 m). Measuring point: Top of casing, 1.12 ft (0.34 m) above land-surface datum.
PERIOD OF RECORD.--July 1979 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 36.38 ft (11.09 m) below land-surface datum, July 1, 1979; lowest, 57.40 ft (17.49 m) below land-surface datum, Sept. 16, 1982.

HIGHEST WATER LEVEL 56.37 FEET BELOW LAND SURFACE DATUM JUL 14, 1982.

LOWEST WATER LEVEL 57.40 FEET BELOW LAND SURFACE DATUM SEP 16, 1982.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JUN 07, 1982	53.62	JUL 14, 1982	56.37	AUG 12, 1982	57.06	SEP 16, 1982	57.40

FRANKLIN COUNTY

395334083012800 Local number FR-223
LOCATION.--Lat 39°53'34", long 83°01'28", Hydrologic unit 05060001, in American Aggregates Quarry near Columbus, Ohio
PERIOD OF RECORD.--July 1979 to current year.
REMARKS.--This site is a point of ground-water seepage and is used for chemical quality sampling only, as part of a cooperative study with the City of Columbus.

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	SPECIFIC CONDUCTANCE (UMHOS)	PH (UNITS)	TEMPERATURE, AIR (DEG C)	TEMPERATURE (DEG C)	HYDROGEN SULFIDE TOTAL (MG/L AS H2S)	OXYGEN DEMAND, CHEMICAL (HIGH LEVEL) (MG/L)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)
APR 12...	1320	920	7.3	13.5	12.5	.0	17	.0	470	110	122

DATE	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE FET-FLD (MG/L AS HCO3)	ALKALINITY FIELD (MG/L AS CACO3)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)
APR 12...	41	24	10	.5	2.4	440	361	34	190	37	.4

DATE	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS NH4)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	PHOSPHORUS, DISSOLVED (MG/L AS P)	ARSENIC DISSOLVED (UG/L AS AS)	CADMIUM DISSOLVED (UG/L AS CD)
APR 12...	12	675	640	.10	.120	.15	.08	.20	<.010	1	<1

DATE	CHROMIUM, HEXAVALENT, DIS. (UG/L AS CR)	IRON, DISSOLVED (UG/L AS FE)	LEAD, DISSOLVED (UG/L AS PB)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	NICKEL, DISSOLVED (UG/L AS NI)	ZINC, DISSOLVED (UG/L AS ZN)	CARBON, ORGANIC DISSOLVED (MG/L AS C)	CYANIDE TOTAL (MG/L AS CN)	PHENOLS (UG/L)	METHYLENE BLUE ACTIVE SUBSTANCE (MG/L)
APR 12...	<1	470	2	93	.1	2	6	1.3	<.01	<1	<.10

FRANKLIN COUNTY

395409083015001. Local number, FR-224
LOCATION.--Lat 39°54'09", long 83°01'50", Hydrologic Unit 05060001, on Dyer Road near Columbus, Ohio.
Owner: H. Barnes.
AQUIFER.--Sand and gravel of Quaternary Age.
WELL CHARACTERISTICS.--Drilled domestic water well, diameter 5.5 in (13.9 cm), depth 78 ft (23.77 m), cased to 78 ft (23.77 m).
DATUM.--Altitude of land-surface datum is 721 ft (219.76 m). Measuring point: Top of casing, 0.69 ft (0.21 m) above land-surface datum.
PERIOD OF RECORD.--July 1979 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 44.72 ft (13.63 m) below land-surface datum, July 11,1979; lowest, 64.18 ft (19.56 m) below land-surface datum, Sept 16, 1982.

HIGHEST WATER LEVEL 62.19 FEET BELOW LAND SURFACE DATUM JUL 14, 1982.

LOWEST WATER LEVEL 64.18 FEET BELOW LAND SURFACE DATUM SEP 16, 1982.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JUN 07, 1982	61.20	JUL 14, 1982	62.19	AUG 12, 1982	63.05	SEP 16, 1982	64.18

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	SPECIFIC CONDUCTANCE (UMHOS)	PH (UNITS)	TEMPERATURE, AIR (DEG C)	TEMPERATURE (DEG C)	HYDROGEN SULFIDE TOTAL (MG/L AS H2S)	OXYGEN DEMAND, CHEMICAL (HIGH LEVEL) (MG/L)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)
APR 08...	0900	730	7.0	6.0	11.0	.0	45	.0	270	7	71

DATE	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE FET-FLD (MG/L AS HCO3)	ALKALINITY FIELD (MG/L AS CACO3)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)
APR 08...	23	45	26	1.3	3.0	320	262	47	81	60	.3

DATE	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS NH4)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	PHOSPHORUS, DISSOLVED (MG/L AS P)	ARSENIC DISSOLVED (UG/L AS AS)	CADMIUM DISSOLVED (UG/L AS CD)
APR 08...	11	451	440	.10	.060	.08	.06	.12	<.010	1	<1

DATE	CHROMIUM, HEXAVALENT, DIS. (UG/L AS CR)	IRON, DISSOLVED (UG/L AS FE)	LEAD, DISSOLVED (UG/L AS PB)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	NICKEL, DISSOLVED (UG/L AS NI)	ZINC, DISSOLVED (UG/L AS ZN)	CARBON, ORGANIC DISSOLVED (MG/L AS C)	CYANIDE TOTAL (MG/L AS CN)	PHENOLS (UG/L)	METHYLENE BLUE ACTIVE SUBSTANCE (MG/L)
APR 08...	<1	880	3	75	.1	<1	82	1.0	<.01	<1	<.10

FRANKLIN COUNTY

395348083022701 Local number FR-227
LOCATION.--Lat 39°53'48", long 83°02'27", Hydrologic Unit 05060001, on Lazar Road near Columbus, Ohio
Owner: J. Johnson.
AQUIFER.--Limestone of Silurian and Devonian Age.
WELL CHARACTERISTICS.--Drilled domestic water well, diameter 5 in (12.7 cm), depth 260 ft (79.25 m), cased to 93 ft (28.35 m).
DATUM.--Altitude of land-surface datum is 748 ft (227.99 m). Measuring point: Top of casing, 1.56 ft (0.48 m) above land-surface datum.
PERIOD OF RECORD.--July 1979 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 61.98 ft (18.89 m) below land-surface datum, July 11, 1979; lowest, 70.29 ft (21.42 m) below land-surface datum, Sept. 16, 1982

HIGHEST WATER LEVEL 69.21 FEET BELOW LAND SURFACE DATUM JUL 14, 1982.

LOWEST WATER LEVEL 70.29 FEET BELOW LAND SURFACE DATUM SEP 16, 1982.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JUN 07, 1982	69.01	JUL 14, 1982	69.21	AUG 12, 1982	69.62	SEP 16, 1982	70.29

0395350083030001 Local number FR-230
LOCATION.--Lat 39°53'50", long 83°03'00", Hydrologic Unit 05060001, on Marlane Drive near Grove City, Ohio.
Owner:J. Kendrick.
AQUIFER.--Sand and gravel of Quaternary Age.
WELL CHARACTERISTICS.--Drilled domestic water well, diameter 6.0 in (15.2 cm), depth unknown.
DATUM.--Altitude of land-surface datum is 760 ft (231.65 m). Measuring point: Top of casing, 1.2 ft (0.36 m) above land-surface datum.
PERIOD OF RECORD.--July 1979 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 69.50 ft (21.18 m) below land-surface datum, July 11, 1979; lowest, 76.73 ft (23.39 m) below land-surface datum, Sept. 17, 1982.

HIGHEST WATER LEVEL 75.80 FEET BELOW LAND SURFACE DATUM JUL 14, 1982.

LOWEST WATER LEVEL 76.73 FEET BELOW LAND SURFACE DATUM SEP 17, 1982.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JUN 08, 1982	75.40	JUL 14, 1982	75.80	AUG 12, 1982	76.37	SEP 17, 1982	76.73

FRANKLIN COUNTY

395413083021301. Local number FR-234.
LOCATION.--Lat 39°54'13", long 83°02'13", Hydrologic Unit 05060001, on Brown Road near Columbus, Ohio.
Owner: H Koontz.
AQUIFER.--Limestone of Devonian Age.
WELL CHARACTERISTICS.--Drilled domestic water well, diameter 4 in (10.2 cm), depth 108 ft (32.92 m). cased to 80 ft (24.38 m).
DATUM.--Altitude of land-surface datum is 733 ft (223.42 m). Measuring point: top of casing, 1.32 ft (0.40 m) above land-surface datum.
PERIOD OF RECORD.--July 1979 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 55.69 ft (16.97 m) below land-surface datum, July 12, 1979; lowest, 70.06 ft (21.35 m) below land-surface datum, Sept. 16, 1982.

HIGHEST WATER LEVEL 68.63 FEET BELOW LAND SURFACE DATUM JUL 15, 1982.

LOWEST WATER LEVEL 70.06 FEET BELOW LAND SURFACE DATUM SEP 16, 1982.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JUN 07, 1982	68.74	JUL 15, 1982	68.63	AUG 12, 1982	69.34	SEP 16, 1982	70.06

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	SPECIFIC CONDUCTANCE (UMHOS)	PH (UNITS)	TEMPERATURE, AIR (DEG C)	TEMPERATURE (DEG C)	HYDROGEN SULFIDE TOTAL (MG/L AS H2S)	OXYGEN DEMAND, CHEMICAL (HIGH LEVEL) (MG/L)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)
APR 08...	1105	764	7.1	6.1	12.5	.0	47	.0	330	0	73

DATE	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE FET-FLD (MG/L AS HCO3)	ALKALINITY FIELD (MG/L AS CACO3)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)
APR 08...	35	18	11	.5	1.8	410	336	40	97	27	.8

DATE	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS NH4)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	PHOSPHORUS, DISSOLVED (MG/L AS P)	ARSENIC DISSOLVED (UG/L AS AS)	CADMIUM DISSOLVED (UG/L AS CD)
APR 08...	9.2	494	419	.10	.380	.49	.00	.38	.040	3	<1

DATE	CHROMIUM, HEXAVALENT, DIS. (UG/L AS CR)	IRON, DISSOLVED (UG/L AS FE)	LEAD, DISSOLVED (UG/L AS PB)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	NICKEL, DISSOLVED (UG/L AS NI)	ZINC, DISSOLVED (UG/L AS ZN)	CARBON, ORGANIC DISSOLVED (MG/L AS C)	CYANIDE TOTAL (MG/L AS CN)	PHENOLS (UG/L)	METHYLENE BLUE ACTIVE SUBSTANCE (MG/L)
APR 08...	<1	1500	1	44	.1	3	9	.5	<.01	<1	<.10

FRANKLIN COUNTY

395250083014101 Local number, FR-236
LOCATION--Lat 39°52'50", long 83°01'41", Hydrologic Unit 05060001, on S.R. 104 near Grove City, Ohio.
Owner: S.B. Riegle.
AQUIFER.--Sand and gravel of Quaternary Age.
WELL CHARACTERISTICS.--Drilled domestic water well, diameter 4.25 in (10.8 cm), depth 95 ft (28.96 m), cased to 95 ft (28.96 m).
DATUM.--Altitude of land-surface datum is 718 ft (218.85 m). Measuring point: Top of casing, 1.05 ft (0.32 m) above land-surface datum.
PERIOD OF RECORD.--July 1979 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 54.47 ft (16.60 m) below land-surface datum, July 6, 1979; lowest, 58.42 ft (17.80 m) below land-surface datum, Sept. 16, 1982.

HIGHEST WATER LEVEL 57.11 FEET BELOW LAND SURFACE DATUM JUL 14, 1982.

LOWEST WATER LEVEL 58.42 FEET BELOW LAND SURFACE DATUM SEP 16, 1982.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JUN 08, 1982	58.09	JUL 14, 1982	57.11	AUG 12, 1982	57.80	SEP 16, 1982	58.42

395407083021500. Local number FR-237
LOCATION.-- Lat 39° 54'07", long 83°02'15", Hydrologic Unit 05060001, on Brown Road near Columbus Ohio
Owner: E Baugess
AQUIFER.--Limestone of Devonian Age.
WELL CHARACTERISTICS.--Drilled domestic water well, diameter 5.75 in (14.6 cm), depth 114 ft (34.75 m), cased to 96 ft (29.26 m).
DATUM.--Altitude of land-surface is 735 ft (224.03). Measuring point: Top of casing, 1.7 ft (0.52 m) above land-surface datum.
PERIOD OF RECORD.--October 1981 to September 1982.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 74.01 ft (22.56 m) below land-surface datum, June 7, 1982; lowest 75.83 ft (23.11 m) below land-surface datum, Sept. 16, 1982

HIGHEST WATER LEVEL 74.01 FEET BELOW LAND SURFACE DATUM JUN 07, 1982.

LOWEST WATER LEVEL 75.83 FEET BELOW LAND SURFACE DATUM SEP 16, 1982.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JUN 07, 1982	74.01	JUL 14, 1982	74.88	AUG 12, 1982	74.94	SEP 16, 1982	75.83

FRANKLIN COUNTY

395333083020700. Local number FR-241.
LOCATION.--Lat 39°53'33", long 83°02'07", Hydrologic Unit 05060001, at Model Landfill Inc. near Columbus Ohio
Owner: Model Landfill Inc.
AQUIFER.--Clay and cobbles of Quaternary Age.
WELL CHARACTERISTICS.--Drilled observation water well, diameter 4.5 in (11.4 cm), depth 80 ft (24.38 m), cased to 60 ft (18.29 m), finish is 20.0 ft (6.09 m) of slotted screen.
DATUM.--Altitude of land-surface is 740 ft (225.55 m). Measuring point: Top of casing, 3.01 ft (0.92 m) above land-surface datum.
PERIOD OF RECORD.--August 1979 to current year.
EXTREEMES FOR PERIOD OF RECORD.--Highest water level, 43.43 ft (13.24 m) below land-surface datum, June 8, 1982; lowest, 49.72 ft (15.15 m) below land-surface datum, Sept. 16, 1982.

HIGHEST WATER LEVEL 43.43 FEET BELOW LAND SURFACE DATUM JUN 08, 1982.

LOWEST WATER LEVEL 49.72 FEET BELOW LAND SURFACE DATUM SEP 16, 1982.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JUN 08, 1982	43.43	JUL 15, 1982	47.87	AUG 12, 1982	49.23	SEP 16, 1982	49.72

FRANKLIN COUNTY

395319083012800. Local number FR-242
LOCATION.--Lat 39°53'19", long 83°01'28", Hydrologic Unit 05060001, at Model Landfill near Columbus, Ohio.
Owner: Model Landfill Inc.
AQUIFER.--Sand and gravel of Quaternary Age.
WELL CHARACTERISTICS.--Drilled observation water well, diameter 6.0 in (15.24 cm), depth 68 ft (20.73 m), cased to 68 ft (20.73 m).
DATUM.--Altitude of land-surface datum is 705 ft (214.88 m). Measuring point: Top of casing, 0.94 ft (2.39 cm) above land-surface datum.
PERIOD OF RECORD.--May 1982 to September 1982.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 53.44 ft (16.29 m) below land-surface datum, April 13, 1982: lowest,55.93 ft (17.05 m) below land-surface datum, Sept.16, 1982.

HIGHEST WATER LEVEL 53.44 FEET BELOW LAND SURFACE DATUM APR 13, 1982.

LOWEST WATER LEVEL 55.93 FEET BELOW LAND SURFACE DATUM SEP 16, 1982.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
APR 13, 1982	53.44	JUN 07, 1982	54.63	AUG 12, 1982	55.51	SEP 16, 1982	55.93

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	SPECIFIC CONDUCTANCE (UMHOS)	PH (UNITS)	TEMPERATURE, AIR (DEG C)	TEMPERATURE (DEG C)	HYDROGEN SULFIDE TOTAL (MG/L AS H2S)	OXYGEN DEMAND, CHEMICAL (HIGH LEVEL) (MG/L)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)
APR 13...	1000	1530	6.3	15.0	13.0	.0	<10	.0	560	130	164

DATE	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE FET-FLD (MG/L AS HCO3)	ALKALINITY FIELD (MG/L AS CACO3)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)
APR 13...	36	78	23	1.5	3.1	520	427	418	100	110	.2

DATE	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS NH4)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	PHOSPHORUS, DISSOLVED (MG/L AS P)	ARSENIC DISSOLVED (UG/L AS AS)	CADMIUM DISSOLVED (UG/L AS CD)
APR 13...	16	1320	766	<.10	.480	.62	.05	.53	<.010	2	<1

DATE	CHROMIUM, HEXAVALENT, DIS. (UG/L AS CR)	IRON, DISSOLVED (UG/L AS FE)	LEAD, DISSOLVED (UG/L AS PB)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	NICKEL, DISSOLVED (UG/L AS NI)	ZINC, DISSOLVED (UG/L AS ZN)	CARBON, ORGANIC DISSOLVED (MG/L AS C)	CYANIDE TOTAL (MG/L AS CN)	PHENOLS (UG/L)	METHYLENE BLUE ACTIVE SUBSTANCE (MG/L)
APR 13...	<1	800	7	1000	.1	11	21	1.1	<.01	<1	.10

FRANKLIN COUNTY

395351083013700. Local number, FR-244
LOCATION.--Lat 39°53'51", long 83°01'37", Hydrologic Unit 05060001, at Model Landfill near Columbus, Ohio.
Owner: Model Landfill Inc.
AQUIFER.--Sand and gravel of Quaternary Age.
WELL CHARACTERISTICS.--Drilled observation well, diameter 4.5 in (11.4 cm), depth 75 ft (22.9 m), cased to 55 ft (16.76 m), finish is 20.0 ft (6.09 m) of slotted screen.
DATUM.--Altitude of land-surface datum is 700 ft (213.36 m). Measuring point: Top of casing, 3.63 ft (1.10 m) above land-surface datum.
PERIOD OF RECORD.--August 1979 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 41.89 ft (12.77 m) below land surface datum, Oct. 18, 1979; lowest, 59.42 ft (18.11 m) below land surface datum, Sept. 16, 1982.

HIGHEST WATER LEVEL 56.44 FEET BELOW LAND SURFACE DATUM JUN 07, 1982.

LOWEST WATER LEVEL 59.42 FEET BELOW LAND SURFACE DATUM SEP 16, 1982.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JUN 07, 1982	56.44	JUL 15, 1982	57.68	AUG 12, 1982	58.45	SEP 16, 1982	59.42

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	SPECIFIC CONDUCTANCE (UMHOS)	PH (UNITS)	TEMPERATURE, AIR (DEG C)	TEMPERATURE (DEG C)	HYDROGEN SULFIDE TOTAL (MG/L AS H2S)	OXYGEN DEMAND, CHEMICAL (HIGH LEVEL) (MG/L)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)
APR 13...	1245	801	7.0	15.0	13.5	.0	<10	.0	330	51	89

DATE	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE FET-FLD (MG/L AS HCO3)	ALKALINITY FIELD (MG/L AS CACO3)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)
APR 13...	26	51	25	1.3	3.1	340	279	53	74	67	.2

DATE	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS NH4)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	PHOSPHORUS, DISSOLVED (MG/L AS P)	ARSENIC DISSOLVED (UG/L AS AS)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, HEXAVALENT, DIS. (UG/L AS CR)
APR 13...	10	494	483	<.10	.030	.04	<.10	<.010	2	<1	<1

DATE	IRON, DISSOLVED (UG/L AS FE)	LEAD, DISSOLVED (UG/L AS PB)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	NICKEL, DISSOLVED (UG/L AS NI)	ZINC, DISSOLVED (UG/L AS ZN)	CARBON, ORGANIC DISSOLVED (MG/L AS C)	CYANIDE TOTAL (MG/L AS CN)	PHENOLS (UG/L)	METHYLENE BLUE ACTIVE SUBSTANCE (MG/L)
APR 13...	410	1	170	<.1	2	8	.4	<.01	1	<.01

FRANKLIN COUNTY

395331083013900. Local number, Fr-246.
LOCATION.--Lat 39°53'31", long 83°01'39", Hydrologic Unit 05060001, at Model Landfill, near Columbus, Ohio.
Owner: Model Landfill, Inc.
AQUIFER.--Limestone of Devonian Age.
WELL CHARACTERISTICS.--Drilled commercial water well, diameter 4.0 in (10.2 cm), depth 142 ft (43.28 m), cased to 89 ft (27.1 m).
DATUM.--Altitude of land-surface datum is 722 ft (220.06 m). Measuring point: Top of casing, 0.0 ft (0.0 m) above land-surface datum.
PERIOD OF RECORD.--October 1979 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 104.40 ft (31.82 m) below land-surface datum, Oct. 18, 1979; lowest, 114.38 ft (34.86 m) below land-surface datum, Sept. 16, 1982.

HIGHEST WATER LEVEL 111.47 FEET BELOW LAND SURFACE DATUM JUN 07, 1982.

LOWEST WATER LEVEL 114.38 FEET BELOW LAND SURFACE DATUM SEP 16, 1982.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JUN 07, 1982	111.47	AUG 12, 1982	112.98	SEP 16, 1982	114.38

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	SPECIFIC CONDUCTANCE (UMHOS)	PH (UNITS)	TEMPERATURE, AIR (DEG C)	TEMPERATURE (DEG C)	HYDROGEN SULFIDE TOTAL (MG/L AS H2S)	OXYGEN DEMAND, CHEMICAL (HIGH LEVEL) (MG/L)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)
APR 12...	1045	1020	6.7	13.5	12.5	.0	<10	.0	510	26	136

DATE	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE FET-FLD (MG/L AS HCO3)	ALKALINITY FIELD (MG/L AS CACO3)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)
APR 12...	41	32	12	.7	2.6	590	484	171	190	18	1.0

DATE	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS NH4)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	PHOSPHORUS, DISSOLVED (MG/L AS P)	ARSENIC DISSOLVED (UG/L AS AS)	CADMIUM DISSOLVED (UG/L AS CD)
APR 12...	16	765	705	.10	.810	1.0	.00	.81	.010	3	<1

DATE	CHROMIUM, HEXAVALENT, DIS. (UG/L AS CR)	IRON, DISSOLVED (UG/L AS FE)	LEAD, DISSOLVED (UG/L AS PB)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	NICKEL, DISSOLVED (UG/L AS NI)	ZINC, DISSOLVED (UG/L AS ZN)	CARBON, ORGANIC DISSOLVED (MG/L AS C)	CYANIDE TOTAL (MG/L AS CN)	PHENOLS (UG/L)	METHYLENE BLUE ACTIVE SUBSTANCE (MG/L)
APR 12...	<1	3200	1	390	.1	3	29	1.6	<.01	1	<.10

FRANKLIN COUNTY

395451083005000. Local number, Fr-247.
LOCATION.--Lat 39°54'51", long 83°00'50", Hydrologic Unit 05060001, on SR 104 near Columbus Ohio.
Owner: Inland Products Inc.
AQUIFER.--Sand and gravel of Quaternary Age.
WELL CHARACTERISTICS.--Drilled commercial well, diameter 26 in (66.0 cm), depth 83 ft (25.29 m), cased to 43 ft (13.10 m), finish is 20 ft (6.10 m) of slotted screen.
DATUM.--Altitude of land-surface datum is 695 ft (211.84 m). Measuring point: Top of casing, 2.2 ft (0.67 m) above land-surface datum.
PERIOD OF RECORD.--August 1979 to currrent year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 12.24 ft (3.73 m) below land-surface datum, Aug. 9, 1979; lowest, 19.25 ft (5.87 m) below land-surface datum, Sept. 16, 1982.

HIGHEST WATER LEVEL 14.34 FEET BELOW LAND SURFACE DATUM JUN 07, 1982.

LOWEST WATER LEVEL 19.25 FEET BELOW LAND SURFACE DATUM SEP 16, 1982.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JUN 07, 1982	14.34	JUL 14, 1982	18.33	SEP 16, 1982	19.25

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	SPECIFIC CONDUCTANCE (UMHOS)	PH (UNITS)	TEMPERATURE, AIR (DEG C)	TEMPERATURE (DEG C)	HYDROGEN SULFIDE TOTAL (MG/L AS H2S)	OXYGEN DEMAND, CHEMICAL (HIGH LEVEL) (MG/L)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)
APR 13...	1510	2710	7.2	14.5	17.0	.0	73	.0	560	0	140

DATE	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE FET-FLD (MG/L AS HCO3)	ALKALINITY FIELD (MG/L AS CACO3)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)
APR 13...	51	380	59	7.0	15	700	574	65	82	520	.3

DATE	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS NH4)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	PHOSPHORUS, DISSOLVED (MG/L AS P)	ARSENIC DISSOLVED (UG/L AS AS)	CADMIUM DISSOLVED (UG/L AS CD)
APR 13...	11	1970	1520	<.10	19.0	24	.00	19	<.010	1	1

DATE	CHROMIUM, HEXAVALENT, DIS. (UG/L AS CR)	IRON, DISSOLVED (UG/L AS FE)	LEAD, DISSOLVED (UG/L AS PB)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	NICKEL, DISSOLVED (UG/L AS NI)	ZINC, DISSOLVED (UG/L AS ZN)	CARBON, ORGANIC DISSOLVED (MG/L AS C)	CYANIDE TOTAL (MG/L AS CN)	PHENOLS (UG/L)	METHYLENE BLUE ACTIVE SUBSTANCE (MG/L)
APR 13...	<1	580	1	720	<.1	9	10	5.7	<.01	1	.20

395458083011600. Local number. FR-248
LOCATION.--Lat 39°54'58", long 83°01'16" , Hydrologic unit 05060001, on Frank Road near Columbus, Ohio
Owner: Agg-Rok Inc.
AQUIFER.--Gravel of Quaternary Age.
WELL CHARACTERISTICS.--Drilled commercial water well, diameter 4.25 in (10.8 cm), depth 63 ft (19.20 m), cased to 63 ft (19.20 m).
DATUM.--Altitude of land-surface datum is 698 ft (212.75 m) Measuring point: Top of casing, 3.21 ft (0.98 m) below land-surface datum.
PERIOD OF RECORD.--August 1979 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 24.23 ft (7.38 m) below land-surface datum, Aug. 21, 1979: lowest, 38.91 ft (11.86 m) below land-surface datum, Sept. 16, 1982.

HIGHEST WATER LEVFL 35.36 FEET BELOW LAND SURFACE DATUM JUN 07, 1982.

LOWEST WATER LEVEL 38.91 FEET BELOW LAND SURFACE DATUM SEP 16, 1982.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JUN 07, 1982	35.36	JUL 15, 1982	37.04	AUG 12, 1982	38.19	SEP 16, 1982	38.91

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	SPECIFIC CONDUCTANCE (UMHOS)	PH (UNITS)	TEMPERATURE, AIR (DEG C)	TEMPERATURE (DEG C)	HYDROGEN SULFIDE TOTAL (MG/L AS H2S)	OXYGEN DEMAND, CHEMICAL (HIGH LEVEL) (MG/L)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)
APR 07...	1425	771	7.4	5.1	12.5	.0	23	.0	320	25	73

DATE	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE FET-FLD (MG/L AS HCO3)	ALKALINITY FIELD (MG/L AS CACO3)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)
APR 07...	33	43	23	1.2	2.5	360	295	22	100	36	.8

DATE	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS NH4)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	PHOSPHORUS, DISSOLVED (MG/L AS P)	ARSENIC DISSOLVED (UG/L AS AS)	CADMIUM DISSOLVED (UG/L AS CD)
APR 07...	11	490	470	.10	.150	.19	.06	.21	.010	1	<3

DATE	CHROMIUM, HEXAVALENT, DIS. (UG/L AS CR)	IRON, DISSOLVED (UG/L AS FE)	LEAD, DISSOLVED (UG/L AS PB)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	NICKEL, DISSOLVED (UG/L AS NI)	ZINC, DISSOLVED (UG/L AS ZN)	CARBON, ORGANIC DISSOLVED (MG/L AS C)	CYANIDE TOTAL (MG/L AS CN)	PHENOLS (UG/L)	METHYLENE BLUE ACTIVE SUBSTANCE (MG/L)
APR 07...	<1	2000	4	69	.1	1	14	3.1	<.01	<1	.10

SURFACE-WATER RECORDS

395316083013300 SCIOTO BIG RUN AT COLUMBUS, OH

LOCATION.--Lat 39°53'16", long 83°01'33", Franklin County, Hydrologic Unit 05060001, right bank, 0.83 mi (1.34 km) downstream of Marsh Run and 0.68 mi (1.09 km) upstream from confluence with Scioto River at Columbus, Ohio.
PERIOD OF RECORD:--May 1979 to current year.
REMARKS.--This site is used for chemical quality sampling only as part of a cooperative study with the City of Columbus.

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	ALUMINUM, RECOV. FM BOTTOM MATERIAL (UG/G)	ARSENIC TOTAL IN BOTTOM MATERIAL (UG/G AS AS)	BORON, RECOV. FM BOTTOM MATERIAL (UG/G AS B)	CADMIUM RECOV. FM BOTTOM MATERIAL (UG/G AS CD)	CHROMIUM, RECOV. FM BOTTOM MATERIAL (UG/G)	COBALT, RECOV. FM BOTTOM MATERIAL (UG/G AS CO)	COPPER, RECOV. FM BOTTOM MATERIAL (UG/G AS CU)
SEP 03...	1500	1900	4	<10	3	10	50	23

DATE	IRON, RECOV. FM BOTTOM MATERIAL (UG/G AS FE)	LEAD, RECOV. FM BOTTOM MATERIAL (UG/G AS PB)	MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G)	MERCURY RECOV. FM BOTTOM MATERIAL (UG/G AS HG)	SELENIUM, TOTAL IN BOTTOM MATERIAL (UG/G)	STRONTIUM, RECOV. FM BOTTOM MATERIAL (UG/G)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN)
SEP 03...	6200	50	380	<.01	<1	120	78

FRANKLIN COUNTY

395254083010700. Local number FR-253
LOCATION.--Lat 39°52'54", long 83°01'07", Hydrologic Unit 05060001, at Scioto River and I-270 E near Columbus, Ohio.
Owner: American Aggregates Corp.
AQUIFER.--Sand and Gravel of Quaternary Age.
WELL CHARACTERISTICS.--Drilled observation water well, diameter 2 in (5.08 cm), depth 50 ft (15.24 m), cased to 40 ft (12.19 m), finish is 10 ft (3.05 m) 0.010 in (0.025 cm) slot screen.
DATUM.--Altitude of land-surface datum is 691 ft (210.62 m). Measuring point: Top of casing, 3.0 ft (0.91 m) above land-surface datum.
PERIOD OF RECORD.--May 1982 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 20.13 ft (6.40 m) below land-surface datum, June 8, 1982; lowest, 23.95 ft (7.29 m) below land-surface datum, Sept. 16, 1982.

HIGHEST WATER LEVEL CANNOT BE DETERMINED BECAUSE OF SITE STATUS.

LOWEST WATER LEVEL CANNOT BE DETERMINED BECAUSE OF SITE STATUS.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
MAY 06, 1982	22.40	JUN 03, 1982	21.03	JUN 30, 1982	23.36	AUG 13, 1982	23.40
20	22.00	08	21.85	JUL 15	23.01		

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	SPECIFIC CONDUCTANCE (UMHOS)	PH (UNITS)	TEMPERATURE, AIR (DEG C)	TEMPERATURE (DEG C)	HYDROGEN SULFIDE TOTAL (MG/L AS H2S)	OXYGEN DEMAND, CHEMICAL (HIGH LEVEL) (MG/L)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)
JUN 30...	0900	690	7.1	24.5	8.4	.0	42	.0	330	110	94

DATE	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE FET-FLD (MG/L AS HCO3)	ALKALINITY FIELD (MG/L AS CACO3)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)
JUN 30...	23	22	13	.6	2.5	270	221	32	120	35	.5

DATE	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS NH4)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	PHOSPHORUS, DISSOLVED (MG/L AS P)	ARSENIC DISSOLVED (UG/L AS AS)	CADMIUM DISSOLVED (UG/L AS CD)
JUN 30...	7.3	507	430	<.10	.500	.64	.10	.60	.200	2	<1

DATE	CHROMIUM, HEXAVALENT, DIS. (UG/L AS CR)	IRON, DISSOLVED (UG/L AS FE)	LEAD, DISSOLVED (UG/L AS PB)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	NICKEL, DISSOLVED (UG/L AS NI)	ZINC, DISSOLVED (UG/L AS ZN)	CARBON, ORGANIC DISSOLVED (MG/L AS C)	CYANIDE TOTAL (MG/L AS CN)	PHENOLS (UG/L)	METHYLENE BLUE ACTIVE SUBSTANCE (MG/L)
JUN 30...	<1	220	<1	51	.1	<1	5	2.5	<.01	<1	.02

FRANKLIN COUNTY

395344083004100. Local number FR-254.
LOCATION.--Lat 39°53'44", long 83°00'41", Hydrologic Unit 05060001, at American Aggregates Quarry near Columbus, Ohio.
Owner: American Aggregates Corporation.
AQUIFER.--Sand and gravel of Quaternary Age.
WELL CHARACTERISTICS.--Drilled observation water well, diameter 2 in (5.08 cm), depth 35 ft (10.67 m), cased to 30 ft (9.14 m), finish is 5 ft (1.52 m) of 0.10 in (0.025 cm) well screen.
DATUM.--Altitude of land-surface datum is 691.20 ft (210.68 m). Measuring point: Top of casing, 3.00 ft (0.91 m) above land-surface datum.
PERIOD OF RECORD.--May 1982 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 28.33 ft (8.63 m) below land-surface datum, May 7, 1982; lowest, 31.74 ft (9.67m) below land-surface datum, July 15, 1982.

HIGHEST WATER LEVEL CANNOT BE DETERMINED BECAUSE OF SITE STATUS.

LOWEST WATER LEVEL CANNOT BE DETERMINED BECAUSE OF SITE STATUS.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
MAY 07, 1982	28.33	JUN 03, 1982	30.09	JUN 29, 1982	30.85	AUG 13, 1982	31.28
26	30.11	08	30.38	JUL 15	31.74	SEP 16	26.94

FRANKLIN COUNTY

395403083000300. Local number, FR-255.
LOCATION.--Lat 39°54'03", long 83°00'03", Hydrologic Unit 05060001, at American Aggregates Quarry near Columbus, Ohio.
Owner: American Aggregates Corporation.
AQUIFER.--Sand and Gravel of Quaternary Age.
WELL CHARACTERISTICS.-- Drilled observation water well, diameter 2 in (5.08 cm), depth 80 ft (24.38 m), cased to 70 ft (21.34 m), finish is 10 ft (3.05 m) of 0.010 in (0.025 cm) well screen.
DATUM.--Altitude of land-surface datum is 714.20 ft (217.69 m). Measuring point: Top of casing, 3.0 ft (0.91 m) above land-surface datum.
PERIOD OF RECORD.--May 1982 to current year.
EXTREMES FOR PERIOD OF RECORD.--highest water level, 44.92 ft (13.69 m) below land-surface datum, Sept. 16, 1982; lowest, 51.76 ft (15.78 m) below land-surface datum, July 15, 1982.

HIGHEST WATER LEVEL CANNOT BE DETERMINED BECAUSE OF SITE STATUS.

LOWEST WATER LEVEL CANNOT BE DETERMINED BECAUSE OF SITE STATUS.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
MAY 18, 1982	50.88	JUN 22, 1982	48.56	JUL 15, 1982	51.76	SEP 16, 1982	44.92
JUN 08	49.84	29	50.69	AUG 13	49.12		

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	SPECIFIC CONDUCTANCE (UMHOS)	PH (UNITS)	TEMPERATURE, AIR (DEG C)	TEMPERATURE (DEG C)	HYDROGEN SULFIDE TOTAL (MG/L AS H2S)	OXYGEN DEMAND, CHEMICAL (HIGH LEVEL) (MG/L)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)
JUN 29...	1330	775	7.2	26.5	11.0	.0	34	.2	350	100	98

DATE	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE FET-FLD (MG/L AS HCO3)	ALKALINITY FIELD (MG/L AS CACO3)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)
JUN 29...	25	29	15	.7	4.0	300	246	28	140	39	.4

DATE	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS NH4)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	PHOSPHORUS, DISSOLVED (MG/L AS P)	ARSENIC DISSOLVED (UG/L AS AS)	CADMIUM DISSOLVED (UG/L AS CD)
JUN 29...	7.3	518	483	<.10	.350	.45	.25	.60	.060	1	<1

DATE	CHROMIUM, HEXAVALENT, DIS. (UG/L AS CR)	IRON, DISSOLVED (UG/L AS FE)	LEAD, DISSOLVED (UG/L AS PB)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	NICKEL, DISSOLVED (UG/L AS NI)	ZINC, DISSOLVED (UG/L AS ZN)	CARBON, ORGANIC DISSOLVED (MG/L AS C)	CYANIDE TOTAL (MG/L AS CN)	PHENOLS (UG/L)	METHYLENE BLUE ACTIVE SUBSTANCE (MG/L)
JUN 29...	<1	4400	<1	95	<.1	<1	<4	2.7	<.01	<1	.03

FRANKLIN COUNTY

395523083003100. Local number FR-256.
LOCATION.--Lat 39°55'23", long 83°00'31", Hydrologic Unit 05060001, on Scioto River levee 0.6 mi (0.96 km) north of Frank Road near Columbus, Ohio.
Owner: City of Columbus.
AQUIFER.--Sand of Quaternary Age.
WELL CHARACTERISTICS.--Drilled observation water well, diameter 2 in (5.08 cm), depth 40 ft (12.19 m),cased to 30 ft (9.14 m), finish is 10 ft (3.05 m) of 0.010 in (0.025 cm) well screen.
DATUM.--Altitude of land-surface datum is 710 ft (216.41 m). Measuring point: top of casing, 3.00 ft (0.91 m) above land-surface datum.
PERIOD OF RECORD.--May 1982 to September 1982
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 22.75 ft (6.93 m) below land-surface datum, June 22, 1982: lowest, 24.97 ft (7.61 m) below land-surface datum, Sept. 16, 1982.

HIGHEST WATER LEVEL CANNOT BE DETERMINED BECAUSE OF SITE STATUS.

LOWEST WATER LEVEL CANNOT BE DETERMINED BECAUSE OF SITE STATUS.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
MAY 10, 1982	23.08	JUN 22, 1982	22.75	JUL 14, 1982	24.04	SEP 01, 1982	24.81
JUN 09	23.21	28	23.36	AUG 12	24.70	16	24.97

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	SPECIFIC CONDUCTANCE (UMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	HYDROGEN SULFIDE TOTAL (MG/L AS H2S)	OXYGEN DEMAND, CHEMICAL (HIGH LEVEL) (MG/L)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)
JUN 28...	0930	1950	6.9	18.0	.5	120	8.5	460	0	72	67
SEP 01...	0915	1910	6.6	20.0	--	--	--	--	--	--	--

DATE	SODIUM, DISSOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE FET-FLD (MG/L AS HCO3)	ALKALINITY FIELD (MG/L AS CACO3)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)
JUN 28...	260	52	5.3	49	950	779	176	16	270	.4	21
SEP 01...	--	--	--	--	--	--	--	--	--	--	--

DATE	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS NH4)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	PHOSPHORUS, DISSOLVED (MG/L AS P)	ARSENIC DISSOLVED (UG/L AS AS)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, HEXAVALENT, DIS. (UG/L AS CR)
JUN 28...	1230	1190	<.10	22.0	28	.00	22	.020	11	<1	<1
SEP 01...	--	--	--	--	--	--	--	--	--	--	--

DATE	IRON, DISSOLVED (UG/L AS FE)	LEAD, DISSOLVED (UG/L AS PB)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	NICKEL, DISSOLVED (UG/L AS NI)	ZINC, DISSOLVED (UG/L AS ZN)	CARBON, ORGANIC DISSOLVED (MG/L AS C)	CYANIDE TOTAL (MG/L AS CN)	PHENOLS (UG/L)	METHYLENE BLUE ACTIVE SUBSTANCE (MG/L)
JUN 28...	6200	<1	50	.1	<1	30	36	<.01	3	.20
SEP 01...	--	--	--	--	--	--	--	--	--	--

FRANKLIN COUNTY

395509083003700. Local number, FR-257
LOCATION.--Lat 39°55'09", long 83°00'37", Hydrologic Unit 05060001, on Scioto River levee 700 ft (213.36 m) north of Frank Road near Columbus, Ohio.
Owner: City of Columbus.
AQUIFER.--Sand and gravel of Quaternary Age.
WELL CHARACTERISTICS.--Drilled observation water well, diameter 2 in (5.08 cm), depth 40 ft (12.19 m), cased to 35 ft (10.67 m), finish is 5 ft (1.52 m) of 0.010 in (0.025 cm) well screen.
DATUM.--Altitude of land-surface datum is 710 ft (216.41 m). Measuring point: Top of casing, 3.00 ft (0.91 m) above land-surface datum.
PERIOD OF RECORD.--May 1982 to September 1982.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 23.04 ft (7.02 m) below land-surface datum, May 12, 1982; lowest, 25.61 ft (7.81 m) below land-surface datum, Sept. 16, 1982.

HIGHEST WATER LEVEL CANNOT BE DETERMINED BECAUSE OF SITE STATUS.

LOWEST WATER LEVEL CANNOT BE DETERMINED BECAUSE OF SITE STATUS.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
MAY 12, 1982	23.04	JUL 15, 1982	25.38	SEP 01, 1982	25.41	SEP 16, 1982	25.61
JUN 28	23.69	AUG 12	25.10				

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	SPECIFIC CONDUCTANCE (UMHOS)	PH (UNITS)	TEMPERATURE, AIR (DEG C)	TEMPERATURE (DEG C)	HYDROGEN SULFIDE TOTAL (MG/L AS H2S)	OXYGEN DEMAND, CHEMICAL (HIGH LEVEL) (MG/L)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)
JUN 28...	1445	1240	6.9	27.5	16.0	.5	13	.9	530	100
SEP 01...	1130	1320	4.2	--	16.5	--	--	--	--	--

DATE	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)
JUN 28...	67	48	16	1.0	11	96	73	.5	12	794
SEP 01...	--	--	--	--	--	--	--	--	--	--

DATE	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS NH4)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	PHOSPHORUS, DISSOLVED (MG/L AS P)	ARSENIC DISSOLVED (UG/L AS AS)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, HEXAVALENT, DIS. (UG/L AS CR)
JUN 28...	714	<.10	3.70	4.8	.50	4.2	.020	3	<1	<1
SEP 01...	--	--	--	--	--	--	--	--	--	--

DATE	IRON, DISSOLVED (UG/L AS FE)	LEAD, DISSOLVED (UG/L AS PB)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	NICKEL, DISSOLVED (UG/L AS NI)	ZINC, DISSOLVED (UG/L AS ZN)	CARBON, ORGANIC DISSOLVED (MG/L AS C)	CYANIDE TOTAL (MG/L AS CN)	PHENOLS (UG/L)	METHYLENE BLUE ACTIVE SUBSTANCE (MG/L)
JUN 28...	430	<1	79	.4	8	<4	12	<.01	2	.07
SEP 01...	--	--	--	--	--	--	--	--	--	--

FRANKLIN COUNTY

395448083004200. Local number FR-258
LOCATION.--Lat 39°54'48", long 83°00'42", Hydrologic Unit 05060001, on Scioto River levee behind Inland Products near Columbus, Ohio.
Owner: City of Columbus.
AQUIFER.--Gravel and cobbles of Quaternary Age.
WELL CHARACTERISTICS.--Drilled observation water well, diameter 2 in (5.08 cm), depth 50 ft (15.24 m), cased to 40 ft (12.19 m), finish is 5 ft (1.52 m) 0f 0.010 in (0.025 cm) well screen from 40 ft (12.19 m) to 45 ft (13.72 m).
DATUM.--Altitude of land-surface datum is 713 ft (217.32 m). Measuring point: Top of casing, 3.00 ft (0.91 m) above land-surface datum.
PERIOD OF RECORD.--May 1982 to September 1982.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 28.54 ft (8.69 m) below land-surface datum, May 12, 1982: lowest,30.76 ft (9.38 m) below land-surface datum, Aug. 13, 1982.

HIGHEST WATER LEVEL CANNOT BE DETERMINED BECAUSE OF SITE STATUS.

LOWEST WATER LEVEL CANNOT BE DETERMINED BECAUSE OF SITE STATUS.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
MAY 12, 1982	28.54	JUN 23, 1982	28.58	AUG 13, 1982	30.76	SEP 16, 1982	30.46
JUN 08	29.18	JUL 14	29.87				

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	SPECIFIC CONDUCTANCE (UMHOS)	PH (UNITS)	TEMPERATURE, AIR (DEG C)	TEMPERATURE (DEG C)	HYDROGEN SULFIDE TOTAL (MG/L AS H2S)	OXYGEN DEMAND, CHEMICAL (HIGH LEVEL) (MG/L)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)
JUN 23...	0915	1320	7.1	19.0	17.0	.0	35	.4	510	0	130

DATE	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE FET-FLD (MG/L AS HCO3)	ALKALINITY FIELD (MG/L AS CACO3)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)
JUN 23...	46	86	26	1.8	14	640	525	81	170	130	.5

DATE	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS NH4)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	PHOSPHORUS, DISSOLVED (MG/L AS P)	ARSENIC DISSOLVED (UG/L AS AS)	CADMIUM DISSOLVED (UG/L AS CD)
JUN 23...	13	948	927	3.7	3.70	4.8	1.2	4.9	<.010	3	<1

DATE	CHROMIUM, HEXAVALENT, DIS. (UG/L AS CR)	IRON, DISSOLVED (UG/L AS FE)	LEAD, DISSOLVED (UG/L AS PB)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	NICKEL, DISSOLVED (UG/L AS NI)	ZINC, DISSOLVED (UG/L AS ZN)	CARBON, ORGANIC DISSOLVED (MG/L AS C)	CYANIDE TOTAL (MG/L AS CN)	PHENOLS (UG/L)	METHYLENE BLUE ACTIVE SUBSTANCE (MG/L)
JUN 23...	<1	370	5	640	.6	7	21	4.5	<.01	1	.03

FRANKLIN COUNTY

395417083005000. Local number FR-259
LOCATION.--Lat 39°54'17", long 83°00'50", Hydrologic Unit 05060001, in Columbus Landfill near Columbus, Ohio.
Owner: City of Columbus.
AQUIFER.--Sand and Gravel of Quaternary Age.
WELL CHARACTERISTICS.--Drilled observation water well, diameter 2 in (5.08 cm), depth 50 ft (15.24 m), cased to 45 ft (13.72 m), finish is 5 ft (1.52 m) of 0.010 in (0.025 cm) well screen.
DATUM.--Altitude of land-surface is 720 ft (219.46 m). Measuring point: Top of casing, 3.00 ft (0.91 m) above land-surface datum.
PERIOD OF RECORD.--May 1982 to September 1982.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 43.60 ft (13.29 m) below land-surface datun, May 18, 1982; lowest, 46.72 ft (14.24 m) below land-surface datum, Aug. 13, 1982.

HIGHEST WATER LEVEL 43.60 FEET BELOW LAND SURFACE DATUM MAY 18, 1982.

LOWEST WATER LEVEL 46.72 FEET BELOW LAND SURFACE DATUM AUG 13, 1982.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
MAY 18, 1982	43.60	JUN 30, 1982	45.46	AUG 13, 1982	46.72	SEP 16, 1982	44.15
JUN 08	44.06	JUL 14	45.84				

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	SPECIFIC CONDUCTANCE (UMHOS)	PH (UNITS)	TEMPERATURE, AIR (DEG C)	TEMPERATURE (DEG C)	HYDROGEN SULFIDE TOTAL (MG/L AS H2S)	OXYGEN DEMAND, CHEMICAL (HIGH LEVEL) (MG/L)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)
JUN 30...	1415	1640	6.7	25.0	17.0	.7	63	.0	580	180	150

DATE	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE FET-FLD (MG/L AS HCO3)	ALKALINITY FIELD (MG/L AS CACO3)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)
JUN 30...	51	57	17	1.1	33	484	397	155	380	90	.5

DATE	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS NH4)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	PHOSPHORUS, DISSOLVED (MG/L AS P)	ARSENIC DISSOLVED (UG/L AS AS)	CADMIUM DISSOLVED (UG/L AS CD)
JUN 30...	17	1090	1090	<.10	41.0	53	.00	41	.010	11	<1

DATE	CHROMIUM, HEXAVALENT, DIS. (UG/L AS CR)	IRON, DISSOLVED (UG/L AS FE)	LEAD, DISSOLVED (UG/L AS PB)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	NICKEL, DISSOLVED (UG/L AS NI)	ZINC, DISSOLVED (UG/L AS ZN)	CARBON, ORGANIC DISSOLVED (MG/L AS C)	CYANIDE TOTAL (MG/L AS CN)	PHENOLS (UG/L)	METHYLENE BLUE ACTIVE SUBSTANCE (MG/L)
JUN 30...	<1	16000	2	67	<.1	2	<4	6.3	<.01	5	.07

FRANKLIN COUNTY

395413083002900. Local number, FR-260
LOCATION.--Lat 39°54'13", long 83°00'29", Hydrologic Unit 05060001, on Scioto River levee 600 ft (182.88 m) North of Columbus Corporate boundary near Columbus, Ohio.
Owner: City of Columbus.
AQUIFER.--Gravel of Quaternary Age.
WELL CHARACTERISTICS.-- Drilled observation water well, diameter 2 in (5.08 cm), depth 60 ft (18.29 m), cased to 55 ft (16.76 m), finish is 5 ft (1.52 m) of 0.010 in (0.025 cm) well screen.
DATUM.--Altitude of land-surface datum is 713 ft (217.32 m). Measuring point: Top of casing, 3.00 ft (0.91 m) above land-surface datum.
PERIOD OF RECORD.--May 1982 to September 1982.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 36.97 ft (11.27 m) below land-surface datum, Sept.16, 1982; lowest, 43.35 ft (13.21 m) below land-surface datum, July 14, 1982.

HIGHEST WATER LEVEL CANNOT BE DETERMINED BECAUSE OF SITE STATUS.

LOWEST WATER LEVEL CANNOT BE DETERMINED BECAUSE OF SITE STATUS.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
MAY 24, 1982	41.28	JUN 29, 1982	42.36	AUG 13, 1982	41.80	SEP 16, 1982	36.97
JUN 08	41.52	JUL 14	43.35				

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	SPECIFIC CONDUCTANCE (UMHOS)	PH (UNITS)	TEMPERATURE, AIR (DEG C)	TEMPERATURE (DEG C)	HYDROGEN SULFIDE TOTAL (MG/L AS H2S)	OXYGEN DEMAND, CHEMICAL (HIGH LEVEL) (MG/L)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)
JUN 29...	0915	1100	6.9	24.0	15.0	.0	50	.0	390	0	98

DATE	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE FET-FLD (MG/L AS HCO3)	ALKALINITY FIELD (MG/L AS CACO3)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)
JUN 29...	36	55	23	1.3	13	501	411	101	38	64	.6

DATE	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS NH4)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	PHOSPHORUS, DISSOLVED (MG/L AS P)	ARSENIC DISSOLVED (UG/L AS AS)	CADMIUM DISSOLVED (UG/L AS CD)
JUN 29...	17	568	600	<.10	23.0	30	.00	23	<.010	2	<1

DATE	CHROMIUM, HEXAVALENT, DIS. (UG/L AS CR)	IRON, DISSOLVED (UG/L AS FE)	LEAD, DISSOLVED (UG/L AS PB)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	NICKEL, DISSOLVED (UG/L AS NI)	ZINC, DISSOLVED (UG/L AS ZN)	CARBON, ORGANIC DISSOLVED (MG/L AS C)	CYANIDE TOTAL (MG/L AS CN)	PHENOLS (UG/L)	METHYLENE BLUE ACTIVE SUBSTANCE (MG/L)
JUN 29...	<1	1600	2	17	<.1	1	6	6.8	<.01	<1	.08

FRANKLIN COUNTY

395426083010200. Local number FR-261
LOCATION.--Lat 39°54'26", long 83°01'02", Hydrologic Unit 05060001, in Columbus Landfill near Columbus, Ohio.
Owner: City of Columbus.
AQUIFER.--Gravel of Quaternary Age.
WELL CHARACTERISTICS.--Drilled observation water well, diameter 2 in (5.08 cm), depth 45 ft (13.72 m), cased to 40 ft (12.19 m), finish is 5 ft (1.52 m) of 0.010 in (0.025 cm) well screen.
DATUM.--Altitude of land-surface datum is 723 ft (220.37 m). Measuring point: Top of casing, 3.00 ft (0.91 m) above land-surface datum.
PERIOD OF RECORD.--May 1982 to September 1982.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 34.93 ft (10.65 m) below land-surface datum, Sept. 1, 1982; lowest, 41.88 ft (12.76 m) below land-surface datum, July 2, 1982.

HIGHEST WATER LEVEL 34.93 FEET BELOW LAND SURFACE DATUM SEP 01, 1982.

LOWEST WATER LEVEL 41.88 FEET BELOW LAND SURFACE DATUM JUL 02, 1982.

WATER LEVELS IN FFET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
MAY 24, 1982	38.82	JUN 20, 1982	39.71	JUL 02, 1982	41.88	AUG 13, 1982	38.57
JUN 08	39.58	JUL 01	41.36	14	40.13	SEP 01	34.93

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)	HYDRO-GEN SULFIDE TOTAL (MG/L AS H2S)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)
JUL 01...	1345	18400	7.7	25.5	22.5	26	2800	67	550	0	7.0

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE FET-FLD (MG/L AS HCO3)	ALKA-LINITY FIELD (MG/L AS CACO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
JUL 01...	130	1400	54	26	1600	10400	8530	291	52	1800	.8

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS NH4)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	ARSENIC DIS-SOLVED (UG/L AS AS)	CADMIUM DIS-SOLVED (UG/L AS CD)
JUL 01...	7.3	7150	9500	.54	1600	2100	.00	1600	.870	67	<1

DATE	CHRO-MIUM, HEXA-VALENT, DIS. (UG/L AS CR)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	NICKEL, DIS-SOLVED (UG/L AS NI)	ZINC, DIS-SOLVED (UG/L AS ZN)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CYANIDE TOTAL (MG/L AS CN)	PHENOLS (UG/L)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L)
JUL 01...	<1	4000	28	20	.3	490	350	420	.19	130	2.4

FRANKLIN COUNTY

395255083003000. Local number FR-262
LOCATION.--Lat 39°52'55", long 83°00'30", Hydrologic Unit 05060001, 0.4 mi (0.64 km) N. of I-270, 0.4 mi (0.64 km) W. of US 23S, near Columbus, Ohio.
Owner: American Aggregates Corp.
AQUIFER.--Sand and gravel of Quaternary Age.
WELL CHARACTERISTICS.--Drilled observation water well, diameter 2 in (5.08 cm), depth 50 ft (15.24 m), cased to 45 ft (13.72 m), finish is 5 ft (1.52 m) of 0.010 in (0.025 cm) well screen.
DATUM.--Altitude of land-surface datum is 691.8 ft (210.86 m). Measuring point: Top of casing, 3.00 ft (0.91 m) above land-surface datum.
PERIOD OF RECORD.--May 1982 to September 1982.
EXTREMES FOR PERIOD OF RECORD.--Highest water level 11.62 ft (3.54 m) below land-surface datum June 8, 1982; lowest, 17.04 ft (5.19 m) below land-surface datum, Sept. 17, 1982.

HIGHEST WATER LEVEL CANNOT BE DETERMINED BECAUSE OF SITE STATUS.

LOWEST WATER LEVEL CANNOT BE DETERMINED BECAUSE OF SITE STATUS.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
MAY 24, 1982	11.95	JUL 01, 1982	13.37	AUG 13, 1982	15.90	SEP 17, 1982	17.04
JUN 08	11.62						

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	SPECIFIC CONDUCTANCE (UMHOS)	PH (UNITS)	TEMPERATURE, AIR (DEG C)	TEMPERATURE (DEG C)	HYDROGEN SULFIDE TOTAL (MG/L AS H2S)	OXYGEN DEMAND, CHEMICAL (HIGH LEVEL) (MG/L)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)
JUL 01...	0930	744	7.1	23.0	11.5	.0	48	.0	380	68	100

DATE	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE FET-FLD (MG/L AS HCO3)	ALKALINITY FIELD (MG/L AS CACO3)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)
JUL 01...	32	7.9	4	.2	.9	380	312	47	75	41	.2

DATE	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS NH4)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	PHOSPHORUS, DISSOLVED (MG/L AS P)	ARSENIC DISSOLVED (UG/L AS AS)	CADMIUM DISSOLVED (UG/L AS CD)
JUL 01...	9.9	558	448	<.10	.050	.06	2.0	2.0	<.010	2	<1

DATE	CHROMIUM, HEXAVALENT, DIS. (UG/L AS CR)	IRON, DISSOLVED (UG/L AS FE)	LEAD, DISSOLVED (UG/L AS PB)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	NICKEL, DISSOLVED (UG/L AS NI)	ZINC, DISSOLVED (UG/L AS ZN)	CARBON, ORGANIC DISSOLVED (MG/L AS C)	CYANIDE TOTAL (MG/L AS CN)	PHENOLS (UG/L)	METHYLENE BLUE ACTIVE SUBSTANCE (MG/L)
JUL 01...	<1	110	<1	170	<.1	<1	<4	.9	<.01	<1	<.01

FRANKLIN COUNTY

395324083001500. Local number FR-263
LOCATION.--Lat 39°53'24", long 83°00'15", Hydrologic Unit 05060001, 500 ft (152.4 m) E of Scioto River and 1.0 mi (1.61 km) N of I-270 near Columbus, Ohio.
Owner: American Aggregates Corp.
AQUIFER.--Gravel of Quaternary Age.
WELL CHARACTERISTICS.--Drilled observation water well, diameter 2 in (5.08 cm), depth 50 ft (15.24 m), cased to 40 ft (12.19 m), finish is 5 ft (1.52 m) of 0.010 in (0.025 m) well screen from 40 ft (12.19 m) to 45 ft (13.72 m).
DATUM.--Altitude of land-surface datum is 691.2 ft (210.68 m). Measuring point: base of instrument shelter 3.0 ft (0.91 m) above land-surface datum.
PERIOD OF RECORD.--May 1982 to September 1982.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 14.16 ft (4.32 m) below land surface datum, July 30, 1982; lowest, 16.52 ft (5.04 m) below land surface datum, Sept. 26, 1982.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1										---	14.63	16.03
2										---	14.85	16.06
3										---	15.02	15.79
4										---	15.11	15.48
5										---	14.99	15.42
6										---	14.89	15.53
7										---	15.04	15.64
8										---	15.21	15.74
9										---	15.34	15.84
10										---	15.45	15.95
11										---	15.57	16.04
12										---	15.67	16.13
13										---	15.73	16.21
14										14.32	15.80	16.28
15										14.46	15.88	16.28
16										14.60	15.97	16.22
17										14.75	16.06	16.21
18										14.89	16.09	16.29
19										14.95	16.14	16.35
20										15.04	16.22	16.41
21										15.16	16.26	16.41
22										15.26	16.31	16.41
23										15.27	16.35	16.44
24										15.23	16.37	16.47
25										15.20	16.37	16.50
26										15.20	16.29	16.52
27										15.20	16.18	16.52
28										15.13	16.09	16.37
29										14.24	16.01	16.17
30										14.16	15.97	16.10
31										14.39	15.99	---
MAX										15.27	16.37	16.52

WTR YR 1982 MEAN 15.68 HIGH 14.16 LOW 16.52

NOTE: NUMBER OF MISSING DAYS OF RECORD EXCEEDED 20% OF YEAR

GROUND- WATER RECORDS

FRANKLIN COUNTY

395324083001500. Local number FR-263--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	SPECIFIC CONDUCTANCE (UMHOS)	PH (UNITS)	TEMPERATURE, AIR (DEG C)	TEMPERATURE (DEG C)	HYDROGEN SULFIDE TOTAL (MG/L AS H2S)	OXYGEN DEMAND, CHEMICAL (HIGH LEVEL) (MG/L)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)
JUL 01...	1045	811	6.9	20.0	12.5	.0	150	.0	430	150	110

DATE	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE FET-FLD (MG/L AS HCO3)	ALKALINITY FIELD (MG/L AS CACO3)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)
JUL 01...	37	8.9	4	.2	2.0	348	285	70	110	35	.8

DATE	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS NH4)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	PHOSPHORUS, DISSOLVED (MG/L AS P)	ARSENIC DISSOLVED (UG/L AS AS)	CADMIUM DISSOLVED (UG/L AS CD)
JUL 01...	16	592	493	<.10	.170	.22	5.0	5.2	.040	2	<1

DATE	CHROMIUM, HEXAVALENT, DIS. (UG/L AS CR)	IRON, DISSOLVED (UG/L AS FE)	LEAD, DISSOLVED (UG/L AS PB)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	NICKEL, DISSOLVED (UG/L AS NI)	ZINC, DISSOLVED (UG/L AS ZN)	CARBON, ORGANIC DISSOLVED (MG/L AS C)	CYANIDE TOTAL (MG/L AS CN)	PHENOLS (UG/L)	METHYLENE BLUE ACTIVE SUBSTANCE (MG/L)
JUL 01...	<1	2000	45	72	.2	<1	16	1.5	<.01	<1	<.01

FRANKLIN COUNTY

395329083013100. Local number FR-264
LOCATION.-- Lat 39°53'29", long 83°01'31", Hydrologic Unit 05060001, at American Aggregates Quarry near Columbus, Ohio.
Owner: American Aggregates Corp.
AQUIFER.--Limestone of Silurian and Devonian Age
WELL CHARACTERISTICS.--Drilled observation water well, diameter 5 in (12.7 cm), depth 140.52 ft (42.83 m), cased to 15.0 ft (4.57 m).
DATUM.--Altitude of land-surface datum is 663 ft (202.08 m). Measuring point: base of instrument shelter 0.0 ft (0.0 m) above land-surface datum.
PERIOD OF RECORD.--July 1982 to September 1982.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 57.65 ft (17.57 m) below land-surface datum, July 13, 1982; lowest, 58.41 ft (17.80 m) below land-surface datum, Sept. 30, 1982.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1										---	57.81	58.06
2										---	57.81	58.04
3										---	57.83	57.93
4										---	57.83	58.02
5										---	57.79	58.07
6										---	57.82	58.09
7										---	57.83	58.11
8										---	57.84	58.14
9										---	57.86	58.17
10										---	57.87	58.20
11										---	57.87	58.24
12										---	57.87	58.25
13										57.65	57.88	58.27
14										57.65	57.90	58.28
15										57.67	57.91	58.30
16										57.68	57.94	58.33
17										57.68	57.98	58.33
18										57.69	57.98	58.33
19										57.69	57.98	58.35
20										57.71	57.98	58.38
21										57.72	57.98	58.35
22										57.73	57.99	58.37
23										57.74	57.99	58.37
24										57.77	57.99	58.37
25										57.77	57.93	58.37
26										57.78	58.04	58.37
27										57.79	58.07	58.37
28										57.77	58.10	58.38
29										57.79	58.11	58.39
30										57.80	58.11	58.41
31										57.81	58.08	---
MAX										57.81	58.11	58.41

WTR YR 1982 MEAN 58.01 HIGH 57.65 LOW 58.41

NOTE: NUMBER OF MISSING DAYS OF RECORD EXCEEDED 20% OF YEAR

SURFACE-WATER RECORDS

395350083000600 SCIOTO RIVER 3.4 MI SOUTH OF GREENLAWN AVENUE, AT COLUMBUS, OH

LOCATION.--Lat 39°53'50", long 83°00'06", Hydrologic Unit 05060001, right bank, 3.4 mi (5.47 km) downstream of bridge at Greenlawn Ave., and 0.9 mi (1.45 km) downstream of Kian Run at Columbus, Ohio.
PERIOD OF RECORD.--May 1982 to September 1982.
REMARKS.--This site is used for chemical quality sampling only as part of a cooperative study with the City of Columbus.

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	ALUMINUM, RECOV. FM BOTTOM MATERIAL (UG/G)	ARSENIC TOTAL IN BOTTOM MATERIAL (UG/G AS AS)	BORON, RECOV. FM BOTTOM MATERIAL (UG/G AS B)	CADMIUM RECOV. FM BOTTOM MATERIAL (UG/G AS CD)	CHROMIUM, RECOV. FM BOTTOM MATERIAL (UG/G)	COBALT, RECOV. FM BOTTOM MATERIAL (UG/G AS CO)	COPPER, RECOV. FM BOTTOM MATERIAL (UG/G AS CU)
SEP 03...	1230	2300	1	<10	5	80	20	49

DATE	IRON, RECOV. FM BOTTOM MATERIAL (UG/G AS FE)	LEAD, RECOV. FM BOTTOM MATERIAL (UG/G AS PB)	MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G)	MERCURY RECOV. FM BOTTOM MATERIAL (UG/G AS HG)	SELENIUM, TOTAL IN BOTTOM MATERIAL (UG/G)	STRONTIUM, RECOV. FM BOTTOM MATERIAL (UG/G)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN)
SEP 03...	7000	180	260	<.01	<1	190	720

Water-quality urban hydrology stations are particular sites where chemical-quality data are collected systematically over a period of years for use in areal hydrologic analysis. The data are collected for three to ten selected runoff events during the year.

03226890 Turkey Run at Upper Arlington, Ohio

LOCATION.--Lat 40°02'10", long 83°04'06", Franklin County, Hydrologic Unit 05060001, at culvert on Lytham Road at Upper Arlington.
DRAINAGE AREA.--0.90 mi^2 (1.45 km^2).
PERIOD OF RECORD.--April 1981 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L)	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO
OCT												
26...	0320	--	249	7.0	11.0	<10	110	33	6.4	11	18	.5
26...	0335	--	271	6.7	11.5	29	120	36	7.2	10	15	.4
26...	0350	--	230	6.6	11.5	80	110	32	6.5	8.1	14	.4
26...	0450	--	176	6.5	12.0	28	75	23	4.3	6.5	15	.3
MAY												
18...	1755	22	276	7.2	22.5	39	120	33	9.3	15	21	.6
22...	1955	8.2	234	7.3	20.0	<10	94	27	6.5	11	20	.5
22...	2025	22	222	7.2	19.5	<10	88	26	5.6	10	20	.5
JUN												
15...	2210	13	158	7.4	20.0	48	67	18	5.3	9.9	24	.6
15...	2230	27	206	7.4	20.0	17	82	23	6.0	12	24	.6
15...	2250	61	140	7.5	20.0	61	64	20	3.3	8.4	22	.5
28...	1820	8.3	316	7.8	26.5	71	120	28	11	24	30	1.1
28...	1835	17	166	7.5	26.0	60	74	20	5.8	11	24	.6
28...	1850	30	220	7.5	26.0	150	99	28	7.0	17	27	.8
AUG												
24...	2150	7.5	326	7.6	22.0	89	150	45	8.7	12	15	.5
24...	2220	7.4	238	7.4	23.0	--	110	34	6.1	8.5	14	.4
24...	2310	5.7	222	7.4	23.0	86	100	31	5.4	8.8	16	.4
31...	1315	7.5	366	7.5	21.0	<10	160	48	10	18	19	.7
31...	1445	5.5	234	7.4	23.0	16	98	30	5.7	12	21	.6
SEP												
02...	1215	10	182	7.3	22.5	<10	86	27	4.5	7.1	15	.3
02...	1315	27	116	7.2	22.5	<10	58	19	2.5	5.8	18	.3
02...	1330	79	100	7.6	22.0	<10	54	18	2.1	4.2	14	.3

03226890 Turkey Run at Upper Arlington, Ohio--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	POTASSIUM, DISSOLVED (MG/L AS K)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER AC-FT)	SOLIDS, DISSOLVED (TONS PER DAY)	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)
OCT												
26...	2.8	30	19	173	.24	--	152	.52	.070	1.8	1.90	2.4
26...	3.8	26	16	175	.24	--	122	.61	.060	2.6	2.70	3.3
26...	3.4	26	12	152	.21	--	117	.67	.090	1.5	1.60	2.3
26...	2.5	19	9.7	122	.17	--	37	.60	.060	.74	.80	1.4
MAY												
18...	3.0	38	30	240	.33	14.3	620	1.5	.470	4.0	4.50	6.0
22...	1.2	25	21	172	.23	3.8	96	.80	.180	.40	.58	1.4
22...	1.4	24	20	163	.22	9.7	333	.90	.200	2.9	3.10	4.0
JUN												
15...	1.4	20	17	133	.18	4.7	82	.46	.190	.71	.90	1.4
15...	1.8	27	23	156	.21	11.4	142	.61	.260	1.0	1.30	1.9
15...	1.8	17	12	121	.16	19.9	510	.68	.350	2.3	2.60	3.3
28...	3.8	39	40	241	.33	5.4	37	.83	.140	.96	1.10	1.9
28...	2.4	22	17	151	.21	6.9	91	.93	.090	2.1	2.20	3.1
28...	2.9	27	24	212	.29	17.2	260	<1.0	.090	2.2	2.30	--
AUG												
24...	2.7	61	24	217	.30	4.4	3	1.1	.070	.93	1.00	2.1
24...	2.3	40	15	168	.23	3.4	60	1.0	.070	.53	.60	1.6
24...	1.5	35	14	166	.23	2.6	41	.92	.050	.55	.60	1.5
31...	3.6	59	31	271	.37	5.5	148	1.1	.390	1.6	2.00	3.1
31...	2.1	36	15	178	.24	2.6	32	1.2	.260	1.3	1.60	2.8
SEP												
02...	1.8	25	8.6	133	.18	3.6	222	.90	.220	1.5	1.70	2.6
02...	1.4	18	7.1	89	.12	6.5	366	.80	.220	1.5	1.70	2.5
02...	1.9	16	5.3	77	.10	16.4	1740	.70	.230	1.8	2.00	2.7

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	NITROGEN, TOTAL (MG/L AS NO3)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS TOTAL (MG/L AS PO4)	ARSENIC TOTAL (UG/L AS AS)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT												
26...	11	.290	.89	1	1	20	15	2200	44	3	130	12
26...	15	.430	1.3	2	1	10	20	2700	38	14	150	13
26...	10	.390	1.2	1	1	10	17	3800	38	6	130	12
26...	6.2	.160	.49	1	<1	10	12	1200	17	2	80	5.2
MAY												
18...	27	.770	2.4	3	4	30	40	9900	200	30	410	16
22...	6.1	.160	.49	2	1	20	12	2100	53	12	110	7.7
22...	18	.440	1.4	2	2	30	18	5700	110	22	250	18
JUN												
15...	6.0	.160	.49	2	1	20	23	2000	53	6	100	12
15...	8.5	.330	1.0	2	2	20	22	4900	66	12	140	20
15...	15	.520	1.6	3	3	20	48	1500	30	42	270	34
28...	8.5	.130	.40	1	1	10	21	1300	22	6	210	9.2
28...	14	.200	.61	2	1	10	27	3100	50	19	240	9.7
28...	--	.360	1.1	3	1	20	34	8400	260	23	280	23
AUG												
24...	9.3	.160	.49	3	6	10	10	1800	27	6	70	9.8
24...	7.1	.150	.46	2	2	10	13	1300	32	7	80	15
24...	6.7	.160	.49	2	2	10	8	890	30	6	70	10
31...	14	.240	.74	4	2	10	19	3800	34	13	100	16
31...	12	.190	.58	4	1	10	12	990	22	7	50	11
SEP												
02...	12	.310	.95	4	2	10	27	5200	68	13	140	9.7
02...	11	.480	1.5	4	2	10	37	5700	100	17	190	8.3
02...	12	.460	1.4	7	5	80	87	30000	380	70	640	21

A total of 19 oil and gas wells in Eastern Ohio were sampled for brine analysis to identify or "fingerprint" the horizon from which it was derived. The following data was from three horizons in Eastern Ohio; the Berea, the Clinton, and the Rose Run formations.

392950082202400 - 065-POSTON WELL 8 NR LOGAN OH

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	PH (UNITS)	SPECIFIC GRAVITY	HYDROGEN SULFIDE TOTAL (MG/L AS H2S)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	PERCENT SODIUM
MAY 25...	1045	5.1	1.218	.0	150000	150000	44000	8700	77000	53

DATE	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE FET-FLD (MG/L AS HCO3)	ALKALINITY FIELD (MG/L AS CACO3)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	BROMIDE DISSOLVED (MG/L AS BR)	IODIDE, DISSOLVED (MG/L AS I)	SILICA, DISSOLVED (MG/L AS SIO2)
MAY 25...	88	2300	20	16	254	170	200000	5500	13	5.8

DATE	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	ALUMINUM, DISSOLVED (UG/L AS AL)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, DISSOLVED (UG/L AS MN)	STRONTIUM, DISSOLVED (UG/L AS SR)	ZINC, DISSOLVED (UG/L AS ZN)	H-2/H-1/ STABLE ISOTOPE RATIO PER MILL	O-18/O-16 STABLE ISOTOPE RATIO PER MIL	S-34/S-32 STABLE ISOTOPE RATIO PER MIL
MAY 25...	338000	600	210000	19000	880000	10000	-35.0	-2.2	18.1

393642081575300 - 065-HERBERT GLORIA SCOTT WELL 2 NR RINGOLD OH

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	PH (UNITS)	SPECIFIC GRAVITY	HYDROGEN SULFIDE TOTAL (MG/L AS H2S)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	PERCENT SODIUM
MAY 04...	1010	5.9	1.094	2.0	40000	40000	11000	3000	44000	71

DATE	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE FET-FLD (MG/L AS HCO3)	ALKALINITY FIELD (MG/L AS CACO3)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	BROMIDE DISSOLVED (MG/L AS BR)	IODIDE, DISSOLVED (MG/L AS I)	SILICA, DISSOLVED (MG/L AS SIO2)
MAY 04...	96	100	140	115	282	190	100000	1100	5.0	17

DATE	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	ALUMINUM, DISSOLVED (UG/L AS AL)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, DISSOLVED (UG/L AS MN)	STRONTIUM, DISSOLVED (UG/L AS SR)	ZINC, DISSOLVED (UG/L AS ZN)	H-2/H-1/ STABLE ISOTOPE RATIO PER MILL	O-18/O-16 STABLE ISOTOPE RATIO PER MIL	S-34/S-32 STABLE ISOTOPE RATIO PER MIL
MAY 04...	150000	80000	580000	21000	400000	1600	-35.0	-2.9	4.6

393851081533000 - 065-DON MURPHY WELL 1 MORGAN NR MALTA OH

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	PH (UNITS)	SPE-CIFIC GRAVITY	HYDRO-GEN SULFIDE TOTAL (MG/L AS H2S)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)
MAY 04...	0900	6.0	1.100	1.4	44000	44000	12000	3300	54000

DATE	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE FET-FLD (MG/L AS HCO3)	ALKA-LINITY FIELD (MG/L AS CACO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	BROMIDE DIS-SOLVED (MG/L AS BR)	IODIDE, DIS-SOLVED (MG/L AS I)
MAY 04...	73	113	21	120	98	192	110000	1800	7.0

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	ZINC, DIS-SOLVED (UG/L AS ZN)	H-2/ H-1/ STABLE ISOTOPE RATIO PER MILL	O-18/ O-16 STABLE ISOTOPE RATIO PER MIL
MAY 04...	10	159000	500	100000	600	400000	17000	-13.5	-2.2

394050081584300 - 065-CAMPBELL WELL 2 MORGAN NR TRIADELPHIA OH

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	PH (UNITS)	SPE-CIFIC GRAVITY	HYDRO-GEN SULFIDE TOTAL (MG/L AS H2S)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	PERCENT SODIUM
MAY 04...	1110	5.4	1.209	.0	120000	120000	38000	5400	84000	60

DATE	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE FET-FLD (MG/L AS HCO3)	ALKA-LINITY FIELD (MG/L AS CACO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	BROMIDE DIS-SOLVED (MG/L AS BR)	IODIDE, DIS-SOLVED (MG/L AS I)	SILICA, DIS-SOLVED (MG/L AS SIO2)
MAY 04...	107	2000	64	52	408	240000	2800	35	5.7

DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	ZINC, DIS-SOLVED (UG/L AS ZN)	H-2/ H-1/ STABLE ISOTOPE RATIO PER MILL	O-18/ O-16 STABLE ISOTOPE RATIO PER MIL	S-34/ S-32 STABLE ISOTOPE RATIO PER MIL
MAY 04...	325000	1000	260000	46000	920000	3300	-33.5	-1.7	16.9

400529081233100 - 065-L VANHORN WELL 1 GUERNSEY NR ANTRIM OH

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	PH (UNITS)	SPE-CIFIC GRAVITY	HYDRO-GEN SULFIDE TOTAL (MG/L AS H2S)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	PERCENT SODIUM
MAY 05...	1030	5.3	1.166	1.4	71000	71000	24000	2600	64000	65

DATE	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE FET-FLD (MG/L AS HCO3)	ALKA-LINITY FIELD (MG/L AS CACO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	BROMIDE DIS-SOLVED (MG/L AS BR)	IODIDE, DIS-SOLVED (MG/L AS I)	SILICA, DIS-SOLVED (MG/L AS SIO2)
MAY 05...	105	2600	100	82	802	630	240000	3400	30	7.9

DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	ZINC, DIS-SOLVED (UG/L AS ZN)	H-2/ H-1/ STABLE ISOTOPE RATIO PER MILL	O-18/ O-16 STABLE ISOTOPE RATIO PER MIL	S-34/ S-32 STABLE ISOTOPE RATIO PER MIL
MAY 05...	253000	4000	520000	62000	680000	12000	-38.0	-3.1	-21.8

400650082175200 - 065-KENNEDY WELL 1 LICK CO NR HANOVER OH

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	PH (UNITS)	SPE-CIFIC GRAVITY	HYDRO-GEN SULFIDE TOTAL (MG/L AS H2S)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	PERCENT SODIUM
APR 22...	1445	4.9	1.220	.0	150000	150000	45000	9200	56000	44

DATE	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE FET-FLD (MG/L AS HCO3)	ALKA-LINITY FIELD (MG/L AS CACO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	BROMIDE DIS-SOLVED (MG/L AS BR)	IODIDE, DIS-SOLVED (MG/L AS I)	SILICA, DIS-SOLVED (MG/L AS SIO2)
APR 22...	63	2000	24	20	483	270000	4100	20	5.5

DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	ZINC, DIS-SOLVED (UG/L AS ZN)	H-2/ H-1/ STABLE ISOTOPE RATIO PER MILL	O-18/ O-16 STABLE ISOTOPE RATIO PER MIL	S-34/ S-32 STABLE ISOTOPE RATIO PER MIL
APR 22...	335000	4000	180000	19000	920000	2500	-34.5	-1.9	26.5

400721082143500 - 065-PENICK WELL LICKING NR REFORM OH

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	PH (UNITS)	SPECIFIC GRAVITY	HYDROGEN SULFIDE TOTAL (MG/L AS H2S)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	PERCENT SODIUM
APR 28...	1000	6.7	1.044	.0	14000	14000	3600	1100	25000	80

DATE	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE FET-FLD (MG/L AS HCO3)	ALKALINITY FIELD (MG/L AS CACO3)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	BROMIDE DISSOLVED (MG/L AS BR)	IODIDE, DISSOLVED (MG/L AS I)
APR 28...	94	11	130	107	42	15	46000	110	5.4

DATE	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	ALUMINUM, DISSOLVED (UG/L AS AL)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, DISSOLVED (UG/L AS MN)	STRONTIUM, DISSOLVED (UG/L AS SR)	ZINC, DISSOLVED (UG/L AS ZN)	H-2/H-1/ STABLE ISOTOPE RATIO PER MILL	O-18/O-16 STABLE ISOTOPE RATIO PER MIL
APR 28...	.8	60000	400	29000	650	150000	500	-34.5	-5.5

401430081511500 - 065-PORTUES WELL 2 NR COSHOCTON OH

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	PH (UNITS)	SPECIFIC GRAVITY	HYDROGEN SULFIDE TOTAL (MG/L AS H2S)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	PERCENT SODIUM
MAY 10...	1145	5.7	1.224	.3	140000	140000	46000	5600	84000	56

DATE	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE FET-FLD (MG/L AS HCO3)	ALKALINITY FIELD (MG/L AS CACO3)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	BROMIDE DISSOLVED (MG/L AS BR)	IODIDE, DISSOLVED (MG/L AS I)	SILICA, DISSOLVED (MG/L AS SIO2)
MAY 10...	98	4000	160	131	511	180	210000	6500	5.4	7.1

DATE	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	ALUMINUM, DISSOLVED (UG/L AS AL)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, DISSOLVED (UG/L AS MN)	STRONTIUM, DISSOLVED (UG/L AS SR)	ZINC, DISSOLVED (UG/L AS ZN)	H-2/H-1/ STABLE ISOTOPE RATIO PER MILL	O-18/O-16 STABLE ISOTOPE RATIO PER MIL	S-34/S-32 STABLE ISOTOPE RATIO PER MIL
MAY 10...	340000	700	240000	11000	800000	6600	-31.0	-3.7	24.1

401541081470800 - 065- DILLON WELL NR COSHOCTON OH

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	PH (UNITS)	SPE-CIFIC GRAVITY	HYDRO-GEN SULFIDE TOTAL (MG/L AS H2S)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	PERCENT SODIUM
JUN 03...	0900	4.9	1.222	.5	150000	150000	46000	8200	100000	59

DATE	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE FET-FLD (MG/L AS HCO3)	ALKA-LINITY FIELD (MG/L AS CACO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	BROMIDE DIS-SOLVED (MG/L AS BR)	IODIDE, DIS-SOLVED (MG/L AS I)	SILICA, DIS-SOLVED (MG/L AS SIO2)
JUN 03...	113	3900	14	11	282	1000	200000	2100	21	1.3

DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	ZINC, DIS-SOLVED (UG/L AS ZN)	H-2/ H-1/ STABLE ISOTOPE RATIO PER MILL	O-18/ O-16 STABLE ISOTOPE RATIO PER MIL	S-34/ S-32 STABLE ISOTOPE RATIO PER MIL
JUN 03...	335000	5200	750000	17000	<10	830	-33.0	-1.8	25.4

401733081485400 - 065-PEW WELL 2A NR COSHOCTON OH

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	PH (UNITS)	SPE-CIFIC GRAVITY	HYDRO-GEN SULFIDE TOTAL (MG/L AS H2S)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	PERCENT SODIUM
MAY 10...	1100	5.5	1.228	.0	150000	150000	49000	6400	78000	52

DATE	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE FET-FLD (MG/L AS HCO3)	ALKA-LINITY FIELD (MG/L AS CACO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	BROMIDE DIS-SOLVED (MG/L AS BR)	IODIDE, DIS-SOLVED (MG/L AS I)	SILICA, DIS-SOLVED (MG/L AS SIO2)
MAY 10...	88	3900	72	59	364	140	210000	6200	19	3.9

DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	ZINC, DIS-SOLVED (UG/L AS ZN)	H-2/ H-1/ STABLE ISOTOPE RATIO PER MILL	O-18/ O-16 STABLE ISOTOPE RATIO PER MIL	S-34/ S-32 STABLE ISOTOPE RATIO PER MIL
MAY 10...	325000	300	38000	5000	100000	1200	-30.0	-1.3	28.4

401802081485200 - 065-PEW WELL 1 NR COSHOCTON OH

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	PH (UNITS)	SPECIFIC GRAVITY	HYDROGEN SULFIDE TOTAL (MG/L AS H2S)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	PERCENT SODIUM
MAY 10...	1030	5.7	1.218	.0	140000	140000	45000	6400	78000	54

DATE	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE FET-FLD (MG/L AS HCO3)	ALKALINITY FIELD (MG/L AS CACO3)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	BROMIDE DISSOLVED (MG/L AS BR)	IODIDE, DISSOLVED (MG/L AS I)	SILICA, DISSOLVED (MG/L AS SIO2)
MAY 10...	91	4200	120	98	383	140	190000	6000	18	2.7

DATE	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	ALUMINUM, DISSOLVED (UG/L AS AL)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, DISSOLVED (UG/L AS MN)	STRONTIUM, DISSOLVED (UG/L AS SR)	ZINC, DISSOLVED (UG/L AS ZN)	H-2/H-1/ STABLE ISOTOPE RATIO PER MILL	O-18/O-16 STABLE ISOTOPE RATIO PER MIL	S-34/S-32 STABLE ISOTOPE RATIO PER MIL
MAY 10...	330000	1100	40000	6500	800000	8000	-32.5	-1.5	27.8

401824081464400 - 065-BARTH WELL COSHOCTON NR FRESNO OH

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	PH (UNITS)	SPECIFIC GRAVITY	HYDROGEN SULFIDE TOTAL (MG/L AS H2S)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)
APR 21...	1215	5.3	1.227	.0	140000	140000	44000	7700	60000

DATE	PERCENT SODIUM	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE FET-FLD (MG/L AS HCO3)	ALKALINITY FIELD (MG/L AS CACO3)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	CHLORIDE, DISSOLVED (MG/L AS CL)	BROMIDE DISSOLVED (MG/L AS BR)	IODIDE, DISSOLVED (MG/L AS I)
APR 21...	47	69	4200	60	49	481	270000	3600	20

DATE	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, DISSOLVED (UG/L AS MN)	STRONTIUM, DISSOLVED (UG/L AS SR)	ZINC, DISSOLVED (UG/L AS ZN)	H-2/H-1/ STABLE ISOTOPE RATIO PER MILL	O-18/O-16 STABLE ISOTOPE RATIO PER MIL	S-34/S-32 STABLE ISOTOPE RATIO PER MIL
APR 21...	5.9	353000	30000	5000	880000	2100	-32.5	-1.3	26.9

401908081472100 - 065-W T ADAMS WELL 2 COSHOCTON NR FRESNO OH

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	PH (UNITS)	SPECIFIC GRAVITY	HYDROGEN SULFIDE TOTAL (MG/L AS H2S)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)
MAY 03...	1430	5.4	1.007	2.7	37000	37000	12000	1800	15000

DATE	PERCENT SODIUM	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE FET-FLD (MG/L AS HCO3)	ALKALINITY FIELD (MG/L AS CACO3)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	CHLORIDE, DISSOLVED (MG/L AS CL)	BROMIDE DISSOLVED (MG/L AS BR)	IODIDE, DISSOLVED (MG/L AS I)
MAY 03...	90	338	100	12	10	76	47000	360	2.3

DATE	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	ALUMINUM, DISSOLVED (UG/L AS AL)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, DISSOLVED (UG/L AS MN)	STRONTIUM, DISSOLVED (UG/L AS SR)	ZINC, DISSOLVED (UG/L AS ZN)	O-18/O-16 STABLE ISOTOPE RATIO PER MIL	S-34/S-32 STABLE ISOTOPE RATIO PER MIL
MAY 03...	4.2	75000	5000	390000	10000	470000	1800	-3.8	14.6

402054081462100 - 065-SEWELL R COAL WELL 1 COSH NR FRESNO OH

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	PH (UNITS)	SPECIFIC GRAVITY	HYDROGEN SULFIDE TOTAL (MG/L AS H2S)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	PERCENT SODIUM
MAY 03...	1345	5.3	1.224	.7	140000	140000	43000	7600	56000	46

DATE	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE FET-FLD (MG/L AS HCO3)	ALKALINITY FIELD (MG/L AS CACO3)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	CHLORIDE, DISSOLVED (MG/L AS CL)	BROMIDE DISSOLVED (MG/L AS BR)	IODIDE, DISSOLVED (MG/L AS I)	SILICA, DISSOLVED (MG/L AS SIO2)
MAY 03...	65	4400	130	107	1040	240000	3900	30	4.7

DATE	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	ALUMINUM, DISSOLVED (UG/L AS AL)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, DISSOLVED (UG/L AS MN)	STRONTIUM, DISSOLVED (UG/L AS SR)	ZINC, DISSOLVED (UG/L AS ZN)	H-2/H-1/ STABLE ISOTOPE RATIO PER MILL	O-18/O-16 STABLE ISOTOPE RATIO PER MIL	S-34/S-32 STABLE ISOTOPE RATIO PER MIL
MAY 03...	350000	4000	48000	5500	360000	3200	-33.0	-1.4	28.3

402205081485200 - 065-B DRENER WELL COSHOCTON NR OKEENE OH

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	PH (UNITS)	SPECIFIC GRAVITY	HYDROGEN SULFIDE TOTAL (MG/L AS H2S)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	PERCENT SODIUM
APR 21...	1100	5.4	1.226	.0	150000	150000	48000	8000	56000	44

DATE	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE FET-FLD (MG/L AS HCO3)	ALKALINITY FIELD (MG/L AS CACO3)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	BROMIDE DISSOLVED (MG/L AS BR)	IODIDE, DISSOLVED (MG/L AS I)	SILICA, DISSOLVED (MG/L AS SIO2)
APR 21...	62	4300	64	52	408	540	320000	4000	23	<.1

DATE	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	ALUMINUM, DISSOLVED (UG/L AS AL)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, DISSOLVED (UG/L AS MN)	STRONTIUM, DISSOLVED (UG/L AS SR)	ZINC, DISSOLVED (UG/L AS ZN)	H-2/H-1/ STABLE ISOTOPE RATIO PER MILL	O-18/O-16 STABLE ISOTOPE RATIO PER MIL	S-34/S-32 STABLE ISOTOPE RATIO PER MIL
APR 21...	344000	900	52000	550	360000	2100	-33.0	-1.6	27.6

402744081192200 - 065- ROTH WELL 3 NR GNADENHUTTEN OH

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	PH (UNITS)	SPECIFIC GRAVITY	HYDROGEN SULFIDE TOTAL (MG/L AS H2S)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	PERCENT SODIUM
JUN 03...	1315	6.3	1.073	.0	33000	33000	8700	2800	42000	72

DATE	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE FET-FLD (MG/L AS HCO3)	ALKALINITY FIELD (MG/L AS CACO3)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	BROMIDE DISSOLVED (MG/L AS BR)	IODIDE, DISSOLVED (MG/L AS I)
JUN 03...	100	1300	62	51	50	510	66000	450	6.5

DATE	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	ALUMINUM, DISSOLVED (UG/L AS AL)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, DISSOLVED (UG/L AS MN)	STRONTIUM, DISSOLVED (UG/L AS SR)	ZINC, DISSOLVED (UG/L AS ZN)	H-2/H-1/ STABLE ISOTOPE RATIO PER MILL	O-18/O-16 STABLE ISOTOPE RATIO PER MIL
JUN 03...	140	113000	100	52000	2000	240000	150	-21.0	-3.7

402929081554500 - 065-STRAITS WELL 3 NR MILLERSBURG OH

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	PH (UNITS)	SPE-CIFIC GRAVITY	HYDRO-GEN SULFIDE TOTAL (MG/L AS H2S)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	PERCENT SODIUM
MAY 26...	1130	6.1	1.198	.0	120000	120000	38000	6000	74000	57

DATE	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE FET-FLD (MG/L AS HCO3)	ALKA-LINITY FIELD (MG/L AS CACO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	BROMIDE DIS-SOLVED (MG/L AS BR)	IODIDE, DIS-SOLVED (MG/L AS I)	SILICA, DIS-SOLVED (MG/L AS SIO2)
MAY 26...	93	1800	92	75	117	320	180000	780	13	4.2

DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	ZINC, DIS-SOLVED (UG/L AS ZN)	H-2/ H-1/ STABLE ISOTOPE RATIO PER MILL	O-18/ O-16 STABLE ISOTOPE RATIO PER MIL	S-34/ S-32 STABLE ISOTOPE RATIO PER MIL
MAY 26...	307000	800	380000	64000	<10	17000	-32.0	-1.5	27.9

413212080441800 - 065-EASTON BROS WELL 1 NR ORWELL ASHT CO OH

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	PH (UNITS)	SPE-CIFIC GRAVITY	HYDRO-GEN SULFIDE TOTAL (MG/L AS H2S)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	PERCENT SODIUM
MAY 12...	0930	6.0	1.167	.0	76000	76000	26000	2700	75000	68

DATE	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE FET-FLD (MG/L AS HCO3)	ALKA-LINITY FIELD (MG/L AS CACO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	BROMIDE DIS-SOLVED (MG/L AS BR)	IODIDE, DIS-SOLVED (MG/L AS I)	SILICA, DIS-SOLVED (MG/L AS SIO2)
MAY 12...	118	1400	25	21	40	160	150000	730	5.6	4.7

DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	ZINC, DIS-SOLVED (UG/L AS ZN)	H-2/ H-1/ STABLE ISOTOPE RATIO PER MILL	O-18/ O-16 STABLE ISOTOPE RATIO PER MIL	S-34/ S-32 STABLE ISOTOPE RATIO PER MIL
MAY 12...	258000	600	200000	47000	760000	1300	-48.0	-4.8	18.6

413642080464000 - 065-KOSENKO WELL 1 NR NEW LYME ASTB CO OH

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	PH (UNITS)	SPECIFIC GRAVITY	HYDROGEN SULFIDE TOTAL (MG/L AS H2S)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	PERCENT SODIUM
MAY 12...	1200	5.6	1.217	.0	110000	110000	37000	4400	94000	65

DATE	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE FET-FLD (MG/L AS HCO3)	ALKALINITY FIELD (MG/L AS CACO3)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	BROMIDE DISSOLVED (MG/L AS BR)	IODIDE, DISSOLVED (MG/L AS I)	SILICA, DISSOLVED (MG/L AS SIO2)
MAY 12...	123	1400	25	21	100	200	200000	6000	17	3.2

DATE	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	ALUMINUM, DISSOLVED (UG/L AS AL)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, DISSOLVED (UG/L AS MN)	STRONTIUM, DISSOLVED (UG/L AS SR)	ZINC, DISSOLVED (UG/L AS ZN)	H-2/H-1/ STABLE ISOTOPE RATIO PER MILL	O-18/O-16 STABLE ISOTOPE RATIO PER MIL	S-34/S-32 STABLE ISOTOPE RATIO PER MIL
MAY 12...	339000	700	270000	82000	<10	1200	-37.5	-4.1	21.7

413648080465800 - 065-RHOA WELL 3 NR NEW LYME ASHT CO OH

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	PH (UNITS)	SPECIFIC GRAVITY	HYDROGEN SULFIDE TOTAL (MG/L AS H2S)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	PERCENT SODIUM
MAY 12...	1115	6.1	1.166	.0	74000	74000	25000	2900	79000	69

DATE	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE FET-FLD (MG/L AS HCO3)	ALKALINITY FIELD (MG/L AS CACO3)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	BROMIDE DISSOLVED (MG/L AS BR)	IODIDE, DISSOLVED (MG/L AS I)	SILICA, DISSOLVED (MG/L AS SIO2)
MAY 12...	126	3700	76	62	97	180	140000	3900	8.1	5.4

DATE	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	ALUMINUM, DISSOLVED (UG/L AS AL)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, DISSOLVED (UG/L AS MN)	STRONTIUM, DISSOLVED (UG/L AS SR)	ZINC, DISSOLVED (UG/L AS ZN)	H-2/H-1/ STABLE ISOTOPE RATIO PER MILL	O-18/O-16 STABLE ISOTOPE RATIO PER MIL	S-34/S-32 STABLE ISOTOPE RATIO PER MIL
MAY 12...	256000	700	330000	16000	920000	3900	-40.5	-4.2	10.6

* U.S. GOVERNMENT PRINTING OFFICE: 1983 - 660-931/85

October 1, 1978

FACTORS FOR CONVERTING INCH-POUND UNITS TO INTERNATIONAL SYSTEM UNITS (SI)

The following factors may be used to convert the inch-pound units published herein to the International System of Units (SI). This report contains both the inch-pound and SI unit equivalents in the station manuscript descriptions.

Multiply inch-pound units	By	To obtain SI units
	Length	
inches (in)	2.54×10^{1}	millimeters (mm)
	2.54×10^{-2}	meters (m)
feet (ft)	3.048×10^{-1}	meters (m)
miles (mi)	1.609×10^{0}	kilometers (km)
	Area	
acres	4.047×10^{3}	square meters (m^2)
	4.047×10^{-1}	square hectometers (hm^2)
	4.047×10^{-3}	square kilometers (km^2)
square miles (mi^2)	2.590×10^{0}	square kilometers (km^2)
	Volume	
gallons (gal)	3.785×10^{0}	liters (L)
	3.785×10^{0}	cubic decimeters (dm^3)
	3.785×10^{-3}	cubic meters (m^3)
million gallons	3.785×10^{3}	cubic meters (m^3)
	3.785×10^{-3}	cubic hectometers (hm^3)
cubic feet (ft^3)	2.832×10^{1}	cubic decimeters (dm^3)
	2.832×10^{-2}	cubic meters (m^3)
cfs-days	2.447×10^{3}	cubic meters (m^3)
	2.447×10^{-3}	cubic hectometers (hm^3)
acre-feet (acre-ft)	1.233×10^{3}	cubic meters (m^3)
	1.233×10^{-3}	cubic hectometers (hm^3)
	1.233×10^{-6}	cubic kilometers (km^3)
	Flow	
cubic feet per second (ft^3/s)	2.832×10^{1}	liters per second (L/s)
	2.832×10^{1}	cubic decimeters per second (dm^3/s)
	2.832×10^{-2}	cubic meters per second (m^3/s)
gallons per minute (gal/min)	6.309×10^{-2}	liters per second (L/s)
	6.309×10^{-2}	cubic decimeters per second (dm^3/s)
	6.309×10^{-5}	cubic meters per second (m^3/s)
million gallons per day	4.381×10^{1}	cubic decimeters per second (dm^3/s)
	4.381×10^{-2}	cubic meters per second (m^3/s)
	Mass	
tons (short)	9.072×10^{-1}	megagrams (Mg) or metric tons

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