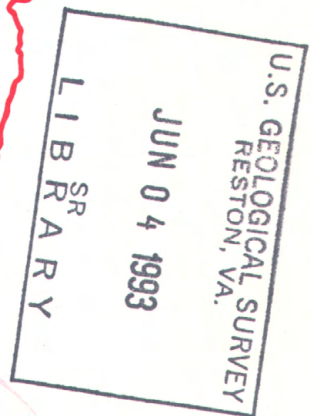
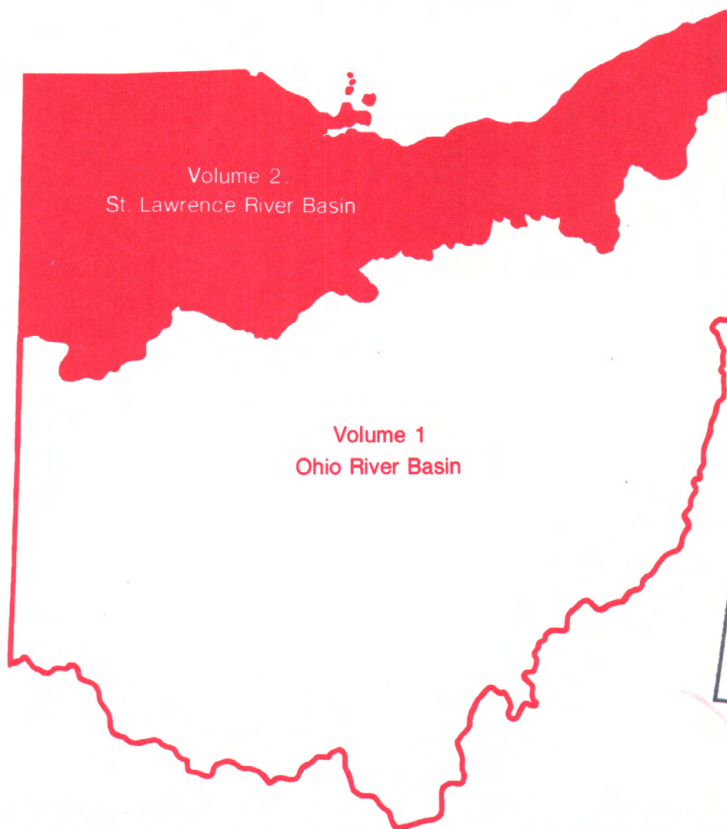


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Water Resources Data Ohio Water Year 1992

Volume 2. St. Lawrence River Basin and
Statewide Project Data



U.S. GEOLOGICAL SURVEY WATER-DATA REPORT OH-92-2
Prepared in cooperation with the State of Ohio
and with other agencies

CALENDAR FOR WATER YEAR 1992

1991

OCTOBER

NOVEMBER

DECEMBER

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1992

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Water Resources Data Ohio Water Year 1992

Volume 2. St. Lawrence River Basin and
Statewide Project Data



U.S. GEOLOGICAL SURVEY WATER-DATA REPORT OH-92-2
Prepared in cooperation with the State of Ohio
and with other agencies

DEPARTMENT OF THE INTERIOR

BRUCE BABBITT, Secretary

U.S. GEOLOGICAL SURVEY

Dallas L. Peck, Director

For additional information on the water program in Ohio write to
District Chief, Water Resources Division
U.S. Geological Survey
975 West Third Avenue
Columbus OH 43212
1993

PREFACE

This volume of the annual hydrologic data report of Ohio is one of a 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 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 two 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. In addition to the authors, who had primary responsibility for assuring that the information contained herein is accurate, complete, and adheres to Geological Survey policy and established guidelines, the following individuals contributed significantly to the collection, processing, and tabulation of the data:

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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.

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16. Abstract (Limit: 200 words) Water-resources data for the 1992 water year for Ohio consist of records of stage, discharge, and water quality of streams; stage and contents 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 121 gaging stations, 336 wells, and 72 partial-record sites; and water levels at 312 observation wells. Also included are data from miscellaneous 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.			13. Type of Report & Period Covered Annual--10/01/91 to 9/30/92
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VI GAGING STATIONS, IN DOWNSTREAM ORDER, FOR WHICH RECORDS ARE PUBLISHED

(Letter after station name designates type of data: (c) miscellaneous chemical measurements, (C) daily chemical data, (d) discharge, (e) contents and (or) elevation, (HEM) hydrologic bench mark, (M) water-quality monitor, (m) microbiological, (NASQAN) National stream-quality accounting network, (r) radio-chemical, (s) miscellaneous sediment measurements, (S) daily suspended-sediment data, (t) temperature.)

ST. LAWRENCE RIVER BASIN

Station number	STREAMS TRIBUTARY TO LAKE ERIE	Page
04177000	Ottawa River at Toledo University, Toledo (d)	36
04185000	Tiffin River at Stryker (d)	37
04185440	Unnamed tributary to Lost Creek near Farmer (d)	38
04186500	Auglaize River near Fort Jennings (d)	39
04187100	Ottawa River at Lima (d)	40
04189000	Blanchard River near Findlay (d)	41
04191500	Auglaize River near Defiance (d)	42
04192500	Maumee River near Defiance (d)	43
04193500	Maumee River at Waterville (dcCmtSs) . . . (NASQAN)	44
04195500	Portage River at Woodville (d)	57
04195825	Bayou Ditch near Oak Harbor (d)	58
04195830	Lacarbe Creek at Oak Harbor (d)	59
04196800	Tymochtee Creek at Crawford (d)	60
04197100	Honey Creek at Melmore (d)	61
04197170	Rock Creek at Tiffin (d)	62
04198000	Sandusky River near Fremont (dcCmtSs) . . . (NASQAN)	63
04199000	Huron River at Milan (d)	76
04199155	Old Woman's Creek at Berlin Road near Huron (d)	77
04199165	Old Woman's Creek at U.S. 6 near Huron (e)	78
04199175	Lake Erie at Ruggles Beach (e)	79
04199287	Vermilion River near Fitchville (d)	80
04200500	Black River at Elyria (d)	81
04201500	Rocky River near Berea (d)	82
04202000	Cuyahoga River at Hiram Rapids (d)	83
04206000	Cuyahoga River at Old Portage (d)	84
04206208	Yellow Creek at Ghent (d)	85
04206210	North Fork at Bath (d)	86
04206211	Park Creek at Bath Center	87
04206212	North Fork at Bath Center	88
04206215	Bath Creek at Bath Center	89
04206220	Yellow Creek at Botzum	90
04207200	Tinkers Creek at Bedford (d)	91
04208000	Cuyahoga River at Independence (dcCmtSs) . . . (NASQAN)	92
04208504	Cuyahoga River at LTV Steel at Cleveland (d)	105
04209000	Chagrin River at Willoughby (d)	106
04212100	Grand River near Painesville (d)	107
04212200	Grand River at Painesville (cmt) . . . (NASQAN)	108
04213000	Conneaut Creek at Conneaut (d)	109

DISCONTINUED SURFACE-WATER-QUALITY STATIONS

VII

The following continuous-record surface-water discharge or stage-only stations (gaging stations) in Ohio have been discontinued. Daily streamflow or stage records were collected and published for the period of record, expressed in water years, shown for each station. Those stations with an asterisk (*) after the station number are currently operated as crest-stage partial-record stations. Discontinued project stations with less than 3 years of record have not been included. Information regarding these stations may be obtained from the District Office at the address given on the back side of the title page of this report.

[Letters after station name designate type of data collected: (d) discharge]

ST. LAWRENCE RIVER BASIN			
Station name	Station number	Drainage area (mi ²)	Period of record
ST JOSEPH R NR BLAKESLEE (d)	04177500	394	1926-32
ST MARYS R NR WILLSHIRE (d)	04181000	354	1925-32
MAUMEE R AT ANTWERP (d)	04183500	2,129	1939-82
MAUMEE R NR SHERWOOD (d)	04184000	2,275	1903-06
BEAN C AT POWERS (d)	04184500	206	1940-81
TIFFIN R NR BRUNERSBURG (d)	04185500	736	1928-35
MIAMI & ERIE CA AT DELPHOS (d)	04186000	--	1928-33
OTTAWA R AT ALLENTOWN (d)	04187500	160	1923-35
			1943-82
OTTAWA R AT KALIDA (d)	04188000	309	1930-35
EAGLE CR NR FINDLAY (d)	4188500	55.0	1947-57
BLANCHARD R AT GLANDORF (d)	04189500	644	1921-28
			1947-51
BLANCHARD R AT DUPONT (d)	04190000	756	1928-35
ROLLER CR AT OHIO CITY (d)	04190500	5.14	1946-48
TOWN CR NR VAN WERT (d)	04191000	21.2	1945-53
MIAMI & ERIE CA NR DEFIANCE (d)	04192000	--	1924-29
			1952-69
MIAMI & ERIE CA AT WATERVILLE (d)	04193000	--	1921-29
SWAN C AT TOLEDO (d)	04194000	199	1940-48
			1985-91
PORTAGE R NR PEMBERVILLE (d)	04194500	337	1930-35
N B PORTAGE R NR BOWLING GREEN (d)	04195000	45.1	1923-32
SANDUSKY R NR BUCYRUS (d)	04196000	88.8	1925-35
			1938-51
			1964-81
BROKEN SWORD C AT NEVADA (d)	04196200	83.8	1976-81
SANDUSKY R NR UPPER SANDUSKY (d)	04196500	298	1921-35
			1938-81
SANDUSKY RIVER NR MEXICO (d)	04197000	774	1928-35
			1938-82
WOLF C AT BETTSVILLE (d)	04197300	66.2	1976-81
E B WOLF C NR BETTSVILLE (d)	04197450	82.4	1976-81
HAVENS C AT HAVENS (d)	04197500	4.28	1946-49
VERMILION R NR VERMILION	04199500	262	1950-81
E B BLACK R AT ELYRIA (d)	04200000	217	1922-35
W B BLACK R AB LAKE ST AT ELYRIA (d)	04200430	174	1980-84
CUYAHOGA RIVER NR KENT (d)	04202500	210	1933-35
BREAKNECK C NR KENT (d)	04203000	77.6	1927-35
L CUYAHOGA R AT MOGADORE (d)	04204000	14.3	1945-78
CUYAHOGA R AT MASSILLON RD AKRON (d)	04204500	31.6	1945-74
SPRINGFIELD LAKE OUTLET AT AKRON (d)	04205000	9.72	1945-74
L CUYAHOGA R AT AKRON (d)	04205500	44.4	1920
			1927-34
L CUYAHOGA R BL OHIO CA AT AKRON (d)	04205700	59.2	1973-79
CUYAHOGA R AT IRA (d)	04206250	478	1973-79
OHIO CANAL FEEDER AT BRECKSVILLE (d)	04207000	--	1923-24
OHIO CA AT INDEPENDENCE (d)	04207500	--	1921-23
			1927-35
			1940-41
			1948-81
BIG C AT CLEVELAND (d)	04208502	35.3	1972-86
EUCLID C NR EUCLID (d)	04208690	22.6	1977-80
			1984-85
GRAND R NR NORTH BRISTOL (d)	04209500	85.4	1942-47
PHELPS C NR WINDSOR (d)	04210000	25.6	1942-59
GRAND RIVER NR ROME (d)	04210500	251	1942-47
ROCK C NR ROCK CREEK (d)	04211000	69.2	1948-66
MILL C NR JEFFERSON (d)	04211500	82.0	1942-74
GRAND R NR MADISON (d)	04212000	581	1922-35
			1938-74
ASHTABULA R NR ASHTABULA (d)	04212500	111	1924-35
			1950-80

-- not determined for canals.

VIII

DISCONTINUED SURFACE-WATER-QUALITY STATIONS

The following stations were discontinued as continuous-record surface-water-quality stations prior to the 1991 water year. Daily records of temperature, specific conductance, pH, dissolved oxygen or sediment were collected and published for the record shown for each station.

ST. LAWRENCE RIVER BASIN

Station name	Station number	Drainage area (mi ²)	Type of record	Period of record
MAUMEE R AT ANTWERP	04183500	2,129	Temp.	1939-82
MAUMEE R AT DEFIANCE	04184100	2,316	Temp., S.C., D.O. pH	1966-70 1973-78
TIFFIN R AT EVANSPOET	04185300	541	Temp., S.C., D.O., pH	1968-78
AUGLAIZE R NR FT. JENNINGS	04186500	332	Temp., S.C., D.O., pH	1969-78
OTTAWA R AT ALLENTOWN	04187500	160	Temp., S.C. D.O., pH	1969-82 1977-82
AUGLAIZE R AT CLOVERDALE	04188200	713	Temp., S.C., D.O., pH	1967-78
BLANCHARD R NR FINDLAY	04189000	346	Temp., S.C., D.O., pH	1968-80
AUGLAIZE R NR DEFIANCE	04191500	2,318	Temp., S.C., D.O., pH Sed.	1966-76 1936
KEITZ RUN AT WATERVILLE	04192900	1.06	Precip.	1981-86
MAUMEE R NR WATERVILLE	04193490	6,313	Temp., S.C., D.O., pH	1977-91
MIAMI RIVER AT WATERVILLE	04193500	6,329	Temp., S.C., D.O., PH	1963-77
MAUMEE R AT MOUTH AT TOLEDO	04194023	6,608	Temp., S.C., D.O., pH	1967-75
M B PORTAGE R NR PORTAGE	04194310	217	Temp., S.C.	1969-75
PORTAGE R AT RR BRIDGE AT WOODVILLE	04195600	428	Temp., S.C., D.O., pH	1968-80
PORTAGE R AT ELMORE	04195800	432	Temp D.O. Sed.	1950-52 1970-80 1950-53
SANUDSKY R NR UPPER SANDUSKY	04196500	298	Temp., S.C., D.O., pH	1969-79 1977-79
TYMOCHTEE C AT CRAWFORD	04196800	229	Temp., S.C., D.O., pH	1968-75
SANDUSKY R AT ST JOHNS BRIDGE NR MEXICO	04196990	711	Temp., S.C., D.O.	1969-76
SANDUKY RIVER BELOW FREMONT	04198005	1,264	Temp., S.C., D.O., pH	1966-80
W B HURON R NR WILLARD	04198018	86.0	Temp., S.C.	1968-75
SANDHILL C NR MONROEVILLE	04198019	1.76	Precip	1981-86
HURON RIVER BL MILAN	04199100	385	Temp., S.C., D.O., pH	1968-78
VERMILION R NR VERMILION	04199500	262	Temp., S.C., D.O., pH	1969-76 1976-80
E B BLACK R AT GRAFTON	04199900	170	Temp., S.C.	1969-75
W B BLACK R NR ELYRIA	04200400	170	Temp., S.C.	1969-75
W B BLACK R AB LAKE ST AT ELYRIA	04200430	174	Sed.	1980-81
BLACK R AT ELYRIA	04200500	396	Temp. S.C. Sed.	1962-70 1964-70 1980-81
BLACK R BL ELYRIA	04200550	412	Temp., S.C., D.O. pH	1966-82 1976-82
CUYAHOGA R AT OLD PORTAGE	04205700	59.2	Temp., S.C., D.O., pH Sed.	1970-84 1972-81
CUYAHOGA R AT BATZUM	04206200	443	Temp.	1947-49
TINKERS C AT BEDFORD	04207200	83.9	Sed.	1972-79
CUYAHOGA R AT INDEPENDENCE	04208000		Temp., S.C., D.O. Temp., S.C., D.O., pH	1965-72 1972-91
BIG C AT CLEVELAND	04208502	35.3	Sed.	1978
CUYAHOGA R AT DUPONT INTAKE IN CLEVELAND	04208505	794	S.C.	1964-75
CUYAHOGA R AT WEST THIRD STREED BRIDGE	04208506	798	Temp., S.C., D.O., pH	1966-87
CUYAHOGA R AT SUPR ST BRIDGE IN CLEVELAND	04208510	808	Temp., S.C., D.O., pH	1964-66
CHAGRIN R AT WILLOUGHBY	04209000	246	Temp Sed.	1950 1969-74
GRAND RIVER AT PAINESVILLE	04212200	701	Temp., S.C., D.O., pH	1966-82
FIELDS BROOK AT ASHTABULA	04212680	3.63	Temp., S.C., D.O., pH	1983-91
ASHTABULA R AT ASHTABULA	04212700	136	Temp., S.C., D.O., pH	1968-79

GROUND-WATER STATIONS FOR WHICH RECORDS ARE PUBLISHED

IX

<u>Well number</u>	<u>Local number</u>	<u>Location</u>	<u>Page</u>
CRAWFORD COUNTY			
404838082563100	CR-1	Bucyrus	150
HANCOCK COUNTY			
405940083275500	HA-3	North of Vanlue	152
HARDIN COUNTY			
404648083412600	HN-2A	Southeast of Dola	153
HENRY COUNTY			
412123083574000	HY-2	Southwest of McClure	154
LUCAS COUNTY			
413704083362200	LU-1	Toledo	155
MEDINA COUNTY			
410142082005900	MD-1	Lodi	156
OTTAWA COUNTY			
413434082494000	O-2	Catawba Island	157
PORTAGE COUNTY			
410540081213600	PO-7	Brimfield	158
410920081192000	PO-6	East of Kent	159
PUTNAM COUNTY			
405505084032900	PU-1	COLUMBUS GROVE	160
RICHLAND COUNTY			
405753082360800	R-3	SHILOH	161
SANDUSKY COUNTY			
411914083045300	S-3	Freemont	162
412703083213600	S-2	Woodville	163
SENECA COUNTY			
410802083093900	SE-2	Tiffin	164
SUMMIT COUNTY			
410330081282000	SU-6	Akron	165
410846081271600	SU-7	Cuyahoga Falls	166
VAN WERT COUNTY			
405215084335400	VW-1	Van Wert	167
WILLIAMS COUNTY			
412821084313600	WM-1	Bryan	168
412930084320900	WM-3	Bryan	169
413108084415300	WM-12	East of Blakeslee	170
WYANDOT COUNTY			
405009083172600	WY-1	Upper Sandusky	171

VOLUME 1: OHIO RIVER BASIN
EXCLUDING PROJECT DATA

INTRODUCTION

The Water Resources Division of the U.S. Geological Survey (USGS), in cooperation with State agencies, obtains a large amount of data pertaining to the water resources of Ohio each water year. These data, accumulated during many years, constitute a valuable data base for developing an improved understanding of the water resources of the State. To make these data readily available to interested parties outside the USGS, the data are published annually in this report series entitled "Water Resources Data--Ohio."

This report (in two volumes) includes records on surface water and ground water in the State. Specifically, it contains: (1) Discharge records for 121 streamflow-gaging stations, 203 miscellaneous sites, and 17 crest-stage stations; (2) stage and content records for 5 streams, lakes, and reservoirs; (3) water-quality data for 21 streamflow-gaging stations, 336 wells, 90 synoptic sites, and 72 partial-record sites; and (4) water levels for 312 observation wells. Locations of lake- and streamflow-gaging stations, water-quality stations, and observation wells for which data are presented in this volume are shown in figure 8. The data in this report represent that part of the National Water Data System collected by the U.S. Geological Survey and cooperating State and Federal agencies in Ohio.

This series of annual reports for Ohio began with the 1961 water year with a report that contained only data relating to the quantities of surface water. For the 1964 water year, a similar report was introduced that contained only data relating to water quality. Beginning with the 1975 water year, the report was changed to present, in two to three volumes, data on quantities of surface water, quality of surface and ground water, and ground-water levels.

Prior to introduction of this series and for several years concurrent with it, water-resources data for Ohio were published in a series of U.S. Geological Survey Water-Supply Papers. Data on stream discharge and stage and on lake or reservoir contents and stage through September 1960 were published annually under the title "Surface-Water Supply of the United States, Parts 3 and 4." For the 1961 through 1970 water years, the data were published in two 5-year reports. Data on the chemical quality, temperature, and suspended sediment for the 1941 through 1970 water years were published annually under the title "Quality of Surface Waters of the United States," and ground-water levels for the 1935 through 1974 water years were published under the title "Ground-Water Levels in the United States." The above-mentioned Water-Supply Papers can be consulted in the libraries of the principal cities of the United States, and can be purchased from the Books and Open-File Reports Section, U.S. Geological Survey, Box 24525, Federal Center, Denver, CO 80225.

Publications similar to this report are published annually by the USGS for all States. These official USGS reports are identified by means of a 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-92-1." For archiving and general distribution, the reports for 1971-74 water years are also identified as water-data reports. These water-data reports can be purchased in paper copy or in microfiche from the National Technical Information Service, U.S. Department of Commerce, Springfield, VA 22161. Beginning with the 1990 water year, all water-data reports will also be available on Compact Disc - Read Only Memory (CD-ROM). All data reports published for the current water year for the entire Nation, including Puerto Rico and the Trust Territories, will be reproduced on a single CD-ROM disc.

Additional information for ordering specific reports, including current prices, may be obtained by writing the District Chief at the address given on the back of title page or by telephoning (614) 469-5553. A limited number of CD-ROM discs will be available for sale by the Books and Open-File Reports Section, U.S. Geological Survey, Federal Center, Box 25425, Denver, Colorado 80225.

COOPERATION

The U.S. Geological Survey and agencies of the State of Ohio have had cooperative agreements for the collection of water-resource data since 1898. The following organizations assisted in collecting data in this report:

Ohio Department of Natural Resources, Frances Buchholzer, Director;
Ohio Department of Natural Areas and Preserves, Ralph Ramey, Chief;
Ohio Environmental Protection Agency, D. R. Schregardus, Director;
Ohio Department of Transportation, Jerry H. Wray, Director;
Miami Conservancy District, J. L. Rozelle, General Manager and Chief Engineer;
City of Columbus Department of Public Service, J. R. Doult, Administrator;
City of Canton Water Department, J. D. Williams, Superintendent;
Ross County, James Kennard, Administrative Assistant;
Summit County, Jeffrey Lintern, Director, Environmental Services;
Seneca Soil and Water Conservation District, Norman Daniel, Board Chairman;
University of Toledo, R. Gallagher;
Cuyahoga River Community Planning Organization, John Beeker;
Northeast Regional Sewer District, E. J. Deal, Executive Director;
City of Fremont, Warren Curtis, City Engineer;
City of Akron, Linda Sowa, Administrator;
Northeast Regional Sewer District, E. J. Deal, Executive Director;

COOPERATION--Continued

City of Lima, A. Godsey, City Sanitary Engineer;
 Estate Development and Transportation Agency, J. Wells, Environment Project Manager;
 U.S. Air Force, Air Force Logistics Command, A. F. Sculimbrene, Office of Environmental Management;
 Toledo Metropolitan Area Council of Governments, K. Erickson, Director of Regional Planning;
 Ohio State University, Ohio Agricultural Research and Development Center (OARDC), Professor Warren Dick;
 Ohio State University Research Foundation, Sharon Coulter, Associate Director;

Funds or services were provided by the U.S. Army Corps of Engineers in collecting data for 72 hydrologic-data stations in this report. The Miami Conservancy District, U.S. Army Corps of Engineers, and Ohio Department of Natural Resources aided in collecting data.

SUMMARY OF HYDROLOGIC CONDITIONS

Ohio is part of three physiographic provinces, each with its own distinctive hydrologic characteristics. The topography of the Till Plains section of the Central Lowlands physiographic province (fig. 1) consists of gently rolling ground moraine, bands of terminal moraine, and outwash-filled valleys. Glaciation altered the courses of most streams in this area. The Eastern Lake Plains section (fig. 1) consists of wide expanses of level or nearly level land interrupted only by the sporadic sandy ridges that are the last visible remnants of glacial-lake beaches. Much of the area was swamp prior to development, and marshes are still present along Lake Erie near Toledo. The Lexington Plains section of the Interior Low Plateau province (fig. 1) is characterized by rolling terrain and a few isolated large hills and ridges. The "barbed" drainage pattern formed when small streams were captured as their headwaters cut back into the hills over time. Streams have carved the Kamala section of the Appalachian Plateaus province (fig. 1) into an intricate series of hollows and steep-sided ridges. Only the large streams in the section have any appreciable flood plain. In the southern New York section (fig. 1), successive waves of glaciation have subdued the relief, buried many precocial valleys, and rerouted many streams.

Precipitation

The average annual precipitation in Ohio is about 38 inches. The annual precipitation decreases from around 42 inches on the southern border to about 32 inches in the northwest. An anomalous area of high precipitation (as much as 44 inches) in northeastern Ohio results from air masses that pick up moisture and heat from Lake Erie and subsequently release precipitation over a range of hills stretching northeastward from Cleveland.

Monthly precipitation typically is greatest from May through July and least in October, December, and February. Of the approximate 38 inches of average annual precipitation, about 10 inches runs off immediately, 2 inches is retained at or near the surface and evaporates and transpires, and 26 inches enters the ground. Of the 26 inches that enters the ground, 20 inches is retained in the unsaturated zone and is later lost by evapotranspiration. The remaining 6 inches reaches the water table. Of this 6 inches, 2 inches eventually discharges to streams, and the rest is lost by evapotranspiration and consumptive use. Average runoff ranges from about 15 to 18 inches along the southern border to about 8 to 12 inches along most of the northern border, except in the northeast, where runoff is as much as 20 inches. The pattern of streamflow differs from the pattern of precipitation because of the contributions of snowmelt to streamflow in the early spring and the reduction in flows by evapotranspiration from June through September.

Surface WaterStreamflow

Streamflow-data-collection stations are distributed irregularly throughout the State, and tend to be concentrated on the main river systems. The stations are used to sample a wide variety of conditions. The drainage areas range from 12 to 7,420 square miles and represent a wide diversity of topography and other physical characteristics. Streamflow ranges from unregulated to highly regulated.

Statewide streamflow, water year 1992

At the beginning of water year 1992, most of the State was experiencing a severe drought; extreme drought conditions prevailed in central and northeastern Ohio. Streamflow for October through February was in the deficient range for most of the State, except for northwestern Ohio where generally excessive flows prevailed in response to above-normal precipitation.

Streamflow was in the normal¹ to below-normal range during March through June as extreme drought conditions continued in central and northeastern Ohio. In northeastern Ohio, streamflow was in the deficient range for the first 9 months of the water year.

Above-normal precipitation in July (the wettest July on record of 110 years for statewide average) effectively ended the drought and resulted in excessive streamflow throughout the State. Flash flooding in the south-central part of the State on July 26 caused severe property damage and loss of life.

Precipitation for the remainder of the water year was generally above normal, and streamflow was in the excessive range for most of the State.

¹For streamflow, "normal" is defined as being between the 25th and 75th percentiles as measured during the base period water years 1951-80.

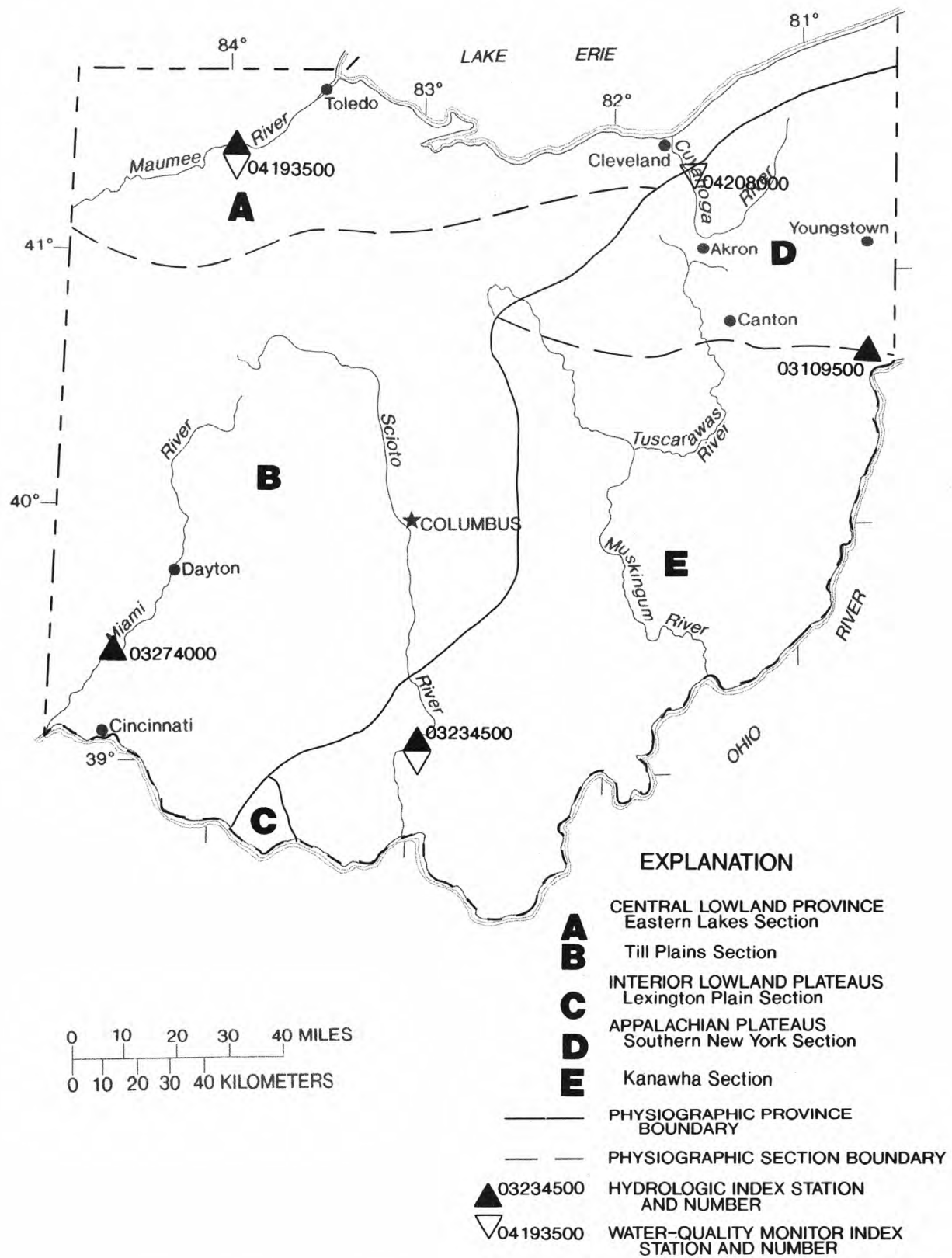


Figure 1.--Physiographic divisions and location of Hydrologic Index Stations.

Water Quality

The U.S. Geological Survey collects long-term water-quality data in Ohio at 10 fixed stations (fig. 1). Nine NASQAN (National Stream Quality Accounting Network) stations are in major river basins in Ohio, and one Hydrologic Benchmark station is in a small, relatively pristine basin in southern Ohio. Samples are collected quarterly at six stations, bimonthly at three stations, and monthly at the Benchmark station. Because of the fixed schedule, samples are collected at a variety of streamflows (fig. 2). Samples are analyzed for major anions and cations, nutrients, trace elements, suspended sediment, selected physical properties, and fecal coliform and fecal streptococci.

Box plots of selected constituents measured from 1982 through 1991 are shown in figure 3. Results of analysis of samples collected in water year 1992 are superimposed on the box plots and are represented by solid circles.

Chloride concentrations, commonly associated with municipal or industrial point sources of discharge, generally followed the distribution of concentrations measured during the previous 11-year period at most stations. In the lower Grand River basin, chloride concentrations were lower than the extremely high concentrations found in previous years. In this area, salt mining and processing as well as runoff from abandoned chemical-industry properties most likely contribute to high chloride concentrations. At all sites, the concentration of chloride generally increased as stream-flow decreased.

Nitrate concentration is of concern for public water supplies--the maximum contaminant level is 10 milligrams per liter (as N) for finished drinking water. In Ohio streams, fertilizers are a major source of nitrate. The highest concentration of nitrate plus nitrite in water year 1992 was found in the Maumee River. Concentrations in the Muskingum, Hocking, and Grand Rivers did not vary greatly and were less than 3 milligrams per liter.

Agricultural runoff and municipal and industrial point discharges are the major sources of phosphorus. In the Hocking, Scioto, and Cuyahoga Rivers, total-phosphorus concentrations for water year 1992 were near or below the 11-year median concentrations. Total-phosphorus concentrations were greatest and most variable in the Great Miami and Little Miami Rivers and ranged from 0.190 to 0.660 milligrams per liter. The basins drained by these rivers contain agricultural and urban lands that contribute runoff of agricultural chemicals and discharges from municipal and industrial point sources.

For most sites, fecal-coliform and dissolved-solids concentrations for water year 1992 were similar to concentrations found in the previous 11-year period. At the great Miami River at Hamilton, however, fecal-coliform concentrations in all samples were less than the 25th percentile. At this site, measured streamflows for 1992 were all below the median value generated for data from 1982 through 1991.

Water-quality monitors at two NASQAN stations (Maumee River at Waterville and Cuyahoga River at Independence) were discontinued in 1992. Data from the remaining water-quality monitor at Scioto River at Higby was used to calculate annual mean temperature, dissolved-oxygen concentration, pH, and specific conductance for water year 1992. The 1992 mean values were compared with the annual means from 1982-91 at this site. Mean pH and specific conductance were slightly higher and mean temperature and dissolved oxygen were slightly lower than for the previous 10-year period, probably because of a lower than average discharge for the year.

Ground Water

Ground water serves the needs of 42 percent of Ohio's population. An estimated 740 million gallons of ground water per day is withdrawn for domestic, industrial, and agricultural purposes. Many people in Ohio depend on ground water as the only practical source of supply.

Ohio's unconsolidated aquifers are composed of either coarse- or fine-grained sediments. Both types are composed mainly of materials of glacial origin. The coarse-grained unconsolidated aquifers generally consist of highly permeable sand and gravel. Much of the sand and gravel is alluvium derived from glaciofluvial outwash along the courses of some modern streams; thus, these aquifers sometimes are referred to as "water-course" aquifers. Coarse-grained unconsolidated aquifers in the northwestern corner of the State (fig. 4) underlie glacial till, are locally confined under artesian pressure, and are highly productive. Extensive kame-terrace deposits of water-bearing gravel and sand are widely used ground water sources in northeastern Ohio. The fine-grained unconsolidated aquifers are similar to the coarse-grained unconsolidated aquifers in form and origin but are less permeable because of higher percentages of mixed fine sand, silt, and clay. Included in the fine-grained unconsolidated aquifers are tills that contain thin or localized stratified lenses of sand and gravel.

Ground-water supply for much of the unglaciated upland area of southeastern Ohio is from bedrock aquifers composed of shaly sandstone and thin limestone. These strata, which range from Mississippian to Permian in age, are dominated by low-yielding shales and shaly sandstones that include numerous coal-bearing strata. In some places, small water supplies are available from fractured coal beds. Several sandstone aquifers in northeastern Ohio are of regional extent and are major ground-water sources for individual and small public supplies. These include the Berea and Black Hand Sandstones of Mississippian age and several sandstone members of the Pottsville and Allegheny Formations of Pennsylvanian age. The Lake Erie coastline of northeastern Ohio is underlain by shale of Devonian and Mississippian age (fig. 4) that yields only small amounts of water to wells. Silurian-age limestone and dolomite and Devonian limestone comprise the carbonate aquifer system (fig. 4) of much of western Ohio. Glacial cover is uneven and consists of valley fill and terminal moraine in some places. The northeastern part of western Ohio contains an area of high-yielding wells that tap a preferentially weathered zone, which developed when carbonate section was periodically exposed as land mass during the Paleozoic Era. The southwestern corner of Ohio near Cincinnati is underlain by shale and a thin limestone aquifer of Ordovician age. Away from the watercourse (coarse unconsolidated) aquifers that traverse the area, the rocks that form the uplands yield only very small amounts of ground water.

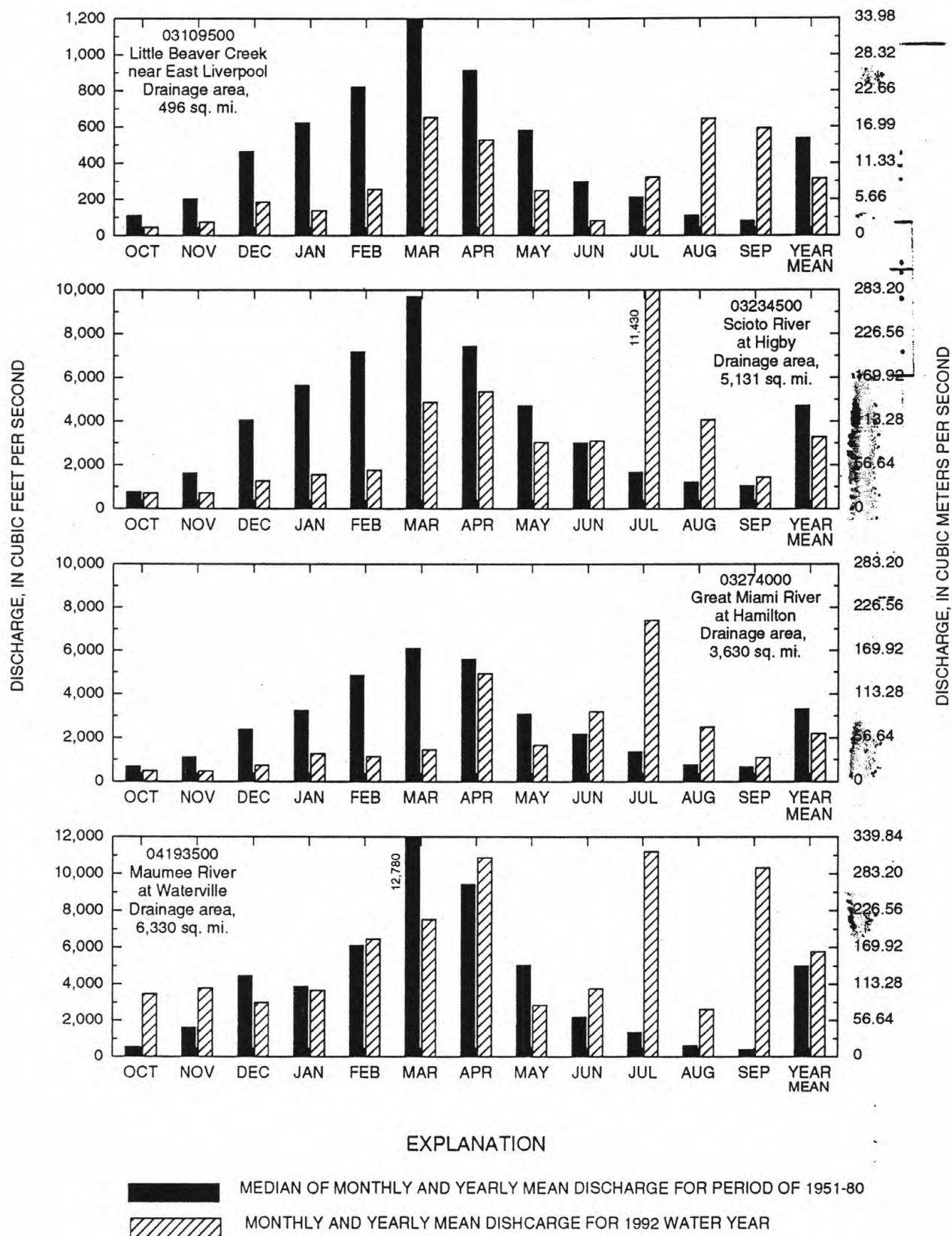


Figure 2.--Runoff during 1992 water year compared with median runoff for period 1951-80 for four representative gaging stations

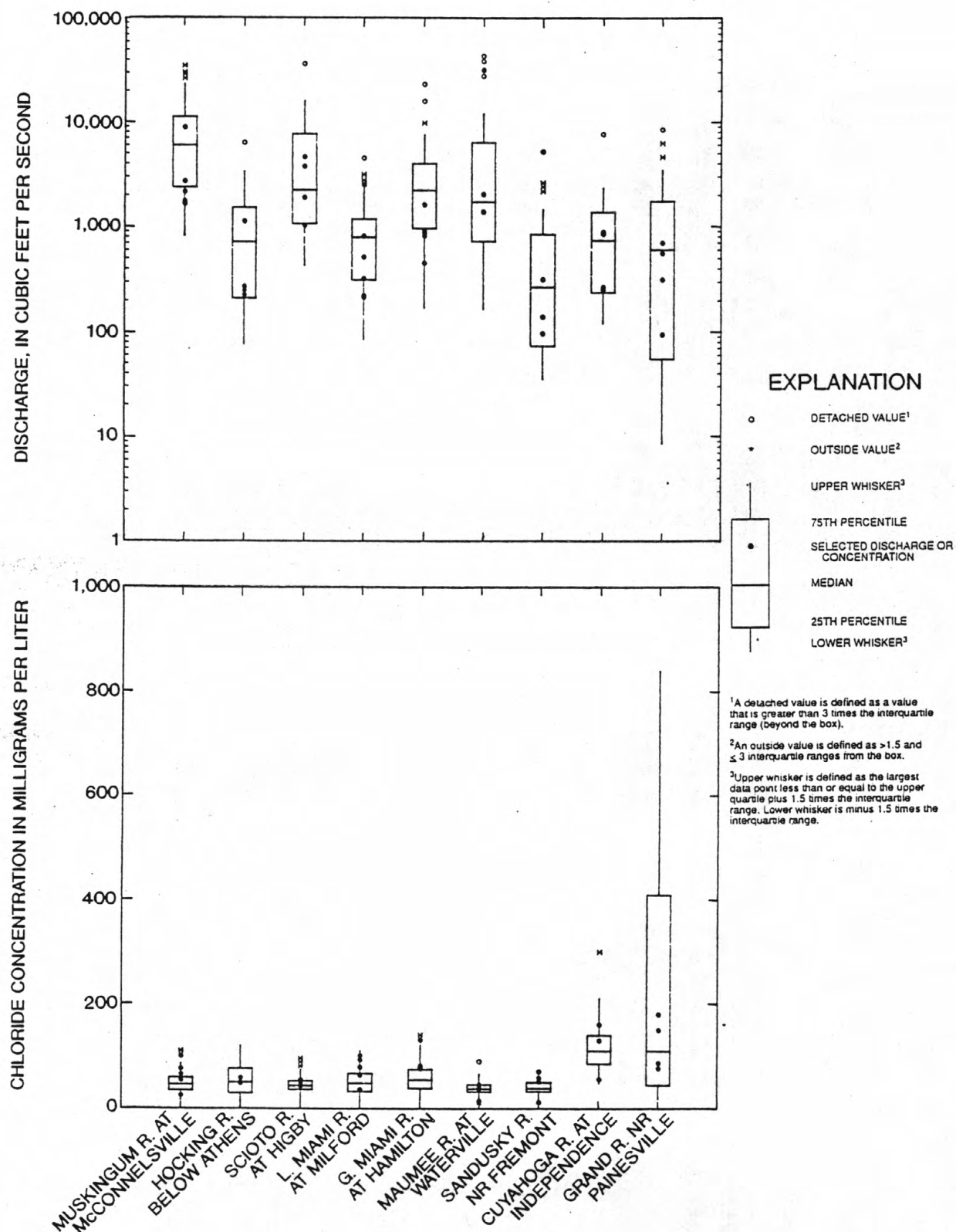


Figure 3.—Discharge and chemical concentrations measured in water year 1992 and the distribution of those constituents from measurements made during water years 1981-90 at NASQAN stations.

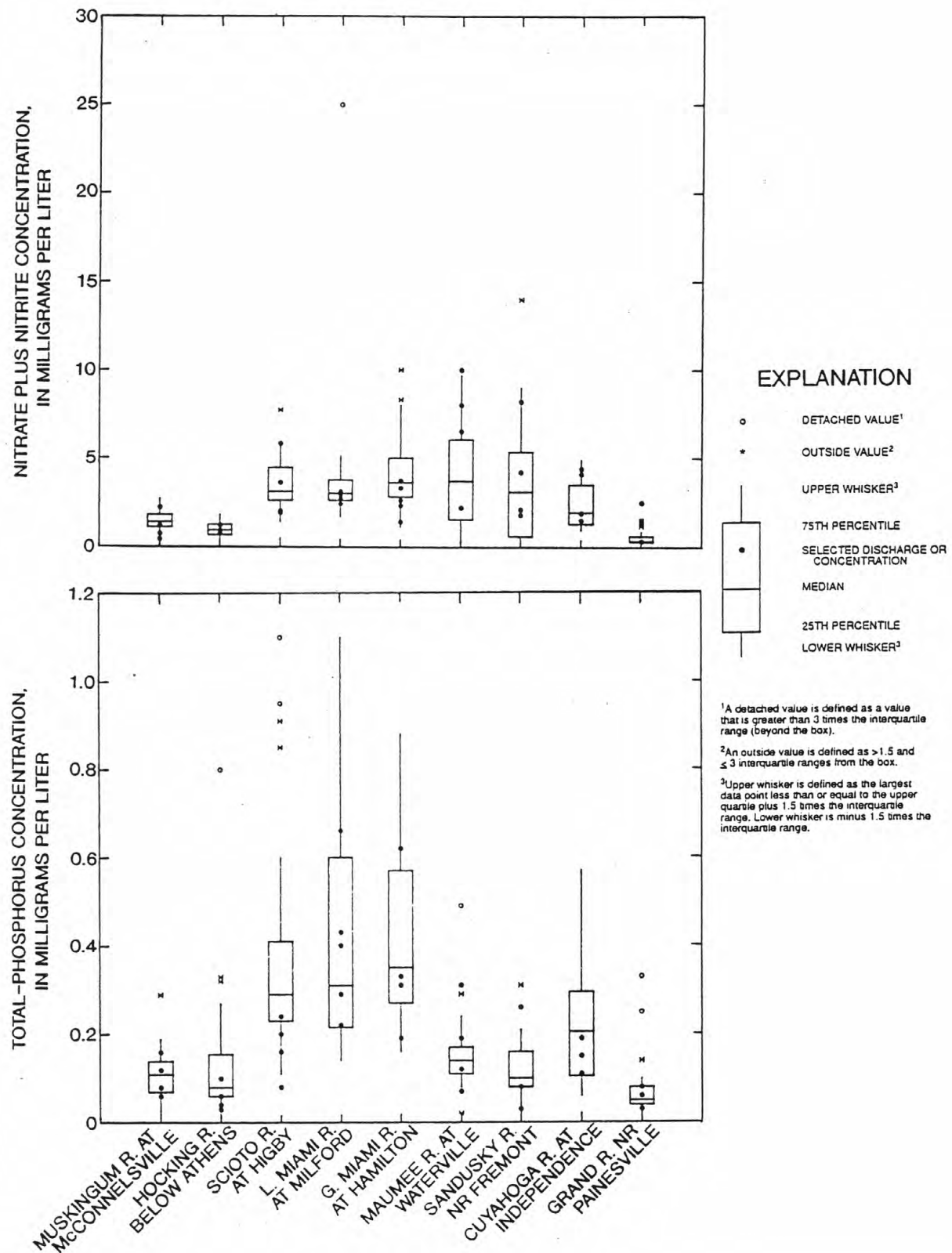


Figure 3.—Discharge and chemical concentrations measured in water year 1992 and the distribution of those constituents from measurements made during water years 1981-90 at NASQAN stations—Continued.

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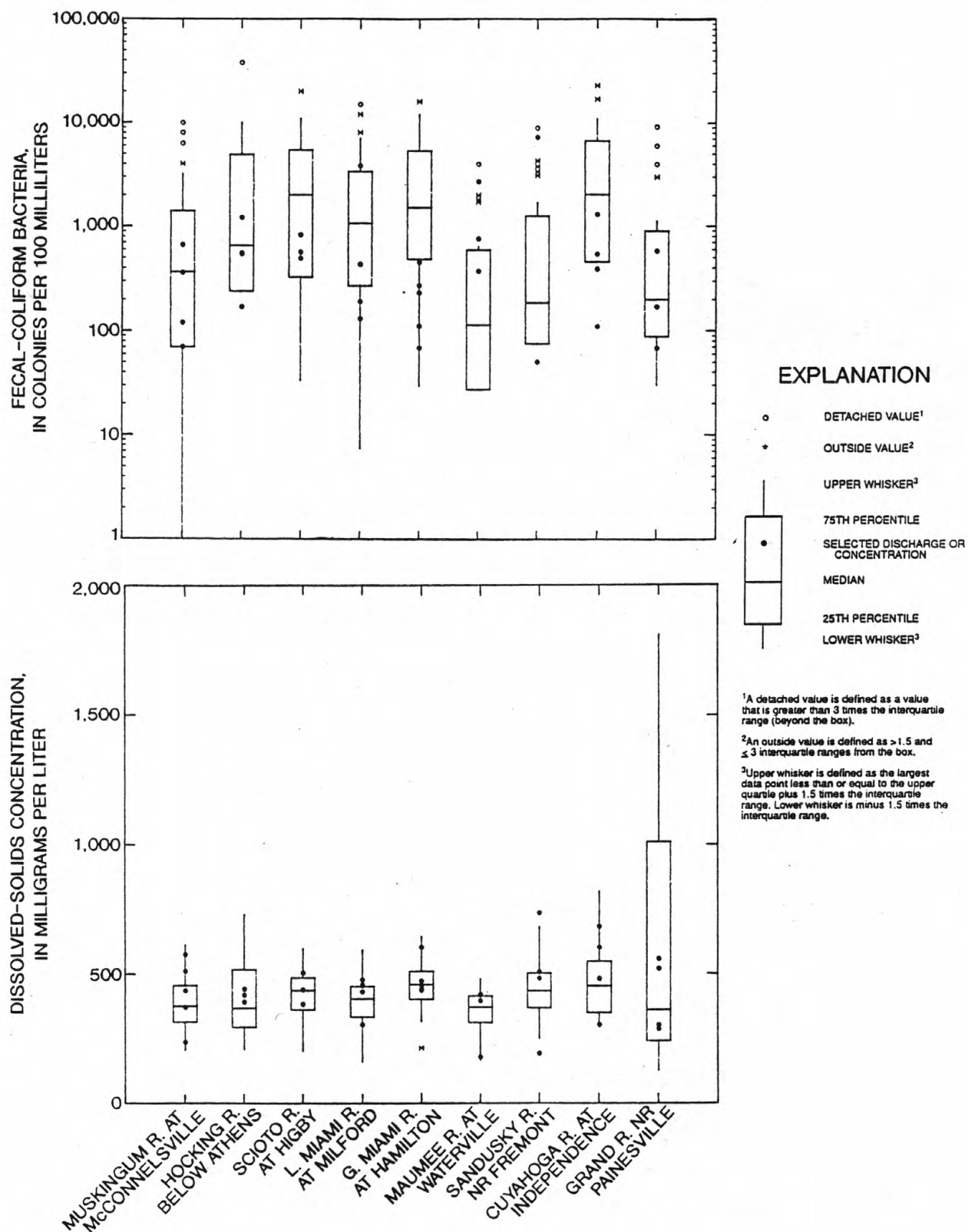


Figure 3.--Discharge and chemical concentrations measured in water year 1992 and the distribution of those constituents from measurements made during water years 1981-90 at NASQAN stations--Continued.

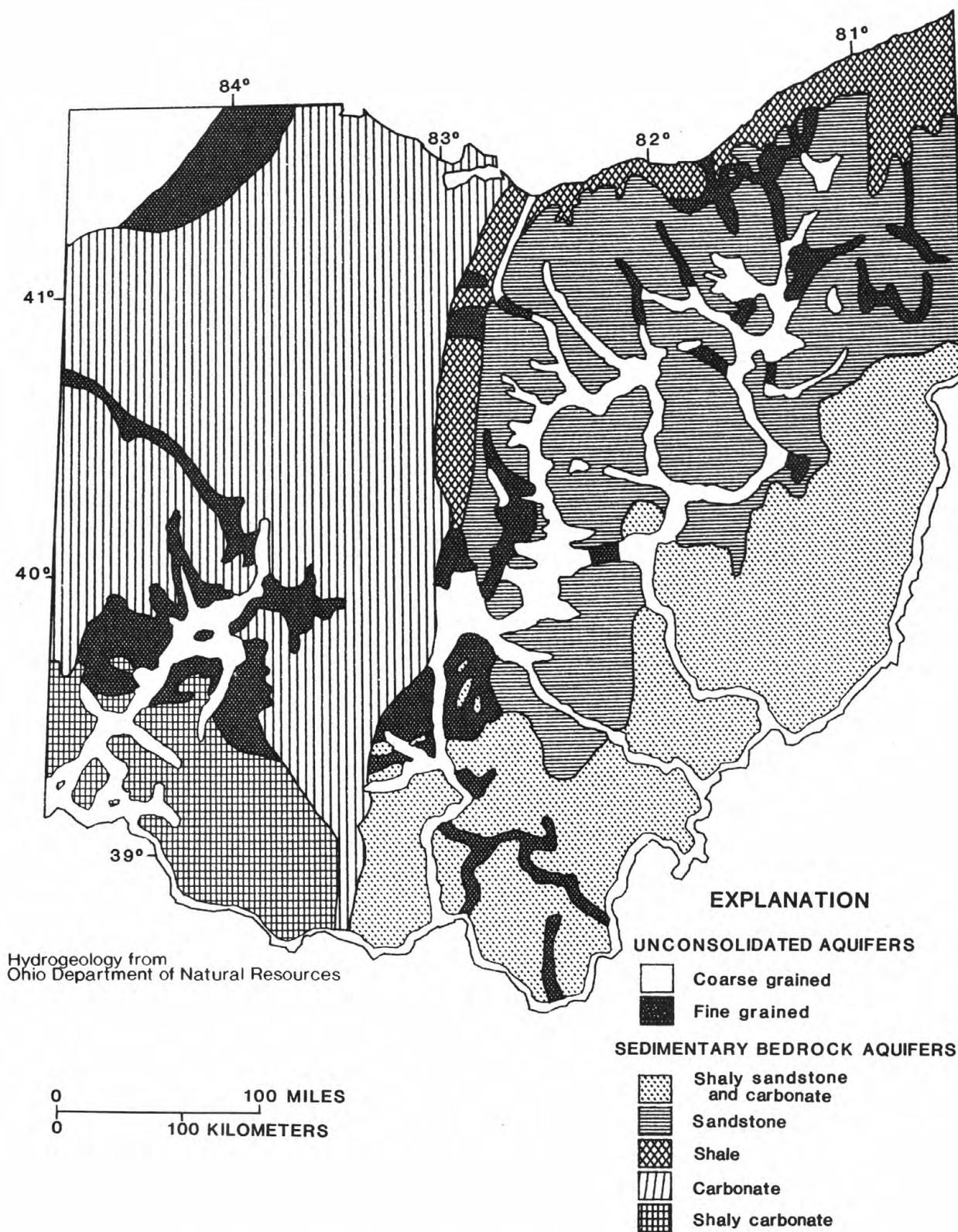


Figure 4.--Geographic distribution of principal aquifers in Ohio.

Ground-Water Levels

Most ground-water observation wells in Ohio tap unconsolidated sand and gravel aquifers associated with the State's principal streams. Sample 1-year and 5-year hydrographs of a well completed in an unconfined unconsolidated sand-and-gravel aquifer are shown in figure 5. The observation-well network also includes some bedrock wells in areas where consolidated aquifers are heavily used for water supply, such as in the carbonate-rock region of northwestern Ohio. Sample 1-year and 5-year hydrographs of a well completed in a confined carbonate-rock aquifer are shown in figure 6. The yearly low for most wells occurs during the winter months, especially in cold, dry years or near the end of the growing season. Highs for the year usually occur from March through June, which is the peak of the recharge season. The yearly water-level fluctuation due to climatic conditions in water-table and confined-aquifer wells is commonly 3 to 5 feet, but can be as much as 10 feet.

Ground water levels at the beginning of water year 1992 were above normal because much of the State was experiencing a severe drought; in central and northeastern Ohio, drought conditions were extreme. Ground-water levels declined and remained below normal during October and November in response to continued below-normal precipitation. Record low levels were established at several observation wells during this period.

Generally, ground-water levels tended to stabilize during December through February after a return to normal precipitation in December. Ground-water levels, however, remained below normal. With the exception of deep bedrock wells, there was a general upward trend in ground-water levels in response to normal and above-normal precipitation in March and April. Levels generally remained below normal, however, most noticeably in central and northeastern Ohio, the area most severely affected by the drought.

Seasonal declines occurred in May and June, and below-normal levels prevailed statewide in bedrock wells in northwestern Ohio. Record precipitation in July reversed this downward trend and, by year's end, ground-water levels returned to normal for most of the State.

SPECIAL NETWORKS AND PROGRAM

Hydrologic Bench-Mark Network is a network of 57 sites in small drainage basins around the country whose purpose is to provide consistent data on the hydrology, water quality, and related factors in representative undeveloped watersheds nationwide, and to provide analyses on a continuing basis to compare and contrast conditions observed in basins more obviously affected by human activity.

National Stream Quality Accounting Network (NASQAN) is a nationwide data-collection network designed by the U.S. Geological Survey to meet many of the information needs of government agencies and other groups involved in general or regional water-quality planning and management. The approximately 500 sites in NASQAN are generally located at the downstream ends of hydrologic accounting units designated by the U.S. Geological Survey Office of Water Data Coordination in consultation with the U.S. Water Resources Council. The objectives of NASQAN are (1) to obtain information on the quality and quantity of water moving within and from the United States through a systematic and uniform process of data collection, summarization, analysis, and reporting such that the data may be used for; (2) description of the areal variability of water quality in the Nation's rivers through analysis of data from this and other programs; (3) detection of changes or trends with time in the pattern of occurrence of water-quality characteristics; and (4) providing a nationally consistent data base useful for water-quality assessment and hydrologic research.

Radiochemical program is a network of regularly sampled water-quality stations where samples are collected to be analyzed for radioisotopes. The streams that are sampled represent major drainage basins in the conterminous United States.

Tritium network is a network of stations which has been established to provide baseline information on the occurrence of tritium in the Nation's surface waters. In addition to the surface-water stations in the network, tritium data are also obtained at a number of precipitation stations. The purpose of the precipitation stations is to provide an estimate sufficient for hydrologic studies of the tritium input to the United States.

EXPLANATION OF THE RECORDS

The records in this report are for the 1992 water year that began October 1, 1991 and ended September 30, 1992. A calendar of the water year is provided on the inside of the front cover. The records contain streamflow data, stage and content data for lakes and reservoirs, water-quality data for surface and ground water, and ground-water-level data. The following sections of the introductory text are presented to provide users with a more detailed explanation of how the hydrologic data published in this report were collected, analyzed, computed, and arranged for presentation.

Station Identification Numbers

Each data station, whether streamsite or wellsite, is assigned a unique identification number. This number is unique in that it applies specifically to a given station and to no other. The number usually is assigned when a station is first established and is retained for that station indefinitely. The systems used by the U.S. Geological Survey to assign identification numbers for surface-water stations and for ground-water wells differ, but both are based on geographic locations. The "downstream order" system is used for regular surface-water stations and the "latitude-longitude" system is used for wells and, in Ohio, for surface-water stations where only miscellaneous measurements are made.

²For ground-water levels, "normal" is defined as being between the 25th and 75th percentiles of the range of values recorded during the reference period 1960-75.

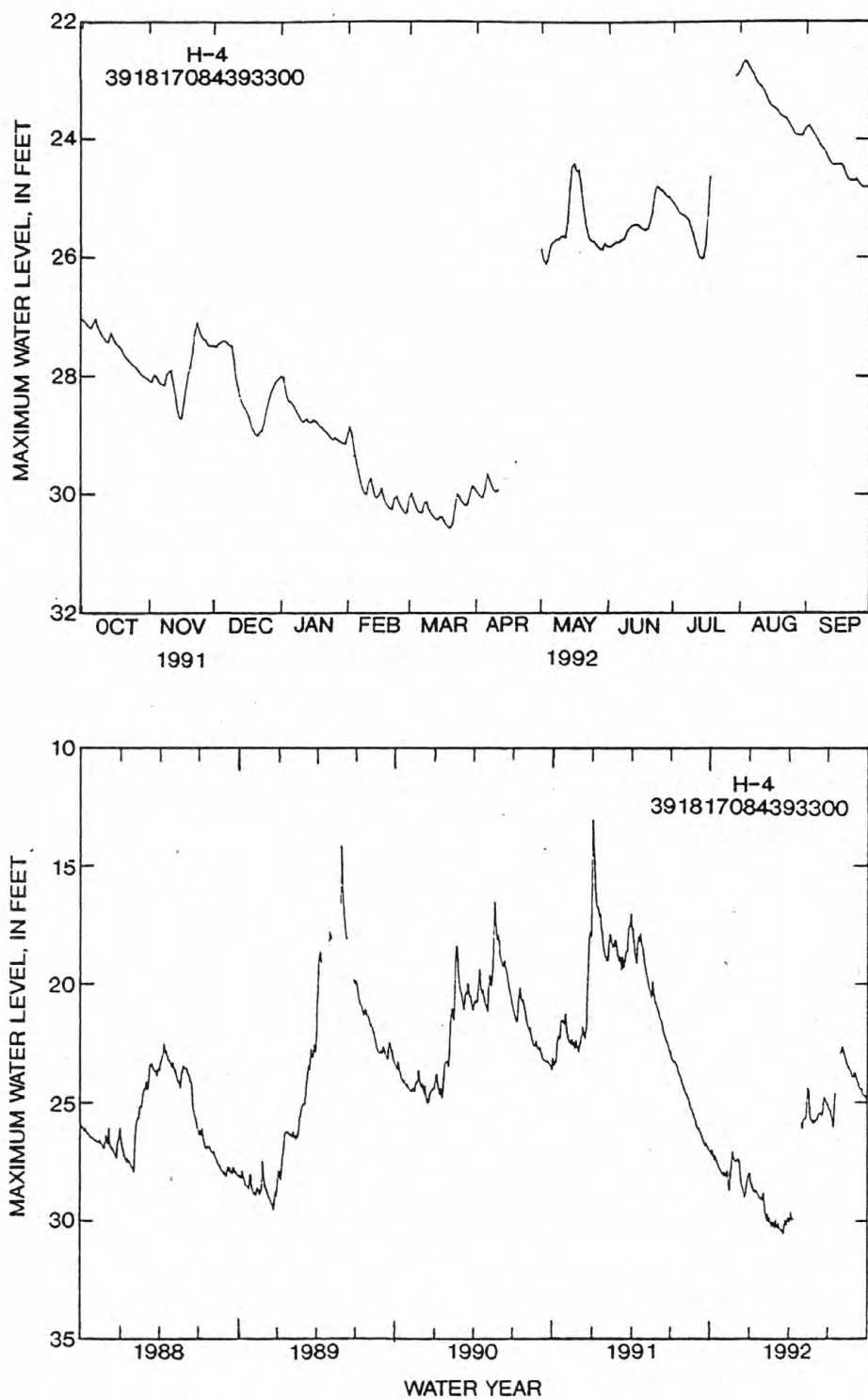


Figure 5.--Sample 1-year and 5-year hydrographs of a well completed in an unconfined unconsolidated aquifer.

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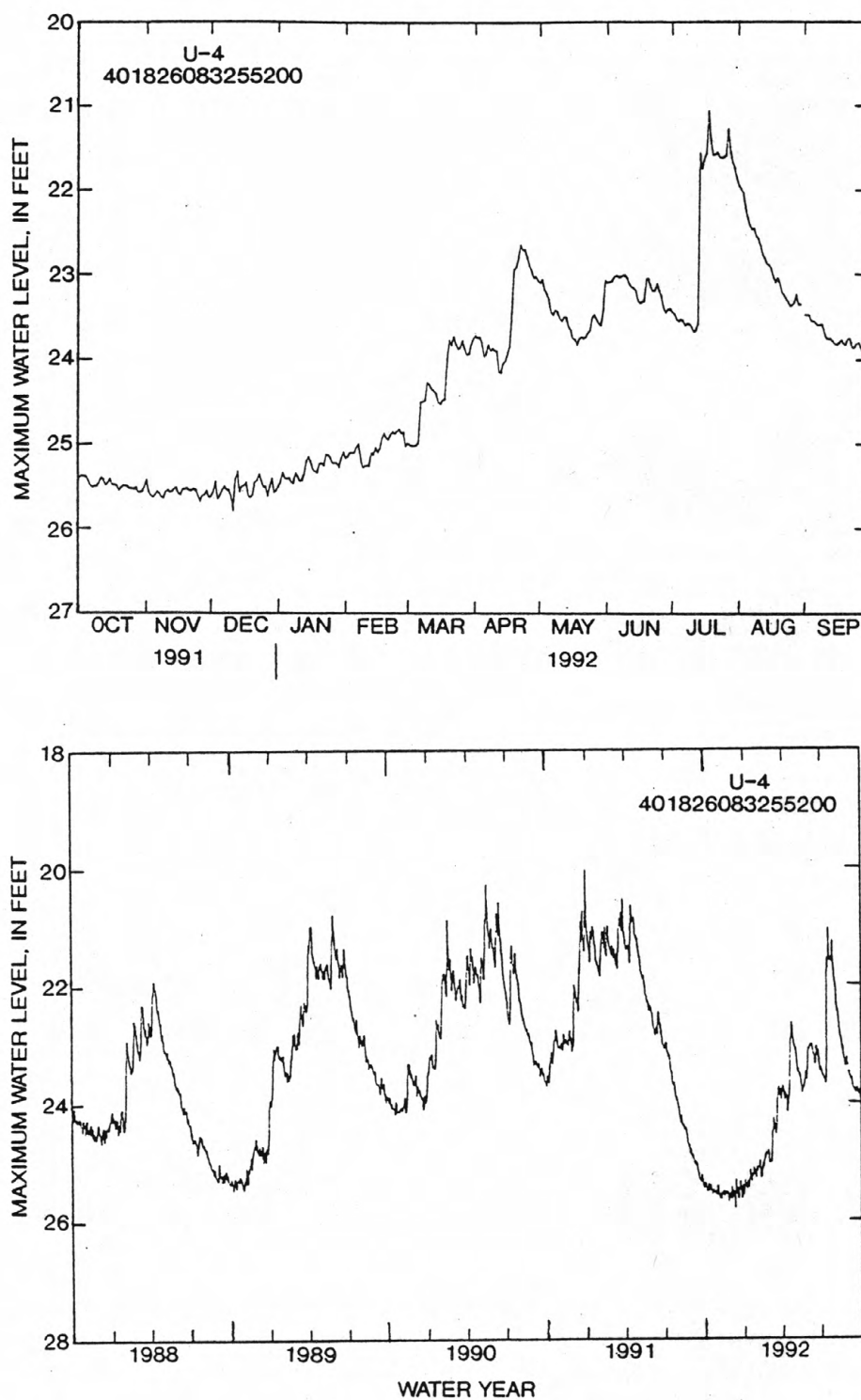


Figure 6.--Sample 1-year and 5-year hydrographs of a well completed in a confined carbonate-rock aquifer.

Downstream Order System

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 with respect to the stream to which it is immediately tributary is indicated by an indentation in a "List of Stations" in the front of the report. Each indentation represents one rank. This downstream order and system of indentation show which stations are on tributaries between any two stations and the rank of the tributary on which each station is situated.

The station-identification number is assigned according to downstream order. 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 eight-digit number for each station such as 04041000, which appears just to the left of the station name, includes the two-digit part number "04" plus the six-digit downstream order number "041000". The part number designates the major river basin; for example, part "03" is the Ohio River Basin, and part "04" is the St. Lawrence River Basin.

Latitude-Longitude System

The identification numbers for wells and miscellaneous surface-water sites are assigned according to the grid system of latitude and longitude. The number consists of 15 digits. The first six digits denote the degrees, minutes, and seconds of latitude, the next seven digits denote degrees, minutes, and seconds of longitude, and the last two digits (assigned sequentially) identify the wells or other sites within a 1-second grid. In the rare instance where the initial determination of latitude and longitude are found to be in error, the station will retain its initial identification number; however, its true latitude and longitude will be listed in the LOCATION paragraph of the station description. (See figure 7.)

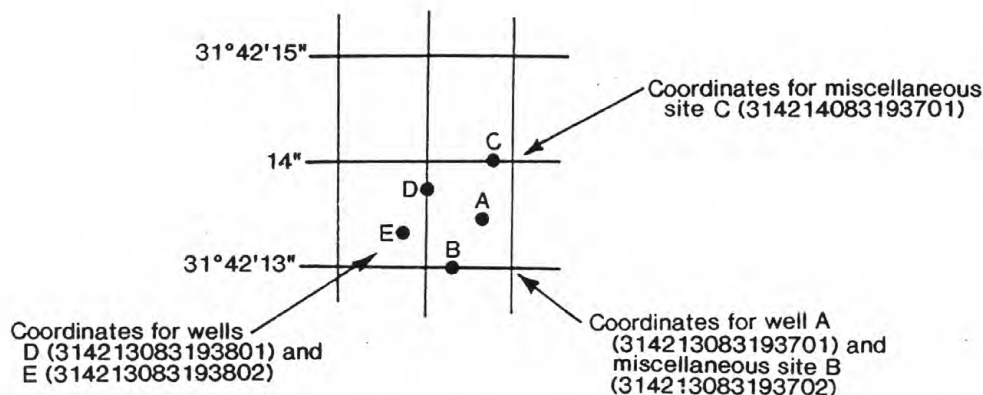


Figure 7.--System for numbering wells and miscellaneous sites (latitude and longitude).

Records of Stage and Water Discharge

Records of stage and water discharge may be complete or partial. Complete records of discharge are those obtained using a continuous stage-recording device through which either instantaneous or mean daily discharge may be computed for any time, or any period of time, during the period of record. Complete records of lake or reservoir contents, similarly, are those for which stage or content may be computed or estimated with reasonable accuracy for any time or period of time. They may be obtained using a continuous stage-recording device, but need not be. Because mean daily discharges and end-of-day contents commonly are published for such stations, they are referred to as "daily stations."

By contrast, partial records are obtained through discrete measurements without using a continuous stage-recording device and pertain only to a few flow characteristics, or perhaps only one. The nature of a partial record is indicated by table titles such as "crest-stage partial records," or "low-flow partial records." Records of miscellaneous discharge measurements or of measurements from special studies, such as low-flow seepage studies, may be considered as partial records, but they are presented separately in this report. Location of all complete-record and crest-stage stations for which data are given in this volume are shown in figure 8.

Data Collection and Computation

The data obtained at a complete-record gaging station on a stream or canal consist of a continuous record of stage, individual measurements of discharge throughout a range of stages, and notations regarding factors that may affect the relationships between stage and discharge. These data, together with supplemental information such as weather records, are used to compute daily discharges. The data obtained at a complete-record gaging station on a lake or reservoir consists of a record of stage and of notations regarding factors that may affect the relationship between stage and lake content. These data are used with stage-area and stage-capacity curves or tables to compute water-surface areas and lake storage.

Continuous records of stage are obtained with analog recorders that trace continuous graphs of stage, or with digital recorders that punch stage values on paper tapes or store stage data on cassette tapes at selected time intervals. Measurements of discharge are made with current meters using methods adapted by the Geological Survey as a result of experience accumulated since 1880. These methods are described in standard textbooks, in Water-Supply Paper 2175, and in U.S. Geological Survey Techniques of Water-Resources Investigations, Book 3, Chapter A6.

In computing discharge records, results of individual measurements are plotted against the corresponding stages, and stage-discharge relation curves are then constructed. From these curves, rating tables indicating the approximate discharge for any stage within the range of the measurements are prepared. If it is necessary to define extremes of discharge outside the range of the current-meter measurements, the curves are extended using: (1) Logarithmic plotting; (2) velocity-area studies; (3) results of indirect measurements of peak discharge, such as slope-area or contracted-opening measurements, and computations of flow-over-dams or weirs; or (4) step-backwater techniques.

Daily mean discharges are computed by applying the daily mean stages (gage heights) to the stage discharge curves or tables. 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 determined by the shifting-control method, in which correction factors based on the individual discharge measurements and notes of the personnel making the measurements are applied to the gage heights before the discharges are determined from the curve or tables. This shifting-control method also is used if the stage-discharge relation is changed temporarily because of aquatic growth or debris on the control. For some stations, formation of ice in the winter may so obscure the stage-discharge relation that daily mean discharges must be estimated from other information such as temperature and precipitation records, notes of observations, and records for other stations in the same or nearby basins for comparable periods.

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.

In computing records of lake or reservoir contents, it is necessary to have available from surveys, curves, or tables defining the relationship of stage and contents. The application of stage to the stage-contents curves or tables give the contents from which daily, monthly, or yearly changes are then determined. If the stage-contents relationship changes because of deposition of sediment in a lake or reservoir, periodic resurveys may be necessary to redefine the relationship. Even when this is done, the contents computed may become increasingly in error as time since the last survey increases. Discharges over lake or reservoir spillways are computed from stage-discharge relationships much as other stream discharges are computed.

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 from the recorded range in stage, previous or following record, discharge measurements, weather records, and comparison with other station records from the same or nearby basins. Likewise, daily contents may be estimated from operator's logs, previous or following record, inflow-outflow studies, and other information.

Data Presentation

The records published for each gaging station consist of two parts--the manuscript or station description and the data table for the current water year. The manuscript provides, under various headings, descriptive information, such as station location; period of record; average discharge; historical extremes; record accuracy; and other remarks pertinent to station operation and regulation. The following information, as appropriate, is provided with each continuous record of discharge or lake content. Comments to follow clarify information presented under the various headings of the station description.

Station manuscript

The manuscript provides, under various headings, descriptive information, such as station location; period of record; historical extremes outside the period of record; record accuracy; and other remarks pertinent to station operation and regulation. The following information, as appropriate, is provided with each continuous record of discharge or lake content. Comments to follow clarify information presented under the various headings of the station description.

LOCATION.--Information on locations is obtained from the most accurate maps available. The location of the gage with respect to the cultural and physical features in the vicinity and with respect to the reference place mentioned in the station name is given. River mileage, given for only a few stations, were determined by methods given in "River Mileage Measurement," Bulletin 14, Revision of October 1968, prepared by the Water Resources Council or were provided by the U.S. Army Corps of Engineers.

DRAINAGE AREA.--Drainage areas are measured using the most accurate maps available. Because the type maps available varies from one

drainage basin to another, the accuracy of the drainage areas likewise varies. Drainage areas are updated as better maps become available.

PERIOD OF RECORD.--This indicates the period for which there are published records for the station or for an equivalent station. An equivalent station is one that was in operation at a time that the present station was not, and whose location was such that records from it can reasonably be considered equivalent with records from the present station.

REVISED RECORDS.--Published records, because of new information, occasionally are found to be incorrect, and revisions are printed in later reports. Listed under this heading are all the reports in which revisions have been published for the station and the water years to which the revisions apply. If a revision did not include daily, monthly, or annual figures of discharge, that fact is noted 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 the peak discharges were revised. If the drainage area has been revised, the report in which the most recently revised figure was first published is given.

GAGE.--The type of gage in current use, the datum of the current gage referred to National Geodetic Vertical Datum of 1929 (see glossary), and a condensed history of the types, locations, and datums of previous gages are given under this heading.

REMARKS.--All periods of estimated daily-discharge record will either be identified by date in this paragraph of the station description for water-discharge stations or flagged in the daily-discharge table. (See next section, "Identifying Estimated Daily Discharge.") If a REMARKS statement is used to identify estimated record, the paragraph will begin with this information presented as the first entry. The paragraph is also used to present information relative to the accuracy of the records, to special methods of computation, to conditions that affect natural flow at the station, in addition, possibly, to other pertinent items. For reservoir stations, information is given on the dam forming the reservoir, the capacity, outlet works and spillway, and purpose and use of the reservoir.

COOPERATION.--Records provided by a cooperating organization or obtained for the Geological Survey by a cooperating organization are identified here.

EXTREMES FOR PERIOD OF RECORD.--Extremes may include maximum and minimum stages and maximum and minimum discharges or contents. Unless otherwise qualified, the maximum discharge or content is the instantaneous maximum corresponding to the highest stage that occurred. The highest stage may have been obtained from a graphic or digital recorder, a crest-stage gage, or by direct observation of a nonrecording gage. If the maximum stage did not occur on the same day as the maximum discharge or content, it is given separately. Similarly, the minimum is the instantaneous minimum discharge, unless otherwise qualified, and was determined and is reported in the same manner as the maximum. Extremes for period of record is presented as a separate paragraph where outside summary statistical period.

EXTREMES OUTSIDE PERIOD OF RECORD.--Included here is information concerning major floods or unusually low flows that occurred outside the stated period of record. The information may or may not have been obtained by U.S. Geological Survey.

PEAK DISCHARGES ABOVE BASE FOR CURRENT YEAR.--For stations meeting certain criteria, all peak discharges and stages occurring during the water year and greater than a selected base discharge are presented under this heading. All peaks greater than the base discharge are listed with the maximum for the year footnoted by an asterisk (*). Peak discharges are not published for canals, ditches, drains, or streams for which the peaks are subject to substantial control by man or at locations where the instantaneous peak discharge does not exceed the mean daily discharge by 10 percent. The time of occurrence for peaks is expressed in 24-hour local standard time. For example, 12:30 a.m. is 0030, and 1:30 p.m. is 1330.

REVISIONS.--If a critical error in published records is discovered, a revision is included in the first report following discovery of the error.

Although rare, occasionally the records of a discontinued station gaging station may need revision. Because, for these stations, there would be no current or, possibly, future station manuscript published to document the revision in a "Revised Records" entry, users of data for these stations who obtained the data from previously published data reports may wish to contact the District office to determine if the published records were ever revised after the station was discontinued. Of course, if the data were obtained by computer retrieval, the data would be current and there would be no need to check because any published retrieval of data is always accompanied by revisions of the corresponding data in computer storage.

Manuscript information for lakes or reservoir stations differs from that for stream stations in the nature of the "Remarks" and in the inclusion of a skeleton stage-capacity table when daily contents are given.

Headings for AVERAGE DISCHARGE, AND EXTREMES FOR CURRENT YEAR have been deleted and the information contained in these paragraphs, except for the listing of secondary instantaneous peak discharges in the EXTREMES FOR CURRENT YEAR paragraph, is now presented in the tabular summaries following the discharge table or in the REMARKS paragraph, as appropriate. No changes have been made to the data presentations of lake contents.

Data table of daily mean values

The daily table for stream-gaging stations gives 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 is often expressed in cubic feet per square mile (line headed "CFSM"), or in inches (line headed "IN."), or in acre-feet (line headed "AC-FT"). Figures for cubic feet per second per square mile and runoff in inches are omitted if there is extensive regulation or diversion or if the drainage area includes large noncontributing areas. In the yearly summary below the monthly summary, the figures shown are the appropriate discharges for the calendar and water years. At some stations monthly and (or) yearly observed discharges are adjusted for reservoir storage or diversion, or diversions or reservoir contents are given. These figures are identified by symbol and corresponding footnote.

Statistics of monthly mean data

A tabular summary of the mean (line headed "MEAN"), maximum (line headed "MAX"), and minimum (line headed "MIN") of monthly mean flows for each month for a designated period is provided below the mean values table. The water years of the first occurrence of the maximum and minimum monthly flows are provided immediately below those figures. The designated period will be expressed as "FOR WATER YEARS ____- ____ BY WATER YEAR (WY)," and will list the first and last water years of the range of years selected from the PERIOD OF RECORD paragraph in the station manuscript. It will consist of all of the station record within the specified water years, inclusive, including complete months of record for partial water years, if any, and may coincide with the period of record for the station. The water years for which the statistics are computed will be consecutive, unless a break in the station record is indicated in the manuscript.

Summary statistics

A table title "SUMMARY STATISTICS" follows the statistics of monthly mean data tabulation. This table consists of four columns, with the first column containing the line headings of the statistics being reported. The table provides a statistical summary of yearly, daily, and instantaneous flows, not only for the current water year but also for the previous calendar year and for a designated period, as appropriate. The designated period selected, "WATER YEARS ____- ____," will consist of all of the station record within the specified water years, inclusive, including complete months of record for partial water years, if any, and may coincide with the period of record for the station. The water years for which the statistics are computed will be consecutive, unless a break in the station record is indicated in the manuscript. All of the calculations for the statistical characteristics designated ANNUAL (See line headings below.), except for the "ANNUAL 7-DAY MINIMUM" statistic, are calculated for the designated period using complete water years. The other statistical characteristics may be calculated using partial water years.

The date or water year as appropriate, of the first occurrence of each statistic reporting extreme values of discharge is provided adjacent to the statistic. Repeated occurrences may be noted in the REMARKS paragraph of the manuscript or in the footnotes. Because the designated period may not be the same as the station period of record published in the manuscript, occasionally the dates of occurrence listed for the daily and instantaneous extremes in the designated-period column may not be within the selected water years listed in the heading. When this occurs, it will be noted in the REMARKS paragraph or in footnotes. Selected streamflow duration curve statistics and runoff data are also given. Runoff data may be omitted if there is extensive regulation or diversion of flow in the drainage basin.

The following summary statistics data, as appropriate, are provided with each continuous record of discharge. Comments to follow clarify information presented under the various line headings of the summary statistics table.

ANNUAL TOTAL.--The sum of the daily mean values of discharge for the year. At some stations the annual total discharge is adjusted for reservoir storage or diversion. The adjusted figures are identified by a symbol and corresponding footnotes.

ANNUAL MEAN.--The arithmetic mean of the individual daily mean discharges for the year noted or for the designated period. At some stations the yearly mean discharge is adjusted for reservoir storage or diversion. The adjusted figures are identified by a symbol and corresponding footnotes. At least 5 complete years of record must be available before, this statistic is published for the designated period.

HIGHEST ANNUAL MEAN.--The maximum annual mean discharge occurring for the designated period.

LOWEST ANNUAL MEAN.--The minimum annual mean discharge occurring for the designated period.

HIGHEST DAILY MEAN.--The maximum daily mean discharge for the year or for the designated period.

LOWEST DAILY MEAN.--The minimum daily mean discharge for the year or for the designated period.

ANNUAL 7-DAY MINIMUM.--The lowest mean discharge for 7 consecutive days for a calendar year or a water year. Note that most low-flow frequency analyses of annual 7-day minimum flows use a climatic year (April 1-March 31). The date shown in the summary statistics table is the initial date of the 7-day period. (This value should not be confused with the 7-day 10-year low-flow statistic.)

INSTANTANEOUS PEAK FLOW.--The maximum instantaneous stage occurring for the water year or for the designated period. Note that secondary instantaneous peak discharges above a selected base discharge are stored in District computer files for stations meeting certain criteria. Those discharge values may be obtained by writing to the District Office. (See address on back of title page of this report.)

INSTANTANEOUS LOW FLOW.--The minimum instantaneous discharge occurring for the water year or for the design-named period.

ANNUAL RUNOFF (AC-FT).--Indicates the depth, in acre-feet, to which the drainage area would be covered if all the runoff for the year were uniformly distributed on it.

ANNUAL RUNOFF (CFSM).--Indicates 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 for the year.

ANNUAL RUNOFF (INCHES).--indicates the depth to which the drainage area would be covered if all the runoff for the year were uniformly distributed on it.

10 PERCENT EXCEEDS.--The discharge that is exceeded by 10 percent of the flow for the designated period.

50 PERCENT EXCEEDS.--The discharge that is exceeded by 50 percent of the flow for the designated period.

90 PERCENT EXCEEDS.--The discharge that is exceeded by 90 percent of the flow for the designated period.

Data collected at partial-record stations follow the information for continuous record sites. Data for partial-record discharge stations are usually presented in two tables. The first is a table of annual maximum stage and discharge at crest-stage stations, and the second, when collected, is a table of discharge measurements at low-flow partial-record 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. These measurements are generally made in time 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.

Identifying Estimated Daily Discharge

Estimated daily-discharge values published in the water-discharge tables of annual State data reports are identified either by flagging individual daily values with the letter "e" and printing a table footnote, "e Estimated," or by listing the dates of the estimated record in the REMARKS paragraph of the station description.

Accuracy of the Records

The accuracy of streamflow records 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 measurements of stage, measurements of discharge, and interpretation of records.

The accuracy attributed to the records is indicated under "REMARKS." "Excellent" means that about 95 percent of the daily discharges are within 5 percent of the true; "good," within 10 percent; and "fair," within 15 percent. Records that do not meet the criteria mentioned are rated "poor." Different accuracies may be attributed to different parts of a given record.

Daily mean discharges in this report are given to the nearest hundredths of a cubic foot per second for values less than 1 ft³/s; to the nearest tenth between 1.0 and 10 ft³/s; to whole numbers between 10 and 1,000 ft³/s; and to three significant figures for more than 1,000 ft³/s. The number of significant figures used is based solely on the magnitude of the discharge value. The same rounding rules apply to discharges listed for partial-record stations and miscellaneous sites.

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 other factors. For such stations, figures of cubic feet per second per square mile and 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 Records Available

Records of discharge, ground-water, reservoir contents, and water-quality not published by the Geological Survey are collected in Ohio at several sites by State and other Federal agencies. The National Water Data Exchange (NAWDEX), U.S. Geological Survey, Reston, VA 22092, maintains an index of these sites as well as an index of records of discharge collected by other agencies but not published by the Geological Survey. Information on records at specific sites can be obtained from that office upon request.

Information used in preparing the records in this publication, such as discharge-measurement notes, gage-height records, temperature measurements, and rating tables are on file in the Ohio District office. Also, most of the daily mean discharges are in computer-readable form and have been analyzed statistically. Information on availability of the unpublished information or on results of statistical analyses of the published records may be obtained from the District office.

Records of Surface-Water Quality

Records of surface-water quality ordinarily are obtained at or near stream-gaging stations because interpretation of records of surface-water quality nearly always requires corresponding discharge data. Records of surface-water quality in this report may involve a variety of types of data and measurement frequency.

Classification of Records

Water-quality data for surface-water sites are grouped into one of three classifications. A continuing-record station is a site where data are collected on a regularly scheduled basis. Frequency may be once or more times daily, weekly, monthly, or quarterly. A partial-record station is a site where limited water-quality data are collected systematically over a period of years. Frequency of sampling is usually less than quarterly. A miscellaneous sampling site is a location other than a continuing or partial-record station, where random samples are collected to give better areal coverage to define water-quality conditions in the river basin.

A careful distinction needs to be made between "continuing records" as used in this report and "continuous recordings," which refers to a continuous graph or a series of discrete values punched at short intervals on a paper tape. Some records of water quality, such as temperature and specific conductance, may be obtained through continuous recording; however, because of cost, most data are obtained only monthly or less frequently. Locations of stations for which records on the quality of surface water appear in this volume are shown in figure 9.

Arrangement of Records

Water-quality records collected at a surface-water daily record station are published immediately following that record, regardless of the frequency of sample collection. Station number and name are the same for both records. Where a surface-water daily record station is not available or where the water quality differs significantly from that at a nearby surface-water station, the continuing water-quality record is published with its own station number and name in the regular downstream-order sequence. Water-quality data for partial-record stations and for miscellaneous sampling sites appear in separate tables following the table of discharge measurements at miscellaneous sites.

On-site Measurements and Sample Collection

In obtaining water-quality data, a major concern is that the data obtained represent the in situ quality of the water. To assure this, certain measurements, such as water temperature, pH, and dissolved oxygen, need to be made on site when the samples are taken. To assure that measurements made in the laboratory also represent the in situ water, carefully prescribed procedures need to be followed in collecting the samples, in treating the sample to prevent changes in quality pending analysis, and in shipping the samples to the laboratory. Procedures for on-site measurements and for collecting, treating, and shipping samples are given in publications on "Techniques of Water-Resources Investigations" (TWRI), Book 1, Chap. D2; Book 3, Chap. C2; Book 5, Chap. A1, A3, and A4. All of these references are listed on p. 21-22 of this report. Also, detailed information on collecting, treating, and shipping samples may be obtained from the Geological Survey District office.

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. All samples obtained for the National Stream-Quality Accounting Network (see definitions) are obtained from at least several verticals. Whether samples are obtained from the centroid of flow or from several verticals depends on flow conditions and other factors that must be evaluated by the collector.

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, minimum, and mean values for each constituent measured and are based upon hourly punches beginning at 0100 hours and ending at 2400 hours for each day of record. More detailed records (hourly values) may be obtained from the U.S. Geological Survey District Office, whose address is given on the back of the title page of this report.

Water Temperatures

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, either mean temperatures or 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 section.

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 discharge 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 values differ 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 observation, such data are useful in establishing seasonal relations between quality and streamflow and in predicting long-term sediment-discharge characteristics of the stream.

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

Laboratory Measurements

Sediment samples, samples for biochemical oxygen demand (BOD), and daily samples for specific conductance are analyzed locally. All other samples are analyzed in the Geological Survey laboratories in Arvada, CO. Methods used in analyzing sediment samples and computing sediment records are given in TWRI, Book 5, Chap. C1. Methods used by the Geological Survey laboratory are given in TWRI, Book 1, Chap. D2; Book 3, Chap. C2; Book 5, Chap. A1, A3, and A4.

In March 1989 the National Water-Quality Laboratory discovered a bias in the turbidimetric method for sulfate analysis, indicating that values below 75 mg/L have a median positive bias of 2 mg/L above the true value for the period between 1982 and 1989.

Historical and current (1992) dissolved trace-element concentrations are reported herein for water that was collected, processed, and analyzed by using either ultraclean or other than ultraclean techniques. If ultraclean techniques were used, then those concentrations are reported in nanograms per liter. If other than ultraclean techniques were used, then those concentrations are reported in micrograms per liter and could reflect contamination introduced during some phase of the procedure.

Data Presentation

For continuing-record stations, information pertinent to the history of station operation is provided in descriptive headings preceding the tabular data. These descriptive headings give details regarding location, drainage area, period of record, type of data available, instrumentation, general remarks, cooperation, and extremes for parameters currently measured daily. Tables of chemical, physical, biological, radiochemical data, and so forth, obtained at a frequency less than daily, are presented first. Tables of "daily values" of specific conductance, pH, water temperature, dissolved oxygen, and suspended sediment then follow in sequence.

In the descriptive headings, if the location is identical to that of the discharge gaging station, neither the LOCATION nor the DRAINAGE AREA statements are repeated. The following information, as appropriate, is provided with each continuous-record station. Comments that follow clarify information presented under the various headings of the station description.

LOCATION.--See Data Presentation under "Records of Stage and Water Discharge;" same comments apply.

DRAINAGE AREA.--See Data Presentation under "Records of Stage and Water Discharge;" same comments apply.

PERIOD OF RECORD.--This indicates the periods for which there are published water-quality records for the station. The periods are shown separately for records of parameters measured daily or continuously and those measured less than daily. For those measured daily or continuously, periods of record are given for the parameters individually.

INSTRUMENTATION.--Information on instrumentation is given only if a water-quality monitor, temperature record, sediment pumping sampler, or other sampling device is in operation at a station.

REMARKS.--Remarks provide added information pertinent to the collection, analysis, or computation of the record.

COOPERATION.--Records provided by a cooperating organization or obtained for the Geological Survey by a cooperating organization are identified here.

EXTREMES.--Maximums and minimums are given only for parameters measured daily or more frequently. None are given for parameters measured weekly or less frequently, because the true maximums and minimums may not have been sampled. Extremes, when given, are for both the period of record and for the current water year.

REVISIONS.--If errors in published water-quality records are discovered after publication, appropriate updates are made to the Water-Quality File in the U.S. Geological Survey's computerized data system, WATSTORE, and subsequently by monthly transfer of update transactions to the U.S. Environmental Protection Agency's STORET system. Because the usual volume of updates makes it impractical to document individual changes in the State data-report series or elsewhere, potential users of U.S. Geological Survey water-quality data are encouraged to obtain all required data from the appropriate computer file to insure the most recent updates.

Remark Codes

The following remarks codes may appear with the water-quality data in this report:

PRINTED OUTPUT	REMARK
E	Estimated value
>	Actual value is known to be greater than the value shown
<	Actual value is known to be less than the value shown
K	Results based on colony count outside the acceptable range (non-ideal colony count)
L	Biological organism count less than 0.5 percent (organisms may be observed rather than counted)
M	Presence of material verified but not quantified
D	Biological organism count equal to or greater than 15 percent (dominant)
&	Biological organism estimated as dominant

Records of Ground-Water Levels

Water-level data from a network of observation wells (as well as project wells) are given in this report. The network well data are intended to provide a sampling and historical record of water-level changes in the Nation's most important aquifers. Locations of the observation wells in this network in Ohio are shown in figure 9. Water-level data for specific projects are reported under those projects.

Data Collection and Computation

Measurements of water levels are made in many types of wells under varying conditions, but the methods of measurement are standardized to the extent possible. The equipment and measuring techniques used at each observation well ensure that measurements at each well are of consistent accuracy and reliability.

Tables of water-level data are presented by counties arranged in alphabetical order. The prime identification number for a given well is a 15-digit number that is based on latitude and longitude. The secondary identification number is the local well number, which is provided for local needs. 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. If known, the altitude of the land-surface datum above National Geodetic Vertical Datum of 1929 is given in each 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 of 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 successive 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 to a tenth of a foot or larger units.

Data Presentation

Each well record consists of two parts, the station description and the data table of water levels observed during the water year. The description of the well is presented first through use of descriptive headings preceding the tabular data. The comments to follow clarify information presented under the various headings.

LOCATION.--This paragraph follows the well-identification number and reports the latitude and longitude (given in degrees, minutes, and seconds); a landline location designation; the hydrologic-unit number; the distance and direction from a geographic point of reference; and the owner's name.

AQUIFER.--This entry describes the aquifer by age and composition.

WELL CHARACTERISTICS.--This entry describes the well in terms of depth, diameter, casing depth and (or) screened interval, method of construction, use, and additional information such as casing breaks, collapsed screen, and other changes since construction.

DATUM.--This entry describes both the measuring point and the land-surface altitude at the well. The measuring point is described physically (such as top of collar, notch in top of casing, plug in pump base, and so on), and in relation to land surface (such as 1.3 ft above land-surface datum). The altitude of the land-surface datum (LSD) is described in feet above (or below) National Geodetic Vertical Datum of 1929 (NGVD of 1929); it is reported with a precision depending on the method of determination.

REMARKS.--This entry describes factors that may influence the water level in a well or the measurement of the water level. It should identify wells that are also water-quality observation wells, and may be used to acknowledge the assistance of local (non-Survey) observers.

PERIOD OF PUBLISHED RECORD.--This entry indicates the period for which there are published records for the well. It reports the month and year of the start of publication of water level records by the U.S. Geological Survey or cooperating agency, and the words "to current year" if the records are to be continued to the following year. Periods for which water-level records are available, but not published by the Survey, may be noted.

EXTREMES FOR PERIOD OF PUBLISHED RECORD.--This entry contains the highest and lowest water levels of the period of published record, with respect to land-surface datum (LSD), and the dates of their occurrence.

A table of water levels follows the station description for each well. Water levels are reported in feet below (or above) land-surface datum. All periodic measurements of water levels for wells are listed. For wells equipped with recorders, daily water-level lows are published. The highest and lowest daily lows of the water year are shown on a line below the table. Because only daily lows are published for wells with recorders, the extreme instantaneous high may be a value that is not listed in the table. Missing records are indicated by dashes in place of the water level.

Records of Ground-Water Quality

Records of ground-water quality in this report differ from other types of records in that, for most sampling sites, they consist of only one set of measurements. The quality of ground water ordinarily changes slowly, so that frequent measuring of the same parameter is not necessary unless one is concerned with a particular problem such as monitoring for trends of a particular constituent.

Data Collection and Computation

The records of ground-water quality in this report were obtained mostly as part of special studies in specific areas. Consequently, a number of chemical analyses are presented for some counties but none are presented for others. As a result, the records for this year, by themselves, do not provide a balanced view of ground-water quality statewide. Such a view can be attained only by considering records for this year in context with similar records obtained for these and other counties in earlier years.

Most methods for collecting and analyzing water samples are described in the TWRI manuals listed on p. 21-22. The data presented in this report represent water-quality conditions at the time of sampling as much as possible, consistent with available sampling techniques and methods of analysis. All samples were obtained by trained personnel. The wells sampled were pumped long enough to assure that the water collected came directly from aquifer and had not stood for a long time in the well casing where it would have been exposed to the atmosphere and the material comprising the casings.

Data Presentation

The records of ground-water quality are published intermixed with the ground-water-level data for network wells and with the specific project for project wells.

AACCESS TO WATSTORE DATA

The U.S. Geological Survey is the principal Federal water-data agency and, as such, collects and disseminates about 70 percent of the water data currently being used by numerous State, local, private, and other Federal agencies to develop and manage our water resources. As part of the Geological Survey's program of releasing water data to the public, a large-scale computerized system has been developed for the storage and retrieval of water data collected through its activities. The National Water Data Storage and Retrieval System (WATSTORE) was established in 1972 to provide an effective and efficient means for the processing and maintenance of water data collected through the activities of the U.S. Geological Survey and to facilitate release of the data to the public. A variety of useful products, ranging from data tables to complex statistical analyses such as Log Pearson Type III, can be produced using WATSTORE. The system resides on the central computer facilities of the U.S. Geological Survey at its National Center in Reston, Virginia, and consists of related files and data bases.

- Station Header File - Contains descriptive information on more than 440,000 sites throughout the United States and its territories where the U.S. Geological Survey collects or has collected data.
- Daily Values File - Contains more than 220 million daily values of stream flows, stages, reservoir contents, water temperatures, specific conductances, sediment concentrations, sediment discharges, and ground-water levels.
- Peak Flow File - Contains approximately 500,000 maximum (peak) streamflow and gage-height values at surface-water sites.
- Water Quality File - Contains approximately 2 million analyses of water samples that describe the chemical, physical, biological, and radio-chemical characteristics of both surface and ground water.
- Ground-Water Site Inventory Data Base - Contains inventory data for more than 900,000 wells, springs, and other sources of ground water. The data includes site location, geohydrologic characteristics, well-construction history, and one-time field measurements such as water temperature.

WATER RESOURCES DATA FOR OHIO, 1992

ACCESS TO WATSTORE DATA--Continued

In 1976, the U.S. Geological Survey opened WATSTORE to the public for direct access. The signing of a Memorandum of Agreement with the Survey is required to obtain direct access to WATSTORE. The system can be accessed either synchronously or asynchronously. The requestor will be expected to pay all computer costs he/she incurs. Direct access may be obtained by contacting:

U.S. Geological Survey
National Water Data Exchange
421 USGS National Center
Reston, Virginia 22092

In addition to providing direct access to WATSTORE, data can be provided in various machine-readable formats on magnetic tape or 5-1/4 inch floppy disk; and, as noted in the introduction, on CD-ROM discs. Beginning with the 1990 water year, all water-data reports will also be available on Compact Disc - Read Only Memory (CD-ROM). All data reports published for the current water year for the entire Nation, including Puerto Rico and the Trust Territories, will be reproduced on a single CD-ROM disc. Information about the availability of specific types of data or products, and user charges, can be obtained locally from each of the Water Resources Division's District offices. (See address on the back of the title page.) A limited number of CD-ROM discs will be available for sale by the Books and Open-File Reports Section. U.S. Geological Survey, Federal Center, Box 25425, Denver, Colorado 80225.

DEFINITION OF TERMS

Dissolved Diatoms 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.

Adenosine triphosphate (ATP) is an organic, phosphate-rich, compound important in the transfer of energy in organisms. Its central role in living cells makes it an excellent indicator of the presence of living material in water. A measure of ATP therefore provides a sensitive and rapid estimate of biomass. ATP is reported in micrograms per liter of the original water sample.

Algae are mostly aquatic single-celled, colonial, or multicelled plants, containing chlorophyll and lacking roots, stems, and leaves.

Algal growth potential (AGP) is the maximum dry weight biomass that can be produced in a natural water sample under standardized laboratory conditions. The growth potential is the algal biomass present at stationary phase and is expressed as milligrams dry weight of algae produced per liter of sample.

Aquifer is a geologic formation, group of formations, or part of a formation that contains sufficient saturated permeable material to yield reasonable 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 that ferment lactose with gas formation within 48 hours at 35 C. In the laboratory, these bacteria are defined as the organisms that produce colonies with a golden-green metallic sheen 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 intestine 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 that produce blue colonies within 24 hours when incubated at 44.0°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 intestine of warm-blooded animals. Their presence in water is considered to verify fecal pollution. They are characterized as gram-positive, cocci bacteria that are capable of growth in brain-heart infusion broth. In the laboratory, they are defined as all the organisms that produce red or pink colonies within 48 hours at 35°C + 1.0°C on KF-streptococcus 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 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), and periphyton and benthic organisms in grams per square meter (g/m²).

Dry mass refers to the mass of residue present after drying in an oven at 105°C for zooplankton and periphyton, until the mass remains unchanged. This mass represents the total organic matter, ash and sediment, in the sample. Dry-mass values are expressed in the same units as ash mass.

Organic mass or volatile mass of the living substance is the difference between the dry mass and the ash mass and represents the actual mass of the living matter. The organic mass is expressed in the same units as for ash and dry mass.

Wet mass is the mass of living matter plus contained water.

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 a 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.

Color unit is produced by one milligram per liter of platinum in the form of the chloroplatinate ion. Color is expressed in units of the platinum-cobalt scale.

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 foot per second (cfs, ft³/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.

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.

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 that 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.

Dissolved solids concentration of water is determined either analytically by the "residue-on-evaporation" method, or mathematically by totaling the concentrations of individual constituents reported in a comprehensive chemical analysis. During the analytical determination of dissolved solids, the bicarbonate (generally a major dissolved component of water) is converted to carbonate. Therefore, in the mathematical calculation of dissolved-solids concentration, the bicarbonate value, in milligrams per liter, is multiplied by 0.492 to reflect the change.

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 stream above the specified point. Figures of drainage area given herein include all closed basins, or noncontribution areas, 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.

Escherichia coli (*E. coli*) are bacteria present in the intestine and feces of warm-blooded animals. *E. coli* are a member species of the fecal coliform group of indicator bacteria. In the laboratory they are defined as those bacteria that produce yellow or yellow-brown colonies on a filter pad saturated with urea substrate broth after primary culturing for 22 to 24 hours at 44.5°C on mTEC medium.

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 the equivalent concentration of calcium carbonate (CaCO_3).

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.

Hydrologic Index Stations, in this report, refers to four continuous record gaging stations that have been selected as representative of stream-flow patterns for their respective regions of Ohio. Station locations are shown in figure 1.

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.

Measuring point (MP) is an arbitrary permanent reference point from which the distance to the water surface in a well is measured to obtain the water level.

Metamorphic stage refers to the stage of development that an organism exhibits during its transformation from an immature form to an adult form. This developmental process exists for most insects, and the degree of difference from the immature stage to the adult form varies from relatively slight to pronounced, with many intermediates. Examples of metamorphic stages of insects are egg-larva-adult or egg-nymph-adult.

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 anionic detergent compounds.

Micrograms per gram (UG/G, $\mu\text{g/g}$) 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, $\mu\text{g/kg}$) 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, $\mu\text{g/L}$) 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 dry 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.

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.

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 unit area habitat, usually square meters (m²), 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.

Parameter code is a 5-digit number used in the U.S. Geological Survey computerized data system, WATSTORE, to uniquely identify a specific constituent. The codes used in WATSTORE are the same as those used in the U.S. Environmental Protection Agency data system, STORET. The Environmental Protection Agency assigns and approves all requests for new codes.

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:

<u>Classification</u>	<u>Size (mm)</u>	<u>Method of analysis</u>
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.

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.

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 (PCI, 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.

Blue-green algae are a group of phytoplankton organisms having a blue pigment, in addition to the green pigment called chlorophyll. Blue-green algae often cause nuisance conditions in water.

Diatoms are the unicellular or colonial algae having a siliceous shell. Their concentrations are expressed as number of cells per milliliter (cells/mL) of sample.

Green algae have chlorophyll pigments similar in color to those of higher green plants. Some forms produce algae mats or floating "moss" in lakes. Their concentrations are expressed as number of cells per millimeter (cells/mm) of sample.

Zooplankton is the animal part of the plankton. Zooplankton are capable of extensive movement within the water column and are often large enough to be seen with the unaided eye. Zooplankton are secondary consumers feeding upon bacteria, phytoplankton, and detritus. Because they are the grazers in the aquatic environment, the zooplankton are a vital part of the aquatic food web. The zooplankton community is dominated by small crustaceans and rotifers.

Primary productivity is a measure of the rate at which new organic matter is formed and accumulated through photosynthetic and chemosynthetic activity of producer organisms (chiefly, green plants). The rate of primary production is estimated by measuring the amount of oxygen released (oxygen method) or the amount of carbon assimilated by the plants (carbon method).

Milligrams of carbon per area or volume per unit time [$\text{mg C}/(\text{m}^2/\text{time})$] for periphyton and macrophytes and [$\text{mg C}/(\text{m}^3/\text{time})$] for phytoplankton are units for expressing primary productivity. They define the amount of carbon dioxide consumed as measured by radioactive carbon (carbon 14). The carbon 14 method is of greater sensitivity than the oxygen light and dark bottle method, and is preferred for use in unenriched waters. Unit time may be either the hour or day, depending on the incubation period.

Milligrams of oxygen per area or volume per unit time [$\text{mg O}_2/(\text{m}^2/\text{time})$] for periphyto and macrophytes and [$\text{mg O}_2/(\text{m}^3/\text{time})$] for phytoplankton are the units for expressing primary productivity. They define production and respiration rates as estimated from changes in the measured dissolved oxygen concentration. The oxygen light and dark bottle method is preferred if the rate of primary production is sufficient for accurate measurements to be made within 24 hours. Unit time may be either the hour or day, depending on the incubation period.

Radiochemical program is a network of regularly sampled water-quality stations where samples are collected to be analyzed for radioisotopes. The streams that are sampled represent major drain-age basins in the conterminous United States.

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, 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.

Return period is the average time interval between occurrences of a hydrological event of a given or greater magnitude, usually expressed in years. May also be called recurrence interval.

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.

Bed load is the sediment that is transported in a stream by rolling, sliding, or skipping along the bed and very close to it. In this report, bed load is considered to consist of particles in transit within 0.25 ft of the streambed.

Bed-load discharge (tons per day) is the quantity of bed load measured by dry weight that moves past a section as bed load in a given time.

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.

7-day, 10-year low flow ($7Q_{10}$) is the discharge at the 10-year recurrence interval taken from a frequency curve of annual values of the lowest mean discharge for 7 consecutive days (the 7-day low flow).

Sodium-adsorption-ratio (SAR) is the expression of relative activity of sodium ions in exchange reactions within soil and is an index of sodium of alkali hazard to the soil. Waters range in respect to sodium hazard from those which can be used for irrigation on almost all soils to those which are generally unsatisfactory for irrigation.

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 microsiemens 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 microsiemens). 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.

Substrate is the physical surface upon which an organism lives.

Natural substrate refers to any naturally occurring emerged or submersed solid surface, such as a rock or tree, upon which an organism lives.

Artificial substrate is a device which is purposely placed in a stream or lake for colonization of organisms. The artificial substrate simplifies the community structure by standardizing the substrate from which each sample is taken. Examples of artificial substrate are basket samplers (made of wire cages filled with clean streamsize rocks) and multiplate samplers made of hardboard) for benthic organism collection, and plexuses strips for periphyton.

Surface area of a lake is that area outlined on the latest USGS topographic map as the boundary of the lake and measured by a planimeter in acres. In localities not covered by topographic maps, the areas are computed from the best maps available at the time planimeted. All areas shown are those for the stage when the planimeted map was made.

Surficial bed material is the part (0.1 to 0.2 ft) of the bed material that is sampled using U.S. Series Bed-material Samplers.

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.

Taxonomy is the division of biology concerned with the classification and naming of organisms. The classification of organisms is based upon hierarchical scheme beginning with Kingdom and ending with Species at the base. The higher the classification level, the fewer features the organisms have in common. For example, the taxonomy of a particular mayfly, *Hexagenia limbata*, is the following:

Kingdom.....Animal
Phylum.....Arthropoda
Class.....Insecta
Order.....Ephemeroptera
Family.....Ephemeridae
Genus.....Hexagenia
Species.....Hexagenia limbata

Thermograph is an instrument that continuously records variations of temperature on a chart. The more general term "temperature recorder" is used in the table headings and refers to any instrument that records temperature whether on a chart, a tape, or any other medium.

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 acre-foot indicates the dry mass of dissolved solids in 1 acre-foot of water. It is computed by multiplying the concentration of the constituent, in milligrams per liter, by 0.00136.

Tons per day (T/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 discharge is the total quantity of any individual constituent, as measured by dry mass or volume, that passes through a stream cross-section per unit of time. This term needs to be qualified, such as "total sediment discharge," "total chloride discharge," and so on.

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.

Water year in Geological Survey reports dealing with surface-water supply is the 12-month period, October 1 through September 30. The water year is designated by the calendar year in which it ends and which includes 9 of the 12 months. Thus, the year ending September 30, 1980, is called the "1980 water year."

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.

Weighted average is used in this report to indicate discharge-weighted average. It is computed by multiplying the discharge for a sampling period by the concentrations of individual constituents for the corresponding period and dividing the sum of the products by the sum of the discharges. A discharge-weighted average approximates the composition of water that would be found in a reservoir containing all the water passing a given location during the water year after thorough mixing in the reservoir.

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.

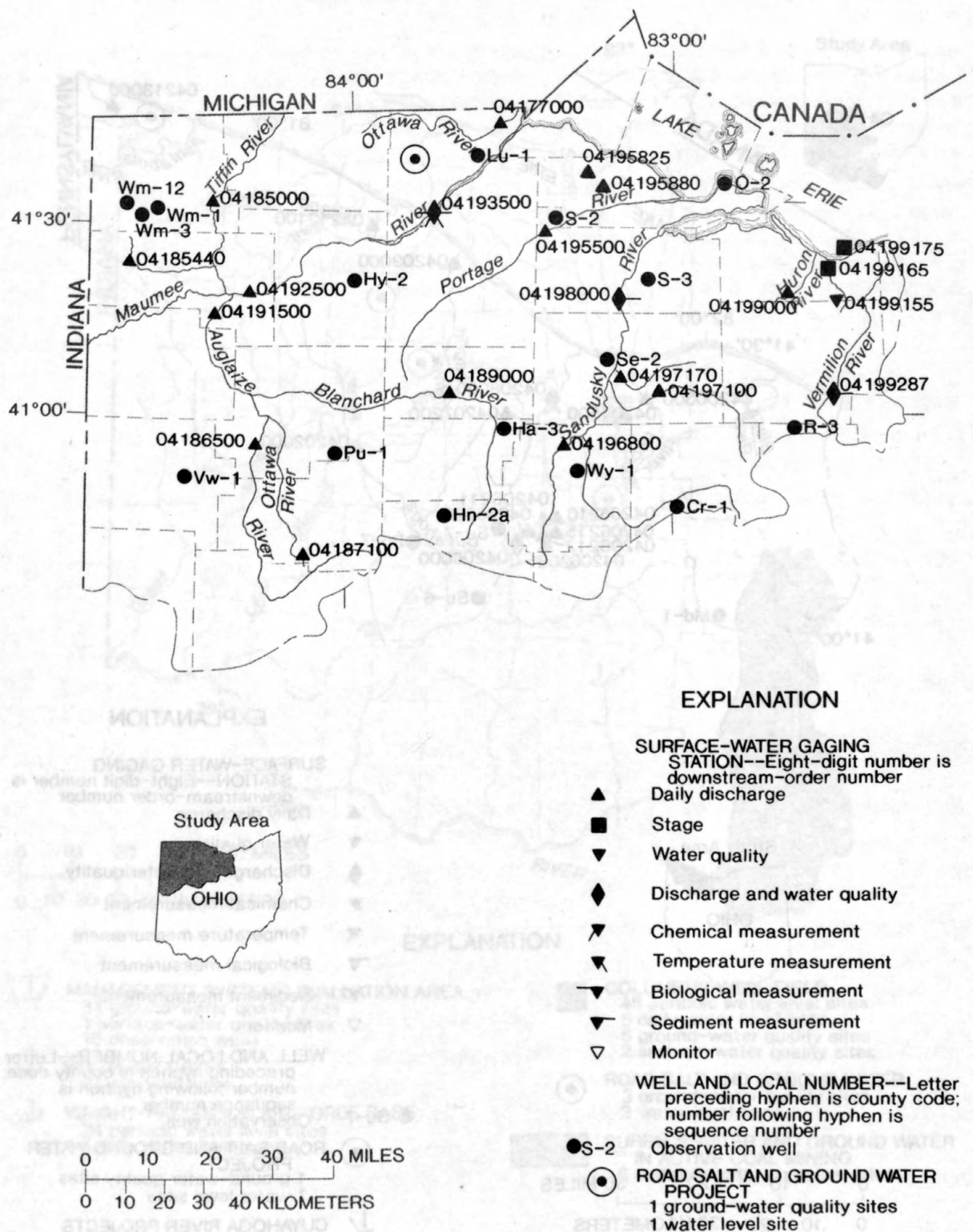


Figure 8a.--Location of data-collection stations.

Discharge is an instrument that continuously records variations of temperature on a chart. The instrument is used in the same manner and refers to any instrument that records temperature variations on a chart, a tape, or any other medium.

Time-weighted average is computed by multiplying the number of days in the sampling period by the concentration of the substance for the corresponding period and dividing the total 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 holds an equal quantity of water from the same source during the sampling period.

Total discharge is the sum of the discharges of all the tributaries of a river or stream at a given point. This is the total volume of water that flows past a given point in a river or stream during a given period.

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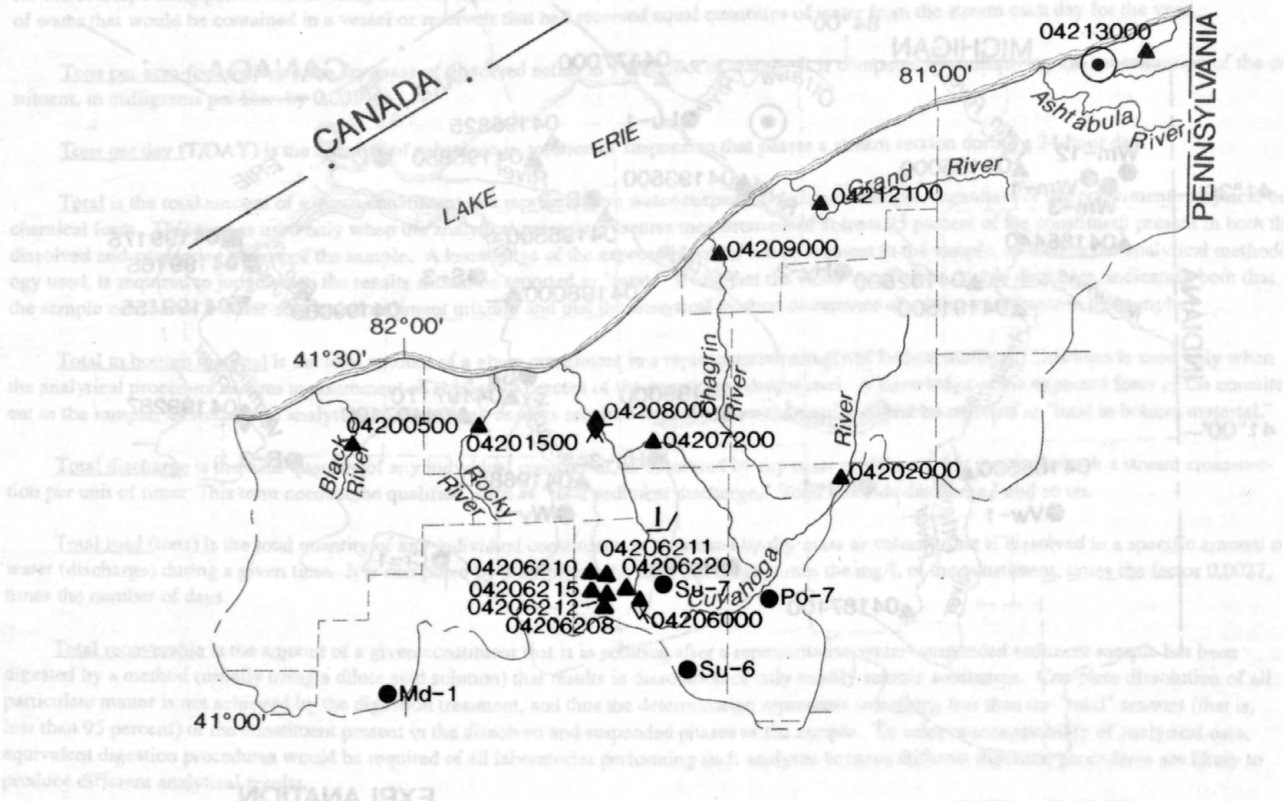
Total discharge is the sum of the discharges of all the tributaries of a river or stream at a given point. This is the total volume of water that flows past a given point in a river or stream during a given period.

Total discharge is the sum of the discharges of all the tributaries of a river or stream at a given point. This is the total volume of water that flows past a given point in a river or stream during a given period.

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EXPLANATION

SURFACE-WATER GAGING

STATION--Eight-digit number is downstream-order number

- ▲ Daily discharge
- ▼ Water quality
- ◆ Discharge and water quality
- ▼ Chemical measurement
- ▼ Temperature measurement
- ▼ Biological measurement
- ▼ Sediment measurement
- ▽ Monitor

WELL AND LOCAL NUMBER--Letter preceding hyphen is county code, number following hyphen is sequence number

● Su-7

Observation well

ROAD SALT AND GROUND WATER PROJECT

1 ground-water quality sites
1 water level sites

CUYAHOGA RIVER PROJECTS

8 surface-water quality sites

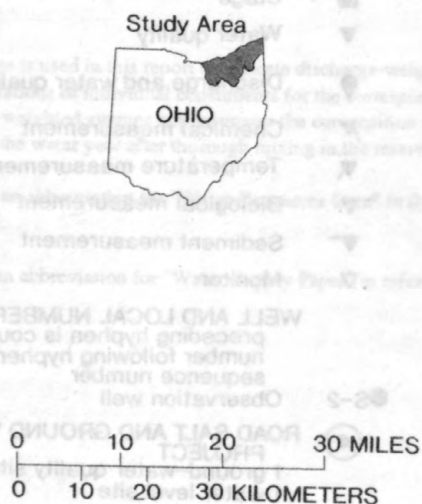
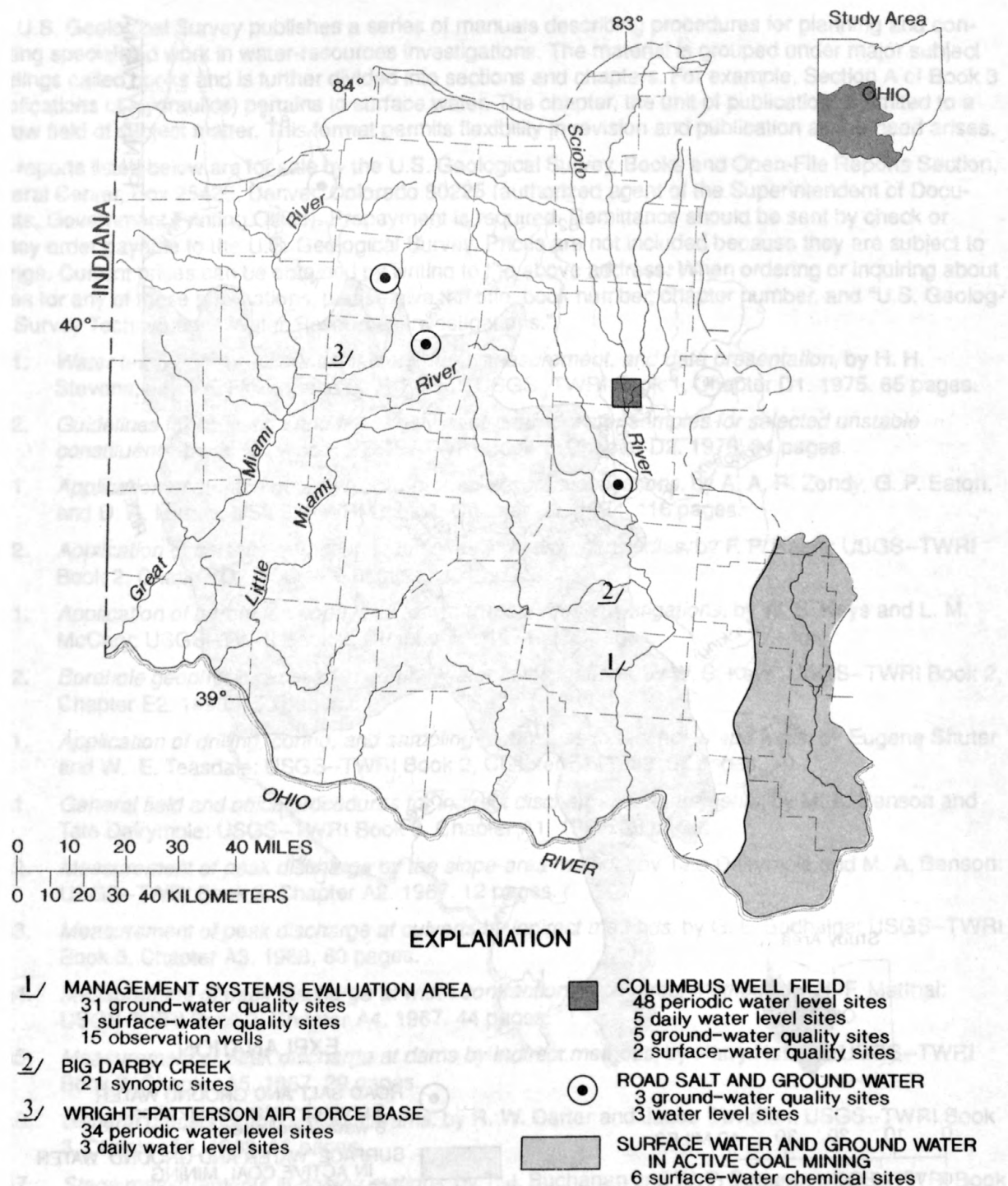


Figure 8b.--Location of data-collection stations.



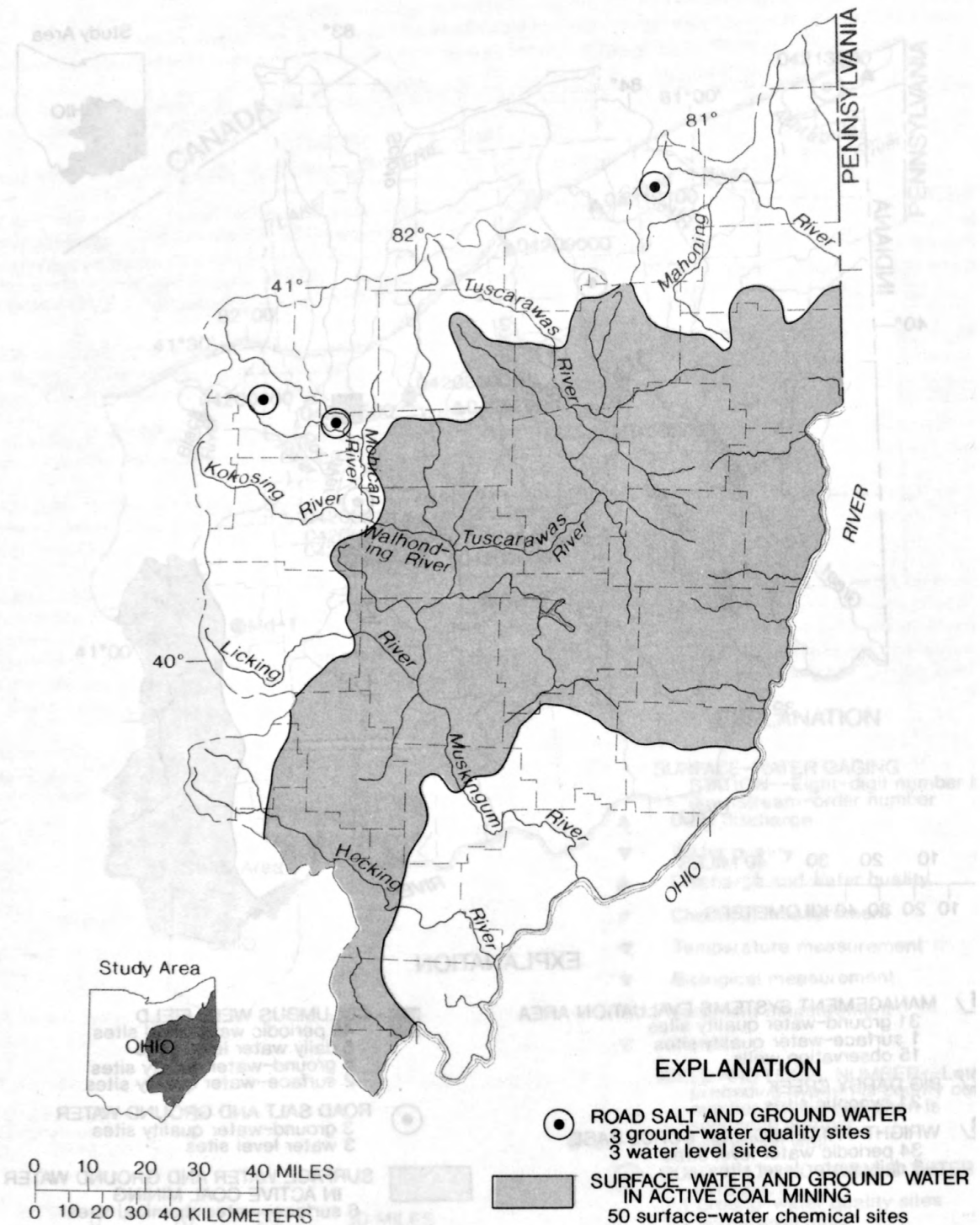


Figure 8d.--Location of data-collections stations for projects, Ohio River basin.

The U.S. Geological Survey publishes a series of manuals describing procedures for planning and conducting 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) pertains to 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.

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- 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.
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- 3-B7. *Analytical solutions for one-, two-, and three-dimensional solute transport in ground-water systems with uniform flow*, by E. J. Wexler: USGS--TWRI Book 3, Chapter B7. 1992. 90 pages.
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- 8-A2. *Installation and service manual for U.S. Geological Survey manometers*, by J. D. Craig: USGS--TWRI Book 8, Chapter A2. 1983. 57 pages.
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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 downstream from Deline Ditch, 5.6 mi upstream from Sibley Creek, and 10.9 mi upstream from mouth.

DRAINAGE AREA.--150 mi². Area at site used prior to Sept. 30, 1948, 150 mi², 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 above National Geodetic Vertical Datum of 1929. (From Aug. 1976 to July, 1979 at site 500 ft downstream. Prior to Sept. 30, 1948 water-stage recorder at site 2,500 ft upstream at datum 3.72 ft higher.)

REMARKS.--Estimated daily discharges: Oct. 24-31, Nov. 1-4, 11-30, Dec. 1-31, Jan. 1-2, 8-12, 16-22, 30, 31, Feb. 1-3, 6-14, Mar. 13-25, 29-31, Apr. 1-30, May 1-6, 10-31, June 1-30, July 1-3, 12, 14-17. Records are poor. Water-quality data collected at this site 1977.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	54	70	23	45	65	185	140	68	13	84	17
2	9.3	60	100	40	44	48	130	120	52	13	66	15
3	16	38	170	68	44	48	120	84	42	18	55	21
4	139	30	255	164	64	48	105	83	37	21	49	15
5	13	25	105	175	87	48	87	76	98	42	37	14
6	3.6	22	76	110	72	66	80	68	250	15	27	18
7	4.9	20	60	78	64	127	64	68	150	22	24	115
8	3.3	18	50	56	56	472	70	57	90	16	53	166
9	1.9	16	78	47	50	301	66	69	62	16	192	95
10	22	15	100	40	46	369	64	61	47	27	73	296
11	7.1	18	78	35	43	931	61	55	37	16	47	325
12	11	22	59	32	40	448	59	51	30	400	26	125
13	6.5	25	135	44	38	240	57	47	25	187	27	62
14	6.0	20	220	124	37	175	56	44	21	330	19	42
15	6.1	18	100	189	190	125	74	41	19	680	17	30
16	2.8	17	68	140	809	96	100	38	17	1200	14	28
17	2.0	16	47	110	1100	80	125	36	15	520	12	27
18	2.1	16	36	84	704	120	170	34	80	323	16	32
19	22	45	30	71	763	170	235	32	140	288	29	31
20	9.6	100	27	61	657	140	330	30	60	237	12	18
21	5.7	220	26	56	390	120	450	29	45	145	12	174
22	5.2	450	25	54	272	100	600	28	35	93	11	724
23	4.6	185	25	106	225	88	450	27	27	495	9.6	753
24	24	115	24	230	188	125	400	40	37	881	18	319
25	64	80	24	224	145	175	760	47	27	676	19	149
26	200	60	24	146	142	215	546	34	21	377	11	86
27	500	50	24	98	138	270	480	29	18	526	30	69
28	560	42	24	76	115	349	300	26	16	288	66	55
29	130	36	23	62	105	210	230	24	15	127	37	46
30	86	92	23	52	---	135	180	78	14	91	35	39
31	64	---	23	47	---	160	---	150	---	108	26	---
TOTAL	1941.7	1925	2129	2842	6673	6064	6634	1746	1595	8191	1153.6	3906
MEAN	62.6	64.2	68.7	91.7	230	196	221	56.3	53.2	264	37.2	130
MAX	560	450	255	230	1100	931	760	150	250	1200	192	753
MIN	1.9	15	23	23	37	48	56	24	14	13	9.6	14
CFSM	.42	.43	.46	.61	1.53	1.30	1.47	.38	.35	1.76	.25	.87
IN.	.48	.48	.53	.70	1.65	1.50	1.65	.43	.40	2.03	.29	.97

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1945 - 1992, BY WATER YEAR (WY)

	MEAN	70.1	97.9	153	91.8	164	285	244	140	126	58.7	31.7	46.2
MAX	407	377	380	200	467	729	438	358	437	264	143	406	
(WY)	1987	1986	1978	1990	1990	1978	1977	1945	1989	1992	1980	1981	
MIN	.85	3.04	6.14	4.92	30.4	56.0	20.4	21.4	7.36	8.46	.82	.13	
(WY)	1947	1947	1947	1977	1978	1989	1946	1988	1988	1984	1946	1946	

SUMMARY STATISTICS

FOR 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1945 - 1992

ANNUAL TOTAL	37920.05	44800.3	
ANNUAL MEAN	104	122	126
HIGHEST ANNUAL MEAN			177
LOWEST ANNUAL MEAN			78.8
HIGHEST DAILY MEAN	1560	1200	3500
LOWEST DAILY MEAN	.58	1.9	.00
ANNUAL SEVEN-DAY MINIMUM	.63	5.2	.00
INSTANTANEOUS PEAK FLOW		1300	3950
INSTANTANEOUS PEAK STAGE		9.54	14.54
INSTANTANEOUS LOW FLOW		.78	.00
ANNUAL RUNOFF (CFSM)	.69	.82	.84
ANNUAL RUNOFF (INCHES)	9.40	11.11	11.39
10 PERCENT EXCEEDS	246	320	312
50 PERCENT EXCEEDS	50	59	41
90 PERCENT EXCEEDS	4.6	16	6.8

a Peaks above base in shown Table of peak discharges and stages at continuous-record surface-water-discharge stations.

37

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

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

GAGE.--Water-stage recorder. Datum of gage is 685.1 ft above National Geodetic Vertical Datum of 1929. Prior to

Sept. 30, 1928, nonrecording gage at site 3.5 mi 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 downstream at same datum.

REMARKS.--Estimated daily discharges: Dec. 22-Jan. 2, 17-22, Jan. 28-Feb. 13. Records fair, except those for estimated discharges, which are poor. Small diversion 12.5 mi upstream from gage for municipal supply of Archbold. Diversion averaged 2.49 ft³/s is returned as sewage to Brush Creek which flows into Tiffin River about 15 mi downstream from station. Water-quality data collected at this site 1965 to 1977. Sediment data collected 1969 to 1974.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1913 reached a stage of 16.0 ft, from floodmarks, discharge, 7,600 ft³/s. Flood in 1937 reached a stage of 15.0 ft, from information by local resident, discharge, 6,000 ft³/s.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	184	256	86	110	240	531	391	264	49	316	115
2	11	207	254	84	105	216	467	346	172	44	347	92
3	12	194	438	147	105	195	401	298	133	40	264	88
4	22	149	493	249	130	182	350	256	113	39	206	106
5	34	116	325	320	125	173	310	227	119	38	172	91
6	32	98	219	290	115	178	274	204	384	115	141	83
7	24	87	200	241	105	495	252	185	448	94	124	88
8	23	78	184	198	96	739	239	171	341	66	151	84
9	21	69	219	180	93	652	223	163	230	57	166	76
10	23	64	234	170	90	735	211	158	170	53	147	530
11	30	64	218	161	90	1050	208	148	132	50	121	768
12	27	70	197	149	89	1160	212	144	112	51	103	620
13	27	65	380	143	88	1140	201	139	99	159	94	351
14	26	63	513	217	128	836	191	131	87	341	87	219
15	24	61	421	258	215	468	183	122	76	739	79	160
16	24	60	275	312	676	325	181	114	68	952	74	140
17	21	58	205	240	773	282	206	107	64	1180	70	119
18	21	58	173	200	783	302	281	108	188	1370	65	107
19	23	72	138	170	844	321	443	109	428	1330	67	99
20	25	302	134	150	859	338	490	102	240	1210	67	92
21	26	853	149	130	823	310	731	95	146	988	59	188
22	31	886	125	125	695	283	882	89	114	630	55	945
23	33	742	120	165	600	279	873	88	94	737	52	1070
24	32	465	110	307	550	290	705	109	87	1120	48	671
25	56	291	100	311	466	580	853	104	84	1230	47	287
26	479	210	95	250	406	872	1000	89	78	1470	48	178
27	1180	169	89	205	367	976	992	83	71	1480	67	143
28	1370	149	85	175	313	997	746	78	63	1230	112	127
29	915	146	80	150	273	939	522	73	56	828	151	113
30	451	198	87	135	---	734	425	92	52	408	189	100
31	237	---	91	120	---	580	---	317	---	270	153	---
TOTAL	5271	6228	6607	6038	10112	16867	13583	4840	4713	18368	3842	7850
MEAN	170	208	213	195	349	544	453	156	157	593	124	262
MAX	1370	886	513	320	859	1160	1000	391	448	1480	347	1070
MIN	11	58	80	84	88	173	181	73	52	38	47	76

MEAN	108	212	376	369	545	791	654	380	235	158	63.8	66.7
MAX	887	843	1785	1597	1569	2563	1990	2112	1422	761	389	460
(WY)	1987	1989	1928	1950	1976	1982	1950	1943	1989	1943	1980	1981
MIN	10.2	14.6	18.4	20.2	21.9	135	106	74.4	24.1	13.7	9.76	7.40
(WY)	1964	1954	1964	1963	1963	1964	1946	1925	1988	1988	1941	1953

WATER YEARS 1922 - 1992

ANNUAL TOTAL	124856.3		104319				
ANNUAL MEAN	342		285			329	
HIGHEST ANNUAL MEAN						671	1950
LOWEST ANNUAL MEAN						59.6	1964
HIGHEST DAILY MEAN	4640	Jan 1	1480	Jul 27		7640	Mar 15 1982
LOWEST DAILY MEAN	9.6	Sep 8	11	Oct 1		2.5	Jul 18 1988
ANNUAL SEVEN-DAY MINIMUM	10	Sep 18	21	Oct 1		3.6	Jul 7 1988
INSTANTANEOUS PEAK FLOW			1560	Jul 26 a		7800	Mar 15 1982
INSTANTANEOUS PEAK STAGE			11.23	Jul 26		18.36	Mar 15 1982
INSTANTANEOUS LOW FLOW			11	Oct 1		2.5	Jul 18 1988
10 PERCENT EXCEEDS	920		776			914	
50 PERCENT EXCEEDS	182		169			120	
90 PERCENT EXCEEDS	13		53			23	

a Peaks above base in shown Table of peak discharges and stages at continuous-record surface-water-discharge stations.

STREAMS TRIBUTARY TO LAKE ERIE

04185440 UNNAMED TRIBUTARY TO LOST CREEK NR FARMER, OH

LOCATION.--Lat 41°21'42", long 84°41'28", Defiance County, Hydrologic Unit 04100006, on right bank 400 ft above bridge on Rosedale Rd., 0.5 mi above mouth and 2.0 mi from Farmer.

DRAINAGE AREA.--4.23 mi².

PERIOD OF RECORD.--October 1985 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 760 ft above National Geodetic Vertical Datum of 1929 from topographic map.

REMARKS.--Estimated discharges: Dec. 21, Jan. 10, 11, 19-22, 30, 31, Feb. 1, 7-14. Records fair.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	3.1	2.0	.79	2.1	1.6	7.1	4.4	2.2	.39	.29	.04
2	.00	4.6	4.4	.71	2.4	1.5	3.9	3.0	1.3	.44	.22	.07
3	.00	1.4	34	9.4	3.7	1.4	2.7	2.2	.87	.49	.19	.27
4	.11	.65	6.3	9.2	12	1.3	2.5	1.9	.78	.52	.18	.21
5	.07	.44	2.3	4.3	8.0	1.3	2.1	1.6	.77	.51	.16	.08
6	.05	.36	1.4	3.0	4.1	4.2	1.8	1.4	5.0	.54	.11	.09
7	.03	.29	1.2	2.2	2.7	17	1.6	1.3	1.8	.57	.12	.07
8	.03	.23	1.6	1.8	2.2	15	1.3	1.2	1.2	.62	.42	.13
9	.03	.20	1.5	2.1	1.8	7.8	1.2	1.3	.64	.61	.24	.22
10	.09	.19	1.0	1.7	1.5	14	1.1	1.1	.49	.69	.10	12
11	.09	.18	.77	1.6	1.3	14	7.5	.97	.38	.60	.06	1.9
12	.07	.18	9.0	1.5	1.2	8.1	3.3	.90	.33	.56	.08	.57
13	.06	.17	24	3.0	1.1	4.9	1.4	.83	.30	.73	.21	.31
14	.05	.16	6.8	11	1.0	3.5	1.0	.79	.29	2.0	.16	.21
15	.05	.17	2.6	6.0	30	2.6	.94	.79	.26	11	.11	.16
16	.05	.16	1.3	3.3	29	2.1	6.3	.73	.25	3.0	.08	.11
17	.05	.13	1.1	2.4	15	5.2	13	.77	.29	2.3	.08	.08
18	.04	.37	.68	1.7	20	5.5	14	.95	6.2	1.9	.09	.26
19	.10	2.1	.47	1.4	17	7.4	12	.73	1.4	.63	.14	.96
20	.06	57	.44	1.2	9.6	10	34	.67	.76	1.5	.08	.32
21	.06	31	.44	1.1	6.1	5.2	27	.62	.59	1.8	.06	33
22	.06	11	.52	1.1	4.5	6.9	8.7	.59	.49	.50	.05	31
23	.05	5.3	.69	10	4.5	12	12	.66	.49	18	.05	6.6
24	.06	3.6	.80	11	3.5	14	22	.74	.49	5.3	.06	3.0
25	3.2	1.7	.55	3.8	3.5	11	11	.65	.43	2.1	.07	1.8
26	34	1.0	.45	2.4	3.2	9.0	6.6	.63	.44	1.1	.05	1.1
27	95	.77	.40	2.0	2.5	10	6.5	.66	.39	.69	.13	.83
28	14	1.0	.41	1.7	2.2	4.8	4.7	.57	.38	.42	.25	.75
29	6.0	3.4	.70	1.6	1.9	3.4	3.7	.55	.37	.34	.11	.48
30	3.4	3.7	2.1	1.7	---	9.9	10	6.0	.38	.37	.07	.36
31	2.9	---	1.2	1.8	---	5.2	---	9.0	---	.42	.04	---
TOTAL	159.76	134.55	111.12	106.50	197.6	219.8	230.94	48.20	29.96	60.64	4.06	96.98
MEAN	5.15	4.48	3.58	3.44	6.81	7.09	7.70	1.55	1.00	1.96	.13	3.23
MAX	95	57	34	11	30	17	34	9.0	6.2	18	.42	33
MIN	.00	.13	.40	.71	1.0	1.3	.94	.55	.25	.34	.04	.04
CFSM	1.22	1.06	.85	.81	1.61	1.68	1.82	.37	.24	.46	.03	.76
IN.	1.40	1.18	.98	.94	1.74	1.93	2.03	.42	.26	.53	.04	.85

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1986 - 1992, BY WATER YEAR (WY)

	1986	1987	1988	1989	1990	1991	1992
MEAN	4.88	5.27	8.70	4.70	8.77	6.89	6.92
MAX	12.6	12.7	23.9	9.90	21.2	13.9	14.1
(WY)	1987	1986	1991	1989	1990	1986	1991
MIN	.14	1.53	.11	1.68	1.47	3.59	1.92
(WY)	1990	1990	1990	1988	1989	1989	1987

SUMMARY STATISTICS	FOR 1991 CALENDAR YEAR	FOR 1992 WATER YEAR	WATER YEARS 1986 - 1992
ANNUAL TOTAL	1425.98	1400.11	
ANNUAL MEAN	3.91	3.83	4.65
HIGHEST ANNUAL MEAN			5.87
LOWEST ANNUAL MEAN			3.44
HIGHEST DAILY MEAN	95	95	244
LOWEST DAILY MEAN	.00	.00	.00
ANNUAL SEVEN-DAY MINIMUM	.00	.04	.00
INSTANTANEOUS PEAK FLOW		203	757
INSTANTANEOUS PEAK STAGE		3.78	5.74
INSTANTANEOUS LOW FLOW		.00	.00
ANNUAL RUNOFF (CFSM)	.92	.90	1.10
ANNUAL RUNOFF (INCHES)	12.54	12.31	14.92
10 PERCENT EXCEEDS	9.0	10	10
50 PERCENT EXCEEDS	.81	1.1	.73
90 PERCENT EXCEEDS	.00	.08	.04

a Peaks above base in shown Table of peak discharges and stages at continuous-record surface-water-discharge stations.

STREAMS TRIBUTARY TO LAKE ERIE

39

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 upstream from bridge on U. S. Highway 224, 3.5 mi northeast of Fort Jennings, 6 mi upstream from Ottawa River, and 7.3 mi downstream from Jennings Creek.

DRAINAGE AREA.--332 mi².

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 above National Geodetic Vertical Datum of 1929. Prior to Oct. 6, 1930, nonrecording gage at same site and datum.

REMARKS.--Estimated daily discharges: Dec. 7-Jan. 3, Jan. 10-13, 17-22, 25-27, 30, 31, Feb. 1, 2, 11-14. Records fair. Beginning Jan. 4, 1971, water was diverted at a point 24.3 mi 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 5,418 mil gal, equivalent to a mean withdrawal of 22.9 ft³/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 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. National Weather Service gage height Handar telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.5	8.3	42	30	76	45	220	315	533	59	2590	67
2	2.4	7.2	42	30	92	40	269	286	278	59	2280	52
3	2.1	6.3	69	30	129	39	226	237	160	55	580	41
4	1.9	5.1	170	164	196	38	178	185	104	53	343	40
5	1.2	4.6	103	159	274	35	140	129	79	48	194	54
6	.72	4.6	70	95	220	35	112	94	191	46	109	259
7	.71	4.6	63	75	157	121	94	77	142	41	76	952
8	.86	4.3	57	59	106	308	93	68	136	41	69	1370
9	1.5	4.0	52	51	79	167	106	87	106	43	96	910
10	1.8	3.4	47	47	64	150	90	90	64	43	142	3940
11	2.7	3.2	44	43	60	342	72	82	50	44	169	4200
12	3.3	3.9	43	41	55	333	96	70	54	42	96	1560
13	4.5	4.5	43	40	51	218	95	67	51	1640	66	516
14	5.7	4.5	52	117	50	135	85	67	47	6870	59	289
15	5.5	4.0	45	534	94	91	67	64	52	12000	52	157
16	5.4	5.0	39	391	816	69	84	62	48	8600	44	94
17	7.1	7.7	35	300	817	60	1010	58	42	5860	52	69
18	7.1	8.3	34	200	408	57	2760	57	109	5230	45	62
19	6.4	14	33	135	671	232	3370	57	414	3290	36	74
20	6.9	84	33	92	639	1040	1970	61	240	960	34	69
21	7.4	399	32	58	391	824	1270	55	124	511	47	564
22	7.5	385	32	54	257	517	1770	52	76	458	43	2270
23	7.1	156	32	124	174	427	1200	49	57	389	41	1720
24	7.1	93	32	789	118	282	648	50	185	682	38	565
25	7.5	74	31	1000	92	202	440	59	664	1380	36	255
26	25	58	31	900	81	173	334	64	296	810	35	144
27	56	50	31	450	71	178	314	59	133	447	44	102
28	108	47	31	333	61	180	571	54	85	329	330	75
29	51	45	30	106	53	213	411	50	69	200	610	62
30	22	43	30	78	---	210	299	124	65	153	296	54
31	13	---	30	71	---	196	---	694	---	841	117	---
TOTAL	381.89	1541.5	1458	6596	6352	6957	18394	3523	4654	51224	8769	20586
MEAN	12.3	51.4	47.0	213	219	224	613	114	155	1652	283	686
MAX	108	399	170	1000	817	1040	3370	694	664	12000	2590	4200
MIN	.71	3.2	30	30	50	35	67	49	42	41	34	40
CFSM	.04	.15	.14	.64	.66	.68	1.85	.34	.47	4.98	.85	2.07
IN.	.04	.17	.16	.74	.71	.78	2.06	.39	.52	5.74	.98	2.31

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1921 - 1992, BY WATER YEAR (WY)

	MEAN	77.7	165	312	428	480	608	508	289	244	162	74.2	91.3
MAX	782	1286	1283	2184	1555	2112	1874	1237	1142	1652	477	1090	
(WY)	1927	1973	1991	1950	1950	1978	1957	1943	1981	1992	1979	1926	
MIN	5.44	13.4	11.9	8.23	23.6	81.3	51.3	28.7	13.6	20.4	8.10	5.78	
(WY)	1989	1957	1977	1977	1964	1981	1971	1934	1988	1965	1991	1991	

SUMMARY STATISTICS

FOR 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1921 - 1992

ANNUAL TOTAL	71940.81												
ANNUAL MEAN	197												
HIGHEST ANNUAL MEAN													1973
LOWEST ANNUAL MEAN													1931
HIGHEST DAILY MEAN	8110	Jan 1					12000	Jul 15					1992
LOWEST DAILY MEAN	.71	Oct 7					.71	Oct 7					1991
ANNUAL SEVEN-DAY MINIMUM	1.2	Oct 4					1.2	Oct 4					1991
INSTANTANEOUS PEAK FLOW							12800	Jul 15 a					1992
INSTANTANEOUS PEAK STAGE							19.76	Jul 15					1959
INSTANTANEOUS LOW FLOW							.71	Oct 7					1991
ANNUAL RUNOFF (CFSM)	.59						1.07						
ANNUAL RUNOFF (INCHES)	8.06						14.62						
10 PERCENT EXCEEDS	425						686						
50 PERCENT EXCEEDS	52						74						
90 PERCENT EXCEEDS	2.9						7.2						

a Peaks above base in shown Table of peak discharges and stages at continuous-record surface-water-discharge stations.

STREAMS TRIBUTARY TO LAKE ERIE

04187100 OTTAWA RIVER AT LIMA, OH

LOCATION.--Lat 40°43'29", long 84°07'35", Allen County, Hydrologic Unit 04100007, on right bank, 70 ft downstream of Erie Lockawanna RR bridge, 300 ft upstream of bridge to Lima STP, 0.7 mi downstream from Collett Street at Lima, Ohio.

DRAINAGE AREA.--128 mi².

PERIOD OF RECORD.--June 1988 to current year.

GAGE.--Water-stage recorder. Datum of gage is 820.00 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Dec. 16, 17, 21-29, Jan. 6-12, 16-21, 26-31, Feb. 1, 2, 7-14, May 14-June 16.

Records fair, except those for periods of estimated record, which are poor. Water diverted upstream of gage for City of Lima and Sohio Chemical Co. Water is returned to stream below gage.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.3	4.5	4.0	3.0	5.2	8.0	71	65	120	4.3	546	35
2	3.7	3.5	19	3.0	6.8	7.8	70	53	74	3.7	106	24
3	4.2	3.5	23	4.3	9.0	8.1	61	41	50	20	71	13
4	5.1	3.0	11	8.5	21	7.9	47	36	31	18	47	27
5	4.5	4.8	7.8	8.5	23	8.2	43	27	22	14	37	211
6	3.4	6.5	6.8	5.6	7.6	10	32	24	57	11	31	2670
7	3.6	4.3	4.1	3.9	4.0	21	28	19	39	9.8	17	693
8	3.1	2.6	3.3	2.8	3.1	22	29	13	29	8.7	39	216
9	4.5	2.6	4.0	2.2	2.5	14	27	14	22	8.5	71	754
10	6.7	2.4	3.9	2.4	2.3	65	24	15	17	7.5	135	2070
11	6.5	2.6	3.4	2.8	2.1	92	32	11	13	8.2	55	818
12	6.7	3.0	3.3	3.7	2.0	20	73	6.9	15	173	22	241
13	6.1	2.8	4.1	5.1	2.0	12	52	7.1	14	2150	31	101
14	5.3	3.1	3.9	46	2.0	12	36	11	13	1340	23	65
15	5.7	2.9	3.2	21	104	12	31	13	14	1880	12	45
16	4.7	4.0	2.8	13	400	9.5	81	14	7.0	1390	33	37
17	4.4	3.7	2.4	7.4	117	9.0	985	13	5.8	1680	22	32
18	4.4	3.3	4.1	5.0	21	31	1460	13	130	1180	19	45
19	5.9	22	5.7	3.7	37	68	1060	13	109	441	23	89
20	5.1	29	5.1	2.9	40	191	530	15	46	147	16	64
21	5.3	18	3.1	2.5	10	65	716	14	16	88	14	567
22	5.5	5.2	2.2	3.9	10	31	727	13	16	64	14	909
23	5.3	4.3	1.6	69	13	63	268	12	50	153	11	296
24	5.0	4.4	1.3	117	12	48	123	16	510	849	10	98
25	29	3.9	1.1	10	12	68	86	18	262	580	12	66
26	41	2.9	1.3	3.7	13	72	71	16	69	201	11	52
27	16	3.1	1.9	3.1	8.3	83	94	13	43	162	95	42
28	7.8	3.5	2.8	2.9	8.5	99	118	12	25	104	433	36
29	6.0	3.8	3.8	2.9	8.8	64	74	11	17	59	279	34
30	4.5	3.6	5.5	3.4	---	46	71	70	9.5	149	76	30
31	5.1	---	5.8	4.1	---	50	---	200	---	872	32	---
TOTAL	228.4	166.8	155.3	377.3	907.2	1317.5	7120	819.0	1845.3	13775.7	2343	10380
MEAN	7.37	5.56	5.01	12.2	31.3	42.5	237	26.4	61.5	444	75.6	346
MAX	41	29	23	117	400	191	1460	200	510	2150	546	2670
MIN	3.1	2.4	1.1	2.2	2.0	7.8	24	6.9	5.8	3.7	10	13

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1988 - 1992, BY WATER YEAR (WY)

	1988	1989	1990	1991	1992
MEAN	53.6	26.3	159	90.5	174
MAX	192	49.8	586	210	425
(WY)	1991	1991	1991	1990	1990
MIN	5.58	5.56	5.01	12.2	18.9
(WY)	1989	1992	1992	1992	1989

SUMMARY STATISTICS	FOR 1991 CALENDAR YEAR	FOR 1992 WATER YEAR	WATER YEARS 1988 - 1992
ANNUAL TOTAL	20245.6	39435.5	
ANNUAL MEAN	55.5	108	
HIGHEST ANNUAL MEAN			104
LOWEST ANNUAL MEAN			129
HIGHEST DAILY MEAN	1040	2670	3860
LOWEST DAILY MEAN	1.1	1.1	1.1
ANNUAL SEVEN-DAY MINIMUM	1.7	1.7	1.7
INSTANTANEOUS PEAK FLOW		3550	4590
INSTANTANEOUS PEAK STAGE		16.70	18.63
INSTANTANEOUS LOW FLOW		1.1	1.1
10 PERCENT EXCEEDS	115	194	178
50 PERCENT EXCEEDS	8.8	14	23
90 PERCENT EXCEEDS	3.7	3.1	4.7

STREAMS TRIBUTARY TO LAKE ERIE

41

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 west of Findlay, 3 mi downstream from Eagle Creek, and 3 mi upstream from Aurand Run.

DRAINAGE AREA.--346 mi².

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 above National Geodetic Vertical Datum of 1929. Prior to July 24, 1930, nonrecording gage at same site and datum.

REMARKS.--Estimated daily discharges: Dec. 21, Dec. 24-Jan. 1, Jan. 3-12, 20, 21, 31, Feb. 1, 2, 7-13. Records good except estimated discharges, 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.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.2	24	21	22	50	50	217	291	538	81	1120	104
2	8.9	21	33	24	55	45	281	219	281	432	494	96
3	9.2	19	80	30	69	44	211	187	186	509	335	447
4	26	19	76	33	148	60	159	153	136	218	367	362
5	15	18	49	37	317	60	112	128	118	121	221	1530
6	13	16	43	40	197	85	82	101	206	84	165	3460
7	9.8	17	34	31	120	160	74	82	169	63	136	2900
8	8.4	17	31	27	85	414	68	75	174	52	130	1650
9	8.0	16	29	25	64	268	87	110	112	46	140	1520
10	15	16	27	24	50	481	107	103	72	124	164	3280
11	13	16	25	23	48	810	113	90	53	117	139	1810
12	12	19	27	22	47	423	108	63	42	83	168	624
13	10	20	36	31	54	260	89	59	54	869	304	380
14	11	18	27	168	68	172	82	53	73	1870	328	277
15	13	19	23	297	347	125	73	47	130	4040	212	213
16	13	23	21	136	1560	94	119	60	68	4090	145	172
17	12	19	21	83	828	100	1100	79	53	4510	115	147
18	12	20	21	55	424	105	2550	92	446	3800	102	403
19	15	51	19	39	648	344	2910	46	699	2120	96	745
20	14	55	18	39	576	1140	1660	67	393	759	73	421
21	16	102	19	42	345	813	1460	58	190	438	63	1610
22	19	72	23	45	239	651	1800	50	122	311	56	2560
23	19	51	26	100	189	755	1170	106	158	1020	52	1030
24	20	37	29	364	143	399	667	1300	1820	1350	52	469
25	79	30	24	224	115	280	507	811	846	1080	50	312
26	125	27	22	123	94	248	399	320	442	1420	47	233
27	49	25	20	83	83	227	347	148	259	1140	217	193
28	33	25	20	64	72	197	314	117	167	623	607	162
29	26	23	23	49	71	146	268	87	119	365	482	137
30	23	21	25	44	---	191	268	589	92	513	234	118
31	25	---	22	46	---	235	---	1090	---	1090	145	---
TOTAL	680.5	856	914	2370	7106	9382	17402	6781	8218	33338	6959	27365
MEAN	22.0	28.5	29.5	76.5	245	303	580	219	274	1075	224	912
MAX	125	102	80	364	1560	1140	2910	1300	1820	4510	1120	3460
MIN	8.0	16	18	22	47	44	68	46	42	46	47	96
CFSM	.06	.08	.09	.22	.71	.87	1.68	.63	.79	3.11	.65	2.64
IN.	.07	.09	.10	.25	.76	1.01	1.87	.73	.88	3.58	.75	2.94

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1924 - 1992, BY WATER YEAR (WY)

	MEAN	63.4	146	288	360	425	556	454	266	214	129	56.7	92.9
MAX	623	1435	1482	1800	1402	1814	1588	865	1612	1075	474	944	
(WY)	1927	1973	1991	1930	1959	1978	1957	1969	1981	1992	1979	1926	
MIN	2.43	3.67	4.28	6.54	9.86	60.1	33.3	22.1	18.3	4.27	1.24	1.62	
(WY)	1935	1935	1935	1945	1964	1941	1925	1925	1988	1934	1934	1934	

SUMMARY STATISTICS

FOR 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1924 - 1992

ANNUAL TOTAL	59239.9	121371.5	
ANNUAL MEAN	162	332	254
HIGHEST ANNUAL MEAN			571
LOWEST ANNUAL MEAN			57.5
HIGHEST DAILY MEAN	5380	Jan 1	4510
LOWEST DAILY MEAN	7.1	Sep 22	8.0
ANNUAL SEVEN-DAY MINIMUM	8.1	Sep 26	11
INSTANTANEOUS PEAK FLOW			5610
INSTANTANEOUS PEAK STAGE			11.74
INSTANTANEOUS LOW FLOW			8.0
ANNUAL RUNOFF (CFSM)	.47	.96	.73
ANNUAL RUNOFF (INCHES)	6.37	13.05	9.97
10 PERCENT EXCEEDS	360	853	612
50 PERCENT EXCEEDS	43	101	56
90 PERCENT EXCEEDS	13	19	9.0

a Peaks above base in shown Table of peak discharges and stages at continuous-record surface-water-discharge stations.

STREAMS TRIBUTARY TO LAKE ERIE

04191500 AUGLAIZE RIVER NEAR DEFIANCE, OH

LOCATION.--Lat 41°14'14", long 84°23'59", in NE 1/4 sec. 9, T.3 N. R.4 E., Defiance County, Hydrologic Unit 04100007, on right bank 125 ft downstream from hydroelectric dam of Hydro-Corporation, 0.2 mi upstream from Jackson ditch, and 3 mi south of Defiance.

DRAINAGE AREA.--2,318 mi².

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 above National Geodetic Vertical Datum of 1929. May 20 to Aug. 8, 1903, non-recording gage at site 1.8 mi 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 higher, and auxiliary tailwater staff gage near right bank on downstream side of dam at present datum. Oct. 1982 to Nov. 1984 at dam 125 ft upstream, at present datum.

REMARKS.--Estimated daily discharges: Oct. 1-16, Jan. 2, 3, 7-10, 12, 16-22, 30, 31, Feb. 1, 2, 6-13, June 18-July 1. Records good, except estimated discharges, which are fair. Flow regulated by dam at powerplant at station; reservoir capacity, 9,800 acre-ft. Plant shut down except for occasional gate operation, Jan. 10, 1963 to Sept. 7, 1985. Some diversion by Miami and Erie Canal from Grand Lake into Jennings Creek, tributary to Auglaize River 70 mi upstream from station. Water-quality data collected at this site 1966 to 1977.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of March 1913 reached a stage of 38.8 ft, from reading on powerplant tailwater gage at present datum; discharge, 120,000 ft³/s, from rating curve extended above 51,000 ft³/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	1080	443	145	660	386	2150	1880	5980	290	4920	568
2	20	387	554	160	840	422	2330	1730	4150	389	4740	391
3	20	217	1610	210	1160	307	2240	1610	2560	387	3610	572
4	25	350	2130	333	1840	301	1870	1280	1390	521	1960	248
5	33	382	1430	1010	2940	352	1330	899	1030	626	1260	504
6	21	40	1220	946	1400	391	929	780	1250	292	910	1640
7	26	40	737	260	860	1290	902	649	1430	385	576	5760
8	23	231	429	160	600	3900	754	596	1050	320	446	8940
9	33	42	353	90	450	4210	713	484	854	62	375	9110
10	48	42	537	54	370	3390	671	536	577	294	521	14500
11	44	247	346	50	400	4990	700	537	494	378	657	20600
12	43	42	689	180	430	4610	464	459	350	595	698	19900
13	40	260	1190	332	510	3420	878	410	356	3640	496	10300
14	34	41	1370	1290	745	2140	594	438	226	11200	439	6060
15	37	259	788	2650	1080	1480	565	430	397	18200	511	2630
16	29	41	991	1800	6900	937	701	335	506	22600	525	1190
17	29	41	561	1200	7110	851	4310	419	493	20000	480	859
18	30	132	281	950	5270	745	15600	614	230	18700	330	489
19	33	265	180	760	6470	1310	19700	742	780	19200	292	1260
20	32	1460	642	660	5810	4640	16700	674	2900	15100	284	1660
21	33	5930	442	570	3990	7310	12900	415	2300	9250	235	5310
22	32	5740	50	500	2680	6770	12200	381	1300	5400	135	15200
23	31	3490	52	671	1900	7340	9480	382	2100	3830	303	15400
24	28	2430	53	2200	1350	5030	7680	1820	3600	3870	160	9890
25	55	1610	59	4230	1010	3450	5190	2670	6400	6020	240	6600
26	4800	885	470	3010	932	2680	3390	2640	10000	5230	164	3330
27	6630	329	320	2020	659	2430	2570	2010	230	3720	291	1710
28	4860	340	56	1390	750	2330	2570	749	180	2940	678	1010
29	4100	540	332	956	508	2040	2550	679	160	1860	1460	836
30	2810	282	296	660	---	1940	2090	1530	140	1430	1810	664
31	1730	---	207	560	---	2050	---	5310	---	1890	1330	---
TOTAL	25728	27175	18818	30007	59624	83442	134721	34088	53413	178619	30836	167131
MEAN	830	906	607	968	2056	2692	4491	1100	1780	5762	995	5571
MAX	6630	5930	2130	4230	7110	7340	19700	5310	10000	22600	4920	20600
MIN	19	40	50	50	370	301	464	335	140	62	135	248

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1916 - 1992, BY WATER YEAR (WY)

	MEAN	491	959	1839	2466	3018	4144	3416	1926	1354	784	313	441
MAX	3445	7856	8510	13350	10170	13090	11210	10490	6733	5762	1988	5571	
(WY)	1955	1973	1967	1950	1976	1982	1957	1943	1947	1992	1979	1992	
MIN	23.6	7.28	9.34	48.5	111	382	242	69.8	101	42.0	27.1	28.9	
(WY)	1953	1953	1977	1977	1964	1941	1946	1934	1988	1930	1932	1963	

SUMMARY STATISTICS	FOR 1991 CALENDAR YEAR		FOR 1992 WATER YEAR		WATER YEARS 1916 - 1992	
ANNUAL TOTAL	569983		843602			
ANNUAL MEAN	1562		2305		1747	
HIGHEST ANNUAL MEAN					3337	
LOWEST ANNUAL MEAN					342	
HIGHEST DAILY MEAN	43500	Jan 1	22600	Jul 16	52300	Mar 14 1982
LOWEST DAILY MEAN	19	Oct 1	a 19	Oct 1	.50	Oct 13 1952
ANNUAL SEVEN-DAY MINIMUM	23	Oct 1	23	Oct 1	1.1	Oct 12 1952
INSTANTANEOUS PEAK FLOW			23200	Jul 16	52500	Feb 16 1950
INSTANTANEOUS PEAK STAGE			17.94	Jul 16	27.65	Feb 13 1959
INSTANTANEOUS LOW FLOW					.50	Oct 13 1952
10 PERCENT EXCEEDS	4000		5990		4830	
50 PERCENT EXCEEDS	444		747		431	
90 PERCENT EXCEEDS			56		54	37

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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. upstream from Independence Dam, 4 mi downstream from mouth of Auglaize River, and 4.5 mi east of Defiance.

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.

Nov. 13, 1924, nonrecording gage at same site and datum:

REMARKS.--No estimated daily discharges. Records good. Flow affected by regulation of Auglaize River at hydroelectric plant of the Hydro-Corporation, 7 mi upstream. Operation of hydroelectric plant there was discontinued Jan. 10, 1963 to Sept. 7, 1985. Low flow slightly regulated by powerplant at Ft. Wayne, Indiana. Slight diversion 275 ft upstream into Miami and Erie Canal through a 24 inch conduit which bypasses station.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	216	4260	2550	1250	2820	2150	6430	5320	9480	1120	8600	1430
2	226	2870	2650	1350	3080	1910	6430	4520	7320	970	9320	1440
3	220	2500	6700	1760	3420	1630	5970	4110	4600	748	8090	2310
4	290	2130	8570	2380	4320	1540	5070	3520	2920	688	6220	2140
5	295	1970	6300	2890	6170	1490	4040	2880	2190	776	5130	1620
6	729	1100	4470	3330	6640	1400	3270	2500	2480	521	3880	2300
7	1140	907	3350	2610	5600	3100	2810	2210	2930	564	2600	6540
8	1070	916	2520	2480	4530	7990	2420	1900	2730	645	2010	10400
9	860	692	2290	2280	3420	8680	2260	1620	2510	377	1690	10700
10	530	615	2210	2060	2330	9030	2100	1750	1850	550	1570	20500
11	473	713	2150	2130	2330	13400	2100	1690	1560	803	1470	30300
12	343	559	2250	1630	1810	12300	2030	1510	1160	2150	1480	28500
13	285	667	5330	1270	1850	9700	2430	1370	1190	4010	1240	18000
14	302	550	6500	3330	2030	7270	2160	1410	933	13800	1200	13200
15	308	652	5310	5560	2950	5440	2020	1390	945	24500	1260	8470
16	671	523	4060	4930	13300	3930	2190	1210	1040	33500	1190	4560
17	487	496	3210	3960	15600	3240	8710	1270	1110	31100	1000	2690
18	377	684	2260	3220	12600	3160	24100	1350	3420	29200	861	1830
19	302	975	1600	2330	13400	3590	30800	1700	9220	30300	806	2080
20	239	3750	1740	1910	13000	8240	27700	1840	7680	27600	798	2490
21	206	16500	1910	2360	10800	12600	24500	1680	5360	21700	752	8550
22	210	17400	1160	2510	8260	12300	22600	1370	3560	16900	716	23900
23	218	13200	1240	2790	6340	13900	18700	1190	1950	15700	733	26100
24	247	9330	1240	4730	5170	11800	15900	2110	2380	13300	688	19400
25	673	6490	1190	7620	4160	9430	13100	3330	4410	13100	654	13500
26	10600	4460	1580	6910	3760	8550	9880	3560	5050	11700	643	8190
27	21200	2580	1310	5320	3130	8260	8190	2970	3770	9520	785	5140
28	21900	2500	1090	4090	2910	7810	7820	1600	2220	8100	3140	3750
29	16200	2400	1210	3380	2460	6940	6920	1250	1340	6530	3300	2900
30	10300	2350	1440	2830	---	6410	5870	1880	1210	5590	3160	2160
31	6440	---	1340	2780	---	6170	---	7730	---	5760	2390	---
TOTAL	97557	104739	90730	97980	168190	213360	278520	73740	98518	331822	77376	285090
MEAN	3147	3491	2927	3161	5800	6883	9284	2379	3284	10700	2496	9503
MAX	21900	17400	8570	7620	15600	13900	30800	7730	9480	33500		

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1925 - 1992, BY WATER YEAR (WY)

MEAN	1355	2575	4613	5823	7019	9464	8474	5092	3372	1928	918	1094
MAX	8314	16410	18040	30150	22460	33940	23210	27270	20370	10700	4739	11470
(WY)	1955	1973	1967	1950	1959	1982	1957	1943	1981	1992	1958	1926
MIN	63.9	110	158	219	363	1455	789	359	214	211	111	88.1
(WY)	1929	1954	1964	1945	1964	1941	1925	1925	1988	1930	1932	1955

SUMMARY STATISTICS

FOR 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1925 - 1992

ANNUAL TOTAL	1624992		1917622			
ANNUAL MEAN	4452		5239		4293	
HIGHEST ANNUAL MEAN					8286	1950
LOWEST ANNUAL MEAN					849	1931
HIGHEST DAILY MEAN	80300	Jan 1	33500	Jul 16	98800	Mar 15 1982
LOWEST DAILY MEAN	166	Aug 2	206	Oct 21	3.0	Sep 4 1925
ANNUAL SEVEN-DAY MINIMUM	200	Aug 1	257	Oct 18	27	Aug 31 1925
INSTANTANEOUS PEAK FLOW			34600	Jul 16 a	104000	Mar 15 1982
INSTANTANEOUS PEAK STAGE			7.06	Jul 16	15.87	Mar 15 1982
INSTANTANEOUS LOW FLOW			206	Oct 21	2.0	Sep 3 1925
10 PERCENT EXCEEDS	12400		13200		12300	
50 PERCENT EXCEEDS	1920		2600		1350	
90 PERCENT EXCEEDS	249		687		214	

a Peaks above base in shown Table of peak discharges and stages at continuous-record surface-water-discharge stations.

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 downstream from Tontogany Creek, and 20.7 mi upstream from mouth.

DRAINAGE AREA.--6,330 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--November 1898 to December 1901, August 1921 to December 1935, March 1939 to current year. Miami and Erie Canal flow included at Waterville prior to 1930 when the canal was abandoned.

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. WRD-OH-82-2: 1981.

GAGE.--Water-stage recorder with auxiliary crest-stage gage. Datum of gage is 595.71 ft above National Geodetic 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.--Estimated daily discharges: Feb. 10-12, May 27-June 3. Records fair except for estimated daily discharges which are poor. Satellite telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Practically no flow at times prior to June 30, 1929, when entire river flow was being diverted by canal.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1913 reached a stage of 19.9 ft, from information by local resident, estimated discharge, 180,000 ft³/s, from rating curve extended above 94,000 ft³/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	245	4940	2170	1390	3350	2640	6630	6440	10800	1310	7260	1910
2	207	3760	2240	1290	3100	2080	6960	5550	8600	1330	9050	1350
3	176	2460	5760	1450	3120	1960	6570	4840	5000	1200	8200	1860
4	269	2200	9320	2400	3660	1900	5820	4160	4250	851	6460	2230
5	496	2020	7210	2530	5650	1780	4960	3540	2990	820	5400	1860
6	397	1680	5100	3330	6460	1760	3930	3010	3420	870	4290	1810
7	699	1070	3970	2900	6220	2820	3380	2800	3580	596	3220	3740
8	1080	1010	2710	2270	5030	8030	3000	2290	3620	660	2510	9260
9	1020	982	2260	2470	3940	9800	2740	2390	3000	709	2060	10500
10	845	798	2030	2080	2500	9300	2650	2160	2520	491	1820	17700
11	592	763	2120	1890	2200	15500	2750	2120	1930	586	1680	31200
12	522	847	1850	1800	2000	13900	2520	1910	1720	1450	1610	31700
13	429	730	4500	1410	1600	10900	2440	1550	1440	2440	1600	22500
14	318	736	6980	2790	2060	8280	2790	1510	1310	9850	1330	14600
15	391	708	5830	5840	2870	6410	2530	1520	1000	21800	1450	10100
16	375	739	4030	5620	14000	4750	2590	1490	1150	34500	1460	6080
17	647	620	3770	4770	18900	3810	5350	1440	1330	34600	1220	3350
18	534	681	2450	3960	14900	3630	21600	1380	2680	30800	1140	2510
19	477	929	1730	2730	15900	3980	36700	1770	8200	30600	861	1970
20	375	1880	1470	2490	15700	6550	32700	1900	8900	29900	808	2550
21	290	15900	1960	3020	12100	11800	30100	1960	6330	24500	797	5900
22	236	20400	1430	3060	9600	12700	29100	1630	4510	18900	752	28200
23	210	15300	1160	2820	7320	14500	23100	1480	2880	16300	707	31100
24	239	10300	1330	6610	6090	13900	19100	2750	2130	18400	766	23600
25	539	7150	1220	9910	4970	11400	17900	4670	3860	13800	587	15900
26	7670	5030	1260	10100	4200	10000	12900	4080	5120	12600	597	9990
27	23300	3200	1430	7460	3810	9220	10400	3200	4510	10200	683	6170
28	26400	2330	1260	4870	3190	8620	9430	1800	3100	8360	2520	4350
29	19500	2210	1200	4140	2980	7610	8340	1350	1840	7210	4040	3140
30	11800	2590	1380	3370	---	6980	7200	2500	1410	5620	3750	2580
31	7520	---	1460	3120	---	6870	---	9000	---	5900	2860	---
TOTAL	107798	113963	92590	113890	187420	233380	326180	88190	113130	347153	81488	309710
MEAN	3477	3799	2987	3674	6463	7528	10870	2845	3771	11200	2629	10320
MAX	26400	20400	9320	10100	18900	15500	36700	9000	10800	34600	9050	31700
MIN	176	620	1160	1290	1600	1760	2440	1350	1000	491	587	1350
CFSM	.55	.60	.47	.58	1.02	1.19	1.72	.45	.60	1.77	.42	1.63
IN.	.63	.67	.54	.67	1.10	1.37	1.92	.52	.66	2.04	.48	1.82

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1930 - 1992, BY WATER YEAR (WY)

	1469	2857	5476	6666	8043	10920	9582	5931	3969	2292	1055	1120
MEAN	1469	2857	5476	6666	8043	10920	9582	5931	3969	2292	1055	1120
MAX	9041	18750	23830	34010	30000	38210	25890	29540	24030	11200	6185	10320
(WY)	1955	1973	1967	1950	1976	1982	1957	1943	1981	1992	1958	1992
MIN	95.5	196	177	235	424	1759	914	587	231	207	146	127
(WY)	1964	1965	1964	1945	1934	1941	1946	1934	1988	1930	1941	1963

SUMMARY STATISTICS

FOR 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1930 - 1992

ANNUAL TOTAL	1771150	2114892	
ANNUAL MEAN	4852	5778	4929
HIGHEST ANNUAL MEAN			9370
LOWEST ANNUAL MEAN			938
HIGHEST DAILY MEAN	86700	Jan 1	36700
LOWEST DAILY MEAN	113	Sep 28	176
ANNUAL SEVEN-DAY MINIMUM	180	Sep 24	337
INSTANTANEOUS PEAK FLOW			40400
INSTANTANEOUS PEAK STAGE			9.72
INSTANTANEOUS LOW FLOW			176
ANNUAL RUNOFF (CFSM)	.77		.91
ANNUAL RUNOFF (INCHES)	10.41		12.43
10 PERCENT EXCEEDS	12300		15000
50 PERCENT EXCEEDS	2000		2940
90 PERCENT EXCEEDS	296		738

04193500 MAUMEE RIVER AT WATERVILLE, OHIO--Continued

WATER-QUALITY RECORDS

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

PERIOD OF DAILY RECORD.--

CHLORIDE: October 1987 to current year.

NITROGEN, NITRITE + NITRATE: October 1987 to current year.

NITROGEN, AMMONIA + ORGANIC: October 1987 to current year.

PHOSPHORUS: October 1987 to current year.

SUSPENDED SEDIMENT DISCHARGE: April 1950 to September 1984. October 1987 to current year.

INSTRUMENTATION.--Refrigerated water-quality pumping sampler since 1987. Sampler located at station 04193490.

REMARKS.--Water-quality samples were collected by pumping sampler three times daily. Sediment samples were collected by a local observer on an approximate once daily basis. Chemical loads were calculated using the mean-interval method (Porterfield, George, 1972, Computation of Fluvial-Sediment Discharge: U.S. Geological Survey, Techniques of Water Resources Investigations, Book 3, Chap. C3, 66 p.). For days with unsteady concentration, discharge, or both, the day was sub-divided into hourly intervals and the daily load was calculated by summation of hourly loads. This required interpolation between measured and estimated concentrations. Concentrations reported as below the limit of detection (for example, <.100) were assumed to have a value of half of the detection limit for the purpose of load calculation.

EXTREMES FOR PERIOD OF DAILY RECORD.--

DISSOLVED CHLORIDE CONCENTRATIONS: Maximum daily mean, 110 mg/L, July 31-Aug. 6, 1988; minimum daily mean, <10 mg/L, July 24-26, 1990, Aug. 26, 1992.

DISSOLVED CHLORIDE LOADS: Maximum daily, 3,490 tons, May 27, 1989; minimum daily, 10.5 tons, June 28, 1988.

DISSOLVED NITROGEN, NITRITE + NITRATE CONCENTRATIONS: Maximum daily mean, 24.1 mg/L, May 13, 1990; minimum daily mean, <.100 mg/L on many days during 1988 and 1991 water years, and on several days during 1992.

DISSOLVED NITROGEN, NITRITE + NITRATE LOADS: Maximum daily, 1,300 tons, April 5, 1989; minimum daily, .01 ton, many days during 1988 water year.

TOTAL NITROGEN, AMMONIA + ORGANIC CONCENTRATIONS: Maximum daily mean, 6.6 mg/L Feb. 23, 1990; minimum daily mean, .33 mg/L, Feb. 26, 1989.

TOTAL NITROGEN, AMMONIA + ORGANIC LOADS: Maximum daily, 1,030 tons, Feb. 23, 1990; minimum daily, .25 ton, June 28, 30, July 1, 1988.

TOTAL PHOSPHORUS CONCENTRATIONS: Maximum daily mean, 1.95 mg/L Feb. 4, 1990; minimum daily mean, .072 mg/L Oct. 26, 1987.

TOTAL PHOSPHORUS LOADS: Maximum daily, 362 tons, Jan. 1, 1991; minimum daily, .039 ton, Sept. 28, 1991.

SEDIMENT CONCENTRATIONS: Maximum daily mean, 2,240 mg/L, March 26, 1954; minimum daily mean, 1 mg/L, on many days during 1953, 1955, 1963.

SEDIMENT LOADS: Maximum daily, 300,000 tons, Feb. 24, 1990; minimum daily, 0.26 ton, Sept. 18, 1955.

EXTREMES FOR CURRENT YEAR.--

DISSOLVED CHLORIDE CONCENTRATIONS: Maximum daily mean, 74 mg/L, Oct. 8, 9, 25; minimum daily mean, <10 mg/L, Aug. 26.

DISSOLVED CHLORIDE LOADS: Maximum daily, 2,610 tons, July 20; minimum daily, 15.6 tons, Aug. 26.

DISSOLVED NITROGEN, NITRITE + NITRATE CONCENTRATIONS: Maximum daily mean, 14.0 mg/L, June 9; minimum daily mean, <.100 mg/L, on several days during the year.

DISSOLVED NITROGEN, NITRITE + NITRATE LOADS: Maximum daily, 820 tons, July 16; minimum daily, .03 ton, Oct. 22-24.

TOTAL NITROGEN, AMMONIA + ORGANIC CONCENTRATIONS: Maximum daily mean, 3.3 mg/L, Nov. 30; minimum daily mean, .60 mg/L, Feb. 14.

TOTAL NITROGEN, AMMONIA + ORGANIC LOADS: Maximum daily, 238 tons, Apr. 21; minimum daily, .64 ton, Oct. 3.

TOTAL PHOSPHORUS CONCENTRATIONS: Maximum daily mean, 1.19 mg/L, May 26; minimum daily mean, .087 mg/L, Aug. 25.

TOTAL PHOSPHORUS LOADS: Maximum daily, 70.9 tons, Apr. 20; minimum daily, .064 ton, Oct. 23.

SEDIMENT CONCENTRATIONS: Maximum daily mean, 998 mg/L, Apr. 19; minimum daily mean, 7 mg/L, Dec. 20.

SEDIMENT LOADS: Maximum daily, 92,300 tons, Apr. 19; minimum daily, 5.1 tons, Oct. 23.

WATER QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	TIME	ALACHLOR TOT RECV (UG/L)	DATE	TIME	ALACHLOR TOT RECV (UG/L)	DATE	TIME	ALACHLOR TOT RECV (UG/L)
Oct 14	1435	<.1	May 28	2000	4.5	July 02	2000	1.9
Oct 28	1450	.2	May 29	2000	5.3	July 04	2000	<.1
Nov 11	1450	<.1	May 30	2000	4.9	July 06	1430	.8
Nov 25	1430	<.1	May 31	0400	8.1	July 07	2000	1.2
Dec 09	1415	<.1	May 31	1200	13.5	July 09	2000	1.1
Jan 06	1400	<.1	May 31	2000	10.3	July 11	2000	<.1
Jan 20	1510	<.1	June 01	0400	7.7	July 13	1415	.5
Feb 03	1420	<.1	June 01	1400	2.8	July 20	1450	<.1
Feb 17	1355	<.1	June 02	2000	14.6	July 21	2000	<.1
Mar 02	1400	.4	June 03	2000	9.3	July 22	2000	<.1
Mar 30	1440	<.1	June 04	2000	6.1	July 23	2000	<.1
Apr 13	1445	<.1	June 05	2000	5.5	July 24	2000	<.1
Apr 20	1410	.4	June 06	2000	4.5	July 25	2000	<.1
Apr 21	2000	<.1	June 07	2000	4.4	July 26	2000	<.1
Apr 22	2000	<.1	June 08	1425	2.9	July 27	1255	<.1
Apr 23	2000	<.1	June 09	2000	4.7	July 28	1400	<.1
Apr 25	2000	<.1	June 11	2000	2.7	July 28	2000	<.1
Apr 27	1500	<.1	June 13	2000	<.1	July 30	2000	<.1
Apr 29	2000	.9	June 15	1400	1.9	Aug 01	2000	<.1
May 01	2000	.7	June 17	2000	<.1	Aug 03	1400	<.1
May 04	1510	<.1	June 22	1420	<.1	Aug 05	2000	<.1
May 08	2000	<.1	June 23	2000	3.8	Aug 10	1330	<.1
May 11	1405	.2	June 24	2000	3.9	Aug 14	2000	.5
May 15	2000	1.5	June 25	2000	3.8	Aug 17	1400	<.1
May 18	----	<.1	June 26	2000	3.1	Aug 24	1400	<.1
May 18	1412	.4	June 27	2000	2.8	Sept 07	1350	<.1
May 22	2000	.5	June 28	2000	3.1	Sept 21	1400	<.1
May 26	1405	2.5	June 29	1450	1.4			

STREAMS TRIBUTARY TO LAKE ERIE

04193500 MAUMEE RIVER AT WATERVILLE, OHIO--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	TUR- BID- ITY (NTU) (00076)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREP- TOCOCCT FECAL, KF AGAR (COLS. PER 100 ML) (31673)
DEC 10...	1300	2030	613	8.2	2.5	3.5	51	12.0	92	370	2600
MAR 03...	1315	1380	625	8.5	12.5	7.5	24	12.0	101	K2	220
JUN 17...	1415	1380	640	8.2	31.5	26.0	2.7	11.0	138	750	50
SEP 23...	0920	31900	319	8.0	8.0	16.5	350	8.0	83	2700	K>10000

DATE	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	ALKA- LITY WAT WH TOT FET FIELD MG/L AS CACO3 (00410)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)
DEC 10...	270	76	19	17	4.2	190	0	155	74	37	0.20
MAR 03...	300	84	22	17	3.6	193	8	170	81	39	0.30
JUN 17...	290	78	23	20	4.3	181	0	150	78	45	0.30
SEP 23...	140	42	9.0	6.9	3.9	127	0	105	27	14	0.20

DATE	SILICA, DIS- SOLVED (MG/L AS SiO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTH, DIS- SOLVED (MG/L AS P) (00671)	ALUM- INUM, DIS- SOLVED (UG/L AS AL) (01106)	BARIIUM, DIS- SOLVED (UG/L AS BA) (01005)
DEC 10...	7.7	420	6.50	0.140	0.140	1.1	0.190	0.100	0.070	40	36
MAR 03...	6.0	395	8.00	0.060	0.060	1.0	0.120	0.060	0.040	<10	31
JUN 17...	4.6	418	10.0	0.030	0.020	1.1	0.070	0.020	<0.010	<10	43
SEP 23...	7.5	177	2.20	0.020	0.020	1.0	0.310	0.100	0.090	190	24

DATE	COBALT, DIS- SOLVED (UG/L AS CO) (01035)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LITHIUM DIS- SOLVED (UG/L AS LI) (01130)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	SILVER, DIS- SOLVED (UG/L AS AG) (01075)	STRON- TIUM, DIS- SOLVED (UG/L AS SR) (01080)	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)	SEDI- MENT, SUS- PENDED (MG/L) (80154)
DEC 10...	<3	37	6	3	<10	2	1	<1.0	570	<6	31
MAR 03...	<3	4	10	4	10	1	1	<1.0	620	<6	35
JUN 17...	<3	9	4	1	<10	2	<1	<1.0	860	<6	67
SEP 23...	<3	220	<4	2	<10	3	<1	<1.0	340	<6	545

K Results based on colony count outside the acceptable range.

STREAMS TRIBUTARY TO LAKE ERIE

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04193500 MAUMEE RIVER AT WATERVILLE, OHIO--Continued

CHLORIDE DISSOLVED (MG/L AS CL), WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	LOAD (TONS/ DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	LOAD (TONS/ DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	LOAD (TONS/ DAY)
OCTOBER			NOVEMBER			DECEMBER			
1	245	70	46.1	4940	28	373	2170	36	213
2	207	70	39.1	3760	29	297	2240	36	221
3	176	70	33.9	2460	30	199	5760	34	530
4	269	69	50.8	2200	31	183	9320	34	854
5	496	70	93.3	2020	32	174	7210	32	632
6	397	70	75.4	1680	33	148	5100	33	448
7	699	72	136	1070	34	98.8	3970	35	371
8	1080	74	217	1010	36	96.6	2710	36	266
9	1020	74	203	982	36	95.5	2260	36	220
10	845	73	167	798	36	76.6	2030	38	207
11	592	73	117	763	36	74.1	2120	38	217
12	522	72	101	847	38	87.1	1850	39	194
13	429	71	82.3	730	40	78.2	4500	39	468
14	318	71	61.4	736	40	78.9	6980	41	764
15	391	72	76.5	708	40	75.9	5830	39	610
16	375	71	72.0	739	40	79.7	4030	35	377
17	647	69	120	620	40	67.1	3770	36	364
18	534	67	96.7	681	41	75.0	2450	37	247
19	477	68	88.1	929	43	107	1730	39	184
20	375	69	70.3	1880	45	226	1470	38	152
21	290	71	55.2	15900	39	1640	1960	37	194
22	236	73	46.4	20400	33	1820	1430	36	140
23	210	71	40.4	15300	30	1260	1160	37	114
24	239	73	47.1	10300	29	800	1330	37	133
25	539	74	107	7150	30	575	1220	38	126
26	7670	57	999	5030	32	435	1260	39	132
27	23300	37	2270	3200	32	277	1430	39	152
28	26400	24	1690	2330	33	207	1260	41	137
29	19500	23	1190	2210	34	202	1200	41	132
30	11800	24	749	2590	35	245	1380	41	153
31	7520	26	526	---	---	---	1460	43	168
TOTAL	107798	---	9667.0	113963	---	10151.5	92590	---	9120
JANUARY			FEBRUARY			MARCH			
1	1390	44	166	3350	48	344	2640	35	189
2	1290	47	164	3100	49	320	2080	36	147
3	1450	49	192	3120	52	341	1960	36	140
4	2400	51	330	3660	54	423	1900	38	139
5	2530	50	342	5650	49	632	1780	38	130
6	3330	46	415	6460	48	715	1760	38	128
7	2900	45	354	6220	47	677	2820	37	218
8	2270	47	290	5030	44	496	8030	30	574
9	2470	44	296	3940	42	364	9800	34	791
10	2080	47	263	2500	42	285	9300	35	764
11	1890	51	258	2200	41	241	15500	27	1010
12	1800	51	249	2000	39	212	13900	27	921
13	1410	50	191	1600	38	108	10900	28	741
14	2790	47	348	2060	39	143	8280	30	572
15	5840	38	595	2870	38	208	6410	31	450
16	5620	36	542	14000	24	768	4750	32	334
17	4770	42	540	18900	21	955	3810	33	269
18	3960	45	484	14900	23	814	3630	34	259
19	2730	45	331	15900	23	879	3980	35	296
20	2490	44	295	15700	23	858	6550	35	524
21	3020	43	305	12100	24	698	11800	37	1050
22	3060	44	271	9500	26	586	12700	39	1190
23	2820	43	242	7320	28	470	14500	33	1170
24	6610	41	614	5090	30	415	13900	25	850
25	9910	43	1000	4970	31	343	11400	26	721
26	10100	44	1060	4200	32	298	10000	28	669
27	7460	47	802	3810	33	272	9220	29	628
28	4870	53	567	3190	33	224	8620	29	603
29	4140	54	489	2980	34	212	7610	29	525
30	3370	51	365	---	---	---	6980	30	487
31	3120	49	318	---	---	---	6870	32	508
TOTAL	113890	---	12678	187420	---	13301	233380	---	16997

STREAMS TRIBUTARY TO LAKE ERIE

04193500 MAUMEE RIVER AT WATERVILLE, OHIO--Continued

CHLORIDE DISSOLVED (MG/L AS CL), WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	LOAD (TONS/ DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	LOAD (TONS/ DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	LOAD (TONS/ DAY)
APRIL			MAY			JUNE			
1	6630	33	509	6440	27	379	10800	33	970
2	6960	34	542	5550	29	341	8600	33	762
3	6570	35	523	4840	29	296	5000	33	442
4	5820	35	458	4160	30	253	4250	35	409
5	4960	35	387	3540	30	214	2990	36	295
6	3930	36	308	3010	30	175	3420	35	331
7	3380	36	259	2800	32	170	3580	34	339
8	3000	36	222	2290	33	134	3620	33	329
9	2740	36	199	2390	34	145	3000	33	271
10	2650	36	189	2160	34	129	2520	35	245
11	2750	36	197	2120	35	129	1930	37	198
12	2520	37	181	1910	36	117	1720	37	181
13	2440	38	179	1550	36	88.3	1440	38	153
14	2790	39	219	1510	36	85.6	1310	38	142
15	2530	40	194	1520	36	98.5	1000	39	112
16	2590	41	203	1490	37	105	1150	40	130
17	5350	40	466	1440	38	98.8	1330	41	152
18	21600	29	1510	1380	38	90.7	2680	37	268
19	36700	22	2030	1770	39	125	8200	24	535
20	32700	15	1260	1900	39	168	8900	21	501
21	30100	17	1260	1960	40	221	6330	22	374
22	29100	16	1170	1630	42	191	4510	23	282
23	23100	18	977	1480	42	176	2880	27	216
24	19100	20	891	2750	43	327	2130	29	175
25	17900	20	844	4670	44	569	3860	26	277
26	12900	21	611	4080	46	516	5120	26	367
27	10400	22	512	3200	47	407	4510	29	357
28	9430	22	477	1800	49	236	3100	32	274
29	8340	24	442	1350	49	178	1840	31	161
30	7200	25	398	2500	43	292	1410	29	115
31	---	---	---	9000	37	905	---	---	---
TOTAL	326180	---	17617	88190	---	7359.9	113130	---	9363
JULY			AUGUST			SEPTEMBER			
1	1310	28	105	7260	19	364	1910	45	234
2	1330	27	101	9050	20	484	1350	44	163
3	1200	26	89.5	8200	23	504	1860	38	190
4	851	26	65.8	6460	21	366	2230	38	225
5	820	25	62.6	5400	17	241	1860	43	216
6	870	25	66.1	4290	16	181	1810	51	248
7	596	25	47.9	3220	17	143	3740	47	465
8	660	25	52.2	2510	16	111	9260	37	923
9	709	26	55.7	2060	16	86.7	10500	31	880
10	491	27	39.9	1820	15	75.9	17700	26	1190
11	586	28	49.2	1680	16	72.4	31200	14	1150
12	1450	31	123	1610	17	72.0	31700	10	876
13	2440	33	216	1600	17	74.7	22500	11	647
14	9850	33	862	1330	18	65.2	14600	11	438
15	21800	29	1720	1450	19	76.3	10100	11	302
16	34500	27	2460	1460	21	82.8	6080	11	188
17	34600	26	2420	1220	23	76.2	3350	12	109
18	30800	28	2320	1140	25	79.6	2510	13	88.2
19	30600	30	2490	861	26	62.9	1970	13	71.5
20	29900	32	2610	808	27	61.5	2550	15	100
21	24500	33	2200	797	28	63.2	5900	14	222
22	18900	34	1740	752	28	61.5	28200	14	1060
23	16300	31	1350	707	29	60.6	31100	11	960
24	18400	15	728	766	30	66.6	23600	12	751
25	13800	16	579	587	30	52.0	15900	12	522
26	12600	17	567	597	<10	15.6	9990	13	346
27	10200	18	494	683	21	43.0	6170	14	238
28	8360	18	400	2520	29	188	4350	15	179
29	7210	17	337	4040	27	299	3140	16	133
30	5620	18	268	3750	34	341	2580	16	112
31	5900	18	292	2860	41	318	---	---	---
TOTAL	347153	---	24910.9	81488	---	4788.7	309710	---	13226.7
YEAR	2114892		149180.7						

STREAMS TRIBUTARY TO LAKE ERIE

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04193500 MAUMEE RIVER AT WATERVILLE, OHIO--Continued

NITROGEN NITRITE PLUS NITRATE DISSOLVED (MG/L AS N), WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)
OCTOBER			NOVEMBER			DECEMBER			
1	245	.204	.13	4940	7.50	100	2170	8.55	50
2	207	.211	.12	3760	7.56	77	2240	7.95	48
3	176	.240	.11	2460	7.19	48	5760	8.47	130
4	269	.276	.20	2200	6.77	40	9320	9.41	240
5	496	.273	.37	2020	6.44	35	7210	7.87	150
6	397	.270	.29	1680	6.06	28	5100	7.37	100
7	699	.281	.53	1070	5.94	17	3970	7.26	78
8	1080	.326	.96	1010	5.78	16	2710	7.18	52
9	1020	.340	.94	982	5.42	14	2260	7.08	43
10	845	.336	.77	798	5.16	11	2030	7.34	40
11	592	.333	.53	763	5.03	10	2120	7.38	42
12	522	.323	.46	847	5.22	12	1850	7.57	38
13	429	.306	.36	730	5.23	10	4500	8.15	100
14	318	.266	.23	736	5.17	10	6980	8.13	150
15	391	.203	.21	708	5.15	9.8	5830	7.70	120
16	375	.190	.19	739	5.15	10	4030	7.18	78
17	647	.177	.31	620	5.08	8.5	3770	7.19	73
18	534	.207	.30	681	4.98	9.2	2450	6.89	46
19	477	.210	.27	929	4.98	12	1730	7.00	33
20	375	.219	.22	1880	5.93	34	1470	6.89	27
21	290	.163	.13	15900	9.69	410	1960	6.86	36
22	236	<.100	.03	20400	8.96	490	1430	7.04	27
23	210	<.100	.03	15300	8.71	360	1160	6.88	22
24	239	<.100	.03	10300	8.98	250	1330	6.84	25
25	539	<.100	.09	7150	9.19	180	1220	6.83	22
26	7670	3.81	120	5030	9.52	130	1260	6.71	23
27	23300	7.72	490	3200	9.32	81	1430	6.71	26
28	26400	7.69	550	2330	9.07	57	1260	6.90	23
29	19500	6.83	360	2210	8.86	53	1200	7.18	23
30	11800	6.84	220	2590	8.73	61	1380	7.39	28
31	7520	7.18	150	---	---	---	1460	7.10	28
TOTAL	107798	---	1897.81	113963	---	2583.5	92590	---	1921
JANUARY			FEBRUARY			MARCH			
1	1390	6.77	25	3350	10.2	73	2640	8.80	48
2	1290	6.68	23	3100	10.0	65	2080	8.60	35
3	1450	6.68	26	3120	9.59	63	1960	8.40	32
4	2400	6.92	45	3660	9.51	75	1900	8.22	30
5	2530	7.22	49	5650	9.31	120	1780	8.01	27
6	3330	7.16	64	6460	9.25	140	1760	7.82	26
7	2900	7.02	55	6220	9.23	130	2820	8.52	52
8	2270	7.01	43	5030	9.28	110	8030	9.38	180
9	2470	6.66	44	3940	9.84	85	9800	8.79	210
10	2080	6.44	36	2500	9.84	66	9300	8.58	190
11	1890	6.58	34	2200	9.14	54	15500	9.96	380
12	1800	6.44	31	2000	8.79	47	13900	9.94	340
13	1410	6.24	24	1600	8.56	24	10900	9.90	260
14	2790	6.71	52	2060	8.48	31	8280	9.85	190
15	5840	9.10	140	2870	8.53	48	6410	9.81	140
16	5620	9.74	150	14000	9.73	330	4750	9.77	100
17	4770	9.10	120	18900	10.4	480	3810	9.75	78
18	3960	9.11	97	14900	10.1	360	3630	9.11	69
19	2730	9.76	72	15900	10.2	390	3980	8.72	74
20	2490	10.2	69	15700	10.2	390	6550	8.69	130
21	3020	10.3	72	12100	10.2	300	11800	8.66	250
22	3060	10.3	64	9600	10.1	230	12700	9.02	280
23	2820	10.5	59	7320	10.1	170	14500	9.05	320
24	6610	10.9	170	6090	10.1	140	13900	9.03	310
25	9910	10.9	250	4970	10.1	110	11400	9.06	250
26	10100	10.0	240	4200	9.94	92	10000	9.44	230
27	7460	10.1	170	3810	9.71	81	9220	9.22	200
28	4870	10.5	110	3190	9.30	64	8620	8.82	180
29	4140	10.3	93	2980	9.00	57	7610	8.47	150
30	3370	10.3	73	---	---	---	6980	8.06	130
31	3120	10.2	67	---	---	---	6870	8.04	130
TOTAL	113890	---	2567	187420	---	4325	233380	---	5021

STREAMS TRIBUTARY TO LAKE ERIE

04193500 MAUMEE RIVER AT WATERVILLE, OHIO--Continued

NITROGEN NITRITE PLUS NITRATE DISSOLVED (MG/L AS N), WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	LOAD (TONS/ DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	LOAD (TONS/ DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	LOAD (TONS/ DAY)
APRIL			MAY			JUNE			
1	6630	8.01	120	6440	7.22	100	10800	8.08	240
2	6960	7.88	130	5550	7.03	83	8600	8.89	210
3	6570	7.78	120	4840	6.61	67	5000	11.2	150
4	5820	7.62	100	4160	6.28	53	4250	11.4	130
5	4960	7.64	84	3540	5.84	41	2990	10.9	90
6	3930	7.69	65	3010	5.52	32	3420	10.4	99
7	3380	7.64	55	2800	5.44	29	3580	10.7	110
8	3000	7.34	45	2290	5.17	21	3620	11.9	120
9	2740	7.11	39	2390	4.99	22	3000	14.0	120
10	2650	6.89	36	2160	4.59	17	2520	12.6	89
11	2750	6.54	36	2120	4.20	16	1930	10.6	58
12	2520	6.39	31	1910	3.98	13	1720	9.39	45
13	2440	6.01	28	1550	3.80	9.4	1440	8.82	36
14	2790	5.66	32	1510	3.73	8.9	1310	8.50	31
15	2530	5.41	26	1520	3.63	9.8	1000	8.63	25
16	2590	5.32	27	1490	3.47	9.8	1150	9.60	31
17	5350	5.57	67	1440	3.26	8.5	1330	9.27	35
18	21600	7.62	410	1380	3.15	7.5	2680	9.61	73
19	36700	7.37	680	1770	3.17	10	8200	11.3	250
20	32700	8.46	690	1900	3.25	14	8900	10.9	270
21	30100	8.62	640	1960	3.06	17	6330	10.1	180
22	29100	8.62	620	1630	2.63	12	4510	9.42	120
23	23100	8.44	470	1480	1.90	7.7	2880	9.53	76
24	19100	8.16	370	2750	.225	1.4	2130	9.84	58
25	17900	8.05	340	4670	<.100	.58	3860	10.3	110
26	12900	7.85	230	4080	<.100	.51	5120	10.2	140
27	10400	7.57	180	3200	<.100	.39	4510	10.3	130
28	9430	7.44	160	1800	<.100	.22	3100	10.5	90
29	8340	7.39	140	1350	<.100	.22	1840	9.70	50
30	7200	7.32	120	2500	.386	2.6	1410	8.92	35
31	---	---	---	9000	2.31	56	---	---	---
TOTAL	326180	---	6091	88190	---	670.52	113130	---	3201
JULY			AUGUST			SEPTEMBER			
1	1310	8.61	32	7260	4.14	81	1910	.390	2.1
2	1330	8.23	31	9050	3.56	87	1350	.655	2.4
3	1200	7.88	27	8200	3.27	72	1860	1.06	5.4
4	851	7.74	20	6460	2.76	48	2230	1.17	7.0
5	820	7.53	19	5400	2.53	37	1860	1.25	6.2
6	870	7.50	20	4290	2.58	30	1810	1.34	6.6
7	596	7.60	14	3220	2.51	22	3740	1.23	12
8	660	7.54	16	2510	2.24	15	9260	1.49	37
9	709	7.54	16	2060	2.03	11	10500	1.62	46
10	491	7.46	11	1820	1.89	9.3	17700	1.94	96
11	586	7.87	14	1680	1.80	8.2	31200	2.42	200
12	1450	7.89	31	1610	1.64	7.1	31700	2.25	190
13	2440	7.49	49	1600	1.53	6.6	22500	2.07	130
14	9850	7.41	200	1330	1.52	5.5	14600	1.91	75
15	21800	8.01	470	1450	1.62	6.4	10100	1.83	50
16	34500	8.84	820	1460	1.65	6.5	6080	1.78	29
17	34600	8.52	800	1220	1.51	5.1	3350	1.74	16
18	30800	8.13	680	1140	1.24	3.9	2510	1.74	12
19	30600	7.76	640	861	.923	2.3	1970	1.72	9.1
20	29900	7.38	600	808	.840	1.9	2550	1.78	12
21	24500	6.92	460	797	.871	2.0	5900	1.92	33
22	18900	6.47	330	752	.950	2.1	28200	2.81	210
23	16300	6.16	270	707	.941	1.9	31100	2.57	220
24	18400	5.99	300	766	.903	2.0	23600	2.36	150
25	13800	5.14	190	587	.812	1.4	15900	2.37	100
26	12600	4.82	160	597	.125	.22	9990	2.54	68
27	10200	4.55	130	683	.433	.90	6170	2.67	45
28	8360	4.25	96	2520	1.21	9.0	4350	2.69	32
29	7210	4.07	79	4040	1.21	13	3140	2.66	23
30	5620	4.13	63	3750	.872	8.8	2580	2.63	18
31	5900	4.34	69	2860	.626	4.9	---	---	---
TOTAL	347153	---	6657	81488	---	512.02	309710	---	1842.8
YEAR	2114892		37289.65						

STREAMS TRIBUTARY TO LAKE ERIE

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04193500 MAUMEE RIVER AT WATERVILLE, OHIO--Continued

NITROGEN AMMONIA PLUS ORGANIC TOTAL (MG/L AS N), WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)
OCTOBER			NOVEMBER			DECEMBER			
1	245	1.2	.81	4940	1.7	22.2	2170	1.4	8.11
2	207	1.3	.73	3760	1.6	16.5	2240	1.4	8.25
3	176	1.3	.64	2460	1.5	10.3	5760	1.5	23.6
4	269	1.2	.90	2200	1.5	8.68	9320	1.6	41.4
5	496	1.1	1.53	2020	1.5	8.41	7210	1.6	31.8
6	397	1.3	1.39	1680	1.5	6.74	5100	1.6	21.6
7	699	1.3	2.53	1070	1.4	4.06	3970	1.4	15.3
8	1080	1.4	4.02	1010	1.4	3.73	2710	1.3	9.19
9	1020	1.5	4.15	982	1.3	3.34	2260	1.2	7.29
10	845	1.3	2.93	798	1.2	2.57	2030	1.2	6.38
11	592	1.2	1.85	763	1.1	2.37	2120	1.2	7.01
12	522	1.2	1.62	847	1.3	3.05	1850	1.2	6.02
13	429	1.2	1.38	730	1.3	2.51	4500	1.3	15.4
14	318	1.3	1.15	736	1.3	2.50	6980	1.4	25.6
15	391	1.3	1.38	708	1.3	2.55	5830	1.3	20.4
16	375	1.3	1.32	739	1.2	2.47	4030	1.2	13.3
17	647	1.3	2.34	620	1.3	2.10	3770	.89	9.12
18	534	1.2	1.68	681	1.2	2.24	2450	1.0	6.81
19	477	1.3	1.72	929	1.2	3.12	1730	.91	4.31
20	375	1.4	1.45	1880	1.4	7.08	1470	.78	3.09
21	290	1.4	1.12	15900	2.1	90.5	1960	.98	5.23
22	236	1.7	1.07	20400	2.6	142	1430	.89	3.46
23	210	1.5	.86	15300	2.5	103	1160	.90	2.82
24	239	1.5	.97	10300	2.2	62.0	1330	.87	3.12
25	539	1.4	2.01	7150	1.9	36.6	1220	.93	3.06
26	7670	1.7	40.5	5030	1.8	24.2	1260	.90	3.06
27	23300	2.3	146	3200	1.8	15.3	1430	.84	3.23
28	26400	2.6	185	2330	1.6	9.92	1260	.80	2.70
29	19500	2.2	118	2210	1.5	8.83	1200	.75	2.44
30	11800	1.9	60.5	2590	3.3	23.3	1380	.63	2.36
31	7520	1.6	33.3	---	---	---	1460	.70	2.75
TOTAL	107798	---	624.85	113963	---	632.17	92590	---	318.21
JANUARY			FEBRUARY			MARCH			
1	1390	.84	3.16	3350	.89	6.36	2640	.82	4.46
2	1290	.81	2.82	3100	.87	5.71	2080	.77	3.18
3	1450	.69	2.70	3120	.85	5.63	1960	.71	2.71
4	2400	.65	4.21	3660	.74	5.81	1900	.70	2.58
5	2530	.65	4.44	5650	.80	10.4	1780	.70	2.40
6	3330	.66	5.90	6460	1.0	15.2	1760	.68	2.27
7	2900	.68	5.32	6220	.82	11.8	2820	.81	5.13
8	2270	.66	4.09	5030	.72	8.16	8030	1.3	24.9
9	2470	.71	4.70	3940	.79	6.80	9800	1.2	28.7
10	2080	.69	3.86	2500	.78	5.29	9300	1.4	33.7
11	1890	.63	3.22	2200	.72	4.25	15500	2.5	96.6
12	1800	.73	3.55	2000	.78	4.23	13900	2.2	75.9
13	1410	.74	2.83	1600	.65	1.81	10900	1.9	51.0
14	2790	.90	7.03	2060	.60	2.21	8280	1.7	32.8
15	5840	1.2	18.4	2870	1.2	7.78	6410	1.5	21.6
16	5620	1.1	16.9	14000	1.9	65.1	4750	1.3	13.4
17	4770	.84	10.8	18900	1.9	86.8	3810	1.1	9.02
18	3960	.75	8.09	14900	1.6	56.4	3630	1.0	7.93
19	2730	.80	5.90	15900	1.6	60.7	3980	1.1	8.93
20	2490	.90	6.11	15700	1.6	59.4	6550	1.0	15.5
21	3020	1.1	7.70	12100	1.5	43.2	11800	1.1	30.2
22	3060	.99	6.22	9600	1.4	31.8	12700	1.1	35.3
23	2820	.93	5.24	7320	1.3	22.4	14500	1.4	50.3
24	6610	.75	11.2	6090	1.2	17.3	13900	2.0	66.3
25	9910	.84	19.6	4970	1.1	11.8	11400	1.7	46.9
26	10100	.94	22.4	4200	.80	7.47	10000	1.4	33.7
27	7460	.86	14.7	3810	.76	6.35	9220	1.4	30.7
28	4870	.85	9.24	3190	.87	5.94	8620	1.1	23.4
29	4140	.86	7.72	2980	.86	5.44	7610	1.0	18.4
30	3370	.97	6.89	---	---	---	6980	1.1	17.5
31	3120	.95	6.24	---	---	---	6870	1.2	18.7
TOTAL	113890	---	241.18	187420	---	581.54	233380	---	814.11

STREAMS TRIBUTARY TO LAKE ERIE

04193500 MAUMEE RIVER AT WATERVILLE, OHIO--Continued

NITROGEN AMMONIA PLUS ORGANIC TOTAL (MG/L AS N), WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	LOAD (TONS/ DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	LOAD (TONS/ DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	LOAD (TONS/ DAY)
APRIL			MAY			JUNE			
1	6630	1.1	16.5	6440	.90	12.6	10800	1.4	40.8
2	6960	.86	13.9	5550	.78	9.21	8600	1.5	35.3
3	6570	.82	12.4	4840	.79	7.97	5000	1.6	21.5
4	5820	.75	9.93	4160	.83	7.05	4250	1.3	15.3
5	4960	.75	8.32	3540	.93	6.55	2990	1.3	11.0
6	3930	.75	6.38	3010	1.0	6.00	3420	1.2	11.5
7	3380	.77	5.50	2800	1.0	5.42	3580	1.2	11.7
8	3000	.91	5.61	2290	.97	3.95	3620	1.2	11.8
9	2740	.92	5.06	2390	1.0	4.32	3000	.77	6.43
10	2650	.88	4.65	2160	1.2	4.54	2520	1.1	7.76
11	2750	1.0	5.70	2120	1.4	5.05	1930	1.2	6.71
12	2520	1.1	5.17	1910	1.3	4.23	1720	1.1	5.30
13	2440	1.3	6.55	1550	1.1	2.66	1440	1.1	4.45
14	2790	1.8	10.4	1510	.94	2.25	1310	1.2	4.44
15	2530	1.2	5.99	1520	1.0	2.74	1000	1.2	3.41
16	2590	1.2	5.98	1490	1.2	3.25	1150	.94	3.07
17	5350	1.2	15.1	1440	1.3	3.46	1330	.97	3.64
18	21600	2.5	141	1380	1.4	3.25	2680	1.2	9.72
19	36700	2.6	236	1770	1.2	3.75	8200	2.2	51.2
20	32700	2.8	228	1900	1.1	4.95	8900	2.2	54.3
21	30100	3.2	238	1960	1.3	7.16	6330	2.0	34.3
22	29100	2.8	199	1630	1.1	4.95	4510	1.7	21.7
23	23100	2.2	125	1480	1.4	6.21	2880	1.5	12.2
24	19100	2.1	95.1	2750	1.8	12.9	2130	1.3	7.41
25	17900	1.9	80.1	4670	1.7	21.2	3860	1.3	14.0
26	12900	1.5	44.7	4080	3.0	34.3	5120	1.2	17.4
27	10400	1.3	30.5	3200	2.9	24.8	4510	1.0	12.6
28	9430	1.2	26.0	1800	2.5	12.0	3100	.97	8.29
29	8340	1.1	21.0	1350	2.3	8.34	1840	1.1	5.49
30	7200	.98	15.4	2500	2.8	19.1	1410	1.2	4.83
31	---	---	---	9000	2.1	49.9	---	---	---
TOTAL	326180	---	1622.94	88190	---	304.06	113130	---	457.55
JULY			AUGUST			SEPTEMBER			
1	1310	1.2	4.53	7260	1.0	20.5	1910	1.1	5.68
2	1330	1.2	4.43	9050	1.0	24.7	1350	1.0	3.83
3	1200	1.1	3.92	8200	.94	20.8	1860	.91	4.53
4	851	1.1	2.71	6460	1.2	20.0	2230	.80	4.79
5	820	1.0	2.47	5400	1.1	16.5	1860	.70	3.52
6	870	1.1	2.90	4290	1.0	11.9	1810	.65	3.19
7	596	1.3	2.43	3220	.97	8.43	3740	.83	8.78
8	660	1.2	2.42	2510	1.0	6.82	9260	1.3	31.8
9	709	1.1	2.27	2060	1.0	5.62	10500	1.4	38.7
10	491	1.2	1.72	1820	.95	4.67	17700	1.8	91.4
11	586	1.2	2.02	1680	1.0	4.53	31200	2.4	201
12	1450	1.3	5.25	1610	1.1	4.72	31700	2.4	204
13	2440	1.3	8.41	1600	1.2	5.35	22500	1.7	107
14	9850	1.4	39.1	1330	1.2	4.26	14600	1.3	52.9
15	21800	1.8	108	1450	.98	3.89	10100	1.2	33.2
16	34500	2.1	195	1460	.97	3.83	6080	1.1	18.1
17	34600	1.8	170	1220	1.1	3.54	3350	.97	8.81
18	30800	1.6	131	1140	1.2	3.86	2510	.98	6.65
19	30600	1.5	122	861	1.2	2.94	1970	.96	5.10
20	29900	1.4	115	808	1.1	2.66	2550	.94	6.43
21	24500	1.3	87.5	797	1.1	2.47	5900	1.2	22.6
22	18900	1.2	62.4	752	.98	2.13	28200	1.8	141
23	16300	1.2	51.5	707	.91	1.88	31100	2.0	169
24	18400	1.3	63.9	766	1.1	2.34	23600	1.7	108
25	13800	1.2	43.6	587	.97	1.68	15900	1.5	62.6
26	12600	1.1	36.2	597	1.1	1.88	9990	1.3	36.2
27	10200	.97	26.8	683	1.1	2.19	6170	1.2	19.9
28	8360	.97	21.9	2520	1.5	11.1	4350	1.1	12.6
29	7210	.97	18.9	4040	1.6	18.0	3140	1.0	8.49
30	5620	1.0	15.3	3750	1.4	14.5	2580	.93	6.51
31	5900	.98	15.7	2860	1.2	9.66	---	---	---
TOTAL	347153	---	1369.28	81488	---	247.35	309710	---	1426.31
YEAR	2114892		8639.55						

STREAMS TRIBUTARY TO LAKE ERIE

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04193500 MAUMEE RIVER AT WATERVILLE, OHIO--Continued

PHOSPHORUS TOTAL (MG/L AS P), WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	LOAD (TONS/ DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	LOAD (TONS/ DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	LOAD (TONS/ DAY)
OCTOBER			NOVEMBER			DECEMBER			
1	245	.152	.10	4940	.293	3.92	2170	.222	1.29
2	207	.158	.089	3760	.262	2.68	2240	.198	1.20
3	176	.147	.072	2460	.229	1.52	5760	.229	3.68
4	269	.150	.11	2200	.203	1.21	9320	.270	6.81
5	496	.155	.21	2020	.192	1.04	7210	.245	4.79
6	397	.154	.17	1680	.188	.86	5100	.215	2.98
7	699	.146	.28	1070	.182	.52	3970	.189	2.03
8	1080	.145	.42	1010	.174	.47	2710	.166	1.22
9	1020	.183	.51	982	.171	.45	2260	.147	.89
10	845	.181	.41	798	.169	.36	2030	.143	.78
11	592	.164	.26	763	.161	.33	2120	.142	.81
12	522	.159	.22	847	.157	.36	1850	.141	.70
13	429	.152	.18	730	.159	.31	4500	.160	1.97
14	318	.146	.13	736	.157	.31	6980	.190	3.58
15	391	.147	.16	708	.172	.33	5830	.192	3.02
16	375	.144	.15	739	.167	.33	4030	.204	2.21
17	647	.141	.25	620	.153	.26	3770	.202	2.06
18	534	.136	.20	681	.144	.26	2450	.198	1.31
19	477	.138	.18	929	.149	.38	1730	.189	.88
20	375	.134	.14	1880	.176	.96	1470	.179	.71
21	290	.121	.095	15900	.374	16.6	1960	.171	.91
22	236	.116	.074	20400	.538	29.6	1430	.169	.65
23	210	.113	.064	15300	.506	21.0	1160	.166	.52
24	239	.108	.070	10300	.423	11.8	1330	.162	.58
25	539	.109	.16	7150	.337	6.55	1220	.153	.50
26	7670	.304	8.13	5030	.293	3.99	1260	.146	.49
27	23300	.486	31.0	3200	.282	2.44	1430	.142	.55
28	26400	.589	42.0	2330	.253	1.60	1260	.136	.46
29	19500	.518	27.4	2210	.229	1.37	1200	.132	.43
30	11800	.394	12.7	2590	.246	1.73	1380	.125	.47
31	7520	.310	6.34	---	---	---	1460	.115	.45
TOTAL	107798	---	132.274	113963	---	113.54	92590	---	48.93
JANUARY			FEBRUARY			MARCH			
1	1390	.112	.42	3350	.145	1.03	2640	.168	.92
2	1290	.110	.38	3100	.139	.91	2080	.160	.66
3	1450	.110	.43	3120	.133	.88	1960	.151	.58
4	2400	.113	.74	3660	.126	.998	1900	.142	.53
5	2530	.108	.74	5650	.151	1.96	1780	.142	.48
6	3330	.109	.98	6460	.163	2.44	1760	.134	.45
7	2900	.111	.87	6220	.148	2.13	2820	.177	1.13
8	2270	.103	.63	5030	.137	1.55	8030	.327	6.29
9	2470	.104	.69	3940	.131	1.14	9800	.264	6.27
10	2080	.112	.63	2500	.126	.85	9300	.294	6.87
11	1890	.116	.59	2200	.111	.66	15500	.471	17.9
12	1800	.115	.56	2000	.106	.57	13900	.409	13.9
13	1410	.108	.41	1600	.099	.28	10900	.354	9.25
14	2790	.123	.97	2060	.098	.36	8280	.306	5.91
15	5840	.194	3.11	2870	.223	1.65	6410	.264	3.85
16	5620	.177	2.75	14000	.612	21.1	4750	.228	2.37
17	4770	.126	1.62	18900	.629	29.2	3810	.199	1.61
18	3960	.118	1.26	14900	.464	16.8	3630	.188	1.43
19	2730	.112	.83	15900	.448	17.4	3980	.170	1.44
20	2490	.105	.71	15700	.428	16.4	6550	.181	2.73
21	3020	.103	.72	12100	.382	11.1	11800	.217	6.17
22	3060	.106	.66	9600	.335	7.63	12700	.247	7.59
23	2820	.127	.72	7320	.294	4.99	14500	.310	11.0
24	6610	.137	2.06	6090	.258	3.60	13900	.506	17.1
25	9910	.141	3.30	4970	.218	2.44	11400	.382	10.7
26	10100	.141	3.37	4200	.194	1.80	10000	.276	6.67
27	7460	.144	2.46	3810	.189	1.57	9220	.243	5.36
28	4870	.158	1.71	3190	.186	1.27	8620	.219	4.50
29	4140	.161	1.45	2980	.178	1.12	7610	.201	3.61
30	3370	.154	1.10	---	---	---	6980	.174	2.83
31	3120	.149	.97	---	---	---	6870	.172	2.75
TOTAL	113890	---	37.84	187420	---	153.828	233380	---	162.85

STREAMS TRIBUTARY TO LAKE ERIE

04193500 MAUMEE RIVER AT WATERVILLE, OHIO--Continued

PHOSPHORUS TOTAL (MG/L AS P), WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	LOAD (TONS/ DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	LOAD (TONS/ DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	LOAD (TONS/ DAY)
APRIL			MAY			JUNE			
1	6630	.156	2.39	6440	.195	2.72	10800	.286	8.33
2	6960	.149	2.41	5550	.194	2.30	8600	.264	6.12
3	6570	.136	2.05	4840	.180	1.82	5000	.250	3.37
4	5820	.122	1.62	4160	.166	1.41	4250	.221	2.61
5	4960	.119	1.31	3540	.159	1.13	2990	.207	1.71
6	3930	.115	.98	3010	.176	1.01	3420	.227	2.15
7	3380	.127	.91	2800	.155	.83	3580	.239	2.36
8	3000	.135	.83	2290	.146	.59	3620	.266	2.65
9	2740	.131	.72	2390	.147	.64	3000	.261	2.17
10	2650	.122	.65	2160	.136	.52	2520	.217	1.53
11	2750	.166	.91	2120	.138	.51	1930	.188	1.02
12	2520	.159	.78	1910	.124	.40	1720	.172	.83
13	2440	.143	.69	1550	.108	.27	1440	.153	.62
14	2790	.173	.98	1510	.107	.26	1310	.143	.53
15	2530	.119	.58	1520	.117	.32	1000	.129	.37
16	2590	.139	.70	1490	.117	.33	1150	.105	.34
17	5350	.178	2.28	1440	.109	.29	1330	.128	.48
18	21600	.657	37.8	1380	.135	.32	2680	.212	1.68
19	36700	.560	51.4	1770	.139	.44	8200	.367	8.41
20	32700	.873	70.9	1900	.116	.50	8900	.368	8.98
21	30100	.902	67.4	1960	.113	.62	6330	.332	5.78
22	29100	.746	53.5	1630	.106	.48	4510	.300	3.74
23	23100	.639	35.6	1480	.158	.69	2880	.277	2.22
24	19100	.577	26.3	2750	.695	5.14	2130	.242	1.45
25	17900	.502	21.4	4670	.638	8.05	3860	.306	3.29
26	12900	.417	12.5	4080	1.19	13.4	5120	.311	4.38
27	10400	.305	7.18	3200	.753	6.51	4510	.265	3.31
28	9430	.285	6.06	1800	.398	1.93	3100	.230	1.98
29	8340	.246	4.58	1350	.222	.81	1840	.225	1.16
30	7200	.197	3.11	2500	.229	1.55	1410	.236	.94
31	---	---	---	9000	.263	6.38	---	---	---
TOTAL	326180	---	418.52	88190	---	62.17	113130	---	84.51
JULY			AUGUST			SEPTEMBER			
1	1310	.242	.90	7260	.242	4.74	1910	.211	1.09
2	1330	.231	.86	9050	.240	5.85	1350	.213	.79
3	1200	.223	.77	8200	.225	4.99	1860	.211	1.06
4	851	.215	.55	6460	.242	4.20	2230	.204	1.22
5	820	.194	.48	5400	.259	3.77	1860	.193	.97
6	870	.190	.50	4290	.267	3.10	1810	.192	.94
7	596	.180	.34	3220	.254	2.22	3740	.220	2.29
8	660	.175	.36	2510	.241	1.63	9260	.303	7.62
9	709	.173	.37	2060	.242	1.35	10500	.304	8.63
10	491	.175	.26	1820	.231	1.13	17700	.376	18.9
11	586	.170	.30	1680	.211	.96	31200	.504	42.6
12	1450	.184	.74	1610	.198	.86	31700	.524	45.0
13	2440	.203	1.33	1600	.211	.91	22500	.472	28.8
14	9850	.249	6.92	1330	.198	.72	14600	.408	16.1
15	21800	.348	20.9	1450	.180	.71	10100	.368	10.0
16	34500	.496	46.3	1460	.179	.71	6080	.322	5.32
17	34600	.479	44.8	1220	.176	.59	3350	.285	2.59
18	30800	.419	34.9	1140	.177	.56	2510	.271	1.84
19	30600	.397	32.8	861	.141	.35	1970	.267	1.42
20	29900	.382	30.8	808	.128	.30	2550	.275	1.89
21	24500	.345	22.8	797	.125	.29	5900	.374	7.10
22	18900	.307	15.8	752	.122	.26	28200	.559	42.8
23	16300	.284	12.5	707	.106	.22	31100	.599	50.4
24	18400	.298	14.9	766	.102	.23	23600	.492	31.6
25	13800	.270	10.1	587	.087	.15	15900	.423	18.2
26	12600	.260	8.82	597	.106	.19	9990	.357	9.70
27	10200	.252	6.93	683	.128	.26	6170	.319	5.33
28	8360	.250	5.63	2520	.195	1.44	4350	.303	3.56
29	7210	.238	4.64	4040	.245	2.68	3140	.289	2.45
30	5620	.237	3.59	3750	.232	2.35	2580	.275	1.92
31	5900	.242	3.85	2860	.219	1.70	---	---	---
TOTAL	347153	---	334.74	81488	---	49.42	309710	---	372.13
YEAR	2114892		1970.754						

STREAMS TRIBUTARY TO LAKE ERIE

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04193500 MAUMEE RIVER AT WATERVILLE, OHIO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

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	245	16	10	4940	87	1160	2170	65	373
2	207	17	9.4	3760	54	559	2240	48	289
3	176	19	9.1	2460	43	284	5760	77	1380
4	269	23	17	2200	36	216	9320	381	9650
5	496	49	70	2020	35	192	7210	229	4530
6	397	50	53	1680	31	143	5100	117	1660
7	699	39	73	1070	28	82	3970	61	667
8	1080	40	116	1010	25	67	2710	42	310
9	1020	39	107	982	24	63	2260	41	249
10	845	32	74	798	19	40	2030	32	179
11	592	27	43	763	18	38	2120	34	191
12	522	29	40	847	18	42	1850	35	174
13	429	23	27	730	17	34	4500	56	719
14	318	20	18	736	17	34	6980	70	1310
15	391	23	25	708	18	34	5830	92	1440
16	375	23	23	739	22	44	4030	89	970
17	647	23	41	620	22	36	3770	44	455
18	534	21	31	681	18	33	2450	37	245
19	477	20	26	929	25	65	1730	33	155
20	375	16	16	1880	135	783	1470	7	27
21	290	13	9.8	15900	191	8260	1960	23	123
22	236	10	6.3	20400	382	20900	1430	25	97
23	210	9	5.1	15300	320	13400	1160	23	71
24	239	12	7.7	10300	223	6280	1330	21	74
25	539	55	88	7150	106	2080	1220	21	68
26	7670	94	2400	5030	94	1280	1260	18	61
27	23300	496	32200	3200	92	803	1430	17	65
28	26400	576	41200	2330	59	372	1260	16	55
29	19500	245	13400	2210	52	309	1200	15	49
30	11800	150	4830	2590	92	655	1380	13	47
31	7520	98	2020	---	---	---	1460	12	47
TOTAL	107798	---	96995.4	113963	---	58288	92590	---	25730
JANUARY			FEBRUARY			MARCH			
1	1390	10	36	3350	24	171	2640	38	206
2	1290	9	31	3100	16	108	2080	32	133
3	1450	8	32	3120	15	98	1960	33	128
4	2400	8	51	3660	17	136	1900	32	119
5	2530	8	52	5650	18	232	1780	32	110
6	3330	11	97	6460	20	294	1760	31	103
7	2900	12	94	6220	23	329	2820	32	197
8	2270	12	75	5030	24	277	8030	66	1300
9	2470	17	114	3940	20	175	9800	93	2190
10	2080	18	102	2500	18	122	9300	235	5400
11	1890	17	88	2200	14	83	15500	305	11600
12	1800	17	82	2000	14	73	13900	245	8330
13	1410	15	59	1600	10	28	10900	225	5880
14	2790	50	458	2060	10	36	8280	151	2940
15	5840	74	1150	2870	13	87	6410	126	1840
16	5620	45	691	14000	135	5290	4750	85	897
17	4770	27	351	18900	441	20100	3810	57	463
18	3960	22	239	14900	454	16400	3630	45	340
19	2730	20	150	15900	308	11800	3980	51	429
20	2490	18	122	15700	267	10200	6550	64	967
21	3020	15	107	12100	272	7900	11800	74	2110
22	3060	13	79	9600	176	4050	12700	157	4800
23	2820	16	88	7320	100	1710	14500	188	6670
24	6610	27	421	6090	69	971	13900	226	7680
25	9910	31	722	4970	44	495	11400	203	5680
26	10100	37	855	4200	35	323	10000	141	3420
27	7460	46	777	3810	33	273	9220	112	2460
28	4870	40	434	3190	45	307	8620	106	2170
29	4140	32	287	2980	39	250	7610	79	1420
30	3370	22	161	---	---	---	6980	72	1170
31	3120	23	150	---	---	---	6870	62	993
TOTAL	113890	---	8155	187420	---	82318	233380	---	82145

STREAMS TRIBUTARY TO LAKE ERIE

04193500 MAUMEE RIVER AT WATERVILLE, OHIO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

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	6630	58	887	6440	68	946	10800	154	4490
2	6960	54	874	5550	63	746	8600	152	3540
3	6570	46	694	4840	52	527	5000	120	1610
4	5820	40	533	4160	50	424	4250	90	1060
5	4960	39	429	3540	50	353	2990	85	701
6	3930	38	320	3010	48	277	3420	90	848
7	3380	43	305	2800	49	260	3580	101	1000
8	3000	41	254	2290	51	206	3620	107	1070
9	2740	38	211	2390	52	223	3000	105	876
10	2650	37	193	2160	53	203	2520	75	532
11	2750	38	208	2120	62	230	1930	71	382
12	2520	42	205	1910	40	128	1720	63	306
13	2440	52	246	1550	27	67	1440	54	220
14	2790	51	286	1510	25	59	1310	47	173
15	2530	48	233	1520	23	62	1000	38	110
16	2590	46	230	1490	30	84	1150	41	132
17	5350	74	1040	1440	26	68	1330	58	218
18	21600	475	29300	1380	25	60	2680	65	491
19	36700	998	92300	1770	25	80	8200	120	2800
20	32700	568	47000	1900	24	104	8900	162	3930
21	30100	476	35600	1960	24	134	6330	197	3400
22	29100	493	35300	1630	25	113	4510	216	2680
23	23100	436	24300	1480	25	106	2880	186	1490
24	19100	337	15300	2750	32	251	2130	190	1130
25	17900	299	12700	4670	43	545	3860	204	2180
26	12900	240	7210	4080	49	555	5120	179	2520
27	10400	155	3640	3200	46	401	4510	149	1850
28	9430	99	2110	1800	45	221	3100	148	1270
29	8340	86	1590	1350	46	169	1840	125	652
30	7200	75	1180	2500	62	421	1410	110	436
31	---	---	---	9000	123	2990	---	---	---
TOTAL	326180	---	314678	88190	---	11013	113130	---	42097
JULY			AUGUST			SEPTEMBER			
1	1310	108	400	7260	95	1870	1910	52	268
2	1330	106	396	9050	102	2490	1350	66	243
3	1200	104	358	8200	98	2180	1860	70	349
4	851	101	257	6460	97	1690	2230	72	430
5	820	92	227	5400	93	1350	1860	67	340
6	870	82	216	4290	86	999	1810	62	305
7	596	66	125	3220	80	697	3740	65	669
8	660	65	135	2510	74	504	9260	116	2970
9	709	73	156	2060	69	383	10500	166	4720
10	491	63	93	1820	64	315	17700	225	11200
11	586	63	110	1680	60	270	31200	408	34600
12	1450	87	364	1610	55	240	31700	464	39800
13	2440	170	1130	1600	47	203	22500	302	18900
14	9850	364	10500	1330	42	154	14600	145	5790
15	21800	645	38100	1450	39	155	10100	116	3160
16	34500	535	49600	1460	35	140	6080	99	1650
17	34600	335	31500	1220	34	114	3350	80	731
18	30800	322	26800	1140	39	124	2510	81	548
19	30600	300	24800	861	39	97	1970	74	395
20	29900	256	20700	808	29	68	2550	76	523
21	24500	214	14200	797	27	62	5900	118	2260
22	18900	172	8830	752	23	51	28200	356	27900
23	16300	145	6380	707	24	50	31100	434	36800
24	18400	160	7910	766	31	69	23600	262	16800
25	13800	181	6760	587	29	51	15900	162	7040
26	12600	173	5880	597	41	73	9990	130	3520
27	10200	128	3540	683	53	107	6170	104	1760
28	8360	98	2220	2520	46	302	4350	84	986
29	7210	95	1850	4040	46	497	3140	75	633
30	5620	85	1280	3750	53	534	2580	59	416
31	5900	85	1350	2860	55	423	---	---	---
TOTAL	347153	---	266167	81488	---	16262	309710	---	225706
YEAR	2114892		1229554.4						

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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 downstream from unnamed right bank tributary, and 10.3 mi upstream from Sugar Creek.

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 above 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.--Estimated daily discharges: Dec. 15, 17-31, Jan. 1, 2, 6-13, 18-23, 31, Feb. 1, 2, 11. Records good, except estimated discharges, which are fair. Flow supplemented by water imported from Maumee River basin for municipal supply for city of Bowling Green 16 mi 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 downstream 1968 to 1980. National Weather Service gage height telemeter at station.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.5	75	69	51	180	148	519	294	988	63	1710	59
2	6.4	63	65	50	190	127	755	255	537	144	693	42
3	6.9	50	332	92	227	118	594	215	330	165	342	35
4	11	44	637	150	287	109	425	166	238	92	205	32
5	15	39	293	189	697	103	328	139	203	59	145	34
6	42	34	216	150	708	102	245	120	633	43	101	32
7	23	30	154	120	466	394	220	97	477	36	74	574
8	12	26	120	100	383	1260	217	83	280	31	63	296
9	9.4	24	99	86	286	829	184	89	189	28	57	347
10	7.9	24	82	75	196	812	166	109	144	28	51	1810
11	7.0	22	71	67	175	1940	162	92	116	28	100	3190
12	9.0	22	65	63	158	1020	159	79	98	89	106	1180
13	7.7	22	100	61	149	608	127	80	85	123	81	388
14	7.8	21	126	157	153	419	108	81	75	757	108	219
15	8.4	23	100	679	570	319	111	77	70	1560	90	145
16	7.7	24	77	558	3640	246	119	74	62	2080	62	105
17	7.3	24	64	359	2790	234	1170	69	58	2160	52	81
18	7.0	25	58	270	1390	301	3220	435	332	3250	47	70
19	8.5	38	52	225	2820	293	3880	627	1100	2740	50	646
20	10	173	48	185	2240	529	2080	247	643	982	64	718
21	13	869	45	150	1110	1000	2270	138	301	667	49	1260
22	12	803	46	130	657	1100	2740	92	180	359	39	4230
23	12	453	48	170	479	1250	1660	77	129	500	33	4180
24	11	245	52	1010	374	1240	1090	757	618	2320	29	1300
25	30	148	55	1000	306	1230	1060	1160	1150	1080	28	563
26	403	96	57	593	261	1160	830	524	411	492	29	333
27	511	75	48	431	228	1050	595	296	213	367	40	229
28	402	67	46	320	196	814	473	198	139	298	255	174
29	279	66	50	247	176	561	366	144	96	169	362	132
30	143	71	51	202	---	455	319	282	75	737	184	105
31	95	---	53	190	---	593	---	1730	---	2070	98	---
TOTAL	2131.5	3696	3379	8130	21492	20364	26192	8826	9970	23517	5347	22509
MEAN	68.8	123	109	262	741	657	873	285	332	759	172	750
MAX	511	869	637	1010	3640	1940	3880	1730	1150	3250	1710	4230
MIN	6.4	21	45	50	149	102	108	69	58	28	28	32
CFSM	.16	.29	.25	.61	1.73	1.53	2.04	.67	.78	1.77	.40	1.75
IN.	.19	.32	.29	.71	1.87	1.77	2.28	.77	.87	2.04	.46	1.96
(+)	6.7	6.0	5.4	5.2	5.5	5.1	5.5	5.2	5.1	5.1	5.0	5.5
MEAN #	62.1	117	104									

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1928 - 1992, BY WATER YEAR (WY)

MEAN	86.8	192	363	438	519	748	630	400	271	160	60.9	93.2
MAX	722	1595	1722	2129	1793	2542	1965	1685	1875	821	635	1088
(WY)	1951	1973	1991	1952	1976	1982	1957	1943	1981	1958	1979	1981
MIN	2.96	3.61	4.37	2.24	2.00	118	41.7	25.4	9.29	2.81	3.09	3.67
(WY)	1935	1935	1935	1945	1934	1941	1946	1934	1988	1930	1933	1944

SUMMARY STATISTICS

FOR 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1928 - 1992

ANNUAL TOTAL	89926.0		155553.5				
ANNUAL MEAN	246		425		327 #		
HIGHEST ANNUAL MEAN					628		1973
LOWEST ANNUAL MEAN					81.4		1931
HIGHEST DAILY MEAN	8070	Jan 1	4230	Sep 22	11000		Feb 15 1950
LOWEST DAILY MEAN	5.1	Sep 20	6.4	Oct 2	.40		Aug 26 1931
ANNUAL SEVEN-DAY MINIMUM	6.0	Sep 16	7.8	Oct 13	.93		Oct 12 1934
INSTANTANEOUS PEAK FLOW			4880	Sep 23 a	11500		Feb 15 1950
INSTANTANEOUS PEAK STAGE			9.66	Sep 23	14.51		Feb 15 1950
INSTANTANEOUS LOW FLOW			6.1	Oct 1	.40		Aug 16 1931
ANNUAL RUNOFF (CFSM)	.58		.99		.77		
ANNUAL RUNOFF (INCHES)	7.82		13.52		10.48		
10 PERCENT EXCEEDS	553		1120		830		
50 PERCENT EXCEEDS	69		157		67		
90 PERCENT EXCEEDS	8.8		28		7.7		

(+) Diversion in cubic ft per second, from Maumee R basin for municipal supply; furnished by city of Bowling Green.

* Adjusted for diversion.

a Peaks above base in shown Table of peak discharges and stages at continuous-record surface-water-discharge stations.

STREAMS TRIBUTARY TO LAKE ERIE

04195825 LACARPE CREEK NR OAK HARBOR, OH

LOCATION.--Lat 41°31'15", long 83°12'11", Ottawa County, Hydrologic Unit 04100010, 30 ft downstream of Lickert Harder Road, 2.3 mi upstream of outlet bypass to Portage River and 2.8 mi west of Oak Harbor.

DRAINAGE AREA.--2.95 mi².

PERIOD OF RECORD.--November 1987 to current year (discontinued).

REVISED RECORDS.--WDR-OH-1989-2: 1988.

GAGE.--Water-stage recorder. Datum of gage is 590 ft above National Geodetic Vertical Datum of 1929, Ottawa county benchmark.

REMARKS.--Estimated daily discharges: Oct. 26 to Jan. 29, Mar. 10-24. Records poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	4.0	1.5	.94	1.8	.99	3.2	.41	2.5	.00	1.3	.00
2	.00	1.0	1.0	.84	1.8	.84	2.7	.36	1.2	.00	.31	.00
3	.00	.35	14	3.2	2.2	.62	1.8	.21	.72	.01	.05	.00
4	.04	.15	3.0	2.3	3.4	.57	.85	.17	.55	.01	.01	.00
5	.01	.07	1.5	1.6	3.2	.57	.13	.15	.48	.01	.00	.01
6	.00	.06	.95	1.2	2.7	.62	.04	.10	.27	.01	.00	.08
7	.00	.05	.90	.90	2.8	9.7	.05	.08	.15	.00	.00	2.2
8	.00	.03	.80	.82	2.2	10	.01	.10	.10	.00	.00	3.2
9	.00	.02	.75	.77	1.4	3.8	.00	.21	.05	.00	.00	6.0
10	.00	.03	.70	.73	1.1	12	.00	.11	.03	.00	.00	46
11	.00	.05	.70	.70	1.1	2.5	.01	.08	.03	.00	3.4	8.7
12	.00	.04	2.0	.66	.52	1.7	.00	.11	.02	5.7	.53	2.8
13	.00	.08	8.2	.80	.85	1.3	.00	.16	.02	24	.10	.86
14	.00	.13	2.5	20	.70	1.1	.00	.20	.06	10	15	.21
15	.00	.14	1.2	29	22	.95	.00	.17	.05	24	15	.03
16	.00	.16	.85	8.0	21	.90	.05	.11	.03	11	23	.00
17	.00	.17	.72	1.8	7.2	2.8	2.9	.26	.02	6.1	3.6	.00
18	.00	.20	.64	1.2	6.4	2.2	12	1.7	.93	4.6	.93	.00
19	.00	2.0	.56	1.0	16	3.2	6.7	.59	1.0	1.5	.87	.00
20	.00	15	.50	.94	5.5	2.8	4.4	.42	.46	7.3	.32	.00
21	.00	28	.58	.85	3.5	2.3	15	.28	.27	13	.06	35
22	.00	12	.66	.80	2.9	1.9	8.2	.25	.12	2.7	.01	34
23	.00	4.5	.74	30	3.3	1.6	3.7	.43	.09	18	.00	11
24	.00	2.5	.80	20	2.7	3.5	5.9	4.1	.36	11	.00	5.5
25	3.5	1.0	.70	3.5	2.4	16	8.8	1.8	.36	3.0	.00	3.0
26	30	.50	.66	1.7	2.2	11	5.8	.87	.16	17	.00	1.7
27	22	.40	.60	1.3	1.8	6.3	3.1	.44	.07	12	.01	1.2
28	12	.45	.54	1.2	1.7	3.7	1.5	.22	.03	2.5	1.3	.57
29	3.5	2.6	1.1	1.3	1.1	2.7	.87	.16	.02	.58	.98	.28
30	2.9	2.2	1.6	1.3	---	2.8	.68	2.6	.01	.14	.27	.15
31	12	---	1.2	1.8	---	2.4	---	5.0	---	2.2	.04	---
TOTAL	85.95	77.88	52.15	141.15	125.47	113.36	88.39	21.85	10.16	176.36	67.09	162.49
MEAN	2.77	2.60	1.68	4.55	4.33	3.66	2.95	.70	.34	5.69	2.16	5.42
MAX	30	28	14	30	22	16	15	5.0	2.5	24	23	46
MIN	.00	.02	.50	.66	.52	.57	.00	.08	.01	.00	.00	.00
CFSM	.94	.88	.57	1.54	1.47	1.24	1.00	.24	.11	1.93	.73	1.84
IN.	1.08	.98	.66	1.78	1.58	1.43	1.11	.28	.13	2.22	.85	2.05

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1988 - 1992, BY WATER YEAR (WY)

	1988	1989	1990	1991	1992
MEAN	1.11	2.32	2.23	2.00	3.57
MAX	2.77	2.60	6.86	4.55	5.55
(WY)	1992	1992	1988	1992	1988
MIN	.15	1.97	.068	.72	.025
(WY)	1990	1990	1990	1988	1989

SUMMARY STATISTICS

FOR 1992 WATER YEAR

WATER YEARS 1988 - 1992

ANNUAL TOTAL	1122.30	
ANNUAL MEAN	3.07	
HIGHEST ANNUAL MEAN		3.09
LOWEST ANNUAL MEAN		3.11
HIGHEST DAILY MEAN		1989
LOWEST DAILY MEAN		1992
ANNUAL SEVEN-DAY MINIMUM	46	Sep 10
INSTANTANEOUS PEAK FLOW	.00	Oct 1
INSTANTANEOUS PEAK STAGE	.00	Oct 6
ANNUAL RUNOFF (CFSM)	73	Sep 10
ANNUAL RUNOFF (INCHES)	5.96	Sep 10
10 PERCENT EXCEEDS	1.04	Oct 1
50 PERCENT EXCEEDS	14.15	
90 PERCENT EXCEEDS	10	

STREAMS TRIBUTARY TO LAKE ERIE

59

04195830 BAYOU DITCH NEAR OAK HARBOR, OH

LOCATION.--Lat 41°30'48", long 83°11'01", Ottawa County, Hydrologic Unit 04100010, on right bank, 30 ft upstream of Salem-Harris Road, 1.5 mi upstream of outlet bypass to Portage River, and 1.8 mi west of Oak Harbor.

DRAINAGE AREA.--2.82 mi².

PERIOD OF RECORD.--December 1987 to current year (discontinued).

REVISED RECORDS.--WDR-OH-1989-2: 1988.

GAGE.--Water-stage recorder. Elevation of gage is 590 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 4-16, June 8-18, 22, 23, June 27, July 11, Aug. 5-10, 23-27, Sept. 1-5. Records fair.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992 DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	3.4	1.1	.93	1.1	.69	2.7	.74	.33	.00	.62	.05
2	.00	.90	1.3	.93	1.1	.65	2.0	.72	.21	.00	.24	.00
3	.00	.25	14	3.0	1.2	.61	1.3	.61	.16	.00	.15	.00
4	.04	.12	3.2	2.1	2.3	.61	1.1	.57	.14	.00	.10	.00
5	.00	.07	1.4	1.3	1.6	.61	.83	.46	.13	.00	.05	.00
6	.00	.07	1.0	1.0	1.3	.63	.79	.24	.11	.00	.00	.15
7	.00	.05	.90	.84	1.2	12	.82	.16	.07	.00	.00	.95
8	.00	.03	.89	.77	.92	21	.72	.24	.05	.00	.00	.52
9	.00	.02	.81	.79	.69	3.7	.70	.47	.01	.00	.00	5.4
10	.00	.03	.72	.70	.67	17	.69	.26	.00	.00	.00	27
11	.00	.03	.68	.68	.63	6.2	.74	.15	.00	.00	2.8	2.2
12	.00	.04	2.0	.65	.55	2.2	.59	.21	.00	7.5	.26	.44
13	.00	.05	8.0	.70	.61	1.4	.46	.31	.00	24	.20	.26
14	.00	.05	2.0	23	.58	1.1	.48	.15	.00	4.2	10	.19
15	.00	.06	1.2	25	21	1.0	.50	.09	.00	19	8.0	.16
16	.00	.06	.87	8.7	27	.92	.57	.08	.00	4.9	10	.11
17	.00	.06	.86	2.1	10	4.2	1.3	.17	.00	2.6	.63	.06
18	.00	.10	.62	.92	7.1	2.6	15	.98	.14	1.4	.28	.08
19	.00	3.3	.50	.76	20	3.4	4.4	.26	.16	.30	.29	.08
20	.00	19	.53	.80	5.9	3.2	1.8	.16	.09	7.8	.20	.02
21	.00	27	.62	.70	1.9	2.8	19	.12	.08	9.7	.14	37
22	.00	9.1	.61	.64	1.4	2.6	12	.11	.02	.54	.09	26
23	.00	3.4	.68	25	1.5	1.8	2.2	.80	.01	16	.03	4.2
24	.00	2.1	.72	26	1.2	8.9	5.4	7.4	.11	6.7	.00	.80
25	3.0	.92	.64	2.9	1.0	22	8.7	.50	.08	.66	.00	.32
26	33	.42	.60	1.0	.93	18	3.4	.24	.06	14	.00	.19
27	24	.38	.56	.88	.84	8.4	1.6	.16	.02	6.1	.01	.15
28	12	.42	.57	.74	.83	3.0	1.1	.12	.00	.53	1.2	.11
29	3.1	2.1	1.2	.70	.70	1.6	.93	.10	.00	.24	.40	.09
30	3.0	2.1	1.3	.78	---	1.6	.85	.50	.00	.19	.21	.08
31	12	---	1.1	.98	---	1.4	---	.93	---	3.8	.13	---
TOTAL	90.14	75.63	51.18	135.99	115.75	155.82	92.67	18.01	1.98	130.16	36.03	106.61
MEAN	2.91	2.52	1.65	4.39	3.99	5.03	3.09	.58	.066	4.20	1.16	3.55
MAX	33	27	14	26	27	22	19	7.4	.33	24	10	37
MIN	.00	.02	.50	.64	.55	.61	.46	.08	.00	.00	.00	.00
CFSM	1.03	.89	.59	1.56	1.42	1.78	1.10	.21	.02	1.49	.41	1.26
IN.	1.19	1.00	.68	1.79	1.53	2.06	1.22	.24	.03	1.72	.48	1.41

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1988 - 1992, BY WATER YEAR (WY)

	1988	1989	1990	1991	1992
MEAN	1.71	1.62	3.19	2.44	4.02
MAX	3.74	2.52	10.1	5.44	10.4
(WY)	1991	1992	1991	1990	1992
MIN	.042	1.16	.23	.55	.003
(WY)	1990	1990	1989	1988	1989

SUMMARY STATISTICS

FOR 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1988 - 1992

ANNUAL TOTAL	425.64	1009.97	
ANNUAL MEAN	1.17	2.76	2.41
HIGHEST ANNUAL MEAN			2.97
LOWEST ANNUAL MEAN			1.86
HIGHEST DAILY MEAN	33	Oct 26	59
LOWEST DAILY MEAN	.00	Sep 22	.00
ANNUAL SEVEN-DAY MINIMUM	.00	Sep 22	.00
INSTANTANEOUS PEAK FLOW			75
INSTANTANEOUS PEAK STAGE			6.26
INSTANTANEOUS LOW FLOW			.00
ANNUAL RUNOFF (CFSM)	.41		.86
ANNUAL RUNOFF (INCHES)	5.61	13.32	11.63
10 PERCENT EXCEEDS	1.8	8.7	5.4
50 PERCENT EXCEEDS	.27	.63	.56
90 PERCENT EXCEEDS	.01	.00	.00

STREAMS TRIBUTARY TO LAKE ERIE

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 northwest of Crawford, 1.5 mi downstream from Lick Run, 2.7 mi upstream from Little Tymochtee Creek, and 3 mi southeast of Carey.

DRAINAGE AREA.--229 mi².

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 above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Dec. 7-Jan. 5, Jan. 7-14, 16-21, Feb. 7-14. Records fair. Beginning Mar. 9, 1972 water is diverted at a point 29.4 mi upstream from station into Killdeer Reservoir. Storage is available for low-flow augmentation. During the year, withdrawals totaled 49.1 m gal, equivalent to a mean annual withdrawal of 0.21 ft³/s. There were no releases. Water-quality data collected at this site 1968 to 1977. Sediment data collected 1970 to 1974.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.21	.52	.38	.82	8.9	12	52	82	192	22	1490	38
2	.15	.39	1.1	.76	8.0	11	64	87	133	21	1630	25
3	.12	.32	4.9	1.0	7.0	11	62	80	77	22	800	38
4	.14	.44	4.4	1.4	15	9.0	54	66	51	21	274	28
5	.13	.62	3.5	1.6	23	7.8	45	54	42	26	168	96
6	.11	.73	3.8	1.7	24	9.8	40	46	37	20	111	1560
7	.10	.74	3.0	1.4	17	15	33	39	48	16	80	1150
8	.09	.57	2.5	1.1	13	78	28	36	37	13	64	392
9	.08	.50	2.2	.92	11	108	23	30	29	13	76	303
10	.10	.40	1.9	.85	9.5	241	23	29	20	14	92	907
11	.10	.31	1.7	.83	7.4	353	23	34	16	12	74	682
12	.10	.31	1.9	.90	6.2	227	20	34	13	11	57	324
13	.09	.29	2.1	1.0	5.0	122	39	31	12	419	162	151
14	.10	.29	1.9	1.2	4.9	69	67	28	9.4	1060	245	84
15	.11	.35	1.7	.57	65	45	48	30	7.8	1400	101	52
16	.10	.48	1.5	.45	202	33	37	32	7.3	1460	69	37
17	.08	.50	1.4	.40	194	25	247	33	7.1	2040	48	27
18	.09	.71	1.2	.45	136	25	982	32	175	2610	35	33
19	.09	1.7	1.1	.62	290	169	1350	60	238	2080	30	254
20	.08	2.0	1.1	.90	355	557	1370	62	194	1490	25	104
21	.07	2.5	1.0	1.8	217	483	963	45	120	462	24	75
22	.07	1.8	1.1	3.3	109	300	1050	36	65	400	20	259
23	.07	2.0	1.3	19	70	278	1060	27	44	360	17	115
24	.08	2.8	1.3	42	49	218	594	220	89	597	15	61
25	.11	1.6	1.1	45	34	144	299	132	213	1280	11	41
26	.26	.99	1.0	26	25	101	215	58	303	1550	7.2	28
27	.27	.65	1.0	27	20	82	160	34	149	1530	19	21
28	.27	.54	1.1	16	18	70	128	24	79	1340	100	17
29	.24	.44	1.2	9.8	16	63	114	19	48	760	176	16
30	.33	.45	1.0	7.2	---	57	90	109	31	467	133	12
31	.50	---	.90	7.4	---	51	---	228	---	1440	68	---
TOTAL	4.44	25.94	55.28	223.37	1959.9	3974.6	9280	1857	2486.6	22956	6221.2	6930
MEAN	.14	.86	1.78	7.21	67.6	128	309	59.9	82.9	741	201	231
MAX	.50	2.8	4.9	45	355	557	1370	228	303	2610	1630	1560
MIN	.07	.29	.38	.40	4.9	7.8	20	19	7.1	11	7.2	12

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 1992, BY WATER YEAR (WY)

	MEAN	34.9	128	243	196	315	406	316	207	128	118	33.0	38.2
MAX	278	781	1104	777	823	1392	946	645	780	741	201	370	
(WY)	1987	1973	1991	1974	1975	1978	1972	1969	1981	1992	1992	1981	
MIN	.084	.86	1.78	1.65	37.2	35.1	32.8	11.7	1.78	1.04	.48	.27	
(WY)	1965	1992	1992	1977	1972	1983	1971	1988	1988	1965	1965	1964	

SUMMARY STATISTICS

FOR 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1964 - 1992

ANNUAL TOTAL	41919.59	55974.33	
ANNUAL MEAN	115	153	180
HIGHEST ANNUAL MEAN			330
LOWEST ANNUAL MEAN			72.2
HIGHEST DAILY MEAN	4710	2610	6280
LOWEST DAILY MEAN	.07 Oct 21	.07 Oct 21	.00 Aug 10 1964
ANNUAL SEVEN-DAY MINIMUM	.08 Oct 17	.08 Oct 17	.00 Oct 23 1964
INSTANTANEOUS PEAK FLOW		2800	6700
INSTANTANEOUS PEAK STAGE		6.96 Jul 18	11.21 Dec 31 1990
INSTANTANEOUS LOW FLOW		.07 Oct 21	.00 Mar 6 1963
10 PERCENT EXCEEDS	288	356	484
50 PERCENT EXCEEDS	4.4	25	32
90 PERCENT EXCEEDS	.24	.37	1.3

a Peaks above base in shown Table of peak discharges and stages at continuous-record surface-water-discharge stations.

STREAMS TRIBUTARY TO LAKE ERIE

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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 upstream from Buckeye Creek.
DRAINAGE AREA.--149 mi².

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder. Elevation of gage is 818 ft above National Geodetic Vertical Datum of 1929 from topographic map.

REMARKS.--Estimated daily discharges: Dec. 19-Jan. 22 and Jan. 26-Feb. 14. Records good except those for estimated daily discharges which are poor. Water-quality data collected at this site 1976 to 1977, 1988 to 1989.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.30	2.3	2.5	2.8	36	61	94	66	116	21	921	30
2	.30	2.2	2.3	3.0	38	50	136	59	83	24	439	23
3	.30	1.8	4.2	3.7	32	46	130	56	54	53	191	146
4	.55	1.7	10	3.8	40	38	105	55	41	40	182	95
5	.63	1.5	15	3.9	80	35	83	50	34	29	122	146
6	.63	1.4	11	3.9	90	31	65	43	30	20	76	751
7	.58	1.3	7.6	3.8	70	66	56	39	25	16	53	279
8	.62	1.1	5.5	3.7	50	169	52	31	20	13	62	125
9	.71	1.0	3.8	3.6	37	145	47	30	16	10	65	103
10	1.0	1.0	2.8	3.5	30	154	41	32	12	10	54	862
11	1.0	1.0	3.0	3.3	25	202	38	29	10	10	37	706
12	.90	1.0	3.1	3.2	22	122	37	23	8.6	24	29	272
13	.80	1.0	3.1	10	20	83	34	21	7.3	80	34	118
14	.88	1.0	2.9	32	18	63	28	19	6.0	483	89	73
15	1.3	1.2	2.2	90	167	51	26	18	6.6	1140	61	52
16	1.1	1.3	2.0	80	766	41	26	16	6.6	1340	160	41
17	1.1	1.3	2.3	35	620	37	296	15	5.5	1540	143	34
18	1.2	1.7	2.4	20	313	41	950	16	110	1260	67	45
19	1.2	3.4	2.4	17	791	83	1440	13	591	860	42	189
20	1.1	4.2	2.4	15	748	272	884	13	276	396	30	150
21	.97	6.9	2.5	14	371	493	618	11	113	190	22	130
22	.93	8.4	2.8	13	197	454	826	9.4	63	138	17	366
23	.91	7.4	3.5	55	138	398	514	10	48	285	13	346
24	.91	5.6	3.3	274	102	277	267	115	252	569	11	171
25	1.3	4.1	3.1	344	78	187	197	119	348	653	9.9	96
26	2.0	3.0	2.9	180	65	189	181	67	173	439	8.9	68
27	2.1	2.6	2.8	82	54	181	153	40	92	267	12	51
28	2.1	2.5	2.8	62	47	161	117	29	54	184	192	42
29	2.6	2.6	3.2	45	60	128	88	21	37	119	253	36
30	3.0	2.6	3.1	39	---	103	76	36	27	125	108	30
31	2.7	---	3.0	35	---	94	---	100	---	1220	51	---
TOTAL	35.72	78.1	123.5	1484.2	5105	4455	7605	1201.4	2665.6	11558	3554.8	5576
MEAN	1.15	2.60	3.98	47.9	176	144	253	38.8	88.9	373	115	186
MAX	3.0	8.4	15	344	791	493	1440	119	591	1540	921	862
MIN	.30	1.0	2.0	2.8	18	31	26	9.4	5.5	10	8.9	23
CFSM	.01	.02	.03	.32	1.18	.96	1.70	.26	.60	2.50	.77	1.25
IN.	.01	.02	.03	.37	1.27	1.11	1.90	.30	.67	2.89	.89	1.39

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1977 - 1992, BY WATER YEAR (WY)

	MEAN	36.4	99.7	177	106	240	273	238	110	111	82.3	34.3	45.5
MAX	186	415	518	249	528	765	540	314	740	373	125	242	
(WY)	1991	1984	1978	1982	1990	1978	1979	1983	1981	1992	1990	1981	
MIN	.71	2.60	1.98	1.31	65.6	40.4	77.5	8.69	1.05	.46	1.67	1.06	
(WY)	1989	1992	1977	1977	1978	1981	1991	1988	1988	1988	1991	1978	

SUMMARY STATISTICS

FOR 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1977 - 1992

ANNUAL TOTAL	22613.27	43442.32	129
ANNUAL MEAN	62.0	119	188
HIGHEST ANNUAL MEAN			48.1
LOWEST ANNUAL MEAN			188
HIGHEST DAILY MEAN	1420	1540	4000
LOWEST DAILY MEAN	.18	.30	.07
ANNUAL SEVEN-DAY MINIMUM	.34	.47	.09
INSTANTANEOUS PEAK FLOW		2130	4440
INSTANTANEOUS PEAK STAGE		8.12	11.00
INSTANTANEOUS LOW FLOW		.30	.07
ANNUAL RUNOFF (CFSM)	.42	.80	.86
ANNUAL RUNOFF (INCHES)	5.65	10.85	11.73
10 PERCENT EXCEEDS	158	301	341
50 PERCENT EXCEEDS	7.4	36	31
90 PERCENT EXCEEDS	.68	1.4	2.0

a Peaks above base in shown Table of peak discharges and stages at continuous-record surface-water-discharge stations.

STREAMS TRIBUTARY TO LAKE ERIE

04197170 ROCK CREEK AT TIFFIN, OH

LOCATION.--Lat 41°06'49", long 83°10'06", Seneca County, Hydrologic Unit 04100011, on left bank 0.05 mi downstream from bridge on Rebecca Street, at Heidelberg College, Tiffin, Ohio.

DRAINAGE AREA.--34.6 mi².

PERIOD OF RECORD.--June 1983 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 740 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Jan. 16 - Feb. 14. Records fair except those for estimated record, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.0	2.0	1.7	1.9	4.5	8.2	20	10	31	2.7	147	4.6
2	.85	2.1	2.8	2.1	4.1	7.2	48	9.8	15	2.6	29	4.2
3	.79	1.8	4.3	2.5	3.7	6.3	28	9.8	8.6	2.4	13	209
4	1.3	1.9	3.3	2.5	6.0	5.8	19	8.7	6.2	2.2	40	187
5	.94	1.8	2.3	2.6	15	5.5	13	8.3	5.5	2.2	30	42
6	.87	1.8	2.2	2.6	11	5.7	10	7.5	4.9	2.1	13	952
7	1.0	2.0	2.1	2.5	8.0	6.1	9.0	6.8	4.9	2.0	8.0	283
8	1.1	1.8	2.0	2.5	5.6	11	8.2	6.6	4.8	1.9	8.8	90
9	1.1	1.7	2.0	2.4	4.5	13	7.3	7.0	4.1	2.0	11	74
10	1.2	1.7	1.8	2.3	4.0	36	6.6	6.6	3.3	3.9	6.9	567
11	1.2	1.8	1.7	2.3	3.7	59	6.2	6.3	3.1	3.2	5.5	136
12	1.6	2.1	1.9	2.2	3.4	21	6.2	6.2	2.8	3.4	4.8	34
13	1.3	2.0	2.0	2.6	3.2	13	5.6	5.8	2.5	35	5.3	17
14	1.7	2.0	1.9	17	3.0	9.3	5.1	5.3	3.1	93	4.6	12
15	1.5	2.5	1.7	21	75	7.5	4.8	5.2	2.5	460	4.6	9.4
16	1.4	2.5	1.7	18	307	6.6	5.9	4.9	2.7	162	4.6	8.0
17	1.4	2.2	1.7	4.5	82	6.7	222	4.8	2.4	556	6.5	6.7
18	1.4	3.2	1.7	3.7	40	7.8	403	8.0	62	582	5.6	14
19	1.5	4.2	1.6	3.3	296	27	249	6.6	170	79	5.3	69
20	1.4	4.7	1.6	2.9	108	97	61	5.4	81	25	5.0	21
21	1.6	4.4	2.0	2.7	48	134	133	4.4	17	14	4.6	52
22	1.5	2.7	1.9	2.5	22	107	225	3.9	8.8	9.5	4.1	100
23	1.5	2.2	2.4	18	15	84	60	5.1	6.5	76	3.5	33
24	1.9	1.9	2.2	77	11	66	39	87	17	53	3.5	15
25	3.5	1.7	2.1	62	9.1	42	42	26	39	19	3.7	9.9
26	3.7	1.5	2.0	20	7.9	57	61	11	12	12	3.8	8.4
27	2.6	1.6	1.9	18	7.2	44	40	7.4	6.4	28	11	7.1
28	2.0	1.7	1.9	4.5	6.8	38	21	5.8	4.7	9.5	70	6.6
29	1.7	1.7	2.2	4.0	8.0	20	14	5.0	3.7	8.1	24	6.0
30	2.0	2.0	2.2	3.6	---	17	12	35	3.1	16	9.9	5.7
31	1.9	---	2.0	3.8	---	19	---	51	---	275	5.9	---
TOTAL	48.45	67.2	64.8	317.5	1122.7	987.7	1784.9	381.2	538.6	2542.7	502.5	2983.6
MEAN	1.56	2.24	2.09	10.2	38.7	31.9	59.5	12.3	18.0	82.0	16.2	99.5
MAX	3.7	4.7	4.3	77	307	134	403	87	170	582	147	952
MIN	.79	1.5	1.6	1.9	3.0	5.5	4.8	3.9	2.4	1.9	3.5	4.2
CFSM	.05	.06	.06	.30	1.12	.92	1.72	.36	.52	2.37	.47	2.87
IN.	.05	.07	.07	.34	1.21	1.06	1.92	.41	.58	2.73	.54	3.21

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1984 - 1992, BY WATER YEAR (WY)

	1984	1985	1986	1987	1988	1989	1990	1991	1992
MEAN	14.4	32.7	47.0	24.0	67.2	42.4	47.6	25.7	11.3
MAX	50.3	99.4	172	41.1	122	138	88.3	82.3	36.1
(WY)	1991	1984	1991	1991	1990	1984	1989	1989	1992
MIN	1.28	2.24	2.09	10.2	14.1	13.6	17.9	2.29	1.12
(WY)	1989	1992	1992	1992	1989	1989	1988	1988	1988

SUMMARY STATISTICS

FOR 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1984 - 1992

ANNUAL TOTAL	5116.67	11341.85	29.5
ANNUAL MEAN	14.0	31.0	48.2
HIGHEST ANNUAL MEAN			11.6
LOWEST ANNUAL MEAN			1440
HIGHEST DAILY MEAN	452	952	11.6
LOWEST DAILY MEAN	.67	.79	.32
ANNUAL SEVEN-DAY MINIMUM	.76	.96	.38
INSTANTANEOUS PEAK FLOW		1740	1850
INSTANTANEOUS PEAK STAGE		7.92	8.05
INSTANTANEOUS LOW FLOW		.79	.32
ANNUAL RUNOFF (CFSM)	.41	.90	.85
ANNUAL RUNOFF (INCHES)	5.50	12.19	11.57
10 PERCENT EXCEEDS	27	71	60
50 PERCENT EXCEEDS	2.2	5.6	6.7
90 PERCENT EXCEEDS	.94	1.7	1.5

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 upstream from Ballville diversion dam, 2.5 mi downstream from Wolf Creek, and 3.5 mi southwest of Fremont.
DRAINAGE AREA.--1,251 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--November 1898 to March 1901 (gage height and discharge measurements only, published as "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 above National Geodetic Vertical Datum of 1929. Nov. 18, 1898, to Mar. 10, 1901, nonrecording gage at site 4 mi downstream at different datum. Nov. 8, 1923, to Sept. 5, 1930, nonrecording gage at present site and datum.

REMARKS.--Estimated daily discharges: Oct. 1-2, Dec. 4-5, 18-20, Jan. 15 to Feb. 15. Records good except for and periods of estimated daily discharge which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28	53	58	68	250	359	751	688	1160	279	8110	470
2	25	52	57	68	300	334	952	616	877	534	5910	331
3	23	56	94	72	270	314	961	585	666	601	3470	445
4	33	54	167	75	290	293	841	539	504	371	2160	1110
5	32	47	169	88	400	268	723	503	471	300	1370	598
6	29	42	166	99	520	256	604	449	461	257	831	7230
7	26	41	160	98	470	299	526	409	372	228	602	7140
8	24	39	138	92	410	562	475	381	342	193	489	4150
9	23	38	119	93	340	1080	429	406	347	164	492	1790
10	24	39	99	91	380	1260	417	403	303	179	491	6010
11	23	40	84	87	330	2480	408	401	252	273	484	5540
12	25	44	80	81	290	1680	381	408	223	302	406	2730
13	27	47	83	78	260	1100	364	416	205	495	464	1410
14	28	49	79	211	250	751	387	413	181	3760	776	855
15	29	47	77	740	420	569	420	409	173	6670	702	598
16	30	46	89	2300	3580	463	399	410	153	8690	721	450
17	31	45	74	2200	3450	410	1220	418	140	10900	691	365
18	35	48	58	1200	2320	381	5440	448	496	14000	456	349
19	38	60	50	540	3410	429	9300	457	2470	9330	360	1280
20	40	80	47	280	3920	1850	7000	431	2200	6560	291	1510
21	39	159	63	220	2730	3500	5110	420	1170	3610	245	2110
22	37	210	57	200	1590	2940	6600	345	682	1820	216	4810
23	38	168	58	520	1030	2650	5650	301	475	2110	202	3190
24	40	129	64	1300	758	2220	3910	1380	1810	5120	189	1800
25	50	100	63	2900	606	1790	2420	1580	2300	5010	190	1070
26	81	85	64	3800	509	1350	1780	862	1230	5200	189	710
27	81	74	68	2000	443	1180	1460	565	920	5010	200	530
28	76	68	68	1000	394	1090	1130	419	603	4550	1130	419
29	64	65	70	640	366	955	910	335	428	3010	2070	347
30	56	63	71	480	---	843	782	417	336	2240	1280	298
31	55	---	71	300	---	789	---	1180	---	6090	755	---
TOTAL	1190	2088	2665	21921	30286	34445	61750	16994	21950	107856	35942	59645
MEAN	38.4	69.6	86.0	707	1044	1111	2058	548	732	3479	1159	1988
MAX	81	210	169	3800	3920	3500	9300	1580	2470	14000	8110	7230
MIN	23	38	47	68	250	256	364	301	140	164	189	298
CFSM	.03	.06	.07	.57	.83	.89	1.65	.44	.58	2.78	.93	1.59
IN.	.04	.06	.08	.65	.90	1.02	1.84	.51	.65	3.21	1.07	1.77

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1924 - 1992, BY WATER YEAR (WY)

	MEAN	230	537	1097	1514	1952	2314	1790	1034	765	456	209	271
MAX	2521	4390	5495	7659	7504	8261	5524	3654	6091	3479	1660	3713	
(WY)	1927	1973	1991	1930	1984	1978	1957	1969	1981	1992	1958	1981	
MIN	9.94	25.4	32.6	53.5	60.3	319	144	100	43.4	30.9	22.4	13.5	
(WY)	1964	1954	1964	1961	1964	1941	1946	1941	1988	1934	1952	1953	

SUMMARY STATISTICS

FOR 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1924 - 1992

ANNUAL TOTAL	264286	396732	
ANNUAL MEAN	724	1084	1009
HIGHEST ANNUAL MEAN			2167
LOWEST ANNUAL MEAN			275
HIGHEST DAILY MEAN	20300	Jan 1	14000
LOWEST DAILY MEAN	23	Sep 28	23
ANNUAL SEVEN-DAY MINIMUM	25	Oct 7	25
INSTANTANEOUS PEAK FLOW			15000
INSTANTANEOUS PEAK STAGE			7.64
INSTANTANEOUS LOW FLOW			23
ANNUAL RUNOFF (CFSM)	.58		.87
ANNUAL RUNOFF (INCHES)	7.86		11.80
10 PERCENT EXCEEDS	1650		3260
50 PERCENT EXCEEDS	119		409
90 PERCENT EXCEEDS	34		47
			2680
			266
			38
			36000
			5.0
			6.3
			16.14
			4.4
			.81
			10.96
			Mar 15 1978
			Oct 20 1963
			Jul 9 1988
			Mar 16 1978
			Feb 24 1979
			Feb 29 1964

a Peaks above base in shown Table of peak discharges and stages at continuous-record surface-water-discharge stations.

04198000 SANDUSKY RIVER NEAR FREMONT, OH--Continued

WATER-QUALITY RECORDS

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

PERIOD OF DAILY RECORD.--

CHLORIDE: February 1988 to current year.

NITROGEN, NITRITE + NITRATE: February 1988 to current year.

NITROGEN, AMMONIA + ORGANIC: February 1988 to current year.

PHOSPHORUS: February 1988 to current year.

SUSPENDED SEDIMENT DISCHARGE: Water years 1951-1956, 1978 to current year.

INSTRUMENTATION.--Refrigerated water-quality pumping sampler since February 1988.

REMARKS.--Water-quality samples were collected by pumping samples three times a day. Sediment samples were collected by a local observer on an approximate once daily basis. Chemical loads were calculated using the mean-interval method (Porterfield, George, 1972, Computation of Fluvial-Sediment Discharge: U.S. Geological Survey, Techniques of Water Resources Investigations, Book 3, Chap. C3, 66 p.). For days with unsteady concentration, discharge, or both, the day was sub-divided into half-hour intervals and the daily load was calculated by summing the loads for these half-hour intervals. This required interpolation between measured and estimated concentrations. Concentrations reported as below the limit of detection (for example, <.100) were assumed to have a value of half of the detection limit for the purpose of load calculation.

EXTREMES FOR PERIOD OF DAILY RECORD.--

DISSOLVED CHLORIDE CONCENTRATIONS: Maximum daily mean, 120 mg/L, Oct. 8-10, 1991; minimum daily mean, <10 mg/L, Dec. 30, 31, 1990, Jan. 1-3, 1991, on several days during 1992.

DISSOLVED CHLORIDE LOADS: Maximum daily, 1,280 tons, Jan. 1, 2, 1990; minimum daily, 1.11 tons, July 9, 15-18, 1988.

DISSOLVED NITROGEN, NITRITE + NITRATE CONCENTRATIONS: Maximum daily mean, 17.5 mg/L, June 23, 1992; minimum daily mean, <.100 mg/L, on many days during 1988, 1989, 1990 and 1991 water years, Oct. 6, 22-24, 1991.

DISSOLVED NITROGEN, NITRITE + NITRATE LOADS: Maximum daily, 330 tons, July 15, 1990; minimum daily, .00 ton, many days during 1988, 1989 and 1991 water years.

TOTAL NITROGEN, AMMONIA + ORGANIC CONCENTRATIONS: Maximum daily mean, 7.6 mg/L, June 1, 1991; minimum daily mean, .22 mg/L, Dec. 1, 1991.

TOTAL NITROGEN, AMMONIA + ORGANIC LOADS: Maximum daily, 184 tons, May 27, 1989; minimum daily, .011 ton, Oct. 10-11, 1988.

TOTAL PHOSPHORUS CONCENTRATIONS: Maximum daily mean, 2.19 mg/L, June 1, 1991; minimum daily mean, <.010 mg/L, May 17-22, 1988, on several days during 1992.

TOTAL PHOSPHORUS LOADS: Maximum daily 66.0 tons, Dec. 31, 1990; minimum daily, .001 ton, Oct. 9-12, 1988, on several days during 1992.

SEDIMENT CONCENTRATIONS: Maximum daily mean, 2,420 mg/L, June 9, 1981; minimum daily mean, 1 mg/L on many days during 1951-56, 1980, 1981, 1988, 1992.

SEDIMENT LOADS: Maximum daily, 124,000 tons, June 14, 1981; minimum daily, less than 0.05 ton on several days during 1952, 1954, 1989.

EXTREMES FOR CURRENT YEAR.--

DISSOLVED CHLORIDE CONCENTRATIONS: Maximum daily mean, 120 mg/L, Oct. 8-10; minimum daily mean, <10 mg/L on several days during the year.

DISSOLVED CHLORIDE LOADS: Maximum daily, 538 tons, Jan. 26; minimum daily, 5.29 tons, Oct. 2.

DISSOLVED NITROGEN, NITRITE + NITRATE CONCENTRATIONS: Maximum daily mean, 17.5 mg/L, June 23; minimum daily mean, <.100 mg/L, Oct. 6, 22-24.

DISSOLVED NITROGEN, NITRITE + NITRATE LOADS: Maximum daily, 260 tons, July 18; minimum daily, .01 ton, on several days during the year.

TOTAL NITROGEN, AMMONIA + ORGANIC CONCENTRATIONS: Maximum daily mean, 3.9 mg/L, Apr. 19; minimum daily mean, .22 mg/L, Dec. 1.

TOTAL NITROGEN, AMMONIA + ORGANIC LOADS: Maximum daily, 103 tons Apr. 19; minimum daily, .035 ton, Dec. 1.

TOTAL PHOSPHORUS CONCENTRATIONS: Maximum daily mean, 1.14 mg/L, June 25; minimum daily mean, <.010 mg/L, on several days during the year.

TOTAL PHOSPHORUS LOADS: Maximum daily, 24.9 tons, Apr. 19; minimum daily, .001 ton, on several days during the year.

SEDIMENT CONCENTRATIONS: Maximum daily mean, 1,200 mg/L, July 14; minimum daily mean, 1 mg/L, Dec. 29, 31, Jan. 1, 2.

SEDIMENT LOADS: Maximum daily, 17,400 tons, July 15; minimum daily, 0.18 ton, Jan. 1.

WATER QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	TIME	ALACHLOR TOT RECV (UG/L)	DATE	TIME	ALACHLOR TOT RECV (UG/L)	DATE	TIME	ALACHLOR TOT RECV (UG/L)
Oct 14	1610	<.1	June 01	1610	2.1	July 07	2000	<.1
Oct 28	1640	<.1	June 02	2000	4.8	July 09	2000	<.1
Nov 11	1435	<.1	June 03	2000	4.0	July 11	2000	<.1
Nov 25	1615	<.1	June 04	2000	3.0	July 13	1610	<.1
Jan 06	1550	<.1	June 05	2000	1.6	July 14	2000	<.1
Jan 20	1725	.3	June 06	0400	5.0	July 15	2000	<.1
Feb 03	1615	<.1	June 06	1200	3.0	July 16	2000	<.1
Feb 17	1620	<.1	June 06	2000	2.2	July 17	2000	<.1
Mar 02	1540	<.1	June 07	2000	1.1	July 18	2000	<.1
Mar 16	1620	<.1	June 08	1630	1.3	July 19	2000	<.1
Mar 30	1630	<.1	June 09	2000	1.2	July 20	1625	<.1
Apr 13	1615	<.1	June 11	2000	1.6	July 21	2000	.9
Apr 20	1630	.5	June 13	2000	.5	July 22	2000	2.0
May 04	1730	<.1	June 15	1600	.9	July 23	2000	2.2
May 08	2000	.1	June 17	2000	<.1	July 24	2000	<.1
May 11	1600	.2	June 18	2000	<.1	July 25	2000	<.1
May 15	2000	<.1	June 19	0400	<.1	July 26	2000	<.1
May 18	1600	.8	June 19	1200	<.1	July 27	1510	.1
May 23	2000	1.2	June 19	2000	<.1	July 28	2000	<.1
May 24	0400	2.3	June 20	0400	<.1	July 29	2000	<.1
May 24	1200	30.4	June 20	1200	<.1	July 30	2000	<.1
May 24	2000	22.6	June 20	2000	<.1	July 31	2000	<.1
May 25	0400	24.6	June 21	0400	<.1	Aug 01	2000	<.1
May 25	1200	16.6	June 21	1200	<.1	Aug 02	2000	<.1
May 25	2000	10.6	June 21	2000	<.1	Aug 03	1545	<.1
May 26	0400	9.5	June 22	1200	3.0	Aug 08	2000	<.1
May 26	1200	11.5	June 22	1615	2.2	Aug 10	1515	<.1
May 26	1605	12.5	June 23	2000	3.3	Aug 14	2000	<.1
May 27	2000	10.7	June 24	2000	3.8	Aug 17	1600	.1
May 28	2000	6.9	June 25	2000	2.8	Aug 24	1540	<.1
May 29	2000	5.6	July 03	2000	.9	Sept 07	1530	<.1
May 30	2000	3.5	July 04	2000	1.2	Sept 21	1610	<.1
May 31	2000	3.8	July 06	1630	.7			

STREAMS TRIBUTARY TO LAKE ERIE

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04198000 SANDUSKY RIVER NEAR FREMONT, OH--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

		DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	TUR- BID- ITY (NTU) (00076)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	
DEC												
10...	0930	96	1040	8.1	1.0	3.0	3.0	13.4	101	K35	210	
MAR												
03...	0915	317	764	8.2	8.5	6.0	12	12.2	99	50	K25	
JUN												
17...	1045	139	752	7.9	32.0	25.0	8.1	10.5	130	K27	90	
SEP												
22...	1200	5170	309	7.9	21.0	19.0	130	7.2	79	K7300	K>10000	
DATE		HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	BICAR- BONATE WATER DIS IT FIELD (MG/L AS HCO3 (00453)	CAR- BONATE WATER DIS IT FIELD (MG/L AS CO3 (00452)	ALKA- LINITY WAT WH TOT FET FIELD (MG/L AS CACO3 (00410)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)
DEC												
10...	460	120	38	40	5.8	266	0	220	230	70	0.50	
MAR												
03...	360	98	28	21	3.6	210	0	174	140	51	0.30	
JUN												
17...	340	81	32	26	3.6	171	0	141	160	58	0.30	
SEP												
22...	140	39	10	4.8	4.7	127	0	105	28	<12	0.20	
DATE		SILICA, DIS- SOLVED (MG/L AS SiO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	ALUM- INUM, DIS- SOLVED (UG/L AS AL) (01106)	BARIUM, DIS- SOLVED (UG/L AS BA) (01005)
DEC												
10...	1.4	735	1.80	0.020	0.020	0.50	0.030	0.010	<0.010	30	54	
MAR												
03...	4.8	507	8.20	0.020	<0.010	0.80	0.080	0.020	0.010	<10	42	
JUN												
17...	0.35	482	4.20	<0.010	0.030	1.2	0.080	0.020	<0.010	<10	52	
SEP												
22...	7.9	191	2.10	0.020	0.020	1.0	0.260	0.100	0.090	110	27	
DATE		COBALT, DIS- SOLVED (UG/L AS CO) (01035)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LITHIUM DIS- SOLVED (UG/L AS LI) (01130)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	SILVER, DIS- SOLVED (UG/L AS AG) (01075)	STRON- TIUM, DIS- SOLVED (UG/L AS SR) (01080)	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)	SEDI- MENT, SUS- PENDE (MG/L) (80154)
DEC												
10...	<3	49	17	7	10	2	<1	<1.0	5100	<6	15	
MAR												
03...	<3	<3	14	8	<10	<1	1	<1.0	2600	<6	23	
JUN												
17...	<3	7	8	2	<10	1	<1	<1.0	2800	<6	41	
SEP												
22...	<3	210	<4	7	<10	3	<1	<1.0	620	<6	214	

K Results based on colony count outside the acceptable range.

STREAMS TRIBUTARY TO LAKE ERIE

04198000 SANDUSKY RIVER NEAR FREMONT, OH--Continued

CHLORIDE DISSOLVED (MG/L AS CL), WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)
OCTOBER			NOVEMBER			DECEMBER			
1	28	76	5.75	53	56	8.94	58	78	12.5
2	25	78	5.29	52	54	8.36	57	81	12.9
3	23	77	6.47	56	52	8.76	94	76	18.4
4	33	69	7.75	54	52	8.38	167	76	34.1
5	32	81	9.03	47	52	7.38	169	79	35.9
6	29	86	8.94	42	54	7.23	166	71	29.7
7	26	95	9.01	41	58	7.55	160	71	28.4
8	24	120	10.6	39	58	7.31	138	69	23.8
9	23	120	10.5	38	58	7.03	119	68	20.2
10	24	120	10.2	39	57	6.81	99	69	17.5
11	23	110	9.50	40	57	6.82	84	70	15.4
12	25	100	9.45	44	56	7.29	80	72	14.9
13	27	100	9.78	47	57	8.04	83	72	15.5
14	28	94	9.55	49	60	8.90	79	74	15.1
15	29	89	9.13	47	62	8.79	77	73	15.0
16	30	84	8.64	46	67	9.26	89	75	17.9
17	31	81	8.57	45	69	9.43	74	74	14.9
18	35	83	9.84	48	71	10.1	58	75	11.7
19	38	73	9.35	60	74	12.8	50	78	10.5
20	40	66	8.41	80	81	17.9	47	77	9.82
21	39	64	7.82	159	75	30.8	63	74	12.7
22	37	61	7.26	210	72	39.3	57	74	11.3
23	38	58	6.95	168	80	35.2	58	76	12.0
24	40	56	6.90	129	75	25.3	64	77	13.2
25	50	56	8.53	100	71	18.2	63	74	12.5
26	81	55	12.6	85	72	16.1	64	72	12.4
27	81	53	12.1	74	72	14.4	68	79	14.6
28	76	52	11.3	68	75	13.7	68	88	16.1
29	64	56	10.4	65	78	13.7	70	86	16.2
30	56	56	9.48	63	77	13.2	71	83	15.9
31	55	57	9.46	---	---	---	71	82	15.7
TOTAL	1190	---	278.56	2088	---	396.98	2665	---	526.72
JANUARY			FEBRUARY			MARCH			
1	68	82	15.0	250	65	44.0	359	46	44.4
2	68	81	14.8	300	64	52.2	334	46	41.8
3	72	79	15.3	270	67	48.5	314	46	38.9
4	75	80	16.2	290	66	51.5	293	47	36.9
5	88	78	18.6	400	60	64.5	268	48	34.7
6	99	82	21.9	520	54	75.8	256	49	34.2
7	98	80	21.1	470	53	66.6	299	54	43.8
8	92	77	19.1	410	55	61.3	562	51	76.1
9	93	74	18.7	340	57	51.9	1080	44	128
10	91	71	17.3	380	57	58.8	1260	46	153
11	87	68	16.0	330	57	50.7	2480	32	214
12	81	67	14.7	290	59	46.2	1680	31	142
13	78	67	14.1	260	75	52.9	1100	34	100
14	211	70	40.0	250	72	48.9	751	37	78.8
15	740	63	127	420	81	92.4	569	39	62.6
16	2300	59	369	3580	32	299	463	41	52.8
17	2200	52	311	3450	26	244	410	47	52.9
18	1200	52	169	2320	35	215	381	49	51.7
19	540	57	82.9	3410	32	287	429	54	64.8
20	280	63	47.3	3920	26	277	1850	54	271
21	220	59	35.2	2730	30	219	3500	34	334
22	200	56	30.4	1590	34	144	2940	30	251
23	520	60	84.5	1030	36	99.8	2650	30	223
24	1300	66	232	758	39	79.6	2220	29	183
25	2900	59	462	606	40	65.3	1790	31	157
26	3800	52	538	509	42	58.0	1350	33	129
27	2000	58	316	443	43	51.5	1180	35	118
28	1000	61	165	394	46	48.8	1090	35	109
29	640	59	102	366	46	45.4	955	36	97.3
30	480	60	77.3	---	---	---	843	39	94.0
31	300	66	53.7	---	---	---	789	41	92.6
TOTAL	21921	---	3465.7	30286	---	2999.6	34445	---	3510.3

STREAMS TRIBUTARY TO LAKE ERIE

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04198000 SANDUSKY RIVER NEAR FREMONT, OH--Continued

CHLORIDE DISSOLVED (MG/L AS CL), WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	LOAD (TONS/ DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	LOAD (TONS/ DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	LOAD (TONS/ DAY)
APRIL			MAY			JUNE			
1	751	43	90.6	688	32	62.7	1160	38	128
2	952	41	111	616	34	58.7	877	40	101
3	961	42	115	585	36	58.3	666	42	78.3
4	841	40	96.0	539	37	56.2	504	42	58.9
5	723	40	81.3	503	38	53.0	471	38	47.9
6	604	41	69.3	449	38	47.7	461	47	60.2
7	526	43	63.3	409	39	44.5	372	50	51.4
8	475	44	57.8	381	41	42.7	342	49	46.0
9	429	45	53.3	406	41	45.6	347	48	46.2
10	417	45	52.5	403	40	44.1	303	47	39.7
11	408	45	51.4	401	40	44.1	252	50	34.8
12	381	45	47.2	408	41	46.1	223	50	30.6
13	364	45	45.1	416	40	46.6	205	50	27.5
14	387	46	49.2	413	40	45.9	181	51	24.7
15	420	45	52.5	409	41	46.0	173	51	24.0
16	399	46	51.0	410	41	46.9	153	52	21.4
17	1220	43	139	418	42	48.7	140	51	19.3
18	5440	27	393	448	43	52.9	496	48	65.6
19	9300	19	495	457	43	54.6	2470	33	223
20	7000	20	395	431	43	51.7	2200	25	155
21	5110	23	322	420	44	50.6	1170	29	95.3
22	6600	22	392	345	44	42.1	682	32	61.0
23	5650	22	341	301	48	39.7	475	37	49.4
24	3910	23	251	1380	39	142	1810	33	147
25	2420	24	164	1580	34	152	2300	19	126
26	1780	25	128	862	35	86.4	1230	18	65.0
27	1460	27	111	565	38	60.5	920	20	53.5
28	1130	28	90.7	419	40	46.4	603	24	39.8
29	910	29	75.9	335	41	38.1	428	27	32.2
30	782	31	68.1	417	42	48.5	336	31	29.1
31	---	---	---	1180	38	127	---	---	---
TOTAL	61750	---	4452.2	16994	---	1830.3	21950	---	1981.8
JULY			AUGUST			SEPTEMBER			
1	279	36	28.0	8110	10	241	470	25	34.6
2	534	39	57.5	5910	11	173	331	27	27.2
3	601	32	54.7	3470	12	116	445	25	31.3
4	371	29	29.5	2160	17	102	1110	16	49.4
5	300	31	25.9	1370	18	72.4	598	20	33.5
6	257	34	23.8	831	20	47.7	7230	12	190
7	228	35	21.9	602	22	38.8	7140	<10	101
8	193	36	18.5	489	24	34.1	4150	<10	59.1
9	164	37	16.4	492	26	36.7	1790	12	59.1
10	179	38	18.3	491	26	37.7	6010	<10	145
11	273	38	29.1	484	29	40.7	5540	<10	118
12	302	38	31.5	406	30	35.5	2730	12	92.6
13	495	36	48.8	464	30	40.6	1410	17	66.1
14	3760	19	190	776	29	63.3	855	21	49.8
15	6670	13	246	702	27	53.5	598	23	39.0
16	8690	13	327	721	23	46.7	450	24	31.5
17	10900	<10	276	691	25	49.3	365	24	26.1
18	14000	<10	331	456	21	27.6	349	24	26.1
19	9330	13	328	360	21	22.0	1280	24	87.2
20	6560	14	255	291	25	21.5	1510	21	90.2
21	3610	16	160	245	27	20.2	2110	18	103
22	1820	18	92.8	216	30	19.1	4810	11	146
23	2110	18	103	202	30	17.8	3190	14	120
24	5120	13	178	189	30	17.0	1800	17	86.4
25	5010	14	196	190	32	18.3	1070	21	64.9
26	5200	13	192	189	34	19.2	710	23	46.9
27	5010	14	188	200	35	21.2	530	24	37.0
28	4550	13	170	1130	34	106	419	25	31.6
29	3010	14	122	2070	22	133	347	27	28.1
30	2240	16	103	1280	16	58.4	298	28	25.8
31	6090	16	251	755	18	38.0	---	---	---
TOTAL	107856	---	4112.7	35942	---	1768.3	59645	---	2046.5
YEAR	396732		27369.66						

STREAMS TRIBUTARY TO LAKE ERIE

04198000 SANDUSKY RIVER NEAR FREMONT, OH--Continued

NITROGEN NITRITE PLUS NITRATE DISSOLVED (MG/L AS N), WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)
OCTOBER			NOVEMBER			DECEMBER			
1	28	.267	.02	53	.114	.02	58	1.41	.23
2	25	.360	.02	52	.136	.02	57	1.35	.21
3	23	.350	.03	56	.228	.04	94	1.92	.48
4	33	.340	.04	54	.248	.04	167	4.03	1.8
5	32	.223	.02	47	.210	.03	169	3.88	1.8
6	29	<.100	.01	42	.188	.03	166	3.33	1.4
7	26	.107	.01	41	.236	.03	160	3.22	1.3
8	24	.239	.02	39	.264	.03	138	2.76	.96
9	23	.231	.02	38	.285	.03	119	2.42	.72
10	24	.219	.02	39	.265	.03	99	2.30	.58
11	23	.208	.02	40	.202	.02	84	2.13	.47
12	25	.198	.02	44	.258	.03	80	2.02	.42
13	27	.188	.02	47	.312	.04	83	1.98	.43
14	28	.178	.02	49	.281	.04	79	2.02	.41
15	29	.169	.02	47	.329	.05	77	2.23	.46
16	30	.166	.02	46	.383	.05	89	2.36	.56
17	31	.166	.02	45	.378	.05	74	2.46	.49
18	35	.166	.02	48	.419	.06	58	2.37	.37
19	38	.166	.02	60	.407	.07	50	2.37	.32
20	40	.166	.02	80	.570	.13	47	2.26	.29
21	39	.121	.01	159	1.14	.50	63	2.10	.36
22	37	<.100	.01	210	1.56	.86	57	2.10	.32
23	38	<.100	.01	168	1.69	.74	58	2.17	.34
24	40	<.100	.01	129	2.02	.67	64	2.22	.38
25	50	.107	.02	100	2.10	.54	63	2.12	.36
26	81	.332	.08	85	1.86	.41	64	2.07	.36
27	81	.224	.05	74	1.57	.31	68	2.15	.40
28	76	.161	.03	68	1.49	.27	68	2.17	.40
29	64	.130	.02	65	1.50	.26	70	2.13	.40
30	56	.125	.02	63	1.44	.25	71	2.06	.40
31	55	.127	.02	---	---	---	71	1.97	.38
TOTAL	1190	---	0.69	2088	---	5.65	2665	---	17.80
JANUARY			FEBRUARY			MARCH			
1	68	1.85	.34	250	8.17	5.5	359	8.52	8.2
2	68	1.80	.33	300	8.21	6.7	334	8.07	7.3
3	72	1.81	.35	270	8.38	6.1	314	7.60	6.4
4	75	2.09	.43	290	8.62	6.7	293	7.22	5.7
5	88	2.10	.50	400	9.18	9.9	268	6.86	5.0
6	99	2.31	.62	520	9.34	13	256	6.31	4.4
7	98	2.43	.64	470	8.92	11	299	6.37	5.2
8	92	2.44	.61	410	9.15	10	562	6.63	10
9	93	2.48	.62	340	9.48	8.7	1080	6.04	17
10	91	2.56	.63	380	9.20	9.4	1260	6.60	23
11	87	2.60	.61	330	8.47	7.5	2480	9.48	64
12	81	2.53	.55	290	8.10	6.3	1680	9.83	45
13	78	2.44	.51	260	7.98	5.6	1100	10.3	30
14	211	2.97	1.9	250	7.94	5.4	751	10.3	22
15	740	6.42	13	420	8.84	10	569	10.1	16
16	2300	6.30	39	3580	9.34	89	463	9.74	13
17	2200	8.24	49	3450	9.73	90	410	9.48	11
18	1200	9.93	32	2320	10.3	65	381	9.19	9.7
19	540	9.27	14	3410	10.3	94	429	8.62	10
20	280	9.23	7.0	3920	10.0	110	1850	7.82	40
21	220	9.71	5.8	2730	10.7	79	3500	9.62	96
22	200	9.71	5.2	1590	10.7	46	2940	10.9	90
23	520	9.81	14	1030	10.5	29	2650	10.8	81
24	1300	10.8	38	758	10.4	21	2220	10.1	63
25	2900	11.4	89	606	10.1	16	1790	10.2	52
26	3800	10.3	110	509	10.1	14	1350	9.96	39
27	2000	9.29	50	443	9.91	12	1180	9.62	33
28	1000	8.67	23	394	9.44	10	1090	10.1	32
29	640	8.43	15	366	9.00	8.9	955	10.2	28
30	480	8.49	11	---	---	---	843	9.80	24
31	300	8.39	6.8	---	---	---	789	9.49	21
TOTAL	21921	---	530.44	30286	---	805.7	34445	---	911.9

STREAMS TRIBUTARY TO LAKE ERIE

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04198000 SANDUSKY RIVER NEAR FREMONT, OH--Continued

NITROGEN NITRITE PLUS NITRATE DISSOLVED (MG/L AS N), WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	LOAD (TONS/ DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	LOAD (TONS/ DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	LOAD (TONS/ DAY)
APRIL			MAY			JUNE			
1	751	9.24	20	688	6.97	14	1160	11.4	38
2	952	9.20	25	616	6.77	12	877	15.3	38
3	961	9.16	25	585	6.57	11	666	15.7	30
4	841	8.94	21	539	6.37	9.6	504	13.2	19
5	723	8.60	18	503	5.94	8.4	471	10.6	14
6	604	8.15	14	449	5.49	6.9	461	15.6	20
7	526	8.00	12	409	5.10	5.8	372	11.8	12
8	475	7.65	10	381	4.82	5.1	342	9.19	8.7
9	429	7.32	8.7	406	4.54	5.1	347	10.2	9.8
10	417	7.02	8.1	403	4.35	4.8	303	9.82	8.3
11	408	6.70	7.6	401	4.07	4.5	252	8.58	6.0
12	381	6.25	6.6	408	3.82	4.3	223	7.55	4.6
13	364	5.69	5.7	416	3.60	4.1	205	6.54	3.6
14	387	5.13	5.5	413	3.37	3.9	181	5.69	2.8
15	420	4.75	5.5	409	3.12	3.5	173	5.03	2.3
16	399	4.54	5.0	410	2.84	3.2	153	4.43	1.8
17	1220	6.11	24	418	2.63	3.0	140	3.84	1.5
18	5440	8.81	130	448	2.64	3.3	496	11.4	16
19	9300	9.37	240	457	2.52	3.2	2470	9.62	68
20	7000	9.13	180	431	2.25	2.7	2200	14.8	91
21	5110	8.76	120	420	1.92	2.2	1170	16.6	55
22	6600	9.00	160	345	1.70	1.6	682	17.2	33
23	5650	8.87	140	301	1.57	1.3	475	17.5	23
24	3910	8.61	95	1380	7.66	35	1810	15.0	71
25	2420	8.35	57	1580	10.4	47	2300	12.9	84
26	1780	8.11	41	862	10.8	27	1230	12.9	46
27	1460	7.87	33	565	11.3	18	920	12.1	32
28	1130	7.63	25	419	11.8	14	603	10.9	19
29	910	7.41	19	335	11.0	10	428	9.76	12
30	782	7.19	16	417	10.1	12	336	8.76	8.2
31	---	---	---	1180	11.1	38	---	---	---
TOTAL	61750	---	1477.7	16994	---	324.5	21950	---	778.6
JULY			AUGUST			SEPTEMBER			
1	279	7.86	6.1	8110	2.97	68	470	1.73	2.4
2	534	8.81	14	5910	2.75	45	331	1.74	1.7
3	601	8.26	14	3470	2.77	27	445	1.70	2.2
4	371	7.02	7.2	2160	3.44	21	1110	1.13	3.6
5	300	7.20	6.0	1370	3.45	14	598	1.36	2.4
6	257	7.51	5.3	831	3.33	8.1	7230	1.68	24
7	228	7.25	4.5	602	3.33	5.8	7140	1.17	23
8	193	7.06	3.7	489	3.09	4.4	4150	1.47	17
9	164	7.00	3.1	492	2.51	3.6	1790	1.70	8.6
10	179	6.52	3.1	491	2.06	3.0	6010	2.07	34
11	273	4.14	3.1	484	1.56	2.2	5540	1.84	28
12	302	2.84	2.4	406	1.12	1.3	2730	1.97	15
13	495	2.84	4.3	464	.885	1.2	1410	2.20	8.8
14	3760	6.18	68	776	1.48	3.3	855	2.39	5.8
15	6670	8.24	150	702	1.98	3.9	598	2.39	4.1
16	8690	9.74	240	721	1.92	3.9	450	2.37	3.1
17	10900	7.76	230	691	1.84	3.6	365	2.33	2.6
18	14000	7.00	260	456	1.58	2.1	349	2.78	3.1
19	9330	7.22	190	360	1.51	1.6	1280	3.54	12
20	6560	6.66	120	291	1.58	1.4	1510	2.38	10
21	3610	5.95	61	245	1.53	1.1	2110	3.18	20
22	1820	5.31	28	216	1.42	.91	4810	2.57	34
23	2110	5.13	31	202	.978	.59	3190	2.67	24
24	5120	3.53	50	189	.868	.50	1800	2.98	15
25	5010	3.50	49	190	.749	.43	1070	3.25	9.9
26	5200	3.40	49	189	.512	.29	710	3.38	6.8
27	5010	3.47	48	200	.456	.28	530	3.40	5.2
28	4550	3.48	44	1130	.728	2.9	419	3.45	4.3
29	3010	3.45	30	2070	1.11	6.5	347	3.52	3.7
30	2240	3.45	22	1280	1.34	4.9	298	3.58	3.3
31	6090	3.36	55	755	1.68	3.6	---	---	---
TOTAL	107856	---	1801.8	35942	---	246.40	59645	---	337.6
YEAR	396732		7238.78						

STREAMS TRIBUTARY TO LAKE ERIE

04198000 SANDUSKY RIVER NEAR FREMONT, OH--Continued

NITROGEN AMMONIA PLUS ORGANIC TOTAL (MG/L AS N), WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	LOAD (TONS/ DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	LOAD (TONS/ DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	LOAD (TONS/ DAY)
OCTOBER			NOVEMBER			DECEMBER			
1	28	.80	.061	53	.66	.10	58	.22	.035
2	25	.76	.052	52	.59	.093	57	.46	.074
3	23	.71	.060	56	.58	.096	94	.64	.16
4	33	.75	.085	54	.55	.088	167	.78	.35
5	32	.83	.093	47	.58	.082	169	.79	.36
6	29	.81	.084	42	.60	.080	166	.79	.33
7	26	.70	.067	41	.56	.073	160	.76	.31
8	24	.72	.064	39	.73	.091	138	.84	.29
9	23	.72	.062	38	.64	.078	119	.64	.19
10	24	.74	.065	39	.50	.061	99	.51	.13
11	23	.75	.065	40	.50	.060	84	.53	.12
12	25	.77	.069	44	.50	.065	80	.56	.12
13	27	.79	.077	47	.50	.070	83	.56	.12
14	28	.81	.082	49	.51	.075	79	.51	.10
15	29	.83	.084	47	.50	.070	77	.46	.096
16	30	.87	.090	46	.50	.069	89	.48	.12
17	31	.72	.076	45	.52	.071	74	.46	.092
18	35	.74	.088	48	.55	.079	58	.43	.068
19	38	.80	.10	60	.54	.095	50	.40	.053
20	40	.81	.10	80	.65	.15	47	.37	.047
21	39	.78	.095	159	.84	.36	63	.35	.060
22	37	.88	.10	210	.89	.50	57	.31	.047
23	38	.83	.10	168	.82	.36	58	.37	.057
24	40	.78	.097	129	.78	.26	64	.43	.075
25	50	.68	.10	100	.75	.19	63	.40	.068
26	81	.73	.17	85	.67	.15	64	.40	.068
27	81	.75	.17	74	.69	.14	68	.43	.079
28	76	.72	.15	68	.73	.13	68	.37	.069
29	64	.75	.14	65	.60	.11	70	.37	.070
30	56	.74	.12	63	.55	.095	71	.40	.077
31	55	.71	.12	---	---	---	71	.41	.079
TOTAL	1190	---	2.886	2088	---	3.941	2665	---	3.914
JANUARY			FEBRUARY			MARCH			
1	68	.34	.063	250	.86	.58	359	.68	.66
2	68	.31	.057	300	.76	.62	334	.71	.64
3	72	.32	.063	270	.62	.45	314	.62	.53
4	75	.41	.083	290	.61	.48	293	.56	.44
5	88	.42	.099	400	.67	.72	268	.51	.37
6	99	.46	.12	520	.75	1.06	256	.43	.30
7	98	.48	.13	470	.62	.79	299	.52	.43
8	92	.54	.14	410	.54	.60	562	.80	1.23
9	93	.51	.13	340	.64	.59	1080	.86	2.50
10	91	.44	.11	380	.65	.67	1260	.87	3.16
11	87	.39	.092	330	.47	.42	2480	2.3	15.7
12	81	.45	.098	290	.36	.28	1680	1.8	8.42
13	78	.44	.094	260	.41	.29	1100	1.2	3.65
14	211	.49	.29	250	.42	.28	751	.87	1.85
15	740	1.0	2.08	420	1.2	1.33	569	.79	1.26
16	2300	1.1	6.76	3580	3.0	30.0	463	.71	.91
17	2200	1.3	7.51	3450	2.7	25.1	410	.74	.84
18	1200	1.4	4.54	2320	2.0	12.5	381	.60	.63
19	540	1.1	1.57	3410	1.5	14.4	429	.51	.61
20	280	1.1	.84	3920	2.1	22.8	1850	.91	5.33
21	220	1.1	.66	2730	2.1	15.3	3500	2.3	22.5
22	200	1.1	.60	1590	1.7	7.56	2940	2.0	17.1
23	520	.98	1.38	1030	1.6	4.36	2650	1.7	12.7
24	1300	1.1	3.69	758	1.3	2.68	2220	1.5	9.68
25	2900	1.1	8.30	606	1.2	1.92	1790	1.4	6.97
26	3800	1.1	11.6	509	1.0	1.39	1350	.99	3.88
27	2000	1.2	6.63	443	.99	1.19	1180	.97	3.31
28	1000	1.1	2.97	394	.85	.91	1090	1.0	3.16
29	640	1.1	1.96	366	.71	.71	955	1.0	2.76
30	480	.95	1.24	---	---	---	843	.84	2.03
31	300	.86	.70	---	---	---	789	.89	1.99
TOTAL	21921	---	64.599	30286	---	149.98	34445	---	135.54

STREAMS TRIBUTARY TO LAKE ERIE

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04198000 SANDUSKY RIVER NEAR FREMONT, OH--Continued

NITROGEN AMMONIA PLUS ORGANIC TOTAL (MG/L AS N), WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)
APRIL			MAY			JUNE			
1	751	.89	1.90	688	.99	1.92	1160	1.1	3.80
2	952	.89	2.41	616	.86	1.49	877	1.3	3.33
3	961	.86	2.36	585	.75	1.23	666	1.4	2.60
4	841	.78	1.86	539	.66	.99	504	1.3	1.80
5	723	.75	1.54	503	.82	1.15	471	2.3	3.57
6	604	.73	1.25	449	.94	1.18	461	1.3	1.82
7	526	.74	1.08	409	.94	1.07	372	.60	.62
8	475	.68	.90	381	.92	.96	342	.84	.80
9	429	.64	.76	406	.87	.98	347	.88	.85
10	417	.56	.65	403	.89	.99	303	.87	.73
11	408	.60	.68	401	.92	1.02	252	.94	.66
12	381	.71	.74	408	.72	.81	223	1.0	.63
13	364	.74	.75	416	.81	.93	205	1.2	.66
14	387	.73	.78	413	.81	.92	181	1.2	.57
15	420	.80	.93	409	.70	.79	173	1.3	.61
16	399	.91	1.00	410	.65	.74	153	1.4	.58
17	1220	1.4	5.83	418	.78	.90	140	1.3	.51
18	5440	3.1	48.4	448	.75	.94	496	2.5	3.22
19	9300	3.9	103	457	.64	.81	2470	2.7	19.5
20	7000	3.5	68.5	431	.65	.78	2200	3.1	19.8
21	5110	3.1	43.4	420	.61	.71	1170	2.5	8.41
22	6600	3.3	59.4	345	.55	.53	682	1.8	3.48
23	5650	3.0	46.6	301	.61	.51	475	1.2	1.66
24	3910	2.6	28.6	1380	2.2	9.49	1810	1.9	11.8
25	2420	2.3	15.5	1580	2.1	9.84	2300	3.1	20.2
26	1780	2.0	9.97	862	1.6	3.89	1230	3.2	11.4
27	1460	1.7	7.21	565	1.4	2.27	920	2.8	7.52
28	1130	1.5	4.87	419	1.4	1.67	603	2.4	4.11
29	910	1.3	3.38	335	1.2	1.15	428	2.0	2.44
30	782	1.1	2.51	417	1.1	1.32	336	1.7	1.62
31	---	---	---	1180	1.1	3.77	---	---	---
TOTAL	61750	---	466.76	16994	---	55.75	21950	---	139.30
JULY			AUGUST			SEPTEMBER			
1	279	1.5	1.14	8110	2.0	46.3	470	.83	1.15
2	534	1.5	2.46	5910	1.6	25.8	331	.75	.75
3	601	1.5	2.61	3470	1.5	14.1	445	.75	1.06
4	371	1.4	1.45	2160	1.4	8.76	1110	1.2	3.75
5	300	1.3	1.12	1370	1.3	5.17	598	1.0	1.81
6	257	1.3	.95	831	1.1	2.70	7230	2.0	43.9
7	228	1.3	.80	602	1.2	2.04	7140	1.5	29.6
8	193	1.3	.66	489	1.1	1.50	4150	1.6	18.4
9	164	1.2	.53	492	1.2	1.73	1790	1.3	6.46
10	179	1.3	.66	491	1.8	2.57	6010	1.8	29.9
11	273	2.0	1.52	484	2.2	3.15	5540	1.6	24.3
12	302	2.0	1.72	406	2.2	2.59	2730	1.3	10.1
13	495	1.7	2.55	464	2.0	2.70	1410	.68	2.84
14	3760	3.4	37.0	776	1.5	3.24	855	.79	1.90
15	6670	3.7	69.3	702	1.2	2.35	598	.79	1.36
16	8690	2.8	68.0	721	1.1	2.18	450	.66	.88
17	10900	2.7	81.7	691	1.2	2.36	365	.60	.65
18	14000	2.0	77.9	456	1.1	1.40	349	.66	.72
19	9330	2.0	51.1	360	.87	.92	1280	1.2	4.42
20	6560	1.9	34.3	291	.78	.68	1510	1.1	4.85
21	3610	1.6	16.0	245	.69	.51	2110	1.3	8.80
22	1820	1.3	6.78	216	.71	.46	4810	1.7	22.2
23	2110	1.2	7.72	202	.85	.51	3190	1.4	12.4
24	5120	1.7	24.1	189	.93	.53	1800	1.1	5.67
25	5010	1.6	21.9	190	1.0	.60	1070	.95	2.93
26	5200	1.6	23.3	189	.69	.39	710	.90	1.81
27	5010	1.6	22.1	200	.73	.44	530	.84	1.29
28	4550	1.7	21.5	1130	1.0	3.18	419	.78	.98
29	3010	1.8	15.5	2070	1.2	7.41	347	.73	.77
30	2240	1.7	10.6	1280	1.0	3.82	298	.68	.63
31	6090	2.1	38.1	755	1.1	2.28	---	---	---
TOTAL	107856	---	645.07	35942	---	152.37	59645	---	246.28
YEAR	396732		2066.390						

STREAMS TRIBUTARY TO LAKE ERIE

04198000 SANDUSKY RIVER NEAR FREMONT, OH--Continued

PHOSPHORUS TOTAL (MG/L AS P), WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)
OCTOBER			NOVEMBER			DECEMBER			
1	28	.060	.005	53	.075	.012	58	.028	.004
2	25	.072	.005	52	.065	.010	57	.026	.004
3	23	.064	.005	56	.055	.009	94	.038	.009
4	33	.078	.009	54	.051	.008	167	.060	.027
5	32	.084	.009	47	.049	.007	169	.050	.023
6	29	.074	.008	42	.047	.006	166	.042	.017
7	26	.060	.006	41	.045	.006	160	.037	.015
8	24	.058	.005	39	.075	.009	138	.033	.011
9	23	.062	.005	38	.065	.008	119	.027	.008
10	24	.066	.006	39	.040	.005	99	.023	.006
11	23	.070	.006	40	.031	.004	84	.023	.005
12	25	.074	.007	44	.025	.003	80	.026	.005
13	27	.078	.008	47	.024	.003	83	.027	.006
14	28	.083	.008	49	.026	.004	79	.024	.005
15	29	.087	.009	47	.025	.004	77	.022	.005
16	30	.072	.007	46	.026	.004	89	.015	.004
17	31	.077	.008	45	.026	.004	74	<.010	.001
18	35	.076	.009	48	.031	.004	58	<.010	.001
19	38	.079	.010	60	.037	.007	50	.013	.002
20	40	.072	.009	80	.051	.011	47	.013	.002
21	39	.063	.008	159	.081	.035	63	.012	.002
22	37	.064	.008	210	.094	.052	57	<.010	.001
23	38	.062	.007	168	.071	.031	58	<.010	.001
24	40	.063	.008	129	.055	.019	64	<.010	.001
25	50	.073	.011	100	.045	.012	63	<.010	.001
26	81	.091	.021	85	.042	.009	64	<.010	.001
27	81	.074	.017	74	.043	.009	68	<.010	.001
28	76	.073	.016	68	.041	.008	68	<.010	.001
29	64	.084	.016	65	.038	.007	70	<.010	.001
30	56	.106	.018	63	.032	.006	71	<.010	.001
31	55	.093	.015	---	---	---	71	<.010	.001
TOTAL	1190	---	0.289	2088	---	0.316	2665	---	0.172
JANUARY			FEBRUARY			MARCH			
1	68	<.010	.002	250	.137	.093	359	.090	.087
2	68	.013	.002	300	.119	.097	334	.082	.074
3	72	.017	.003	270	.097	.071	314	.075	.064
4	75	.019	.004	290	.101	.079	293	.070	.056
5	88	.019	.004	400	.122	.13	268	.067	.049
6	99	.022	.006	520	.132	.19	256	.067	.047
7	98	.025	.007	470	.120	.15	299	.096	.079
8	92	.026	.007	410	.107	.12	562	.144	.22
9	93	.029	.007	340	.099	.091	1080	.155	.45
10	91	.032	.008	380	.087	.089	1260	.187	.69
11	87	.035	.008	330	.070	.063	2480	.588	4.01
12	81	.043	.009	290	.059	.046	1680	.418	1.91
13	78	.037	.008	260	.052	.036	1100	.286	.86
14	211	.057	.040	250	.047	.032	751	.195	.42
15	740	.202	.40	420	.397	.45	569	.153	.25
16	2300	.198	1.23	3580	.881	8.77	463	.125	.16
17	2200	.202	1.20	3450	.802	7.49	410	.102	.12
18	1200	.228	.74	2320	.569	3.65	381	.084	.089
19	540	.131	.19	3410	.599	5.89	429	.077	.091
20	280	.131	.099	3920	.866	9.15	1850	.171	1.03
21	220	.124	.074	2730	.630	4.72	3500	.442	4.39
22	200	.127	.068	1590	.470	2.05	2940	.367	3.07
23	520	.149	.21	1030	.327	.92	2650	.277	2.07
24	1300	.193	.68	758	.230	.47	2220	.261	1.64
25	2900	.179	1.41	606	.195	.32	1790	.243	1.24
26	3800	.177	1.82	509	.162	.22	1350	.203	.79
27	2000	.184	.995	443	.138	.17	1180	.167	.57
28	1000	.158	.43	394	.121	.13	1090	.143	.45
29	640	.152	.26	366	.100	.10	955	.122	.33
30	480	.151	.20	---	---	---	843	.098	.23
31	300	.144	.12	---	---	---	789	.090	.20
TOTAL	21921	---	10.241	30286	---	45.787	34445	---	25.736

STREAMS TRIBUTARY TO LAKE ERIE

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04198000 SANDUSKY RIVER NEAR FREMONT, OH--Continued

PHOSPHORUS TOTAL (MG/L AS P), WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	LOAD (TONS/ DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	LOAD (TONS/ DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	LOAD (TONS/ DAY)
APRIL			MAY			JUNE			
1	751	.088	.19	688	.148	.29	1160	.213	.71
2	952	.087	.24	616	.125	.22	877	.211	.53
3	961	.084	.23	585	.105	.17	666	.196	.37
4	841	.080	.19	539	.089	.13	504	.172	.24
5	723	.079	.16	503	.080	.11	471	.523	.86
6	604	.068	.12	449	.072	.091	461	.307	.42
7	526	.062	.092	409	.060	.068	372	.146	.15
8	475	.056	.074	381	.073	.077	342	.124	.12
9	429	.052	.062	406	.084	.095	347	.121	.12
10	417	.052	.060	403	.073	.081	303	.107	.090
11	408	.054	.061	401	.071	.079	252	.092	.064
12	381	.060	.063	408	.065	.073	223	.088	.053
13	364	.069	.070	416	.063	.073	205	.096	.053
14	387	.070	.075	413	.059	.067	181	.094	.046
15	420	.072	.084	409	.056	.064	173	.097	.045
16	399	.089	.098	410	.057	.065	153	.101	.042
17	1220	.237	1.12	418	.060	.070	140	.099	.037
18	5440	.732	11.4	448	.059	.074	496	.403	.54
19	9300	.952	24.9	457	.056	.071	2470	.644	4.87
20	7000	.737	14.4	431	.051	.061	2200	.889	5.63
21	5110	.558	7.89	420	.050	.059	1170	.458	1.58
22	6600	.633	11.6	345	.047	.045	682	.288	.56
23	5650	.580	9.10	301	.054	.045	475	.243	.32
24	3910	.489	5.40	1380	.373	1.62	1810	.526	3.75
25	2420	.412	2.83	1580	.290	1.34	2300	1.14	7.33
26	1780	.348	1.76	862	.219	.54	1230	1.09	3.91
27	1460	.293	1.23	565	.194	.31	920	.895	2.37
28	1130	.247	.81	419	.172	.20	603	.704	1.20
29	910	.208	.54	335	.141	.13	428	.553	.66
30	782	.176	.39	417	.146	.18	336	.435	.41
31	---	---	---	1180	.230	.79	---	---	---
TOTAL	61750	---	95.239	16994	---	7.288	21950	---	37.080
JULY			AUGUST			SEPTEMBER			
1	279	.342	.27	8110	.557	12.8	470	.229	.32
2	534	.270	.39	5910	.433	7.12	331	.190	.19
3	601	.255	.43	3470	.365	3.59	445	.216	.31
4	371	.276	.28	2160	.342	2.11	1110	.372	1.19
5	300	.258	.22	1370	.316	1.27	598	.360	.62
6	257	.235	.17	831	.253	.62	7230	.852	19.3
7	228	.225	.14	602	.206	.36	7140	.728	14.6
8	193	.222	.12	489	.181	.26	4150	.594	6.99
9	164	.210	.093	492	.171	.25	1790	.433	2.22
10	179	.217	.11	491	.175	.25	6010	.619	10.6
11	273	.265	.20	484	.168	.24	5540	.533	8.35
12	302	.278	.24	406	.182	.22	2730	.421	3.28
13	495	.295	.50	464	.218	.30	1410	.320	1.31
14	3760	.932	10.3	776	.249	.55	855	.271	.66
15	6670	1.00	18.3	702	.192	.38	598	.229	.39
16	8690	.668	16.4	721	.205	.43	450	.192	.26
17	10900	.734	22.1	691	.219	.43	365	.166	.18
18	14000	.503	19.2	456	.208	.27	349	.184	.20
19	9330	.415	10.9	360	.207	.22	1280	.316	1.17
20	6560	.379	6.93	291	.183	.16	1510	.291	1.27
21	3610	.343	3.50	245	.150	.11	2110	.407	2.79
22	1820	.310	1.62	216	.122	.079	4810	.513	6.80
23	2110	.341	2.21	202	.097	.058	3190	1.04	8.64
24	5120	.569	8.16	189	.084	.048	1800	.559	3.04
25	5010	.477	6.64	190	.084	.048	1070	.231	.71
26	5200	.465	6.71	189	.090	.051	710	.204	.41
27	5010	.425	5.88	200	.098	.059	530	.203	.31
28	4550	.448	5.67	1130	.244	.90	419	.194	.24
29	3010	.467	3.98	2070	.391	2.26	347	.179	.19
30	2240	.433	2.77	1280	.376	1.38	298	.164	.15
31	6090	.575	10.9	755	.308	.67	---	---	---
TOTAL	107856	---	165.333	35942	---	37.493	59645	---	96.69
YEAR	396732		521.669						

STREAMS TRIBUTARY TO LAKE ERIE

04198000 SANDUSKY RIVER NEAR FREMONT, OH--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
OCTOBER			NOVEMBER			DECEMBER			
1	28	9	.64	53	8	1.3	58	7	1.1
2	25	7	.45	52	7	1.0	57	7	1.1
3	23	8	.70	56	7	1.3	94	6	1.5
4	33	12	1.4	54	8	1.3	167	7	3.2
5	32	9	1.0	47	8	1.1	169	8	3.8
6	29	6	.58	42	8	1.1	166	9	3.9
7	26	4	.41	41	9	1.2	160	7	2.7
8	24	5	.41	39	9	1.1	138	6	2.0
9	23	6	.49	38	8	.99	119	4	1.3
10	24	6	.52	39	6	.73	99	3	.82
11	23	5	.39	40	5	.55	84	4	.83
12	25	4	.39	44	8	1.1	80	10	2.2
13	27	5	.48	47	5	.73	83	7	1.5
14	28	5	.47	49	5	.71	79	5	1.0
15	29	4	.42	47	5	.67	77	5	1.0
16	30	5	.49	46	4	.60	89	5	1.2
17	31	5	.53	45	4	.56	74	5	1.0
18	35	6	.68	48	6	.82	58	5	.75
19	38	7	.93	60	9	1.5	50	5	.61
20	40	6	.74	80	8	1.8	47	4	.54
21	39	5	.61	159	31	14	63	4	.69
22	37	4	.51	210	39	22	57	4	.59
23	38	5	.65	168	17	7.7	58	4	.58
24	40	6	.75	129	10	3.3	64	4	.61
25	50	7	1.0	100	6	1.6	63	3	.58
26	81	8	1.7	85	4	.94	64	3	.57
27	81	9	1.9	74	4	.79	68	3	.58
28	76	7	1.4	68	4	.73	68	3	.53
29	64	6	1.1	65	4	.70	70	1	.26
30	56	7	1.3	63	4	.72	71	2	.32
31	55	8	1.3	---	---	---	71	1	.23
TOTAL	1190	---	24.34	2088	---	72.64	2665	---	37.59
JANUARY			FEBRUARY			MARCH			
1	68	1	.18	250	27	18	359	15	15
2	68	1	.19	300	27	22	334	18	16
3	72	2	.33	270	30	22	314	20	17
4	75	2	.42	290	33	25	293	19	15
5	88	4	.88	400	35	38	268	17	13
6	99	8	2.1	520	32	46	256	16	11
7	98	5	1.5	470	24	30	299	24	20
8	92	3	.63	410	21	23	562	42	65
9	93	3	.67	340	21	19	1080	62	181
10	91	2	.54	380	21	21	1260	83	303
11	87	2	.47	330	20	18	2480	305	2080
12	81	2	.44	290	20	16	1680	198	922
13	78	2	.46	260	20	14	1100	101	307
14	211	9	7.0	250	20	14	751	53	115
15	740	55	110	420	130	148	569	35	57
16	2300	168	1050	3580	439	4520	463	25	32
17	2200	146	868	3450	408	3830	410	20	23
18	1200	86	279	2320	247	1570	381	17	18
19	540	47	69	3410	386	3770	429	17	21
20	280	27	20	3920	433	4620	1850	276	1930
21	220	22	13	2730	292	2190	3500	394	3870
22	200	22	12	1590	187	819	2940	213	1790
23	520	42	58	1030	120	337	2650	116	871
24	1300	82	288	758	79	164	2220	91	570
25	2900	161	1260	606	53	88	1790	83	426
26	3800	264	2710	509	39	53	1350	70	274
27	2000	203	1090	443	30	36	1180	57	195
28	1000	134	361	394	24	25	1090	49	154
29	640	88	153	366	19	18	955	42	115
30	480	58	76	---	---	---	843	28	67
31	300	39	31	---	---	---	789	26	58
TOTAL	21921	---	8463.81	30286	---	22514	34445	---	14551

STREAMS TRIBUTARY TO LAKE ERIE

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04198000 SANDUSKY RIVER NEAR FREMONT, OH--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
APRIL			MAY			JUNE			
1	751	28	59	688	66	128	1160	86	287
2	952	25	68	616	66	115	877	77	193
3	961	23	62	585	68	112	666	65	123
4	841	24	57	539	62	94	504	56	80
5	723	24	50	503	51	71	471	73	107
6	604	24	41	449	60	75	461	143	186
7	526	24	35	409	58	66	372	83	86
8	475	24	32	381	43	46	342	87	82
9	429	22	26	406	39	43	347	85	81
10	417	19	22	403	34	37	303	50	43
11	408	19	22	401	25	28	252	37	26
12	381	19	20	408	21	24	223	28	17
13	364	21	21	416	19	22	205	16	9.1
14	387	23	25	413	18	21	181	14	7.0
15	420	26	31	409	18	20	173	18	8.5
16	399	32	36	410	17	20	153	19	8.0
17	1220	51	236	418	26	31	140	19	7.3
18	5440	274	4550	448	33	41	496	131	259
19	9300	522	13700	457	37	46	2470	487	3570
20	7000	357	7040	431	41	49	2200	415	2640
21	5110	274	3870	420	45	52	1170	232	803
22	6600	335	6130	345	49	47	682	144	282
23	5650	289	4540	301	52	43	475	107	143
24	3910	212	2350	1380	228	1020	1810	753	5910
25	2420	154	1070	1580	142	669	2300	1160	7920
26	1780	105	532	862	92	226	1230	585	2120
27	1460	75	318	565	81	129	920	304	818
28	1130	60	197	419	67	78	603	159	276
29	910	60	156	335	51	48	428	108	129
30	782	63	140	417	50	60	336	94	88
31	---	---	---	1180	95	329	---	---	---
TOTAL	61750	---	45436	16994	---	3790	21950	---	26308.9
JULY			AUGUST			SEPTEMBER			
1	279	88	68	8110	306	7090	470	66	92
2	534	409	845	5910	183	3040	331	49	49
3	601	546	979	3470	144	1410	445	59	85
4	371	222	231	2160	144	888	1110	123	385
5	300	152	127	1370	123	499	598	114	199
6	257	115	82	831	96	235	7230	576	14300
7	228	87	54	602	73	128	7140	456	9260
8	193	66	34	489	54	76	4150	266	3200
9	164	50	22	492	72	103	1790	164	844
10	179	38	18	491	78	112	6010	249	4350
11	273	29	21	484	80	113	5540	215	3390
12	302	25	21	406	81	96	2730	149	1180
13	495	55	126	464	96	129	1410	93	382
14	3760	1200	14300	776	85	186	855	65	161
15	6670	984	17400	702	68	137	598	51	88
16	8690	492	12100	721	124	276	450	40	53
17	10900	413	12400	691	99	200	365	31	35
18	14000	380	14400	456	70	92	349	30	33
19	9330	350	9160	360	66	70	1280	108	437
20	6560	322	5880	291	54	47	1510	99	436
21	3610	296	3020	245	41	30	2110	170	1380
22	1820	272	1420	216	34	22	4810	234	3070
23	2110	260	1610	202	31	19	3190	144	1320
24	5120	477	6850	189	31	18	1800	97	505
25	5010	391	5430	190	32	19	1070	64	200
26	5200	287	4140	189	32	18	710	52	106
27	5010	219	3020	200	31	19	530	44	69
28	4550	233	2950	1130	296	1670	419	37	46
29	3010	229	1960	2070	326	2090	347	30	32
30	2240	240	1530	1280	130	480	298	25	23
31	6090	331	6420	755	96	210	---	---	---
TOTAL	107856	---	126618	35942	---	19522	59645	---	45710
YEAR	396732		313048.28						

STREAMS TRIBUTARY TO LAKE ERIE

04199000 HURON RIVER AT MILAN, OH

LOCATION.--Lat 41°18'04", long 82°36'36, in SW 1/4 sec. 4, T.5 N., R.22 W., Erie County, Hydrologic Unit 04100012, on right bank on upstream side of bridge on U.S. Highway 250, 0.2 mi northwest of Milan and 2.0 mi downstream from confluence of East and West Branches.

DRAINAGE AREA.--371 mi².

PERIOD OF RECORD.--March 1950 to September 1980, October 1987 to current year.

REVISED RECORDS.--WSP 1912: Drainage area. WRD OH-89-2: 1988.

GAGE.--Water-stage recorder. Datum of gage is 573.26 ft above National Geodetic Vertical Datum of 1929. July 29, 1953 to Oct. 5, 1979, water-stage recorder at site of former highway bridge 500 ft downstream at same datum. July 29, 1953, nonrecording gage at site of former highway 450 ft downstream at same datum.

REMARKS.--Estimated daily discharges: Dec. 5, 6, Dec. 18-Jan. 2, Jan. 17-Feb. 14. Records fair except for periods of estimated daily discharges which are poor. Water-quality data collected at this site 1969 to 1974, 1978 to 1980, 1988 to 1991. Sediment data collected 1970 to 1974, 1988 to 1991.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.3	23	29	20	140	163	289	210	219	54	1760	124
2	7.6	19	29	19	180	127	499	185	141	77	593	100
3	7.6	19	84	27	150	109	420	174	105	103	323	421
4	18	20	45	31	140	104	322	157	85	69	492	714
5	13	19	130	44	220	101	244	135	71	58	386	302
6	11	17	80	40	300	107	189	114	66	48	191	1270
7	16	16	55	35	200	206	166	97	92	42	142	581
8	15	13	36	28	150	847	142	93	80	39	137	437
9	11	15	32	24	140	433	130	89	65	37	153	236
10	10	18	29	22	130	369	119	83	57	51	142	3020
11	12	19	25	22	90	464	115	88	49	65	146	1110
12	15	16	25	20	70	306	103	81	44	68	115	387
13	19	17	34	23	60	198	101	72	41	561	128	229
14	15	24	33	436	54	137	97	67	39	1370	189	155
15	15	19	25	810	236	115	90	64	37	3100	536	112
16	13	18	26	1610	2710	102	96	65	35	2260	1860	91
17	16	17	27	800	883	122	773	65	38	2390	502	76
18	15	20	17	450	455	133	1200	76	192	3530	221	87
19	15	31	21	300	1910	183	1650	70	2060	849	244	478
20	15	31	20	220	1070	612	1010	65	563	427	181	310
21	15	55	21	180	526	1050	1050	59	281	558	125	425
22	15	47	19	150	309	882	2220	51	168	315	98	1420
23	14	43	25	135	256	781	892	52	113	1260	86	673
24	12	35	24	2200	205	811	704	266	593	1900	111	298
25	51	31	22	2250	162	806	653	264	448	822	129	188
26	102	26	20	1000	130	719	613	145	190	409	97	145
27	32	24	19	500	116	562	575	98	124	380	212	123
28	21	25	18	350	111	554	381	76	91	254	1410	104
29	17	24	24	260	158	365	279	65	73	260	646	88
30	16	26	22	210	---	289	245	91	63	590	270	79
31	34	---	21	170	---	278	---	221	---	4490	172	---
TOTAL	596.5	727	1037	12386	11261	12035	15367	3438	6223	26436	11797	13783
MEAN	19.2	24.2	33.5	400	388	388	512	111	207	853	381	459
MAX	102	55	130	2250	2710	1050	2220	266	2060	4490	1860	3020
MIN	7.6	13	17	19	54	101	90	51	35	37	86	76
CFSM	.05	.07	.09	1.08	1.05	1.05	1.38	.30	.56	2.30	1.03	1.24
IN.	.06	.07	.10	1.24	1.13	1.21	1.54	.34	.62	2.65	1.18	1.38

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951 - 1992, BY WATER YEAR (WY)

	54.9	149	349	433	549	687	542	309	203	190	86.5	79.4
MEAN	54.9	149	349	433	549	687	542	309	203	190	86.5	79.4
MAX	402	1259	1909	1302	1422	1697	1536	929	980	1821	514	573
(WY)	1991	1973	1991	1952	1959	1978	1957	1967	1981	1969	1958	1972
MIN	7.86	14.0	9.23	26.8	24.0	117	86.0	46.5	14.9	11.8	11.3	5.76
(WY)	1964	1964	1964	1977	1964	1981	1971	1962	1988	1963	1952	1955

SUMMARY STATISTICS	FOR 1991 CALENDAR YEAR	FOR 1992 WATER YEAR	WATER YEARS 1951 - 1992
ANNUAL TOTAL	77172.8	115086.5	
ANNUAL MEAN	211	314	301
HIGHEST ANNUAL MEAN			528
LOWEST ANNUAL MEAN			145
HIGHEST DAILY MEAN	6000	4490	31400
LOWEST DAILY MEAN	7.6	7.6	3.0
ANNUAL SEVEN-DAY MINIMUM	8.9	12	3.4
INSTANTANEOUS PEAK FLOW		6400	46900
INSTANTANEOUS PEAK STAGE		16.33	31.10
INSTANTANEOUS LOW FLOW		7.6	2.2
ANNUAL RUNOFF (CFSM)	.57	.85	.81
ANNUAL RUNOFF (INCHES)	7.74	11.54	11.04
10 PERCENT EXCEEDS	452	810	683
50 PERCENT EXCEEDS	40	113	84
90 PERCENT EXCEEDS	11	19	15

a Peaks above base in shown Table of peak discharges and stages at continuous-record surface-water-discharge stations.

STREAMS TRIBUTARY TO LAKE ERIE

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04199155 OLD WOMAN'S CREEK AT BERLIN ROAD NR HURON, OH

LOCATION.--Lat 41°20'54", long 82°22'50", Erie County, Hydrologic Unit 04100012, on left downstream side of Berlin Road Bridge, 3.8 mi southeast of Huron.

DRAINAGE AREA.--22.1 mi².

PERIOD OF RECORD.--October 1987 to current year.

GAGE.--Water-stage recorder. Datum of gage is 570 ft above National Geodetic Vertical Datum of 1929, Erie county benchmark.

REMARKS.--Estimated daily discharges: Dec. 17-31, Jan. 1-4, 19-22, 29-31, Feb. 1, 2, 9-15, and Mar. 13-17. Records fair except for periods of estimated record which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge 881 ft³/s May 26, 1989, gage height 11.16 ft; minimum daily discharge, no flow many days.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992 DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.06	.35	.68	6.4	9.5	34	12	6.8	1.1	55	8.1
2	.00	.03	.56	.60	5.0	8.0	55	12	4.5	.92	20	6.5
3	.00	.00	6.7	.90	4.3	6.6	52	13	3.4	.90	10	27
4	.00	.00	3.4	1.3	6.6	5.7	41	9.1	2.8	.68	14	17
5	.00	.00	1.1	1.6	12	5.2	22	7.8	2.8	.79	8.9	9.2
6	.00	.00	.64	1.4	7.3	6.2	15	6.4	2.4	.59	5.3	15
7	.00	.00	.64	1.1	5.5	57	12	5.3	2.1	.47	3.9	12
8	.00	.00	.64	.82	3.5	76	10	5.1	1.9	.44	5.4	7.9
9	.00	.00	.51	.82	2.0	28	8.6	5.7	1.6	.49	3.7	24
10	.00	.01	.35	.81	1.7	33	7.9	4.5	1.4	.86	2.7	133
11	.00	.03	.28	.81	1.4	28	9.2	3.9	1.2	1.3	2.8	31
12	.00	.05	.28	.71	1.3	21	7.1	3.5	1.0	6.8	1.9	14
13	.00	.09	.46	.94	1.3	11	5.3	3.1	.92	34	5.4	8.7
14	.00	.11	.44	60	1.2	9.0	5.1	2.8	.79	15	5.0	6.0
15	.00	.13	.28	29	60	7.8	4.6	2.6	.68	79	3.5	4.3
16	.00	.29	.19	12	137	7.0	6.3	2.4	.61	35	126	3.3
17	.00	.25	.16	5.5	42	14	75	2.4	.60	276	34	2.5
18	.00	.31	.14	3.4	27	22	146	7.3	9.2	103	12	5.0
19	.00	1.9	.12	2.4	165	18	78	3.4	40	24	16	11
20	.00	1.1	.11	2.2	57	44	40	2.6	9.8	12	8.1	5.0
21	.00	1.9	.17	2.1	28	62	50	2.1	8.9	9.1	4.6	42
22	.00	.63	.30	2.0	17	47	115	1.7	5.7	5.5	3.2	61
23	.00	.34	.47	55	13	32	48	2.8	4.0	7.5	2.5	15
24	.00	.47	.40	95	10	77	61	46	10	59	19	7.6
25	2.5	.33	.35	19	8.6	97	81	15	8.5	26	17	5.1
26	2.3	.22	.31	11	7.7	63	109	8.0	4.1	10	6.4	4.2
27	.39	.19	.29	6.1	7.0	55	44	5.6	2.7	8.7	64	3.5
28	.15	.23	.28	4.6	7.7	42	24	3.9	2.0	4.9	182	2.8
29	.07	.28	.40	3.5	18	23	17	3.0	1.6	99	56	2.1
30	.03	.35	.70	3.3	---	21	15	5.6	1.3	94	22	2.0
31	.04	---	.80	7.0	---	18	---	7.5	---	171	13	---
TOTAL	5.48	9.30	21.82	335.59	664.5	954.0	1198.1	216.1	143.30	1088.04	733.3	495.8
MEAN	.18	.31	.70	10.8	22.9	30.8	39.9	6.97	4.78	35.1	23.7	16.5
MAX	2.5	1.9	6.7	95	165	97	146	46	40	276	182	133
MIN	.00	.00	.11	.60	1.2	5.2	4.6	1.7	.60	.44	1.9	2.0
CFSM	.01	.01	.03	.49	1.04	1.39	1.81	.32	.22	1.59	1.07	.75
IN.	.01	.02	.04	.56	1.12	1.61	2.02	.36	.24	1.83	1.23	.83

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1988 - 1992, BY WATER YEAR (WY)

	1988	1989	1990	1991	1992
MEAN	3.96	5.48	24.8	19.7	41.1
MAX	14.8	14.6	98.2	38.7	78.6
(WY)	1991	1990	1991	1990	1992
MIN	.16	.31	.70	8.03	10.3
(WY)	1989	1992	1992	1988	1989

SUMMARY STATISTICS

FOR 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1988 - 1992

ANNUAL TOTAL	5018.74	5865.33	16.1
ANNUAL MEAN	13.7	16.0	23.8
HIGHEST ANNUAL MEAN			8.77
LOWEST ANNUAL MEAN			1991
HIGHEST DAILY MEAN	495	276	677
LOWEST DAILY MEAN	.00	.00	.00
ANNUAL SEVEN-DAY MINIMUM	.00	.00	.00
INSTANTANEOUS PEAK FLOW		711	881
INSTANTANEOUS PEAK STAGE		9.34	11.16
INSTANTANEOUS LOW FLOW		.00	.00
ANNUAL RUNOFF (CFSM)	.62	.73	.73
ANNUAL RUNOFF (INCHES)	8.45	9.87	9.91
10 PERCENT EXCEEDS	25	53	35
50 PERCENT EXCEEDS	.63	4.6	4.3
90 PERCENT EXCEEDS	.00	.05	.00

STREAMS TRIBUTARY TO LAKE ERIE

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 east of Huron.

DRAINAGE AREA.--26.5 mi².

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

GAGE.--Water-stage recorder. Datum of gage is 560.00 ft above National Geodetic Vertical Datum of 1929. Oct. 1982 to Sept. 1985 at same site at datum 0.10 ft lower.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum recorded gage height, 22.20 ft Feb. 5, 1988 due to ice jam; minimum recorded gage height, 9.95 ft Dec. 16, 1987.

EXTREMES FOR CURRENT YEAR.--Maximum recorded gage height, 16.85 ft Feb. 16; minimum recorded gage height, 11.32 ft Mar. 1.

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12.79	12.92	13.15	13.43	16.09	11.77	12.76	13.34	13.76	13.24	13.54	13.32
2	12.81	12.93	13.15	13.44	16.09	12.68	12.93	13.20	13.87	13.35	13.31	13.32
3	12.79	12.90	13.27	13.46	16.09	12.74	13.12	13.32	13.92	13.38	13.42	13.25
4	12.83	12.86	13.30	13.49	16.09	12.85	12.88	13.52	13.98	13.37	13.58	13.71
5	12.85	12.85	13.33	13.49	16.12	12.95	13.08	13.67	14.02	13.36	13.58	13.55
6	12.83	12.84	13.33	13.50	16.14	13.07	13.16	13.80	14.05	13.35	13.58	13.39
7	12.82	12.82	13.36	13.51	16.15	13.35	13.00	13.89	14.10	13.35	13.61	13.42
8	12.82	12.83	13.40	13.51	16.13	14.03	12.88	13.98	14.14	13.37	13.37	13.28
9	12.83	12.83	13.41	13.55	16.11	12.37	12.88	14.11	14.15	13.37	13.43	13.46
10	12.84	12.82	13.41	13.56	16.07	12.53	12.94	14.17	14.15	13.39	13.48	13.51
11	12.83	12.81	13.40	13.56	16.06	12.44	13.23	14.23	14.15	13.42	13.65	13.58
12	12.82	12.83	13.42	13.57	16.06	12.25	13.36	14.30	14.15	13.44	13.66	13.52
13	12.83	12.86	13.42	13.58	16.06	12.33	13.48	14.32	14.15	13.90	13.71	13.47
14	12.84	12.86	13.43	13.87	16.06	12.36	13.57	14.36	14.13	14.23	14.11	13.36
15	12.85	12.87	13.40	14.32	16.13	12.61	13.67	14.37	14.10	14.44	14.38	13.35
16	12.83	12.87	13.38	14.51	15.02	12.42	13.78	14.41	14.10	13.47	14.70	13.31
17	12.82	12.88	13.40	14.57	12.29	12.34	14.02	14.46	14.11	13.59	13.50	13.17
18	12.82	12.91	13.38	14.61	12.36	13.17	13.37	14.52	14.27	13.57	13.34	13.09
19	12.79	12.98	13.37	14.65	12.05	13.22	13.24	14.59	14.66	13.41	13.48	13.51
20	12.77	13.03	13.37	14.67	12.09	12.58	13.04	14.60	14.92	13.24	13.46	13.41
21	12.75	13.08	13.39	14.68	12.06	12.70	13.01	14.61	15.03	13.69	13.42	13.49
22	12.74	13.11	13.39	14.70	12.30	13.22	13.03	14.63	15.12	13.74	13.44	13.78
23	12.74	13.14	13.39	14.84	12.53	12.64	13.01	14.64	15.17	13.87	13.43	14.26
24	12.74	13.17	13.39	15.50	12.71	12.49	13.13	15.03	15.25	13.92	13.40	14.03
25	12.75	13.14	13.40	15.83	12.23	12.54	13.27	14.74	14.63	13.61	13.34	13.99
26	12.86	13.13	13.40	15.95	12.09	12.60	13.39	13.20	13.10	13.39	13.33	13.88
27	12.89	13.14	13.40	16.00	12.02	12.71	13.43	13.18	13.12	13.53	13.43	13.94
28	12.89	13.14	13.39	16.02	12.18	12.65	13.73	13.28	13.10	13.56	13.79	13.98
29	12.92	13.16	13.39	16.03	12.37	12.58	13.42	13.34	13.05	13.50	13.17	14.04
30	12.91	13.19	13.41	16.03	---	12.81	13.25	13.48	13.10	14.11	12.78	14.13
31	12.92	---	13.43	16.05	---	12.57	---	13.62	---	14.45	13.11	---
MEAN	12.82	12.96	13.37	14.47	14.34	12.70	13.24	14.03	14.12	13.60	13.53	13.58
MAX	12.92	13.19	13.43	16.05	16.15	14.03	14.02	15.03	15.25	14.45	14.70	14.26
MIN	12.74	12.81	13.15	13.43	12.02	11.77	12.76	13.18	13.05	13.24	12.78	13.09

CAL YR 1991 MEAN 13.30 MAX 15.16 MIN 12.18
WTR YR 1992 MEAN 13.56 MAX 16.15 MIN 11.77

STREAMS TRIBUTARY TO LAKE ERIE

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04199175 LAKE ERIE AT RUGGLES BEACH, OH

LOCATION.--Lat 41°22'59", long 82°28'22", Erie County, Hydrologic Unit 04100012, on left bank, at mouth of Cranberry Creek, at Ruggles Beach, 4.5 mi east of Huron.

PERIOD OF RECORD.--Oct. 29, 1986 to current year.

GAGE.--Water-stage recorder. Datum of gage is 560.00 ft above 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, 17.98 ft Jan. 19, 1987; minimum recorded gage height, 10.98 ft several days in 1990, 1991, and 1992.

EXTREMES FOR CURRENT YEAR.--Maximum recorded gage height, 15.07 ft July 31, minimum recorded gage height, 10.98 ft Nov. 24, Dec. 14, 15, and Jan. 23, 24.

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12.53	12.50	12.27	12.36	12.31	12.95	13.00	13.30	13.50	13.63	13.71	13.65
2	12.42	11.28	12.82	12.42	12.49	12.82	12.92	13.51	13.55	13.67	13.71	13.68
3	12.58	11.51	11.91	12.48	12.33	12.81	13.03	13.54	13.58	13.31	13.80	13.52
4	12.65	11.97	11.46	12.40	12.46	12.82	13.01	13.61	13.60	13.33	13.88	13.84
5	11.98	12.02	11.82	12.40	12.36	12.88	13.07	13.60	13.47	13.33	13.89	13.78
6	11.83	11.60	11.96	12.22	12.39	12.76	12.98	13.57	13.42	13.45	13.93	13.70
7	12.21	12.37	11.87	12.28	12.46	12.74	13.07	13.70	13.48	13.43	13.91	13.72
8	12.03	12.26	12.19	12.48	12.31	12.77	13.07	13.52	13.51	13.30	13.71	13.55
9	12.07	12.29	12.29	12.06	12.34	12.89	13.17	13.51	13.39	13.35	13.80	13.73
10	12.43	12.50	12.08	12.27	12.44	12.72	13.10	13.57	13.50	13.37	13.83	13.52
11	12.43	12.35	12.17	12.09	12.57	12.64	13.12	13.55	13.54	13.45	13.89	13.87
12	12.53	12.08	12.20	12.11	12.41	12.68	13.15	13.50	13.50	13.34	13.89	13.84
13	12.51	11.68	12.31	12.30	12.39	12.78	13.10	13.51	13.45	13.45	13.99	13.84
14	12.24	12.13	11.67	12.65	12.51	12.91	13.20	13.56	13.48	13.49	14.14	13.74
15	12.06	11.98	11.59	12.37	12.24	12.73	13.08	13.57	13.73	13.74	14.10	13.72
16	12.31	12.33	12.03	11.86	12.69	12.75	13.07	13.40	13.58	13.73	13.92	13.71
17	12.27	12.32	11.80	11.59	12.67	13.25	13.26	13.56	13.37	13.67	13.85	13.55
18	12.24	12.19	12.38	11.94	12.46	13.09	13.31	13.55	13.26	13.70	13.68	13.46
19	12.49	12.22	12.27	11.84	12.46	12.87	13.30	13.52	13.52	13.78	13.81	13.79
20	12.26	12.29	12.08	12.11	12.53	12.90	13.34	13.53	13.55	13.65	13.79	13.79
21	12.14	12.40	11.75	12.12	12.71	13.21	13.17	13.48	13.48	13.93	13.38	13.67
22	12.23	12.44	11.64	12.56	12.89	12.90	13.40	13.50	13.40	14.01	13.56	13.83
23	12.26	12.22	12.20	12.14	12.90	12.87	13.33	13.71	13.48	14.01	13.41	14.06
24	12.29	11.18	11.94	12.07	12.58	12.82	13.38	13.61	13.36	14.01	13.27	14.09
25	12.27	11.58	12.29	12.49	12.50	12.99	13.45	13.51	13.53	13.88	13.44	13.92
26	12.45	12.07	12.10	12.33	12.48	12.96	13.50	13.43	13.50	13.80	13.65	13.84
27	12.57	11.63	12.31	12.37	12.57	12.93	13.48	13.46	13.46	13.89	13.77	13.35
28	13.17	12.08	12.46	12.28	12.59	13.00	13.47	13.54	13.51	13.82	13.69	13.60
29	12.71	12.31	12.34	12.18	12.20	13.07	13.52	13.50	13.44	13.75	13.39	13.74
30	12.60	11.82	12.54	12.42	---	12.96	13.47	13.47	13.49	14.14	13.07	13.70
31	12.64	---	12.37	12.57	---	13.01	---	13.47	---	14.17	13.47	---
MEAN	12.37	12.05	12.10	12.25	12.49	12.89	13.22	13.53	13.49	13.66	13.72	13.73
MAX	13.17	12.50	12.82	12.65	12.90	13.25	13.52	13.71	13.73	14.17	14.14	14.09
MIN	11.83	11.18	11.46	11.59	12.20	12.64	12.92	13.30	13.26	13.30	13.07	13.35

CAL YR 1991 MEAN 13.17 MAX 14.41 MIN 11.18
WTR YR 1992 MEAN 12.96 MAX 14.17 MIN 11.18

STREAMS TRIBUTARY TO LAKE ERIE

04199287 VERMILION RIVER NEAR FITCHVILLE, OH

LOCATION.--Lat 41°07'52", long 82°28'13, Huron County, Hydrologic Unit 04100012, on left bank upstream side of Prospect Road Bridge, 2.6 mi north of Fitchville.

DRAINAGE AREA.--112 mi².

PERIOD OF RECORD.--May 1987 to September 1989 and October 1990 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 903 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Dec. 16 to Jan. 4, Jan. 16-22, 26-31, Feb. 2-4, 9-14. Records fair. Sediment data collected at this site 1987 to 1989.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,900 ft³/s July 2, 1987, gage height, 14.80 ft; (from flood mark), from drainage area adjustment of slope-area estimate of flow at Fitchville.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.34	3.6	2.7	1.8	46	76	86	42	11	8.7	416	23
2	.29	3.4	3.2	1.7	38	52	131	38	11	7.5	142	18
3	.27	2.8	18	1.9	31	34	109	44	9.2	12	84	55
4	.56	2.4	23	2.1	30	27	86	37	7.9	8.3	68	171
5	.70	2.2	11	2.5	70	22	67	31	7.2	6.4	52	54
6	.80	2.2	5.6	2.5	59	28	52	28	55	5.1	36	31
7	.67	2.2	4.1	2.4	46	175	45	24	44	4.4	27	30
8	.79	2.1	3.3	2.1	33	458	40	21	21	4.1	26	19
9	.97	2.1	3.2	2.1	23	194	34	24	15	4.4	132	52
10	1.5	2.1	2.7	2.1	19	127	30	28	11	4.5	57	394
11	1.8	2.1	2.3	2.1	16	131	32	23	9.1	9.9	32	175
12	2.0	2.1	2.1	2.2	15	88	42	19	7.4	12	22	71
13	2.1	2.4	2.7	2.4	14	63	37	17	6.4	215	37	43
14	2.3	2.5	2.9	148	13	45	29	15	5.7	454	33	30
15	2.5	2.7	2.8	180	147	36	26	14	5.2	840	96	24
16	2.5	2.7	2.1	54	716	28	26	13	11	1190	192	19
17	2.3	2.7	1.9	35	271	30	477	11	8.3	822	65	16
18	2.4	2.8	1.8	25	154	39	1080	11	223	1180	33	20
19	2.1	3.7	1.7	20	348	113	934	11	231	422	24	139
20	2.1	4.2	1.6	17	259	267	275	12	76	171	18	74
21	2.0	5.2	1.6	14	148	313	181	10	44	176	14	46
22	1.9	4.7	2.0	13	100	215	276	9.0	30	125	12	543
23	1.9	3.5	2.4	84	79	243	180	8.5	22	338	10	208
24	2.0	3.4	4.0	494	62	210	123	15	60	946	9.0	89
25	2.1	3.1	5.0	239	49	156	109	17	81	498	8.4	55
26	2.1	2.6	3.5	80	42	205	106	16	38	162	8.1	40
27	2.2	2.2	2.6	52	36	182	90	11	24	111	69	31
28	2.2	2.1	2.3	39	32	163	68	9.2	17	75	248	25
29	2.4	2.1	2.0	31	81	107	52	7.8	13	77	155	21
30	2.6	2.6	1.9	28	---	84	46	8.4	11	153	61	17
31	3.6	---	1.8	34	---	87	---	9.6	---	1500	34	---
TOTAL	53.99	84.5	127.8	1614.9	2977	3998	4869	584.5	1115.4	9542.3	2220.5	2533
MEAN	1.74	2.82	4.12	52.1	103	129	162	18.9	37.2	308	71.6	84.4
MAX	3.6	5.2	23	494	716	458	1080	44	231	1500	416	543
MIN	.27	2.1	1.6	1.7	13	22	26	7.8	5.2	4.1	8.1	16

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1988 - 1992, BY WATER YEAR (WY)

	1988	1989	1990	1991	1992
MEAN	37.4	29.1	187	92.1	177
MAX	129	62.3	616	146	315
(WY)	1991	1989	1991	1991	1988
MIN	1.74	2.82	4.12	38.7	82.1
(WY)	1992	1992	1992	1988	1989

SUMMARY STATISTICS

FOR 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1988 - 1992

ANNUAL TOTAL	20976.76	29720.89	
ANNUAL MEAN	57.5	81.2	92.3
HIGHEST ANNUAL MEAN			124
LOWEST ANNUAL MEAN			60.9
HIGHEST DAILY MEAN	1170	1500	3940
LOWEST DAILY MEAN	.30	.27	.00
ANNUAL SEVEN-DAY MINIMUM	.01	.52	.00
INSTANTANEOUS PEAK FLOW		1920	6290
INSTANTANEOUS PEAK STAGE		9.44	14.03
INSTANTANEOUS LOW FLOW		.27	.00
10 PERCENT EXCEEDS	135	197	195
50 PERCENT EXCEEDS	5.0	23	26
90 PERCENT EXCEEDS	.33	2.1	1.6

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 downstream from confluence of East and West Branches.

DRAINAGE AREA.--396 mi².

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 above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Jan. 17-22, Feb. 8-14, and Sept. 23-30. Records good except for discharges greater than 1,000 ft³/s and for periods of estimated record, 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.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.8	6.9	9.7	17	98	336	356	153	62	30	4460	95
2	3.9	7.9	22	16	115	232	576	162	64	25	1070	71
3	4.0	5.6	67	17	96	165	729	141	53	72	396	220
4	48	6.0	45	18	97	126	654	124	45	33	325	667
5	22	6.8	66	16	121	103	445	105	38	22	415	334
6	9.0	8.0	44	15	151	127	287	89	35	17	213	150
7	5.5	9.7	29	13	120	536	212	77	112	14	134	98
8	5.2	10	22	13	90	1780	170	64	55	15	106	67
9	5.4	9.6	17	14	72	1290	139	65	37	13	87	70
10	9.2	8.8	15	14	56	600	122	57	29	37	99	553
11	5.5	15	17	12	45	493	119	57	24	45	128	845
12	8.0	15	16	12	39	423	128	53	20	84	81	360
13	15	16	18	17	35	324	191	46	17	724	98	167
14	12	12	17	261	33	238	153	40	15	1950	96	104
15	13	20	14	422	216	182	112	35	14	2570	117	76
16	7.8	25	13	276	1270	149	104	34	12	3840	348	59
17	6.7	21	13	160	1360	152	528	37	19	3380	498	47
18	6.4	20	13	120	646	253	2950	37	69	4470	194	71
19	8.9	30	12	90	1130	291	4060	38	206	2690	139	83
20	11	23	12	74	1210	675	1860	40	357	626	105	224
21	8.8	29	18	64	609	1040	683	38	160	417	77	250
22	8.9	22	15	56	352	884	670	33	101	384	58	805
23	9.2	19	17	137	250	677	611	33	70	292	45	1300
24	11	21	18	529	203	758	444	114	70	1450	174	550
25	25	17	18	663	157	1400	451	108	163	2040	338	250
26	16	13	16	359	125	1170	539	118	174	819	96	120
27	15	11	17	212	107	1090	433	71	96	648	130	160
28	13	12	17	129	115	933	289	54	62	425	869	130
29	10	11	19	96	283	582	206	45	67	394	876	90
30	9.6	10	21	80	---	363	169	62	42	1300	370	74
31	7.8	---	17	86	---	304	---	62	---	5040	160	---
TOTAL	344.6	441.3	674.7	4008	9201	17676	18390	2192	2288	33866	12302	8090
MEAN	11.1	14.7	21.8	129	317	570	613	70.7	76.3	1092	397	270
MAX	48	30	67	663	1360	1780	4060	162	357	5040	4460	1300
MIN	3.8	5.6	9.7	12	33	103	104	33	12	13	45	47
CFSM	.03	.04	.05	.33	.80	1.44	1.55	.18	.19	2.76	1.00	.68
IN.	.03	.04	.06	.38	.86	1.66	1.73	.21	.21	3.18	1.16	.76

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1945 - 1992, BY WATER YEAR (WY)

	MEAN	56.6	202	398	449	626	802	612	366	200	149	71.3	77.7
MAX	431	1238	1885	1825	1505	1866	1728	1122	1245	1472	529	701	
(WY)	1991	1986	1991	1952	1959	1978	1957	1969	1947	1969	1958	1972	
MIN	2.34	5.78	5.82	8.48	16.6	135	22.0	50.0	10.6	7.42	4.72	2.84	
(WY)	1945	1945	1945	1945	1964	1953	1946	1963	1988	1991	1952	1946	

SUMMARY STATISTICS

FOR 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1945 - 1992

ANNUAL TOTAL	77732.5		109473.6										
ANNUAL MEAN	213		299										
HIGHEST ANNUAL MEAN										333			
LOWEST ANNUAL MEAN										534			1973
HIGHEST DAILY MEAN	5680	Feb 20								130			1953
LOWEST DAILY MEAN	3.5	Aug 7								24900			Jan 22 1959
ANNUAL SEVEN-DAY MINIMUM	4.3	Aug 10								.60			Oct 5 1944
INSTANTANEOUS PEAK FLOW										1.4			Oct 1 1944
INSTANTANEOUS PEAK STAGE										51700			Jul 6 1969
INSTANTANEOUS LOW FLOW										26.40			Jul 6 1969
ANNUAL RUNOFF (CFSM)	.54									.00			Oct 10 1956
ANNUAL RUNOFF (INCHES)	7.30									.84			
10 PERCENT EXCEEDS	480									11.41			
50 PERCENT EXCEEDS	22									819			
90 PERCENT EXCEEDS	5.6									73			
										10			

a Peaks above base in shown Table of peak discharges and stages at continuous-record surface-water-discharge stations.

STREAMS TRIBUTARY TO LAKE ERIE

04201500 ROCKY RIVER NEAR BERE, 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 northwest of Berea.

DRAINAGE AREA.--267 mi².

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. WRD-OH-2-1983: 1978-1982(M).

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

REMARKS.--Estimated daily discharges: Jan. 16-22, Feb. 6-14. Records good except those for periods of estimated record which are fair. Some regulation at low flow by small reservoirs on East Branch. Some interbasin 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.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	43	68	82	180	411	401	196	177	39	1830	102
2	18	45	71	66	150	291	567	173	109	37	444	71
3	18	44	572	57	138	222	477	178	76	36	247	352
4	143	46	333	55	161	174	427	159	63	34	328	802
5	75	46	138	54	173	146	306	128	77	31	353	288
6	49	44	84	47	130	246	219	117	161	31	171	142
7	39	48	71	46	120	747	187	105	79	30	114	91
8	31	51	66	43	100	1210	172	85	66	35	103	72
9	26	50	59	55	90	621	143	117	56	35	110	84
10	46	49	52	65	80	423	140	110	47	70	89	964
11	68	157	49	68	74	494	212	101	42	203	95	447
12	85	161	45	64	70	383	373	95	43	152	71	172
13	91	160	62	77	64	314	289	83	39	1490	163	101
14	55	104	62	1210	60	235	189	75	36	690	128	70
15	69	108	57	665	571	206	157	69	35	1780	143	56
16	55	160	82	200	2580	170	149	65	38	1680	373	41
17	48	105	43	160	836	216	1410	66	34	2440	204	34
18	41	78	47	140	530	385	2660	174	198	2600	114	53
19	47	89	45	120	1710	413	2410	146	270	501	159	517
20	48	97	50	100	984	632	706	96	121	230	99	210
21	42	181	71	90	509	769	557	74	76	253	69	151
22	38	100	83	300	335	541	846	64	58	202	56	1370
23	40	75	110	819	306	477	496	72	49	158	48	513
24	37	102	149	1530	236	504	406	554	144	962	123	196
25	47	69	129	481	194	1090	502	324	160	1020	353	113
26	67	59	79	286	168	1310	478	151	88	492	148	78
27	51	50	59	216	149	1120	344	110	73	545	1130	87
28	48	53	56	177	201	998	241	80	54	235	2020	105
29	44	59	64	148	857	472	187	64	46	378	1000	62
30	42	62	92	135	---	354	192	118	42	2400	293	45
31	42	---	88	171	---	328	---	228	---	8720	157	---
TOTAL	1569	2495	3036	7727	11756	15902	15843	4177	2557	27509	10735	7389
MEAN	50.6	83.2	97.9	249	405	513	528	135	85.2	887	346	246
MAX	143	181	572	1530	2580	1310	2660	554	270	8720	2020	1370
MIN	18	43	43	43	60	146	140	64	34	30	48	34
CFSM	.19	.31	.37	.93	1.52	1.92	1.98	.50	.32	3.32	1.30	.92
IN.	.22	.35	.42	1.08	1.64	2.22	2.21	.58	.36	3.83	1.50	1.03

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1924 - 1992, BY WATER YEAR (WY)

	MEAN	87.0	198	341	382	482	597	490	295	167	118	73.0	98.1
MAX	935	1080	1534	1398	1245	1253	1374	845	911	887	553	820	
(WY)	1927	1986	1991	1930	1959	1984	1961	1984	1947	1992	1935	1924	
MIN	1.25	9.14	8.15	32.4	17.0	141	40.9	17.6	10.1	4.25	.90	.94	
(WY)	1934	1964	1964	1945	1934	1969	1946	1934	1933	1954	1933	1933	

SUMMARY STATISTICS	FOR 1991 CALENDAR YEAR	FOR 1992 WATER YEAR	WATER YEARS 1924 - 1992
ANNUAL TOTAL	80283	110695	
ANNUAL MEAN	220	302	276
HIGHEST ANNUAL MEAN			437
LOWEST ANNUAL MEAN			79.5
HIGHEST DAILY MEAN	3720	Feb 20	14300
LOWEST DAILY MEAN	13	Aug 3	.20
ANNUAL SEVEN-DAY MINIMUM	16	Jul 28	.27
INSTANTANEOUS PEAK FLOW			21400
INSTANTANEOUS PEAK STAGE		10200	18.60
INSTANTANEOUS LOW FLOW		7.21	.20
ANNUAL RUNOFF (CFSM)	.32	1.13	1.03
ANNUAL RUNOFF (INCHES)	11.19	15.42	14.05
10 PERCENT EXCEEDS	555	695	643
50 PERCENT EXCEEDS	78	117	80
90 PERCENT EXCEEDS	22	44	9.9

a Peaks above base in shown Table of peak discharges and stages at continuous-record surface-water-discharge stations.

STREAMS TRIBUTARY TO LAKE ERIE

83

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 downstream from Black Brook.

DRAINAGE AREA.--151 mi².

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 above National Geodetic Vertical Datum of 1929. Prior to Aug. 26, 1927, nonrecording gage and Aug. 26, 1927, to Dec. 31, 1935, water-stage recorder, at site 2.8 mi downstream at different datum. Oct. 20, 1944, to Oct. 22, 1946, nonrecording gage at present site and datum.

REMARKS.--Estimated daily discharges: Oct. 15 to Nov. 4, Feb. 6-14. Records good except for estimated daily discharges, which are fair. Flow regulated by East Branch Reservoir, usable capacity, 4,140 acre-ft, 14.6 mi upstream since 1939 and by LaDue Reservoir, usable capacity, 18,110 acre-ft, 9.8 mi upstream since 1961. Water-quality data collected at this site 1965 to 1977.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3670 ft³/s Jan. 23, 1959, gage height 8.11 ft; minimum daily, 6.6 ft³/s Sept. 10, 1933.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	26	42	54	131	218	578	174	91	22	351	925
2	32	26	45	49	129	244	497	163	82	20	361	742
3	41	25	80	47	108	242	434	175	68	20	336	601
4	47	24	116	49	92	214	382	173	58	23	302	542
5	64	23	104	52	84	176	337	152	54	24	263	557
6	64	23	81	51	80	142	295	128	54	24	221	533
7	64	25	64	47	74	154	251	109	50	25	176	472
8	66	25	60	43	68	184	214	94	47	49	138	431
9	94	26	61	41	62	199	180	89	43	83	112	400
10	136	27	58	48	58	212	155	91	38	122	88	418
11	152	32	53	56	52	220	151	88	32	136	184	423
12	156	38	46	56	49	212	168	82	28	142	208	424
13	154	43	45	54	46	208	170	76	26	166	238	400
14	105	43	49	79	44	190	156	67	25	170	228	360
15	76	43	50	130	60	172	133	59	23	195	225	318
16	70	56	47	138	171	149	117	52	21	211	327	276
17	58	59	44	196	228	133	163	51	20	196	383	237
18	50	49	41	195	340	130	266	74	35	205	423	210
19	42	44	39	167	466	135	398	79	54	226	406	216
20	33	43	50	130	581	147	478	74	43	266	358	229
21	35	36	38	108	700	154	481	64	35	295	308	229
22	37	33	39	95	689	156	446	56	31	250	259	246
23	35	32	42	96	568	155	398	49	28	192	217	256
24	33	30	52	161	449	151	360	56	30	155	184	253
25	31	29	61	217	357	161	353	75	31	179	162	231
26	31	28	58	245	288	246	347	71	28	183	144	202
27	30	26	52	254	221	431	337	63	27	205	138	171
28	29	26	47	233	174	752	310	55	28	197	238	137
29	28	31	46	208	190	909	266	46	25	175	542	107
30	27	34	53	179	---	819	224	49	23	188	961	114
31	27	---	58	152	---	685	---	79	---	323	1050	---
TOTAL	1864	1005	1721	3630	6559	8300	9045	2713	1178	4667	9531	10660
MEAN	60.1	33.5	55.5	117	226	268	301	87.5	39.3	151	307	355
MAX	156	59	116	254	700	909	578	175	91	323	1050	925
MIN	17	23	38	41	44	130	117	46	20	20	88	107
CFSM	.40	.22	.37	.78	1.50	1.77	2.00	.58	.26	1.00	2.04	2.35
IN.	.46	.25	.42	.89	1.62	2.04	2.23	.67	.29	1.15	2.35	2.63

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1961 - 1992, BY WATER YEAR (WY)

MEAN	109	196	280	255	360	450	353	205	130	103	89.1	109
MAX	315	616	816	589	883	835	649	569	542	325	307	374
(WY)	1991	1986	1978	1991	1976	1963	1961	1984	1989	1969	1992	1975
MIN	39.0	33.5	45.2	43.5	56.6	174	134	59.8	35.2	48.4	37.1	36.6
(WY)	1984	1992	1961	1961	1963	1989	1986	1987	1991	1991	1961	1967

SUMMARY STATISTICS

FOR 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1961 - 1992

ANNUAL TOTAL	62607	60873	
ANNUAL MEAN	172	166	219
HIGHEST ANNUAL MEAN			301
LOWEST ANNUAL MEAN			131
HIGHEST DAILY MEAN	2360	1050	3250
LOWEST DAILY MEAN	17	17	12
ANNUAL SEVEN-DAY MINIMUM	21	22	13
INSTANTANEOUS PEAK FLOW		1070	3320
INSTANTANEOUS PEAK STAGE		4.04	7.67
INSTANTANEOUS LOW FLOW		17	12
ANNUAL RUNOFF (CFSM)	1.14	1.10	1.45
ANNUAL RUNOFF (INCHES)	15.42	15.00	19.73
10 PERCENT EXCEEDS	453	398	511
50 PERCENT EXCEEDS	64	110	126
90 PERCENT EXCEEDS	27	29	43

STREAMS TRIBUTARY TO LAKE ERIE

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 upstream from North Portage Path bridge at Old Portage, 1.2 mi downstream from Little Cuyahoga River, and 4 mi northwest of Akron City Hall.

DRAINAGE AREA.--404 mi².

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 above National Geodetic Vertical Datum of 1929, unadjusted.

Prior to Dec. 21, 1923, nonrecording gage at same site and datum.

REMARKS.--No estimated daily discharges. Records good. Natural flow of stream affected by diversions, storage reservoirs and power plants. At Lake Rockwell, 17.7 mi upstream from gage, an average of 71 ft³/s was diverted for municipal supply of city of Akron. Sewage from city enters river 2.9 mi downstream from station. Some diversion from the Tuscarawas River basin drainage into this basin at Portage Lakes (see REMARKS for station 03117000 in volume 1 of this report). Sediment data collected at this site 1972-1981.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	68	62	76	73	251	424	1160	548	158	60	1960	1140
2	67	60	168	71	211	413	1080	356	146	52	1350	1090
3	68	60	617	72	194	411	861	302	129	82	1000	1130
4	138	60	207	78	187	371	736	284	124	75	1010	1100
5	107	60	150	73	187	340	635	342	174	165	811	932
6	91	60	127	66	182	418	589	318	122	98	635	805
7	68	60	107	69	183	538	638	277	104	68	539	745
8	66	60	98	67	182	668	232	250	95	67	801	789
9	68	63	100	64	174	563	209	264	83	67	588	1130
10	173	62	90	69	166	540	227	240	77	148	365	1640
11	105	124	84	72	81	543	262	231	73	225	354	1170
12	90	104	82	64	101	493	258	215	70	164	546	927
13	99	106	133	73	75	442	213	192	69	1170	559	848
14	84	87	110	374	87	390	205	145	164	567	478	784
15	97	85	94	126	190	347	229	137	84	1170	655	718
16	98	89	90	119	266	310	428	131	65	938	1130	379
17	94	80	82	135	228	314	901	139	62	1130	1120	329
18	108	74	80	160	417	327	1130	191	208	1090	811	385
19	119	93	77	203	677	401	1060	135	130	899	638	399
20	106	91	72	277	850	394	1110	133	88	784	709	341
21	69	87	86	184	855	419	1200	98	81	743	609	847
22	67	83	82	161	942	486	1160	85	72	648	477	1860
23	68	87	100	331	940	460	982	179	74	575	391	1450
24	67	91	97	403	815	406	936	219	170	759	515	1040
25	66	85	88	346	662	461	883	121	89	970	388	922
26	63	82	82	326	530	676	757	108	79	838	320	787
27	69	73	80	324	436	1090	393	100	70	659	494	653
28	65	74	76	315	429	1190	523	95	66	497	1570	512
29	60	77	85	350	516	1210	645	114	64	476	1120	424
30	61	78	87	309	---	1340	593	220	62	1310	932	388
31	61	---	77	277	---	1290	---	216	---	2640	1050	---
TOTAL	2630	2357	3584	5631	11014	17675	20235	6385	3052	19134	23925	25664
MEAN	84.8	78.6	116	182	380	570	674	206	102	617	772	855
MAX	173	124	617	403	942	1340	1200	548	208	2640	1960	1860
MIN	60	60	72	64	75	310	205	85	62	52	320	329

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1922 - 1992, BY WATER YEAR (WY)

MEAN	211	312	466	551	669	871	731	468	303	232	179	210
MAX	1205	1307	1516	1807	1592	1416	1520	1225	1371	676	772	1150
(WY)	1927	1986	1928	1952	1976	1927	1940	1984	1989	1976	1992	1926
MIN	50.8	56.5	48.3	83.3	86.1	282	166	77.0	72.4	50.4	56.9	47.1
(WY)	1934	1964	1964	1961	1963	1931	1935	1934	1988	1954	1962	1964

SUMMARY STATISTICS

FOR 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1922 - 1992

ANNUAL TOTAL	144068	141286	
ANNUAL MEAN	395	386	433
HIGHEST ANNUAL MEAN			669
LOWEST ANNUAL MEAN			181
HIGHEST DAILY MEAN	3820	2640	6040
LOWEST DAILY MEAN	60	52	24
ANNUAL SEVEN-DAY MINIMUM	60	60	40
INSTANTANEOUS PEAK FLOW		4030	6500
INSTANTANEOUS PEAK STAGE		9.78	13.29
INSTANTANEOUS LOW FLOW		52	26
10 PERCENT EXCEEDS	1080	1000	1020
50 PERCENT EXCEEDS	114	210	262
90 PERCENT EXCEEDS	67	68	75

STREAMS TRIBUTARY TO LAKE ERIE

85

04206208 YELLOW CREEK AT GHENT, OH

LOCATION.--Lat 41°09'29", long 81°38'32", Summit County, Hydrologic Unit 04110002, on left downstream bank at driveway bridge of Creekside Farm at 3680 Granger Road, 150 ft south of Granger Road, 0.25 mi west of Cleveland-Massillon Road, 2.9 mi northwest of Akron corporate boundary.

DRAINAGE AREA.--12.7 mi².

PERIOD OF RECORD.--October 1, 1991 to September 30, 1992.

GAGE.--Water-stage recorder. Elevation of gage is 908 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 1-31, Nov. 1-3, Nov. 7-10, Dec. 5, Jan. 11, 15-21, 25-28, Feb. 1-13, Mar. 13-17. Records good, except those for periods of estimated daily discharges, which are fair.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.0	3.5	7.3	5.1	7.0	13	17	13	12	3.6	37	11
2	2.3	2.8	8.0	4.9	7.0	11	18	13	8.4	3.6	19	8.9
3	2.7	3.2	28	4.9	6.5	8.7	17	13	7.2	3.6	15	27
4	4.2	3.3	11	4.9	5.6	8.0	16	12	6.1	3.1	15	58
5	4.5	3.3	7.6	4.7	5.3	7.7	13	11	9.8	3.1	13	22
6	4.0	3.4	6.2	5.0	5.3	13	12	11	43	3.2	11	14
7	3.0	2.7	5.8	4.7	5.0	24	12	9.3	14	2.6	9.0	12
8	2.5	2.5	5.5	4.2	4.7	27	11	9.0	9.9	2.3	9.5	11
9	2.3	2.4	5.3	5.0	4.3	16	11	9.0	7.5	2.6	9.2	19
10	3.7	2.5	4.9	5.5	4.0	17	11	9.0	6.5	10	8.0	77
11	8.0	10	5.1	5.0	3.7	17	13	8.6	5.7	12	7.6	28
12	3.2	7.6	4.3	4.9	3.7	14	14	7.7	5.1	12	7.2	17
13	3.7	6.6	5.5	5.2	4.3	11	11	7.1	4.7	69	8.7	14
14	2.8	6.5	5.7	25	5.5	9.0	9.7	7.8	4.6	44	8.0	12
15	3.2	6.3	6.0	14	28	8.0	8.9	6.5	4.4	74	15	11
16	2.9	7.2	6.4	9.0	47	7.6	9.4	6.0	4.3	36	21	10
17	2.7	5.2	5.2	7.7	20	9.0	49	7.0	4.1	62	12	8.7
18	2.5	4.1	5.1	6.4	17	13	92	12	14	49	8.7	13
19	2.9	5.6	4.9	6.0	28	15	55	7.9	8.5	18	9.3	22
20	3.0	5.6	5.0	5.6	19	18	28	6.6	6.2	15	7.7	12
21	3.0	5.1	5.5	6.6	14	22	34	5.6	5.4	20	6.9	25
22	2.8	4.1	5.6	7.0	14	20	41	5.3	5.2	14	6.0	59
23	2.6	3.9	7.3	17	13	17	23	7.1	5.3	13	5.6	26
24	2.4	4.4	7.8	24	11	18	23	23	13	29	11	17
25	2.8	4.1	6.2	10	9.7	26	22	11	7.6	23	17	13
26	3.4	3.7	5.4	7.6	8.4	37	19	8.0	5.6	18	8.9	12
27	3.5	3.8	5.0	7.3	7.9	43	16	6.9	4.8	16	12	12
28	3.7	4.7	4.9	7.0	11	26	15	5.9	4.3	12	81	10
29	3.9	5.0	5.5	6.9	21	17	13	5.4	3.8	11	37	8.8
30	4.1	5.9	5.6	6.5	---	16	14	16	3.7	31	17	8.5
31	4.3	---	5.4	7.1	---	15	---	27	---	138	12	---
TOTAL	102.6	139.0	207.0	244.7	340.9	524.0	648.0	307.7	244.7	753.7	465.3	598.9
MEAN	3.31	4.63	6.68	7.89	11.8	16.9	21.6	9.93	8.16	24.3	15.0	20.0
MAX	8.0	10	28	25	47	43	92	27	43	138	81	77
MIN	2.0	2.4	4.3	4.2	3.7	7.6	8.9	5.3	3.7	2.3	5.6	8.5
CFSM	.26	.36	.53	.62	.93	1.33	1.70	.78	.64	1.91	1.18	1.57
IN.	.30	.41	.61	.72	1.00	1.53	1.90	.90	.72	2.21	1.36	1.75

SUMMARY STATISTICS

FOR 1992 WATER YEAR

ANNUAL TOTAL	4576.5
ANNUAL MEAN	12.5
HIGHEST DAILY MEAN	138 Jul 31
LOWEST DAILY MEAN	2.0 Oct 1
ANNUAL SEVEN-DAY MINIMUM	2.7 Oct 18
INSTANTANEOUS PEAK FLOW	221 Jul 31
INSTANTANEOUS PEAK STAGE	12.83 Jul 31
INSTANTANEOUS LOW FLOW	1.6 Aug 8
ANNUAL RUNOFF (CFSM)	.98
ANNUAL RUNOFF (INCHES)	13.41
10 PERCENT EXCEEDS	25
50 PERCENT EXCEEDS	8.0
90 PERCENT EXCEEDS	3.5

STREAMS TRIBUTARY TO LAKE ERIE

04206210 NORTH FORK AT BATH, OH

LOCATION.--Lat 41°11'20", long 81°39'12", Summit County, Hydrologic Unit 04110002, on right upstream bank at triple barrel culvert under Ira Road, 0.9 mi west of Cleveland-Massillon Road, 4.7 mi northwest of Akron corporate boundary.

DRAINAGE AREA.--2.81 mi².

PERIOD OF RECORD.--October 1, 1991 to September 30, 1992.

GAGE.--Water-stage recorder. Elevation of gage is 996 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 1-21. Records good, except for period of estimated record, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.30	.30	.54	.63	.64	4.1	2.7	1.0	1.6	.08	10	1.5
2	.30	.31	1.7	.54	.66	2.5	2.6	1.3	.65	.07	5.9	1.2
3	.30	.27	11	.53	.52	1.2	2.3	1.3	.45	.02	3.7	14
4	2.0	.20	4.1	.53	.56	.76	1.6	.84	.41	.01	5.1	11
5	1.0	.20	1.9	.47	.57	.71	.84	.69	.45	.01	3.1	5.1
6	.40	.25	1.0	.41	.54	3.7	.62	.60	.39	.01	1.8	3.0
7	.37	.28	.74	.40	.48	8.8	.53	.51	.30	.01	1.3	2.3
8	.36	.30	.65	.36	.40	7.3	.46	.46	.29	.01	1.1	2.0
9	.35	.27	.54	.53	.38	2.9	.40	.64	.20	.01	1.1	3.2
10	5.0	.27	.46	.63	.34	4.5	.57	.50	.17	.09	.79	9.9
11	1.0	5.1	.40	.68	.34	3.4	1.3	.41	.12	.13	.94	3.9
12	1.5	4.2	.40	.54	.30	2.7	4.5	.36	.09	6.7	.69	2.3
13	.60	3.2	.56	.66	.29	1.7	.92	.36	.08	11	1.9	1.6
14	.90	1.3	.65	12	.37	1.1	.61	.38	.09	2.3	1.1	1.4
15	.50	1.1	.56	6.5	21	.85	.49	.34	.10	29	6.3	1.1
16	.35	3.3	.46	3.7	18	.68	1.1	.29	.05	5.0	9.3	.87
17	.30	.97	.43	3.0	7.4	1.4	18	1.0	.06	18	3.3	.69
18	.30	.63	.45	1.6	7.4	1.7	27	.98	1.5	6.9	1.7	4.9
19	.50	2.2	.40	1.1	16	2.3	10	.46	.44	1.7	1.7	4.8
20	.40	1.9	.41	1.4	7.1	4.1	6.4	.32	.30	1.8	1.1	1.3
21	.37	.94	.57	.85	3.2	4.4	11	.22	.26	1.4	.84	10
22	.35	.65	.57	.78	3.1	3.6	11	.16	.19	.60	.75	11
23	.32	.52	2.7	13	2.0	2.5	5.4	1.1	.31	.83	.78	2.9
24	.30	.63	2.2	11	1.1	4.6	5.4	5.3	1.8	37	1.2	1.1
25	.30	.48	1.0	3.9	.74	9.2	4.6	1.0	.38	11	1.6	.61
26	.30	.40	.69	1.9	.66	16	3.7	.64	.25	8.6	1.7	.51
27	.31	.35	.55	1.2	.55	15	2.2	.40	.18	5.5	6.2	.63
28	.30	.47	.51	.86	3.8	6.7	1.3	.29	.12	1.9	27	.46
29	.29	.55	.65	.70	6.8	3.3	.94	.20	.12	7.6	10	.40
30	.26	.60	.88	.62	---	2.9	1.4	4.5	.10	85	4.5	.40
31	.29	---	.78	.69	---	1.5	---	4.9	---	44	2.4	---
TOTAL	20.12	32.14	38.45	71.71	105.24	126.10	129.88	31.45	11.45	286.28	118.89	104.07
MEAN	.65	1.07	1.24	2.31	3.63	4.07	4.33	1.01	.38	9.23	3.84	3.47
MAX	5.0	5.1	11	13	21	16	27	5.3	1.8	85	27	14
MIN	.26	.20	.40	.36	.29	.66	.40	.16	.05	.01	.69	.40
CFSM	.23	.38	.44	.82	1.29	1.45	1.54	.36	.14	3.29	1.36	1.23
IN.	.27	.43	.51	.95	1.39	1.67	1.72	.42	.15	3.79	1.57	1.38

SUMMARY STATISTICS

FOR 1992 WATER YEAR

ANNUAL TOTAL	1075.78
ANNUAL MEAN	2.94
HIGHEST DAILY MEAN	85 Jul 30
LOWEST DAILY MEAN	.01 Jul 4
ANNUAL SEVEN-DAY MINIMUM	.01 Jul 3
INSTANTANEOUS PEAK FLOW	635 Jul 30
INSTANTANEOUS PEAK STAGE	15.21 Jul 30
INSTANTANEOUS LOW FLOW	.01 Jul 4
ANNUAL RUNOFF (CFSM)	1.05
ANNUAL RUNOFF (INCHES)	14.24
10 PERCENT EXCEEDS	7.3
50 PERCENT EXCEEDS	.84
90 PERCENT EXCEEDS	.27

STREAMS TRIBUTARY TO LAKE ERIE

87

04206211 PARK CREEK AT BATH CENTER, OH

LOCATION.--Lat 41°10'44", long 81°38'09", Summit County, Hydrologic Unit 04110002, on upstream left bank at culvert under the entrance of the Bath Community Center, 200 ft east of Cleveland-Massillon Road, 0.7 mi north of Bath Road, 3.7 mi northwest of Akron corporate boundary.

DRAINAGE AREA.--0.826 mi².

PERIOD OF RECORD.--October 1, 1991 to September 30, 1992.

GAGE.--Water-stage recorder. Elevation of gage is 980 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 1-18, Dec. 15-Jan. 13, Jan. 16-18, 24-28, Feb. 1-12, Mar. 11-16, 19-22, 24-25. Records fair, except those for periods of estimated daily discharges, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.01	.01	.01	.15	1.2	.38	1.3	.47	.42	.01	1.9	.58
2	.01	.01	1.1	.15	1.1	.17	1.2	.44	.20	.01	1.1	.41
3	.01	.01	1.5	.15	1.1	.45	1.2	.46	.14	.01	.83	.81
4	.20	.01	.11	.15	1.1	.65	1.1	.33	.13	.01	.78	1.8
5	.45	.01	.07	.10	1.1	.53	1.0	.25	.14	.01	.60	1.1
6	.01	.01	.01	.08	1.1	1.1	.96	.20	.13	.01	.50	.81
7	.01	.01	.01	.08	1.0	1.9	1.0	.18	.10	.01	.41	.74
8	.01	.01	.01	.07	1.0	.72	.90	.17	.08	.01	.39	.69
9	.01	.01	.01	.16	.90	.30	.86	.17	.06	.01	.29	.58
10	.70	.01	.01	.16	.80	1.3	.89	.17	.04	.17	.25	2.1
11	.09	.45	.01	.17	.72	1.7	.95	.15	.03	.03	.23	1.0
12	.20	.13	.01	.14	.72	1.6	1.0	.15	.03	4.5	.01	.65
13	.07	.13	.01	3.0	.88	1.5	.73	.26	.03	3.9	.19	.57
14	.15	.10	.01	4.3	1.1	1.5	.71	.08	.14	2.1	.06	.50
15	.05	.12	.16	2.7	7.2	1.4	.68	.08	.03	10	.60	.36
16	.01	.14	.15	1.5	4.5	1.3	.74	.06	.01	3.5	1.0	.30
17	.01	.06	.15	1.2	2.4	1.5	3.0	.31	.01	12	.38	.26
18	.01	.04	.15	1.1	2.0	1.4	5.5	.14	1.1	4.1	.21	1.9
19	.04	.09	.14	1.1	2.8	1.5	3.3	.07	.08	2.3	.18	1.1
20	.03	.07	.14	1.1	1.4	1.5	1.3	.04	.03	1.9	.05	.31
21	.01	.04	.25	1.1	.86	1.5	1.9	.03	.02	1.9	.01	6.6
22	.01	.01	.24	1.1	.62	1.5	2.4	.03	.02	1.1	.01	5.5
23	.01	.01	.56	6.0	.44	2.7	1.3	.51	.26	1.5	.01	1.9
24	.01	.01	.45	2.7	.26	1.5	1.1	1.3	.37	4.2	.05	.43
25	.01	.01	.25	1.3	.19	1.6	1.1	.14	.06	1.4	.26	.32
26	.01	.01	.14	1.2	.16	3.2	.92	.10	.03	.98	.73	.30
27	.01	.01	.14	1.2	.14	3.4	.77	.07	.02	.58	1.5	.31
28	.01	.01	.12	1.2	.46	1.6	.64	.06	.01	.30	7.0	.25
29	.01	.01	.17	1.2	.57	1.2	.52	.05	.01	3.3	2.6	.20
30	.01	.02	.20	1.3	---	1.1	.49	2.6	.01	20	1.4	.19
31	.01	---	.17	1.4	---	1.1	---	2.0	---	8.1	1.0	---
TOTAL	2.19	1.57	6.46	37.26	37.82	42.80	39.46	11.07	3.74	87.95	24.53	32.57
MEAN	.071	.052	.21	1.20	1.30	1.38	1.32	.36	.12	2.84	.79	1.09
MAX	.70	.45	1.5	6.0	7.2	3.4	5.5	2.6	1.1	20	7.0	6.6
MIN	.01	.01	.01	.07	.14	.17	.49	.03	.01	.01	.01	.19
CFSM	.09	.06	.25	1.47	1.59	1.68	1.60	.44	.15	3.46	.96	1.32
IN.	.10	.07	.29	1.69	1.72	1.94	1.79	.50	.17	3.99	1.11	1.48

SUMMARY STATISTICS

FOR 1992 WATER YEAR

ANNUAL TOTAL	327.42
ANNUAL MEAN	.89
HIGHEST DAILY MEAN	20 Jul 30
LOWEST DAILY MEAN	.01 Oct 1
ANNUAL SEVEN-DAY MINIMUM	.01 Oct 21
INSTANTANEOUS PEAK FLOW	117 Jul 30
INSTANTANEOUS PEAK STAGE	14.19 Jul 30
INSTANTANEOUS LOW FLOW	.01 Jul 4
ANNUAL RUNOFF (CFSM)	1.09
ANNUAL RUNOFF (INCHES)	14.85
10 PERCENT EXCEEDS	1.9
50 PERCENT EXCEEDS	.30
90 PERCENT EXCEEDS	.01

STREAMS TRIBUTARY TO LAKE ERIE

04206212 NORTH FORK AT BATH CENTER, OH

LOCATION.--Lat 41°10'08", long 81°38'04", Summit County, Hydrologic Unit 04110002, on left upstream side of bridge on Bath Road, 750 ft east of Cleveland-Massillon Road at Bath Center, 3.1 mi northwest of Akron corporate boundary.

DRAINAGE AREA.--5.58 mi².

PERIOD OF RECORD.--October 1, 1991 to September 30, 1992.

GAGE.--Water-stage recorder. Elevation of gage is 936 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 1-19, Aug. 1-16. Records good, except those for periods of estimated daily discharges, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.5	4.0	2.2	1.0	2.9	8.7	8.6	5.0	5.5	.10	25	2.9
2	3.5	4.1	5.1	1.0	2.0	7.0	8.7	5.7	3.5	.09	11	1.7
3	3.5	3.5	15	1.0	1.8	4.7	8.2	5.7	2.0	.07	7.7	22
4	8.0	3.5	4.2	1.0	2.3	3.9	7.4	4.3	1.6	.08	7.0	17
5	5.4	3.5	2.1	.66	2.1	3.5	5.5	4.0	2.4	.12	5.5	6.6
6	4.0	3.5	1.3	.55	1.7	9.1	4.7	3.5	1.6	.21	3.8	4.3
7	3.8	2.9	1.1	.55	1.6	18	4.1	3.4	1.1	.10	3.0	3.8
8	3.6	3.0	1.0	.50	1.3	15	3.8	3.0	1.0	.15	2.4	3.6
9	3.5	2.5	1.0	1.1	.82	8.4	3.5	3.9	1.0	.18	2.0	9.1
10	13	2.1	.58	1.1	.86	11	4.5	3.2	.95	1.9	1.8	22
11	6.8	11	.55	1.2	.93	9.6	6.1	2.6	.55	1.1	1.5	6.6
12	8.0	6.3	.55	.92	.51	8.1	10	1.9	.32	14	1.2	3.9
13	5.4	5.3	1.2	1.5	.60	6.4	5.2	1.4	.25	27	1.6	3.3
14	6.4	3.5	1.1	18	1.1	5.4	4.0	1.2	.25	7.6	1.5	2.1
15	4.5	3.8	1.1	6.0	31	4.6	3.5	1.0	.25	57	4.5	1.4
16	4.0	5.7	1.0	5.8	32	3.6	4.5	1.0	.25	11	9.6	1.0
17	3.8	2.9	1.0	5.2	13	6.0	35	3.1	.25	51	3.5	1.0
18	3.7	1.8	1.0	2.3	12	6.4	63	4.6	6.5	17	3.5	11
19	4.5	4.7	.95	2.5	28	9.0	22	1.8	2.6	6.7	3.5	8.9
20	3.7	3.9	1.0	2.2	13	11	13	1.0	1.4	6.3	2.7	3.1
21	3.1	2.9	1.7	1.5	7.9	11	24	.79	1.0	6.5	1.0	30
22	3.2	1.7	1.6	1.4	8.2	10	21	.55	.69	3.9	.88	25
23	3.0	1.4	3.9	19	6.4	8.2	11	3.5	1.0	5.1	.77	8.6
24	3.2	2.1	2.9	15	4.7	12	12	14	7.0	49	3.9	4.9
25	3.3	1.3	1.5	6.9	4.0	17	10	4.4	1.8	14	2.9	3.5
26	3.8	1.0	.97	4.5	3.5	28	9.1	3.3	.98	10	5.0	2.9
27	3.7	.80	.97	3.5	3.3	27	7.0	1.8	.55	7.1	18	2.8
28	4.0	1.9	.77	3.0	9.9	15	5.7	1.1	.34	3.8	56	1.3
29	3.9	1.9	1.2	2.1	13	9.6	4.7	1.0	.25	20	14	1.0
30	3.7	2.5	1.4	2.2	---	8.9	6.3	14	.20	138	6.3	1.0
31	3.8	---	1.1	3.4	---	7.0	---	13	---	64	4.0	---
TOTAL	141.3	99.00	61.04	116.58	210.42	313.1	336.1	118.74	47.08	523.10	215.05	216.3
MEAN	4.56	3.30	1.97	3.76	7.26	10.1	11.2	3.83	1.57	16.9	6.94	7.21
MAX	13	11	15	19	32	28	63	14	7.0	138	56	30
MIN	3.0	.80	.55	.50	.51	3.5	3.5	.55	.20	.07	.77	1.0
CFSM	.82	.59	.35	.67	1.30	1.81	2.01	.69	.28	3.02	1.24	1.29
IN.	.94	.66	.41	.78	1.40	2.09	2.24	.79	.31	3.49	1.43	1.44

SUMMARY STATISTICS

FOR 1992 WATER YEAR

ANNUAL TOTAL	2397.81
ANNUAL MEAN	6.55
HIGHEST DAILY MEAN	138 Jul 30
LOWEST DAILY MEAN	.07 Jul 3
ANNUAL SEVEN-DAY MINIMUM	.11 Jul 1
INSTANTANEOUS PEAK FLOW	885 Jul 30
INSTANTANEOUS PEAK STAGE	12.93 Jul 30
INSTANTANEOUS LOW FLOW	.06 Jul 2
ANNUAL RUNOFF (CFSM)	1.17
ANNUAL RUNOFF (INCHES)	15.99
10 PERCENT EXCEEDS	14
50 PERCENT EXCEEDS	3.5
90 PERCENT EXCEEDS	.85

STREAMS TRIBUTARY TO LAKE ERIE

89

04206215 BATH CREEK AT BATH CENTER, OH

LOCATION.--Lat 41°10'09", long 81°38'56", Summit County, Hydrologic Unit 04110002, on upstream left bank at bridge on Bath Road, 0.6 mi west of Cleveland-Massillon Road, 0.2 mi downstream from Steriner Pond, and 3.6 mi northwest of Akron corporate boundary.

DRAINAGE AREA.--3.52 mi².

PERIOD OF RECORD.--October 1, 1991 to September 30, 1992.

GAGE.--Water-stage recorder. Elevation of gage is 961 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 1-Nov. 10, Jan. 16-21, Sept. 16-19. Records fair, except those for periods of estimated daily discharges, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.33	.36	.68	.56	1.3	5.9	7.0	2.4	3.0	.35	16	1.5
2	.33	.36	.70	.52	1.3	4.5	7.3	2.3	1.6	.34	7.5	1.2
3	.33	.36	3.9	.52	1.2	3.2	6.9	2.8	1.2	.35	5.0	6.7
4	.76	.29	1.3	.51	1.3	2.7	5.8	2.0	1.1	.31	4.6	12
5	.54	.32	.73	.48	1.3	2.0	4.1	1.8	1.2	.33	3.4	3.4
6	.43	.29	.60	.44	1.3	3.0	3.3	1.6	1.3	.34	2.4	2.3
7	.39	.28	.56	.42	1.1	8.6	3.2	1.4	1.0	.26	1.8	1.7
8	.36	.30	.55	.41	1.0	11	3.8	1.2	.89	.28	1.5	1.6
9	.35	.31	.46	.53	.92	4.9	4.2	1.6	.72	.32	1.3	2.9
10	1.3	.33	.38	.58	.96	6.4	3.7	1.3	.55	.77	1.1	11
11	.54	1.0	.37	.57	.80	5.3	5.2	1.2	.49	.79	.96	3.5
12	.74	.89	.37	.50	.79	3.7	8.0	1.0	.43	1.9	.75	2.2
13	.44	.57	.48	.61	.72	2.7	4.3	.92	.40	14	.99	1.7
14	.56	.48	.52	7.3	.80	2.2	3.4	.82	.42	4.3	.90	1.4
15	.38	.46	.48	4.3	13	1.7	2.9	.77	.39	25	2.7	.99
16	.32	.64	.44	1.4	23	1.7	2.6	.70	.33	13	6.1	.62
17	.30	.48	.40	1.2	9.8	1.9	20	1.1	.31	21	2.5	.62
18	.29	.33	.42	1.1	8.4	2.3	38	2.6	1.6	19	1.5	6.8
19	.38	.56	.41	1.1	17	5.0	17	1.2	.92	5.5	1.3	5.6
20	.28	.60	.50	1.0	11	7.6	9.2	.85	.54	3.8	1.1	1.4
21	.27	.44	.58	.94	6.3	8.9	13	.66	.48	4.9	.80	10
22	.28	.35	.69	.88	6.1	6.6	15	.57	.40	3.0	.61	20
23	.26	.33	1.0	6.4	5.0	4.8	7.5	.82	.47	2.6	.52	4.7
24	.27	.43	1.2	10	4.0	6.1	6.8	5.8	1.8	11	.65	2.5
25	.26	.42	.74	4.1	3.4	12	6.1	2.4	.87	9.0	1.1	1.8
26	.27	.34	.75	2.3	2.9	19	5.4	1.5	.55	4.2	.50	1.5
27	.29	.33	.54	1.7	2.6	20	4.0	1.2	.43	3.4	2.5	1.6
28	.30	.42	.60	1.5	4.7	13	3.0	.92	.31	2.2	21	1.2
29	.29	.52	.65	1.3	11	8.3	2.4	.76	.26	6.4	7.3	.81
30	.30	.82	.76	1.2	---	7.0	2.8	3.9	.29	35	2.9	.64
31	.45	---	.69	1.4	---	5.6	---	8.5	---	93	2.0	---
TOTAL	12.59	13.61	22.45	55.77	142.99	197.6	225.9	56.59	24.25	286.64	103.28	113.88
MEAN	.41	.45	.72	1.80	4.93	6.37	7.53	1.83	.81	9.25	3.33	3.80
MAX	1.3	1.0	3.9	10	23	20	38	8.5	3.0	93	21	20
MIN	.26	.28	.37	.41	.72	1.7	2.4	.57	.26	.26	.50	.62
CFSM	.12	.13	.21	.51	1.40	1.81	2.14	.52	.23	2.63	.95	1.08
IN.	.13	.14	.24	.59	1.51	2.09	2.39	.60	.26	3.03	1.09	1.20

SUMMARY STATISTICS

FOR 1992 WATER YEAR

ANNUAL TOTAL	1255.55
ANNUAL MEAN	3.43
HIGHEST DAILY MEAN	93 Jul 31
LOWEST DAILY MEAN	.26 Oct 23
ANNUAL SEVEN-DAY MINIMUM	.27 Oct 20
INSTANTANEOUS PEAK FLOW	188 Jul 31
INSTANTANEOUS PEAK STAGE	14.22 Jul 31
INSTANTANEOUS LOW FLOW	.22 Jun 29
ANNUAL RUNOFF (CFSM)	.97
ANNUAL RUNOFF (INCHES)	13.27
10 PERCENT EXCEEDS	8.4
50 PERCENT EXCEEDS	1.2
90 PERCENT EXCEEDS	.33

STREAMS TRIBUTARY TO LAKE ERIE

04206220 YELLOW CREEK AT BOTZUM, OH

LOCATION.--Lat 41°09'47", long 81°35'03", Summit County, Hydrologic Unit 04110002, on right downstream bank near Bath Road truss bridge over Yellow Creek, 0.5 mi upstream from confluence with Cuyahoga River, 0.7 mi west of Akron sewage treatment plant.

DRAINAGE AREA.--30.7 mi².

PERIOD OF RECORD.--October 1, 1991 to September 30, 1992.

GAGE.--Water-stage recorder. Elevation of gage is 743 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 1-19, Dec. 10-12, 16-19, 26-28, Jan. 15-21, 25-29, Feb. 2-3, 5-7, '9-13. Records good, except those for periods of estimated daily discharges, which are fair and Oct. 1-19 which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.5	7.3	10	8.5	14	30	40	24	27	7.5	114	23
2	6.4	7.4	19	8.3	13	25	40	25	17	7.5	61	20
3	8.8	7.4	74	8.5	13	20	36	26	14	7.7	40	74
4	10	5.8	19	8.3	12	17	32	21	12	7.0	45	132
5	12	6.6	12	8.1	13	16	25	20	15	8.2	32	55
6	9.0	5.8	10	8.1	12	36	21	19	57	7.6	25	33
7	6.8	5.9	9.8	7.8	11	76	20	17	20	6.6	21	25
8	5.8	6.3	9.3	7.7	11	78	19	16	15	6.4	25	27
9	10	6.4	8.4	9.7	10	39	18	19	12	6.7	21	72
10	27	6.8	7.8	9.7	9.2	45	19	16	11	41	18	180
11	9.0	27	7.6	11	8.8	42	24	15	10	29	18	71
12	8.0	16	7.2	8.5	8.8	32	32	14	9.4	49	16	39
13	6.0	13	9.7	8.8	19	26	21	13	8.9	185	23	28
14	7.0	11	9.2	72	25	23	18	13	9.0	102	17	23
15	6.4	11	8.0	19	97	20	17	12	10	220	52	21
16	5.8	13	7.1	15	134	20	20	12	8.5	92	69	19
17	5.5	9.3	7.1	12	55	22	156	14	8.2	198	29	17
18	5.5	8.0	7.1	12	46	26	249	25	41	128	20	38
19	6.2	11	7.1	12	94	38	132	15	20	50	21	64
20	5.8	10	15	12	55	45	72	13	13	44	17	26
21	5.6	9.0	12	14	33	51	92	11	11	55	15	76
22	5.7	7.6	11	19	32	47	101	11	10	31	13	152
23	5.4	7.3	13	65	27	38	56	15	11	30	13	67
24	5.5	8.4	13	65	22	47	56	60	37	131	31	40
25	5.4	7.6	10	30	19	71	51	23	16	75	41	27
26	5.6	6.9	8.4	20	17	117	44	17	12	50	23	23
27	6.0	9.0	7.7	17	15	127	35	14	10	38	52	23
28	6.2	7.9	7.4	15	31	71	28	12	8.9	24	228	20
29	6.0	8.8	9.2	13	59	42	24	11	8.2	51	100	17
30	6.2	9.3	10	13	---	39	28	41	7.8	230	46	17
31	9.3	---	9.2	14	---	32	---	71	---	401	29	---
TOTAL	233.4	276.8	375.3	552.0	915.8	1358	1526	635	469.9	2319.2	1275	1449
MEAN	7.53	9.23	12.1	17.8	31.6	43.8	50.9	20.5	15.7	74.8	41.1	48.3
MAX	27	27	74	72	134	127	249	71	57	401	228	180
MIN	5.4	5.8	7.1	7.7	8.8	16	17	11	7.8	6.4	13	17
CFSM	.25	.30	.39	.58	1.03	1.43	1.66	.67	.51	2.44	1.34	1.57
IN.	.28	.34	.45	.67	1.11	1.65	1.85	.77	.57	2.81	1.54	1.76

SUMMARY STATISTICS

FOR 1992 WATER YEAR

ANNUAL TOTAL	11385.4	
ANNUAL MEAN	31.1	
HIGHEST DAILY MEAN	401	Jul 31
LOWEST DAILY MEAN	5.4	Oct 23
ANNUAL SEVEN-DAY MINIMUM	5.6	Oct 20
INSTANTANEOUS PEAK FLOW	1160	Jul 31
INSTANTANEOUS PEAK STAGE	15.60	Jul 31
INSTANTANEOUS LOW FLOW	5.2	Oct 23
ANNUAL RUNOFF (CFSM)	1.01	
ANNUAL RUNOFF (INCHES)	13.80	
10 PERCENT EXCEEDS	71	
50 PERCENT EXCEEDS	17	
90 PERCENT EXCEEDS	7.1	

STREAMS TRIBUTARY TO LAKE ERIE

91

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 upstream from mouth.

DRAINAGE AREA.--83.9 mi².

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 above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Jan. 17-22, 26-29, July 12 to Sept. 30. Records good except for estimated daily discharges, which are poor. Water-quality data collected at this site 1965 to 1977. Sediment data collected at this site 1974 to 1979.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	28	35	49	96	204	197	92	57	23	900	120
2	22	25	101	47	83	155	168	99	42	23	400	110
3	24	24	437	49	78	114	151	97	35	23	230	300
4	147	25	134	47	82	89	124	74	33	23	270	380
5	54	26	66	44	79	76	91	69	35	29	215	270
6	38	26	46	42	69	186	79	65	31	23	150	170
7	80	27	43	40	74	431	73	59	28	22	100	120
8	32	31	44	39	67	398	68	55	29	23	100	110
9	27	27	50	59	56	208	60	67	28	25	150	110
10	103	25	42	71	57	225	91	59	27	39	94	560
11	62	138	38	62	52	204	99	54	26	48	130	350
12	104	84	39	49	52	190	165	51	26	35	100	190
13	89	73	61	65	51	158	112	48	24	600	130	140
14	49	49	56	563	56	133	82	45	22	350	94	120
15	57	149	46	209	648	113	70	41	23	760	250	100
16	35	138	41	117	867	92	84	38	24	470	520	80
17	31	59	41	96	520	149	501	48	24	880	350	58
18	29	43	41	80	335	154	880	79	127	800	220	130
19	58	59	38	70	794	227	706	51	97	450	150	210
20	39	48	42	62	480	240	394	40	40	220	120	120
21	33	72	51	56	240	203	304	36	30	300	100	150
22	31	43	50	52	182	162	288	32	28	200	84	560
23	27	36	102	434	156	167	167	32	31	170	66	350
24	27	39	93	396	127	233	185	193	65	400	60	220
25	29	33	62	299	107	348	181	72	41	500	120	150
26	34	32	50	170	96	619	145	50	37	450	60	130
27	26	30	45	86	86	933	114	40	30	300	180	120
28	27	46	42	70	291	573	91	35	24	180	1200	110
29	26	37	61	64	326	297	77	32	23	140	800	94
30	26	51	86	90	---	214	113	118	24	800	350	80
31	30	---	63	102	---	169	---	111	---	1700	200	---
TOTAL	1418	1523	2146	3679	6207	7664	5860	1982	1111	10006	7893	5712
MEAN	45.7	50.8	69.2	119	214	247	195	63.9	37.0	323	255	190
MAX	147	149	437	563	867	933	880	193	127	1700	1200	560
MIN	22	24	35	39	51	76	60	32	22	22	60	58
CFSM	.01	.01	.01	.01	.03	.03	.02	.01	.00	.04	.03	.02
IN.	.01	.01	.01	.02	.03	.03	.03	.01	.00	.04	.04	.03

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1963 - 1992, BY WATER YEAR (WY)

	MEAN	68.2	131	178	136	208	249	183	125	81.1	81.6	61.5	75.5
MAX	261	402	506	296	463	457	314	339	257	329	255	289	
(WY)	1991	1986	1991	1965	1976	1963	1964	1989	1975	1969	1992	1990	
MIN	8.55	13.4	16.9	33.1	39.0	81.2	54.1	33.4	16.5	13.1	11.3	8.73	
(WY)	1964	1965	1964	1977	1963	1990	1971	1965	1964	1967	1963	1964	

SUMMARY STATISTICS	FOR 1991 CALENDAR YEAR	FOR 1992 WATER YEAR	WATER YEARS 1963 - 1992
ANNUAL TOTAL	37333	55201	
ANNUAL MEAN	102	151	132
HIGHEST ANNUAL MEAN			185
LOWEST ANNUAL MEAN			81.7
HIGHEST DAILY MEAN	1150	1700	2920
LOWEST DAILY MEAN	15	22	5.8
ANNUAL SEVEN-DAY MINIMUM	18	23	6.5
INSTANTANEOUS PEAK FLOW		2700	7220
INSTANTANEOUS PEAK STAGE		.00	10.10
INSTANTANEOUS LOW FLOW		22	5.2
ANNUAL RUNOFF (CFSM)	.012	.018	.016
ANNUAL RUNOFF (INCHES)	.17	.25	.22
10 PERCENT EXCEEDS	213	384	320
50 PERCENT EXCEEDS	51	79	61
90 PERCENT EXCEEDS	21	27	19

a Peaks above base in shown Table of discharges and stages at continuous-record surface-water-discharge stations.

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 downstream from bridge on Old Rockside Road, 0.8 mi northeast of Independence, and 3.0 mi downstream from Tinkers Creek.

DRAINAGE AREA.--707 mi².

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 above National Geodetic Vertical Datum of 1929. Sept. 21, 1903 to July 21, 1906, nonrecording gage at bridge 240 ft upstream at present datum. Sept. 28, 1921 to May 30, 1923, nonrecording gage at bridge 240 ft upstream at datum 2.42 ft higher. Sept., 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 upstream at present datum.
REMARKS.--Estimated daily discharges: Dec. 3, Mar. 2-9. Records fair except for periods of estimated daily discharge, which are poor. 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 upstream from station, bypasses station. These records do not include flow in canal except above about 15,000 ft³/s, when channels merge.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	191	165	317	279	578	1040	1630	876	584	217	4400	1260
2	186	161	328	261	509	970	1540	733	465	214	2470	1200
3	189	157	1850	266	483	930	1290	759	384	213	1340	1790
4	501	150	804	268	480	840	1130	600	310	252	1580	2170
5	358	177	451	265	488	670	956	599	309	231	1180	1250
6	273	192	365	244	433	1060	829	596	380	371	822	996
7	273	191	327	240	484	1730	919	542	279	245	651	868
8	187	171	313	237	448	1590	559	492	264	223	652	874
9	170	172	309	253	381	1140	467	526	239	224	925	873
10	407	169	280	311	368	1080	492	492	217	254	477	3260
11	467	457	259	310	357	1100	651	460	205	706	841	1920
12	367	497	248	251	265	1010	909	431	201	465	631	1290
13	413	451	309	266	270	897	625	343	197	2660	845	1030
14	275	327	388	1840	312	761	528	308	191	1270	612	941
15	292	359	302	839	1270	691	468	305	356	3010	1190	872
16	254	572	265	503	3860	600	583	306	232	2170	2880	649
17	211	305	254	545	2430	690	2480	296	226	3370	1960	488
18	203	238	254	519	1350	816	3630	515	669	2870	1200	735
19	273	283	238	453	2960	937	2790	369	570	1560	948	1290
20	301	319	225	478	2910	1080	1900	319	348	1130	802	622
21	225	396	267	511	2130	1070	1960	291	279	1350	691	876
22	195	336	320	450	1230	962	2060	252	267	1070	555	3310
23	179	308	404	1210	1240	1020	1470	274	257	908	457	2200
24	170	318	486	1960	1110	994	1410	1050	554	2120	423	1440
25	165	287	347	942	948	1380	1450	500	399	2660	746	1140
26	178	270	279	700	813	2220	1280	408	343	2500	415	1010
27	156	255	266	596	725	2830	883	352	300	1720	1150	932
28	170	280	252	595	841	2240	797	314	248	1150	4520	749
29	165	303	288	496	1560	1710	894	303	223	839	3480	641
30	155	336	387	483	---	1670	950	605	225	3730	2000	566
31	164	---	334	588	---	1640	---	956	---	8140	1410	---
TOTAL	7713	8602	11716	17159	31233	37368	37530	15172	9721	47842	42253	37242
MEAN	249	287	378	554	1077	1205	1251	489	324	1543	1363	1241
MAX	501	572	1850	1960	3860	2830	3630	1050	669	8140	4520	3310
MIN	155	150	225	237	265	600	467	252	191	213	415	488

MEAN	361	607	929	1080	1320	1664	1444	935	602	456	347	364
MAX	1747	2713	2889	3585	3217	3008	3175	2396	2450	1543	1363	1866
(WY)	1955	1986	1978	1952	1959	1963	1957	1984	1989	1992	1992	1979
MIN	65.8	74.9	115	191	194	584	243	120	111	82.9	62.3	61.0
(WY)	1934	1931	1964	1945	1934	1931	1946	1934	1934	1954	1933	1933

WATER YEARS 1922 - 1992

ANNUAL TOTAL	273711		303551				
ANNUAL MEAN	750		829		843		
HIGHEST ANNUAL MEAN					1393		1975
LOWEST ANNUAL MEAN					278		1934
HIGHEST DAILY MEAN	6580	Jan 1	8140	Jul 31	16700	Jan 22	1959
LOWEST DAILY MEAN	84	Jun 24	150	Nov 4	21	Aug 28	1933
ANNUAL SEVEN-DAY MINIMUM	105	Jun 19	160	Oct 29	37	Aug 26	1933
INSTANTANEOUS PEAK FLOW			8780	Jul 31			
INSTANTANEOUS PEAK STAGE			16.52	Jul 31			
INSTANTANEOUS LOW FLOW			150	Nov 4			
10 PERCENT EXCEEDS	1820		1910		2000		
50 PERCENT EXCEEDS	327		502		469		
90 PERCENT EXCEEDS	155		223		125		

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.--

CHLORIDE: October 1987 to current year.

NITROGEN, NITRITE + NITRATE: October 1987 to current year.

NITROGEN, AMMONIA + ORGANIC: October 1987 to current year.

PHOSPHORUS: October 1987 to current year.

SUSPENDED SEDIMENT DISCHARGE: Water years 1950-74, December 1976 to September 1984, October 1987 to current year.

INSTRUMENTATION.--Alcohol-actuated thermograph October 1956 to June 1965, water-quality monitor from July 1965 to September 1991 and a refrigerated water-quality pumping sampler since October 1987.

REMARKS.--Interruptions in the water-quality record were due to malfunction of the instrument. Sediment samples were collected by a local observer on an approximate once daily basis. Chemical loads were calculated using the mean-interval method (Porterfield, George, 1972, Computation of Fluvial-Sediment Discharge: U.S. Geological Survey, Techniques of Water Resources Investigations, Book 3, Chap. C3, 66 p.). For days with unsteady concentration, discharge, or both, the day was sub-divided into half-hour intervals and the daily load was calculated by summing the loads for these half-hour intervals. This required interpolation between measured and estimated concentrations. Concentrations reported as below the limit of detection (for example, <.20) were assumed to have a value of half of the detection limit for the purpose of load calculation.

EXTREMES FOR PERIOD OF DAILY RECORD.--

DISSOLVED CHLORIDE CONCENTRATIONS: Maximum daily mean, 400 mg/L Dec. 23, 1991, Jan. 24, 1992; minimum daily mean, 21 mg/L Aug. 25, 1989.

DISSOLVED CHLORIDE LOADS: Maximum daily, 2,290 tons Feb. 19, 1991; minimum daily, 10.2 tons, Aug. 27, 1989.

DISSOLVED NITROGEN, NITRITE + NITRATE CONCENTRATIONS: Maximum daily mean, 9.81 mg/L July 11, 1988; minimum daily mean, .169 mg/L July 30, 1992.

DISSOLVED NITROGEN, NITRITE + NITRATE LOADS: Maximum daily, 28 tons Sept. 7, 1990; minimum daily, .21 ton Aug. 27, 1989.

TOTAL NITROGEN, AMMONIA + ORGANIC CONCENTRATIONS: Maximum daily mean, 4.7 mg/L Sept. 7, 1990; minimum daily mean, <.20 mg/L Feb. 23, 24, 1989, May 2, 3, 1990, June 29, 30, 1992.

TOTAL NITROGEN, AMMONIA + ORGANIC LOADS: Maximum daily 130 tons Sept. 7, 1990; minimum daily, .060 ton June 29, 1992.

TOTAL PHOSPHORUS CONCENTRATIONS: Maximum daily mean 2.27 mg/L July 11, 1988; minimum daily mean .026 mg/L Aug. 27, 1989.

TOTAL PHOSPHORUS LOADS: Maximum daily 54.4 tons Sept. 7, 1990; minimum daily, .012 ton Aug. 27, 1989.

SEDIMENT CONCENTRATIONS: Maximum daily mean, 1,630 mg/L Sept. 7, 1990; minimum daily mean, 1 mg/L Feb. 12, 13, 1989.

SEDIMENT LOADS: Maximum daily, 45,800 tons May 26, 1989; minimum daily, 1.2 tons Feb. 13, 1989.

EXTREMES FOR CURRENT YEAR.--

DISSOLVED CHLORIDE CONCENTRATIONS: Maximum daily mean, 400 mg/L Dec. 23, Jan. 24; minimum daily mean, 39 mg/L Sept. 22.

DISSOLVED CHLORIDE LOADS: Maximum daily, 2,200 tons Jan. 24; minimum daily, 51.2 tons Nov. 4.

DISSOLVED NITROGEN, NITRITE + NITRATE CONCENTRATIONS: Maximum daily mean, 5.86 mg/L Oct. 1; minimum daily mean, .169 mg/L July 30.

DISSOLVED NITROGEN, NITRITE + NITRATE LOADS: Maximum daily, 15 tons Dec. 3; minimum daily, .40 ton Aug. 6.

TOTAL NITROGEN, AMMONIA + ORGANIC CONCENTRATIONS: Maximum daily mean, 3.7 mg/L Oct. 4; minimum daily mean, <.20 mg/L June 29, 30.

TOTAL NITROGEN, AMMONIA + ORGANIC LOADS: Maximum daily, 34.2 tons Apr. 18; minimum daily, .060 ton June 29.

TOTAL PHOSPHORUS CONCENTRATIONS: Maximum daily mean, .950 mg/L Feb. 16; minimum daily mean, .070 mg/L Feb. 8, May 11.

TOTAL PHOSPHORUS LOADS: Maximum daily, 10.0 tons Feb. 16; minimum daily, .046 ton Nov. 10.

SEDIMENT CONCENTRATIONS: Maximum daily mean, 1,210 mg/L July 30; minimum daily mean, 2 mg/L Nov. 26.

SEDIMENT LOADS: Maximum daily, 19,700 tons July 31; minimum daily, 1.7 tons Nov. 26.

STREAMS TRIBUTARY TO LAKE ERIE

04208000 CUYAHOGA RIVER AT INDEPENDENCE, OH--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPR- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	TUR- BID- ITY (NTU) (00076)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREP- TOCOCCI KF AGAR (COLS. PER 100 ML) (31673)
DEC 11...	1330	268	1090	8.2	11.5	7.5	4.4	11.9	100	1300	110
MAR 04...	1345	850	808	8.0	28.5	9.5	6.9	10.7	95	540	65
JUN 23...	1410	253	1030	8.2	20.0	17.5	8.7	8.5	91	390	85
SEP 15...	1145	884	503	8.1	28.5	19.5	10	8.1	89	110	120
DATE	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	ALKA- LINITY WAT WH TOT FET FIELD MG/L AS CACO3 (00410)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)
DEC 11...	300	86	20	110	7.2	188	0	154	120	160	0.50
MAR 04...	220	63	14	76	4.7	129	0	105	90	130	0.30
JUN 23...	280	84	18	93	5.8	189	0	154	110	160	0.50
SEP 15...	170	51	11	35	3.9	146	0	119	52	56	0.30
DATE	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L AS N) (70300)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	ALUM- INUM, DIS- SOLVED (UG/L AS AL) (01106)	BARIUM, DIS- SOLVED (UG/L AS BA) (01005)
DEC 11...	8.0	682	4.10	0.260	0.270	0.90	0.120	0.120	0.090	<10	43
MAR 04...	5.5	481	1.90	0.210	0.210	0.80	0.110	0.050	0.040	10	29
JUN 23...	7.4	602	4.40	0.060	0.060	0.90	0.150	0.070	0.100	<10	43
SEP 15...	8.8	303	1.50	0.050	0.050	0.70	0.110	0.060	0.040	20	34
DATE	COBALT, DIS- SOLVED (UG/L AS CO) (01035)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LITHIUM DIS- SOLVED (UG/L AS LI) (01130)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	SILVER, DIS- SOLVED (UG/L AS AG) (01075)	STRON- TIUM, DIS- SOLVED (UG/L AS SR) (01080)	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)	SEDI- MENT, SUS- PENDED (MG/L) (80154)
DEC 11...	<3	20	15	93	<10	4	<1	<1.0	240	<6	8
MAR 04...	<3	22	11	95	<10	1	<1	<1.0	170	<6	37
JUN 23...	<3	8	11	73	<10	3	<1	<1.0	240	<6	37
SEP 15...	<3	87	5	15	<10	3	<1	<1.0	130	<6	54

STREAMS TRIBUTARY TO LAKE ERIE

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04208000 CUYAHOGA RIVER AT INDEPENDENCE, OH--Continued

CHLORIDE DISSOLVED (MG/L AS CL), WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	LOAD (TONS/ DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	LOAD (TONS/ DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	LOAD (TONS/ DAY)
OCTOBER			NOVEMBER			DECEMBER			
1	191	110	56.8	165	120	55.3	317	140	117
2	186	110	56.4	161	120	53.1	328	130	116
3	189	110	56.8	157	130	54.1	1850	110	532
4	501	94	122	150	130	51.2	804	120	260
5	358	120	112	177	120	57.2	451	130	161
6	273	120	86.8	192	120	62.4	365	140	137
7	273	110	82.2	191	120	60.8	327	140	123
8	187	110	56.8	171	120	54.0	313	130	114
9	170	120	54.3	172	120	54.1	309	140	116
10	407	110	126	169	120	54.6	280	140	103
11	467	110	134	457	140	176	259	140	97.0
12	367	89	87.2	497	140	192	248	130	90.4
13	413	98	108	451	150	183	309	140	120
14	275	110	81.8	327	150	130	388	150	155
15	292	110	87.8	359	130	128	302	150	120
16	254	120	79.6	572	110	163	265	150	110
17	211	120	68.2	305	120	100	254	170	117
18	203	120	64.3	238	130	81.1	254	210	141
19	273	120	86.5	283	130	96.9	238	220	141
20	301	120	95.9	319	120	105	225	240	146
21	225	130	77.2	396	110	116	267	340	248
22	195	130	69.1	336	120	107	320	390	346
23	179	130	63.5	308	120	97.7	404	400	459
24	170	130	60.7	318	120	101	486	380	512
25	165	130	57.2	287	130	101	347	260	244
26	178	130	60.3	270	130	97.9	279	220	169
27	156	130	53.2	255	140	94.0	266	200	141
28	170	120	56.8	280	140	105	252	180	123
29	165	130	55.6	303	140	115	288	180	140
30	155	120	52.0	336	140	127	387	270	281
31	164	120	55.3	---	---	---	334	240	214
TOTAL	7713	---	2364.3	8602	---	2973.4	11716	---	5893.4
JANUARY			FEBRUARY			MARCH			
1	279	240	183	578	260	411	1040	170	488
2	261	220	153	509	300	406	970	180	465
3	266	190	135	483	300	397	930	180	456
4	268	170	125	480	280	365	840	190	421
5	265	160	116	488	260	342	670	180	332
6	244	150	99.9	433	220	261	1060	150	418
7	240	150	97.1	484	210	271	1730	120	538
8	237	150	96.0	448	220	269	1590	120	510
9	253	150	101	381	230	232	1140	130	395
10	311	150	124	368	230	224	1080	140	403
11	310	150	125	357	210	207	1100	150	444
12	251	150	105	265	210	153	1010	160	440
13	266	160	113	270	230	167	897	170	421
14	1840	350	1980	312	290	246	761	190	386
15	839	310	719	1270	260	657	691	200	378
16	503	260	356	3860	110	1170	600	220	355
17	545	250	367	2430	150	943	690	240	442
18	519	280	384	1350	180	652	816	260	561
19	453	290	352	2960	130	1020	937	270	692
20	478	290	370	2910	140	1120	1080	280	806
21	511	290	395	2130	160	932	1070	280	800
22	450	290	348	1230	180	584	962	280	722
23	1210	360	1360	1240	180	614	1020	280	765
24	1960	400	2200	1110	190	574	994	270	706
25	942	340	866	948	200	512	1380	200	741
26	700	300	574	813	210	458	2220	110	629
27	596	270	435	725	220	427	2830	74	531
28	595	240	386	841	210	439	2240	76	454
29	496	210	289	1560	160	652	1710	89	407
30	483	210	273	---	---	---	1670	92	417
31	588	230	372	---	---	---	1640	95	418
TOTAL	17159	---	13599.0	31233	---	14705	37368	---	15941

STREAMS TRIBUTARY TO LAKE ERIE

04208000 CUYAHOGA RIVER AT INDEPENDENCE, OH--Continued

CHLORIDE DISSOLVED (MG/L AS CL), WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	LOAD (TONS/ DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	LOAD (TONS/ DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	LOAD (TONS/ DAY)
APRIL			MAY			JUNE			
1	1630	97	428	876	86	204	584	110	170
2	1540	100	414	733	87	171	465	110	144
3	1290	100	357	759	94	193	384	110	115
4	1130	110	320	600	97	157	310	110	91.1
5	956	110	278	599	100	164	309	110	95.4
6	829	110	248	596	100	165	380	110	118
7	919	110	282	542	100	152	279	110	86.4
8	559	120	176	492	110	140	264	120	88.9
9	467	120	151	526	110	149	239	130	84.7
10	492	120	165	492	110	142	217	130	75.1
11	651	140	243	460	110	132	205	120	66.8
12	909	140	340	431	110	123	201	120	64.1
13	625	130	219	343	110	99.3	197	120	64.7
14	528	120	171	308	110	88.1	191	110	58.7
15	468	110	139	305	110	89.1	356	110	107
16	583	110	169	306	110	90.1	232	110	68.8
17	2480	100	695	296	110	89.0	226	110	69.0
18	3630	85	813	515	120	161	669	110	204
19	2790	75	561	369	120	119	570	99	154
20	1900	76	391	319	120	102	348	100	96.5
21	1960	77	408	291	120	90.9	279	120	90.2
22	2060	78	436	252	120	80.2	267	140	98.2
23	1470	77	305	274	110	83.3	257	140	94.8
24	1410	79	303	1050	99	280	554	130	193
25	1450	83	324	500	99	133	399	120	126
26	1280	84	291	408	110	121	343	120	108
27	883	85	202	352	120	110	300	130	102
28	797	93	200	314	120	97.8	248	130	85.3
29	894	92	221	303	120	96.7	223	130	76.4
30	950	86	221	605	120	190	225	130	78.7
31	---	---	---	956	100	264	---	---	---
TOTAL	37530	---	9471	15172	---	4276.5	9721	---	3074.8
JULY			AUGUST			SEPTEMBER			
1	217	130	76.6	4400	42	494	1260	62	210
2	214	130	75.4	2470	46	307	1200	63	204
3	213	130	75.9	1340	56	202	1790	60	280
4	252	130	87.8	1580	73	315	2170	53	305
5	231	130	83.4	1180	99	313	1250	63	213
6	371	120	125	822	130	283	996	67	180
7	245	120	77.2	651	150	269	868	69	162
8	223	130	81.0	652	130	235	874	72	169
9	224	130	80.7	925	160	402	873	73	172
10	254	130	88.3	477	200	262	3260	47	406
11	706	100	196	841	220	500	1920	54	278
12	465	110	136	631	170	291	1290	60	209
13	2660	82	577	845	120	264	1030	64	179
14	1270	91	310	612	190	305	941	69	175
15	3010	79	611	1190	230	624	872	74	174
16	2170	80	463	2880	48	369	649	79	138
17	3370	77	657	1960	55	289	488	85	111
18	2870	78	593	1200	60	194	735	77	142
19	1560	83	350	948	66	169	1290	64	212
20	1130	86	262	802	73	158	622	78	131
21	1350	90	327	691	80	150	876	78	167
22	1070	93	268	555	89	132	3310	39	349
23	908	97	237	457	98	120	2200	47	280
24	2120	91	481	423	100	116	1440	54	210
25	2660	87	615	746	79	151	1140	58	177
26	2500	100	676	415	96	108	1010	60	165
27	1720	110	497	1150	66	185	932	63	160
28	1150	130	393	4520	41	481	749	67	135
29	839	170	370	3480	43	398	641	70	121
30	3730	83	793	2000	51	272	566	73	112
31	8140	58	1260	1410	59	224	---	---	---
TOTAL	47842	---	10923.3	42253	---	8582	37242	---	5926
YEAR	303551		97729.7						

STREAMS TRIBUTARY TO LAKE ERIE

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04208000 CUYAHOGA RIVER AT INDEPENDENCE, OH--Continued

NITROGEN NITRITE PLUS NITRATE DISSOLVED (MG/L AS N), WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	LOAD (TONS/ DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	LOAD (TONS/ DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	LOAD (TONS/ DAY)
OCTOBER			NOVEMBER			DECEMBER			
1	191	5.86	3.0	165	4.77	2.1	317	4.15	3.5
2	186	5.85	2.9	161	4.88	2.1	328	4.31	3.8
3	189	5.79	3.0	157	5.25	2.2	1850	2.92	15
4	501	4.07	5.2	150	5.62	2.3	804	2.37	5.2
5	358	4.36	4.3	177	5.76	2.8	451	2.44	3.0
6	273	3.93	2.9	192	5.78	3.0	365	2.86	2.8
7	273	3.05	2.2	191	5.43	2.8	327	3.16	2.8
8	187	3.52	1.8	171	5.15	2.4	313	3.51	3.0
9	170	4.90	2.2	172	5.39	2.5	309	3.68	3.1
10	407	5.07	5.4	169	5.39	2.5	280	4.00	3.0
11	467	3.87	5.0	457	4.38	5.0	259	4.00	2.8
12	367	2.86	2.8	497	3.09	4.2	248	4.04	2.7
13	413	3.15	3.5	451	2.96	3.6	309	4.07	3.4
14	275	3.56	2.6	327	3.27	2.9	388	3.79	4.0
15	292	3.87	3.1	359	3.38	3.2	302	3.43	2.8
16	254	4.42	3.0	572	2.73	4.2	265	4.09	2.9
17	211	4.48	2.6	305	3.29	2.7	254	4.77	3.3
18	203	4.64	2.5	238	3.57	2.3	254	4.96	3.4
19	273	4.49	3.3	283	4.08	3.1	238	4.92	3.2
20	301	3.66	3.0	319	3.94	3.4	225	4.96	3.0
21	225	3.47	2.1	396	3.18	3.4	267	4.80	3.5
22	195	3.91	2.1	336	3.69	3.3	320	4.05	3.5
23	179	4.29	2.1	308	3.94	3.3	404	4.15	4.5
24	170	4.37	2.0	318	4.25	3.6	486	3.95	5.2
25	165	4.33	1.9	287	4.81	3.7	347	3.76	3.5
26	178	4.16	2.0	270	4.91	3.6	279	3.89	2.9
27	156	4.36	1.8	255	5.06	3.5	266	4.33	3.1
28	170	4.84	2.2	280	5.16	3.9	252	4.90	3.3
29	165	5.06	2.2	303	4.78	3.9	288	4.68	3.6
30	155	5.10	2.1	336	4.36	4.0	387	4.14	4.3
31	164	4.98	2.2	---	---	---	334	4.05	3.7
TOTAL	7713	---	87.0	8602	---	95.5	11716	---	117.8
JANUARY			FEBRUARY			MARCH			
1	279	3.95	3.0	578	2.80	4.4	1040	1.77	5.0
2	261	3.90	2.7	509	2.88	4.0	970	1.84	4.8
3	266	4.30	3.1	483	3.03	3.9	930	1.93	4.8
4	268	4.60	3.3	480	3.07	4.0	840	2.01	4.6
5	265	4.46	3.2	488	2.96	3.9	670	2.04	3.7
6	244	4.29	2.8	433	2.88	3.4	1060	1.72	4.9
7	240	4.37	2.8	484	2.99	3.9	1730	1.45	6.8
8	237	4.49	2.9	448	1.98	2.4	1590	1.53	6.6
9	253	4.46	3.0	381	2.56	2.6	1140	1.66	5.1
10	311	2.82	2.4	368	3.17	3.2	1080	1.71	5.0
11	310	2.26	1.9	357	3.30	3.2	1100	1.68	5.0
12	251	2.47	1.7	265	3.08	2.2	1010	1.74	4.8
13	266	2.67	1.9	270	3.28	2.4	897	1.79	4.3
14	1840	1.84	7.8	312	3.32	2.8	761	1.84	3.8
15	839	1.70	3.8	1270	2.66	7.2	691	1.89	3.5
16	503	2.12	2.9	3860	1.14	12	600	1.94	3.1
17	545	2.31	3.4	2430	1.33	8.6	690	1.87	3.4
18	519	2.20	3.1	1350	1.60	5.8	816	1.53	3.3
19	453	2.29	2.8	2960	1.32	10	937	1.48	3.7
20	478	2.35	3.0	2910	1.33	10	1080	1.35	3.9
21	511	2.37	3.3	2130	1.53	8.8	1070	1.40	4.0
22	450	2.38	2.9	1230	1.65	5.5	962	1.47	3.8
23	1210	2.01	5.7	1240	1.71	5.7	1020	1.53	4.2
24	1960	1.61	8.2	1110	1.78	5.3	994	1.56	4.1
25	942	1.99	5.0	948	1.85	4.7	1380	1.49	5.5
26	700	2.25	4.2	813	1.93	4.2	2220	1.26	7.5
27	596	2.49	4.0	725	2.00	3.9	2830	1.19	9.0
28	595	2.60	4.2	841	1.96	4.2	2240	1.29	7.8
29	496	2.60	3.5	1560	1.61	6.7	1710	1.39	6.4
30	483	2.64	3.5	---	---	---	1670	1.41	6.4
31	588	2.73	4.3	---	---	---	1640	1.42	6.3
TOTAL	17159	---	110.3	31233	---	148.9	37368	---	155.1

STREAMS TRIBUTARY TO LAKE ERIE

04208000 CUYAHOGA RIVER AT INDEPENDENCE, OH--Continued

NITROGEN NITRITE PLUS NITRATE DISSOLVED (MG/L AS N), WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)
APRIL			MAY			JUNE			
1	1630	1.43	6.3	876	1.74	4.1	584	2.19	3.4
2	1540	1.44	6.0	733	1.84	3.6	465	2.97	3.7
3	1290	1.46	5.1	759	1.75	3.6	384	3.32	3.4
4	1130	1.47	4.5	600	1.80	2.9	310	3.24	2.7
5	956	1.48	3.8	599	2.11	3.4	309	3.42	2.9
6	829	1.49	3.3	596	2.17	3.5	380	3.36	3.4
7	919	1.35	3.3	542	2.20	3.2	279	2.90	2.2
8	559	1.55	2.3	492	2.25	3.0	264	3.29	2.3
9	467	1.63	2.1	526	2.09	3.0	239	3.71	2.4
10	492	1.67	2.2	492	1.95	2.6	217	4.23	2.5
11	651	1.65	2.9	460	1.98	2.5	205	4.33	2.4
12	909	1.55	3.8	431	2.13	2.5	201	3.99	2.2
13	625	1.70	2.9	343	2.22	2.0	197	3.83	2.0
14	528	1.74	2.5	308	2.34	1.9	191	3.95	2.0
15	468	1.60	2.0	305	2.75	2.3	356	3.57	3.4
16	583	1.69	2.7	306	3.01	2.5	232	3.49	2.2
17	2480	1.41	9.0	296	2.91	2.3	226	4.13	2.5
18	3630	1.07	10	515	2.95	4.1	669	3.57	6.3
19	2790	1.09	8.2	369	2.63	2.6	570	2.20	3.5
20	1900	1.10	5.7	319	3.06	2.6	348	2.28	2.1
21	1960	1.08	5.6	291	3.38	2.7	279	3.12	2.3
22	2060	.965	5.4	252	3.42	2.3	267	3.95	2.8
23	1470	1.06	4.2	274	3.31	2.4	257	4.35	3.0
24	1410	1.14	4.3	1050	2.50	7.1	554	4.31	6.4
25	1450	1.13	4.4	500	1.75	2.4	399	3.36	3.7
26	1280	1.26	4.3	408	2.42	2.7	343	3.19	3.0
27	883	1.49	3.5	352	3.20	3.0	300	3.82	3.1
28	797	1.86	4.0	314	3.41	2.9	248	3.88	2.6
29	894	1.89	4.6	303	3.47	2.8	223	3.96	2.4
30	950	1.74	4.5	605	3.07	4.8	225	4.01	2.4
31	---	---	---	956	1.74	4.5	---	---	---
TOTAL	37530	---	133.4	15172	---	95.8	9721	---	89.2
JULY			AUGUST			SEPTEMBER			
1	217	4.52	2.6	4400	.193	2.3	1260	1.51	5.2
2	214	4.45	2.6	2470	.257	1.6	1200	1.63	5.3
3	213	4.13	2.4	1340	.673	2.4	1790	1.46	6.9
4	252	4.42	3.0	1580	.650	2.5	2170	1.34	7.7
5	231	4.74	2.9	1180	.230	.75	1250	1.57	5.3
6	371	3.65	3.7	822	.181	.40	996	1.64	4.4
7	245	3.23	2.1	651	.242	.42	868	1.69	4.0
8	223	3.86	2.3	652	.792	1.4	874	1.73	4.1
9	224	4.36	2.6	925	.347	.71	873	1.76	4.1
10	254	3.65	2.5	477	.476	.62	3260	1.25	11
11	706	2.62	5.1	841	.243	.53	1920	1.45	7.5
12	465	2.50	3.1	631	.547	.93	1290	1.69	5.9
13	2660	1.35	9.4	845	.839	1.9	1030	1.82	5.0
14	1270	1.45	4.9	612	.371	.64	941	1.94	4.9
15	3010	1.16	8.5	1190	.173	.67	872	2.07	4.9
16	2170	1.25	7.1	2880	1.05	7.5	649	2.21	3.9
17	3370	1.22	9.7	1960	1.47	7.7	488	2.36	3.1
18	2870	1.16	8.7	1200	1.67	5.4	735	2.15	3.9
19	1560	1.39	5.8	948	1.83	4.7	1290	1.65	5.5
20	1130	1.60	4.9	802	1.98	4.3	622	2.14	3.6
21	1350	1.56	5.7	691	2.15	4.0	876	2.30	5.1
22	1070	1.67	4.8	555	2.33	3.5	3310	1.46	13
23	908	1.74	4.3	457	2.53	3.1	2200	1.68	10
24	2120	1.45	6.9	423	2.62	2.9	1440	1.79	6.9
25	2660	1.11	7.9	746	2.13	4.1	1140	1.85	5.7
26	2500	1.12	7.5	415	2.60	2.9	1010	1.91	5.2
27	1720	.784	3.8	1150	1.84	5.1	932	1.97	5.0
28	1150	.376	1.2	4520	1.23	14	749	2.04	4.1
29	839	.265	.59	3480	1.12	10	641	2.10	3.6
30	3730	.169	1.7	2000	1.25	6.7	566	2.17	3.3
31	8140	.181	4.0	1410	1.39	5.3	---	---	---
TOTAL	47842	---	142.29	42253	---	108.97	37242	---	168.1
YEAR	303551		1452.36						

STREAMS TRIBUTARY TO LAKE ERIE

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04208000 CUYAHOGA RIVER AT INDEPENDENCE, OH--Continued

NITROGEN AMMONIA PLUS ORGANIC TOTAL (MG/L AS N), WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)
OCTOBER			NOVEMBER			DECEMBER			
1	191	.66	.34	165	.75	.33	317	.68	.59
2	186	.64	.32	161	.72	.31	328	.67	.63
3	189	.73	.37	157	.69	.29	1850	2.6	12.9
4	501	3.7	5.46	150	.70	.29	804	1.5	3.49
5	358	.90	.91	177	.69	.33	451	1.1	1.31
6	273	.74	.54	192	.43	.22	365	.97	.96
7	273	.93	.71	191	.51	.26	327	1.0	.91
8	187	.71	.36	171	.68	.32	313	1.0	.85
9	170	.65	.30	172	.68	.32	309	1.0	.84
10	407	.79	.94	169	.65	.30	280	.95	.72
11	467	.84	1.07	457	.86	1.10	259	1.2	.81
12	367	.81	.82	497	1.1	1.43	248	1.1	.71
13	413	.78	.88	451	.89	1.09	309	.93	.79
14	275	.70	.52	327	.78	.68	388	1.9	1.98
15	292	.73	.57	359	.83	.86	302	.73	.62
16	254	.77	.53	572	1.2	1.92	265	.30	.21
17	211	.70	.40	305	.77	.64	254	.34	.23
18	203	.68	.37	238	.67	.43	254	.35	.24
19	273	.74	.55	283	.67	.51	238	.34	.22
20	301	.70	.57	319	.79	.68	225	.31	.19
21	225	.64	.39	396	.89	.95	267	.31	.23
22	195	.67	.35	336	1.0	.90	320	.24	.22
23	179	.66	.32	308	1.0	.83	404	.24	.29
24	170	.70	.32	318	.79	.68	486	.32	.43
25	165	.76	.34	287	.58	.45	347	.32	.30
26	178	.73	.35	270	.56	.41	279	.35	.27
27	156	.73	.31	255	.59	.41	266	.32	.23
28	170	.83	.38	280	.65	.49	252	.31	.21
29	165	.76	.34	303	.65	.53	288	.40	.31
30	155	.73	.31	336	.71	.65	387	.39	.41
31	164	.75	.33	---	---	---	334	.42	.38
TOTAL	7713	---	20.27	8602	---	18.61	11716	---	32.48
JANUARY			FEBRUARY			MARCH			
1	279	.47	.35	578	.65	1.02	1040	1.4	3.86
2	261	.57	.40	509	.61	.83	970	1.2	3.23
3	266	.76	.55	483	.65	.85	930	1.1	2.79
4	268	.60	.44	480	.72	.94	840	1.0	2.27
5	265	.50	.35	488	.82	1.07	670	.93	1.69
6	244	.49	.32	433	.83	.97	1060	1.1	3.11
7	240	.59	.38	484	.68	.89	1730	1.2	5.82
8	237	.75	.48	448	.69	.84	1590	1.1	4.74
9	253	.89	.61	381	.80	.82	1140	.94	2.88
10	311	1.8	1.51	368	.74	.74	1080	.95	2.81
11	310	2.2	1.87	357	.75	.72	1100	1.0	3.10
12	251	2.3	1.55	265	.96	.68	1010	.97	2.64
13	266	2.4	1.71	270	1.0	.74	897	.93	2.26
14	1840	1.7	8.28	312	1.1	.95	761	.90	1.84
15	839	1.5	3.37	1270	1.7	7.37	691	.86	1.61
16	503	1.4	1.85	3860	3.1	32.4	600	.83	1.35
17	545	1.4	2.02	2430	2.3	15.6	690	.84	1.58
18	519	1.6	2.16	1350	1.8	6.78	816	.86	1.91
19	453	1.5	1.87	2960	2.7	22.1	937	.81	2.12
20	478	1.5	1.90	2910	2.5	19.4	1080	1.0	3.06
21	511	1.4	2.00	2130	2.1	12.2	1070	1.1	3.06
22	450	1.4	1.73	1230	1.9	6.26	962	.94	2.44
23	1210	1.2	3.19	1240	1.7	5.79	1020	.87	2.40
24	1960	.67	3.58	1110	1.6	4.76	994	.88	2.42
25	942	.62	1.57	948	1.5	3.72	1380	1.2	4.42
26	700	.68	1.28	813	1.3	2.93	2220	1.8	10.6
27	596	.77	1.24	725	1.2	2.39	2830	2.0	16.0
28	595	.87	1.40	841	1.2	3.04	2240	1.6	9.96
29	496	.83	1.12	1560	1.6	6.73	1710	1.2	5.77
30	483	.75	.97	---	---	---	1670	1.2	5.26
31	588	.70	1.11	---	---	---	1640	1.1	4.98
TOTAL	17159	---	51.16	31233	---	163.53	37368	---	121.98

STREAMS TRIBUTARY TO LAKE ERIE

04208000 CUYAHOGA RIVER AT INDEPENDENCE, OH--Continued

NITROGEN AMMONIA PLUS ORGANIC TOTAL (MG/L AS N), WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	LOAD (TONS/ DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	LOAD (TONS/ DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	LOAD (TONS/ DAY)
APRIL			MAY			JUNE			
1	1630	1.1	4.80	876	.64	1.52	584	.57	.90
2	1540	1.1	4.38	733	.67	1.33	465	.70	.87
3	1290	1.0	3.55	759	.68	1.39	384	.73	.76
4	1130	.99	3.01	600	.64	1.03	310	.73	.61
5	956	.95	2.46	599	.59	.96	309	.71	.59
6	829	.92	2.06	596	.59	.95	380	.69	.71
7	919	.97	2.43	542	.58	.86	279	.66	.50
8	559	.88	1.33	492	.55	.74	264	.56	.40
9	467	.84	1.06	526	.54	.77	239	.57	.36
10	492	.89	1.22	492	.53	.70	217	.58	.34
11	651	1.1	1.92	460	.63	.78	205	.69	.38
12	909	1.1	2.69	431	.77	.89	201	.77	.42
13	625	.80	1.35	343	.86	.80	197	.75	.40
14	528	.71	1.02	308	.80	.67	191	.76	.39
15	468	.67	.85	305	.81	.67	356	.60	.58
16	583	.78	1.25	306	.82	.68	232	.65	.41
17	2480	2.7	19.5	296	.73	.58	226	.74	.45
18	3630	3.0	34.2	515	.68	.95	669	1.6	3.08
19	2790	1.4	11.3	369	.85	.84	570	1.2	1.85
20	1900	.71	3.67	319	.85	.74	348	.85	.80
21	1960	.81	4.43	291	.80	.63	279	.70	.53
22	2060	.86	4.80	252	.92	.62	267	.68	.49
23	1470	.77	3.06	274	1.2	.93	257	.66	.46
24	1410	.77	2.97	1050	1.5	4.70	554	1.0	1.54
25	1450	.84	3.31	500	.82	1.17	399	.73	.80
26	1280	.68	2.37	408	.68	.74	343	.70	.65
27	883	.58	1.39	352	.79	.75	300	.67	.54
28	797	.62	1.33	314	1.0	.85	248	.55	.38
29	894	.63	1.52	303	.97	.80	223	<.20	.060
30	950	.64	1.63	605	.96	1.60	225	<.20	.063
31	---	---	---	956	1.3	3.53	---	---	---
TOTAL	37530	---	130.86	15172	---	34.17	9721	---	20.313
JULY			AUGUST			SEPTEMBER			
1	217	.45	.26	4400	.96	11.2	1260	1.8	6.01
2	214	.86	.50	2470	.76	5.15	1200	1.7	5.56
3	213	.84	.48	1340	.59	2.14	1790	2.1	10.7
4	252	.86	.58	1580	.60	2.63	2170	2.5	14.9
5	231	.76	.47	1180	.77	2.46	1250	1.9	6.30
6	371	.80	.81	822	.82	1.82	996	1.7	4.66
7	245	.71	.47	651	.85	1.49	868	1.7	3.89
8	223	.75	.45	652	.84	1.48	874	1.6	3.75
9	224	.82	.50	925	.58	1.66	873	1.5	3.65
10	254	.85	.60	477	.46	.57	3260	2.1	19.3
11	706	2.5	5.28	841	.76	1.74	1920	1.6	8.49
12	465	.96	1.21	631	.93	1.58	1290	1.4	4.92
13	2660	2.1	15.9	845	.91	2.05	1030	1.3	3.49
14	1270	1.9	6.49	612	.97	1.60	941	1.1	2.87
15	3010	2.7	23.9	1190	.95	3.79	872	1.0	2.40
16	2170	2.2	13.4	2880	1.9	15.6	649	.92	1.62
17	3370	2.5	27.5	1960	1.5	8.05	488	.83	1.09
18	2870	2.2	18.4	1200	1.3	4.08	735	.85	1.82
19	1560	1.7	7.34	948	1.0	2.68	1290	1.0	3.76
20	1130	1.5	4.57	802	.95	2.07	622	.72	1.22
21	1350	1.5	5.61	691	.90	1.68	876	.67	1.73
22	1070	1.3	3.75	555	.85	1.28	3310	1.2	10.4
23	908	1.1	2.78	457	.81	.995	2200	.93	5.60
24	2120	1.3	8.89	423	.81	.94	1440	.77	3.00
25	2660	.82	6.36	746	1.1	2.29	1140	.70	2.14
26	2500	.45	3.06	415	.79	.89	1010	.64	1.76
27	1720	.38	1.81	1150	1.2	4.48	932	.59	1.49
28	1150	.53	1.59	4520	2.5	31.5	749	.55	1.11
29	839	.71	1.74	3480	2.4	23.1	641	.51	.88
30	3730	1.5	15.6	2000	2.1	11.4	566	.47	.71
31	8140	1.1	24.7	1410	1.8	6.97	---	---	---
TOTAL	47842	---	205.00	42253	---	159.365	37242	---	139.22
YEAR	303551		1096.963						

STREAMS TRIBUTARY TO LAKE ERIE

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04208000 CUYAHOGA RIVER AT INDEPENDENCE, OH--Continued

PHOSPHORUS TOTAL (MG/L AS P), WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)
OCTOBER			NOVEMBER			DECEMBER			
1	191	.349	.18	165	.135	.060	317	.117	.10
2	186	.455	.23	161	.130	.056	328	.111	.11
3	189	.301	.15	157	.127	.054	1850	.842	4.20
4	501	.385	.52	150	.173	.070	804	.372	.87
5	358	.222	.22	177	.226	.11	451	.196	.24
6	273	.167	.12	192	.224	.12	365	.146	.14
7	273	.176	.13	191	.157	.082	327	.115	.10
8	187	.212	.11	171	.119	.055	313	.117	.099
9	170	.250	.12	172	.101	.047	309	.127	.11
10	407	.213	.23	169	.101	.046	280	.140	.11
11	467	.191	.24	457	.168	.23	259	.168	.12
12	367	.145	.14	497	.221	.30	248	.149	.10
13	413	.161	.18	451	.171	.21	309	.136	.11
14	275	.153	.11	327	.135	.12	388	.184	.20
15	292	.199	.16	359	.151	.16	302	.122	.10
16	254	.225	.15	572	.223	.37	265	.112	.080
17	211	.201	.11	305	.119	.099	254	.120	.082
18	203	.179	.098	238	.112	.072	254	.131	.089
19	273	.171	.13	283	.142	.11	238	.130	.084
20	301	.165	.13	319	.174	.15	225	.144	.088
21	225	.160	.097	396	.165	.18	267	.165	.12
22	195	.154	.081	336	.155	.14	320	.144	.12
23	179	.158	.076	308	.142	.12	404	.164	.19
24	170	.141	.065	318	.115	.099	486	.151	.20
25	165	.143	.064	287	.074	.057	347	.117	.11
26	178	.139	.067	270	.080	.058	279	.112	.084
27	156	.152	.064	255	.097	.067	266	.108	.078
28	170	.192	.088	280	.375	.29	252	.118	.080
29	165	.211	.094	303	.240	.20	288	.138	.11
30	155	.209	.088	336	.123	.11	387	.142	.15
31	164	.170	.075	---	---	---	334	.134	.12
TOTAL	7713	---	4.317	8602	---	3.842	11716	---	8.494
JANUARY			FEBRUARY			MARCH			
1	279	.166	.12	578	.077	.12	1040	.216	.61
2	261	.166	.12	509	.077	.11	970	.183	.48
3	266	.148	.11	483	.077	.10	930	.155	.39
4	268	.118	.085	480	.083	.11	840	.131	.30
5	265	.102	.073	488	.084	.11	670	.119	.21
6	244	.116	.076	433	.082	.095	1060	.169	.48
7	240	.133	.086	484	.074	.096	1730	.232	1.08
8	237	.151	.097	448	.070	.084	1590	.201	.86
9	253	.168	.12	381	.082	.084	1140	.161	.49
10	311	.949	.80	368	.087	.086	1080	.154	.45
11	310	.913	.79	357	.081	.078	1100	.165	.49
12	251	.453	.31	265	.084	.060	1010	.144	.39
13	266	.269	.19	270	.108	.078	897	.128	.31
14	1840	.344	1.85	312	.131	.11	761	.114	.24
15	839	.207	.48	1270	.283	1.58	691	.102	.19
16	503	.147	.20	3860	.950	10.0	600	.091	.15
17	545	.122	.18	2430	.553	3.76	690	.089	.17
18	519	.109	.15	1350	.348	1.29	816	.097	.22
19	453	.093	.11	2960	.669	5.50	937	.105	.27
20	478	.089	.11	2910	.535	4.23	1080	.127	.37
21	511	.087	.12	2130	.388	2.28	1070	.119	.34
22	450	.086	.10	1230	.321	1.07	962	.104	.27
23	1210	.166	.79	1240	.284	.95	1020	.097	.27
24	1960	.263	1.58	1110	.251	.76	994	.105	.29
25	942	.127	.33	948	.222	.57	1380	.193	.73
26	700	.103	.20	813	.197	.43	2220	.312	1.88
27	596	.091	.15	725	.174	.34	2830	.374	2.92
28	595	.090	.14	841	.191	.52	2240	.317	1.93
29	496	.088	.12	1560	.287	1.26	1710	.240	1.11
30	483	.082	.11	---	---	---	1670	.215	.97
31	588	.077	.12	---	---	---	1640	.199	.88
TOTAL	17159	---	9.817	31233	---	35.861	37368	---	19.74

STREAMS TRIBUTARY TO LAKE ERIE

04208000 CUYAHOGA RIVER AT INDEPENDENCE, OH--Continued

PHOSPHORUS TOTAL (MG/L AS P), WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)
APRIL			MAY			JUNE			
1	1630	.185	.81	876	.136	.32	584	.155	.25
2	1540	.171	.71	733	.110	.22	465	.125	.16
3	1290	.159	.55	759	.133	.27	384	.119	.12
4	1130	.147	.45	600	.114	.19	310	.117	.098
5	956	.137	.35	599	.103	.17	309	.122	.10
6	829	.127	.28	596	.109	.18	380	.114	.12
7	919	.141	.36	542	.100	.15	279	.124	.093
8	559	.091	.14	492	.093	.12	264	.147	.10
9	467	.084	.11	526	.083	.12	239	.162	.10
10	492	.086	.12	492	.072	.095	217	.163	.095
11	651	.093	.16	460	.070	.087	205	.140	.078
12	909	.200	.52	431	.071	.083	201	.121	.066
13	625	.098	.17	343	.075	.069	197	.119	.063
14	528	.093	.13	308	.075	.063	191	.125	.065
15	468	.087	.11	305	.076	.063	356	.238	.26
16	583	.116	.19	306	.076	.063	232	.147	.092
17	2480	.554	4.23	296	.085	.068	226	.165	.10
18	3630	.664	7.66	515	.117	.16	669	.458	.91
19	2790	.446	3.66	369	.113	.11	570	.311	.50
20	1900	.194	1.01	319	.106	.091	348	.204	.19
21	1960	.204	1.14	291	.103	.081	279	.162	.12
22	2060	.237	1.33	252	.107	.073	267	.142	.10
23	1470	.164	.65	274	.164	.14	257	.156	.11
24	1410	.140	.54	1050	.356	1.12	554	.286	.44
25	1450	.148	.58	500	.159	.23	399	.192	.21
26	1280	.125	.43	408	.122	.13	343	.178	.16
27	883	.120	.29	352	.107	.10	300	.138	.11
28	797	.114	.25	314	.093	.079	248	.128	.086
29	894	.133	.32	303	.082	.067	223	.118	.071
30	950	.143	.37	605	.152	.28	225	.126	.077
31	---	---	---	956	.254	.67	---	---	---
TOTAL	37530	---	27.62	15172	---	5.662	9721	---	5.044
JULY			AUGUST			SEPTEMBER			
1	217	.140	.082	4400	.201	2.39	1260	.192	.66
2	214	.123	.072	2470	.199	1.33	1200	.184	.60
3	213	.117	.067	1340	.220	.79	1790	.234	1.20
4	252	.130	.088	1580	.207	.87	2170	.271	1.66
5	231	.143	.089	1180	.210	.67	1250	.185	.63
6	371	.182	.19	822	.212	.47	996	.150	.40
7	245	.181	.12	651	.137	.24	868	.123	.29
8	223	.209	.13	652	.117	.21	874	.113	.27
9	224	.165	.10	925	.133	.33	873	.117	.28
10	254	.169	.12	477	.128	.17	3260	.400	3.77
11	706	.784	1.67	841	.111	.25	1920	.248	1.29
12	465	.265	.34	631	.155	.26	1290	.189	.67
13	2660	.899	6.94	845	.167	.38	1030	.145	.40
14	1270	.505	1.79	612	.136	.23	941	.119	.30
15	3010	.613	6.15	1190	.137	.54	872	.099	.23
16	2170	.513	3.26	2880	.386	3.21	649	.084	.15
17	3370	.498	5.80	1960	.234	1.25	488	.078	.10
18	2870	.463	3.86	1200	.166	.54	735	.103	.25
19	1560	.280	1.20	948	.119	.31	1290	.175	.69
20	1130	.188	.58	802	.102	.22	622	.092	.16
21	1350	.171	.63	691	.093	.17	876	.098	.29
22	1070	.124	.36	555	.086	.13	3310	.390	3.53
23	908	.101	.25	457	.078	.097	2200	.277	1.67
24	2120	.185	1.49	423	.076	.088	1440	.189	.74
25	2660	.229	1.74	746	.111	.25	1140	.160	.49
26	2500	.212	1.45	415	.073	.082	1010	.141	.38
27	1720	.222	1.04	1150	.189	.77	932	.124	.31
28	1150	.200	.62	4520	.532	6.85	749	.109	.22
29	839	.198	.45	3480	.444	4.25	641	.096	.17
30	3730	.178	1.80	2000	.299	1.63	566	.085	.13
31	8140	.194	4.28	1410	.210	.80	---	---	---
TOTAL	47842	---	46.758	42253	---	29.777	37242	---	21.93
YEAR	303551		218.862						

STREAMS TRIBUTARY TO LAKE ERIE

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04208000 CUYAHOGA RIVER AT INDEPENDENCE, OH--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

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	191	8	4.2	165	14	6.1	317	18	15
2	186	9	4.7	161	13	5.8	328	24	26
3	189	9	4.8	157	9	3.9	1850	599	2990
4	501	174	315	150	6	2.6	804	203	485
5	358	60	64	177	6	2.9	451	49	62
6	273	45	33	192	6	3.0	365	14	13
7	273	38	29	191	5	2.7	327	12	11
8	187	14	7.3	171	5	2.1	313	20	17
9	170	18	8.4	172	4	1.9	309	25	21
10	407	79	123	169	5	2.1	280	14	10
11	467	94	131	457	133	213	259	6	4.3
12	367	25	24	497	45	68	248	5	3.6
13	413	21	24	451	15	18	309	19	16
14	275	20	15	327	8	6.8	388	23	24
15	292	18	14	359	56	82	302	15	12
16	254	14	9.8	572	132	241	265	9	6.4
17	211	9	5.2	305	15	13	254	6	4.3
18	203	13	7.1	238	5	3.4	254	6	4.2
19	273	21	15	283	13	9.8	238	7	4.3
20	301	16	13	319	26	22	225	6	3.8
21	225	8	5.0	396	37	40	267	7	4.8
22	195	9	4.5	336	17	16	320	6	4.8
23	179	14	6.9	308	11	8.9	404	26	37
24	170	17	7.6	318	11	9.1	486	32	45
25	165	15	6.8	287	5	3.7	347	9	8.8
26	178	21	9.8	270	2	1.7	279	4	3.3
27	156	23	9.5	255	3	2.0	266	4	2.9
28	170	20	9.3	280	5	4.1	252	5	3.4
29	165	15	6.5	303	11	8.8	288	6	4.9
30	155	15	6.2	336	22	20	387	9	9.1
31	164	17	7.7	---	---	---	334	6	5.2
TOTAL	7713	---	931.3	8602	---	824.4	11716	---	3862.1
JANUARY			FEBRUARY			MARCH			
1	279	4	3.0	578	13	20	1040	57	164
2	261	3	2.4	509	14	19	970	40	106
3	266	6	4.4	483	13	17	930	32	80
4	268	10	7.1	480	11	14	840	26	60
5	265	8	5.7	488	12	16	670	32	58
6	244	5	3.1	433	7	8.4	1060	149	426
7	240	5	3.0	484	8	10	1730	266	1240
8	237	4	2.8	448	8	10	1590	206	883
9	253	7	4.5	381	5	5.1	1140	80	246
10	311	10	8.6	368	4	4.3	1080	65	189
11	310	7	5.8	357	6	5.9	1100	43	128
12	251	6	4.0	265	5	3.3	1010	30	81
13	266	5	3.9	270	7	5.1	897	26	64
14	1840	246	1500	312	11	8.9	761	26	53
15	839	127	310	1270	445	3180	691	25	48
16	503	36	50	3860	641	6820	600	19	30
17	545	27	40	2430	192	1340	690	17	32
18	519	14	19	1350	117	428	816	23	50
19	453	20	24	2960	577	4660	937	19	49
20	478	18	23	2910	219	1740	1080	37	107
21	511	21	29	2130	166	980	1070	52	149
22	450	12	14	1230	73	243	962	62	161
23	1210	195	1290	1240	68	226	1020	31	85
24	1960	311	1990	1110	83	248	994	27	75
25	942	74	196	948	91	233	1380	131	519
26	700	33	62	813	50	111	2220	639	3890
27	596	27	43	725	36	70	2830	355	2750
28	595	25	41	841	92	359	2240	168	1030
29	496	21	29	1560	221	1030	1710	121	561
30	483	18	24	---	---	---	1670	80	359
31	588	17	27	---	---	---	1640	75	332
TOTAL	17159	---	5769.3	31233	---	21815.0	37368	---	14005

STREAMS TRIBUTARY TO LAKE ERIE

04208000 CUYAHOGA RIVER AT INDEPENDENCE, OH--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

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	1630	69	306	876	36	85	584	61	99.5
2	1540	89	369	733	37	72	465	37	47
3	1290	59	206	759	81	165	384	27	29
4	1130	45	137	600	30	49	310	27	23
5	956	34	87	599	17	27	309	30	25
6	829	47	105	596	16	25	380	34	34
7	919	69	173	542	15	22	279	40	30
8	559	31	48	492	17	22	264	29	21
9	467	18	23	526	17	24	239	23	15
10	492	16	22	492	11	15	217	25	15
11	651	20	36	460	13	16	205	23	13
12	909	68	166	431	15	18	201	27	15
13	625	29	50	343	23	21	197	26	14
14	528	16	22	308	19	16	191	22	11
15	468	12	15	305	18	15	356	117	140
16	583	34	57	306	20	16	232	46	29
17	2480	377	2930	296	17	14	226	30	18
18	3630	1030	12000	515	95	141	669	155	322
19	2790	675	5500	369	24	25	570	166	267
20	1900	164	866	319	22	19	348	71	69
21	1960	178	1030	291	19	15	279	39	30
22	2060	194	1100	252	24	16	267	26	18
23	1470	126	498	274	54	47	257	36	25
24	1410	233	875	1050	361	1160	554	227	380
25	1450	107	424	500	57	85	399	54	60
26	1280	159	547	408	28	31	343	33	30
27	883	64	157	352	23	22	300	26	21
28	797	48	105	314	23	19	248	26	17
29	894	124	302	303	24	20	223	33	20
30	950	63	159	605	113	244	225	36	22
31	---	---	---	956	336	958	---	---	---
TOTAL	37530	---	28315	15172	---	3424	9721	---	1859.5
JULY			AUGUST			SEPTEMBER			
1	217	28	17	4400	545	6320	1260	186	633
2	214	29	17	2470	709	4770	1200	215	694
3	213	32	18	1340	282	1070	1790	214	1130
4	252	34	23	1580	425	2030	2170	257	1580
5	231	32	20	1180	204	644	1250	118	404
6	371	73	82	822	334	748	996	74	201
7	245	29	19	651	80	142	868	62	145
8	223	24	14	652	129	242	874	73	173
9	224	26	16	925	271	750	873	53	126
10	254	49	39	477	83	108	3260	510	4980
11	706	327	681	841	414	1010	1920	253	1340
12	465	116	172	631	263	447	1290	117	418
13	2660	981	7640	845	147	332	1030	86	239
14	1270	804	2740	612	61	103	941	152	385
15	3010	1140	10400	1190	236	1840	872	67	160
16	2170	888	5650	2880	550	4950	649	58	103
17	3370	675	8250	1960	262	1390	488	43	57
18	2870	500	4470	1200	197	650	735	199	693
19	1560	240	1010	948	80	212	1290	543	2220
20	1130	347	1050	802	48	104	622	142	247
21	1350	347	1270	691	41	77	876	108	460
22	1070	289	840	555	35	53	3310	691	6470
23	908	158	390	457	24	30	2200	338	2050
24	2120	540	4880	423	52	69	1440	191	759
25	2660	574	4460	746	291	715	1140	81	252
26	2500	423	2810	415	47	55	1010	57	156
27	1720	203	969	1150	463	2100	932	129	321
28	1150	178	554	4520	639	7990	749	69	143
29	839	291	739	3480	348	3340	641	136	232
30	3730	1210	13000	2000	220	1200	566	41	64
31	8140	902	19700	1410	140	538	---	---	---
TOTAL	47842	---	91940	42253	---	44029	37242	---	26835
YEAR	303551		243610.1						

STREAMS TRIBUTARY TO LAKE ERIE

105

04208504 CUYAHOGA RIVER AT LTV STEEL AT CLEVELAND, OH

LOCATION.--Lat 41°27'54", long 82°22'50", Cuyahoga County, Hydrologic Unit 04110002, on left bank, at LTV Steel Company footbridge, 1.2 mi downstream from Big Creek, 5.5 mi upstream from mouth at Cleveland.

DRAINAGE AREA.--788 mi².

PERIOD OF RECORD.--October 1, 1991 to September 30, 1992.

GAGE.--Water-stage and acoustic velocity meter recorder. Elevation of gage is 583.57 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Dec. 2 to Feb. 9 and July 13 to Aug. 24. Records fair.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 10,000 ft³/s July 31, 1992; minimum daily discharge, 349 ft³/s Nov. 3, 1992.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 10,000 ft³/s July 31; minimum daily discharge, 349 ft³/s Nov. 3.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	393	389	476	430	800	1480	2390	1220	819	430	5000	1810
2	393	432	1000	400	750	1350	2140	1100	646	397	3000	1770
3	406	359	2500	400	710	1140	1780	1090	569	369	2000	3020
4	1400	349	1700	400	720	995	1570	894	526	387	2300	3030
5	721	408	720	380	680	923	1320	900	571	436	1500	1820
6	574	408	560	370	660	1450	1210	874	649	528	1100	1520
7	707	434	500	360	700	2390	1300	800	513	412	1000	1310
8	462	415	480	370	620	2320	963	770	523	407	1000	1310
9	405	409	460	400	540	1650	795	849	506	385	1200	1390
10	726	434	440	470	493	1650	868	743	450	538	820	4260
11	781	1240	410	430	624	1630	1040	683	457	997	1100	2580
12	830	923	390	390	383	1490	1310	661	433	943	980	1850
13	814	767	510	1000	370	1310	989	606	405	3780	1100	1490
14	553	598	600	2500	406	1150	863	621	405	1940	980	1360
15	640	852	450	1300	1990	1070	774	597	582	4000	2500	1290
16	542	1100	420	780	3890	935	937	549	468	3000	3500	1060
17	462	620	400	800	1880	1190	3350	556	410	4300	2200	829
18	471	587	380	740	1610	1270	4460	829	1390	3000	1500	1110
19	646	627	370	690	3530	1520	3880	606	1110	2000	1200	1950
20	582	666	360	720	2480	1640	3100	550	648	1600	1100	986
21	471	863	420	760	1900	1630	2540	521	505	1900	920	1320
22	444	575	500	700	1760	1470	2820	481	463	1500	820	4020
23	417	514	620	1700	1770	1590	2080	554	463	1400	700	2770
24	452	636	720	2800	1550	1560	2070	1960	858	2800	900	1940
25	504	481	520	1700	1370	2100	2160	840	613	3500	1280	1560
26	465	465	430	1000	1190	3090	1820	630	501	3100	848	1370
27	436	482	390	880	1050	3820	1340	570	599	2000	2340	1360
28	423	552	400	800	1460	3000	1150	511	429	1500	5780	1070
29	394	515	470	710	2310	2280	1220	475	405	1300	4610	941
30	404	520	560	760	---	2250	1420	1080	423	6000	2730	831
31	427	---	490	850	---	2150	---	1360	---	9000	2020	---
TOTAL	17345	17620	18646	25990	38196	53493	53659	24480	17339	63849	58028	52927
MEAN	560	587	601	838	1317	1726	1789	790	578	2060	1872	1764
MAX	1400	1240	2500	2800	3890	3820	4460	1960	1390	9000	5780	4260
MIN	393	349	360	360	370	923	774	475	405	369	700	829

WTR YR 1992 TOTAL 441572 MEAN 1206 MAX 9000 MIN 349

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 downstream from city waterworks dam, 800 ft downstream from East Branch, 1.0 mi southeast of Willoughby, and 5.0 mi upstream from mouth.

PERIOD OF RECORD.--July 1925 to November 1935, October 1939 to 1984, March 25, 1988 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].

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

REMARKS.--Estimated daily discharges: Dec. 6-17, Jan. 17-22. Records good except for periods of estimated record, which are fair. Water diverted 200 ft upstream from station for municipal supply of city of Willoughby until 1988 when water treatment plant was relocated downstream of gaging station. Water-quality data collected at this site 1965 to 1977. Sediment data collected at this site 1969 to 1981.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	43	66	129	129	193	653	646	297	144	57	654	348
2	44	59	105	116	179	635	599	272	106	55	293	220
3	44	56	932	116	165	383	465	424	86	59	178	975
4	285	53	392	120	162	280	426	260	78	63	504	833
5	196	53	197	111	156	232	347	203	79	75	306	303
6	108	54	150	101	147	367	274	183	74	72	155	213
7	190	59	120	94	163	726	232	159	73	59	115	220
8	128	66	130	88	149	823	208	146	69	58	107	164
9	81	64	150	105	156	533	179	161	64	61	107	177
10	97	61	130	151	158	511	175	157	59	63	94	745
11	122	176	110	169	123	563	263	139	55	81	1040	379
12	136	201	130	128	121	445	245	127	53	113	331	202
13	247	175	210	152	104	365	213	116	52	705	413	142
14	139	124	200	1710	103	306	165	108	50	378	226	115
15	114	130	180	788	939	286	148	109	50	927	315	99
16	90	418	160	391	2500	218	172	102	48	537	2310	90
17	73	193	150	300	995	333	1390	94	48	1390	560	83
18	65	118	105	250	852	399	1460	224	147	1290	286	93
19	72	141	92	210	2750	375	1110	132	169	401	315	339
20	91	135	97	180	1560	446	573	102	107	222	182	171
21	79	231	139	160	858	485	505	88	77	261	142	181
22	66	152	134	140	608	399	601	78	66	169	113	790
23	63	114	181	1060	545	340	380	82	63	130	101	324
24	61	109	281	1680	406	357	623	382	118	885	98	189
25	78	98	164	729	314	681	744	191	96	1150	97	122
26	131	89	128	455	260	1830	519	121	78	592	88	93
27	91	85	116	328	210	2470	359	100	71	619	560	103
28	81	103	106	276	410	1610	271	86	67	252	4390	132
29	72	141	129	223	1210	905	217	76	60	177	2600	80
30	61	116	214	198	---	720	318	156	59	505	1160	69
31	69	---	166	210	---	626	---	214	---	2000	814	---
TOTAL	3217	3640	5627	10868	16496	19302	13827	5089	2366	13406	18654	7994
MEAN	104	121	182	351	569	623	461	164	78.9	432	602	266
MAX	285	418	932	1710	2750	2470	1460	424	169	2000	4390	975
MIN	43	53	92	88	103	218	148	76	48	55	88	69
CFSM	.42	.49	.74	1.43	2.31	2.53	1.87	.67	.32	1.76	2.45	1.08
IN.	.49	.55	.85	1.64	2.49	2.92	2.09	.77	.36	2.03	2.82	1.22

MEAN	155	291	416	456	552	687	543	362	208	130	118	124
MAX	976	850	1284	1312	1242	1234	1409	1088	781	698	602	641
(WY)	1927	1984	1991	1952	1982	1963	1957	1989	1947	1969	1992	1926
MIN	21.9	44.3	60.4	115	48.1	179	120	53.4	23.1	20.3	16.8	17.6
(WY)	1954	1965	1964	1977	1934	1990	1946	1934	1934	1934	1930	1933

ANNUAL TOTAL	98131			120486			
ANNUAL MEAN	269			329		336	
HIGHEST ANNUAL MEAN						465	1975
LOWEST ANNUAL MEAN						148	1934
HIGHEST DAILY MEAN	3820	Mar	6	4390	Aug	28	12300 Mar 22 1948
LOWEST DAILY MEAN	23	Aug	8	43	Oct	1	3.0 Jul 25 1934
ANNUAL SEVEN-DAY MINIMUM	25	Aug	2	51	Jun	11	7.0 Aug 25 1933
INSTANTANEOUS PEAK FLOW				5460	Aug	28 a	28000 Mar 22 1948
INSTANTANEOUS PEAK STAGE				8.01	Aug	28	17.95 Mar 22 1948
INSTANTANEOUS LOW FLOW				43	Oct	1	3.0 Jul 25 1934
ANNUAL RUNOFF (CFSM)	1.09			1.34			1.37
ANNUAL RUNOFF (INCHES)	14.84			18.22			18.58
10 PERCENT EXCEEDS	599			758			761
50 PERCENT EXCEEDS	129			163			146
90 PERCENT EXCEEDS	36			66			35

a Peaks above base in shown Table of discharges and stages at continuous-record surface-water-discharge stations.

STREAMS TRIBUTARY TO LAKE ERIE

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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 downstream from Big Creek in Painesville.
DRAINAGE AREA.--685 mi².

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder. Datum of gage is 596.37 ft above National Geodetic Vertical Datum of 1929. Previously published, in error, as 620.37 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Jan. 18-23, Feb. 10-14. Records fair except periods of estimated record, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	18	157	400	520	1270	2150	729	130	32	838	1380
2	13	17	119	346	490	1130	1780	754	130	30	873	800
3	12	16	586	267	471	912	1510	859	143	29	805	1010
4	71	19	557	242	390	678	1380	1010	138	29	1150	933
5	80	19	766	235	345	505	1220	930	118	30	744	957
6	57	19	798	229	275	458	915	771	97	29	440	922
7	100	19	688	208	315	877	692	601	89	28	352	570
8	75	22	985	175	273	1800	568	494	86	26	281	1150
9	39	23	676	169	253	1800	485	421	69	32	259	966
10	39	23	449	211	220	1600	419	359	59	35	326	2210
11	44	69	313	277	200	1610	410	314	49	35	337	1780
12	39	66	234	295	180	1380	413	288	42	54	264	1270
13	41	74	215	318	170	1150	478	257	37	384	279	897
14	41	64	234	1560	150	973	493	222	32	1010	378	567
15	41	78	281	1510	550	821	432	193	27	1700	1470	344
16	41	183	247	1030	2800	668	390	174	23	1550	1990	237
17	40	129	226	754	3540	660	1660	159	21	2430	1060	180
18	34	85	192	560	2660	696	2430	247	52	4230	878	150
19	29	131	169	460	4840	731	2980	242	182	4340	815	221
20	29	139	179	390	4860	875	2420	264	566	2350	498	753
21	29	193	189	340	3060	1180	1930	257	222	1140	304	703
22	27	156	194	300	2000	1250	1750	215	126	670	208	1400
23	24	110	252	900	1560	1110	1330	179	88	439	155	2070
24	24	90	357	2400	1230	980	1120	310	77	316	131	1360
25	39	80	346	2540	930	1320	1670	235	64	254	118	1030
26	107	81	302	1560	722	3340	1640	213	57	296	94	764
27	55	80	264	1150	584	4500	1250	215	46	391	116	449
28	43	162	207	879	588	4230	946	183	42	540	2010	301
29	32	250	222	645	1210	3200	724	136	38	584	3130	222
30	26	208	361	562	---	2670	668	115	35	558	2570	172
31	21	---	491	513	---	2430	---	136	---	820	1860	---
TOTAL	1306	2623	11256	21425	35386	46804	36253	11482	2885	24391	24733	25768
MEAN	42.1	87.4	363	691	1220	1510	1208	370	96.2	787	798	859
MAX	107	250	985	2540	4860	4500	2980	1010	566	4340	3130	2210
MIN	12	16	119	169	150	458	390	115	21	26	94	150
CFSM	.06	.13	.53	1.01	1.78	2.20	1.76	.54	.14	1.15	1.16	1.25
IN.	.07	.14	.61	1.16	1.92	2.54	1.97	.62	.16	1.32	1.34	1.40

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1975 - 1992, BY WATER YEAR (WY)

	MEAN	525	1183	1668	1233	1951	1974	1432	826	636	322	305	494
MAX	1880	4026	3816	2304	4044	3412	2598	3214	2851	1106	1106	1854	
(WY)	1991	1986	1978	1990	1981	1978	1987	1989	1986	1987	1980	1990	
MIN	42.1	67.1	363	109	322	577	450	106	39.8	30.5	17.0	18.6	
(WY)	1992	1979	1992	1977	1987	1990	1975	1987	1988	1991	1991	1991	

SUMMARY STATISTICS

FOR 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1975 - 1992

ANNUAL TOTAL	245131.0	244312	1040
ANNUAL MEAN	672	668	1375
HIGHEST ANNUAL MEAN			667
LOWEST ANNUAL MEAN			1986
HIGHEST DAILY MEAN	9000	4860	15300
LOWEST DAILY MEAN	5.1	12	5.1
ANNUAL SEVEN-DAY MINIMUM	5.3	18	5.3
INSTANTANEOUS PEAK FLOW		5680	18700
INSTANTANEOUS PEAK STAGE		7.72	13.16
INSTANTANEOUS LOW FLOW		12	5.1
ANNUAL RUNOFF (CFSM)	.98	.97	1.52
ANNUAL RUNOFF (INCHES)	13.31	13.27	20.63
10 PERCENT EXCEEDS	2200	1710	2800
50 PERCENT EXCEEDS	129	317	421
90 PERCENT EXCEEDS	12	35	42

a Peaks above base in shown Table of discharges and stages at continuous-record surface-water-discharge stations.

STREAMS TRIBUTARY TO LAKE ERIE

04212200 GRAND RIVER AT PAINESVILLE, OH--Continued
(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 upstream from mouth, and 8.0 mi downstream from Kellogg Creek.
DRAINAGE.--701 mi².

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 1991 TO SEPTEMBER 1992

		DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	TUR- BID- ITY (NTU) (00076)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREP- TOCOCCEI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	
DEC												
11...	1020	316	862	7.9	10.0	4.0	7.0	12.4	95	K400	650	
MAR												
04...	1030	700	490	7.8	15.0	6.0	19	12.2	99	68	K36	
JUN												
23...	1115	94	819	7.9	20.5	18.0	8.5	8.2	88	580	K24	
SEP												
14...	1220	558	469	8.0	27.0	19.0	10	8.8	95	170	55	
DATE		HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	BICAR- BONATE WATER DIS IT FIELD (MG/L AS HCO3 (00453)	CAR- BONATE WATER DIS IT FIELD (MG/L AS CO3 (00452)	ALKA- LINITY WAT WH TOT FET FIELD (MG/L AS CACO3 (00410)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)
DEC												
11...	250	80	12	66	4.4	77	0	63	82	150	0.20	
MAR												
04...	150	48	8.2	34	3.3	49	0	43	58	87	0.10	
JUN												
23...	230	81	7.2	61	3.9	80	0	66	42	180	0.20	
SEP												
14...	150	48	7.4	30	3.9	93	0	76	31	77	0.20	
DATE		SILICA, DIS- SOLVED (MG/L AS SiO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	ALUM- INUM, DIS- SOLVED (UG/L AS AL) (01106)	BARIUM, DIS- SOLVED (UG/L AS BA) (01005)
DEC												
11...	6.3	558	2.50	0.060	0.060	0.50	0.030	<0.010	<0.010	30	44	
MAR												
04...	5.1	302	1.50	0.050	0.040	0.30	0.030	0.010	<0.010	20	21	
JUN												
23...	3.6	520	1.30	0.150	0.170	0.70	0.060	0.050	<0.010	10	39	
SEP												
14...	7.1	287	0.350	0.050	0.050	0.90	0.080	0.040	0.020	40	30	
DATE		COBALT, DIS- SOLVED (UG/L AS CO) (01035)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LITHIUM DIS- SOLVED (UG/L AS LI) (01130)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	SILVER, DIS- SOLVED (UG/L AS AG) (01075)	STRON- TIUM, DIS- SOLVED (UG/L AS SR) (01080)	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)	SEDI- MENT, SUS- PENDED (MG/L) (80154)
DEC												
11...	<3	51	9	63	<10	4	<1	<1.0	230	<6	9	
MAR												
04...	<3	190	8	41	<10	2	<1	<1.0	140	<6	20	
JUN												
23...	<3	48	5	50	<10	2	<1	<1.0	230	<6	17	
SEP												
14...	<3	270	<4	31	<10	4	<1	<1.0	150	<6	21	

K Results based on colony count outside the acceptable range.

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 upstream from mouth.

DRAINAGE AREA.--175 mi².

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 above National Geodetic Vertical Datum of 1929. Prior to Aug. 17, 1924, nonrecording gage at same site and datum.

REMARKS.--Estimated daily discharges: Oct. 1 to Dec. 2, Jan. 18-22, Feb. 1-13, June 5-18, June 23 to July 12, Aug. 24-27. Records good except for estimated records and discharges below 45 cfs which are poor. Water-quality data collected at this site 1965 to 1977. Sediment data collected 1970 to 1974.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.7	6.0	34	163	170	373	325	228	46	11	67	180
2	4.4	5.4	30	144	150	223	327	219	50	9.8	65	107
3	4.2	5.0	83	87	135	194	324	467	49	8.8	50	158
4	15	5.8	206	102	120	158	321	497	42	8.4	54	466
5	18	5.8	157	180	110	131	337	245	39	9.4	162	376
6	14	5.8	113	146	100	126	244	193	35	8.2	146	158
7	22	5.8	131	104	90	190	183	164	32	7.6	76	402
8	15	6.8	252	76	80	498	157	129	30	7.0	58	250
9	12	6.8	368	68	73	598	139	110	29	9.8	44	229
10	12	9.0	244	123	75	402	121	100	25	11	59	2210
11	15	16	137	230	77	470	120	95	21	11	72	1670
12	11	15	85	180	80	366	264	85	18	20	46	382
13	11	17	66	133	76	272	282	74	15	42	46	185
14	11	16	68	298	73	229	176	66	12	62	45	121
15	11	22	86	612	81	193	137	59	9.0	191	151	90
16	11	35	88	318	762	168	122	54	7.8	330	578	74
17	11	30	88	168	1690	164	1060	49	6.4	271	363	63
18	9.8	25	62	140	807	168	1510	71	25	1570	156	56
19	8.0	29	52	120	1280	170	966	137	42	2110	103	601
20	8.0	33	93	100	1820	216	532	149	109	1480	118	651
21	8.0	40	88	92	850	273	339	93	69	393	83	229
22	7.2	34	70	86	478	265	587	68	45	414	53	1370
23	6.8	28	71	2420	466	203	446	56	39	190	42	1950
24	6.8	25	106	3290	398	180	298	54	32	112	36	398
25	15	23	181	1400	295	237	699	111	26	83	32	194
26	24	23	164	629	234	956	518	135	21	74	27	130
27	17	23	104	405	195	1670	345	92	18	71	33	104
28	13	30	87	309	174	1470	240	76	16	100	118	87
29	10	45	81	234	331	647	180	62	14	80	1210	77
30	8.4	40	286	216	---	391	186	53	12	73	836	66
31	7.0	---	382	190	---	338	---	50	---	69	277	---
TOTAL	351.3	611.2	4063	12763	11270	11939	11485	4041	934.2	7837.0	5206	13034
MEAN	11.3	20.4	131	412	389	385	383	130	31.1	253	168	434
MAX	24	45	382	3290	1820	1670	1510	497	109	2110	1210	2210
MIN	4.2	5.0	30	68	73	126	120	49	6.4	7.0	27	56
CFSM	.06	.12	.75	2.35	2.22	2.20	2.19	.74	.18	1.44	.96	2.48
IN.	.07	.13	.86	2.71	2.40	2.54	2.44	.86	.20	1.67	1.11	2.77

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1922 - 1992, BY WATER YEAR (WY)

MEAN	137	304	424	406	468	534	385	233	126	79.2	66.9	107
MAX	804	1373	1049	929	1115	987	839	670	1013	415	493	709
(WY)	1927	1986	1928	1990	1981	1972	1957	1953	1986	1969	1980	1990
MIN	4.95	17.1	35.1	81.0	39.6	235	69.9	20.2	5.46	2.79	3.19	3.56
(WY)	1924	1954	1961	1977	1934	1969	1935	1934	1934	1934	1923	1932

SUMMARY STATISTICS

FOR 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1922 - 1992

ANNUAL TOTAL	66777.4			83534.7					
ANNUAL MEAN	183			228			272		
HIGHEST ANNUAL MEAN							401		1986
LOWEST ANNUAL MEAN							140		1931
HIGHEST DAILY MEAN	3150	Feb	5	3290	Jan	24	11000		Jan 31 1968
LOWEST DAILY MEAN	2.7	Aug	7	4.2	Oct	3	.30		Jul 30 1933
ANNUAL SEVEN-DAY MINIMUM	2.9	Aug	2	5.7	Nov	1	.64		Aug 27 1933
INSTANTANEOUS PEAK FLOW				4200	Jan	24 a	17000		Jan 22 1959
INSTANTANEOUS PEAK STAGE				6.92	Jan	24	12.94		Mar 4 1934
INSTANTANEOUS LOW FLOW				4.2	Oct	3	.20		Jul 31 1933
ANNUAL RUNOFF (CFSM)	1.05			1.30			1.55		
ANNUAL RUNOFF (INCHES)	14.19			17.76			21.12		
10 PERCENT EXCEEDS	465			497			677		
50 PERCENT EXCEEDS	33			94			95		
90 PERCENT EXCEEDS	4.5			11			10		

a Peaks above base in shown Table of discharges and stages at continuous-record surface-water-discharge stations.

PEAK DISCHARGES AND STAGES AT CONTINUOUS-RECORD SURFACE DISCHARGE STATIONS

For continuous-record surface-water-discharge stations meeting certain criteria, all peak discharges and stages occurring during the water year and greater than a selected base discharge are presented in this table. The peaks greater than the base discharge, excluding the highest one are referred to as secondary peaks. The peaks are listed in chronological order. Peak discharges are not published for canals, ditches, drains, or streams for which the peaks are subject to substantial control by man. The time of occurrence for peaks is expressed in 24-hour local standard time. For example, 12:30 a.m. is 0030 and 1:30 p.m. is 1330. The maximum peak discharge and gage height for the water year are flagged with an asterisk (*)

Peak discharges equal to or greater than base discharges, water year October 1991 to September 1992

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
STREAMS TRIBUTARY TO LAKE ERIE							
04177000 OTTAWA RIVER AT TOLEDO UNIVERSITY, TOLEDO, OH (Base discharge: 1,150 ft ³ /s)							
Feb. 17	0600	1,180	9.17	July 16	unknown	*1,300	unknown
04185000 TIFFIN RIVER AT STRYKER, OH (Base discharge: 1,850 ft ³ /s)							
July 26	2100	*1,560	*11.23				
04185440 UNNAMED TRIBUTARY TO LOST CREEK NR FARMER, OH (Base discharge: 120 ft ³ /s)							
Oct. 27	0830	*203	*3.78	Apr. 20	1200	124	3.26
04186500 AUGLAIZE RIVER NEAR FORT JENNINGS, OH (Base discharge: 2,700 ft ³ /s)							
Apr. 19	1200	3,530	12.44	Aug. 2	0030	3,090	11.70
July 15	0530	*12,800	*19.76	Sept. 10	2200	5,430	14.78
04187100 OTTAWA RIVER AT LIMA, OH (Base discharge: 1,300 ft ³ /s)							
Apr. 18	1400	1,770	13.71	Sept. 6	1500	*3,550	*16.70
July 13	0030	2,590	15.02	Sept. 10	0400	2,850	15.45
July 17	1730	2,350	14.62				
04189000 BLANCHARD RIVER NEAR FINDLAY, OH (Base discharge: 2,800 ft ³ /s)							
Apr. 19	0230	3,340	8.92	Sept. 10	1000	3,560	9.91
July 15	2300	*5,610	*11.74	Sept. 22	0430	2,850	8.55
Sept. 6	0530	4,230	10.97				
4192500 MAUMEE RIVER NEAR DEFIANCE, OH (Base discharge: 23,000 ft ³ /s)							
Oct. 27	2000	23,600	5.79	Sept. 11	2000	31,300	6.69
Apr. 19	1000	31,300	6.69	Sept. 22	2300	27,600	6.27
July 16	1600	*34,600	*7.06				
04195500 PORTAGE RIVER AT WOODVILLE, OH (Base discharge: 3,500 ft ³ /s)							
Feb. 16	1900	4,160	8.99	July 19	0100	3,690	8.52
Apr. 19	0930	4,160	8.99	Sept. 23	0430	*4,880	*9.66
04195825 LACARPE CREEK NEAR OAK HARBOR, OH (Base discharge: 40 ft ³ /s)							
Oct. 26	0100	42	4.63	July 13	0015	47	4.85
Nov. 20	unknown	45	unknown	Aug. 15	2300	46	4.84
Jan. 23	unknown	50	unknown	Sept. 10	0415	*73	*5.96
Feb. 15	1945	54	5.20	Sept. 21	1700	70	5.86
Mar. 7	2115	41	4.62				
04195830 BAYOU DITCH NEAR OAK HARBOR, OH (Base discharge: 40 ft ³ /s)							
Oct. 26	0300	49	4.70	Mar. 7	2115	48	4.67
Nov. 28	2300	43	4.37	July 13	0045	46	4.58
Jan. 23	1930	50	4.83	Sept. 10	0230	46	4.53
Feb. 15	1915	48	4.66	Sept. 21	1445	*57	*5.22
04196800 TYMOCHTEE CREEK AT CRAWFORD, OH (Base discharge: 1,800 ft ³ /s)							
July 18	0300	*2,800	*6.96	July 26	2200	1,870	6.01
04197100 HONEY CREEK AT MELMORE, OH (Base discharge: 1,500 ft ³ /s)							
Apr. 19	0300	1,530	7.11	Sept. 6	0030	1,550	7.15
July 17	1600	*2,130	*8.12				
04198000 SANDUSKY RIVER NEAR FREMONT, OH (Base discharge: 10,000 ft ³ /s)							
July 18	0700	*15,000	*7.64	Sept. 6	1730	11,200	6.47
04199000 HURON RIVER AT MILAN, OH (Base discharge: 4,700 ft ³ /s)							
July 18	0200	5,370	15.22	July 31	1230	*6,400	*16.33
04199155 OLD WOMAN'S CREEK AT BERLIN ROAD NR HURON, OH (Base discharge: 400 ft ³ /s)							
July 17	2000	*711	*9.34				
04200500 BLACK RIVER AT ELYRIA, OH (Base discharge: 3,200 ft ³ /s)							
Apr. 19	1400	4,280	9.55	July 31	1930	*6,080	*11.48
July 18	2000	4,810	10.16				
04201500 ROCKY RIVER NEAR BEREA, OH (Base discharge: 4,000 ft ³ /s)							
Apr. 18	2200	4,580	4.89	July 31	1530	*10200	*7.21
July 17	2000	6,060	5.55				

Peak discharges equal to or greater than base discharges, water year October 1991 to September 1992 (Continued)

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
04207200 TINKERS CREEK AT BEDFORD, OH (Base discharge: 1,500 ft³/s)							
Jan. 14	0730	1,550	6.10	July 13	unknown	1,500	unknown
Feb. 15	2100	1,700	6.25	July 17	unknown	1,700	unknown
Feb. 19	0400	1,590	6.14	July 31	unknown	*2,700	unknown
Apr. 18	1300	1,550	6.10	Aug. 28	unknown	1,800	unknown
04209000 CHAGRIN RIVER AT WILLOUGHBY, OH (Base discharge: 4,000 ft³/s)							
Feb. 19	0630	4,360	7.06	Aug. 28	0430	*5,460	*8.01
July 17	2000	4,630	7.28				
04212100 GRAND RIVER NEAR PAINESVILLE, OH (Base discharge: 6,500 ft³/s)							
Jan. 23	1800	ice jam	*7.72				
04213000 CONNEAUT CREEK AT CONNEAUT, OH (Base discharge: 2,900 ft³/s)							
Jan. 18	2400	ice jam	5.89	Jan. 24	1500	*4,200	*6.92

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., depth 54 ft, cased.

INSTRUMENTATION.--Digital recorder -- 60-minute punch.

DATUM.--Elevation of land-surface datum is 1039.13 ft above National Geodetic Vertical Datum of 1929.

Measuring point: Floor of instrument shelter 3.50 ft above land-surface datum.

REMARKS.--Station operated by Ohio Department of Natural Resources, Division of water.

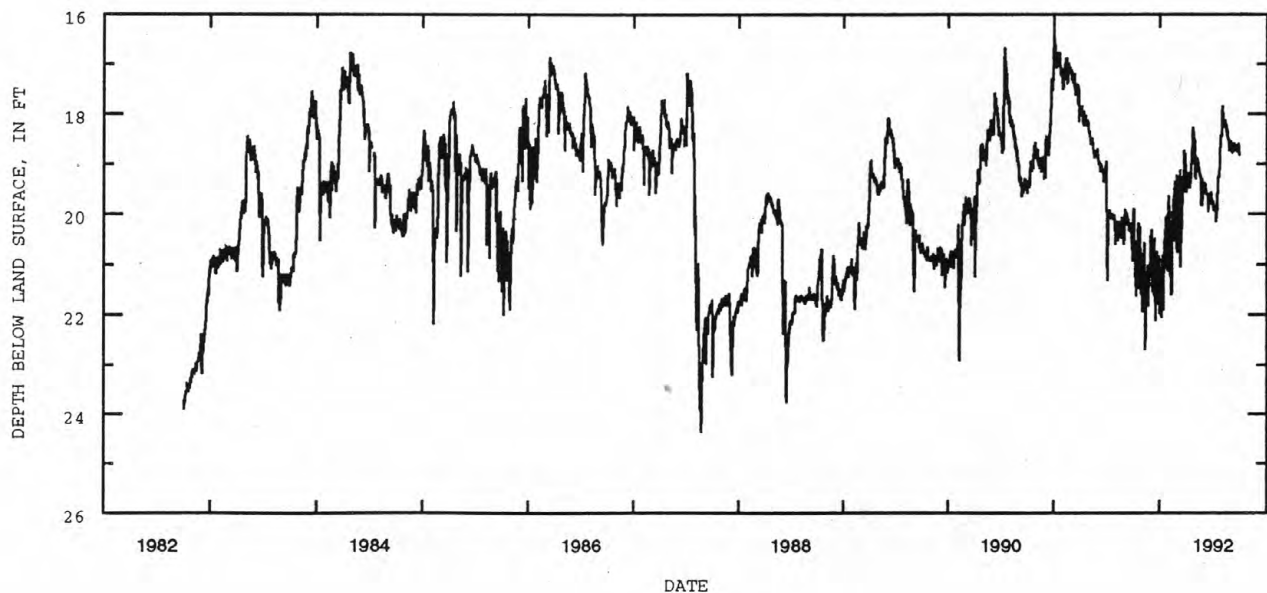
PERIOD OF RECORD.--April 1962 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 37.64 ft below land-surface datum, Dec. 11, 1962;
minimum daily low, 16.29 ft below land-surface datum, Jan. 1, 1991.DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20.91	21.00	20.64	21.54	20.15	20.77	19.38	18.58	19.51	19.77	17.88	18.72
2	20.87	21.58	20.42	21.06	20.34	19.94	19.19	19.23	19.49	19.79	17.83	18.68
3	20.37	21.95	21.22	21.23	20.43	19.96	19.58	19.30	19.48	19.92	17.92	18.75
4	20.13	21.81	20.86	21.42	20.27	20.15	19.43	18.86	19.40	19.93	18.06	18.79
5	19.94	21.35	20.60	21.48	19.85	20.25	19.30	18.90	19.42	19.84	18.14	18.78
6	19.90	21.23	20.31	21.55	20.59	20.32	19.30	18.98	19.49	19.92	18.19	18.72
7	20.55	21.23	20.75	21.85	21.22	20.35	19.17	19.01	19.55	19.95	18.26	18.66
8	20.53	21.27	21.53	22.06	21.13	19.81	19.27	18.89	19.60	19.89	18.14	18.75
9	21.11	20.98	21.52	21.33	20.45	19.56	19.26	18.97	19.60	19.91	18.16	18.73
10	21.43	20.58	20.79	20.97	20.19	19.17	19.28	19.04	19.60	19.92	18.12	18.59
11	21.27	20.99	21.42	20.82	21.33	19.12	19.29	19.03	19.64	20.16	18.27	18.65
12	21.62	21.16	21.62	21.34	21.61	20.38	19.47	18.96	19.64	20.00	18.22	18.68
13	21.63	22.25	20.90	21.89	21.52	21.05	19.49	19.03	19.60	19.89	18.20	18.63
14	21.11	22.70	20.52	21.92	20.68	20.53	19.40	19.09	19.65	20.02	18.23	18.64
15	20.64	22.30	20.48	21.40	20.19	20.54	19.37	19.13	19.96	19.86	18.24	18.70
16	20.67	21.51	21.13	20.93	19.95	19.85	19.26	19.18	19.84	19.64	18.28	18.71
17	20.93	21.21	21.65	20.57	20.14	20.24	19.26	19.18	19.76	19.54	18.45	18.68
18	20.93	21.56	21.87	20.52	19.71	20.30	19.12	19.24	19.75	19.31	18.32	18.65
19	20.64	21.66	22.12	20.42	19.97	19.31	18.89	19.24	19.62	19.24	18.39	18.70
20	20.42	21.58	21.45	20.20	19.62	19.63	18.73	19.27	19.68	19.23	18.44	18.65
21	20.19	21.29	21.09	20.06	19.35	19.25	18.64	19.84	19.73	19.26	18.49	18.74
22	20.24	21.01	20.74	20.85	19.55	19.46	18.43	19.57	19.73	19.25	18.51	18.68
23	21.11	21.55	21.38	21.03	20.55	19.56	18.41	19.38	19.68	19.20	18.53	18.73
24	21.49	21.84	21.75	20.32	20.36	19.00	18.27	19.36	19.56	19.01	18.56	18.70
25	20.96	21.59	21.29	20.19	20.32	18.73	18.32	19.34	19.63	18.76	18.73	18.64
26	20.53	21.34	21.17	20.02	20.23	19.00	18.42	19.84	19.66	18.59	18.66	18.60
27	20.26	21.22	21.23	20.83	19.42	19.44	18.54	19.62	19.73	18.42	18.60	18.67
28	21.11	20.97	21.57	21.14	19.23	19.39	18.56	19.57	19.82	18.46	18.53	18.76
29	21.59	21.23	20.84	20.36	20.63	18.80	18.51	19.56	19.76	18.41	18.60	18.83
30	21.31	20.79	21.60	19.90	---	19.23	18.58	19.45	19.76	18.44	18.59	18.80
31	21.34	---	21.99	19.64	---	19.42	---	19.50	---	17.99	18.68	---
MAX	21.63	22.70	22.12	22.06	21.61	21.05	19.58	19.84	19.96	20.16	18.73	18.83

CAL YR 1991 LOW 22.70

WTR YR 1992 LOW 22.70



HANCOCK COUNTY

405940083275500. Local number, HA-3.

LOCATION.--Lat 40°59'40", long 83°27'55", Hydrologic Unit 0410008, 2 miles south of Vanlue.

Owner: City of Findlay.

AQUIFER.--Limestone of Silurian Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 10 in., diameter 6 in. below 55 ft., depth 240 ft., cased to 55 ft.

INSTRUMENTATION.--Type F continuous recorder.

DATUM.--Elevation of land-surface datum is 815 ft above National Geodetic Vertical Datum of 1929, from topographic map.

Measuring point: Floor of instrument shelter 1.40 ft above land-surface datum.

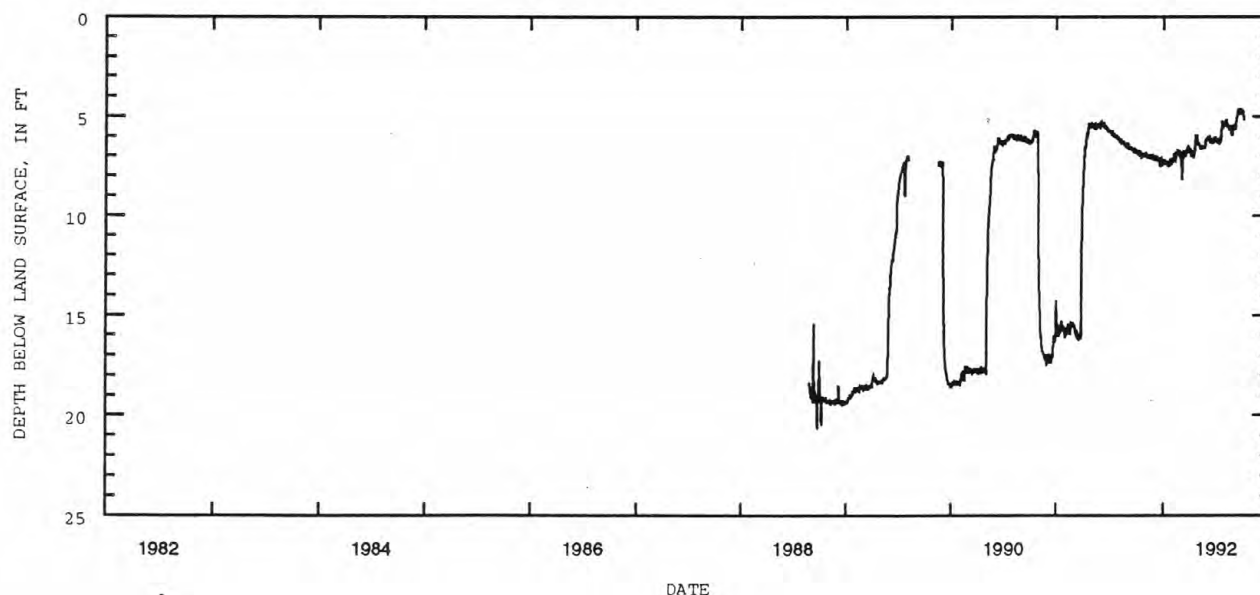
REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

PERIOD OF RECORD.--May 1947 to October 1972 and August 1988 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 20.67 ft below land-surface datum, Sept. 22, 1988; minimum daily low, 4.06 ft below land-surface datum, June 8, 1947.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.72	6.84	7.18	7.36	7.32	7.00	6.68	6.41	6.09	6.19	5.21	5.66
2	6.69	7.02	7.11	7.28	7.25	7.10	6.70	6.41	6.04	6.18	5.20	5.51
3	6.75	7.04	7.00	7.19	7.17	7.12	6.66	6.50	6.03	6.27	5.31	5.34
4	6.75	7.04	7.25	7.29	7.12	7.95	6.84	6.49	5.99	6.30	5.44	5.22
5	6.87	7.00	7.23	7.29	7.10	8.19	6.93	6.57	6.05	6.24	5.49	5.20
6	6.89	7.00	7.18	7.29	6.95	7.35	6.88	6.64	6.13	6.32	5.52	4.83
7	6.91	7.05	7.05	7.38	6.92	7.09	6.77	6.64	6.19	6.35	5.50	4.86
8	6.89	7.08	7.05	7.38	7.14	7.10	6.84	6.50	6.24	6.30	5.52	4.71
9	6.85	7.07	7.14	7.26	7.24	7.02	6.81	6.52	6.23	6.34	5.55	4.71
10	6.83	6.97	7.17	7.32	7.19	6.87	6.83	6.60	6.22	6.33	5.53	4.61
11	6.78	6.99	7.17	7.33	7.22	6.87	6.91	6.57	6.27	6.30	5.57	4.72
12	6.93	6.99	7.17	7.32	7.22	6.83	7.06	6.47	6.27	6.25	5.62	4.78
13	6.99	6.98	7.10	7.25	7.01	6.87	7.06	6.53	6.23	6.20	5.59	4.80
14	6.90	7.00	7.22	7.42	7.07	6.86	6.91	6.58	6.27	6.09	5.54	4.87
15	6.94	7.01	7.25	7.43	6.86	6.96	6.88	6.57	6.34	6.05	5.52	4.92
16	7.01	7.15	7.28	7.46	6.91	6.99	6.76	6.62	6.35	5.75	5.50	4.84
17	6.98	7.15	7.20	7.41	6.89	6.97	6.80	6.54	6.29	5.52	5.48	4.81
18	6.98	6.98	7.45	7.50	6.65	6.95	6.69	6.62	6.28	5.21	5.47	4.80
19	7.06	7.03	7.46	7.49	6.78	6.87	6.28	6.58	6.22	5.25	5.87	4.79
20	7.03	7.04	7.40	7.38	6.89	6.73	6.10	6.58	6.25	5.44	5.90	4.72
21	6.94	7.04	7.21	7.37	6.95	6.73	6.04	6.58	6.28	5.54	5.90	4.60
22	6.91	7.03	7.17	7.37	6.74	6.55	6.09	6.54	6.28	5.57	5.78	4.69
23	6.93	7.03	7.16	7.16	6.76	6.60	6.07	6.45	6.22	5.56	5.70	4.73
24	6.93	7.06	7.24	7.47	6.81	6.64	6.04	6.35	6.07	5.39	5.67	4.72
25	6.94	7.16	7.34	7.43	6.79	6.54	6.12	6.17	6.08	5.40	5.69	4.71
26	6.94	7.18	7.32	7.42	6.74	6.48	6.24	6.10	6.11	5.34	5.56	4.70
27	6.97	7.08	7.41	7.29	6.87	6.72	6.32	6.14	6.16	5.41	5.48	4.79
28	6.97	7.08	7.33	7.32	6.97	6.77	6.36	6.19	6.17	5.46	5.42	4.79
29	6.95	7.03	7.21	7.25	7.14	6.71	6.30	6.20	6.15	5.49	5.45	4.79
30	6.95	7.18	7.42	7.13	---	6.63	6.41	6.11	6.16	5.50	5.52	5.15
31	6.89	---	7.42	7.22	---	6.67	---	6.11	---	5.24	5.61	---
MAX	7.06	7.18	7.46	7.50	7.32	8.19	7.06	6.64	6.35	6.35	5.90	5.66

CAL YR 1991 LOW 16.19
WTR YR 1992 LOW 8.19

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: Kevin Eikenbary.

AQUIFER.--Limestone of Silurian Age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 6 in., depth 51 ft cased.

INSTRUMENTATION.--Type F continuous recorder.

DATUM.--Elevation of land-surface datum is 945 ft above National Geodetic Vertical Datum of 1929, from topographic map.

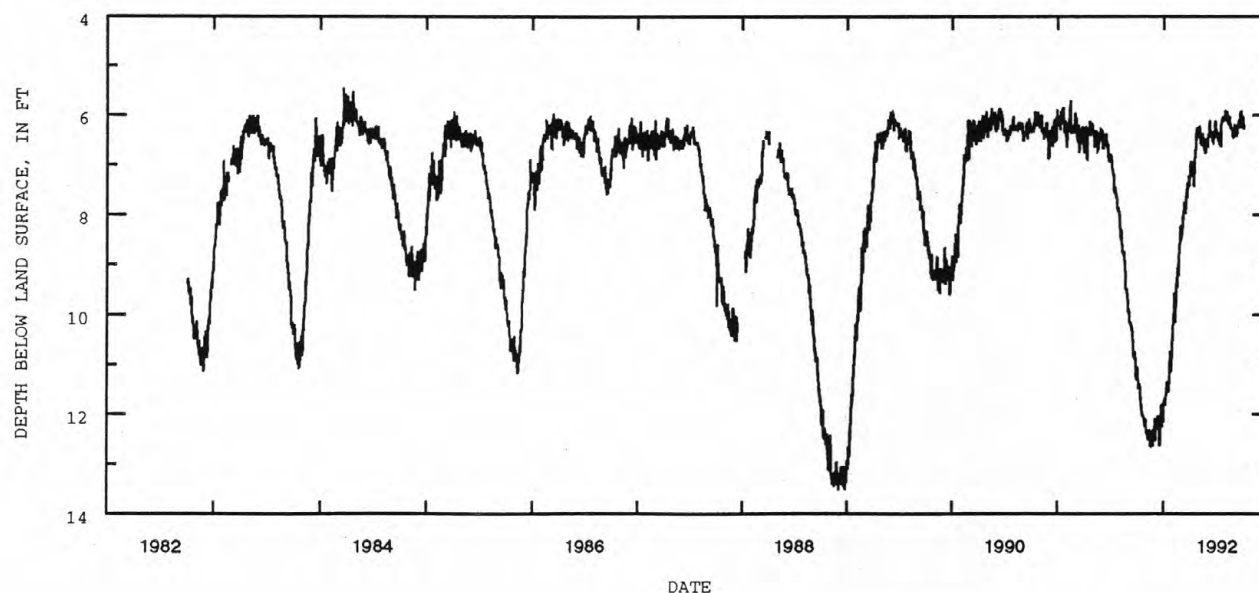
Measuring point: Floor of instrument shelter 2.88 ft above land-surface datum.

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 below land-surface datum, Jan. 20, 21, 1965;
minimum daily low, 5.46 ft below land-surface datum, Mar. 21, 1984.DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11.15	12.10	12.47	12.12	10.52	8.45	6.94	6.30	6.45	6.35	6.10	6.43
2	11.05	12.25	12.40	11.97	10.50	8.42	6.95	6.23	6.40	6.37	6.06	6.38
3	11.09	12.35	12.09	11.70	10.32	8.45	6.94	6.31	6.34	6.46	5.93	6.36
4	11.09	12.40	12.51	11.75	10.10	8.39	7.00	6.38	6.21	6.53	6.07	6.43
5	11.25	12.40	12.51	11.76	10.10	8.35	7.19	6.43	6.12	6.45	6.15	6.43
6	11.38	12.31	12.38	11.68	9.89	8.20	7.20	6.58	6.24	6.53	6.20	6.33
7	11.48	12.46	12.15	11.81	9.56	8.00	6.95	6.62	6.37	6.59	6.16	6.27
8	11.50	12.52	12.15	11.80	9.87	8.11	7.03	6.46	6.42	6.59	6.03	6.23
9	11.49	12.52	12.20	11.48	10.14	8.11	6.97	6.38	6.43	6.54	6.05	6.23
10	11.47	12.42	12.24	11.54	10.14	7.75	7.00	6.50	6.43	6.55	6.03	6.19
11	11.40	12.36	12.24	11.55	10.02	7.79	7.01	6.50	6.45	6.63	6.09	6.24
12	11.50	12.36	12.24	11.51	10.03	7.80	7.39	6.36	6.45	6.62	6.19	6.26
13	11.70	12.33	12.02	11.34	9.65	7.83	7.43	6.42	6.38	6.43	6.20	6.16
14	11.69	12.31	12.16	11.39	9.48	7.80	7.23	6.50	6.38	6.25	6.25	6.10
15	11.65	12.34	12.22	11.40	9.28	7.91	7.13	6.58	6.52	6.13	6.25	6.14
16	11.81	12.61	12.26	11.53	9.44	7.98	6.90	6.70	6.55	6.11	6.26	6.12
17	11.82	12.63	12.09	11.36	9.44	7.77	6.83	6.64	6.55	6.07	6.30	6.00
18	11.85	12.40	12.53	11.55	9.15	7.77	6.78	6.72	6.46	6.05	6.27	5.94
19	12.02	12.40	12.63	11.55	8.98	7.50	6.64	6.72	6.33	6.06	6.30	6.08
20	12.03	12.39	12.58	11.21	9.17	7.50	6.43	6.74	6.39	6.03	6.36	6.10
21	11.98	12.39	12.20	11.15	9.19	7.65	6.30	6.78	6.44	6.12	6.42	5.91
22	11.99	12.38	12.11	11.12	9.08	7.35	6.51	6.74	6.45	6.13	6.43	6.10
23	12.03	12.36	11.80	10.75	8.81	7.44	6.51	6.65	6.38	6.06	6.43	6.26
24	12.04	12.35	11.94	10.98	8.74	7.49	6.26	6.59	6.11	6.10	6.43	6.26
25	12.04	12.54	12.11	10.98	8.65	7.49	6.26	6.59	6.19	6.12	6.45	6.14
26	12.08	12.65	12.11	11.15	8.50	7.22	6.38	6.47	6.23	6.02	6.43	6.05
27	12.16	12.55	12.26	11.12	8.26	7.35	6.43	6.52	6.38	5.91	6.40	6.03
28	12.23	12.48	12.23	10.91	8.23	7.43	6.46	6.63	6.38	6.01	6.20	6.13
29	12.23	12.33	11.79	10.87	8.53	7.40	6.38	6.65	6.34	6.00	6.33	6.27
30	12.25	12.46	12.11	10.68	---	7.15	6.30	6.48	6.38	6.00	6.28	6.24
31	12.19	---	12.15	10.35	---	7.05	---	6.45	---	6.07	6.41	---
MAX	12.25	12.65	12.63	12.12	10.52	8.45	7.43	6.78	6.55	6.63	6.45	6.43
CAL YR 1991	LOW 12.65											
WTR YR 1992	LOW 12.65											



HENRY COUNTY

412123083574000. Local number, HY-2.

LOCATION.--Lat 41°21'23", long 83°57'40", Hydrologic Unit 04100009, 1.4 Mi southwest of McClure.

Owner: State of Ohio.

AQUIFER.--Limestone of Silurian Age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 12 in., depth drilled 300 ft, cased to 43 ft.

INSTRUMENTATION.--Digital recorder -- 60-minute punch.

DATUM.--Elevation of land-surface datum is 680 ft above National Geodetic Vertical Datum of 1929, from topographic map.

Measuring point: Floor of instrument shelter 3.00 ft above land-surface datum.

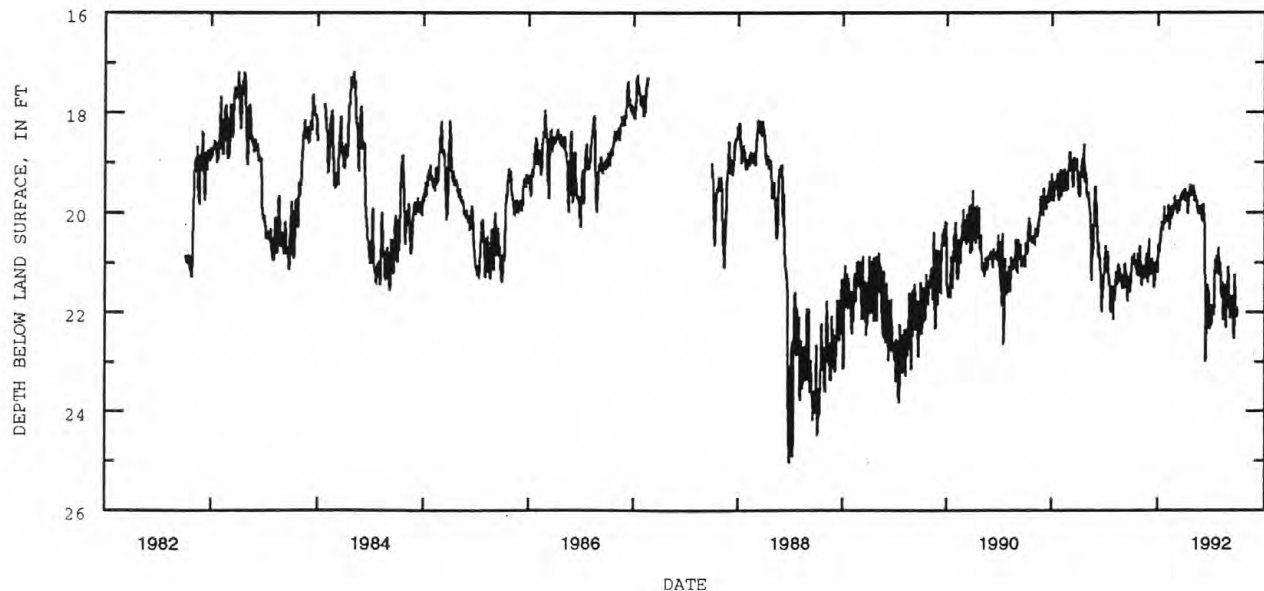
PERIOD OF RECORD.--June 1971 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 25.04 ft below land-surface datum, June 28, 1988;

minimum daily low, 14.55 ft below land-surface datum, Mar. 22, 1978.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21.34	20.67	21.02	21.19	20.17	19.84	19.55	19.55	20.11	22.01	21.03	21.63
2	21.29	20.79	20.90	21.00	20.19	19.89	19.56	19.47	20.06	22.20	21.20	21.71
3	21.22	20.89	20.52	20.78	20.19	19.91	19.54	19.57	19.99	22.26	21.07	21.81
4	21.16	21.07	20.88	20.69	20.07	19.89	19.58	19.59	19.87	22.15	21.35	22.07
5	20.91	21.19	21.18	20.70	20.07	19.90	19.79	19.62	19.84	21.96	21.56	22.12
6	20.88	21.37	21.24	20.77	20.05	19.91	19.76	19.76	19.94	21.85	21.70	21.89
7	20.97	21.39	21.22	20.77	19.85	19.89	19.62	19.79	20.08	21.96	21.70	21.81
8	20.98	21.46	21.22	20.72	19.94	20.02	19.69	19.71	20.17	21.89	21.54	21.75
9	20.99	21.43	21.19	20.48	20.12	20.00	19.69	19.66	20.24	22.04	21.40	21.77
10	21.01	21.24	21.13	20.39	20.25	19.75	19.69	19.76	20.66	22.04	21.43	21.67
11	20.91	21.05	21.16	20.49	20.33	19.79	19.68	19.76	21.83	22.03	21.93	21.94
12	20.82	21.06	21.18	20.51	20.33	19.79	19.93	19.71	22.55	21.80	22.16	21.98
13	20.94	21.17	20.92	20.41	20.14	19.79	20.01	19.73	22.99	21.42	21.91	21.98
14	20.95	21.29	21.04	20.19	20.01	19.80	19.90	19.81	22.91	21.22	21.87	21.98
15	20.98	21.29	21.19	20.19	19.94	19.94	19.83	19.88	22.66	21.06	21.72	22.11
16	21.01	21.31	21.19	20.21	20.11	19.96	19.70	19.95	22.23	20.95	21.44	22.15
17	20.99	21.31	21.06	20.22	20.11	19.81	19.67	19.94	22.20	20.95	21.62	22.34
18	21.09	21.12	21.38	20.34	20.00	19.82	19.63	20.00	21.88	20.96	21.73	22.54
19	21.15	21.09	21.48	20.35	19.88	19.68	19.64	20.00	21.43	20.94	21.72	22.49
20	21.14	21.10	21.48	20.18	20.00	19.72	19.56	20.01	21.57	20.86	21.98	22.10
21	21.11	21.01	21.30	20.13	20.06	19.77	19.45	20.03	21.92	20.92	22.21	21.76
22	21.22	20.97	21.32	20.13	20.00	19.61	19.57	20.00	21.78	21.03	22.32	21.24
23	21.23	20.97	21.15	19.90	19.99	19.68	19.57	19.92	21.71	21.22	22.12	21.76
24	21.24	20.82	21.09	20.06	19.97	19.75	19.48	19.91	21.56	21.15	21.70	22.02
25	21.15	21.16	21.05	20.09	19.89	19.71	19.51	19.90	21.67	20.99	21.59	21.99
26	20.86	21.22	20.97	20.23	19.81	19.59	19.57	19.86	21.88	20.76	21.56	22.03
27	20.81	21.26	21.15	20.19	19.72	19.67	19.65	19.89	22.32	20.70	21.57	22.09
28	20.84	21.39	21.13	20.19	19.70	19.74	19.68	19.96	22.35	21.10	21.16	21.91
29	20.84	21.27	21.03	20.16	19.86	19.75	19.60	20.14	22.19	21.25	21.08	21.97
30	20.82	21.02	21.12	20.13	---	19.63	19.55	20.13	22.00	21.14	21.39	22.03
31	20.77	---	21.20	20.13	---	19.58	---	20.15	---	21.01	21.43	---
MAX	21.34	21.46	21.48	21.19	20.33	20.02	20.01	20.15	22.99	22.26	22.32	22.54
CAL YR 1991	LOW 22.15											
WTR YR 1992	LOW 22.99											



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., depth drilled 525 ft, present depth 523.0 ft, cased to 93 ft.

INSTRUMENTATION.--Type F continuous recorder.

DATUM.--Elevation of land-surface datum is 624 ft above National Geodetic Vertical Datum of 1929, from topographic map.

Measuring point: Floor of instrument shelter 2.98 ft above land-surface datum (Revised from 1978 and 1979).

REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water. Prior to Aug. 23, 1978,

measuring point was 3.10 ft above land-surface datum. Reported in 1979 as 3.00 ft above land-surface datum.

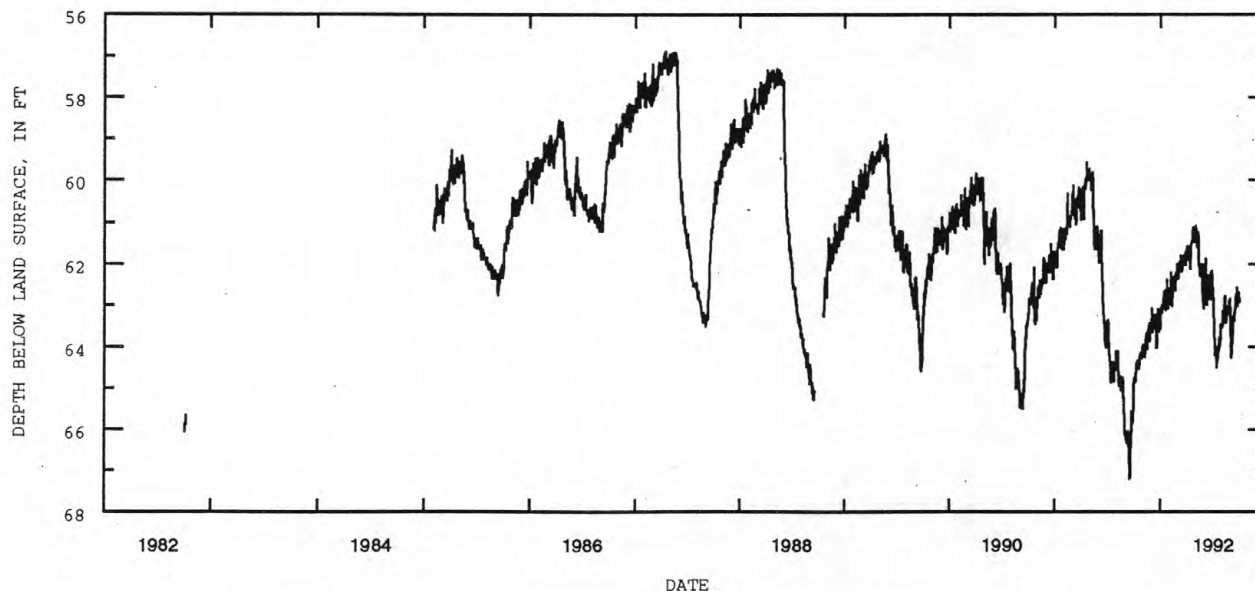
PERIOD OF RECORD.--March 1946 to September 1982 continuous, October 1983 to January 1985 periodic, continuous thereafter.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 117.25 ft below land-surface datum, Sept. 18, 1957;

minimum daily low, 56.87 ft below land-surface datum, Apr. 16, 1987.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	65.36	63.94	63.63	63.55	62.88	62.16	61.57	61.30	62.75	62.93	63.51	64.27
2	65.05	64.03	63.58	63.39	62.87	62.31	61.61	61.07	62.57	62.92	63.36	64.12
3	64.90	64.16	63.07	63.05	62.72	62.38	61.56	61.21	62.38	63.20	63.16	63.81
4	64.84	64.17	63.62	63.08	62.65	62.32	61.65	61.20	62.10	63.41	63.17	63.92
5	64.74	64.16	63.68	63.10	62.68	62.26	61.86	61.38	61.87	63.63	63.26	63.84
6	64.81	64.00	63.54	62.97	62.48	62.16	61.88	61.55	62.27	63.98	63.28	63.58
7	64.83	64.15	63.23	63.18	62.19	61.91	61.58	61.61	62.74	64.16	63.15	63.48
8	64.83	64.24	63.24	63.18	62.60	62.07	61.72	61.42	62.97	64.14	62.87	63.32
9	64.68	64.25	63.32	62.81	62.94	62.05	61.66	61.22	63.01	64.00	62.87	63.32
10	64.59	64.06	63.41	62.88	62.93	61.79	61.71	61.34	62.88	64.11	62.78	63.21
11	64.37	63.85	63.48	62.89	63.03	61.84	61.65	61.31	62.78	64.29	63.06	63.37
12	64.41	63.86	63.48	62.84	63.02	61.92	62.10	61.35	62.66	64.32	63.42	63.39
13	64.55	63.76	63.20	62.65	62.62	61.96	62.13	61.88	62.45	64.51	63.43	63.27
14	64.41	63.69	63.30	62.74	62.54	61.97	61.90	62.23	62.27	64.36	63.43	63.12
15	64.31	63.67	63.46	62.78	62.32	62.17	61.81	62.29	62.40	64.36	63.37	63.10
16	64.45	64.00	63.54	62.92	62.61	62.20	61.52	62.32	62.38	64.37	63.26	63.06
17	64.40	64.02	63.31	62.83	62.62	62.08	61.53	62.12	62.38	64.19	63.23	62.85
18	64.39	63.72	63.91	63.12	62.38	62.09	61.48	62.19	62.38	64.14	63.10	62.71
19	64.54	63.60	64.03	63.13	62.29	61.85	61.42	62.13	62.75	64.10	63.02	62.86
20	64.55	63.57	63.97	62.85	62.54	61.93	61.25	62.03	62.88	63.94	63.08	62.78
21	64.36	63.61	63.53	62.81	62.66	62.04	61.11	62.00	62.88	64.04	63.12	62.55
22	64.27	63.56	63.41	62.81	62.54	61.76	61.46	62.00	62.82	64.00	63.11	62.84
23	64.25	63.53	63.06	62.36	62.41	61.92	61.47	62.31	62.60	63.77	63.06	63.04
24	64.24	63.42	63.19	62.86	62.39	62.00	61.21	62.66	62.23	63.99	62.99	63.03
25	64.17	63.72	63.44	62.94	62.25	61.94	61.20	62.79	62.21	63.99	62.96	62.90
26	64.16	63.86	63.42	63.08	62.14	61.71	61.33	62.85	62.22	63.68	62.86	62.80
27	64.21	63.69	63.64	62.98	62.00	61.92	61.45	62.98	62.31	63.47	62.83	62.67
28	64.29	63.65	63.59	63.05	62.01	62.04	61.49	63.05	62.47	63.47	63.26	62.83
29	64.24	63.45	63.10	62.94	62.33	61.99	61.33	63.08	62.69	63.53	63.61	62.94
30	64.21	63.60	63.53	62.75	---	61.74	61.30	62.92	62.73	63.54	63.88	62.86
31	64.08	---	63.58	62.66	---	61.68	---	62.81	---	63.47	64.21	---
MAX	65.36	64.25	64.03	63.55	63.03	62.38	62.13	63.08	63.01	64.51	64.21	64.27

CAL YR 1991 LOW 67.17
WTR YR 1992 LOW 65.36

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., depth 65 ft, cased.

INSTRUMENTATION.--Digital recorder -- 60-minute punch.

DATUM.--Elevation of land-surface datum is 910 ft above National Geodetic Vertical Datum of 1929, from topographic map.

Measuring point: Floor of instrument shelter 1.90 ft 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, 45.21 ft below land-surface datum, July 8, 1988;

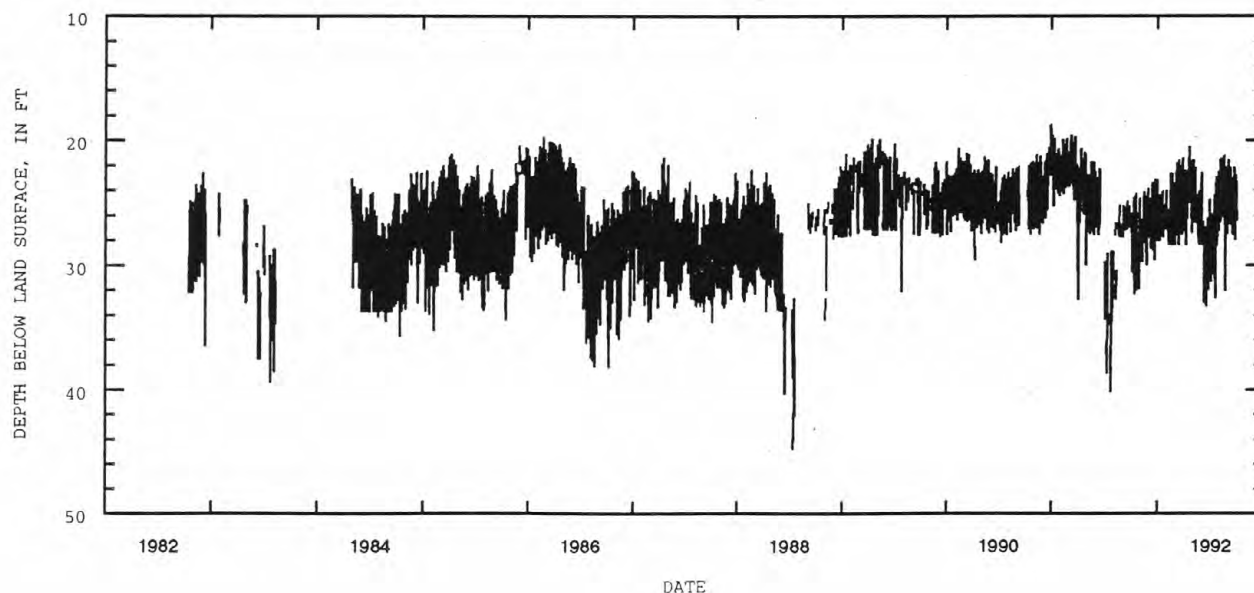
minimum daily low, 7.60 ft below land-surface datum, July 6, 1969.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	27.61	23.78	23.09	24.14	23.66	27.17	24.06	28.36	31.35	25.79	25.52
2	---	27.43	26.49	26.46	23.92	28.36	24.85	23.23	26.15	31.05	21.43	26.70
3	---	24.62	26.37	27.16	26.11	26.03	25.21	21.54	26.92	28.69	26.51	26.56
4	---	28.25	24.83	24.93	26.46	25.03	23.98	26.53	27.62	27.09	25.99	25.75
5	27.32	28.25	27.81	25.12	27.00	26.95	22.35	23.98	26.71	25.85	26.42	22.67
6	25.79	28.25	25.95	28.07	26.45	26.03	25.43	23.30	26.47	29.73	25.80	22.16
7	30.49	29.22	25.14	27.46	27.19	23.02	24.75	26.34	28.36	30.41	24.92	23.30
8	---	28.51	24.60	27.21	25.47	21.81	28.36	23.59	32.98	30.40	21.74	26.42
9	---	27.39	28.67	26.97	28.03	27.55	25.36	23.19	31.41	30.63	21.39	26.69
10	28.31	26.32	28.06	27.97	28.26	26.01	25.81	22.16	31.09	30.45	25.31	25.58
11	27.81	29.69	25.82	25.70	28.36	25.74	23.45	26.50	31.03	29.34	25.19	23.77
12	25.48	27.90	26.93	24.27	27.57	26.16	22.43	26.59	32.49	24.35	24.68	23.70
13	24.52	27.31	26.98	26.56	26.59	25.36	26.25	24.56	28.36	29.42	26.09	23.00
14	29.99	28.18	25.25	26.29	27.35	22.39	26.08	26.20	26.88	29.06	25.08	25.59
15	32.30	27.21	23.38	27.38	23.87	21.57	24.05	25.94	33.09	29.46	21.78	27.50
16	29.57	24.75	27.46	26.21	22.59	28.36	25.03	26.03	30.26	29.52	21.17	25.48
17	31.28	24.10	28.77	26.90	28.09	24.26	23.92	24.47	33.29	32.64	26.71	26.56
18	30.02	27.87	27.15	24.21	28.36	25.79	22.13	27.40	28.34	23.82	26.04	25.26
19	25.14	26.83	28.16	24.03	27.23	24.61	20.48	27.22	28.93	22.92	26.21	23.76
20	24.24	26.20	26.46	27.73	26.59	24.78	23.69	28.21	28.56	27.14	32.04	22.18
21	27.28	26.76	27.04	26.19	26.85	24.28	24.37	27.96	26.19	25.35	25.96	24.60
22	31.99	26.95	24.50	26.00	23.73	21.99	23.67	28.36	30.51	28.42	24.96	25.97
23	28.05	24.73	29.57	27.18	22.68	27.19	24.65	26.81	32.01	27.88	22.10	25.40
24	29.75	24.44	24.73	26.68	28.36	26.20	23.17	24.31	28.31	27.51	26.93	27.94
25	---	27.99	23.11	26.24	27.56	24.67	22.28	23.97	30.79	23.40	26.10	23.81
26	---	29.99	26.73	25.22	26.61	27.52	21.65	26.95	28.87	22.46	27.47	22.77
27	---	28.56	26.98	26.09	26.62	24.45	25.07	28.36	26.60	26.48	26.98	23.67
28	29.10	24.67	24.77	26.06	28.36	22.92	27.35	26.35	24.70	27.23	23.76	25.20
29	29.06	26.29	24.77	25.13	23.43	21.39	24.22	26.79	28.26	26.35	22.88	26.37
30	---	24.50	26.24	27.11	---	25.14	25.34	24.31	28.65	24.31	21.57	25.63
31	31.84	---	28.04	25.53	---	27.14	---	22.57	---	25.10	26.27	---
MAX	32.30	29.99	29.57	28.07	28.36	28.36	28.36	28.36	33.29	32.64	32.04	27.94

CAL YR 1991 LOW 40.11

WTR YR 1992 LOW 33.29



OTTAWA COUNTY

413434082494000. Local number, O-2.

LOCATION.--Lat 41°34'34", long 82°49'40", Hydrologic Unit 04100010. Catawba Island near Port Clinton.

Owner: William Williams.

AQUIFER.--Limestone of Silurian Age.

WELL CHARACTERISTICS.--Drilled water table well, diameter 6 in., depth 62 ft, cased to 26 ft.

INSTRUMENTATION.--Type F continuous recorder.

DATUM.--Elevation of land-surface datum is 591 ft above National Geodetic Vertical Datum of 1929, from topographic map.

Measuring point: Floor of instrument shelter 1.60 ft above land-surface datum.

REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

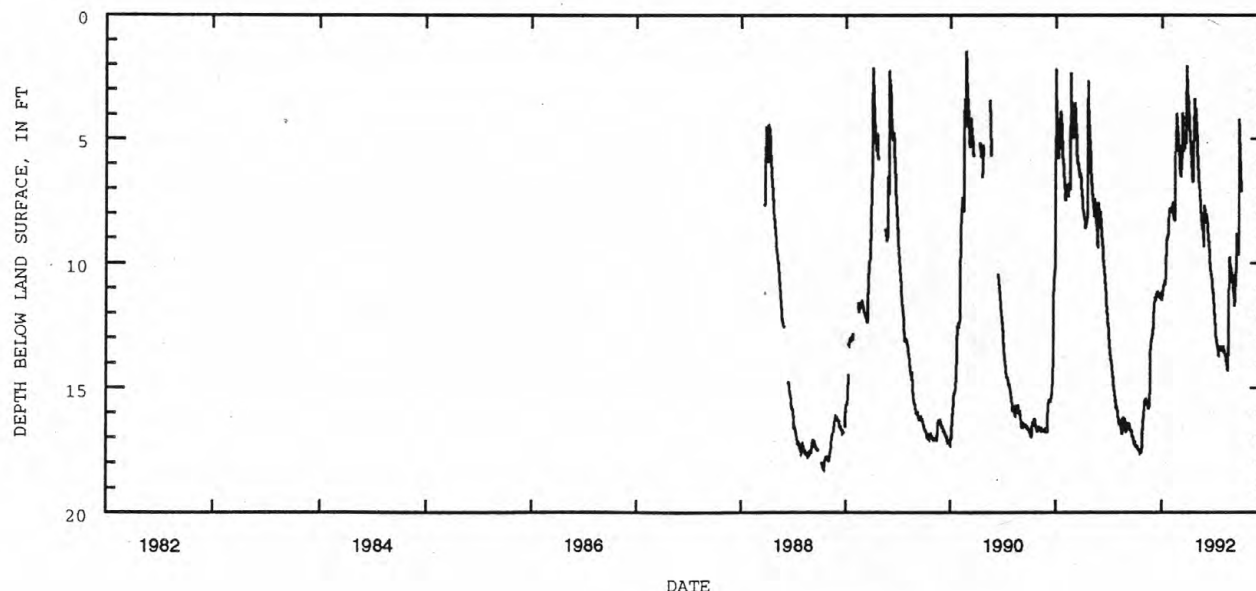
PERIOD OF RECORD.--March 1988 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 18.27 ft below land-surface datum, Sept. 17, 1989;

minimum daily low, 1.45 ft below land-surface datum, Feb. 23, 1990.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17.19	15.79	12.85	11.43	7.99	5.71	3.47	5.13	8.00	12.51	13.54	11.14
2	17.29	15.65	12.77	11.39	7.90	5.98	3.55	5.52	8.05	12.70	13.62	11.16
3	17.30	15.58	12.51	11.25	7.83	6.13	3.77	5.88	8.18	12.83	13.61	11.30
4	17.31	15.55	12.06	11.11	7.78	6.29	4.30	6.07	8.30	13.06	13.64	11.52
5	17.35	15.49	11.88	11.08	7.77	6.42	4.64	6.39	8.50	13.09	13.73	11.72
6	17.38	15.46	11.66	10.93	7.61	6.50	4.72	6.69	8.72	13.11	13.80	11.43
7	17.35	15.50	11.46	10.90	7.55	6.45	4.99	6.84	8.89	13.24	13.89	11.12
8	17.35	15.53	11.39	10.88	7.80	6.00	5.29	6.88	9.05	13.30	14.01	10.71
9	17.40	15.55	11.39	10.75	8.02	5.87	5.55	7.17	9.20	13.40	14.07	10.60
10	17.38	15.55	11.38	10.76	8.05	5.62	5.68	7.41	9.37	13.52	14.07	10.14
11	17.42	15.58	11.40	10.79	8.19	3.91	5.97	7.52	9.56	13.66	14.14	8.83
12	17.47	15.61	11.40	10.77	8.22	4.25	6.37	7.63	9.73	13.76	14.25	8.80
13	17.48	15.62	11.26	10.71	8.17	4.53	6.45	7.88	9.92	13.58	14.33	8.90
14	17.48	15.65	11.20	10.57	8.31	4.81	6.60	8.08	10.10	13.53	14.30	9.03
15	17.49	15.69	11.21	9.97	8.26	5.19	6.72	8.28	10.24	13.47	13.14	9.06
16	17.50	15.81	11.22	9.43	5.83	5.31	6.77	8.52	10.38	13.36	11.93	9.13
17	17.50	15.80	11.11	9.06	5.23	5.41	6.66	8.64	10.48	13.36	10.13	9.24
18	17.54	15.76	11.31	9.05	4.94	5.41	6.08	8.57	10.49	13.44	9.83	9.37
19	17.56	15.74	11.36	9.01	4.39	5.34	4.08	8.63	10.54	13.47	9.76	9.56
20	17.59	15.60	11.32	8.97	3.95	5.13	4.35	8.79	10.73	13.46	9.81	9.68
21	17.57	14.91	11.22	8.92	4.24	4.95	4.38	8.97	10.90	13.46	9.94	9.65
22	17.56	14.04	11.19	8.94	4.35	4.91	3.34	9.11	10.99	13.51	10.09	4.19
23	17.56	13.62	11.15	8.81	4.41	5.11	3.66	9.35	11.04	13.41	10.14	4.60
24	17.55	13.32	11.21	8.28	4.56	5.20	3.89	8.59	11.10	13.47	10.21	5.00
25	17.55	13.17	11.32	8.05	4.71	4.02	3.80	7.68	11.26	13.50	10.31	5.37
26	17.33	13.13	11.34	7.85	4.85	2.05	3.81	7.85	11.51	13.51	10.41	5.68
27	16.84	13.05	11.44	7.78	5.16	2.36	4.20	7.86	11.70	13.35	10.46	6.15
28	16.49	12.99	11.42	7.85	5.34	2.88	4.44	8.02	11.98	13.36	10.51	6.55
29	16.29	12.90	11.32	7.85	5.60	3.20	4.67	8.15	12.08	13.42	10.74	6.84
30	16.20	12.85	11.45	7.79	---	3.26	5.02	8.10	12.35	13.48	10.84	7.09
31	16.03	---	11.50	7.88	---	3.48	---	8.04	---	13.47	11.02	---
MAX	17.59	15.81	12.85	11.43	8.31	6.50	6.77	9.35	12.35	13.76	14.33	11.72
CAL YR 1991	LOW 17.59											
WTR YR 1992	LOW 17.59											



PORTAGE COUNTY

410540081213600. Local number, PO-7.

LOCATION.--Lat 41°05'40", long 81°21'36", Hydrologic Unit 04110002, Sunnybrook golf course near Brimfield.

Owner: City of Talmidge.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 12 in., depth 101 ft cased.

INSTRUMENTATION.--Type F continuous recorder.

DATUM.--Elevation of land-surface datum is 1065 ft above National Geodetic Vertical Datum of 1929, from topographic map.

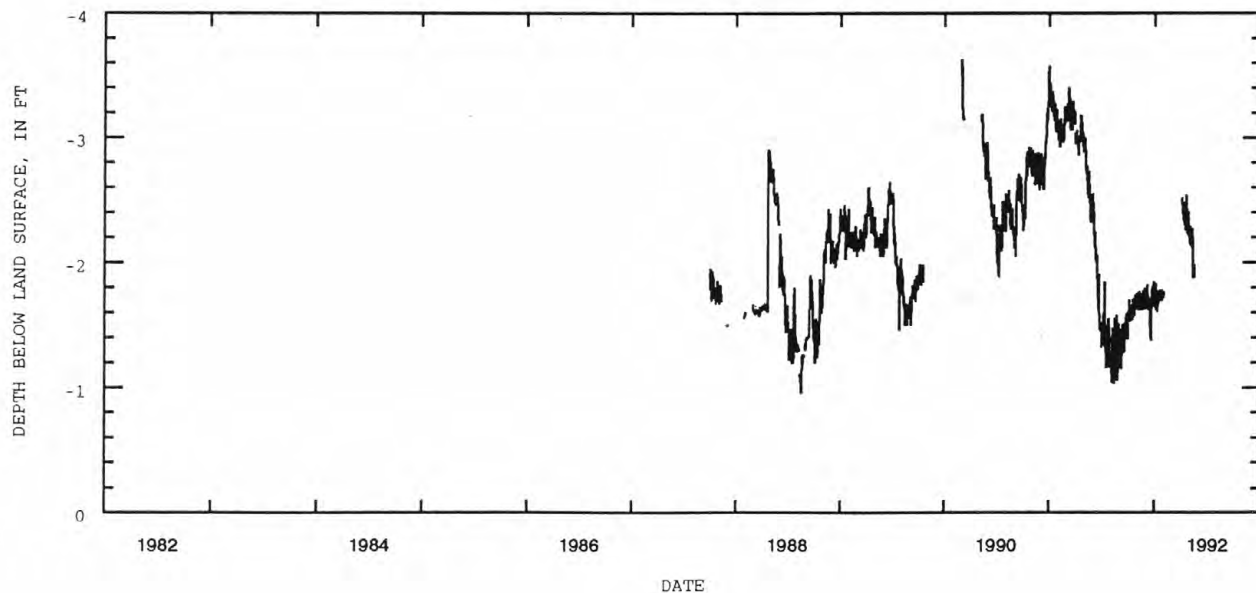
Measuring point: Floor of instrument shelter 7.00 ft above land-surface datum.

REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

PERIOD OF RECORD.--March 1985 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 0.97 ft above land-surface datum, Aug. 17-18, 1988;
minimum daily low, 3.94 ft above land-surface datum, Mar. 15-16, 1986.DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	-1.55	-1.65	-1.79	-1.78	---	---	---	-2.15	---	---	---	---
2	-1.39	-1.75	-1.72	-1.70	---	---	---	-2.21	---	---	---	---
3	-1.53	-1.76	-1.79	-1.65	---	---	---	-2.29	---	---	---	---
4	-1.54	-1.73	-1.73	-1.75	---	---	-2.47	-2.18	---	---	---	---
5	-1.53	-1.70	-1.70	-1.83	---	---	-2.52	-2.18	---	---	---	---
6	-1.70	-1.62	-1.68	-1.66	---	---	-2.45	-2.14	---	---	---	---
7	-1.64	-1.65	-1.70	-1.62	---	---	-2.43	-2.13	---	---	---	---
8	-1.62	-1.63	-1.82	-1.64	---	---	-2.34	-2.16	---	---	---	---
9	-1.53	-1.65	-1.65	-1.63	---	---	-2.35	-2.15	---	---	---	---
10	-1.56	-1.77	-1.63	-1.63	---	---	-2.33	-2.27	---	---	---	---
11	-1.58	-1.77	-1.64	-1.67	---	---	-2.33	-2.14	---	---	---	---
12	-1.62	-1.70	-1.62	-1.78	---	---	-2.41	-1.94	---	---	---	---
13	-1.66	-1.71	-1.62	-1.67	---	---	-2.40	-1.88	---	---	---	---
14	-1.66	-1.65	-1.65	-1.68	---	---	-2.35	-1.90	---	---	---	---
15	-1.65	-1.63	-1.71	-1.70	---	---	-2.26	-1.98	---	---	---	---
16	-1.62	-1.62	-1.70	-1.70	---	---	-2.27	-1.97	---	---	---	---
17	-1.57	-1.75	-1.57	-1.71	---	---	-2.35	-1.89	---	---	---	---
18	-1.54	-1.75	-1.40	-1.70	---	---	-2.43	---	---	---	---	---
19	-1.59	-1.66	-1.42	-1.75	---	---	-2.54	---	---	---	---	---
20	-1.71	-1.62	-1.38	-1.78	---	---	-2.50	---	---	---	---	---
21	-1.62	-1.63	-1.56	-1.72	---	---	-2.35	---	---	---	---	---
22	-1.67	-1.63	-1.70	-1.71	---	---	-2.24	---	---	---	---	---
23	-1.60	-1.65	-1.76	-1.71	---	---	-2.24	---	---	---	---	---
24	-1.58	-1.78	-1.77	-1.70	---	---	-2.23	---	---	---	---	---
25	-1.59	-1.75	-1.79	-1.70	---	---	-2.35	---	---	---	---	---
26	-1.64	-1.67	-1.81	-1.78	---	---	-2.41	---	---	---	---	---
27	-1.74	-1.65	-1.75	-1.75	---	---	-2.25	---	---	---	---	---
28	-1.67	-1.63	-1.80	-1.74	---	---	-2.23	---	---	---	---	---
29	-1.67	-1.79	-1.85	-1.72	---	---	-2.20	---	---	---	---	---
30	-1.69	-1.79	-1.75	-1.72	---	---	-2.23	---	---	---	---	---
31	-1.70	---	-1.73	-1.76	---	---	---	---	---	---	---	---
MAX	-1.39	-1.62	-1.38	-1.62	---	---	-2.20	-1.88	---	---	---	---

CAL YR 1991 LOW -1.03
WTR YR 1992 LOW -1.38

PORTAGE COUNTY--Continued

410920081192000. Local number, PO-6.

LOCATION.--Lat 41°09'20", long 81°19'20", Hydrologic Unit 04110002, State Rt 59, east of Kent.

Owner: Testa Bros.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 8 in., depth 72 ft, cased.

INSTRUMENTATION.--Type F continuous recorder.

DATUM.--Elevation of land-surface datum is 1040 ft above National Geodetic Vertical Datum of 1929, from topographic map.

Measuring point: Top of platform 4.50 ft below land-surface datum.

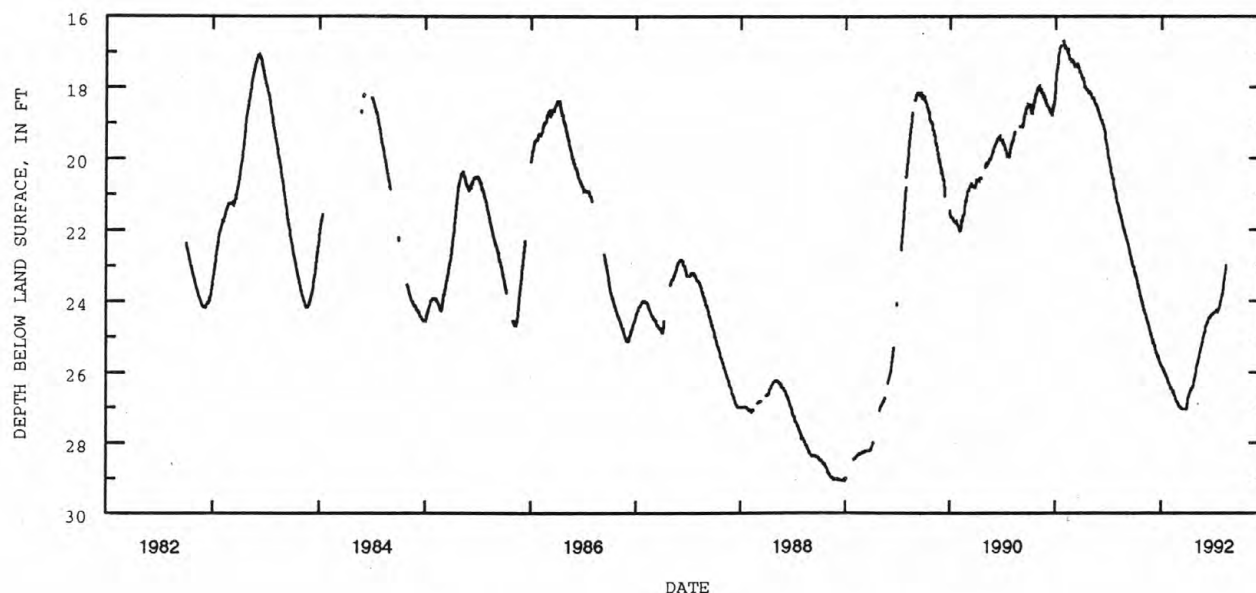
REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

PERIOD OF RECORD.--April 1977 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 29.06 ft below land-surface datum, Dec. 23-26, 28-29, 1988; minimum daily low, 14.28 ft below-land surface datum, May 5, 1980.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23.06	24.15	25.02	25.81	26.40	26.90	26.85	25.98	24.80	24.34	23.68	---
2	23.13	24.20	25.08	25.81	26.41	26.95	26.77	25.87	24.75	24.31	23.61	---
3	23.17	24.22	25.11	25.83	26.44	26.96	26.73	25.83	24.71	24.32	23.55	---
4	23.19	24.24	25.15	25.85	26.45	26.97	26.69	25.81	24.69	24.32	23.48	---
5	23.20	24.26	25.14	25.87	26.45	26.98	26.69	25.77	24.68	24.31	23.43	---
6	23.23	24.30	25.18	25.89	26.45	26.98	26.68	25.75	24.64	24.32	23.38	---
7	23.28	24.33	25.19	25.91	26.46	26.99	26.64	25.71	24.63	24.32	23.30	---
8	23.29	24.37	25.20	25.91	26.50	27.00	26.58	25.67	24.61	24.32	23.20	---
9	23.33	24.38	25.24	25.92	26.50	27.01	26.58	25.62	24.59	24.30	23.15	---
10	23.36	24.39	25.28	25.95	26.51	27.03	26.56	25.58	24.57	24.31	23.11	---
11	23.38	24.42	25.30	25.97	26.58	27.03	26.53	25.57	24.54	24.32	23.03	---
12	23.45	24.46	25.30	25.99	26.58	27.03	26.50	25.52	24.53	24.31	23.00	---
13	23.49	24.49	25.35	26.00	26.58	27.03	26.50	25.49	24.50	24.29	---	---
14	23.51	24.51	25.40	26.05	26.59	27.03	26.49	25.43	24.49	24.28	---	---
15	23.55	24.55	25.45	26.05	26.59	27.04	26.48	25.41	24.47	24.27	---	---
16	23.58	24.58	25.45	26.05	26.65	27.04	26.45	25.38	24.47	24.25	---	---
17	23.60	24.61	25.46	26.10	26.66	27.04	26.43	25.33	24.46	24.23	---	---
18	23.64	24.64	25.53	26.11	26.66	27.04	26.43	25.32	24.46	24.21	---	---
19	23.71	24.67	25.55	26.11	26.72	27.04	26.43	25.28	24.42	24.18	---	---
20	23.73	24.69	25.55	26.17	26.75	27.05	26.39	25.21	24.42	24.15	---	---
21	23.76	24.73	25.57	26.18	26.79	27.05	26.36	25.17	24.41	24.12	---	---
22	23.79	24.78	25.57	26.18	26.79	27.05	26.34	25.15	24.41	24.09	---	---
23	23.85	24.79	25.60	26.19	26.80	27.05	26.29	25.11	24.41	24.05	---	---
24	23.87	24.83	25.63	26.24	26.83	27.06	26.23	25.06	24.39	24.01	---	---
25	23.91	24.87	25.65	26.25	26.83	27.05	26.19	25.05	24.38	23.98	---	---
26	23.93	24.90	25.70	26.28	26.84	27.05	26.18	25.01	24.38	23.94	---	---
27	24.00	24.93	25.73	26.30	26.85	27.04	26.13	24.97	24.37	23.89	---	---
28	24.01	24.94	25.73	26.32	26.88	27.04	26.07	24.95	24.36	23.87	---	---
29	24.05	24.96	25.75	26.34	26.90	27.03	26.04	24.89	24.35	23.84	---	---
30	24.05	25.02	25.78	26.35	---	27.00	25.99	24.88	24.35	23.76	---	---
31	24.14	---	25.81	26.38	---	26.96	---	24.87	---	23.72	---	---
MAX	24.14	25.02	25.81	26.38	26.90	27.06	26.85	25.98	24.80	24.34	23.68	---

CAL YR 1991 LOW 25.81
WTR YR 1992 LOW 27.06

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., depth 110 ft, cased.

INSTRUMENTATION.--Digital recorder -- 60-minute punch.

DATUM.--Elevation of land-surface datum is 770 ft above National Geodetic Vertical Datum of 1929, from topographic map.

Measuring point: Floor of instrument shelter 3.00 ft above land-surface datum.

REMARKS.--Station operated by Ohio Department of Natural Resource, Division of Water.

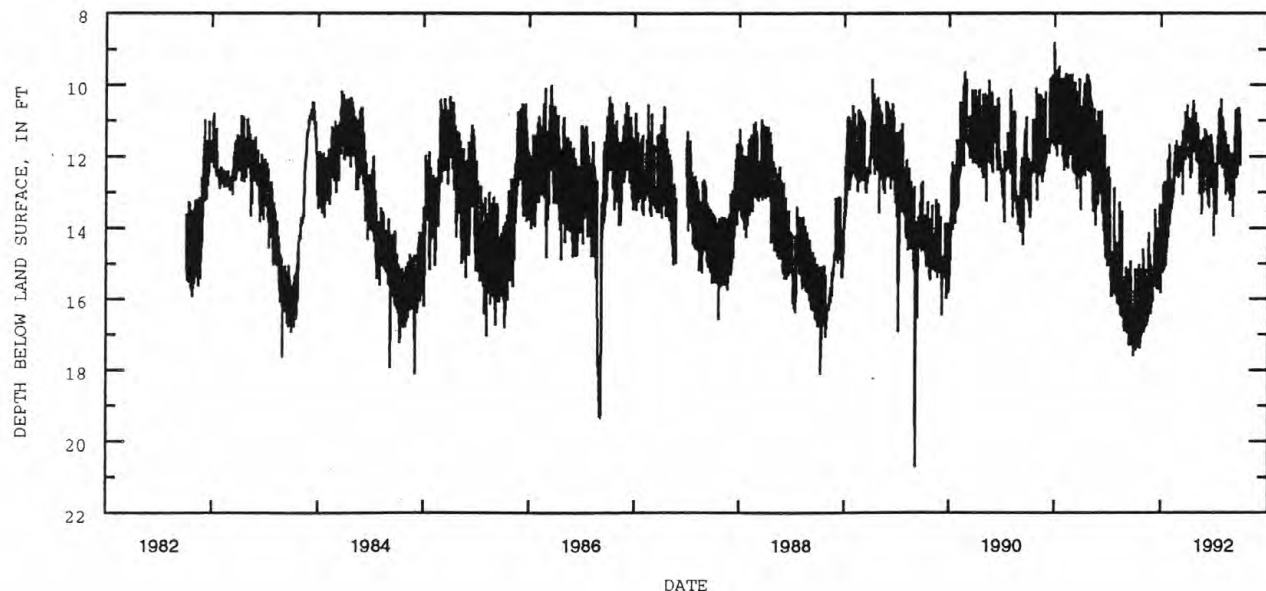
PERIOD OF RECORD.--July 1946 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 24.30 ft below land-surface datum, Aug. 24, 1962;

minimum daily low, 8.80 ft below land-surface datum, Dec. 30, 1990.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17.37	14.59	15.73	15.41	13.74	11.71	10.57	10.77	12.56	14.21	11.56	12.15
2	17.10	16.93	16.21	15.11	11.88	12.60	10.56	12.14	11.72	12.91	10.95	13.09
3	17.46	16.65	15.71	14.98	13.89	11.80	10.85	11.09	11.50	12.42	12.32	12.21
4	15.76	16.94	15.90	13.89	12.70	12.52	10.96	11.08	12.47	13.30	11.46	12.26
5	16.98	14.81	16.07	15.18	13.61	12.55	11.58	12.16	11.33	12.18	11.38	13.68
6	15.15	16.86	15.58	15.05	12.74	12.30	11.27	11.75	11.31	12.35	12.55	12.37
7	17.35	15.59	15.37	15.26	13.08	11.95	10.94	11.07	12.46	13.54	11.38	11.90
8	15.74	16.79	15.52	12.78	12.67	12.09	12.06	12.20	11.41	12.50	11.29	13.09
9	17.45	15.17	15.12	15.19	13.46	12.36	11.34	11.40	11.45	12.23	12.59	11.92
10	17.24	16.67	15.36	13.32	13.03	11.78	11.13	11.18	13.11	13.60	11.79	10.94
11	16.86	16.38	13.48	15.07	13.29	11.72	12.40	13.06	11.87	12.37	11.45	12.07
12	17.36	16.69	15.57	12.69	12.64	11.74	11.60	11.58	12.07	12.11	13.05	10.94
13	17.08	16.77	14.32	15.17	13.16	11.61	11.30	11.56	13.35	12.86	12.27	10.69
14	16.60	16.34	15.44	14.80	12.95	12.00	12.60	12.71	13.19	11.95	11.75	12.40
15	17.18	16.52	13.61	15.12	13.03	11.31	11.64	11.54	12.04	11.42	12.72	11.92
16	15.87	16.72	15.66	14.73	12.17	11.81	11.20	11.99	13.43	12.00	11.68	10.95
17	17.11	16.53	15.28	14.41	12.75	11.28	12.45	12.92	12.18	10.86	11.81	12.61
18	15.09	16.41	15.74	15.07	11.86	13.06	11.06	11.93	12.28	10.75	12.78	11.09
19	17.12	14.34	15.04	14.55	12.55	11.41	10.67	11.68	12.70	11.68	11.77	11.00
20	15.03	16.52	15.63	14.68	11.68	11.88	11.80	13.60	11.59	10.72	11.68	12.51
21	17.39	14.13	14.76	14.40	12.39	11.31	10.84	12.63	11.39	10.65	12.97	11.07
22	16.84	16.33	15.38	14.58	11.93	11.28	10.42	12.02	12.85	12.23	12.06	10.63
23	17.24	15.99	13.99	12.11	12.21	11.02	11.82	13.48	11.54	10.95	11.86	11.86
24	15.15	16.09	15.74	14.52	11.56	11.85	10.53	11.65	11.47	10.73	13.22	11.08
25	17.25	16.03	15.42	12.39	12.10	10.75	10.54	11.49	12.66	12.02	12.61	10.63
26	16.89	16.31	15.33	14.15	12.04	11.74	11.71	12.84	11.65	10.41	12.07	11.64
27	16.71	14.75	13.33	12.05	12.22	10.93	10.97	11.77	11.79	10.71	13.02	11.03
28	16.63	16.42	15.62	14.25	12.16	12.09	10.86	11.79	12.86	12.32	11.91	10.83
29	17.01	15.02	15.33	11.67	12.47	11.00	11.90	13.00	12.57	11.18	12.05	12.22
30	15.76	16.23	15.31	13.85	---	11.54	10.98	11.77	11.96	10.90	13.06	11.29
31	16.48	---	15.82	12.35	---	11.00	---	11.23	---	12.15	12.27	---
MAX	17.46	16.94	16.21	15.41	13.89	13.06	12.60	13.60	13.43	14.21	13.22	13.68

CAL YR 1991 LOW 17.58
WTR YR 1992 LOW 17.46

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., depth 150 ft, cased.

INSTRUMENTATION.--Digital recorder --60-minute punch.

DATUM.--Elevation of land-surface datum is 1080 ft above National Geodetic Vertical Datum of 1929, from topographic map.

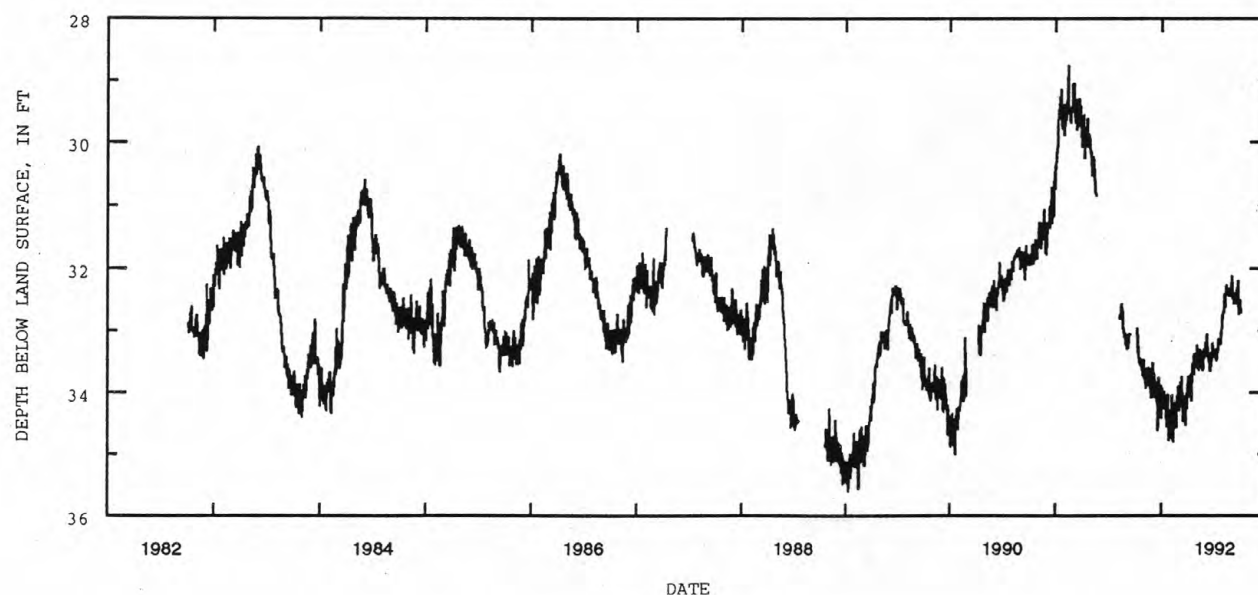
Measuring point: Floor of instrument shelter 3.17 ft above land-surface datum.

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 below land-surface datum, Feb. 12, 1981;
minimum daily low, 23.68 ft below land-surface datum, June 15, 23, 1947.DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	33.47	33.92	34.31	34.50	34.12	33.77	33.44	33.31	33.38	32.70	32.48
2	---	33.56	33.91	34.17	34.47	34.24	33.80	33.23	33.33	33.36	32.62	32.48
3	---	33.73	33.52	33.93	34.39	34.30	33.73	33.33	33.27	33.37	32.40	32.43
4	---	33.79	34.00	33.97	34.36	34.19	33.81	33.29	33.11	33.44	32.55	32.56
5	---	33.79	34.08	34.03	34.38	34.16	34.05	33.43	33.06	33.29	32.62	32.53
6	---	33.62	33.96	34.01	34.18	34.03	34.04	33.62	33.23	33.42	32.61	32.41
7	---	33.80	33.69	34.27	34.04	33.82	33.78	33.65	33.31	33.49	32.57	32.39
8	---	33.94	33.73	34.24	34.41	34.03	33.90	33.38	33.41	33.43	32.31	32.45
9	---	33.87	33.98	33.98	34.75	34.01	33.79	33.30	33.44	33.36	32.30	32.44
10	---	33.68	34.00	34.10	34.75	33.74	33.82	33.42	33.45	33.34	32.27	32.45
11	32.97	33.67	34.01	34.14	34.80	33.92	33.69	33.43	33.51	33.35	32.33	32.57
12	33.17	33.68	34.02	34.18	34.79	34.08	34.10	33.34	33.50	33.28	32.42	32.57
13	33.37	33.61	33.84	34.04	34.40	34.19	34.14	33.30	33.44	33.21	32.40	32.51
14	33.30	33.64	33.92	34.18	34.40	34.10	33.90	33.37	33.50	33.13	32.41	32.47
15	33.29	33.63	34.08	34.20	34.17	34.37	33.77	33.41	33.65	33.15	32.41	32.55
16	33.42	33.83	34.20	34.35	34.48	34.48	33.52	33.50	33.65	33.16	32.39	32.55
17	33.47	33.90	33.97	34.32	34.51	34.32	33.60	33.45	33.60	33.17	32.36	32.37
18	33.49	33.66	34.45	34.53	34.26	34.29	33.54	33.62	33.55	33.22	32.33	32.29
19	33.56	33.70	34.62	34.56	34.24	34.10	33.51	33.59	33.37	33.22	32.33	32.38
20	33.56	33.60	34.51	34.40	34.47	34.11	33.43	33.61	33.43	33.17	32.39	32.38
21	33.45	33.67	34.08	34.39	34.57	34.21	33.38	33.65	33.49	33.21	32.44	32.19
22	33.53	33.67	33.94	34.34	34.37	34.05	33.71	33.58	33.49	33.21	32.40	32.53
23	33.53	33.62	33.75	34.03	34.20	34.46	33.69	33.41	33.40	33.06	32.38	32.71
24	33.59	33.65	33.93	34.54	34.23	34.53	33.43	33.37	33.20	33.07	32.37	32.74
25	33.56	33.94	34.16	34.57	34.15	34.37	33.37	33.31	33.31	33.04	32.45	32.67
26	33.50	34.10	34.19	34.78	33.97	34.08	33.49	33.28	33.30	32.89	32.40	32.56
27	33.57	33.95	34.39	34.73	33.93	34.17	33.57	33.34	33.41	32.75	32.31	32.50
28	33.70	33.91	34.26	34.74	33.90	34.26	33.61	33.43	33.37	32.80	32.12	32.59
29	33.73	33.81	33.88	34.59	34.23	34.17	33.47	33.42	33.32	32.73	32.27	32.71
30	33.69	33.87	34.36	34.38	---	33.86	33.46	33.18	33.37	32.71	32.25	32.65
31	33.58	---	34.43	34.28	---	33.91	---	33.30	---	32.68	32.40	---
MAX	33.73	34.10	34.62	34.78	34.80	34.53	34.14	33.65	33.65	33.49	32.70	32.74

CAL YR 1991 LOW 34.62
WTR YR 1992 LOW 34.80

SANDUSKY COUNTY

411914083045300. Local number, S-3.

LOCATION.--Lat 41°19'14", long 83°04'53", Hydrologic Unit 04100011, 2.6 mi southeast of Fremont Post Office.

Owner: State of Ohio.

AQUIFER.--Limestone of Silurian Age.

WELL CHARACTERISTICS.--Drilled test artesian well, diameter 12 in., depth 121 ft, cased to 93 ft.

INSTRUMENTATION.--Digital recorder -- 60-minute punch.

DATUM.--Elevation of land-surface datum is 627 ft above National Geodetic Vertical Datum of 1929, from topographic map.

Measuring point: Floor of instrument shelter 3.00 ft above land-surface datum.

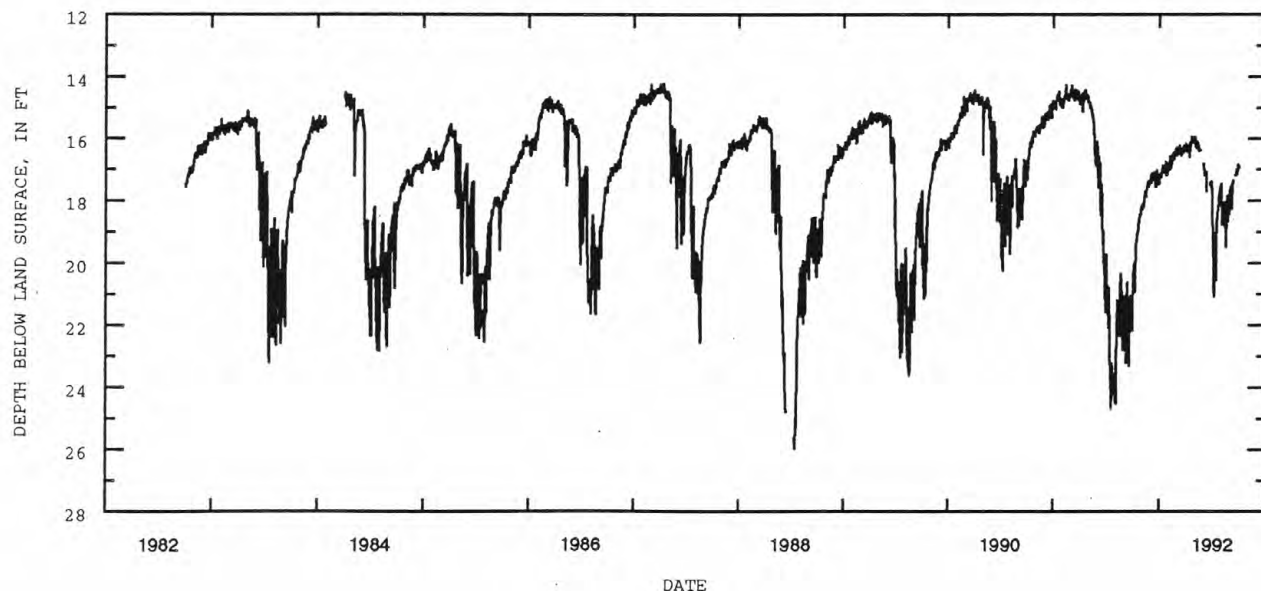
PERIOD OF RECORD.--December 1974 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 25.97 ft below land-surface datum, July 17, 1988;

minimum daily low, 14.02 ft below land-surface datum, Mar. 24, 1975.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21.88	18.16	17.46	17.42	16.98	16.48	16.18	16.01	---	19.18	18.75	17.80
2	22.20	18.21	17.46	17.35	16.97	16.55	16.23	15.92	16.81	19.50	---	17.65
3	21.25	18.29	17.16	17.17	16.90	16.55	16.19	16.04	17.18	19.55	---	17.49
4	20.79	18.28	17.42	17.18	16.82	16.50	16.23	16.09	---	20.05	---	18.28
5	20.28	18.24	17.43	17.18	16.84	16.47	16.43	16.10	---	20.82	18.38	18.02
6	20.23	18.11	17.31	17.15	16.72	16.39	16.39	16.25	---	21.09	18.31	17.55
7	20.13	18.14	17.18	17.21	16.54	16.24	16.23	16.30	17.14	20.11	18.31	17.48
8	19.98	18.16	17.18	17.26	16.73	16.38	16.33	16.15	17.12	20.57	18.20	17.38
9	20.52	18.14	17.22	16.97	16.95	16.38	16.30	16.08	17.06	19.77	18.03	17.36
10	20.94	18.00	17.28	16.98	16.92	16.21	16.29	16.19	17.69	19.39	18.82	---
11	20.24	17.85	17.25	17.03	16.92	16.26	16.24	16.21	---	20.36	18.54	---
12	19.72	17.87	17.25	17.01	16.91	16.31	16.54	16.12	---	20.57	18.22	---
13	19.64	17.81	17.07	16.91	16.70	16.32	16.59	16.16	---	19.63	18.04	---
14	19.51	17.73	17.16	16.92	16.62	16.35	16.42	16.29	---	19.16	18.31	---
15	19.24	17.68	17.27	16.91	16.52	16.50	16.37	16.28	---	18.86	19.49	---
16	19.30	17.87	17.29	16.96	16.68	16.55	16.16	16.41	---	18.67	19.24	---
17	19.18	17.86	17.22	16.94	16.67	16.46	16.18	16.35	---	18.50	18.52	17.18
18	19.08	17.72	17.54	17.12	16.56	16.46	16.14	16.36	---	18.38	18.20	17.11
19	19.06	17.61	17.56	17.12	16.43	16.30	16.10	---	---	18.33	17.93	17.19
20	19.02	17.57	17.55	16.96	16.58	16.33	16.00	---	---	18.18	17.87	17.13
21	18.90	17.54	17.22	16.95	16.65	16.46	15.91	---	---	18.15	17.82	16.96
22	18.77	17.51	17.19	16.98	16.52	16.26	16.09	---	---	18.12	18.68	16.96
23	18.74	17.45	17.00	16.73	16.53	16.38	16.10	---	---	17.92	18.50	17.13
24	18.70	17.36	17.11	16.98	16.54	16.42	15.94	---	17.50	17.84	18.05	17.09
25	18.62	17.49	17.31	17.03	16.45	16.37	15.93	---	17.38	17.80	18.36	16.98
26	18.48	17.58	17.30	17.20	16.37	16.20	16.03	---	17.37	17.62	18.38	16.90
27	18.44	17.47	17.46	17.14	16.34	16.31	16.10	---	17.45	17.63	18.24	16.82
28	18.49	17.47	17.38	17.09	16.30	16.41	16.11	---	17.47	17.66	17.75	16.89
29	18.45	17.34	17.14	17.02	16.52	16.39	16.09	---	17.71	17.58	17.71	16.94
30	18.43	17.46	17.42	16.92	---	16.24	16.01	---	18.39	17.55	17.59	16.90
31	18.29	---	17.47	16.84	---	16.22	---	---	---	17.44	17.62	---
MAX	22.20	18.29	17.56	17.42	16.98	16.55	16.59	16.41	18.39	21.09	19.49	18.28
CAL YR 1991	LOW 24.67											
WTR YR 1992	LOW 22.20											



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., depth 198 ft cased.

INSTRUMENTATION.--Digital recorder -- 60-minute punch.

DATUM.--Elevation of land-surface datum is 635 ft above National Geodetic Vertical Datum of 1929 from topographic map.

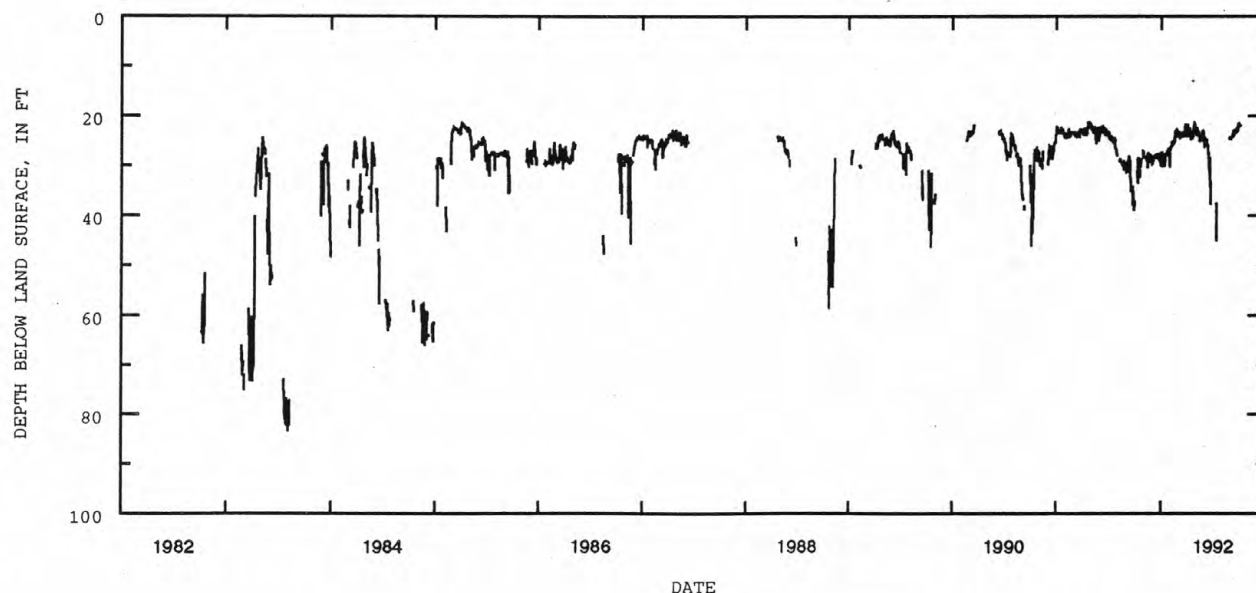
Measuring point: Top of casing at land-surface datum.

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 below land-surface datum, Jan. 29, 1982;
minimum daily low, 18.60 ft below land-surface datum, May 6, 1977.DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	27.45	29.65	27.43	26.75	24.12	22.62	23.07	24.31	---	---	24.29
2	---	28.39	29.48	27.62	26.76	24.26	21.77	23.44	25.74	---	---	24.12
3	---	28.39	28.59	27.21	26.76	23.16	22.85	23.89	25.57	---	---	24.05
4	---	28.53	29.07	30.15	26.37	24.08	23.84	22.42	25.53	51.81	---	24.31
5	---	28.19	28.68	---	26.12	24.09	24.09	23.37	25.56	---	---	24.32
6	---	28.35	28.91	---	25.75	24.11	24.19	22.76	25.74	42.65	---	24.13
7	---	28.43	28.48	---	25.05	24.06	23.76	23.77	24.77	---	---	22.90
8	---	28.24	28.25	---	25.62	24.29	22.99	24.06	25.91	---	---	23.99
9	---	28.44	28.24	28.07	26.10	24.14	22.92	23.58	25.94	---	---	23.77
10	31.14	28.57	28.57	27.72	25.70	23.85	24.20	24.10	25.99	---	---	23.76
11	33.57	29.10	28.34	28.31	25.70	23.59	23.49	23.32	26.09	45.04	---	23.55
12	28.75	28.85	27.67	27.63	25.70	23.81	24.66	23.30	27.71	37.64	---	23.31
13	28.88	28.86	28.09	30.15	25.35	23.88	24.89	24.01	27.36	---	---	23.22
14	28.45	27.69	27.75	28.70	25.57	23.76	24.07	25.08	29.69	---	---	23.04
15	28.93	30.42	28.02	28.00	24.12	24.17	24.35	24.98	30.26	---	---	22.90
16	30.68	27.57	28.09	27.82	25.57	24.09	23.85	24.44	31.16	---	---	23.10
17	29.61	---	28.01	27.55	24.91	24.13	24.08	24.53	29.68	---	---	23.02
18	32.29	---	28.73	27.80	23.77	23.63	24.52	24.55	34.12	---	---	22.79
19	---	---	27.98	27.52	23.28	23.82	23.61	24.05	28.51	---	---	22.98
20	---	29.42	28.06	27.49	23.28	23.71	23.75	24.55	37.71	---	---	22.95
21	30.17	27.64	27.61	27.48	23.08	23.66	23.58	23.66	---	---	---	22.62
22	30.14	28.94	27.78	27.22	22.98	24.26	23.33	24.29	---	---	---	23.04
23	28.93	28.02	28.47	26.74	23.60	22.61	22.75	24.49	---	38.60	---	22.94
24	---	27.80	28.58	27.03	22.58	21.66	22.75	24.32	---	---	---	22.71
25	---	28.30	29.21	26.64	23.86	23.59	21.15	22.93	---	---	24.40	21.90
26	---	28.89	28.38	26.65	23.50	23.08	21.87	23.93	---	---	24.73	21.62
27	---	29.39	28.77	26.63	23.53	24.05	21.87	23.14	---	---	24.20	21.34
28	---	29.34	28.59	26.81	23.39	24.23	21.91	25.14	---	---	24.36	21.92
29	28.11	28.91	28.30	30.26	24.08	23.86	22.89	25.27	---	---	24.39	21.86
30	27.78	29.24	30.16	26.84	---	23.03	23.07	26.39	---	---	24.05	21.97
31	27.28	---	27.36	27.07	---	23.50	---	25.14	---	---	24.48	---
MAX	33.57	30.42	30.16	30.26	26.76	24.29	24.89	26.39	37.71	51.81	24.73	24.32
CAL YR 1991	LOW 39.00											
WTR YR 1992	LOW 51.81											



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., depth 250 ft, cased.

INSTRUMENTATION.--Digital recorder -- 60-minute punch.

DATUM.--Elevation of land-surface datum is 740 ft above National Geodetic Vertical Datum of 1929, from topographic map.

Measuring point: Floor of instrument shelter 0.50 ft above land-surface datum.

REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

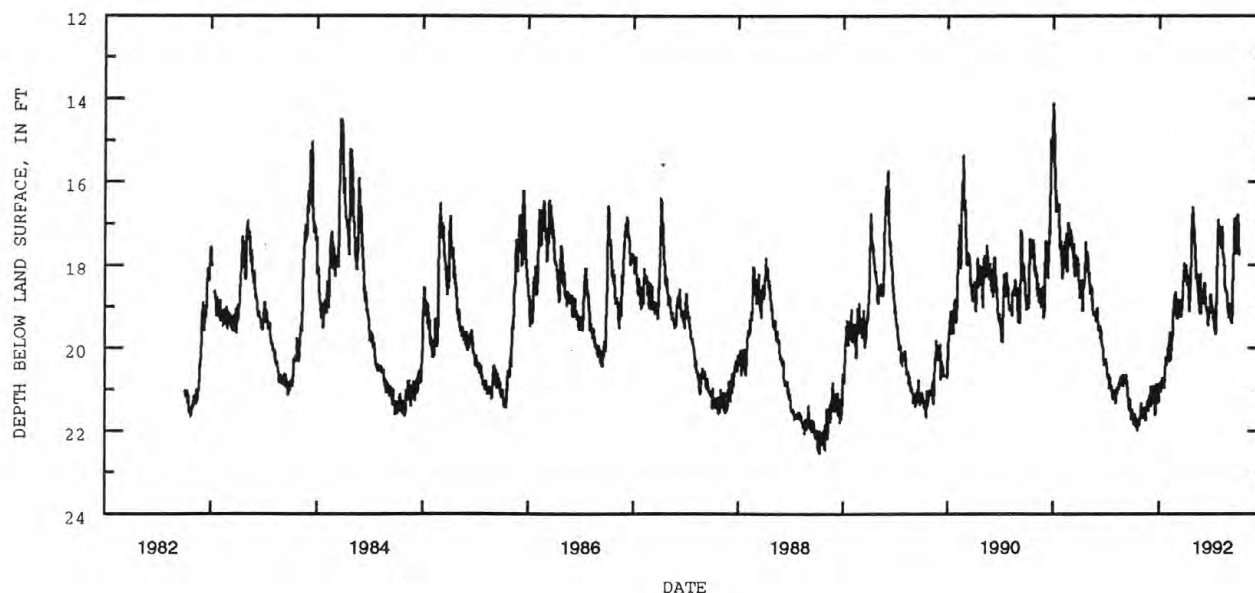
PERIOD OF RECORD.--July 1962 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 23.76 ft below land-surface datum, Nov. 22, 1964;

minimum daily low, 14.11 ft below land-surface datum, Jan. 2, 1991.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21.54	21.33	21.39	21.24	20.22	19.11	18.00	17.32	18.70	19.09	17.33	19.30
2	21.46	21.59	21.30	21.08	20.20	19.26	18.06	17.38	18.65	19.12	17.12	19.29
3	21.56	21.67	20.93	20.82	20.02	19.29	18.03	17.65	18.58	19.22	17.07	19.26
4	21.56	21.66	21.41	20.96	19.97	19.28	18.23	17.76	18.43	19.33	17.38	19.41
5	21.73	21.63	21.41	20.96	19.97	19.27	18.51	18.02	18.48	19.24	17.64	19.40
6	21.82	21.55	21.18	20.91	19.79	19.20	18.48	18.29	18.69	19.44	17.81	19.09
7	21.84	21.66	20.96	21.05	19.61	19.06	18.24	18.35	18.85	19.57	17.80	18.64
8	21.85	21.69	20.97	21.06	20.00	19.25	18.44	18.19	19.00	19.48	17.85	18.06
9	21.77	21.70	21.06	20.76	20.29	19.25	18.48	18.26	19.02	19.54	18.01	18.06
10	21.70	21.52	21.13	20.87	20.26	18.83	18.52	18.45	19.04	19.57	18.03	17.46
11	21.60	21.45	21.14	20.88	20.27	18.92	18.60	18.51	19.13	19.67	18.28	17.09
12	21.75	21.48	21.15	20.87	20.26	18.97	19.07	18.40	19.15	19.58	18.51	16.98
13	21.88	21.43	20.91	20.70	19.88	19.00	19.12	18.58	19.09	19.57	18.54	16.86
14	21.77	21.42	21.11	20.91	19.90	19.02	18.89	18.76	19.18	19.17	18.61	16.97
15	21.75	21.45	21.21	20.91	19.74	19.22	18.83	18.83	19.40	18.70	18.62	17.24
16	21.90	21.73	21.25	20.87	19.67	19.25	18.61	19.00	19.45	18.20	18.60	17.31
17	21.87	21.73	21.10	20.75	19.67	19.17	18.49	18.95	19.32	17.83	18.66	17.36
18	21.86	21.42	21.62	20.97	19.24	19.17	18.35	19.17	19.28	17.28	18.64	17.45
19	22.00	21.45	21.62	20.97	18.86	18.92	17.77	19.13	19.01	16.96	18.76	17.73
20	21.98	21.44	21.54	20.63	19.02	18.89	17.25	19.18	19.04	16.90	18.87	17.73
21	21.85	21.44	21.06	20.61	19.02	18.81	16.94	18.21	19.13	17.17	19.00	17.55
22	21.78	21.37	21.04	20.63	18.84	18.39	17.01	19.18	19.17	17.29	19.07	16.83
23	21.82	21.30	20.84	20.23	18.74	18.35	17.00	19.06	19.04	17.27	19.12	16.93
24	21.83	21.25	20.99	20.37	18.79	18.42	16.61	18.80	18.79	17.30	19.17	16.83
25	21.80	21.44	21.20	20.38	18.73	18.30	16.64	18.64	18.70	17.38	19.23	16.77
26	21.81	21.53	21.19	20.43	18.65	17.97	16.82	18.58	18.78	17.12	19.21	16.79
27	21.70	21.37	21.30	20.34	18.76	18.22	17.03	18.72	18.97	17.19	19.14	17.17
28	21.74	21.30	21.21	20.25	18.83	18.34	17.14	18.89	19.01	17.42	18.92	17.51
29	21.67	21.15	20.89	20.16	19.21	18.27	17.06	18.94	19.00	17.47	19.07	17.70
30	21.62	21.40	21.30	19.97	---	18.01	17.30	18.70	19.04	17.59	19.01	17.75
31	21.48	---	21.29	20.00	---	18.05	---	18.70	---	17.29	19.20	---
MAX	22.00	21.73	21.62	21.24	20.29	19.29	19.12	19.18	19.45	19.67	19.23	19.41
CAL YR 1991	LOW 22.00											
WTR YR 1992	LOW 22.00											



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., depth 89 ft, cased.

INSTRUMENTATION.--Digital recorder -- 60-minute punch.

DATUM.--Elevation of land-surface datum is 1000 ft above National Geodetic Vertical Datum of 1929 from topographic map.

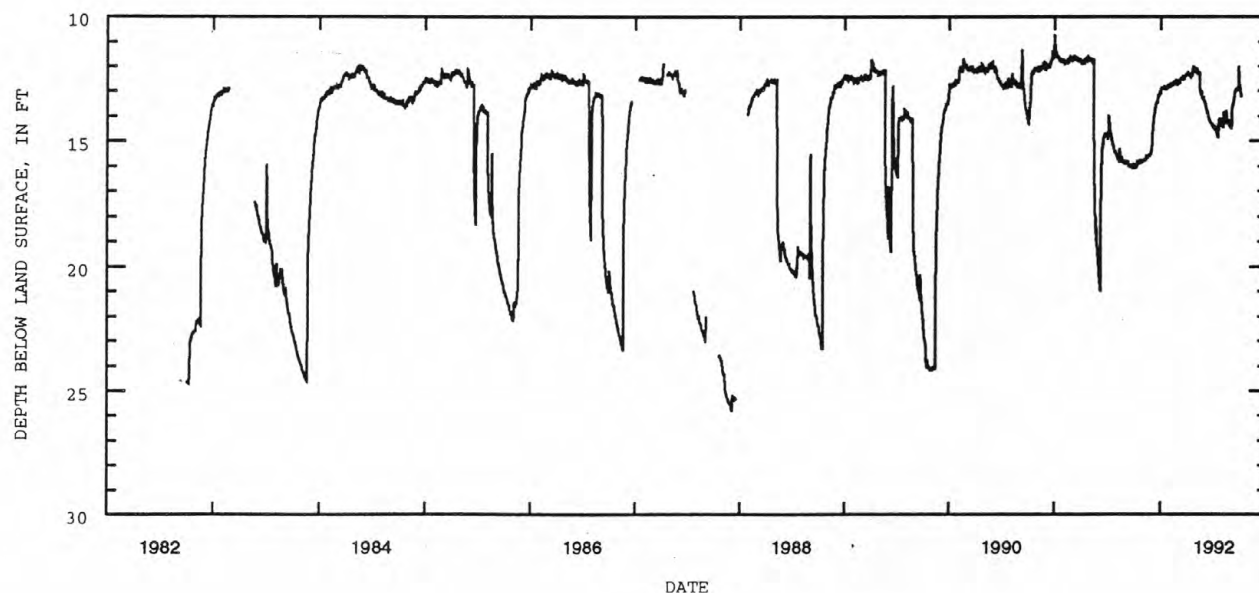
Measuring point: Floor of instrument shelter 2.63 ft above land-surface datum.

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 below land-surface datum, Oct. 18, 1947;
minimum daily low, 10.73 ft below land-surface datum, Dec. 31, 1990.DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15.94	15.78	15.29	13.00	12.76	12.64	12.32	12.23	13.56	14.54	13.86	13.55
2	15.94	15.77	15.21	12.92	12.72	12.67	12.32	12.19	13.63	14.57	13.87	13.50
3	15.99	15.76	15.14	12.91	12.69	12.68	12.32	12.09	13.68	14.56	13.97	13.40
4	15.99	15.73	14.69	12.89	12.77	12.65	12.31	12.16	13.75	14.51	14.08	13.35
5	15.99	15.74	14.54	12.85	12.78	12.66	12.30	12.22	13.79	14.46	14.18	13.33
6	15.98	15.77	14.36	12.84	12.75	12.64	12.31	12.27	13.84	14.56	14.24	13.17
7	15.95	15.77	14.22	12.88	12.75	12.59	12.34	12.31	13.84	14.63	14.30	13.05
8	16.00	15.77	14.09	12.88	12.74	12.51	12.37	12.30	13.88	14.68	14.30	13.00
9	16.03	15.77	13.95	12.87	12.73	12.45	12.39	12.28	13.95	14.74	13.76	13.01
10	16.01	15.72	13.90	12.89	12.71	12.50	12.42	12.28	14.00	14.79	13.94	12.90
11	15.94	15.65	13.85	12.89	12.78	12.51	12.38	12.24	14.09	14.83	14.04	12.95
12	15.94	15.65	13.81	12.84	12.79	12.51	12.38	12.62	14.13	14.83	14.14	12.95
13	15.92	15.67	13.70	12.80	12.74	12.51	12.39	12.86	14.17	14.51	14.19	12.93
14	15.85	15.67	13.64	12.88	12.76	12.50	12.36	13.01	14.12	14.44	14.24	12.94
15	15.87	15.67	13.57	12.89	12.71	12.44	12.37	13.10	14.18	14.47	14.28	12.95
16	15.88	15.67	13.48	12.88	12.63	12.43	12.41	13.18	14.23	14.15	14.14	12.94
17	15.88	15.64	13.45	12.91	12.63	12.51	12.33	13.18	14.25	14.17	14.19	12.94
18	15.88	15.58	13.45	12.92	12.60	12.51	12.18	12.99	14.29	14.12	14.24	12.94
19	15.87	15.60	13.45	12.87	12.64	12.49	12.01	13.17	14.30	14.11	14.28	12.86
20	15.86	15.59	13.42	12.86	12.66	12.49	12.01	13.24	14.34	14.17	14.32	12.85
21	15.81	15.59	13.34	12.88	12.68	12.49	12.07	13.28	14.34	14.24	14.37	12.79
22	15.82	15.57	13.24	12.87	12.65	12.41	12.13	13.32	14.31	14.30	14.39	12.01
23	15.81	15.55	13.17	12.82	12.59	12.42	12.16	13.31	14.34	14.34	14.38	12.43
24	15.82	15.56	13.17	12.86	12.63	12.44	12.14	13.24	14.37	14.36	14.38	12.66
25	15.83	15.51	13.17	12.85	12.64	12.44	12.15	13.24	14.43	14.39	14.43	12.83
26	15.83	15.52	13.16	12.76	12.63	12.40	12.14	13.35	14.44	14.39	14.47	12.89
27	15.82	15.51	13.16	12.76	12.67	12.36	12.17	13.41	14.48	14.34	14.49	12.92
28	15.76	15.51	13.14	12.79	12.67	12.35	12.21	13.44	14.48	14.41	14.25	13.02
29	15.77	15.43	13.00	12.79	12.67	12.32	12.20	13.48	14.45	14.43	13.65	13.14
30	15.78	15.37	13.02	12.75	---	12.29	12.23	13.52	14.48	14.44	13.61	13.21
31	15.79	---	13.04	12.76	---	12.31	---	13.53	---	13.83	13.57	---
MAX	16.03	15.78	15.29	13.00	12.79	12.68	12.42	13.53	14.48	14.83	14.49	13.55

CAL YR 1991 LOW 20.99
WTR YR 1992 LOW 16.03

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 Department.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled unused water-table, diameter 6 in., depth 100 ft, cased.

INSTRUMENTATION.--Digital recorder -- 60-minute punch.

DATUM.--Elevation of land-surface datum is 994 ft above National Geodetic Vertical Datum of 1929, from topographic map.

Measuring point: Floor of instrument shelter 5.00 ft above land-surface datum.

REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

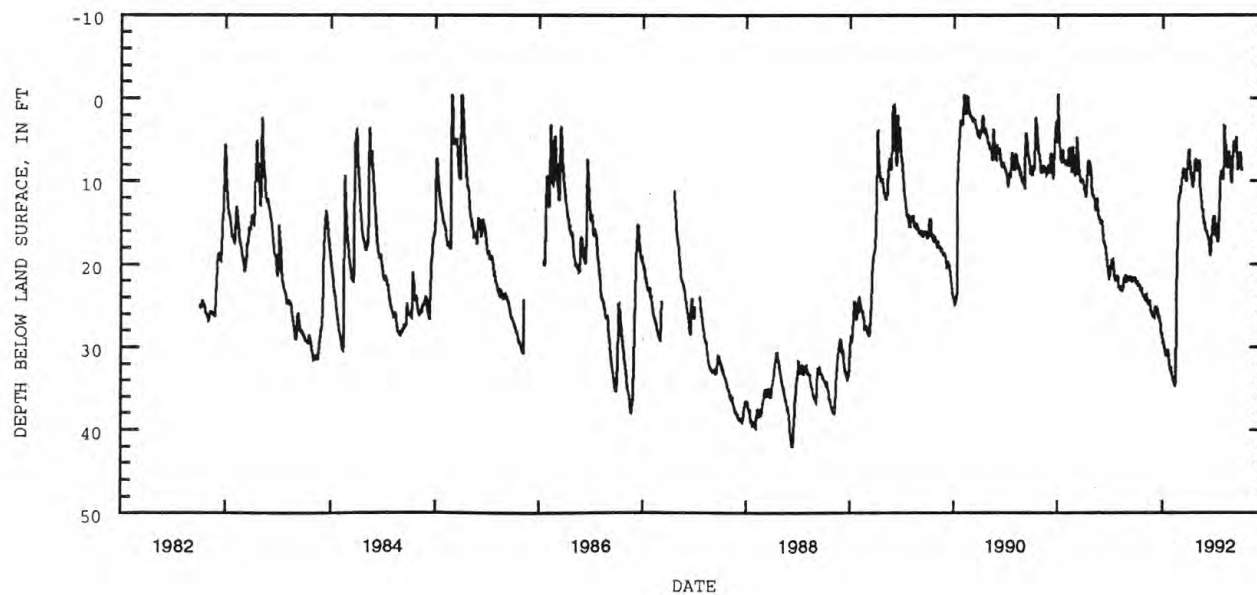
PERIOD OF RECORD.--August 1968 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 44.19 ft below land-surface datum, Sept. 7, 1971;

minimum daily low, 0.48 ft above land-surface datum, Feb. 5, 1990.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22.31	24.29	26.38	29.44	33.06	11.47	6.56	7.69	16.09	15.56	3.42	6.04
2	22.47	23.80	26.44	29.52	33.33	11.44	6.46	7.68	16.15	15.74	3.46	5.42
3	22.47	24.19	26.36	29.23	33.40	10.84	6.98	7.76	16.33	16.45	4.63	5.09
4	22.29	23.83	25.73	29.39	33.66	10.88	7.45	7.87	16.45	16.51	5.35	5.40
5	22.16	23.80	25.46	29.60	33.88	10.69	7.66	7.84	16.35	16.42	5.34	5.19
6	22.09	24.04	25.30	29.87	33.94	10.45	8.17	7.80	16.74	15.97	5.75	5.30
7	22.58	24.16	25.30	30.27	33.76	10.23	8.35	7.50	16.80	16.72	6.28	5.85
8	22.64	24.55	25.22	30.28	34.04	9.87	9.22	8.29	16.84	16.91	6.69	6.28
9	22.29	24.49	25.16	30.76	34.06	9.45	9.40	9.53	17.05	17.32	7.25	6.17
10	22.65	24.68	25.21	30.82	34.26	9.11	9.74	10.45	17.36	17.14	8.25	5.23
11	22.32	24.71	25.69	30.85	34.40	8.81	9.98	11.16	17.84	17.24	8.32	4.70
12	22.33	24.58	25.45	30.85	34.49	8.67	10.15	11.44	18.38	17.14	8.31	4.81
13	22.50	24.38	25.50	31.12	34.54	8.49	10.26	11.69	18.70	16.51	8.14	5.74
14	23.09	24.78	25.83	30.79	34.74	9.11	10.77	12.06	18.89	15.07	7.82	6.24
15	23.10	24.48	26.00	30.84	34.17	9.16	10.56	12.63	18.90	14.35	7.82	6.70
16	23.10	24.50	26.25	30.81	32.01	9.30	10.46	13.12	18.37	12.93	7.78	6.90
17	22.75	24.61	26.31	30.24	28.22	9.40	10.31	13.55	17.53	11.64	6.58	7.78
18	23.27	24.84	26.44	30.37	25.09	9.57	9.63	13.64	17.40	9.60	6.42	8.62
19	23.00	24.99	26.54	30.64	22.64	9.55	9.20	13.47	16.77	9.16	7.27	8.40
20	22.84	25.58	26.26	30.90	20.70	9.48	8.60	13.48	16.30	8.69	7.38	7.94
21	23.41	25.59	26.86	31.34	19.07	9.81	8.00	14.20	15.58	8.96	8.02	8.33
22	23.47	25.74	26.98	31.24	17.21	9.78	7.84	14.62	15.21	9.16	8.77	8.19
23	23.68	25.85	27.08	31.67	15.58	10.02	7.37	15.05	15.21	9.28	9.20	7.12
24	23.68	25.93	27.31	32.15	14.36	9.92	7.52	15.07	14.67	9.24	9.29	6.46
25	23.94	26.02	27.93	32.40	12.68	9.25	7.30	14.86	14.44	8.76	9.54	6.87
26	23.95	26.13	28.14	32.66	11.89	8.85	8.04	15.20	14.31	8.70	9.83	6.63
27	23.93	26.22	28.36	32.73	11.89	8.27	8.91	15.32	14.18	8.99	10.22	6.51
28	23.88	26.35	28.44	32.74	11.79	7.88	8.55	15.76	14.49	9.57	9.74	7.38
29	23.67	26.39	28.47	32.79	11.77	7.34	8.07	15.75	14.22	9.79	7.80	8.08
30	23.76	26.38	28.72	32.39	---	7.02	7.43	15.92	14.67	9.42	7.08	8.62
31	24.22	---	29.27	33.03	---	6.20	---	16.09	---	7.06	7.06	---
MAX	24.22	26.39	29.27	33.03	34.74	11.47	10.77	16.09	18.90	17.32	10.22	8.62
CAL YR 1991	LOW 29.27											
WTR YR 1992	LOW 34.74											



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., depth 340 ft, cased.

INSTRUMENTATION.--Type F continuous recorder.

DATUM.--Elevation of land-surface datum is 790.37 ft above National Geodetic Vertical Datum of 1929.

Measuring point: Floor of instrument shelter 6.15 ft above land-surface datum.

REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

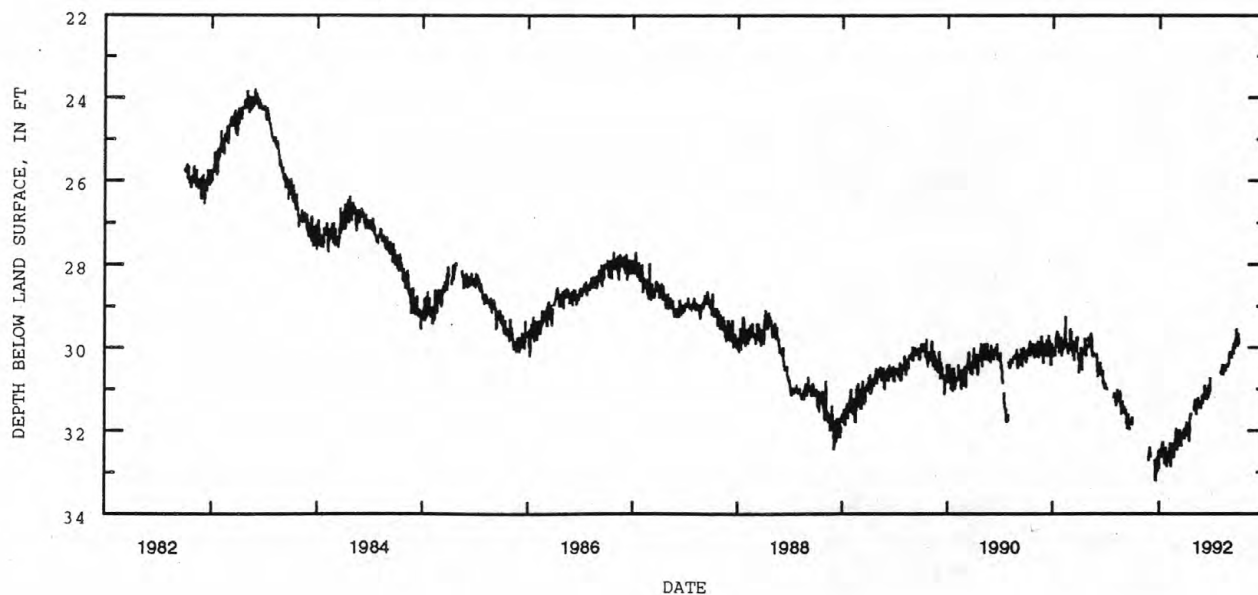
PERIOD OF RECORD.--August 1957 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low 33.20 ft below land-surface datum, Dec. 20-21, 1991;
minimum daily low, 18.85 ft below land-surface datum, Mar. 6, 1959.DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	31.85	---	32.60	32.90	32.65	32.40	31.90	31.35	31.25	---	30.60	30.25
2	31.70	---	32.60	32.75	32.50	32.35	31.90	31.30	31.15	---	30.65	30.15
3	---	---	32.55	32.45	32.70	32.45	31.90	31.25	31.05	---	30.55	30.15
4	---	---	---	32.55	32.75	32.45	31.80	31.30	30.95	---	30.40	30.25
5	---	---	---	32.55	32.60	32.40	32.10	31.30	30.90	---	30.60	30.20
6	---	---	---	32.50	32.55	32.35	32.10	31.50	31.00	---	30.65	30.10
7	---	---	---	32.65	32.55	32.20	32.00	31.60	31.15	---	30.65	30.10
8	---	---	---	32.65	32.30	32.20	32.00	31.60	31.20	---	30.55	30.05
9	---	---	---	32.35	32.30	32.20	31.90	31.35	31.20	---	30.45	30.05
10	---	---	---	32.45	32.70	32.05	31.90	31.35	31.20	---	30.45	29.90
11	---	---	---	32.45	32.85	32.00	32.00	31.35	31.25	---	30.40	30.10
12	---	---	---	32.45	32.80	32.00	32.25	31.35	31.20	---	30.50	30.15
13	---	---	---	32.30	---	32.10	32.25	31.20	31.05	---	30.50	30.05
14	---	---	---	32.30	---	32.10	32.05	31.25	31.00	---	30.55	30.00
15	---	---	---	32.40	---	32.30	32.00	31.30	31.15	---	30.55	30.00
16	---	---	32.80	32.60	---	32.35	31.70	31.30	31.20	---	30.50	30.00
17	---	---	32.75	32.45	32.45	32.35	31.70	31.40	31.05	---	30.45	29.90
18	---	---	32.70	32.75	32.30	32.25	31.60	31.30	30.90	---	30.45	29.75
19	---	---	33.15	32.80	32.55	32.10	31.60	31.40	30.90	---	30.45	29.90
20	---	---	33.20	32.60	32.65	32.05	---	31.45	31.00	---	30.40	29.80
21	---	---	33.20	32.55	32.60	32.20	---	31.45	31.05	---	30.45	29.70
22	---	---	32.85	32.50	32.35	32.10	---	31.45	31.10	---	30.45	29.55
23	---	---	32.80	32.40	32.40	32.10	---	31.40	31.00	---	30.40	29.95
24	---	---	32.95	32.40	32.35	32.15	---	---	30.75	---	30.40	29.95
25	---	---	32.65	32.60	32.30	32.15	---	---	---	---	30.40	29.95
26	---	32.70	---	32.80	32.10	31.95	---	31.18	---	---	30.35	29.70
27	---	32.65	32.95	32.85	32.10	32.15	---	31.25	---	---	30.20	29.65
28	---	32.55	32.85	32.80	31.95	32.20	31.50	31.35	---	---	30.10	29.80
29	---	32.55	32.50	32.70	32.45	32.20	31.50	31.30	---	30.60	30.15	29.90
30	---	32.40	32.85	32.75	---	32.00	31.30	31.10	---	30.55	30.15	29.80
31	---	---	32.90	32.70	---	31.95	---	31.25	---	30.55	30.25	---
MAX	31.85	32.70	33.20	32.90	32.85	32.45	32.25	31.60	31.25	30.60	30.65	30.25

CAL YR 1991 LOW 33.20

WTR YR 1992 LOW 33.20



GROUND-WATER RECORDS

129

WILLIAMS COUNTY

412821084313600. Local number, WM-1.

LOCATION.--Lat 41°28'21", long 84°31'36", Hydrologic Unit 04100006, Bryan Water Treatment Plant, Bryan.

Owner: City of Bryan.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled unused production well, diameter 8 in., depth 118 ft, cased.

INSTRUMENTATION.--Type F continuous recorder.

DATUM.--Elevation of land-surface datum is 747 ft above National Geodetic Vertical Datum of 1929, from topographic map.

Measuring point: Floor of instrument shelter 3.30 ft above land-surface datum.

REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

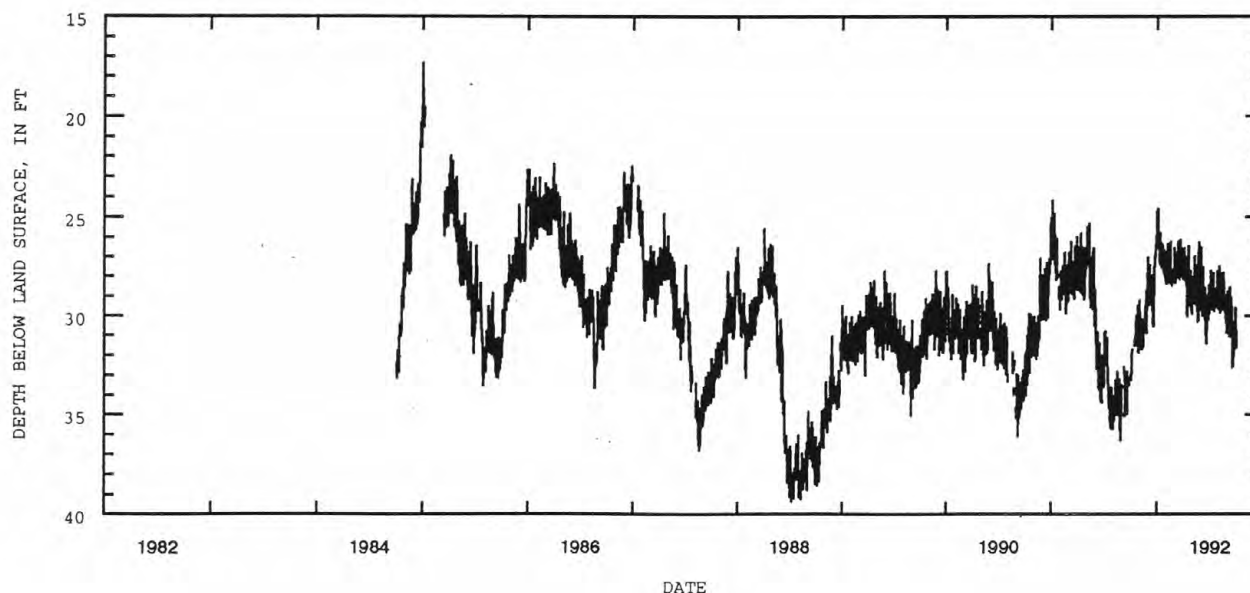
PERIOD OF RECORD.--May 1951 to May 1957, discontinued June 1957 to September 1984, reactivated October 1984 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 39.35 ft below land-surface datum, July 7, 1988;

minimum daily low, 1.45 ft below land-surface datum, Jan. 27, 1952.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	31.45	27.00	25.00	27.70	27.40	27.45	29.90	28.50	29.60	28.25	30.55
2	---	30.10	27.90	24.70	26.70	26.50	27.25	29.90	29.00	29.65	27.45	30.35
3	33.20	29.20	28.35	25.35	27.30	27.80	27.45	28.25	29.20	29.70	28.40	30.85
4	33.00	30.40	28.85	25.25	27.00	28.00	27.00	28.00	29.45	28.15	28.90	31.00
5	33.25	30.75	29.35	24.60	28.40	28.35	26.55	29.00	30.05	27.70	29.90	31.10
6	32.65	31.35	29.50	25.30	27.85	28.05	27.30	29.10	28.80	28.30	29.75	29.50
7	32.05	31.70	28.60	26.50	28.00	28.30	27.50	29.25	27.50	28.90	29.60	28.55
8	31.70	31.55	27.40	26.20	26.90	26.75	28.20	29.20	28.70	29.20	29.05	29.50
9	---	30.95	28.55	26.80	26.30	27.25	28.05	28.40	29.00	29.25	27.85	30.75
10	---	30.15	28.40	27.30	27.25	27.65	28.50	26.95	29.05	29.70	28.75	30.85
11	---	31.70	28.80	27.45	27.00	27.65	27.80	28.40	29.60	29.70	29.00	31.10
12	---	31.70	28.90	25.75	27.90	27.75	27.05	28.60	29.55	29.70	29.70	30.65
13	---	31.50	29.25	25.85	27.25	28.10	29.00	29.45	29.10	27.80	29.60	29.10
14	---	31.65	29.15	26.70	28.35	28.10	29.80	29.20	28.55	29.55	29.55	30.00
15	31.25	31.50	27.95	26.95	27.45	26.20	30.05	29.25	29.85	29.80	29.00	30.90
16	31.50	30.90	29.45	27.60	26.35	26.75	29.80	28.70	30.60	28.70	27.80	30.95
17	31.50	30.35	29.20	27.30	26.30	27.70	29.10	27.40	30.50	---	28.60	32.55
18	31.00	30.40	30.35	27.40	27.85	28.05	27.50	28.75	31.40	---	29.35	32.50
19	31.50	30.20	30.20	26.35	27.65	28.10	26.45	29.75	31.05	---	29.30	32.50
20	30.60	30.20	30.55	26.55	28.20	27.60	28.10	29.55	30.40	29.00	29.55	31.55
21	29.95	30.60	29.45	26.90	28.50	27.60	28.35	30.25	28.90	29.05	29.50	30.55
22	30.00	30.65	28.45	27.20	28.50	26.10	29.50	30.20	29.85	29.60	30.10	30.30
23	31.35	30.30	28.45	26.80	27.80	26.85	29.50	28.80	29.20	28.80	28.95	31.70
24	---	28.70	28.05	27.80	27.70	26.90	29.30	27.30	30.20	29.10	29.10	31.20
25	31.40	29.90	26.95	27.15	27.70	27.70	28.75	26.25	30.10	29.35	29.95	31.25
26	30.75	30.20	26.90	26.65	28.05	27.75	27.70	27.90	30.20	27.75	30.90	31.15
27	29.45	30.90	27.00	27.55	27.65	27.20	27.90	28.75	29.15	27.80	30.85	29.60
28	31.40	28.60	26.75	27.85	28.10	27.30	29.30	29.00	28.40	28.80	30.80	30.50
29	31.80	28.05	25.95	28.20	27.85	27.30	29.60	29.55	29.55	29.70	30.00	31.00
30	31.85	27.60	26.60	28.00	---	26.70	29.85	28.50	29.90	29.00	28.75	31.60
31	31.70	---	25.95	28.35	---	28.20	---	26.50	---	29.20	30.00	---
MAX	33.25	31.70	30.55	28.35	28.50	28.35	30.05	30.25	31.40	29.80	30.90	32.55

CAL YR 1991 LOW 36.30
WTR YR 1992 LOW 33.25

WILLIAMS COUNTY--Continued

412930084320900. Local number, WM-3.

LOCATION.--Lat 41°29'30", long 84°32'09", Hydrologic Unit 04100006, Union Street, Bryan.

Owner: City of Bryan.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled unused test well, diameter 8 in., depth 174 ft, cased.

INSTRUMENTATION.--Type F continuous recorder.

DATUM.--Elevation of land-surface datum is 760 ft above National Geodetic Vertical Datum of 1929, from topographic map.

Measuring point: Floor of instrument shelter 2.00 ft above land-surface datum.

REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

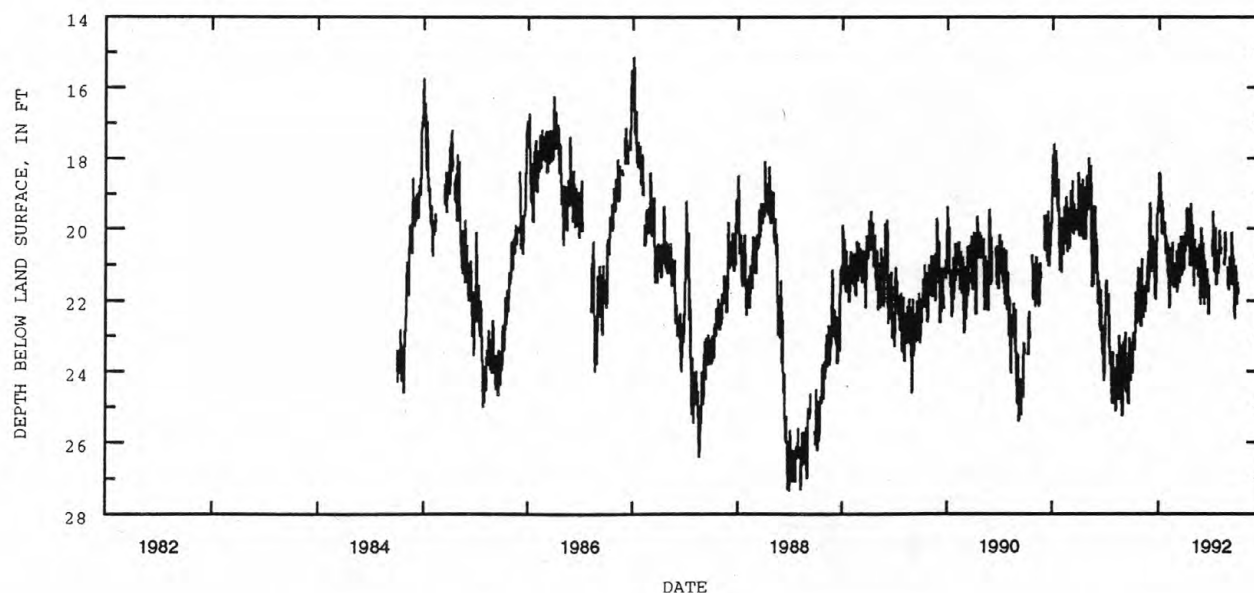
PERIOD OF RECORD.--October 1984 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 27.35 ft below land-surface datum, June 30 - July 1, 1988;
minimum daily low, 15.15 ft below land-surface datum, Jan. 4, 1987.DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23.50	22.70	19.25	18.50	21.35	20.65	20.65	21.60	20.40	20.75	20.55	21.25
2	23.80	22.10	19.55	18.40	20.50	20.60	20.60	21.50	21.05	20.75	---	21.30
3	24.05	21.40	20.20	18.45	20.45	21.30	20.40	20.75	21.50	20.60	---	21.45
4	24.00	20.85	20.65	18.60	20.60	21.75	20.10	20.30	21.75	20.00	---	21.55
5	23.60	21.60	21.00	18.50	21.60	21.75	19.55	20.75	22.10	19.50	---	21.50
6	23.00	22.05	21.20	18.55	21.75	21.55	19.40	20.80	22.10	20.25	---	20.75
7	22.90	22.45	20.95	19.35	22.20	21.45	19.55	20.95	20.90	20.65	---	20.10
8	23.20	22.45	20.30	19.45	22.05	20.65	19.75	21.10	21.35	20.80	---	20.85
9	23.30	22.40	20.25	19.65	21.15	20.40	20.05	21.00	21.30	21.15	---	21.25
10	23.40	21.60	20.20	20.10	20.95	20.90	20.20	20.65	21.30	21.20	---	21.30
11	22.95	21.75	20.30	20.15	21.10	21.05	20.00	20.55	---	21.10	---	21.45
12	22.85	22.00	20.50	19.60	21.45	21.20	19.45	20.85	---	20.45	20.95	21.40
13	22.40	22.00	20.90	19.20	21.35	21.50	19.80	21.10	---	19.95	21.00	20.75
14	21.80	22.25	20.90	19.60	21.55	21.50	20.35	21.10	---	21.10	20.90	20.95
15	22.30	22.30	20.40	19.70	21.50	20.55	20.60	21.30	21.15	21.10	20.80	21.35
16	22.55	22.30	20.95	20.15	20.60	20.20	21.05	21.35	21.70	21.55	20.10	21.80
17	22.65	21.90	21.05	20.10	20.40	20.75	20.95	20.80	21.85	21.50	20.40	22.20
18	22.65	21.65	21.70	20.05	21.00	21.05	20.30	20.45	22.00	21.30	20.60	22.50
19	22.55	21.70	21.75	19.90	21.30	21.20	19.40	20.90	22.35	20.60	---	22.30
20	21.85	21.55	21.95	19.80	21.50	21.30	19.30	21.30	22.35	20.60	---	21.70
21	21.10	21.40	21.80	20.10	21.65	21.20	19.85	21.80	21.55	21.20	---	21.05
22	21.30	21.55	21.20	20.20	21.60	20.40	20.70	22.10	21.75	21.25	---	21.35
23	21.95	21.40	20.55	20.20	21.05	20.20	20.85	22.10	---	21.00	---	21.90
24	22.30	20.65	20.50	20.70	21.10	20.50	21.05	21.10	---	21.10	21.10	22.05
25	22.45	21.10	20.20	20.65	21.10	20.70	20.90	20.00	---	21.10	21.55	22.10
26	22.45	21.50	19.65	20.25	21.30	20.90	20.15	20.00	---	20.25	21.65	21.95
27	21.55	21.75	19.55	20.50	21.40	21.15	19.90	20.40	---	20.05	21.65	21.50
28	21.85	21.05	19.50	20.85	21.45	21.10	20.70	20.95	---	20.35	21.70	21.50
29	22.50	20.15	19.30	21.05	21.25	20.55	21.20	21.40	---	20.65	21.60	21.80
30	22.65	19.50	19.15	21.10	---	20.10	21.50	21.45	---	20.70	20.80	21.80
31	22.70	---	19.00	21.35	---	20.55	---	20.45	---	20.65	20.85	---
MAX	24.05	22.70	21.95	21.35	22.20	21.75	21.50	22.10	22.35	21.55	21.70	22.50

CAL YR 1991 LOW 25.25

WTR YR 1992 LOW 24.05



WILLIAMS COUNTY--Continued

413108084415300. Local number, WM-12.

LOCATION.--Lat 41°31'08", long 84°41'53", Hydrologic Unit 04100003, 1.7 mi east of Blakeslee.

Owner: State of Ohio.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled test artesian well, diameter 10 in., depth 115 ft, cased to 115 ft, screened 85 ft to 115 ft.

INSTRUMENTATION.--Periodic measurement with chalked tape by ODNR personnel.

DATUM.--Elevation of land-surface datum is 830 ft above National Geodetic Vertical Datum of 1929, from topographic map.

Measuring point: Floor of instrument shelter 1.50 ft above land-surface datum.

REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

PERIOD OF RECORD.--1974 to September 1982 continuous, periodic October 1983 to December 1984, continuous

January 1985 to November 1986, periodic thereafter.

EXTREMES FOR PERIOD OF RECORD.--Maximum measured low, 10.59 ft below land-surface datum, Oct. 25, 1989;
minimum daily low, 3.83 ft below land-surface datum, Mar. 17, 1982.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM
INSTANTANEOUS OBSERVATIONS

DATE	WATER LEVEL	DATE	WATER LEVEL
Oct. 21, 1991	10.10	Apr. 15, 1992	8.62

GROUND-WATER RECORDS

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, depth 90 ft, cased.

INSTRUMENTATION.--Digital recorder -- 60-minute punch.

DATUM.--Elevation of land-surface datum is 850 ft above National Geodetic Vertical Datum of 1929, from topographic map.

Measuring point: Floor of instrument shelter 3.00 ft above land-surface datum.

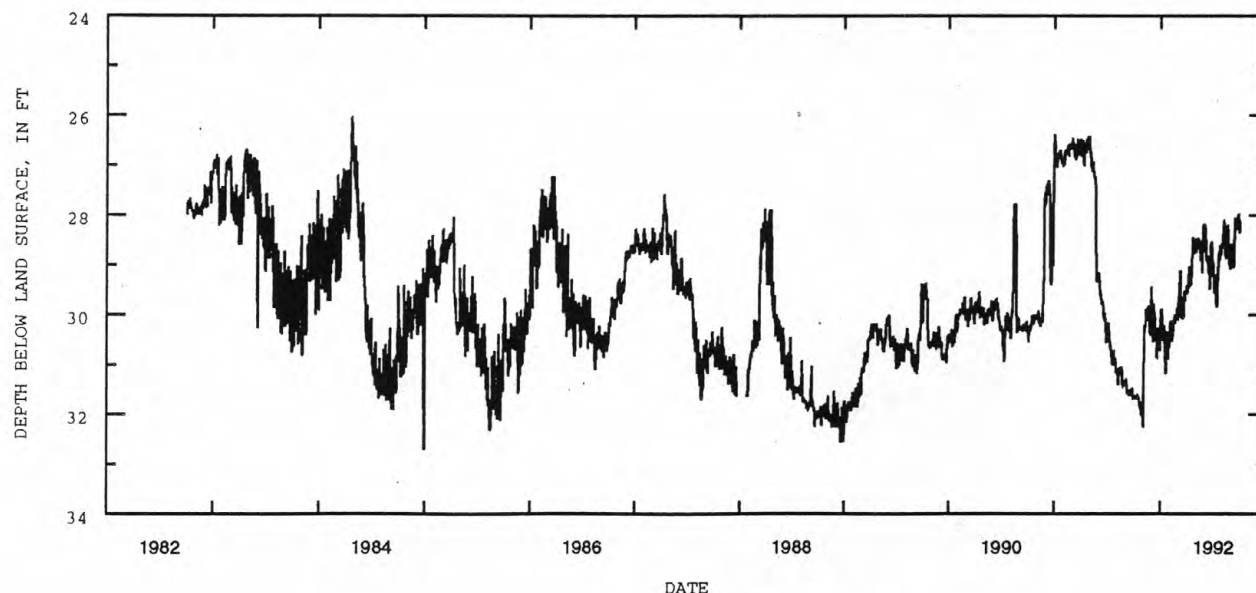
REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

PERIOD OF RECORD.--September 1951 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 40.90 ft below land-surface datum, July 12, 15, 17, 21, Aug. 26, 1961; minimum daily low, 25.75 ft below land-surface datum, Apr. 16, 1980.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	31.65	31.94	29.43	30.72	30.50	30.11	29.41	28.69	28.19	29.30	28.24	28.60
2	31.66	32.06	29.58	30.18	30.65	30.03	29.56	28.74	28.24	29.53	28.25	28.60
3	31.66	32.23	29.82	30.02	30.58	29.79	29.58	28.74	28.28	29.53	28.23	28.69
4	31.66	32.26	30.20	29.92	30.25	29.74	29.50	28.62	28.40	29.51	28.20	28.87
5	31.66	31.42	30.52	29.89	30.18	29.72	29.54	28.53	28.61	29.37	28.10	28.95
6	31.66	30.47	30.52	29.89	30.17	29.53	29.39	28.60	28.87	29.25	28.21	29.06
7	31.67	30.20	30.52	30.14	30.12	29.45	29.31	28.56	28.92	29.20	28.49	29.06
8	31.67	30.34	30.10	30.25	30.34	29.27	29.10	28.53	28.92	29.32	28.70	28.98
9	31.66	30.35	29.79	30.21	30.49	29.14	29.03	28.46	28.88	29.71	28.76	28.68
10	31.66	30.14	29.96	30.49	30.53	29.14	29.19	28.58	28.82	29.84	28.86	28.33
11	31.65	29.88	30.12	30.49	30.42	29.71	29.18	28.64	28.95	29.84	28.87	28.04
12	31.63	29.99	30.13	30.51	30.44	29.73	29.13	28.62	29.06	29.78	28.70	28.20
13	31.63	30.06	29.96	30.49	30.44	30.03	29.40	28.63	29.12	29.47	28.58	28.22
14	31.64	30.08	30.15	30.22	30.28	30.07	29.40	28.51	29.19	29.35	28.51	28.22
15	31.64	30.08	30.27	30.43	30.29	29.83	29.38	28.54	29.17	29.31	28.38	28.21
16	31.64	30.11	30.31	30.69	30.15	29.98	29.27	28.82	29.14	29.11	28.33	28.26
17	31.64	30.06	30.33	30.82	30.19	29.99	29.20	28.90	29.47	28.96	28.27	28.26
18	31.64	29.88	30.59	31.03	30.12	29.95	28.98	28.88	29.47	28.82	28.20	28.25
19	31.68	29.82	30.82	31.17	30.00	29.95	28.73	28.58	29.32	28.72	28.38	28.16
20	31.75	29.84	30.84	31.12	30.10	30.04	28.44	28.69	28.98	28.87	28.48	28.13
21	31.86	29.95	30.75	30.69	30.03	30.03	28.60	28.85	28.74	28.87	28.70	28.16
22	31.78	30.01	30.58	30.60	30.16	29.75	28.61	29.02	28.63	28.66	28.97	28.19
23	31.75	30.06	30.33	30.33	29.99	29.52	28.76	29.15	28.63	28.61	28.98	28.14
24	31.76	29.88	30.44	30.50	30.08	29.63	28.73	28.97	28.54	28.70	28.95	28.00
25	31.87	30.30	30.28	30.74	30.10	29.71	28.68	28.53	28.74	28.77	28.97	27.97
26	31.94	30.42	30.25	30.85	30.03	29.71	28.71	28.32	28.87	28.80	29.07	27.97
27	31.97	30.40	30.50	30.88	29.90	29.53	28.71	28.18	28.94	28.73	29.08	28.21
28	32.02	30.31	30.51	30.73	29.85	29.58	28.67	28.22	28.95	28.58	28.97	28.35
29	32.02	29.84	30.50	30.62	30.06	29.58	28.63	28.23	29.00	28.64	28.65	28.31
30	31.89	29.57	30.45	30.44	---	29.53	28.47	28.23	29.15	28.64	28.66	28.15
31	31.94	---	30.71	30.42	---	29.45	---	28.19	---	28.53	28.64	---
MAX	32.02	32.26	30.84	31.17	30.65	30.11	29.58	29.15	29.47	29.84	29.08	29.06
CAL YR 1991	LOW 32.26											
WTR YR 1992	LOW 32.26											



The following tables contain ground-water-level measurements from a network of water-supply and monitoring wells near Wright-Patterson Air Force Base, Ohio. The data was collected as part of a cooperative study with Air Force Logistics Command, 2750 Air Base Wing/ Environmental Management. The purpose of the study is to evaluate ground-water resources near Wright-Patterson Air Force Base, Ohio.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

Site	Local well number	Aquifer code	Water level code	Water level (feet)	Altitude of land surface (feet)
394942084033500	GR-303	360ODVC	10-23-91	8.99	801.0
			11-26-91	9.08	
			12-30-91	8.99	
			01-31-92	8.90	
			02-25-92	8.77	
			03-31-92	8.36	
			04-29-92	7.85	
			05-29-92	8.64	
			06-24-92	8.29	
			07-28-92	6.94	
			08-31-92	8.37	
			09-29-92	8.90	
394855084033900	GR-304	360ODVC	10-23-91	1.59	798.1
			11-26-91	1.98	
			12-30-91	1.96	
			01-20-92	1.89	
			01-31-92	1.39	
			02-25-92	1.92	
			03-31-92	1.94	
			04-29-92	1.89	
			05-29-92	2.02	
			06-24-92	1.44	
			07-29-92	1.88	
			08-31-92	1.72	
			09-29-92	2.03	
394831084042700	GR-305	360ODVC	10-23-91	5.39	796.4
			11-26-91	5.42	
			12-30-91	5.43	
			01-31-92	5.37	
			02-25-92	5.35	
			03-31-92	5.08	
			04-29-92	4.78	
			05-29-92	5.22	
			06-24-92	5.13	
			07-29-92	4.56	
			08-31-92	5.26	
			09-29-92	5.38	
394815084020700	GR-306	360ODVC	10-23-91	49.65	839.2
			11-26-91	42.24	
			12-30-91	37.76	
			01-31-92	35.13	

GROUND-WATER RECORDS FOR THEWRIGHT-PATTERSON AIR FORCE BASE PROJECT

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM--Continued

Site	Local well number	Aquifer code	Water level code	Water level (feet)	Altitude of land surface (feet)
394815084020700	GR-306	360ODVC0	02-25-92	33.92	839.2
			03-31-92	32.27	
			04-29-92	31.54	
			05-29-92	30.95	
			06-24-92	30.56	
			07-29-92	30.13	
			08-31-92	29.75	
			09-29-92	29.51	
			10-28-92	29.21	
394743084024300	GR-307	360ODVC	10-23-91	72.28	838.1
			11-26-91	63.72	
			12-30-91	57.72	
			01-31-92	52.44	
			02-25-92	49.48	
			03-31-92	45.99	
			04-29-92	43.58	
			05-29-92	41.53	
			06-25-92	40.06	
			07-29-92	38.63	
			08-31-92	37.36	
			09-29-92	36.44	
			10-28-92	35.69	
394750084043800	GR-308	360ODVC	10-23-91	7.52	799.9
			11-26-91	7.73	
			12-30-91	6.79	
			01-31-92	5.43	
			02-25-92	5.13	
			03-31-92	4.47	
			04-29-92	3.79	
			05-29-92	5.18	
			07-29-92	3.6	
			09-29-92	5.42	
394706084045800	GR-309	357BFLD	10-23-91	26.77	976.6
			11-26-91	27.10	
			12-30-91	26.84	
			01-31-92	26.30	
			02-25-92	26.15	
			03-31-92	25.44	
			04-29-92	25.09	
			05-29-92	25.84	
			06-25-92	25.69	
			07-29-92	24.91	
			08-31-92	25.46	
			09-29-92	25.90	
			10-28-92	26.17	

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM--Continued

Site	Local well number	Aquifer code	Water level code	Water level (feet)	Altitude of land surface (feet)
394633084045300	GR-310	357BFLD	10-23-91	27.56	974.0
			11-26-91	27.93	
			12-30-91	26.89	
			01-31-92	26.13	
			02-25-92	25.37	
			03-31-92	24.63	
			04-29-92	24.11	
			05-29-92	25.19	
			06-25-92	25.13	
			07-29-92	24.21	
			08-31-92	25.75	
			09-29-92	25.71	
			10-28-92	26.05	
394852084023100	GR-311	360ODVC	10-23-91	37.29	815
			11-26-91	35.62	
			12-30-91	34.09	
			01-31-92	32.41	
			02-25-92	31.70	
			03-31-92	30.39	
			04-29-92	29.26	
			05-29-92	28.39	
			06-24-92	27.67	
			07-29-92	26.66	
			08-31-92	25.74	
			09-29-92	25.11	
			10-28-92	24.49	
394706084045801	GR-312	361WTTR	10-23-91	100.40	976.3
			11-26-91	99.62	
			12-30-91	98.96	
			01-31-92	98.35	
			02-25-92	97.9	
			03-31-92	97.16	
			04-29-92	96.75	
			05-29-92	96.20	
			06-25-92	95.68	
			07-29-92	95.11	
			08-31-92	94.77	
			09-29-92	94.23	
			10-28-92	93.73	
394645084055200	GR-313	360ODVC	10-23-91	33.46	806.5
			11-26-91	34.23	
			12-30-91	34.64	
			01-31-92	34.85	
			02-25-92	35.07	
			03-31-92	34.92	
			04-29-92	34.84	
			05-29-92	34.45	
			06-25-92	34.25	

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM--Continued

Site	Local well number	Aquifer code	Water level code	Water level (feet)	Altitude of land surface (feet)
394645084055200	GR-313	360ODVC	08-31-92	34.15	806.5
			09-29-92	34.07	
			10-28-92	34.00	
394929084015000	GR-314	360ODVC	01-30-89	19.66	821.6
			10-23-91	19.17	
			11-26-91	19.51	
			12-30-91	19.51	
			01-31-92	19.52	
			02-25-92	19.58	
			03-31-92	19.60	
			04-29-92	19.44	
			05-29-92	19.52	
			06-15-92	19.60	
			07-28-92	19.51	
			08-31-92	19.4	
			09-31-92	19.4	
395032084023100	GR-315	360ODVC	01-18-89	259.35	812.2.
			12-13-89	207.39	
			01-11-91	165.03	
			10-23-91	161.62	
			10-23-91	140.56	
			11-26-91	138.01	
			12-30-91	135.45	
			01-31-92	133.03	
			02-25-92	131.27	
			03-31-92	128.66	
			04-29-92	126.72	
			05-29-92	124.63	
			06-24-92	122.87	
			07-28-92	120.66	
			08-31-92	118.49	
			09-29-92	116.61	
395032084023101	GR-316	112OTSH	08-10-89	6.45	812.2
			10-23-91	8.40	
			11-26-91	7.98	
			12-30-91	8.00	
			01-31-92	7.97	
			02-25-92	7.98	812.2
			03-31-92	8.06	
			04-29-92	7.44	
			05-29-92	7.88	
			06-24-92	7.55	
			07-28-92	6.55	
			08-31-92	7.58	
			09-29-92	7.92	
			09-29-92	7.92	

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM--Continued

Site	Local well number	Aquifer code	Water level code	Water level (feet)	Altitude of land surface (feet)
395032084023102	GR-317	112OTSH	08-18-89	5.00	812.2
			11-26-91	5.48	
			12-30-91	5.31	
			01-31-91	5.33	
			02-25-92	5.43	
			03-31-92	5.91	
			04-29-92	5.26	
			05-29-92	5.75	
			06-24-92	5.52	
			07-28-92	4.63	
			08-31-92	5.11	
			09-29-92	5.11	
394929084015001	GR-318	112OTSH	10-23-91	17.06	821.6
			11-26-91	17.84	
			12-30-91	17.86	
			01-31-92	17.90	
			02-25-92	17.89	
			03-31-92	17.73	
			04-29-92	16.85	
			05-29-92	16.94	
			06-15-92	17.05	
			07-28-92	16.58	
			08-31-92	16.57	
			09-29-92	17.06	
394929084015002	GR-319	112OTSH	10-24-89	18.73	821.6
			11-26-91	20.44	
			12-30-91	20.38	
			01-22-92	20.11	
			02-25-92	20.28	
			03-31-92	20.15	
			04-29-92	19.40	
			05-29-92	19.84	
			06-15-92	20.02	
			07-28-92	19.36	
			08-31-92	19.58	
			09-29-92	20.00	
394942084033501	GR-320	112OTSH	07-25-89	8.67	801.0
			08-10-89	8.56	
			08-21-89	9.15	
			09-13-89	9.39	
			10-24-89	9.50	
			12-05-89	9.48	
			07-25-89	8.67	
			02-16-90	4.81	
			03-19-90	8.62	
			04-16-90	8.69	
			05-09-90	8.33	

GROUND-WATER RECORDS FOR THEWRIGHT-PATTERSON AIR FORCE BASE PROJECT

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM--Continued

Site	Local well number	Aquifer code	Water level code	Water level (feet)	Altitude of land surface (feet)
394942084033501	GR-320	112OTSH	06-08-90	8.25	801.0
			07-24-90	7.90	
			08-15-90	8.98	
			09-27-90	9.27	
			10-12-90	8.30	
			11-13-90	8.92	
			12-17-90	8.26	
			01-11-91	7.49	
			02-21-91	7.37	
			03-15-91	7.80	
			04-24-91	8.10	
			05-21-91	8.67	
			06-24-91	9.32	
			07-18-91	9.31	
			08-29-91	9.50	
			09-27-91	9.57	
			10-23-91	9.61	
			11-26-91	9.61	
			12-30-91	9.57	
			01-31-92	9.50	
			02-25-92	9.45	
			02-25-92	9.30	
			03-31-92	9.05	
			04-29-92	8.80	
			05-29-92	9.37	
			06-24-92	9.09	
			07-28-92	8.04	
			08-31-92	9.15	
			09-29-92	9.51	
394855084033901	GR-321	112OTSH	09-13-89	3.59	798.1
			10-24-89	3.74	
			12-07-89	3.84	
			01-05-90	3.97	
			02-16-90	1.82	
			03-19-90	3.01	
			04-16-90	3.03	
			05-15-90	2.19	
			06-08-90	2.83	
			07-26-90	2.70	
			08-15-90	3.31	
			09-27-90	3.59	
			10-12-90	3.05	
			11-13-90	3.49	
			12-17-90	3.03	
			01-08-91	2.41	
			02-21-91	2.60	
			03-15-91	2.49	
			04-18-91	2.63	

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM--Continued

Site	Local well number	Aquifer code	Water level code	Water level (feet)	Altitude of land surface (feet)
394855084033901	GR-321	112OTSH	05-21-91	3.08	798.1
			06-19-91	3.68	
			07-18-91	3.74	
			08-29-91	3.95	
			09-27-91	3.94	
			10-23-91	4.05	
			11-26-91	4.17	
			12-30-91	4.14	
			01-31-92	3.71	
			02-25-92	3.99	
			02-25-92	3.70	
			03-31-92	0.62	
			04-29-92	3.37	
			05-29-92	3.82	
			06-24-92	3.77	
			07-29-92	3.54	
			08-31-92	4.22	
			09-29-92	3.03	
394855084033902	GR-322	112OTSH	11-17-89	1.87	798.1
			12-07-89	2.93	
			01-05-90	3.02	
			02-16-90	0.98	
			03-19-90	2.03	
			04-16-90	1.85	
			05-15-90	1.97	
			06-08-90	1.47	
			07-26-90	1.43	
			08-15-90	2.07	
			09-27-90	2.70	
			10-12-90	2.04	
			11-13-90	2.38	
			12-17-90	1.99	
			01-08-91	1.15	
			02-21-91	1.47	
			03-15-91	1.41	
			04-18-91	1.47	
			05-21-91	1.85	
			06-19-91	2.51	
			07-18-91	2.65	
			08-29-91	2.91	
			09-27-91	3.05	
			10-23-91	3.08	
			11-26-91	3.27	
			12-30-91	3.25	
			01-31-92	3.14	
			02-25-92	3.05	
			02-25-92	3.10	
			03-31-92	2.84	

GROUND-WATER RECORDS FOR THEWRIGHT-PATTERSON AIR FORCE BASE PROJECT

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM--Continued

Site	Local well number	Aquifer code	Water level code	Water level (feet)	Altitude of land surface (feet)
394855084033902	GR-322	112OTSH	04-29-92	2.42	798.1
			05-29-92	2.85	
			06-24-92	2.84	
			07-29-92	2.43	
			08-31-92	3.00	
			09-29-92	4.07	
394831084042701	GR-323	112OTSH	08-31-89	6.88	796.4
			09-13-89	6.69	
			10-24-89	6.89	
			12-07-89	7.00	
			01-05-90	7.03	
			02-16-90	4.82	
			03-19-90	6.65	
			04-16-90	6.59	
			05-15-90	6.05	
			06-08-90	6.51	
			07-26-90	6.46	
			08-15-90	6.81	
			09-27-90	6.97	
			10-12-90	6.54	
			11-13-90	6.79	
			02-17-90	6.49	
			01-08-91	6.27	
			02-21-91	6.46	
			03-15-91	6.30	
			04-18-91	6.16	
			05-21-91	6.71	
			06-20-91	7.19	
			07-18-91	7.15	
			08-29-91	7.22	
			09-27-91	6.21	
			10-23-91	7.13	
			11-26-91	7.15	
			12-30-91	7.14	
			01-31-92	7.08	
			02-25-92	7.07	
			03-31-92	6.82	
			04-29-92	6.71	
			05-29-92	6.97	
			06-24-92	6.93	
			07-29-92	6.38	
			08-31-92	7.01	
			09-29-92	7.15	
394831084042702	GR-324	112OTSH	09-13-89	6.01	796.4
			10-24-89	6.18	
			12-07-89	6.39	
			01-05-90	6.36	
			02-16-90	4.11	

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM--Continued

Site	Local well number	Aquifer code	Water level code	Water level (feet)	Altitude of land surface (feet)
394831084042702	GR-324	112OTSH	03-19-90	5.81	796.4
			04-16-90	5.66	
			05-15-90	4.98	
			06-08-90	5.48	
			07-26-90	5.41	
			08-15-90	5.97	
			09-27-90	6.25	
			10-12-90	5.75	
			11-13-90	6.03	
			12-17-90	5.54	
			01-08-91	4.97	
			02-21-91	5.38	
			03-15-91	5.26	
			04-18-91	5.41	
			05-21-91	5.71	
			06-20-91	6.13	
			07-18-91	6.38	
			08-29-91	6.53	
			09-27-91	5.57	
			10-23-91	6.40	
			11-26-91	6.43	
			12-30-91	6.46	
			01-31-92	6.43	
			02-25-92	6.34	
			04-29-92	5.82	
			05-29-92	6.26	
			06-24-92	6.11	
			07-29-92	5.55	
			08-31-92	6.29	
			09-29-92	6.33	
			10-28-92	6.27	
394743084024301	GR-326	112OTSH	09-22-89	24.80	838.1
			10-24-89	26.57	
			12-07-89	28.28	
			01-06-90	28.71	
			02-16-90	28.41	
			03-19-90	27.59	
			04-16-90	27.14	
			05-15-90	26.56	
			06-08-90	25.59	
			07-24-90	24.91	
			08-15-90	25.70	
			09-27-90	26.40	
			10-12-90	26.16	
			11-13-90	26.94	
			12-17-90	27.32	
			01-08-91	25.18	

GROUND-WATER RECORDS FOR THEWRIGHT-PATTERSON AIR FORCE BASE PROJECT

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM--Continued

Site	Local well number	Aquifer code	Water level code	Water level (feet)	Altitude of land surface (feet)
394743084024301	GR-326	112OTSH	02-21-91	25.17	838.1
			03-25-91	25.15	
			04-24-91	25.88	
			05-21-91	25.13	
			06-25-91	26.24	
			07-18-91	27.71	
			08-29-91	27.80	
			09-27-91	28.43	
			10-23-91	28.98	
			11-26-91	29.68	
			12-30-91	30.00	
			01-31-92	30.10	
			02-25-92	30.35	
			03-31-92	30.32	
			04-29-92	29.63	
			05-29-92	29.88	
			08-31-92	29.19	
			09-29-92	29.49	
			10-28-92	29.69	
394743084024302	GR-327	112OTSH	10-05-89	26.40	838.1
			10-24-89	26.99	
			12-07-89	27.69	
			01-06-90	28.23	
			02-16-90	27.22	
			03-19-90	27.29	
			04-16-90	26.98	
			05-15-90	26.41	
			06-08-90	25.35	
			07-24-90	24.72	
			08-15-90	25.28	
			09-27-90	26.04	
			10-12-90	26.12	
			11-13-90	26.56	
			12-17-90	26.98	
			01-08-91	24.99	
			02-21-91	24.95	
			03-25-91	24.92	
			04-24-91	24.66	
			05-21-91	24.95	
			06-25-91	25.90	
			07-18-91	27.10	
			08-29-91	27.35	
			09-27-91	27.89	
			10-23-91	28.52	
			11-26-91	29.14	
			12-30-91	29.50	
			01-31-92	29.50	
			02-25-92	29.89	

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM--Continued

Site	Local well number	Aquifer code	Water level code	Water level (feet)	Altitude of land surface (feet)
29.87394743084024302	GR-327	112OTSH	03-31-92	29.87	
			04-29-92	29.39	
			05-29-92	29.45	
			06-25-92	29.5	
			07-29-92	29.30	
			08-31-92	28.85	
			09-29-92	29.10	
			10-28-92	29.40	
394743084024303	GR-328	112OTSH	02-16-90	31.57	838.1
			03-19-90	31.17	
			04-16-90	30.83	
			05-15-90	30.49	
			06-08-90	29.89	
			07-24-90	29.25	
			08-15-90	29.85	
			09-27-90	30.47	
			10-12-90	30.43	
			11-13-90	30.75	
			12-17-90	31.00	
			01-08-91	29.32	
			02-21-91	29.49	
			03-25-91	29.56	
			04-24-91	29.29	
			05-21-91	29.56	
			06-25-91	30.25	
			07-18-91	30.65	
			08-29-91	31.42	
			09-27-91	31.90	
			10-23-91	32.25	
			11-26-91	32.83	
			12-30-91	33.06	
			01-31-92	33.09	
			02-25-92	33.20	
			03-31-92	33.03	
			04-29-92	32.68	
			05-29-92	32.86	
			06-25-92	32.82	
			07-29-92	32.74	
			08-31-92	32.58	
			09-29-92	32.82	
			10-28-92	32.93	
394645084055201	GR-329	112OTSH	05-15-90	31.80	806.5
			06-08-90	30.85	
			07-25-90	29.95	
			08-15-90	30.11	
			09-27-90	30.88	
			10-12-90	31.02	

GROUND-WATER RECORDS FOR THEWRIGHT-PATTERSON AIR FORCE BASE PROJECT

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM--Continued

Site	Local well number	Aquifer code	Water level code	Water level (feet)	Altitude of land surface (feet)
394645084055201	GR-329	112OTSH	11-13-90	31.53	806.5
			12-17-90	32.20	
			01-08-91	31.33	
			02-21-91	29.83	
			05-15-90	31.80	
			03-25-91	29.76	
			04-24-91	27.63	
			05-21-91	29.58	
			06-27-91	30.23	
			07-18-91	30.71	
			08-29-91	31.48	
			09-27-91	31.88	
			10-23-91	32.36	
			11-26-91	33.08	
			12-30-91	33.56	
			01-31-92	33.76	
			02-25-92	34.18	
			03-31-92	34.16	
			04-29-92	34.03	
			05-29-92	33.71	
			06-25-92	33.50	
			07-29-92	33.39	
			08-31-92	32.92	
			09-29-92	32.94	
			10-28-92	32.91	
394815084020701	GR-330	112OTSH	06-08-90	28.63	839.2
			07-25-90	27.87	
			08-15-90	28.00	
			09-27-90	28.95	
			10-12-90	28.94	
			11-13-90	29.32	
			12-17-90	30.00	
			01-08-91	28.66	
			02-21-91	28.38	
			03-25-91	28.42	
			04-16-91	28.25	
			05-21-91	28.30	
			06-27-91	0	
			07-17-91	29.18	
			08-29-91	30.07	
			09-27-91	30.54	
			10-23-91	30.96	
			11-26-91	31.50	
			12-30-91	31.87	
			01-31-92	32.02	
			02-25-92	32.15	
			03-31-92	32.24	
			04-29-92	31.95	

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM--Continued

Site	Local well number	Aquifer code	Water level code	Water level (feet)	Altitude of land surface (feet)
394815084020701	GR-330	112OTSH	05-29-92	31.70	
			06-24-92	31.54	
			07-29-92	31.49	
			08-31-92	31.10	
			09-29-92	31.24	
			10-28-92	31.48	
394815084020702	GR-331	112OTSH	06-08-90	28.38	839.2
			07-25-90	27.66	
			08-15-90	27.86	
			09-27-90	28.83	
			10-12-90	28.81	
			11-13-90	29.18	
			12-17-90	29.86	
			01-08-91	28.52	
			02-21-91	28.28	
			03-25-91	28.31	
			04-16-91	28.12	
			05-21-91	28.19	
			06-27-91	28.98	
			07-18-91	29.08	
			08-29-91	29.91	
			09-27-91	30.14	
			10-23-91	30.85	
			11-26-91	31.37	
			12-30-91	31.73	
			01-31-92	31.89	
			02-25-92	32.02	
			03-31-92	32.13	
			04-29-92	31.81	
			05-29-92	31.57	
			06-24-92	31.55	
			07-29-92	31.46	
			08-31-92	0.95	
			09-29-92	31.08	
			10-28-92	31.37	
394815084020703	GR-332	112OTSH	05-15-90	28.57	839.2
			06-08-90	26.30	
			07-25-90	25.53	
			08-15-90	25.63	
			09-27-90	26.35	
			10-12-90	26.45	
			11-13-90	26.89	
			12-17-90	27.45	
			01-08-91	26.23	
			02-21-91	25.85	
			03-25-91	25.85	
			04-10-91	25.69	
			05-21-91	25.69	

GROUND-WATER RECORDS FOR THE WRIGHT-PATTERSON AIR FORCE BASE PROJECT

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM--Continued

Site	Local well number	Aquifer code	Water level code	Water level (feet)	Altitude of land surface (feet)
394815084020703	GR-332	112OTSH	06-27-91	26.20	839.2
			07-17-91	26.57	
			08-29-91	27.46	
			09-27-91	27.98	
			10-23-91	28.51	
			11-26-91	29.08	
			12-30-91	29.51	
			01-31-92	29.62	
			02-25-92	29.90	
			03-31-92	29.93	
			04-29-92	29.82	
			05-29-92	29.62	
			06-24-92	29.55	
			07-29-92	29.59	
			08-31-92	29.06	
			09-29-92	29.14	
			10-28-92	29.38	
394852084023101	GR-333	112OTSH	05-15-90	11.78	812.1
			06-08-90	11.41	
			07-25-90	10.75	
			08-15-90	11.52	
			09-27-90	12.27	
			10-12-90	12.17	
			11-13-90	13.38	
			12-17-90	13.38	
			01-11-91	11.05	
			02-21-91	11.43	
			03-25-91	11.35	
			04-24-91	11.48	
			05-21-91	11.84	
			06-26-91	12.56	
			07-18-91	12.86	
			08-29-91	13.33	
			09-27-91	13.41	
			10-23-91	13.73	
			11-26-91	14.06	
			12-30-91	14.16	
			01-31-92	14.12	
			02-25-92	14.05	
			03-31-92	13.72	
			04-29-92	13.06	
			05-29-92	13.50	
			06-24-92	13.56	
			07-29-92	13.02	
			08-31-92	13.25	
			09-29-92	13.70	
			10-28-92	13.83	

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM--Continued

Site	Local well number	Aquifer code	Water level code	Water level (feet)	Altitude of land surface (feet)
394852084023102	GR-334	112OTSH	05-15-90	11.64	812.1
			06-08-90	11.24	
			07-25-90	10.63	
			08-15-90	11.41	
			09-27-90	12.59	
			10-12-90	12.03	
			11-13-90	12.18	
			12-17-90	12.50	
			01-11-91	10.92	
			02-21-91	11.29	
			03-25-91	11.20	
			04-24-91	11.31	
			05-21-91	11.71	
			06-26-91	12.38	
			07-18-91	12.71	
			08-29-91	13.18	
			09-27-91	13.38	
			10-23-91	13.72	
			11-26-91	14.05	
			12-30-91	14.03	
			01-31-92	13.98	
			02-25-92	13.91	
			03-31-92	13.72	
			04-29-92	12.98	
			05-29-92	13.51	
			06-24-92	13.52	
			07-29-92	12.99	
			08-31-92	13.24	
			09-29-92	13.55	
			10-28-92	13.74	
394852084023103	GR-335	112OTSH	05-15-90	11.58	812.1
			06-08-90	11.13	
			07-25-90	10.53	
			08-15-90	11.31	
			09-27-90	11.58	
			10-12-90	11.97	
			11-13-90	12.18	
			12-17-90	12.43	
			01-11-91	10.84	
			02-21-91	11.23	
			03-25-91	11.16	
			04-24-91	11.25	
			05-21-91	11.63	
			06-26-91	12.33	
			07-18-91	12.65	
			08-29-91	13.12	
			09-27-91	13.32	
			10-23-91	13.63	

GROUND-WATER RECORDS FOR THE WRIGHT-PATTERSON AIR FORCE BASE PROJECT

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM--Continued

Site	Local well number	Aquifer code	Water level code	Water level (feet)	Altitude of land surface (feet)
394852084023103	GR-335	112OTSH	11-26-91	13.99	812.1
			12-30-91	13.98	
			01-31-92	13.90	
			02-25-92	13.84	
			03-31-92	13.51	
			04-29-92	12.97	
			05-29-92	13.37	
			06-24-92	13.47	
			07-29-92	12.93	
			08-31-92	13.16	
			09-29-92	13.48	
			10-28-92	13.02	
394623084064400	MT-133	360ODVC	03-30-89	71.99	791.4
			04-12-89	33.04	
			04-20-89	31.97	
			04-27-89	31.24	
			05-04-89	31.10	
			05-10-89	31.13	
			05-18-89	31.03	
			05-25-89	30.71	
			06-01-89	29.68	
			06-16-89	30.34	
			06-29-89	30.34	
			07-12-89	30.36	
			07-29-89	30.50	
			08-21-89	30.57	
			10-25-89	30.77	
			12-28-89	33.67	
			02-16-90	30.75	
			03-19-90	30.49	
			04-16-90	30.17	
			05-15-90	29.87	
			06-08-90	29.61	
			07-25-90	29.06	
			08-15-90	29.15	
			09-27-90	29.02	
			10-12-90	28.85	
			11-13-90	28.67	
			12-17-90	28.67	
			01-08-91	27.90	
			02-21-91	27.61	
			03-25-91	27.39	
			04-24-91	27.27	
			05-21-91	27.36	
			06-28-91	28.04	
			07-18-91	29.46	

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM--Continued

Site	Local well number	Aquifer code	Water level code	Water level (feet)	Altitude of land surface (feet)
394623084064400	MT-133	360ODVC	08-30-91	28.26	791.4
			09-27-91	28.05	
			10-23-91	28.02	
			11-26-91	28.16	
			12-30-91	27.97	
			01-31-92	27.80	
			02-25-92	27.74	
			04-29-92	27.27	
			05-29-92	27.22	
			06-25-92	27.04	
394623084064400	MT-133	360ODVC	07-29-92	26.97	791.4
			08-31-92	27.11	
			09-29-92	27.36	
			10-28-92	27.31	
			05-15-90	21.00	
			06-08-90	19.70	
			07-25-90	19.59	
			08-15-90	20.35	
			09-27-90	21.10	
			10-12-90	21.27	
394623084064401	MT-152	112OTSH	11-13-90	21.47	791.4
			12-17-90	21.65	
			01-08-91	19.32	
			02-21-91	19.67	
			03-25-91	19.85	
			04-24-91	19.42	
			05-21-91	19.55	
			06-28-91	20.69	
			07-18-91	21.12	
			08-30-91	21.34	
			09-27-91	21.59	
			10-23-91	22.43	
			11-26-91	3.26	
			12-30-91	23.39	
			01-31-92	23.29	
			02-25-92	23.60	
			03-31-92	23.33	
			04-29-92	22.24	
			05-29-92	21.90	
			06-25-92	21.82	
394623084064402	MT-153	112OTSH	07-29-92	22.79	791.4
			08-31-92	22.74	
			09-29-92	22.99	
			10-28-92	22.51	
			05-15-90	21.62	
			06-08-90	19.65	
			07-25-90	20.23	

GROUND-WATER RECORDS FOR THE WRIGHT-PATTERSON AIR FORCE BASE PROJECT

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM--Continued

Site	Local well number	Aquifer code	Water level code	Water level (feet)	Altitude of land surface (feet)
394623084064402	MT-153	112OTSH	08-15-90	20.34	791.4
			09-27-90	21.17	
			10-12-90	21.26	
			11-13-90	22.02	
			12-17-90	22.26	
			01-08-91	19.32	
			08-15-90	20.34	
			09-27-90	21.17	
			10-12-90	21.26	
			11-13-90	22.02	
			12-17-90	22.26	
			01-08-91	19.32	
			03-25-91	19.84	
			04-24-91	19.44	
			05-21-91	19.69	
			06-28-91	20.16	
			07-18-91	21.11	
			08-30-91	21.34	
			09-27-91	21.70	
			10-23-91	22.44	
			11-26-91	23.23	
			12-30-91	23.41	
			01-31-92	23.33	
			02-25-92	23.69	
			03-31-92	23.35	
			04-29-92	22.22	
			05-29-92	21.84	
			06-25-92	21.90	
			07-29-92	22.77	
			08-31-92	22.72	
			09-29-92	23.01	
			10-28-92	22.48	

Aquifer Code

112OTSH - Outwash, Pleistocene Epoch
 112TILL - Glacial Till
 357BFLD - Brassfield Limestone, Lower Silurian
 361RCMD - Richmond Group, Upper Ordovician
 111ALVM - Holocene Alluvium
 360ODVC - Ordovician System
 361WTTR - Whitewater Formation

394853084042200. Local number, GR-208.

LOCATION.--Lat 39° 48'53" Long 84° 04'22", Hydrologic Unit 05080001, at Wright-Patterson Air Force Base, Ohio.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Observation well drilled by hollow stem auger, diameter 4.0 in. depth 19.5 ft. Cased with stainless steel to 4.50 ft; .010 in screen from 4.5 to 19.5 ft, bentonite seal.

INSTRUMENTATION.--Recorder -- 60-minute record. Also collected: Water level and water temperature.

DATUM.--Elevation of land-surface datum is 796.29 feet above National Geodetic Vertical datum of 1929 (NGVD of 1929). Measuring point: Shelter floor 3.01 ft above land-surface datum.

PERIOD OF RECORD.--August 1989 to current year.

PERIOD OF DAILY RECORD.--

Water level: August 1989 to current year

Water temperature: November 1991 to current year

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 6.40 ft below land-surface datum, August 2, 3, 1991; minimum daily-low, 1.68 ft below land-surface datum, December 31, 1990.

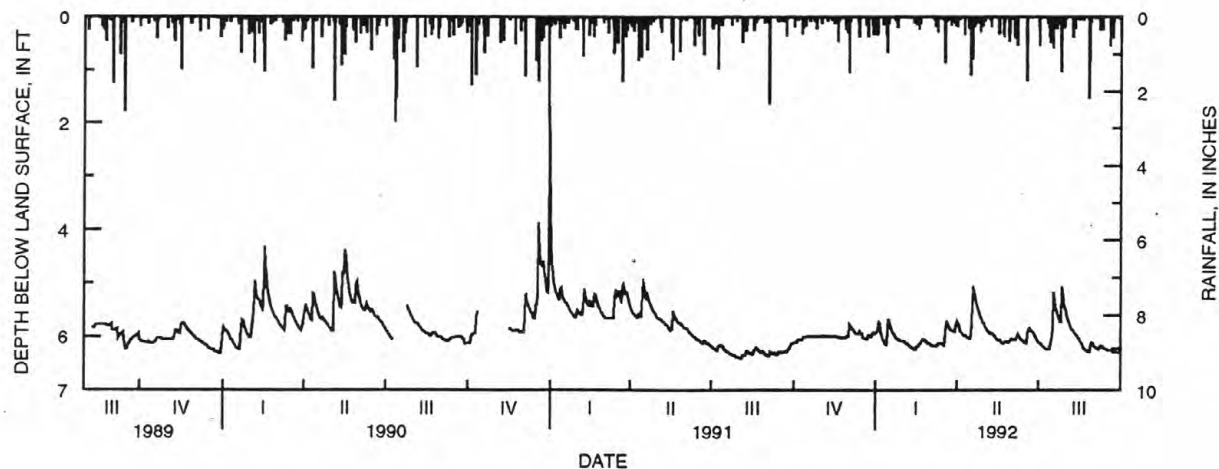
WATER TEMPERATURE.--Maximum, 14.0°C, many days in 1991; minimum, 11.1°C, many days in 1992.

**WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
MAXIMUM VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.11	5.99	5.98	5.93	6.08	6.13	5.71	5.75	6.04	6.10	5.56	6.19
2	6.10	5.98	5.98	5.93	6.09	6.14	5.75	5.79	6.05	6.13	5.63	6.20
3	6.10	5.98	5.78	5.89	6.10	6.16	5.79	5.82	6.06	6.12	5.69	6.22
4	6.10	5.99	5.81	5.75	6.12	6.16	5.84	5.86	6.05	6.14	5.74	6.22
5	6.10	5.99	5.82	5.73	6.13	6.17	5.89	5.88	6.05	6.16	5.78	6.22
6	6.07	5.99	5.85	5.76	6.14	6.18	---	5.90	6.05	6.19	5.83	6.23
7	6.05	5.99	5.87	5.91	6.15	6.17	5.94	5.92	6.02	6.20	5.87	6.22
8	6.05	5.99	5.89	5.98	6.17	6.17	5.97	5.94	5.96	6.20	5.87	6.17
9	6.05	5.99	5.92	6.04	6.19	6.17	5.98	5.93	5.98	6.23	5.91	6.17
10	6.05	5.99	5.94	6.08	6.20	6.16	5.97	5.94	5.99	6.23	5.94	6.19
11	6.04	5.99	5.94	6.12	6.21	6.14	5.98	5.95	6.03	6.24	5.96	6.21
12	6.01	5.99	5.94	6.14	6.22	6.12	6.01	5.97	6.05	6.23	5.98	6.22
13	6.01	5.99	5.94	6.15	6.23	6.12	6.02	5.99	6.07	6.24	5.99	6.23
14	6.01	5.99	5.91	6.10	6.23	6.12	6.02	6.01	6.08	6.20	6.03	6.24
15	6.00	5.99	5.93	5.67	6.23	6.13	6.03	6.03	6.10	6.11	6.04	6.25
16	5.99	5.99	5.94	5.69	6.19	6.14	6.03	6.05	6.11	6.00	6.08	6.26
17	5.99	5.99	5.95	5.76	6.19	6.16	5.97	6.07	6.12	5.85	6.10	6.26
18	5.99	5.99	6.02	5.82	6.17	6.16	5.73	6.07	6.12	5.17	6.14	6.26
19	5.99	---	6.03	5.87	6.14	5.93	5.06	6.07	5.95	5.34	6.17	6.26
20	5.99	6.01	6.03	5.91	6.12	5.75	5.15	6.08	5.87	5.43	6.21	6.26
21	5.99	6.01	6.04	5.94	6.10	5.73	5.23	6.10	5.85	5.49	6.23	6.25
22	5.99	6.02	6.04	5.96	6.08	5.76	5.30	6.12	5.87	5.56	6.25	6.22
23	5.99	6.02	6.04	5.98	6.06	5.81	5.36	6.12	5.88	5.61	6.26	6.22
24	5.99	6.02	5.98	6.02	6.07	5.85	5.43	6.12	5.91	5.67	6.27	6.23
25	5.99	6.02	5.99	6.03	6.07	5.87	5.50	6.10	5.91	5.72	6.29	6.23
26	5.99	6.02	6.00	6.04	6.08	5.88	5.55	6.09	5.95	5.72	6.29	6.22
27	5.99	6.02	6.01	6.06	6.10	5.89	5.61	6.09	5.98	5.07	6.28	6.22
28	5.99	6.02	5.95	6.07	6.11	5.90	5.65	6.11	6.01	5.25	6.14	6.22
29	5.99	6.01	5.93	6.08	6.12	5.91	5.69	6.11	6.04	5.37	6.11	6.22
30	5.99	6.01	5.94	6.08	---	5.91	5.72	6.09	6.07	5.45	6.12	6.21
31	5.99	---	5.94	6.08	---	5.80	---	6.05	---	5.49	6.15	---
MAX	6.11	6.02	6.04	6.15	6.23	6.18	6.03	6.12	6.12	6.24	6.29	6.26
MAX	6.11	6.02	6.04	6.15	6.23	6.18	6.03	6.12	6.12	6.24	6.29	6.26

CAL YR 1991 LOW 6.40

WTR YR 1992 LOW 6.29



WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	---	---	---	---	---	---	14.0	14.0	14.0	13.7	13.7	13.7
2	---	---	---	---	---	---	14.0	13.7	14.0	13.7	13.7	13.7
3	---	---	---	---	---	---	14.0	13.7	13.7	13.7	13.7	13.7
4	---	---	---	---	---	---	14.0	13.7	14.0	13.7	13.7	13.7
5	---	---	---	---	---	---	14.0	14.0	14.0	13.7	13.7	13.7
6	---	---	---	---	---	---	14.0	14.0	14.0	13.7	13.7	13.7
7	---	---	---	---	---	---	14.0	14.0	14.0	13.7	13.7	13.7
8	---	---	---	---	---	---	14.0	14.0	14.0	13.7	13.7	13.7
9	---	---	---	---	---	---	14.0	14.0	14.0	13.7	13.7	13.7
10	---	---	---	---	---	---	14.0	14.0	14.0	13.7	13.7	13.7
11	---	---	---	---	---	---	14.0	14.0	14.0	13.7	13.7	13.7
12	---	---	---	---	---	---	14.0	14.0	14.0	13.7	13.7	13.7
13	---	---	---	---	---	---	14.0	14.0	14.0	13.7	13.7	13.7
14	---	---	---	---	---	---	14.0	14.0	14.0	13.7	13.7	13.7
15	---	---	---	---	---	---	14.0	14.0	14.0	13.7	13.7	13.7
16	---	---	---	---	---	---	14.0	14.0	14.0	13.7	13.7	13.7
17	---	---	---	---	---	---	14.0	14.0	14.0	13.7	13.7	13.7
18	---	---	---	---	---	---	14.0	14.0	14.0	13.7	13.7	13.7
19	---	---	---	---	---	---	14.0	14.0	14.0	13.7	13.7	13.7
20	---	---	---	13.7	13.7	13.7	14.0	14.0	14.0	13.7	13.7	13.7
21	---	---	---	13.7	13.7	13.7	14.0	13.7	13.9	13.7	13.7	13.7
22	---	---	---	13.7	13.7	13.7	14.0	13.7	13.7	13.7	13.7	13.7
23	---	---	---	14.0	13.7	13.8	13.7	13.7	13.7	13.7	13.7	13.7
24	---	---	---	14.0	13.7	14.0	13.7	13.7	13.7	13.7	13.7	13.7
25	---	---	---	14.0	14.0	14.0	13.7	13.7	13.7	13.7	13.7	13.7
26	---	---	---	14.0	13.7	14.0	13.7	13.7	13.7	13.7	13.7	13.7
27	---	---	---	14.0	14.0	14.0	13.7	13.7	13.7	13.7	13.7	13.7
28	---	---	---	14.0	14.0	14.0	13.7	13.7	13.7	13.7	13.7	13.7
29	---	---	---	14.0	14.0	14.0	13.7	13.7	13.7	13.7	13.7	13.7
30	---	---	---	14.0	14.0	14.0	13.7	13.7	13.7	13.7	13.5	13.6
31	---	---	---	---	---	---	13.7	13.7	13.7	13.5	13.5	13.5
MONTH	---	---	---	14.0	13.7	13.9	14.0	13.7	13.9	13.7	13.5	13.7

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	13.5	13.5	13.5	13.0	13.0	13.0	12.0	12.0	12.0	11.3	11.3	11.3
2	13.5	13.5	13.5	13.0	13.0	13.0	12.0	12.0	12.0	11.3	11.3	11.3
3	13.5	13.5	13.5	13.0	13.0	13.0	12.0	12.0	12.0	11.3	11.3	11.3
4	13.5	13.5	13.5	13.0	13.0	13.0	12.0	12.0	12.0	11.3	11.3	11.3
5	13.5	13.5	13.5	13.0	12.8	12.9	12.0	12.0	12.0	11.3	11.3	11.3
6	13.5	13.5	13.5	12.8	12.8	12.8	---	---	---	11.3	11.3	11.3
7	13.5	13.5	13.5	12.8	12.8	12.8	12.0	12.0	12.0	11.3	11.3	11.3
8	13.5	13.5	13.5	12.8	12.8	12.8	12.0	11.8	11.8	11.3	11.1	11.3
9	13.5	13.5	13.5	12.8	12.8	12.8	11.8	11.8	11.8	11.3	11.1	11.1
10	13.5	13.5	13.5	12.8	12.8	12.8	11.8	11.8	11.8	11.3	11.1	11.1
11	13.5	13.5	13.5	12.8	12.8	12.8	11.8	11.8	11.8	11.1	11.1	11.1
12	13.5	13.3	13.4	12.8	12.8	12.8	11.8	11.8	11.8	11.1	11.1	11.1
13	13.3	13.3	13.3	12.8	12.8	12.8	11.8	11.8	11.8	11.1	11.1	11.1
14	13.3	13.3	13.3	12.8	12.8	12.8	11.8	11.8	11.8	11.1	11.1	11.1
15	13.3	13.3	13.3	12.8	12.5	12.6	11.8	11.8	11.8	11.1	11.1	11.1
16	13.3	13.3	13.3	12.5	12.5	12.5	11.8	11.8	11.8	11.1	11.1	11.1
17	13.3	13.3	13.3	12.5	12.5	12.5	11.8	11.8	11.8	11.1	11.1	11.1
18	13.3	13.3	13.3	12.5	12.5	12.5	11.8	11.8	11.8	11.1	11.1	11.1
19	13.3	13.3	13.3	12.5	12.5	12.5	11.8	11.5	11.6	11.1	11.1	11.1
20	13.3	13.3	13.3	12.5	12.5	12.5	11.5	11.5	11.5	11.1	11.1	11.1
21	13.3	13.3	13.3	12.5	12.5	12.5	11.5	11.5	11.5	11.1	11.1	11.1
22	13.3	13.3	13.3	12.5	12.3	12.5	11.5	11.5	11.5	11.1	11.1	11.1
23	13.3	13.0	13.3	12.3	12.3	12.3	11.5	11.5	11.5	11.1	11.1	11.1
24	13.3	13.0	13.0	12.3	12.3	12.3	11.5	11.3	11.4	11.1	11.1	11.1
25	13.0	13.0	13.0	12.3	12.3	12.3	11.3	11.3	11.3	11.1	11.1	11.1
26	13.0	13.0	13.0	12.3	12.3	12.3	11.3	11.3	11.3	11.1	11.1	11.1
27	13.0	13.0	13.0	12.3	12.3	12.3	11.3	11.3	11.3	11.1	11.1	11.1
28	13.0	13.0	13.0	12.3	12.3	12.3	11.3	11.3	11.3	11.1	11.1	11.1
29	13.0	13.0	13.0	12.3	12.3	12.3	11.3	11.3	11.3	11.1	11.1	11.1
30	---	---	---	12.3	12.3	12.3	11.3	11.3	11.3	11.1	11.1	11.1
31	---	---	---	12.3	12.0	12.2	---	---	---	11.1	11.1	11.1
MONTH	13.5	13.0	13.3	13.0	12.0	12.6	12.0	11.3	11.7	11.3	11.1	11.2

154 GROUND-WATER RECORDS FOR THE WRIGHT PATTERSON AIR FORCE BASE PROJECT--Continued

394851084042300. Local number, GR-210.

LOCATION.--Lat 39°48'51" Long 84°04'23" Hydrologic Unit 05080001, at Wright-Patterson Air Force Base, Ohio.

AQUIFER.--Sand of Pleistocene Age.

WELL CHARACTERISTICS.--Observation well installed by hollow stem auger, diameter 4.0 in. depth 38.0 ft. Cased with stainless steel to 33.0 ft; .010 in screen from 33.0 to 38.0 ft, bentonite seal.

INSTRUMENTATION.--Recorder -- 60-minute record. Also collected: Water level and water temperature.

DATUM.--Elevation of land-surface datum is 796.07 feet above National Geodetic Vertical datum of 1929 (NGVD of 1929). Measuring point: Floor of shelter 2.97 ft above land-surface datum.

PERIOD OF RECORD.--August 1989 to current year.

PERIOD OF DAILY RECORD.--

Water level: August 1989 to current year.

Water temperature: November 1991 to current year.

EXTREMES FOR PERIOD OF RECORD.--Water level: Maximum daily low, 5.46 ft below land-surface datum,

August 25, 26, 1992; minimum daily low, 1.23 ft below land-surface datum, December 31, 1990.

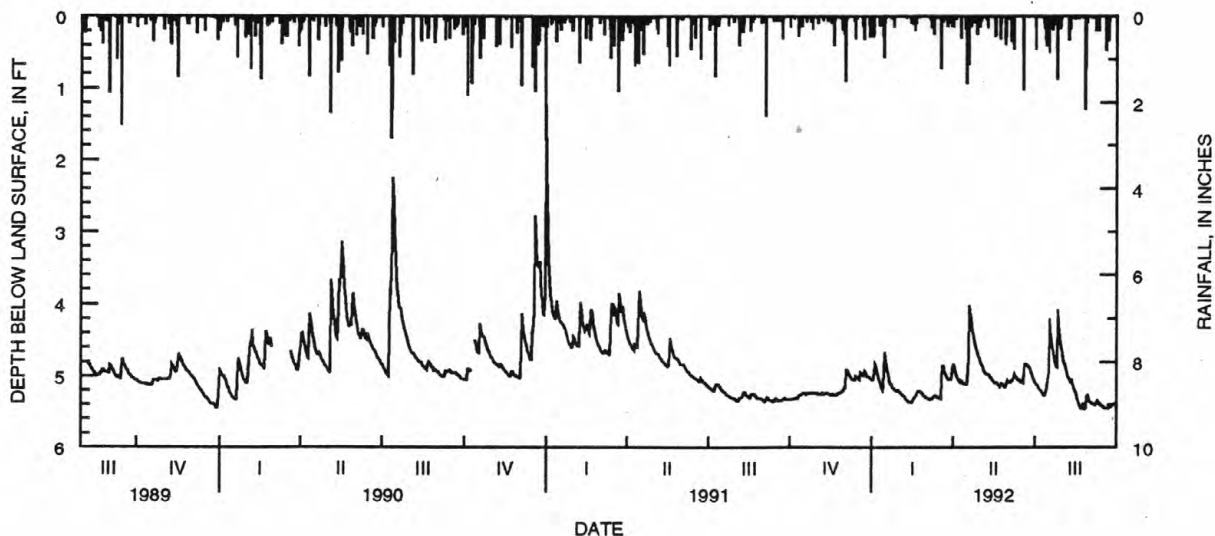
Water temperature: Maximum, 14.0°C, many days in 1991; minimum, 11.9°C, many days in 1992.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.33	5.24	5.16	5.06	5.23	5.29	4.83	4.79	5.08	5.09	4.68	5.37
2	5.33	5.25	5.16	5.06	5.24	5.30	4.88	4.82	5.08	5.11	4.77	5.37
3	5.33	5.25	4.91	5.03	5.25	5.31	4.91	4.86	5.09	5.12	4.80	5.39
4	5.33	5.25	4.91	4.83	5.26	5.32	4.96	4.88	5.09	5.14	4.84	5.39
5	5.32	5.25	4.93	4.85	5.27	5.32	5.01	4.91	5.07	5.15	4.89	5.40
6	5.32	5.24	4.96	4.91	5.28	5.33	---	4.95	5.07	5.17	4.96	5.41
7	5.31	5.25	4.99	4.96	5.30	5.32	5.05	4.96	5.04	5.20	5.02	5.41
8	5.30	5.25	5.01	5.01	5.32	5.32	5.08	4.97	4.97	5.20	5.03	5.37
9	5.31	5.25	5.03	5.07	5.34	5.32	5.09	4.97	4.99	5.24	5.07	5.35
10	5.31	5.24	5.05	5.11	5.34	5.30	5.07	4.97	5.01	5.25	5.08	5.37
11	5.27	5.24	5.06	5.15	5.36	5.28	5.08	4.99	5.03	5.27	5.06	5.39
12	5.26	5.24	5.06	5.18	5.36	5.27	5.11	5.01	5.05	5.27	5.10	5.40
13	5.26	5.24	5.06	5.20	5.36	5.28	5.11	5.03	5.06	5.25	5.15	5.41
14	5.26	5.25	5.00	5.15	5.37	5.29	5.12	5.05	5.06	5.18	5.19	5.42
15	5.24	5.25	5.01	4.67	5.36	5.30	5.12	5.06	5.08	5.14	5.21	5.43
16	5.24	5.26	5.02	4.74	5.33	5.31	5.12	5.08	5.09	5.07	5.24	5.44
17	5.24	5.26	5.03	4.84	5.31	5.31	5.07	5.10	5.09	4.94	5.29	5.45
18	5.24	5.25	5.05	4.92	5.30	5.32	4.74	5.10	5.10	4.21	5.33	5.45
19	5.25	---	4.95	4.97	5.27	5.04	4.02	5.09	4.90	4.39	5.38	5.45
20	5.25	5.26	4.96	5.04	5.25	4.86	4.11	5.10	4.83	4.50	5.42	5.45
21	5.24	5.26	4.98	5.10	5.23	4.86	4.20	5.12	4.83	4.59	5.45	5.45
22	5.24	5.26	4.99	5.12	5.21	4.91	4.30	5.14	4.84	4.67	5.44	5.42
23	5.24	5.25	4.98	5.12	5.21	4.96	4.37	5.15	4.85	4.75	5.41	5.42
24	5.24	5.24	4.93	5.16	5.22	4.99	4.45	5.13	4.87	4.81	5.45	5.43
25	5.24	5.24	4.96	5.17	5.23	5.01	4.52	5.11	4.88	4.87	5.46	5.41
26	5.24	5.24	4.98	5.18	5.24	5.03	4.59	5.12	4.91	4.88	5.46	5.40
27	5.24	5.23	5.01	5.20	5.25	5.05	4.63	5.13	4.95	4.08	5.44	5.39
28	5.24	5.23	5.01	5.21	5.27	5.05	4.68	5.15	4.99	4.30	5.28	5.39
29	5.24	5.21	5.01	5.21	5.28	5.05	4.72	5.15	5.03	4.46	5.27	5.39
30	5.24	5.20	5.03	5.20	---	5.05	4.75	5.13	5.05	4.54	5.30	5.39
31	5.24	---	5.04	5.22	---	4.92	---	5.07	---	4.59	5.34	---
MAX	5.33	5.26	5.16	5.22	5.37	5.33	5.12	5.15	5.10	5.27	5.46	5.45

CAL YR 1991 LOW 5.36

WTR YR 1992 LOW 5.46



WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	---	---	---	---	---	---	14.0	14.0	14.0	13.8	13.8	13.8
2	---	---	---	---	---	---	14.0	14.0	14.0	13.8	13.8	13.8
3	---	---	---	---	---	---	14.0	14.0	14.0	13.8	13.8	13.8
4	---	---	---	---	---	---	14.0	14.0	14.0	13.8	13.8	13.8
5	---	---	---	---	---	---	14.0	14.0	14.0	13.8	13.8	13.8
6	---	---	---	---	---	---	14.0	14.0	14.0	13.8	13.8	13.8
7	---	---	---	---	---	---	14.0	14.0	14.0	13.8	13.8	13.8
8	---	---	---	---	---	---	14.0	14.0	14.0	13.8	13.8	13.8
9	---	---	---	---	---	---	14.0	14.0	14.0	13.8	13.8	13.8
10	---	---	---	---	---	---	14.0	14.0	14.0	13.8	13.8	13.8
11	---	---	---	---	---	---	14.0	14.0	14.0	13.8	13.8	13.8
12	---	---	---	---	---	---	14.0	13.8	14.0	13.8	13.8	13.8
13	---	---	---	---	---	---	14.0	13.8	13.9	13.8	13.8	13.8
14	---	---	---	---	---	---	14.0	13.8	13.9	13.8	13.8	13.8
15	---	---	---	---	---	---	13.8	13.8	13.8	13.8	13.8	13.8
16	---	---	---	---	---	---	13.8	13.8	13.8	13.8	13.8	13.8
17	---	---	---	---	---	---	13.8	13.8	13.8	13.8	13.8	13.8
18	---	---	---	---	---	---	13.8	13.8	13.8	13.8	13.8	13.8
19	---	---	---	---	---	---	13.8	13.8	13.8	13.8	13.8	13.8
20	---	---	---	14.0	14.0	14.0	13.8	13.8	13.8	13.8	13.8	13.8
21	---	---	---	14.0	14.0	14.0	13.8	13.8	13.8	13.8	13.8	13.8
22	---	---	---	14.0	14.0	14.0	13.8	13.8	13.8	14.0	13.8	13.9
23	---	---	---	14.0	14.0	14.0	13.8	13.8	13.8	14.0	14.0	14.0
24	---	---	---	14.0	14.0	14.0	13.8	13.8	13.8	14.0	14.0	14.0
25	---	---	---	14.0	14.0	14.0	13.8	13.8	13.8	14.0	14.0	14.0
26	---	---	---	14.0	14.0	14.0	13.8	13.8	13.8	14.0	14.0	14.0
27	---	---	---	14.0	14.0	14.0	13.8	13.8	13.8	14.0	14.0	14.0
28	---	---	---	14.0	14.0	14.0	13.8	13.8	13.8	14.0	14.0	14.0
29	---	---	---	14.0	14.0	14.0	13.8	13.8	13.8	14.0	14.0	14.0
30	---	---	---	14.0	14.0	14.0	13.8	13.8	13.8	14.0	13.7	14.0
31	---	---	---	---	---	---	13.8	13.8	13.8	14.0	13.7	13.9
MONTH	---	---	---	14.0	14.0	14.0	14.0	13.8	13.9	14.0	13.7	13.9

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	14.0	13.7	13.7	13.3	13.3	13.3	12.8	12.6	12.7	12.1	12.1	12.1
2	13.7	13.7	13.7	13.3	13.3	13.3	12.6	12.6	12.6	12.1	12.1	12.1
3	13.7	13.7	13.7	13.3	13.1	13.2	12.6	12.6	12.6	12.1	12.1	12.1
4	13.7	13.7	13.7	13.3	13.1	13.1	12.6	12.6	12.6	12.1	11.9	12.1
5	13.7	13.7	13.7	13.3	13.1	13.1	12.6	12.6	12.6	12.1	11.9	12.0
6	13.7	13.7	13.7	13.1	13.1	13.1	---	---	---	12.1	11.9	11.9
7	13.7	13.7	13.7	13.1	13.1	13.1	12.6	12.6	12.6	12.1	11.9	11.9
8	13.7	13.7	13.7	13.1	13.1	13.1	12.6	12.6	12.6	12.1	11.9	11.9
9	13.7	13.7	13.7	13.1	13.1	13.1	12.6	12.6	12.6	11.9	11.9	11.9
10	13.7	13.7	13.7	13.1	13.1	13.1	12.6	12.6	12.6	11.9	11.9	11.9
11	13.7	13.7	13.7	13.1	13.1	13.1	12.6	12.4	12.6	11.9	11.9	11.9
12	13.7	13.7	13.7	13.1	13.1	13.1	12.6	12.4	12.5	11.9	11.9	11.9
13	13.7	13.7	13.7	13.1	13.1	13.1	12.6	12.4	12.4	11.9	11.9	11.9
14	13.7	13.7	13.7	13.1	13.1	13.1	12.4	12.4	12.4	11.9	11.9	11.9
15	13.7	13.5	13.7	13.1	13.1	13.1	12.4	12.4	12.4	11.9	11.9	11.9
16	13.7	13.5	13.6	13.1	13.1	13.1	12.4	12.4	12.4	11.9	11.9	11.9
17	13.7	13.5	13.6	13.1	13.1	13.1	12.4	12.4	12.4	11.9	11.9	11.9
18	13.5	13.5	13.5	13.1	13.1	13.1	12.4	12.4	12.4	11.9	11.9	11.9
19	13.5	13.5	13.5	13.1	12.8	13.1	12.4	12.4	12.4	11.9	11.9	11.9
20	13.5	13.5	13.5	13.1	12.8	12.9	12.4	12.4	12.4	11.9	11.9	11.9
21	13.5	13.5	13.5	13.1	12.8	12.8	12.4	12.4	12.4	11.9	11.9	11.9
22	13.5	13.5	13.5	12.8	12.8	12.8	12.4	12.4	12.4	11.9	11.9	11.9
23	13.5	13.5	13.5	12.8	12.8	12.8	12.4	12.1	12.3	11.9	11.9	11.9
24	13.5	13.5	13.5	12.8	12.8	12.8	12.4	12.1	12.1	11.9	11.9	11.9
25	13.5	13.3	13.4	12.8	12.8	12.8	12.1	12.1	12.1	11.9	11.9	11.9
26	13.3	13.3	13.3	12.8	12.8	12.8	12.1	12.1	12.1	11.9	11.9	11.9
27	13.3	13.3	13.3	12.8	12.8	12.8	12.1	12.1	12.1	11.9	11.9	11.9
28	13.3	13.3	13.3	12.8	12.8	12.8	12.1	12.1	12.1	11.9	11.9	11.9
29	13.3	13.3	13.3	12.8	12.8	12.8	12.1	12.1	12.1	11.9	11.9	11.9
30	---	---	---	12.8	12.8	12.8	12.1	12.1	12.1	11.9	11.9	11.9
31	---	---	---	12.8	12.6	12.8	---	---	---	11.9	11.9	11.9
MONTH	14.0	13.3	13.6	13.3	12.6	13.0	12.8	12.1	12.4	12.1	11.9	11.9

GROUND-WATER RECORDS FOR THE WRIGHT PATTERSON AIR FORCE BASE PROJECT--Continued 157

395008084011500. Local number, GR-248.

LOCATION.--Lat 39 50'08" Long 84 01'15", Hydrologic Unit 05080001, at Wright-Patterson Air Force Base, Ohio.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Observation well drilled by cable tool, diameter 4.0 in. depth 31.0 ft. Cased with stainless steel to 21.0 ft; .010 in screen from 21.0 to 31.0 ft, bentonite seal:

INSTRUMENTATION.--Digital recorder -- 60-minute punch.

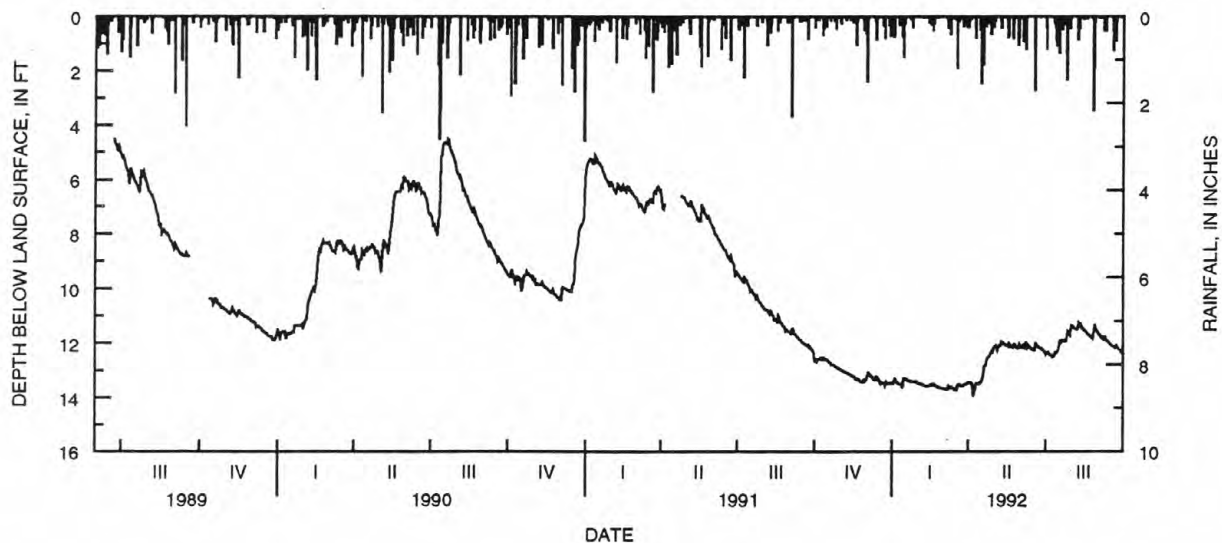
DATUM.--Altitude of land-surface datum is 825.43 Measuring point: Shelter floor 2.32 ft above land-surface datum.

PERIOD OF RECORD.--June 23, 1989 to present.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 12.36 ft below land-surface datum, September 30, 1991; minimum daily low, 4.34 ft below land-surface datum, June 23, 1989.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12.66	12.97	13.33	13.48	13.47	13.67	13.44	12.18	12.10	12.40	11.35	11.63
2	12.68	13.00	13.32	13.49	13.48	13.68	13.43	12.12	12.16	12.37	11.39	11.67
3	12.63	13.01	13.17	13.47	13.49	13.68	13.44	12.12	12.18	12.36	11.42	11.70
4	12.68	13.03	13.11	13.32	13.50	13.70	13.46	12.10	12.18	12.33	11.45	11.75
5	12.61	13.04	13.13	13.33	13.50	13.70	13.47	12.23	12.10	12.38	11.48	11.79
6	12.57	13.07	13.17	13.39	13.51	13.70	13.88	12.14	12.16	12.42	11.49	11.83
7	12.57	13.09	13.20	13.43	13.53	13.70	13.92	12.13	12.10	12.44	11.50	11.85
8	12.56	13.10	13.23	13.45	13.55	13.61	13.83	12.11	11.96	12.47	11.47	11.76
9	12.59	13.11	13.27	13.48	13.57	13.65	13.62	12.08	12.14	12.49	11.25	11.77
10	12.60	13.12	13.30	13.50	13.57	13.66	13.51	11.96	12.07	12.50	11.29	11.88
11	12.52	13.15	13.33	13.52	13.59	13.60	13.48	11.98	12.11	12.45	11.29	11.90
12	12.52	13.16	13.34	13.52	13.59	13.61	13.50	12.00	12.14	12.42	11.37	11.93
13	12.58	13.17	13.35	13.65	13.59	13.65	13.50	12.03	12.16	12.33	11.43	11.96
14	12.61	13.20	13.24	13.52	13.59	13.68	13.46	12.05	12.20	12.33	11.48	12.01
15	12.60	13.22	13.29	13.29	13.56	13.70	13.43	12.07	12.23	12.30	11.51	12.04
16	12.61	13.23	13.33	13.28	13.50	13.71	13.40	12.09	12.25	12.27	11.55	12.06
17	12.65	13.24	13.37	13.32	13.50	13.73	13.39	12.11	12.27	12.18	11.56	12.09
18	12.68	13.26	13.47	13.34	13.54	13.72	13.20	12.12	12.27	11.89	11.59	12.12
19	12.71	13.31	13.44	13.35	13.54	13.57	12.96	12.02	11.99	11.96	11.63	12.12
20	12.73	13.30	13.45	13.37	13.52	13.53	12.87	12.09	12.06	11.99	11.66	12.14
21	12.78	13.31	13.46	13.38	13.54	13.52	12.81	12.12	12.10	11.88	11.70	12.17
22	12.78	13.34	13.46	13.38	13.58	13.52	12.70	12.14	12.13	11.89	11.72	12.11
23	12.80	13.35	13.47	13.39	13.59	13.55	12.58	12.16	12.14	11.94	11.75	12.15
24	12.82	13.38	13.54	13.41	13.61	13.59	12.52	12.09	12.16	11.94	11.77	12.18
25	12.84	13.40	13.43	13.41	13.62	13.57	12.49	12.05	12.16	11.91	11.82	12.23
26	12.86	13.42	13.47	13.41	13.63	13.57	12.45	12.11	12.20	11.92	11.83	12.25
27	12.88	13.43	13.48	13.41	13.64	13.52	12.41	12.15	12.24	11.57	11.72	12.29
28	12.90	13.43	13.47	13.42	13.65	13.50	12.31	12.18	12.27	11.60	11.31	12.34
29	12.93	13.37	13.48	13.42	13.66	13.50	12.24	12.19	12.29	11.62	11.43	12.36
30	12.94	13.39	13.45	13.41	---	13.51	12.36	12.17	12.31	11.69	11.50	12.39
31	12.96	---	13.45	13.45	---	13.46	---	12.04	---	11.45	11.57	---
MAX	12.96	13.43	13.54	13.65	13.66	13.73	13.92	12.23	12.31	12.50	11.83	12.39
CAL YR 1991	LOW 13.54											
WTR YR 1992	LOW 13.92											



WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	---	---	---	---	---	---	---	---	---	15.4	15.1	15.1
2	---	---	---	---	---	---	---	---	---	15.1	15.1	15.1
3	---	---	---	---	---	---	---	---	---	15.1	15.1	15.1
4	---	---	---	---	---	---	---	---	---	15.1	15.1	15.1
5	---	---	---	---	---	---	---	---	---	15.1	15.1	15.1
6	---	---	---	---	---	---	---	---	---	15.1	15.1	15.1
7	---	---	---	---	---	---	---	---	---	15.1	14.9	15.1
8	---	---	---	---	---	---	---	---	---	15.1	14.9	15.0
9	---	---	---	---	---	---	---	---	---	14.9	14.9	14.9
10	---	---	---	---	---	---	---	---	---	14.9	14.9	14.9
11	---	---	---	---	---	---	---	---	---	14.9	14.9	14.9
12	---	---	---	---	---	---	---	---	---	14.9	14.9	14.9
13	---	---	---	---	---	---	---	---	---	14.9	14.9	14.9
14	---	---	---	---	---	---	---	---	---	14.9	14.9	14.9
15	---	---	---	---	---	---	---	---	---	14.9	14.6	14.8
16	---	---	---	---	---	---	---	---	---	14.9	14.6	14.6
17	---	---	---	---	---	---	---	---	---	14.6	14.6	14.6
18	---	---	---	---	---	---	---	---	---	14.6	14.6	14.6
19	---	---	---	---	---	---	15.6	15.6	15.6	14.6	14.6	14.6
20	---	---	---	---	---	---	15.6	15.6	15.6	14.6	14.6	14.6
21	---	---	---	---	---	---	15.6	15.6	15.6	14.6	14.6	14.6
22	---	---	---	---	---	---	15.6	15.4	15.6	14.6	14.6	14.6
23	---	---	---	---	---	---	15.4	15.4	15.4	14.6	14.4	14.6
24	---	---	---	---	---	---	15.4	15.4	15.4	14.6	14.4	14.5
25	---	---	---	---	---	---	15.4	15.4	15.4	14.4	14.4	14.4
26	---	---	---	---	---	---	15.4	15.4	15.4	14.4	14.4	14.4
27	---	---	---	---	---	---	15.4	15.4	15.4	14.4	14.4	14.4
28	---	---	---	---	---	---	15.4	15.4	15.4	14.4	14.4	14.4
29	---	---	---	---	---	---	15.4	15.4	15.4	14.4	14.4	14.4
30	---	---	---	---	---	---	15.4	15.4	15.4	14.4	14.4	14.4
31	---	---	---	---	---	---	15.4	15.1	15.3	14.4	14.2	14.4
MONTH	---	---	---	---	---	---	15.6	15.1	15.5	15.4	14.2	14.7

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	14.4	14.2	14.4	13.4	13.4	13.4	12.7	12.7	12.7	12.0	11.7	12.0
2	14.2	14.2	14.2	13.4	13.2	13.4	12.7	12.5	12.7	12.0	11.7	12.0
3	14.2	14.2	14.2	13.4	13.4	13.4	12.7	12.5	12.7	12.0	11.7	11.9
4	14.2	14.2	14.2	13.4	13.2	13.4	12.7	12.5	12.7	12.0	11.7	12.0
5	14.2	14.2	14.2	13.4	13.2	13.3	12.7	12.5	12.7	12.0	11.7	11.9
6	14.2	14.2	14.2	13.4	13.2	13.3	12.7	12.5	12.7	12.0	11.7	11.9
7	14.2	14.2	14.2	13.4	13.2	13.3	12.7	12.5	12.5	12.0	11.7	11.9
8	14.2	13.9	14.2	13.2	13.2	13.2	12.7	12.5	12.5	12.0	11.7	11.9
9	14.2	13.9	14.2	13.2	13.2	13.2	12.5	12.5	12.5	12.0	11.7	11.8
10	14.2	13.9	14.1	13.2	13.2	13.2	12.5	12.5	12.5	12.0	11.7	11.9
11	14.2	13.9	13.9	13.2	13.2	13.2	12.5	12.5	12.5	12.0	11.7	11.8
12	13.9	13.9	13.9	13.2	12.9	13.2	12.5	12.5	12.5	12.0	11.7	11.8
13	13.9	13.9	13.9	13.2	12.9	13.2	12.5	12.5	12.5	12.0	11.7	11.7
14	13.9	13.9	13.9	13.2	12.9	13.1	12.5	12.2	12.5	12.0	11.7	11.8
15	13.9	13.9	13.9	13.2	12.9	13.1	12.5	12.2	12.5	12.0	11.7	11.8
16	13.9	13.9	13.9	13.2	12.9	13.0	12.5	12.2	12.4	12.0	11.7	11.8
17	13.9	13.7	13.8	12.9	12.9	12.9	12.5	12.2	12.3	12.0	11.7	11.9
18	13.9	13.7	13.8	12.9	12.9	12.9	12.5	12.2	12.2	12.0	11.7	11.8
19	13.7	13.7	13.7	12.9	12.9	12.9	12.2	12.2	12.2	12.0	11.7	11.8
20	13.7	13.7	13.7	12.9	12.9	12.9	12.2	12.0	12.2	12.0	11.7	11.9
21	13.7	13.7	13.7	12.9	12.9	12.9	12.2	12.2	12.2	12.0	11.7	11.9
22	13.7	13.7	13.7	12.9	12.7	12.9	12.2	12.0	12.1	12.0	11.7	11.9
23	13.7	13.7	13.7	12.9	12.7	12.8	12.2	12.0	12.1	12.0	11.7	11.9
24	13.7	13.4	13.6	12.9	12.7	12.9	12.2	12.0	12.0	12.0	11.7	11.9
25	13.7	13.4	13.6	12.9	12.7	12.8	12.0	12.0	12.0	12.0	11.7	11.9
26	13.7	13.4	13.5	12.9	12.7	12.8	12.0	12.0	12.0	12.0	12.0	12.0
27	13.7	13.4	13.4	12.7	12.7	12.7	12.0	12.0	12.0	12.0	12.0	12.0
28	13.4	13.4	13.4	12.7	12.7	12.7	12.0	12.0	12.0	12.0	12.0	12.0
29	13.4	13.4	13.4	12.7	12.7	12.7	12.0	12.0	12.0	12.0	12.0	12.0
30	---	---	---	12.7	12.7	12.7	12.0	12.0	12.0	12.0	12.0	12.0
31	---	---	---	12.7	12.7	12.7	---	---	---	12.0	12.0	12.0
MONTH	14.4	13.4	13.9	13.4	12.7	13.0	12.7	12.0	12.3	12.0	11.7	11.9

SURFACE-WATER IN ACTIVE COAL MINING AREAS OF OHIO

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The following tables list the results of chemical analysis of samples collected from 21 drainage basins in eastern Ohio during the period October 1, 1991 through September 30, 1992. All basins are in Ohio's coal region. These data will be used by the Ohio Department of Natural Resources, Division of Reclamation as base-line information for surface mining permit application and compliance. An asterisk denotes an active gaging station. Refer to report OH-92-1 for detailed flow records.

SURFACE-WATER QUALITY DATA

Date	TIME	DISCHARGE,	SPECIFIC	PH WATER	TEMPER-	ACIDITY	ALKALINITY
		INST. CUBIC		CONDUCTANCE		WHOLE	ATURE
		FEET PER	(US/CM)	(STANDARD	WATER	AS	TOT FET
		SECOND		UNITS)	(DEG C)	CA CO ₃)	FIELD MG/L
							AS CA CO ₃
03109100 M F L BEAVER C NR ROGERS OH (LAT 40 43 22N LONG 080 38 03W)							
OCT 1991 30...	1220	22	1020	8.4	9.0	--	183
03109500* L BEAVER C NR EAST LIVERPOOL OH (LAT 40 40 33N LONG 080 32 27W)							
OCT 1991 30...	1100	59	832	8.4	10.0	--	155
03110000* YELLOW C NR HAMMONDSVILLE OH (LAT 40 32 16N LONG 080 43 31W)							
OCT 1991 30...	0900	35	598	8.1	9.0	--	123
03111500* SHORT C NR DILLONVALE OH (LAT 40 11 36N LONG 080 44 04W)							
OCT 1991 29...	1130	17	2280	8.0	11.0	--	212
03111548* WHEELING C BL BLAINE OH (LAT 40 04 01N LONG 080 48 31W)							
OCT 1991 29...	1000	17	2730	7.9	10.0	--	207
03113550 MCMAHON C AT BELLAIRE OH (LAT 40 00 39N LONG 080 45 45W)							
OCT 1991 29...	0900	5.2	1430	8.0	11.5	--	174
03114000* CAPTINA C AT ARMSTRONGS MILLS OH (LAT 39 54 31N LONG 080 55 27W)							
OCT 1991 28...	1630	4.7	1100	8.3	17.5	--	183
03114250 SUNFISH C AT CAMERON OH (LAT 39 46 00N LONG 080 56 09W)							
OCT 1991 28...	1500	0.81	535	8.1	17.5	--	174
03116950 NEWMAN C NR MASSILLON OH (LAT 40 49 22N LONG 081 33 06W")							
OCT 1991 29...	1145	1.7	845	7.8	13.0	--	311
03117500* SANDY C AT WAYNESBURG OH (LAT 40 40 21N LONG 081 15 36W)							
OCT 1991 29...	0930	23	735	7.6	11.5	--	162
03123000 SUGAR C AB BEACH CITY DAM AT BEACH CITY OH (LAT 40 39 24N LONG 081 34 37W)							
OCT 1991 29...	1250	12	885	7.8	14.0	--	268
03127500* STILLWATER C AT UHRICHSVILLE OH (LAT 40 23 10N LONG 081 20 50W)							
OCT 1991 28...	1510	19	1150	7.6	14.0	--	277
03129100 WHITE EYES C NR FRESNO OH (LAT 40 18 17N LONG 081 45 01W)							
OCT 1991 28...	1325	1.3	480	7.3	15.0	--	122

SURFACE-WATER IN ACTIVE COAL MINING AREAS OF OHIO

SURFACE-WATER QUALITY DATA -- Continued

DATE	SULFATE DISSOLVED (MG/L AS SO ₄)	ALUMINUM, TOTAL RECOV- ERABLE (UG/L AS AL)	ALUMINUM, DISSOLVED (UG/L AS AL)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)
OCT 1991 30...	180	90	10	230	20	70	40
OCT 1991 30...	170	20	10	60	<10	30	20
OCT 1991 30...	190	50	20	100	<10	60	20
OCT 1991 29...	1200	180	90	290	<10	30	30
OCT 1991 29...	1300	80	60	3900	<10	170	130
OCT 1991 29...	570	80	20	340	<10	40	30
OCT 1991 28...	240	50	<10	90	20	20	10
OCT 1991 28...	59	30	<10	20	<10	<10	20
OCT 1991 29...	93	150	<10	550	40	270	280
OCT 1991 29...	180	110	20	450	20	360	360
OCT 1991 29...	49	490	<10	1500	200	640	640
OCT 1991 28...	460	110	10	320	50	600	620
OCT 1991 28...	80	100	20	4300	1500	2900	3100

SURFACE-WATER QUALITY DATA -- Continued

DATE	TIME	DISCHARGE, INST. CUBIC FEET PER SECOND	SPECIFIC CONDUCTANCE (US/CM)	PH WATER WHOLE FIELD (STANDARD UNITS)	TEMPERATURE WATER (DEG C)	ACIDITY (MG/L AS CA _{CO} ₃)	ALKALINITY WAT WH TOT FET FIELD MG/L AS CA _{CO} ₃
03140000* MILL C NR COSHOCTON OH (LAT 40 21 46N LONG 081 51 45W)							
OCT 1991 28...	1225	0.62	450	7.4	14.5	--	132
03148400 MOXAHALA C AT ROBERTS OH (LAT 39 51 17N LONG 082 03 23W)							
OCT 1991 24...	1255	9.7	2180	3.2	15.0	150	--
03149500 SALT C NR CHANDLERSVILLE OH (LAT 39 54 31N LONG 081 51 38W)							
OCT 1991 24...	1010	0.21	750	7.6	14.0	--	139
03150250 MEIGS C NR BEVERLY OH (LAT 39 36 00N LONG 081 42 42W)							
OCT 1991 23...	1400	2.2	2100	7.7	13.5	--	167
03156700 RUSH C NR SUGAR GROVE OH (LAT 39 38 18N LONG 082 30 42W)							
OCT 1991 25...	1315	11	755	7.2	17.0	--	138
03157000* CLEAR C NR ROCKBRIDGE OH (LAT 39 35 18N LONG 082 34 43W)							
OCT 1991 25...	1200	18	331	7.8	15.0	--	161
03158195 SNOW F MONDAY C AT BUCHTEL OH (LAT 39 27 51N LONG 082 10 16W)							
NOV 1991 01...	1440	2.4	1750	2.7	12.5	332	--
03158200 MONDAY C AT DOANVILLE OH (LAT 39 26 07N LONG 082 11 30W)							
OCT 1991 23...	1015	4.9	1350	3.3	9.5	143	--
03160050 LEADING C NR MIDDLEPORT OH (LAT 39 00 31N LONG 082 05 07W)							
OCT 1991 24...	1345	2.0	5170	7.4	16.5	--	105
03160105 CAMPAIGN C NR GALLIPOLIS OH (LAT 38 53 51N LONG 082 11 31W)							
OCT 1991 24...	1500	0.17	830	7.1	19.5	--	57
03201988 L RACCOON C NR VINTON, OH (LAT 38 57 11N LONG 082 21 56W)							
OCT 1991 25...	0900	8.6	662	6.0	12.5	9.0	13
382715082242400 INDIAN GUYAN C NR BRADRIK OH (LAT 38 27 15N LONG 082 24 24W)							
OCT 1991 24...	1145	0.70	713	7.0	14.5	--	94
383005082280600 SYMMES C NR GETAWAY OH (LAT 38 30 05N LONG 082 28 06W)							
OCT 1991 24...	1045	3.3	395	6.8	12.0	--	66

SURFACE-WATER IN ACTIVE COAL MINING AREAS OF OHIO

SURFACE-WATER QUALITY DATA -- Continued

DATE	SULFATE DISSOLVED (MG/L AS SO ₄)	ALUMINUM, TOTAL RECOV- ERABLE (UG/L AS AL)	ALUMINUM, DISSOLVED (UG/L AS AL)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)
OCT 1991 28...	40	200	<10	1800	140	340	370
OCT 1991 24...	1400	11000	12000	8300	8400	15000	17000
OCT 1991 24...	170	420	<10	1500	100	970	950
OCT 1991 23...	1100	70	<10	130	<10	100	100
OCT 1991 25...	180	120	10	320	160	390	360
OCT 1991 25...	25	130	<10	240	130	90	60
NOV 1991 01...	800	32000	35000	15000	16000	5700	6300
OCT 1991 23...	560	16000	17000	4700	5000	4300	4200
OCT 1991 24...	2100	230	20	230	140	2400	2500
OCT 1991 24...	350	240	<10	730	50	790	720
OCT 1991 25...	310	970	80	2500	180	3100	3000
OCT 1991 24...	270	70	<10	530	440	630	640
OCT 1991 24...	110	110	10	930	660	360	390

SURFACE-WATER QUALITY DATA -- Continued

DATE	TIME	DISCHARGE, INST. CUBIC FEET PER SECOND	SPECIFIC CONDUCTANCE (US/CM)	PH WATER WHOLE FIELD (STANDARD UNITS)	TEMPERATURE WATER (DEG C)	ACIDITY (MG/L AS CACO ₃)	ALKALINITY WAT WH TOT FET FIELD MG/L AS CACO ₃	
OCT 1991 25...	0815	385826082201800 RACCOON C AT VINTON OH (LAT 38 58 26N LONG 082 20 18W)	4.1	498	6.5	12.0	--	30
NOV 1991 01...	0830	390017082042700 THOMAS F NR MIDDLEPORT OH (LAT 39 00 17N LONG 082 04 27W)	1.2	1750	3.5	9.5	166	--
NOV 1991 01...	0925	390134082081300 L LEADING C NR RUTLAND OH (LAT 39 01 34N LONG 082 08 13W)	0.15	765	7.4	10.0	--	104
NOV 1991 01...	1025	390222082093300 O84 LEADING C NR RUTLAND OH (LAT 39 02 22N LONG 082 09 33W)	1.1	6250	7.2	11.0	--	137
OCT 1991 25...	1015	390941082212200 ELK F NR RADCLIFF OH (LAT 39 09 41N LONG 082 21 22W)	0.64	630	6.6	13.0	--	66
NOV 1991 01...	1230	391809082083700 MARGARET C NR ATHENS OH (LAT 39 18 09N LONG 082 08 37W)	0.31	665	7.2	12.5	--	181
OCT 1991 23...	1125	392342082072000 SUNDAY C AT CHAUNCEY OH (LAT 39 23 42N LONG 082 07 20W)	7.4	2030	2.9	10.5	183	--
NOV 1991 01...	1515	392540082124800 MINKERS RUN NR NELSONVILLE OH (LAT 39 25 40N LONG 082 12 48W)	0.52	1450	3.2	12.5	307	--
NOV 1991 01...	1615	392928082214200 FIVE MILE C NR LOGAN OH (LAT 39 29 28N LONG 082 21 42W)	0.08	685	7.4	13.0	--	160
NOV 1991 01...	1650	393052082252800 SCOTT C NR LOGAN OH (LAT 39 30 52N LONG 082 25 28W)	0.08	425	7.0	12.5	--	168
NOV 1991 01...	1345	393107082051000 W B SUNDAY C NR OAKDALE OH (LAT 39 31 07N LONG 082 05 10W)	2.8	930	6.7	12.5	--	36
OCT 1991 31...	1725	393333081475400 BALD EAGLE RN NR STOCKPORT OH (LAT 39 33 33N LONG 081 47 54W)	0.06	690	8.0	13.5	--	292
OCT 1991 31...	1625	393754081431700 DYES F NR UNIONVILLE OH (LAT 39 37 54N LONG 081 43 17W)	1.3	2400	8.1	14.5	--	202

SURFACE-WATER IN ACTIVE COAL MINING AREAS OF OHIO

SURFACE-WATER QUALITY DATA -- Continued

DATE.	SULFATE DISSOLVED (MG/L AS SO4)	ALUMINUM, TOTAL RECOV- ERABLE (UG/L AS AL)	ALUMINUM, DISSOLVED (UG/L AS AL)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)
OCT 1991 25...	200	110	20	720	310	630	630
NOV 1991 01...	850	18000	20000	2100	2100	8100	8100
NOV 1991 01...	210	30	30	80	20	180	140
NOV 1991 01...	2700	50	10	610	350	6400	6700
OCT 1991 25...	230	90	30	840	740	2400	2600
NOV 1991 01...	65	100	<10	2500	950	4500	4700
OCT 1991 23...	770	1800	1800	48000	53000	3500	3700
NOV 1991 01...	780	5100	5100	4100	3300	5300	5600
NOV 1991 01...	140	80	<10	720	60	550	490
NOV 1991 01...	8.5	20	<10	1200	140	3700	3400
NOV 1991 01...	440	30	<10	120	20	90	100
OCT 1991 31...	47	100	<10	170	<10	40	20
OCT 1991 31...	1200	60	<10	120	10	60	50

SURFACE-WATER IN ACTIVE COAL MINING AREAS OF OHIO

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SURFACE-WATER QUALITY DATA -- Continued

DATE	TIME	DISCHARGE, INST. CUBIC FEET PER SECOND	SPECIFIC CONDUCTANCE (US/CM)	PH WATER WHOLE FIELD (STANDARD UNITS)	TEMPERATURE WATER (DEG C)	ACIDITY (MG/L AS CACO ₃)	ALKALINITY WAT WH TOT FET FIELD MG/L AS CACO ₃
OCT 1991 31...	1530	394117081452200 0.01	MANS F NR MEIGS OH (LAT 39 41 17N LONG 081 45 22W) 2100	7.8	14.5	--	198
OCT 1991 31...	1500	394130081450700 0.01	MEIGS C NR MEIGS OH (LAT 39 41 30N LONG 081 45 07W) 1200	8.1	15.0	--	247
OCT 1991 31...	1140	395120081590700 0.53	BRUSH C NR PHILO OH (LAT 39 51 20N LONG 081 59 07W) 2100	3.5	15.0	112	--
OCT 1991 24...	1345	395214082054700 4.1	JONATHAN C AT WHITE COTTAGE OH (LAT 39 52 14N LONG 082 05 47W) 2180	7.7	14.5	--	72
OCT 1991 31...	1315	395329081530800 0.19	BOGGS C NR DUNCAN FALLS OH (LAT 39 53 29N LONG 081 53 08W) 610	8.1	15.0	--	237
OCT 1991 24...	1200	395337082011100 12	MOXAHALA C NR DARLINGTON OH (LAT 39 53 37N LONG 082 01 11W) 2000	4.5	14.0	50	--
OCT 1991 23...	1600	395417081323000 5.3	WILLS C AT PLEASANT CITY OH (LAT 39 54 17N LONG 081 32 30W) 3350	7.9	13.0	--	391
OCT 1991 23...	1700	400117081362600 0.56	CROOKED C NR CAMBRIDGE OH (LAT 40 01 17N LONG 081 36 26W) 1220	7.6	13.5	--	199
OCT 1991 28...	0915	400710082081000 8.0	WAKATOMIKA C NR FRAZEYSBURG OH (LAT 41 06 16N LONG 082 07 55W) 415	7.3	14.5	--	122
OCT 1991 28...	1015	400912082014700 5.3	LITTLE WAKATOMIKA C NR TRINWAY OH (LAT 40 09 12N LONG 082 01 47W) 2000	7.2	14.0	--	78
OCT 1991 24...	0840	400920081432900 2.1	WHITE EYES C NR PLAINFIELD OH (LAT 40 09 20N LONG 081 43 29W) 1350	7.2	12.0	--	89
OCT 1991 28...	1420	401624081363400 1.1	BUCKHORN C AT NEWCOMERSTOWN OH (LAT 40 16 24N LONG 081 36 34W) 575	7.4	15.0	--	139
OCT 1991 29...	1300	401716080451300 6.4	MCINTYRE C NR SMITHFIELD OH (LAT 40 17 16N LONG 080 45 13W) 2300	8.2	12.0	--	192

SURFACE-WATER IN ACTIVE COAL MINING AREAS OF OHIO

SURFACE-WATER QUALITY DATA -- Continued

DATE	SULFATE DISSOLVED (MG/L AS SO4)	ALUMINUM, TOTAL RECOVER- ABLE (UG/L AS AL)	ALUMIN- UM, DISSOLVED (UG/L AS AL)	IRON, TOTAL RECOVER- ABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, TOTAL RECOVER- ABLE (UG/L AS MN)	MANGAN- ESE, DISSOLVED (UG/L AS MN)
	394117081452200 MANS F NR MEIGS OH (LAT 39 41 17N LONG 081 45 22W)						
OCT 1991 31...	1300	190	<10	370	<10	330	280
	394130081450700 MEIGS C NR MEIGS OH (LAT 39 41 30N LONG 081 45 07W)						
OCT 1991 31...	470	370	<10	450	<10	<160	100
	395120081590700 BRUSH C NR PHILO OH (LAT 39 51 20N LONG 081 59 07W)						
OCT 1991 31...	1100	12000	12000	1900	1900	8700	9300
	395214082054700 JONATHAN C AT WHITE COTTAGE OH (LAT 39 52 14N LONG 082 05 47W)						
OCT 1991 24...	1100	150	40	70	10	4900	4900
	395329081530800 BOGGS C NR DUNCAN FALLS OH (LAT 39 53 29N LONG 081 53 08W)						
OCT 1991 31...	90	30	30	60	<10	40	50
	395337082011100 MOXAHALA C NR DARLINGTON OH (LAT 39 53 37N LONG 082 01 11W)						
OCT 1991 24...	1100	7500	7100	440	270	11000	11000
	395417081323000 WILLS C AT PLEASANT CITY OH (LAT 39 54 17N LONG 081 32 30W)						
OCT 1991 23...	1700	310	10	310	<10	110	60
	400117081362600 CROOKED C NR CAMBRIDGE OH (LAT 40 01 17N LONG 081 36 26W)						
OCT 1991 23...	350	210	<10	640	50	1300	1300
	400710082081000 WAKATOMIKA C NR FRAZEYSBURG OH (LAT 41 06 16N LONG 082 07 55W)						
OCT 1991 28...	19	270	40	870	280	270	270
	400912082014700 LITTLE WAKATOMIKA C NR TRINWAY OH (LAT 40 09 12N LONG 082 01 47W)						
OCT 1991 28...	1300	120	<10	260	70	1200	1300
	400920081432900 WHITE EYES C NR PLAINFIELD OH (LAT 40 09 20N LONG 081 43 29W)						
OCT 1991 24...	620	160	<10	920	360	840	890
	401624081363400 BUCKHORN C AT NEWCOMERSTOWN OH (LAT 40 16 24N LONG 081 36 34W)						
OCT 1991 28...	110	140	10	370	240	2500	2600
	401716080451300 MCINTYRE C NR SMITHFIELD OH (LAT 40 17 16N LONG 080 45 13W)						
OCT 1991 29...	1200	50	50	60	10	50	50

SURFACE-WATER QUALITY DATA -- Continued

DATE	TIME	DISCHARGE, INST. CUBIC FEET PER SECOND	SPECIFIC CONDUCTANCE (US/CM)	PH WATER WHOLE FIELD (STANDARD UNITS)	TEMPER- ATURE WATER (DEG C)	ACIDITY (MG/L AS CACO ₃)	ALKALINITY WAT WH TOT FET FIELD MG/L AS CACO ₃	
OCT 1991 29...	1400	401857080391700 CROSS C NR MINGO JUNCTION OH (LAT 40 18 57N LONG 080 39 17W)	12	1880	8.3	12.0	--	152
OCT 1991 28...	1125	401936082001400 SIMMONS RN NR WARSAW OH (LAT 40 19 36N LONG 082 00 14W)	0.85	1700	7.4	14.0	--	110
OCT 1991 29...	0825	403426081211900 CONOTTON C NR SOMERDALE OH (LAT 40 34 26N LONG 081 21 19W)	16	615	7.1	12.0	--	112
OCT 1991 29...	1030	403823081213700 NIMISHILLEN CR AT SANDYVILLE OH (LAT 40 38 23N LONG 081 21 37W)	62	1480	7.8	13.5	--	274

DATE	SULFATE DISSOLVED (MG/L AS SO ₄)	ALUMINUM, TOTAL RECOVER- ABLE (UG/L AS AL)	ALUMINUM DISSOLVED (UG/L AS AL)	IRON, TOTAL RECOVER- ABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, TOTAL RECOVER- ABLE (UG/L AS MN)	MANGANESE DISSOLVED (UG/L AS MN)
OCT 1991 29...	810	500	<10	750	<10	140	40
OCT 1991 28...	1100	180	<10	330	<10	200	190
OCT 1991 29...	170	330	20	2300	710	3400	3600
OCT 1991 29...	180	80	10	200	<10	60	60

The following tables contain ground water-level measurements and chemical analyses from a network of wells and two surface-water sites in southern Franklin County. The data were collected as part of a cooperative study with the City of Columbus. The objective of the study is to present estimates of ground-water travel times and flow paths under transient flow to determine the zone of contribution to the City of Columbus' South Well Field. The five digit parameter codes (in parentheses) in the water-quality reports are defined in WATSTORE.

394957083002900. SCIOTO RIVER AT ROUTE 665 AT SHADEVILLE.

LOCATION.--Lat 39°49'57", long 83°00'29", Hydrologic Unit 05060001, north side of Rt. 665 bridge over the Scioto River, 0.1 mi west of Shadeville.

PERIOD OF RECORD.--Aug. 1987 intermittently to current year.

REMARKS.--This site is used for chemical-quality sampling only as part of a cooperative study with the City of Columbus. A "K" associated with bacteriologic data indicates non-ideal colony counts.

WATER QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	DIS-CHARGE, IN CUBIC FEET PER SECOND (00060)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	HYDRO-GEN PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	SULFIDE TOTAL (MG/L AS H2S) (71875)	COLI-FORM, TOTAL, IMMED. MEM.FIL (COLS./100 ML) (31504)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML) (31625)	STREP-TOCOCCI, FECAL, KF AGAR (COLS. PER 100 ML) (31673)	ACIDITY (MG/L AS H) (71825)
MAR 23...		809	7.7	5.5	16.6	<0.5	--	700	K150	0.2
SEP 09...	684	756	8.0	24.0	8.1	--	--	1000	410	<0.1
DATE	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	BICAR-BONATE IT-FLD (MG/L AS HCO3) (99440)	CAR-BONATE IT-FLD (MG/L AS CO3) (99445)	ALKA-LINITY, CARBON-ATE IT-FLD (MG/L AS CAC03) (99430)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)
MAR 23...	83	25	36	3.9	187	0	153	150	65	0.20
SEP 09...	82	24	35	6.2	190	0	156	150	51	0.40
DATE	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AMMONIA + ORGANIC DIS-SOLVED (MG/L AS N) (00623)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE) (01010)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	COBALT, DIS-SOLVED (UG/L AS CO) (01035)
MAR 23...	4.0	493	6.50	0.080	0.80	0.150	48	0.6	<1.0	<3
SEP 09...	6.4	485	3.30	0.030	0.80	0.640	41	<0.5	<1.0	<3
DATE	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	LITHIUM DIS-SOLVED (UG/L AS LI) (01130)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO) (01060)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)	VANA-DIUM, DIS-SOLVED (UG/L AS V) (01085)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)
MAR 23...	<10	33	<10	10	6	<10	2000	<6	6	5.8
SEP 09...	<10	21	<10	10	6	20	1800	<6	11	6.0

395000082593400. BIG WALNUT CREEK NEAR FR-126 NEAR SHADEVILLE.

LOCATION.--Lat 39°50'00", long 82°59'34", Hydrologic Unit 05060001, 0.15 mi north of Rt. 665 bridge over Big Walnut Creek, 0.5 mi east-northeast of Shadeville.

PERIOD OF RECORD.--June 1984 intermittently to current year.

REMARKS.--This site is used for chemical-quality sampling only as part of a cooperative study with the City of Columbus. A "K" associated with bacteriological data indicates non-ideal colony counts.

WATER QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	DIS-CHARGE, IN CUBIC FEET PER SECOND (00060)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	HYDRO-GEN PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	SULFIDE TOTAL (MG/L AS H2S) (71875)	COLI-FORM, TOTAL, IMMED. MEM.FIL (COLS./100 ML) (31504)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML) (31625)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	ACIDITY (MG/L AS H) (71825)
MAR 23...		715	7.2	5.5	--	<0.5	--	K93	K33	0.2
SEP 09...	116	803	8.1	24.5	7.6	--	--	73	79	<0.1
09...	116	803	8.1	24.5	7.6	--	--	73	79	<0.1
DATE	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	BICAR-BONATE IT-FLD (MG/L AS HCO3) (99440)	CAR-BONATE IT-FLD (MG/L AS CO3) (99445)	ALKA-LINITY, CARBON-ATE IT-FLD (MG/L AS CAC03) (99430)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)
MAR 23...	73	20	33	3.0	223	0	183	93	70	<0.10
SEP 09...	88	28	37	4.3	293	0	240	97	67	0.20
09...	89	28	37	4.1	293	0	240	97	68	0.30
DATE	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE qAT 180 DEG. C DIS-SOLVED (MG/L) (70300)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC DIS-SOLVED (MG/L AS N) (00623)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	BAR-IUM, DIS-SOLVED (UG/L AS BA) (01005)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE) (01010)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	COBALT, DIS-SOLVED (UG/L AS CO) (01035)
MAR 23...	5.5	409	3.80	0.140	0.70	0.030	68	<0.5	<1.0	<3
SEP 09...	9.5	502	1.30	0.030	0.40	0.070	110	<0.5	<1.0	<3
09...	6.9	497	0.60	0.030	0.30	0.060	100	<0.5	<1.0	<3
DATE	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	LITHIUM DIS-SOLVED (UG/L AS LI) (01130)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO) (01060)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)	VANA-DIUM, DIS-SOLVED (UG/L AS V) (01085)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)
MAR 23...	<10	35	<10	7	47	<10	370	<6	12	5.3
SEP 09...	<10	6	<10	6	19	10	560	<6	3	4.2
09...	<10	7	<10	7	21	10	560	<6	<3	3.7

395134083010000. Local number FR-100.

LOCATION.--Lat 39°51'34", long 83°01'00", Hydrologic Unit 05060001.

Owner.--City of Columbus.

AQUIFER.--Sand and gravel of Quaternary Age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 12 in., depth 56.8 ft.

INSTRUMENTATION - Periodic measurement with steel tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 688 feet above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.47 ft above land-surface datum.

PERIOD OF RECORD.--July 1975 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.72 ft below land-surface datum, Mar. 31, 1980; lowest measured, 34.71 ft below land-surface datum, Dec. 11, 1991.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

	WATER LEVEL		WATER LEVEL		WATER LEVEL		WATER LEVEL
DEC 11	34.71	MAR 16	34.22	JUN 11	30.18	SEP 30	16.18

395114083010500. Local number, FR-101 TH41.

LOCATION.--Lat 39°51'14", long 83°01'05", Hydrologic Unit 05060001.

Owner.--City of Columbus

AQUIFER.--Sand and gravel of Quaternary Age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 12 in., depth 82 ft.

INSTRUMENTATION - Periodic measurement with steel tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 685.6 feet above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.90 ft above land-surface datum

PERIOD OF RECORD.--Dec. 1989 to current year

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 8.62 ft below land-surface datum, July 28, 1992; lowest measured, 54.27 ft below land-surface datum, Mar. 16, 1992.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

	WATER LEVEL		WATER LEVEL		WATER LEVEL
DEC 11	38.87	MAR 16	54.27	JUL 28	8.62

395116083010400. Local number, FR-101 TH42.

LOCATION.--Lat 39°51'16", long 83°01'04", Hydrologic Unit 05060001.

Owner.--City of Columbus.

AQUIFER.--Sand and gravel of Quaternary Age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 12 in., depth 81 ft.

INSTRUMENTATION - Periodic measurement with steel tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 687.3 feet above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing 2.10 ft above land-surface datum

PERIOD OF RECORD.--Dec. 1989 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 20.13 ft below land-surface datum, Mar. 19, 1991; lowest measured, 35.33 ft below land-surface datum, June 11, 1992.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

	WATER LEVEL		WATER LEVEL		WATER LEVEL		WATER LEVEL		WATER LEVEL
DEC 11	28.86	MAR 16	33.81	JUN 11	35.33	JUL 28	34.54	SEP 30	32.26

395114083010201. Local number, FR-101 TH46.

LOCATION.--Lat 39°51'14", long 83°01'02", Hydrologic Unit 05060001.

Owner.--City of Columbus.

AQUIFER.--Sand and gravel of Quaternary Age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 12 in., depth 80 ft.

INSTRUMENTATION - Periodic measurement with steel tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 687.5 feet above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 3.57 ft above land-surface datum.

PERIOD OF RECORD.--May 1981 to current year

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 5.19 ft below land-surface datum, May 19, 1981; lowest measured, 60.69 ft below land-surface datum, Dec. 11, 1991.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

	WATER LEVEL		WATER LEVEL		WATER LEVEL		WATER LEVEL		WATER LEVEL
DEC 11	60.69	MAR 16	56.99	JUN 11	38.92	JUL 28	8.95	SEP 30	23.26

395045083003100. Local number, FR-103, TH11.

LOCATION.--Lat 39°50'45", long 83°00'31", Hydrologic Unit 05060001, near Columbus.

Owner.--City of Columbus.

AQUIFER.--Sand and gravel of Quaternary Age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 6 in., depth 93 ft.

INSTRUMENTATION - Periodic measurement with steel tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 699 feet above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point:

Top of sampler cap, 2.13 ft above land-surface datum.

PERIOD OF RECORD.--Aug. 1982 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 18.00 ft below land-surface datum, May 9, 1983; lowest measured, 75.49 ft below land-surface datum, Dec. 11, 1991.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

	WATER LEVEL		WATER LEVEL		WATER LEVEL		WATER LEVEL		WATER LEVEL
DEC 11	75.49	MAR 16	58.58	JUN 11	62.20	JUL 28	29.95	SEP 30	48.20

395021083002900. Local number, FR-104 TH18

LOCATION.--Lat 39°50'21", long 83°00'29", Hydrologic Unit 05060001.

Owner.--City of Columbus.

AQUIFER.--Sand and gravel of Quaternary Age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 12 in., depth 76 ft.

INSTRUMENTATION - Periodic measurement with steel tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 691 feet above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point:

Top of casing, 3.00 ft above land-surface datum.

PERIOD OF RECORD.--Sept. 1982 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 9.17 ft below land-surface datum, Mar. 26, 1984; lowest measured, 58.23 ft below land-surface datum, Dec. 11, 1991.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

	WATER LEVEL		WATER LEVEL		WATER LEVEL		WATER LEVEL		WATER LEVEL
DEC 11	58.23	MAR 16	56.52	JUN 11	46.69	JUL 28	19.36	SEP 30	34.52

395020083003300. Local number, FR-104 TH72

LOCATION.--Lat 39°50'20", long 83°00'34", Hydrologic Unit 05060001.

Owner.--City of Columbus.

AQUIFER.--Sand and gravel of Quaternary Age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 6 in., depth 100 ft.

INSTRUMENTATION - Periodic measurement with steel tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 680 ft above National Geodetic Vertical Datum of 1929. Measuring point: top of casing, 6.17 ft above land-surface datum.

PERIOD OF RECORD.--Sept. 1982 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.45 ft below land-surface datum, Mar. 26, 1984; lowest measured, 55.37 ft below land-surface datum, Dec. 20, 1990.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

	WATER LEVEL		WATER LEVEL		WATER LEVEL		WATER LEVEL		WATER LEVEL
DEC 11	55.26	MAR 16	52.02	JUN 11	39.91	JUL 28	12.30	SEP 30	29.34

395019083003300. Local number, FR-104 TH-A

LOCATION.--Lat 39°50'19", long 83°00'33", Hydrologic Unit 05060001.

Owner.--City of Columbus

AQUIFER.--Sand and gravel of Quaternary Age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 6 in., depth 79.3 ft.

INSTRUMENTATION - Periodic measurement with steel tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 683 feet above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 3.89 ft above land-surface datum

PERIOD OF RECORD.--Dec. 1989 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 12.67 ft below land-surface datum, July 28, 1992; lowest measured, 53.59 ft below land-surface datum, Dec. 11, 1991.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

	WATER LEVEL		WATER LEVEL		WATER LEVEL		WATER LEVEL		WATER LEVEL
DEC 11	53.59	MAR 16	51.22	JUN 11	39.96	JUL 28	12.67	SEP 30	28.85

395157083003500. Local number, FR-109

LOCATION.--Lat 39°51'57", long 83°00'35", Hydrologic Unit 05060001.

Owner.--City of Columbus.

AQUIFER.--Sand and gravel of Quaternary Age.

WELL CHARACTERISTICS.--Drilled observation water well, depth 92 ft., 2in. PVC.

INSTRUMENTATION - Periodic measurement with steel tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 702.2 feet above National Geodetic Vertical Datum of 1929. Measuring point: Floor of instrument shelter, 30.8 ft above land-surface datum.

PERIOD OF RECORD.--June 1975 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.47 ft above land-surface datum, Sept. 05, 1990; lowest measured, 30.56 ft below land-surface datum, Aug. 05, 1988.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

	WATER LEVEL		WATER LEVEL		WATER LEVEL		WATER LEVEL		WATER LEVEL
DEC 11	0.93	MAR 16	1.33	JUN 12	0.81	JUL 28	0.35	SEP 30	0.99

395016083010300. Local number, FR-116, M1.

LOCATION.--Lat 39°50'06", long 83°01'36", Hydrologic Unit 05060001.

Owner.--Jackson Township.

AQUIFER.--Sand and gravel of Quaternary Age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 2 in., depth 62 ft.

INSTRUMENTATION - Periodic measurement with steel tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 725 feet above National Geodetic Vertical Datum of 1929. Measuring point: Top of plastic pipe, 2.5 ft above land-surface datum.

PERIOD OF RECORD.--Apr. 1982 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 21.48 ft below land-surface datum, Mar. 26, 1984; lowest measured, 28.29 ft below land-surface datum, Dec. 10, 1991.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

	WATER LEVEL		WATER LEVEL		WATER LEVEL		WATER LEVEL		WATER LEVEL
DEC 10	28.29	MAR 16	26.85	JUN 12	24.49	JUL 28	23.27	SEP 30	24.44

395016083010300. Local number, FR-117, M2.

LOCATION.--Lat 39°50'16", long 83°01'03", Hydrologic Unit 05060001.

Owner.--Jackson Township.

AQUIFER.--Clay, sand, and gravel of Quaternary Age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 2 in., depth 45 ft.

INSTRUMENTATION - Periodic measurement with steel tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 700 feet above National Geodetic Vertical Datum of 1929. Measuring point: Top of 2-inch steel pipe, 3.08 ft above land-surface datum.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 13.02 ft below land-surface datum, June 17, 1981; lowest measured, 24.15 ft below land-surface datum, Dec. 10, 1991.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

	WATER LEVEL		WATER LEVEL		WATER LEVEL		WATER LEVEL		WATER LEVEL
DEC 10	24.15	MAR 16	23.60	JUN 12	21.37	JUL 28	17.63	SEP 30	19.58

395117083011600. Local number, FR-120, M6

LOCATION.--Lat 39°51'17", long 83°01'16", Hydrologic Unit 05060001, near Columbus.

Owner.--Franklin County.

AQUIFER.--Sand and gravel of Quaternary Age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 2 in., depth 72 ft.

INSTRUMENTATION - Periodic measurement with steel tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 685 feet above National Geodetic Vertical Datum of 1929. Measuring point: Floor of instrument shelter, 7.14 ft above land-surface datum.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.36 ft below land-surface datum, Mar. 21, 1984; lowest measured, 35.24 ft below land-surface datum, Mar. 16, 1992.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

	WATER LEVEL		WATER LEVEL
MAR 16	35.24	SEP 30	14.44

395039082585800. Local number, FR-115 TH67.

LOCATION.--Lat 39°50'39", long 82°58'58", Hydrologic Unit 05060001, near Hamilton Meadows.

Owner.--City of Columbus.

AQUIFER.--Sand and gravel of Quaternary Age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 6 in., depth 116 ft.

INSTRUMENTATION - Data logger -- 60 minute record.

DATUM.--Elevation of land-surface datum is 721 feet above National Geodetic Vertical Datum of 1929. Measuring point: Floor of instrument shelter, 2.10 ft above land-surface datum.

PERIOD OF RECORD.--Aug. 1982 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 48.15 ft below land-surface datum, Feb. 28 and 29, 1992; minimum daily low, 27.21 ft below land-surface datum, May 3, 1984.

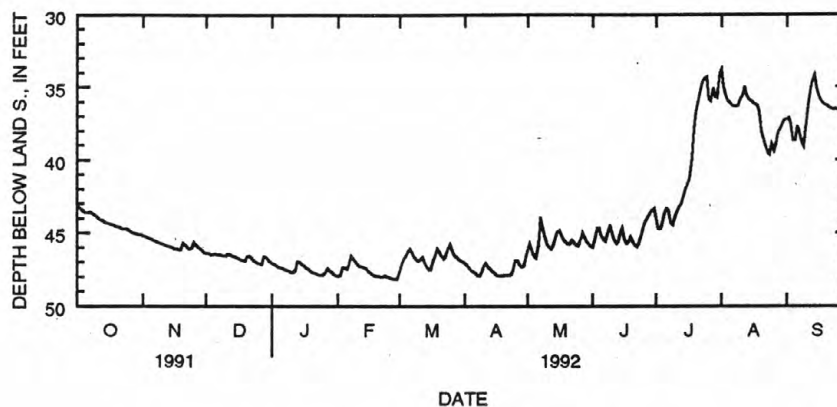
WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

WATER LEVEL	WATER LEVEL	WATER LEVEL	WATER LEVEL	WATER LEVEL
DEC 10 46.45	MAR 16 47.31	JUN 12 45.73	JUL 28 34.51	SEP 30 37.33

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992 DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	42.99	45.21	46.39	47.10	47.96	47.62	47.06	46.18	46.00	43.99	33.78	37.20
2	43.24	45.26	46.42	47.18	47.90	47.19	47.21	45.75	45.52	44.74	35.00	37.13
3	43.40	45.33	46.49	47.27	47.36	46.83	47.37	46.26	44.68	44.74	35.52	37.56
4	43.50	45.37	46.50	47.34	47.38	46.54	47.55	46.63	44.68	44.29	35.91	38.68
5	43.62	45.43	46.47	47.38	47.47	46.30	47.66	46.73	45.19	43.69	36.11	38.68
6	43.63	45.52	46.50	47.46	47.09	46.11	47.73	45.83	45.49	43.34	36.25	37.71
7	43.57	45.57	46.51	47.52	46.59	46.41	47.86	43.92	45.58	43.42	36.34	38.06
8	43.65	45.64	46.53	47.56	46.81	46.67	47.91	44.56	45.09	44.34	36.32	38.89
9	43.74	45.69	46.58	47.63	47.00	46.82	47.72	45.31	44.50	44.44	36.26	39.13
10	43.88	45.75	46.58	47.68	47.16	46.96	47.26	45.74	44.98	43.96	35.90	37.90
11	43.99	45.81	46.45	47.71	47.28	46.80	47.06	45.96	45.45	43.50	35.56	36.25
12	44.10	45.86	46.51	47.50	47.31	46.67	47.32	46.09	45.73	43.22	34.97	35.32
13	44.15	45.91	46.57	46.94	47.38	47.03	47.48	45.87	45.63	43.01	35.56	34.65
14	44.25	45.96	46.65	46.99	47.44	47.29	47.63	45.37	45.00	42.57	35.86	34.20
15	44.33	46.01	46.72	47.17	47.62	47.50	47.75	44.95	44.70	41.95	35.98	35.09
16	44.37	46.09	46.75	47.25	47.75	47.52	47.85	44.84	45.39	41.64	36.10	35.58
17	44.42	46.12	46.85	47.39	47.82	47.00	47.91	45.22	45.74	41.28	36.18	35.89
18	44.47	46.17	46.91	47.47	47.91	46.54	47.93	45.48	45.67	39.90	36.25	36.12
19	44.53	46.13	46.93	47.58	47.95	46.09	47.93	45.66	45.30	37.86	36.77	36.23
20	44.59	45.68	46.61	47.69	47.98	46.26	47.90	45.80	45.65	36.69	38.00	36.29
21	44.65	45.81	46.57	47.75	48.02	46.56	47.86	45.80	45.88	35.88	38.68	36.40
22	44.71	46.00	46.74	47.79	48.02	46.77	47.85	45.53	45.98	35.20	39.15	36.50
23	44.73	46.11	46.91	47.88	47.94	46.61	47.82	45.72	45.76	34.69	39.51	36.52
24	44.72	46.05	47.00	47.88	48.00	46.15	47.53	45.88	45.12	34.36	39.66	36.51
25	44.83	45.66	47.06	47.88	48.04	45.77	46.91	45.91	44.60	34.31	38.96	36.54
26	44.91	45.81	47.13	47.70	48.09	46.17	46.90	45.56	44.23	35.89	39.37	36.55
27	44.99	46.01	47.15	47.41	48.12	46.49	47.19	45.00	43.93	35.99	38.89	36.66
28	45.04	46.12	46.63	47.56	48.15	46.67	47.35	45.31	43.69	35.07	38.15	36.73
29	45.09	46.23	46.66	47.70	48.15	46.79	47.25	45.55	43.49	35.71	37.81	36.77
30	45.11	46.35	46.84	47.81	---	46.92	46.70	45.79	43.34	35.74	37.51	37.75
31	45.13	---	46.98	47.92	---	46.98	---	45.95	---	34.04	37.27	---
MAX	45.13	46.35	47.15	47.92	48.15	47.62	47.93	46.73	46.00	44.74	39.66	39.13

395039082585800.--Continued



395039082585800 FR-115 TH-67
MAXIMUM DAILY DEPTH BELOW LAND S. (FT), DATA LOGGER

395123083003300. Local number, FR-121

LOCATION.--Lat 39°51'23", long 83°00'33", Hydrologic Unit 05060001.

Owner.--Franklin County.

AQUIFER.--Sand and gravel of Quaternary Age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 2 in., depth 45 ft.

INSTRUMENTATION - Periodic measurement with steel tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 690 feet above National Geodetic Vertical Datum of 1929. Measuring point: Top of coupling, 2.6 ft above land-surface datum.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 5.01 ft below land-surface datum, Mar. 24, 1984; lowest measured, 38.93 ft below land-surface datum, Mar. 16, 1992.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

	WATER LEVEL		WATER LEVEL		WATER LEVEL		WATER LEVEL		WATER LEVEL
DEC 11	37.18	MAR 16	38.93	JUN 11	34.86	JUL 28	7.58	SEP 30	22.03

395058083002400. Local number, FR-119, M5

LOCATION.--Lat 39°51'11", long 83°00'26", Hydrologic Unit 05060001.

Owner.--Franklin County.

AQUIFER.--Sand and gravel of Quaternary Age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 2 in., depth 85 ft.

INSTRUMENTATION - Data logger -- 60 minute record.

DATUM.--Elevation of land-surface datum is 700 feet above National Geodetic Vertical Datum of 1929. Measuring point: Top of PVC casing, 2.48 ft above land-surface datum.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 52.34 ft below land-surface datum, Mar. 4-7, 1992; minimum daily low, 11.10 ft below land-surface datum, June 17, 1981.

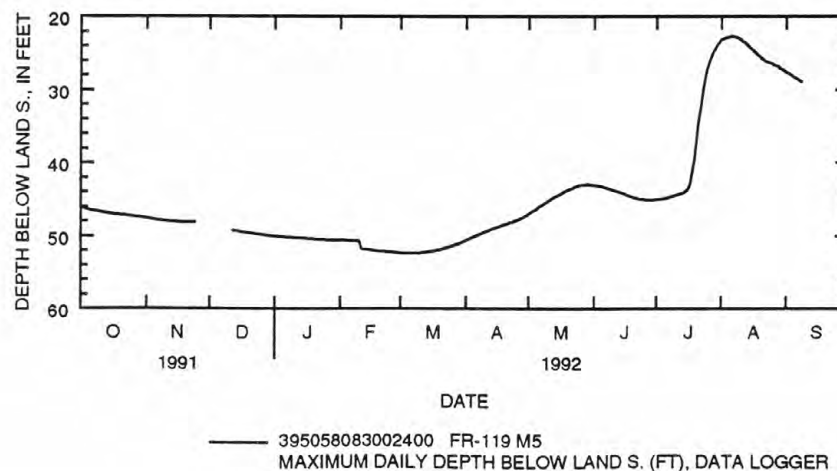
WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

	WATER LEVEL		WATER LEVEL		WATER LEVEL		WATER LEVEL		WATER LEVEL
DEC 11	49.20	MAR 16	52.07	JUN 11	43.77	JUL 28	24.47	SEP 30	32.75

395058083002400.--Continued

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	46.14	47.61	---	50.03	50.56	52.31	50.56	47.00	43.03	44.98	23.13	27.62
2	46.22	47.65	---	50.06	50.56	52.33	50.43	46.81	43.07	44.97	22.97	27.79
3	46.31	47.71	---	50.09	50.58	52.33	50.30	46.62	43.14	44.94	22.86	27.98
4	46.39	47.76	---	50.12	50.59	52.34	50.17	46.43	43.20	44.89	22.80	28.16
5	46.45	47.82	---	50.14	50.61	52.34	50.04	46.24	43.26	44.83	22.73	28.34
6	46.52	47.86	---	50.16	50.61	52.34	49.92	46.04	43.34	44.77	22.67	28.53
7	46.57	47.90	---	50.18	50.63	52.34	49.78	45.84	43.43	44.70	22.68	28.69
8	46.63	47.92	---	50.21	50.65	52.33	49.65	45.64	43.52	44.61	22.78	28.82
9	46.68	47.95	---	50.22	50.66	52.31	49.53	45.45	43.62	44.53	22.92	---
10	46.73	47.99	---	50.25	50.68	52.29	49.41	45.26	43.71	44.44	23.11	---
11	46.78	48.01	---	50.26	51.72	52.27	49.30	45.07	43.80	44.35	23.31	---
12	46.82	48.04	49.25	50.28	51.75	52.23	49.18	44.88	43.90	44.25	23.54	---
13	46.87	48.06	49.29	50.30	51.78	52.19	49.06	44.70	43.98	44.13	23.77	---
14	46.92	48.07	49.34	50.31	51.82	52.15	48.95	44.54	44.07	44.03	24.03	---
15	46.95	48.09	49.39	50.33	51.87	52.09	48.85	44.37	44.18	43.90	24.29	---
16	46.99	48.10	49.43	50.35	51.91	52.04	48.75	44.21	44.27	43.66	24.55	---
17	47.03	48.11	49.47	50.37	51.95	51.99	48.65	44.07	44.37	42.91	24.84	---
18	47.07	48.11	49.53	50.39	51.98	51.92	48.55	43.92	44.47	41.51	25.10	---
19	47.10	48.12	49.56	50.41	52.02	51.85	48.45	43.78	44.57	39.45	25.37	---
20	47.14	48.13	49.60	50.44	52.03	51.78	48.36	43.65	44.66	36.89	25.64	---
21	47.18	48.13	49.64	50.45	52.06	51.68	48.28	43.56	44.76	34.48	25.88	---
22	47.21	48.13	49.67	50.47	52.09	51.61	48.19	43.41	44.84	32.28	26.09	---
23	47.25	48.14	49.71	50.48	52.12	51.52	48.10	43.28	44.90	30.31	26.22	---
24	47.29	48.16	49.75	50.49	52.14	51.43	48.01	43.16	44.95	28.67	26.31	---
25	47.33	---	49.79	50.51	52.18	51.34	47.89	43.08	44.98	27.34	26.41	---
26	47.37	---	49.83	50.51	52.20	51.24	47.77	43.01	45.00	26.31	26.53	---
27	47.40	---	49.87	50.52	52.23	51.13	47.64	42.96	45.02	25.50	26.69	---
28	47.44	---	49.90	50.52	52.26	51.04	47.50	42.95	45.02	24.84	26.85	---
29	47.48	---	49.94	50.53	52.29	50.94	47.34	42.94	45.01	24.25	27.04	---
30	47.52	---	49.97	50.54	---	50.83	47.18	42.96	45.00	23.78	27.23	---
31	47.56	---	50.00	50.55	---	50.70	---	42.99	---	23.40	27.42	---
MAX	47.56	---	---	50.55	52.29	52.34	50.56	47.00	45.02	44.98	27.42	---



395131082592400. Local number, FR-123, M9.

LOCATION.--Lat 39°51'31", long 82°59'24", Hydrologic Unit 05060001, near Hamilton Meadows.

Owner.--Franklin County.

AQUIFER.--Sand and gravel of Quaternary Age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 2 in., depth 36.5 ft.

INSTRUMENTATION - Data logger -- 60 minute record.

DATUM.--Elevation of land-surface datum is 710 feet above National Geodetic Vertical Datum of 1929. Measuring point: Floor of shelter, 2.25 ft above land-surface datum.

PERIOD OF RECORD.--Apr. 1982 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 18.55 ft below land-surface datum, May 12, 1992; minimum daily low, 6.87 ft below land-surface datum, April 01, 1980.

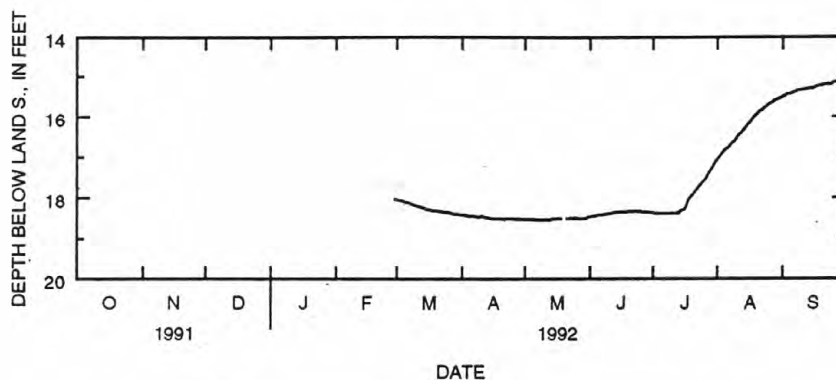
WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

	WATER LEVEL		WATER LEVEL		WATER LEVEL		WATER LEVEL		WATER LEVEL		WATER LEVEL		WATER LEVEL
DEC 10	16.00	MAR 16	18.19	APR 9	18.42	JUN 12	18.36	JUL 28	17.31	SEP 30	14.98		

 DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
 DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	18.04	18.41	18.52	18.46	18.37	17.05	15.49
2	---	---	---	---	---	18.06	18.42	18.53	18.45	18.38	16.98	15.46
3	---	---	---	---	---	18.06	18.43	18.53	18.44	18.38	16.91	15.43
4	---	---	---	---	---	18.08	18.44	18.53	18.43	18.38	16.85	15.42
5	---	---	---	---	---	18.11	18.45	18.53	18.42	18.38	16.80	15.40
6	---	---	---	---	---	18.12	18.45	18.54	18.42	18.38	16.76	15.38
7	---	---	---	---	---	18.13	18.46	18.54	18.41	18.38	16.70	15.36
8	---	---	---	---	---	18.15	18.47	18.54	18.40	18.38	16.64	15.33
9	---	---	---	---	---	18.17	18.48	18.54	18.39	18.38	16.60	15.32
10	---	---	---	---	---	18.19	18.45	18.54	18.38	18.38	16.52	15.31
11	---	---	---	---	---	18.21	18.47	18.54	18.38	18.38	16.45	15.31
12	---	---	---	---	---	18.23	18.48	18.55	18.37	18.38	16.40	15.29
13	---	---	---	---	---	18.24	18.49	18.54	18.36	18.38	16.33	15.28
14	---	---	---	---	---	18.26	18.49	18.51	18.36	18.33	16.28	15.27
15	---	---	---	---	---	18.28	18.51	18.51	18.36	18.30	16.22	15.27
16	---	---	---	---	---	18.29	18.51	18.51	18.36	18.28	16.15	15.25
17	---	---	---	---	---	18.30	18.51	18.51	18.36	18.19	16.09	15.23
18	---	---	---	---	---	18.32	18.51	18.51	18.36	18.04	16.02	15.21
19	---	---	---	---	---	18.32	18.51	---	18.34	17.96	15.96	15.22
20	---	---	---	---	---	18.32	18.51	---	18.33	17.91	15.91	15.19
21	---	---	---	---	---	18.33	18.52	18.51	18.33	17.86	15.86	15.18
22	---	---	---	---	---	18.34	18.51	18.51	18.33	17.78	15.82	15.17
23	---	---	---	---	---	18.35	18.51	18.50	18.33	17.71	15.78	15.18
24	---	---	---	---	---	18.35	18.51	18.51	18.33	17.66	15.74	15.16
25	---	---	---	---	---	18.36	18.51	18.50	18.34	17.60	15.70	15.14
26	---	---	---	---	---	18.37	18.51	18.51	18.35	17.55	15.67	15.12
27	---	---	---	---	---	18.38	18.52	18.51	18.36	17.45	15.63	15.12
28	---	---	---	---	---	18.39	18.51	18.51	18.36	17.37	15.59	15.11
29	---	---	---	---	18.03	18.39	18.52	18.51	18.36	17.28	15.56	15.12
30	---	---	---	---	---	18.40	18.52	18.51	18.37	17.20	15.53	15.10
31	---	---	---	---	---	18.41	---	18.47	---	17.11	15.51	---
MAX	---	---	---	---	18.03	18.41	18.52	18.55	18.46	18.38	17.05	15.49

395131082592400 - Continued



— 395131082592400 FR-123
MAXIMUM DAILY DEPTH BELOW LAND S. (FT), DATA LOGGER

395059083000900. Local number, FR-122, M8.

LOCATION.--Lat 39°50'59", long 82°00'09", Hydrologic Unit 05060002, near Shadeville.

Owner.--Franklin County.

AQUIFER.--Clay, sand and gravel of Quaternary Age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 2 in., depth 104 ft.

INSTRUMENTATION - Periodic measurement with steel tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 730 feet above National Geodetic Vertical Datum of 1929. Measuring point: Top of 3-inch aluminum casing, 2.90 ft above land-surface datum.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 30.15 ft below land-surface datum, May 19, 1981; lowest measured, 94.64 ft below land-surface datum, Mar. 2, 1982.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 11	43.05	MAR 16	46.39
JUN 11	48.15	JUL 28	48.69

395008082593100. Local number, FR-126 M13

LOCATION.--Lat 39°50'08", long 82°59'31", Hydrologic Unit 05060001, near Shadeville.

Owner.--Franklin County.

AQUIFER.--Sand and gravel of Quaternary Age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 2 in., depth 122 ft.

INSTRUMENTATION - Periodic measurement with steel tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 703 feet above National Geodetic Vertical Datum of 1929. Measuring point: Top of PVC casing, 4.2 ft above land-surface datum.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.96 ft below land-surface datum, June 17, 1981; lowest measured, 51.42 ft below land-surface datum, Nov. 09, 1977.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 11	17.63	MAR 16	18.55	JUN 12	17.21	JUL 28	10.99
						SEP 30	13.05

395126083014000. Local number, FR-131 M18.

LOCATION.--Lat 39°51'26", long 83°01'40", Hydrologic Unit 05060001, near Columbus.

Owner.--Franklin County.

AQUIFER.--Clay, sand, and gravel of Quaternary Age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 2 in., depth 53 ft.

INSTRUMENTATION - Periodic measurement with steel tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 728 feet above National Geodetic Vertical Datum of 1929. Measuring point: Top of plastic coupling, 2.4 ft above land-surface datum.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 37.77 ft below land-surface datum, July 1, 1981; lowest measured, dry on Dec. 10, 1991; Mar. 16, June 12, and July 28, 1992.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

	WATER LEVEL		WATER LEVEL		WATER LEVEL		WATER LEVEL		WATER LEVEL
DEC 10	dry	MAR 16	dry	JUN 12	dry	JUL 28	dry	SEP 30	50.81

395218083023900. Local number, FR-133.

LOCATION.--Lat 39°52'18", long 83°02'39", Hydrologic Unit 05060001, on White Road near Grove City, Ohio

Owner.--Franklin County.

AQUIFER.--Gravel of Quaternary Age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 2 in., depth 82 ft, cased to 78 ft, finish: 4.0 ft of 0.80 in. well screen.

INSTRUMENTATION - Periodic measurement with steel tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 765 feet above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 0.0 ft above land-surface datum.

PERIOD OF RECORD.--Apr. 1977 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 49.05 ft below land-surface datum, Apr. 1, 1981; lowest measured, 79.36 ft below land-surface datum, June 22, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

	WATER LEVEL		WATER LEVEL		WATER LEVEL		WATER LEVEL		WATER LEVEL
DEC 10	62.58	MAR 16	63.03	JUN 12	62.72	JUL 28	62.04	SEP 30	61.06

395020083014400. Local number, FR-141

LOCATION.--Lat 39°50'20", long 83°01'44", Hydrologic Unit 05060001.

Owner.--John Lako.

AQUIFER.--Sand and gravel of Quaternary Age.

WELL CHARACTERISTICS.--Drilled domestic water well, diameter 4.25 in., depth 64 ft.

INSTRUMENTATION - Periodic measurement with steel tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 720 feet above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 0.6 ft above land-surface datum.

PERIOD OF RECORD.--Sept. 1987 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 26.13 ft below land-surface datum, June 26, 1990; lowest measured, 31.72 ft below land-surface datum, Dec. 10, 1991.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

	WATER LEVEL		WATER LEVEL		WATER LEVEL		WATER LEVEL		WATER LEVEL
DEC 10	31.72	MAR 16	30.72	JUN 12	29.18	JUL 28	27.49	SEP 30	28.53

395108083010600. Local number FR-147.

LOCATION.--Lat 39°51'08", long 83°01'06", Hydrologic Unit 05060001, near Columbus.

Owner.--City of Columbus.

AQUIFER.--Sand and gravel of Quaternary Age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 6 in., depth 75 ft.

INSTRUMENTATION - Periodic measurement with steel tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 685 feet above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.84 ft above land-surface datum.

PERIOD OF RECORD.--May 1981 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.54 ft below land-surface datum, May 19, 1981; lowest measured, 45.66 ft below land-surface datum, Dec. 11, 1991.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

	WATER LEVEL		WATER LEVEL		WATER LEVEL		WATER LEVEL		WATER LEVEL
DEC 11	45.66	MAR 16	43.95	JUN 11	35.16	JUL 28	6.26	SEP 30	20.49

395114083010200. Local number, FR-148

LOCATION.--Lat 39°51'14", long 83°01'02", Hydrologic Unit 05060001.

Owner.--City of Columbus.

AQUIFER.--Devonian limestone.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 12 in., depth 140 ft., 12 in. casing to 85 ft; 8 in. casing to 97.5.

INSTRUMENTATION - Periodic measurement with steel tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 687 feet above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.5 ft above land-surface datum.

PERIOD OF RECORD.--June 1986 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 9.39 ft below land-surface datum, July 28, 1992; lowest measured, 54.34 ft below land-surface datum, Dec. 11, 1991.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

	WATER LEVEL		WATER LEVEL		WATER LEVEL		WATER LEVEL		WATER LEVEL
DEC 11	54.34	MAR 16	54.27	JUN 11	38.96	JUL 28	9.39	SEP 30	22.59

394956083002700. Local number, FR-18

LOCATION.--Lat 39°49'56", long 83°00'27", Hydrologic Unit 05060001.

Owner.--City of Columbus.

AQUIFER.--Sand and gravel of Quaternary Age.

WELL CHARACTERISTICS.--Drilled observation water well, depth 74.75 ft, 6 in. casing.

INSTRUMENTATION - Continuous recorder operated by the Ohio Department of Natural Resources, Division of Water.

DATUM.--Elevation of land-surface datum is 695 feet above National Geodetic Vertical Datum of 1929. Measuring point: Floor of shelter, 4.05 ft above land-surface datum.

PERIOD OF RECORD.--June 1987 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 14.22 ft below land-surface datum, June 25, 1990; lowest measured, 32.04 ft below land-surface datum, Mar. 16, 1992.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

	WATER LEVEL		WATER LEVEL		WATER LEVEL		WATER LEVEL		WATER LEVEL
DEC 10	31.65	MAR 16	32.04	JUN 12	27.70	JUL 28	15.09	SEP 30	22.70

395314083021900. Local number, FR-202

LOCATION.--Lat 39°53'14", long 83°02'19", Hydrologic Unit 05060001.

Owner.--Mr. Daniel Himes

AQUIFER.--Devonian limestone

WELL CHARACTERISTICS.--Drilled domestic water well, diameter 4 in., depth 220 ft., cased to 175 ft.

INSTRUMENTATION - Periodic measurement with steel tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 752 feet above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 1.17 ft above land-surface datum.

PERIOD OF RECORD.--June 1979 to present.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 66.17 ft below land-surface datum, June 25, 1979; lowest measured, 96.50 ft below land-surface datum, July 19, 1984.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

	WATER LEVEL		WATER LEVEL		WATER LEVEL		WATER LEVEL		WATER LEVEL
DEC 10	91.25	MAR 16	91.57	JUN 12	91.74	JUL 28	89.75	SEP 30	90.77

395206083014501. Local number, FR-209

LOCATION.--Lat 39°2'06", long 83°01'45", Hydrologic Unit 05060001.

Owner.--Mr. Martin Davis

AQUIFER.--Sand and gravel of Quaternary Age.

WELL CHARACTERISTICS.--Drilled domestic water well, diameter 4 in.

INSTRUMENTATION - Periodic measurement with steel tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 704 feet above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 0.72 ft above land-surface datum

PERIOD OF RECORD.--June 1979 to present

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 12.51 ft below land-surface datum, May 23, 1984; lowest measured, 18.11 ft below land-surface datum, Mar. 16, 1992.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

	WATER LEVEL		WATER LEVEL		WATER LEVEL		WATER LEVEL		WATER LEVEL
DEC 10	18.02	MAR 16	18.11	JUN 12	17.49	JUL 28	15.64	SEP 30	15.95

395024083003000. Local number, FR-149

LOCATION.--Lat 39°50'24", long 83°00'30", Hydrologic Unit 05060001, at Hartman Farms.

Owner.--City of Columbus.

AQUIFER.--Devonian limestone.

WELL CHARACTERISTICS.--Drilled observation water well, depth 144 ft.

INSTRUMENTATION - Continuous recording discontinued Aug. 13, 1991. Periodic measurement with steel tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 683 feet above National Geodetic Vertical Datum of 1929. Measuring point: Floor of shelter 2.83 ft above land-surface datum.

PERIOD OF RECORD.--June 1986 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 11.33 ft below land-surface datum, June 20, 1990; lowest measured, 30.99 ft below land-surface datum, Dec. 11, 1991.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

	WATER LEVEL		WATER LEVEL		WATER LEVEL		WATER LEVEL		WATER LEVEL		WATER LEVEL
DEC 11	30.99	MAR 16	30.78	JUN 11	26.34	JUL 28	15.48	SEP 10	16.73	SEP 30	19.31

WATER QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	HYDRO- GEN PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	COLI- FORM, TOTAL, IMMED. MEM.FIL (COLS./ 100 ML) (31504)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	ACIDITY (MG/L AS H) (71825)		
SEP 09...	1329	7.0	13.5	-1.3	--	--	--	0.6		
DATE	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	BICAR- BONATE IT-FLD (MG/L AS HCO3) (99440)	CAR- BONATE IT-FLD (MG/L AS CO3) (99445)	ALKA- LINITY, CARBON- ATE IT-FLD (MG/L CAC03) (99430)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)
SEP 09...	100	67	53	9.1	769	0	630	65	100	1.3
DATE	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	BARIIUM, DIS- SOLVED (UG/L AS BA) (01005)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE) (01010)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	COBALT, DIS- SOLVED (UG/L AS CO) (01035)
SEP 09...	9.5	750	0.11	1.5	1.9	0.09	33,000	<0.5	<1.0	<3
DATE	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	LITHIUM DIS- SOLVED (UG/L AS LI) (01130)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	STRON- TIUM, DIS- SOLVED (UG/L AS SR) (01080)	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)
SEP 09...	<10	180	<10	82	220	<10	7100	<6	53	3.8

395027082592500. Local number, FR-151

LOCATION.--Lat 39°50'27", long 82°59'25", Hydrologic Unit 05060001, near Shadeville.

Owner.--City of Columbus.

AQUIFER.--Sand and gravel of Quaternary Age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 2 in., depth 60 ft.

INSTRUMENTATION - Periodic measurement with steel tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 718 feet above National Geodetic Vertical Datum of 1929. Measuring point: Top of plastic pipe, 2.50 ft above land-surface datum.

PERIOD OF RECORD.--July 1983 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 23.00 ft below land-surface datum, Mar. 26, 1986; lowest measured, 37.56 ft below land-surface datum, Mar. 16, 1992.

REMARKS.--A "K" associated with bacteriological data indicates non-ideal colony counts.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

	WATER LEVEL		WATER LEVEL		WATER LEVEL		WATER LEVEL		WATER LEVEL
DEC 11	36.25	MAR 16	37.56	JUN 12	36.15	JUL 28	29.91	SEP 30	30.33

WATER QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	SPE- CIFIC CON- DUCT- ANCE (US/CM (00095)	HYDRO- GEN PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	COLI- FORM, TOTAL, IMMED. MEM.FIL (COLS./ 100 ML) (31504)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	ACIDITY (MG/L AS H) (71825)		
MAR 24...	941	7.1	13.5	--	27	<2	<2	0.6		
SEP 08...	925	6.9	14.5	0.5	K10	<2	<2	1.5		
DATE	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	BICAR- BONATE IT-FLD (MG/L AS HCO3) (99440)	CAR- BONATE IT-FLD (MG/L AS CO3) (99445)	ALKA- LINITY, CARBON- ATE IT-FLD (MG/L CAC03) (99430)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)
MAR 24...	140	41	3.7	1.5	559	0	458	150	16	<0.10
SEP 08...	140	41	8.7	1.6	449	0	368	150	20	0.20
DATE	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N) (00623)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	BARIUM, DIS- SOLVED (UG/L AS BA) (01005)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE) (01010)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	COBALT, DIS- SOLVED (UG/L AS CO) (01035)
MAR 24...	13	586	<0.050	0.050	<0.20	<0.010	58	<0.5	<1.0	<3
SEP 08...	13	624	<0.050	0.050	<0.20	<0.010	54	<0.5	<1.0	<3
DATE	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	LITHIUM DIS- SOLVED (UG/L AS LI) (01130)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	STRON- TIUM, DIS- SOLVED (UG/L AS SR) (01080)	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)
MAR 24...	<10	2300	<10	11	47	<10	280	<6	<3	1.0
SEP 08...	<10	2100	<10	4	51	<10	260	<6	<3	0.6

395315083020002. Local number, FR-213

LOCATION.--Lat 39°53'15", long 83°02'00", Hydrologic Unit 05060001.

Owner.--Tom Cannon Co.

AQUIFER.--Sand and gravel of Quaternary Age.

WELL CHARACTERISTICS.--Drilled commercial water well, diameter 5 in., depth 97 ft., cased to 97 ft.

INSTRUMENTATION - Periodic measurement with steel tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 730 feet above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 0.80 ft above land-surface datum

PERIOD OF RECORD.--June 1982 to present

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 71.38 ft below land-surface datum, June 08, 1982; lowest measured, 84.83 ft below land-surface datum, Mar. 16, 1992.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

	WATER LEVEL		WATER LEVEL		WATER LEVEL		WATER LEVEL		WATER LEVEL
DEC 10	83.81	MAR 16	84.83	JUN 12	84.69	JUL 28	84.61	SEP 30	83.04

395351083013700. Local number, FR-244

LOCATION.--Lat 39°53'35" long 83°01'37", Hydrologic Unit 05060001.

Owner.--Model Landfill

AQUIFER.--Sand and gravel of Quaternary Age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 75 ft., cased to 51.4 ft.

INSTRUMENTATION - Periodic measurement with steel tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 710 feet above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 3.63 ft above land-surface datum

PERIOD OF RECORD.--Aug. 1979 to present.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 41.89 ft below land-surface datum, Oct. 18, 1979; lowest measured, 73.83 ft below land-surface datum, Dec. 10, 1991.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

	WATER LEVEL		WATER LEVEL		WATER LEVEL		WATER LEVEL		WATER LEVEL
DEC 10	73.83	MAR 16	70.72	JUN 12	70.43	JUL 28	69.80	SEP 30	67.40

395331083013900. Local number, FR-246

LOCATION.--Lat 39°53'31", long 83°01'39", Hydrologic Unit 05060001.

Owner.--Model Landfill

AQUIFER.--Devonian limestone.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 142 ft., cased to 89 ft.

INSTRUMENTATION - Periodic measurement with steel tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 722 feet above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 0.63 ft above land-surface datum

PERIOD OF RECORD.--Oct. 1979 to present.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 104.40 ft below land-surface datum, Oct. 18, 1979; lowest measured, 127.99 ft below land-surface datum, Mar. 16, 1992.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

	WATER LEVEL		WATER LEVEL		WATER LEVEL		WATER LEVEL		WATER LEVEL
DEC 10	126.11	MAR 16	127.99	JUN 12	127.46	JUL 28	121.74	SEP 30	124.80

395055082592400. Local number, FR-271

LOCATION.--Lat 39°50'55", long 82°59'24", Hydrologic Unit 05060001, at Parsons Ave. WTP

Owner.--Franklin County

AQUIFER.--Sand and gravel of Quaternary Age.

WELL CHARACTERISTICS.--Drilled observation water well, depth 91.8 ft.; 76 ft of 2 in casing.

INSTRUMENTATION - Data logger -- 60 minute record.

DATUM.--Elevation of land-surface datum is 710 feet above National Geodetic Vertical Datum of 1929. Measuring point: Top of PVC casing, 2.53 ft above land-surface datum.

PERIOD OF RECORD.--Sept. 1987 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 25.00 ft below land-surface datum, Apr. 25 - May 2, 1992; minimum daily low, 13.92 ft below land-surface datum, Mar. 18, 1991.

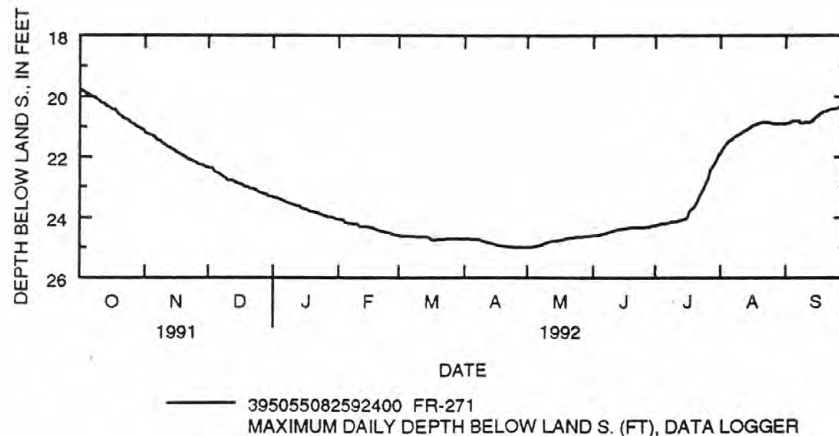
WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

	WATER LEVEL		WATER LEVEL		WATER LEVEL		WATER LEVEL		WATER LEVEL
DEC 10	22.72	MAR 16	24.66	JUN 12	24.40	JUL 28	22.26	SEP 30	20.26

395055082592400--Continued

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19.77	21.19	22.36	23.33	24.08	24.61	24.72	25.00	24.61	24.26	21.87	20.90
2	19.80	21.24	22.37	23.35	24.08	24.63	24.72	25.00	24.59	24.25	21.75	20.88
3	19.83	21.25	22.37	23.38	24.08	24.63	24.72	24.99	24.59	24.23	21.63	20.85
4	19.88	21.28	22.50	23.39	24.17	24.63	24.73	24.98	24.58	24.20	21.53	20.82
5	19.92	21.33	22.52	23.42	24.18	24.63	24.73	24.96	24.55	24.20	21.47	20.82
6	19.95	21.38	22.55	23.45	24.20	24.63	24.73	24.95	24.54	24.20	21.43	20.82
7	20.00	21.45	22.61	23.49	24.20	24.64	24.73	24.94	24.52	24.19	21.37	20.82
8	20.02	21.46	22.64	23.52	24.22	24.64	24.73	24.90	24.50	24.17	21.32	20.87
9	20.08	21.53	22.69	23.54	24.23	24.65	24.78	24.86	24.48	24.15	21.28	20.87
10	20.12	21.58	22.77	23.59	24.23	24.65	24.81	24.85	24.46	24.14	21.24	20.86
11	20.22	21.62	22.77	23.59	24.31	24.65	24.81	24.83	24.43	24.13	21.19	20.86
12	20.22	21.66	22.77	23.64	24.31	24.65	24.84	24.81	24.42	24.12	21.15	20.86
13	20.26	21.70	22.79	23.64	24.31	24.66	24.85	24.79	24.39	24.09	21.11	20.83
14	20.33	21.75	22.85	23.70	24.31	24.66	24.86	24.78	24.39	24.07	21.06	20.78
15	20.35	21.77	22.86	23.72	24.31	24.67	24.88	24.77	24.38	24.05	21.02	20.70
16	20.41	21.85	22.90	23.74	24.33	24.75	24.90	24.76	24.37	24.02	20.97	20.65
17	20.44	21.88	22.91	23.76	24.34	24.75	24.94	24.75	24.37	23.82	20.95	20.58
18	20.44	21.93	22.98	23.79	24.38	24.75	24.94	24.73	24.35	23.73	20.92	20.53
19	20.58	21.96	23.00	23.79	24.40	24.74	24.95	24.70	24.34	23.68	20.88	20.50
20	20.61	22.01	23.02	23.81	24.41	24.73	24.95	24.70	24.34	23.59	20.86	20.49
21	20.67	22.06	23.04	23.84	24.45	24.73	24.97	24.68	24.34	23.47	20.86	20.45
22	20.73	22.08	23.06	23.84	24.46	24.73	24.98	24.68	24.34	23.32	20.86	20.42
23	20.75	22.11	23.07	23.89	24.48	24.72	24.98	24.67	24.33	23.16	20.86	20.40
24	20.79	22.16	23.12	23.90	24.50	24.72	24.99	24.66	24.33	23.03	20.86	20.40
25	20.86	22.18	23.15	23.95	24.51	24.72	25.00	24.66	24.33	22.89	20.87	20.38
26	20.89	22.24	23.17	23.96	24.52	24.71	25.00	24.65	24.33	22.72	20.89	20.36
27	20.95	22.27	23.20	23.99	24.56	24.71	25.00	24.65	24.32	22.44	20.89	20.33
28	21.00	22.27	23.22	23.99	24.58	24.71	25.00	24.64	24.32	22.34	20.89	20.33
29	21.02	22.31	23.25	23.99	24.60	24.71	25.00	24.64	24.30	22.21	20.89	20.32
30	21.09	22.35	23.30	24.03	---	24.71	25.00	24.64	24.28	22.08	20.89	20.32
31	21.09	---	23.30	24.05	---	24.71	---	24.61	---	21.95	20.90	---
MAX	21.09	22.35	23.30	24.05	24.60	24.75	25.00	25.00	24.61	24.26	21.87	20.90



395055082592401. Local number FR-272.

LOCATION.--Lat 39°50'55", long 82°59'24", Hydrologic Unit 05060001.

Owner.--City of Columbus.

AQUIFER.--Sand and gravel of Quaternary Age.

WELL CHARACTERISTICS.--Drilled observation water well, depth 45.95; 2 in. PVC.

INSTRUMENTATION - Data logger -- 60 minute record.

DATUM.--Elevation of land-surface datum is 710 feet above National Geodetic Vertical Datum of 1929. Measuring point: Top of outer steel casing, 2.36 ft above land-surface datum.

PERIOD OF RECORD.--Sept. 1987 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 25.45 ft below land-surface datum, Apr. 24, 1992; minimum daily low, 14.53 ft below land-surface datum, Mar. 18, 1991.

REMARKS.--A "K" associated with bacteriological data indicates non-ideal colony counts.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

	WATER LEVEL		WATER LEVEL		WATER LEVEL		WATER LEVEL		WATER LEVEL		WATER LEVEL
DEC 10	23.35	MAR 16	25.21	MAR 25	25.33	JUN 12	24.97	JUL 28	22.81	SEP 30	20.72

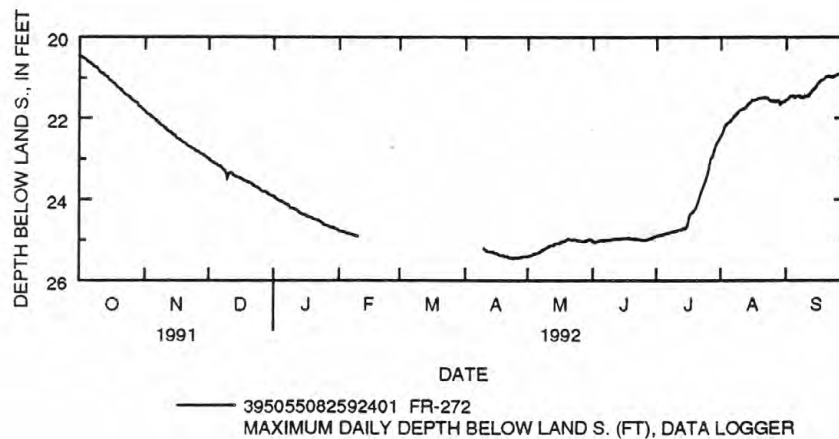
WATER QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	HYDRO- GEN PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	COLI- FORM, TOTAL, IMMED. MEM.FIL (COLS./ 100 ML) (31504)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	ACIDITY (MG/L AS H) (71825)			
MAR 25...	991	7.1	12.0	0.5	K5	<2	<2	0.6			
SEP 08...	1030	7.0	13.0	0.4	<1	<2	<2	1.5			
DATE	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	BICAR- BONATE IT-FLD (MG/L AS HCO3) (99440)	CAR- BONATE IT-FLD (MG/L AS CO3) (99445)	ALKA- LITY, CARBON- ATE IT-FLD (MG/L CAC03) (99430)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	
MAR 25...	140	41	11	1.9	460	0	377	190	26	<0.10	
SEP 08...	140	43	12	2.0	488	0	400	190	31	0.30	
DATE	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N) (00623)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	BARIIUM, DIS- SOLVED (UG/L AS BA) (01005)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE) (01010)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	COBALT, DIS- SOLVED (UG/L AS CO) (01035)	
MAR 25...	13	633	<0.050	0.030	<0.20	<0.010	38	<0.5	<1.0	<3	
SEP 08...	13	682	<0.050	0.030	<0.20	<0.010	39	<0.5	1.0	<3	
DATE	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	LITHIUM DIS- SOLVED (UG/L AS LI) (01130)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	STRON- TIUM, DIS- SOLVED (UG/L AS SR) (01080)	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	
MAR 25...	<10	3000	<10	12	60	<10	120	<6	4	1.2	
SEP 08...	<10	3800	<10	5	67	10	130	<6	32	1.0	

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MAXIMUM VALUES

395055082592401--Continued

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20.44	21.82	23.01	23.91	24.78	---	---	25.41	25.04	24.90	22.44	21.55
2	20.47	21.88	23.05	23.97	24.78	---	---	25.38	25.05	24.89	22.35	21.52
3	20.53	21.91	23.08	23.99	24.80	---	---	25.37	25.04	24.88	22.21	21.46
4	20.54	21.97	23.12	24.03	24.82	---	---	25.34	25.02	24.87	22.11	21.44
5	20.60	22.00	23.15	24.04	24.84	---	---	25.32	25.00	24.85	22.09	21.48
6	20.63	22.05	23.18	24.08	24.84	---	---	25.31	25.02	24.83	22.04	21.46
7	20.69	22.09	23.18	24.11	24.86	---	---	25.29	25.00	24.83	21.97	21.43
8	20.74	22.14	23.28	24.13	24.87	---	---	25.24	25.01	24.81	21.91	21.48
9	20.75	22.17	23.29	24.20	24.90	---	---	25.21	25.00	24.80	21.86	21.48
10	20.83	22.22	23.48	24.21	24.90	---	25.22	25.19	24.99	24.79	21.81	21.45
11	20.87	22.26	23.34	24.23	---	---	25.26	25.15	24.98	24.77	21.77	21.45
12	20.89	22.31	23.34	24.25	---	---	25.29	25.13	24.97	24.75	21.76	21.41
13	20.95	22.34	23.40	24.30	---	---	25.30	25.13	24.97	24.75	21.72	21.34
14	20.98	22.39	23.43	24.33	---	---	25.30	25.09	24.97	24.72	21.65	21.28
15	21.05	22.42	23.45	24.37	---	---	25.32	25.09	24.97	24.71	21.62	21.23
16	21.09	22.49	23.46	24.37	---	---	25.33	25.08	24.96	24.65	21.55	21.15
17	21.13	22.51	23.50	24.41	---	---	25.36	25.04	24.95	24.37	21.55	21.09
18	21.18	22.56	23.54	24.42	---	---	25.38	25.03	24.94	24.34	21.53	21.05
19	21.24	22.58	23.55	24.45	---	---	25.37	25.01	24.97	24.29	21.50	21.03
20	21.28	22.62	23.58	24.47	---	---	25.40	24.98	24.97	24.22	21.50	20.98
21	21.32	22.68	23.60	24.49	---	---	25.41	24.99	24.98	24.08	21.50	20.96
22	21.38	22.70	23.63	24.50	---	---	25.43	25.00	24.99	23.90	21.48	20.97
23	21.42	22.73	23.67	24.54	---	---	25.44	24.99	24.99	23.77	21.50	20.99
24	21.46	22.77	23.69	24.58	---	---	25.45	25.01	25.01	23.61	21.55	20.95
25	21.50	22.82	23.72	24.62	---	---	25.44	25.02	25.01	23.48	21.58	20.92
26	21.55	22.83	23.78	24.64	---	---	25.44	25.02	25.00	23.30	21.56	20.90
27	21.60	22.87	23.81	24.65	---	---	25.44	25.03	24.99	22.98	21.59	20.90
28	21.62	22.90	23.81	24.68	---	---	25.42	25.03	24.97	22.94	21.57	20.89
29	21.70	22.93	23.84	24.68	---	---	25.41	25.02	24.95	22.76	21.64	20.91
30	21.73	22.97	23.88	24.71	---	---	25.41	24.99	24.93	22.64	21.60	20.88
31	21.78	---	23.90	24.74	---	---	---	24.99	---	22.52	21.59	---
MAX	21.78	22.97	23.90	24.74	24.90	---	25.45	25.41	25.05	24.90	22.44	21.55



395224083000500. Local number, FR-273

LOCATION.--Lat 39°52'24", long 83°00'05", Hydrologic Unit 05060001, at County Water-Treatment Plant.

Owner.--Franklin County

AQUIFER.--Sand and gravel of Quaternary Age.

WELL CHARACTERISTICS.--Drilled observation water well, depth 91.5 ft.

INSTRUMENTATION - Periodic measurement with steel tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 710 feet above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 1.15 ft above land-surface datum.

PERIOD OF RECORD.--May 1990 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 13.5 ft below land-surface datum, June 27, 1990; lowest measured, 20.78 ft below land-surface datum, Mar. 16, 1992.

REMARKS.--A "K" associated with bacteriological data indicates non-ideal colony counts.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

	WATER LEVEL		WATER LEVEL		WATER LEVEL		WATER LEVEL		WATER LEVEL		WATER LEVEL
DEC 10	19.30	MAR 16	20.78	JUN 12	19.77	JUL 28	16.76	SEP 10	16.99	SEP 30	17.53

WATER QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	SPE- CIFIC CON- DUCT- ANCE (US/CM (00095)	HYDRO- GEN PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	COLI- FORM, TOTAL, IMMED. MEM.FIL (COLS./ 100 ML) (31504)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	ACIDITY (MG/L AS H) (71825)		
MAR 24...	646	7.3	13.5	--	<1	<1	1	0.3		
SEP 10...	665	7.1	13.5	1.3	--	--	--	0.3		
DATE	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	BICAR- BONATE IT-FLD (MG/L AS HCO3) (99440)	CAR- BONATE IT-FLD (MG/L AS CO3) (99445)	ALKA- LITY, CARBON- ATE IT-FLD (MG/L CAC03) (99430)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)
MAR 24...	84	28	9.5	2.9	482	0	395	29	12	0.70
SEP 10...	88	31	14	2.1	449	0	368	26	7.6	1.0
DATE	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N) (00623)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	BARIIUM, DIS- SOLVED (UG/L AS BA) (01005)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE) (01010)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	COBALT, DIS- SOLVED (UG/L AS CO) (01035)
MAR 24...	16	361	0.170	0.100	0.90	<0.100	200	0.7	<1.0	<3
SEP 10...	18	370	0.610	0.170	0.40	<0.010	150	<0.5	<1.0	<3
DATE	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	LITHIUM DIS- SOLVED (UG/L AS LI) (01130)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	STRON- TIUM, DIS- SOLVED (UG/L AS SR) (01080)	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)
MAR 24...	<10	220	<10	11	120	20	670	<6	17	4.9
SEP 10...	<10	360	<10	11	87	20	680	<6	10	11

395224083000501. Local number, FR-274

LOCATION.--Lat 39°52'24", long 83°00'05", Hydrologic Unit 05060001, at County Water-Treatment Plant.

Owner.--Franklin County

AQUIFER.--Sand and gravel of Quaternary Age.

WELL CHARACTERISTICS.--Drilled observation water well, depth 25 ft.; 4 in. casing.

INSTRUMENTATION - Periodic measurement with steel tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 710 feet above National Geodetic Vertical Datum of 1929. Measuring point: Top of PVC casing, 2.44 ft above land-surface datum.

PERIOD OF RECORD.--May 1990 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 12.63 ft below land-surface datum, Mar. 18, 1991; lowest measured, 16.98 ft below land-surface datum, Mar. 16, 1992.

REMARKS.--A "K" associated with bacteriological data indicates non-ideal colony counts.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

	WATER LEVEL		WATER LEVEL		WATER LEVEL		WATER LEVEL		WATER LEVEL		WATER LEVEL
DEC 10	16.09	MAR 16	16.98	JUN 12	16.67	JUL 28	15.16	SEP 10	15.02	SEP 30	15.32

WATER QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	HYDRO- GEN PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	COLI- FORM, TOTAL, IMMED. MEM.FIL (COLS./ 100 ML) (31504)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	ACIDITY (MG/L AS H) (71825)		
MAR 24...	1130	7.0	13.5	--	<1	<2	<2	0.7		
SEP 10...	1480	7.0	14.0	0.5	<1	<2	<2	0.8		
DATE	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	BICAR- BONATE IT-FLD (MG/L AS HCO3) (99440)	CAR- BONATE IT-FLD (MG/L AS CO3) (99445)	ALKA- LITY, CARBON- ATE IT-FLD (MG/L CAC03) (99430)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)
MAR 24...	140	41	44	1.8	586	0	480	130	50	0.10
SEP 10...	130	35	110	3.0	390	0	320	130	230	0.40
DATE	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N) (00623)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	BARIIUM, DIS- SOLVED (UG/L AS BA) (01005)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE) (01010)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	COBALT, DIS- SOLVED (UG/L AS CO) (01035)
MAR 24...	15	662	<0.050	0.130	<0.20	<0.100	52	<0.5	1.0	<3
SEP 10...	13	880	0.590	0.170	0.20	<0.010	62	<0.5	<1.0	<3
DATE	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	LITHIUM DIS- SOLVED (UG/L AS LI) (01130)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	STRON- TIUM, DIS- SOLVED (UG/L AS SR) (01080)	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)
MAR 24...	<10	3300	<10	14	34	10	210	<6	9	1.8
SEP 10...	<10	2500	<10	12	46	20	180	<6	4	2.0

395323083014000. Local number, FR-269

LOCATION.--Lat 39°53'23", long 83°01'40", Hydrologic Unit 05060001, at Ron's Trucking.

Owner.--Ron's Trucking.

AQUIFER.--Devonian limestone.

WELL CHARACTERISTICS.--Drilled commercial water well, depth 90 ft.; 75 ft of 6 in casing.

INSTRUMENTATION - Periodic measurement with steel tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 705 feet above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 0.22 ft above land-surface datum.

PERIOD OF RECORD.--Aug. 1988 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 67.04 ft below land-surface datum, Apr. 18, 1990; lowest measured, 71.79 ft below land-surface datum, Dec. 10, 1990.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

	WATER LEVEL		WATER LEVEL		WATER LEVEL		WATER LEVEL		WATER LEVEL
DEC 10	70.09	MAR 16	70.86	JUN 12	70.67	JUL 28	69.46	SEP 30	69.11

394941083004400. Local number, FR-275.

LOCATION.--Lat 39°49'41", long 83°00'44", Hydrologic Unit 05060001, near Shadeville.

Owner.--Franklin County

AQUIFER.--Sand and gravel of Quaternary Age.

WELL CHARACTERISTICS.--Drilled observation water well, depth 35 ft.; 2 in. casing.

INSTRUMENTATION - Periodic measurement with steel tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 680 feet above National Geodetic Vertical Datum of 1929. Measuring point: Top of steel protective casing, 5.00 ft above land-surface datum.

PERIOD OF RECORD.--Apr. 1990 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 5.48 ft below land-surface datum, Mar. 20, 1991; lowest measured, 13.12 ft below land-surface datum, Apr. 18, 1991.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

	WATER LEVEL		WATER LEVEL		WATER LEVEL
DEC 10	12.67	MAR 16	11.29	JUN 12	11.29

395239083021400. Local number, FR-276

LOCATION.--Lat 39°52'39", long 83°02'14", Hydrologic Unit 05060001

Owner.--Stanley and Betty Wray.

AQUIFER.--Devonian limestone

WELL CHARACTERISTICS.--Drilled domestic water well, depth 155 ft.

INSTRUMENTATION.--Periodic measurement with steel tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 755 ft. above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 1.25 ft above land-surface datum.

PERIOD OF RECORD.--June 1990 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 71.46 ft below land-surface datum, Mar. 18, 1991; lowest measured, 76.05 ft below land-surface datum, Mar. 16, 1992.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

	WATER LEVEL		WATER LEVEL		WATER LEVEL		WATER LEVEL		WATER LEVEL
DEC 10	75.39	MAR 16	76.05	JUN 12	75.78	JUL 28	74.90	SEP 30	74.22

394930083013100. Local number, FR-277

LOCATION.--Lat 39°49'30", long 83°01'31", Hydrologic unit 05060001

Owner.--Mr. and Mrs. Steve Doersam

AQUIFER.--Sand and gravel of Quaternary Age

WELL CHARACTERISTICS.--Drilled domestic water well, depth 52 ft.

INSTRUMENTATION.--Periodic measurement with steel tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 713 ft. above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 1.5 ft above land-surface datum.

PERIOD OF RECORD.--Dec. 1989 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 16.84 ft below land-surface datum, June 21, 1990; lowest measured, 21.33 ft below land-surface datum, Dec. 10, 1991.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

	WATER LEVEL		WATER LEVEL		WATER LEVEL		WATER LEVEL		WATER LEVEL
DEC 10	21.33	MAR 16	20.16	JUN 12	18.09	JUL 28	17.03	SEP 30	18.25

395115083022600. Local number, FR-278

LOCATION.--Lat 39°51'15", long 83°02'26", Hydrologic Unit 05060001

Owner.--Mr. Mark Boster

AQUIFER.--Quaternary sand and gravel-primary; Devonian limestone-secondary

WELL CHARACTERISTICS.--Drilled domestic water well, diameter 5 in, depth 114 ft, 10 ft screen.

INSTRUMENTATION.--Periodic measurement with steel tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 735 feet above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 0.95 ft above land-surface datum.

PERIOD OF RECORD.-- July 1990 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 29.24 ft below land-surface datum, Mar. 18, 1991; lowest measured, 35.11 ft below land-surface datum, Dec. 10, 1991.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

	WATER LEVEL		WATER LEVEL		WATER LEVEL		WATER LEVEL		WATER LEVEL
DEC 10	35.11	MAR 16	34.83	JUN 12	33.87	JUL 28	33.07	SEP 30	32.43

394932083022700. Local number, FR-279

LOCATION.--Lat 39°49'32", long 83°02'27", Hydrologic unit 05060001

Owner.--Mr. Gerald Boggs

AQUIFER.--Devonian limestone

WELL CHARACTERISTICS.--Drilled domestic water well, diameter 5 in, depth 145 ft, cased to 102 ft.

INSTRUMENTATION.--Periodic measurement with steel tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 735 ft. above National Geodetic Vertical datum of 1929. Measuring point: Top of casing, 1.35 ft above land-surface datum.

PERIOD OF RECORD.-- Sept. 1990 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 7.85 ft below land-surface datum, Mar. 18, 1991; lowest measured, 23.54 ft below land-surface datum, Sep. 12, 1991.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

	WATER LEVEL		WATER LEVEL		WATER LEVEL		WATER LEVEL		WATER LEVEL
DEC 10	14.61	MAR 16	13.57	JUN 12	13.58	JUL 28	9.99	SEP 30	11.84

395000082581700. Local number, FR-281

LOCATION.--Lat 39°50'00", long 82°58'17", Hydrologic Unit 05060001.

Owner.--Hamilton Township Trustees.

AQUIFER.--Sand and gravel of Quaternary Age.

WELL CHARACTERISTICS.--Drilled domestic water-supply well, depth 83 ft., 4 in. steel.

INSTRUMENTATION - Periodic measurement with steel tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 731 feet above National Geodetic Vertical Datum of 1929. Measuring point: top of casing, 1.40 ft above land-surface datum.

PERIOD OF RECORD.--December 1991 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 39.10 ft below land-surface datum, Sept. 30, 1992; lowest measured, 42.42 ft below land-surface datum, March 16, 1992.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

	WATER LEVEL		WATER LEVEL		WATER LEVEL		WATER LEVEL		WATER LEVEL
DEC 11	41.02	MAR 16	42.42	JUN 12	41.35	JUL 28	39.53	SEP 30	39.10

394921083004700. Local number, FR-282

LOCATON.--Lat 39°49'21", long 83°00'47", Hydrologic Unit 05060001.

Owner.--City of Columbus.

AQUIFER.--Sand and gravel of Quaternary Age.

WELL CHARACTERISTICS.--Drilled observation water well, depth 56 ft., 2 in. PVC.

INSTRUMENTATION - Periodic measurement with steel tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 673 feet above National Geodetic Vertical Datum of 1929. Measuring point: top of casing, 3.00 ft above land-surface datum.

PERIOD OF RECORD.--June 1992 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 9.73 ft below land-surface datum, June 12, 1992; lowest measured, 10.64 ft below land-surface datum, Sept. 30, 1992.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

	WATER LEVEL		WATER LEVEL
JUN 12	9.73	SEP 30	10.64

395118082573300. Local number, FR-3.

LOCATION.--Lat 39°51'18", long 82°57'33", Hydrologic Unit 05060001.

Owner.--R. Hann.

AQUIFER.--Sand and gravel of Quaternary Age.

WELL CHARACTERISTICS.--Drilled observation water well, depth 60 ft.; 12 in. casing.

INSTRUMENTATION - Continuous recorder operated by the Ohio Department of Natural Resources, Division of Water.

DATUM.--Elevation of land-surface datum is 713.0 feet above National Geodetic Vertical Datum of 1929. Measuring point: Floor of shelter, 3.43 ft. above land-surface datum

PERIOD OF RECORD.--Oct. 1965 to current year

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 8.33 ft below land-surface datum, Mar. 30, 1984 and Nov 29, 1985; lowest measured, 16.48 feet below land-surface datum, Dec. 20, 1989.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

	WATER LEVEL		WATER LEVEL		WATER LEVEL		WATER LEVEL		WATER LEVEL
DEC 10	13.25	MAR 16	13.05	JUN 12	13.12	JUL 28	10.59	SEP 30	13.00

395037082581900. Local number, FR-36

LOCATION.--Lat 39°50'37", long 82°58'19", Hydrologic Unit 05060001.

Owner.--J.P. Sand and Gravel

AQUIFER.--Sand and gravel of Quaternary Age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 31 ft.

INSTRUMENTATION - Periodic measurement with steel tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 715 feet above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 1.3 ft above land-surface datum

PERIOD OF RECORD.--Oct. 1974 to present year

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 10.03 ft below land-surface datum, Oct. 17, 1979; lowest measured, 21.69 ft below land-surface datum, Mar. 16, 1992.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

	WATER LEVEL		WATER LEVEL		WATER LEVEL		WATER LEVEL		WATER LEVEL
DEC 10	21.01	MAR 16	21.69	JUN 12	21.52	JUL 28	20.01	SEP 30	19.46

394927082595800. Local number, FR-70.

LOCATION.--Lat 39°49'27", long 82°59'58", Hydrologic Unit 05060001.

Owner.--St. Joseph Cemetery.

AQUIFER.--Sand and gravel of Quaternary Age.

WELL CHARACTERISTICS.--Drilled observation water well, depth 59 ft.; 4 in. casing.

INSTRUMENTATION - Periodic measurement with steel tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 705 feet above National Geodetic Vertical Datum of 1929. Measuring point: Top of concrete base, 0.35 ft above land-surface datum.

PERIOD OF RECORD.--Apr. 1975 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 13.24 ft below land-surface datum, Mar. 18, 1991; lowest measured, 27.60 ft below land-surface datum, June 12, 1992.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

	WATER LEVEL		WATER LEVEL		WATER LEVEL		WATER LEVEL		WATER LEVEL
DEC 10	24.98	MAR 16	26.89	JUN 12	27.60	JUL 28	23.81	SEP 30	20.17

395217083002300. Local number FR-72.

LOCATION.--Lat 39°52'17", long 83°00'23", Hydrologic Unit 05060001.

AQUIFER.--Sand and gravel of Quaternary Age.

WELL CHARACTERISTICS.--Drilled observation water well, depth 34.6 ft, 3 in. casing.

INSTRUMENTATION - Periodic measurement with steel tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 715 feet above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing inside pit, 3.5 ft below land-surface datum.

PERIOD OF RECORD.--May 1975 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 23.01 ft below land-surface datum, June 27, 1990; lowest measured, dry on Mar. 16, 1992.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

	WATER LEVEL		WATER LEVEL		WATER LEVEL		WATER LEVEL		WATER LEVEL
DEC 11	37.01	MAR 16	dry	JUN 12	36.80	JUL 28	31.63	SEP 30	34.63

395027082585600. Local number TH-83 M15

LOCATION.--Lat 39°50'27", long 82°58'56", Hydrologic Unit 05060001

Owner.--J.P. Sand and Gravel

AQUIFER.--Sand and gravel of Quaternary Age.

WELL CHARACTERISTICS.--Drilled observation water well, 8 in. diameter, 64 feet deep.

INSTRUMENTATION.--Periodic measurement with steel tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 707 feet above national Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 1.70 ft above land-surface datum

PERIOD OF RECORD.--Oct. 1977 to present

EXTREMES FOR PERIOD OF RECORD.--highest water level measured, 11.71 ft below land-surface datum, June 17, 1981; lowest measured, 38.08 ft below land-surface datum, Dec. 10, 1991.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

	WATER LEVEL		WATER LEVEL		WATER LEVEL		WATER LEVEL		WATER LEVEL
DEC 10	38.08	MAR 16	37.96	JUN 12	35.12	JUL 28	20.55	SEP 30	24.67

194 EFFECTS OF HIGHWAY DEICING CHEMICALS ON SHALLOW UNCONSOLIDATED AQUIFERS IN OHIO

The following tables list the results of chemical analysis of ground-water samples collected from eight sites throughout Ohio, established to monitor the ground-water quality in areas near state highways where road deicing is practiced. Some wells, with station ID's ending in "01" through "06" represent the multiports within the same well ending in "00". Level "01" is the deepest port and level "06" is the shallowest port. These ports were sampled using dialysis tubing filled with distilled water, set at each level and allowed to come to equilibrium in thirty to forty-five days.

This study began in 1988 and will continue through 1997. Water-quality sampling will be done 1991-1996. These data are presented to the Ohio Department of Transportation for their use in reviewing deicing practices and to accumulate base-line data.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 THROUGH SEPTEMBER 1992

DATE	SPECIFIC CONDUCTANCE LAB (US/CM)	CALCIUM DISSOLVED (MG/L AS CA)	SODIUM, DISSOLVED (MG/L AS NA)	CHLORIDE, DISSOLVED (MG/L AS CL)	BROMIDE DISSOLVED (MG/L AS BR)
393541083000801 PK-50 NR CIRCLEVILLE OH-LEVEL 1 (LAT 39 35 41N LONG 083 00 08W)					
OCT 1991					
18...	524	100	3.6	10	0.04
NOV					
15...	761	100	3.6	17	0.03
JAN 1992					
21...	762	110	3.7	19	0.04
FEB					
24...	768	100	4.6	18	0.04
APR					
09...	758	120	3.4	22	0.04
MAY					
22...	516	71	2.6	14	0.03
393541083000802 PK-50 NR CIRCLEVILLE OH-LEVEL 2 (LAT 39 35 41N LONG 083 00 08W)					
OCT 1991					
18...	445	88	5.9	9.3	0.03
NOV					
15...	--	90	5.0	17	<0.01
JAN 1992					
21...	655	90	3.8	18	0.03
FEB					
24...	690	87	3.8	18	0.04
APR					
09...	699	90	3.2	22	0.03
MAY					
22...	689	84	3.0	15	0.03
393541083000803 PK-50 NR CIRCLEVILLE OH-LEVEL 3 (LAT 39 35 41N LONG 083 00 08W)					
OCT 1991					
18...	420	89	7.1	16	0.02
NOV					
15...	752	89	5.5	15	0.03
JAN 1992					
21...	808	110	3.9	17	0.03
FEB					
24...	857	130	3.6	13	0.04
APR					
09...	812	120	3.4	20	0.02
MAY					
22...	536	69	5.3	22	0.03
393541083000804 PK-50 NR CIRCLEVILLE OH-LEVEL 4 (LAT 39 35 41N LONG 083 00 08W)					
OCT 1991					
18...	458	84	5.1	14	0.04
NOV					
15...	685	81	4.9	16	0.03
JAN 1992					
21...	681	79	3.5	17	0.03
FEB					
24...	715	95	3.3	17	0.03
APR					
09...	714	91	3.0	21	0.02
MAY					
22...	728	91	2.8	15	0.02
393541083000805 PK-50 NR CIRCLEVILLE OH-LEVEL 5 (LAT 39 35 41N LONG 083 00 08W)					
OCT 1991					
18...	412	67	5.2	13	0.03
NOV					
15...	639	81	5.0	16	0.03
JAN 1992					
21...	658	81	3.6	18	0.03
FEB					
24...	676	89	3.3	17	0.03
APR					
09...	675	85	5.5	21	0.03
MAY					
22...	548	79	3.4	17	0.03
393541083000901 PK-49 NR CIRCLEVILLE OH-LEVEL 1 (LAT 39 35 41N LONG 083 00 09W)					
OCT 1991					
18...	408	83	4.9	12	0.03
JAN 1992					
21...	537	73	3.8	18	0.03
FEB					
24...	543	72	3.3	18	0.04
APR					
09...	464	75	2.5	20	0.02
MAY					
22...	487	71	2.0	14	0.03

DATE	SPECIFIC CONDUCTANCE LAB (US/CM)	CALCIUM DISSOLVED (MG/L AS CA)	SODIUM, DISSOLVED (MG/L AS NA)	CHLORIDE, DISSOLVED (MG/L AS CL)	BROMIDE DISSOLVED (MG/L AS BR)
393541083000902 PK-49 NR CIRCLEVILLE OH-LEVEL 2 (LAT 39 35 41N LONG 083 00 09W)					
OCT 1991 18...	359	170	5.0	11	0.03
JAN 1992 21...	--	41	3.7	19	0.02
FEB 24...	538	76	3.0	18	0.03
APR 09...	538	--	--	16	0.02
MAY 22...	587	82	6.9	23	0.04
393541083000903 PK-49 NR CIRCLEVILLE OH-LEVEL 3 (LAT 39 35 41N LONG 083 00 09W)					
JAN 1992 21...	535	35	3.6	18	0.03
FEB 24...	545	75	3.2	19	0.03
APR 09...	545	77	2.3	21	0.03
MAY 22...	344	--	--	14	0.03
393541083000904 PK-49 NR CIRCLEVILLE OH-LEVEL 4 (LAT 39 35 41N LONG 083 00 09W)					
OCT 1991 18...	338	72	3.5	12	0.02
NOV 15...	542	--	--	17	0.04
JAN 1992 21...	--	97	3.5	19	0.02
FEB 24...	536	76	3.2	18	0.03
APR 09...	542	74	2.3	20	0.03
MAY 22...	517	71	2.6	16	0.03
393541083000905 PK-49 NR CIRCLEVILLE OH-LEVEL 5 (LAT 39 35 41N LONG 083 00 09W)					
OCT 1991 18...	328	70	3.2	10	0.03
JAN 1992 21...	--	86	3.3	19	0.03
FEB 24...	548	76	3.2	18	0.04
APR 09...	--	72	2.4	20	0.03
MAY 22...	573	86	4.5	16	0.03
393541083001001 PK-47 NR CIRCLEVILLE OH-LEVEL 1 (LAT 39 35 41N LONG 083 00 10W)					
OCT 1991 18...	333	86	4.1	10	0.02
NOV 15...	547	--	--	16	0.05
JAN 1992 21...	542	82	3.6	18	0.04
FEB 24...	524	--	--	17	0.04
APR 09...	534	72	2.2	20	0.03
MAY 22...	520	75	2.7	16	0.03
393541083001002 PK-47 NR CIRCLEVILLE OH-LEVEL 2 (LAT 39 35 41N LONG 083 00 10W)					
OCT 1991 18...	279	--	--	12	0.03
NOV 15...	--	78	3.2	15	0.03
JAN 1992 21...	525	76	3.9	18	0.10
FEB 24...	533	75	2.6	18	0.03
APR 09...	536	78	2.3	20	0.03
MAY 22...	520	76	2.5	15	0.03
393541083001003 PK-47 NR CIRCLEVILLE OH-LEVEL 3 (LAT 39 35 41N LONG 083 00 10W)					
OCT 1991 18...	347	--	--	14	0.03
NOV 15...	--	75	3.5	15	0.03
JAN 1992 21...	531	82	3.3	18	0.04
FEB 24...	524	72	3.0	17	0.03
APR 09...	537	73	2.2	20	0.04
MAY 22...	558	72	2.5	15	0.03

DATE	SPECIFIC CONDUCTANCE LAB (US/CM)	CALCIUM DISSOLVED (MG/L AS CA)	SODIUM, DISSOLVED (MG/L AS NA)	CHLORIDE, DISSOLVED (MG/L AS CL)	BROMIDE DISSOLVED (MG/L AS BR)
393541083001004 PK-47 NR CIRCLEVILLE OH-LEVEL 4 (LAT 39 35 41N LONG 083 00 10W)					
OCT 1991 18...	—	80	3.5	11	0.02
NOV 15...	—	76	3.4	15	0.02
JAN 1992 21...	528	86	3.3	19	0.02
FEB 24...	—	75	3.0	18	0.04
APR 09...	533	74	2.1	20	0.04
MAY 22...	510	75	1.9	12	0.03
393541083001005 PK-47 NR CIRCLEVILLE OH-LEVEL 5 (LAT 39 35 41N LONG 083 00 10W)					
OCT 1991 18...	332	77	3.6	11	0.03
NOV 15...	—	70	4.4	15	0.04
JAN 1992 21...	531	76	3.5	18	0.04
FEB 24...	516	—	—	18	0.05
APR 09...	530	74	2.1	20	0.04
MAY 22...	550	72	2.7	17	0.02
393541083001201 PK-53 NR CIRCLEVILLE OH-LEVEL 1 (LAT 39 35 41N LONG 083 00 12W)					
OCT 1991 18...	348	80	2.6	9.3	0.02
NOV 15...	626	93	3.6	18	0.03
JAN 1992 21...	611	90	3.4	17	0.06
FEB 24...	—	74	2.3	14	0.03
APR 09...	529	75	1.6	18	0.03
MAY 22...	530	78	3.0	15	0.03
393541083001202 PK-53 NR CIRCLEVILLE OH-LEVEL 2 (LAT 39 35 41N LONG 083 00 12W)					
OCT 1991 18...	352	80	2.4	12	0.01
NOV 15...	625	94	3.5	17	0.04
JAN 1992 21...	—	84	2.6	15	0.02
FEB 24...	529	73	2.1	14	0.03
APR 09...	516	77	1.6	18	0.04
MAY 22...	544	71	2.7	15	0.02
393541083001203 PK-53 NR CIRCLEVILLE OH-LEVEL 3 (LAT 39 35 41N LONG 083 00 12W)					
OCT 1991 18...	358	81	2.3	13	0.02
NOV 15...	556	77	2.3	13	0.03
JAN 1992 21...	546	79	2.6	14	0.02
FEB 24...	527	69	2.2	14	0.03
APR 09...	523	75	1.5	18	0.04
MAY 22...	515	74	1.9	14	0.03
393541083001204 PK-53 NR CIRCLEVILLE OH-LEVEL 4 (LAT 39 35 41N LONG 083 00 12W)					
OCT 1991 18...	—	78	2.4	9.8	0.02
NOV 15...	519	80	2.6	13	0.03
JAN 1992 21...	—	35	2.5	15	0.02
FEB 24...	532	72	2.0	14	0.03
APR 09...	530	75	1.7	18	0.04
MAY 22...	546	69	4.4	19	0.03

DATE	SPECIFIC CONDUCTANCE LAB (US/CM)	CALCIUM DISSOLVED (MG/L AS CA)	SODIUM, DISSOLVED (MG/L AS NA)	CHLORIDE, DISSOLVED (MG/L AS CL)	BROMIDE DISSOLVED (MG/L AS BR)
393541083001205 PK-53 NR CIRCLEVILLE OH-LEVEL 5 (LAT 39 35 41N LONG 083 00 12W)					
OCT 1991 18...	335	71	2.1	11	0.01
NOV 15...	—	84	2.4	12	0.02
JAN 1992 21...	525	36	2.4	13	0.02
FEB 24...	510	71	2.1	14	0.03
APR 09...	523	73	1.6	18	0.03
MAY 22...	684	81	2.8	15	0.03
393541083001206 PK-53 NR CIRCLEVILLE OH-LEVEL 6 (LAT 39 35 41N LONG 083 00 12W)					
OCT 1991 18...	245	79	2.5	7.2	0.01
NOV 15...	—	83	2.5	12	0.04
JAN 1992 21...	511	34	2.3	13	0.02
FEB 24...	526	70	2.1	14	0.03
APR 09...	523	75	1.6	19	0.04
MAY 22...	468	69	1.8	12	0.03
393542083000501 PK-52 NR CIRCLEVILLE OH-LEVEL 1 (LAT 39 35 42N LONG 083 00 05W)					
OCT 1991 18...	388	85	3.8	12	0.03
JAN 1992 21...	577	46	6.3	18	0.03
FEB 24...	569	70	5.4	18	0.03
APR 09...	—	80	4.0	23	0.07
393542083000502 PK-52 NR CIRCLEVILLE OH-LEVEL 2 (LAT 39 35 42N LONG 083 00 05W)					
OCT 1991 18...	362	75	3.7	11	0.03
JAN 1992 21...	565	39	6.7	18	0.03
FEB 24...	585	82	4.7	19	0.03
APR 09...	594	85	3.8	20	0.03
393542083000503 PK-52 NR CIRCLEVILLE OH-LEVEL 3 (LAT 39 35 42N LONG 083 00 05W)					
JAN 1992 21...	584	85	5.7	20	0.02
FEB 24...	591	78	4.7	18	0.03
APR 09...	600	79	3.7	23	0.03
393542083000504 PK-52 NR CIRCLEVILLE OH-LEVEL 4 (LAT 39 35 42N LONG 083 00 05W)					
OCT 1991 18...	372	88	3.7	10	0.03
JAN 1992 21...	586	—	—	19	0.03
FEB 24...	584	78	4.9	18	0.03
APR 09...	590	86	3.7	23	0.03
393542083000505 PK-52 NR CIRCLEVILLE OH-LEVEL 5 (LAT 39 35 42N LONG 083 00 05W)					
OCT 1991 18...	364	88	4.6	12	0.03
JAN 1992 21...	583	80	6.0	19	0.03
FEB 24...	580	83	4.5	18	0.03
APR 09...	—	89	3.6	22	0.03
393542083000506 PK-52 NR CIRCLEVILLE OH-LEVEL 6 (LAT 39 35 42N LONG 083 00 05W)					
OCT 1991 18...	323	85	6.4	10	0.02
JAN 1992 21...	582	36	6.6	18	0.05
FEB 24...	—	86	6.7	20	0.03
APR 09...	627	86	6.4	26	0.03
MAY 22...	688	84	2.8	17	0.03

DATE	SPECIFIC CONDUCTANCE LAB (US/CM)	CALCIUM DISSOLVED (MG/L AS CA)	SODIUM, DISSOLVED (MG/L AS NA)	CHLORIDE, DISSOLVED (MG/L AS CL)	BROMIDE DISSOLVED (MG/L AS BR)
393542083000701 PK-51 NR CIRCLEVILLE OH-LEVEL 1 (LAT 39 35 42N LONG 083 00 07W)					
OCT 1991 18...	362	73	9.9	11	0.03
JAN 1992 21...	543	39	8.9	19	0.04
FEB 24...	552	72	5.9	19	0.03
APR 09...	558	76	8.4	21	0.03
MAY 22...	--	35	5.4	17	0.04
393542083000702 PK-51 NR CIRCLEVILLE OH-LEVEL 2 (LAT 39 35 42N LONG 083 00 07W)					
OCT 1991 18...	--	90	10	11	0.03
JAN 1992 21...	534	--	--	18	0.03
FEB 24...	549	74	5.3	19	0.04
APR 09...	558	76	4.5	23	0.04
MAY 22...	530	72	4.1	16	0.03
393542083000703 PK-51 NR CIRCLEVILLE OH-LEVEL 3 (LAT 39 35 42N LONG 083 00 07W)					
OCT 1991 18...	348	--	--	14	0.03
JAN 1992 21...	539	49	8.1	18	0.04
FEB 24...	541	73	5.8	19	0.05
APR 09...	547	65	4.5	22	0.05
MAY 22...	517	73	4.3	19	0.03
393542083000704 PK-51 NR CIRCLEVILLE OH-LEVEL 4 (LAT 39 35 42N LONG 083 00 07W)					
OCT 1991 18...	350	77	9.8	14	0.04
JAN 1992 21...	--	45	8.8	19	0.04
FEB 24...	543	73	5.4	19	0.04
APR 09...	371	75	4.6	22	0.04
MAY 22...	550	74	4.2	17	0.03
393542083000705 PK-51 NR CIRCLEVILLE OH-LEVEL 5 (LAT 39 35 42N LONG 083 00 07W)					
OCT 1991 18...	363	75	10	11	0.04
JAN 1992 21...	538	--	--	20	0.03
FEB 24...	--	73	5.1	18	0.03
APR 09...	544	74	4.1	22	0.03
MAY 22...	523	71	1.9	14	0.04
393542083000706 PK-51 NR CIRCLEVILLE OH-LEVEL 6 (LAT 39 35 42N LONG 083 00 07W)					
OCT 1991 18...	348	83	11	13	0.04
JAN 1992 21...	531	47	9.0	18	0.04
FEB 24...	543	76	7.2	20	0.05
APR 09...	550	77	5.1	24	0.03
MAY 22...	553	71	2.5	16	0.03
CLARK COUNTY SITE #8 (SR 4)					
395859083440201 CL-141 NR SPRINGFIELD OH-LEVEL 1 (LAT 39 58 59N LONG 083 44 02W)					
OCT 1991 17...	864	120	6.2	13	0.03
NOV 25...	--	110	7.4	18	0.03
JAN 1992 13...	--	47	7.8	26	0.04
FEB 18...	--	100	9.1	37	0.03
APR 06...	--	--	--	35	0.02
MAY 19...	738	110	13	28	0.02

DATE	SPECIFIC CONDUCTANCE LAB (US/CM)	CALCIUM DISSOLVED (MG/L AS CA)	SODIUM, DISSOLVED (MG/L AS NA)	CHLORIDE, DISSOLVED (MG/L AS CL)	BROMIDE DISSOLVED (MG/L AS BR)
395859083440202 CL-141 NR SPRINGFIELD OH-LEVEL 2 (LAT 39 58 59N LONG 083 44 02W)					
OCT 1991 17...	870	130	6.1	13	0.03
NOV 25...	792	120	7.8	18	0.03
JAN 1992 13...	--	--	--	27	0.04
FEB 18...	742	110	10	32	0.03
APR 06...	--	120	15	41	0.03
MAY 19...	753	100	13	30	0.03
395859083440203 CL-141 NR SPRINGFIELD OH-LEVEL 3 (LAT 39 58 59N LONG 083 44 02W)					
OCT 1991 17...	869	120	7.2	16	0.03
NOV 25...	--	110	9.6	21	0.03
JAN 1992 13...	--	45	8.6	28	0.04
FEB 18...	820	120	10	33	0.03
APR 06...	881	--	--	34	0.03
MAY 19...	794	--	--	34	0.03
395859083440204 CL-141 NR SPRINGFIELD OH-LEVEL 4 (LAT 39 58 59N LONG 083 44 02W)					
OCT 1991 17...	553	120	8.7	17	0.04
NOV 25...	--	120	9.9	16	0.03
JAN 1992 13...	797	--	--	28	0.04
FEB 18...	--	110	11	37	0.03
APR 06...	--	120	17	40	0.02
MAY 19...	746	100	11	35	0.02
395859083440205 CL-141 NR SPRINGFIELD OH-LEVEL 5 (LAT 39 58 59N LONG 083 44 02W)					
OCT 1991 17...	--	120	11	22	0.03
NOV 25...	--	120	12	23	0.03
JAN 1992 13...	772	--	--	28	0.04
FEB 18...	682	110	11	34	0.03
APR 06...	--	110	20	38	0.03
MAY 19...	728	110	15	31	<0.01
395859083440301 CL-143 NR SPRINGFIELD OH-LEVEL 1 (LAT 39 58 59N LONG 083 44 03W)					
OCT 1991 17...	862	120	12	20	0.04
NOV 25...	--	120	11	18	0.04
JAN 1992 13...	779	--	--	19	0.05
FEB 18...	692	110	8.9	19	0.04
APR 06...	--	130	9.6	20	0.03
MAY 19...	688	100	7.7	18	--
395859083440302 CL-143 NR SPRINGFIELD OH-LEVEL 2 (LAT 39 58 59N LONG 083 44 03W)					
OCT 1991 17...	729	110	12	14	0.03
NOV 25...	688	120	11	16	0.03
JAN 1992 13...	--	52	11	20	0.05
FEB 18...	721	100	8.8	20	0.03
APR 06...	--	120	12	22	0.03
MAY 19...	755	140	9.1	22	0.02

DATE	SPECIFIC CONDUCTANCE LAB (US/CM)	CALCIUM DISSOLVED (MG/L AS CA)	SODIUM, DISSOLVED (MG/L AS NA)	CHLORIDE, DISSOLVED (MG/L AS CL)	BROMIDE DISSOLVED (MG/L AS BR)
395859083440303 CL-143 NR SPRINGFIELD OH-LEVEL 3 (LAT 39 58 59N LONG 083 44 03W)					
OCT 1991 17...	770	110	9.7	14	0.03
NOV 25...	--	110	9.1	11	0.04
JAN 1992 13...	722	50	9.6	20	0.04
FEB 18...	691	100	9.9	24	0.04
APR 06...	734	110	11	26	0.03
MAY 19...	--	110	9.5	25	0.02
395859083440304 CL-143 NR SPRINGFIELD OH-LEVEL 4 (LAT 39 58 59N LONG 083 44 03W)					
OCT 1991 17...	676	98	4.4	7.9	0.02
NOV 25...	--	81	5.0	10	0.03
JAN 1992 13...	--	42	6.4	11	0.02
FEB 18...	533	87	7.0	14	0.02
APR 06...	--	97	7.0	18	0.02
MAY 19...	691	87	6.5	16	0.02
395859083440305 CL-143 NR SPRINGFIELD OH-LEVEL 5 (LAT 39 58 59N LONG 083 44 03W)					
OCT 1991 17...	429	90	4.0	3.1	0.02
NOV 25...	--	91	5.1	7.9	0.02
FEB 1992 18...	317	--	--	6.4	0.01
APR 06...	566	--	--	7.1	0.02
MAY 19...	--	80	5.2	6.6	<0.01
395859083440401 CL-142 NR SPRINGFIELD OH-LEVEL 1 (LAT 39 58 59N LONG 083 44 04W)					
OCT 1991 17...	577	120	16	24	0.03
NOV 25...	--	120	11	23	0.04
JAN 1992 13...	--	48	12	30	0.05
FEB 18...	732	100	11	31	0.04
APR 06...	--	130	14	40	0.03
MAY 19...	830	110	14	43	0.02
395859083440402 CL-142 NR SPRINGFIELD OH-LEVEL 2 (LAT 39 58 59N LONG 083 44 04W)					
OCT 1991 17...	553	130	18	30	0.03
NOV 25...	--	130	14	28	0.03
JAN 1992 13...	712	46	13	32	0.04
FEB 18...	747	100	12	35	0.03
APR 06...	774	110	14	37	0.03
MAY 19...	755	100	14	41	0.02
395859083440403 CL-142 NR SPRINGFIELD OH-LEVEL 3 (LAT 39 58 59N LONG 083 44 04W)					
OCT 1991 17...	869	120	19	29	0.04
NOV 25...	--	110	16	31	0.04
JAN 1992 13...	704	47	14	32	0.04
FEB 18...	709	99	12	33	0.04
APR 06...	782	120	15	38	0.02
MAY 19...	765	100	13	40	0.02

DATE	SPECIFIC CONDUCTANCE LAB (US/CM)	CALCIUM DISSOLVED (MG/L AS CA)	SODIUM, DISSOLVED (MG/L AS NA)	CHLORIDE, DISSOLVED (MG/L AS CL)	BROMIDE DISSOLVED (MG/L AS BR)
395859083440404 CL-142 NR SPRINGFIELD OH-LEVEL 4 (LAT 39 58 59N LONG 083 44 04W)					
OCT 1991 17...	518	120	12	46	0.03
NOV 25...	--	120	20	43	0.04
JAN 1992 13...	--	--	--	34	0.04
FEB 18...	595	--	--	24	0.04
APR 06...	--	120	15	39	0.03
MAY 19...	--	110	14	40	0.02
395859083440501 CL-140 NR SPRINGFIELD OH-LEVEL 1 (LAT 39 58 59N LONG 083 44 05W)					
OCT 1991 17...	856	120	5.1	12	0.03
NOV 25...	845	110	6.3	16	0.04
JAN 1992 13...	853	48	7.9	31	0.04
FEB 18...	880	110	8.5	35	0.04
APR 06...	890	120	13	32	0.02
MAY 19...	854	97	9.9	27	0.04
395859083440502 CL-140 NR SPRINGFIELD OH-LEVEL 2 (LAT 39 58 59N LONG 083 44 05W)					
OCT 1991 17...	865	120	5.2	11	0.04
NOV 25...	856	120	6.3	16	0.04
JAN 1992 13...	876	50	7.3	26	0.03
FEB 18...	879	110	9.6	34	0.03
APR 06...	798	110	14	28	0.03
MAY 19...	857	110	10	24	0.03
395859083440503 CL-140 NR SPRINGFIELD OH-LEVEL 3 (LAT 39 58 59N LONG 083 44 05W)					
OCT 1991 17...	870	120	6.9	14	0.03
NOV 25...	861	110	8.2	20	0.04
JAN 1992 13...	878	49	8.5	29	0.04
FEB 18...	896	100	12	35	0.04
APR 06...	887	110	16	33	0.03
MAY 19...	868	110	12	32	0.04
395859083440504 CL-140 NR SPRINGFIELD OH-LEVEL 4 (LAT 39 58 59N LONG 083 44 05W)					
OCT 1991 17...	914	120	11	26	0.04
NOV 25...	893	120	10	23	0.04
JAN 1992 13...	880	50	11	28	0.04
FEB 18...	863	110	9.8	32	0.03
APR 06...	896	120	13	35	0.03
MAY 19...	893	110	14	37	0.03
395859083440505 CL-140 NR SPRINGFIELD OH-LEVEL 5 (LAT 39 58 59N LONG 083 44 05W)					
OCT 1991 17...	913	130	13	27	0.04
NOV 25...	884	100	11	24	0.03
APR 1992 06...	882	110	14	34	0.03
MAY 19...	875	110	14	34	0.03

DATE	SPECIFIC CONDUCTANCE LAB (US/CM)	CALCIUM DISSOLVED (MG/L AS CA)	SODIUM, DISSOLVED (MG/L AS NA)	CHLORIDE, DISSOLVED (MG/L AS CL)	BROMIDE DISSOLVED (MG/L AS BR)
395859083440601 CL-137 NR SPRINGFIELD OH-LEVEL 1 (LAT 39 58 59N LONG 083 44 06W)					
OCT 1991 17...	552	130	6.7	7.1	0.04
NOV 25...	--	130	6.5	12	0.03
JAN 1992 13...	789	--	--	18	0.04
FEB 18...	753	110	6.5	22	0.04
APR 06...	794	--	--	23	0.02
MAY 19...	793	--	--	23	0.03
395859083440602 CL-137 NR SPRINGFIELD OH-LEVEL 2 (LAT 39 58 59N LONG 083 44 06W)					
OCT 1991 17...	491	130	7.2	12	0.04
NOV 25...	--	120	6.5	13	0.03
JAN 1992 13...	--	46	6.6	16	0.04
FEB 18...	713	110	11	22	0.03
APR 06...	762	--	--	22	0.02
MAY 19...	819	--	--	43	0.04
395859083440603 CL-137 NR SPRINGFIELD OH-LEVEL 3 (LAT 39 58 59N LONG 083 44 06W)					
OCT 1991 17...	800	130	6.8	13	0.03
NOV 25...	--	120	6.0	13	0.03
JAN 1992 13...	740	--	--	16	0.03
FEB 18...	746	100	12	18	0.04
APR 06...	836	--	--	23	0.03
MAY 19...	789	110	14	39	0.03
395859083440604 CL-137 NR SPRINGFIELD OH-LEVEL 4 (LAT 39 58 59N LONG 083 44 06W)					
OCT 1991 17...	488	130	7.2	13	0.04
NOV 25...	--	100	7.5	14	0.03
JAN 1992 13...	--	--	--	16	0.04
FEB 18...	694	100	12	19	0.03
APR 06...	--	110	9.3	26	0.02
MAY 19...	768	--	--	40	0.03
395901083440701 CL-136 NR SPRINGFIELD OH-LV-1 (LAT 39 59 01N LONG 044 07W)					
OCT 1991 17...	544	120	5.2	7.9	0.03
NOV 25...	--	120	6.3	10	0.03
JAN 1992 13...	--	--	--	15	0.06
FEB 18...	740	100	6.6	15	0.03
APR 06...	--	100	7.3	21	0.03
MAY 19...	422	99	6.2	24	0.02
395901083440702 CL-136 NR SPRINGFIELD OH-LV-2 (LAT 39 59 01N LONG 044 07W)					
OCT 1991 17...	832	120	5.6	8.3	0.03
NOV 25...	--	130	6.6	11	0.04
JAN 1992 13...	--	45	7.0	14	0.04
FEB 18...	693	100	6.6	15	0.03
APR 06...	760	95	8.2	20	0.02
MAY 19...	751	--	--	19	0.02
395901083440703 CL-136 NR SPRINGFIELD OH-LV-3 (LAT 39 59 01N LONG 044 07W)					
OCT 1991 17...	446	86	7.9	9.2	0.02
MAY 1992 19...	706	--	--	27	0.02

DATE	SPECIFIC CONDUCTANCE LAB (US/CM)	CALCIUM DISSOLVED (MG/L AS CA)	SODIUM, DISSOLVED (MG/L AS NA)	CHLORIDE, DISSOLVED (MG/L AS CL)	BROMIDE DISSOLVED (MG/L AS BR)
CHAMPAIGN COUNTY SITE #7 (SR 29)					
400947083480001 CH-44 NR URBANA OH-LV1 (LAT 40 09 47N LONG 083 40W)					
OCT 1991 16...	935	110	23	68	0.05
NOV 26...	823	100	16	36	0.03
JAN 1992 13...	649	44	12	28	0.03
FEB 26...	808	110	11	39	0.03
APR 07...	844	110	14	43	0.03
MAY 18...	867	110	25	54	0.03
JUN 30...	806	98	42	64	0.01
AUG 10...	1010	71	53	54	0.04
SEP 23...	849	110	13	41	0.03
400947083480002 CH-44 NR URBANA OH-LV2 (LAT 40 09 47N LONG 083 40W)					
OCT 1991 16...	970	120	25	66	0.04
NOV 26...	872	110	16	36	0.03
JAN 1992 13...	867	50	13	42	0.04
FEB 26...	867	110	13	44	0.03
APR 07...	878	110	13	48	0.03
MAY 18...	932	110	21	58	0.03
JUN 30...	921	100	32	37	0.05
AUG 10...	987	100	52	47	0.03
SEP 23...	891	110	24	45	0.05
400947083480003 CH-44 NR URBANA OH-LV3 (LAT 40 09 47N LONG 083 40W)					
OCT 1991 16...	981	110	25	73	0.05
NOV 26...	897	110	17	47	0.03
JAN 1992 13...	899	48	17	49	0.04
FEB 26...	894	110	16	51	0.03
APR 07...	785	120	16	51	0.04
MAY 18...	912	110	16	53	0.04
JUN 30...	912	100	24	49	0.05
AUG 10...	951	110	30	47	0.03
SEP 23...	904	110	26	47	0.03
400947083480004 CH-44 NR URBANA OH-LV4 (LAT 40 09 47N LONG 083 40W)					
OCT 1991 16...	966	110	27	59	0.05
JAN 1992 13...	1050	60	43	86	0.05
FEB 26...	1060	110	40	93	0.05
APR 07...	1070	120	40	100	0.04
MAY 18...	1060	100	35	88	0.05
JUN 30...	1030	97	36	88	0.06
AUG 10...	1040	97	41	81	0.04
SEP 23...	1040	100	47	65	0.04

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DATE	SPECIFIC CONDUCTANCE LAB (US/CM)	CALCIUM DISSOLVED (MG/L AS CA)	SODIUM, DISSOLVED (MG/L AS NA)	CHLORIDE, DISSOLVED (MG/L AS CL)	BROMIDE DISSOLVED (MG/L AS BR)
400948083475801 CH-46 NR URBANA OH-LV1 (LAT 40 09 48N LONG 083 48W)					
OCT 1991 16...	839	120	18	40	0.03
NOV 26...	842	110	15	41	0.03
JAN 1992 13...	--	58	15	40	0.03
FEB 26...	840	--	--	42	0.03
APR 07...	--	110	15	44	0.03
MAY 18...	967	110	37	88	0.04
JUN 30...	855	110	34	80	0.02
AUG 10...	733	140	30	41	0.03
SEP 23...	944	110	30	64	0.05
400948083475802 CH-46 NR URBANA OH-LV2 (LAT 40 09 48N LONG 083 48W)					
OCT 1991 16...	851	110	18	39	0.03
NOV 26...	--	110	15	35	0.03
JAN 1992 13...	--	46	14	40	0.04
FEB 26...	840	110	14	40	0.03
APR 07...	--	110	15	44	0.02
MAY 18...	896	110	34	81	0.04
JUN 30...	627	--	--	31	0.09
AUG 10...	769	140	30	41	0.03
SEP 23...	923	110	27	59	0.03
400948083475803 CH-46 NR URBANA OH-LV3 (LAT 40 09 48N LONG 083 48W)					
OCT 1991 16...	845	110	17	39	0.03
NOV 26...	--	110	15	35	0.03
JAN 1992 13...	750	--	--	38	0.04
FEB 26...	832	--	--	41	0.03
APR 07...	850	110	14	46	0.03
MAY 18...	889	110	35	80	0.04
JUN 30...	859	--	--	76	0.06
AUG 10...	763	110	29	41	0.03
SEP 23...	--	120	25	54	0.05
400948083475804 CH-46 NR URBANA OH-LV4 (LAT 40 09 48N LONG 083 48W)					
OCT 1991 16...	829	110	19	40	0.03
NOV 26...	--	110	14	35	0.02
JAN 1992 13...	766	66	15	40	0.04
FEB 26...	825	--	--	40	0.03
APR 07...	857	110	16	46	0.04
MAY 18...	937	110	35	77	0.02
JUN 30...	876	110	33	70	0.04
AUG 10...	792	160	28	41	0.02
SEP 23...	890	110	24	47	0.05

DATE	SPECIFIC CONDUCTANCE LAB (US/CM)	CALCIUM DISSOLVED (MG/L AS CA)	SODIUM, DISSOLVED (MG/L AS NA)	CHLORIDE, DISSOLVED (MG/L AS CL)	BROMIDE DISSOLVED (MG/L AS BR)
400948083475805 CH-46 NR URBANA OH-LV5 (LAT 40 09 48N LONG 083 48W)					
OCT 1991 16...	839	100	20	41	0.03
NOV 26...	--	110	16	36	0.03
JAN 1992 13...	--	51	15	43	0.04
FEB 26...	--	110	16	43	0.03
APR 07...	--	120	16	47	0.04
MAY 18...	873	110	26	69	0.03
JUN 30...	845	120	30	62	0.05
AUG 10...	763	160	27	42	0.03
SEP 23...	830	120	26	45	<0.01
400948083475806 CH-46 NR URBANA OH-LV6 (LAT 40 09 48N LONG 083 48W)					
NOV 1991 26...	--	--	--	6.6	0.01
JAN 1992 13...	--	--	--	5.0	0.01
APR 07...	--	--	--	5.4	<0.01
MAY 18...	835	--	--	49	0.02
JUN 30...	871	--	--	68	0.05
AUG 10...	677	130	26	43	0.02
SEP 23...	779	98	22	40	0.02
400948083480002 CH-45 NR URBANA OH-LV2 (LAT 40 09 48N LONG 083 40W)					
OCT 1991 16...	831	110	14	36	0.04
NOV 26...	--	110	12	32	0.03
JAN 1992 13...	756	47	10	36	0.03
FEB 26...	816	110	11	38	0.03
APR 07...	--	120	34	130	0.05
MAY 18...	656	110	32	110	0.04
JUN 30...	783	110	24	46	0.04
AUG 10...	775	110	43	42	0.02
SEP 23...	839	110	12	40	<0.01
400948083480003 CH-45 NR URBANA OH-LV3 (LAT 40 09 48N LONG 083 40W)					
OCT 1991 16...	779	120	14	35	0.03
NOV 26...	--	98	12	31	0.03
JAN 1992 13...	--	--	--	37	0.03
FEB 26...	823	110	13	45	0.02
APR 07...	--	140	41	150	0.05
MAY 18...	999	110	33	93	0.04
JUN 30...	840	--	--	54	0.05
AUG 10...	847	110	40	40	0.03
SEP 23...	796	110	12	39	0.02

DATE	SPECIFIC CONDUCTANCE LAB (US/CM)	CALCIUM DISSOLVED (MG/L AS CA)	SODIUM, DISSOLVED (MG/L AS NA)	CHLORIDE, DISSOLVED (MG/L AS CL)	BROMIDE DISSOLVED (MG/L AS BR)
400948083480004 CH-45 NR URBANA OH-LV4 (LAT 40 09 48N LONG 083 40W)					
OCT 1991					
16...	876	120	18	45	0.04
NOV					
26...	837	100	14	35	0.04
JAN 1992					
13...	--	51	19	54	0.05
FEB					
26...	905	120	16	53	0.04
APR					
07...	1060	130	30	98	0.05
MAY					
18...	954	110	33	93	0.04
JUN					
30...	812	100	32	51	0.04
AUG					
10...	867	--	--	40	0.04
SEP					
23...	886	110	25	43	0.02
400948083480005 CH-45 NR URBANA OH-LV5 (LAT 40 09 48N LONG 083 40W)					
OCT 1991					
16...	930	120	24	50	0.04
NOV					
26...	--	120	18	45	0.04
JAN 1992					
13...	--	50	18	49	0.04
FEB					
26...	952	120	18	56	0.04
APR					
07...	959	--	--	58	0.04
MAY					
18...	918	110	28	76	0.03
JUN					
30...	822	--	--	56	0.05
AUG					
10...	742	130	17	38	<0.01
SEP					
23...	914	97	41	49	0.05
400948083480006 CH-45 NR URBANA OH-LV6 (LAT 40 09 48N LONG 083 40W)					
SEP 1992					
23...	635	77	11	33	0.03
400948083480101 CH-43 NR URBANA OH-LV1 (LAT 40 09 48N LONG 083 41W)					
OCT 1991					
16...	899	110	25	68	0.05
NOV					
26...	844	110	19	40	0.03
JAN 1992					
13...	--	47	13	40	0.03
FEB					
26...	833	110	12	41	0.03
APR					
07...	826	110	13	40	0.03
MAY					
18...	919	110	36	56	0.02
JUN					
30...	826	120	51	41	0.05
AUG					
10...	938	130	55	56	0.03
SEP					
23...	812	--	--	40	0.02
400948083480102 CH-43 NR URBANA OH-LV2 (LAT 40 09 48N LONG 083 41W)					
OCT 1991					
16...	935	110	25	67	0.04
NOV					
26...	--	--	--	42	0.03
JAN 1992					
13...	682	44	13	40	0.03
FEB					
26...	839	110	13	44	0.03
APR					
07...	--	110	13	42	0.03
MAY					
18...	--	100	35	56	0.02
JUN					
30...	842	100	49	38	0.04
AUG					
10...	905	--	--	58	0.03
SEP					
23...	865	120	16	44	0.02

DATE	SPECIFIC CONDUCTANCE LAB (US/CM)	CALCIUM DISSOLVED (MG/L AS CA)	SODIUM, DISSOLVED (MG/L AS NA)	CHLORIDE, DISSOLVED (MG/L AS CL)	BROMIDE DISSOLVED (MG/L AS BR)
400948083480103 CH-43 NR URBANA OH-LV3 (LAT 40 09 48N LONG 083 41W)					
OCT 1991 16...	917	120	29	81	0.04
NOV 26...	--	99	19	39	0.02
JAN 1992 13...	711	--	--	40	0.03
FEB 26...	829	110	13	47	0.03
APR 07...	879	110	18	51	0.03
MAY 18...	891	100	38	61	0.02
JUN 30...	--	99	50	45	0.05
AUG 10...	914	110	49	53	0.03
SEP 23...	853	100	18	45	<0.01
400948083480104 CH-43 NR URBANA OH-LV4 (LAT 40 09 48N LONG 083 41W)					
OCT 1991 16...	928	120	24	66	0.04
NOV 26...	--	110	23	56	0.03
JAN 1992 13...	789	--	--	45	0.03
FEB 26...	873	110	17	54	0.03
APR 07...	832	110	22	55	0.03
MAY 18...	840	100	40	62	0.02
JUN 30...	954	99	44	40	0.05
AUG 10...	879	110	51	53	0.03
SEP 23...	1020	110	63	53	0.05
400948083480105 CH-43 NR URBANA OH-LV5 (LAT 40 09 48N LONG 083 41W)					
OCT 1991 16...	911	100	26	70	0.04
NOV 26...	--	120	23	55	0.03
JAN 1992 13...	--	43	16	44	0.03
FEB 26...	871	100	15	49	0.03
APR 07...	837	110	19	52	0.03
MAY 18...	885	110	13	46	0.01
JUN 30...	847	97	38	65	0.04
AUG 10...	972	--	--	48	0.04
SEP 23...	939	110	38	52	<0.01
400948083480201 CH-41 NR URBANA OH-LV1 (LAT 40 09 48N LONG 083 42W)					
OCT 1991 16...	800	110	12	35	0.03
NOV 26...	--	110	13	33	0.03
JAN 1992 13...	--	41	15	36	0.03
FEB 26...	811	110	13	34	0.03
APR 07...	807	110	14	32	0.03
MAY 18...	487	100	11	35	0.02
JUN 30...	721	100	14	38	0.01
AUG 10...	735	110	13	39	0.02
SEP 23...	828	110	12	38	0.01

DATE	SPECIFIC CONDUCTANCE LAB (US/CM)	CALCIUM DISSOLVED (MG/L AS CA)	SODIUM, DISSOLVED (MG/L AS NA)	CHLORIDE, DISSOLVED (MG/L AS CL)	BROMIDE, DISSOLVED (MG/L AS BR)
400948083480202 CH-41 NR URBANA OH-LV2 (LAT 40 09 48N LONG 083 42W)					
OCT 1991 16...	777	100	12	36	0.03
NOV 26...	--	110	13	33	0.03
JAN 1992 13...	--	52	14	36	0.02
FEB 26...	810	110	14	36	0.03
APR 07...	--	110	14	31	0.02
MAY 18...	754	100	11	35	0.03
JUN 30...	698	110	13	39	0.04
AUG 10...	722	110	14	38	0.02
SEP 23...	823	100	12	34	0.02
400948083480203 CH-41 NR URBANA OH-LV3 (LAT 40 09 48N LONG 083 42W)					
OCT 1991 16...	782	110	13	37	0.03
NOV 26...	--	110	14	35	0.03
JAN 1992 13...	--	42	15	36	0.03
FEB 26...	809	--	--	34	0.04
APR 07...	806	--	--	32	0.03
MAY 18...	750	99	11	35	0.02
JUN 30...	732	110	13	40	0.03
AUG 10...	706	110	14	38	0.02
SEP 23...	809	110	11	32	0.02
400948083480204 CH-41 NR URBANA OH-LV4 (LAT 40 09 48N LONG 083 42W)					
OCT 1991 16...	763	110	14	37	0.03
NOV 26...	--	110	18	35	0.03
JAN 1992 13...	--	44	21	35	0.03
FEB 26...	871	110	29	35	0.03
APR 07...	--	110	14	31	0.03
MAY 18...	775	110	15	33	0.02
JUN 30...	753	100	14	40	0.02
AUG 10...	632	110	14	37	0.02
SEP 23...	745	110	12	31	0.06
400948083480205 CH-41 NR URBANA OH-LV5 (LAT 40 09 48N LONG 083 42W)					
OCT 1991 16...	820	110	39	40	0.04
NOV 26...	--	110	48	34	0.03
JAN 1992 13...	--	43	44	37	0.04
FEB 26...	898	100	35	36	0.03
APR 07...	806	110	35	34	0.03
MAY 18...	789	97	18	36	0.02
JUN 30...	699	97	22	39	0.05
AUG 10...	843	120	35	86	0.02
SEP 23...	894	110	31	51	0.04

DATE	SPECIFIC CONDUCTANCE LAB (US/CM)	CALCIUM DISSOLVED (MG/L AS CA)	SODIUM, DISSOLVED (MG/L AS NA)	CHLORIDE, DISSOLVED (MG/L AS CL)	BROMIDE DISSOLVED (MG/L AS BR)
400948083480206 CH-41 NR URBANA OH-LV6 (LAT 40 09 48N LONG 083 42W)					
OCT 1991					
16...	791	100	40	41	0.03
NOV					
26...	--	98	44	37	0.03
JAN 1992					
13...	--	41	47	37	--
FEB					
26...	--	100	39	36	0.03
APR					
07...	--	110	34	34	0.03
MAY					
18...	--	100	24	36	0.01
JUN					
30...	774	100	23	42	0.05
AUG					
10...	823	110	25	68	0.02
SEP					
23...	871	100	28	52	0.03
400952083480801 CH-40 NR URBANA OH-LV1 (LAT 40 09 52N LONG 083 48W)					
OCT 1991					
16...	772	110	7.7	28	0.04
NOV					
26...	--	140	7.3	25	0.03
JAN 1992					
13...	--	52	7.9	30	0.04
FEB					
26...	754	110	7.9	31	0.03
APR					
07...	--	120	7.6	29	0.02
MAY					
18...	--	110	7.6	30	0.03
JUN					
30...	690	120	7.8	30	0.02
AUG					
18...	724	110	7.0	26	0.03
SEP					
23...	768	100	7.1	27	0.02
400952083480802 CH-40 NR URBANA OH-LV2 (LAT 40 09 52N LONG 083 48W)					
OCT 1991					
16...	713	120	7.5	30	0.03
NOV					
26...	--	120	7.5	31	0.03
JAN 1992					
13...	678	--	--	31	0.04
FEB					
26...	--	110	7.8	32	0.03
APR					
07...	--	120	7.2	28	0.03
MAY					
18...	714	97	7.9	30	0.03
JUN					
30...	695	160	8.3	29	0.02
AUG					
18...	747	110	6.9	26	0.03
SEP					
23...	778	110	7.5	27	0.03
400952083480803 CH-40 NR URBANA OH-LV3 (LAT 40 09 52N LONG 083 48W)					
OCT 1991					
16...	781	110	7.2	29	0.04
NOV					
26...	734	110	7.0	25	0.03
JAN 1992					
13...	702	--	--	29	0.04
FEB					
26...	765	--	--	30	0.03
APR					
07...	--	100	7.2	27	0.03
MAY					
18...	688	100	8.3	28	0.03
JUN					
30...	701	--	--	27	0.05
AUG					
18...	735	120	6.6	26	0.02
SEP					
23...	783	110	6.7	26	0.03

DATE	SPECIFIC CONDUCTANCE LAB (US/CM)	CALCIUM DISSOLVED (MG/L AS CA)	SODIUM, DISSOLVED (MG/L AS NA)	CHLORIDE, DISSOLVED (MG/L AS CL)	BROMIDE DISSOLVED (MG/L AS BR)
400952083480804 CH-40 NR URBANA OH-LV4 (LAT 40 09 52N LONG 083 48W)					
OCT 1991 16...	726	110	7.7	28	0.03
NOV 26...	--	110	7.5	30	0.03
JAN 1992 13...	663	--	--	29	0.04
FEB 26...	777	110	7.9	30	0.03
APR 07...	774	110	7.2	28	0.03
MAY 18...	675	100	11	29	0.03
JUN 30...	642	100	7.7	29	0.04
AUG 18...	773	130	7.2	26	0.02
SEP 23...	777	100	7.3	26	0.02
400952083480805 CH-40 NR URBANA OH-LV5 (LAT 40 09 52N LONG 083 48W)					
OCT 1991 16...	728	110	7.7	28	0.03
NOV 26...	723	110	7.3	26	0.03
JAN 1992 13...	--	47	6.9	29	0.03
FEB 26...	774	--	--	30	0.03
APR 07...	768	--	--	29	0.03
JUN 30...	711	--	--	27	0.05
SEP 23...	778	110	7.1	27	0.05
400952083480806 CH-40 NR URBANA OH-LV6 (LAT 40 09 52N LONG 083 48W)					
OCT 1991 16...	728	110	7.3	28	0.04
NOV 26...	--	110	6.8	25	0.03
JAN 1992 13...	--	52	7.3	29	0.08
FEB 26...	772	--	--	30	0.03
APR 07...	770	110	7.4	29	0.03
MAY 18...	670	100	6.8	28	0.03
JUN 30...	704	100	10	24	0.01
AUG 10...	737	160	8.2	17	<0.01
SEP 23...	760	110	6.9	27	0.32
ASHLAND COUNTY SITE #3 (SR 3)					
403635082152101 AS-48 NR LOUDONVILLE OH-LEVEL 1 (LAT 40 36 35N LONG 082 15 21W)					
OCT 1991 07...	480	58	16	19	0.04
JAN 1992 09...	--	27	14	9.4	0.04
FEB 21...	494	60	13	13	0.04
MAR 30...	510	62	14	12	0.03
MAY 11...	560	79	16	27	0.04
403635082152102 AS-48 NR LOUDONVILLE OH-LEVEL 2 (LAT 40 36 35N LONG 082 15 21W)					
OCT 1991 07...	536	66	17	22	0.03
NOV 22...	--	63	16	15	0.03
JAN 1992 09...	--	31	17	13	0.05
FEB 21...	527	63	15	16	0.05
MAR 30...	682	85	19	47	0.02
MAY 11...	584	76	17	30	0.06

DATE	SPECIFIC CONDUCTANCE LAB (US/CM)	CALCIUM DISSOLVED (MG/L AS CA)	SODIUM, DISSOLVED (MG/L AS NA)	CHLORIDE, DISSOLVED (MG/L AS CL)	BROMIDE DISSOLVED (MG/L AS BR)
403635082152103 AS-48 NR LOUDONVILLE OH-LEVEL 3 (LAT 40 36 35N LONG 082 15 21W)					
OCT 1991 07...	554	72	19	28	0.03
NOV 22...	--	66	19	19	0.04
JAN 1992 09...	--	31	19	15	0.05
FEB 21...	513	67	15	17	0.11
MAR 30...	693	88	18	51	0.02
MAY 11...	--	77	23	42	0.05
403635082152104 AS-48 NR LOUDONVILLE OH-LEVEL 4 (LAT 40 36 35N LONG 082 15 21W)					
OCT 1991 07...	603	71	22	30	0.04
NOV 22...	--	63	22	24	0.04
JAN 1992 09...	--	30	19	14	0.04
FEB 21...	532	66	16	15	0.05
MAR 30...	--	87	21	52	0.01
MAY 11...	614	80	24	42	0.05
403635082152105 AS-48 NR LOUDONVILLE OH-LEVEL 5 (LAT 40 36 35N LONG 082 15 21W)					
OCT 1991 07...	402	74	21	34	0.04
NOV 22...	--	72	21	23	0.05
JAN 1992 09...	--	31	19	16	0.06
FEB 21...	521	64	17	18	0.05
MAR 30...	680	86	19	53	0.02
MAY 11...	451	80	22	37	0.04
403635082152106 AS-48 NR LOUDONVILLE OH-LEVEL 6 (LAT 40 36 35N LONG 082 15 21W)					
MAY 1992 11...	561	--	--	23	0.02
403635082152201 AS-47 NR LOUDONVILLE OH-LEVEL 1 (LAT 40 36 35N LONG 082 15 22W)					
OCT 1991 07...	605	84	48	85	0.05
NOV 22...	--	83	49	78	0.06
JAN 1992 09...	817	--	--	74	0.09
FEB 21...	807	92	48	74	0.09
MAR 30...	821	91	49	70	0.07
MAY 11...	781	83	52	84	0.07
403635082152202 AS-47 NR LOUDONVILLE OH-LEVEL 2 (LAT 40 36 35N LONG 082 15 22W)					
OCT 1991 07...	744	79	45	68	0.04
NOV 22...	--	--	--	65	0.06
JAN 1992 09...	782	--	--	70	0.09
FEB 21...	777	82	44	70	0.07
MAR 30...	--	81	54	74	0.06
MAY 11...	805	89	55	96	<0.01
403635082152203 AS-47 NR LOUDONVILLE OH-LEVEL 3 (LAT 40 36 35N LONG 082 15 22W)					
FEB 1992 21...	--	15	4.3	11	<0.01
MAR 30...	--	--	--	80	0.05
MAY 11...	773	81	56	98	0.08
403635082152204 AS-47 NR LOUDONVILLE OH-LEVEL 4 (LAT 40 36 35N LONG 082 15 22W)					
MAR 1992 30...	723	--	--	84	0.04
MAY 11...	--	--	--	93	0.06

DATE	SPECIFIC CONDUCTANCE LAB (US/CM)	CALCIUM DISSOLVED (MG/L AS CA)	SODIUM, DISSOLVED (MG/L AS NA)	CHLORIDE, DISSOLVED (MG/L AS CL)	BROMIDE DISSOLVED (MG/L AS BR)
403635082152401 AS-46 NR LOUDONVILLE OH-LEVEL 1 (LAT 40 36 35N LONG 082 15 24W)					
OCT 1991 07...	595	100	40	42	0.06
NOV 22...	--	96	40	54	0.07
JAN 1992 09...	878	69	42	54	0.11
FEB 21...	975	120	43	50	0.11
MAR 30...	--	--	--	41	0.06
MAY 11...	994	--	--	37	0.07
403635082152402 AS-46 NR LOUDONVILLE OH-LEVEL 2 (LAT 40 36 35N LONG 082 15 24W)					
OCT 1991 07...	844	100	42	64	0.07
NOV 22...	--	100	43	56	0.12
JAN 1992 09...	--	42	44	49	0.10
FEB 21...	986	110	44	51	0.09
MAR 30...	--	130	48	41	0.05
MAY 11...	942	130	46	42	0.06
403635082152403 AS-46 NR LOUDONVILLE OH-LEVEL 3 (LAT 40 36 35N LONG 082 15 24W)					
JAN 1992 09...	--	44	42	39	0.12
FEB 21...	1000	120	43	50	0.10
MAR 30...	--	130	46	41	0.05
MAY 11...	935	130	44	42	0.05
403635082152404 AS-46 NR LOUDONVILLE OH-LEVEL 4 (LAT 40 36 35N LONG 082 15 24W)					
MAR 1992 30...	--	--	--	33	0.03
MAY 11...	720	84	44	45	0.05
403635082152405 AS-46 NR LOUDONVILLE OH-LEVEL 5 (LAT 40 36 35N LONG 082 15 24W)					
MAY 1992 11...	--	--	--	41	0.03
403635082152502 AS-44 NR LOUDONVILLE OH-LEVEL 2 (LAT 40 36 35N LONG 082 15 25W)					
OCT 1991 07...	707	87	45	44	0.04
NOV 22...	--	74	37	27	0.04
JAN 1992 09...	--	32	27	17	0.05
FEB 21...	623	71	25	22	0.05
MAR 30...	663	--	--	36	<0.01
MAY 11...	--	84	44	56	0.04
403635082152503 AS-44 NR LOUDONVILLE OH-LEVEL 3 (LAT 40 36 35N LONG 082 15 25W)					
OCT 1991 07...	721	83	42	36	0.04
NOV 22...	--	80	33	24	0.04
JAN 1992 09...	--	32	360	15	0.05
FEB 21...	642	70	26	28	0.05
MAR 30...	--	73	43	41	0.05
MAY 11...	--	--	--	59	0.06
403635082152504 AS-44 NR LOUDONVILLE OH-LEVEL 4 (LAT 40 36 35N LONG 082 15 25W)					
OCT 1991 07...	737	82	43	35	0.05
NOV 22...	--	82	29	20	0.04
JAN 1992 09...	--	34	24	17	0.04
FEB 21...	627	--	--	22	0.06
MAR 30...	--	--	--	45	<0.01
MAY 11...	592	75	56	69	0.05

DATE	SPECIFIC CONDUCTANCE LAB (US/CM)	CALCIUM DISSOLVED (MG/L AS CA)	SODIUM, DISSOLVED (MG/L AS NA)	CHLORIDE, DISSOLVED (MG/L AS CL)	BROMIDE DISSOLVED (MG/L AS BR)
403635082152505 AS-44 NR LOUDONVILLE OH-LEVEL 5 (LAT 40 36 35N LONG 082 15 25W)					
FEB 1992 21...	--	62	44	34	0.05
MAR 30...	--	69	45	48	0.05
MAY 11...	684	68	53	66	0.06
403635082152603 AS-49 NR LOUDONVILLE OH-LEVEL 3 (LAT 40 36 35N LONG 082 15 26W)					
OCT 1991 07...	536	86	43	54	0.04
NOV 22...	--	75	35	43	0.06
JAN 1992 09...	775	37	42	54	0.08
FEB 21...	785	90	39	53	0.08
MAR 30...	905	100	42	45	0.06
MAY 11...	759	90	39	42	0.05
403635082152604 AS-49 NR LOUDONVILLE OH-LEVEL 4 (LAT 40 36 35N LONG 082 15 26W)					
FEB 1992 21...	1220	--	--	41	0.03
MAR 30...	712	83	40	39	0.03
MAY 11...	717	82	42	63	0.05
403635082152605 AS-49 NR LOUDONVILLE OH-LEVEL 5 (LAT 40 36 35N LONG 082 15 26W)					
MAR 1992 30...	693	84	39	26	0.02
403635082152702 AS-43 NR LOUDONVILLE OH-LEVEL 2 (LAT 40 36 35N LONG 082 15 27W)					
OCT 1991 07...	374	110	13	13	<0.01
NOV 22...	--	110	14	15	0.01
JAN 1992 09...	654	42	10	6.1	<0.01
FEB 21...	675	--	--	38	0.02
MAR 30...	--	92	24	40	0.02
MAY 11...	439	88	20	28	0.01
403635082152703 AS-43 NR LOUDONVILLE OH-LEVEL 3 (LAT 40 36 35N LONG 082 15 27W)					
OCT 1991 07...	707	120	12	6.6	<0.01
NOV 22...	--	--	--	18	0.02
JAN 1992 09...	660	45	10	6.5	0.02
FEB 21...	673	96	23	50	0.01
MAR 30...	--	87	24	36	0.03
MAY 11...	616	91	21	27	0.02
403635082152704 AS-43 NR LOUDONVILLE OH-LEVEL 4 (LAT 40 36 35N LONG 082 15 27W)					
OCT 1991 07...	701	130	12	12	<0.01
NOV 22...	--	92	16	20	0.06
JAN 1992 09...	657	49	11	7.1	0.02
FEB 21...	618	92	25	50	<0.01
MAR 30...	--	--	--	25	0.05
MAY 11...	--	110	32	74	0.06
403635082152705 AS-43 NR LOUDONVILLE OH-LEVEL 5 (LAT 40 36 35N LONG 082 15 27W)					
FEB 1992 21...	--	89	32	61	<0.01
MAR 30...	534	--	--	25	0.06
MAY 11...	590	92	22	16	0.05

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RICHLAND COUNTY SITE #4 (SR 97)					
403922082325901 R-19 NR LEXINGTON OH-LV1 (LAT 40 39 22N LONG 082 59W)					
OCT 1991	--	--	--	38	0.03
10...	--	--	--	38	0.04
NOV	--	73	8.2	38	0.04
18...	--	--	--	39	0.05
JAN 1992	--	--	--	45	0.05
06...	543	--	--	48	0.03
FEB	568	71	7.6	48	0.03
25...	--	76	5.4	50	0.05
APR	--	76	5.4	50	0.05
02...	611	78	7.3	47	0.05
MAY	602	79	6.8	48	0.04
14...	633	82	7.4	48	0.03
25...	633	82	7.4	48	0.03
AUG	633	82	7.4	48	0.03
06...	633	82	7.4	48	0.03
SEP	633	82	7.4	48	0.03
14...	633	82	7.4	48	0.03
403922082325902 R-19 NR LEXINGTON OH-LV2 (LAT 40 39 22N LONG 082 59W)					
OCT 1991	384	75	8.7	37	0.03
10...	384	75	8.7	37	0.03
NOV	--	--	--	38	0.02
18...	--	--	--	38	0.02
JAN 1992	--	78	8.4	40	0.04
06...	--	78	8.4	40	0.04
FEB	535	--	--	49	0.04
25...	535	--	--	49	0.04
APR	556	70	7.0	49	0.04
02...	556	70	7.0	49	0.04
MAY	--	--	--	45	0.04
14...	--	--	--	45	0.04
JUN	629	--	--	47	0.09
25...	629	--	--	47	0.09
AUG	621	82	5.9	47	0.04
06...	621	82	5.9	47	0.04
SEP	626	83	7.0	48	0.03
14...	626	83	7.0	48	0.03
403922082325903 R-19 NR LEXINGTON OH-LV3 (LAT 40 39 22N LONG 082 59W)					
OCT 1991	--	76	9.0	38	0.03
10...	--	76	9.0	38	0.03
NOV	--	69	7.8	40	0.03
18...	--	69	7.8	40	0.03
JAN 1992	--	77	8.1	42	0.04
06...	--	77	8.1	42	0.04
FEB	532	73	6.3	50	0.06
25...	532	73	6.3	50	0.06
APR	564	74	5.7	49	0.04
02...	564	74	5.7	49	0.04
MAY	--	78	5.7	51	0.04
14...	--	78	5.7	51	0.04
JUN	627	78	6.7	47	0.05
25...	627	78	6.7	47	0.05
SEP	626	84	7.0	50	0.04
14...	626	84	7.0	50	0.04
403922082325904 R-19 NR LEXINGTON OH-LV4 (LAT 40 39 22N LONG 082 59W)					
OCT 1991	417	79	9.2	38	0.04
10...	417	79	9.2	38	0.04
NOV	--	83	9.1	35	0.03
18...	--	83	9.1	35	0.03
JAN 1992	--	75	7.8	42	0.04
06...	--	75	7.8	42	0.04
FEB	590	76	8.6	42	0.08
25...	590	76	8.6	42	0.08
APR	597	79	6.5	45	0.04
02...	597	79	6.5	45	0.04
MAY	--	76	6.4	49	0.03
14...	--	76	6.4	49	0.03
JUN	625	82	7.3	45	0.05
25...	625	82	7.3	45	0.05
AUG	639	83	6.6	56	0.04
06...	639	83	6.6	56	0.04
SEP	642	87	7.2	49	0.04
14...	642	87	7.2	49	0.04

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403922082325905 R-19 NR LEXINGTON OH-LV5 (LAT 40 39 22N LONG 082 59W)					
OCT 1991 10...	--	75	9.3	36	0.02
NOV 18...	--	--	--	29	0.02
JAN 1992 06...	573	--	--	38	0.04
FEB 25...	--	78	8.8	40	0.04
APR 02...	588	--	--	46	0.03
MAY 14...	636	--	--	41	0.04
JUN 25...	1230	83	8.2	46	0.05
AUG 06...	605	87	7.0	46	0.04
SEP 14...	643	89	6.8	49	0.04
403922082330001 R-20 NR LEXINGTON OH-LV1 (LAT 40 39 22N LONG 082 00W)					
OCT 1991 10...	385	73	7.8	30	0.05
NOV 18...	--	73	7.7	32	0.02
JAN 1992 06...	--	82	8.4	35	0.03
FEB 25...	629	--	--	37	0.03
APR 02...	648	84	8.5	39	0.02
MAY 14...	--	--	--	36	0.03
JUN 25...	614	100	7.9	40	0.03
AUG 06...	637	--	--	41	0.02
SEP 14...	590	76	7.6	48	0.03
403922082330002 R-20 NR LEXINGTON OH-LV2 (LAT 40 39 22N LONG 082 00W)					
OCT 1991 10...	434	83	9.6	31	0.03
NOV 18...	--	83	9.9	32	0.03
JAN 1992 06...	--	86	9.0	35	0.04
FEB 25...	656	86	9.4	41	0.04
APR 02...	667	86	9.3	39	0.03
MAY 14...	--	97	10	42	0.05
JUN 25...	664	--	--	42	0.03
AUG 06...	626	110	7.6	41	0.04
SEP 14...	591	78	6.5	48	0.03
403922082330003 R-20 NR LEXINGTON OH-LV3 (LAT 40 39 22N LONG 082 00W)					
OCT 1991 10...	--	79	8.7	31	0.03
NOV 18...	--	84	10	32	0.02
JAN 1992 06...	--	88	9.2	36	0.03
FEB 25...	653	89	9.6	40	0.04
APR 02...	662	89	8.4	39	0.02
MAY 14...	--	--	--	35	0.03
JUN 25...	648	90	8.4	40	0.10
AUG 06...	588	86	7.4	41	0.03
SEP 14...	591	78	7.4	49	0.03

DATE	SPECIFIC CONDUCTANCE LAB (US/CM)	CALCIUM DISSOLVED (MG/L AS CA)	SODIUM, DISSOLVED (MG/L AS NA)	CHLORIDE, DISSOLVED (MG/L AS CL)	BROMIDE DISSOLVED (MG/L AS BR)
403922082330004 R-20 NR LEXINGTON OH-LV4 (LAT 40 39 22N LONG 082 00W)					
OCT 1991 10...	427	83	8.9	31	0.03
NOV 18...	--	79	10	33	0.02
JAN 1992 06...	657	87	9.1	37	0.03
FEB 25...	655	--	--	39	0.04
APR 02...	672	88	8.8	40	0.03
MAY 14...	--	99	9.4	42	0.04
JUN 25...	634	99	8.4	41	0.05
AUG 06...	584	86	7.6	41	0.04
SEP 14...	585	77	7.3	39	0.04
403922082330005 R-20 NR LEXINGTON OH-LV5 (LAT 40 39 22N LONG 082 00W)					
OCT 1991 10...	--	--	--	31	0.03
NOV 18...	--	87	9.8	35	0.02
JAN 1992 06...	657	--	--	36	0.05
FEB 25...	663	92	9.5	40	0.07
APR 02...	671	93	8.4	40	0.03
MAY 14...	703	--	--	35	0.03
JUN 25...	634	83	9.0	41	0.06
AUG 06...	610	88	7.6	41	0.03
SEP 14...	590	78	7.4	49	0.03
403922082330006 R-20 NR LEXINGTON OH-LV6 (LAT 40 39 22N LONG 082 00W)					
OCT 1991 10...	--	78	9.3	28	0.02
NOV 18...	614	--	--	30	0.02
JAN 1992 06...	--	91	9.4	36	0.03
FEB 25...	--	81	10	38	0.03
APR 02...	667	92	8.6	40	0.03
MAY 14...	--	99	9.1	39	0.04
JUN 25...	701	89	9.1	48	0.04
AUG 06...	579	75	6.3	43	0.04
SEP 14...	572	74	6.9	50	0.03
403923082325401 R-21 NR LEXINGTON OH-LV1 (LAT 40 39 23N LONG 082 54W)					
OCT 1991 10...	187	27	2.4	2.9	0.03
NOV 18...	194	25	2.7	3.6	0.02
JAN 1992 06...	176	--	--	3.4	0.03
FEB 25...	188	--	--	6.5	0.03
APR 02...	--	26	4.1	6.4	<0.01
MAY 14...	--	40	1.9	3.8	0.02
JUN 25...	219	30	3.0	3.9	0.03
AUG 06...	369	50	9.2	--	0.01
SEP 14...	--	--	--	--	--

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403923082325402 R-21 NR LEXINGTON OH-LV2 (LAT 40 39 23N LONG 082 54W)					
OCT 1991 10...	--	24	2.2	6.0	0.03
NOV 18...	--	--	--	2.8	<0.01
JAN 1992 06...	--	--	--	2.9	0.02
FEB 25...	171	--	--	4.6	0.01
APR 02...	195	27	2.8	3.7	<0.01
MAY 14...	256	39	2.0	3.2	0.02
JUN 25...	218	--	--	3.8	0.04
AUG 06...	327	50	5.2	--	<0.01
SEP 14...	209	27	2.1	3.1	<0.01
403923082325403 R-21 NR LEXINGTON OH-LV3 (LAT 40 39 23N LONG 082 54W)					
OCT 1991 10...	--	--	--	1.1	<0.01
MAY 1992 14...	252	37	2.0	1.8	0.02
JUN 25...	68	30	2.5	3.7	0.04
AUG 06...	363	50	3.3	--	--
SEP 14...	--	--	--	--	--
403923082325601 R-15 NR LEXINGTON OH-LV1 (LAT 40 39 23N LONG 082 56W)					
OCT 1991 10...	409	53	18	19	0.05
NOV 18...	473	58	19	15	0.03
JAN 1992 06...	--	56	18	16	0.04
FEB 25...	474	52	18	18	0.04
APR 02...	454	32	36	81	0.03
MAY 14...	300	25	19	43	0.01
JUN 25...	436	42	22	52	0.09
AUG 06...	457	--	--	82	0.03
SEP 14...	511	49	28	62	0.05
403923082325602 R-15 NR LEXINGTON OH-LV2 (LAT 40 39 23N LONG 082 56W)					
OCT 1991 10...	409	51	18	18	0.04
NOV 18...	--	--	--	16	0.02
JAN 1992 06...	--	--	--	17	0.03
FEB 25...	471	53	18	18	0.02
APR 02...	--	31	37	86	0.02
MAY 14...	291	24	18	42	0.03
JUN 25...	438	43	21	51	0.06
AUG 06...	436	30	29	76	0.02
SEP 14...	518	50	28	61	0.03
403923082325603 R-15 NR LEXINGTON OH-LV3 (LAT 40 39 23N LONG 082 56W)					
APR 1992 02...	442	--	--	84	0.02
MAY 14...	--	25	20	41	0.02
JUN 25...	434	42	22	52	0.04
AUG 06...	428	--	--	73	0.02
SEP 14...	508	48	27	64	<0.01
403923082325604 R-15 NR LEXINGTON OH-LV4 (LAT 40 39 23N LONG 082 56W)					
MAY 1992 14...	--	24	19	42	0.03
AUG 06...	377	--	--	64	0.02

DATE	SPECIFIC CONDUCTANCE LAB (US/CM)	CALCIUM DISSOLVED (MG/L AS CA)	SODIUM, DISSOLVED (MG/L AS NA)	CHLORIDE, DISSOLVED (MG/L AS CL)	BROMIDE DISSOLVED (MG/L AS BR)
403923082325605 R-15 NR LEXINGTON OH-LV5 (LAT 40 39 23N LONG 082 56W)					
AUG 1992 06...	507	--	--	93	0.03
403923082325701 R-18 NR LEXINGTON OH-LV1 (LAT 40 39 23N LONG 082 57W)					
OCT 1991 10...	453	56	4.3	47	0.05
NOV 18...	439	57	4.5	43	0.03
JAN 1992 06...	451	57	3.5	46	0.04
FEB 25...	447	54	4.0	48	0.04
APR 02...	458	57	5.6	49	0.04
MAY 14...	457	57	4.8	54	0.04
JUN 25...	445	55	4.8	49	0.05
AUG 06...	463	56	5.6	55	0.04
SEP 14...	458	56	6.1	47	0.04
403923082325702 R-18 NR LEXINGTON OH-LV2 (LAT 40 39 23N LONG 082 57W)					
OCT 1991 10...	424	55	5.0	45	0.04
NOV 18...	426	51	4.1	43	0.04
JAN 1992 06...	444	53	3.7	46	0.04
FEB 25...	443	53	4.1	49	0.04
APR 02...	443	54	5.2	49	0.04
MAY 14...	453	55	4.6	57	0.04
JUN 25...	436	51	5.0	49	0.05
AUG 06...	463	54	5.3	56	0.04
SEP 14...	461	55	6.0	47	0.03
403923082325703 R-18 NR LEXINGTON OH-LV3 (LAT 40 39 23N LONG 082 57W)					
OCT 1991 10...	523	76	19	48	0.03
NOV 18...	--	61	18	39	0.03
JAN 1992 06...	405	67	19	28	0.02
FEB 25...	503	69	13	47	0.04
APR 02...	543	97	18	48	0.04
MAY 14...	501	67	6.9	53	0.04
JUN 25...	464	60	7.0	45	0.05
AUG 06...	492	65	7.0	49	0.04
SEP 14...	525	66	6.8	49	0.03
403923082325704 R-18 NR LEXINGTON OH-LV4 (LAT 40 39 23N LONG 082 57W)					
OCT 1991 10...	549	56	18	28	0.03
FEB 1992 25...	962	120	26	38	0.03
APR 02...	632	74	18	46	0.03
MAY 14...	620	75	17	48	0.05
JUN 25...	558	67	14	50	0.05
AUG 06...	597	--	--	51	0.03
SEP 14...	561	73	9.2	50	0.03

DATE	SPECIFIC CONDUCTANCE LAB (US/CM)	CALCIUM DISSOLVED (MG/L AS CA)	SODIUM, DISSOLVED (MG/L AS NA)	CHLORIDE, DISSOLVED (MG/L AS CL)	BROMIDE DISSOLVED (MG/L AS BR)
403923082325705 R-18 NR LEXINGTON OH-LV5 (LAT 40 39 23N LONG 082 57W)					
FEB 1992	--	--	--	--	--
25...	--	--	--	--	--
APR 02...	891	110	25	42	0.04
MAY 14...	846	110	22	44	0.04
JUN 25...	604	78	15	47	0.05
AUG 06...	775	150	17	48	0.04
SEP 14...	630	82	11	51	0.03
403923082325901 R-17 NR LEXINGTON OH-LV1 (LAT 40 39 23N LONG 082 59W)					
OCT 1991	--	69	6.7	48	0.04
10...	--	69	6.3	45	0.04
NOV 18...	515	69	6.3	45	0.04
JAN 1992	--	70	5.7	47	0.04
06...	--	70	5.7	47	0.04
FEB 25...	520	66	6.3	49	0.04
APR 02...	--	68	6.2	48	0.06
MAY 14...	--	--	--	47	0.03
JUN 25...	511	--	--	53	0.04
AUG 06...	507	66	5.3	50	0.05
SEP 14...	515	66	6.2	54	0.04
403923082325902 R-17 NR LEXINGTON OH-LV2 (LAT 40 39 23N LONG 082 59W)					
OCT 1991	382	69	6.3	47	0.06
10...	--	67	5.5	43	0.03
NOV 18...	--	67	5.5	43	0.03
JAN 1992	509	68	4.8	46	0.04
06...	--	64	5.0	37	0.01
FEB 25...	--	64	5.1	50	0.04
APR 02...	487	64	5.1	50	0.04
MAY 14...	--	66	4.9	52	0.04
JUN 25...	487	60	6.0	50	0.04
AUG 06...	486	61	5.3	51	0.03
SEP 14...	498	63	6.4	56	0.04
403923082325903 R-17 NR LEXINGTON OH-LV3 (LAT 40 39 23N LONG 082 59W)					
OCT 1991	--	--	--	48	0.05
10...	--	64	5.3	45	0.04
NOV 18...	--	66	4.9	47	0.04
JAN 1992	--	66	4.9	47	0.04
06...	--	66	4.9	47	0.04
FEB 25...	492	64	4.9	41	0.07
APR 02...	475	61	5.0	49	0.04
MAY 14...	--	--	--	49	0.04
JUN 25...	474	60	5.9	49	0.05
AUG 06...	527	63	9.7	70	0.04
SEP 14...	488	60	6.4	55	0.04

DATE	SPECIFIC CONDUCTANCE LAB (US/CM)	CALCIUM DISSOLVED (MG/L AS CA)	SODIUM, DISSOLVED (MG/L AS NA)	CHLORIDE, DISSOLVED (MG/L AS CL)	BROMIDE DISSOLVED (MG/L AS BR)
PORTAGE COUNTY SITE #5 (SR 14)					
411136081172501 PO-119 NR RAVENNA OH-LV1 (LAT 41 11 36N LONG 081 25W)					
OCT 1991					
09...	931	150	25	34	<0.01
NOV					
20...	--	140	26	35	<0.01
JAN 1992					
08...	1640	--	--	54	0.02
FEB					
19...	1500	290	23	62	0.02
APR					
01...	1260	210	24	55	0.01
MAY					
13...	971	150	21	36	<0.01
JUN					
22...	825	120	22	32	0.03
AUG					
05...	828	--	--	33	<0.01
SEP					
16...	704	100	24	20	<0.01
411136081172502 PO-119 NR RAVENNA OH-LV2 (LAT 41 11 36N LONG 081 25W)					
OCT 1991					
09...	959	140	25	31	<0.01
NOV					
20...	--	140	25	36	<0.01
JAN 1992					
08...	--	310	25	51	<0.01
FEB					
19...	1460	--	--	64	0.03
APR					
01...	--	180	20	25	0.02
MAY					
13...	795	120	18	21	<0.01
JUN					
22...	713	110	19	24	<0.01
AUG					
05...	644	93	18	10	<0.01
SEP					
16...	--	--	--	--	--
411136081172503 PO-119 NR RAVENNA OH-LV3 (LAT 41 11 36N LONG 081 25W)					
OCT 1991					
09...	807	140	22	29	<0.01
NOV					
20...	924	150	23	37	<0.01
JAN 1992					
08...	--	120	23	66	<0.01
FEB					
19...	--	210	22	62	0.03
APR					
01...	640	95	18	10	0.01
MAY					
13...	582	77	18	7.4	<0.01
JUN					
22...	608	--	--	13	<0.01
AUG					
05...	576	77	26	4.2	0.02
SEP					
16...	--	--	--	--	--
411136081172504 PO-119 NR RAVENNA OH-LV4 (LAT 41 11 36N LONG 081 25W)					
FEB 1992					
19...	--	190	21	54	0.02
APR					
01...	--	88	19	--	0.07
MAY					
13...	465	61	18	4.9	<0.01
JUN					
22...	485	--	--	9.7	0.01
AUG					
05...	546	75	26	3.3	--
SEP					
16...	--	--	--	--	--
411136081172505 PO-119 NR RAVENNA OH-LV5 (LAT 41 11 36N LONG 081 25W)					
APR 1992					
01...	525	--	--	5.5	<0.01
MAY					
13...	--	60	16	6.1	<0.01
AUG					
05...	--	--	--	5.7	<0.01
SEP					
16...	--	--	--	--	--

DATE	SPECIFIC CONDUCTANCE LAB (US/CM)	CALCIUM DISSOLVED (MG/L AS CA)	SODIUM, DISSOLVED (MG/L AS NA)	CHLORIDE, DISSOLVED (MG/L AS CL)	BROMIDE DISSOLVED (MG/L AS BR)
411136081172601 PO-120 NR RAVENNA OH-LV1 (LAT 41 11 36N LONG 081 26W)					
OCT 1991					
09...	454	71	9.0	18	0.01
NOV					
20...	490	74	9.7	20	<0.01
JAN 1992					
08...	--	81	10	23	0.04
FEB					
19...	671	100	12	25	0.02
APR					
01...	384	44	22	9.7	0.02
MAY					
13...	267	30	21	5.3	<0.01
JUN					
22...	329	57	10	7.2	0.09
AUG					
05...	395	51	35	2.6	0.02
SEP					
16...	--	--	--	--	--
411136081172602 PO-120 NR RAVENNA OH-LV2 (LAT 41 11 36N LONG 081 26W)					
OCT 1991					
09...	482	73	9.5	27	<0.01
NOV					
20...	--	72	11	27	<0.01
JAN 1992					
08...	--	91	11	22	0.02
FEB					
19...	499	59	17	11	0.02
APR					
01...	218	--	--	5.0	0.04
MAY					
13...	231	30	9.9	5.7	0.01
JUN					
22...	337	54	7.6	5.5	0.03
AUG					
05...	365	45	34	--	<0.01
SEP					
16...	--	--	--	--	--
411136081172603 PO-120 NR RAVENNA OH-LV3 (LAT 41 11 36N LONG 081 26W)					
OCT 1991					
09...	486	79	9.9	22	0.01
NOV					
20...	--	--	--	25	<0.01
JAN 1992					
08...	--	97	11	24	0.05
FEB					
19...	365	47	15	6.6	0.01
APR					
01...	--	16	17	4.7	0.05
MAY					
13...	--	29	6.2	7.1	<0.01
JUN					
22...	339	51	8.7	5.6	0.01
AUG					
05...	376	41	36	0.90	<0.01
SEP					
16...	--	--	--	--	--
411136081172604 PO-120 NR RAVENNA OH-LV4 (LAT 41 11 36N LONG 081 26W)					
OCT 1991					
09...	--	--	--	8.9	<0.01
NOV					
20...	--	--	--	7.6	<0.01
JAN 1992					
08...	627	--	--	26	0.02
FEB					
19...	329	45	12	5.7	<0.01
APR					
01...	191	16	19	5.0	<0.01
MAY					
13...	215	29	8.1	5.4	<0.01
JUN					
22...	337	51	10	4.9	<0.01
AUG					
05...	384	--	--	1.8	<0.01
SEP					
16...	--	--	--	--	--

DATE	SPECIFIC CONDUCTANCE LAB (US/CM)	CALCIUM DISSOLVED (MG/L AS CA)	SODIUM, DISSOLVED (MG/L AS NA)	CHLORIDE, DISSOLVED (MG/L AS CL)	BROMIDE DISSOLVED (MG/L AS BR)
411136081172605 PO-120 NR RAVENNA OH-LV5 (LAT 41 11 36N LONG 081 26W)					
JAN 1992					
08...	107	--	--	3.4	<0.01
FEB					
19...	282	32	8.6	7.1	<0.01
APR					
01...	--	17	17	5.0	0.02
MAY					
13...	--	31	5.6	5.3	0.03
JUN					
22...	296	--	--	5.2	0.02
AUG					
05...	389	--	--	0.50	<0.01
SEP					
16...	345	53	15	1.7	<0.01
411136081172606 PO-120 NR RAVENNA OH-LV6 (LAT 41 11 36N LONG 081 26W)					
JUN 1992					
22...	125	15	--	3.7	0.02
SEP					
16...	297	--	--	1.8	<0.01
411137081172101 PO-114 NR RAVENNA OH-LV1 (LAT 41 11 37N LONG 081 21W)					
OCT 1991					
09...	1120	250	20	6.9	0.01
NOV					
20...	--	--	--	7.5	<0.01
JAN 1992					
08...	--	290	15	8.0	0.01
FEB					
19...	1150	190	19	--	0.03
APR					
01...	459	45	44	8.1	0.01
MAY					
13...	434	58	24	7.7	0.04
JUN					
22...	423	62	16	7.0	0.03
AUG					
05...	468	65	23	2.2	0.01
SEP					
16...	498	70	28	2.4	<0.01
411137081172102 PO-114 NR RAVENNA OH-LV2 (LAT 41 11 37N LONG 081 21W)					
OCT 1991					
09...	1270	250	20	5.8	0.01
NOV					
20...	--	--	--	11	<0.01
JAN 1992					
08...	--	320	15	6.4	0.03
FEB					
19...	--	140	21	4.7	0.02
APR					
01...	--	39	40	7.9	0.01
MAY					
13...	436	60	24	7.8	0.02
JUN					
22...	420	62	12	7.4	0.02
AUG					
05...	456	--	--	3.8	0.01
SEP					
16...	496	70	27	2.6	<0.01
411137081172103 PO-114 NR RAVENNA OH-LV3 (LAT 41 11 37N LONG 081 21W)					
OCT 1991					
09...	1170	280	19	8.2	0.02
NOV					
20...	--	--	--	7.0	0.01
JAN 1992					
08...	1590	--	--	6.9	0.02
FEB					
19...	--	110	22	7.7	0.04
APR					
01...	455	41	43	8.1	0.01
MAY					
13...	437	--	--	7.3	0.01
JUN					
22...	385	66	12	6.8	0.02
AUG					
05...	459	--	--	4.1	0.01
SEP					
16...	489	71	27	2.8	<0.01

DATE	SPECIFIC CONDUCTANCE LAB (US/CM)	CALCIUM DISSOLVED (MG/L AS CA)	SODIUM, DISSOLVED (MG/L AS NA)	CHLORIDE, DISSOLVED (MG/L AS CL)	BROMIDE DISSOLVED (MG/L AS BR)
411137081172104 PO-114 NR RAVENNA OH-LV4 (LAT 41 11 37N LONG 081 21W)					
OCT 1991 09...	1140	270	18	10	0.02
NOV 20...	--	250	15	6.6	0.01
JAN 1992 08...	1230	--	--	6.8	0.02
FEB 19...	667	99	19	8.1	0.01
APR 01...	--	44	42	7.9	0.01
MAY 13...	--	58	19	7.6	0.02
JUN 22...	412	64	9.9	7.0	0.01
AUG 05...	457	66	19	2.4	0.01
SEP 16...	484	68	22	5.2	<0.01
411137081172105 PO-114 NR RAVENNA OH-LV5 (LAT 41 11 37N LONG 081 21W)					
NOV 1991 20...	--	--	--	13	<0.01
JAN 1992 08...	--	310	15	5.6	0.01
FEB 19...	--	90	17	9.9	0.02
APR 01...	453	43	43	7.6	<0.01
MAY 13...	415	--	--	7.5	0.02
JUN 22...	441	--	--	7.3	0.02
AUG 05...	448	68	19	--	0.01
SEP 16...	462	67	17	5.5	<0.01
411137081172106 PO-114 NR RAVENNA OH-LV6 (LAT 41 11 37N LONG 081 21W)					
APR 1992 01...	--	39	53	8.7	<0.01
MAY 13...	--	61	20	7.7	0.02
JUN 22...	407	70	1.0	7.2	0.01
AUG 05...	459	--	--	3.7	<0.01
SEP 16...	--	--	--	--	--
411137081172301 PO-118 NR RAVENNA OH-LV1 (LAT 41 11 37N LONG 081 23W)					
OCT 1991 09...	3460	130	560	900	0.19
NOV 20...	3250	140	510	950	0.17
JAN 1992 08...	--	80	510	830	0.17
FEB 19...	2950	100	480	820	0.16
APR 01...	--	31	100	140	0.04
MAY 13...	669	28	94	160	0.03
JUN 22...	5180	--	--	1500	0.27
AUG 05...	688	42	77	--	0.03
SEP 16...	619	32	81	110	0.03
411137081172302 PO-118 NR RAVENNA OH-LV2 (LAT 41 11 37N LONG 081 23W)					
OCT 1991 09...	3290	130	660	850	0.18
NOV 20...	--	--	--	850	0.17
JAN 1992 08...	--	67	490	790	0.17
FEB 19...	2970	110	480	780	0.16
APR 01...	--	29	96	130	0.06
MAY 13...	--	28	96	160	0.04
JUN 22...	5230	240	730	1600	0.31
AUG 05...	797	44	91	190	0.04
SEP 16...	--	34	80	170	0.04

DATE	SPECIFIC CONDUCTANCE LAB (US/CM)	CALCIUM DISSOLVED (MG/L AS CA)	SODIUM, DISSOLVED (MG/L AS NA)	CHLORIDE, DISSOLVED (MG/L AS CL)	BROMIDE DISSOLVED (MG/L AS BR)
411137081172303 PO-118 NR RAVENNA OH-LV3 (LAT 41 11 37N LONG 081 23W)					
OCT 1991					
09...	3430	130	550	880	0.18
NOV					
20...	--	130	490	840	0.16
JAN 1992					
08...	--	--	--	810	0.17
FEB					
19...	2870	110	480	760	0.16
APR					
01...	--	29	91	100	0.03
MAY					
13...	712	30	99	170	0.07
JUN					
22...	5210	240	750	1600	0.29
AUG					
05...	499	51	120	200	0.02
SEP					
16...	780	37	99	170	0.03
411137081172304 PO-118 NR RAVENNA OH-LV4 (LAT 41 11 37N LONG 081 23W)					
OCT 1991					
09...	3380	120	540	890	0.18
NOV					
20...	--	110	450	690	0.13
JAN 1992					
08...	--	120	480	800	0.16
FEB					
19...	2930	99	480	770	0.16
APR					
01...	--	26	70	59	0.03
MAY					
13...	513	25	83	110	0.02
JUN					
22...	5100	220	770	1500	0.26
AUG					
05...	663	49	95	140	0.03
SEP					
16...	--	34	77	170	0.07
411137081172305 PO-118 NR RAVENNA OH-LV5 (LAT 41 11 37N LONG 081 23W)					
OCT 1991					
09...	3620	140	580	960	0.19
NOV					
20...	--	120	480	730	0.15
JAN 1992					
08...	--	120	500	830	0.16
FEB					
19...	2410	88	370	600	0.13
APR					
01...	457	22	37	84	0.03
MAY					
13...	331	18	38	60	<0.01
JUN					
22...	4010	180	590	1200	0.20
AUG					
05...	585	40	64	120	0.20
SEP					
16...	650	38	65	120	<0.01
411137081172306 PO-118 NR RAVENNA OH-LV6 (LAT 41 11 37N LONG 081 23W)					
APR 1992					
01...	379	23	41	57	0.02
MAY					
13...	329	18	33	53	0.04
SEP					
16...	560	27	73	110	0.01
411137081172401 PO-117 NR RAVENNA OH-LV1 (LAT 41 11 37N LONG 081 24W)					
APR 1992					
01...	1880	240	96	130	0.03
AUG					
05...	1030	130	76	100	0.02
SEP					
16...	701	73	56	81	0.02

DATE	SPECIFIC CONDUCTANCE LAB (US/CM)	CALCIUM DISSOLVED (MG/L AS CA)	SODIUM, DISSOLVED (MG/L AS NA)	CHLORIDE, DISSOLVED (MG/L AS CL)	BROMIDE DISSOLVED (MG/L AS BR)
411137081172402 PO-117 NR RAVENNA OH-LV2 (LAT 41 11 37N LONG 081 24W)					
OCT 1991					
09...	1040	78	120	190	0.05
NOV					
20...	1370	110	170	200	0.05
JAN 1992					
08...	1460	100	160	270	0.04
FEB					
19...	1470	100	170	280	0.07
APR					
01...	1810	190	180	270	0.05
MAY					
13...	—	130	110	170	0.05
AUG					
05...	1330	120	110	200	0.04
SEP					
16...	838	86	76	110	0.02
411137081172403 PO-117 NR RAVENNA OH-LV3 (LAT 41 11 37N LONG 081 24W)					
OCT 1991					
09...	1490	100	160	260	0.04
NOV					
20...	1450	100	170	260	0.05
JAN 1992					
08...	1570	100	180	290	0.04
FEB					
19...	1480	110	180	280	0.07
APR					
01...	2010	190	200	270	0.05
MAY					
13...	1850	170	170	240	0.06
AUG					
05...	1820	160	190	390	0.06
SEP					
16...	1480	110	150	270	0.04
411137081172404 PO-117 NR RAVENNA OH-LV4 (LAT 41 11 37N LONG 081 24W)					
OCT 1991					
09...	1030	100	130	150	0.01
NOV					
20...	1730	120	200	300	0.05
JAN 1992					
08...	1980	110	200	340	0.06
FEB					
19...	1870	150	210	320	0.06
APR					
01...	2310	220	200	260	0.05
MAY					
13...	1730	180	150	220	0.06
AUG					
05...	1890	150	200	400	0.06
SEP					
16...	1270	91	130	220	0.03
411137081172405 PO-117 NR RAVENNA OH-LV5 (LAT 41 11 37N LONG 081 24W)					
OCT 1991					
09...	1200	140	170	220	0.04
NOV					
20...	—	170	230	480	0.08
JAN 1992					
08...	2560	250	250	390	0.08
FEB					
19...	2810	350	250	350	0.08
APR					
01...	2300	280	170	190	0.04
MAY					
13...	1220	140	93	130	0.04
AUG					
05...	1670	140	160	310	0.05
SEP					
16...	944	76	100	140	0.02
411137081172406 PO-117 NR RAVENNA OH-LV6 (LAT 41 11 37N LONG 081 24W)					
JAN 1992					
08...	2160	200	170	210	0.06
FEB					
19...	2070	300	120	160	0.04
APR					
01...	1570	230	58	76	0.03
MAY					
13...	664	95	30	36	0.03
AUG					
05...	1030	120	66	110	0.03
SEP					
16...	592	65	47	65	<0.01

DATE	SPECIFIC CONDUCTANCE LAB (US/CM)	CALCIUM DISSOLVED (MG/L AS CA)	SODIUM, DISSOLVED (MG/L AS NA)	CHLORIDE, DISSOLVED (MG/L AS CL)	BROMIDE DISSOLVED (MG/L AS BR)
411138081172401 PO-115 NR RAVENNA OH-LV1 (LAT 41 11 38N LONG 081 24W)					
OCT 1991					
09...	2490	63	450	630	0.12
NOV					
20...	--	69	470	730	0.13
JAN 1992					
08...	--	47	360	460	0.09
APR					
01...	885	40	120	190	0.04
MAY					
13...	--	94	260	490	0.07
JUN					
22...	3500	120	530	1000	0.15
AUG					
05...	501	51	140	200	0.04
SEP					
16...	684	39	97	100	<0.01
411138081172402 PO-115 NR RAVENNA OH-LV2 (LAT 41 11 38N LONG 081 24W)					
OCT 1991					
09...	2470	63	440	610	0.12
NOV					
20...	--	65	450	580	0.13
JAN 1992					
08...	--	39	360	460	0.07
FEB					
19...	1880	57	320	410	0.10
APR					
01...	--	34	110	160	0.04
MAY					
13...	1760	87	240	460	0.07
JUN					
22...	3140	110	480	890	0.15
AUG					
05...	1010	--	--	200	0.03
SEP					
16...	645	49	75	86	<0.01
411138081172403 PO-115 NR RAVENNA OH-LV3 (LAT 41 11 38N LONG 081 24W)					
OCT 1991					
09...	2320	60	420	600	0.11
NOV					
20...	--	57	440	600	0.13
JAN 1992					
08...	1860	--	--	440	0.09
FEB					
19...	1860	56	320	400	0.10
APR					
01...	--	34	110	150	0.04
MAY					
13...	1530	80	200	370	0.05
JUN					
22...	2830	100	420	790	0.15
AUG					
05...	714	--	--	110	0.03
SEP					
16...	556	46	67	63	<0.01
411138081172404 PO-115 NR RAVENNA OH-LV4 (LAT 41 11 38N LONG 081 24W)					
OCT 1991					
09...	--	49	380	420	0.14
NOV					
20...	--	44	390	530	0.10
JAN 1992					
08...	1800	33	320	350	0.09
FEB					
19...	1820	55	310	390	0.07
APR					
01...	--	39	86	110	0.03
MAY					
13...	1410	81	180	330	0.05
JUN					
22...	2470	87	380	680	0.11
AUG					
05...	--	51	83	140	0.04
SEP					
16...	559	55	55	56	0.02

DATE	SPECIFIC CONDUCTANCE LAB (US/CM)	CALCIUM DISSOLVED (MG/L AS CA)	SODIUM, DISSOLVED (MG/L AS NA)	CHLORIDE, DISSOLVED (MG/L AS CL)	BROMIDE DISSOLVED (MG/L AS BR)
411138081172405 PO-115 NR RAVENNA OH-LV5 (LAT 41 11 38N LONG 081 24W)					
OCT 1991 09...	--	45	350	--	0.07
JAN 1992 08...	1740	--	--	410	0.06
FEB 19...	--	--	--	370	0.11
APR 01...	477	43	46	73	0.01
MAY 13...	--	71	92	230	0.05
JUN 22...	2250	100	310	610	0.12
AUG 05...	691	--	--	84	0.01
SEP 16...	525	59	46	45	<0.01
411138081172406 PO-115 NR RAVENNA OH-LV6 (LAT 41 11 38N LONG 081 24W)					
APR 1992 01...	--	--	--	--	--
MAY 13...	475	57	28	83	0.02
JUN 22...	979	--	--	210	0.05
AUG 05...	970	--	--	170	0.03
SEP 16...	481	55	39	37	<0.01
LUCAS COUNTY SITE #2 (SR 2)					
413546083480901 LU-28 NR HOLLAND OH-LV1 (LAT 41 35 46N LONG 083 09W)					
OCT 1991 15...	455	--	--	18	0.04
NOV 27...	--	71	11	15	<0.01
JAN 1992 22...	453	--	--	17	0.01
FEB 27...	455	76	10	19	0.01
APR 08...	451	74	8.6	16	0.02
MAY 20...	461	--	--	20	0.01
JUL 01...	464	15	9.7	20	--
AUG 13...	--	100	8.8	20	--
SEP 24...	--	--	--	--	--
413546083480902 LU-28 NR HOLLAND OH-LV2 (LAT 41 35 46N LONG 083 09W)					
OCT 1991 15...	519	76	14	50	0.03
NOV 27...	--	83	13	51	0.03
JAN 1992 22...	--	81	11	66	0.03
FEB 27...	538	82	14	55	0.02
APR 08...	--	75	10	45	0.03
MAY 20...	521	75	8.3	45	<0.01
JUL 01...	525	76	13	51	0.01
AUG 13...	566	110	7.9	--	0.03
SEP 24...	585	87	8.7	61	0.03
413546083480903 LU-28 NR HOLLAND OH-LV3 (LAT 41 35 46N LONG 083 09W)					
OCT 1991 15...	644	77	19	110	0.03
NOV 27...	667	80	24	100	0.03
JAN 1992 22...	692	78	17	120	0.03
FEB 27...	531	74	9.3	51	0.02
APR 08...	--	74	9.4	49	0.04
MAY 20...	605	78	10	66	0.03
JUL 01...	618	82	14	82	--
AUG 13...	699	100	14	120	0.03
SEP 24...	613	89	12	76	<0.01

DATE	SPECIFIC CONDUCTANCE LAB (US/CM)	CALCIUM DISSOLVED (MG/L AS CA)	SODIUM, DISSOLVED (MG/L AS NA)	CHLORIDE, DISSOLVED (MG/L AS CL)	BROMIDE DISSOLVED (MG/L AS BR)
413546083480904 LU-28 NR HOLLAND OH-LV4 (LAT 41 35 46N LONG 083 09W)					
OCT 1991 15...	1430	75	180	350	0.07
NOV 27...	--	72	140	280	0.06
JAN 1992 22...	990	46	130	210	0.04
FEB 27...	934	46	130	190	0.03
APR 08...	--	44	110	150	0.03
MAY 20...	--	47	130	190	0.03
JUL 01...	1010	42	150	220	0.03
AUG 13...	946	52	130	200	0.04
SEP 24...	826	54	91	130	0.04
413546083480905 LU-28 NR HOLLAND OH-LV5 (LAT 41 35 46N LONG 083 09W)					
OCT 1991 15...	578	53	34	39	0.02
NOV 27...	--	48	26	58	0.02
JAN 1992 22...	--	50	40	68	0.03
FEB 27...	395	50	16	19	0.02
APR 08...	--	37	17	14	<0.01
MAY 20...	363	--	--	22	0.01
JUL 01...	373	45	16	24	--
AUG 13...	365	57	24	21	--
SEP 24...	725	58	62	89	0.02
413547083481001 LU-26 NR HOLLAND OH-LV1 (LAT 41 35 47N LONG 083 10W)					
OCT 1991 15...	457	63	7.8	26	0.03
NOV 27...	463	75	7.6	23	0.03
JAN 1992 22...	498	68	12	38	0.02
FEB 27...	489	78	12	38	0.03
APR 08...	479	80	11	37	0.04
MAY 20...	498	73	8.3	36	<0.01
JUL 01...	498	69	8.0	36	<0.01
AUG 13...	507	78	8.1	40	<0.01
SEP 24...	496	80	7.5	38	<0.01
413547083481002 LU-26 NR HOLLAND OH-LV2 (LAT 41 35 47N LONG 083 10W)					
OCT 1991 15...	511	68	9.4	46	0.03
NOV 27...	557	81	15	54	0.03
JAN 1992 22...	547	76	13	56	0.03
FEB 27...	525	80	8.3	51	0.03
APR 08...	513	80	6.6	47	0.03
MAY 20...	508	72	6.7	45	0.02
JUL 01...	520	74	5.6	49	<0.01
AUG 13...	540	87	6.2	55	0.03
SEP 24...	558	84	6.1	61	0.04

DATE	SPECIFIC CONDUCTANCE LAB (US/CM)	CALCIUM DISSOLVED (MG/L AS CA)	SODIUM, DISSOLVED (MG/L AS NA)	CHLORIDE, DISSOLVED (MG/L AS CL)	BROMIDE DISSOLVED (MG/L AS BR)
413547083481003 LU-26 NR HOLLAND OH-LV3 (LAT 41 35 47N LONG 083 10W)					
OCT 1991 15...	879	52	99	190	0.04
NOV 27...	1280	87	130	290	0.05
JAN 1992 22...	786	84	35	150	0.03
FEB 27...	621	60	45	92	0.01
APR 08...	416	26	51	32	0.01
MAY 20...	314	30	24	16	0.01
JUL 01...	343	44	7.7	23	<0.01
AUG 13...	693	91	11	160	0.02
SEP 24...	937	120	13	210	0.04
413547083481004 LU-26 NR HOLLAND OH-LV4 (LAT 41 35 47N LONG 083 10W)					
OCT 1991 15...	1060	57	120	250	0.05
NOV 27...	1350	88	130	320	0.06
JAN 1992 22...	1190	88	110	290	0.05
FEB 27...	916	57	110	160	0.03
APR 08...	532	31	76	43	0.02
MAY 20...	382	24	52	29	0.01
JUL 01...	352	24	40	28	<0.01
AUG 13...	401	24	49	59	0.02
SEP 24...	921	59	88	240	0.03
413547083481005 LU-26 NR HOLLAND OH-LV5 (LAT 41 35 47N LONG 083 10W)					
OCT 1991 15...	1270	68	170	280	0.08
NOV 27...	1190	65	150	290	0.06
JAN 1992 22...	1120	46	150	270	0.05
FEB 27...	1290	61	170	300	0.05
APR 08...	970	34	160	180	0.05
MAY 20...	1080	32	170	220	0.06
JUL 01...	770	19	130	130	<0.01
AUG 13...	1050	40	160	240	0.07
SEP 24...	753	22	130	140	0.06
413547083481006 LU-26 NR HOLLAND OH-LV6 (LAT 41 35 47N LONG 083 10W)					
FEB 1992 27...	446	36	27	69	0.02
APR 08...	293	25	15	32	0.01
MAY 20...	425	41	15	30	0.02
JUL 01...	254	25	11	32	<0.01
AUG 13...	315	29	11	25	<0.01
SEP 24...	268	23	16	20	<0.01

DATE	SPECIFIC CONDUCTANCE LAB (US/CM)	CALCIUM DISSOLVED (MG/L AS CA)	SODIUM, DISSOLVED (MG/L AS NA)	CHLORIDE, DISSOLVED (MG/L AS CL)	BROMIDE DISSOLVED (MG/L AS BR)
413547083481101 LU-27 NR HOLLAND OH-LV1 (LAT 41 35 47N LONG 083 11W)					
OCT 1991 15...	478	68	16	28	0.02
NOV 27...	472	72	12	17	0.01
JAN 1992 22...	468	71	9.5	20	0.02
FEB 27...	468	78	9.2	25	0.02
APR 08...	465	80	9.1	24	0.01
MAY 20...	469	73	14	23	--
JUL 01...	470	73	9.9	26	0.01
AUG 13...	565	110	15	60	<0.01
SEP 24...	--	--	--	--	--
413547083481102 LU-27 NR HOLLAND OH-LV2 (LAT 41 35 47N LONG 083 11W)					
OCT 1991 15...	539	83	11	52	0.04
NOV 27...	--	83	21	43	0.03
JAN 1992 22...	560	81	8.8	52	0.03
FEB 27...	711	86	30	110	0.03
APR 08...	--	94	8.6	60	0.03
MAY 20...	--	79	9.7	57	0.02
JUL 01...	859	110	14	160	<0.01
AUG 13...	1150	160	41	--	0.04
SEP 24...	1520	140	110	370	0.07
413547083481103 LU-27 NR HOLLAND OH-LV3 (LAT 41 35 47N LONG 083 11W)					
OCT 1991 15...	561	53	58	57	0.02
NOV 27...	659	57	58	63	0.03
JAN 1992 22...	--	63	54	95	0.03
FEB 27...	741	75	46	110	0.03
APR 08...	--	84	41	160	0.05
MAY 20...	--	57	37	51	--
JUL 01...	596	48	53	100	<0.01
AUG 13...	921	--	--	210	0.04
SEP 24...	1530	130	120	390	0.06
413547083481104 LU-27 NR HOLLAND OH-LV4 (LAT 41 35 47N LONG 083 11W)					
OCT 1991 15...	714	26	100	120	0.03
NOV 27...	752	57	77	85	0.04
JAN 1992 22...	797	--	--	120	0.04
FEB 27...	774	69	63	77	0.02
APR 08...	--	64	29	24	0.02
MAY 20...	496	58	32	15	0.03
JUL 01...	687	56	61	91	--
AUG 13...	23	67	25	15	0.03
SEP 24...	546	73	15	16	<0.01

DATE	SPECIFIC CONDUCTANCE LAB (US/CM)	CALCIUM DISSOLVED (MG/L AS CA)	SODIUM, DISSOLVED (MG/L AS NA)	CHLORIDE, DISSOLVED (MG/L AS CL)	BROMIDE DISSOLVED (MG/L AS BR)
413547083481105 LU-27 NR HOLLAND OH-LV5 (LAT 41 35 47N LONG 083 11W)					
OCT 1991 15...	649	74	7.4	9.8	0.02
NOV 27...	752	110	6.6	6.2	0.03
JAN 1992 22...	--	84	8.6	11	0.03
FEB 27...	633	92	12	6.2	0.02
APR 08...	--	67	19	13	<0.01
MAY 20...	513	54	42	16	--
JUL 01...	418	62	5.9	--	--
AUG 13...	427	--	--	2.7	--
SEP 24...	433	62	10	0.90	--
413547083481201 LU-25 NR HOLLAND OH-LV1 (LAT 41 35 47N LONG 083 12W)					
OCT 1991 15...	471	75	9.1	24	0.02
NOV 27...	--	73	9.2	17	0.01
JAN 1992 22...	511	83	9.5	36	0.02
FEB 27...	506	78	18	39	0.04
APR 08...	--	78	13	36	0.02
MAY 20...	475	70	9.7	26	--
JUL 01...	474	72	9.6	26	0.01
AUG 13...	502	--	--	34	<0.01
SEP 24...	--	--	--	--	--
413547083481202 LU-25 NR HOLLAND OH-LV2 (LAT 41 35 47N LONG 083 12W)					
OCT 1991 15...	489	79	7.4	39	0.02
NOV 27...	508	77	11	42	0.02
JAN 1992 22...	--	89	9.5	56	0.04
FEB 27...	612	87	22	76	0.02
APR 08...	577	92	15	62	0.04
MAY 20...	567	86	6.0	55	0.02
JUL 01...	568	--	--	60	0.08
AUG 13...	571	100	6.6	63	0.03
SEP 24...	582	90	5.2	63	0.04
413547083481203 LU-25 NR HOLLAND OH-LV3 (LAT 41 35 47N LONG 083 12W)					
OCT 1991 15...	970	--	--	210	0.04
NOV 27...	--	77	34	120	0.03
JAN 1992 22...	--	93	94	260	0.04
FEB 27...	780	61	69	140	0.07
APR 08...	507	70	13	53	0.01
MAY 20...	--	51	19	28	0.07
JUL 01...	358	39	21	21	0.01
AUG 13...	424	58	17	39	--
SEP 24...	448	61	6.6	40	<0.01

DATE	SPECIFIC CONDUCTANCE LAB (US/CM)	CALCIUM DISSOLVED (MG/L AS CA)	SODIUM, DISSOLVED (MG/L AS NA)	CHLORIDE, DISSOLVED (MG/L AS CL)	BROMIDE DISSOLVED (MG/L AS BR)
413547083481204 LU-25 NR HOLLAND OH-LV4 (LAT 41 35 47N LONG 083 12W)					
OCT 1991					
15...	802	73	51	170	0.04
NOV					
27...	806	88	36	170	0.03
JAN 1992					
22...	--	89	170	400	0.06
FEB					
27...	1570	76	210	330	0.05
APR					
08...	787	54	89	150	0.02
MAY					
20...	751	43	90	130	0.02
JUL					
01...	639	27	110	120	<0.01
AUG					
13...	471	26	70	69	0.01
SEP					
24...	838	51	91	190	0.04
413547083481205 LU-25 NR HOLLAND OH-LV5 (LAT 41 35 47N LONG 083 12W)					
OCT 1991					
15...	897	57	97	210	0.05
NOV					
27...	--	--	--	200	0.04
JAN 1992					
22...	1340	70	160	310	0.06
FEB					
27...	944	51	110	200	0.03
APR					
08...	1010	57	130	210	0.04
MAY					
20...	944	40	130	180	0.03
JUL					
01...	724	29	110	120	--
AUG					
13...	454	--	--	49	0.03
SEP					
24...	557	29	70	93	0.02
413547083481300 LU-22 NR HOLLAND OH (LAT 41 35 47N LONG 083 48W)					
JUL 1992					
01...	581	61	19	30	0.05
413547083481301 LU-22 NR HOLLAND OH-LV1 (LAT 41 35 47N LONG 083 13W)					
OCT 1991					
15...	529	81	11	47	0.03
NOV					
27...	507	78	8.9	40	0.02
JAN 1992					
22...	500	89	7.0	35	0.03
FEB					
27...	525	86	7.8	46	0.03
APR					
08...	533	91	6.2	46	0.02
MAY					
20...	564	--	--	51	<0.01
JUL					
01...	572	--	--	60	<0.01
AUG					
13...	630	110	12	83	0.03
SEP					
24...	--	100	9.3	82	0.02
413547083481302 LU-22 NR HOLLAND OH-LV2 (LAT 41 35 47N LONG 083 13W)					
OCT 1991					
15...	603	85	20	80	0.04
NOV					
27...	--	83	14	60	0.04
JAN 1992					
22...	564	--	--	59	0.04
FEB					
27...	607	99	5.8	71	0.04
APR					
08...	595	100	5.8	64	0.04
MAY					
20...	622	--	--	71	0.03
JUL					
01...	604	--	--	70	--
AUG					
13...	612	110	17	84	0.03
SEP					
24...	652	90	14	94	0.02

DATE	SPECIFIC CONDUCTANCE LAB (US/CM)	CALCIUM DISSOLVED (MG/L AS CA)	SODIUM, DISSOLVED (MG/L AS NA)	CHLORIDE, DISSOLVED (MG/L AS CL)	BROMIDE DISSOLVED (MG/L AS BR)
413547083481303 LU-22 NR HOLLAND OH-LV3 (LAT 41 35 47N LONG 083 13W)					
OCT 1991 15...	458	53	33	43	0.08
NOV 27...	451	60	15	30	<0.01
JAN 1992 22...	425	60	5.1	24	0.01
FEB 27...	431	61	5.0	27	<0.01
APR 08...	520	76	5.3	59	0.02
MAY 20...	531	68	7.9	60	--
JUL 01...	738	75	27	140	--
AUG 13...	598	83	31	98	0.01
SEP 24...	1270	120	85	320	0.05
413547083481304 LU-22 NR HOLLAND OH-LV4 (LAT 41 35 47N LONG 083 13W)					
OCT 1991 15...	1820	71	270	480	0.03
NOV 27...	--	27	54	55	0.01
JAN 1992 22...	370	24	42	28	0.02
FEB 27...	411	18	58	54	0.01
APR 08...	516	20	74	100	0.03
MAY 20...	816	56	75	190	0.01
JUL 01...	1380	120	73	--	--
AUG 13...	2210	200	190	670	0.13
SEP 24...	2250	94	310	600	0.09
413547083481305 LU-22 NR HOLLAND OH-LV5 (LAT 41 35 47N LONG 083 13W)					
OCT 1991 15...	677	27	98	130	0.02
NOV 27...	693	--	--	130	0.03
JAN 1992 22...	--	--	--	130	0.04
FEB 27...	757	17	130	150	0.03
APR 08...	716	17	130	140	0.06
MAY 20...	854	23	140	170	0.04
JUL 01...	718	24	130	140	--
AUG 13...	491	--	--	76	0.02
SEP 24...	826	43	130	170	0.02
413549083481501 LU-21 NR HOLLAND OH-LV1 (LAT 41 35 49N LONG 083 15W)					
OCT 1991 15...	799	130	7.5	120	0.09
NOV 27...	--	130	7.9	110	0.08
JAN 1992 22...	--	150	7.2	140	0.09
FEB 27...	892	150	8.6	140	0.09
APR 08...	897	160	7.5	140	0.10
MAY 20...	903	140	7.3	140	<0.01
JUL 01...	881	140	8.4	140	0.08
AUG 13...	894	330	8.5	150	0.08
SEP 24...	894	150	7.3	140	0.10

DATE	SPECIFIC CONDUCTANCE LAB (US/CM)	CALCIUM DISSOLVED (MG/L AS CA)	SODIUM, DISSOLVED (MG/L AS NA)	CHLORIDE, DISSOLVED (MG/L AS CL)	BROMIDE DISSOLVED (MG/L AS BR)
413549083481502 LU-21 NR HOLLAND OH-LV2 (LAT 41 35 49N LONG 083 15W)					
OCT 1991					
15...	477	--	--	46	0.02
NOV					
27...	482	72	3.8	41	0.03
JAN 1992					
22...	--	--	--	30	0.01
FEB					
27...	378	58	3.9	25	0.01
APR					
08...	--	54	2.7	15	<0.01
MAY					
20...	339	52	3.7	18	0.08
JUL					
01...	--	55	4.0	20	--
AUG					
13...	355	66	3.2	21	<0.01
SEP					
24...	434	62	3.4	37	<0.01
413549083481503 LU-21 NR HOLLAND OH-LV3 (LAT 41 35 49N LONG 083 15W)					
OCT 1991					
15...	293	42	3.1	11	0.01
NOV					
27...	271	37	3.0	8.6	<0.01
JAN 1992					
22...	259	36	2.8	9.0	<0.01
FEB					
27...	234	32	3.6	7.8	<0.01
APR					
08...	186	24	5.5	8.2	<0.01
MAY					
20...	221	27	5.2	7.6	--
JUL					
01...	254	36	3.4	--	--
AUG					
13...	217	44	3.5	5.6	<0.01
SEP					
24...	249	35	2.3	7.0	--
413549083481504 LU-21 NR HOLLAND OH-LV4 (LAT 41 35 49N LONG 083 15W)					
OCT 1991					
15...	222	31	2.8	5.5	0.01
NOV					
27...	191	25	2.5	4.5	<0.01
JAN 1992					
22...	--	20	3.1	8.5	<0.01
FEB					
27...	201	24	5.0	9.0	<0.01
APR					
08...	--	17	7.0	8.3	<0.01
MAY					
20...	145	--	--	9.2	<0.01
JUL					
01...	193	--	--	8.0	<0.01
AUG					
13...	148	16	4.7	8.1	<0.01
SEP					
24...	193	24	2.9	5.2	<0.01
413549083481505 LU-21 NR HOLLAND OH-LV5 (LAT 41 35 49N LONG 083 15W)					
OCT 1991					
15...	153	21	2.8	4.8	0.01
NOV					
27...	--	22	2.7	4.0	<0.01
JAN 1992					
22...	--	20	3.3	9.0	<0.01
FEB					
27...	--	23	6.7	11	0.01
APR					
08...	172	19	6.7	9.5	<0.01
MAY					
20...	<31	14	4.8	9.5	0.03
JUL					
01...	173	--	--	8.6	0.02
AUG					
13...	160	--	--	9.6	--
SEP					
24...	174	22	3.1	6.2	<0.01

DATE	SPECIFIC CONDUCTANCE LAB (US/CM)	CALCIUM DISSOLVED (MG/L AS CA)	SODIUM, DISSOLVED (MG/L AS NA)	CHLORIDE, DISSOLVED (MG/L AS CL)	BROMIDE DISSOLVED (MG/L AS BR)
ASHTABULA COUNTY SITE #1 (SR 84)					
415305080414201 AB-139 NR KINGSVILLE OH-LEVEL 1 (LAT 41 53 05N LONG 080 41 42W)					
OCT 1991					
08...	--	--	--	--	--
NOV					
19...	550	79	12	8.1	<0.01
JAN 1992					
07...	--	79	16	43	0.02
FEB					
20...	816	92	44	120	0.03
MAR					
31...	--	43	4.6	4.6	0.02
MAY					
12...	--	63	5.0	21	0.02
JUN					
23...	473	--	--	20	0.04
SEP					
15...	--	110	13	17	<0.01
415305080414202 AB-139 NR KINGSVILLE OH-LEVEL 2 (LAT 41 53 05N LONG 080 41 42W)					
OCT 1991					
08...	412	83	9.7	12	0.02
NOV					
19...	546	80	13	8.2	0.02
JAN 1992					
07...	--	69	13	19	0.02
FEB					
20...	715	80	33	92	0.02
MAR					
31...	286	40	4.6	3.8	0.01
MAY					
12...	396	61	4.3	3.7	0.04
JUN					
23...	536	--	--	16	0.04
SEP					
15...	--	100	14	28	<0.01
415305080414203 AB-139 NR KINGSVILLE OH-LEVEL 3 (LAT 41 53 05N LONG 080 41 42W)					
OCT 1991					
08...	564	75	9.6	10	0.01
NOV					
19...	600	88	9.9	5.8	0.01
JAN 1992					
07...	494	--	--	19	0.01
FEB					
20...	615	76	30	67	0.02
MAR					
31...	--	--	--	--	<0.01
MAY					
12...	412	57	4.2	4.1	0.02
JUN					
23...	540	77	8.8	13	0.04
AUG					
04...	512	72	12	22	0.02
SEP					
15...	--	110	11	19	<0.01
415305080414204 AB-139 NR KINGSVILLE OH-LEVEL 4 (LAT 41 53 05N LONG 080 41 42W)					
OCT 1991					
08...	422	86	9.6	7.4	0.02
NOV					
19...	607	93	9.7	7.5	0.01
JAN 1992					
07...	494	70	14	19	0.08
FEB					
20...	629	75	29	70	0.03
MAR					
31...	293	39	5.0	4.8	<0.01
MAY					
12...	354	55	4.3	3.9	0.04
JUN					
23...	527	--	--	18	0.05
AUG					
04...	487	73	12	21	<0.01
SEP					
15...	712	110	9.1	14	<0.01

DATE	SPECIFIC CONDUCTANCE LAB (US/CM)	CALCIUM DISSOLVED (MG/L AS CA)	SODIUM, DISSOLVED (MG/L AS NA)	CHLORIDE, DISSOLVED (MG/L AS CL)	BROMIDE DISSOLVED (MG/L AS BR)
415305080414205 AB-139 NR KINGSVILLE OH-LEVEL 5 (LAT 41 53 05N LONG 080 41 42W)					
JAN 1992					
07...	--	66	14	20	0.02
FEB					
20...	573	69	27	59	--
MAR					
31...	--	24	4.3	5.1	<0.01
MAY					
12...	--	58	5.0	3.9	0.05
JUN					
23...	569	--	--	16	0.19
AUG					
04...	506	--	--	18	0.02
SEP					
15...	675	110	11	15	0.01
415305080414206 AB-139 NR KINGSVILLE OH-LEVEL 6 (LAT 41 53 05N LONG 080 41 42W)					
FEB 1992					
20...	661	--	--	83	0.04
MAR					
31...	--	23	4.6	4.2	<0.01
415307080414201 AB-133 NR KINGSVILLE OH-LEVEL 1 (LAT 41 53 07N LONG 080 41 42W)					
OCT 1991					
08...	--	170	630	1000	0.24
NOV					
19...	--	190	760	1300	0.31
JAN 1992					
07...	--	110	400	600	0.11
FEB					
20...	2730	110	420	750	0.14
MAR					
31...	2090	74	320	510	0.07
MAY					
12...	2250	76	360	620	<0.01
AUG					
04...	--	160	460	870	0.16
SEP					
15...	2240	160	200	480	0.11
415307080414202 AB-133 NR KINGSVILLE OH-LEVEL 2 (LAT 41 53 07N LONG 080 41 42W)					
OCT 1991					
08...	3890	170	640	1000	0.25
NOV					
19...	--	190	750	1400	0.30
JAN 1992					
07...	2330	--	--	560	0.11
FEB					
20...	2050	91	330	520	0.10
MAR					
31...	--	79	340	570	0.08
MAY					
12...	2230	76	350	600	0.07
AUG					
04...	3200	160	460	880	0.17
SEP					
15...	1640	57	230	370	0.06
415307080414203 AB-133 NR KINGSVILLE OH-LEVEL 3 (LAT 41 53 07N LONG 080 41 42W)					
OCT 1991					
08...	2360	120	340	600	0.15
NOV					
19...	--	160	410	730	0.19
JAN 1992					
07...	--	77	350	610	0.12
FEB					
20...	2270	91	310	600	0.12
MAR					
31...	--	79	340	600	0.08
MAY					
12...	2140	--	--	560	0.08
JUN					
23...	2070	65	330	520	0.10
AUG					
04...	--	120	380	670	0.13
SEP					
15...	1630	61	250	370	0.05

DATE	SPECIFIC CONDUCTANCE LAB (US/CM)	CALCIUM DISSOLVED (MG/L AS CA)	SODIUM, DISSOLVED (MG/L AS NA)	CHLORIDE, DISSOLVED (MG/L AS CL)	BROMIDE DISSOLVED (MG/L AS BR)
415307080414204 AB-133 NR KINGSVILLE OH-LEVEL 4 (LAT 41 53 07N LONG 080 41 42W)					
OCT 1991					
08...	--	130	330	470	0.13
NOV					
19...	--	150	400	680	0.16
JAN 1992					
07...	--	72	350	620	0.12
FEB					
20...	2150	81	300	550	0.09
MAR					
31...	--	70	310	550	0.07
MAY					
12...	--	67	320	520	0.06
JUN					
23...	2040	61	330	560	0.09
AUG					
04...	--	99	380	670	0.12
SEP					
15...	1570	62	250	340	0.05
415307080414205 AB-133 NR KINGSVILLE OH-LEVEL 5 (LAT 41 53 07N LONG 080 41 42W)					
NOV 1991					
19...	2660	--	--	670	0.15
JAN 1992					
07...	--	64	330	410	0.11
FEB					
20...	2140	82	300	530	0.09
MAR					
31...	2470	74	320	490	0.07
MAY					
12...	--	62	320	490	0.07
JUN					
23...	1980	61	320	220	0.09
AUG					
04...	--	99	360	650	0.11
SEP					
15...	1440	53	220	310	0.05
415307080414206 AB-133 NR KINGSVILLE OH-LEVEL 6 (LAT 41 53 07N LONG 080 41 42W)					
FEB 1992					
20...	2020	74	370	520	0.08
MAR					
31...	2000	66	300	530	0.07
MAY					
12...	--	63	290	450	0.06
415308080414302 AB-135 NR KINGSVILLE OH-LEVEL 2 (LAT 41 53 08N LONG 080 41 43W)					
OCT 1991					
08...	1180	110	110	280	0.06
NOV					
19...	2490	--	--	370	0.10
JAN 1992					
07...	--	180	330	750	0.17
FEB					
20...	1960	--	--	470	0.14
MAR					
31...	--	110	150	350	0.08
MAY					
12...	--	90	100	240	0.06
JUN					
23...	1150	--	--	240	0.12
AUG					
04...	1230	100	100	260	0.07
SEP					
15...	1520	100	150	350	0.07
415308080414303 AB-135 NR KINGSVILLE OH-LEVEL 3 (LAT 41 53 08N LONG 080 41 43W)					
OCT 1991					
08...	1210	110	110	290	0.07
NOV					
19...	1830	--	--	440	0.10
JAN 1992					
07...	2800	170	320	680	0.17
FEB					
20...	1970	130	220	440	0.12
MAR					
31...	--	110	150	350	0.09
MAY					
12...	1170	91	100	250	0.06
JUN					
23...	1140	--	--	240	0.08
AUG					
04...	--	110	120	300	0.06
SEP					
15...	1500	110	150	330	0.07

DATE	SPECIFIC CONDUCTANCE LAB (US/CM)	CALCIUM DISSOLVED (MG/L AS CA)	SODIUM, DISSOLVED (MG/L AS NA)	CHLORIDE, DISSOLVED (MG/L AS CL)	BROMIDE DISSOLVED (MG/L AS BR)
415308080414304 AB-135 NR KINGSVILLE OH-LEVEL 4 (LAT 41 53 08N LONG 080 41 43W)					
OCT 1991					
08...	1090	110	84	250	0.06
NOV					
19...	--	120	80	210	0.07
JAN 1992					
07...	--	140	140	360	0.09
FEB					
20...	1830	120	190	410	0.11
MAR					
31...	1450	100	35	320	0.08
MAY					
12...	1140	95	100	250	0.06
JUN					
23...	1020	88	82	200	0.07
AUG					
04...	1170	--	--	240	0.07
SEP					
15...	1460	110	130	330	0.07
415308080414305 AB-135 NR KINGSVILLE OH-LEVEL 5 (LAT 41 53 08N LONG 080 41 43W)					
OCT 1991					
08...	875	110	71	200	0.05
NOV					
19...	--	97	87	220	0.06
JAN 1992					
07...	--	120	110	300	0.08
FEB					
20...	1860	140	180	410	0.11
MAR					
31...	1540	110	160	340	0.08
MAY					
12...	1440	110	130	330	0.07
JUN					
23...	1080	91	99	240	0.07
AUG					
04...	1060	96	94	220	0.06
SEP					
15...	1390	120	120	320	0.06
415308080414306 AB-135 NR KINGSVILLE OH-LEVEL 6 (LAT 41 53 08N LONG 080 41 43W)					
OCT 1991					
08...	--	99	65	190	0.04
NOV					
19...	2490	--	--	230	0.06
JAN 1992					
07...	--	110	110	290	0.08
FEB					
20...	1880	140	190	440	0.12
MAR					
31...	--	130	180	390	0.08
MAY					
12...	--	110	150	340	<0.01
JUN					
23...	1180	95	110	240	0.18
AUG					
04...	--	97	95	220	0.05
SEP					
15...	1290	120	96	300	0.07
415309080414301 AB-136 NR KINGSVILLE OH-LEVEL 1 (LAT 41 53 09N LONG 080 41 43W)					
OCT 1991					
08...	--	53	200	270	<0.01
NOV					
19...	1250	--	--	270	0.06
JAN 1992					
07...	--	--	--	330	0.07
FEB					
20...	1440	69	200	300	0.07
MAR					
31...	1430	75	200	320	0.08
MAY					
12...	1350	62	180	300	0.06
JUN					
23...	1450	80	200	330	0.08
AUG					
04...	1420	72	190	300	0.09
SEP					
15...	1540	72	220	360	0.07

DATE	SPECIFIC CONDUCTANCE LAB (US/CM)	CALCIUM DISSOLVED (MG/L AS CA)	SODIUM, DISSOLVED (MG/L AS NA)	CHLORIDE, DISSOLVED (MG/L AS CL)	BROMIDE DISSOLVED (MG/L AS BR)
415309080414302 AB-136 NR KINGSVILLE OH-LEVEL 2 (LAT 41 53 09N LONG 080 41 43W)					
OCT 1991 08...	1500	84	190	340	0.07
NOV 19...	--	82	140	210	0.06
JAN 1992 07...	--	86	200	330	0.07
FEB 20...	1400	--	--	310	0.09
MAR 31...	1450	--	--	320	0.08
MAY 12...	1300	65	170	300	0.06
JUN 23...	1460	--	--	320	0.09
AUG 04...	1430	--	--	320	0.08
SEP 15...	1540	72	220	350	0.06
415309080414303 AB-136 NR KINGSVILLE OH-LEVEL 3 (LAT 41 53 09N LONG 080 41 43W)					
OCT 1991 08...	1470	82	180	320	0.07
NOV 19...	1330	82	160	240	0.07
JAN 1992 07...	--	76	200	350	0.07
FEB 20...	1410	--	--	310	0.09
MAR 31...	--	--	--	310	0.07
MAY 12...	1210	63	160	260	0.05
JUN 23...	1350	--	--	290	0.07
AUG 04...	--	73	190	300	0.07
SEP 15...	1530	73	220	350	0.06
415309080414304 AB-136 NR KINGSVILLE OH-LEVEL 4 (LAT 41 53 09N LONG 080 41 43W)					
OCT 1991 08...	--	81	190	320	0.06
NOV 19...	--	82	170	250	0.07
JAN 1992 07...	--	79	200	320	0.07
FEB 20...	1410	68	190	310	0.08
MAR 31...	1420	76	190	310	0.07
MAY 12...	1470	66	200	330	0.06
JUN 23...	1510	69	210	330	0.08
AUG 04...	1410	71	190	300	0.06
SEP 15...	1500	72	210	340	0.06
415309080414305 AB-136 NR KINGSVILLE OH-LEVEL 5 (LAT 41 53 09N LONG 080 41 43W)					
OCT 1991 08...	--	88	210	350	0.09
NOV 19...	--	85	200	290	0.08
JAN 1992 07...	--	76	190	340	0.07
FEB 20...	1400	72	190	300	0.06
MAR 31...	1380	--	--	300	0.06
MAY 12...	1440	64	190	320	0.06
JUN 23...	1460	70	200	320	0.08
AUG 04...	1450	69	200	310	0.06
SEP 15...	1490	71	210	330	0.06

DATE	SPECIFIC CONDUCTANCE LAB (US/CM)	CALCIUM DISSOLVED (MG/L AS CA)	SODIUM, DISSOLVED (MG/L AS NA)	CHLORIDE, DISSOLVED (MG/L AS CL)	BROMIDE DISSOLVED (MG/L AS BR)
415309080414306 AB-136 NR KINGSVILLE OH-LEVEL 6 (LAT 41 53 09N LONG 080 41 43W)					
OCT 1991					
08...	1250	83	180	310	0.08
NOV					
19...	1340	--	--	290	0.07
JAN 1992					
07...	1350	--	--	280	0.07
FEB					
20...	1360	72	180	280	0.07
MAR					
31...	--	75	180	280	0.06
MAY					
12...	1320	66	170	290	0.05
JUN					
23...	1240	65	170	260	0.06
AUG					
04...	1270	73	160	260	0.06
SEP					
15...	1450	76	190	320	0.06
415309080414401 AB-138 NR KINGSVILLE OH-LEVEL 1 (LAT 41 53 09N LONG 080 41 44W)					
OCT 1991					
08...	810	83	41	130	0.04
NOV					
19...	738	86	37	88	0.05
JAN 1992					
07...	890	86	56	150	0.05
FEB					
20...	717	69	51	110	0.04
MAR					
31...	635	64	38	83	0.03
MAY					
12...	593	59	42	70	0.03
AUG					
04...	627	70	27	73	0.03
SEP					
15...	719	67	54	110	0.03
415309080414402 AB-138 NR KINGSVILLE OH-LEVEL 2 (LAT 41 53 09N LONG 080 41 44W)					
OCT 1991					
08...	804	88	41	130	0.04
NOV					
19...	790	85	31	110	0.05
JAN 1992					
07...	846	87	47	140	0.04
FEB					
20...	705	74	42	100	0.04
MAR					
31...	649	68	39	87	0.03
MAY					
12...	582	60	37	66	0.03
AUG					
04...	618	68	28	71	0.03
SEP					
15...	651	67	37	85	0.03
415309080414403 AB-138 NR KINGSVILLE OH-LEVEL 3 (LAT 41 53 09N LONG 080 41 44W)					
OCT 1991					
08...	802	100	31	120	0.04
NOV					
19...	795	90	31	97	0.05
JAN 1992					
07...	806	89	38	110	0.05
FEB					
20...	668	70	33	83	0.04
MAR					
31...	--	--	--	--	--
MAY					
12...	578	59	35	67	0.03
AUG					
04...	621	70	23	69	0.03
SEP					
15...	629	69	33	79	0.03
415309080414404 AB-138 NR KINGSVILLE OH-LEVEL 4 (LAT 41 53 09N LONG 080 41 44W)					
OCT 1991					
08...	784	99	28	120	0.04
NOV					
19...	882	93	34	140	0.06
JAN 1992					
07...	712	75	27	110	0.04
MAR					
31...	799	61	76	140	0.03
MAY					
12...	661	54	60	91	0.04
AUG					
04...	537	60	24	53	0.02
SEP					
15...	838	67	77	140	0.04

DATE	SPECIFIC CONDUCTANCE LAB (US/CM)	CALCIUM DISSOLVED (MG/L AS CA)	SODIUM, DISSOLVED (MG/L AS NA)	CHLORIDE, DISSOLVED (MG/L AS CL)	BROMIDE DISSOLVED (MG/L AS BR)
415309080414405 AB-138 NR KINGSVILLE OH-LEVEL 5 (LAT 41 53 09N LONG 080 41 44W)					
OCT 1991					
08...	931	71	120	170	0.04
NOV					
19...	961	61	98	190	0.05
JAN 1992					
07...	974	85	86	190	0.05
MAR					
31...	741	61	72	120	0.03
415309080414406 AB-138 NR KINGSVILLE OH-LEVEL 6 (LAT 41 53 09N LONG 080 41 44W)					
OCT 1991					
08...	917	67	98	170	0.04
NOV					
19...	940	72	92	190	0.05
JAN 1992					
07...	1060	73	100	210	0.05
FEB					
20...	967	65	110	180	0.05
MAR					
31...	908	63	95	170	0.04
MAY					
12...	707	56	72	120	0.04
JUN					
23...	607	52	58	100	0.04
AUG					
04...	731	64	62	110	0.03
SEP					
15...	894	63	96	160	0.04
415310080414401 AB-137 NR KINGSVILLE OH-LEVEL 1 (LAT 41 53 10N LONG 080 41 44W)					
OCT 1991					
08...	690	96	46	130	0.04
NOV					
19...	--	86	44	100	0.05
JAN 1992					
07...	--	93	47	120	0.06
FEB					
20...	821	94	42	110	0.03
MAR					
31...	--	92	42	100	0.04
MAY					
12...	812	90	40	100	0.04
JUN					
23...	862	97	43	110	0.04
AUG					
04...	--	85	48	120	0.04
SEP					
15...	875	100	44	110	0.03
415310080414402 AB-137 NR KINGSVILLE OH-LEVEL 2 (LAT 41 53 10N LONG 080 41 44W)					
OCT 1991					
08...	712	88	46	130	0.05
NOV					
19...	--	86	49	130	0.04
JAN 1992					
07...	--	94	47	120	0.04
FEB					
20...	816	93	41	110	0.03
MAR					
31...	--	89	41	100	0.04
MAY					
12...	836	95	40	100	0.04
JUN					
23...	831	83	44	110	0.06
AUG					
04...	--	82	53	120	0.04
SEP					
15...	852	95	43	110	0.03
415310080414403 AB-137 NR KINGSVILLE OH-LEVEL 3 (LAT 41 53 10N LONG 080 41 44W)					
OCT 1991					
08...	827	76	46	130	0.04
NOV					
19...	--	--	--	130	0.04
JAN 1992					
07...	--	95	47	120	0.05
FEB					
20...	803	93	41	110	0.04
MAR					
31...	--	87	42	110	0.04
MAY					
12...	848	92	40	110	0.04
JUN					
23...	832	91	43	110	0.11
AUG					
04...	812	82	52	120	0.04
SEP					
15...	834	96	42	110	0.03

DATE	SPECIFIC CONDUCTANCE LAB (US/CM)	CALCIUM DISSOLVED (MG/L AS CA)	SODIUM, DISSOLVED (MG/L AS NA)	CHLORIDE, DISSOLVED (MG/L AS CL)	BROMIDE DISSOLVED (MG/L AS BR)
415310080414404 AB-137 NR KINGSVILLE OH-LEVEL 4 (LAT 41 53 10N LONG 080 41 44W)					
OCT 1991					
08...	672	91	49	130	0.04
NOV					
19...	--	87	51	130	0.05
JAN 1992					
07...	--	97	46	120	0.14
FEB					
20...	777	92	42	110	0.04
MAR					
31...	--	87	43	100	0.03
MAY					
12...	835	95	40	100	0.04
JUN					
23...	806	91	45	110	0.04
AUG					
04...	776	84	51	110	0.04
SEP					
15...	832	98	43	120	0.03
415310080414405 AB-137 NR KINGSVILLE OH-LEVEL 5 (LAT 41 53 10N LONG 080 41 44W)					
OCT 1991					
08...	679	87	46	130	0.04
NOV					
19...	--	88	49	120	0.04
JAN 1992					
07...	--	100	46	120	0.04
FEB					
20...	804	91	41	100	0.04
MAR					
31...	--	88	43	110	0.03
MAY					
12...	815	89	39	100	0.04
JUN					
23...	831	87	43	110	0.06
AUG					
04...	737	85	49	110	0.03
SEP					
15...	829	93	43	120	0.03
415310080414406 AB-137 NR KINGSVILLE OH-LEVEL 6 (LAT 41 53 10N LONG 080 41 44W)					
OCT 1991					
08...	671	88	46	120	0.04
NOV					
19...	--	89	48	100	0.05
JAN 1992					
07...	--	110	45	120	0.04
FEB					
20...	809	90	42	110	0.03
MAR					
31...	--	86	42	110	0.03
MAY					
12...	--	94	42	100	0.03
JUN					
23...	824	90	43	110	0.06
AUG					
04...	840	100	49	110	0.09
SEP					
15...	--	--	--	--	--

PICKAWAY COUNTY SITE #6 (SR 104)

393541083001000 - PK-47 NR CIRCLEVILLE OH

COMPREHENSIVE SAMPLE ANALYSIS FROM ONE WELL AT EACH SITE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	SPE- CIFIC CON- DUCT- ANCE LAB (US/CM)	PH (STAND- ARD UNITS)	PH LAB (STAND- ARD UNITS)	ACIDITY (MG/L AS H)	HARD- NESS TOTAL (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)	SODIUM PERCENT	SODIUM AD- SORP- TION RATIO
JUN 29...	12.55	575	711	7.5	7.4	0.6	390	100	33	3.5	2	0.1
DATE	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LITY, CARBON- ATE IT-FLD (MG/L - CACO3)	ALKA- LITY LAB (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	BROMIDE DIS- SOLVED (MG/L AS BR)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)
JUN 29...	2.1	308	303	76	19	0.10	0.04	9.1	386	426	<0.01	0.18
DATE	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	LIUM, DIS- SOLVED (UG/L AS BE)	BERYL- BORON, DIS- SOLVED (UG/L AS B)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, DIS- SOLVED (UG/L AS CU)
JUN 29...	0.02	<0.20	<0.01	<0.01	<1	100	<0.5	30	<1.0	<1	<3	<10
DATE	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)	ZINC, DIS- SOLVED (UG/L AS ZN)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	CYANIDE DIS- SOLVED (MG/L AS CN)	
JUN 29...	97	10	<4	160	<0.1	<10	150	<6	11	0.6	<0.01	

CLARK COUNTY SITE # 8 (SR 4)

395859083440600 - CL-137 NR SPRINGFIELD OH

COMPREHENSIVE SAMPLE ANALYSIS FROM ONE WELL AT EACH SITE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	SPE- CIFIC CON- DUCT- ANCE LAB (US/CM)	PH (STAND- ARD UNITS)	PH LAB (STAND- ARD UNITS)	ACIDITY (MG/L AS H)	HARD- NESS TOTAL (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)	SODIUM PERCENT	SODIUM AD- SORP- TION RAITTO
JUN 29...	19.34	700	865	7.2	7.3	0.3	440	110	40	16	7	0.3
DATE	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LITY, CARBON- ATE IT-FLD (MG/L - CACO3)	ALKA- LINTY LAB (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	BROMIDE DIS- SOLVED (MG/L AS BR)	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, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)
JUN 29...	3.0	375	292	36	27	0.20	0.04	12	511	468	<0.01	11.0
DATE	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	LIUM, DIS- SOLVED (UG/L AS BE)	BERYL- BORON, DIS- SOLVED (UG/L AS B)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, DIS- SOLVED (UG/L AS CU)
JUN 29...	0.05	<0.20	<0.01	<0.01	<1	120	<0.5	20	<1.0	<1	<3	<10
DATE	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)	ZINC, DIS- SOLVED (UG/L AS ZN)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	CYANIDE DIS- SOLVED (MG/L AS CN)	
JUN 29...	4	<10	<4	1	<0.1	<10	160	<6	<3	0.6	<0.01	

CHAMPAIGN COUNTY SITE #7 (SR 29)

400948083480200 - CH-41 NR URBANA OH

COMPREHENSIVE SAMPLE ANALYSIS FROM ONE WELL AT EACH SITE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	SPE- CIFIC CON- DUCT- ANCE LAB (US/CM)	PH (STAND- ARD UNITS)	PH LAB (STAND- ARD UNITS)	ACIDITY (MG/L AS H)	HARD- NESS TOTAL (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)	SODIUM PERCENT	SODIUM AD- SORP- TION RATIO
JUN 30...	9.13	670	840	7.4	7.3	0.7	420	110	36	14	7	0.3
DATE	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINTY, CARBON- ATE IT-FLD (MG/L - CACO3)	ALKA- LINTY LAB (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	BROMIDE DIS- SOLVED (MG/L AS BR)	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, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)
JUN 30...	3.5	309	300	99	42	0.30	0.06	8.4	502	496	<0.01	0.40
DATE	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE)	BORON, DIS- SOLVED (UG/L AS B)	CHRO- CADMIUM DIS- SOLVED (UG/L AS CD)	MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, DIS- SOLVED (UG/L AS CO)	
JUN 30...	0.03	<0.20	<0.01	<0.01	<1	74	<0.5	30	<1.0	<1	<3	
DATE	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)	ZINC, DIS- SOLVED (UG/L AS ZN)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	
JUN 30...	<10	170	<10	5	130	<0.1	<10	390	<6	9	0.8	

ASHLAND COUNTY SITE #3 (SR 3)

403635082152500 - AS-44 NR LOUDONVILLE OH

COMPREHENSIVE SAMPLE ANALYSIS FROM ONE WELL AT EACH SITE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	SPE- CIFIC CON- DUCT- ANCE LAB (US/CM)	PH (STAND- ARD UNITS)	PH LAB (STAND- ARD UNITS)	ACIDITY (MG/L AS H)	HARD- NESS TOTAL (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)	SODIUM PERCENT	SODIUM AD- SORP- TION RATIO
JUL 02...	5.72	475	1100	7.1	7.7	<0.1	420	130	22	50	21	1
DATE	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LITY, CARBON- ATE IT-FLD (MG/L - CACO3)	ALKA- LITY LAB (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	BROMIDE DIS- SOLVED (MG/L AS BR)	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, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)
JUL 02...	4.7	228	71	51	280	0.10	0.06	7.1	978	595	0.01	1.50
DATE	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	LIUM, DIS- SOLVED (UG/L AS BE)	BERYL- BORON, DIS- SOLVED (UG/L AS B)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, DIS- SOLVED (UG/L AS CU)
JUL 02...	0.06	<0.20	<0.01	<0.01	<1	64	<0.5	20	<1.0	<1	<3	<10
DATE	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)	ZINC, DIS- SOLVED (UG/L AS ZN)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	CYANIDE DIS- SOLVED (MG/L AS CN)	
JUL 02...	22	<10	10	110	0.2	<10	690	<6	<3	1.6	<0.01	

RICHLAND COUNTY SITE # 4 (SR 97)

403923082325600 - R-15 NR LEXINGTON OH

COMPREHENSIVE SAMPLE ANALYSIS FROM ONE WELL AT EACH SITE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	SPE- CIFIC CON- DUCT- ANCE LAB (US/CM)	PH (STAND- ARD UNITS)	PH LAB (STAND- ARD UNITS)	ACIDITY (MG/L AS H)	HARD- NESS TOTAL (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)	SODIUM PERCENT	SODIUM AD- SORP- TION RATIO
JUN 25...	16.08	1230	1280	7.4	7.4	0.4	220	63	15	160	61	5
DATE	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LITY, CARBON- ATE IT-FLD (MG/L - CACO3)	ALKA- LITY LAB (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	BROMIDE DIS- SOLVED (MG/L AS BR)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTITU- ENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)
JUN 25...	2.2	130	141	44	290	<0.10	0.06	7.8	701	672	0.01	1.10
DATE	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	LIUM, DIS- SOLVED (UG/L AS BE)	BERYL- BORON, DIS- SOLVED (UG/L AS B)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, DIS- SOLVED (UG/L AS CU)
JUN 25...	0.03	1.7	<0.01	0.01	<1	48	<0.5	30	<1.0	<1	<3	<10
DATE	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)	ZINC, DIS- SOLVED (UG/L AS ZN)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	CYANIDE DIS- SOLVED (MG/L AS CN)	
JUN 25...	46	<10	<4	9	<0.1	<10	120	<6	4	14	<0.01	

PORTAGE COUNTY SITE # 5 (SR 14)

411138081172400 - PO-115 NR RAVENNA OH

COMPREHENSIVE SAMPLE ANALYSIS FROM ONE WELL AT EACH SITE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	SPE- CIFIC CON- DUCT- ANCE LAB (US/CM)	PH (STAND- ARD UNITS)	PH LAB (STAND- ARD UNITS)	ACIDITY (MG/L AS H)	HARD- NESS TOTAL (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)	SODIUM PERCENT	SODIUM AD- SORP- TION RATIO
JUN 22...	6.31	2350	3040	7.3	7.1	0.6	360	120	14	470	74	11
DATE	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LITY, CARBON- ATE IT-FLD (MG/L - CAC03)	ALKA- LITY LAB (MG/L AS CAC03)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	BROMIDE DIS- SOLVED (MG/L AS BR)	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, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)
JUN 22...	0.60	141	138	87	860	0.30	0.15	5.9	2010	1650	0.01	0.96
DATE	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	LIUM, DIS- SOLVED (UG/L AS BE)	BERYL- BORON, DIS- SOLVED (UG/L AS B)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, DIS- SOLVED (UG/L AS CU)
JUN 22...	0.04	<0.20	0.01	0.02	<1	86	<1	50	<2.0	<1	<6	<20
DATE	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)	ZINC, DIS- SOLVED (UG/L AS ZN)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	CYANIDE DIS- SOLVED (MG/L AS CN)	
JUN 22...	<6	<20	<8	3	<0.1	<20	490	<12	24	2.0	0.01	

LUCAS COUNTY SITE # 2 (SR 2)

413547083481300 - LU-22 NR HOLLAND OH

COMPREHENSIVE SAMPLE ANALYSIS FROM ONE WELL AT EACH SITE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	SPE- CIFIC CON- DUCT- ANCE LAB (US/CM)	PH (STAND- ARD UNITS)	PH LAB (STAND- ARD UNITS)	ACIDITY (MG/L AS H)	HARD- NESS TOTAL (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)	SODIUM PERCENT	SODIUM AD- SORP- TION RATIO
JUL 01...	6.02	880	581	7.8	7.1	0.6	230	61	19	19	15	0.5
DATE	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LITY, CARBON- ATE IT-FLD (MG/L - CACO3)	ALKA- LITY LAB (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	BROMIDE DIS- SOLVED (MG/L AS BR)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)
JUL 01...	1.4	76	218	54	30	0.20	0.05	11	327	329	<0.01	<0.05
DATE	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	LIUM, DIS- SOLVED (UG/L AS BE)	BERYL- BORON, DIS- SOLVED (UG/L AS B)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, DIS- SOLVED (UG/L AS CU)
JUL 01...	0.14	0.30	<0.01	<0.01	<1	64	<0.5	40	<1.0	1	<3	<10
DATE	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)	ZINC, DIS- SOLVED (UG/L AS ZN)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	CYANIDE DIS- SOLVED (MG/L AS CN)	
JUL 01...	74	<10	<4	1800	0.6	<10	150	<6	5	1.1	<0.01	

ASHTABULA COUNTY SITE #1 (SR 84)

415307080414200 - AB-133 NR KINGSVILLE OH

COMPREHENSIVE SAMPLE ANALYSIS FROM ONE WELL AT EACH SITE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	SPE- CIFIC CON- DUCT- ANCE LAB (US/CM)	PH (STAND- ARD UNITS)	PH LAB (STAND- ARD UNITS)	ACIDITY (MG/L AS H)	HARD- NESS TOTAL (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)	SODIUM PERCENT	SODIUM AD- SORP- TION RATIO
JUN 23...	8.48	1730	2310	7.5	7.4	0.2	280	87	15	370	74	10
DATE	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LITY, CARBON- ATE IT-FLD (MG/L - CAC03)	ALKA- LITY LAB (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	BROMIDE DIS- SOLVED (MG/L AS BR)	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, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)
JUN 23...	2.0	161	160	71	580	0.20	0.10	7.0	1270	1230	0.02	0.46
DATE	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARJUM, DIS- SOLVED (UG/L AS BA)	LIUM, DIS- SOLVED (UG/L AS BE)	BERYL- BORON, DIS- SOLVED (UG/L AS B)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, DIS- SOLVED (UG/L AS CU)
JUN 23...	0.05	<0.20	<0.01	<0.01	<1	85	<1	40	<2.0	<1	<6	<20
DATE	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)	ZINC, DIS- SOLVED (UG/L AS ZN)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	CYANIDE DIS- SOLVED (MG/L AS CN)	
JUN 23...	990	<20	8	54	<0.1	<20	200	<12	9	1.6	<0.01	

EFFECTS OF HIGHWAY DEICING CHEMICALS ON SHALLOW UNCONSOLIDATED AQUIFERS IN OHIO 251

The following table lists ground-water-level measurements from wells located throughout the eight sites in the "Effects of Highway Deicing Chemicals" study area. The water level in these wells is measured periodically, however, they are not part of the routine water-quality network.

GROUND-WATER LEVELS

SITE-ID	LOCAL WELL NUMBER	DEPTH OF WELL (FEET)	AQUIFER CODE	WATER- LEVEL DATE	WATER LEVEL (FEET)	ALTITUDE OF LAND SURFACE (FEET)
393540083001200	PK-46	34.6	112OTSH	10-18-91	11.79	680
				11-15-91	12.19	
				01-21-92	12.82	
				02-24-92	13.07	
				04-09-92	13.02	
				05-22-92	13.11	
				08-10-92	12.49	
393541083000700	PK-44 NR CIRCLEVILLE OH	38	112OTSH	10-18-91	13.26	680
				11-15-91	13.63	
				01-21-92	14.13	
				02-24-92	14.33	
				04-09-92	14.24	
				05-22-92	14.34	
393541083000800	PK-50 NR CIRCLEVILLE OH	34.3	112OTSH	10-18-91	13.00	680
				11-15-91	13.37	
				01-21-92	13.93	
				02-24-92	14.15	
				04-09-92	14.07	
				05-22-92	14.17	
				08-10-92	13.65	
393541083000900	PK-49 NR CIRCLEVILLE OH	35.6	112OTSH	10-18-91	12.62	680
				11-15-91	13.02	
				01-21-92	13.59	
				02-24-92	13.79	
				04-09-92	13.72	
				05-22-92	13.84	
				08-10-92	13.29	
393541083001000	PK-47 NR CIRCLEVILLE OH	36.1	112OTSH	10-18-91	11.44	680
				11-15-91	11.78	
				01-21-92	12.36	
				02-24-92	12.57	
				04-09-92	12.5	
				05-22-92	12.61	
				06-29-92	12.55	
393541083001100	PK-48 NR CIRCLEVILLE OH	28.0	112OTSH	10-18-91	11.58	680
				11-15-91	12.24	
				12-17-91	12.53	
				01-21-92	12.79	
				02-05-92	12.89	
				02-24-92	13.01	
				03-17-92	13.06	
393541083001200	PK-53 NR CIRCLEVILLE OH	35.6	112OTSH	10-18-91	11.13	680
				11-15-91	11.54	
				01-21-92	12.12	
				02-24-92	12.42	
				04-09-92	13.37	
				05-22-92	12.42	
				08-10-92	11.80	
393542083000500	PK-52 NR CIRCLEVILLE OH	36.2	112OTSH	10-18-91	13.03	680
				11-15-91	13.36	
				01-21-92	13.89	
				02-24-92	14.07	
				04-09-92	13.99	
				05-22-92	14.11	
				08-10-92	13.59	
393542083000700	PK-51 NR CIRCLEVILLE OH	35.5	112OTSH	10-18-91	12.85	680
				11-15-91	13.22	
				01-21-92	13.84	
				02-24-92	14.04	
				04-09-92	13.94	
				05-22-92	14.04	
				08-10-92	13.47	
395854083440500	CL-132 NR SPRINGFIELD OH	27.3	112OTSH	10-17-91	11.63	1020
				01-13-92	13.49	
				02-18-92	13.48	
				04-06-92	12.51	
				05-19-92	11.06	
				06-29-92	10.65	

SITE-ID	LOCAL WELL NUMBER	DEPTH OF WELL (FEET)	AQUIFER CODE	WATER- LEVEL DATE	WATER LEVEL (FEET)	ALTITUDE OF LAND SURFACE (FEET)
395858083440100	CL-133 NR SPRINGFIELD OH	22.3	112OTSH	10-17-91 01-13-92 02-18-92 04-06-92 05-19-92 08-12-92	15.90 15.04 15.06 14.06 12.64 12.17	1025
395859083440200	CL-141 NR SPRINGFIELD OH	37.5	112OTSH	10-17-91 11-25-91 01-13-92 02-18-92 04-06-92 05-19-92 08-12-92	19.61 20.64 21.25 21.49 20.52 19.10 18.37	1030
395859083440300	CL-143 NR SPRINGFIELD OH	40.0	112OTSH	10-17-91 11-25-91 01-13-92 02-18-92 04-06-92 05-19-92	18.42 19.44 20.27 20.27 19.30 17.87	1030
395859083440400	CL-142 NR SPRINGFIELD OH	35.9	112OTSH	10-17-91 11-25-91 01-13-92 02-18-92 04-06-92 05-19-92	18.95 19.95 20.77 20.81 19.82 18.38	1030
395859083440500	CL-140 NR SPRINGFIELD OH	36.7	112OTSH	10-17-91 11-25-91 01-13-92 04-06-92 05-19-92	19.47 20.48 21.31 20.39 18.94	1030
395859083440600	CL-137 NR SPRINGFIELD OH	38.0	112OTSH	10-17-91 11-25-91 01-13-92 02-18-92 04-06-92 05-19-92 06-29-92 08-12-92	20.31 21.28 21.85 22.13 21.16 19.74 19.34 18.99	1030
395859083440700	CL-138 NR SPRINGFIELD OH	28.5	112OTSH	10-17-91 11-25-91 12-17-91 01-13-92 02-05-92 02-18-92 03-16-92 04-06-92 05-19-92 06-29-92 07-28-92	20.54 21.52 22.30 22.39 22.41 22.42 21.99 21.42 20.01 19.61 19.41	1030
395859083440800	CL-139 NR SPRINGFIELD OH	36.9	112OTSH	10-17-91 10-23-91 11-25-91 12-17-91 01-13-92 02-18-92 04-06-92 05-19-92 08-12-92	20.24 20.40 21.26 22.02 22.12 22.16 21.15 19.72 18.86	1030
395901083440600	CL-135 NR SPRINGFIELD OH	37.2	112OTSH	10-17-91 11-25-91 12-17-91 01-13-92 02-18-92 04-06-92 05-19-92 08-12-92	18.96 19.54 19.77 19.86 19.81 19.63 18.74 18.30	1030
395901083440700	CL-136 NR SPRINGFIELD OH	37.5	112OTSH	10-17-91 11-25-91 01-13-92 02-18-92 04-06-92 05-19-92 08-12-92	19.32 19.76 20.10 20.16 19.89 19.10 18.88	1030
400947083480000	CH-44 NR URBANA OH	31.0	112OTSH	10-16-91 11-26-91 02-26-92 04-07-92 05-18-92 06-30-92 08-10-92 09-23-92	10.24 10.37 10.30 10.08 9.48 8.87 9.18 10.38	1030

SITE-ID	LOCAL WELL NUMBER	DEPTH OF WELL (FEET)	AQUIFER CODE	WATER- LEVEL DATE	WATER LEVEL (FEET)	ALTITUDE OF LAND SURFACE (FEET)
400948083475800	CH-46 NR URBANA OH	34.8	112OTSH	10-16-91	9.18	1030
				11-26-91	9.26	
				01-13-92	9.30	
				02-26-92	9.19	
				04-07-92	8.94	
				05-18-92	8.42	
				06-30-92	7.84	
				08-10-92	7.67	
				09-23-92	8.72	
400948083480000	CH-45 NR URBANA OH	34.4	112OTSH	10-16-91	9.82	1030
				01-23-92	9.96	
				02-26-92	9.83	
				04-07-92	9.60	
				05-18-92	9.03	
				06-30-92	8.45	
				08-10-92	8.29	
				09-23-92	9.34	
400948083480100	CH-43 NR URBANA OH	32.2	112OTSH	10-16-91	10.09	1030
				11-26-91	10.17	
				01-13-92	10.23	
				02-26-92	10.13	
				04-07-92	9.88	
				05-18-92	9.28	
				06-30-92	8.70	
				08-10-92	8.55	
				09-23-92	9.63	
400948083480200	CH-41 NR URBANA OH	34.3	112OTSH	10-16-91	10.54	1030
				11-26-91	10.64	
				01-13-92	10.66	
				02-26-92	10.56	
				04-07-92	10.29	
				05-18-92	9.70	
				06-30-92	9.13	
				08-10-92	8.90	
				09-23-92	10.05	
400949083480100	CH-42 NR URBANA OH	28.7	112OTSH	10-16-91	10.50	1030
				10-23-91	10.52	
				11-26-91	10.58	
				02-05-92	10.54	
				02-26-92	10.53	
				04-07-92	10.24	
				04-29-92	8.84	
				05-18-92	9.65	
				06-30-92	9.08	
400950083480600	CH-38 NR URBANA OH	19.2	112OTSH	10-16-91	7.83	1025
				11-26-91	7.95	
				01-13-92	8.03	
				02-26-92	7.91	
				04-07-92	7.63	
				05-18-92	6.92	
				06-30-92	6.37	
				08-10-92	6.22	
400952083480800	CH-40 NR URBANA OH	34.7	112OTSH	10-16-91	8.59	1030
				11-26-91	8.62	
				01-13-92	8.67	
				02-26-92	8.64	
				04-07-92	8.37	
				05-18-92	7.69	
				06-30-92	7.10	
				08-10-92	6.77	
				09-23-92	8.01	
400952083480900	CH-39 NR URBANA OH	24.4	112OTSH	10-03-91	9.77	1030
403631082152100	AS-9 NR LOUDONVILLE OH	12.3	111ALVM	10-07-91	7.44	930
				11-22-91	7.10	
				01-09-92	7.02	
				02-21-92	6.46	
				03-30-92	4.33	
				05-11-92	4.92	
403631082152200	AS-6 NR LOUDONVILLE OH	19.9	111ALVM	08-06-92	4.12	930
				10-27-91	7.02	
				11-22-91	6.65	
				01-09-92	6.57	
				02-21-92	5.87	
				03-30-92	3.92	
				05-11-92	4.75	

SITE-ID	LOCAL WELL NUMBER	DEPTH OF WELL (FEET)	AQUIFER CODE	WATER- LEVEL DATE	WATER LEVEL (FEET)	ALTITUDE OF LAND SURFACE (FEET)
403633082152400	AS-10 NR LOUDONVILLE OH	12.7	111ALVM	10-07-91	7.50	930
				11-22-91	7.15	
				01-09-92	7.06	
				02-21-92	6.47	
				03-30-92	4.27	
				05-11-92	5.11	
				08-06-92	4.26	
403634082152300	AS-7 NR LOUDONVILLE OH	23.1	111ALVM	10-07-91	7.35	930
				11-22-91	7.01	
				01-09-92	6.92	
				02-21-92	6.27	
				03-30-92	4.20	
				05-11-92	5.02	
403635082152100	AS-48 NR LOUDONVILLE OH	16.0	111ALVM	10-07-91	8.24	930
				11-22-91	7.14	
				01-09-92	7.11	
				03-30-92	4.23	
403635082152200	AS-47 NR LOUDONVILLE OH	11.2	111ALVM	10-07-91	8.45	930
				11-22-91	8.05	
				01-09-92	8.01	
				03-30-92	3.97	
				05-11-92	4.92	
403635082152300	AS-45 NR LOUDONVILLE OH	15.7	111ALVM	10-07-91	7.01	930
				11-22-91	6.75	
				01-09-92	6.85	
				02-21-92	6.12	
				03-30-92	3.80	
				05-11-92	4.58	
				07-02-92	5.87	
				08-06-92	4.19	
403635082152400	AS-46 NR LOUDONVILLE OH	11.6	111ALVM	10-07-91	8.24	930
				11-22-91	8.05	
				01-09-92	7.48	
				03-30-92	3.60	
				05-11-92	4.54	
403635082152500	AS-44 NR LOUDONVILLE OH	18.0	111ALVM	10-07-91	7.09	930
				11-22-91	6.89	
				01-09-92	6.80	
				03-30-92	3.56	
				05-11-92	4.35	
				07-02-92	5.72	
403635082152600	AS-49 NR LOUDONVILLE OH	11.0	111ALVM	10-07-91	7.40	930
				11-22-91	7.18	
				01-09-92	6.90	
				02-21-92	6.33	
				03-30-92	4.05	
				05-11-92	4.98	
403635082152700	AS-43 NR LOUDONVILLE OH	16.2	111ALVM	10-07-91	6.78	935
				11-22-91	6.58	
				01-09-92	5.98	
				03-30-92	2.84	
403635082152800	AS-8 NR LOUDONVILLE OH	16.2	111ALVM	10-07-91	6.37	935
				11-22-91	6.35	
				01-09-92	5.71	
				02-21-92	4.25	
				03-30-92	2.74	
				05-11-92	3.38	
				08-06-92	3.46	
403636082152200	AS-42 NR LOUDONVILLE OH	16.5	111ALVM	10-07-91	7.37	930
				11-22-91	7.01	
				01-09-92	6.91	
				02-21-92	6.32	
				03-30-92	4.02	
				05-11-92	4.93	
403636082152300	AS-41 NR LOUDONVILLE OH	11.8	111ALVM	10-07-91	7.23	930
				11-22-91	6.87	
				01-09-92	6.68	
				02-21-92	6.16	
				03-30-92	3.90	
				05-11-92	4.79	
				08-06-92	3.95	
403636082152600	AS-5 NR LOUDONVILLE OH	12.7	111ALVM	10-07-91	5.51	930
				11-22-91	5.16	
				01-09-92	4.71	
				02-21-92	3.36	
				03-30-92	1.84	
				05-11-92	2.42	

SITE-ID	LOCAL WELL NUMBER	DEPTH OF WELL (FEET)	AQUIFER CODE	WATER- LEVEL DATE	WATER LEVEL (FEET)	ALTITUDE OF LAND SURFACE (FEET)
403922082325700	R-11 NR LEXINGTON OH	22.5	112OTSH	10-10-91	17.39	1170
				11-18-91	17.52	
				01-06-92	17.47	
				02-25-92	16.89	
				04-02-92	15.91	
				05-14-92	16.07	
				06-25-92	16.76	
				08-06-92	15.64	
				09-14-92	16.66	
403922082325900	R-19 NR LEXINGTON OH	30.0	112OTSH	10-10-91	14.13	1160
				11-18-91	14.26	
				01-06-92	14.20	
				02-25-92	13.54	
				04-02-92	12.56	
				05-14-92	12.64	
				06-25-92	13.41	
				08-06-92	12.02	
				09-14-92	13.26	
403922082330000	R-20 NR LEXINGTON OH	34.2	112OTSH	10-10-91	10.81	1155
				11-18-91	10.99	
				01-06-92	10.89	
				02-25-92	10.23	
				04-02-92	9.31	
				05-14-92	9.45	
				06-25-92	10.16	
				08-06-92	8.98	
				09-14-92	10.05	
403923082325400	R-21 NR LEXINGTON OH	25.0	112OTSH	10-10-91	20.25	1180
				11-18-91	20.25	
				02-25-92	20.86	
				04-02-92	14.98	
				05-14-92	16.10	
				06-25-92	17.18	
				08-06-92	15.54	
				09-14-92	17.56	
403923082325500	R-16 NR LEXINGTON OH	18.9	112OTSH	10-10-91	17.39	1170
				11-18-91	17.60	
				12-18-91	17.56	
				01-06-92	17.57	
				02-03-92	17.27	
				02-25-92	16.97	
				03-09-92	16.95	
				04-02-92	15.14	
				05-14-92	14.69	
				06-25-92	16.58	
				08-06-92	13.89	
				09-14-92	16.57	
403923082325700	R-18 NR LEXINGTON OH	23.0	112OTSH	10-10-91	15.91	1160
				11-18-91	16.01	
				01-06-92	15.94	
				02-25-92	15.40	
				04-02-92	14.36	
				05-14-92	14.44	
				06-25-92	15.29	
				08-06-92	13.84	
				09-14-92	15.16	
403923082325800	R-12 NR LEXINGTON OH	22.0	112OTSH	10-10-91	16.14	1170
				11-18-91	16.30	
				01-06-92	16.24	
				02-25-92	15.58	
				04-02-92	14.55	
				05-14-92	14.65	
				06-25-92	15.46	
				08-06-92	13.99	
				09-14-92	15.32	
403923082325900	R-17 NR LEXINGTON OH	23.2	112OTSH	10-10-91	15.63	1160
				11-18-91	15.97	
				04-02-92	14.06	
403923082330000	R-13	30	112OTSH	10-10-91	11.86	1160
				11-18-91	12.01	
				01-06-92	11.97	
				02-25-92	11.35	
				04-02-92	10.43	
				05-14-92	10.54	
				06-25-92	11.26	
				08-06-92	10.04	
				09-14-92	11.14	

256 EFFECTS OF HIGHWAY DEICING CHEMICALS ON SHALLOW UNCONSOLIDATED AQUIFERS IN OHIO

SITE-ID	LOCAL WELL NUMBER	DEPTH OF WELL (FEET)	AQUIFER CODE	WATER- LEVEL DATE	WATER LEVEL (FEET)	ALTITUDE OF LAND SURFACE (FEET)
403925082325600	R-14 NR LEXINGTON OH	30	112OTSH	10-10-91	27.60	1185
				11-18-91	28.18	
				01-06-92	28.43	
				02-25-92	28.01	
				04-02-92	17.79	
				05-14-92	18.91	
				06-25-92	19.97	
				08-06-92	18.37	
				09-14-92	23.44	
411135081172600	PO-113 NR RAVENNA OH	9.2	112OTSH	10-09-91	2.87	1060
				11-20-91	2.44	
				01-08-92	1.86	
				02-19-92	.45	
				04-01-92	.47	
				05-13-92	.81	
				06-22-92	1.71	
				08-05-92	.43	
				09-16-92	.56	
411136081172500	PO-119 NR RAVENNA OH	11.0	112OTSH	10-09-91	7.07	1065
				11-20-91	6.82	
				01-08-92	6.61	
				02-19-92	3.99	
				04-01-92	2.71	
				05-13-92	3.66	
				08-05-92	2.48	
				09-16-92	3.08	
411136081172600	PO-120 NR RAVENNA OH	10.4	112OTSH	10-09-91	5.62	1065
				11-20-91	5.32	
				01-08-92	4.72	
				02-19-92	2.92	
				04-01-92	2.01	
				05-13-92	3.02	
				08-05-92	2.22	
				09-16-92	2.33	
411137081172100	PO-114 NR RAVENNA OH	12.3	112OTSH	10-09-91	5.97	1065
				11-20-91	6.15	
				01-08-92	5.70	
				04-01-92	1.08	
				08-05-92	1.25	
				09-16-92	1.67	
411137081172300	PO-118 NR RAVENNA OH	19.0	112OTSH	10-09-91	8.24	1065
				11-20-91	8.06	
				01-08-92	7.51	
				02-19-92	6.08	
				04-01-92	4.92	
				05-13-92	5.78	
				08-05-92	4.66	
				09-16-92	5.28	
411137081172400	PO-117 NR RAVENNA OH	18.5	112OTSH	10-09-91	8.02	1065
				11-20-91	7.81	
				01-08-92	7.19	
				02-19-92	5.76	
				04-01-92	4.63	
				08-05-92	4.39	
				09-16-92	5.00	
411137081172500	PO-112 NR RAVENNA OH	8.5	112OTSH	10-09-91	5.64	1065
				11-20-91	5.44	
				01-08-92	4.86	
				02-19-92	3.28	
				04-01-92	2.30	
				05-13-92	3.11	
				06-22-92	4.17	
				08-05-92	2.12	
				09-16-92	2.65	
411138081172100	PO-111 NR RAVENNA OH	10.0	112OTSH	10-09-91	4.95	1065
				11-20-91	4.84	
				01-08-92	4.26	
				02-19-92	2.66	
				04-01-92	.77	
				05-13-92	1.42	
				06-22-92	2.81	
				08-05-92	.77	
				09-16-92	1.14	
411138081172400	PO-115 NR RAVENNA OH	17.5	112OTSH	10-09-91	9.70	1070
				11-20-91	9.51	
				01-08-92	8.95	
				02-19-92	7.52	
				04-01-92	6.31	
				08-05-92	6.07	
				09-16-92	6.67	

EFFECTS OF HIGHWAY DEICING CHEMICALS ON SHALLOW UNCONSOLIDATED AQUIFERS IN OHIO 257

SITE-ID	LOCAL WELL NUMBER	DEPTH OF WELL (FEET)	AQUIFER CODE	WATER- LEVEL DATE	WATER LEVEL (FEET)	ALTITUDE OF LAND SURFACE (FEET)
411138081172500	PO-116 NR RAVENNA OH	17.5	112OTSH	10-09-91	9.50	1070
				11-20-91	9.29	
				12-19-91	8.91	
				01-08-92	8.70	
				02-04-92	7.80	
				02-19-92	7.32	
				03-09-92	6.65	
				04-01-92	6.09	
				05-13-92	7.00	
				06-22-92	8.11	
				08-05-92	5.83	
				09-16-92	6.47	
413546083480900	LU-28 NR HOLLAND OH	28.2	112LAKE	10-15-91	8.10	675
				11-27-91	6.86	
				01-22-92	6.80	
				02-27-92	6.03	
				04-08-92	5.65	
				05-20-92	5.70	
				07-01-92	6.25	
				08-13-92	5.88	
				09-24-92	5.84	
413547083481000	LU-26 NR HOLLAND OH	29.6	112LAKE	10-15-91	7.61	675
				01-22-92	6.29	
				02-27-92	5.56	
				04-08-92	5.17	
				05-20-92	5.19	
				07-01-92	5.74	
				08-13-92	5.32	
				09-24-92	5.35	
413547083481100	LU-27 NR HOLLAND OH	28.4	112LAKE	10-15-91	7.32	675
				11-27-91	6.15	
				01-22-92	6.08	
				02-27-92	5.32	
				04-08-92	4.93	
				05-20-92	4.97	
				07-01-92	5.50	
				08-13-92	5.12	
				09-24-92	5.12	
413547083481200	LU-25 NR HOLLAND OH	29.4	112LAKE	10-15-91	7.53	675
				11-27-91	6.30	
				01-22-92	6.22	
				02-27-92	5.49	
				04-08-92	5.09	
				05-20-92	5.12	
				07-01-92	5.69	
				08-13-92	5.27	
				09-24-92	5.28	
413547083481300	LU-22 NR HOLLAND OH	28.3	112LAKE	10-15-91	7.87	675
				11-27-91	6.65	
				01-22-92	6.57	
				02-27-92	5.83	
				04-08-92	5.44	
				05-20-92	5.46	
				07-01-92	6.02	
				08-13-92	5.49	
				09-24-92	5.62	
413547083481400	LU-23 NR HOLLAND OH	29.4	112LAKE	10-15-91	7.76	675
				11-27-91	6.55	
				01-22-92	6.47	
				02-27-92	5.74	
				04-08-92	5.34	
				05-20-92	5.35	
				07-01-92	5.92	
				08-13-92	5.51	
				09-24-92	5.52	
413547083481500	LU-24 NR HOLLAND OH	18.7	112LAKE	10-15-91	8.02	675
				11-27-91	6.78	
				01-22-92	6.72	
				02-04-92	6.48	
				02-27-92	5.98	
				03-16-92	5.94	
				04-08-92	5.58	
				05-20-92	5.60	
				07-01-92	6.16	
				08-13-92	5.76	
				09-24-92	5.78	

258 EFFECTS OF HIGHWAY DEICING CHEMICALS ON SHALLOW UNCONSOLIDATED AQUIFERS IN OHIO

SITE-ID	LOCAL WELL NUMBER	DEPTH OF WELL (FEET)	AQUIFER CODE	WATER- LEVEL DATE	WATER LEVEL (FEET)	ALTITUDE OF LAND SURFACE (FEET)
413548083480400	LU-17 NR HOLLAND OH	29.2	112LAKE	10-15-91	8.04	675
				11-27-91	6.65	
				01-22-92	6.64	
				02-27-92	5.91	
				04-08-92	5.59	
				05-20-92	5.62	
				07-01-92	6.17	
				08-13-92	5.80	
				09-24-92	5.72	
413549083481500	LU-21 NR HOLLAND OH	29.1	112LAKE	10-15-91	7.36	675
				11-27-91	6.22	
				01-22-92	6.15	
				02-27-92	5.43	
				04-08-92	5.02	
				05-20-92	5.06	
				07-01-92	5.63	
				08-13-92	8.13	
				09-24-92	5.08	
413551083481200	LU-20 NR HOLLAND OH	31.0	112LAKE	10-15-91	6.59	675
				11-27-91	5.23	
				01-22-92	5.24	
				02-27-92	4.51	
				04-08-92	4.17	
				05-20-92	4.28	
				07-01-92	4.86	
				08-13-92	4.40	
				09-24-92	4.21	
413553083480600	LU-18 NR HOLLAND OH	29.0	112LAKE	10-15-91	6.70	675
				11-27-91	5.12	
				01-22-92	5.19	
				02-27-92	4.52	
				04-08-92	4.26	
				05-20-92	4.45	
				07-01-92	5.02	
				08-13-92	4.60	
				09-24-92	4.29	
413553083480900	LU-19 NR HOLLAND OH	31.3	112LAKE	10-15-91	6.14	675
				11-26-91	4.65	
				01-22-92	4.72	
				02-27-92	4.03	
				04-08-92	3.73	
				05-20-92	3.92	
				07-01-92	4.50	
				08-13-92	4.09	
				09-24-92	3.77	
415305080414200	AB-139 NR KINGSVILLE OH	20.2	111TRRC	10-08-91	12.12	775
				11-19-91	12.04	
				01-07-92	11.10	
				02-20-92	8.52	
				03-31-92	7.48	
				05-12-92	10.34	
				06-23-92	11.53	
				08-04-92	11.24	
				09-15-92	7.61	
415305080414300	AB-132 NR KINGSVILLE OH	14.5	111TRRC	10-08-91	13.15	775
				11-19-91	12.98	
				01-07-92	12.02	
				02-20-92	9.27	
				03-31-92	7.95	
				05-12-92	11.21	
				06-23-92	12.43	
				08-04-92	12.29	
				09-15-92	8.35	
415307080414200	AB-133 NR KINGSVILLE OH	20.0	111TRRC	10-08-91	9.57	770
				11-19-91	9.70	
				01-07-92	7.40	
				02-20-92	4.94	
				03-31-92	4.81	
				05-12-92	7.00	
				06-23-92	8.48	
				08-04-92	8.42	
				09-15-92	5.90	
415307080414300	AB-129	18.0	111TRRC	10-08-91	10.13	770
				11-19-91	9.95	
				01-07-92	7.84	
				02-20-92	5.50	
				03-31-92	5.29	
				05-12-92	5.48	
				06-23-92	8.83	
				08-04-92	8.73	
				09-15-92	5.89	

SITE-ID	LOCAL WELL NUMBER	DEPTH OF WELL (FEET)	AQUIFER CODE	WATER- LEVEL DATE	WATER LEVEL (FEET)	ALTITUDE OF LAND SURFACE (FEET)
415307080414400	AB-130	10.0	111TRRC	10-08-91	9.74	765
				01-07-92	6.72	
				02-20-92	5.44	
				03-31-92	4.85	
				05-12-92	6.36	
				06-23-92	7.80	
				08-04-92	7.99	
				09-15-92	5.25	
415307080414500	AB-134 NR KINGSVILLE OH	17.4	111TRRC	11-19-91	9.72	770
				01-07-92	7.39	
				02-04-92	6.04	
				02-20-92	4.94	
				03-31-92	4.79	
				05-12-92	6.92	
				06-23-92	8.49	
				08-04-92	8.49	
				09-15-92	5.49	
415307080414600	AB-140 NR KINGSVILLE OH	20.8	111TRRC	07-08-92	10.10	772.2
				08-04-92	8.55	
				09-15-92	5.63	
415308080414300	AB-135 NR KINGSVILLE OH	19.5	111TRRC	10-08-91	10.00	765
				11-19-91	10.01	
				01-07-92	7.55	
				02-20-92	5.79	
				03-31-92	5.30	
				05-12-92	6.97	
				06-23-92	8.60	
				08-04-92	8.54	
				09-15-92	5.72	
415308080414400	AB-131	21	111TRRC	10-08-91	7.55	760
				11-19-91	7.48	
				01-07-92	6.08	
				02-20-92	4.81	
				03-31-92	4.46	
				05-12-92	5.63	
				06-23-92	6.77	
				08-04-92	6.43	
				09-15-92	4.61	
415309080414300	AB-136 NR KINGSVILLE OH	20.1	111TRRC	10-08-91	8.33	760
				11-19-91	8.32	
				01-07-92	6.62	
				02-20-92	5.44	
				03-31-92	4.90	
				05-12-92	5.99	
				06-23-92	7.17	
				08-04-92	7.04	
				09-15-92	4.91	
415309080414400	AB-138 NR KINGSVILLE OH	19.5	111TRRC	10-08-91	8.59	760
				11-19-91	8.56	
				01-07-92	6.87	
				02-20-92	5.69	
				03-31-92	5.15	
				05-12-92	6.25	
				06-23-92	7.41	
				08-04-92	7.26	
				09-15-92	5.15	
415310080414400	AB-137 NR KINGSVILLE OH	19.5	111TRRC	10-08-91	6.34	755
				11-19-91	6.29	
				01-07-92	4.80	
				02-20-92	3.54	
				03-31-92	3.16	
				05-12-92	4.38	
				06-23-92	5.54	
				08-04-92	5.19	
				09-15-92	3.31	

AQUIFER CODE (Geologic Unit)

112OTSH - Outwash, Pleistocene Epoch
 111TRCC - Terrace Deposits, Holocene Epoch
 112LAKE - Lake Deposits, Pleistocene Epoch
 111ALVM - Alluvium, Holocene Epoch

GROUND-WATER RECORDS

393541083001100. Local number, PK-48.

LOCATION.--Lat 39°35'41" Long 83°00'11", Hydrologic Unit 05060002, along State Route 104 near Circleville, OH.
Owner.--USGS-Stacy Thomas.

AQUIFER.--Sand and Gravel of Pleistocene age.

WELL CHARACTERISTICS.--Observation well drilled by hollow stem auger, diameter 4.0 in., depth 28 ft. Cased with Sch 40 PVC to 8 ft; .010 in. screen from 8 to 28 ft.

INSTRUMENTATION - Data logger--60 minute record. Precipitation data collected with a propane-heated, tipping-bucket rain gauge. Also collected: water level, air temperature, soil temperature, water temperature, and specific conductance. Conductivity/water temperature probe set at 16.0 feet below land surface.

DATUM.--Elevation of land-surface datum is 678.50 feet above National Geodetic Vertical Datum of 1929.
Measuring point: shelter floor 3.36 ft above land-surface datum.

REMARKS.--

PERIOD OF RECORD.--February 1991 to current year.

PERIOD OF DAILY RECORD.--

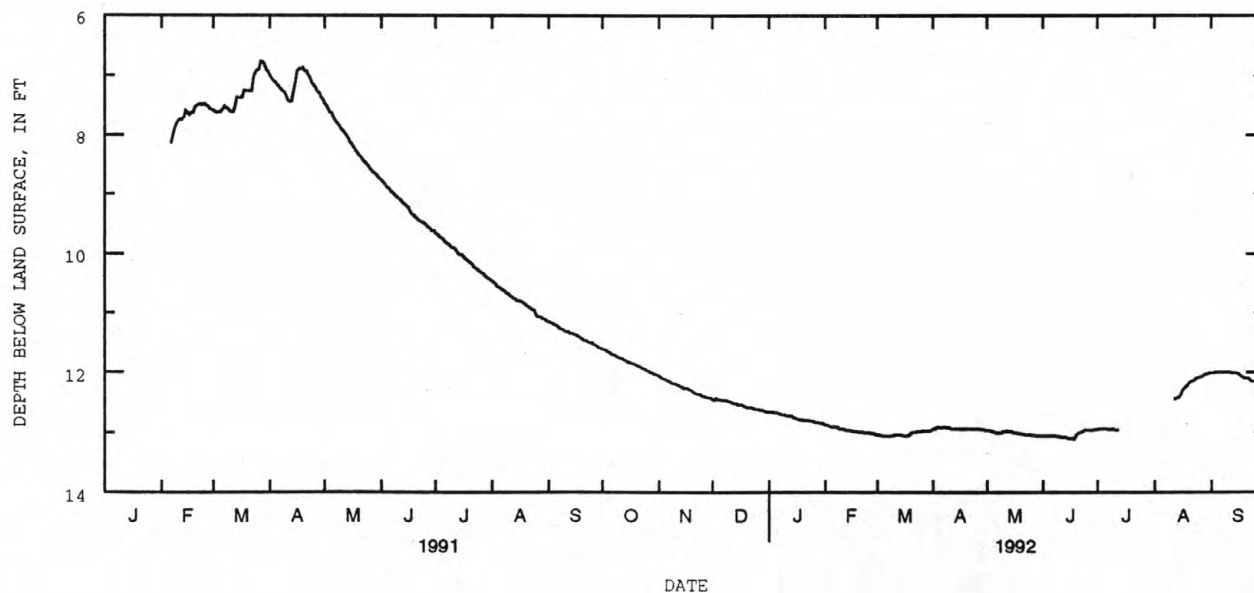
WATER LEVEL: February 1991 to current year.
SPECIFIC CONDUCTANCE: February 1991 to current year.
AIR TEMPERATURE: February 1991 to current year.
WATER TEMPERATURE: February 1991 to current year.
SOIL TEMPERATURE: February 1991 to current year.
PRECIPITATION: February 1991 to current year.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER LEVEL: Maximum daily low, 13.11 ft. below land-surface datum, June 18, 1992; minimum daily low, 6.68 ft. below land-surface datum, March 27, 1991.
SPECIFIC CONDUCTANCE: Maximum, 717 microsiemens March 31, 1991; minimum, 585 microsiemens October 23, 1992.
AIR TEMPERATURE: Maximum, 37.0°C June 29 and August 1, 1991; minimum, -19.8°C January 19, 1992.
WATER TEMPERATURE: Maximum, 15.0°C October 20-21 1991; minimum, 11.5°C many days in 1991.
SOIL TEMPERATURE: Maximum, 32.5°C September 16, 1991; minimum, 1.0°C February 16-19, 1991.

EXTREMES FOR CURRENT YEAR.--

WATER LEVEL: Maximum daily low, 13.11 ft. below land-surface datum, June 18, 1992; minimum daily low, 11.59 ft. below land-surface datum, October 1, 1992.
SPECIFIC CONDUCTANCE: Maximum, 699 microsiemens September 12-14, 1992; minimum, 585 microsiemens October 23, 1992.
AIR TEMPERATURE: Maximum, 33.0°C July 9, 1992; minimum, -19.8°C January 19, 1992.
WATER TEMPERATURE: Maximum, 15.0°C October 20-21, 1991; minimum, 11.7°C April 17-June 8, 1992.
SOIL TEMPERATURE: Maximum, 27.0°C October 4, 1991; minimum, 8.9°C December 21-22, 28, 1991.



393541083001100 PK-48 NR CIRCLEVILLE OH

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11.60	12.05	12.45	12.65	12.87	13.03	12.93	12.96	13.05	12.95	---	12.01
2	11.62	12.07	12.46	12.65	12.87	13.03	12.93	12.96	13.05	12.94	---	12.01
3	11.63	12.09	12.43	12.65	12.88	13.04	12.92	12.97	13.05	12.94	---	12.00
4	11.65	12.10	12.45	12.67	12.89	13.05	12.91	12.98	13.05	12.94	---	12.00
5	11.67	12.11	12.45	12.67	12.90	13.06	12.92	12.99	13.06	12.94	---	12.00
6	11.69	12.13	12.46	12.68	12.89	13.06	12.92	13.00	13.06	12.94	---	12.00
7	11.70	12.14	12.46	12.69	12.90	13.06	12.91	13.00	13.06	12.95	---	12.00
8	11.72	12.17	12.46	12.70	12.91	13.05	12.92	13.00	13.06	12.95	---	11.99
9	11.73	12.18	12.47	12.70	12.93	13.05	12.92	13.00	13.07	12.94	---	11.99
10	11.74	12.18	12.48	12.71	12.93	13.04	12.92	12.98	13.07	12.95	---	12.00
11	11.76	12.20	12.49	12.72	12.94	13.03	12.93	12.98	13.08	12.96	---	12.00
12	11.77	12.21	12.50	12.72	12.95	13.03	12.94	12.97	13.08	12.96	12.44	12.01
13	11.79	12.23	12.51	12.72	12.96	13.03	12.94	12.98	13.08	---	12.43	12.01
14	11.80	12.23	12.52	12.74	12.96	13.03	12.94	12.98	13.09	---	12.42	12.01
15	11.82	12.27	12.53	12.75	12.96	13.04	12.94	12.99	13.10	---	12.40	12.02
16	11.83	12.26	12.53	12.76	12.97	13.05	12.94	13.00	13.10	---	12.31	12.02
17	11.84	12.27	12.54	12.77	12.98	13.05	12.94	13.00	13.10	---	12.27	12.06
18	11.85	12.29	12.56	12.78	12.98	13.05	12.94	13.01	13.11	---	12.24	12.07
19	11.87	12.30	12.57	12.78	12.98	13.03	12.94	13.01	13.06	---	12.20	12.09
20	11.89	12.32	12.58	12.79	12.99	13.00	12.93	13.02	13.01	---	12.17	12.09
21	11.90	12.34	12.58	12.80	12.99	12.99	12.93	13.02	13.00	---	12.14	12.09
22	11.91	12.35	12.58	12.80	12.99	12.99	12.93	13.03	12.99	---	12.13	12.12
23	11.93	12.36	12.59	12.80	13.00	12.98	12.93	13.03	12.98	---	12.11	12.14
24	11.94	12.36	12.60	12.81	13.00	12.98	12.93	13.03	12.96	---	12.09	12.14
25	11.96	12.38	12.61	12.81	13.00	12.98	12.93	13.03	12.96	---	12.08	12.15
26	11.97	12.39	12.61	12.82	13.00	12.97	12.94	13.04	12.96	---	12.07	12.15
27	11.99	12.41	12.62	12.83	13.01	12.97	12.94	13.04	12.96	---	12.06	12.17
28	12.00	12.42	12.62	12.83	13.01	12.97	12.95	13.05	12.96	---	12.04	12.18
29	12.02	12.42	12.63	12.84	13.02	12.97	12.95	13.05	12.95	---	12.03	12.19
30	12.03	12.43	12.64	12.84	---	12.97	12.96	13.05	12.95	---	12.02	12.20
31	12.04	---	12.65	12.85	---	12.96	---	13.05	---	---	12.01	---
MAX	12.04	12.43	12.65	12.85	13.02	13.06	12.96	13.05	13.11	12.96	12.44	12.20

WTR YR 1992 LOW 13.11

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	594	592	593	593	592	592	593	589	592	600	598	599
2	594	593	593	596	593	593	593	589	592	600	597	599
3	594	593	593	597	592	595	593	589	592	599	598	599
4	594	593	593	598	593	595	595	588	593	599	598	599
5	595	593	593	599	593	596	596	590	593	603	596	599
6	595	593	594	596	593	595	593	589	592	603	599	599
7	596	593	595	597	596	596	593	591	592	602	599	600
8	597	592	595	598	594	596	591	590	591	602	596	600
9	595	592	594	599	594	595	593	591	591	601	598	601
10	594	593	593	599	593	595	594	591	593	602	598	601
11	594	593	593	596	593	595	594	591	592	602	599	601
12	594	592	593	597	593	595	593	591	592	601	598	600
13	595	592	593	597	595	596	593	592	592	600	599	599
14	595	589	593	598	595	596	594	592	593	601	597	599
15	593	589	592	597	592	594	598	591	594	601	596	599
16	594	589	593	595	593	594	599	591	596	601	598	599
17	595	591	593	596	592	594	598	593	597	601	596	599
18	593	590	591	594	592	593	598	594	597	601	597	600
19	592	587	591	593	592	593	599	594	596	600	596	598
20	594	586	591	593	593	593	598	594	596	599	595	598
21	594	586	590	593	593	593	597	595	596	599	595	597
22	592	586	590	593	593	593	597	593	596	599	595	597
23	590	585	589	593	592	593	599	595	596	601	596	597
24	590	586	589	594	593	594	600	595	598	601	594	599
25	590	589	590	595	591	593	600	593	597	602	595	599
26	591	586	590	595	589	592	601	596	599	601	597	599
27	591	590	591	593	587	591	601	597	599	601	597	599
28	591	591	591	591	590	590	600	599	599	600	597	598
29	592	591	591	590	589	589	600	595	599	599	595	598
30	592	591	592	593	589	590	600	599	600	599	594	597
31	592	591	592	---	---	---	600	599	600	600	597	597
MONTH	597	585	592	599	587	594	601	588	595	603	594	599

393541083001100 PK-48 NR CIRCLEVILLE OH

TEMPERATURE, AIR, DEGREES CENTIGRADE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	27.5	9.8	18.3	17.1	4.3	10.3	3.8	2.4	3.4	4.9	-3.1	1.1
2	25.6	11.2	17.6	5.8	-3.5	2.2	5.1	1.5	2.5	7.2	-3.7	1.9
3	23.4	11.6	16.7	2.0	-7.8	-2.7	11.7	-1.7	3.0	11.2	4.0	6.7
4	27.9	13.5	19.7	-7	-11.5	-6.2	-6.3	-10.3	-8.6	6.6	2.3	5.1
5	18.2	4.9	13.6	3.0	-12.9	-4.4	2.7	-11.1	-4.8	3.2	1.3	2.1
6	11.5	1.4	6.1	9.7	-2.6	3.1	5.3	-1.7	1.1	1.4	.5	1.0
7	14.2	-1.4	5.2	.7	-4.7	-1.7	13.8	1.0	7.7	1.9	.0	.7
8	18.8	-2.7	7.6	1.8	-8.1	-3.5	16.5	9.9	13.6	4.6	-5.3	.8
9	22.8	4.1	13.2	4.9	-10.3	-4.1	15.1	.5	8.4	9.3	2.3	5.8
10	18.1	6.5	12.1	9.3	-9.5	.4	5.3	-3.5	.0	2.3	-2.0	.8
11	10.6	3.2	7.9	9.8	-5.0	2.5	10.7	-1.8	3.8	6.2	-4.5	.1
12	13.3	1.3	7.7	2.0	-6.2	-8	15.8	1.3	8.8	4.8	-3.4	.9
13	14.1	-1.8	5.3	9.3	.1	3.4	15.3	8.5	11.1	8.4	2.7	5.9
14	19.4	-5	9.2	16.2	-7	7.6	8.9	-2.5	3.7	11.3	-10.1	-1.9
15	15.1	1.5	7.9	19.1	7.0	11.6	1.0	-6.8	-2.9	-2.6	-12.5	-6.4
16	11.8	-1.9	4.3	11.4	-2.5	7.4	.8	-10.0	-5.6	-6.6	-19.5	-13.8
17	17.5	-3.3	6.6	12.6	-6.4	2.2	8.6	-1.8	2.6	.9	-9.4	-4.4
18	23.5	2.3	12.8	21.3	4.5	13.0	-7	-9.9	-4.7	-7.3	-15.9	-10.1
19	15.2	-3.1	7.0	20.0	13.0	15.9	.1	-13.0	-7.2	-4.0	-19.8	-11.8
20	12.0	-6.5	1.8	19.1	14.2	16.6	3.3	-9.4	-1.8	-.4	-6.7	-2.9
21	19.1	-4.8	6.2	12.2	8.3	10.2	4.5	-5.4	.6	10.3	-7.3	-.1
22	24.6	2.2	12.1	10.7	6.9	8.4	4.4	-4.3	.6	8.2	-4.5	1.8
23	22.7	7.6	14.7	15.4	.8	8.7	7.2	1.2	4.6	6.4	-.9	3.7
24	25.5	13.8	17.7	.8	-4.2	-1.1	3.6	-2.3	.0	-1.0	-10.1	-5.7
25	25.9	13.9	19.0	-2.4	-8.4	-5.3	-.3	-6.9	-3.4	-2.8	-9.1	-5.6
26	25.6	11.1	17.0	2.4	-12.1	-5.4	5.6	-7.8	-3.0	-.3	-15.8	-6.9
27	17.7	12.2	15.6	6.6	-5.5	.5	8.1	-7.3	-1.0	4.9	-12.0	-3.9
28	16.9	12.2	14.1	9.8	3.5	5.9	3.4	-2.0	1.1	1.7	-5.0	-.9
29	23.1	10.3	15.4	19.5	11.2	14.0	2.9	.3	1.9	.1	-5.2	-1.2
30	18.6	10.5	13.9	18.3	4.1	12.9	1.8	.3	1.0	7.1	-5.5	.2
31	18.5	6.0	12.9	---	---	---	2.4	-.1	.8	1.0	-.7	.4
MONTH	27.9	-6.5	11.6	21.3	-12.9	4.1	16.5	-13.0	1.2	11.3	-19.8	-1.2

TEMPERATURE, AIR, DEGREES CENTIGRADE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	- .7	-8.9	-3.4	15.2	-4.2	5.6	6.2	-2.3	2.0	26.1	1.8	14.4
2	5.6	-9.4	-3.3	21.8	4.9	12.9	1.2	-3.8	-1.6	26.4	15.0	20.3
3	11.8	-5.8	1.3	20.7	2.2	10.5	5.8	-6.1	.8	21.3	4.9	12.9
4	6.2	-.5	2.2	24.8	1.9	11.9	5.2	-.6	1.9	12.8	2.0	7.6
5	2.5	-4.8	-1.7	23.2	5.7	13.1	10.9	-2.8	3.6	12.3	1.2	7.2
6	8.8	-7.1	-.7	17.8	11.5	13.6	13.8	-4.0	5.6	15.9	2.5	8.7
7	1.9	-2.7	-.9	16.4	10.1	12.4	19.8	5.7	12.5	18.1	.7	10.2
8	-1.6	-5.8	-3.3	12.6	6.6	10.6	18.5	3.7	11.2	17.3	6.7	10.9
9	-2.4	-11.3	-6.9	19.1	3.9	12.2	21.7	4.6	12.8	14.0	8.6	10.6
10	7.4	-10.3	-1.8	16.3	-4.5	6.5	20.9	7.8	13.2	21.5	3.9	13.4
11	4.4	-4.1	1.7	-2.9	-7.7	-5.3	24.4	12.2	17.9	25.4	7.4	16.9
12	-.8	-9.4	-4.6	-.6	-5.9	-4.0	15.2	2.7	8.4	27.7	9.5	18.4
13	4.4	-3.2	.9	-1.0	-7.7	-4.3	12.0	.1	5.4	22.4	12.5	16.4
14	3.3	.0	1.6	-.2	-8.4	-2.8	8.3	4.1	6.5	21.5	8.9	14.2
15	16.0	3.3	8.9	.3	-9.0	-3.6	19.1	4.3	11.5	21.5	10.2	14.8
16	4.1	1.5	2.7	6.2	-9.8	-.9	25.6	8.4	16.7	27.6	8.1	18.4
17	8.0	-1.1	3.7	12.3	1.3	6.8	18.5	11.1	15.4	27.7	12.7	20.3
18	16.7	5.2	9.4	5.4	.9	2.1	19.1	11.5	14.4	20.4	12.5	16.7
19	6.3	1.8	4.8	4.5	-3.9	.5	25.9	11.2	18.5	23.1	11.1	16.8
20	3.9	-.2	2.0	6.9	-5.0	.6	27.6	15.2	20.8	24.9	14.4	19.4
21	9.5	.2	4.1	5.2	-3.2	1.3	20.4	12.4	17.3	28.4	12.8	19.5
22	18.3	1.5	8.9	7.4	-2.1	2.0	15.7	4.7	11.0	31.5	9.7	20.1
23	14.0	-.7	6.7	4.6	-5.3	.1	25.5	2.4	14.9	28.1	12.0	20.3
24	7.5	2.4	4.9	12.3	-4.8	3.0	21.5	9.1	16.4	17.0	6.5	10.5
25	6.9	1.8	4.5	8.8	-2.0	3.9	9.0	4.5	6.8	14.9	4.9	9.0
26	1.7	-.8	.5	11.7	3.3	7.6	9.0	3.7	6.2	14.6	7.2	10.9
27	10.9	.2	4.9	4.9	-.9	2.1	9.9	3.8	6.8	16.6	4.5	10.9
28	14.5	.0	6.5	8.6	-1.1	2.7	13.4	1.3	7.2	19.2	2.4	11.6
29	1.3	-4.8	-2.3	4.8	-1.2	2.2	15.6	-.7	8.6	13.6	5.3	10.2
30	---	---	---	5.3	2.3	3.5	16.4	4.9	11.0	17.0	10.1	13.3
31	---	---	---	11.9	-2.1	5.3	---	---	---	14.9	9.4	13.0
MONTH	18.3	-11.3	1.8	24.8	-9.8	4.3	27.6	-6.1	10.1	31.5	.7	14.1

393541083001100 PK-48 NR CIRCLEVILLE OH

TEMPERATURE, AIR, DEGREES CENTIGRADE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	21.2	4.6	13.5	29.4	18.6	22.7	---	---	---	25.2	7.8	15.6
2	23.9	6.6	15.6	31.7	15.9	24.1	---	---	---	24.7	9.7	17.6
3	27.5	7.6	18.1	29.0	16.6	22.0	---	---	---	23.0	16.2	19.9
4	18.8	15.7	17.0	27.0	11.8	19.8	---	---	---	24.4	14.0	18.7
5	23.8	13.9	17.6	27.6	14.6	20.2	---	---	---	27.0	15.9	20.6
6	26.8	14.8	20.0	23.4	12.3	18.3	---	---	---	28.4	16.3	21.8
7	24.5	16.4	19.8	24.9	8.4	17.5	---	---	---	29.5	15.5	21.0
8	26.3	16.2	19.9	28.4	17.0	23.3	---	---	---	27.0	16.2	21.1
9	23.3	12.5	18.7	33.0	19.8	26.1	---	---	---	27.9	15.4	21.4
10	23.0	8.2	16.4	32.2	18.8	24.6	---	---	---	23.5	9.8	18.1
11	25.4	8.7	18.1	30.1	19.3	23.9	---	---	---	19.9	5.6	12.4
12	27.6	10.2	19.2	29.6	18.7	23.8	25.0	11.3	17.9	20.1	4.0	11.9
13	29.2	12.6	20.9	---	---	---	23.9	12.9	18.2	24.8	5.3	14.2
14	25.5	12.9	19.4	---	---	---	23.1	12.4	16.9	28.9	9.7	18.2
15	26.0	14.3	20.5	---	---	---	20.1	13.7	16.1	29.1	10.5	18.9
16	29.6	11.3	21.2	---	---	---	21.7	12.8	16.9	29.0	11.9	19.5
17	30.0	17.4	24.0	---	---	---	23.6	10.6	16.6	27.9	13.6	20.0
18	26.9	16.5	21.1	---	---	---	26.7	9.8	17.6	21.5	16.3	19.5
19	24.5	12.1	19.1	---	---	---	23.1	11.9	17.4	19.2	6.4	13.0
20	15.1	10.6	12.7	---	---	---	22.1	8.1	15.2	23.2	3.8	13.5
21	15.0	7.4	11.5	---	---	---	24.4	8.5	16.4	26.5	15.8	21.0
22	19.6	2.9	12.2	---	---	---	25.1	13.3	18.5	20.2	8.9	17.7
23	21.2	9.7	16.4	---	---	---	26.7	14.6	20.2	15.5	4.4	9.5
24	25.9	14.7	19.3	---	---	---	28.2	16.3	21.7	18.9	1.7	9.3
25	28.0	11.2	19.7	---	---	---	30.5	15.3	22.6	20.6	.9	10.5
26	28.7	12.2	20.0	---	---	---	30.7	16.8	22.4	24.4	6.4	15.3
27	23.4	8.7	16.4	---	---	---	29.7	18.4	22.7	23.2	6.1	16.8
28	26.1	7.6	17.4	---	---	---	18.4	12.8	16.5	25.3	3.0	13.0
29	28.8	10.0	19.8	---	---	---	22.8	7.8	15.3	13.7	.4	6.8
30	31.3	14.9	22.3	---	---	---	26.2	11.1	18.2	15.8	-2.2	6.0
31	---	---	---	---	---	---	24.6	10.7	17.1	---	---	---
MONTH	31.3	2.9	18.3	33.0	8.4	22.2	30.7	7.8	18.2	29.5	-2.2	16.1
YEAR	33.0	-19.8	9.1									

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	14.6	14.6	14.6	14.6	14.5	14.6	14.5	14.3	14.4	13.8	13.8	13.8
2	14.6	14.6	14.6	14.6	14.5	14.5	14.5	14.3	14.3	14.0	13.8	13.8
3	14.6	14.6	14.6	14.8	14.5	14.6	14.5	14.3	14.3	13.8	13.8	13.8
4	14.6	14.6	14.6	14.8	14.5	14.6	14.8	14.2	14.4	13.8	13.8	13.8
5	14.6	14.5	14.6	14.8	14.5	14.6	14.5	14.2	14.4	14.0	13.5	13.8
6	14.6	14.5	14.6	14.6	14.5	14.5	14.5	14.3	14.3	13.8	13.5	13.8
7	14.6	14.5	14.6	14.5	14.5	14.5	14.3	14.3	14.3	13.8	13.5	13.7
8	14.6	14.5	14.6	14.8	14.5	14.6	14.3	14.3	14.3	14.0	13.5	13.6
9	14.6	14.5	14.6	14.8	14.5	14.6	14.3	14.3	14.3	13.8	13.5	13.6
10	14.6	14.6	14.6	14.8	14.5	14.6	14.3	14.3	14.3	13.8	13.5	13.6
11	14.6	14.5	14.6	14.6	14.5	14.5	14.3	14.3	14.3	13.6	13.5	13.5
12	14.6	14.5	14.6	14.8	14.5	14.6	14.3	14.3	14.3	13.8	13.5	13.6
13	14.6	14.5	14.6	14.6	14.5	14.5	14.3	14.3	14.3	13.6	13.5	13.6
14	14.8	14.5	14.6	14.6	14.5	14.6	14.3	14.3	14.3	13.8	13.5	13.6
15	14.8	14.5	14.6	14.6	14.5	14.6	14.5	14.0	14.3	13.8	13.5	13.7
16	14.8	14.5	14.6	14.6	14.5	14.6	14.5	14.0	14.2	13.8	13.5	13.7
17	14.8	14.5	14.6	14.8	14.5	14.6	14.3	14.0	14.0	13.8	13.5	13.6
18	14.8	14.5	14.6	14.6	14.5	14.6	14.3	14.0	14.1	13.7	13.5	13.6
19	14.8	14.5	14.6	14.6	14.6	14.6	14.3	14.0	14.1	13.8	13.5	13.6
20	15.0	14.5	14.6	14.6	14.6	14.6	14.3	14.0	14.1	13.8	13.5	13.6
21	15.0	14.5	14.6	14.6	14.6	14.6	14.0	14.0	14.0	13.8	13.5	13.6
22	14.9	14.5	14.6	14.6	14.5	14.6	14.3	14.0	14.0	13.8	13.5	13.6
23	14.9	14.5	14.6	14.6	14.5	14.6	14.0	13.8	14.0	13.6	13.3	13.5
24	14.9	14.6	14.6	14.5	14.5	14.5	14.0	13.8	13.9	13.8	13.3	13.5
25	14.6	14.6	14.6	14.8	14.5	14.6	14.3	13.8	14.0	13.8	13.3	13.4
26	14.8	14.6	14.6	14.8	14.5	14.6	14.0	13.8	13.8	13.5	13.3	13.4
27	14.6	14.6	14.6	14.8	14.5	14.6	14.0	13.8	13.8	13.5	13.3	13.3
28	14.6	14.6	14.6	14.5	14.5	14.5	13.8	13.8	13.8	13.3	13.3	13.3
29	14.6	14.6	14.6	14.6	14.6	14.6	14.0	13.8	13.8	13.5	13.3	13.3
30	14.6	14.6	14.6	14.6	14.3	14.5	13.8	13.8	13.8	13.5	13.3	13.4
31	14.6	14.5	14.6	---	---	---	13.8	13.8	13.8	13.3	13.1	13.3
MONTH	15.0	14.5	14.6	14.8	14.3	14.6	14.8	13.8	14.1	14.0	13.1	13.6

393541083001100 PK-48 NR CIRCLEVILLE OH

RAINFALL ACCUMULATED (INCHES), WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.03	.12	.00	.00	.00	.02	.00	.00	.00	---	.00
2	.00	.00	.12	.02	.00	.00	.00	.06	.00	.00	---	.03
3	.04	.00	.22	.16	.00	.00	.00	.00	.00	.01	---	.48
4	.00	.00	.00	.00	.00	.00	.01	.00	.66	.00	---	.00
5	.03	.00	.16	.00	.00	.00	.00	.00	.41	.00	---	.00
6	.01	.00	1.08	.00	.00	.97	.00	.00	.00	.00	---	.00
7	.06	.01	.17	.00	.00	.40	.01	.00	.07	.00	---	.62
8	.01	.00	.04	.01	.00	.00	.02	.76	.00	.00	---	.04
9	.00	.00	.02	.01	.00	.00	.27	.89	.00	.00	---	.00
10	.13	.01	.00	.04	.00	.38	.17	.00	.00	.00	---	.07
11	.14	.00	.00	.00	.00	.00	.00	.00	.00	.00	---	.00
12	.06	.15	.00	.04	.00	.00	.03	.00	.00	.01	.00	.00
13	.00	.00	.65	.43	.45	.00	.00	.06	.00	---	.01	.00
14	.30	.00	.03	.20	.00	.01	.06	.00	.00	---	1.00	.00
15	.00	.01	.00	.01	.48	.00	.00	.00	.00	---	1.10	.00
16	.00	.04	.00	.00	.00	.00	.22	.00	.00	---	.00	.00
17	.00	.00	.00	.00	.00	.01	.18	.11	.13	---	.00	.00
18	.03	.00	.00	.00	.07	1.05	.51	.48	.55	---	.00	.03
19	.04	.00	.00	.00	.02	.00	.00	.00	.03	---	.02	.00
20	.00	.04	.00	.00	.01	.03	.38	.00	.01	---	.00	.00
21	.00	.06	.15	.00	.00	.01	.06	.00	.00	---	.00	.02
22	.00	.06	.00	.00	.00	.10	.00	.00	.00	---	.17	.52
23	.01	.10	.61	.45	.13	.00	.00	.09	.00	---	.00	.00
24	.02	.00	.00	.04	.00	.00	.01	.18	.00	---	.00	.01
25	.03	.00	.00	.16	.00	.18	.03	.00	.00	---	.00	.00
26	.00	.00	.01	.00	.00	.13	.01	.00	.00	---	.19	.04
27	.08	.01	.00	.00	.00	.04	.14	.00	.00	---	.93	.00
28	.06	.20	.24	.00	.11	.00	.00	.00	.00	---	.37	.00
29	.02	.00	.21	.00	.00	.05	.02	.99	.00	---	.00	.00
30	.01	.22	.00	.00	---	.58	.05	.46	.00	---	.03	.00
31	.00	---	.00	.00	---	.00	---	.01	---	---	.00	---
TOTAL	1.08	0.94	3.83	1.57	1.27	3.94	2.20	4.09	1.86	0.02	3.82	1.86

WTR YR 1992 TOTAL 26.48

GROUND-WATER RECORDS

395901083440600. Local number, CL-135.

LOCATION.--Lat 39°59'01" Long 83°44'06", Hydrologic Unit 05080001, along State Route 4 near Springfield, OH.
Owner.--USGS-Ron Galluzzo.

AQUIFER.--Sand and Gravel of Pleistocene age.

WELL CHARACTERISTICS.--Observation well drilled by hollow stem auger, diameter 3.0 in., depth 37.2 ft. Cased with Sch 40 PVC to 17.7 ft; .020 in. screen from 17.7 to 37.2 ft.

INSTRUMENTATION - Data logger--60 minute record. At this well there are 4 conductivity/water temperature probes at increasing depths within the well to better document vertical movement of high conductivity water on an hourly basis. Conductivity/water temperature probes are set at 19.0 (level 4), 23.5 (level 3), 29.0 (level 2), and 35.0 (level 1) feet below land surface. All probes were removed July 7, 1992 except for one down gradient conductance/water temperature probe.

DATUM.--Elevation of land-surface datum is 1031.89 feet above National Geodetic Vertical Datum of 1929.
Measuring point: shelter floor 3.26 ft above land-surface datum.

REMARKS.--This station is part of an eight-site network to collect data for the Ohio Department of Transportation concerning road salt application and its effect(s) on shallow ground-water quality. Water-quality data for nearby wells is available in preceding tables.

PERIOD OF RECORD.--February 1991 to present.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE (FOUR LEVELS): February 1991 to July 1992.
WATER TEMPERATURE (FOUR LEVELS): February 1991 to July 1992.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE:

LEVEL 1- Maximum, 864 microsiemens May 31-June 1, 1992; minimum, 749 microsiemens August 14, 1991.

LEVEL 2- Maximum, 853 microsiemens June 6, 1992; minimum, 751 microsiemens August 14, 1991.

LEVEL 3- Maximum, 852 microsiemens June 4-12, 1992; minimum, 741 microsiemens August 31, 1991.

LEVEL 4- Maximum, 865 microsiemens May 7 and 9, 1991; minimum, 325 microsiemens June 1, 1992.

WATER TEMPERATURE:

LEVEL 1- Maximum, 12.2°C many days in January and February 1992; minimum, 11.0°C many days in 1991.

LEVEL 2- Maximum, 12.6°C many days in December 1991; minimum, 10.5°C many days in 1991.

LEVEL 3- Maximum, 13.7°C October 26,29,30, 1991; minimum, 10.5°C many days in 1991.

LEVEL 4- Maximum, 14.0°C many days in 1991; minimum, 10.0°C many days in 1991.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE:

LEVEL 1- Maximum, 864 microsiemens May 31-June 1, 1992; minimum, 764 microsiemens October 1,8, 1991.

LEVEL 2- Maximum, 853 microsiemens June 6, 1992; minimum, 764 microsiemens October 1-2, 1991.

LEVEL 3- Maximum, 852 microsiemens June 4-12, 1992; minimum, 754 microsiemens October 3,4,13, 1991.

LEVEL 4- Maximum, 833 microsiemens June 19-21, 1992; minimum, 325 microsiemens June 1, 1992.

WATER TEMPERATURE:

LEVEL 1- Maximum, 12.2°C January 15,16,18,24-27, February 2,9, 1992; minimum, 11.1°C April 30,-July 7, 1992.

LEVEL 2- Maximum, 12.6°C December 4,5,16,18,19, 1991; minimum, 10.7°C June 6,7,11,14,17,24,1992.

LEVEL 3- Maximum, 13.7°C October 26,29,30, 1991; minimum, 10.5°C many days in May and June 1992.

LEVEL 4- Maximum, 11.0°C July 5-6, 1992; minimum, 10.2°C June 1,1992.

395901083440600 CL-135 NR SPRINGFIELD OH

#1 (35.0' BLS)
SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	770	764	767	773	771	771	780	779	779	796	794	795
2	770	765	767	778	774	776	781	780	780	796	795	795
3	771	765	767	780	776	779	782	781	781	796	795	795
4	771	766	767	782	776	779	783	782	782	796	795	795
5	771	767	768	783	778	781	784	783	784	795	794	795
6	769	768	768	784	783	783	785	784	784	795	794	794
7	773	765	769	784	779	783	789	785	785	795	793	794
8	770	764	768	784	780	781	790	785	786	794	793	793
9	770	768	769	784	779	781	788	786	787	793	792	793
10	771	769	770	784	778	781	789	788	789	794	793	793
11	771	770	771	784	779	781	789	788	789	794	793	794
12	772	767	771	784	779	782	789	788	789	794	793	794
13	772	767	770	784	779	783	789	788	788	794	793	794
14	773	767	770	783	779	781	790	788	789	795	794	794
15	773	768	770	783	781	782	790	789	790	795	790	794
16	773	768	770	782	777	781	791	790	791	795	790	793
17	773	768	770	782	777	780	792	791	791	795	794	795
18	774	768	770	782	781	781	792	791	792	795	790	792
19	773	769	771	781	780	781	793	792	793	795	791	794
20	774	769	771	781	780	780	793	792	793	795	794	794
21	774	769	771	781	780	780	793	792	792	795	793	794
22	774	769	771	781	776	780	794	793	793	794	793	794
23	775	770	771	781	777	780	794	793	793	794	793	794
24	775	770	772	778	777	778	794	793	794	795	790	794
25	775	770	773	778	777	778	795	794	794	794	790	793
26	775	770	771	778	777	778	795	794	794	794	790	793
27	775	770	771	778	777	778	795	794	794	794	789	792
28	772	771	772	779	778	778	795	794	795	794	792	793
29	772	771	772	783	778	780	795	794	795	794	793	793
30	772	771	772	783	778	782	795	794	795	794	792	793
31	773	771	772	---	---	---	796	795	795	793	792	793
MONTH	775	764	770	784	771	780	796	779	790	796	789	794

#1 (35.0' BLS)
SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	794	792	793	795	789	792	791	789	790	812	811	811
2	794	789	792	794	787	790	790	786	789	818	808	813
3	794	792	793	793	787	790	793	785	789	819	814	815
4	793	793	793	793	787	790	793	788	789	821	815	817
5	794	792	793	793	787	792	793	787	790	823	817	819
6	794	793	793	792	792	792	792	788	790	824	818	820
7	794	793	793	792	787	791	793	787	789	826	820	822
8	794	793	793	792	791	791	792	786	790	827	822	824
9	794	789	793	792	790	791	793	787	790	829	823	827
10	794	793	793	791	787	790	793	792	792	830	824	826
11	794	793	793	792	787	789	794	788	791	831	825	828
12	794	793	794	792	787	790	794	788	793	833	826	829
13	794	793	793	793	788	791	795	790	793	834	828	831
14	793	793	793	793	791	792	796	794	795	835	829	833
15	793	792	793	793	788	792	796	795	796	836	829	833
16	793	793	793	793	789	792	796	791	794	837	831	834
17	793	792	793	796	791	793	797	796	797	838	832	835
18	793	791	792	792	792	792	798	797	797	839	837	838
19	792	791	792	793	791	792	799	793	796	842	834	837
20	792	790	791	796	791	793	799	794	797	842	837	839
21	791	789	790	797	791	793	801	795	800	843	837	839
22	794	789	790	792	791	792	802	800	801	843	837	839
23	791	789	790	796	791	793	802	797	801	844	838	841
24	790	790	790	796	791	793	804	798	802	844	839	841
25	791	790	790	796	791	793	804	803	804	844	839	841
26	791	791	791	795	790	794	805	804	805	845	839	842
27	795	790	792	795	790	792	807	805	806	845	840	842
28	795	790	791	794	788	792	808	803	807	845	839	841
29	794	790	791	793	787	791	813	808	809	845	840	844
30	---	---	---	792	791	791	814	809	810	845	840	844
31	---	---	---	794	786	791	---	---	---	846	844	845
MONTH	795	789	792	797	786	792	814	785	796	846	808	832

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#1 (35.0' BLS)

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	846	839	843	829	823	827	---	---	---	---	---	---
2	845	840	843	829	823	827	---	---	---	---	---	---
3	845	839	842	829	823	826	---	---	---	---	---	---
4	845	840	844	828	823	827	---	---	---	---	---	---
5	844	838	842	828	823	827	---	---	---	---	---	---
6	844	838	841	828	823	827	---	---	---	---	---	---
7	844	838	842	828	823	825	---	---	---	---	---	---
8	843	837	841	---	---	---	---	---	---	---	---	---
9	843	837	841	---	---	---	---	---	---	---	---	---
10	842	836	840	---	---	---	---	---	---	---	---	---
11	841	835	840	---	---	---	---	---	---	---	---	---
12	841	835	839	---	---	---	---	---	---	---	---	---
13	840	834	838	---	---	---	---	---	---	---	---	---
14	840	833	837	---	---	---	---	---	---	---	---	---
15	839	832	837	---	---	---	---	---	---	---	---	---
16	838	832	836	---	---	---	---	---	---	---	---	---
17	837	831	835	---	---	---	---	---	---	---	---	---
18	836	831	834	---	---	---	---	---	---	---	---	---
19	836	830	834	---	---	---	---	---	---	---	---	---
20	835	834	835	---	---	---	---	---	---	---	---	---
21	835	829	833	---	---	---	---	---	---	---	---	---
22	834	828	833	---	---	---	---	---	---	---	---	---
23	833	827	832	---	---	---	---	---	---	---	---	---
24	833	827	832	---	---	---	---	---	---	---	---	---
25	832	827	831	---	---	---	---	---	---	---	---	---
26	832	826	830	---	---	---	---	---	---	---	---	---
27	831	825	830	---	---	---	---	---	---	---	---	---
28	831	825	829	---	---	---	---	---	---	---	---	---
29	830	824	829	---	---	---	---	---	---	---	---	---
30	830	824	828	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	846	824	836	829	823	827	---	---	---	---	---	---
YEAR	846	764	799									

#2 (29.0' BLS)

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	769	764	767	779	777	778	780	779	780	791	791	791
2	770	764	767	781	779	780	781	780	780	795	791	791
3	770	765	768	781	777	780	781	780	780	795	790	791
4	771	765	769	782	777	779	782	778	781	791	790	791
5	772	771	771	782	777	780	783	778	782	792	791	791
6	773	772	772	782	781	782	784	782	783	792	791	791
7	773	767	771	782	777	779	788	783	784	793	792	792
8	774	768	770	782	778	779	788	784	784	797	792	793
9	774	768	772	783	778	780	788	784	785	797	792	794
10	775	774	774	783	778	780	787	786	786	794	792	793
11	775	774	775	784	779	781	787	786	786	797	793	794
12	775	771	774	785	780	780	787	786	786	797	792	793
13	776	770	772	785	780	782	791	786	787	798	793	796
14	776	771	774	784	780	782	789	787	788	798	793	794
15	777	772	774	784	783	784	789	788	788	794	793	793
16	777	772	773	784	779	783	789	785	788	799	793	794
17	777	772	774	783	779	781	789	788	789	797	793	794
18	777	772	773	783	778	782	790	785	789	798	792	793
19	778	773	774	783	782	782	790	785	788	798	792	795
20	778	774	775	782	782	782	790	789	790	797	792	794
21	779	774	775	782	778	780	791	789	790	797	792	794
22	779	774	775	783	778	779	791	790	790	797	792	795
23	779	774	775	782	778	779	791	790	790	797	796	797
24	779	775	775	779	778	779	795	790	791	797	792	795
25	776	775	775	779	778	779	791	790	791	796	791	795
26	776	771	775	779	778	779	791	790	791	800	791	796
27	776	771	775	780	778	779	794	790	791	801	791	795
28	776	775	776	783	778	779	791	790	791	796	795	795
29	776	771	774	783	778	779	791	791	791	800	795	795
30	776	771	775	783	778	780	791	790	791	800	795	797
31	780	776	777	---	---	---	791	791	791	796	795	795
MONTH	780	764	773	785	777	780	795	778	787	801	790	794

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#3 (23.5' BLS)
SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	758	757	758	782	777	778	778	773	774	786	785	785
2	759	757	758	779	778	778	775	774	774	785	784	785
3	759	754	758	780	778	779	779	773	775	785	783	784
4	759	754	758	780	779	779	778	774	776	784	783	783
5	761	759	760	780	775	779	780	776	777	784	783	783
6	761	760	761	780	779	779	780	775	778	787	783	783
7	761	756	759	780	776	780	780	775	778	787	782	784
8	762	756	758	781	776	779	779	779	779	787	782	785
9	762	756	759	781	776	779	781	779	780	786	785	786
10	762	761	761	784	776	780	782	776	781	787	786	786
11	762	757	760	784	779	781	782	782	782	787	782	785
12	761	756	759	781	781	781	783	782	782	787	786	787
13	760	754	756	782	780	780	782	781	782	787	786	787
14	760	755	757	784	779	780	783	782	783	788	787	788
15	760	755	757	783	778	779	783	782	783	788	784	787
16	760	756	757	778	778	778	784	782	783	788	783	787
17	763	757	758	782	777	778	782	780	781	788	787	788
18	765	759	760	780	775	777	782	781	781	788	787	788
19	767	761	763	780	775	777	782	781	782	792	787	788
20	769	761	765	780	775	779	783	781	782	791	787	788
21	770	762	766	776	775	775	781	780	781	791	786	788
22	766	765	766	779	774	775	781	780	781	790	785	788
23	770	764	766	778	773	775	782	781	781	790	785	789
24	766	764	765	775	774	774	786	782	783	791	786	787
25	769	764	765	775	774	775	786	782	782	791	786	788
26	768	759	764	775	773	774	786	781	783	791	786	789
27	763	761	762	773	772	772	786	781	783	793	786	788
28	762	761	762	777	772	774	786	781	783	790	789	789
29	763	758	762	778	772	777	786	781	784	791	789	790
30	769	761	765	777	773	776	786	781	785	794	790	791
31	780	766	771	---	---	---	786	781	785	791	790	791
MONTH	780	754	761	784	772	778	786	773	781	794	782	787

#3 (23.5' BLS)
SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	795	791	792	795	788	791	795	793	794	817	812	813
2	796	791	793	795	789	791	795	793	794	819	812	816
3	796	791	793	795	789	791	797	792	793	821	814	818
4	796	791	794	795	789	791	796	792	793	822	815	820
5	796	791	793	794	789	792	796	791	793	824	818	822
6	796	791	793	794	790	794	796	791	794	825	819	822
7	796	791	795	794	789	794	796	790	792	827	819	823
8	796	791	794	794	793	794	795	790	793	828	826	827
9	796	790	794	794	789	792	796	789	793	829	827	828
10	795	791	794	794	789	792	796	794	795	833	828	829
11	794	793	794	794	789	791	798	793	795	832	826	830
12	794	792	793	797	789	792	799	794	795	832	829	831
13	794	792	793	793	789	792	796	792	795	834	828	832
14	793	792	792	794	789	792	797	795	796	836	829	834
15	792	791	791	797	789	793	800	795	797	836	831	835
16	792	791	792	797	789	793	800	795	796	840	834	836
17	792	791	791	797	792	795	801	796	799	842	835	837
18	795	790	791	797	792	793	801	796	798	843	838	839
19	792	791	791	797	792	794	802	796	800	844	837	839
20	791	790	791	797	792	795	802	797	801	845	838	840
21	794	790	791	797	793	796	803	802	802	845	838	840
22	794	788	791	797	796	797	804	800	803	846	839	841
23	794	788	791	797	793	795	808	800	803	846	839	842
24	793	789	791	798	793	796	809	804	805	847	842	843
25	793	789	792	797	796	797	807	806	806	848	843	845
26	793	788	791	797	795	796	811	807	808	849	844	845
27	793	791	792	797	796	796	813	808	809	850	843	846
28	793	791	792	797	791	796	814	809	810	850	843	846
29	793	788	791	796	795	796	816	810	813	850	845	846
30	---	---	---	796	794	795	817	811	814	850	844	847
31	---	---	---	798	793	795	---	---	---	851	845	848
MONTH	796	788	792	798	788	794	817	789	799	851	812	834

395901083440600 CL-135 NR SPRINGFIELD OH

#1 (35.0' BLS)
WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	11.6	11.4	11.5	11.8	11.8	11.8	12.0	12.0	12.0	12.0	12.0	12.0
2	11.6	11.4	11.5	11.8	11.7	11.8	12.0	12.0	12.0	12.0	12.0	12.0
3	11.6	11.4	11.5	12.0	11.7	11.8	12.0	12.0	12.0	12.0	12.0	12.0
4	11.6	11.4	11.5	12.0	11.7	11.8	12.0	11.9	12.0	12.0	12.0	12.0
5	11.6	11.4	11.5	12.0	11.7	11.8	12.0	11.9	12.0	12.0	12.0	12.0
6	11.6	11.5	11.6	11.8	11.7	11.8	12.0	12.0	12.0	12.0	12.0	12.0
7	11.7	11.4	11.6	12.0	11.7	11.8	12.0	11.8	12.0	12.0	12.0	12.0
8	11.8	11.5	11.7	12.0	11.7	11.9	12.0	11.8	12.0	12.0	12.0	12.0
9	11.6	11.5	11.6	12.0	11.7	11.9	12.0	12.0	12.0	12.0	12.0	12.0
10	11.6	11.5	11.6	12.0	11.7	11.9	12.0	12.0	12.0	12.0	12.0	12.0
11	11.6	11.5	11.6	12.0	11.7	11.9	12.0	12.0	12.0	12.0	12.0	12.0
12	11.8	11.5	11.6	12.0	11.7	11.8	12.0	12.0	12.0	12.0	12.0	12.0
13	11.8	11.5	11.7	12.0	11.7	11.8	12.0	12.0	12.0	12.0	12.0	12.0
14	11.8	11.5	11.7	12.0	11.7	11.8	12.0	12.0	12.0	12.0	12.0	12.0
15	11.8	11.5	11.7	11.8	11.8	11.8	12.0	12.0	12.0	12.2	11.9	12.0
16	11.8	11.6	11.7	12.0	11.8	11.8	12.0	11.9	12.0	12.2	11.9	12.0
17	11.8	11.5	11.7	12.0	11.8	11.9	12.0	12.0	12.0	12.0	11.9	12.0
18	11.8	11.5	11.7	11.8	11.8	11.8	12.0	11.9	12.0	12.2	11.9	12.1
19	11.8	11.6	11.7	11.8	11.8	11.8	12.0	11.9	12.0	12.1	11.9	12.0
20	11.8	11.6	11.7	11.8	11.8	11.8	12.0	12.0	12.0	12.0	12.0	12.0
21	11.8	11.6	11.7	11.8	11.8	11.8	12.0	12.0	12.0	12.0	12.0	12.0
22	11.8	11.6	11.7	12.0	11.8	11.8	12.0	12.0	12.0	12.0	12.0	12.0
23	11.8	11.6	11.7	12.0	11.8	11.8	12.0	12.0	12.0	12.0	12.0	12.0
24	11.8	11.6	11.7	12.0	12.0	12.0	12.0	12.0	12.0	12.2	12.0	12.0
25	11.8	11.6	11.7	12.0	12.0	12.0	12.0	12.0	12.0	12.2	12.0	12.0
26	11.8	11.6	11.8	12.0	11.9	12.0	12.0	12.0	12.0	12.2	11.9	12.0
27	11.8	11.6	11.8	12.0	12.0	12.0	12.0	12.0	12.0	12.2	11.9	12.0
28	11.8	11.8	11.8	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
29	11.8	11.8	11.8	12.0	11.8	11.9	12.0	12.0	12.0	12.0	12.0	12.0
30	11.8	11.8	11.8	12.0	11.8	11.8	12.0	12.0	12.0	12.0	12.0	12.0
31	11.8	11.8	11.8	---	---	---	12.0	12.0	12.0	12.0	12.0	12.0
MONTH	11.8	11.4	11.7	12.0	11.7	11.9	12.0	11.8	12.0	12.2	11.9	12.0

#1 (35.0' BLS)
WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MTN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	12.0	12.0	12.0	12.0	11.8	11.9	11.5	11.5	11.5	11.4	11.3	11.4
2	12.2	11.9	12.0	12.1	11.8	11.9	11.7	11.5	11.6	11.6	11.1	11.3
3	12.0	12.0	12.0	12.0	11.8	11.9	11.7	11.3	11.6	11.4	11.1	11.3
4	12.0	12.0	12.0	12.1	11.8	11.9	11.6	11.3	11.5	11.4	11.1	11.3
5	12.0	12.0	12.0	12.0	11.8	11.8	11.6	11.3	11.5	11.4	11.1	11.3
6	12.0	12.0	12.0	11.8	11.8	11.8	11.5	11.3	11.4	11.4	11.1	11.3
7	12.0	12.0	12.0	12.0	11.8	11.8	11.6	11.3	11.5	11.4	11.1	11.3
8	12.0	12.0	12.0	11.8	11.8	11.8	11.6	11.3	11.5	11.3	11.1	11.2
9	12.2	11.9	12.0	11.8	11.8	11.8	11.6	11.3	11.4	11.4	11.1	11.2
10	12.0	12.0	12.0	12.0	11.7	11.8	11.4	11.3	11.3	11.4	11.1	11.3
11	12.0	12.0	12.0	12.0	11.7	11.9	11.6	11.3	11.4	11.4	11.1	11.3
12	12.0	11.9	12.0	12.0	11.7	11.8	11.6	11.3	11.3	11.4	11.1	11.3
13	12.0	12.0	12.0	12.0	11.7	11.8	11.5	11.3	11.4	11.4	11.1	11.2
14	12.0	12.0	12.0	11.8	11.7	11.7	11.3	11.3	11.3	11.4	11.1	11.2
15	12.0	12.0	12.0	11.9	11.7	11.8	11.4	11.3	11.3	11.4	11.1	11.2
16	12.0	12.0	12.0	11.9	11.7	11.8	11.6	11.3	11.4	11.4	11.1	11.2
17	12.0	12.0	12.0	11.8	11.6	11.7	11.4	11.3	11.3	11.4	11.1	11.2
18	12.0	12.0	12.0	11.8	11.7	11.7	11.4	11.3	11.3	11.1	11.1	11.1
19	12.0	12.0	12.0	11.8	11.7	11.8	11.6	11.3	11.5	11.4	11.1	11.2
20	12.0	12.0	12.0	11.8	11.6	11.7	11.6	11.4	11.4	11.4	11.1	11.3
21	12.0	12.0	12.0	11.8	11.5	11.7	11.6	11.3	11.4	11.4	11.1	11.3
22	12.0	11.8	12.0	11.8	11.7	11.8	11.4	11.3	11.3	11.4	11.1	11.3
23	12.0	12.0	12.0	11.8	11.5	11.7	11.6	11.3	11.4	11.4	11.1	11.3
24	12.0	12.0	12.0	11.8	11.5	11.7	11.6	11.3	11.4	11.4	11.1	11.3
25	12.0	12.0	12.0	11.8	11.5	11.7	11.3	11.3	11.3	11.4	11.1	11.3
26	12.0	12.0	12.0	11.8	11.5	11.6	11.3	11.3	11.3	11.4	11.1	11.2
27	12.0	11.8	11.9	11.7	11.5	11.6	11.4	11.3	11.3	11.4	11.1	11.2
28	12.0	11.8	12.0	11.8	11.5	11.6	11.6	11.3	11.3	11.4	11.1	11.3
29	12.0	11.8	11.9	11.7	11.5	11.6	11.4	11.1	11.3	11.3	11.1	11.2
30	---	---	---	11.5	11.5	11.5	11.4	11.1	11.3	11.3	11.1	11.2
31	---	---	---	11.7	11.3	11.5	---	---	---	11.1	11.1	11.1
MONTH	12.2	11.8	12.0	12.1	11.3	11.7	11.7	11.1	11.4	11.6	11.1	11.3

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#1 (35.0' BLS)
WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	11.4	11.1	11.2	11.4	11.1	11.2	---	---	---	---	---	---
2	11.4	11.1	11.2	11.4	11.1	11.2	---	---	---	---	---	---
3	11.4	11.1	11.2	11.4	11.1	11.2	---	---	---	---	---	---
4	11.4	11.1	11.1	11.4	11.1	11.2	---	---	---	---	---	---
5	11.4	11.1	11.2	11.4	11.1	11.2	---	---	---	---	---	---
6	11.4	11.1	11.2	11.4	11.1	11.2	---	---	---	---	---	---
7	11.4	11.1	11.2	11.4	11.1	11.3	---	---	---	---	---	---
8	11.4	11.1	11.2	---	---	---	---	---	---	---	---	---
9	11.4	11.1	11.2	---	---	---	---	---	---	---	---	---
10	11.4	11.1	11.2	---	---	---	---	---	---	---	---	---
11	11.4	11.1	11.2	---	---	---	---	---	---	---	---	---
12	11.4	11.1	11.2	---	---	---	---	---	---	---	---	---
13	11.4	11.1	11.2	---	---	---	---	---	---	---	---	---
14	11.4	11.1	11.2	---	---	---	---	---	---	---	---	---
15	11.4	11.1	11.2	---	---	---	---	---	---	---	---	---
16	11.4	11.1	11.2	---	---	---	---	---	---	---	---	---
17	11.4	11.1	11.2	---	---	---	---	---	---	---	---	---
18	11.4	11.1	11.2	---	---	---	---	---	---	---	---	---
19	11.4	11.1	11.2	---	---	---	---	---	---	---	---	---
20	11.1	11.1	11.1	---	---	---	---	---	---	---	---	---
21	11.4	11.1	11.2	---	---	---	---	---	---	---	---	---
22	11.4	11.1	11.2	---	---	---	---	---	---	---	---	---
23	11.4	11.1	11.2	---	---	---	---	---	---	---	---	---
24	11.4	11.1	11.2	---	---	---	---	---	---	---	---	---
25	11.4	11.1	11.2	---	---	---	---	---	---	---	---	---
26	11.4	11.1	11.2	---	---	---	---	---	---	---	---	---
27	11.4	11.1	11.2	---	---	---	---	---	---	---	---	---
28	11.4	11.1	11.2	---	---	---	---	---	---	---	---	---
29	11.4	11.1	11.2	---	---	---	---	---	---	---	---	---
30	11.4	11.1	11.2	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	11.4	11.1	11.2	11.4	11.1	11.2	---	---	---	---	---	---
YEAR	12.2	11.1	11.7									

#2 (29.0' BLS)
WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	12.3	12.0	12.1	12.2	12.2	12.2	12.5	12.4	12.4	12.4	12.4	12.4
2	12.3	12.0	12.1	12.2	12.2	12.2	12.4	12.4	12.4	12.5	12.2	12.4
3	12.3	12.0	12.1	12.4	12.2	12.3	12.5	12.4	12.4	12.5	12.2	12.4
4	12.3	12.0	12.1	12.4	12.2	12.3	12.6	12.4	12.4	12.5	12.4	12.4
5	12.0	12.0	12.0	12.4	12.2	12.3	12.6	12.4	12.4	12.4	12.4	12.4
6	12.0	12.0	12.0	12.2	12.2	12.2	12.5	12.4	12.4	12.4	12.4	12.4
7	12.3	12.0	12.1	12.4	12.2	12.3	12.5	12.2	12.4	12.4	12.4	12.4
8	12.3	12.0	12.1	12.4	12.2	12.4	12.5	12.2	12.4	12.4	12.2	12.4
9	12.3	12.0	12.1	12.4	12.2	12.3	12.5	12.2	12.4	12.5	12.2	12.4
10	12.0	12.0	12.0	12.5	12.2	12.4	12.5	12.4	12.4	12.4	12.4	12.4
11	12.0	12.0	12.0	12.5	12.2	12.4	12.5	12.4	12.4	12.4	12.2	12.4
12	12.2	12.0	12.1	12.4	12.2	12.4	12.5	12.4	12.5	12.4	12.2	12.4
13	12.3	12.0	12.2	12.5	12.2	12.3	12.5	12.2	12.5	12.5	12.2	12.3
14	12.3	12.0	12.1	12.5	12.2	12.3	12.5	12.4	12.4	12.4	12.2	12.4
15	12.3	12.0	12.1	12.2	12.2	12.2	12.4	12.4	12.4	12.4	12.4	12.4
16	12.3	12.0	12.2	12.5	12.2	12.3	12.6	12.4	12.4	12.4	12.1	12.4
17	12.3	12.0	12.2	12.5	12.2	12.4	12.5	12.4	12.4	12.4	12.2	12.4
18	12.3	12.0	12.2	12.5	12.2	12.3	12.6	12.4	12.4	12.4	12.1	12.4
19	12.3	12.0	12.2	12.2	12.2	12.2	12.6	12.4	12.5	12.4	12.1	12.3
20	12.3	12.0	12.2	12.2	12.2	12.2	12.4	12.4	12.4	12.4	12.2	12.3
21	12.3	12.0	12.2	12.5	12.2	12.4	12.5	12.4	12.4	12.4	12.2	12.3
22	12.3	12.0	12.2	12.5	12.2	12.4	12.4	12.4	12.4	12.4	12.2	12.3
23	12.3	12.0	12.2	12.5	12.2	12.4	12.5	12.4	12.4	12.2	12.2	12.2
24	12.3	12.0	12.2	12.4	12.4	12.4	12.5	12.2	12.4	12.4	12.2	12.3
25	12.3	12.2	12.3	12.4	12.4	12.4	12.5	12.4	12.4	12.4	12.2	12.3
26	12.5	12.2	12.3	12.5	12.4	12.4	12.5	12.4	12.4	12.4	12.0	12.2
27	12.5	12.2	12.3	12.5	12.4	12.4	12.5	12.2	12.4	12.4	12.0	12.2
28	12.2	12.2	12.2	12.5	12.2	12.4	12.4	12.4	12.4	12.2	12.2	12.2
29	12.5	12.2	12.3	12.5	12.2	12.4	12.4	12.4	12.4	12.2	12.0	12.2
30	12.5	12.2	12.3	12.5	12.2	12.4	12.4	12.4	12.4	12.2	12.0	12.1
31	12.2	12.0	12.2	---	---	---	12.4	12.4	12.4	12.2	12.2	12.2
MONTH	12.5	12.0	12.2	12.5	12.2	12.3	12.6	12.2	12.4	12.5	12.0	12.3

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#3 (23.5' BLS)
WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	13.2	13.2	13.2	13.2	12.9	13.1	13.1	12.9	13.1	12.7	12.7	12.7
2	13.2	13.2	13.2	13.2	13.1	13.1	13.1	13.1	13.1	12.7	12.7	12.7
3	13.5	13.2	13.2	13.2	13.1	13.1	13.1	12.9	13.1	12.7	12.7	12.7
4	13.5	13.2	13.3	13.1	13.1	13.1	13.1	13.1	13.1	12.7	12.7	12.7
5	13.2	13.2	13.2	13.4	13.1	13.2	13.1	12.9	13.1	12.7	12.7	12.7
6	13.2	13.1	13.2	13.2	13.1	13.1	13.1	12.9	13.0	12.7	12.4	12.6
7	13.5	13.1	13.3	13.4	13.1	13.1	13.1	12.9	12.9	12.7	12.4	12.6
8	13.5	13.1	13.3	13.4	13.1	13.2	13.0	12.9	12.9	12.7	12.4	12.5
9	13.5	13.2	13.3	13.4	13.1	13.2	12.9	12.9	12.9	12.5	12.4	12.4
10	13.2	13.2	13.2	13.4	12.9	13.1	13.1	12.9	12.9	12.4	12.4	12.4
11	13.4	13.2	13.2	13.2	13.0	13.1	12.9	12.9	12.9	12.6	12.4	12.5
12	13.4	13.2	13.3	13.1	13.1	13.1	12.9	12.9	12.9	12.4	12.4	12.4
13	13.5	13.2	13.4	13.2	13.1	13.2	12.9	12.9	12.9	12.5	12.4	12.4
14	13.4	13.2	13.3	13.2	13.0	13.1	12.9	12.9	12.9	12.5	12.4	12.4
15	13.4	13.2	13.3	13.2	12.9	13.2	12.9	12.9	12.9	12.6	12.4	12.4
16	13.5	13.2	13.4	13.2	13.1	13.2	12.9	12.9	12.9	12.6	12.4	12.4
17	13.5	13.2	13.4	13.2	12.9	13.1	12.9	12.9	12.9	12.4	12.4	12.4
18	13.5	13.2	13.4	13.2	12.9	13.1	12.9	12.9	12.9	12.4	12.4	12.4
19	13.5	13.2	13.4	13.2	12.9	13.1	12.9	12.9	12.9	12.4	12.1	12.4
20	13.6	13.2	13.4	13.2	12.9	13.0	12.9	12.9	12.9	12.4	12.2	12.4
21	13.6	13.2	13.4	13.2	13.2	13.2	12.9	12.9	12.9	12.5	12.2	12.4
22	13.5	13.4	13.4	13.2	12.9	13.1	12.9	12.9	12.9	12.4	12.2	12.3
23	13.5	13.2	13.4	13.2	12.9	13.1	12.9	12.9	12.9	12.4	12.2	12.2
24	13.5	13.4	13.4	13.1	13.1	13.1	12.9	12.7	12.9	12.4	12.2	12.4
25	13.5	13.2	13.4	13.1	13.1	13.1	12.9	12.7	12.9	12.4	12.2	12.3
26	13.7	13.2	13.4	13.2	13.1	13.1	12.9	12.7	12.9	12.4	12.2	12.3
27	13.5	13.4	13.4	13.1	13.1	13.1	12.9	12.7	12.8	12.4	12.0	12.3
28	13.4	13.4	13.4	13.2	12.9	13.1	12.9	12.7	12.8	12.2	12.2	12.2
29	13.7	13.4	13.4	13.2	12.9	13.0	12.9	12.7	12.8	12.2	12.2	12.2
30	13.7	13.2	13.4	13.2	12.9	13.0	12.9	12.7	12.7	12.2	12.0	12.2
31	13.4	13.0	13.4	---	---	---	12.9	12.7	12.7	12.2	12.2	12.2
MONTH	13.7	13.0	13.3	13.4	12.9	13.1	13.1	12.7	12.9	12.7	12.0	12.4

#3 (23.5' BLS)
WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	12.2	12.0	12.2	12.0	11.6	11.8	11.3	11.3	11.3	11.0	10.7	10.9
2	12.2	12.0	12.1	11.8	11.6	11.8	11.3	11.3	11.3	11.0	10.7	10.8
3	12.2	12.0	12.1	11.8	11.6	11.7	11.3	11.1	11.3	11.0	10.7	10.8
4	12.2	12.0	12.1	11.8	11.6	11.7	11.3	11.1	11.3	10.9	10.7	10.8
5	12.2	12.0	12.1	11.8	11.6	11.7	11.4	11.1	11.2	10.9	10.7	10.7
6	12.2	12.0	12.1	11.8	11.6	11.6	11.3	11.1	11.2	10.9	10.7	10.8
7	12.2	12.0	12.0	11.8	11.5	11.6	11.4	11.1	11.3	11.0	10.7	10.8
8	12.2	12.0	12.0	11.6	11.5	11.6	11.4	11.1	11.2	10.7	10.7	10.7
9	12.2	11.9	12.0	11.8	11.5	11.6	11.4	11.1	11.2	10.7	10.7	10.7
10	12.2	12.0	12.0	11.7	11.5	11.6	11.1	11.1	11.1	10.7	10.5	10.7
11	12.0	12.0	12.0	11.7	11.5	11.7	11.2	10.9	11.1	11.0	10.7	10.7
12	12.0	11.9	12.0	11.7	11.3	11.6	11.1	10.9	11.1	10.8	10.7	10.7
13	12.0	12.0	12.0	11.7	11.5	11.6	11.3	11.1	11.1	10.9	10.7	10.7
14	12.0	12.0	12.0	11.7	11.5	11.6	11.1	11.1	11.1	10.9	10.7	10.7
15	12.0	12.0	12.0	11.7	11.3	11.5	11.1	10.9	11.1	10.9	10.7	10.7
16	12.0	12.0	12.0	11.7	11.3	11.5	11.2	10.9	11.1	10.8	10.5	10.7
17	12.0	12.0	12.0	11.5	11.3	11.4	11.1	10.9	11.0	10.8	10.5	10.7
18	12.0	11.8	12.0	11.5	11.3	11.5	11.1	10.9	11.1	10.7	10.5	10.7
19	12.0	12.0	12.0	11.5	11.3	11.4	11.2	10.9	11.0	10.8	10.5	10.7
20	12.0	12.0	12.0	11.5	11.3	11.4	11.2	10.9	11.0	10.7	10.5	10.7
21	12.0	11.8	11.9	11.5	11.3	11.4	10.9	10.9	10.9	10.8	10.5	10.7
22	12.0	11.8	11.9	11.3	11.3	11.3	11.1	10.9	10.9	10.8	10.5	10.7
23	12.0	11.8	11.9	11.5	11.3	11.4	11.2	10.7	11.0	10.8	10.5	10.7
24	12.0	11.8	11.9	11.5	11.3	11.4	10.9	10.7	10.9	10.7	10.5	10.6
25	12.0	11.7	11.8	11.3	11.3	11.3	10.9	10.9	10.9	10.7	10.5	10.6
26	12.0	11.7	11.9	11.4	11.3	11.3	10.9	10.7	10.9	10.7	10.5	10.6
27	11.8	11.7	11.8	11.3	11.3	11.3	10.9	10.7	10.9	10.7	10.5	10.6
28	11.8	11.7	11.8	11.6	11.3	11.3	11.0	10.7	10.9	10.7	10.5	10.6
29	12.0	11.7	11.8	11.3	11.3	11.3	10.9	10.7	10.8	10.7	10.5	10.7
30	---	---	---	11.3	11.3	11.3	11.0	10.7	10.8	10.7	10.5	10.6
31	---	---	---	11.4	11.1	11.3	---	---	---	10.7	10.5	10.6
MONTH	12.2	11.7	12.0	12.0	11.1	11.5	11.4	10.7	11.1	11.0	10.5	10.7

GROUND-WATER RECORDS

395859083440700. Local number, CL-138.

LOCATION.--Lat 39°58'59" Long 83°44'07", Hydrologic Unit 05080001, along State Route 4 near Springfield, OH.
Owner.--USGS-U.S. Corps of Engineers.

AQUIFER.--Sand and Gravel of Pleistocene age.

WELL CHARACTERISTICS.--Observation well drilled by hollow stem auger, diameter 4.0 in., depth 28.5 ft. Cased with Sch 40 PVC to 18.5 ft; .020 in. screen from 18.5 to 28.5 ft.

INSTRUMENTATION - Data logger--60 minute record. Precipitation data collected with a propane-heated, tipping-bucket rain gauge. Also collected: water level, air temperature and soil temperature, and also water temperature and specific conductance.

DATUM.--Elevation of land-surface datum is 1031.61 feet above National Geodetic Vertical Datum of 1929.
Measuring point: shelter floor 3.31 ft above land-surface datum.

REMARKS.--This station is part of an eight-site network to collect data for the Ohio Department of Transportation concerning road salt application and its effect(s) on shallow ground-water quality. Water-quality data for nearby wells is available in preceding tables.

PERIOD OF RECORD.--February 1991 to current year.

PERIOD OF DAILY RECORD.--

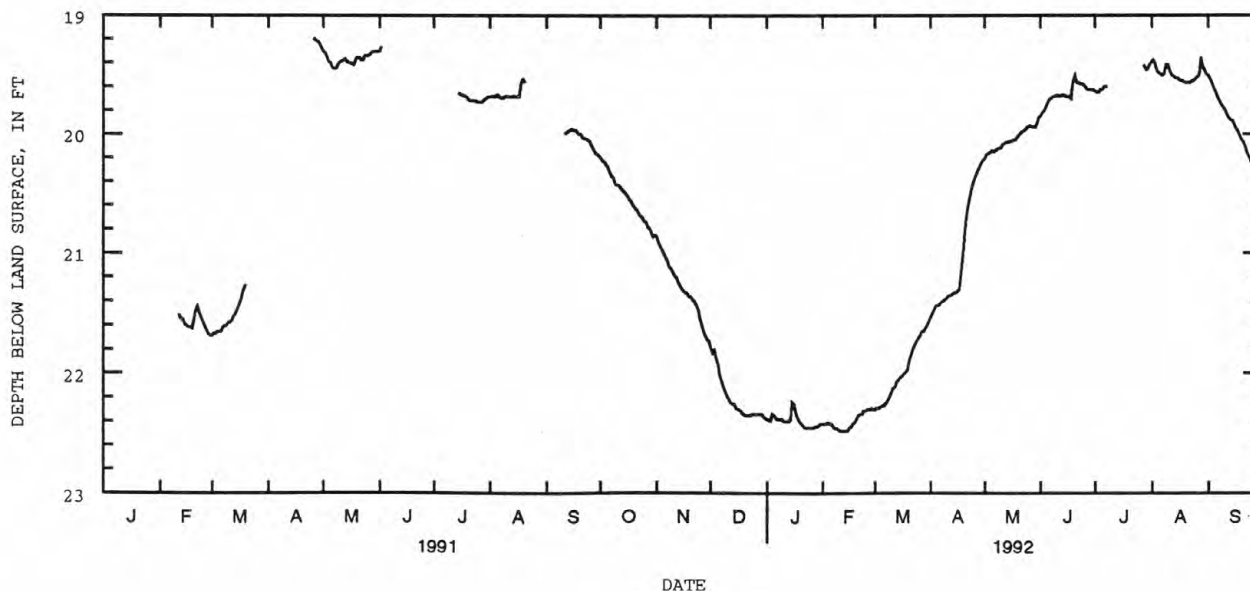
WATER LEVEL: February 1991 to current year.
AIR TEMPERATURE: February 1991 to current year.
SOIL TEMPERATURE: February 1991 to current year.
PRECIPITATION: February 1991 to current year.
WATER TEMPERATURE: July 1992 to current year.
SPECIFIC CONDUCTANCE: July 1992 to current year.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER LEVEL: Maximum daily low, 22.48 ft. below land-surface datum, February 11-15, 1992; minimum daily low, 19.32 ft. below land-surface datum, August 28, 1992.
WATER TEMPERATURE: Maximum, 12.3°C September 17, 30, 1992; minimum, 10.7°C July 28-August 13, 1992.
AIR TEMPERATURE: Maximum, 37.5°C July 22, 1991; minimum, -21.2°C January 16, 1992.
SOIL TEMPERATURE: Maximum, 39.5°C July 22 and August 2, 1991; minimum, <0.0°C several days in 1991.
SPECIFIC CONDUCTANCE: Maximum, 877 microsiemens, July 31-August 1, 1992; minimum 835 microsiemens, September 17, 1992.

EXTREMES FOR CURRENT YEAR.--

WATER LEVEL: Maximum daily low, 22.48 ft. below land-surface datum, February 11-15, 1992; minimum daily low, 19.32 ft. below land-surface datum, August 28, 1992.
AIR TEMPERATURE: Maximum, 33.3°C August 10, 1992; minimum, -21.2°C January 16, 1992.
SOIL TEMPERATURE: Maximum, 29.9°C July 28, 1992; minimum, 9.4°C September 30, 1992.
WATER TEMPERATURE: Maximum, 12.3°C September 17, 30, 1992; minimum 10.7°C July 28-August 13, 1992.
SPECIFIC CONDUCTANCE: Maximum, 877 microsiemens, July 31- August 1, 1992; minimum, 835 microsiemens, September 17, 1992.



395859083440700 CL-138 NR SPRINGFIELD OH

TEMPERATURE, AIR, DEGREES CENTIGRADE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	26.9	12.3	19.2	16.0	6.1	11.3	4.9	2.6	3.6	3.3	-4	1.6
2	26.3	13.1	19.2	5.2	-1.8	1.4	4.9	.6	2.1	6.6	-.7	3.7
3	24.7	14.5	18.3	-.8	-7.3	-3.4	8.0	-7.4	1.5	10.5	5.6	7.0
4	27.5	14.0	21.1	-1.4	-7.7	-5.3	-7.9	-11.7	-10.2	6.9	1.5	4.4
5	21.0	5.5	13.9	1.9	-9.5	-2.3	3.7	-11.5	-4.4	2.9	1.3	1.9
6	10.4	3.2	6.3	6.4	.3	3.4	4.2	-3.4	.8	2.3	.7	1.2
7	14.5	-.1	5.8	-1.0	-8.8	-3.3	14.3	3.7	9.3	2.2	.2	1.2
8	19.4	-.4	10.2	1.7	-11.2	-5.7	16.4	9.1	13.2	6.1	-2.3	1.9
9	24.3	9.4	16.3	5.1	-10.1	-3.6	15.2	-1.1	7.2	8.8	2.3	5.6
10	16.7	6.6	12.8	8.3	-7.8	-.7	6.7	-2.6	1.1	2.0	-3.3	.2
11	14.0	6.7	9.6	9.7	-3.9	1.5	11.9	1.2	5.0	8.3	-4.0	1.2
12	14.1	4.0	8.6	2.7	-4.0	.6	15.2	2.7	9.2	4.2	-.6	1.9
13	14.5	1.4	7.0	10.5	1.2	4.6	15.1	8.1	10.2	7.3	3.4	5.6
14	17.6	4.8	10.4	15.1	.2	8.3	8.6	-2.7	3.0	5.9	-7.8	-2.8
15	12.8	2.4	7.0	16.5	6.9	11.4	1.1	-7.4	-3.4	-4.4	-14.8	-7.4
16	13.6	-2.0	4.8	11.4	-1.8	7.3	.8	-11.0	-5.4	-6.8	-21.2	-14.7
17	18.4	-.4	8.7	12.3	-2.5	4.3	6.7	-2.0	2.4	1.0	-8.8	-4.4
18	22.2	7.2	14.3	17.1	7.1	12.0	-2.7	-10.3	-5.5	-8.3	-16.9	-11.3
19	17.7	-.2	7.5	17.8	12.1	14.6	-.4	-11.7	-6.4	-3.9	-20.4	-12.2
20	12.7	-3.0	3.8	17.5	8.9	15.0	5.2	-5.3	.4	-.4	-5.4	-2.9
21	18.2	-1.5	7.3	11.0	8.6	9.6	5.4	-3.2	1.4	9.0	-4.2	.9
22	23.9	3.1	13.1	10.7	7.8	8.7	4.4	-3.3	.6	9.3	-4.3	2.5
23	21.3	10.5	16.1	13.6	.2	7.5	7.4	.1	4.1	6.4	-2.0	3.2
24	24.3	14.2	17.6	-.2	-6.2	-2.5	4.6	-3.7	.3	-2.7	-11.4	-6.9
25	24.4	15.0	18.9	-3.5	-8.4	-5.9	4.2	-6.2	-1.9	-2.6	-9.2	-5.4
26	24.6	14.0	18.4	1.6	-11.7	-4.6	8.3	-5.2	-.3	-.5	-10.1	-5.8
27	22.3	12.5	18.1	6.4	-2.2	2.8	8.0	-5.1	.7	6.6	-9.4	-2.2
28	17.0	12.2	14.0	12.6	4.4	7.2	3.7	-.8	1.5	2.0	-4.0	.2
29	23.9	12.7	17.3	18.7	11.8	13.9	2.2	.7	1.5	1.4	-6.4	-.8
30	21.5	13.4	16.5	18.7	3.2	12.3	1.0	-.2	.3	7.1	-6.5	.8
31	16.4	8.9	13.5	---	---	---	1.1	-.5	.0	1.9	-.1	.7
MONTH	27.5	-3.0	12.8	18.7	-11.7	4.0	16.4	-11.7	1.4	10.5	-21.2	-1.0

TEMPERATURE, AIR, DEGREES CENTIGRADE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MTN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	-.5	-8.8	-3.1	16.8	-2.4	7.4	4.5	-3.9	1.0	27.3	5.5	16.7
2	6.4	-9.9	-2.3	23.0	4.1	13.3	1.7	-5.0	-1.8	26.2	11.5	20.7
3	11.7	-4.4	2.2	20.7	1.7	10.4	7.2	-6.1	1.3	20.2	4.6	12.9
4	7.0	-1.0	2.8	24.5	3.6	12.6	7.4	.0	2.9	14.0	2.2	7.9
5	2.7	-5.3	-1.7	22.1	6.6	14.8	11.7	-3.1	3.6	12.5	3.9	7.7
6	10.1	-7.2	.3	17.8	11.4	14.2	13.3	-2.0	6.2	15.2	3.7	9.5
7	1.6	-2.3	-.3	18.1	10.4	12.9	21.2	6.6	13.5	19.4	4.2	12.1
8	-2.3	-6.1	-3.8	14.7	5.0	10.7	19.5	1.8	11.2	18.6	7.9	12.6
9	-1.3	-11.5	-6.9	18.0	3.9	12.2	20.3	7.2	13.7	17.1	8.7	12.3
10	6.0	-8.2	-1.0	15.6	-7.7	4.6	18.6	8.2	13.0	23.0	5.4	14.7
11	5.2	-4.7	2.4	-3.5	-9.0	-6.2	25.7	12.4	18.4	26.6	10.1	18.4
12	-2.2	-9.7	-5.0	-.6	-7.7	-4.5	12.6	2.3	7.6	27.6	12.9	20.1
13	3.2	-3.1	.5	1.2	-9.3	-4.3	11.1	.8	5.5	23.5	13.6	18.1
14	2.8	.0	1.2	1.7	-5.1	-2.2	7.3	3.5	5.6	21.1	9.4	13.7
15	14.9	2.9	8.0	.0	-8.5	-4.1	16.5	4.4	10.5	23.2	10.2	16.0
16	4.1	1.1	2.2	6.1	-10.0	-.8	26.6	9.4	17.5	28.5	9.6	19.5
17	9.3	-.3	3.9	13.3	2.3	7.6	16.0	10.1	14.1	28.3	15.0	20.8
18	15.0	4.5	8.5	3.7	-.1	1.0	17.7	10.1	13.9	19.1	11.5	15.9
19	7.0	1.2	4.4	4.0	-3.1	.3	25.2	13.7	19.2	24.2	9.5	17.2
20	4.0	.9	2.1	8.8	-3.7	1.0	25.7	15.7	19.6	24.5	15.4	19.6
21	9.7	1.3	5.0	6.3	-4.7	1.3	19.7	12.3	16.9	27.1	13.3	19.9
22	18.9	1.8	9.2	7.0	-3.3	1.8	12.8	4.7	10.3	29.2	12.5	21.4
23	14.8	1.4	6.6	6.0	-6.4	-.2	26.2	3.7	15.7	25.7	14.2	20.0
24	6.4	.8	3.4	13.0	-4.2	4.2	20.1	9.0	14.4	14.2	5.3	9.9
25	6.0	1.4	4.1	7.2	1.0	5.1	8.7	4.6	6.5	14.4	4.4	9.1
26	4.6	-.7	1.4	13.2	3.7	7.7	11.9	3.8	6.6	13.6	5.8	10.1
27	12.6	1.5	6.2	6.0	-.2	2.4	11.0	5.7	7.8	16.9	6.4	10.9
28	14.7	-.5	6.0	10.0	-2.3	3.2	15.0	1.8	8.3	20.5	4.0	12.6
29	1.8	-5.5	-2.2	4.9	.5	2.6	15.8	3.1	9.5	16.0	6.8	11.5
30	---	---	---	4.8	2.5	3.3	17.5	7.4	12.4	18.1	11.1	13.6
31	---	---	---	13.0	-.9	6.8	---	---	---	15.4	9.0	13.2
MONTH	18.9	-11.5	1.9	24.5	-10.0	4.5	26.6	-6.1	10.2	29.2	2.2	14.8

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TEMPERATURE, SOIL DEG. C), WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	28.6	25.0	26.7	23.3	21.8	22.5	18.5	16.7	17.3	12.2	11.5	11.8
2	29.0	25.6	27.2	21.6	18.2	19.9	16.6	14.2	15.6	13.0	11.5	12.2
3	28.3	26.1	27.2	18.0	15.9	17.2	15.0	14.1	14.7	14.3	13.0	13.6
4	29.6	26.6	27.8	15.8	14.5	15.1	13.9	12.3	12.9	14.3	13.9	14.2
5	28.7	25.1	27.3	15.0	13.3	14.3	12.3	11.7	12.0	13.8	13.1	13.4
6	24.8	22.6	23.5	16.1	14.5	15.2	12.6	11.7	12.0	13.1	12.7	12.9
7	23.7	20.3	21.9	15.6	14.0	14.9	14.9	11.9	13.2	12.9	12.5	12.7
8	24.2	20.0	22.0	13.8	12.0	12.9	17.4	14.9	16.0	12.6	11.9	12.3
9	26.0	22.2	23.9	13.0	11.2	12.1	17.8	16.2	17.3	14.4	12.6	13.6
10	25.2	23.6	24.4	13.5	11.0	12.1	15.9	14.0	14.7	13.9	12.6	13.3
11	23.4	22.2	22.6	14.7	11.9	13.0	14.9	13.4	14.1	12.6	11.6	12.1
12	22.2	20.6	21.5	13.5	12.5	13.0	16.4	14.2	15.0	12.0	11.4	11.8
13	22.3	19.4	20.9	15.2	13.4	14.1	17.7	16.5	17.4	13.7	12.0	12.7
14	21.5	19.5	20.6	16.4	13.3	14.8	17.4	14.7	16.6	13.9	12.3	13.1
15	21.5	19.5	20.6	17.7	16.0	16.8	14.5	12.5	13.3	12.2	11.4	11.7
16	20.6	17.9	19.4	18.2	16.6	17.8	12.4	11.4	11.8	11.4	10.9	11.2
17	20.8	17.6	19.2	16.5	14.4	15.6	11.6	11.2	11.4	10.9	10.7	10.7
18	22.4	18.8	20.4	18.4	15.6	16.8	11.5	11.0	11.2	10.7	10.5	10.6
19	22.3	20.6	21.5	20.2	18.4	19.2	11.0	10.4	10.6	10.5	10.2	10.4
20	20.3	17.8	19.2	21.5	20.2	20.8	10.4	10.2	10.2	10.2	10.1	10.2
21	20.4	17.0	18.7	20.9	19.9	20.3	10.3	10.1	10.2	10.2	10.1	10.1
22	21.8	18.2	19.8	19.8	19.2	19.5	10.5	10.3	10.4	10.3	10.0	10.1
23	23.3	20.1	21.6	19.7	18.5	19.2	12.7	10.5	11.7	11.7	10.3	11.1
24	24.8	22.6	23.5	18.2	14.9	16.2	12.4	11.5	12.0	11.2	10.5	10.8
25	25.4	23.7	24.3	14.8	13.4	14.0	11.6	10.9	11.1	10.5	10.2	10.4
26	25.5	23.8	24.6	13.3	12.1	12.4	11.4	10.8	11.0	10.3	10.2	10.2
27	26.0	24.4	25.1	12.7	11.7	12.0	11.3	10.7	11.0	10.2	10.1	10.2
28	25.4	23.9	24.6	15.0	12.8	14.0	11.7	10.8	11.1	10.2	10.1	10.2
29	25.2	22.8	24.0	18.1	15.1	16.7	11.9	11.6	11.8	10.5	10.2	10.3
30	25.2	23.8	24.5	20.0	17.8	18.9	11.9	11.7	11.8	10.4	10.1	10.3
31	24.7	23.6	24.3	---	---	---	11.7	11.5	11.6	10.7	10.4	10.5
MONTH	29.6	17.0	23.0	23.3	11.0	16.0	18.5	10.1	12.9	14.4	10.0	11.6

TEMPERATURE, SOIL DEG. C), WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	11.1	10.4	10.6	15.2	11.8	13.4	16.1	14.2	15.2	23.5	19.3	21.2
2	10.5	10.1	10.3	17.6	13.7	15.5	14.1	12.7	13.4	25.3	22.1	23.6
3	11.4	10.1	10.5	18.5	15.5	16.9	14.7	12.1	13.4	25.2	21.9	23.6
4	11.5	10.7	11.1	19.4	15.9	17.6	14.9	13.3	14.0	23.1	20.6	22.0
5	11.6	10.5	11.0	19.5	17.6	18.5	16.9	13.0	14.8	21.3	19.8	20.5
6	11.3	10.3	10.7	20.1	18.8	19.4	16.7	14.0	15.3	21.3	18.6	20.0
7	11.1	10.4	10.7	21.1	19.1	20.0	19.8	15.5	17.3	22.9	18.5	20.5
8	11.0	10.4	10.6	20.5	19.4	20.0	20.8	17.3	19.0	21.6	19.9	20.6
9	10.5	10.1	10.2	19.5	17.7	18.7	22.2	18.4	20.1	21.8	20.3	20.9
10	10.1	9.9	9.9	19.3	16.8	18.8	21.4	19.5	20.5	24.3	19.4	21.7
11	10.3	9.9	10.0	16.6	14.3	15.5	23.2	19.9	21.3	25.9	21.3	23.5
12	10.2	9.8	9.9	14.7	12.9	13.8	22.6	20.2	21.4	26.5	22.7	24.6
13	9.8	9.8	9.8	13.6	12.4	13.0	20.4	17.9	19.2	26.0	23.7	24.9
14	10.2	9.8	9.9	12.9	12.0	12.4	19.3	18.0	18.4	25.3	22.9	24.1
15	13.8	10.3	12.0	13.0	11.6	12.3	19.7	17.3	18.4	25.3	22.6	23.8
16	13.5	12.4	12.8	13.1	11.3	12.1	22.8	18.4	20.2	27.0	22.6	24.7
17	13.1	11.9	12.5	15.2	12.5	13.6	22.8	22.0	22.4	27.2	24.2	25.7
18	14.9	12.8	13.6	14.8	12.7	13.8	22.3	21.0	21.7	26.1	24.4	25.2
19	14.7	13.5	14.1	14.5	12.4	13.2	24.3	21.0	22.5	26.6	22.9	24.6
20	13.4	12.6	13.0	14.5	12.0	13.2	25.5	23.0	24.1	26.8	24.7	25.7
21	14.4	11.8	13.0	14.9	12.2	13.5	24.8	23.8	24.2	27.0	24.3	25.7
22	16.1	13.2	14.4	14.2	13.1	13.8	23.6	21.0	22.1	27.8	24.2	26.0
23	15.6	13.7	14.7	14.5	11.8	13.1	23.7	19.2	21.3	27.5	24.9	26.3
24	15.1	14.0	14.6	15.8	12.3	13.9	23.3	22.1	22.8	26.6	22.9	24.6
25	14.7	13.9	14.5	14.5	13.3	13.9	22.3	20.4	21.1	22.7	21.1	21.9
26	13.8	12.9	13.3	16.7	14.4	15.3	20.2	19.0	19.5	22.1	20.9	21.7
27	15.3	12.6	13.8	15.9	14.2	14.8	20.2	18.6	19.3	22.2	20.4	21.3
28	15.3	13.8	14.6	16.5	13.4	14.8	21.7	17.7	19.6	22.9	19.5	21.3
29	14.7	12.7	13.7	15.3	13.9	14.4	20.2	18.2	19.3	21.9	20.2	20.9
30	---	---	---	14.3	13.7	14.0	22.2	19.1	20.3	21.1	20.1	20.5
31	---	---	---	16.8	13.1	14.8	---	---	---	21.3	20.7	21.0
MONTH	16.1	9.8	12.1	21.1	11.3	15.1	25.5	12.1	19.4	27.8	18.5	23.0

GROUND-WATER RECORDS

395859083440800. Local number, CL-139.

LOCATION.--Lat 39°58'59" Long 83°44'08", Hydrologic Unit 05080001, along State Route 4 near Springfield, OH.
Owner.--USGS-U.S. Corps of Engineers.

AQUIFER.--Sand and Gravel of Pleistocene age.

WELL CHARACTERISTICS.--Observation well drilled by hollow stem auger, diameter 3.0 in., depth 36.9 ft. Cased with Sch 40 PVC to 16.9 ft; .020 in. screen from 16.9 to 36.9 ft.

INSTRUMENTATION - Data logger--60 minute record. At this well there are 4 conductivity/water temperature probes at increasing depths within the well to better document vertical movement of high conductivity water on an hourly basis. Conductance/water temperature probes are set at 23.0 (level 4), 27.0 (level 3), 31.0 (level 2), and 35.0 (level 1) feet below land surface.

DATUM.--Elevation of land-surface datum is 1031.33 feet above National Geodetic Vertical Datum of 1929.
Measuring point: shelter floor 2.61 ft above land-surface datum.

REMARKS.--This station is part of an eight-site network to collect data for the Ohio Department of Transportation concerning road salt application and its effect(s) on shallow ground-water quality. Water-quality data for nearby wells is available in preceding tables.

PERIOD OF RECORD.--February 1991 to July 1992.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE (FOUR LEVELS): February 1991 to July 1992.

WATER TEMPERATURE (FOUR LEVELS): February 1991 to July 1992.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE:

LEVEL 1- Maximum, 899 microsiemens May 23, 1992; minimum, 831 microsiemens February 12, 1991.

LEVEL 2- Maximum, 860 microsiemens February 26, 1991; minimum, 809 microsiemens July 15, August 9, and September 13, 1991.

LEVEL 3- Maximum, 882 microsiemens October 18, 1991; minimum, 783 microsiemens April 20-21, 1992.

LEVEL 4- Maximum, 879 microsiemens, October 28,31, 1991; minimum 791 microsiemens June 21,22,27, 1992.

WATER TEMPERATURE:

LEVEL 1- Maximum, 13.2°C January 16 1992; minimum, 10.5°C many days in 1991.

LEVEL 2- Maximum, 13.5°C many days in 1991; minimum, 10.0°C May 29 and June 1-2, 1991.

LEVEL 3- Maximum, 14.0°C many days in 1991; minimum, 10.0°C many days in 1991.

LEVEL 4- Maximum, 14.1°C December 4-5,1991; minimum, 10.5°C June 23-30, July 4-7, 1992.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE:

LEVEL 1- Maximum, 899 microsiemens May 23, 1992;minimum, 842 microsiemens October 9,20-22, 1991.

LEVEL 2- Maximum, 859 microsiemens October 29-30, November 10-13 1991; minimum, 811 microsiemens October 1-2,1991.

LEVEL 3- Maximum, 882 microsiemens October 18, 1991; minimum, 783 microsiemens April 20-21, 1992.

LEVEL 4- Maximum, 879 microsiemens, October 28,31, 1991; minimum, 791 microsiemens June 21,22,27 1992.

WATER TEMPERATURE:

LEVEL 1- Maximum, 13.2°C January 16, 1992; minimum, 11.0°C June 23-July 7, 1992.

LEVEL 2- Maximum, 13.5°C many days in December, 1991 and January, 1992; minimum, 10.8°C July 1-2,4-6, 1992.

LEVEL 3- Maximum, 14.0°C many days in November and December 1991; minimum, 10.8°C June 25-July 7, 1992.

LEVEL 4- Maximum, 14.1°C December 4-5, 1991;minimum, 10.5°C June 23-30, July 4-7, 1992.

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#1 (35.0' BLS)
SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	848	843	845	884	882	883	886	880	881	874	873	874
2	848	843	845	886	881	885	881	880	881	875	874	875
3	845	844	844	886	881	884	881	880	880	875	873	874
4	845	844	844	887	882	883	881	880	881	875	874	874
5	847	845	846	887	882	883	880	879	880	875	874	875
6	848	843	847	887	882	883	880	879	879	877	875	876
7	848	843	846	885	883	884	879	877	878	877	876	876
8	849	844	846	886	880	885	878	876	877	877	876	876
9	849	842	846	887	881	885	878	876	877	876	874	875
10	854	843	847	887	882	886	879	877	878	876	875	875
11	855	848	850	889	883	888	879	877	878	876	875	876
12	851	850	850	889	884	887	878	876	877	876	875	876
13	852	850	851	890	884	888	876	875	875	876	876	876
14	852	850	851	890	884	887	877	875	876	878	876	877
15	853	851	852	890	884	888	877	876	876	879	878	878
16	853	851	852	886	884	885	877	875	876	880	874	878
17	854	846	850	891	885	886	876	874	875	880	878	879
18	846	843	845	886	884	885	875	874	874	880	879	879
19	847	844	846	885	885	885	875	874	874	880	875	879
20	847	842	846	885	885	885	875	874	874	880	879	879
21	847	842	846	886	885	885	875	873	874	880	877	879
22	848	842	846	886	885	886	875	873	874	878	877	878
23	864	843	853	886	885	886	873	871	872	879	878	878
24	872	864	867	887	881	886	872	870	871	880	879	880
25	874	870	872	887	881	886	872	870	871	880	879	880
26	877	874	876	887	881	885	871	868	870	880	879	880
27	880	877	879	886	880	884	871	868	869	880	878	879
28	882	880	881	886	884	885	870	868	869	879	878	879
29	882	880	881	885	879	884	871	869	870	879	878	878
30	881	880	881	884	880	883	873	870	872	880	878	879
31	883	881	882	---	---	---	874	872	873	879	878	879
MONTH	883	842	855	891	879	885	886	868	875	880	873	877

#1 (35.0' BLS)
SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	879	878	879	879	877	878	873	867	871	874	866	870
2	880	878	879	880	877	878	873	866	871	873	872	872
3	880	878	879	881	877	879	872	867	871	874	872	873
4	879	878	879	886	877	879	871	870	871	874	873	873
5	880	878	879	880	878	879	872	870	871	874	873	874
6	880	877	879	879	878	878	871	869	870	875	873	874
7	878	878	878	879	877	878	871	869	870	880	874	875
8	879	877	878	878	877	878	871	869	870	880	874	876
9	879	878	879	878	877	877	876	869	870	880	874	876
10	879	876	878	878	876	877	870	868	869	881	875	878
11	877	876	877	878	876	877	870	868	869	883	876	880
12	878	877	878	877	874	875	869	867	868	885	879	881
13	878	876	877	876	873	874	868	866	867	881	879	880
14	877	876	876	874	871	873	867	866	866	881	879	880
15	880	874	875	876	870	872	867	865	866	888	879	881
16	875	874	874	875	869	872	873	866	868	885	879	880
17	879	873	875	874	868	872	871	866	867	885	880	881
18	878	873	876	872	867	871	871	865	867	881	880	881
19	878	873	874	872	866	870	878	865	871	887	880	883
20	879	873	875	871	866	870	871	869	870	893	881	884
21	878	873	876	871	866	870	870	868	869	889	880	884
22	884	872	878	870	865	870	869	867	868	894	880	886
23	882	874	880	871	866	870	870	863	868	899	884	890
24	880	874	879	875	869	870	870	867	868	890	883	887
25	881	875	880	870	869	869	868	866	866	888	881	885
26	880	879	879	874	869	870	866	865	866	892	883	885
27	881	879	880	869	869	869	866	865	866	888	883	884
28	879	877	878	874	868	871	872	865	867	885	883	883
29	879	877	878	874	868	869	872	865	867	884	882	883
30	---	---	---	873	867	870	872	866	869	887	882	884
31	---	---	---	874	867	871	---	---	---	885	882	883
MONTH	884	872	878	886	865	873	878	863	869	899	866	880

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#1 (35.0' BLS)

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	884	880	882	874	869	873	---	---	---	---	---	---
2	883	879	881	875	869	873	---	---	---	---	---	---
3	884	879	881	875	871	872	---	---	---	---	---	---
4	884	881	882	872	870	871	---	---	---	---	---	---
5	887	881	884	871	870	870	---	---	---	---	---	---
6	890	878	884	871	869	870	---	---	---	---	---	---
7	883	878	879	870	868	869	---	---	---	---	---	---
8	883	877	879	---	---	---	---	---	---	---	---	---
9	883	877	879	---	---	---	---	---	---	---	---	---
10	882	875	878	---	---	---	---	---	---	---	---	---
11	887	876	880	---	---	---	---	---	---	---	---	---
12	888	875	880	---	---	---	---	---	---	---	---	---
13	887	880	882	---	---	---	---	---	---	---	---	---
14	888	880	883	---	---	---	---	---	---	---	---	---
15	881	879	880	---	---	---	---	---	---	---	---	---
16	880	878	879	---	---	---	---	---	---	---	---	---
17	883	877	879	---	---	---	---	---	---	---	---	---
18	878	877	878	---	---	---	---	---	---	---	---	---
19	879	876	877	---	---	---	---	---	---	---	---	---
20	876	873	875	---	---	---	---	---	---	---	---	---
21	877	873	873	---	---	---	---	---	---	---	---	---
22	874	871	873	---	---	---	---	---	---	---	---	---
23	876	872	873	---	---	---	---	---	---	---	---	---
24	876	871	873	---	---	---	---	---	---	---	---	---
25	876	871	874	---	---	---	---	---	---	---	---	---
26	877	871	874	---	---	---	---	---	---	---	---	---
27	877	870	873	---	---	---	---	---	---	---	---	---
28	878	870	873	---	---	---	---	---	---	---	---	---
29	876	870	873	---	---	---	---	---	---	---	---	---
30	875	869	873	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	890	869	878	875	868	871	---	---	---	---	---	---
YEAR	899	842	874									

#2 (31.0' BLS)

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	817	811	815	856	855	855	847	842	846	842	841	842
2	818	811	815	857	856	856	848	842	846	845	840	841
3	817	812	814	857	856	857	847	845	846	844	839	841
4	817	812	813	858	856	857	843	841	843	844	838	840
5	815	813	814	858	856	857	846	841	843	843	838	839
6	816	815	815	858	857	857	847	841	842	841	840	840
7	817	815	816	858	857	857	846	840	843	841	840	840
8	817	813	815	858	857	858	845	840	844	845	839	841
9	818	813	817	858	857	858	845	840	843	845	838	842
10	818	812	816	859	857	858	846	841	842	844	838	839
11	819	814	815	859	858	858	846	841	843	843	838	841
12	816	815	815	859	854	858	846	840	843	843	837	840
13	817	814	815	859	851	857	845	844	844	843	837	842
14	817	816	816	857	851	855	846	840	843	844	838	842
15	818	816	817	856	853	855	843	842	842	843	838	840
16	818	816	817	855	850	853	843	842	842	841	838	839
17	823	817	820	854	848	851	847	841	843	843	838	839
18	826	824	825	853	847	850	843	841	842	842	837	838
19	827	824	826	853	847	850	843	841	842	843	837	840
20	828	822	826	853	846	849	846	840	842	843	837	841
21	828	822	825	849	847	847	845	840	841	843	837	840
22	827	822	825	849	847	848	845	841	841	841	836	840
23	855	822	835	850	847	848	845	839	841	841	839	840
24	856	851	854	852	846	850	845	840	841	842	841	841
25	857	856	856	853	846	850	843	841	842	842	836	841
26	857	856	857	851	847	849	846	840	842	842	840	841
27	858	857	857	850	845	849	845	840	842	842	839	840
28	858	853	857	850	846	849	842	840	841	840	839	839
29	859	853	857	847	845	846	842	841	841	839	838	839
30	859	853	856	846	843	845	842	840	841	839	838	839
31	855	854	854	---	---	---	842	841	842	839	838	838
MONTH	859	811	828	859	843	853	848	839	843	845	836	840

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#3 (27.0' BLS)
SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	878	872	873	817	816	816	811	808	809	806	805	806
2	875	873	874	818	816	817	810	809	810	806	804	805
3	876	874	875	818	817	817	813	809	811	809	802	805
4	876	874	875	818	812	816	813	810	811	807	802	802
5	879	875	877	817	812	815	811	809	810	806	801	802
6	879	878	878	819	813	817	811	808	810	807	801	803
7	880	874	878	813	813	813	810	807	809	807	803	803
8	880	875	877	815	813	814	809	807	808	807	802	804
9	881	875	879	818	813	814	809	807	808	806	800	805
10	881	874	876	818	812	814	810	809	809	805	800	803
11	877	876	877	818	813	814	810	807	808	806	800	803
12	878	877	877	814	813	814	809	808	808	805	800	804
13	879	877	878	814	813	813	810	808	809	804	799	804
14	879	878	879	814	813	813	811	810	810	806	802	805
15	880	875	879	814	812	813	812	811	811	807	802	806
16	881	875	878	814	811	812	811	810	810	805	799	803
17	881	875	877	814	809	813	811	809	810	803	799	802
18	882	877	879	815	809	813	810	809	809	802	796	800
19	880	877	879	813	812	812	809	808	809	802	797	800
20	880	879	879	813	812	812	810	807	809	802	800	801
21	881	878	880	813	808	812	807	806	807	804	799	801
22	880	878	879	814	808	812	808	806	807	805	800	801
23	881	817	856	814	808	810	806	805	805	807	802	802
24	820	817	819	811	810	810	807	805	806	804	803	804
25	820	818	819	812	808	810	808	806	807	804	802	803
26	820	818	819	811	809	810	807	805	806	808	802	804
27	820	818	819	811	809	810	807	804	805	807	802	804
28	820	815	819	810	809	809	806	804	805	807	802	805
29	820	815	818	810	807	809	805	804	805	806	801	806
30	820	815	816	813	807	809	806	805	805	806	801	804
31	816	815	815	---	---	---	806	805	806	806	805	805
MONTH	882	815	861	819	807	813	813	804	808	809	796	803

#3 (27.0' BLS)
SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY				MARCH			APRIL			MAY		
1	806	805	805	799	798	798	794	789	793	801	796	798
2	806	804	805	798	796	797	794	790	793	799	797	798
3	806	803	805	797	796	797	793	789	792	800	792	796
4	805	804	804	799	795	796	791	790	791	798	793	797
5	807	803	804	796	795	795	791	789	790	798	791	795
6	805	803	804	797	795	796	791	789	790	796	792	794
7	803	802	803	797	796	796	790	789	789	796	791	793
8	804	802	803	796	793	794	793	788	789	793	790	792
9	802	801	802	798	793	794	793	788	790	795	790	791
10	806	802	803	795	793	793	793	788	789	796	790	793
11	806	801	802	795	794	795	792	788	790	796	791	793
12	807	802	803	798	792	795	793	788	790	798	792	795
13	808	802	804	798	792	794	792	787	790	798	796	797
14	807	802	806	797	791	794	793	788	792	799	797	798
15	806	799	803	796	790	793	793	788	792	802	798	799
16	806	802	805	796	790	793	793	792	792	801	797	799
17	806	802	804	794	792	793	792	787	790	800	799	799
18	803	801	802	793	792	793	788	786	787	801	799	800
19	803	801	802	793	792	793	788	784	786	801	799	800
20	804	802	803	794	792	793	789	783	785	805	800	802
21	807	801	802	795	790	792	788	783	785	803	800	802
22	808	801	803	791	790	790	789	784	786	807	801	803
23	808	802	804	795	789	792	790	784	787	807	801	803
24	806	801	802	794	790	792	790	786	789	802	801	801
25	806	800	803	794	788	792	791	787	790	806	800	802
26	805	800	802	793	791	792	792	787	791	807	801	802
27	803	797	801	793	791	792	794	791	793	808	801	803
28	802	799	801	795	790	792	798	792	795	806	801	803
29	799	797	798	791	790	791	799	794	796	805	800	804
30	---	---	---	795	790	793	801	794	798	804	798	801
31	---	---	---	794	790	792	---	---	---	804	801	802
MONTH	808	797	803	799	788	794	801	783	790	808	790	799

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#3 (27.0' BLS)

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	805	804	804	793	789	791	---	---	---	---	---	---
2	806	804	805	794	789	791	---	---	---	---	---	---
3	808	803	805	794	787	791	---	---	---	---	---	---
4	805	803	804	793	788	791	---	---	---	---	---	---
5	806	803	804	793	789	791	---	---	---	---	---	---
6	810	803	806	793	787	790	---	---	---	---	---	---
7	806	801	803	793	789	789	---	---	---	---	---	---
8	806	801	804	---	---	---	---	---	---	---	---	---
9	805	800	803	---	---	---	---	---	---	---	---	---
10	805	800	802	---	---	---	---	---	---	---	---	---
11	805	798	802	---	---	---	---	---	---	---	---	---
12	804	798	801	---	---	---	---	---	---	---	---	---
13	804	798	802	---	---	---	---	---	---	---	---	---
14	803	800	801	---	---	---	---	---	---	---	---	---
15	802	800	801	---	---	---	---	---	---	---	---	---
16	802	797	800	---	---	---	---	---	---	---	---	---
17	800	798	799	---	---	---	---	---	---	---	---	---
18	800	793	797	---	---	---	---	---	---	---	---	---
19	794	788	790	---	---	---	---	---	---	---	---	---
20	800	792	796	---	---	---	---	---	---	---	---	---
21	804	800	802	---	---	---	---	---	---	---	---	---
22	803	790	797	---	---	---	---	---	---	---	---	---
23	796	792	794	---	---	---	---	---	---	---	---	---
24	795	793	793	---	---	---	---	---	---	---	---	---
25	796	792	793	---	---	---	---	---	---	---	---	---
26	797	793	794	---	---	---	---	---	---	---	---	---
27	795	790	792	---	---	---	---	---	---	---	---	---
28	794	788	791	---	---	---	---	---	---	---	---	---
29	793	785	789	---	---	---	---	---	---	---	---	---
30	794	786	790	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	810	785	799	794	787	791	---	---	---	---	---	---
YEAR	882	783	807									

#4 (23.0' BLS)

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	---	---	---	875	874	874	871	870	871	857	856	856
2	---	---	---	876	870	874	872	870	871	856	855	856
3	---	---	---	876	870	873	871	870	871	855	854	854
4	---	---	---	875	870	871	871	865	870	854	853	854
5	---	---	---	875	869	871	871	865	869	854	853	853
6	---	---	---	875	869	870	870	869	869	854	853	853
7	---	---	---	871	870	870	869	867	868	854	853	854
8	---	---	---	871	869	870	868	866	867	858	853	854
9	---	---	---	871	870	870	867	866	867	858	852	856
10	---	---	---	871	870	870	868	867	868	857	851	854
11	---	---	---	871	870	870	868	866	867	857	852	854
12	---	---	---	871	870	871	867	865	866	856	856	856
13	---	---	---	871	870	870	865	865	865	857	851	855
14	---	---	---	871	869	870	867	865	865	862	856	860
15	---	---	---	870	869	869	867	866	867	862	853	860
16	---	---	---	871	868	869	867	865	866	858	850	853
17	---	---	---	871	870	871	866	865	866	853	851	852
18	---	---	---	871	869	870	866	864	865	852	851	851
19	---	---	---	870	869	870	864	863	863	853	846	850
20	---	---	---	870	869	870	863	861	862	858	852	852
21	---	---	---	870	870	870	862	860	861	855	848	852
22	---	---	---	871	870	871	862	860	861	856	849	851
23	---	---	---	871	870	871	861	859	860	858	852	857
24	877	875	876	873	871	872	860	859	860	858	851	854
25	877	876	877	873	872	872	861	860	860	859	852	856
26	878	876	877	873	872	872	860	858	859	858	853	857
27	878	876	877	872	872	872	860	857	858	858	853	857
28	879	873	877	872	870	871	858	857	857	856	854	855
29	878	872	875	870	869	870	857	857	857	855	853	854
30	878	872	874	870	869	870	858	857	857	854	852	853
31	879	872	874	---	---	---	857	856	857	852	850	852
MONTH	879	872	876	876	868	871	872	856	864	862	846	854

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#1 (35.0' BLS)
WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	12.1	11.9	12.0	12.3	12.3	12.3	13.0	12.7	13.0	13.0	13.0	13.0
2	12.1	11.9	12.0	12.5	12.3	12.3	13.0	13.0	13.0	13.0	13.0	13.0
3	12.1	12.1	12.1	12.5	12.3	12.3	13.0	13.0	13.0	13.0	13.0	13.0
4	12.1	12.1	12.1	12.5	12.3	12.4	13.0	12.9	12.9	13.0	13.0	13.0
5	12.1	12.1	12.1	12.5	12.3	12.5	13.0	12.9	12.9	13.0	13.0	13.0
6	12.3	12.0	12.1	12.5	12.3	12.5	13.0	13.0	13.0	13.0	13.0	13.0
7	12.3	12.0	12.1	12.5	12.5	12.5	13.0	13.0	13.0	13.0	13.0	13.0
8	12.3	12.0	12.2	12.7	12.5	12.5	13.0	13.0	13.0	13.0	13.0	13.0
9	12.3	12.1	12.2	12.7	12.5	12.5	13.0	13.0	13.0	13.0	13.0	13.0
10	12.3	12.1	12.2	12.7	12.5	12.5	13.0	13.0	13.0	13.0	13.0	13.0
11	12.3	12.1	12.3	12.7	12.5	12.5	13.0	13.0	13.0	13.0	13.0	13.0
12	12.3	12.3	12.3	12.7	12.5	12.6	13.0	13.0	13.0	13.0	13.0	13.0
13	12.3	12.3	12.3	12.7	12.5	12.5	13.0	13.0	13.0	13.0	13.0	13.0
14	12.3	12.3	12.3	12.8	12.5	12.6	13.0	13.0	13.0	13.0	13.0	13.0
15	12.3	12.3	12.3	12.8	12.5	12.6	13.0	13.0	13.0	13.0	12.9	12.9
16	12.3	12.3	12.3	12.8	12.7	12.8	13.0	12.9	12.9	13.2	12.9	13.0
17	12.3	12.3	12.3	12.8	12.5	12.7	13.0	13.0	13.0	13.0	12.9	13.0
18	12.4	12.3	12.3	12.8	12.7	12.8	13.0	12.9	13.0	13.0	12.9	12.9
19	12.3	12.3	12.3	12.8	12.8	12.8	13.0	12.9	12.9	13.1	12.9	12.9
20	12.5	12.2	12.3	12.8	12.8	12.8	13.0	13.0	13.0	13.0	13.0	13.0
21	12.5	12.3	12.3	12.8	12.8	12.8	13.0	13.0	13.0	13.0	13.0	13.0
22	12.5	12.3	12.3	12.8	12.7	12.8	13.0	13.0	13.0	13.0	13.0	13.0
23	12.5	12.3	12.3	12.8	12.7	12.8	13.0	13.0	13.0	13.0	13.0	13.0
24	12.3	12.1	12.3	13.0	12.7	12.7	13.0	13.0	13.0	13.0	12.9	13.0
25	12.3	12.3	12.3	13.0	12.7	12.7	13.0	13.0	13.0	13.0	12.9	12.9
26	12.3	12.3	12.3	13.0	12.7	12.8	13.0	13.0	13.0	13.0	12.9	13.0
27	12.3	12.3	12.3	13.0	12.7	12.8	13.0	13.0	13.0	13.0	12.9	13.0
28	12.3	12.3	12.3	12.8	12.7	12.7	13.0	13.0	13.0	13.0	13.0	13.0
29	12.3	12.3	12.3	13.0	12.8	12.8	13.0	13.0	13.0	13.0	13.0	13.0
30	12.3	12.3	12.3	13.0	12.7	12.8	13.0	13.0	13.0	13.0	13.0	13.0
31	12.3	12.3	12.3	--	---	---	13.0	13.0	13.0	13.0	13.0	13.0
MONTH	12.5	11.9	12.2	13.0	12.3	12.6	13.0	12.7	13.0	13.2	12.9	13.0

#1 (35.0' BLS)
WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	13.0	13.0	13.0	12.8	12.7	12.7	12.5	12.3	12.3	12.1	11.8	11.9
2	13.0	12.9	13.0	12.8	12.7	12.8	12.5	12.2	12.3	11.9	11.9	11.9
3	13.0	13.0	13.0	12.8	12.7	12.8	12.5	12.2	12.3	11.9	11.8	11.9
4	13.0	13.0	13.0	12.8	12.7	12.8	12.3	12.3	12.3	11.9	11.8	11.8
5	13.0	13.0	13.0	12.8	12.7	12.8	12.3	12.3	12.3	11.9	11.8	11.8
6	13.0	12.9	13.0	12.8	12.8	12.8	12.3	12.3	12.3	11.9	11.8	11.8
7	13.0	13.0	13.0	12.8	12.8	12.8	12.3	12.3	12.3	11.9	11.7	11.8
8	13.0	13.0	13.0	12.8	12.7	12.8	12.4	12.3	12.3	11.9	11.6	11.8
9	13.0	12.9	13.0	12.8	12.7	12.8	12.4	12.3	12.3	11.9	11.6	11.8
10	13.0	12.9	13.0	12.8	12.7	12.7	12.3	12.3	12.3	11.8	11.6	11.7
11	13.0	13.0	13.0	12.7	12.7	12.7	12.4	12.3	12.3	11.9	11.6	11.7
12	13.0	12.9	13.0	12.7	12.7	12.7	12.3	12.3	12.3	11.7	11.6	11.7
13	13.0	13.0	13.0	12.7	12.7	12.7	12.3	12.3	12.3	11.7	11.6	11.6
14	13.0	13.0	13.0	12.7	12.7	12.7	12.3	12.3	12.3	11.7	11.6	11.6
15	13.0	12.7	13.0	12.7	12.5	12.7	12.3	12.3	12.3	11.7	11.6	11.6
16	13.0	13.0	13.0	12.8	12.5	12.6	12.4	12.1	12.2	11.7	11.5	11.6
17	13.0	12.7	12.9	12.7	12.5	12.6	12.3	12.1	12.3	11.7	11.5	11.6
18	13.0	12.7	12.9	12.7	12.5	12.5	12.3	12.1	12.3	11.6	11.6	11.6
19	13.0	12.7	12.9	12.7	12.5	12.6	12.3	12.1	12.2	11.7	11.4	11.5
20	13.0	12.7	12.9	12.7	12.5	12.5	12.1	12.1	12.1	11.7	11.4	11.6
21	13.0	12.7	12.8	12.7	12.5	12.5	12.1	12.1	12.1	11.6	11.4	11.5
22	13.0	12.7	12.8	12.7	12.5	12.5	12.1	12.1	12.1	11.6	11.4	11.5
23	13.0	12.7	12.8	12.7	12.5	12.5	12.3	12.0	12.1	11.6	11.4	11.5
24	13.0	12.7	12.7	12.5	12.3	12.5	12.1	12.1	12.1	11.6	11.4	11.4
25	13.0	12.7	12.7	12.5	12.5	12.5	12.1	12.0	12.1	11.6	11.4	11.4
26	12.7	12.7	12.7	12.5	12.3	12.5	12.1	12.0	12.1	11.4	11.4	11.4
27	12.8	12.7	12.7	12.5	12.5	12.5	12.1	12.0	12.1	11.4	11.4	11.4
28	12.8	12.7	12.7	12.5	12.3	12.4	12.1	11.9	12.0	11.5	11.4	11.4
29	12.8	12.7	12.7	12.5	12.3	12.5	12.1	11.9	12.0	11.4	11.4	11.4
30	---	---	---	12.5	12.3	12.4	12.1	11.8	11.9	11.4	11.4	11.4
31	---	---	---	12.5	12.3	12.4	---	---	---	11.4	11.4	11.4
MONTH	13.0	12.7	12.9	12.8	12.3	12.6	12.5	11.8	12.2	12.1	11.4	11.6

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#1 (35.0' BLS)
WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	11.5	11.4	11.4	11.2	11.0	11.0	---	---	---	---	---	---
2	11.5	11.4	11.4	11.2	11.0	11.0	---	---	---	---	---	---
3	11.5	11.4	11.4	11.0	11.0	11.0	---	---	---	---	---	---
4	11.4	11.4	11.4	11.0	11.0	11.0	---	---	---	---	---	---
5	11.5	11.4	11.4	11.0	11.0	11.0	---	---	---	---	---	---
6	11.5	11.2	11.4	11.0	11.0	11.0	---	---	---	---	---	---
7	11.5	11.2	11.4	11.0	11.0	11.0	---	---	---	---	---	---
8	11.5	11.2	11.4	---	---	---	---	---	---	---	---	---
9	11.4	11.2	11.3	---	---	---	---	---	---	---	---	---
10	11.4	11.2	11.3	---	---	---	---	---	---	---	---	---
11	11.4	11.2	11.3	---	---	---	---	---	---	---	---	---
12	11.4	11.2	11.3	---	---	---	---	---	---	---	---	---
13	11.3	11.2	11.2	---	---	---	---	---	---	---	---	---
14	11.2	11.2	11.2	---	---	---	---	---	---	---	---	---
15	11.2	11.2	11.2	---	---	---	---	---	---	---	---	---
16	11.3	11.2	11.2	---	---	---	---	---	---	---	---	---
17	11.2	11.2	11.2	---	---	---	---	---	---	---	---	---
18	11.2	11.2	11.2	---	---	---	---	---	---	---	---	---
19	11.2	11.2	11.2	---	---	---	---	---	---	---	---	---
20	11.2	11.2	11.2	---	---	---	---	---	---	---	---	---
21	11.2	11.2	11.2	---	---	---	---	---	---	---	---	---
22	11.2	11.2	11.2	---	---	---	---	---	---	---	---	---
23	11.2	11.0	11.2	---	---	---	---	---	---	---	---	---
24	11.2	11.0	11.2	---	---	---	---	---	---	---	---	---
25	11.2	11.0	11.1	---	---	---	---	---	---	---	---	---
26	11.2	11.0	11.1	---	---	---	---	---	---	---	---	---
27	11.2	11.0	11.1	---	---	---	---	---	---	---	---	---
28	11.2	11.0	11.1	---	---	---	---	---	---	---	---	---
29	11.2	11.0	11.1	---	---	---	---	---	---	---	---	---
30	11.2	11.0	11.0	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	11.5	11.0	11.2	11.2	11.0	11.0	---	---	---	---	---	---
YEAR	13.2	11.0	12.3									

#2 (31.0' BLS)
WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	12.8	12.5	12.6	13.0	13.0	13.0	13.5	13.2	13.2	13.5	13.4	13.4
2	12.8	12.5	12.6	13.0	13.0	13.0	13.5	13.2	13.3	13.5	13.2	13.4
3	12.8	12.6	12.7	13.0	13.0	13.0	13.2	13.2	13.2	13.5	13.2	13.4
4	12.8	12.6	12.7	13.0	12.9	13.0	13.4	13.4	13.4	13.5	13.2	13.4
5	12.8	12.7	12.8	13.0	12.9	13.0	13.5	13.2	13.4	13.5	13.2	13.4
6	12.8	12.7	12.8	13.0	13.0	13.0	13.5	13.2	13.4	13.5	13.5	13.5
7	12.8	12.7	12.8	13.0	13.0	13.0	13.5	13.2	13.4	13.5	13.4	13.4
8	13.0	12.7	12.8	13.0	12.9	13.0	13.5	13.2	13.3	13.5	13.2	13.4
9	13.0	12.8	12.8	13.0	12.9	13.0	13.5	13.2	13.3	13.5	13.2	13.3
10	13.0	12.8	12.8	13.0	12.9	13.0	13.5	13.2	13.4	13.5	13.2	13.4
11	13.0	12.8	13.0	13.0	13.0	13.0	13.5	13.2	13.4	13.5	13.2	13.3
12	13.0	13.0	13.0	13.2	13.0	13.0	13.5	13.2	13.3	13.5	13.2	13.4
13	13.0	13.0	13.0	13.2	13.0	13.0	13.2	13.2	13.2	13.5	13.2	13.3
14	13.0	13.0	13.0	13.2	13.0	13.0	13.5	13.2	13.3	13.5	13.2	13.2
15	13.0	13.0	13.0	13.0	13.0	13.0	13.5	13.4	13.4	13.4	13.2	13.4
16	13.0	13.0	13.0	13.2	13.0	13.0	13.4	13.4	13.4	13.4	13.4	13.4
17	13.0	13.0	13.0	13.2	13.0	13.1	13.5	13.2	13.4	13.5	13.2	13.4
18	13.0	13.0	13.0	13.2	13.0	13.1	13.4	13.4	13.4	13.4	13.2	13.4
19	13.0	13.0	13.0	13.2	13.0	13.1	13.5	13.4	13.4	13.4	13.2	13.3
20	13.2	13.0	13.0	13.2	13.0	13.1	13.5	13.2	13.4	13.5	13.2	13.3
21	13.2	13.0	13.1	13.2	13.2	13.2	13.5	13.2	13.4	13.4	13.2	13.3
22	13.2	13.0	13.1	13.2	13.2	13.2	13.5	13.2	13.4	13.4	13.2	13.2
23	13.2	12.8	13.0	13.2	13.2	13.2	13.5	13.2	13.4	13.2	13.2	13.2
24	12.8	12.8	12.8	13.4	13.2	13.2	13.5	13.2	13.4	13.2	13.2	13.2
25	12.8	12.8	12.8	13.4	13.2	13.3	13.5	13.4	13.4	13.4	13.2	13.2
26	12.8	12.8	12.8	13.4	13.2	13.3	13.5	13.2	13.4	13.2	13.2	13.2
27	12.8	12.8	12.8	13.4	13.2	13.2	13.5	13.2	13.4	13.2	13.2	13.2
28	13.0	12.8	12.8	13.2	13.2	13.2	13.5	13.4	13.4	13.2	13.2	13.2
29	13.0	12.8	12.8	13.3	13.2	13.2	13.5	13.5	13.4	13.2	13.2	13.2
30	13.0	12.8	12.9	13.3	13.2	13.2	13.5	13.4	13.4	13.2	13.2	13.2
31	13.0	13.0	13.0	---	---	---	13.5	13.4	13.4	13.2	13.2	13.2
MONTH	13.2	12.5	12.9	13.4	12.9	13.1	13.5	13.2	13.4	13.5	13.2	13.3

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#3 (27.0' BLS)

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	13.1	12.8	13.0	13.5	13.5	13.5	14.0	14.0	13.9	14.0	13.9	13.9
2	13.0	13.0	13.0	13.5	13.4	13.5	14.0	13.9	13.9	14.0	13.9	13.9
3	13.0	13.0	13.0	13.5	13.4	13.4	14.0	13.9	13.9	14.0	13.7	13.9
4	13.0	13.0	13.0	13.7	13.4	13.5	13.9	13.9	13.9	14.0	13.7	13.9
5	13.0	13.0	13.0	13.7	13.4	13.5	13.9	13.9	13.9	14.0	13.7	13.9
6	13.0	13.0	13.0	13.7	13.5	13.5	14.0	13.9	13.9	14.0	13.7	13.9
7	13.2	13.0	13.0	13.7	13.7	13.7	14.0	13.9	14.0	14.0	13.7	13.9
8	13.2	13.0	13.1	13.7	13.6	13.7	14.0	14.0	14.0	14.0	13.7	13.8
9	13.2	13.0	13.1	13.7	13.5	13.7	14.0	13.9	14.0	14.0	13.7	13.7
10	13.3	13.0	13.2	13.7	13.5	13.7	14.0	13.9	13.9	13.9	13.7	13.8
11	13.2	13.2	13.2	13.7	13.5	13.7	14.0	13.9	13.9	13.9	13.7	13.8
12	13.2	13.2	13.2	13.7	13.7	13.7	14.0	13.9	14.0	13.9	13.7	13.7
13	13.3	13.2	13.2	13.7	13.7	13.7	14.0	14.0	14.0	14.0	13.7	13.7
14	13.3	13.2	13.2	13.7	13.7	13.7	14.0	13.9	13.9	13.9	13.7	13.7
15	13.5	13.2	13.3	13.7	13.7	13.7	13.9	13.9	13.9	13.9	13.6	13.7
16	13.5	13.2	13.3	13.7	13.7	13.7	13.9	13.9	13.9	13.9	13.6	13.8
17	13.5	13.2	13.4	14.0	13.7	13.8	14.0	13.9	13.9	13.9	13.7	13.7
18	13.5	13.3	13.4	14.0	13.7	13.7	13.9	13.9	13.9	13.9	13.6	13.7
19	13.5	13.5	13.5	13.7	13.7	13.7	14.0	13.9	13.9	13.9	13.6	13.7
20	13.5	13.4	13.5	13.7	13.7	13.7	14.0	13.9	13.9	13.7	13.7	13.7
21	13.5	13.4	13.5	14.0	13.7	13.7	14.0	13.9	13.9	13.7	13.5	13.7
22	13.5	13.5	13.5	14.0	13.7	13.8	14.0	13.9	13.9	13.7	13.5	13.7
23	13.5	13.2	13.4	14.0	13.7	13.9	14.0	13.9	14.0	13.7	13.5	13.7
24	13.3	13.2	13.3	13.9	13.9	13.9	14.0	13.9	13.9	13.7	13.6	13.7
25	13.3	13.2	13.3	13.9	13.9	13.9	14.0	13.9	13.9	13.7	13.6	13.7
26	13.3	13.2	13.3	14.0	13.9	13.9	14.0	13.9	13.9	13.7	13.5	13.6
27	13.3	13.2	13.3	14.0	13.9	13.9	14.0	13.9	13.9	13.7	13.4	13.6
28	13.5	13.2	13.3	14.0	14.0	14.0	14.0	13.9	13.9	13.7	13.4	13.5
29	13.5	13.2	13.3	14.0	14.0	14.0	13.9	13.9	13.9	13.7	13.4	13.5
30	13.5	13.2	13.4	14.0	13.7	14.0	13.9	13.9	13.9	13.7	13.4	13.5
31	13.5	13.5	13.5	---	---	---	13.9	13.9	13.9	13.5	13.4	13.4
MONTH	13.5	12.8	13.2	14.0	13.4	13.7	14.0	13.9	13.9	14.0	13.4	13.7

#3 (27.0' BLS)

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	13.5	13.4	13.4	13.0	13.0	13.0	12.5	12.3	12.3	11.8	11.6	11.7
2	13.5	13.4	13.4	13.0	13.0	13.0	12.5	12.2	12.3	11.7	11.6	11.7
3	13.5	13.4	13.5	13.0	13.0	13.0	12.5	12.2	12.3	11.7	11.6	11.6
4	13.5	13.4	13.5	13.0	13.0	13.0	12.3	12.3	12.3	11.8	11.6	11.6
5	13.5	13.4	13.4	13.0	13.0	13.0	12.3	12.3	12.3	11.6	11.6	11.6
6	13.5	13.4	13.4	13.0	13.0	13.0	12.3	12.3	12.3	11.6	11.6	11.6
7	13.5	13.4	13.4	13.0	13.0	13.0	12.3	12.3	12.3	11.7	11.4	11.6
8	13.5	13.4	13.4	13.0	13.0	13.0	12.3	12.1	12.3	11.6	11.6	11.6
9	13.5	13.4	13.4	13.0	12.8	13.0	12.3	12.1	12.3	11.6	11.4	11.6
10	13.5	13.2	13.4	13.0	13.0	13.0	12.3	12.1	12.3	11.7	11.4	11.5
11	13.5	13.2	13.4	13.0	12.9	13.0	12.3	12.1	12.2	11.6	11.4	11.5
12	13.5	13.2	13.4	13.0	12.7	12.9	12.3	12.0	12.2	11.6	11.4	11.5
13	13.5	13.2	13.4	13.0	12.7	12.9	12.3	12.1	12.2	11.5	11.4	11.4
14	13.5	13.2	13.3	13.0	12.7	12.9	12.3	12.0	12.1	11.4	11.4	11.4
15	13.5	13.2	13.2	13.0	12.7	12.8	12.3	12.0	12.1	11.5	11.4	11.4
16	13.2	13.2	13.2	13.0	12.7	12.8	12.1	12.1	12.1	11.5	11.4	11.4
17	13.2	13.2	13.2	12.8	12.7	12.8	12.1	12.1	12.1	11.5	11.4	11.4
18	13.2	13.2	13.2	12.7	12.7	12.7	12.1	12.1	12.1	11.4	11.4	11.4
19	13.2	13.2	13.2	12.7	12.7	12.7	12.1	12.1	12.1	11.5	11.4	11.4
20	13.2	13.2	13.2	12.8	12.7	12.7	12.1	11.9	12.0	11.5	11.4	11.4
21	13.2	13.0	13.2	12.8	12.5	12.7	12.1	11.9	12.0	11.5	11.4	11.4
22	13.2	13.0	13.2	12.7	12.7	12.7	12.1	11.8	12.0	11.5	11.2	11.4
23	13.2	13.0	13.2	12.7	12.5	12.6	12.0	11.8	11.9	11.5	11.2	11.4
24	13.2	13.0	13.2	12.7	12.5	12.6	12.1	11.8	11.9	11.4	11.4	11.4
25	13.2	13.0	13.1	12.7	12.5	12.5	12.0	11.8	11.8	11.4	11.2	11.4
26	13.2	13.0	13.1	12.5	12.5	12.5	12.0	11.8	11.8	11.4	11.2	11.4
27	13.2	13.0	13.0	12.5	12.5	12.5	11.9	11.8	11.8	11.4	11.2	11.3
28	13.0	13.0	13.0	12.5	12.3	12.5	11.8	11.6	11.7	11.4	11.2	11.3
29	13.0	13.0	13.0	12.5	12.5	12.5	11.9	11.6	11.8	11.4	11.2	11.2
30	---	---	---	12.5	12.3	12.4	11.9	11.6	11.7	11.4	11.2	11.2
31	---	---	---	12.5	12.3	12.4	---	---	---	11.2	11.2	11.2
MONTH	13.5	13.0	13.3	13.0	12.3	12.8	12.5	11.6	12.1	11.8	11.2	11.4

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#3 (27.0' BLS)
WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	11.2	11.2	11.2	11.0	10.8	10.9	---	---	---	---	---	---
2	11.2	11.2	11.2	11.0	10.8	10.9	---	---	---	---	---	---
3	11.2	11.0	11.2	11.0	10.8	10.9	---	---	---	---	---	---
4	11.2	11.2	11.2	11.0	10.8	10.9	---	---	---	---	---	---
5	11.2	11.2	11.2	11.0	10.8	10.9	---	---	---	---	---	---
6	11.2	11.0	11.1	11.0	10.8	10.8	---	---	---	---	---	---
7	11.2	11.0	11.2	11.0	10.8	11.0	---	---	---	---	---	---
8	11.2	11.0	11.1	---	---	---	---	---	---	---	---	---
9	11.2	11.0	11.1	---	---	---	---	---	---	---	---	---
10	11.2	11.0	11.1	---	---	---	---	---	---	---	---	---
11	11.2	11.0	11.1	---	---	---	---	---	---	---	---	---
12	11.2	11.0	11.1	---	---	---	---	---	---	---	---	---
13	11.2	11.0	11.0	---	---	---	---	---	---	---	---	---
14	11.0	11.0	11.0	---	---	---	---	---	---	---	---	---
15	11.0	11.0	11.0	---	---	---	---	---	---	---	---	---
16	11.2	11.0	11.0	---	---	---	---	---	---	---	---	---
17	11.0	11.0	11.0	---	---	---	---	---	---	---	---	---
18	11.0	11.0	11.0	---	---	---	---	---	---	---	---	---
19	11.0	11.0	11.0	---	---	---	---	---	---	---	---	---
20	11.0	11.0	11.0	---	---	---	---	---	---	---	---	---
21	11.0	11.0	11.0	---	---	---	---	---	---	---	---	---
22	11.2	11.0	11.0	---	---	---	---	---	---	---	---	---
23	11.0	11.0	11.0	---	---	---	---	---	---	---	---	---
24	11.0	11.0	11.0	---	---	---	---	---	---	---	---	---
25	11.0	10.8	11.0	---	---	---	---	---	---	---	---	---
26	11.0	10.8	11.0	---	---	---	---	---	---	---	---	---
27	11.0	11.0	11.0	---	---	---	---	---	---	---	---	---
28	11.0	10.8	10.9	---	---	---	---	---	---	---	---	---
29	11.0	10.8	10.9	---	---	---	---	---	---	---	---	---
30	11.0	10.8	10.9	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	11.2	10.8	11.0	11.0	10.8	10.9	---	---	---	---	---	---
YEAR	14.0	10.8	12.8									

#4 (23.0' BLS)
WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MTN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	---	---	---	13.7	13.7	13.7	14.0	14.0	13.9	14.0	13.9	13.9
2	---	---	---	13.9	13.7	13.7	14.0	13.9	13.9	14.0	13.9	13.9
3	---	---	---	13.9	13.7	13.8	14.0	13.9	13.9	14.0	14.0	14.0
4	---	---	---	14.0	13.7	13.9	14.1	13.9	14.0	14.0	13.9	13.9
5	---	---	---	14.0	13.7	13.9	14.1	13.9	14.0	14.0	13.9	13.9
6	---	---	---	14.0	13.7	13.9	14.0	13.9	13.9	14.0	13.9	13.9
7	---	---	---	13.9	13.9	13.9	14.0	13.9	14.0	14.0	13.9	13.9
8	---	---	---	14.0	13.9	13.9	14.0	14.0	14.0	14.0	13.7	13.9
9	---	---	---	14.0	13.9	13.9	14.0	13.9	14.0	14.0	13.7	13.7
10	---	---	---	14.0	13.9	13.9	14.0	13.9	13.9	13.9	13.7	13.8
11	---	---	---	14.0	13.9	13.9	14.0	13.9	13.9	13.9	13.7	13.8
12	---	---	---	14.0	13.9	13.9	14.0	13.9	14.0	13.7	13.7	13.7
13	---	---	---	14.0	13.9	14.0	14.0	14.0	14.0	14.0	13.7	13.7
14	---	---	---	14.0	13.9	14.0	14.0	13.9	13.9	13.9	13.7	13.7
15	---	---	---	14.0	14.0	14.0	13.9	13.9	13.9	13.9	13.6	13.7
16	---	---	---	14.0	13.9	14.0	13.9	13.9	13.9	13.9	13.6	13.8
17	---	---	---	14.0	13.9	13.9	14.0	13.9	13.9	13.7	13.7	13.7
18	---	---	---	14.0	14.0	14.0	13.9	13.9	13.9	13.7	13.6	13.7
19	---	---	---	14.0	14.0	14.0	14.0	13.9	13.9	13.9	13.6	13.7
20	---	---	---	14.0	14.0	14.0	14.0	13.9	13.9	13.7	13.5	13.7
21	---	---	---	14.0	14.0	14.0	14.0	13.9	13.9	13.7	13.5	13.6
22	---	---	---	14.0	14.0	14.0	14.0	13.9	13.9	13.7	13.5	13.6
23	---	---	---	14.0	13.9	14.0	14.0	13.9	14.0	13.7	13.4	13.5
24	13.5	13.5	13.5	13.9	13.9	13.9	14.0	13.9	13.9	13.7	13.4	13.6
25	13.5	13.5	13.5	13.9	13.9	13.9	14.0	13.9	13.9	13.7	13.4	13.5
26	13.5	13.5	13.5	14.0	13.9	13.9	14.0	13.9	13.9	13.7	13.4	13.5
27	13.5	13.5	13.5	14.0	13.9	13.9	14.0	13.9	13.9	13.6	13.4	13.4
28	13.7	13.5	13.5	14.0	14.0	14.0	14.0	13.9	13.9	13.5	13.4	13.4
29	13.7	13.5	13.6	14.0	14.0	14.0	13.9	13.9	13.9	13.5	13.4	13.4
30	13.8	13.5	13.7	14.0	14.0	14.0	13.9	13.9	13.9	13.5	13.4	13.4
31	13.7	13.5	13.7	---	---	---	13.9	13.9	13.9	13.5	13.4	13.4
MONTH	13.8	13.5	13.6	14.0	13.7	13.9	14.1	13.9	13.9	14.0	13.4	13.7

GROUND-WATER RECORDS

400949083480100. Local number, CH-42.

LOCATION.--Lat 40°09'49" Long 83°48'01", Hydrologic Unit 05080001, along State Route 29 near Urbana, OH.
Owner.--USGS-Jack Sommers.

AQUIFER.--Sand and Gravel of Pleistocene age.

WELL CHARACTERISTICS.--Observation well drilled by hollow stem auger, diameter 4.0 in., depth 28.7 ft. Cased with Sch 40 PVC to 13.7 ft; .020 in. screen from 13.7 to 28.7 ft.

INSTRUMENTATION - Data logger--60 minute record. Precipitation data was collected with a propane-heated, tipping-bucket rain gauge. Also collected: air temperature, soil temperature, water temperature, and specific conductance. Conductivity/water temperature probe set at 23.7 feet below land surface.

DATUM.--Elevation of land-surface datum is 1029.89 feet above National Geodetic Vertical Datum of 1929.
Measuring point: shelter floor 2.32 ft above land-surface datum.

REMARKS.--This station is part of an eight-site network to collect data for the Ohio Department of Transportation concerning road salt application and its effect(s) on shallow ground-water quality. Water-quality data for nearby wells is available in preceding tables.

PERIOD OF RECORD.--February 1991 to current year.

PERIOD OF DAILY RECORD.--

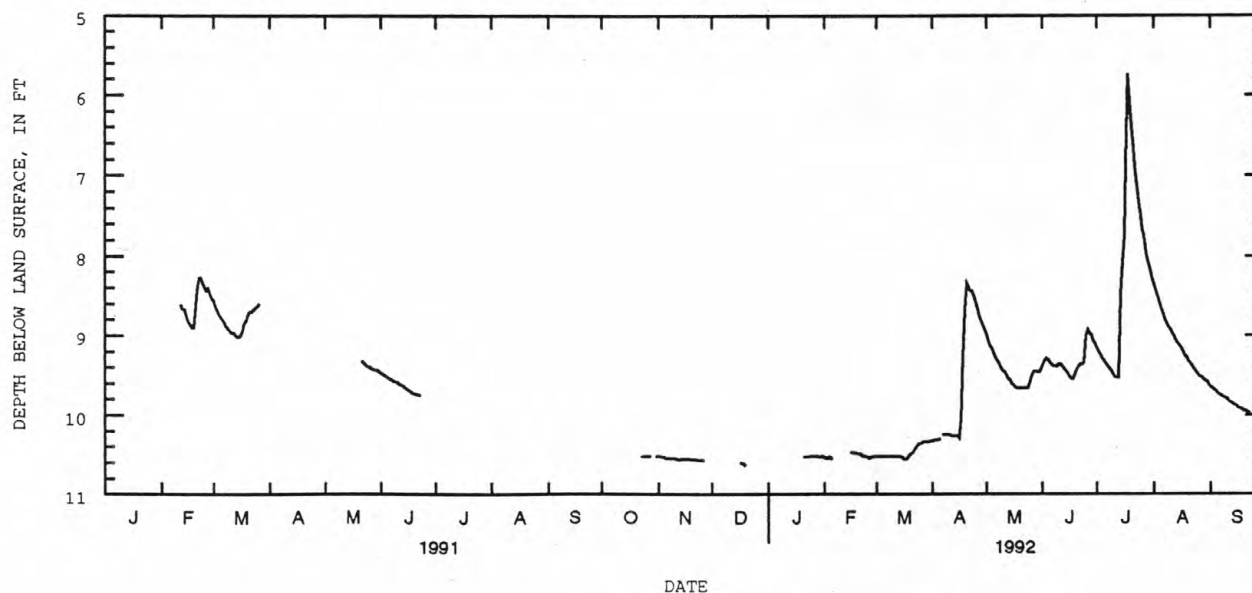
WATER LEVEL: February 1991 to current year.
SPECIFIC CONDUCTANCE: February 1991 to current year.
AIR TEMPERATURE: February 1991 to current year.
WATER TEMPERATURE: February 1991 to current year.
SOIL TEMPERATURE: February 1991 to current year.
PRECIPITATION: February 1991 to current year.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER LEVEL: Maximum daily low, 10.62 ft. below land-surface datum, December 19, 1991; minimum daily low, 5.47 ft. below land-surface datum, July 18, 1992.
SPECIFIC CONDUCTANCE: Maximum, 852 microsiemens March 18-19, 25, 1991; minimum, 725 microsiemens July 31, 1991.
AIR TEMPERATURE: Maximum, 37.0°C August 1, 1991; minimum, -14.8°C December 4, 1991.
WATER TEMPERATURE: Maximum, 12.9°C many days in November and December, 1991; minimum, 10.5°C many days in 1991.
SOIL TEMPERATURE: Maximum, 30.5°C August 2, 1991; minimum, <0.0°C many days in 1991.

EXTREMES FOR CURRENT YEAR.--

WATER LEVEL: Maximum daily low, 10.62 ft. below land-surface datum, December 19, 1991; minimum daily low, 5.47 ft. below land-surface datum, July 18, 1992.
SPECIFIC CONDUCTANCE: Maximum, 846 microsiemens August 11-12, 1992; minimum, 759 microsiemens several days in February and March 1992.
AIR TEMPERATURE: Maximum, 30.7°C July 2, 1992; minimum, -14.8°C December 4, 1991.
WATER TEMPERATURE: Maximum, 12.9°C many days in November and December, 1991; minimum, 11.1°C many days in April and May 1992.
SOIL TEMPERATURE: Maximum, 24.3°C July 14, 1992; minimum, 0.7°C January 25-31, February 2-3, 1992.



400949083480100 CH-42 NR URBANA OH

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	10.52	---	---	10.53	10.52	10.32	8.99	9.38	9.16	8.35	9.64
2	---	10.52	---	---	10.54	10.52	10.31	9.05	9.32	9.20	8.41	9.66
3	---	10.53	---	---	10.54	10.52	10.31	9.12	9.29	9.24	8.49	9.68
4	---	10.53	---	---	10.53	10.52	10.31	9.16	9.30	9.28	8.57	9.70
5	---	10.54	---	---	10.54	10.52	10.30	9.22	9.33	9.31	8.65	9.72
6	---	10.54	---	---	---	10.52	---	9.28	9.36	9.35	8.72	9.74
7	---	10.54	---	---	---	10.52	10.24	9.32	9.38	9.38	8.77	9.76
8	---	10.54	---	---	---	10.52	10.24	9.34	9.38	9.41	8.84	9.77
9	---	10.54	---	---	---	10.52	10.24	9.40	9.38	9.45	8.89	9.78
10	---	10.54	---	---	---	10.52	10.24	9.44	9.36	9.48	8.92	9.80
11	---	10.55	---	---	---	10.52	10.25	9.46	9.36	9.52	8.97	9.82
12	---	10.56	---	---	---	10.52	10.26	9.50	9.38	9.53	9.01	9.84
13	---	10.56	---	---	---	10.52	10.26	9.53	9.41	9.53	9.05	9.85
14	---	10.55	---	---	---	10.52	10.26	9.56	9.45	8.48	9.09	9.87
15	---	10.55	---	---	---	10.53	10.26	9.60	9.48	8.21	9.12	9.88
16	---	10.55	---	---	10.47	10.55	10.28	9.62	9.51	7.74	9.16	9.90
17	---	10.55	10.60	---	10.47	10.55	10.06	9.65	9.54	6.86	9.20	9.91
18	---	10.55	10.61	---	10.48	10.55	9.28	9.66	9.54	5.74	9.24	9.92
19	---	10.56	10.62	---	10.48	10.51	8.68	9.66	9.49	6.08	9.28	9.94
20	---	10.56	---	---	10.49	10.49	8.34	9.66	9.42	6.40	9.32	9.94
21	---	10.56	---	10.53	10.49	10.47	8.38	9.66	9.38	6.66	9.35	9.96
22	---	10.56	---	10.53	10.51	10.43	8.43	9.66	9.36	6.89	9.38	9.97
23	10.52	10.57	---	10.53	10.52	10.40	8.44	9.66	9.36	7.12	9.42	---
24	10.52	10.57	---	10.52	10.52	10.37	8.50	9.66	9.34	7.33	9.45	---
25	10.52	10.57	---	10.52	10.53	10.36	8.58	9.60	9.00	7.50	9.48	---
26	10.52	10.57	---	10.52	10.54	10.35	8.66	9.52	8.93	7.66	9.51	---
27	10.52	---	---	10.52	10.53	10.33	8.74	9.46	8.96	7.75	9.52	---
28	---	---	---	10.52	10.53	10.33	8.81	9.45	9.00	7.96	9.54	---
29	---	---	---	10.53	10.52	10.33	8.86	9.46	9.06	8.08	9.56	---
30	---	---	---	10.53	---	10.33	8.93	9.46	9.10	8.16	9.58	---
31	10.52	---	---	10.52	---	10.32	---	9.44	---	8.28	9.61	---
MAX	10.52	10.57	10.62	10.53	10.54	10.55	10.32	9.66	9.54	9.53	9.61	9.97

WTR YR 1992 LOW 10.62

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	---	---	---	776	768	775	---	---	---	---	---	---
2	---	---	---	778	769	774	---	---	---	---	---	---
3	---	---	---	779	770	774	782	774	776	---	---	---
4	---	---	---	780	771	773	781	777	779	---	---	---
5	---	---	---	778	769	773	783	773	776	---	---	---
6	---	---	---	779	770	773	783	773	779	---	---	---
7	---	---	---	776	771	773	780	777	778	---	---	---
8	---	---	---	777	768	774	779	776	778	---	---	---
9	---	---	---	777	769	774	782	773	778	---	---	---
10	---	---	---	777	768	773	782	772	777	---	---	---
11	---	---	---	777	768	773	782	773	778	---	---	---
12	---	---	---	782	772	776	780	777	778	---	---	---
13	---	---	---	781	771	778	779	777	778	---	---	---
14	---	---	---	781	773	778	784	771	777	---	---	---
15	---	---	---	779	777	778	782	774	778	---	---	---
16	---	---	---	780	773	778	783	773	780	---	---	---
17	---	---	---	782	772	777	781	772	779	---	---	---
18	---	---	---	779	772	777	782	773	779	---	---	---
19	---	---	---	779	776	777	784	776	780	---	---	---
20	---	---	---	778	777	778	---	---	---	---	---	---
21	---	---	---	778	777	778	---	---	---	774	766	770
22	---	---	---	780	777	779	---	---	---	774	767	770
23	776	774	775	780	772	778	---	---	---	774	773	773
24	776	774	775	782	773	775	---	---	---	776	767	771
25	776	774	775	783	774	776	---	---	---	776	767	772
26	777	775	776	---	---	---	---	---	---	776	768	773
27	777	775	776	---	---	---	---	---	---	776	768	771
28	---	---	---	---	---	---	---	---	---	774	770	772
29	---	---	---	---	---	---	---	---	---	773	771	772
30	---	---	---	---	---	---	---	---	---	773	768	770
31	776	774	775	---	---	---	---	---	---	771	770	770
MONTH	777	774	775	783	768	776	784	771	778	776	766	771

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TEMPERATURE, AIR, DEGREES CENTIGRADE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER				NOVEMBER			DECEMBER			JANUARY		
1	---	---	---	15.1	4.3	10.4	---	---	---	---	---	---
2	---	---	---	3.8	-2.4	7.7	---	---	---	---	---	---
3	---	---	---	-1.3	-7.6	-4.1	1.8	-12.6	-3.7	---	---	---
4	---	---	---	-2.8	-7.9	-5.7	-8.9	-14.8	-12.0	---	---	---
5	---	---	---	2.2	-11.0	-2.3	3.6	-8.1	-1.3	---	---	---
6	---	---	---	5.5	-2.4	2.3	6.3	-3.8	1.6	---	---	---
7	---	---	---	-1.9	-10.7	-4.7	13.5	7.0	10.2	---	---	---
8	---	---	---	.2	-12.3	-7.0	16.4	5.1	13.1	---	---	---
9	---	---	---	5.5	-12.6	-4.2	6.4	-4.0	1.7	---	---	---
10	---	---	---	8.1	-10.1	-1.7	5.1	-.3	1.0	---	---	---
11	---	---	---	9.0	-6.3	.6	9.8	-.3	4.5	---	---	---
12	---	---	---	3.0	-5.7	.4	14.6	8.0	11.5	---	---	---
13	---	---	---	10.6	.5	4.0	9.7	5.2	8.3	---	---	---
14	---	---	---	16.1	.4	8.2	3.6	-6.9	-1.7	---	---	---
15	---	---	---	14.2	6.8	10.4	.4	-11.8	-5.9	---	---	---
16	---	---	---	11.0	-1.9	6.8	1.7	-9.5	-2.4	---	---	---
17	---	---	---	11.7	-2.7	3.8	5.9	-2.6	3.6	---	---	---
18	---	---	---	16.0	6.4	12.4	-3.4	-12.3	-5.8	---	---	---
19	---	---	---	17.3	13.1	15.0	-.1	-13.1	-7.1	---	---	---
20	---	---	---	17.7	8.5	14.9	---	---	---	---	---	---
21	---	---	---	10.0	8.1	9.0	---	---	---	7.8	-2.7	2.1
22	---	---	---	9.7	7.4	8.2	---	---	---	7.6	-4.1	1.8
23	22.6	14.1	18.2	13.9	-.7	7.0	---	---	---	5.6	-2.4	3.0
24	24.8	14.7	18.2	-.9	-6.4	-3.1	---	---	---	-3.1	-10.7	-6.5
25	24.6	13.6	18.3	-3.8	-9.3	-6.4	---	---	---	-2.9	-9.7	-5.8
26	25.5	16.6	19.3	---	---	---	---	---	---	1.1	-11.1	-5.7
27	21.2	11.8	15.1	---	---	---	---	---	---	5.8	-10.8	-2.8
28	---	---	---	---	---	---	---	---	---	1.9	-.8	.1
29	---	---	---	---	---	---	---	---	---	.4	-4.6	-.9
30	---	---	---	---	---	---	---	---	---	4.6	-5.4	.2
31	15.5	8.8	13.6	---	---	---	---	---	---	1.3	-.6	.4
MONTH	25.5	8.8	17.1	17.7	-12.6	3.0	16.4	-14.8	.9	7.8	-11.1	-1.3

TEMPERATURE, AIR, DEGREES CENTIGRADE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY				MARCH			APRIL			MAY		
1	-1.3	-8.2	-3.5	16.8	-4.1	7.2	---	---	---	27.5	5.4	16.4
2	5.3	-9.7	-2.7	21.2	4.5	12.2	---	---	---	26.8	10.9	19.9
3	12.3	-4.1	2.3	18.6	1.7	9.2	---	---	---	18.9	5.4	11.7
4	6.3	-1.5	2.1	24.9	1.3	12.1	---	---	---	13.9	2.1	7.8
5	-.1	-5.1	-1.5	21.3	6.2	13.9	---	---	---	11.8	3.1	7.3
6	---	---	---	17.6	11.2	14.2	---	---	---	15.3	2.2	8.9
7	---	---	---	17.2	10.8	12.7	20.7	4.3	12.9	19.0	1.7	11.4
8	---	---	---	13.7	5.6	10.3	18.4	.2	10.6	17.5	5.8	12.2
9	---	---	---	17.7	2.3	11.6	19.1	7.7	13.0	16.9	8.8	12.3
10	---	---	---	14.8	-8.2	4.0	19.3	6.9	13.0	23.7	4.9	15.1
11	---	---	---	---	---	---	24.7	4.5	16.3	27.5	8.0	18.8
12	---	---	---	---	---	---	11.8	.7	5.8	28.2	11.1	20.0
13	---	---	---	---	---	---	9.5	.6	5.1	22.9	13.2	17.6
14	---	---	---	---	---	---	6.6	2.8	5.1	21.0	8.7	13.0
15	---	---	---	---	---	---	15.1	3.5	9.7	23.7	9.8	16.1
16	5.0	.4	2.1	---	---	---	25.8	9.4	17.6	28.6	8.8	19.8
17	7.5	.3	3.1	---	---	---	15.4	9.4	12.1	29.0	16.1	20.8
18	14.7	4.3	7.5	---	---	---	18.1	10.5	14.4	18.7	11.4	15.4
19	11.4	1.5	5.8	---	---	---	24.8	12.0	19.5	24.0	8.7	17.0
20	4.0	.5	1.6	---	---	---	26.1	15.8	19.5	23.4	15.5	19.5
21	8.3	.7	4.1	---	---	---	19.8	8.5	15.6	26.7	12.8	20.2
22	17.5	2.3	8.5	---	---	---	12.3	2.4	8.4	28.7	12.1	21.2
23	12.7	1.4	6.2	---	---	---	25.3	2.4	17.3	25.5	14.7	19.6
24	6.4	.4	3.0	---	---	---	16.4	7.1	12.1	12.1	4.9	9.1
25	5.5	3.0	4.1	---	---	---	7.9	3.6	5.8	13.1	3.7	8.6
26	4.3	-1.1	1.8	---	---	---	10.2	3.6	6.5	13.8	6.3	9.7
27	11.9	.1	5.5	---	---	---	10.5	2.7	7.2	17.0	6.5	10.8
28	13.5	-1.0	4.8	---	---	---	14.3	.8	7.7	19.9	3.0	12.2
29	1.1	-6.4	-2.6	---	---	---	14.3	1.9	10.3	17.2	7.9	12.1
30	---	---	---	---	---	---	17.3	6.6	11.9	17.0	10.8	13.2
31	---	---	---	---	---	---	---	---	---	16.0	9.1	13.1
MONTH	17.5	-9.7	2.7	24.9	-8.2	10.7	26.1	.2	11.6	29.0	1.7	14.5

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TEMPERATURE, AIR, DEGREES CENTIGRADE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	23.7	7.7	15.3	29.5	18.8	23.9	23.8	8.5	16.3	25.5	7.9	16.2
2	25.0	9.1	16.7	30.7	18.0	24.1	23.9	9.3	17.4	22.6	11.7	18.1
3	25.5	9.9	18.6	25.5	16.5	21.2	25.0	14.4	19.1	25.4	18.2	21.2
4	19.3	16.7	17.8	24.8	12.7	19.7	24.9	12.2	17.9	24.6	13.7	18.6
5	24.0	15.8	18.6	26.6	15.5	20.3	24.8	9.0	16.3	27.7	14.7	21.1
6	25.4	13.5	19.7	24.8	9.8	17.6	25.3	9.4	17.2	28.4	17.4	22.1
7	24.3	17.6	20.0	22.7	9.3	17.3	27.2	12.2	20.2	27.7	17.3	21.2
8	26.1	12.9	19.0	26.7	16.6	22.6	27.6	18.8	23.2	24.0	14.9	20.0
9	24.0	11.6	16.9	29.4	21.1	25.2	29.1	15.6	22.7	27.9	12.7	20.8
10	25.4	8.7	17.0	29.4	18.7	23.7	30.6	18.7	23.9	22.5	9.4	17.6
11	25.9	11.4	18.5	28.1	18.4	23.3	29.2	14.2	22.0	21.9	6.6	13.3
12	28.0	11.8	20.4	28.5	19.5	24.0	27.7	10.9	18.6	22.1	3.9	12.9
13	29.5	14.0	21.3	29.9	21.0	25.3	25.5	14.6	18.7	24.3	5.7	14.9
14	26.6	13.9	20.4	29.3	19.2	25.5	24.6	13.0	17.1	27.1	8.8	17.5
15	25.4	14.3	20.1	24.1	18.7	20.9	20.4	13.0	16.1	28.6	11.7	19.7
16	28.8	12.9	21.7	28.1	17.1	21.3	25.8	11.7	17.4	27.5	12.7	19.8
17	30.3	19.4	25.4	22.7	17.6	20.4	28.3	7.9	16.7	27.4	14.8	20.6
18	26.8	16.6	21.0	25.6	16.8	21.0	24.5	8.6	17.2	21.9	12.3	19.2
19	23.8	12.4	18.5	26.7	14.2	20.6	26.7	10.9	19.1	21.2	6.0	13.2
20	15.3	9.6	12.6	28.1	17.6	21.4	26.1	6.7	15.8	22.4	4.8	14.1
21	17.3	7.3	11.9	21.7	16.7	18.5	27.6	7.7	16.7	26.3	17.4	20.6
22	18.9	4.3	12.7	22.2	15.0	18.9	24.6	12.9	18.8	21.6	8.8	17.1
23	22.1	13.0	16.5	26.2	17.9	21.0	25.6	14.0	20.4	---	5.1	---
24	24.5	12.2	18.3	29.4	18.5	22.0	27.1	17.2	22.4	---	---	---
25	27.0	12.4	19.3	25.4	17.0	21.0	29.7	14.7	21.7	---	---	---
26	28.1	12.9	19.7	27.2	20.7	23.2	29.0	15.2	22.1	---	---	---
27	27.7	10.6	17.5	29.2	18.7	24.4	28.3	18.1	21.1	---	---	---
28	28.8	8.8	17.7	26.8	16.9	25.0	18.7	12.0	16.3	---	---	---
29	27.0	10.9	19.6	26.3	15.2	19.6	21.4	7.6	15.1	---	---	---
30	29.0	13.5	22.1	27.1	16.1	20.6	23.4	13.6	18.4	---	---	---
31	---	---	---	20.7	11.4	17.7	23.7	9.8	16.7	---	---	---
MONTH	30.3	4.3	18.5	30.7	9.3	21.7	30.6	6.7	18.8	28.6	3.9	18.2
YEAR	30.7	-14.8	12.7									

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	---	---	---	12.9	12.7	12.7	---	---	---	---	---	---
2	---	---	---	12.9	12.7	12.8	---	---	---	---	---	---
3	---	---	---	12.9	12.7	12.8	12.9	12.6	12.9	---	---	---
4	---	---	---	12.9	12.7	12.9	12.9	12.8	12.9	---	---	---
5	---	---	---	12.9	12.7	12.9	12.9	12.6	12.8	---	---	---
6	---	---	---	12.9	12.7	12.9	12.9	12.6	12.8	---	---	---
7	---	---	---	12.9	12.9	12.9	12.7	12.7	12.7	---	---	---
8	---	---	---	12.9	12.7	12.9	12.7	12.7	12.7	---	---	---
9	---	---	---	12.9	12.7	12.9	12.9	12.6	12.7	---	---	---
10	---	---	---	12.9	12.7	12.9	12.9	12.6	12.8	---	---	---
11	---	---	---	12.9	12.7	12.9	12.9	12.6	12.7	---	---	---
12	---	---	---	12.9	12.7	12.8	12.7	12.7	12.7	---	---	---
13	---	---	---	12.9	12.7	12.7	12.7	12.7	12.7	---	---	---
14	---	---	---	12.9	12.6	12.7	12.9	12.6	12.8	---	---	---
15	---	---	---	12.7	12.7	12.7	12.9	12.6	12.8	---	---	---
16	---	---	---	12.9	12.6	12.7	12.9	12.6	12.7	---	---	---
17	---	---	---	12.9	12.6	12.8	12.9	12.6	12.7	---	---	---
18	---	---	---	12.9	12.7	12.7	12.9	12.6	12.7	---	---	---
19	---	---	---	12.7	12.7	12.7	12.9	12.6	12.7	---	---	---
20	---	---	---	12.7	12.7	12.7	---	---	---	---	---	---
21	---	---	---	12.7	12.7	12.7	---	---	---	12.4	12.2	12.3
22	---	---	---	12.7	12.7	12.7	---	---	---	12.4	12.2	12.3
23	12.7	12.7	12.7	12.9	12.7	12.7	---	---	---	12.2	12.2	12.2
24	12.7	12.7	12.7	12.9	12.6	12.8	---	---	---	12.4	12.2	12.3
25	12.7	12.7	12.7	12.9	12.6	12.9	---	---	---	12.4	12.2	12.3
26	12.7	12.7	12.7	12.9	12.9	12.9	---	---	---	12.4	12.2	12.2
27	12.7	12.7	12.7	---	---	---	---	---	---	12.4	12.2	12.2
28	12.7	---	---	---	---	---	---	---	---	12.2	12.2	12.2
29	---	---	---	---	---	---	---	---	---	12.2	12.2	12.2
30	---	---	---	---	---	---	---	---	---	12.2	12.2	12.2
31	12.7	12.7	12.7	---	---	---	---	---	---	12.2	12.2	12.2
MONTH	12.7	12.7	12.7	12.9	12.6	12.8	12.9	12.6	12.8	12.4	12.2	12.2

400949083480100 CH-42 NR URBANA OH

TEMPERATURE, SOIL DEG. C), WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	5.1	3.2	4.2	---	---	---
4	---	---	---	---	---	---	3.1	2.7	2.9	---	---	---
5	---	---	---	5.5	2.8	4.9	2.6	2.4	2.5	---	---	---
6	---	---	---	6.4	5.1	5.7	2.8	2.3	2.5	---	---	---
7	---	---	---	5.6	4.4	5.2	5.8	2.8	4.7	---	---	---
8	---	---	---	4.2	2.7	3.3	8.5	5.9	7.5	---	---	---
9	---	---	---	3.0	1.9	2.5	7.9	4.9	6.8	---	---	---
10	---	---	---	3.5	2.0	2.7	5.4	3.8	4.7	---	---	---
11	---	---	---	4.8	2.6	3.5	5.5	3.8	4.7	---	---	---
12	---	---	---	4.2	3.2	3.7	8.1	4.7	6.7	---	---	---
13	---	---	---	5.7	4.0	4.7	8.2	7.4	8.0	---	---	---
14	---	---	---	7.2	4.3	5.6	7.3	3.3	5.1	---	---	---
15	---	---	---	8.4	7.0	7.6	3.2	2.2	2.7	---	---	---
16	---	---	---	8.8	7.1	8.5	2.1	1.6	1.8	---	---	---
17	---	---	---	7.1	5.1	6.3	1.6	1.5	1.6	---	---	---
18	---	---	---	9.5	6.3	7.6	1.6	1.3	1.5	---	---	---
19	---	---	---	11.8	9.6	10.6	1.2	.8	.9	---	---	---
20	---	---	---	13.0	11.8	12.4	---	---	---	---	---	---
21	---	---	---	12.0	10.4	11.1	---	---	---	1.2	1.1	1.2
22	---	---	---	10.3	9.8	10.1	---	---	---	1.2	.9	1.1
23	---	---	---	10.1	8.0	9.5	---	---	---	2.3	.9	1.6
24	---	---	---	7.7	5.1	5.8	---	---	---	1.5	.9	1.2
25	---	---	---	5.1	4.4	4.7	---	---	---	.9	.7	.8
26	---	---	---	---	---	---	---	---	---	.7	.7	.7
27	---	---	---	---	---	---	---	---	---	.7	.7	.7
28	---	---	---	---	---	---	---	---	---	.7	.7	.7
29	---	---	---	---	---	---	---	---	---	.8	.7	.7
30	---	---	---	---	---	---	---	---	---	.8	.7	.7
31	---	---	---	---	---	---	---	---	---	.8	.7	.7
MONTH	---	---	---	13.0	1.9	6.5	8.5	.8	4.0	2.3	.7	.9

TEMPERATURE, SOIL DEG. C), WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY				MARCH			APRIL			MAY		
1	.9	.8	.8	5.6	2.2	3.7	---	---	---	16.3	10.6	13.2
2	.8	.7	.7	8.2	4.1	6.0	---	---	---	18.0	13.8	15.6
3	1.6	.7	.9	9.0	5.7	7.3	---	---	---	17.6	12.6	14.9
4	2.0	1.0	1.5	10.4	6.1	8.2	---	---	---	15.6	11.5	13.6
5	1.4	1.0	1.1	10.3	8.1	9.1	---	---	---	13.6	11.1	12.4
6	---	---	---	11.2	9.5	10.2	---	---	---	14.6	9.8	12.2
7	---	---	---	11.9	10.1	11.0	10.9	6.3	8.7	17.4	10.1	13.4
8	---	---	---	10.9	9.8	10.4	12.6	7.4	10.1	14.4	12.0	13.2
9	---	---	---	10.3	8.0	9.3	13.0	9.2	11.2	14.9	12.5	13.6
10	---	---	---	10.1	6.2	9.1	12.1	9.6	10.8	18.2	11.4	14.5
11	---	---	---	---	---	---	14.0	10.3	12.2	19.9	13.4	16.4
12	---	---	---	---	---	---	13.6	9.7	11.5	20.1	15.1	17.5
13	---	---	---	---	---	---	11.3	8.3	9.7	19.2	16.2	17.6
14	---	---	---	---	---	---	9.1	8.2	8.7	18.0	15.0	16.5
15	---	---	---	---	---	---	10.2	7.6	9.1	18.7	14.2	16.2
16	4.1	2.3	2.9	---	---	---	13.8	9.0	11.9	21.0	14.8	17.6
17	3.6	2.1	2.6	---	---	---	13.8	11.9	13.2	20.5	16.9	18.5
18	5.7	3.1	3.8	---	---	---	13.8	11.5	12.6	18.5	16.5	17.6
19	5.8	4.3	5.1	---	---	---	16.7	12.1	14.7	20.2	14.8	17.2
20	4.2	3.1	3.5	---	---	---	18.0	14.5	16.1	19.8	17.3	18.6
21	4.9	2.6	3.3	---	---	---	16.6	13.8	15.6	20.7	16.9	18.7
22	6.6	3.7	4.7	---	---	---	13.4	10.3	12.3	21.6	17.1	19.2
23	6.6	4.3	5.5	---	---	---	15.3	9.6	12.9	20.7	18.0	19.3
24	6.4	4.6	5.4	---	---	---	14.4	12.2	13.7	19.2	15.2	16.9
25	6.0	5.1	5.4	---	---	---	12.4	10.3	11.6	15.1	13.3	14.3
26	5.1	3.4	4.1	---	---	---	11.2	9.5	10.4	14.3	13.1	13.7
27	5.4	3.0	4.2	---	---	---	11.9	9.6	10.6	15.1	12.6	13.7
28	5.5	3.6	4.6	---	---	---	14.8	8.4	11.6	16.6	12.0	14.0
29	4.7	2.8	3.6	---	---	---	11.3	9.5	10.5	14.8	13.2	13.9
30	---	---	---	---	---	---	14.9	10.3	12.1	14.2	13.1	13.6
31	---	---	---	---	---	---	---	---	---	14.3	13.6	13.9
MONTH	6.6	.7	3.4	11.9	2.2	8.4	18.0	6.3	11.7	21.6	9.8	15.5

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RAINFALL ACCUMULATED (INCHES), WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992												
DAILY SUM VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	.06	.05	---	.00	.00	---	.00	.00	.00	.00	.00
2	---	.00	.10	---	.00	.00	---	.12	.00	.18	.00	.03
3	---	.00	.11	---	.00	.00	---	.00	.00	.14	.00	.38
4	---	.00	.07	---	.00	.00	---	.00	.18	.00	.00	.07
5	---	.00	.01	---	.00	.00	---	.02	.48	.09	.00	.01
6	---	.00	.00	---	---	.18	---	.00	.19	.00	.00	.30
7	---	.00	.00	---	---	.18	.00	.00	.26	.00	.00	.10
8	---	.00	.13	---	---	.00	.03	.02	.00	.02	.36	.02
9	---	.00	.00	---	---	.00	.12	.30	.00	.00	.00	.00
10	---	.00	.00	---	---	.21	.09	.00	.00	.26	.83	.16
11	---	.00	.00	---	---	.00	.01	.00	.00	.05	.14	.00
12	---	.03	.28	---	---	---	.00	.00	.00	.80	.00	.00
13	---	.00	.01	---	---	---	.04	.01	.00	2.83	.03	.00
14	---	.00	.07	---	---	---	.14	.12	.01	.37	.00	.00
15	---	.02	.09	---	---	---	.25	.00	.00	.85	.06	.00
16	---	.01	.09	---	.00	---	2.09	.00	.00	1.13	.00	.00
17	---	.00	.05	---	.00	---	.19	.53	.00	1.35	.00	.00
18	---	.08	.12	---	.00	---	.92	.75	1.76	.00	.00	.48
19	---	1.03	.00	---	.00	---	.01	.00	.00	.00	.04	.00
20	---	.07	---	---	.00	---	.20	.00	.00	.02	.00	.02
21	---	.00	---	.00	.00	---	.34	.00	.00	.51	.00	.52
22	---	.00	---	.00	.00	---	.00	.00	.00	.00	.00	.13
23	.01	.01	---	.00	.00	---	.00	.40	.91	.12	.00	.00
24	.80	.00	---	.00	.00	---	.02	.63	.55	.02	.02	---
25	.25	.00	---	.00	.00	---	.03	.00	.00	.00	.00	---
26	.01	---	---	.00	.14	---	.14	.00	.17	.17	.11	---
27	.00	---	---	.00	.00	---	.01	.02	.00	.00	1.05	---
28	---	---	---	.00	.01	---	.00	.00	.00	.00	.15	---
29	---	---	---	.00	.00	---	.01	.57	.00	.66	.00	---
30	---	---	---	.00	---	---	.13	.43	.00	.39	.04	---
31	.00	---	---	.00	---	---	---	.01	---	.00	.00	---
TOTAL	1.07	1.31	1.18	0.00	0.15	0.57	4.77	3.93	4.51	9.96	2.83	2.22
WTR YR 1992		TOTAL 32.50										

GROUND-WATER RECORDS

403635082152300. Local number, AS-45.

LOCATION.--Lat 40°36'35" Long 82°15'23", Hydrologic Unit 05040002, along State Route 3 near Loudonville, OH.
Owner.--USGS-State of Ohio (Mohican State Park).

AQUIFER.--Sand and Gravel of Quaternary age.

WELL CHARACTERISTICS.--Observation well drilled by hollow stem auger, diameter 4.0 in., depth 15.7 ft. Cased with Sch 40 PVC to 5.7 ft; .010 in. screen from 5.7 to 15.7 ft.

INSTRUMENTATION - Data logger--60 minute record. Precipitation data collected with a propane-heated, tipping-bucket rain gauge. Also collected: water level, air temperature, soil temperature, water temperature and specific conductance. Conductivity/water temperature probe set at 6.9 feet below land surface.

DATUM.--Elevation of land-surface datum is 931.74 feet above National Geodetic Vertical Datum of 1929.
Measuring point: shelter floor 3.08 ft above land-surface datum.

REMARKS.--This station is part of an eight-site network to collect data for the Ohio Department of Transportation concerning road salt application and its effect(s) on shallow ground-water quality. Water-quality data for nearby wells is available in preceding tables.

PERIOD OF RECORD.--February 1991 to current year.

PERIOD OF DAILY RECORD.--

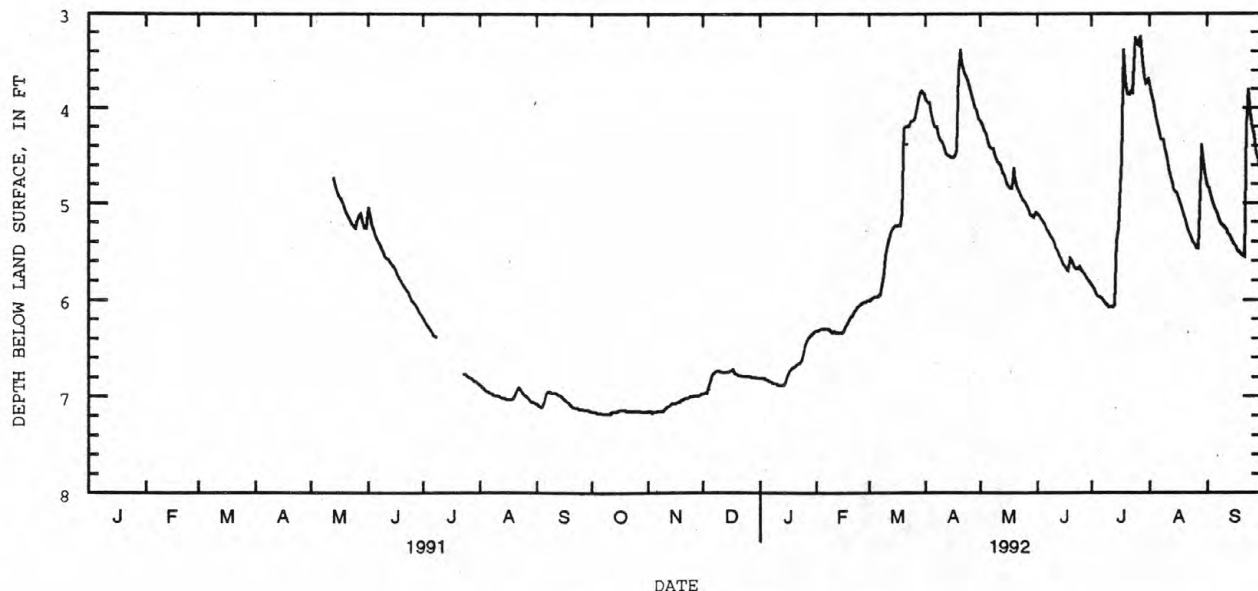
WATER LEVEL: February 1991 to current year.
SPECIFIC CONDUCTANCE: February 1991 to current year.
AIR TEMPERATURE: February 1991 to current year.
WATER TEMPERATURE: February 1991 to current year.
SOIL TEMPERATURE: February 1991 to current year.
PRECIPITATION: February 1991 to current year.

EXTREMES FOR PERIOD OF DAILY RECORD.--YYYYYY

WATER LEVEL: Maximum daily low, 7.18 ft. below land-surface datum, October 7-11, 1991; minimum daily low, 3.10 ft. below land-surface datum, July 17,18,24,27, 1992.
SPECIFIC CONDUCTANCE: Maximum, 847 microsiemens September 25, 1992; minimum, 722 microsiemens March 26, 1992.
AIR TEMPERATURE: Maximum, 35.5°C July 3, 1991; minimum, -23.1°C January 19, 1992.
WATER TEMPERATURE: Maximum, 16.0°C September 27, 1991; minimum, 8.2°C April 7, 1992.
SOIL TEMPERATURE: Maximum, 35.5°C July 3, 1991; minimum, 5.4°C December 28-31, 1991, February 13,14, 1992.

EXTREMES FOR CURRENT YEAR.--

WATER LEVEL: Maximum daily low, 7.18 ft. below land-surface datum, October 7-11, 1991; minimum daily low, 3.10 ft. below land-surface datum, July 17,18,24,27, 1992.
SPECIFIC CONDUCTANCE: Maximum, 847 microsiemens September 25, 1992; minimum, 722 microsiemens March 26, 1992.
AIR TEMPERATURE: Maximum, 31.7°C June 30, and August 10, 1992; minimum, -23.1°C January 19, 1992.
WATER TEMPERATURE: Maximum, 15.7°C September 12-30, 1992; minimum, 8.2°C April 7, 1992.
SOIL TEMPERATURE: Maximum, 31.5°C July 14, 1992; minimum, 5.4°C December 28-31, 1991, February 13,14, 1992.



403635082152300 AS-45 NR LOUDONVILLE OH

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.16	7.15	6.97	6.81	6.32	6.01	3.90	4.14	5.11	5.85	3.75	4.82
2	7.16	7.15	6.96	6.81	6.32	5.99	3.94	4.18	5.14	5.89	3.86	4.85
3	7.16	7.17	6.96	6.81	6.31	5.98	3.94	4.24	5.17	5.93	3.94	4.94
4	7.17	7.16	6.89	6.82	6.30	5.97	4.06	4.27	5.19	5.96	4.07	5.01
5	7.17	7.16	6.83	6.83	6.30	5.97	4.15	4.34	5.22	5.97	4.17	5.05
6	7.17	7.15	6.78	6.84	6.30	5.96	4.20	4.41	5.27	5.98	4.26	5.11
7	7.18	7.15	6.75	6.85	6.30	5.94	4.20	4.43	5.30	6.01	4.33	5.15
8	7.18	7.15	6.74	6.86	6.31	5.87	4.28	4.43	5.34	6.03	4.33	5.21
9	7.18	7.15	6.73	6.86	6.33	5.71	4.33	4.51	5.37	6.06	4.42	5.23
10	7.18	7.13	6.74	6.87	6.34	5.54	4.36	4.56	5.41	6.08	4.50	5.25
11	7.18	7.11	6.75	6.88	6.33	5.44	4.41	4.58	5.46	6.07	4.63	5.28
12	7.16	7.10	6.75	6.88	6.34	5.36	4.48	4.61	5.49	6.08	4.72	5.31
13	7.16	7.09	6.75	6.88	6.34	5.29	4.50	4.67	5.54	6.05	4.79	5.34
14	7.16	7.07	6.75	6.88	6.34	5.26	4.50	4.72	5.58	5.39	4.87	5.38
15	7.15	7.07	6.74	6.84	6.34	5.23	4.52	4.78	5.63	5.27	4.89	5.42
16	7.14	7.07	6.73	6.78	6.33	5.24	4.52	4.82	5.66	4.81	4.92	5.45
17	7.14	7.06	6.72	6.74	6.29	5.23	4.51	4.85	5.69	4.55	4.98	5.49
18	7.14	7.06	6.76	6.71	6.25	5.23	4.45	4.85	5.70	3.38	5.04	5.51
19	7.14	7.04	6.77	6.70	6.21	5.11	3.62	4.63	5.57	3.71	5.12	5.53
20	7.15	7.03	6.78	6.69	6.18	4.21	3.38	4.75	5.60	3.85	5.18	5.55
21	7.15	7.02	6.78	6.67	6.16	4.20	3.51	4.83	5.65	3.86	5.24	5.56
22	7.15	7.02	6.79	6.66	6.12	4.20	3.62	4.88	5.68	3.82	5.30	4.19
23	7.15	7.01	6.79	6.65	6.09	4.18	3.65	4.93	5.68	3.83	5.34	3.80
24	7.15	7.00	6.79	6.62	6.07	4.14	3.70	4.97	5.66	3.25	5.40	4.05
25	7.15	7.00	6.79	6.54	6.06	4.14	3.77	4.99	5.70	3.31	5.43	4.21
26	7.15	6.99	6.79	6.47	6.04	4.11	3.85	5.03	5.71	3.33	5.47	4.29
27	7.15	6.99	6.80	6.42	6.02	4.02	3.93	5.07	5.74	3.24	5.47	4.44
28	7.16	6.99	6.80	6.39	6.02	3.91	3.99	5.12	5.77	3.49	4.88	4.53
29	7.16	6.98	6.80	6.37	6.01	3.83	4.02	5.14	5.80	3.67	4.39	4.62
30	7.16	6.97	6.81	6.35	---	3.82	4.11	5.15	5.83	3.74	4.57	4.69
31	7.16	---	6.81	6.33	---	3.85	---	5.10	---	3.70	4.72	---
MAX	7.18	7.17	6.97	6.88	6.34	6.01	4.52	5.15	5.83	6.08	5.47	5.56

WTR YR 1992 - LOW 7.18

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	817	811	814	803	798	801	782	779	780	772	767	770
2	818	811	815	802	798	801	779	776	778	770	766	768
3	817	812	815	803	798	801	775	774	774	768	764	766
4	819	813	815	803	797	800	776	774	775	766	765	765
5	814	812	813	801	797	799	777	772	775	765	764	764
6	815	810	812	800	797	799	777	772	774	768	763	764
7	816	811	813	799	797	798	777	772	774	767	763	766
8	814	810	812	799	794	797	777	772	775	766	762	764
9	814	808	812	799	793	796	776	772	775	766	762	763
10	814	812	814	797	792	796	777	772	774	764	763	763
11	814	812	813	798	791	795	776	772	774	766	762	763
12	813	810	811	796	791	793	776	772	774	766	762	764
13	812	809	811	796	791	793	772	771	772	765	763	764
14	812	807	810	795	791	792	772	771	771	766	762	764
15	810	805	807	792	789	790	773	771	772	767	763	764
16	809	804	807	794	789	790	773	771	772	767	763	765
17	812	804	807	793	788	791	773	768	771	767	762	764
18	813	808	811	793	789	790	773	769	770	766	762	764
19	810	809	809	793	788	791	773	769	771	770	761	766
20	810	805	809	792	790	791	773	769	771	767	763	765
21	809	804	807	792	790	791	771	769	770	766	762	764
22	811	803	807	791	790	790	772	769	771	765	762	763
23	810	805	807	790	788	789	773	768	772	764	762	763
24	808	806	807	790	789	789	773	768	771	765	762	763
25	807	805	806	790	789	789	773	769	772	766	762	764
26	808	802	805	790	785	788	774	769	772	766	762	764
27	806	801	802	789	785	786	773	769	771	765	761	763
28	805	800	802	787	782	784	773	769	771	765	760	763
29	805	800	802	786	783	784	771	770	771	763	762	762
30	804	800	803	783	781	782	770	769	770	765	762	762
31	803	801	802	---	---	---	772	768	769	764	760	763
MONTH	819	800	809	803	781	793	782	768	773	772	759	764

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TEMPERATURE, AIR, DEGREES CENTIGRADE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	26.8	7.2	15.0	19.0	-5	9.6	5.0	2.3	3.8	3.9	-1.0	1.0
2	27.5	7.3	15.5	6.7	-6.8	1.4	5.3	1.0	2.5	9.6	-3.2	3.0
3	23.4	8.1	13.6	3.3	-10.5	-3.3	11.5	-1.5	3.4	13.7	-1.2	4.6
4	27.7	7.4	17.7	-3.3	-12.1	-7.4	-1.8	-13.0	-8.9	6.9	2.4	4.1
5	18.8	.9	13.1	2.2	-12.3	-4.6	2.8	-13.0	-6.6	2.9	1.2	2.2
6	10.9	-6	5.4	7.3	-2.0	2.8	3.7	-6.5	-1.7	1.7	.5	1.0
7	12.5	-1.7	4.8	.3	-4.3	-1.5	12.9	.0	7.7	2.9	.0	1.6
8	19.0	-3.9	7.8	2.6	-10.7	-4.4	16.0	10.5	13.1	5.4	-7.1	.8
9	24.6	2.0	12.6	4.9	-12.8	-5.7	14.1	1.5	7.4	8.6	2.7	5.7
10	16.2	3.8	10.9	9.4	-13.0	-1.4	6.0	-4.0	.7	2.8	-1.1	1.4
11	11.0	2.3	7.2	8.4	-6.2	1.7	10.0	-3.7	2.8	4.4	-4.0	-1.1
12	13.1	.7	7.2	1.1	-7.7	-2.1	13.5	-3.9	6.2	6.7	-6.6	.5
13	13.5	-2.2	5.0	6.8	-2.3	2.0	15.6	7.0	10.1	6.8	3.0	5.2
14	20.1	-3.1	8.1	14.9	-4.2	6.2	7.4	-2.4	3.1	10.2	-14.1	-2.9
15	13.1	.4	7.1	17.7	7.7	11.5	.1	-7.9	-3.8	-4.5	-14.1	-8.3
16	13.2	-4.2	3.3	10.5	-4.9	5.9	-3.4	-12.5	-7.4	-9.2	-18.7	-14.2
17	18.9	-4.7	5.2	11.3	-8.4	-.9	5.2	-3.3	.1	-.7	-11.3	-4.9
18	22.8	-1.0	9.7	18.2	-4.9	8.7	-2.6	-9.9	-4.8	-9.0	-18.2	-13.3
19	10.8	-2.8	5.6	17.8	12.5	15.4	-.4	-14.3	-8.7	-6.2	-23.1	-14.3
20	13.5	-5.7	2.2	19.7	8.6	16.5	2.7	-14.0	-3.1	-2.7	-13.0	-6.2
21	19.1	-5.3	4.3	11.6	8.0	9.4	4.8	-6.9	.1	6.8	-8.8	-1.0
22	23.6	-2.0	9.2	9.9	7.4	8.3	4.2	-8.2	-1.1	8.8	-9.7	-1.0
23	24.7	3.5	14.2	13.6	.7	8.4	6.7	-.4	3.3	5.8	-1.6	3.4
24	25.2	13.5	18.7	.7	-4.7	-1.6	2.7	-3.0	-.4	-2.4	-12.2	-5.8
25	25.5	11.8	18.6	-2.8	-7.0	-4.7	3.2	-6.8	-2.2	-4.7	-14.1	-9.1
26	26.6	9.5	16.5	1.0	-11.4	-6.4	4.7	-9.6	-3.7	-1.5	-11.2	-6.1
27	18.6	10.2	14.6	4.7	-7.0	.3	5.9	-8.5	-3.4	4.9	-15.6	-5.6
28	17.1	5.8	11.3	10.8	1.7	5.9	3.4	-8.2	-1.7	3.5	-4.2	-.7
29	23.9	6.8	13.8	18.8	10.8	13.7	2.0	.1	1.0	-.1	-2.0	-1.0
30	22.1	3.3	12.6	17.9	4.0	13.2	1.1	-1.6	.1	4.9	-2.8	.6
31	16.2	1.5	10.9	---	---	---	-.8	-3.0	-1.8	1.8	-1.6	.3
MONTH	27.7	-5.7	10.4	19.7	-13.0	3.2	16.0	-14.3	.2	13.7	-23.1	-1.9

TEMPERATURE, AIR, DEGREES CENTIGRADE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	-1.8	-11.3	-4.9	15.9	-8.4	4.4	5.9	-2.9	.7	25.1	.9	12.7
2	3.7	-12.3	-4.4	20.5	-2.0	8.9	1.4	-5.0	-2.4	26.2	10.8	19.7
3	10.2	-8.8	-.9	16.3	-.5	7.0	5.9	-4.0	.4	19.4	3.9	11.4
4	5.1	-2.8	.5	24.6	-1.4	9.6	7.0	-6.0	.5	11.3	5.4	7.5
5	1.2	-8.8	-3.6	20.8	1.0	9.3	10.4	-7.0	1.8	12.8	4.3	7.7
6	8.9	-10.4	-2.8	14.2	7.1	11.2	15.4	-6.1	4.9	16.0	1.6	8.7
7	1.3	-2.3	-.9	16.7	8.6	11.9	20.5	2.5	11.6	18.9	-1.4	9.2
8	-1.7	-10.4	-4.3	13.0	6.4	10.2	17.1	2.9	9.5	19.5	1.9	11.3
9	-3.6	-16.5	-10.1	18.2	3.7	12.1	17.5	1.5	10.9	17.0	6.6	12.2
10	4.6	-16.8	-5.9	16.1	-6.5	6.2	13.8	1.7	8.6	24.2	3.2	14.0
11	4.2	-8.1	.1	-4.3	-9.3	-6.6	25.2	5.1	16.7	27.1	5.4	16.8
12	-3.0	-12.9	-6.6	-1.1	-10.0	-5.6	11.6	-1.6	6.6	28.9	7.3	18.5
13	2.3	-3.5	-.5	-2.0	-11.5	-6.8	8.7	-4.8	2.5	21.2	8.4	15.2
14	2.7	.0	1.1	.3	-10.8	-5.0	10.4	2.9	6.1	18.4	4.2	10.3
15	13.6	1.3	7.3	-1.2	-12.8	-6.0	17.3	-.2	9.3	24.3	8.2	15.5
16	5.3	.8	2.4	4.7	-13.9	-3.2	27.1	4.6	15.0	27.9	6.2	16.8
17	7.1	-.6	2.9	8.4	-2.3	3.2	16.4	6.8	11.9	29.0	9.5	18.7
18	11.8	.4	5.4	1.3	-5.8	-1.2	18.2	7.3	12.0	17.2	7.8	14.3
19	7.3	.2	3.9	.4	-5.9	-1.0	27.5	8.2	17.1	24.9	6.8	16.2
20	2.9	.9	2.0	5.3	-7.6	-1.3	27.4	14.8	21.4	25.8	12.2	18.4
21	8.4	-2.7	3.4	3.4	-6.3	-.3	20.9	11.6	18.3	28.5	7.5	17.5
22	18.4	-3.1	6.5	3.1	-6.8	-.9	15.1	3.5	10.5	29.1	7.3	18.6
23	13.9	-2.1	4.9	2.9	-9.3	-3.1	25.4	.2	13.4	27.1	10.4	19.1
24	7.8	-.2	3.3	11.7	-8.3	.9	19.4	8.6	13.1	10.5	1.5	8.5
25	7.5	1.1	4.5	9.5	-5.0	3.0	8.1	5.2	6.7	14.6	.0	7.9
26	1.4	.0	.5	11.2	4.5	7.4	11.0	3.9	7.0	14.2	6.0	9.7
27	10.1	-.4	5.1	5.9	-.2	2.6	12.8	.3	7.2	16.4	1.9	9.0
28	8.5	-3.7	2.5	7.9	-3.8	1.6	14.7	-1.6	6.3	19.6	-.5	9.9
29	-2.1	-8.9	-5.3	7.4	-6.2	.9	15.0	-2.9	7.7	19.6	.2	10.9
30	---	---	---	4.7	.4	2.7	12.7	2.6	9.2	18.2	10.2	13.3
31	---	---	---	13.1	-2.6	5.6	---	---	---	14.4	8.2	12.5
MONTH	18.4	-16.8	.2	24.6	-13.9	2.5	27.5	-7.0	8.8	29.1	-1.4	13.3

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TEMPERATURE, AIR, DEGREES CENTIGRADE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	21.1	5.3	13.9	30.2	15.4	21.2	26.2	7.9	16.5	24.2	7.2	14.4
2	23.7	5.9	14.5	31.3	16.2	23.7	25.1	8.8	17.0	23.6	7.2	15.9
3	26.0	4.8	16.0	28.4	15.0	23.1	25.2	10.3	17.6	25.8	16.8	21.0
4	20.3	10.1	16.2	26.2	10.9	18.9	24.1	11.0	17.5	23.9	14.3	18.7
5	23.9	14.2	18.6	26.2	11.9	18.6	23.6	8.5	15.3	27.6	15.7	20.2
6	27.0	15.4	20.1	24.1	9.1	16.4	26.1	7.4	16.3	28.4	14.8	20.5
7	23.4	13.6	19.2	25.1	6.4	16.7	28.8	10.5	19.4	27.6	13.6	19.9
8	25.2	8.5	18.7	26.1	12.6	20.6	28.6	18.0	22.3	24.9	15.0	20.1
9	22.9	6.0	13.8	30.3	18.2	25.0	29.7	14.2	21.6	27.7	13.3	19.5
10	23.9	3.4	14.3	30.6	17.4	22.1	31.7	16.5	24.1	23.2	9.3	17.2
11	25.8	3.6	15.3	29.4	15.8	22.2	25.4	12.4	20.6	18.4	6.2	11.8
12	28.2	5.8	17.5	29.1	19.1	22.9	25.0	9.1	16.7	20.1	4.6	11.4
13	29.8	8.9	19.0	30.5	21.0	23.6	24.1	11.7	17.4	23.1	5.5	13.3
14	30.1	11.3	19.6	30.6	19.2	25.4	25.1	9.5	16.6	27.1	7.0	15.7
15	24.7	10.1	18.0	27.6	18.4	21.5	16.6	14.0	15.3	27.9	9.6	17.9
16	30.1	6.6	18.7	27.8	17.5	21.3	22.5	11.1	17.1	26.7	11.9	18.4
17	30.6	12.9	23.0	24.1	15.7	20.1	25.2	10.6	16.2	27.0	11.4	18.3
18	27.8	16.7	21.5	27.5	12.8	19.9	26.1	8.3	16.8	21.6	12.3	18.5
19	23.3	12.4	17.5	28.2	12.5	19.7	23.7	8.9	17.3	19.8	5.7	11.5
20	14.9	9.0	11.4	28.7	13.9	19.8	22.4	7.3	13.9	21.4	3.4	12.2
21	14.3	4.6	10.0	21.1	13.1	17.7	25.7	6.5	15.3	23.6	12.9	19.1
22	21.6	1.8	12.0	24.5	12.5	18.3	28.3	9.1	18.0	19.5	7.8	16.8
23	21.4	8.4	13.8	29.0	16.0	20.8	26.7	14.7	20.1	15.4	3.1	9.0
24	24.2	9.6	16.5	26.1	16.8	20.5	28.9	14.2	21.0	18.1	.7	7.9
25	25.6	9.9	17.2	28.5	16.4	21.2	31.0	13.7	21.3	20.1	.5	9.3
26	27.8	9.7	18.2	25.9	17.5	21.8	31.3	15.6	22.0	24.1	5.0	14.4
27	24.7	6.9	16.0	27.5	14.8	21.0	29.0	17.9	21.3	20.9	6.7	16.4
28	26.7	6.0	16.7	26.6	11.8	19.0	19.0	12.1	16.8	22.5	3.2	11.6
29	28.5	7.1	18.5	27.5	12.4	19.6	21.0	6.5	14.2	13.2	.4	6.7
30	31.7	10.6	21.0	27.7	16.2	20.1	24.3	10.5	17.4	16.9	-.4	6.8
31	---	---	---	21.5	9.8	18.0	22.3	7.6	14.7	---	---	---
MONTH	31.7	1.8	16.9	31.3	6.4	20.7	31.7	6.5	18.0	28.4	-.4	15.1
YEAR	31.7	-23.1	9.0									

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	15.6	15.4	15.5	14.3	14.1	14.1	12.9	12.9	12.9	11.7	11.5	11.6
2	15.6	15.4	15.5	14.3	14.1	14.1	12.9	12.9	12.9	11.5	11.5	11.5
3	15.6	15.4	15.4	14.3	14.0	14.1	12.9	12.9	12.9	11.5	11.5	11.5
4	15.4	15.1	15.3	14.3	14.0	14.2	12.9	12.8	12.8	11.5	11.5	11.5
5	15.4	15.4	15.4	14.3	14.0	14.2	12.9	12.8	12.8	11.5	11.5	11.5
6	15.4	15.1	15.3	14.1	14.1	14.1	12.9	12.6	12.7	11.5	11.3	11.5
7	15.4	15.1	15.3	14.1	14.0	14.1	12.8	12.4	12.6	11.5	11.3	11.3
8	15.4	15.1	15.2	14.1	14.0	14.1	12.7	12.4	12.5	11.5	11.3	11.3
9	15.4	15.1	15.2	14.1	13.9	14.0	12.6	12.4	12.4	11.3	11.1	11.3
10	15.1	15.1	15.1	14.1	13.8	14.0	12.6	12.4	12.5	11.3	11.3	11.3
11	15.1	15.1	15.1	14.1	13.8	13.9	12.6	12.4	12.4	11.3	11.1	11.2
12	15.1	15.1	15.1	14.0	13.8	13.9	12.4	12.4	12.4	11.3	11.0	11.2
13	15.1	15.1	15.1	13.8	13.6	13.8	12.4	12.4	12.4	11.1	11.1	11.1
14	15.1	14.9	15.1	13.8	13.6	13.7	12.4	12.4	12.4	11.2	11.0	11.1
15	15.1	14.9	15.1	13.6	13.6	13.6	12.4	12.4	12.4	11.2	11.0	11.1
16	15.1	14.9	15.0	13.6	13.4	13.5	12.4	12.4	12.4	11.2	11.0	11.0
17	15.1	14.8	15.0	13.6	13.3	13.5	12.4	12.2	12.3	11.1	10.8	11.0
18	15.1	14.6	14.8	13.6	13.3	13.4	12.4	12.1	12.3	11.0	10.8	11.0
19	14.9	14.8	14.8	13.4	13.1	13.2	12.4	12.1	12.3	11.0	10.8	10.9
20	14.9	14.6	14.8	13.1	13.1	13.1	12.4	12.1	12.2	10.9	10.6	10.8
21	14.8	14.6	14.7	13.1	13.1	13.1	12.2	12.1	12.2	10.8	10.6	10.7
22	14.8	14.4	14.6	13.1	13.1	13.1	12.2	12.1	12.2	10.8	10.6	10.7
23	14.6	14.4	14.5	13.1	13.1	13.1	12.2	11.9	12.0	10.6	10.6	10.6
24	14.4	14.4	14.4	13.1	13.1	13.1	12.2	11.9	12.0	10.6	10.6	10.6
25	14.4	14.4	14.4	13.1	13.1	13.1	12.1	11.7	11.9	10.6	10.4	10.6
26	14.4	14.1	14.3	13.1	13.1	13.1	11.9	11.7	11.9	10.6	10.4	10.5
27	14.4	14.1	14.3	13.1	13.1	13.1	11.9	11.7	11.8	10.6	10.4	10.5
28	14.4	14.1	14.3	13.1	12.9	13.1	11.9	11.7	11.8	10.5	10.4	10.4
29	14.3	14.1	14.2	12.9	12.9	12.9	11.7	11.7	11.7	10.4	10.4	10.4
30	14.3	14.1	14.1	12.9	12.9	12.9	11.7	11.7	11.7	10.4	10.2	10.3
31	14.1	14.1	14.1	---	---	---	11.7	11.5	11.7	10.4	10.2	10.3
MONTH	15.6	14.1	14.9	14.3	12.9	13.6	12.9	11.5	12.3	11.7	10.2	11.0

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TEMPERATURE, SOIL DEG. C), WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	21.9	18.2	19.9	17.2	14.7	16.2	13.2	11.7	12.2	5.8	5.5	5.6
2	22.8	18.7	20.6	16.7	12.4	14.6	11.6	9.6	10.8	7.5	5.7	6.4
3	22.0	19.4	20.6	12.1	10.1	11.1	10.7	9.3	10.1	9.1	6.8	7.8
4	23.2	19.5	21.2	9.9	8.1	8.8	9.1	7.5	8.2	8.9	8.1	8.5
5	22.3	19.7	21.3	8.0	7.5	7.7	7.5	7.0	7.2	8.5	7.9	8.2
6	19.2	17.0	17.8	10.2	7.9	8.9	6.9	6.7	6.9	7.8	7.3	7.6
7	17.7	15.3	16.5	9.8	9.0	9.4	9.4	6.7	7.7	7.7	7.1	7.4
8	17.8	13.7	15.8	9.1	8.0	8.5	12.5	9.4	10.9	7.4	6.4	6.9
9	19.5	15.4	17.2	8.0	7.1	7.4	12.9	11.4	12.4	9.2	7.3	8.3
10	19.1	17.9	18.4	7.2	6.7	6.9	11.3	9.1	10.1	8.6	7.5	8.2
11	17.6	16.2	16.8	10.1	7.2	8.5	9.9	8.0	8.9	7.4	6.6	6.9
12	17.6	15.6	16.5	8.5	7.4	7.7	11.2	8.2	9.4	6.5	6.0	6.2
13	16.9	14.5	15.7	9.3	7.4	8.1	12.7	11.3	12.3	8.5	6.3	7.4
14	17.2	13.2	15.1	11.0	7.6	9.0	12.3	9.2	11.4	9.0	7.0	8.1
15	16.9	15.2	16.3	13.2	11.0	12.0	9.0	7.4	8.0	6.9	6.1	6.4
16	16.2	13.2	14.9	13.7	11.7	13.1	7.4	7.0	7.2	6.1	5.9	6.0
17	16.1	12.1	14.1	11.4	9.0	10.1	7.1	6.8	7.0	6.0	5.8	5.9
18	17.3	13.0	14.9	12.6	8.6	10.2	6.9	6.5	6.7	5.9	5.8	5.8
19	16.3	14.3	15.6	15.3	12.5	13.8	6.5	6.2	6.3	5.8	5.7	5.7
20	14.8	11.6	13.3	17.1	15.4	16.2	6.1	5.8	5.9	5.9	5.8	5.8
21	14.7	10.9	12.8	16.5	15.3	15.7	5.9	5.8	5.8	5.9	5.8	5.8
22	16.5	11.9	13.9	15.2	14.5	14.8	5.8	5.7	5.8	5.9	5.8	5.9
23	18.3	13.9	15.9	14.9	13.9	14.4	6.2	5.7	5.9	6.1	5.9	6.0
24	20.6	17.9	18.9	14.0	9.9	11.8	6.4	6.0	6.1	6.0	5.9	5.9
25	21.4	18.9	20.0	9.7	8.5	9.1	6.1	5.8	5.9	5.9	5.8	5.9
26	21.5	18.7	20.1	8.4	7.3	7.7	5.8	5.6	5.7	5.9	5.8	5.9
27	20.2	19.1	19.7	7.2	6.7	6.9	5.7	5.5	5.6	5.9	5.8	5.9
28	19.7	17.9	19.0	9.0	6.7	7.5	5.5	5.4	5.4	5.9	5.8	5.9
29	19.4	16.7	17.9	12.5	9.1	10.7	5.4	5.4	5.4	5.9	5.9	5.9
30	18.8	16.4	17.8	14.6	11.9	13.2	5.5	5.4	5.4	5.9	5.9	5.9
31	18.7	17.1	18.0	---	---	---	5.5	5.4	5.5	6.0	5.9	5.9
MONTH	23.2	10.9	17.3	17.2	6.7	10.7	13.2	5.4	7.8	9.2	5.5	6.6

TEMPERATURE, SOIL DEG. C), WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	6.1	5.9	6.0	10.4	7.1	8.4	11.4	9.4	10.3	21.1	15.4	17.9
2	6.0	5.8	5.9	13.0	8.1	10.3	10.1	8.2	9.0	22.9	19.0	20.8
3	5.8	5.8	5.8	13.7	9.8	11.7	10.4	7.6	8.9	21.6	18.8	20.4
4	5.8	5.8	5.8	15.1	10.2	12.6	10.6	7.7	9.0	19.8	18.1	18.8
5	6.0	5.8	5.8	14.5	11.3	12.8	13.1	7.6	10.0	20.0	17.0	18.3
6	5.8	5.7	5.7	14.5	12.9	13.7	13.6	8.4	10.8	20.5	16.7	18.6
7	5.7	5.7	5.7	15.6	14.1	14.7	15.8	11.1	13.2	21.6	16.3	18.9
8	5.8	5.7	5.7	15.3	14.5	14.9	17.6	13.3	15.3	20.7	17.4	19.0
9	5.8	5.7	5.7	16.3	13.5	14.9	17.0	13.7	15.3	21.4	18.9	20.1
10	5.7	5.6	5.6	15.6	12.6	14.8	15.8	13.9	15.0	23.8	18.1	20.8
11	5.6	5.6	5.6	12.4	9.7	11.2	19.0	14.2	16.3	25.0	19.5	22.2
12	5.6	5.5	5.5	10.3	8.6	9.3	18.7	16.1	17.5	25.5	20.5	23.0
13	5.5	5.4	5.5	8.7	7.6	8.0	15.9	12.6	14.5	23.8	21.7	22.9
14	5.5	5.4	5.5	7.6	7.1	7.2	15.5	13.5	14.5	23.1	19.8	21.4
15	6.4	5.5	5.7	8.3	7.1	7.5	17.2	13.3	15.2	25.4	19.9	22.3
16	7.3	6.0	6.6	9.0	7.0	7.7	19.6	14.6	16.8	25.7	20.9	23.3
17	9.0	6.8	7.7	9.6	7.4	8.3	19.1	17.7	18.7	25.9	21.7	23.8
18	10.4	7.8	8.8	8.4	7.0	7.5	18.9	16.5	17.5	24.6	23.0	23.8
19	9.6	8.5	9.1	8.3	7.0	7.5	22.6	17.2	19.5	26.2	21.2	23.4
20	9.1	8.5	8.8	9.1	6.8	7.7	23.2	19.8	21.3	27.5	23.2	25.2
21	11.0	8.1	9.2	10.7	7.4	8.9	22.3	20.9	21.6	27.3	22.7	25.0
22	12.2	8.1	9.9	9.3	7.6	8.4	21.3	18.5	19.7	27.5	22.8	25.1
23	11.9	8.9	10.4	8.7	6.8	7.6	21.5	16.0	18.6	27.2	23.7	25.5
24	12.0	9.9	10.8	10.2	6.8	8.1	20.6	19.3	20.0	25.8	21.6	23.4
25	11.0	10.3	10.6	9.4	7.3	8.4	19.4	17.9	18.4	23.3	19.1	21.1
26	10.2	8.8	9.4	12.1	9.4	10.5	17.9	16.8	17.3	22.1	20.4	21.3
27	10.8	8.5	9.5	11.2	9.7	10.2	19.1	15.8	17.3	22.1	19.5	20.8
28	10.3	8.4	9.4	12.5	8.1	10.1	20.4	14.9	17.4	23.1	18.3	20.7
29	9.5	7.9	8.6	9.9	8.1	9.2	18.1	15.0	16.9	21.6	18.7	20.5
30	---	---	---	10.2	9.2	9.6	18.1	16.9	17.4	21.6	20.4	20.9
31	---	---	---	12.9	7.9	10.2	---	---	---	21.4	20.7	21.1
MONTH	12.2	5.4	7.4	16.3	6.8	10.1	23.2	7.6	15.8	27.5	15.4	21.6

403635082152300 AS-45 NR LOUDONVILLE OH

TEMPERATURE, SOIL DEG. C), WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	23.7	19.7	21.5	28.8	25.9	27.3	28.5	25.0	26.7	27.3	22.2	24.7
2	23.9	20.5	22.3	29.2	26.5	27.9	28.1	24.9	26.6	25.5	22.3	24.1
3	24.4	20.5	22.5	29.0	27.7	28.4	27.3	25.0	26.1	27.5	24.6	25.7
4	23.5	22.1	22.9	28.3	26.3	27.4	28.3	25.2	26.6	27.5	24.6	26.1
5	24.7	22.7	23.5	27.6	26.0	26.8	27.0	24.5	25.8	28.4	24.9	26.4
6	26.1	23.7	24.6	27.5	25.5	26.5	27.7	23.7	25.6	29.1	25.2	27.0
7	25.3	23.9	24.6	27.4	24.7	26.1	27.9	24.3	26.1	28.8	25.0	26.9
8	26.1	24.2	25.1	27.4	25.8	26.6	28.2	26.6	27.2	28.2	25.8	26.9
9	25.0	22.2	23.7	29.3	27.0	28.0	29.5	26.2	27.7	28.1	24.9	26.4
10	24.7	21.0	22.9	29.5	27.5	28.5	30.2	26.9	28.4	27.3	25.2	26.1
11	24.8	21.0	22.9	30.0	27.4	28.7	30.1	27.9	28.9	25.5	22.4	24.0
12	25.5	21.4	23.4	29.5	28.0	28.8	28.0	25.5	27.0	25.4	21.0	23.2
13	26.1	22.5	24.2	30.3	28.4	29.2	27.6	25.5	26.4	25.7	21.0	23.2
14	26.2	23.4	24.9	31.5	28.8	30.0	27.3	24.7	26.0	26.0	21.2	23.5
15	25.8	23.8	24.9	30.5	28.8	29.8	26.2	24.6	25.2	26.8	22.0	24.3
16	27.4	22.8	25.0	31.3	28.7	29.9	26.0	24.4	25.0	26.9	22.9	24.9
17	28.5	24.7	26.5	30.0	28.4	29.1	26.8	23.7	25.1	26.7	22.7	24.7
18	28.7	25.8	27.2	30.8	27.4	29.0	26.4	23.3	24.9	25.2	23.8	24.6
19	27.8	26.1	26.9	30.8	27.8	29.4	26.6	24.4	25.3	24.4	21.3	23.1
20	26.1	23.9	24.8	30.2	27.9	29.1	25.7	22.9	24.3	23.9	20.0	22.0
21	23.9	22.5	23.3	29.1	27.9	28.4	27.9	22.4	24.8	24.8	22.3	23.3
22	25.0	20.9	22.9	29.2	26.8	27.9	28.8	23.6	26.1	24.4	23.0	23.9
23	23.9	22.2	23.1	30.0	27.5	28.5	28.5	25.4	26.9	22.6	20.2	21.5
24	25.3	22.4	23.7	29.4	28.0	28.8	29.7	25.3	27.4	21.4	18.0	19.8
25	26.6	22.9	24.5	30.1	27.8	28.9	30.3	25.7	27.8	21.3	17.3	19.3
26	27.3	23.4	25.2	29.7	28.3	29.0	30.4	26.5	28.4	22.1	18.2	20.0
27	27.0	23.3	25.3	30.5	28.0	29.1	29.8	27.0	28.2	22.7	21.0	21.7
28	27.2	23.0	25.1	29.9	26.9	28.4	27.5	25.2	26.6	21.2	18.2	19.8
29	27.8	23.2	25.5	29.1	26.5	27.9	27.2	22.7	25.0	19.6	17.0	18.4
30	28.6	24.3	26.4	29.3	27.3	28.2	26.8	23.2	25.0	18.8	15.8	17.3
31	---	---	---	28.7	27.1	28.1	27.1	22.5	24.8	---	---	---
MONTH	28.7	19.7	24.3	31.5	24.7	28.4	30.4	22.4	26.3	29.1	15.8	23.4
YEAR	31.5	5.4	16.7									

RAINFALL ACCUMULATED (INCHES), WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.20	.00	.06	.01	.01	.00
2	.00	.00	1.16	.00	.00	.00	.05	.38	.00	.01	.02	.01
3	.00	.00	.56	.04	.00	.00	.00	.00	.00	.01	.01	.00
4	.00	.00	.00	.01	.00	.00	.04	.20	.11	.00	.01	.01
5	.00	.00	.01	.00	.00	.00	.00	.01	.02	.01	.01	.00
6	.00	.00	.00	.00	.00	.56	.00	.00	.03	.01	.01	.00
7	.00	.00	.00	.00	.00	.70	.07	.00	.00	.00	.02	.01
8	.00	.00	.05	.00	.01	.04	.01	.19	.01	.01	.01	.00
9	.00	.00	.02	.09	.00	.01	.00	.04	.00	.00	.01	.01
10	.00	.03	.00	.00	.02	.36	.01	.00	.00	.01	.01	.01
11	.00	.03	.00	.00	.00	.00	.38	.00	.00	.01	.00	.00
12	.00	.09	.06	.01	.00	.01	.02	.00	.00	.01	.01	.01
13	.00	.55	.52	.14	.18	.00	.00	.00	.00	.01	.00	.00
14	.00	.01	.07	.65	.00	.00	.00	.01	.00	.00	.01	.01
15	.00	.10	.00	.04	.50	.00	.00	.00	.00	.02	.00	.00
16	.00	.06	.00	.14	.04	.00	.49	.00	.00	.00	.01	.00
17	.00	.00	.00	.10	.00	.13	.19	.29	.00	.01	.00	.00
18	.00	.04	.01	.05	.09	.87	.79	.41	.37	.01	.00	.01
19	.00	.17	.00	.09	.17	.53	.00	.22	.03	.01	.01	.00
20	.00	.01	.02	.10	.02	.02	.06	.09	.01	.02	.00	.00
21	.00	.09	.15	.01	.01	.09	.22	.02	.01	.02	.01	.01
22	.00	.00	.00	.03	.01	.34	.02	.00	.01	.01	.00	.00
23	.00	.25	.24	.43	.02	.01	.00	.08	.01	.01	.00	.01
24	.00	.00	.00	.00	.02	.00	.14	.21	.01	.01	.00	.00
25	.00	.00	.00	.16	.00	.22	.09	.13	.02	.01	.01	.00
26	.00	.00	.00	.04	.00	.31	.03	.10	.01	.02	.00	.00
27	.00	.01	.00	.00	.00	.08	.00	.00	.01	.02	.02	.01
28	.00	.13	.08	.00	.41	.00	.00	.00	.01	.01	.01	.00
29	.00	.00	.14	.00	.01	.05	.00	.12	.00	.01	.01	.00
30	.00	.28	.03	.00	---	.21	.19	.46	.01	.02	.00	.01
31	.00	---	.00	.00	---	.00	---	.36	---	.02	.00	---
TOTAL	0.00	1.85	3.12	2.13	1.51	4.54	3.00	3.32	0.74	0.33	0.22	0.12

WTR YR 1992 TOTAL 20.88

GROUND-WATER RECORDS

403923082325500. Local number, R-16.

LOCATION.--Lat 40°39'23" Long 82°32'55", Hydrologic Unit 05040002, along State Route 97 near Lexington, OH.
Owner.--USGS-Sam McBride.

AQUIFER.--Sand and Gravel of Pleistocene age.

WELL CHARACTERISTICS.--Observation well drilled by hollow stem auger, diameter 4.0 in., depth 18.9 ft. Cased with Sch 40 PVC to 8.9 ft; .010 in. screen from 8.9 to 18.9 ft.

INSTRUMENTATION - Data logger--60 minute record. Precipitation data collected with a propane-heated, tipping-bucket rain gauge. Also collected: air temperature, soil temperature, water temperature, and specific conductance. Conductivity/water temperature probe set at 18.6 feet below land surface.

DATUM.--Elevation of land-surface datum is 1168.37 feet above National Geodetic Vertical Datum of 1929.
Measuring point: shelter floor 2.36 ft above land-surface datum.

REMARKS.--This station is part of an eight-site network to collect data for the Ohio Department of Transportation concerning road salt application and its effect(s) on shallow ground-water quality. Water-quality data for nearby wells is available in preceding tables.

PERIOD OF RECORD.--February 1991 to current year.

PERIOD OF DAILY RECORD.--

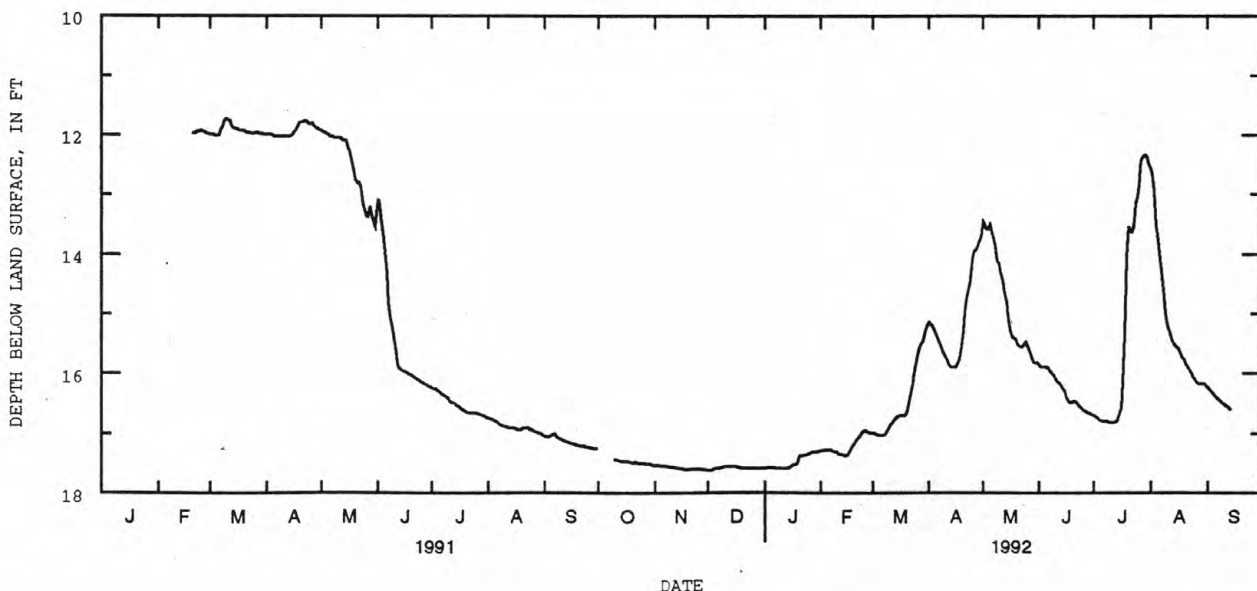
WATER LEVEL: February 1991 to current year.
SPECIFIC CONDUCTANCE: February 1991 to current year.
AIR TEMPERATURE: February 1991 to current year.
WATER TEMPERATURE: February 1991 to current year.
SOIL TEMPERATURE: February 1991 to current year.
PRECIPITATION: February 1991 to current year.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER LEVEL: Maximum daily low, 17.62 ft. below land-surface datum, November 30-December 3, 1991; minimum daily low, 11.73 ft. below land-surface datum, March 9-11, 1992.
SPECIFIC CONDUCTANCE: Maximum, 634 microsiemens July 23, 1992; minimum, 157 microsiemens March 6, 1991.
AIR TEMPERATURE: Maximum, 36.0°C August 1, 1991; minimum, -26.1°C January 19, 1992.
WATER TEMPERATURE: Maximum, 12.0°C many days in 1991; minimum, 8.5°C many days in 1991.
SOIL TEMPERATURE: Maximum, 28.5°C July 17, 19, and 20, 1991; minimum, 1.0°C February 27 & 28, 1991.

EXTREMES FOR CURRENT YEAR.--

WATER LEVEL: Maximum daily low, 17.62 ft below land-surface datum, November 30-December 3, 1991; minimum daily low, 12.32 ft below land-surface datum, July 28, 29, 1991.
SPECIFIC CONDUCTANCE: Maximum, 634 microsiemens July 23, 1992; minimum, 306 microsiemens May 15, 1992.
AIR TEMPERATURE: Maximum, 30.4°C August 10, 1992; minimum, -26.1°C January 19, 1992.
WATER TEMPERATURE: Maximum, 12.0°C many days in 1991; minimum, 8.8°C many days in 1992.
SOIL TEMPERATURE: Maximum, 27.9°C July 14, 1992; minimum, 1.0°C February 12-15, 1992.



403923082325500 R-16 NR LEXINGTON OH

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	17.53	17.62	17.58	17.28	16.99	15.15	13.45	15.85	16.70	12.56	16.23
2	---	17.53	17.62	17.57	17.28	16.99	15.18	13.48	15.88	16.72	12.64	16.27
3	---	17.53	17.62	17.57	17.27	17.01	15.20	13.58	15.88	16.74	12.93	16.31
4	---	17.54	17.60	17.57	17.27	17.02	15.27	13.58	15.88	16.77	13.53	16.34
5	---	17.54	17.59	17.57	17.27	17.02	15.35	13.51	15.88	16.78	13.76	16.37
6	---	17.54	17.59	17.57	17.27	17.02	15.42	13.64	15.91	16.79	14.09	16.41
7	---	17.54	17.58	17.58	17.27	17.02	15.50	13.76	15.96	16.80	14.28	16.44
8	---	17.55	17.57	17.58	17.29	17.01	15.58	13.85	16.00	16.80	14.61	16.46
9	---	17.55	17.56	17.58	17.30	16.96	15.64	14.11	16.04	16.82	14.99	16.49
10	17.43	17.56	17.55	17.58	17.31	16.90	15.70	14.15	16.09	16.82	15.19	16.51
11	17.45	17.56	17.55	17.59	17.33	16.86	15.76	14.34	16.13	16.82	15.29	16.53
12	17.46	17.56	17.55	17.58	17.35	16.81	15.84	14.45	16.16	16.82	15.40	16.56
13	17.47	17.57	17.55	17.58	17.35	16.77	15.88	14.62	16.20	16.81	15.46	16.59
14	17.47	17.58	17.55	17.58	17.36	16.74	15.89	14.80	16.25	16.77	15.52	---
15	17.47	17.59	17.55	17.56	17.37	16.71	15.89	15.04	16.30	16.70	15.55	---
16	17.47	17.59	17.55	17.54	17.36	16.70	15.88	15.26	16.40	16.57	15.58	---
17	17.47	17.60	17.56	17.52	17.31	16.70	15.82	15.38	16.47	16.15	15.66	---
18	17.48	17.61	17.57	17.52	17.26	16.70	15.74	15.41	16.48	15.35	15.72	---
19	17.49	17.61	17.58	17.50	17.21	16.70	15.54	15.42	16.48	14.04	15.77	---
20	17.49	17.61	17.58	17.39	17.16	16.64	15.29	15.50	16.46	13.54	15.83	---
21	17.48	17.60	17.59	17.37	17.11	16.49	14.99	15.54	16.47	13.62	15.88	---
22	17.49	17.60	17.59	17.37	17.07	16.33	14.74	15.55	16.51	13.63	15.94	---
23	17.50	17.60	17.59	17.36	17.03	16.17	14.59	15.55	16.55	13.55	16.00	---
24	17.50	17.60	17.58	17.36	16.99	15.99	14.44	15.51	16.57	13.15	16.05	---
25	17.50	17.60	17.58	17.34	16.96	15.82	14.09	15.48	16.61	13.03	16.09	---
26	17.50	17.60	17.58	17.34	16.95	15.66	13.94	15.55	16.62	12.84	16.14	---
27	17.51	17.60	17.58	17.32	16.97	15.54	13.94	15.64	16.64	12.42	16.17	---
28	17.51	17.61	17.58	17.31	16.98	15.49	13.87	15.73	16.65	12.37	16.17	---
29	17.51	17.61	17.58	17.31	16.99	15.45	13.78	15.81	16.67	12.34	16.17	---
30	17.52	17.62	17.58	17.30	---	15.30	13.70	15.82	16.69	12.36	16.17	---
31	17.53	---	17.58	17.29	---	15.21	---	15.81	---	12.49	16.20	---
MAX	17.53	17.62	17.62	17.59	17.37	17.02	15.89	15.82	16.69	16.82	16.20	16.59

WTR YR 1992 LOW 17.62

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	436	433	435	447	446	447	455	454	454	466	463	465
2	437	434	435	448	446	448	456	455	455	466	463	465
3	437	434	436	449	446	448	455	454	455	466	465	465
4	438	435	437	449	446	447	457	454	456	466	465	466
5	439	437	438	449	447	448	457	454	456	467	466	466
6	439	436	437	449	447	449	456	455	455	467	466	467
7	440	437	438	450	447	448	455	454	454	468	467	467
8	440	437	438	450	447	448	455	454	454	468	467	468
9	441	438	438	450	447	449	456	454	455	468	467	468
10	439	433	437	450	447	449	456	456	456	468	468	468
11	437	435	436	450	447	449	456	455	456	468	466	467
12	439	435	438	451	448	449	456	455	456	467	465	466
13	440	439	439	451	448	450	456	455	455	466	465	465
14	441	439	440	451	448	450	457	456	456	467	465	466
15	441	440	440	451	448	451	458	457	457	467	465	466
16	442	437	440	452	449	451	459	458	459	467	465	466
17	442	437	440	452	450	451	459	458	458	468	465	466
18	441	437	440	453	450	452	460	459	459	468	465	467
19	442	441	441	452	451	451	461	458	460	468	466	468
20	443	438	441	452	450	451	461	460	461	468	466	468
21	443	439	442	453	452	452	461	460	461	468	465	467
22	443	438	441	454	453	453	462	461	462	468	466	467
23	442	439	441	454	453	453	461	461	461	469	466	466
24	442	439	441	454	451	453	462	460	461	469	466	467
25	443	440	443	454	452	453	462	460	461	470	467	468
26	444	440	443	455	452	453	463	461	462	471	467	469
27	444	443	444	455	452	454	463	460	461	471	467	469
28	445	442	444	455	454	454	463	461	462	470	468	469
29	445	442	445	454	453	454	463	462	462	470	469	469
30	446	443	445	454	453	454	463	462	463	469	468	469
31	446	445	446	---	---	---	464	463	463	469	468	469
MONTH	446	433	440	455	446	451	464	454	458	471	463	467

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TEMPERATURE, AIR, DEGREES CENTIGRADE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	27.2	11.9	19.2	17.6	3.0	10.5	4.5	1.6	3.0	2.6	-1.3	.5
2	26.4	12.8	19.5	6.1	-1.7	1.2	5.7	.7	1.9	8.7	-2.5	3.9
3	22.9	10.3	16.6	-1	-8.3	-3.7	11.2	-2.4	2.3	11.3	2.7	6.0
4	27.2	9.7	19.4	-4.0	-11.5	-7.6	-5.4	-14.3	-10.5	7.4	1.5	4.4
5	18.9	5.2	13.8	1.7	-11.9	-4.6	2.4	-13.8	-7.2	2.3	.5	1.5
6	9.7	3.3	6.0	6.1	-.6	2.4	3.2	-4.6	-1.4	.8	.1	.4
7	12.1	-1.7	5.3	-.5	-5.6	-2.7	12.4	1.6	8.5	2.1	-.6	1.0
8	18.7	-3.2	7.9	1.8	-11.1	-4.9	15.2	10.4	12.7	5.1	-6.1	.6
9	23.2	11.1	16.1	5.1	-13.0	-5.2	13.7	.4	6.4	7.8	1.9	5.0
10	17.3	3.5	11.7	8.6	-11.6	-.8	3.7	-3.3	.6	1.7	-2.1	.4
11	13.0	3.5	7.8	8.7	-6.6	1.6	8.5	-1.7	4.1	4.0	-3.2	-.2
12	14.8	1.4	7.6	1.1	-8.4	-2.2	14.9	-1.6	7.2	6.2	-1.7	2.0
13	12.5	-1.7	4.8	7.3	.3	3.1	15.7	6.7	9.6	6.7	2.8	4.8
14	17.8	-2.1	8.5	14.9	-2.4	7.9	7.4	-3.2	2.3	5.8	-15.0	-4.4
15	12.0	3.1	7.6	15.5	9.4	11.3	-.9	-9.1	-4.7	-5.3	-10.8	-8.4
16	12.4	-4.6	3.2	10.4	-3.9	5.7	-3.3	-12.3	-8.1	-9.9	-19.8	-15.3
17	18.6	-3.3	7.0	11.3	-6.9	1.3	5.0	-3.9	.4	-1.1	-9.9	-5.5
18	21.4	8.4	13.3	16.7	4.4	11.1	-3.5	-9.5	-5.8	-10.6	-18.5	-12.7
19	11.6	-1.7	5.7	16.8	13.5	15.1	-.9	-15.5	-8.5	-6.4	-26.1	-14.6
20	12.2	-5.7	2.3	18.7	8.1	15.4	3.6	-7.7	-1.3	-2.4	-9.7	-5.8
21	17.4	-4.4	4.9	11.6	7.9	9.0	4.0	-5.7	.6	5.0	-8.1	-1.5
22	23.0	-.8	11.0	9.2	6.0	8.0	4.0	-4.1	-.6	6.6	-10.5	-1.2
23	22.7	6.3	15.8	13.7	.1	7.3	5.4	-1.8	3.0	5.2	-2.6	2.9
24	24.2	15.5	18.9	-.3	-5.7	-2.8	2.7	-4.1	-.7	-3.4	-10.6	-6.6
25	23.2	13.5	18.6	-3.1	-7.6	-5.6	4.4	-3.5	-.7	-5.1	-15.2	-8.9
26	23.9	11.1	17.4	.4	-12.6	-5.5	4.3	-8.2	-2.5	-2.9	-11.0	-6.2
27	19.2	11.5	16.0	5.3	-3.9	.8	6.6	-7.2	-1.9	5.1	-13.8	-3.3
28	16.8	10.4	12.7	12.6	4.6	6.7	5.2	-2.4	.9	3.6	-2.8	-.4
29	22.0	11.2	15.3	18.5	10.9	13.9	1.7	-.4	.6	-.2	-2.6	-1.4
30	21.8	7.3	13.9	17.5	2.4	12.0	.3	-2.1	-.5	3.9	-2.6	.6
31	16.2	5.0	11.5	---	---	---	-1.4	-3.7	-2.4	.2	-2.1	-.4
MONTH	27.2	-5.7	11.6	18.7	-13.0	3.3	15.7	-15.5	.2	11.3	-26.1	-2.0

TEMPERATURE, AIR, DEGREES CENTIGRADE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY				MARCH			APRIL			MAY		
1	-2.4	-12.1	-5.9	15.0	-4.2	6.3	2.7	-3.1	-.3	25.0	.2	13.0
2	2.5	-12.9	-4.6	20.1	-1.0	9.5	-.4	-5.8	-3.1	25.6	10.6	19.6
3	9.1	-8.1	-.6	16.7	-.3	7.0	4.9	-4.5	.4	18.1	3.8	10.4
4	5.5	-3.0	1.0	24.4	-.1	10.7	7.4	-1.3	1.7	10.9	4.8	6.9
5	1.8	-7.1	-3.1	21.3	2.6	10.8	9.9	-5.9	1.7	12.5	3.7	7.2
6	7.9	-10.0	-1.6	13.8	8.7	12.3	14.8	-5.3	5.0	14.8	3.7	8.9
7	.2	-2.6	-1.0	16.1	10.4	12.2	20.4	3.9	12.2	18.5	-.8	9.6
8	-3.0	-8.5	-5.1	11.8	4.6	9.6	15.6	-.2	8.7	20.2	4.7	12.8
9	-5.6	-17.0	-11.1	17.1	2.4	11.5	18.0	3.5	11.1	16.5	7.9	12.3
10	3.7	-17.3	-4.9	16.4	-7.5	5.2	12.8	4.1	9.3	24.3	4.1	14.0
11	3.8	-8.8	-.1	-4.7	-10.1	-7.4	24.1	12.3	17.6	25.6	6.5	16.4
12	-2.6	-12.5	-6.9	-2.3	-9.3	-6.2	11.6	-1.5	6.3	28.4	7.6	18.5
13	2.1	-3.9	-1.0	-2.2	-9.0	-5.7	7.7	-2.8	2.5	19.8	9.6	15.0
14	1.6	-.6	.5	-.9	-9.8	-4.7	9.3	2.3	5.3	17.4	7.6	10.8
15	13.7	1.4	6.9	-2.0	-12.8	-6.3	15.8	3.3	9.3	24.5	9.2	15.9
16	3.6	-.1	1.5	4.3	-16.0	-4.0	26.1	6.8	15.9	26.7	6.9	17.3
17	6.8	.9	3.1	8.0	-1.7	3.6	16.2	7.0	11.4	27.1	10.6	18.5
18	12.4	4.3	7.7	.6	-3.3	-1.1	18.9	6.7	11.9	17.3	9.5	14.3
19	7.5	1.0	4.3	.3	-6.9	-1.6	26.1	8.6	17.4	25.1	7.4	16.8
20	2.4	.5	1.4	4.9	-7.9	-1.8	26.5	15.7	20.8	25.4	12.6	18.9
21	8.3	-1.1	3.4	2.1	-8.3	-1.2	19.4	12.0	17.3	26.5	8.5	17.9
22	17.5	.9	8.0	3.2	-7.1	-1.3	13.5	3.4	10.0	27.7	9.9	19.3
23	13.5	.1	5.5	2.6	-9.9	-3.4	23.5	.2	12.8	26.6	10.5	18.3
24	9.2	.2	3.1	10.7	-7.9	1.2	19.5	7.5	13.1	9.6	4.6	7.9
25	8.5	.5	4.0	8.6	-2.1	4.2	7.5	4.3	5.7	15.2	1.0	8.4
26	1.3	-1.0	.0	11.3	4.3	7.4	10.8	4.3	6.6	12.9	5.6	9.2
27	9.5	1.4	4.7	5.3	-.9	2.1	13.3	1.9	7.5	14.2	2.7	8.6
28	8.8	-3.3	2.6	7.0	-3.2	1.3	13.1	-.1	6.1	20.1	.0	10.1
29	-3.4	-8.6	-5.5	5.6	-5.1	.5	14.1	-2.0	7.3	19.2	3.0	11.4
30	---	---	---	4.2	-.9	2.3	12.6	2.4	9.4	16.7	10.3	13.1
31	---	---	---	12.3	-2.3	5.5	---	---	---	12.9	7.8	12.0
MONTH	17.5	-17.3	.2	24.4	-16.0	2.5	26.5	-5.9	8.7	28.4	-.8	13.3

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TEMPERATURE, AIR, DEGREES CENTIGRADE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	20.3	6.9	14.0	29.3	17.1	22.2	24.8	8.1	15.9	22.8	-7.8	14.8
2	23.1	6.3	15.1	29.3	17.7	23.8	23.9	9.9	17.0	22.1	9.3	16.2
3	25.0	6.3	16.3	26.2	17.4	22.2	23.3	12.2	17.6	24.8	17.1	20.6
4	20.6	12.5	17.1	25.5	12.5	19.8	23.0	11.7	17.2	22.6	13.4	18.6
5	22.9	15.6	18.4	25.5	16.5	20.6	22.7	9.6	15.4	27.5	13.6	19.8
6	25.7	14.9	20.0	21.7	10.3	16.2	24.8	7.6	16.4	27.5	18.8	22.2
7	21.7	16.7	19.7	23.4	8.2	17.0	26.5	11.7	19.6	26.6	16.4	21.3
8	22.9	11.2	18.2	26.0	15.9	21.6	26.9	17.6	22.7	23.6	14.7	20.2
9	21.2	8.1	14.6	27.5	20.4	24.7	28.6	14.4	21.6	25.4	12.2	18.6
10	23.9	5.5	15.2	28.4	18.2	22.2	30.4	16.9	23.8	21.9	9.6	17.3
11	25.4	5.1	16.4	27.8	17.8	22.7	24.5	13.9	20.5	17.0	6.3	11.4
12	27.7	8.4	18.5	26.7	19.5	22.7	24.8	10.4	17.3	19.8	3.7	11.2
13	28.1	10.1	19.7	29.0	21.3	24.2	22.8	13.5	17.4	22.2	5.0	13.2
14	26.2	12.5	19.0	29.5	19.5	25.3	23.3	10.5	16.2	---	---	---
15	24.5	12.4	18.4	24.2	18.7	20.5	16.7	14.2	15.3	---	---	---
16	28.7	9.4	19.7	27.0	16.5	20.5	21.2	10.7	16.9	---	---	---
17	29.7	17.7	24.2	22.6	16.0	19.9	24.7	8.9	15.7	---	---	---
18	26.9	16.5	21.2	26.4	14.8	20.2	25.5	8.4	17.1	---	---	---
19	21.5	11.7	17.1	26.4	13.3	19.5	23.1	10.4	17.5	---	---	---
20	13.4	9.0	10.9	26.8	16.3	20.2	22.1	7.2	14.5	---	---	---
21	14.1	5.2	9.7	20.2	13.5	17.5	24.1	6.5	15.4	---	---	---
22	19.0	1.6	11.3	23.3	13.2	18.1	26.9	10.8	18.7	---	---	---
23	20.1	9.6	14.4	27.3	16.9	20.8	26.8	16.3	20.8	---	---	---
24	20.9	11.6	16.3	24.9	17.6	20.2	28.0	16.3	21.8	---	---	---
25	23.2	11.4	17.6	25.9	16.9	20.7	30.1	15.2	22.0	---	---	---
26	25.8	11.6	18.8	25.8	19.8	22.2	28.4	16.2	21.7	---	---	---
27	23.5	11.5	16.8	25.1	14.7	20.9	28.3	18.9	21.5	---	---	---
28	24.4	7.9	16.6	25.6	12.3	18.9	19.0	13.0	16.5	---	---	---
29	27.1	9.1	18.6	26.8	16.5	21.0	20.5	8.1	14.5	---	---	---
30	29.3	12.6	20.8	25.6	15.7	20.0	22.9	14.5	18.4	---	---	---
31	---	---	---	20.9	10.8	17.6	22.0	9.9	16.0	---	---	---
MONTH	29.7	1.6	17.2	29.5	8.2	20.8	30.4	6.5	18.2	27.5	3.7	17.3
YEAR	30.4	-26.1	8.9									

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	11.8	11.5	11.7	11.8	11.7	11.8	11.7	11.7	11.7	11.7	11.5	11.6
2	11.8	11.5	11.7	12.0	11.7	11.8	11.7	11.7	11.7	11.7	11.5	11.5
3	11.8	11.5	11.6	12.0	11.7	11.8	11.8	11.7	11.7	11.5	11.5	11.5
4	11.8	11.5	11.6	12.0	11.7	11.9	11.9	11.7	11.7	11.5	11.5	11.5
5	11.7	11.5	11.6	12.0	11.7	11.9	11.9	11.7	11.8	11.5	11.5	11.5
6	11.8	11.5	11.7	12.0	11.7	11.8	11.7	11.7	11.7	11.5	11.5	11.5
7	11.8	11.6	11.7	12.0	11.7	11.9	11.8	11.7	11.8	11.5	11.5	11.5
8	11.8	11.6	11.7	12.0	11.7	11.9	11.8	11.8	11.8	11.5	11.5	11.5
9	11.8	11.6	11.8	12.0	11.7	11.9	11.8	11.7	11.8	11.5	11.5	11.5
10	12.0	11.7	11.8	12.0	11.7	11.8	11.7	11.7	11.7	11.5	11.5	11.5
11	11.8	11.7	11.8	12.0	11.7	11.9	11.8	11.7	11.7	11.5	11.5	11.5
12	12.0	11.7	11.8	12.0	11.7	11.9	11.8	11.7	11.7	11.5	11.5	11.5
13	11.8	11.7	11.8	12.0	11.7	11.8	11.8	11.7	11.8	11.5	11.5	11.5
14	11.8	11.7	11.8	12.0	11.7	11.8	11.7	11.7	11.7	11.5	11.5	11.5
15	11.8	11.7	11.8	12.0	11.8	11.8	11.7	11.7	11.7	11.5	11.5	11.5
16	12.0	11.7	11.8	12.0	11.7	11.8	11.7	11.7	11.7	11.5	11.5	11.5
17	12.0	11.7	11.8	12.0	11.7	11.9	11.7	11.7	11.7	11.5	11.3	11.5
18	12.0	11.8	11.8	12.0	11.7	11.8	11.7	11.7	11.7	11.5	11.3	11.5
19	11.8	11.7	11.8	11.8	11.8	11.8	11.8	11.7	11.7	11.5	11.3	11.4
20	12.0	11.7	11.8	11.8	11.8	11.8	11.7	11.7	11.7	11.3	11.3	11.3
21	12.0	11.7	11.8	11.8	11.8	11.8	11.8	11.7	11.7	11.3	11.1	11.3
22	12.0	11.7	11.8	11.8	11.7	11.8	11.7	11.7	11.7	11.3	11.1	11.3
23	12.0	11.7	11.8	11.8	11.7	11.8	11.7	11.7	11.7	11.3	11.1	11.3
24	12.0	11.8	11.9	12.0	11.7	11.9	11.8	11.7	11.7	11.3	11.1	11.3
25	12.0	11.8	11.8	12.0	11.7	11.9	11.8	11.7	11.7	11.3	11.1	11.2
26	12.0	11.8	11.8	12.0	11.7	11.9	11.7	11.7	11.7	11.3	11.0	11.2
27	11.8	11.8	11.8	12.0	11.7	11.8	11.8	11.7	11.7	11.3	11.0	11.2
28	12.0	11.8	11.8	11.8	11.7	11.7	11.7	11.7	11.7	11.1	11.1	11.1
29	12.0	11.8	11.8	11.8	11.8	11.8	11.7	11.7	11.7	11.1	11.1	11.1
30	12.0	11.8	11.8	11.8	11.7	11.8	11.7	11.7	11.7	11.1	11.1	11.1
31	11.8	11.8	11.8	---	---	---	11.7	11.7	11.7	11.1	11.1	11.1
MONTH	12.0	11.5	11.8	12.0	11.7	11.8	11.9	11.7	11.7	11.7	11.0	11.4

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TEMPERATURE, SOIL DEG. C), WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	19.8	16.8	18.1	13.5	12.0	12.7	9.2	7.6	8.1	3.1	2.3	2.6
2	20.5	17.5	18.9	12.6	9.0	10.7	7.5	5.7	6.7	4.0	2.6	3.2
3	19.6	18.1	18.9	8.9	6.7	7.9	6.5	5.4	6.0	5.3	3.8	4.4
4	20.0	17.4	18.5	6.4	4.8	5.5	5.2	4.3	4.6	5.1	4.8	4.9
5	19.3	16.5	18.2	5.3	3.6	4.5	4.2	3.3	3.7	4.8	4.1	4.4
6	16.2	14.0	14.8	6.5	5.0	5.7	3.6	3.2	3.4	4.0	3.5	3.8
7	14.2	12.5	13.4	6.2	5.2	5.8	5.9	3.1	4.3	3.7	3.3	3.5
8	14.3	10.9	12.6	5.3	3.8	4.6	8.3	5.9	7.0	3.4	2.6	3.0
9	16.2	13.2	14.4	4.5	2.4	3.4	8.7	7.4	8.3	4.7	3.3	4.1
10	15.9	14.6	15.2	4.9	2.2	3.5	7.3	5.6	6.2	4.5	3.4	4.0
11	14.4	13.2	13.6	6.4	4.9	5.5	6.1	4.8	5.4	3.3	2.6	2.9
12	14.1	12.4	13.1	5.0	3.6	4.1	7.1	4.9	5.7	3.0	2.3	2.7
13	12.9	11.0	12.0	5.8	4.4	4.9	8.4	7.3	8.1	4.4	2.9	3.5
14	12.5	10.2	11.3	7.5	4.6	5.9	8.1	5.6	7.4	4.7	3.2	4.0
15	12.6	11.0	11.9	8.9	7.5	8.1	5.4	3.5	4.1	3.1	2.5	2.7
16	12.0	9.4	10.9	9.4	7.8	8.9	3.5	3.0	3.2	2.5	2.4	2.5
17	12.0	8.8	10.4	7.5	5.3	6.4	3.5	2.9	3.1	2.4	2.3	2.3
18	13.5	10.4	11.7	9.0	5.9	7.0	3.2	2.5	2.9	2.4	2.2	2.3
19	12.9	10.7	11.9	11.5	9.2	10.3	2.5	2.0	2.3	2.2	1.7	1.9
20	10.9	8.4	9.8	12.9	11.5	12.2	2.1	1.8	1.9	1.9	1.7	1.8
21	10.9	7.9	9.4	12.3	11.0	11.6	2.0	1.8	1.9	2.0	1.9	1.9
22	12.3	8.7	10.3	11.0	10.3	10.7	1.9	1.8	1.9	2.0	1.9	1.9
23	14.2	11.1	12.5	10.3	9.7	10.0	3.3	1.9	2.7	1.9	1.7	1.8
24	15.9	14.0	14.8	9.5	6.1	7.3	3.0	2.4	2.7	1.8	1.6	1.7
25	16.1	15.1	15.5	6.1	5.3	5.9	2.8	2.1	2.4	1.7	1.5	1.5
26	16.3	14.8	15.5	5.2	3.7	4.3	2.6	2.0	2.3	1.6	1.5	1.5
27	15.9	15.2	15.5	3.7	3.0	3.3	2.2	1.8	2.0	1.6	1.5	1.6
28	15.4	14.3	14.9	5.8	3.8	4.7	2.2	1.8	1.9	1.8	1.6	1.7
29	15.0	13.1	14.0	8.6	5.9	7.2	2.8	2.3	2.6	1.8	1.7	1.7
30	14.6	13.2	14.0	10.4	8.6	9.5	2.7	2.5	2.6	1.8	1.6	1.7
31	14.5	13.7	14.1	---	---	---	2.6	2.2	2.3	2.0	1.7	1.8
MONTH	20.5	7.9	13.9	13.5	2.2	7.1	9.2	1.8	4.1	5.3	1.5	2.7

TEMPERATURE, SOIL DEG. C), WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	1.9	1.5	1.7	5.0	2.1	3.3	6.8	4.7	5.7	14.5	9.4	11.6
2	1.5	1.3	1.4	7.6	3.8	5.5	4.4	3.4	3.9	17.1	13.4	15.0
3	1.5	1.2	1.3	8.2	5.3	6.7	5.1	2.6	3.8	15.9	13.2	14.6
4	1.8	1.3	1.5	9.6	6.0	7.7	5.4	3.2	4.2	13.8	12.3	13.0
5	1.9	1.4	1.6	9.2	7.2	8.2	7.2	3.0	4.9	14.4	11.3	12.7
6	1.5	1.3	1.4	9.7	8.4	9.0	8.1	3.8	5.8	14.1	11.6	12.9
7	1.4	1.2	1.3	10.8	9.5	10.0	10.4	6.4	8.1	15.5	10.7	13.0
8	1.3	1.3	1.3	10.4	9.7	10.0	11.3	7.8	9.6	15.1	12.3	13.6
9	1.3	1.2	1.3	10.3	8.5	9.5	11.6	8.5	9.9	15.7	13.5	14.6
10	1.2	1.1	1.1	10.1	7.1	9.4	10.6	8.9	9.6	17.4	12.9	15.0
11	1.2	1.1	1.1	6.8	4.8	5.7	13.4	9.3	10.9	18.9	14.1	16.4
12	1.2	1.0	1.1	5.5	3.7	4.5	12.9	10.7	11.8	19.6	15.3	17.4
13	1.1	1.0	1.0	3.8	2.6	3.1	10.4	7.9	9.2	18.4	16.5	17.4
14	1.1	1.0	1.0	2.7	2.2	2.5	9.3	8.1	8.7	16.6	14.9	15.8
15	3.1	1.0	1.6	3.2	2.1	2.5	10.6	7.8	9.1	18.1	14.3	16.0
16	3.1	2.4	2.8	4.3	2.1	3.0	13.4	9.1	10.9	19.8	15.2	17.3
17	3.9	2.5	3.1	4.6	3.0	3.7	13.2	12.2	12.9	20.0	16.7	18.3
18	5.0	3.3	4.0	3.8	2.4	2.9	13.0	10.8	11.8	19.2	17.3	18.2
19	5.0	4.4	4.8	3.3	2.3	2.7	16.0	11.5	13.5	19.7	15.6	17.5
20	4.4	3.5	3.8	4.4	2.0	2.9	16.9	14.4	15.5	20.8	17.9	19.3
21	5.2	3.2	4.0	5.2	2.8	3.9	16.3	15.4	15.9	21.3	17.5	19.4
22	6.6	3.7	4.9	4.4	2.7	3.5	15.7	12.8	14.0	21.9	18.0	19.9
23	6.6	4.7	5.7	3.4	2.0	2.6	14.8	10.6	12.6	21.9	18.9	20.4
24	6.7	5.0	5.8	4.9	2.0	3.1	14.4	13.3	13.9	20.6	15.8	17.8
25	5.9	5.1	5.6	4.5	2.9	3.7	13.1	11.3	12.0	17.1	14.0	15.5
26	5.0	3.7	4.2	7.0	4.5	5.6	11.4	10.3	10.8	16.1	14.7	15.4
27	5.2	3.5	4.2	6.4	4.8	5.4	12.6	10.0	11.1	15.6	13.7	14.7
28	4.8	3.7	4.3	6.7	3.5	4.9	13.6	9.3	11.3	16.9	12.9	14.9
29	4.3	2.7	3.3	5.2	3.6	4.4	12.0	9.6	10.9	16.0	14.0	15.2
30	---	---	---	4.9	4.1	4.5	11.8	10.8	11.2	15.8	14.9	15.3
31	---	---	---	7.6	3.5	5.4	---	---	---	15.6	15.0	15.3
MONTH	6.7	1.0	2.8	10.8	2.0	5.2	16.9	2.6	10.1	21.9	9.4	15.9

403923082325500 R-16 NR LEXINGTON OH

TEMPERATURE, SOIL DEG. C), WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	17.8	14.2	15.7	25.0	22.6	23.8	23.4	20.5	21.9	23.7	20.8	22.2
2	18.7	15.4	17.0	26.1	23.1	24.5	23.6	20.9	22.2	22.8	21.1	22.0
3	19.8	15.9	17.8	25.7	24.2	25.0	22.9	21.4	22.2	23.9	22.4	22.9
4	19.0	17.8	18.4	25.1	22.7	23.9	23.2	21.4	22.2	23.9	22.4	23.3
5	19.4	17.8	18.5	24.2	22.7	23.5	22.7	20.6	21.6	24.9	22.1	23.4
6	21.3	18.5	19.6	23.6	21.6	22.7	23.2	19.9	21.5	26.0	23.7	24.7
7	20.8	19.9	20.3	23.4	20.4	22.0	24.1	20.9	22.4	26.1	24.0	25.1
8	21.6	19.7	20.6	23.6	21.8	22.7	24.9	23.2	23.8	25.4	24.3	24.9
9	21.1	18.4	19.8	25.6	23.5	24.3	25.3	22.7	24.0	24.8	22.9	23.9
10	21.3	17.5	19.4	25.8	23.7	24.7	26.4	23.7	24.9	24.4	23.3	23.8
11	21.8	17.9	19.8	26.4	24.0	25.1	26.5	24.7	25.6	23.2	20.8	21.7
12	22.7	18.5	20.6	26.1	24.5	25.3	24.9	22.7	24.0	21.9	19.1	20.5
13	23.2	19.5	21.4	26.5	24.9	25.6	24.7	22.7	23.6	22.7	19.2	20.9
14	22.2	20.4	21.5	27.9	25.4	26.5	24.2	21.7	23.1	---	---	---
15	22.6	20.1	21.4	26.9	25.3	26.0	23.3	21.8	22.3	---	---	---
16	23.6	19.4	21.5	26.7	24.6	25.6	23.1	21.4	22.0	---	---	---
17	24.6	21.5	23.0	25.9	24.6	25.0	23.8	20.6	22.1	---	---	---
18	24.4	21.8	23.2	25.7	23.2	24.4	23.4	20.7	22.2	---	---	---
19	23.5	21.7	22.6	25.5	23.2	24.4	24.0	22.1	22.9	---	---	---
20	21.5	19.3	20.3	24.9	23.7	24.3	23.2	20.5	21.9	---	---	---
21	19.1	18.0	18.6	24.1	23.0	23.4	23.7	20.1	21.9	---	---	---
22	19.8	16.3	18.0	23.7	21.7	22.6	24.8	21.4	23.0	---	---	---
23	19.0	18.0	18.5	25.1	22.5	23.6	24.9	23.1	24.0	---	---	---
24	20.4	18.1	19.1	24.7	23.6	24.2	25.8	23.2	24.4	---	---	---
25	20.4	18.8	19.5	25.1	23.3	24.1	26.6	23.6	25.0	---	---	---
26	22.4	18.9	20.4	25.0	23.9	24.4	26.3	24.4	25.4	---	---	---
27	22.2	19.8	21.0	25.5	23.8	24.6	26.8	24.6	25.6	---	---	---
28	22.4	19.2	20.8	25.1	22.7	23.9	25.7	22.6	24.3	---	---	---
29	23.4	19.7	21.5	25.2	23.3	24.2	23.3	20.6	22.0	---	---	---
30	24.5	20.9	22.6	24.9	23.4	24.1	23.1	21.4	22.3	---	---	---
31	---	---	---	24.4	22.3	23.6	23.5	21.0	22.3	---	---	---
MONTH	24.6	14.2	20.1	27.9	20.4	24.3	26.8	19.9	23.1	26.1	19.1	23.0
YEAR	27.9	1.0	12.2									

RAINFALL ACCUMULATED (INCHES), WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.05	.00	.00	.00	.00	.10	.00	.00	.00	.00	.00
2	.00	.00	1.01	.01	.00	.00	.03	.78	.00	.00	.00	.09
3	.06	.00	.16	.05	.01	.00	.00	.00	.00	.04	.02	.16
4	.04	.00	.00	.01	.00	.00	.01	.13	.04	.00	.06	.02
5	.12	.01	.00	.00	.00	.00	.00	.00	.18	.15	.00	.00
6	.01	.00	.00	.00	.00	.43	.00	.00	.00	.00	.00	.06
7	.00	.00	.00	.00	.00	.46	.09	.00	.06	.00	.00	.05
8	.00	.00	.07	.00	.00	.02	.00	.12	.00	.06	.17	.02
9	.00	.00	.00	.11	.00	.00	.00	.00	.00	.00	.07	.50
10	.61	.00	.00	.08	.00	.27	.00	.00	.00	1.19	.23	.38
11	.00	.00	.00	.00	.00	.00	.62	.00	.00	.00	.06	.00
12	.00	.15	.05	.00	.00	.00	.01	.00	.00	1.32	.00	.00
13	.03	.00	.17	.31	.10	.00	.00	.01	.00	1.50	.05	.00
14	.30	.00	.04	.78	.00	.01	.00	.03	.08	.45	.00	---
15	.00	.18	.00	.00	.62	.00	.00	.00	.00	1.34	.44	---
16	.00	.05	.00	.00	.06	.00	.38	.00	.00	.30	.00	---
17	.00	.00	.00	.00	.01	.11	.31	.82	.00	.69	.00	---
18	.00	.20	.01	.00	.26	.06	.52	.53	1.89	.00	.00	---
19	.07	.34	.00	.00	.20	.01	.00	.00	.01	.00	.15	---
20	.00	.00	.02	.02	.03	.07	.17	.00	.00	.27	.00	---
21	.00	.05	.18	.07	.00	.10	.40	.00	.02	.17	.00	---
22	.00	.00	.00	.07	.01	.14	.02	.00	.00	.00	.00	---
23	.00	.19	.21	.35	.01	.00	.16	.52	.24	1.44	.00	---
24	.00	.00	.00	.00	.00	.00	.19	.33	.04	.17	.00	---
25	.03	.02	.00	.00	.00	.27	.07	.01	.25	.00	.00	---
26	.02	.00	.00	.08	.00	.18	.03	.08	.10	.22	.00	---
27	.01	.03	.00	.12	.00	.04	.00	.00	.00	.00	1.23	---
28	.00	.12	.08	.00	.37	.00	.00	.00	.00	.00	.25	---
29	.00	.00	.15	.00	.00	.07	.01	.20	.00	.00	.00	---
30	.03	.10	.00	.01	---	.14	.10	.57	.00	.54	.11	---
31	.00	---	.00	.00	---	.00	---	.05	---	.07	.00	---
TOTAL	1.33	1.49	2.15	2.07	1.68	2.38	3.22	4.18	2.91	9.92	2.84	1.28

WTR YR 1992 TOTAL 35.45

GROUND-WATER RECORDS

411138081172500. Local number, PO-116.

LOCATION.--Lat 41°11'38" Long 81°17'25", Hydrologic Unit 04110002, along State Route 14 near Ravenna, OH.
Owner.--USGS-City of Akron, OH.

AQUIFER.--Sand and Gravel of Pleistocene age.

WELL CHARACTERISTICS.--Observation well drilled by hollow stem auger, diameter 4.0 in., depth 17.5 ft. Cased with Sch 40 PVC to 5.2 ft; .010 in. screen from 5.2 to 17.5 ft.

INSTRUMENTATION - Data logger--60 minute record. Precipitation data collected with a propane-heated, tipping-bucket rain gauge. Also collected: water level, air temperature, soil temperature, water temperature and specific conductance. Conductivity/water temperature probe set at 10.8 feet below land surface.

DATUM.--Elevation of land-surface datum is 1068.39 feet above National Geodetic Vertical Datum of 1929.
Measuring point: shelter floor 2.20 ft above land-surface datum.

REMARKS.--This station is part of an eight-site network to collect data for the Ohio Department of Transportation concerning road salt application and its effect(s) on shallow ground-water quality. Water-quality data for nearby wells is available in preceding tables.

PERIOD OF RECORD.--February 1991 to current year.

PERIOD OF DAILY RECORD.--

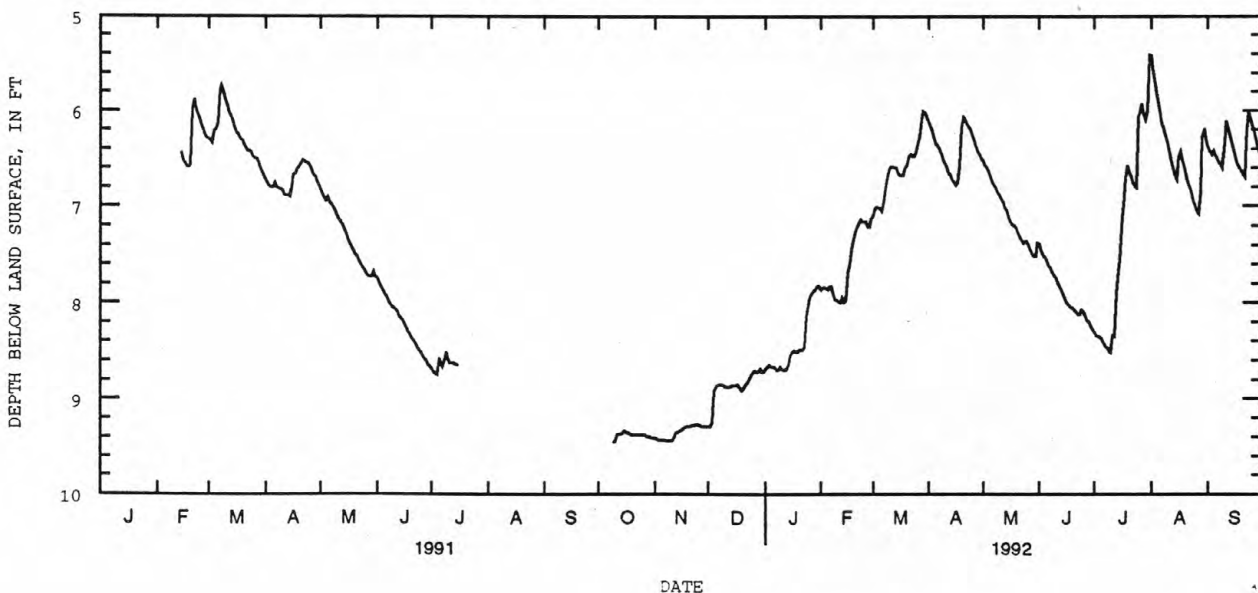
WATER LEVEL: February 1991 to current year.
SPECIFIC CONDUCTANCE: February 1991 to July 1992.
AIR TEMPERATURE: February 1991 to current year.
SOIL TEMPERATURE: July 1992 to current year.
PRECIPITATION: February 1991 to current year.
WATER TEMPERATURE: February 1991 to July 1992.

EXTREMES FOR PERIOD OF DAILY RECORD:

WATER LEVEL: Maximum daily low, 9.45 ft. below land-surface datum, October 9-10, 1991; minimum daily low, 5.15 ft. below land-surface datum, July 31, 1992.
SPECIFIC CONDUCTANCE: Maximum, 2540 microsiemens December 19-20, 22-28, 1991; minimum, 242 microsiemens April 10, 1992.
AIR TEMPERATURE: Maximum, 36.0°C August 2, 1991; minimum, -19.1°C February 9-10, 1992.
WATER TEMPERATURE: Maximum, 14.8°C October 1, 1991; minimum, 6.5°C many days in 1991.
SOIL TEMPERATURE: Maximum, 28.5°C August 11, 1992; minimum, 12.9°C September 30, 1992. (Probe functional only from July-September, 1992).

EXTREMES FOR CURRENT YEAR:

WATER LEVEL: Maximum daily low, 9.45 ft. below land-surface datum, October 9-10, 1991; minimum daily low, 5.15 ft. below land-surface datum, July 31, 1992.
SPECIFIC CONDUCTANCE: Maximum, 2540 microsiemens December 19-20, 22-28, 1991; minimum, 242 microsiemens April 10, 1992.
AIR TEMPERATURE: Maximum, 31.9°C July 14, 1992; minimum, -19.1°C February 9-10, 1992.
WATER TEMPERATURE: Maximum, 14.8°C October 1, 1991; minimum, 6.8°C many days in March-April, 1992.
SOIL TEMPERATURE: Maximum, 28.5°C August 11, 1992; minimum, 12.9°C September 30, 1992. (Probe functional only from July-September, 1992).



411138081172500 PO-116 NR RAVENNA OH

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	9.41	9.29	8.69	7.86	7.09	6.12	6.53	7.39	8.31	5.42	6.38
2	---	9.42	9.29	8.67	7.85	7.03	6.17	6.57	7.46	8.34	5.55	6.43
3	---	9.43	9.25	8.65	7.84	7.01	6.20	6.60	7.51	8.35	5.68	6.46
4	---	9.43	8.92	8.66	7.85	7.02	6.28	6.64	7.53	8.36	5.81	6.42
5	---	9.43	8.88	8.67	7.86	7.03	6.35	6.70	7.56	8.38	5.93	6.46
6	---	9.43	8.86	8.67	7.83	7.05	6.37	6.75	7.61	8.42	6.05	6.50
7	---	9.44	8.85	8.70	7.83	6.96	6.41	6.79	7.64	8.46	6.14	6.54
8	---	9.44	8.85	8.70	7.91	6.82	6.46	6.81	7.69	8.47	6.19	6.57
9	9.45	9.44	8.86	8.67	7.97	6.70	6.51	6.86	7.72	8.51	6.27	6.60
10	9.45	9.44	8.87	8.69	7.97	6.62	6.55	6.89	7.75	8.52	6.34	6.34
11	9.38	9.43	8.88	8.70	7.99	6.59	6.59	6.93	7.79	8.34	6.45	6.11
12	9.37	9.39	8.88	8.70	8.00	6.59	6.66	6.96	7.83	8.35	6.54	6.18
13	9.37	9.36	8.87	8.68	7.95	6.60	6.68	7.01	7.87	7.90	6.60	6.26
14	9.36	9.35	8.86	8.63	7.99	6.60	6.72	7.06	7.92	7.67	6.68	6.34
15	9.34	9.34	8.86	8.55	7.97	6.66	6.76	7.11	7.97	7.56	6.72	6.42
16	9.35	9.33	8.86	8.52	7.69	6.68	6.78	7.16	8.00	7.12	6.48	6.49
17	9.36	9.31	8.85	8.50	7.60	6.68	6.75	7.19	8.03	6.99	6.43	6.56
18	9.37	9.30	8.90	8.51	7.48	6.68	6.58	7.20	8.05	6.71	6.50	6.60
19	9.38	9.29	8.91	8.51	7.37	6.60	6.18	7.23	8.05	6.58	6.60	6.63
20	9.38	9.29	8.89	8.49	7.28	6.57	6.07	7.27	8.08	6.65	6.67	6.67
21	9.38	9.29	8.85	8.49	7.22	6.48	6.08	7.31	8.10	6.69	6.75	6.70
22	9.38	9.28	8.83	8.49	7.18	6.46	6.14	7.35	8.13	6.75	6.81	6.33
23	9.38	9.28	8.80	8.46	7.14	6.48	6.17	7.38	8.13	6.79	6.87	6.00
24	9.38	9.27	8.76	8.14	7.16	6.48	6.20	7.37	8.08	6.81	6.94	6.07
25	9.38	9.27	8.73	8.03	7.16	6.44	6.26	7.36	8.10	6.06	7.00	6.15
26	9.38	9.28	8.71	7.95	7.16	6.35	6.32	7.40	8.14	6.02	7.06	6.21
27	9.39	9.29	8.72	7.91	7.21	6.27	6.37	7.45	8.18	5.93	7.08	6.28
28	9.40	9.29	8.72	7.88	7.21	6.10	6.43	7.50	8.21	6.04	6.85	6.37
29	9.40	9.29	8.69	7.86	7.13	6.01	6.46	7.52	8.24	6.10	6.27	6.45
30	9.41	9.29	8.72	7.83	---	6.02	6.51	7.52	8.28	6.01	6.19	6.51
31	9.41	---	8.72	7.82	---	6.06	---	7.38	---	5.41	6.29	---
MAX	9.45	9.44	9.29	8.70	8.00	7.09	6.78	7.52	8.28	8.52	7.08	6.70

WTR YR 1992 LOW 9.45

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	2070	2050	2060	2310	2290	2300	2470	2450	2460	2520	2510	2520
2	2080	2050	2070	2320	2290	2300	2470	2460	2470	2520	2490	2510
3	2090	2070	2070	2320	2300	2310	2480	2460	2470	2510	2490	2500
4	2090	2070	2080	2330	2300	2320	2490	2470	2480	2510	2490	2500
5	2090	2080	2080	2330	2300	2320	2500	2480	2490	2510	2480	2500
6	2110	2090	2100	2330	2310	2320	2500	2490	2490	2510	2490	2500
7	2120	2100	2100	2330	2330	2330	2510	2490	2500	2500	2480	2490
8	2120	2100	2120	2350	2330	2340	2500	2490	2500	2490	2460	2480
9	2110	2090	2100	2360	2340	2340	2510	2500	2500	2480	2460	2470
10	2130	2100	2110	2360	2340	2350	2520	2500	2510	2480	2460	2470
11	2130	2110	2130	2370	2350	2360	2520	2500	2510	2470	2460	2470
12	2150	2130	2140	2390	2370	2370	2520	2500	2510	2470	2450	2460
13	2170	2140	2150	2400	2370	2390	2520	2510	2510	2460	2440	2450
14	2170	2150	2160	2400	2380	2390	2530	2510	2520	2460	2440	2450
15	2180	2160	2170	2400	2380	2390	2530	2520	2530	2460	2440	2450
16	2190	2170	2180	2410	2390	2400	2530	2520	2530	2470	2440	2460
17	2200	2180	2190	2420	2390	2410	2530	2510	2530	2460	2450	2460
18	2210	2180	2200	2430	2400	2410	2530	2530	2530	2460	2450	2450
19	2210	2190	2200	2420	2410	2420	2540	2520	2530	2460	2450	2460
20	2220	2200	2210	2420	2420	2420	2540	2520	2530	2460	2450	2460
21	2230	2210	2220	2430	2420	2420	2530	2510	2530	2460	2420	2440
22	2240	2220	2230	2420	2420	2420	2540	2520	2530	2450	2420	2440
23	2240	2220	2230	2430	2420	2420	2540	2520	2530	2450	2420	2430
24	2250	2230	2240	2450	2430	2440	2540	2510	2530	2460	2440	2450
25	2250	2240	2240	2450	2440	2450	2540	2510	2530	2460	2440	2450
26	2260	2240	2250	2450	2430	2440	2540	2510	2530	2470	2450	2460
27	2270	2260	2260	2450	2430	2450	2540	2520	2530	2470	2440	2460
28	2280	2270	2270	2460	2430	2450	2540	2520	2530	2460	2440	2450
29	2290	2270	2280	2460	2440	2450	2530	2510	2530	2460	2440	2460
30	2300	2280	2280	2450	2450	2450	2530	2520	2520	2470	2450	2450
31	2300	2280	2290	---	---	---	2530	2490	2520	2460	2440	2450
MONTH	2300	2050	2170	2460	2290	2390	2540	2450	2510	2520	2420	2470

411138081172500 PO-116 NR RAVENNA OH

TEMPERATURE, AIR, DEGREES CENTIGRADE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	26.7	12.5	19.2	20.1	.5	11.7	5.2	2.6	3.7	1.6	-4.0	-.7
2	26.2	12.2	20.0	10.4	-1.7	3.1	4.7	.8	2.4	9.3	.1	4.1
3	21.8	10.1	14.9	1.4	-7.3	-2.2	12.0	-1.7	3.5	11.1	3.0	6.3
4	26.8	8.6	17.9	-.8	-9.3	-5.9	-2.0	-10.7	-7.9	10.6	2.2	5.6
5	21.4	4.4	15.1	1.9	-11.1	-3.9	1.1	-13.3	-7.5	3.6	.8	2.0
6	11.3	4.0	6.7	6.1	-.5	2.6	2.8	-4.4	-1.7	1.1	.0	.6
7	12.4	-.1	6.3	1.6	-2.4	-.5	11.6	.7	7.8	2.0	-2.6	.8
8	17.9	-2.4	8.2	.3	-3.4	-2.0	15.1	9.8	12.4	4.7	-6.6	.4
9	22.1	9.6	15.8	4.6	-7.9	-1.6	14.4	2.7	7.0	7.9	2.8	5.1
10	16.3	2.5	11.3	9.3	-10.1	-.2	8.2	-2.0	3.0	2.6	-.9	.9
11	9.6	2.6	7.0	5.4	-4.3	1.0	8.9	-.7	4.0	.3	-4.5	-1.7
12	9.1	1.3	6.1	4.1	-4.5	-.2	13.7	-2.7	6.3	7.6	-2.9	2.0
13	12.5	-.9	6.2	3.7	.7	2.0	14.9	6.6	9.8	6.2	2.8	4.8
14	18.4	-1.6	8.8	13.0	-1.9	6.6	6.5	-2.4	2.8	12.0	-11.1	-1.8
15	13.0	3.5	8.0	14.5	7.6	10.6	-.1	-8.7	-4.0	-3.8	-12.1	-7.7
16	12.0	-3.2	4.0	10.7	-3.0	5.8	-5.1	-11.1	-8.1	-9.8	-17.7	-13.8
17	19.5	-3.1	6.5	9.4	-6.7	.3	4.0	-4.9	-.4	-1.3	-10.9	-5.7
18	21.8	1.6	10.8	14.7	.0	8.5	-2.7	-8.6	-5.8	-9.2	-15.3	-11.6
19	9.8	1.6	6.4	17.0	9.8	14.8	-.9	-16.8	-10.3	-8.2	-17.6	-12.8
20	12.8	-1.7	4.4	19.1	8.9	15.5	3.2	-16.0	-3.8	-4.3	-13.2	-7.4
21	17.2	-3.2	5.6	10.7	7.2	8.9	3.8	-3.6	.7	4.9	-9.9	-2.1
22	22.4	-1.1	9.8	9.8	6.3	7.8	3.0	-7.9	-1.4	4.7	-10.8	-1.5
23	25.3	5.2	15.6	10.9	2.8	7.8	4.2	-.7	2.3	6.1	-1.7	3.7
24	25.5	15.0	19.3	1.8	-4.4	-1.6	1.6	-2.8	-.6	-2.3	-8.9	-6.2
25	23.9	16.0	20.2	-3.3	-5.6	-4.4	3.6	-7.1	-.7	-5.8	-15.5	-9.7
26	26.3	12.5	19.2	.4	-9.5	-4.8	4.0	-9.2	-3.1	-2.8	-11.8	-6.9
27	19.3	12.5	16.3	4.8	-5.4	-.6	6.3	-5.7	-1.1	5.2	-13.3	-4.4
28	18.2	4.8	11.6	12.2	3.8	6.0	2.9	-5.1	-.7	1.8	-6.5	-1.0
29	20.8	5.2	12.1	16.8	8.6	13.0	3.0	.2	1.5	.0	-2.6	-1.3
30	23.0	2.6	12.1	18.2	3.6	13.1	.7	-3.7	-.6	3.9	-3.5	.4
31	15.9	3.5	10.6	---	---	---	2.3	-7.8	-3.0	.7	-2.9	-.4
MONTH	26.8	-3.2	11.5	20.1	-11.1	3.7	15.1	-16.8	.2	12.0	-17.7	-1.9

TEMPERATURE, AIR, DEGREES CENTIGRADE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	-3.3	-6.9	-5.3	15.0	-5.8	5.8	3.7	-2.7	.4	21.9	1.6	12.9
2	2.1	-10.8	-4.1	18.7	.3	9.3	-1.1	-5.3	-3.3	25.3	10.9	20.4
3	3.8	-9.4	-2.9	13.7	-1.0	4.7	4.1	-3.6	.3	19.3	2.9	10.2
4	4.6	-3.8	.0	21.9	-2.5	8.5	7.6	-1.4	2.1	10.8	4.7	7.1
5	-.4	-10.3	-4.7	22.4	1.2	11.5	7.4	-4.2	1.5	8.8	3.5	6.1
6	7.6	-11.9	-3.1	13.7	7.2	11.5	14.8	-5.9	4.9	16.4	.6	8.4
7	1.3	-3.2	-.9	13.2	8.4	10.7	19.5	4.2	11.3	19.4	-1.1	9.9
8	-2.3	-9.6	-5.4	10.7	8.3	9.6	15.2	1.7	8.6	19.6	5.1	13.2
9	-6.7	-19.1	-11.5	18.2	-.3	11.3	15.9	4.3	10.0	14.9	6.5	11.1
10	3.2	-19.1	-5.9	16.8	-6.5	6.3	14.4	1.8	7.8	23.0	5.5	14.4
11	3.8	-9.2	-1.0	-6.6	-8.7	-7.7	25.0	8.0	16.8	27.1	6.5	17.2
12	-3.5	-15.8	-8.4	-4.2	-9.3	-7.1	9.0	-2.5	4.7	28.6	8.4	19.0
13	1.7	-5.3	-1.7	-2.4	-9.5	-6.2	7.7	-5.5	1.8	20.6	7.8	16.1
14	1.6	-1.2	.2	.9	-8.7	-3.9	11.8	1.9	6.0	17.4	6.2	10.7
15	10.9	.8	6.1	-4.1	-14.1	-7.8	16.6	-.8	9.1	24.6	8.0	15.8
16	3.9	-1.3	.9	3.0	-18.1	-6.0	24.0	7.0	15.3	27.5	10.1	18.4
17	5.5	-.1	2.0	5.0	-3.6	1.7	16.0	6.6	9.8	28.9	12.1	20.4
18	9.3	2.4	5.3	1.8	-7.6	-2.0	16.3	6.6	10.6	17.7	9.3	14.9
19	7.0	1.7	4.9	2.1	-4.2	-.3	27.9	9.1	18.0	25.3	6.7	16.5
20	2.6	-.2	1.3	5.4	-9.8	-1.7	27.1	15.2	20.4	25.8	10.0	18.2
21	6.8	-1.8	2.8	1.7	-8.8	-2.0	20.3	15.7	17.6	27.1	4.3	16.3
22	15.7	-.1	6.5	.5	-5.2	-2.1	16.1	6.3	12.0	29.1	6.9	18.8
23	13.0	2.0	5.8	-.1	-11.6	-5.0	23.7	.6	12.6	27.5	10.3	18.7
24	10.3	1.5	4.7	8.5	-13.2	-1.6	18.3	6.6	12.4	9.6	1.2	7.7
25	6.5	.6	4.0	11.0	-1.6	5.4	7.3	4.0	5.6	17.2	.4	8.2
26	1.1	-1.2	-.1	9.4	4.4	6.5	9.8	4.2	6.7	14.1	6.4	9.5
27	8.4	.6	4.2	4.6	-1.5	1.6	13.3	.6	7.4	17.1	2.6	9.4
28	6.2	-3.8	2.0	3.2	-4.9	.2	13.4	-1.2	6.9	18.8	-.5	10.1
29	-4.5	-11.4	-7.3	10.0	-7.4	1.8	14.5	-3.0	7.6	22.3	.7	13.0
30	---	---	---	4.7	.5	2.3	11.3	2.6	8.9	14.8	10.7	12.8
31	---	---	---	12.6	-3.2	5.8	---	---	---	17.4	12.0	13.4
MONTH	15.7	-19.1	-.4	22.4	-18.1	2.0	27.9	-5.9	8.5	29.1	-1.1	13.5

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TEMPERATURE, AIR, DEGREES CENTIGRADE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	21.8	9.9	15.4	29.6	13.1	21.2	24.8	8.2	16.5	21.4	9.0	14.7
2	23.6	6.5	15.3	30.9	12.9	22.4	25.0	9.6	17.4	22.5	8.1	15.9
3	26.4	6.2	16.7	29.5	20.3	23.9	23.4	11.8	18.1	23.6	15.8	20.2
4	21.5	11.6	16.6	25.4	14.3	20.4	22.1	12.4	17.5	21.7	13.6	17.4
5	22.7	15.1	18.2	25.0	13.7	19.9	23.1	8.8	15.3	25.9	11.9	19.3
6	24.9	13.5	18.5	21.7	10.0	16.0	26.0	6.3	16.2	27.3	17.9	21.7
7	24.0	14.4	20.1	25.3	7.3	17.1	27.7	11.9	19.9	29.0	15.8	21.6
8	23.0	10.3	18.8	25.8	12.4	20.2	26.3	18.4	22.0	26.1	13.5	20.6
9	21.3	5.8	13.9	29.3	17.9	25.2	28.5	13.6	20.6	26.2	11.2	17.8
10	23.8	4.2	14.2	27.7	16.6	21.0	31.2	13.5	23.0	22.0	11.5	18.0
11	26.8	3.9	16.0	28.1	18.2	22.4	24.1	13.5	20.4	18.5	7.0	12.0
12	28.8	6.8	18.2	27.5	18.1	22.0	24.0	11.3	17.2	20.8	4.2	11.6
13	28.3	9.3	19.2	26.7	21.4	23.0	23.6	13.0	17.2	23.1	5.0	13.3
14	29.6	11.0	19.2	31.9	19.5	25.2	23.8	12.0	16.3	25.9	7.7	16.1
15	25.1	11.6	17.4	25.4	18.8	21.0	16.3	13.9	15.1	27.9	11.5	19.5
16	29.7	9.6	19.4	27.6	17.9	22.0	20.4	11.1	16.7	27.2	14.9	20.1
17	29.6	14.1	23.0	24.3	16.6	20.1	23.3	9.8	15.8	27.1	14.7	20.4
18	26.8	16.3	21.4	28.3	14.8	20.8	24.7	8.6	17.3	23.9	13.9	18.8
19	21.2	10.5	16.5	27.8	13.4	20.3	21.7	10.2	17.0	17.6	6.5	12.4
20	12.0	7.6	9.9	27.3	16.9	21.1	22.6	6.9	14.1	21.7	4.1	12.6
21	9.9	5.6	8.1	21.7	11.2	17.3	24.9	5.5	14.8	24.5	13.2	19.4
22	19.9	7	10.9	24.5	8.4	17.2	27.7	8.1	17.7	20.1	10.7	17.2
23	17.7	7.0	12.8	25.7	17.1	20.6	27.9	14.7	20.8	14.5	4.1	9.5
24	21.1	11.6	15.5	21.6	15.4	18.2	29.4	17.5	22.5	18.7	2.7	8.9
25	23.3	8.9	16.1	27.1	18.0	21.2	29.5	17.9	22.9	19.5	3.4	11.4
26	25.3	9.2	17.8	25.7	17.8	21.3	29.9	16.9	22.9	24.2	9.5	16.7
27	22.2	9.3	16.1	26.1	13.7	20.9	29.6	18.2	22.3	19.8	7.4	16.6
28	25.6	6.3	16.2	25.4	12.3	18.8	19.6	13.0	17.6	22.4	3.6	12.6
29	28.3	8.0	18.8	27.0	17.3	20.5	20.2	10.6	14.8	12.9	2.3	8.2
30	29.7	11.5	20.7	24.8	16.2	18.5	23.1	14.4	18.3	14.0	2.3	6.9
31	---	---	---	22.3	10.7	17.5	21.9	11.1	16.4	---	---	---
MONTH	29.7	7	16.7	31.9	7.3	20.6	31.2	5.5	18.2	29.0	2.3	15.7
YEAR	31.9	-19.1	9.0									

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	14.8	14.4	14.5	13.5	13.2	13.3	12.2	12.0	12.1	10.7	10.5	10.6
2	14.7	14.2	14.5	13.5	13.2	13.3	12.2	12.0	12.1	10.7	10.5	10.6
3	14.5	14.2	14.4	13.4	13.2	13.2	12.2	11.8	12.0	10.7	10.5	10.6
4	14.5	14.2	14.4	13.4	13.1	13.2	12.0	11.8	12.0	10.7	10.3	10.6
5	14.5	14.4	14.5	13.4	13.1	13.2	12.0	11.8	11.9	10.7	10.3	10.4
6	14.5	14.2	14.4	13.4	13.2	13.3	11.8	11.8	11.8	10.5	10.3	10.3
7	14.5	14.2	14.4	13.2	13.2	13.2	11.8	11.6	11.8	10.5	10.3	10.3
8	14.5	14.1	14.2	13.2	12.9	13.2	11.8	11.8	11.8	10.5	10.1	10.4
9	14.4	14.2	14.3	13.2	12.9	13.1	11.8	11.6	11.8	10.5	10.1	10.3
10	14.5	14.2	14.2	13.2	12.9	13.1	11.8	11.6	11.7	10.3	10.1	10.1
11	14.4	14.2	14.3	13.2	12.9	13.0	11.8	11.6	11.7	10.3	10.0	10.1
12	14.4	14.2	14.2	12.9	12.7	12.9	11.8	11.5	11.6	10.1	9.9	10.0
13	14.4	13.9	14.2	13.2	12.7	12.9	11.6	11.6	11.6	10.1	9.9	10.0
14	14.2	14.1	14.2	13.0	12.7	12.8	11.6	11.3	11.5	10.1	9.8	10.0
15	14.2	13.9	14.2	13.0	12.7	12.9	11.5	11.3	11.4	10.1	9.8	9.9
16	14.2	13.9	14.1	13.0	12.7	12.9	11.5	11.3	11.4	10.0	9.8	9.9
17	14.2	13.9	14.0	12.9	12.7	12.7	11.6	11.3	11.4	9.9	9.6	9.8
18	14.2	13.7	14.0	12.7	12.5	12.7	11.3	11.3	11.3	9.8	9.6	9.8
19	14.2	13.9	14.1	12.7	12.5	12.6	11.5	11.1	11.3	9.8	9.6	9.8
20	14.2	13.7	13.9	12.5	12.5	12.5	11.4	11.1	11.3	9.8	9.6	9.7
21	14.0	13.7	13.8	12.5	12.3	12.5	11.4	11.1	11.2	9.9	9.6	9.7
22	13.9	13.7	13.7	12.5	12.5	12.5	11.1	10.9	11.1	9.9	9.6	9.7
23	14.0	13.7	13.8	12.5	12.5	12.5	11.1	10.9	11.0	9.9	9.5	9.7
24	13.7	13.5	13.7	12.5	12.2	12.3	11.1	10.9	10.9	9.6	9.4	9.5
25	13.7	13.5	13.6	12.2	12.2	12.2	11.1	10.9	10.9	9.6	9.2	9.5
26	13.7	13.5	13.6	12.5	12.2	12.3	11.1	10.9	10.9	9.6	9.2	9.4
27	13.5	13.5	13.5	12.5	12.2	12.3	10.9	10.7	10.9	9.5	9.2	9.3
28	13.5	13.4	13.5	12.5	12.0	12.2	10.9	10.7	10.8	9.5	9.0	9.2
29	13.5	13.2	13.4	12.3	12.0	12.3	10.9	10.7	10.7	9.3	9.0	9.1
30	13.5	13.2	13.4	12.3	12.2	12.3	10.7	10.7	10.7	9.3	9.0	9.1
31	13.5	13.2	13.4	---	---	---	10.9	10.7	10.7	9.1	9.0	9.1
MONTH	14.8	13.2	14.0	13.5	12.0	12.8	12.2	10.7	11.4	10.7	9.0	9.9

411138081172500 PO-116 NR RAVENNA OH

TEMPERATURE, SOIL DEG. C), WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	---	---	---	---	---	---	24.4	16.0	19.8	22.1	16.4	19.2
2	---	---	---	---	---	---	25.2	17.4	21.1	20.2	16.3	18.4
3	---	---	---	---	---	---	23.0	18.6	21.0	21.8	19.2	20.2
4	---	---	---	---	---	---	24.1	19.1	21.4	20.9	18.5	19.7
5	---	---	---	---	---	---	24.0	17.2	20.5	22.2	17.2	19.8
6	---	---	---	---	---	---	25.9	16.4	20.9	23.8	19.6	21.6
7	---	---	---	---	---	---	25.9	18.5	22.1	24.5	19.9	22.2
8	---	---	---	---	---	---	24.1	21.1	22.5	23.3	21.1	22.1
9	---	---	---	---	---	---	25.3	19.3	22.1	23.1	18.6	20.8
10	---	---	---	24.3	22.1	23.5	27.5	19.3	23.2	21.7	19.4	20.5
11	---	---	---	24.8	19.7	22.2	28.5	22.3	25.0	20.2	16.8	18.5
12	---	---	---	23.3	20.8	21.9	26.1	19.8	22.9	20.8	15.0	17.9
13	---	---	---	24.1	21.4	22.5	24.2	19.5	21.7	21.4	15.3	18.3
14	---	---	---	27.0	21.2	23.7	24.5	18.5	21.0	21.8	16.1	18.9
15	---	---	---	24.8	21.3	22.9	20.7	17.9	19.0	23.1	17.5	20.2
16	---	---	---	26.7	21.0	23.5	21.2	17.8	19.2	23.5	19.2	21.3
17	---	---	---	23.6	21.4	22.5	23.3	16.7	19.7	23.8	19.3	21.4
18	---	---	---	25.3	19.4	22.1	23.6	16.8	20.3	21.2	19.8	20.6
19	---	---	---	27.8	19.6	23.4	23.9	18.8	21.1	20.1	17.2	18.8
20	---	---	---	26.2	21.2	23.4	23.9	16.4	20.0	20.1	15.0	17.6
21	---	---	---	23.0	20.3	21.6	24.6	15.9	20.2	20.6	17.9	19.0
22	---	---	---	24.5	17.1	20.7	25.5	17.2	21.1	19.8	17.9	19.4
23	---	---	---	24.0	20.6	22.0	25.2	19.7	22.3	18.2	15.5	16.8
24	---	---	---	21.7	19.2	20.6	26.3	20.7	23.2	17.6	13.3	15.5
25	---	---	---	25.7	19.7	22.1	27.5	21.0	24.0	17.9	13.1	15.5
26	---	---	---	23.7	21.2	22.3	27.4	21.4	24.3	19.9	15.2	17.5
27	---	---	---	26.5	20.5	23.1	26.8	22.2	24.3	20.7	17.8	19.1
28	---	---	---	26.8	19.3	22.7	22.8	19.5	21.6	19.0	14.8	17.1
29	---	---	---	25.1	20.9	22.7	22.1	17.3	19.6	16.6	14.2	15.5
30	---	---	---	23.1	20.3	21.3	20.8	17.5	19.1	15.2	12.9	14.0
31	---	---	---	21.4	18.6	20.3	21.5	16.6	19.1	---	---	---
MONTH	---	---	---	27.8	17.1	22.3	28.5	15.9	21.4	24.5	12.9	18.9
YEAR	28.5	12.9	20.7									

RAINFALL ACCUMULATED (INCHES), WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.01	.20	.01	.00	.00	.00	.00
2	.00	.00	1.06	.00	.01	.00	.00	.32	.00	.00	.00	.00
3	.01	.00	.34	.00	.02	.00	.01	.00	.00	.00	.00	.00
4	.63	.00	.08	.01	.01	.00	.01	.03	.10	.00	.00	.00
5	.15	.09	.03	.00	.03	.00	.00	.04	.01	.00	.00	.00
6	.00	.00	.00	.00	.00	.57	.00	.00	.00	.00	.00	.00
7	.02	.01	.00	.00	.00	.39	.00	.00	.02	.00	.00	.00
8	.00	.02	.02	.01	.01	.01	.00	.13	.00	.00	.00	.00
9	.00	.00	.00	.10	.02	.00	.00	.05	.00	.00	.00	.00
10	.65	.14	.00	.04	.03	.27	.19	.00	.00	.00	.00	.00
11	.06	.50	.00	.00	.01	.11	.12	.00	.00	.00	.00	.00
12	.19	.09	.01	.04	.04	.06	.00	.00	.00	.00	.00	.00
13	.08	.20	.19	.02	.15	.04	.00	.00	.00	.00	.00	.00
14	.12	.04	.04	.49	.00	.03	.00	.00	.00	.00	.00	.00
15	.00	.22	.06	.08	.51	.02	.00	.00	.00	.00	.00	.00
16	.00	.03	.06	.03	.02	.03	.54	.00	.00	.00	.00	.00
17	.00	.00	.01	.03	.00	.22	.55	.43	.00	.00	.00	.00
18	.00	.01	.03	.03	.10	.27	.87	.00	.00	.00	.00	.00
19	.19	.10	.05	.04	.21	.31	.00	.00	.00	.00	.00	.00
20	.00	.01	.01	.08	.01	.04	.06	.00	.00	.00	.00	.00
21	.00	.07	.21	.11	.00	.00	.29	.00	.00	.00	.00	.00
22	.00	.00	.00	.00	.14	.42	.07	.00	.00	.00	.00	.00
23	.00	.04	.13	.53	.00	.04	.00	.43	.00	.00	.00	.00
24	.00	.02	.00	.11	.01	.00	.20	.31	.00	.00	.00	.00
25	.00	.08	.00	.05	.00	.09	.04	.00	.00	.00	.00	.00
26	.00	.05	.00	.09	.00	.24	.02	.12	.00	.00	.00	.00
27	.09	.02	.00	.03	.00	.43	.00	.00	.00	.00	.00	.00
28	.00	.07	.04	.00	.64	.00	.00	.00	.00	.00	.00	.00
29	.00	.03	.08	.00	.04	.00	.00	.01	.00	.00	.00	.00
30	.00	.03	.08	.00	---	.21	.24	.88	.00	.00	.00	.00
31	.00	---	.00	.01	---	.00	---	.05	---	.00	.00	---
TOTAL	2.19	1.87	2.53	1.93	2.01	3.81	3.41	2.81	0.13	0.00	0.00	0.00

WTR YR 1992 TOTAL 20.69

GROUND-WATER RECORDS

411138081172600. Local number, PO-121.

LOCATION.--Lat 41°11'38" Long 81°17'26", Hydrologic Unit 04110002, along State Route 14 near Ravenna, OH.
Owner.--USGS-City of Akron, OH.

AQUIFER.--Sand and Gravel of Pleistocene age.

WELL CHARACTERISTICS.--Observation well drilled by hollow stem auger, diameter 4.0 in., depth 18.4 ft. Cased with Sch 40 PVC to 3.4 ft; .020 in. screen from 3.4 to 18.4 ft.

INSTRUMENTATION - Data logger--60 minute record. At this well there are 4 conductivity/water temperature probes at increasing depths within the well to better document vertical movement of high conductivity water on an hourly basis. Conductance/water temperature probes are set at 5.4 (level 4), 9.4 (level 3), 13.4 (level 2), and 17.4 (level 1) feet below land surface.

DATUM.--Elevation of land-surface datum is 1068.24 feet above National Geodetic Vertical Datum of 1929.
Measuring point: Top of PVC casing, 1.80 ft above land-surface datum.

REMARKS.--This station is part of an eight-site network to collect data for the Ohio Department of Transportation concerning road salt application and its effect(s) on shallow ground-water quality. Water-quality data for nearby wells is available in preceding tables.

PERIOD OF RECORD.--July 1992 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE (FOUR LEVELS): July 1992 to current year.

WATER TEMPERATURE (FOUR LEVELS): July 1992 to current year.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE:

LEVEL 1- Maximum, 1870 microsiemens September 22, 1992; minimum, 245 microsiemens August 5, 1992.

LEVEL 2- Maximum, 1600 microsiemens September 22, 1992; minimum, 202 microsiemens August 5, 1992.

LEVEL 3- Maximum, 1650 microsiemens September 22, 1992; minimum, 136 microsiemens August 2, 1992.

LEVEL 4- Probe out of water.

WATER TEMPERATURE:

LEVEL 1- Maximum, 15.2°C many days in August, September 1992; minimum, 9.7°C July 11, 1992.

LEVEL 2- Maximum, 16.0°C August 5, September 11-14, 1992; minimum, 10.1°C July 13, 15, 1992.

LEVEL 3- Maximum, 16.3°C August 1, 1992; minimum, 10.5°C July 15, 1992.

LEVEL 4- Probe out of water.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE:

LEVEL 1- Maximum, 1870 microsiemens September 22, 1992; minimum, 245 microsiemens August 5, 1992.

LEVEL 2- Maximum, 1600 microsiemens September 22, 1992; minimum, 202 microsiemens August 5, 1992.

LEVEL 3- Maximum, 1650 microsiemens September 22, 1992; minimum, 136 microsiemens August 2, 1992.

LEVEL 4- Probe out of water.

WATER TEMPERATURE:

LEVEL 1- Maximum, 15.2°C many days in August, September 1992; minimum, 9.7°C July 11, 1992.

LEVEL 2- Maximum, 16.0°C August 5, September 11-14, 1992; minimum, 10.1°C July 13, 15, 1992.

LEVEL 3- Maximum, 16.3°C August 1, 1992; minimum, 10.5°C July 15, 1992.

LEVEL 4- Probe out of water.

GROUND-WATER RECORDS

413551083481200. Local number, LU-20.

LOCATION.--Lat 41°35'51" Long 83°48'12", Hydrologic Unit 04100009, along State Route 2 near Holland, OH.
Owner.--USGS-Toledo Express Airport.

AQUIFER.--Sand of Quaternary age.

WELL CHARACTERISTICS.--Observation well drilled by hollow stem auger, diameter 4.0 in., depth 31 ft. Cased with Sch 40 PVC to 6.0 ft; .010 in. screen from 6.0 to 31 ft.

INSTRUMENTATION - Data logger--60 minute record. Precipitation data collected with a propane-heated, tipping-bucket rain gauge. Also collected: air temperature, soil temperature, water temperature, and specific conductance. At this well there are 4 conductivity/water temperature probes at various depths within the well to better document vertical movement of high conductivity water on an hourly basis. Conductivity/water temperature probes set at 8.6 (level 4), 13.6 (level 3), 21.6 (level 2), and 26.6 (level 1) feet below land surface.

DATUM.--Elevation of land-surface datum is 676.13 feet above National Geodetic Vertical Datum of 1929.
Measuring point: shelter floor 2.38 ft above land-surface datum.

REMARKS.--This station is part of an eight-site network to collect data for the Ohio Department of Transportation concerning road salt application and its effect(s) on shallow ground-water quality. Water-quality data for nearby wells is available in preceding tables.

PERIOD OF RECORD.--February 1991 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE (FOUR LEVELS): February 1991 to current year.

AIR TEMPERATURE: February 1991 to current year.

WATER TEMPERATURE (FOUR LEVELS): February 1991 to current year.

SOIL TEMPERATURE: February 1991 to current year.

PRECIPITATION: February 1991 to current year.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE:

LEVEL 1- Maximum, 1260 microsiemens August 13, 1991; minimum, 484 microsiemens April 11, 1992.

LEVEL 2- Maximum, 953 microsiemens July 1, 1991; minimum, 437 microsiemens April 11, 1992.

LEVEL 3- Maximum, 785 microsiemens April 25, 1991; minimum, 130 microsiemens June 1-2, 1992.

LEVEL 4- Maximum, 544 microsiemens April 9, 1991; minimum, 98 microsiemens May 18, 1992.

AIR TEMPERATURE: Maximum, 34.5°C July 20, 1991; minimum, -19.8°C January 16, 1992.

WATER TEMPERATURE:

LEVEL 1- Maximum, 12.7°C several days in November, December 1991; minimum, 10.5°C many days in 1991.

LEVEL 2- Maximum, 13.6°C several days in November, 1991; minimum, 10.0°C many days in 1991, 1992.

LEVEL 3- Maximum, 15.2°C many days in October 1991; minimum, 8.5°C many days in 1991.

LEVEL 4- Maximum, 17.5°C many days in 1991; minimum, 7.5°C many days in 1991.

SOIL TEMPERATURE: Maximum, 30.0°C July 20, 1991; minimum, 0.4°C February 15, 1992.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE:

LEVEL 1- Maximum, 1170 microsiemens nine days in November, 1991; minimum, 484 microsiemens April 11, 1992.

LEVEL 2- Maximum, 928 microsiemens November 22, 23, 1991; minimum, 437 microsiemens April 11, 1992.

LEVEL 3- Maximum, 726 microsiemens May 2, 1992; minimum, 130 microsiemens June 1, 2, 1992.

LEVEL 4- Maximum, 510 microsiemens February 17, 18, 1992; minimum, 98 microsiemens May 18, 1992.

AIR TEMPERATURE: Maximum, 33.6°C August 10, 1991; minimum, -19.8°C January 16, 1992.

WATER TEMPERATURE:

LEVEL 1- Maximum, 12.7°C several days in November, December 1991; minimum, 10.6°C April 16, 19-20, 1992.

LEVEL 2- Maximum, 13.6°C several days in November 1991; minimum, 10.0°C April 11, 16, 19, 1992.

LEVEL 3- Maximum, 15.2°C many days in October 1991; minimum, 9.0°C April 5, 9, May 8, 10 1992.

LEVEL 4- Maximum, 17.1°C October 1-3, 1991; minimum, 7.8°C April 22, 1992.

SOIL TEMPERATURE: Maximum, 26.7°C August 10, 1992; minimum, 0.4°C February 15, 1992.

413551083481200 LU-20 NR HOLLAND OH

#1 (26.6' BLS)

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	1160	1160	1160	1150	1150	1150	1110	1100	1100	1060	1050	1050
2	1160	1160	1160	1150	1150	1150	1100	1090	1090	1050	1050	1050
3	1160	1160	1160	1160	1150	1160	1090	1090	1090	1050	1050	1050
4	1160	1160	1160	1160	1150	1160	1090	1080	1080	1050	1050	1050
5	1160	1150	1150	1160	1150	1160	1080	1080	1080	1050	1040	1040
6	1150	1150	1150	1160	1160	1160	1080	1080	1080	1040	1040	1040
7	1150	1150	1150	1170	1160	1160	1080	1070	1070	1040	1040	1040
8	1150	1150	1150	1170	1160	1160	1070	1070	1070	1040	1040	1040
9	1150	1150	1150	1170	1160	1160	1070	1070	1070	1040	1030	1040
10	1150	1150	1150	1170	1160	1170	1070	1070	1070	1030	1030	1030
11	1150	1140	1150	1170	1160	1170	1070	1070	1070	1030	1030	1030
12	1150	1140	1150	1160	1160	1160	1070	1070	1070	1030	1030	1030
13	1150	1140	1150	1170	1160	1160	1070	1070	1070	1030	1030	1030
14	1150	1140	1150	1170	1160	1170	1070	1070	1070	1030	1030	1030
15	1140	1140	1140	1170	1160	1160	1070	1070	1070	1030	1020	1030
16	1140	1140	1140	1160	1160	1160	1070	1070	1070	1020	1020	1020
17	1150	1140	1140	1160	1160	1160	1070	1070	1070	1020	1020	1020
18	1150	1140	1140	1160	1160	1160	1070	1070	1070	1020	1020	1020
19	1150	1140	1150	1160	1150	1160	1070	1070	1070	1020	1020	1020
20	1150	1140	1140	1160	1150	1150	1070	1070	1070	1020	1020	1020
21	1150	1140	1140	1150	1150	1150	1070	1070	1070	1020	1020	1020
22	1150	1140	1140	1150	1150	1150	1070	1070	1070	1020	1010	1020
23	1150	1140	1140	1150	1150	1150	1070	1070	1070	1020	1010	1010
24	1140	1140	1140	1150	1150	1150	1070	1060	1070	1010	1010	1010
25	1140	1140	1140	1150	1140	1150	1070	1060	1070	1010	1010	1010
26	1140	1130	1140	1140	1140	1140	1070	1060	1060	1010	1000	1000
27	1140	1140	1140	1140	1130	1140	1060	1060	1060	1000	991	996
28	1140	1140	1140	1130	1120	1130	1060	1060	1060	994	984	990
29	1150	1140	1140	1120	1110	1120	1060	1060	1060	986	962	978
30	1140	1140	1140	1110	1110	1110	1060	1060	1060	962	941	952
31	1150	1140	1150	---	---	---	1060	1060	1060	940	921	931
MONTH	1160	1130	1150	1170	1110	1150	1110	1060	1070	1060	921	1020

#1 (26.6' BLS)

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	919	903	911	504	498	501	503	497	501	696	688	691
2	914	883	896	504	501	502	502	496	499	703	695	699
3	883	868	877	505	501	503	499	495	497	711	703	707
4	865	850	858	505	503	504	495	492	494	717	710	714
5	849	832	839	505	503	504	498	494	495	723	717	720
6	831	813	823	506	503	505	499	494	496	727	724	725
7	813	796	805	507	504	505	494	488	492	732	727	728
8	796	781	789	513	506	509	492	487	489	734	731	732
9	780	765	773	520	514	517	489	485	487	740	734	736
10	765	758	762	524	517	519	488	485	487	745	739	741
11	757	739	749	546	528	539	488	484	486	750	743	746
12	743	730	736	546	538	542	493	486	490	754	747	750
13	730	715	722	539	532	536	495	493	494	758	751	754
14	714	701	707	532	521	527	495	491	493	761	755	758
15	701	685	695	522	512	518	493	490	491	764	760	762
16	683	566	627	515	510	513	493	490	491	771	765	767
17	579	567	574	511	506	508	523	491	508	777	770	772
18	578	566	574	519	505	513	524	515	521	779	774	776
19	565	551	558	521	517	520	516	496	507	785	778	781
20	550	538	544	525	519	523	503	494	498	790	783	786
21	539	520	529	526	523	524	525	503	515	798	789	793
22	522	511	517	528	519	524	543	526	534	809	798	804
23	511	502	506	519	513	516	569	543	556	821	809	815
24	504	500	501	513	507	510	605	570	585	826	822	824
25	501	496	498	529	508	518	621	607	614	827	824	826
26	500	496	498	542	529	536	638	622	630	833	827	830
27	501	497	499	540	524	534	654	639	646	839	833	836
28	502	494	498	525	516	522	666	653	659	846	840	843
29	501	493	496	516	507	512	678	666	671	853	847	849
30	---	---	---	509	502	505	688	677	682	858	852	856
31	---	---	---	505	500	503	---	---	---	858	856	857
MONTH	919	493	668	546	498	517	688	484	534	858	688	773

413551083481200 LU-20 NR HOLLAND OH

#1 (26.6' BLS)
SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	858	855	857	929	926	927	969	964	967	969	966	967
2	862	858	859	932	929	930	970	964	968	969	967	968
3	867	862	864	934	931	933	970	965	968	970	967	968
4	872	867	869	936	934	935	971	965	969	970	967	969
5	877	872	874	937	936	937	972	966	969	971	968	970
6	882	876	877	939	936	938	973	967	969	971	969	970
7	881	878	879	939	937	938	973	967	970	971	969	970
8	886	880	882	940	939	940	973	968	970	973	971	972
9	887	884	885	941	939	940	974	967	971	973	967	971
10	890	887	888	943	941	942	975	968	972	973	965	971
11	895	890	891	944	942	943	975	968	971	973	967	970
12	897	892	894	946	943	944	976	969	971	972	966	969
13	901	895	897	948	946	947	972	969	970	973	966	969
14	903	897	899	948	946	947	971	968	970	973	967	969
15	902	900	901	949	947	948	971	967	969	974	967	969
16	906	902	903	949	947	948	971	968	970	973	968	969
17	910	904	905	951	949	950	972	968	970	970	968	969
18	908	906	907	953	951	952	972	966	970	971	969	970
19	909	908	908	955	953	954	971	969	970	972	966	970
20	911	909	910	957	954	955	971	966	969	972	967	969
21	912	910	911	958	956	957	972	965	970	972	966	971
22	913	912	912	959	957	958	972	965	969	975	967	972
23	915	913	914	961	958	959	972	965	970	972	967	969
24	917	915	915	961	960	961	972	965	969	970	964	967
25	918	916	917	962	960	961	972	966	970	971	966	967
26	920	918	919	963	961	962	972	966	969	973	967	968
27	922	920	921	965	963	964	972	965	967	970	967	968
28	923	921	922	966	964	965	970	967	968	971	968	969
29	925	923	924	966	965	965	970	968	969	971	969	970
30	927	924	925	968	966	967	969	967	968	972	969	970
31	---	---	---	969	963	968	969	965	967	---	---	---
MONTH	927	855	898	969	926	950	976	964	969	975	964	969
YEAR	1170	484	890									

#2 (21.6' BLS)
SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	920	918	919	923	917	919	916	915	915	918	912	916
2	920	915	919	918	917	918	915	914	914	918	916	917
3	920	915	917	919	918	918	915	914	915	916	915	916
4	922	916	918	919	914	919	916	910	915	916	915	915
5	918	917	918	920	919	919	916	915	915	915	915	915
6	918	917	918	919	919	919	916	913	915	915	914	915
7	918	916	917	921	919	920	918	911	913	914	913	913
8	918	916	917	921	915	920	916	910	914	914	913	913
9	917	916	916	921	920	921	916	909	911	918	911	912
10	918	917	917	921	916	920	915	909	910	916	910	912
11	918	913	917	922	916	921	914	908	910	916	911	913
12	918	913	916	922	916	921	914	908	912	916	915	915
13	919	913	915	922	922	922	914	912	913	915	914	915
14	919	913	914	923	921	922	915	914	914	916	914	915
15	915	914	915	923	922	922	916	910	914	917	915	916
16	916	914	915	923	918	922	916	910	913	918	916	917
17	920	914	915	924	918	923	916	914	915	916	913	914
18	920	915	916	924	922	923	915	913	914	913	911	912
19	918	916	917	923	922	922	914	909	913	912	904	908
20	918	916	917	924	922	923	914	913	914	904	899	901
21	918	916	917	927	923	925	914	912	913	899	893	896
22	918	916	917	928	925	926	914	912	913	909	898	904
23	918	916	917	928	926	927	913	912	913	909	907	908
24	918	917	917	926	920	924	913	912	912	908	905	906
25	919	918	919	925	919	924	914	912	913	908	896	903
26	922	919	920	924	916	922	914	913	913	902	892	897
27	925	923	924	922	917	921	917	912	913	897	891	893
28	925	917	922	921	918	919	918	912	913	892	888	890
29	921	916	920	918	916	917	918	912	915	888	873	882
30	922	916	921	921	915	916	917	912	915	875	857	866
31	922	916	918	---	---	---	918	912	916	860	842	851
MONTH	925	913	918	928	914	921	918	908	913	918	842	905

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#3 (13.6' BLS)
SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	463	462	463	488	482	486	391	361	378	259	255	257
2	463	462	463	482	475	478	411	236	330	260	257	259
3	465	463	464	475	470	473	422	400	411	259	257	258
4	469	465	466	470	466	468	396	299	372	260	257	258
5	471	469	471	466	464	465	438	342	422	262	258	259
6	475	472	473	464	461	462	425	279	394	261	259	259
7	475	474	475	461	460	461	275	259	267	260	257	259
8	474	473	473	461	459	460	258	251	254	259	257	258
9	473	472	473	462	459	460	269	250	259	259	255	256
10	473	473	473	463	460	461	258	249	253	257	254	255
11	474	473	474	462	459	460	249	243	245	256	253	255
12	474	473	473	461	458	461	256	241	244	257	254	255
13	474	473	473	461	461	461	250	245	247	257	255	256
14	474	472	473	461	460	460	247	244	245	258	255	257
15	475	472	473	461	459	460	247	244	245	263	257	261
16	476	475	475	462	459	460	256	244	248	270	264	267
17	476	475	475	463	459	461	254	247	251	271	268	270
18	476	475	475	464	463	464	249	243	246	286	268	276
19	476	475	476	464	463	464	249	242	244	282	278	279
20	477	475	476	471	462	466	247	244	246	278	273	275
21	481	477	478	520	472	487	245	241	243	274	269	272
22	482	478	480	669	521	618	243	241	242	271	268	269
23	481	478	479	664	617	646	246	242	244	270	267	268
24	484	478	481	616	570	589	245	242	244	273	267	270
25	489	483	485	572	490	522	251	244	246	282	274	278
26	543	488	502	488	476	482	250	247	248	288	280	284
27	570	548	565	485	465	477	250	247	248	291	286	288
28	562	517	538	463	438	452	251	248	250	288	284	285
29	516	503	509	438	416	427	251	248	250	291	283	287
30	503	496	499	414	392	403	256	249	251	295	290	293
31	494	487	491	---	---	---	257	254	255	296	292	295
MONTH	570	462	482	669	392	480	438	236	275	296	253	268

#3 (13.6' BLS)
SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	301	295	298	504	497	500	505	499	501	724	712	717
2	309	303	306	502	495	500	503	497	500	726	333	627
3	316	309	311	505	499	502	501	495	498	322	301	309
4	324	316	319	508	501	504	497	488	494	330	308	318
5	332	324	328	506	502	504	500	493	497	357	331	343
6	342	332	338	507	502	505	500	496	498	372	355	363
7	346	340	343	512	505	507	498	489	493	390	374	383
8	348	344	345	518	510	512	496	488	492	384	166	278
9	349	345	347	525	514	520	492	487	490	162	150	152
10	354	348	352	528	519	523	492	484	489	153	151	152
11	354	348	352	555	529	543	491	487	488	152	149	150
12	353	348	351	552	542	547	498	488	494	153	150	151
13	355	351	353	545	535	541	501	495	497	155	152	154
14	357	350	354	536	523	531	501	493	496	156	155	155
15	377	356	363	526	517	520	498	493	495	157	156	156
16	565	376	473	519	512	515	496	491	494	161	157	159
17	581	563	574	513	505	509	529	496	512	168	161	164
18	581	567	576	523	509	516	535	522	530	170	160	164
19	569	550	560	526	516	523	523	503	514	191	171	183
20	552	536	544	530	523	526	516	504	509	257	189	222
21	538	515	526	531	523	527	540	517	527	249	238	243
22	519	507	513	532	520	527	559	542	550	255	244	250
23	507	497	501	523	513	519	586	559	571	341	251	264
24	499	495	497	515	510	513	621	588	601	429	359	411
25	500	492	495	536	511	522	642	622	634	411	337	380
26	500	491	495	550	538	545	659	642	651	335	301	314
27	498	493	495	549	527	538	677	660	669	318	302	309
28	498	490	495	530	519	525	690	678	684	326	294	318
29	500	490	494	521	508	514	700	688	694	291	265	279
30	---	---	---	511	501	505	711	701	706	442	271	367
31	---	---	---	506	502	504	---	---	---	443	153	338
MONTH	581	295	424	555	495	519	711	484	542	726	149	283

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#3 (13.6' BLS)

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	148	130	135	298	279	289	402	259	344	420	417	419
2	143	130	136	292	285	291	254	208	225	419	417	417
3	166	143	154	291	235	263	249	211	225	419	320	389
4	205	167	183	270	236	251	312	252	283	336	306	320
5	279	209	244	387	266	338	339	314	331	360	333	350
6	309	283	300	396	370	386	344	330	339	364	343	354
7	300	276	285	368	343	354	332	313	325	418	353	404
8	282	262	277	353	313	345	315	297	306	420	418	419
9	261	232	248	311	272	286	309	291	304	420	419	420
10	242	233	238	342	279	313	294	260	284	420	419	419
11	263	243	254	322	297	311	268	256	262	418	229	319
12	284	265	277	425	313	346	264	255	258	226	211	215
13	302	286	295	573	427	502	271	258	264	236	212	223
14	285	256	271	431	378	406	290	269	282	266	236	252
15	265	255	259	379	329	367	301	292	295	291	265	279
16	268	260	263	323	229	270	302	292	298	317	294	307
17	266	239	260	230	219	223	300	291	295	331	315	323
18	412	253	361	246	232	241	294	281	290	347	332	339
19	419	412	416	250	245	247	324	285	310	378	340	360
20	411	341	379	366	246	276	338	323	330	404	379	392
21	339	311	327	372	263	348	334	319	326	415	406	411
22	314	305	310	249	175	196	326	313	319	418	401	415
23	311	288	304	393	177	260	314	298	307	391	228	294
24	295	278	287	392	204	300	364	296	321	226	217	222
25	298	285	292	202	191	194	388	366	378	262	226	243
26	306	288	301	315	195	237	380	363	373	296	265	282
27	308	287	297	333	282	318	413	363	386	328	298	310
28	318	299	307	280	239	261	418	414	416	350	330	341
29	306	291	301	249	239	244	420	418	418	368	351	361
30	295	280	290	314	249	274	420	419	420	380	369	374
31	---	---	---	406	320	372	420	419	419	---	---	---
MONTH	419	130	275	573	175	300	420	208	320	420	211	339
YEAR	726	130	375									

#4 (8.6' BLS)

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	110	110	110	116	114	115	182	179	180	230	228	228
2	110	109	109	114	113	114	210	182	192	230	229	229
3	109	109	109	114	113	113	209	204	206	229	227	228
4	112	109	110	114	113	113	229	204	207	229	227	228
5	113	112	112	115	113	114	229	225	227	230	228	229
6	112	111	112	116	115	116	242	219	222	230	228	229
7	111	109	110	118	116	117	243	229	236	229	227	228
8	109	108	108	119	117	118	229	222	225	229	228	228
9	108	108	108	121	119	120	232	220	227	228	225	227
10	108	107	108	123	121	122	228	220	224	227	225	226
11	108	107	108	125	123	124	220	215	217	227	225	226
12	107	107	107	128	125	126	223	214	216	227	225	226
13	108	107	107	130	128	129	222	219	220	228	226	226
14	107	107	107	133	130	132	220	217	219	229	227	228
15	107	106	107	134	133	133	219	217	218	234	227	231
16	107	106	107	136	134	135	226	216	219	239	234	236
17	107	106	107	139	136	137	226	221	224	240	238	239
18	108	107	107	139	139	139	221	217	219	249	238	243
19	108	107	107	141	139	140	219	216	217	248	246	247
20	108	107	108	144	141	143	219	217	218	247	241	244
21	109	108	109	157	145	150	217	214	215	243	239	241
22	109	109	109	354	159	294	216	214	215	239	238	238
23	110	109	109	300	256	279	217	214	216	239	236	238
24	111	109	110	255	224	239	217	215	216	244	237	240
25	112	111	111	223	203	213	220	216	218	250	244	248
26	121	112	117	203	190	196	221	219	220	256	249	252
27	122	121	122	190	184	187	221	219	220	256	253	255
28	122	120	121	185	179	181	222	220	221	254	250	252
29	120	119	120	180	178	179	222	221	221	257	251	254
30	119	118	118	180	178	179	225	221	222	260	256	258
31	118	116	117	---	---	---	228	225	227	261	259	260
MONTH	122	106	111	354	113	153	243	179	218	261	225	237

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TEMPERATURE, AIR, DEGREES CENTIGRADE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	24.2	11.8	19.1	16.7	5.1	10.2	3.4	1.3	2.6	-6	-3.4	-2.0
2	28.1	15.3	21.2	4.0	-3.4	-1	2.6	.1	1.0	8.1	-1.5	3.0
3	23.5	13.3	17.3	-2.6	-7.3	-5.0	2.7	-3.0	-1	5.7	3.8	4.9
4	22.6	14.9	18.2	-1.2	-7.6	-5.3	-6.9	-12.9	-9.0	5.0	1.7	3.1
5	21.6	6.2	13.8	1.7	-8.6	-3.2	3.3	-12.9	-6.0	3.4	-2	2.0
6	7.2	3.6	5.7	3.7	-2.9	1.5	3.3	-4.7	-2.2	2.3	.4	1.4
7	13.6	2.9	7.2	-2.3	-9.2	-5.4	11.1	4.6	8.5	2.9	1.3	1.9
8	20.8	2.1	12.0	.0	-12.2	-6.6	16.1	10.0	13.3	3.4	-4.0	.5
9	22.5	13.6	17.2	4.1	-10.3	-3.6	12.0	-2.5	4.2	7.5	2.4	4.6
10	17.5	8.3	12.8	7.0	-7.4	-9	2.9	-3.4	.3	2.4	-2.1	1.0
11	12.7	7.8	9.6	9.3	-2.1	2.7	6.5	-.9	3.1	3.9	-2.6	.4
12	13.5	6.2	9.4	3.0	.0	1.8	14.7	.4	7.7	5.7	-.5	2.0
13	13.3	1.9	6.9	9.7	1.4	5.1	13.5	5.2	7.9	5.7	2.7	4.4
14	14.6	3.8	9.5	15.0	1.6	8.5	5.5	-2.7	1.5	1.2	-11.5	-6.2
15	11.4	2.8	6.9	11.5	9.3	10.8	-.7	-8.3	-4.6	-7.9	-11.7	-9.1
16	13.7	-3.4	4.8	9.7	-3.1	5.2	-1.9	-11.9	-7.5	-7.6	-19.8	-15.2
17	20.3	1.8	11.1	8.7	-5.1	1.8	3.1	-2.8	-.1	-1.0	-8.5	-4.7
18	21.0	8.8	13.5	15.4	3.2	10.6	-2.8	-11.6	-6.3	-8.9	-15.9	-12.0
19	8.2	-1.5	4.8	17.5	14.5	15.6	-.9	-12.5	-7.4	-4.1	-19.2	-13.5
20	11.9	-3.5	3.8	16.8	7.6	11.9	3.8	-7.4	-.9	-2.6	-8.0	-5.7
21	16.9	.4	8.6	7.9	6.7	7.2	3.7	-1.9	.9	2.4	-4.8	-1.9
22	23.9	3.6	13.8	8.2	6.8	7.5	2.5	-2.7	-.5	3.7	-4.2	-.1
23	25.1	12.2	18.5	11.7	-1.2	5.9	3.2	-1.4	1.8	3.8	-3.2	2.0
24	22.8	15.5	18.2	-1.5	-4.3	-3.0	4.2	-5.6	-.5	-3.8	-11.6	-6.2
25	18.5	16.8	17.8	-.6	-5.2	-3.7	4.3	-5.7	-1.3	-5.2	-12.2	-7.8
26	21.2	16.0	18.0	-.7	-8.6	-4.4	4.8	-2.3	.2	-1.3	-9.0	-5.4
27	17.9	9.9	14.8	4.6	-1.7	1.6	6.2	-4.0	.6	2.3	-8.3	-3.0
28	14.4	10.0	11.7	5.4	2.8	4.6	2.7	-2.8	.2	1.1	-1.1	.1
29	21.3	10.7	15.5	17.0	4.5	10.4	1.9	.0	.6	-.1	-1.6	-.7
30	16.8	11.1	14.2	16.6	3.8	10.9	.0	-1.6	-.5	2.7	-1.4	.7
31	13.0	6.9	10.5	---	---	---	-1.0	-2.8	-2.1	1.2	-3.5	-.2
MONTH	28.1	-3.5	12.5	17.5	-12.2	3.1	16.1	-12.9	.2	8.1	-19.8	-2.0

TEMPERATURE, AIR, DEGREES CENTIGRADE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	-2.5	-10.3	-6.2	17.7	-1.3	8.3	1.3	-3.5	-.1	27.8	6.8	16.9
2	3.5	-8.4	-2.5	9.0	.7	3.0	.6	-5.7	-2.0	25.5	12.4	20.1
3	5.1	-6.7	-1.1	7.5	.5	2.9	7.4	-4.7	1.6	15.3	7.2	11.3
4	3.2	-4.6	.5	13.0	.2	5.2	5.0	.7	2.5	10.4	5.0	7.5
5	8.4	-8.4	-4.0	12.7	2.7	6.8	11.3	-2.9	3.7	12.6	1.6	7.3
6	5.0	-8.1	-1.1	5.8	3.2	4.7	16.0	-2.3	7.8	15.1	2.1	8.9
7	1.2	-3.3	-.3	16.8	6.0	11.4	19.6	6.8	11.8	19.0	.6	10.4
8	10.7	-10.7	-5.9	13.2	3.0	9.1	15.5	2.2	9.4	19.0	2.8	12.6
9	-5.6	-11.2	-8.6	16.4	2.3	11.1	14.1	5.1	9.3	19.7	9.1	14.6
10	10.7	-10.6	-3.0	13.9	-9.3	-.2	9.3	2.3	6.1	25.7	6.6	16.5
11	2.9	-7.8	-1.0	-3.4	-10.7	-7.2	22.8	5.6	13.8	29.0	10.6	20.3
12	12.2	-12.2	-7.6	-2.9	-11.3	-6.8	8.3	1.6	5.1	29.8	15.4	22.2
13	5.1	-5.1	-2.6	-1.3	-9.9	-5.5	4.9	-.9	1.7	22.5	12.6	18.2
14	1.8	-.4	.6	-.6	-7.9	-4.0	7.3	.6	3.6	13.6	6.2	11.0
15	9.0	.8	3.8	-1.5	-10.0	-5.0	10.8	.5	5.8	20.3	2.7	12.6
16	3.5	-.2	1.5	5.4	-11.5	-1.6	25.9	5.4	13.9	26.6	7.4	18.1
17	4.8	.3	2.2	10.4	-1.3	3.8	11.5	5.2	7.8	29.3	14.0	21.3
18	9.7	.4	4.4	.3	-2.7	-1.5	9.9	5.4	7.3	17.6	10.7	14.8
19	6.2	1.8	4.2	6.2	-2.9	.7	25.1	7.1	14.7	22.5	5.9	15.0
20	4.3	.8	2.4	5.7	-4.9	-.3	25.9	13.4	18.7	27.7	8.8	19.0
21	5.5	-.6	2.3	3.1	-5.8	-1.4	21.0	11.7	17.2	29.4	11.1	21.3
22	8.3	-.1	3.5	-.5	-8.3	-2.5	12.1	5.6	9.1	31.1	13.4	22.6
23	4.7	.9	2.7	3.1	-12.5	-3.1	24.2	2.0	11.4	27.2	8.6	18.7
24	2.6	-.2	.8	11.8	-5.5	3.7	14.0	7.2	10.6	9.7	3.1	7.9
25	4.7	.3	2.1	7.4	2.5	5.5	6.8	3.3	5.4	13.5	1.3	8.3
26	3.7	-1.6	1.3	12.2	.9	6.3	11.4	5.7	7.8	14.2	6.1	9.2
27	10.1	.3	4.2	7.8	.0	3.4	11.7	3.3	7.6	17.9	2.8	10.9
28	6.9	-3.1	2.8	8.1	-3.0	2.1	15.2	-.3	7.6	21.0	2.3	13.2
29	-.3	-8.3	-4.1	7.1	-1.6	2.1	12.9	5.2	9.4	21.2	4.7	13.6
30	---	---	---	5.2	.5	2.9	16.9	9.4	11.8	14.7	11.8	13.3
31	---	---	---	12.4	-1.6	5.0	---	---	---	19.4	11.3	14.2
MONTH	12.2	-12.2	-.3	17.7	-12.5	1.9	25.9	-5.7	8.0	31.1	.6	14.6

413551083481200 LU-20 NR HOLLAND OH

TEMPERATURE, AIR, DEGREES CENTIGRADE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	24.0	8.3	16.7	28.6	15.4	22.4	25.1	11.5	18.6	24.3	9.9	16.9
2	24.5	8.4	17.7	31.6	17.3	24.4	25.6	14.7	20.3	22.4	13.4	17.7
3	26.1	8.8	18.4	27.4	15.9	22.5	25.2	15.5	19.7	26.7	13.3	21.5
4	23.2	15.5	18.3	27.1	14.0	20.9	21.5	13.9	17.6	23.1	10.5	16.6
5	23.5	16.4	18.8	25.3	15.4	20.6	25.1	11.5	17.9	26.9	11.4	18.9
6	26.1	15.4	19.7	23.5	10.6	17.1	25.9	9.1	17.9	28.6	17.6	22.8
7	23.6	16.4	20.0	25.6	11.7	19.6	28.4	12.3	21.0	27.8	18.9	22.3
8	23.2	10.6	17.4	28.0	17.6	22.7	29.2	17.9	24.1	22.7	11.4	19.5
9	23.1	11.1	17.0	27.2	20.3	24.2	31.4	17.3	24.0	24.0	10.0	17.2
10	23.0	6.4	16.1	27.9	18.5	22.7	33.6	20.7	26.9	21.5	11.4	17.9
11	25.6	8.7	17.6	28.5	16.7	23.1	25.2	16.2	21.7	19.2	8.0	13.1
12	29.8	8.0	19.6	27.7	20.2	22.8	24.7	12.5	17.4	21.2	6.2	13.3
13	31.1	12.6	22.2	22.6	18.9	21.1	19.9	14.2	16.4	24.1	8.5	15.9
14	27.7	18.2	22.7	30.7	19.1	23.2	19.7	12.1	15.4	27.0	13.1	19.5
15	22.4	13.5	18.4	18.8	16.1	17.6	18.6	14.0	16.1	29.7	17.3	22.8
16	24.7	12.0	19.4	26.2	17.8	21.3	23.5	10.1	16.8	28.7	18.4	23.0
17	33.5	16.5	25.4	25.4	18.3	21.2	25.2	8.6	16.9	28.4	18.7	22.9
18	28.5	18.1	22.6	27.2	16.6	21.7	25.5	12.0	18.2	24.5	11.4	20.0
19	20.0	12.0	16.2	27.6	14.4	21.5	23.0	12.0	17.4	18.4	6.2	11.9
20	12.1	8.6	10.9	26.4	17.8	21.5	24.3	10.5	17.1	21.6	5.5	14.2
21	16.9	4.1	10.6	22.4	14.2	18.6	25.1	8.8	17.6	22.5	15.1	19.2
22	19.9	4.8	13.5	22.5	12.6	17.4	27.2	10.9	19.0	20.1	7.2	16.5
23	17.6	12.0	14.9	20.6	15.3	18.1	28.8	16.5	22.6	14.2	2.5	8.1
24	22.2	11.1	15.7	21.6	15.7	19.6	28.0	20.5	23.4	17.7	4.1	11.2
25	24.6	11.6	18.2	26.2	13.3	20.0	30.0	18.8	24.6	20.1	5.4	12.6
26	25.6	14.7	19.9	27.3	20.6	23.3	29.8	19.4	23.3	22.1	9.1	15.5
27	23.9	10.9	16.9	25.7	15.1	20.1	24.8	17.7	20.8	20.3	8.0	16.0
28	26.5	7.6	18.2	27.4	11.1	20.2	18.0	12.5	15.7	20.7	5.3	11.6
29	29.3	9.9	21.1	27.8	17.7	23.0	21.4	8.3	15.6	13.6	1.2	7.0
30	30.4	14.3	22.8	21.4	16.0	18.3	24.7	16.0	19.7	16.3	2.3	8.5
31	---	---	---	20.1	11.9	16.3	22.5	12.4	16.9	---	---	---
MONTH	33.5	4.1	18.2	31.6	10.6	20.9	33.6	8.3	19.4	29.7	1.2	16.5
YEAR	33.6	-19.8	9.4									

#1 (26.6' BLS)

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	12.0	11.7	11.9	12.4	12.4	12.4	12.6	12.6	12.6	12.6	12.6	12.6
2	12.0	11.7	11.9	12.4	12.4	12.4	12.6	12.6	12.6	12.6	12.6	12.6
3	12.0	11.8	11.9	12.6	12.4	12.4	12.6	12.6	12.6	12.6	12.6	12.6
4	12.0	12.0	12.0	12.6	12.4	12.4	12.6	12.6	12.6	12.6	12.6	12.6
5	12.0	11.9	12.0	12.6	12.4	12.5	12.6	12.6	12.6	12.6	12.6	12.6
6	12.0	11.9	11.9	12.6	12.4	12.4	12.6	12.6	12.6	12.6	12.6	12.6
7	12.0	11.9	11.9	12.6	12.4	12.5	12.6	12.6	12.6	12.6	12.6	12.6
8	12.0	11.9	12.0	12.6	12.4	12.5	12.7	12.6	12.6	12.6	12.6	12.6
9	12.0	12.0	12.0	12.6	12.4	12.5	12.6	12.6	12.6	12.6	12.6	12.6
10	12.0	11.9	12.0	12.6	12.4	12.5	12.6	12.6	12.6	12.6	12.6	12.6
11	12.2	11.9	12.0	12.6	12.4	12.5	12.6	12.6	12.6	12.6	12.6	12.6
12	12.2	11.9	12.0	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.6
13	12.2	12.0	12.1	12.6	12.4	12.6	12.6	12.6	12.6	12.6	12.6	12.6
14	12.2	12.0	12.1	12.6	12.4	12.5	12.6	12.6	12.6	12.6	12.6	12.6
15	12.2	12.2	12.2	12.6	12.4	12.6	12.6	12.6	12.6	12.6	12.6	12.6
16	12.4	12.1	12.2	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.5	12.6
17	12.2	12.0	12.2	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.6
18	12.2	12.0	12.2	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.6
19	12.4	12.1	12.2	12.7	12.4	12.6	12.6	12.6	12.6	12.6	12.5	12.6
20	12.4	12.1	12.2	12.7	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.6
21	12.4	12.1	12.2	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.6
22	12.4	12.1	12.3	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.6
23	12.4	12.2	12.2	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.6
24	12.2	12.2	12.2	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.6
25	12.4	12.2	12.2	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.6
26	12.4	12.2	12.2	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.6
27	12.4	12.2	12.4	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.6
28	12.4	12.4	12.4	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.4	12.6
29	12.5	12.2	12.4	12.7	12.6	12.6	12.6	12.6	12.6	12.6	12.4	12.5
30	12.4	12.4	12.4	12.7	12.6	12.6	12.6	12.6	12.6	12.4	12.4	12.4
31	12.4	12.4	12.4	---	---	---	12.6	12.6	12.6	12.4	12.4	12.4
MONTH	12.5	11.7	12.1	12.7	12.4	12.5	12.7	12.6	12.6	12.6	12.4	12.6

413551083481200 LU-20 NR HOLLAND OH

#2 (21.6' BLS)
WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER				NOVEMBER			DECEMBER			JANUARY		
1	12.7	12.6	12.7	13.4	13.1	13.3	13.3	13.3	13.3	13.1	12.8	12.9
2	12.9	12.7	12.7	13.3	13.3	13.3	13.3	13.3	13.3	12.9	12.8	12.8
3	12.9	12.7	12.8	13.3	13.3	13.3	13.3	13.3	13.3	12.9	12.9	12.9
4	12.9	12.7	12.9	13.5	13.3	13.3	13.5	13.3	13.3	12.9	12.8	12.9
5	12.9	12.9	12.9	13.3	13.3	13.3	13.3	13.3	13.3	12.9	12.8	12.8
6	12.9	12.9	12.9	13.3	13.3	13.3	13.3	13.3	13.3	12.9	12.8	12.8
7	12.9	12.9	12.9	13.3	13.3	13.3	13.4	13.1	13.3	12.9	12.8	12.8
8	12.9	12.8	12.9	13.5	13.3	13.3	13.4	13.1	13.2	12.9	12.8	12.8
9	12.9	12.9	12.9	13.4	13.3	13.3	13.4	13.1	13.3	12.9	12.6	12.8
10	12.9	12.9	12.9	13.5	13.3	13.4	13.3	13.1	13.3	12.9	12.6	12.8
11	13.1	12.9	12.9	13.6	13.3	13.3	13.3	13.1	13.2	12.8	12.6	12.7
12	13.1	12.9	13.0	13.6	13.3	13.3	13.3	13.1	13.2	12.6	12.6	12.6
13	13.1	12.9	13.0	13.4	13.3	13.3	13.1	13.1	13.1	12.6	12.6	12.6
14	13.1	12.9	13.1	13.4	13.3	13.3	13.1	13.1	13.1	12.6	12.6	12.6
15	13.1	13.1	13.1	13.4	13.4	13.4	13.3	13.1	13.1	12.6	12.6	12.6
16	13.1	13.1	13.1	13.6	13.3	13.4	13.3	13.0	13.1	12.6	12.5	12.6
17	13.2	12.9	13.1	13.5	13.3	13.3	13.1	13.1	13.1	12.6	12.6	12.6
18	13.2	12.9	13.1	13.4	13.3	13.3	13.1	13.0	13.1	12.6	12.6	12.6
19	13.1	13.1	13.1	13.4	13.4	13.4	13.3	13.0	13.1	12.6	12.5	12.6
20	13.1	13.1	13.1	13.4	13.3	13.4	13.1	13.0	13.1	12.6	12.6	12.6
21	13.1	13.1	13.1	13.4	13.3	13.3	13.1	13.1	13.1	12.6	12.6	12.6
22	13.2	13.1	13.1	13.4	13.3	13.3	13.1	13.1	13.1	12.6	12.6	12.6
23	13.2	13.1	13.1	13.4	13.3	13.3	13.1	13.1	13.1	12.6	12.6	12.6
24	13.1	13.1	13.1	13.6	13.3	13.4	13.1	13.1	13.1	12.6	12.6	12.6
25	13.1	13.1	13.1	13.6	13.3	13.3	13.1	13.1	13.1	12.6	12.4	12.5
26	13.1	13.1	13.1	13.5	13.3	13.3	13.1	13.1	13.1	12.6	12.3	12.5
27	13.1	13.1	13.1	13.5	13.3	13.3	13.1	12.9	13.1	12.6	12.3	12.4
28	13.4	13.1	13.2	13.3	13.3	13.3	13.1	12.8	13.1	12.4	12.4	12.4
29	13.4	13.1	13.1	13.4	13.3	13.4	13.1	12.8	13.0	12.4	12.1	12.4
30	13.4	13.1	13.2	13.4	13.1	13.3	13.1	12.8	12.9	12.4	12.1	12.2
31	13.4	13.1	13.3	---	---	---	13.1	12.8	12.9	12.1	12.1	12.1
MONTH	13.4	12.6	13.0	13.6	13.1	13.3	13.5	12.8	13.2	13.1	12.1	12.6

#2 (21.6' BLS)
WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	12.2	12.1	12.1	10.9	10.8	10.8	10.4	10.2	10.3	10.6	10.2	10.4
2	12.2	11.9	12.1	10.8	10.8	10.8	10.4	10.2	10.2	10.5	10.3	10.4
3	12.1	11.9	12.0	10.9	10.8	10.8	10.4	10.2	10.2	10.6	10.4	10.5
4	11.9	11.9	11.9	10.9	10.6	10.8	10.4	10.2	10.2	10.6	10.4	10.5
5	12.1	11.9	11.9	10.9	10.6	10.8	10.4	10.2	10.2	10.6	10.4	10.5
6	11.9	11.9	11.9	10.8	10.8	10.8	10.4	10.2	10.2	10.6	10.4	10.5
7	11.9	11.9	11.9	10.9	10.6	10.8	10.2	10.2	10.2	10.6	10.4	10.5
8	11.9	11.7	11.9	10.9	10.6	10.7	10.2	10.2	10.2	10.7	10.4	10.5
9	11.9	11.7	11.9	10.9	10.6	10.7	10.2	10.2	10.2	10.7	10.4	10.6
10	11.9	11.7	11.8	10.9	10.6	10.8	10.2	10.2	10.2	10.6	10.4	10.5
11	11.9	11.7	11.7	10.8	10.6	10.8	10.2	10.0	10.2	10.6	10.4	10.5
12	11.9	11.7	11.7	10.8	10.6	10.7	10.2	10.2	10.2	10.7	10.4	10.5
13	11.7	11.7	11.7	10.8	10.6	10.7	10.2	10.2	10.2	10.7	10.4	10.5
14	11.7	11.7	11.7	10.8	10.6	10.7	10.2	10.2	10.2	10.6	10.4	10.6
15	11.7	11.7	11.7	10.8	10.6	10.6	10.2	10.2	10.2	10.7	10.4	10.6
16	11.7	11.0	11.4	10.8	10.6	10.6	10.3	10.0	10.2	10.7	10.5	10.6
17	11.3	11.0	11.1	10.8	10.6	10.6	10.2	10.2	10.2	10.7	10.5	10.6
18	11.2	11.0	11.0	10.8	10.6	10.6	10.2	10.2	10.2	10.7	10.5	10.6
19	11.0	10.8	11.0	10.6	10.4	10.6	10.3	10.0	10.2	10.7	10.5	10.6
20	11.0	11.0	11.0	10.6	10.4	10.6	10.3	10.2	10.2	10.7	10.5	10.7
21	11.1	10.8	10.9	10.6	10.4	10.6	10.2	10.2	10.2	10.7	10.6	10.7
22	11.0	10.8	10.9	10.6	10.4	10.6	10.4	10.2	10.2	10.7	10.6	10.7
23	11.0	10.8	10.9	10.6	10.4	10.5	10.5	10.2	10.4	10.7	10.6	10.7
24	11.0	10.8	10.8	10.6	10.4	10.5	10.6	10.2	10.4	10.8	10.6	10.6
25	10.8	10.8	10.8	10.6	10.4	10.5	10.4	10.2	10.4	10.6	10.6	10.6
26	10.8	10.8	10.8	10.6	10.2	10.4	10.4	10.2	10.3	10.9	10.6	10.7
27	10.9	10.8	10.8	10.4	10.2	10.4	10.6	10.2	10.4	10.9	10.6	10.7
28	10.8	10.8	10.8	10.4	10.2	10.4	10.6	10.2	10.4	10.8	10.6	10.7
29	10.8	10.8	10.8	10.4	10.2	10.3	10.4	10.4	10.4	10.9	10.6	10.7
30	---	---	---	10.4	10.2	10.3	10.5	10.2	10.4	10.9	10.6	10.7
31	---	---	---	10.4	10.2	10.3	---	---	---	10.9	10.6	10.7
MONTH	12.2	10.8	11.4	10.9	10.2	10.6	10.6	10.0	10.3	10.9	10.2	10.6

413551083481200 LU-20 NR HOLLAND OH

#2 (21.6' BLS)
WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	10.9	10.7	10.8	10.9	10.7	10.8	11.1	11.1	11.1	11.8	11.7	11.8
2	10.9	10.7	10.8	10.9	10.9	10.9	11.1	11.1	11.1	11.8	11.7	11.7
3	10.9	10.6	10.7	10.9	10.9	10.9	11.1	11.1	11.1	11.8	11.7	11.8
4	10.9	10.6	10.7	10.9	10.9	10.9	11.1	11.1	11.1	11.8	11.7	11.7
5	10.9	10.6	10.7	10.9	10.9	10.9	11.3	11.1	11.1	12.0	11.7	11.8
6	10.7	10.6	10.7	10.9	10.8	10.9	11.3	11.1	11.2	11.8	11.7	11.8
7	10.7	10.6	10.7	10.9	10.8	10.9	11.3	11.1	11.2	12.0	11.7	11.8
8	10.9	10.6	10.7	10.9	10.9	10.9	11.3	11.1	11.2	12.0	11.7	11.9
9	10.9	10.6	10.7	10.9	10.9	10.9	11.4	11.1	11.2	12.0	11.9	12.0
10	10.9	10.6	10.7	10.9	10.9	10.9	11.4	11.1	11.3	12.0	12.0	12.0
11	10.9	10.6	10.7	10.9	10.9	10.9	11.3	11.1	11.3	12.0	11.9	12.0
12	10.9	10.6	10.7	10.9	10.9	10.9	11.3	11.3	11.3	12.0	11.9	12.0
13	10.9	10.6	10.7	10.9	10.9	10.9	11.3	11.3	11.3	12.0	11.9	12.0
14	10.9	10.6	10.7	10.9	10.9	10.9	11.3	11.3	11.3	12.0	12.0	12.0
15	10.9	10.6	10.7	10.9	10.9	10.9	11.3	11.3	11.3	12.0	12.0	12.0
16	10.9	10.6	10.7	10.9	10.9	10.9	11.5	11.3	11.3	12.2	12.0	12.0
17	10.9	10.6	10.7	10.9	10.9	10.9	11.5	11.3	11.4	12.2	12.0	12.0
18	10.9	10.6	10.7	10.9	10.9	10.9	11.5	11.3	11.4	12.2	12.0	12.1
19	10.9	10.6	10.7	10.9	10.9	10.9	11.5	11.3	11.5	12.2	12.2	12.2
20	10.9	10.6	10.8	10.9	10.9	10.9	11.6	11.3	11.5	12.4	12.2	12.2
21	10.9	10.6	10.8	10.9	10.9	10.9	11.6	11.3	11.5	12.2	12.2	12.2
22	10.9	10.6	10.8	10.9	10.9	10.9	11.7	11.5	11.6	12.4	12.2	12.2
23	10.9	10.9	10.9	10.9	10.9	10.9	11.8	11.5	11.6	12.4	12.2	12.3
24	10.9	10.7	10.8	10.9	10.9	10.9	11.7	11.5	11.6	12.4	12.2	12.3
25	10.9	10.7	10.8	10.9	10.9	10.9	11.8	11.5	11.6	12.4	12.2	12.4
26	10.9	10.7	10.8	10.9	10.9	10.9	11.8	11.5	11.7	12.5	12.2	12.4
27	10.9	10.7	10.8	10.9	10.9	10.9	11.8	11.5	11.7	12.4	12.4	12.4
28	10.9	10.7	10.8	11.1	10.9	10.9	11.7	11.7	11.7	12.4	12.4	12.4
29	10.9	10.7	10.8	11.1	10.9	10.9	11.8	11.7	11.7	12.4	12.4	12.4
30	10.9	10.7	10.8	11.1	10.9	11.1	11.8	11.7	11.8	12.5	12.4	12.4
31	---	---	---	11.1	11.1	11.1	11.8	11.7	11.7	---	---	---
MONTH	10.9	10.6	10.7	11.1	10.7	10.9	11.8	11.1	11.4	12.5	11.7	12.1
YEAR	13.6	10.0	11.7									

#3 (13.6' BLS)
WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	15.2	15.1	15.2	14.9	14.9	14.9	13.6	13.6	13.6	11.7	11.5	11.6
2	15.2	15.1	15.2	14.9	14.8	14.8	13.6	12.8	13.4	11.7	11.5	11.5
3	15.2	15.1	15.2	14.8	14.8	14.8	13.6	13.3	13.5	11.7	11.3	11.5
4	15.2	15.1	15.1	14.8	14.8	14.8	13.6	12.8	13.3	11.5	11.2	11.4
5	15.1	15.1	15.1	14.8	14.8	14.8	13.3	12.8	13.2	11.5	11.2	11.3
6	15.1	15.1	15.1	14.8	14.8	14.8	13.3	12.8	13.2	11.2	11.2	11.2
7	15.1	15.1	15.1	14.8	14.8	14.8	12.9	12.6	12.7	11.2	11.2	11.2
8	15.2	15.1	15.1	14.9	14.8	14.8	12.7	12.6	12.6	11.2	11.0	11.2
9	15.2	15.1	15.1	14.9	14.6	14.8	12.6	12.6	12.6	11.3	11.0	11.2
10	15.2	15.1	15.1	14.8	14.6	14.7	12.6	12.6	12.6	11.2	11.0	11.2
11	15.1	15.1	15.1	14.8	14.6	14.7	12.6	12.6	12.6	11.2	11.0	11.1
12	15.1	15.1	15.1	14.8	14.6	14.6	12.6	12.6	12.6	11.0	11.0	11.0
13	15.1	15.1	15.1	14.6	14.6	14.6	12.6	12.6	12.6	11.2	10.8	11.0
14	15.1	15.1	15.1	14.6	14.6	14.6	12.6	12.4	12.6	11.0	10.8	11.0
15	15.1	15.1	15.1	14.6	14.6	14.6	12.6	12.4	12.4	11.0	10.8	10.9
16	15.1	15.1	15.1	14.6	14.3	14.5	12.4	12.3	12.4	10.8	10.7	10.8
17	15.2	15.1	15.1	14.6	14.3	14.5	12.4	12.4	12.4	10.8	10.8	10.8
18	15.2	15.1	15.1	14.4	14.3	14.3	12.4	12.3	12.4	10.8	10.8	10.8
19	15.1	15.1	15.1	14.4	14.4	14.4	12.4	12.1	12.3	11.0	10.7	10.8
20	15.1	15.1	15.1	14.4	14.3	14.4	12.4	12.1	12.3	10.8	10.8	10.8
21	15.1	14.9	15.1	14.3	14.3	14.3	12.2	12.1	12.1	10.8	10.6	10.7
22	15.2	14.9	15.0	14.3	14.1	14.3	12.1	11.9	12.1	10.8	10.6	10.7
23	15.1	14.9	15.0	14.3	14.1	14.2	12.1	11.9	12.0	10.6	10.6	10.6
24	15.1	14.9	14.9	14.1	13.8	14.0	12.1	11.9	11.9	10.6	10.6	10.6
25	14.9	14.9	14.9	13.8	13.8	13.8	11.9	11.9	11.9	10.6	10.2	10.3
26	14.9	14.9	14.9	13.8	13.8	13.8	11.9	11.7	11.9	10.4	10.2	10.4
27	14.9	14.9	14.9	13.8	13.8	13.8	11.9	11.7	11.8	10.4	10.1	10.3
28	14.9	14.9	14.9	13.8	13.8	13.8	11.9	11.7	11.7	10.4	10.2	10.2
29	14.9	14.9	14.9	13.8	13.6	13.7	11.7	11.7	11.7	10.6	10.2	10.3
30	14.9	14.9	14.9	13.6	13.6	13.6	11.7	11.7	11.7	10.4	10.2	10.3
31	14.9	14.9	14.9	---	---	---	11.7	11.7	11.7	10.4	10.2	10.2
MONTH	15.2	14.9	15.1	14.9	13.6	14.4	13.6	11.7	12.4	11.7	10.1	10.9

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#4 (8.6' BLS)
WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	17.1	17.1	17.1	15.1	15.1	15.1	12.9	12.6	12.6	10.8	10.8	10.8
2	17.1	16.8	17.0	15.1	15.1	15.1	12.6	12.6	12.6	10.8	10.8	10.8
3	17.1	16.8	16.9	15.1	15.1	15.1	12.6	12.6	12.6	10.8	10.8	10.8
4	16.8	16.8	16.8	15.1	14.8	15.0	12.6	12.6	12.6	10.8	10.6	10.8
5	16.8	16.7	16.8	15.1	14.8	14.9	12.6	12.4	12.5	10.8	10.6	10.7
6	16.8	16.7	16.8	14.8	14.8	14.8	12.4	12.4	12.4	10.8	10.6	10.6
7	16.8	16.7	16.8	14.8	14.8	14.8	12.4	12.4	12.4	10.6	10.6	10.6
8	16.8	16.5	16.6	14.8	14.5	14.7	12.4	12.2	12.3	10.6	10.4	10.6
9	16.8	16.5	16.6	14.6	14.5	14.6	12.4	12.1	12.3	10.6	10.4	10.6
10	16.8	16.5	16.5	14.6	14.3	14.5	12.4	12.1	12.2	10.6	10.4	10.5
11	16.5	16.5	16.5	14.4	14.3	14.3	12.2	11.9	12.1	10.6	10.4	10.4
12	16.5	16.5	16.5	14.3	14.1	14.2	12.2	11.9	12.0	10.6	10.4	10.4
13	16.5	16.2	16.5	14.1	13.8	14.0	12.2	11.9	12.0	10.4	10.2	10.3
14	16.5	16.2	16.3	14.1	13.8	13.9	11.9	11.9	11.9	10.4	10.1	10.3
15	16.5	16.2	16.2	13.9	13.8	13.8	11.9	11.9	11.9	10.4	10.1	10.2
16	16.2	15.9	16.1	13.9	13.8	13.8	11.9	11.7	11.9	10.3	10.1	10.2
17	16.2	15.9	16.0	13.8	13.6	13.7	11.9	11.7	11.7	10.2	10.1	10.2
18	16.0	15.9	15.9	13.6	13.6	13.6	11.7	11.6	11.7	10.1	10.1	10.1
19	15.9	15.6	15.9	13.6	13.4	13.5	11.9	11.6	11.7	10.1	9.9	10.1
20	15.9	15.6	15.7	13.6	13.3	13.4	11.7	11.7	11.7	10.2	9.9	10.0
21	15.7	15.6	15.6	13.3	12.9	13.2	11.7	11.5	11.7	10.0	9.9	10.0
22	15.7	15.6	15.7	13.6	12.9	13.2	11.7	11.5	11.6	10.0	10.0	10.0
23	15.7	15.4	15.7	13.1	13.1	13.1	11.7	11.2	11.5	10.0	9.7	9.9
24	15.7	15.4	15.5	13.1	13.1	13.1	11.5	11.2	11.3	10.0	9.7	9.8
25	15.4	15.4	15.4	13.1	13.1	13.1	11.5	11.2	11.3	9.9	9.5	9.6
26	15.4	15.1	15.3	13.1	13.0	13.1	11.3	11.0	11.2	9.6	9.5	9.5
27	15.1	15.1	15.1	13.1	12.8	13.0	11.3	11.0	11.2	9.6	9.4	9.5
28	15.1	15.1	15.1	13.1	12.8	12.9	11.2	11.0	11.1	9.6	9.4	9.5
29	15.2	15.1	15.1	12.9	12.6	12.8	11.0	11.0	11.0	9.6	9.4	9.5
30	15.1	15.1	15.1	12.9	12.6	12.7	11.0	10.8	11.0	9.6	9.4	9.4
31	15.1	15.1	15.1	---	---	---	11.0	10.8	10.9	9.6	9.3	9.4
MONTH	17.1	15.1	16.1	15.1	12.6	13.9	12.9	10.8	11.8	10.8	9.3	10.2

#4 (8.6' BLS)
WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY				MARCH			APRIL			MAY		
1	9.4	9.3	9.3	8.8	8.5	8.6	8.4	8.2	8.3	8.5	8.4	8.4
2	9.5	9.3	9.4	8.8	8.6	8.6	8.4	8.0	8.3	8.5	8.4	8.4
3	9.4	9.2	9.3	8.8	8.4	8.6	8.4	8.0	8.3	8.6	8.4	8.5
4	9.4	9.1	9.3	8.8	8.4	8.6	8.4	8.2	8.2	8.6	8.6	8.6
5	9.4	9.1	9.2	8.8	8.6	8.6	8.4	8.0	8.3	8.6	8.6	8.6
6	9.3	9.1	9.2	8.8	8.6	8.6	8.4	8.0	8.2	8.8	8.6	8.7
7	9.2	9.0	9.1	8.8	8.4	8.6	8.4	8.0	8.2	8.8	8.6	8.7
8	9.1	8.9	9.1	8.8	8.6	8.7	8.4	8.0	8.2	9.0	8.8	8.8
9	9.2	8.9	9.0	8.8	8.6	8.7	8.4	8.0	8.2	9.0	8.8	9.0
10	9.1	8.9	9.0	8.8	8.5	8.7	8.4	8.2	8.3	9.1	8.8	9.0
11	9.0	8.8	8.9	8.9	8.7	8.8	8.4	8.2	8.4	9.1	9.0	9.0
12	9.0	8.7	8.9	8.9	8.5	8.7	8.4	8.4	8.4	9.2	9.0	9.0
13	9.0	8.7	8.8	8.9	8.5	8.7	8.6	8.4	8.4	9.2	9.2	9.2
14	9.0	8.6	8.8	8.9	8.5	8.7	8.6	8.4	8.4	9.4	9.2	9.2
15	8.8	8.6	8.7	8.8	8.5	8.7	8.6	8.4	8.4	9.4	9.2	9.3
16	9.2	8.6	8.8	8.7	8.5	8.6	8.6	8.4	8.5	9.5	9.4	9.4
17	9.2	9.0	9.0	8.8	8.6	8.6	8.6	8.4	8.5	9.5	9.4	9.4
18	9.0	8.8	8.9	8.8	8.4	8.6	8.6	8.4	8.5	9.6	9.4	9.5
19	9.0	8.8	8.9	8.6	8.4	8.5	8.8	8.6	8.6	9.6	9.6	9.6
20	9.0	8.6	8.8	8.6	8.4	8.5	9.0	8.2	8.8	10.0	9.6	9.7
21	9.0	8.6	8.7	8.6	8.4	8.4	8.2	8.0	8.1	10.0	9.6	9.8
22	9.0	8.6	8.7	8.6	8.3	8.4	8.0	7.8	8.0	10.1	9.8	10.0
23	8.8	8.6	8.6	8.5	8.2	8.4	8.1	8.0	8.0	10.1	10.0	10.0
24	8.8	8.6	8.7	8.4	8.2	8.4	8.4	8.0	8.1	10.2	10.0	10.1
25	8.8	8.6	8.6	8.4	8.2	8.4	8.4	8.2	8.3	10.2	10.2	10.2
26	8.8	8.6	8.6	8.4	8.2	8.4	8.2	8.2	8.2	10.4	10.2	10.3
27	8.8	8.6	8.6	8.4	8.2	8.3	8.4	8.2	8.3	10.5	10.4	10.4
28	8.8	8.6	8.6	8.4	8.0	8.3	8.4	8.2	8.4	10.7	10.4	10.6
29	8.8	8.5	8.6	8.4	8.2	8.3	8.4	8.4	8.4	10.7	10.6	10.6
30	---	---	---	8.4	8.2	8.3	8.4	8.4	8.4	10.6	10.6	10.6
31	---	---	---	8.4	8.2	8.3	---	---	---	10.9	10.6	10.8
MONTH	9.5	8.5	8.9	8.9	8.0	8.5	9.0	7.8	8.3	10.9	8.4	9.5

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#4 (8.6' BLS)

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	10.9	10.7	10.9	13.2	12.9	12.9	14.9	14.9	14.9	16.0	15.9	16.0
2	10.9	10.8	10.9	13.0	12.9	12.9	15.2	14.9	15.0	16.0	15.9	15.9
3	10.9	10.8	10.9	13.2	12.9	13.0	15.2	14.9	15.1	16.2	16.0	16.0
4	10.9	10.9	10.9	13.2	12.9	13.1	15.2	14.9	15.1	16.2	15.9	16.0
5	10.9	10.9	10.9	13.2	13.1	13.2	15.2	15.1	15.2	16.2	15.9	16.0
6	10.9	10.9	10.9	13.2	13.1	13.1	15.2	15.1	15.2	16.2	16.0	16.0
7	11.1	10.9	11.1	13.4	13.1	13.3	15.2	15.1	15.2	16.0	16.0	16.0
8	11.1	11.1	11.1	13.4	13.4	13.4	15.2	15.1	15.2	16.0	15.9	16.0
9	11.3	11.1	11.2	13.7	13.4	13.5	15.4	15.1	15.2	16.2	15.9	16.0
10	11.3	11.3	11.3	13.7	13.6	13.6	15.5	15.2	15.3	16.2	15.9	16.0
11	11.5	11.3	11.3	13.7	13.6	13.6	15.5	15.2	15.4	16.2	16.0	16.2
12	11.6	11.3	11.4	13.7	12.9	13.6	15.7	15.4	15.4	16.3	16.0	16.2
13	11.8	11.5	11.6	13.9	12.9	13.4	15.7	15.4	15.5	16.3	16.0	16.2
14	11.8	11.6	11.7	13.9	13.9	13.9	15.7	15.7	15.7	16.3	16.0	16.2
15	11.8	11.7	11.8	13.9	13.9	13.9	15.7	15.7	15.7	16.3	16.0	16.2
16	11.8	11.7	11.8	14.1	13.9	14.0	15.7	15.6	15.7	16.3	16.0	16.2
17	12.0	11.7	11.9	14.2	13.9	14.1	15.7	15.6	15.7	16.3	16.0	16.2
18	12.0	12.0	12.0	14.2	14.1	14.1	15.7	15.7	15.7	16.2	16.0	16.2
19	12.2	12.0	12.0	14.4	14.1	14.3	15.7	15.7	15.7	16.2	16.0	16.2
20	12.4	12.2	12.2	14.4	14.1	14.3	15.7	15.6	15.7	16.3	16.2	16.2
21	12.4	12.4	12.4	14.4	14.4	14.4	15.7	15.6	15.7	16.2	16.0	16.2
22	12.7	12.4	12.4	14.6	14.4	14.5	15.9	15.7	15.7	16.2	16.0	16.1
23	12.7	12.4	12.6	14.6	14.4	14.5	16.0	15.7	15.7	16.5	16.2	16.3
24	12.7	12.6	12.7	14.6	14.6	14.6	15.7	15.7	15.7	16.5	16.2	16.3
25	12.7	12.6	12.7	14.7	14.6	14.6	15.7	15.7	15.7	16.5	16.2	16.2
26	12.7	12.6	12.7	14.7	14.6	14.6	16.0	15.7	15.8	16.5	16.2	16.2
27	12.7	12.6	12.7	14.9	14.6	14.8	16.0	15.7	15.8	16.2	16.2	16.2
28	12.9	12.6	12.7	14.9	14.9	14.9	16.0	15.7	15.7	16.2	16.2	16.2
29	12.9	12.6	12.8	14.9	14.9	14.9	16.0	15.7	15.8	16.2	16.0	16.2
30	12.9	12.7	12.8	14.9	14.9	14.9	16.0	16.0	16.0	16.2	15.9	16.1
31	---	---	---	14.9	14.9	14.9	16.0	15.9	16.0	---	---	---
MONTH	12.9	10.7	11.8	14.9	12.9	14.0	16.0	14.9	15.5	16.5	15.9	16.1
YEAR	17.1	7.8	12.1									

TEMPERATURE, SOIL DEG. C), WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	20.2	16.5	18.3	12.4	10.7	11.7	7.2	5.8	6.5	1.5	1.5	1.5
2	21.0	16.8	18.8	10.4	6.0	7.9	5.7	4.3	5.0	3.3	1.5	2.1
3	20.8	17.9	19.2	5.8	4.3	5.0	4.4	3.4	4.0	4.6	3.3	4.0
4	20.1	16.5	18.2	4.2	3.2	3.7	3.3	2.5	2.9	4.6	4.0	4.4
5	18.5	14.4	17.1	3.7	2.7	3.2	2.4	1.8	2.0	4.1	3.4	3.8
6	14.1	11.9	12.9	5.1	3.5	4.2	1.8	1.7	1.8	3.4	2.9	3.2
7	13.7	10.2	11.7	4.1	3.5	3.8	5.5	1.7	3.4	3.7	3.0	3.3
8	14.5	9.5	11.9	3.4	2.7	3.1	8.8	5.5	7.2	3.1	2.2	2.6
9	17.0	12.7	14.5	3.6	2.2	2.8	8.9	5.5	7.4	4.1	2.9	3.8
10	17.2	13.6	15.3	4.3	2.1	3.0	5.2	3.8	4.4	3.8	2.8	3.5
11	15.0	12.9	13.8	5.7	2.7	3.8	5.2	3.4	4.1	2.8	2.1	2.5
12	14.7	12.2	13.3	4.6	3.5	4.1	7.6	3.5	4.9	2.9	1.9	2.4
13	14.7	10.1	12.2	6.0	4.1	4.9	8.0	7.1	7.6	4.2	2.7	3.5
14	12.1	10.7	11.4	8.0	4.2	6.1	7.0	4.0	5.9	4.1	2.7	3.1
15	12.0	9.4	10.6	9.1	7.8	8.4	3.9	2.4	3.0	2.7	2.4	2.5
16	12.3	7.3	9.8	10.0	6.9	8.9	2.4	1.8	2.0	2.4	2.2	2.3
17	13.7	8.0	10.5	7.0	4.7	6.0	1.8	1.7	1.7	2.2	2.0	2.1
18	15.0	10.5	12.5	9.3	5.7	7.2	1.7	1.3	1.5	2.1	1.7	1.9
19	13.2	9.5	11.6	12.0	9.4	10.8	1.2	.7	.9	1.7	1.5	1.6
20	11.2	6.6	8.9	12.8	10.5	11.9	.7	.6	.7	1.5	1.4	1.4
21	11.4	7.1	9.2	10.4	9.5	10.0	.8	.7	.7	1.4	1.3	1.4
22	13.5	8.0	10.4	9.6	9.1	9.3	1.0	.8	.9	1.4	1.3	1.3
23	16.0	11.2	13.3	9.7	7.0	8.8	1.5	1.0	1.2	1.3	1.2	1.3
24	16.4	14.3	15.2	6.7	4.0	5.1	1.4	1.3	1.4	1.3	1.2	1.2
25	16.7	15.5	16.0	4.0	3.3	3.5	1.3	1.1	1.2	1.1	.9	1.0
26	17.7	15.9	16.6	3.2	2.6	2.9	1.3	1.2	1.2	.9	.9	.9
27	16.9	15.0	16.5	2.9	2.4	2.6	1.4	1.2	1.3	.9	.9	.9
28	14.9	13.3	14.0	5.0	2.7	3.8	1.7	1.3	1.4	1.0	.9	.9
29	15.3	12.0	13.6	8.2	5.0	6.5	2.7	1.7	2.0	1.1	1.0	1.0
30	14.6	14.0	14.3	9.9	7.4	8.8	2.1	1.8	1.9	1.1	1.1	1.1
31	14.1	12.2	13.5	---	---	---	1.8	1.6	1.7	1.2	1.1	1.1
MONTH	21.0	6.6	13.7	12.8	2.1	6.1	8.9	.6	3.0	4.6	.9	2.2

413551083481200 LU-20 NR HOLLAND OH

RAINFALL ACCUMULATED (INCHES), WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.10	.00	.00	.01	.00	.10	.07	.03	.00	.00	.00
2	.00	.00	.19	.01	.00	.00	.00	.00	.08	.03	.00	.03
3	.05	.00	.04	.08	.00	.00	.01	.00	.03	.00	.13	.11
4	.08	.00	.00	.00	.00	.00	.10	.13	.06	.00	.02	.00
5	.03	.00	.00	.00	.00	.00	.01	.07	.14	.18	.00	.04
6	.01	.00	.01	.00	.00	.08	.00	.00	.01	.00	.00	.00
7	.02	.02	.00	.00	.00	.16	.00	.00	.06	.00	.00	1.00
8	.01	.01	.00	.03	.01	.00	.00	.00	.00	.03	.04	.03
9	.00	.00	.00	.00	.00	.00	.00	.07	.00	.00	.06	.55
10	.08	.00	.01	.01	.00	.28	.04	.00	.00	.19	.01	.03
11	.01	.00	.00	.00	.00	.01	.08	.00	.00	.00	.00	.00
12	.00	.04	.19	.04	.00	.00	.00	.00	.00	1.12	.05	.00
13	.00	.00	.03	.10	.03	.00	.00	.00	.00	.16	.05	.00
14	.00	.01	.01	.03	.00	.01	.00	.01	.00	.26	.00	.00
15	.01	.04	.00	.00	.07	.00	.00	.00	.00	.15	.00	.00
16	.00	.01	.00	.00	.05	.00	.76	.00	.00	.00	.00	.00
17	.00	.00	.00	.01	.02	.11	.11	.09	.07	.04	.00	.00
18	.02	.08	.00	.00	.03	.00	.15	.00	.06	.00	.41	.16
19	.24	.11	.00	.00	.01	.07	.00	.00	.08	.00	.00	.00
20	.01	.65	.03	.00	.00	.01	.34	.00	.01	.74	.00	.00
21	.00	.02	.04	.00	.01	.00	.28	.00	.00	.00	.00	.72
22	.00	.00	.01	.05	.00	.02	.00	.00	.00	.00	.00	.71
23	.00	.04	.04	.04	.00	.08	.06	.83	.00	.60	.00	.00
24	.35	.00	.00	.01	.00	.00	.31	.00	.00	.00	.31	.00
25	.87	.00	.00	.00	.00	.05	.02	.00	.00	.00	.01	.00
26	.16	.00	.00	.02	.04	.03	.07	.02	.00	.14	.00	.02
27	.15	.03	.00	.00	.00	.08	.00	.00	.00	.00	.49	.06
28	.00	.09	.06	.00	.05	.00	.00	.00	.00	.00	.14	.00
29	.00	.03	.06	.00	.00	.04	.03	.06	.00	.00	.00	.00
30	.07	.05	.00	.00	---	.05	.03	.04	.00	.01	.00	.00
31	.06	---	.00	.03	---	.04	---	.09	---	.00	.00	---
TOTAL	2.23	1.33	0.72	0.46	0.33	1.12	2.50	1.48	0.63	3.65	1.66	3.46

WTR YR 1992 TOTAL 19.57

GROUND-WATER RECORDS

413547083481400. Local number, LU-23.

LOCATION.--Lat 41°35'47" Long 83°48'14", Hydrologic Unit 04100009, along State Route 2 near Holland, OH.
Owner.--USGS-Toledo Express Airport.

AQUIFER.--Sand of Quaternary age.

WELL CHARACTERISTICS.--Observation well drilled by hollow stem auger, diameter 4.0 in., depth 29.4 ft. Cased with Sch 40 PVC to 4.4 ft; .010 in. screen from 4.4 to 29.4 ft.

INSTRUMENTATION - Data logger--60 minute record. At this well there are 4 conductivity/water temperature probes at increasing depths within the well to better document vertical movement of high conductivity water on an hourly basis. Conductivity/water temperature probes are set at 6.9 (level 4), 10.4 (level 3), 16.9 (level 2), and 25.4 (level 1) feet below land surface.

DATUM.--Elevation of land-surface datum is 676.97 feet above National Geodetic Vertical Datum of 1929.
Measuring point: shelter floor 0.58 ft above land-surface datum.

REMARKS.--This station is part of an eight-site network to collect data for the Ohio Department of Transportation concerning road salt application and its effect(s) on shallow ground-water quality. Water-quality data for nearby wells is available in preceding tables.

PERIOD OF RECORD.--February 1991 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE (FOUR LEVELS): February 1991 to current year.
WATER TEMPERATURE (FOUR LEVELS): February 1991 to current year.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE:

LEVEL 1- Maximum, 1630 microsiemens July 16 and 17, 1991; minimum, 441 microsiemens March 2-3, 1992.
LEVEL 2- Maximum, 1790 microsiemens July 15, 1991; minimum, 462 microsiemens September 11, 1991.
LEVEL 3- Maximum, 1530 microsiemens July 22 and 23, 1991; minimum, 413 microsiemens October 8, 1991.
LEVEL 4- Maximum, 1030 microsiemens August 3 and 4, 1991; minimum, 107 microsiemens August 31, 1991.

WATER TEMPERATURE:

LEVEL 1- Maximum, 13.9°C many days in 1991; minimum, 11.5°C many days in 1991.
LEVEL 2- Maximum, 15.4°C October 30, November 11, 16, 1991; minimum, 10.5°C many days in 1991, 1992.
LEVEL 3- Maximum, 17.5°C many days in 1991; minimum, 9.5°C many days in 1991.
LEVEL 4- Maximum, 19.0°C many days in 1991; minimum, 8.5°C many days in 1991.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE:

LEVEL 1- Maximum, 898 microsiemens December 12, 1991; minimum, 441 microsiemens March 2-3, 1992.
LEVEL 2- Maximum, 1000 microsiemens December 12, 1991; minimum, 474 microsiemens October 2, 1991.
LEVEL 3- Maximum, 914 microsiemens December 12, 1991; minimum, 413 microsiemens October 8, 1991.
LEVEL 4- Maximum, 946 microsiemens December 12, 1991; minimum, 303 microsiemens October 25, 1991.

WATER TEMPERATURE:

LEVEL 1- Maximum, 13.9°C many days in 1991; minimum, 11.6°C May 25, 29, 31, June 5, 1992.
LEVEL 2- Maximum, 15.4°C October 30, November 11, 16, 1991; minimum, 10.5°C many days in April 1992.
LEVEL 3- Maximum, 17.4°C many days in October 1991; minimum, 9.6°C April 1-3, 6, 13, 1992.
LEVEL 4- Maximum, 17.4°C October 16, 17, 1991; minimum, 9.5°C April 3-11, 1992.

413547083481400 LU-23 NR HOLLAND OH

#1 (25.4' BLS)
SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	500	496	498	509	506	509	679	652	665	654	638	646
2	501	496	498	511	509	510	700	680	690	637	622	630
3	501	498	499	513	508	512	707	698	702	622	608	616
4	502	499	500	513	509	512	721	702	711	609	592	601
5	502	499	500	515	510	513	748	720	734	594	581	588
6	501	499	500	516	513	515	776	746	759	583	571	576
7	501	497	500	517	513	515	810	776	791	570	561	566
8	501	497	501	517	514	515	841	812	823	561	553	557
9	502	499	501	518	514	515	862	835	852	553	545	549
10	503	499	502	518	515	516	882	861	871	545	540	543
11	504	500	502	518	515	516	893	877	887	539	534	537
12	504	500	503	517	516	516	898	888	895	533	528	531
13	505	501	504	520	516	517	897	888	893	529	524	526
14	506	502	505	520	517	518	894	883	890	524	514	518
15	506	499	504	521	516	519	889	876	883	514	510	512
16	498	494	496	521	516	518	883	875	878	509	506	508
17	498	494	495	519	518	518	880	867	875	505	501	502
18	498	495	496	521	515	519	874	857	864	501	496	499
19	498	495	496	522	515	519	858	846	855	497	493	495
20	497	495	497	521	517	519	851	838	844	492	491	491
21	498	497	497	522	520	521	838	827	833	490	486	488
22	499	497	498	522	521	521	830	815	823	487	483	486
23	499	496	498	522	521	521	812	797	805	483	477	480
24	499	496	497	524	521	523	798	783	790	477	469	473
25	500	495	497	525	524	525	783	767	775	469	464	466
26	496	491	494	543	525	528	766	748	757	463	460	462
27	502	495	499	561	541	548	748	731	740	461	458	459
28	506	502	504	594	561	578	730	713	722	460	458	459
29	506	503	504	626	595	609	713	690	702	459	456	458
30	508	503	506	650	626	636	689	672	681	458	456	457
31	509	508	508	---	---	---	672	655	663	457	457	457
MONTH	509	491	500	650	506	527	898	652	795	654	456	521

#1 (25.4' BLS)
SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	457	456	456	445	442	443	476	474	475	490	485	488
2	456	455	456	445	441	443	476	476	476	488	485	486
3	456	455	456	444	441	442	477	476	476	488	484	487
4	456	454	455	445	442	443	480	476	477	487	484	487
5	455	455	455	446	442	445	478	476	477	487	483	485
6	457	454	455	447	445	446	481	477	478	485	480	483
7	454	454	454	448	445	446	481	478	479	483	478	481
8	456	454	454	449	446	448	481	478	479	481	477	479
9	456	453	454	450	447	448	482	478	480	480	476	478
10	456	453	454	453	448	451	483	479	482	479	475	478
11	455	453	454	455	451	453	483	480	482	479	476	478
12	455	452	454	456	454	456	484	480	483	482	477	480
13	455	452	454	457	457	457	484	483	484	484	480	482
14	455	454	454	458	457	458	484	481	484	485	481	484
15	456	454	454	459	458	458	485	481	484	485	482	484
16	456	455	456	459	458	459	485	483	484	486	482	485
17	455	454	455	460	457	459	487	481	483	486	482	485
18	454	451	454	462	460	461	484	481	481	485	482	484
19	454	453	454	462	459	461	484	479	481	485	482	484
20	454	453	454	463	462	463	485	481	482	485	482	484
21	455	450	453	464	461	463	484	480	481	486	482	485
22	454	451	453	465	464	464	482	477	479	487	484	486
23	453	450	452	468	464	465	481	477	478	487	483	486
24	452	449	451	470	466	467	484	480	483	486	483	485
25	451	448	451	471	467	469	484	481	483	485	479	482
26	451	450	450	472	469	471	489	485	487	482	479	481
27	450	446	449	473	470	472	491	489	490	482	479	481
28	448	444	446	472	469	471	491	487	489	483	480	482
29	444	443	443	473	471	472	491	490	491	485	480	483
30	---	---	---	473	472	473	491	487	489	484	481	483
31	---	---	---	475	471	473	---	---	---	486	481	483
MONTH	457	443	453	475	441	458	491	474	482	490	475	483

413547083481400 LU-23 NR HOLLAND OH

#1 (25.4' BLS)
SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	485	305	466	483	477	480	525	519	522	577	558	569
2	487	305	385	485	480	482	525	521	522	562	548	556
3	489	486	488	486	482	484	526	521	523	554	541	548
4	491	488	490	489	485	487	526	523	523	542	530	537
5	495	489	492	492	487	489	524	523	523	535	527	531
6	495	491	494	493	489	491	525	523	524	530	524	528
7	496	492	494	494	490	491	525	521	524	524	519	522
8	497	493	496	495	492	493	525	517	522	524	519	521
9	498	495	497	494	492	493	529	518	523	524	518	521
10	499	496	498	497	493	495	533	520	527	523	519	521
11	500	496	498	498	494	496	534	524	529	524	519	522
12	500	497	499	501	495	497	549	533	541	525	520	522
13	499	497	498	503	499	500	569	545	554	524	519	522
14	499	494	497	503	498	501	598	570	585	527	521	523
15	498	493	496	509	501	504	600	594	596	526	522	524
16	497	492	495	510	504	507	600	592	597	526	522	524
17	495	490	493	511	507	509	599	593	597	527	524	525
18	493	488	491	512	508	511	599	592	596	529	524	526
19	493	487	490	513	510	513	597	589	593	529	524	526
20	490	488	489	515	511	513	594	583	589	530	525	527
21	489	483	487	516	513	515	591	581	587	531	525	528
22	487	482	485	518	514	516	592	584	587	531	525	527
23	485	481	484	519	515	517	593	586	590	532	526	529
24	485	479	482	519	516	517	601	592	595	---	---	---
25	484	479	481	520	516	518	611	599	604	---	---	---
26	482	478	480	519	517	518	621	611	616	---	---	---
27	481	477	479	521	517	519	626	617	622	---	---	---
28	481	477	479	521	517	519	619	606	611	---	---	---
29	482	478	480	522	518	520	612	605	608	---	---	---
30	482	478	480	524	520	521	604	584	596	---	---	---
31	---	---	---	524	520	522	587	570	580	---	---	---
MONTH	500	305	485	524	477	504	626	517	568	577	518	530
YEAR	898	305	526									

#2 (16.9' BLS)
SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	479	475	477	510	504	507	765	735	749	718	699	708
2	478	474	476	510	503	506	792	765	779	699	681	690
3	480	475	477	505	500	502	791	783	787	680	664	673
4	480	475	478	502	496	500	814	788	801	664	649	657
5	482	477	480	502	496	499	845	816	828	648	635	643
6	481	479	480	504	497	500	881	843	860	638	623	630
7	481	477	480	504	500	502	915	882	898	625	615	620
8	481	477	480	505	501	502	949	917	929	615	605	610
9	481	476	479	505	500	503	974	944	961	605	597	601
10	480	475	478	508	503	505	987	972	981	599	590	594
11	480	476	479	511	505	508	998	987	992	592	584	588
12	482	477	480	516	508	512	1000	992	998	586	578	582
13	482	478	481	523	513	518	998	989	992	581	575	578
14	483	481	482	534	520	526	994	979	988	575	561	567
15	484	475	480	546	532	539	989	980	984	564	556	561
16	483	478	480	555	543	550	982	974	979	559	553	556
17	482	478	479	562	554	558	979	967	973	554	548	551
18	482	478	481	568	541	559	968	955	962	548	544	546
19	483	479	481	547	537	542	956	941	949	543	539	541
20	483	479	480	540	513	530	942	931	937	540	536	538
21	483	480	481	516	507	510	931	915	923	538	532	535
22	485	479	481	511	502	508	912	895	904	535	529	533
23	484	480	481	519	504	509	896	876	886	531	522	526
24	484	480	482	557	520	539	877	856	868	521	512	517
25	486	479	481	598	560	578	858	838	848	513	506	509
26	486	480	482	622	594	610	840	819	830	509	502	505
27	486	482	484	651	622	634	818	799	810	506	498	503
28	487	483	486	681	652	666	802	782	792	502	497	500
29	488	482	485	710	683	696	782	756	769	500	497	499
30	494	478	484	736	709	721	756	737	747	500	494	498
31	505	494	500	---	---	---	736	718	727	499	496	498
MONTH	505	474	481	736	496	545	1000	718	885	718	494	570

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#3 (10.4' BLS)

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	432	427	429	463	441	454	701	675	687	651	633	642
2	430	424	426	465	461	463	724	702	714	633	618	626
3	427	419	423	464	455	460	724	718	721	619	604	612
4	430	420	425	460	456	459	747	724	734	603	589	596
5	428	425	426	460	460	460	771	749	759	589	576	583
6	425	419	423	463	459	461	806	773	789	576	564	570
7	419	415	418	464	460	463	842	809	823	564	553	559
8	417	413	416	466	464	465	869	840	854	554	545	549
9	418	415	417	472	466	469	890	865	880	547	537	543
10	420	417	419	477	470	473	903	890	897	540	531	536
11	421	418	420	482	474	479	909	902	905	534	527	530
12	424	419	422	487	482	484	914	907	910	528	521	524
13	433	423	428	494	487	490	911	903	907	521	516	519
14	435	431	433	506	495	499	906	900	904	517	505	509
15	437	423	431	515	507	511	901	895	899	506	500	503
16	445	429	439	522	515	519	895	888	891	500	496	498
17	448	445	447	527	522	524	887	878	883	497	491	494
18	450	444	447	527	521	525	877	867	872	492	486	490
19	445	441	443	524	513	518	866	854	860	488	484	486
20	440	433	436	513	491	505	854	839	847	487	482	484
21	434	429	431	490	474	482	843	828	835	483	477	481
22	431	426	428	476	466	471	826	810	818	480	473	477
23	429	424	427	476	465	468	809	793	802	473	466	470
24	427	423	424	511	478	493	792	777	786	466	458	462
25	425	420	422	544	511	527	779	759	770	458	451	455
26	436	421	431	566	543	555	762	745	753	454	449	451
27	436	432	434	595	567	581	744	726	735	451	447	449
28	433	428	431	624	597	610	725	706	716	450	445	447
29	429	422	426	650	625	637	705	683	694	447	444	446
30	427	422	424	674	650	661	683	665	676	447	444	446
31	439	425	433	---	---	---	668	651	659	446	443	444
MONTH	450	413	428	674	441	506	914	651	806	651	443	512

#3 (10.4' BLS)

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	445	442	444	429	426	427	466	462	465	480	477	478
2	444	442	443	429	426	428	468	464	466	480	476	477
3	443	441	442	429	425	428	470	464	467	479	474	477
4	444	440	442	430	426	428	469	465	468	479	473	476
5	443	439	441	432	427	429	471	466	467	476	472	475
6	443	440	441	433	429	431	471	467	468	475	470	472
7	443	440	441	434	429	431	471	467	469	474	470	471
8	442	440	441	436	431	434	472	467	469	473	468	471
9	442	439	440	438	433	435	474	469	471	474	468	470
10	442	439	440	438	434	436	474	470	472	471	466	469
11	442	438	440	440	435	438	475	470	473	470	466	468
12	442	438	440	443	438	441	475	471	473	469	466	468
13	441	438	440	445	441	443	475	472	473	469	465	467
14	443	439	441	446	442	445	476	472	474	468	465	467
15	442	439	441	447	443	445	476	472	474	468	464	466
16	443	439	441	448	443	446	477	473	474	467	463	465
17	444	440	442	449	445	447	475	471	472	467	464	465
18	443	440	441	451	446	449	473	471	472	465	462	464
19	444	441	442	452	448	450	473	470	472	465	462	464
20	444	441	442	453	448	451	474	470	472	466	462	465
21	444	439	442	454	450	453	472	469	470	468	465	467
22	442	438	440	454	452	453	471	467	469	470	465	467
23	440	438	439	455	451	454	474	467	470	468	465	467
24	438	436	437	459	453	455	475	471	473	467	462	465
25	439	435	436	459	456	458	475	472	473	464	461	462
26	437	435	436	462	458	459	479	475	477	464	458	461
27	437	430	435	462	458	460	481	478	480	463	459	462
28	433	429	431	461	458	460	482	478	480	464	460	463
29	431	427	428	462	458	460	482	481	481	466	462	464
30	---	---	---	463	459	462	482	477	480	466	465	465
31	---	---	---	464	461	463	---	---	---	467	464	465
MONTH	445	427	440	464	425	445	482	462	472	480	458	468

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#3 (10.4' BLS)

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	467	292	447	459	455	458	498	492	495	568	556	562
2	472	293	370	458	451	454	500	494	498	557	551	554
3	471	468	470	451	445	448	503	498	500	554	544	548
4	474	471	473	448	444	447	508	502	503	547	538	544
5	477	473	475	446	442	444	509	505	507	541	533	537
6	478	475	477	446	443	444	510	507	508	534	525	529
7	480	477	478	444	443	443	513	507	510	526	515	521
8	483	479	480	445	441	443	515	510	512	518	504	509
9	484	481	482	445	442	443	518	513	516	506	495	501
10	485	482	483	446	443	444	521	515	518	497	481	490
11	486	483	483	448	444	446	524	518	521	484	472	478
12	484	481	484	451	445	447	526	522	524	475	469	472
13	485	482	484	468	448	460	532	526	527	472	466	469
14	485	481	483	475	465	471	556	534	543	470	466	468
15	482	479	481	471	462	467	562	553	559	469	465	467
16	482	478	481	465	455	460	563	558	562	469	465	466
17	481	477	479	457	453	454	565	560	563	471	467	469
18	480	475	477	456	452	454	566	562	564	474	469	471
19	478	472	475	455	452	454	568	563	565	476	471	473
20	475	471	473	456	452	454	569	565	567	479	473	476
21	472	467	471	460	457	458	569	565	567	479	475	478
22	471	467	469	463	459	461	569	566	567	481	470	475
23	470	466	469	466	461	463	570	565	568	475	471	473
24	466	463	466	470	464	468	571	566	569	---	---	---
25	466	462	464	474	470	472	574	568	571	---	---	---
26	465	461	462	474	471	473	576	571	574	---	---	---
27	464	460	462	480	473	477	585	578	580	---	---	---
28	463	459	460	482	477	480	586	579	584	---	---	---
29	460	456	459	487	482	484	583	576	580	---	---	---
30	459	456	458	494	487	490	580	570	574	---	---	---
31	---	---	---	496	491	493	574	563	568	---	---	---
MONTH	486	292	469	496	441	460	586	492	544	568	465	497
YEAR	914	292	505									

#4 (6.9' BLS)

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	---	---	---	438	432	436	721	692	707	676	659	668
2	---	---	---	449	435	441	744	722	735	658	642	650
3	---	---	---	464	450	458	749	739	744	641	624	633
4	---	---	---	465	462	464	772	745	758	626	613	619
5	---	---	---	467	463	464	798	774	785	612	599	606
6	---	---	---	470	464	467	835	800	817	599	586	593
7	---	---	---	473	469	470	868	837	851	586	575	581
8	---	---	---	476	473	474	900	868	881	575	566	571
9	---	---	---	482	475	479	917	900	909	568	559	565
10	---	---	---	486	481	483	937	919	928	562	555	558
11	---	---	---	491	485	487	944	937	940	554	548	551
12	---	---	---	496	491	493	946	936	944	549	542	545
13	---	---	---	506	495	500	941	937	938	542	538	540
14	---	---	---	517	507	510	938	932	935	537	525	530
15	430	427	428	526	516	521	933	926	929	527	521	525
16	433	427	429	535	526	530	926	918	922	523	517	520
17	447	434	442	539	531	535	922	913	917	518	512	514
18	448	442	445	538	532	536	912	901	906	512	507	509
19	444	429	434	535	527	530	901	888	894	507	503	505
20	432	428	431	529	505	519	887	871	880	505	499	502
21	433	427	430	503	487	493	873	855	866	502	497	500
22	432	425	428	488	475	482	858	842	850	498	492	496
23	426	419	422	488	474	479	842	825	833	494	485	490
24	423	388	410	522	488	505	824	807	816	484	476	480
25	410	303	393	558	524	541	807	789	799	476	471	474
26	421	349	404	581	559	571	789	774	782	471	467	469
27	425	417	420	615	582	598	773	755	764	468	462	466
28	428	424	426	643	615	630	754	736	745	464	462	463
29	429	423	425	669	645	655	733	715	724	463	460	461
30	434	426	430	692	667	678	714	696	705	463	460	462
31	435	431	434	---	---	---	695	677	686	462	460	461
MONTH	448	303	425	692	432	514	946	677	835	676	460	532

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#1 (25.4' BLS)
WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	13.2	13.0	13.1	13.7	13.4	13.4	13.6	13.6	13.6	13.6	13.6	13.6
2	13.2	13.0	13.1	13.4	13.4	13.4	13.6	13.6	13.6	13.6	13.4	13.6
3	13.2	13.0	13.1	13.6	13.4	13.4	13.6	13.6	13.6	13.6	13.4	13.5
4	13.2	13.0	13.1	13.6	13.4	13.5	13.9	13.6	13.8	13.6	13.4	13.5
5	13.2	13.0	13.1	13.6	13.4	13.5	13.9	13.6	13.8	13.6	13.4	13.5
6	13.2	13.2	13.2	13.6	13.4	13.4	13.9	13.6	13.7	13.6	13.4	13.4
7	13.4	13.1	13.2	13.6	13.4	13.5	13.9	13.6	13.7	13.4	13.4	13.4
8	13.5	13.1	13.2	13.6	13.4	13.5	13.9	13.6	13.8	13.4	13.4	13.4
9	13.5	13.2	13.3	13.7	13.4	13.6	13.9	13.6	13.7	13.4	13.4	13.4
10	13.5	13.2	13.3	13.6	13.4	13.5	13.9	13.6	13.8	13.4	13.4	13.4
11	13.4	13.2	13.2	13.7	13.4	13.5	13.9	13.6	13.6	13.4	13.4	13.4
12	13.4	13.2	13.2	13.6	13.6	13.6	13.9	13.6	13.7	13.4	13.4	13.4
13	13.5	13.1	13.2	13.6	13.4	13.6	13.9	13.6	13.7	13.4	13.4	13.4
14	13.4	13.2	13.2	13.7	13.4	13.6	13.9	13.6	13.7	13.4	13.4	13.4
15	13.4	13.2	13.2	13.7	13.4	13.5	13.9	13.6	13.8	13.4	13.4	13.4
16	13.4	13.2	13.3	13.7	13.4	13.6	13.9	13.6	13.8	13.4	13.3	13.3
17	13.5	13.2	13.4	13.7	13.6	13.6	13.9	13.6	13.7	13.4	13.4	13.4
18	13.5	13.2	13.3	13.9	13.4	13.7	13.9	13.6	13.8	13.4	13.3	13.4
19	13.4	13.2	13.4	13.9	13.4	13.7	13.9	13.6	13.8	13.4	13.3	13.3
20	13.4	13.4	13.4	13.9	13.6	13.7	13.9	13.6	13.7	13.4	13.4	13.4
21	13.5	13.4	13.4	13.6	13.6	13.6	13.6	13.6	13.6	13.7	13.4	13.4
22	13.5	13.4	13.4	13.6	13.6	13.6	13.6	13.6	13.6	13.4	13.4	13.4
23	13.7	13.4	13.5	13.7	13.6	13.6	13.6	13.6	13.6	13.4	13.4	13.4
24	13.7	13.4	13.6	13.6	13.6	13.6	13.6	13.6	13.6	13.4	13.4	13.4
25	13.7	13.4	13.6	13.6	13.6	13.6	13.7	13.6	13.6	13.4	13.4	13.4
26	13.7	13.4	13.6	13.6	13.6	13.6	13.6	13.6	13.6	13.4	13.1	13.3
27	13.7	13.4	13.6	13.6	13.6	13.6	13.6	13.6	13.6	13.4	13.1	13.3
28	13.7	13.4	13.5	13.6	13.6	13.6	13.6	13.6	13.6	13.4	13.1	13.2
29	13.7	13.4	13.5	13.9	13.6	13.7	13.6	13.6	13.6	13.4	13.1	13.2
30	13.7	13.4	13.5	13.9	13.6	13.7	13.6	13.6	13.6	13.2	13.1	13.1
31	13.4	13.4	13.4	---	---	---	13.6	13.6	13.6	13.1	13.1	13.1
MONTH	13.7	13.0	13.3	13.9	13.4	13.6	13.9	13.6	13.7	13.7	13.1	13.4

#1 (25.4' BLS)
WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	13.2	13.1	13.1	12.7	12.5	12.7	12.2	12.2	12.2	12.1	11.8	11.9
2	13.2	13.1	13.1	12.7	12.5	12.6	12.2	12.2	12.2	12.1	11.8	12.0
3	13.2	13.1	13.1	12.7	12.5	12.6	12.2	12.2	12.2	12.0	11.8	11.9
4	13.2	13.1	13.1	12.7	12.5	12.6	12.2	12.0	12.2	12.0	11.8	11.8
5	13.2	13.1	13.1	12.7	12.5	12.5	12.3	12.2	12.2	12.0	11.8	11.9
6	13.2	12.9	13.1	12.5	12.5	12.5	12.3	12.0	12.2	12.0	11.8	11.9
7	13.2	13.1	13.1	12.7	12.5	12.6	12.3	12.0	12.1	12.1	11.8	11.9
8	13.2	12.9	13.1	12.7	12.5	12.5	12.3	12.0	12.1	12.1	11.8	11.9
9	13.1	12.9	13.1	12.7	12.5	12.6	12.3	12.0	12.1	12.1	11.8	11.9
10	13.1	12.9	13.0	12.7	12.4	12.5	12.2	12.0	12.0	12.1	11.8	11.9
11	13.1	12.9	13.0	12.6	12.4	12.4	12.3	12.0	12.1	12.1	11.8	11.9
12	13.1	12.9	13.0	12.5	12.4	12.4	12.3	12.0	12.1	12.1	11.8	11.9
13	13.1	12.9	12.9	12.5	12.4	12.4	12.0	12.0	12.0	12.1	11.8	11.9
14	12.9	12.9	12.9	12.5	12.4	12.4	12.2	12.0	12.0	12.0	11.8	11.8
15	12.9	12.9	12.9	12.5	12.4	12.4	12.3	12.0	12.0	12.1	11.8	11.9
16	12.9	12.9	12.9	12.5	12.4	12.4	12.1	12.0	12.0	12.1	11.8	11.9
17	12.9	12.9	12.9	12.7	12.5	12.5	12.0	11.8	12.0	12.1	11.8	11.9
18	13.2	12.9	12.9	12.5	12.4	12.4	12.0	11.8	12.0	12.1	11.8	11.9
19	12.9	12.9	12.9	12.7	12.4	12.5	12.2	11.8	12.0	12.1	11.8	11.9
20	12.9	12.9	12.9	12.5	12.4	12.4	12.1	11.8	12.0	12.1	11.8	11.9
21	13.2	12.7	12.9	12.7	12.4	12.5	12.1	11.8	12.0	12.0	11.8	11.9
22	12.9	12.7	12.8	12.5	12.4	12.4	12.0	11.8	12.0	12.1	11.8	11.9
23	12.9	12.7	12.7	12.5	12.2	12.4	12.1	11.8	12.0	12.1	11.8	11.9
24	12.9	12.7	12.7	12.5	12.2	12.4	12.0	11.8	11.8	11.8	11.8	11.8
25	12.9	12.7	12.7	12.5	12.2	12.3	12.0	11.8	11.9	12.0	11.6	11.8
26	12.7	12.7	12.7	12.5	12.2	12.3	12.0	11.8	11.8	12.0	11.8	11.8
27	13.0	12.7	12.7	12.5	12.2	12.2	11.8	11.8	11.8	12.1	11.8	11.9
28	12.7	12.7	12.7	12.5	12.2	12.3	12.1	11.8	12.0	12.0	11.8	11.8
29	12.7	12.6	12.7	12.2	12.2	12.2	11.8	11.8	11.8	12.0	11.6	11.8
30	---	---	---	12.2	12.2	12.2	12.1	11.8	11.9	12.0	11.8	11.8
31	---	---	---	12.5	12.2	12.3	---	---	---	12.0	11.6	11.8
MONTH	13.2	12.6	12.9	12.7	12.2	12.4	12.3	11.8	12.0	12.1	11.6	11.9

413547083481400 LU-23 NR HOLLAND OH

#1 (25.4' BLS)
WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE			JULY			AUGUST			SEPTEMBER			
1	12.1	11.8	11.9	12.1	11.8	11.9	12.5	12.0	12.2	12.7	12.5	12.5
2	12.0	11.8	11.9	12.1	11.8	12.0	12.3	12.0	12.2	12.7	12.5	12.6
3	12.1	11.8	11.9	12.1	11.8	12.0	12.3	12.0	12.2	12.7	12.5	12.6
4	12.1	11.8	11.9	12.1	11.8	12.0	12.3	12.0	12.3	12.8	12.5	12.5
5	12.1	11.6	11.9	12.1	11.8	12.0	12.3	12.2	12.3	12.8	12.5	12.6
6	12.1	11.8	11.9	12.1	11.8	12.0	12.3	12.2	12.3	12.8	12.5	12.6
7	12.1	11.8	11.9	12.1	11.8	12.0	12.5	12.2	12.3	12.8	12.5	12.7
8	12.1	11.8	11.9	12.1	11.8	12.0	12.5	12.3	12.3	12.8	12.5	12.6
9	12.1	11.8	11.9	12.1	12.1	12.1	12.5	12.1	12.3	12.7	12.5	12.6
10	12.1	11.8	11.8	12.1	11.8	12.0	12.5	12.1	12.3	12.8	12.5	12.6
11	12.1	11.8	11.9	12.1	11.8	12.0	12.5	12.3	12.4	12.8	12.5	12.6
12	12.0	11.7	11.8	12.1	11.8	12.1	12.5	12.2	12.3	12.8	12.5	12.6
13	11.9	11.8	11.8	12.1	11.8	12.0	12.5	12.3	12.4	12.8	12.5	12.6
14	12.1	11.8	11.9	12.3	11.8	12.0	12.5	12.2	12.4	12.8	12.5	12.6
15	12.1	11.8	11.9	12.3	11.8	12.0	12.5	12.2	12.3	12.8	12.5	12.6
16	12.1	11.8	11.9	12.3	11.8	12.1	12.5	12.2	12.3	12.8	12.5	12.7
17	12.1	11.8	11.9	12.3	12.0	12.1	12.5	12.2	12.3	12.8	12.5	12.7
18	12.1	11.8	11.9	12.3	12.0	12.1	12.5	12.2	12.4	12.7	12.5	12.7
19	12.1	11.8	11.9	12.3	12.0	12.1	12.5	12.3	12.4	12.8	12.5	12.7
20	11.8	11.8	11.8	12.3	12.0	12.2	12.5	12.2	12.4	12.8	12.5	12.7
21	12.1	11.8	11.9	12.3	12.0	12.1	12.5	12.2	12.4	12.7	12.5	12.6
22	12.1	11.8	11.9	12.3	12.0	12.1	12.5	12.2	12.4	12.7	12.5	12.7
23	12.0	11.8	11.8	12.3	12.0	12.1	12.5	12.3	12.4	13.0	12.5	12.7
24	12.1	11.8	11.9	12.3	12.0	12.2	12.5	12.3	12.5	---	---	---
25	12.1	11.8	11.9	12.3	12.0	12.1	12.5	12.3	12.5	---	---	---
26	12.1	11.8	11.9	12.3	12.1	12.2	12.6	12.3	12.5	---	---	---
27	12.1	11.8	11.9	12.3	12.0	12.2	12.7	12.3	12.5	---	---	---
28	12.1	11.8	11.9	12.3	12.0	12.1	12.7	12.5	12.5	---	---	---
29	12.1	11.8	11.9	12.3	12.0	12.2	12.5	12.5	12.5	---	---	---
30	12.1	11.8	11.9	12.3	12.0	12.2	12.7	12.5	12.5	---	---	---
31	---	---	---	12.3	12.0	12.1	12.7	12.5	12.5	---	---	---
MONTH	12.1	11.6	11.9	12.3	11.8	12.1	12.7	12.0	12.4	13.0	12.5	12.6
YEAR	13.9	11.6	12.7									

#2 (16.9' BLS)
WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	15.0	14.7	14.8	15.2	15.1	15.2	14.4	14.4	14.4	13.4	13.4	13.4
2	15.0	14.7	14.8	15.1	15.1	15.1	14.4	14.4	14.4	13.4	13.4	13.4
3	15.0	14.7	14.8	15.1	15.1	15.1	14.4	14.4	14.4	13.4	13.4	13.4
4	15.0	14.7	14.8	15.1	15.1	15.1	14.4	14.3	14.3	13.4	13.1	13.4
5	14.9	14.7	14.9	15.1	15.1	15.1	14.4	14.1	14.3	13.4	13.1	13.3
6	14.9	14.9	14.9	15.1	15.1	15.1	14.4	14.1	14.3	13.4	13.1	13.3
7	15.2	14.9	14.9	15.1	15.1	15.1	14.1	14.1	14.1	13.2	13.1	13.2
8	15.2	14.9	15.0	15.2	15.1	15.1	14.4	14.1	14.3	13.1	13.1	13.1
9	15.2	14.9	15.0	15.2	15.1	15.1	14.4	14.1	14.1	13.2	12.9	13.1
10	15.2	14.9	15.0	15.2	15.1	15.1	14.1	14.1	14.1	13.1	12.9	13.1
11	15.2	14.9	14.9	15.4	15.1	15.2	14.1	14.1	14.1	13.2	12.9	13.1
12	15.2	14.9	14.9	15.1	15.1	15.1	14.4	14.1	14.1	13.2	12.9	13.0
13	15.2	14.9	15.0	15.2	15.1	15.1	14.1	13.9	14.1	13.2	12.9	12.9
14	14.9	14.9	14.9	15.2	14.9	15.1	14.1	13.9	14.1	13.1	12.9	13.0
15	15.2	14.9	15.0	15.2	14.9	15.1	14.1	13.9	14.1	13.1	12.9	12.9
16	15.2	14.9	15.0	15.4	14.9	15.1	14.1	13.9	14.0	13.1	12.9	12.9
17	15.2	14.9	15.1	15.2	14.9	15.1	13.9	13.9	13.9	12.9	12.7	12.9
18	15.2	14.9	15.0	15.2	14.9	15.0	13.9	13.8	13.9	12.9	12.9	12.9
19	15.1	14.9	15.0	15.2	14.9	15.1	13.9	13.6	13.8	12.9	12.9	12.9
20	15.2	14.9	15.1	15.2	14.9	15.0	13.9	13.6	13.7	12.9	12.7	12.8
21	15.2	14.9	15.1	14.9	14.9	14.9	13.6	13.6	13.6	13.0	12.5	12.8
22	15.2	14.9	15.2	14.9	14.9	14.9	13.6	13.6	13.6	12.9	12.5	12.7
23	15.2	14.9	15.1	14.9	14.6	14.9	13.6	13.6	13.6	12.7	12.5	12.6
24	15.2	14.9	15.1	14.9	14.9	14.9	13.6	13.6	13.6	12.7	12.4	12.6
25	15.2	14.9	15.2	14.9	14.6	14.8	13.9	13.6	13.6	12.7	12.4	12.6
26	15.2	14.9	15.1	14.9	14.6	14.7	13.6	13.4	13.6	12.7	12.4	12.5
27	15.2	14.9	15.1	14.6	14.6	14.6	13.6	13.4	13.5	12.7	12.4	12.5
28	15.2	14.9	15.0	14.6	14.4	14.6	13.6	13.4	13.4	12.5	12.5	12.5
29	15.2	14.9	15.1	14.7	14.4	14.5	13.4	13.4	13.4	12.5	12.4	12.4
30	15.4	14.9	15.1	14.7	14.4	14.5	13.4	13.4	13.4	12.5	12.2	12.4
31	15.2	15.1	15.2	---	---	---	13.4	13.4	13.4	12.5	12.2	12.4
MONTH	15.4	14.7	15.0	15.4	14.4	15.0	14.4	13.4	13.9	13.4	12.2	12.9

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#3 (10.4' BLS)
WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	17.4	17.1	17.3	16.2	16.0	16.1	14.1	14.1	14.1	12.7	12.7	12.7
2	17.4	17.1	17.3	16.2	16.2	16.2	14.1	14.1	14.1	12.7	12.5	12.6
3	17.4	17.1	17.3	16.2	15.9	16.0	14.1	14.1	14.1	12.5	12.5	12.5
4	17.4	17.1	17.2	16.2	15.9	15.9	14.1	14.1	14.1	12.5	12.5	12.5
5	17.4	17.1	17.2	15.9	15.9	15.9	14.1	14.1	14.1	12.5	12.5	12.5
6	17.1	17.0	17.1	15.9	15.7	15.8	14.1	13.9	14.0	12.5	12.5	12.4
7	17.4	17.0	17.1	15.9	15.6	15.7	13.9	13.6	13.8	12.5	12.5	12.5
8	17.4	17.0	17.2	15.7	15.6	15.6	13.9	13.6	13.8	12.5	12.2	12.4
9	17.4	17.1	17.2	15.7	15.4	15.6	13.9	13.6	13.7	12.5	12.2	12.3
10	17.4	17.1	17.1	15.7	15.4	15.5	13.9	13.6	13.6	12.5	12.2	12.3
11	17.4	17.1	17.1	15.7	15.4	15.4	13.6	13.6	13.6	12.2	12.2	12.2
12	17.4	16.8	17.1	15.4	15.4	15.4	13.7	13.4	13.6	12.2	12.2	12.2
13	17.1	16.8	17.0	15.4	15.4	15.4	13.7	13.4	13.4	12.2	12.0	12.2
14	17.1	16.8	16.9	15.5	15.2	15.3	13.4	13.4	13.4	12.2	12.0	12.2
15	17.1	16.8	16.9	15.2	15.2	15.2	13.6	13.4	13.4	12.2	12.0	12.2
16	17.1	16.7	16.9	15.2	15.1	15.2	13.6	13.4	13.4	12.2	12.0	12.2
17	17.1	16.7	16.8	15.2	14.9	15.1	13.4	13.4	13.4	12.2	12.0	12.0
18	16.8	16.5	16.8	15.2	14.9	15.0	13.4	13.4	13.4	12.2	11.9	12.0
19	16.8	16.5	16.7	15.2	14.9	15.1	13.4	13.3	13.4	12.2	11.7	11.9
20	16.8	16.5	16.7	15.2	14.9	15.0	13.4	13.1	13.3	12.0	11.7	11.8
21	16.8	16.5	16.7	14.9	14.6	14.8	13.4	13.1	13.2	12.0	11.7	11.8
22	16.8	16.5	16.6	14.9	14.6	14.7	13.4	13.1	13.2	11.8	11.7	11.8
23	16.8	16.5	16.7	14.6	14.6	14.6	13.2	12.9	13.1	11.8	11.5	11.7
24	16.8	16.5	16.7	14.6	14.6	14.6	13.2	12.9	13.1	11.8	11.5	11.7
25	16.8	16.5	16.8	14.6	14.4	14.6	13.2	12.9	13.0	11.8	11.5	11.7
26	16.8	16.2	16.5	14.6	14.3	14.5	13.1	12.9	12.9	11.7	11.5	11.6
27	16.5	16.2	16.4	14.4	14.4	14.4	12.9	12.9	12.9	11.6	11.3	11.5
28	16.5	16.2	16.3	14.4	14.4	14.4	12.9	12.9	12.9	11.6	11.3	11.5
29	16.5	16.2	16.3	14.4	14.1	14.3	12.9	12.7	12.9	11.5	11.3	11.4
30	16.5	16.0	16.3	14.4	14.1	14.2	12.9	12.7	12.8	11.5	11.3	11.3
31	16.2	16.0	16.2	---	---	---	12.9	12.7	12.7	11.5	11.3	11.3
MONTH	17.4	16.0	16.9	16.2	14.1	15.2	14.1	12.7	13.4	12.7	11.3	12.0

#3 (10.4' BLS)
WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	11.3	11.3	11.3	10.5	10.3	10.4	10.1	9.6	9.8	10.4	10.1	10.2
2	11.4	11.1	11.3	10.5	10.3	10.3	9.9	9.6	9.8	10.4	10.1	10.3
3	11.4	11.3	11.3	10.5	10.3	10.3	10.1	9.6	9.8	10.5	10.1	10.3
4	11.3	11.1	11.3	10.5	10.3	10.3	9.9	9.7	9.8	10.5	10.1	10.3
5	11.4	11.1	11.2	10.5	10.1	10.3	9.9	9.7	9.8	10.5	10.3	10.4
6	11.3	11.1	11.2	10.3	10.1	10.3	9.9	9.6	9.8	10.5	10.3	10.4
7	11.1	11.1	11.1	10.5	10.1	10.3	9.9	9.7	9.8	10.5	10.3	10.5
8	11.1	11.1	11.1	10.5	10.1	10.3	9.9	9.7	9.8	10.7	10.3	10.5
9	11.1	10.9	11.1	10.5	10.1	10.3	9.9	9.7	9.8	10.7	10.3	10.5
10	11.1	10.9	11.0	10.5	10.2	10.4	9.9	9.7	9.8	10.7	10.4	10.5
11	11.1	10.9	11.0	10.5	10.2	10.3	9.9	9.7	9.8	10.8	10.5	10.6
12	11.1	10.9	11.0	10.5	10.1	10.3	9.9	9.7	9.8	10.8	10.5	10.6
13	11.1	10.9	10.9	10.5	10.2	10.3	9.9	9.6	9.8	10.8	10.5	10.7
14	10.9	10.7	10.8	10.5	10.1	10.3	9.9	9.7	9.8	10.7	10.5	10.5
15	10.9	10.7	10.8	10.5	10.1	10.3	10.1	9.7	9.9	10.8	10.5	10.6
16	10.9	10.7	10.8	10.4	10.1	10.2	10.1	9.7	9.9	10.8	10.5	10.7
17	10.9	10.7	10.7	10.3	10.1	10.2	10.1	9.9	9.9	10.8	10.5	10.7
18	10.7	10.5	10.7	10.3	10.0	10.2	9.9	9.9	9.9	11.0	10.7	10.8
19	10.7	10.5	10.6	10.3	10.0	10.1	10.1	9.9	9.9	11.0	10.7	10.8
20	10.7	10.5	10.6	10.5	10.0	10.1	10.1	9.9	10.0	11.0	10.7	10.8
21	10.7	10.5	10.5	10.3	10.0	10.1	10.1	9.9	10.1	11.0	10.7	10.9
22	10.7	10.5	10.5	10.1	10.0	10.1	10.1	9.9	9.9	11.2	10.7	11.0
23	10.5	10.5	10.5	10.3	10.0	10.1	10.1	9.9	10.0	11.2	10.9	11.0
24	10.5	10.5	10.5	10.3	9.9	10.1	10.1	9.9	10.0	11.1	10.9	11.0
25	10.5	10.3	10.5	10.1	9.9	10.0	10.1	9.9	10.1	11.2	10.9	11.1
26	10.5	10.3	10.5	10.1	9.9	10.0	10.3	10.1	10.1	11.4	10.9	11.1
27	10.7	10.3	10.4	10.1	9.9	9.9	10.3	10.1	10.1	11.4	11.1	11.2
28	10.5	10.3	10.4	10.1	9.9	9.9	10.3	10.1	10.2	11.4	11.1	11.2
29	10.5	10.3	10.4	10.1	9.9	9.9	10.1	10.1	10.1	11.4	11.1	11.2
30	---	---	---	10.1	9.9	9.9	10.3	10.1	10.2	11.2	11.1	11.2
31	---	---	---	10.1	9.9	9.9	---	---	---	11.4	11.1	11.2
MONTH	11.4	10.3	10.8	10.5	9.9	10.2	10.3	9.6	9.9	11.4	10.1	10.7

413547083481400 LU-23 NR HOLLAND OH

#3 (10.4' BLS)
WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	11.4	11.1	11.4	13.2	12.7	12.9	14.5	14.1	14.4	15.8	15.4	15.6
2	11.4	11.2	11.4	13.0	12.7	12.9	14.7	14.4	14.5	15.7	15.4	15.7
3	11.6	11.4	11.4	13.2	13.0	13.1	14.7	14.4	14.6	16.0	15.5	15.7
4	11.6	11.4	11.4	13.2	13.0	13.1	14.7	14.4	14.6	16.0	15.7	15.7
5	11.6	11.4	11.5	13.2	13.0	13.1	14.7	14.4	14.6	16.0	15.7	15.8
6	11.6	11.4	11.5	13.2	12.9	13.1	14.9	14.6	14.7	16.0	15.7	15.8
7	11.6	11.4	11.6	13.2	13.2	13.2	15.0	14.4	14.7	16.0	15.7	15.9
8	11.6	11.4	11.5	13.5	13.2	13.3	15.0	14.7	14.9	16.0	15.7	15.9
9	11.6	11.4	11.5	13.5	13.2	13.4	15.0	14.7	14.8	16.0	15.7	15.8
10	11.6	11.4	11.5	13.5	13.2	13.4	15.0	14.7	14.8	16.0	15.7	15.8
11	11.6	11.4	11.6	13.7	13.2	13.4	15.2	14.9	15.0	16.0	15.7	15.8
12	11.8	11.6	11.6	13.7	13.2	13.5	15.2	14.9	15.0	16.0	15.7	15.8
13	11.9	11.6	11.7	13.7	13.4	13.7	15.2	14.9	15.0	16.0	15.7	15.8
14	11.9	11.6	11.8	13.7	13.4	13.6	15.2	14.9	15.0	16.0	15.7	15.9
15	12.1	11.8	11.9	13.7	13.4	13.5	15.2	14.9	15.1	16.0	15.7	15.9
16	12.1	11.8	11.9	13.7	13.4	13.6	15.5	15.2	15.2	16.0	15.7	16.0
17	12.1	11.8	11.9	13.7	13.4	13.7	15.5	15.1	15.2	16.0	15.7	15.9
18	12.1	11.8	12.0	13.9	13.4	13.7	15.5	15.2	15.3	16.0	15.7	15.9
19	12.3	11.8	12.0	14.0	13.7	13.8	15.5	15.2	15.3	16.0	15.7	16.0
20	12.3	12.0	12.1	14.0	13.7	13.9	15.5	15.2	15.4	16.2	15.7	16.0
21	12.5	12.2	12.3	14.0	13.7	13.7	15.5	15.2	15.4	16.3	16.0	16.0
22	12.5	12.2	12.4	14.0	13.7	13.8	15.5	15.4	15.5	16.0	15.7	15.9
23	12.5	12.2	12.3	13.9	13.7	13.9	15.7	15.4	15.5	16.0	15.7	15.9
24	12.7	12.5	12.5	14.2	13.7	13.9	15.7	15.5	15.5	---	---	---
25	12.8	12.5	12.6	14.2	13.9	14.0	15.7	15.5	15.6	---	---	---
26	12.8	12.5	12.7	14.4	14.2	14.2	15.7	15.5	15.6	---	---	---
27	12.8	12.5	12.6	14.4	14.2	14.3	15.7	15.5	15.6	---	---	---
28	12.8	12.5	12.7	14.5	14.1	14.3	15.7	15.4	15.5	---	---	---
29	13.0	12.7	12.8	14.5	14.2	14.4	15.7	15.4	15.6	---	---	---
30	13.0	12.7	12.8	14.4	14.2	14.3	15.7	15.4	15.6	---	---	---
31	---	---	---	14.4	14.2	14.3	15.7	15.4	15.6	---	---	---
MONTH	13.0	11.1	12.0	14.5	12.7	13.6	15.7	14.1	15.1	16.3	15.4	15.8
YEAR	17.4	9.6	12.9									

#4 (6.9' BLS)
WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	---	---	---	16.2	16.0	16.0	14.1	14.1	14.1	12.5	12.4	12.4
2	---	---	---	16.2	15.9	16.0	14.1	14.1	14.1	12.5	12.4	12.5
3	---	---	---	15.9	15.9	15.9	14.1	13.9	14.0	12.5	12.2	12.5
4	---	---	---	16.2	15.9	15.9	14.1	13.8	13.9	12.5	12.2	12.3
5	---	---	---	15.9	15.7	15.8	14.1	13.8	13.9	12.2	12.2	12.2
6	---	---	---	15.7	15.7	15.7	13.9	13.6	13.8	12.2	12.2	12.2
7	---	---	---	15.7	15.6	15.7	13.7	13.6	13.7	12.2	12.2	12.2
8	---	---	---	15.7	15.6	15.6	13.9	13.4	13.7	12.2	12.2	12.2
9	---	---	---	15.6	15.4	15.5	13.6	13.4	13.6	12.2	12.0	12.1
10	---	---	---	15.6	15.4	15.5	13.6	13.4	13.5	12.0	12.0	12.0
11	---	---	---	15.7	15.4	15.4	13.4	13.4	13.4	12.0	12.0	12.0
12	---	---	---	15.4	15.4	15.4	13.7	13.4	13.4	12.0	11.8	12.0
13	---	---	---	15.4	15.1	15.3	13.4	13.4	13.4	12.0	11.8	11.9
14	---	---	---	15.5	15.1	15.2	13.4	13.4	13.4	12.0	11.7	11.9
15	17.1	17.0	17.1	15.2	15.2	15.2	13.4	13.4	13.4	12.0	11.7	11.8
16	17.4	17.0	17.1	15.2	14.9	15.1	13.4	13.1	13.4	11.7	11.7	11.7
17	17.4	17.0	17.1	15.1	14.9	15.0	13.4	13.1	13.2	11.8	11.7	11.8
18	17.1	16.8	17.0	15.2	14.9	14.9	13.4	13.1	13.2	11.7	11.7	11.7
19	17.1	16.8	16.8	15.2	14.7	15.0	13.3	13.1	13.1	11.7	11.5	11.7
20	17.1	16.7	16.8	14.9	14.6	14.8	13.1	12.9	13.1	11.7	11.5	11.6
21	16.8	16.5	16.7	14.6	14.6	14.6	13.1	12.9	13.0	11.8	11.5	11.6
22	16.8	16.5	16.7	14.6	14.4	14.6	13.1	12.9	12.9	11.6	11.3	11.5
23	16.8	16.5	16.7	14.6	14.4	14.4	12.9	12.9	12.9	11.6	11.3	11.4
24	16.8	16.5	16.8	14.6	14.4	14.4	12.9	12.9	12.9	11.5	11.3	11.5
25	16.8	16.2	16.6	14.4	14.4	14.4	13.0	12.7	12.8	11.5	11.3	11.4
26	16.5	16.2	16.5	14.4	14.3	14.4	12.9	12.7	12.8	11.4	11.3	11.3
27	16.5	16.2	16.4	14.4	14.1	14.3	12.7	12.7	12.7	11.6	11.3	11.3
28	16.5	16.2	16.3	14.1	14.1	14.1	12.7	12.5	12.7	11.4	11.3	11.3
29	16.5	16.0	16.3	14.4	14.1	14.2	12.7	12.5	12.5	11.3	11.1	11.3
30	16.2	16.0	16.0	14.4	14.1	14.3	12.5	12.4	12.4	11.3	11.1	11.2
31	16.2	16.0	16.0	---	---	---	12.5	12.4	12.4	11.1	11.1	11.1
MONTH	17.4	16.0	16.6	16.2	14.1	15.1	14.1	12.4	13.3	12.5	11.1	11.8

GROUND-WATER RECORDS

413547083481500. Local number, LU-24.

LOCATION.--Lat 41°35'47" Long 83°48'15", Hydrologic Unit 04100009, along State Route 2 near Holland, OH.
Owner.--USGS-Toledo Express Airport.

AQUIFER.--Sand of Quaternary age.

WELL CHARACTERISTICS.--Observation well drilled by hollow stem auger, diameter 4.0 in., depth 18.7 ft. Cased with Sch 40 PVC to 8.7 ft; .010 in. screen from 8.7 to 18.7 ft.

INSTRUMENTATION - Data logger--60 minute record. Water-level data only was collected at this well.

DATUM.--Elevation of land-surface datum is 677.21 feet above National Geodetic Vertical Datum of 1929.
Measuring point: shelter floor 2.12 ft above land-surface datum.

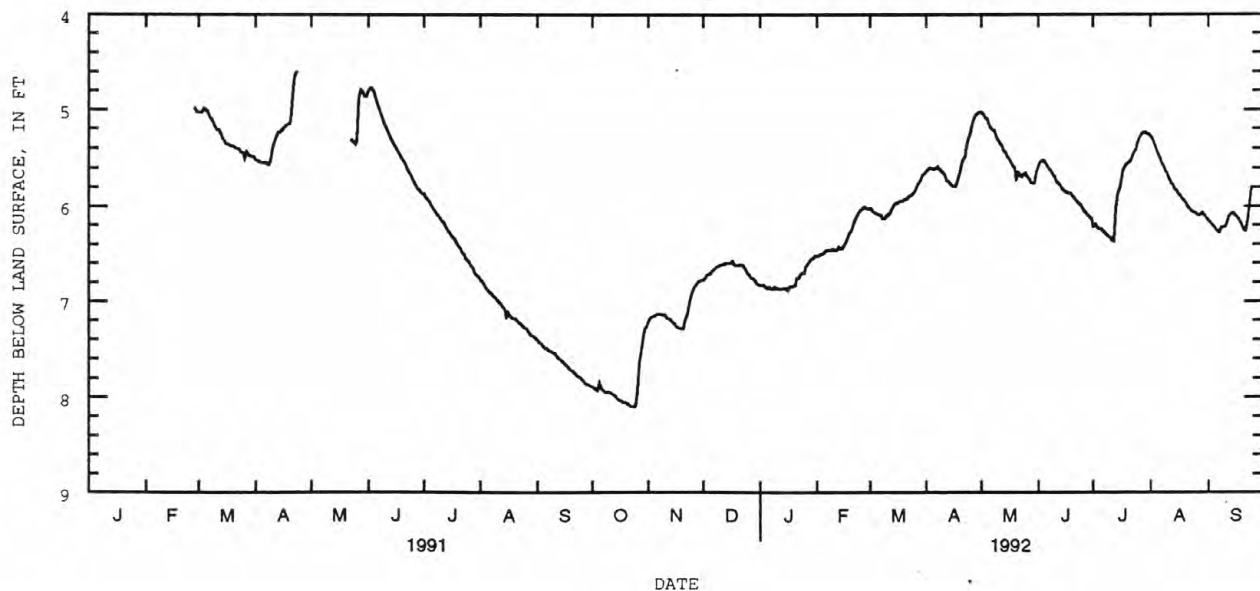
REMARKS.--This station is part of an eight-site network to collect data for the Ohio Department of Transportation concerning road salt application and its effect(s) on shallow ground-water quality. Water-quality data for nearby wells is available in preceding tables.

PERIOD OF RECORD.--February 1991 to current year.

PERIOD OF DAILY RECORD.--
WATER LEVEL: February 1991 to current year.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER LEVEL: Maximum daily low, 8.10 ft. below land-surface datum, October 24, 1991; minimum daily low, 4.61 ft. below land-surface data, April 22 and 23, 1991.

EXTREMES FOR CURRENT YEAR.--
WATER LEVEL: Maximum daily low, 8.10 ft. below land-surface datum, October 24, 1991; minimum daily low, 5.01 ft. below land-surface data, April 29,30,May 1,2, 1992.\



413547083481500 LU-24 NR HOLLAND OH

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.89	7.21	6.77	6.83	6.52	6.02	5.64	5.03	5.59	6.21	5.28	6.15
2	7.90	7.17	6.75	6.83	6.52	6.04	5.62	5.05	5.54	6.19	5.30	6.17
3	7.92	7.16	6.72	6.83	6.51	6.06	5.60	5.08	5.53	6.22	5.35	6.20
4	7.93	7.15	6.71	6.85	6.50	6.07	5.61	5.10	5.53	6.24	5.41	6.22
5	7.85	7.14	6.70	6.86	6.49	6.08	5.62	5.14	5.55	6.24	5.46	6.24
6	7.90	7.13	6.68	6.85	6.47	6.09	5.61	5.19	5.58	6.26	5.50	6.27
7	7.93	7.13	6.66	6.87	6.46	6.10	5.59	5.21	5.62	6.28	5.54	6.27
8	7.94	7.14	6.64	6.87	6.46	6.13	5.61	5.22	5.64	6.29	5.59	6.22
9	7.94	7.14	6.63	6.85	6.46	6.13	5.63	5.28	5.67	6.32	5.63	6.22
10	7.94	7.14	6.62	6.86	6.45	6.11	5.65	5.32	5.70	6.33	5.66	6.21
11	7.95	7.17	6.61	6.87	6.46	6.09	5.67	5.35	5.74	6.36	5.71	6.16
12	7.96	7.18	6.61	6.87	6.46	6.07	5.73	5.37	5.76	6.37	5.75	6.11
13	7.97	7.19	6.60	6.87	6.43	6.03	5.74	5.42	5.78	6.02	5.78	6.08
14	7.99	7.21	6.60	6.86	6.45	5.99	5.76	5.45	5.81	5.87	5.81	6.07
15	8.02	7.23	6.60	6.86	6.44	5.97	5.78	5.48	5.83	5.82	5.84	6.09
16	8.03	7.26	6.60	6.88	6.40	5.97	5.79	5.51	5.85	5.72	5.87	6.11
17	8.04	7.27	6.58	6.84	6.38	5.95	5.79	5.54	5.87	5.63	5.89	6.14
18	8.05	7.28	6.62	6.84	6.33	5.95	5.74	5.58	5.86	5.59	5.92	6.17
19	8.05	7.29	6.62	6.84	6.28	5.94	5.67	5.60	5.87	5.56	5.94	6.22
20	8.06	7.29	6.62	6.83	6.25	5.93	5.58	5.73	5.90	5.55	5.97	6.25
21	8.08	7.20	6.61	6.75	6.19	5.92	5.53	5.65	5.92	5.53	6.00	6.26
22	8.09	7.13	6.61	6.75	6.14	5.90	5.49	5.67	5.95	5.48	6.02	6.15
23	8.09	7.06	6.63	6.71	6.10	5.89	5.39	5.69	5.97	5.45	6.05	5.97
24	8.10	6.96	6.66	6.70	6.07	5.88	5.30	5.67	5.99	5.41	6.06	5.80
25	8.09	6.89	6.70	6.70	6.04	5.86	5.25	5.66	6.02	5.34	6.07	---
26	7.93	6.85	6.72	6.64	6.03	5.83	5.15	5.70	6.05	5.29	6.09	---
27	7.64	6.82	6.75	6.61	6.01	5.78	5.09	5.72	6.07	5.26	6.10	---
28	7.51	6.79	6.75	6.58	6.02	5.75	5.06	5.75	6.10	5.24	6.08	---
29	7.38	6.78	6.77	6.56	6.03	5.72	5.04	5.76	6.12	5.24	6.07	---
30	7.30	6.77	6.81	6.54	---	5.68	5.03	5.76	6.14	5.25	6.10	---
31	7.25	---	6.82	6.52	---	5.66	---	5.65	---	5.26	6.13	---
MAX	8.10	7.29	6.82	6.88	6.52	6.13	5.79	5.76	6.14	6.37	6.13	6.27

WTR YR 1992 LOW 8.10

GROUND-WATER RECORDS

415307080414500. Local number, AB-134.

LOCATION.--Lat 41°53'07" Long 80°41'45", Hydrologic Unit 04120101, along State Route 84 near Kingsville, OH.
Owner.--USGS-Ohio State University (OARDC).

AQUIFER.--Sand and Gravel of Pleistocene age.

WELL CHARACTERISTICS.--Observation well drilled by hollow stem auger, diameter 4.0 in., depth 17.4 ft. Cased with Sch 40 PVC to 7.5 ft; .010 in. screen from 7.5 to 17.4 ft.

INSTRUMENTATION - Data logger--60 minute record. Precipitation data collected with a propane-heated, tipping-bucket rain gauge. Also collected: water level, air temperature, soil temperature, water temperature, and specific conductance. Conductivity/water temperature probe set at 10.0 feet below land surface.

DATUM.--Elevation of land-surface datum is 772.10 feet above National Geodetic Vertical Datum of 1929.
Measuring point: shelter floor 3.93 ft above land-surface datum.

REMARKS.--This station is part of an eight-site network to collect data for the Ohio Department of Transportation concerning road salt application and its effect(s) on shallow ground-water quality. Water-quality data for nearby wells is available in preceding tables.

PERIOD OF RECORD.--February 1991 to current year.

PERIOD OF DAILY RECORD.--

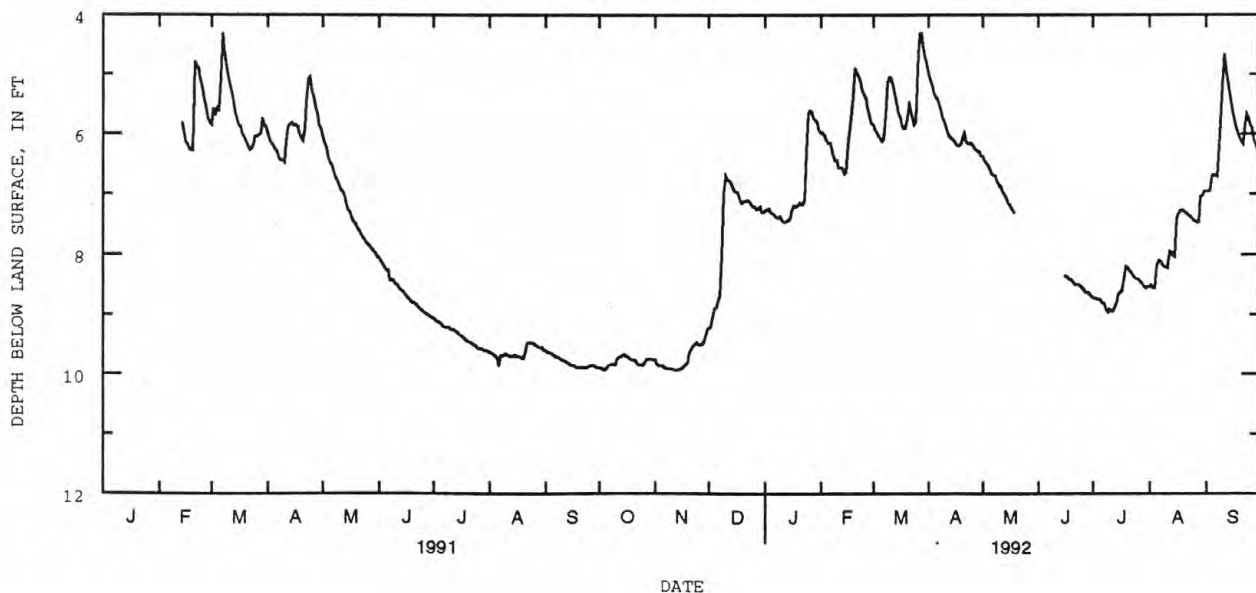
WATER LEVEL: February 1991 to current year
SPECIFIC CONDUCTANCE: February 1991 to July 1992
AIR TEMPERATURE: February 1991 to current year
WATER TEMPERATURE: February 1991 to July 1992
SOIL TEMPERATURE: July 1992 to current year
PRECIPITATION: February 1991 to current year

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER LEVEL: Maximum daily low, 9.93 ft. below land-surface datum, October 3-4, November 12-13 1991; minimum daily low, 4.11 ft. below land-surface datum, March 27-28, 1992.
SPECIFIC CONDUCTANCE: Maximum, 2560 microsiemens March 27, 1991; minimum, 948 microsiemens August 8, 1991.
AIR TEMPERATURE: Maximum, 33.0°C September 16, 1991; minimum, -18.8°C February 12, 1992.
WATER TEMPERATURE: Maximum, 15.5°C many days in 1991; minimum, 6.6°C March 26-28, April 1-7 1992.
SOIL TEMPERATURE: Maximum, 27.9°C July 11, 1992; minimum, 12.9°C September 30, 1992.

EXTREMES FOR CURRENT YEAR.--

WATER LEVEL: Maximum daily low, 9.93 ft. below land-surface datum, October 3-4, November 12-13 1991; minimum daily low, 4.11 ft. below land-surface datum, March 27-28, 1992.
SPECIFIC CONDUCTANCE: Maximum, 2390 microsiemens December 5, 1991; minimum, 1300 microsiemens April 8-9, 1992.
AIR TEMPERATURE: Maximum, 30.7°C August 10, 1992; minimum, -18.8°C February 12, 1992.
WATER TEMPERATURE: Maximum, 15.5°C October 1-3, 1991; minimum, 6.6°C March 26-28, April 1-7 1992.
SOIL TEMPERATURE: Maximum, 27.9°C July 11, 1992; minimum, 12.9°C September 30, 1992.



415307080414500 AB-134 NR KINGSVILLE OH

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.90	9.76	9.23	7.28	5.99	5.85	4.98	6.38	---	8.72	8.53	6.96
2	9.90	9.82	9.19	7.26	5.98	5.93	5.10	6.45	---	8.73	8.51	6.96
3	9.93	9.85	9.03	7.25	6.03	5.98	5.15	6.49	---	8.74	8.55	6.94
4	9.93	9.85	8.89	7.30	6.10	6.04	5.30	6.53	---	8.75	8.55	6.70
5	9.88	9.86	8.88	7.32	6.15	6.09	5.39	6.60	---	8.75	8.19	6.68
6	9.85	9.89	8.77	7.34	6.15	6.12	5.42	6.67	---	8.80	8.10	6.69
7	9.84	9.90	8.69	7.39	6.22	6.08	5.53	6.69	---	8.82	8.10	6.70
8	9.83	9.91	8.03	7.40	6.37	5.69	5.63	6.71	---	8.91	8.14	6.21
9	9.84	9.91	7.00	7.38	6.45	5.13	5.74	6.80	---	8.96	8.20	5.81
10	9.84	9.91	6.71	7.41	6.45	5.05	5.80	6.86	---	8.91	8.21	4.99
11	9.74	9.92	6.77	7.46	6.56	5.06	5.91	6.89	---	8.94	8.22	4.66
12	9.71	9.93	6.77	7.46	6.56	5.20	6.02	6.98	---	8.94	7.95	4.93
13	9.70	9.93	6.82	7.45	6.58	5.32	6.06	7.01	---	8.87	7.96	5.16
14	9.68	9.92	6.89	7.43	6.66	5.48	6.08	7.08	---	8.78	8.02	5.39
15	9.67	9.92	6.95	7.41	6.64	5.65	6.11	7.15	---	8.67	8.04	5.57
16	9.70	9.90	6.97	7.27	6.20	5.72	6.15	7.19	8.36	8.62	7.40	5.71
17	9.71	9.87	6.99	7.19	5.90	5.88	6.20	7.24	8.38	8.60	7.32	5.85
18	9.74	9.83	7.12	7.21	5.73	5.90	6.20	7.30	8.42	8.39	7.28	5.97
19	9.76	9.81	7.15	7.19	5.39	5.91	6.18	---	8.42	8.20	7.27	6.07
20	9.77	9.65	7.13	7.15	4.90	5.75	6.04	---	8.46	8.22	7.29	6.13
21	9.77	9.58	7.12	7.17	4.97	5.46	5.99	---	8.50	8.28	7.31	6.18
22	9.82	9.53	7.10	7.17	5.04	5.63	6.14	---	8.50	8.30	7.34	5.91
23	9.84	9.50	7.12	7.10	5.14	5.78	6.16	---	8.50	8.35	7.37	5.67
24	9.84	9.47	7.16	6.31	5.25	5.85	6.15	---	8.52	8.39	7.39	5.73
25	9.85	9.50	7.20	5.65	5.34	5.80	6.18	---	8.56	8.41	7.43	5.85
26	9.81	9.51	7.20	5.61	5.41	4.88	6.23	---	8.59	8.40	7.45	5.92
27	9.76	9.50	7.26	5.63	5.59	4.32	6.26	---	8.63	8.45	7.47	6.09
28	9.75	9.46	7.24	5.73	5.72	4.31	6.28	---	8.63	8.48	7.46	6.19
29	9.75	9.35	7.22	5.78	5.82	4.51	6.31	---	8.65	8.53	7.04	6.28
30	9.75	9.24	7.30	5.81	---	4.69	6.37	---	8.69	8.55	7.02	6.35
31	9.76	---	7.30	5.93	---	4.82	---	---	---	8.53	6.95	---
MAX	9.93	9.93	9.23	7.46	6.66	6.12	6.37	7.30	8.69	8.96	8.55	6.96

WTR YR 1992 LOW 9.93

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	---	---	---	---	---	---	2270	2150	2180	1480	1460	1470
2	---	---	---	---	---	---	2250	2200	2230	1520	1460	1470
3	---	---	---	---	---	---	2280	2250	2260	1490	1460	1470
4	---	---	---	---	---	---	2370	2290	2330	1460	1420	1450
5	---	---	---	---	---	---	2390	2350	2370	1440	1410	1430
6	---	---	---	---	---	---	2380	2370	2380	1430	1400	1410
7	---	---	---	---	---	---	2380	2340	2370	1410	1380	1400
8	1450	1360	1330	---	---	---	2330	1830	2010	1400	1390	1400
9	1480	1390	1440	---	---	---	1840	1710	1780	1410	1390	1400
10	1510	1480	1490	---	---	---	1760	1740	1750	1400	1370	1390
11	---	---	---	---	---	---	1760	1740	1750	1380	1360	1370
12	---	---	---	---	---	---	1740	1730	1740	1370	1360	1370
13	---	---	---	---	---	---	1730	1700	1720	1370	1370	1370
14	---	---	---	---	---	---	1720	1690	1700	1540	1370	1390
15	---	---	---	---	---	---	1720	1680	1690	1510	1390	1430
16	---	---	---	---	---	---	1720	1660	1680	1530	1480	1510
17	---	---	---	---	---	---	1680	1660	1670	1550	1530	1540
18	---	---	---	---	---	---	1740	1640	1660	1540	1500	1520
19	---	---	---	1830	1820	1820	1640	1620	1630	1500	1480	1490
20	---	---	---	1840	1790	1820	1620	1600	1610	1500	1470	1490
21	---	---	---	1880	1830	1850	1610	1590	1600	1480	1440	1470
22	---	---	---	1920	1870	1890	1600	1580	1590	1450	1440	1450
23	---	---	---	1970	1920	1950	1590	1570	1580	1570	1440	1470
24	1680	1590	1600	2000	1970	1980	1570	1550	1560	1700	1580	1670
25	---	---	---	2010	1980	1990	1600	1530	1550	1680	1650	1670
26	---	---	---	2030	2000	2010	1540	1530	1530	1650	1590	1620
27	---	---	---	2050	2010	2040	1530	1510	1520	1590	1520	1560
28	---	---	---	2070	2050	2060	1510	1500	1510	1530	1510	1530
29	---	---	---	2090	2070	2070	1530	1500	1510	1510	1490	1500
30	---	---	---	2150	2090	2120	1510	1470	1490	1500	1490	1490
31	---	---	---	---	---	---	1480	1470	1470	1490	1480	1490
MONTH	1680	1360	1460	2150	1790	1970	2390	1470	1790	1700	1360	1470

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SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY				MARCH			APRIL			MAY		
1	1510	1480	1500	1700	1600	1640	1440	1380	---	---	---	---
2	1530	1510	1520	1680	1600	1630	---	---	---	---	---	---
3	1530	1510	1530	1690	1620	1630	---	---	---	---	---	---
4	1590	1520	1540	1660	1590	1660	---	---	---	---	---	---
5	1600	1540	1550	1620	1600	1610	---	---	---	---	---	---
6	1600	1530	1560	1610	1600	1610	1500	1350	---	---	---	---
7	1690	1510	1570	1690	1600	1610	1460	1340	---	---	---	---
8	1590	1570	1580	---	1650	1690	1450	1300	---	---	---	---
9	1630	1570	1590	---	1610	1690	1430	1300	1370	---	---	---
10	1630	1580	1590	---	1610	1680	1420	1340	1360	---	---	---
11	1610	1590	1600	---	---	---	1450	1340	1350	---	---	---
12	1610	1600	1600	---	---	---	1350	1330	---	---	---	---
13	1670	1600	1580	---	---	---	1350	1330	---	---	---	---
14	1680	1610	1620	1740	1620	1680	1380	1320	---	---	---	---
15	1640	1590	1620	1760	1640	1670	1370	1320	---	---	---	---
16	1730	1640	1680	1680	1630	1640	1400	1320	1340	---	---	---
17	1770	1730	1750	1640	1640	1640	---	---	---	---	---	---
18	1780	1760	1770	1650	1630	1640	---	---	---	---	---	---
19	1770	1730	1750	1720	1630	1690	---	---	---	---	---	---
20	1760	1730	1750	1790	1650	1690	---	---	---	---	---	---
21	1770	1740	1760	1720	1700	1710	---	---	---	---	---	---
22	1820	1730	1760	1740	1680	1690	---	---	---	---	---	---
23	1830	1730	1760	1700	1680	1690	---	---	---	---	---	---
24	1790	1720	1730	1700	1660	1680	---	---	---	---	---	---
25	1720	1700	1710	1720	1680	1700	---	---	---	---	---	---
26	1750	1670	1690	1670	1580	1620	---	---	---	---	---	---
27	1740	1660	1670	1580	1530	1560	---	---	---	---	---	---
28	1660	1640	1650	1550	1530	1540	---	---	---	---	---	---
29	1660	1630	1650	1530	1480	1510	---	---	---	---	---	---
30	---	---	---	1490	1450	1470	---	---	---	---	---	---
31	---	---	---	1480	1410	1440	---	---	---	---	---	---
MONTH	1830	1480	1640	1790	1410	1630	1500	1300	1350	---	---	---
YEAR	2390	1300	1650									

TEMPERATURE, AIR, DEGREES CENTIGRADE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	20.4	13.7	17.4	19.5	2.1	13.0	4.7	3.5	4.1	1.2	-6.2	-1.7
2	26.1	15.0	20.0	9.7	-.5	3.6	3.6	-.1	1.9	7.2	.2	2.7
3	19.4	10.3	15.7	1.2	-3.6	-1.1	8.5	-.9	2.9	11.7	3.7	6.9
4	23.7	12.5	16.8	-.3	-7.7	-4.3	-1.9	-8.9	-5.8	10.2	2.1	4.7
5	22.0	8.6	15.7	.9	-8.3	-3.4	-1.3	-11.6	-7.7	2.5	1.0	1.8
6	9.8	3.8	6.8	5.3	-.5	2.8	.9	-3.6	-2.0	1.6	-.2	.7
7	9.1	4.9	7.2	.7	-1.3	-.7	10.7	-.2	6.7	4.7	-1.3	1.4
8	16.8	4.4	11.1	-.8	-2.7	-1.5	14.9	8.2	11.7	3.4	-7.0	-.5
9	21.4	10.3	14.9	2.3	-6.6	-1.4	16.0	1.4	5.6	7.8	2.7	4.5
10	15.0	3.2	11.0	5.4	-8.6	.1	7.9	-.2	3.6	2.4	-1.0	.5
11	10.6	4.8	7.9	5.0	1.5	3.1	8.2	.9	3.8	-.1	-1.7	-.8
12	10.7	5.4	7.9	4.7	.6	2.6	14.2	-.4	7.0	7.2	-1.0	2.2
13	9.9	1.3	6.9	5.7	1.7	3.0	15.1	5.5	8.7	5.7	2.1	4.3
14	15.4	1.3	8.5	13.1	.9	7.3	6.2	-2.0	2.5	11.3	-6.7	-.8
15	11.2	5.4	8.6	14.1	8.4	10.5	-.8	-7.2	-2.9	-4.2	-10.8	-6.4
16	9.3	.7	5.6	8.9	2.2	5.7	-6.1	-7.8	-7.3	-10.8	-14.8	-12.4
17	15.5	-.4	7.0	7.2	-4.1	1.1	3.1	-6.0	-1.1	-2.8	-11.9	-6.2
18	15.6	4.4	9.6	13.5	2.4	9.0	-1.9	-7.7	-5.2	-6.7	-12.7	-10.3
19	9.8	4.8	6.7	16.4	12.5	14.8	-3.1	-11.6	-6.7	-9.7	-13.3	-11.3
20	10.6	.5	5.2	20.0	7.6	14.2	2.9	-10.8	-3.4	-5.2	-8.9	-6.9
21	16.2	2.7	8.6	8.3	6.8	7.5	1.9	.0	1.1	-.5	-7.9	-2.7
22	20.0	4.9	12.7	8.5	6.3	7.0	4.4	-3.0	.2	4.8	-12.9	-1.3
23	24.2	12.8	17.7	9.8	3.2	7.5	2.8	-.4	1.7	5.6	-1.0	3.7
24	24.4	15.6	19.0	1.6	-3.8	-.9	2.3	-2.8	-.8	-1.8	-7.6	-5.6
25	22.8	16.4	18.5	-3.1	-4.8	-3.8	1.4	-5.8	-.3	-6.4	-9.0	-7.5
26	25.4	13.6	18.5	-.2	-10.2	-4.7	3.7	-5.0	-.9	-4.4	-13.2	-7.0
27	19.2	10.9	15.4	4.1	-6.1	.3	3.8	-5.9	-.1	1.6	-6.0	-2.8
28	13.1	4.6	10.0	6.9	3.8	4.9	2.8	-6.7	-1.1	1.2	-3.2	-1.0
29	19.7	1.2	10.4	14.2	6.1	10.7	3.7	.2	2.0	.7	-2.7	-1.3
30	18.3	1.2	10.2	18.6	4.6	12.8	1.3	-7.3	-1.5	3.8	-3.0	-.1
31	11.9	5.6	9.5	---	---	---	1.9	-8.7	-4.6	.3	-3.4	-.7
MONTH	26.1	-.4	11.6	20.0	-10.2	4.0	16.0	-11.6	.4	11.7	-14.8	-1.7

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WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	15.5	15.5	15.5	14.2	14.1	14.1	12.7	12.4	12.6	10.9	10.6	10.8
2	15.5	15.2	15.4	14.1	14.1	14.1	12.7	12.4	12.5	10.9	10.6	10.7
3	15.5	15.2	15.4	14.1	14.1	14.1	12.7	12.4	12.5	10.7	10.6	10.7
4	15.4	15.2	15.3	14.1	13.9	14.1	12.6	12.4	12.5	10.7	10.4	10.6
5	15.2	15.2	15.2	14.1	13.9	14.0	12.6	12.4	12.5	10.6	10.4	10.6
6	15.2	15.1	15.2	13.9	13.9	13.9	12.4	12.4	12.4	10.6	10.4	10.5
7	15.2	15.1	15.2	13.9	13.9	13.9	12.5	12.2	12.4	10.4	10.2	10.3
8	15.2	14.9	15.0	13.9	13.9	13.9	12.5	11.8	12.1	10.5	10.2	10.3
9	15.0	14.9	14.9	13.9	13.8	13.9	12.0	11.5	11.6	10.5	10.2	10.3
10	14.9	14.9	14.9	13.9	13.8	13.9	11.5	11.5	11.5	10.4	10.2	10.2
11	14.9	14.9	14.9	13.9	13.6	13.8	11.5	11.5	11.5	10.2	10.2	10.2
12	14.9	14.6	14.9	13.9	13.6	13.6	11.5	11.5	11.5	10.2	10.0	10.2
13	14.9	14.7	14.9	13.6	13.6	13.6	11.5	11.5	11.5	10.2	10.2	10.2
14	14.9	14.6	14.8	13.6	13.4	13.5	11.5	11.5	11.5	10.2	10.2	10.2
15	14.9	14.6	14.7	13.4	13.4	13.4	11.5	11.5	11.5	10.2	10.2	10.2
16	14.7	14.6	14.6	13.4	13.4	13.4	11.5	11.3	11.5	10.2	10.0	10.2
17	14.7	14.6	14.6	13.4	13.4	13.4	11.5	11.3	11.5	10.2	10.0	10.2
18	14.7	14.6	14.7	13.4	13.1	13.3	11.5	11.3	11.4	10.0	9.8	9.9
19	14.6	14.6	14.6	13.2	13.2	13.2	11.3	11.3	11.3	10.0	9.8	9.8
20	14.6	14.4	14.6	13.2	13.1	13.2	11.5	11.3	11.3	10.0	9.8	9.8
21	14.6	14.4	14.5	13.1	13.1	13.1	11.3	11.3	11.3	9.8	9.6	9.7
22	14.4	14.4	14.4	13.1	13.1	13.1	11.5	11.3	11.3	9.8	9.6	9.7
23	14.5	14.4	14.4	13.1	12.9	13.0	11.3	11.3	11.3	9.8	9.6	9.8
24	14.5	14.4	14.4	13.1	12.9	12.9	11.3	11.1	11.3	9.6	9.0	9.1
25	14.4	14.2	14.3	12.9	12.9	12.9	11.3	11.1	11.1	9.0	9.0	9.0
26	14.4	14.1	14.2	12.9	12.7	12.9	11.1	11.0	11.1	9.2	9.0	9.1
27	14.2	14.1	14.2	12.9	12.6	12.7	11.1	10.8	11.0	9.0	8.8	8.9
28	14.2	14.1	14.1	12.7	12.7	12.7	11.1	10.8	11.0	9.0	8.8	8.9
29	14.2	14.1	14.1	12.7	12.5	12.7	11.1	10.9	10.9	9.0	8.8	9.0
30	14.2	14.1	14.1	12.7	12.4	12.6	10.9	10.6	10.8	9.0	8.8	8.9
31	14.2	14.1	14.1	---	---	---	10.9	10.6	10.8	9.0	8.8	8.9
MONTH	15.5	14.1	14.7	14.2	12.4	13.4	12.7	10.6	11.6	10.9	8.8	9.9

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY				MARCH			APRIL			MAY		
1	9.0	8.8	8.9	7.5	7.3	7.4	6.9	6.6	6.7	7.7	7.5	7.7
2	8.8	8.8	8.8	7.5	7.3	7.4	6.8	6.6	6.7	7.7	7.6	7.7
3	8.8	8.6	8.8	7.5	7.3	7.4	6.8	6.6	6.7	7.7	7.7	7.7
4	8.8	8.6	8.7	7.5	7.3	7.4	6.8	6.6	6.7	7.9	7.7	7.7
5	8.8	8.4	8.6	7.5	7.2	7.4	6.8	6.6	6.8	7.9	7.7	7.8
6	8.8	8.4	8.6	7.5	7.3	7.4	6.9	6.6	6.7	7.9	7.7	7.8
7	8.6	8.4	8.6	7.5	7.3	7.4	7.0	6.6	6.8	7.9	7.7	7.9
8	8.6	8.4	8.6	7.3	7.0	7.2	6.9	6.8	6.8	8.0	7.9	7.9
9	8.6	8.4	8.5	7.2	6.9	7.1	7.0	6.8	6.8	8.1	7.7	7.9
10	8.6	8.4	8.6	7.2	7.0	7.1	7.0	6.7	6.8	8.1	7.7	7.9
11	8.8	8.4	8.6	7.1	7.1	7.1	7.0	6.8	6.8	8.1	7.9	8.0
12	8.6	8.6	8.6	7.1	6.9	7.1	7.0	6.8	6.9	8.3	7.9	8.1
13	8.6	8.4	8.6	7.1	6.9	7.1	7.1	6.7	6.9	---	---	---
14	8.6	8.4	8.5	7.3	7.1	7.1	7.1	6.7	7.0	---	---	---
15	8.6	8.4	8.6	7.3	7.1	7.2	7.1	6.7	7.0	---	---	---
16	8.6	8.0	8.3	7.3	7.1	7.2	7.2	7.1	7.2	---	---	---
17	8.2	7.9	8.0	7.3	7.1	7.2	7.2	7.1	7.1	---	---	---
18	8.2	7.9	8.0	7.3	7.1	7.3	7.3	7.1	7.2	---	---	---
19	7.9	7.3	7.6	7.3	7.1	7.3	7.4	7.1	7.3	---	---	---
20	7.5	7.1	7.3	7.3	7.1	7.3	7.4	7.3	7.4	---	---	---
21	7.5	7.3	7.3	7.3	7.1	7.1	7.4	7.3	7.4	---	---	---
22	7.5	7.3	7.3	7.1	6.9	7.1	7.4	7.3	7.3	---	---	---
23	7.5	7.3	7.4	7.1	6.9	7.0	7.4	7.3	7.3	---	---	---
24	7.5	7.3	7.4	7.2	6.9	7.1	7.3	7.3	7.3	---	---	---
25	7.5	7.3	7.4	7.1	6.8	7.0	7.5	7.3	7.4	---	---	---
26	7.5	7.3	7.3	6.9	6.6	6.8	7.5	7.5	7.5	---	---	---
27	7.5	7.3	7.4	6.8	6.6	6.6	7.5	7.5	7.5	---	---	---
28	7.5	7.3	7.4	6.8	6.6	6.6	7.7	7.5	7.5	---	---	---
29	7.5	7.3	7.4	7.0	6.7	6.8	7.7	7.5	7.6	---	---	---
30	---	---	---	7.1	6.9	7.0	7.7	7.5	7.7	---	---	---
31	---	---	---	7.0	6.8	6.9	---	---	---	---	---	---
MONTH	9.0	7.1	8.1	7.5	6.6	7.1	7.7	6.6	7.1	8.3	7.5	7.8

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RAINFALL ACCUMULATED (INCHES), WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY SUM VALUES

[illegible]

GROUND-WATER RECORDS

415307080414600. Local number, AB-140.

LOCATION.--Lat 41°53'07" Long 80°41'46", Hydrologic Unit 04120101, along State Route 84 near Kingsville, OH.
Owner.--USGS-Ohio State University (OARDC).

AQUIFER.--Sand and Gravel of Pleistocene age.

WELL CHARACTERISTICS.--Observation well drilled by hollow stem auger, diameter 4.0 in., depth 20.8 ft. Cased with Sch 40 PVC to 5.8 ft; .020 in. screen from 5.8 to 20.8 ft.

INSTRUMENTATION - Data logger--60 minute record. At this well there are 4 conductivity/water temperature probes at increasing depths within the well to better document vertical movement of high conductivity water on an hourly basis. Conductance/water temperature probes are set at 8.3 (level 4), 12.3 (level 3), 16.3 (level 2), and 20.3 (level 1) feet below land surface.

DATUM.--Elevation of land-surface datum is 772.22 feet above National Geodetic Vertical Datum of 1929.
Measuring point: top of PVC casing 1.70 ft above land-surface datum.

REMARKS.--This station is part of an eight-site network to collect data for the Ohio Department of Transportation concerning road salt application and its effect(s) on shallow ground-water quality. Water-quality data for nearby wells is available in preceding tables.

PERIOD OF RECORD.--July 1992 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: (FOUR LEVELS): July 1992 to current year
WATER TEMPERATURE: (FOUR LEVELS): July 1992 to current year

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE:

LEVEL 1-Maximum, 2880 microsiemens August 23-24, 1992; minimum, 2330 microsiemens September 16, 1992.
LEVEL 2- Maximum, 2640 microsiemens August 18,20-21, 1992; minimum, 1610 microsiemens September 14, 1992.
LEVEL 3- Maximum, 2450 microsiemens August 26-27, 1992; minimum, 768 microsiemens September 16, 1992.
LEVEL 4- Maximum, 2480 microsiemens August 28, 1992; minimum, 615 microsiemens September 20, 1992.
WATER TEMPERATURE: LEVEL 1- Maximum, 11.7°C September 28, 1992; minimum, 10.0°C July 10-11, 1992.
LEVEL 2- Maximum, 12.6 °C September 28, 1992; minimum, 10.2°C July 10-12, 1992.
LEVEL 3- Maximum, 14.0°C many days in September 1992; minimum, 11.0°C July 10-11,13, 1992.
LEVEL 4- Maximum, 15.8°C September 15-16, 1992; minimum, 13.0°C July 19-21, 1992.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE:

LEVEL 1-Maximum, 2880 microsiemens August 23-24, 1992; minimum, 2330 microsiemens September 16, 1992.
LEVEL 2-Maximum, 2640 microsiemens August 18,20-21, 1992; minimum,1610 microsiemens September 14, 1992.
LEVEL 3-Maximum, 2450 microsiemens August 26-27, 1992; minimum, 768 microsiemens September 16, 1992.
LEVEL 4-Maximum, 2480 microsiemens August 28, 1992; minimum, 615 microsiemens September 20,1992.

WATER TEMPERATURE:

LEVEL 1-Maximum, 11.7°C September 28, 1992; minimum, 10.0°C July 10-11, 1992.
LEVEL 2-Maximum, 12.6°C September 28, 1992; minimum, 10.2°C July 10-12, 1992.
LEVEL 3-Maximum, 14.0°C many days in September 1992; minimum, 11.0°C July 10-11,13, 1992.
LEVEL 4-Maximum, 15.8°C September 15-16, 1992; minimum, 13.0°C July 19-21,1992.

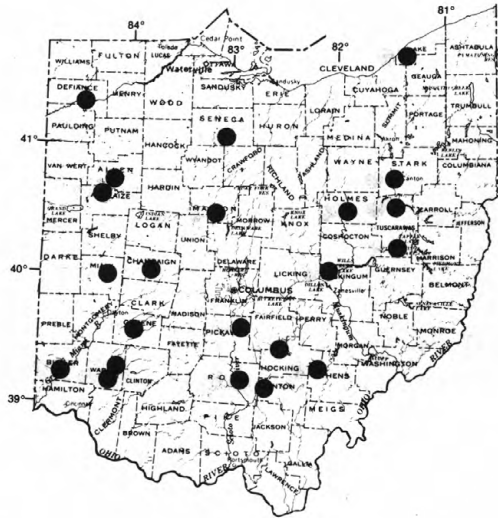
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The following tables list bridge-scour measurement sites and instantaneous discharge measurements collected at some of these sites. The data were collected as part of a cooperative study with the Ohio Department of Transportation. The objectives of this study are (1) to collect reliable and sufficient data during flood events to determine whether local scour, contraction scour, and general scour, are occurring at the sites; (2) to compare and evaluate published local scour-prediction equations with observed data; and (3) to compare local scour data collected using geophysical techniques with local scour data defined by physical measurements.

Bridge Scour Measurement Sites

Site Number	Name	Drainage Area (mi ²)
403515081312401	Sugar Creek at Strasburg, Ohio	311
401933081304100	Tuscarawas River near Port Washington, Ohio	2,400
402941081591200	Killbuck Creek at Killbuck, Ohio	462
393549082324700	Clear Creek near Rockbridge, Ohio	91.8
392731082142400	Hocking River at Nelsonville, Ohio	576
402902083112800	Scioto River near Prospect, Ohio	528
394609082544200	Walnut Creek near Ashville, Ohio	216
392031082582700	Scioto River at Chillicothe, Ohio	3,849
391520082461200	Salt Creek near Londonderry, Ohio	286
392424084060400	Little Miami River at Ft. Ancient, Ohio	675
392115084074600	Todd Fork at Morrow, Ohio	262
400627083475701	Mad River near Urbana, Ohio	162
400150084111300	Great Miami River at Troy, Ohio	927
392340084341700	Great Miami at Hamilton, Ohio	3,630
404037084155200	Auglaize River near Wapakoneta, Ohio	200
404257084081500	Ottawa River at Lima, Ohio	130
411536084331400	Maumee River near Sherwood, Ohio	2,276
410120083063501	Honey Creek at Melmore, Ohio	149
414308081134101	Grand River near Painesville, Ohio	685

Location of Bridge-Scour Measurement Sites



Instantaneous Discharge Measurements at Bridge-Scour Sites

Site Number	Name	Dis-charge (ft ³ /s)
392731082142400	Hocking River at Nelsonville, Ohio	4,500
		4,430
394609082544200	Walnut Creek near Ashville, Ohio	1,970
		3,450
400150084111300	Great Miami River at Troy, Ohio	12,300
392340084341700	Great Miami River at Hamilton, Ohio	24,200
404037084155200	Auglaize river near Wapakoneta, Ohio	6,680
		2,530
404257084081500	Ottawa River at Lima, Ohio	1,840
411536084331400	Maumee River near Sherwood, Ohio	11,400
410120083063501	Honey Creek at Melmore, Ohio	1,200
		1,380

GROUND-WATER, SURFACE-WATER, AND SUBSURFACE SEDIMENT DATA FOR THE MANAGEMENT SYSTEMS 379 EVALUATION AREA IN PIKE COUNTY

The following tables contain ground-water-level measurements and chemical analyses from a network of wells and one surface-water site on the Van Meter farm near Piketon. Grain-size distribution and carbon content of subsurface sediments at the farm are also presented. The data were collected as part of an inter-agency study with the United States Department of Agriculture, the USGS, and The Ohio State University. The purpose of the study is to evaluate the effects of different farming practices on ground-water quality. The USGS began its research at the Management Systems Evaluation Area in 1990 and is funded through 1993.

Ground-Water Records

390156083014320. Local number, PI-242-WT NR PIKETON OH. Cooperator number, R8-WT.

LOCATION.--Lat 39°01'56", long 83°01'43", Hydrologic Unit 05060002, at Van Meter Farm, 2.3 miles south of Piketon, Ohio.

Owner: The Ohio State University.

AQUIFER.--Sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Test well installed by cable tool drilling method, diameter 6 in., depth 32 ft. below land-surface datum.

INSTRUMENTATION.--Electronic datalogger--60 minute recording interval.

DATUM.--Elevation of land-surface datum.

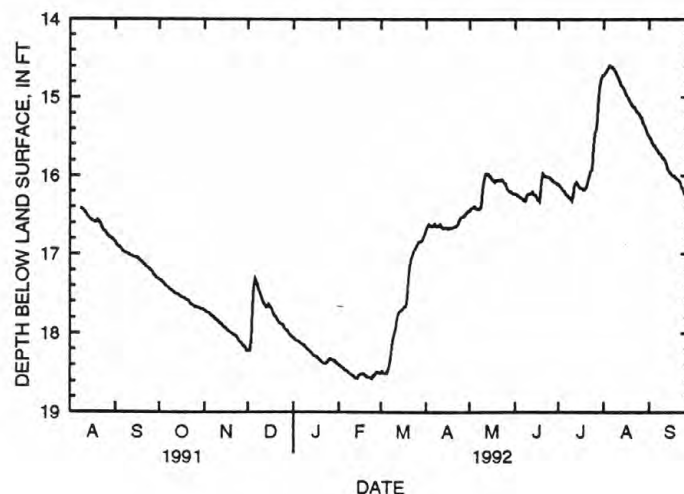
PERIOD OF RECORD.--August 8, 1991 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 18.57 ft. below land-surface datum, February 24, 1992; minimum daily low, 14.59 ft. below land-surface datum, August 5, 1992.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992 DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17.32	17.71	18.22	18.06	18.40	18.50	16.69	16.45	16.23	16.12	14.72	15.51
2	17.33	17.73	18.22	18.08	18.41	18.48	16.65	16.42	16.24	16.13	14.69	15.53
3	17.35	17.74	18.10	18.09	18.42	18.50	16.63	16.41	16.26	16.17	14.67	15.57
4	17.37	17.75	17.69	18.10	18.44	18.50	16.64	16.40	16.27	16.19	14.63	15.61
5	17.39	17.76	17.39	18.11	18.46	18.50	16.65	16.41	16.29	16.20	14.59	15.63
6	17.41	17.78	17.31	18.13	18.46	18.46	16.64	16.43	16.29	16.23	14.60	15.66
7	17.42	17.79	17.37	18.14	18.47	18.41	16.62	16.43	16.32	16.26	14.62	15.68
8	17.44	17.81	17.43	18.15	18.50	18.25	16.65	16.42	16.32	16.27	14.64	15.71
9	17.45	17.83	17.50	18.17	18.51	18.11	16.65	16.39	16.26	16.30	14.67	15.73
10	17.47	17.84	17.55	18.19	18.52	18.03	16.64	16.18	16.23	16.32	14.71	15.76
11	17.48	17.86	17.60	18.21	18.54	17.94	16.63	16.03	16.23	16.25	14.76	15.79
12	17.50	17.88	17.63	18.23	18.56	17.82	16.67	15.98	16.22	16.12	14.80	15.81
13	17.51	17.89	17.67	18.23	18.56	17.76	16.68	15.98	16.21	16.08	14.84	15.86
14	17.51	17.91	17.66	18.27	18.56	17.73	16.67	16.00	16.24	16.11	14.87	15.92
15	17.53	17.93	17.64	18.28	18.52	17.71	16.67	16.02	16.25	16.14	14.91	15.96
16	17.54	17.94	17.66	18.29	18.51	17.70	16.68	16.04	16.30	16.16	14.95	15.98
17	17.55	17.96	17.70	18.30	18.51	17.67	16.68	16.07	16.31	16.17	14.98	16.00
18	17.56	17.98	17.75	18.32	18.50	17.66	16.67	16.08	16.33	16.18	15.02	16.00
19	17.57	17.99	17.78	18.34	18.52	17.56	16.67	16.07	16.07	16.18	15.06	16.03
20	17.58	18.00	17.80	18.35	18.54	17.33	16.66	16.06	15.98	16.14	15.08	16.04
21	17.59	18.02	17.84	18.37	18.55	17.15	16.65	16.07	16.00	16.07	15.11	16.05
22	17.62	18.03	17.86	18.38	18.55	17.05	16.65	16.06	16.01	16.02	15.13	16.08
23	17.64	18.04	17.88	18.38	18.56	17.00	16.62	16.05	16.02	15.95	15.16	16.14
24	17.65	18.07	17.89	18.36	18.57	16.96	16.58	16.09	16.02	15.92	15.19	16.17
25	17.67	18.10	17.90	18.34	18.54	16.93	16.54	16.10	16.03	15.63	15.21	16.22
26	17.66	18.12	17.94	18.32	18.51	16.88	16.53	16.14	16.05	15.46	15.24	16.25
27	17.67	18.14	17.96	18.33	18.49	16.85	16.52	16.18	16.07	15.38	15.26	16.30
28	17.68	18.16	17.98	18.34	18.49	16.84	16.50	16.20	16.08	15.11	15.33	16.34
29	17.69	18.18	18.01	18.35	18.50	16.83	16.48	16.21	16.09	14.90	15.37	16.38
30	17.70	18.22	18.03	18.36	---	16.80	16.45	16.22	16.11	14.79	15.42	16.41
31	17.70	---	18.05	18.38	---	16.77	---	16.23	---	14.72	15.47	---
MAX	17.70	18.22	18.22	18.38	18.57	18.50	16.69	16.45	16.33	16.32	15.47	16.41

CAL YR 1991 LOW 18.22
WTR YR 1992 LOW 18.57



380 GROUND-WATER, SURFACE-WATER, AND SUBSURFACE SEDIMENT DATA FOR THE MANAGEMENT SYSTEMS
EVALUATION AREA IN PIKE COUNTY

Ground-Water Records--Continued

390156083022820. Local number, PI-239-WT NR PIKETON OH. Cooperator number, R7-WT.
LOCATION.--Lat 39°01'56", long 83°02'28", Hydrologic Unit 05060002, at Van Meter Farm, 2.4 miles southwest of Piketon,
Ohio.

Owner: The Ohio State University.

AQUIFER.--Sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Test well installed by cable tool drilling method, diameter 6.0 in., depth 32 ft below land-
surface datum.

INSTRUMENTATION.--Electronic datalogger--60 minute recording interval.

DATUM.--Elevation of land-surface datum is 544.75 ft. above National GVD of 1929. Measuring point: Top of wooden
floor of instrument shelter, 9.18 ft. above land-surface datum.

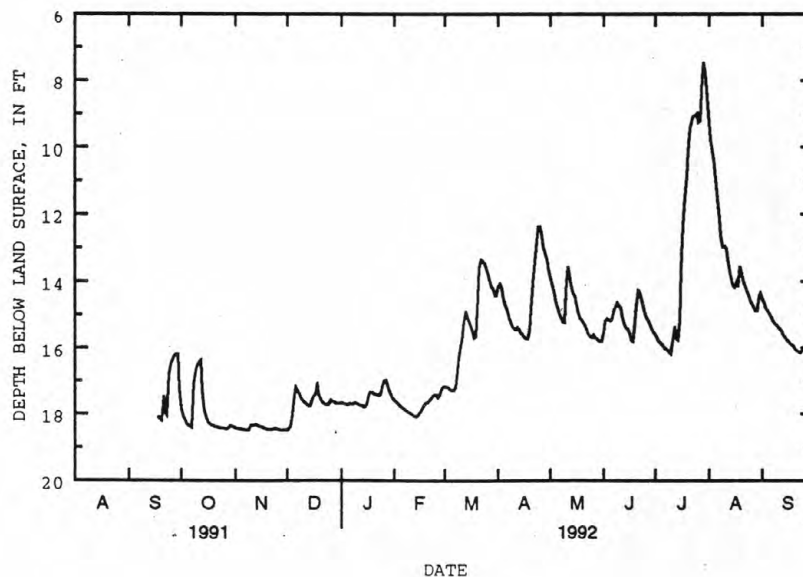
PERIOD OF RECORD.--September 17, 1991 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 18.49 ft. below land-surface datum, November 30 and December 1,
1991; minimum daily low, 7.48 ft. below land-surface datum, July 29, 1992.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17.84	18.42	18.49	17.66	17.59	17.18	14.16	13.89	15.50	15.61	9.26	14.54
2	18.07	18.43	18.44	17.68	17.64	17.20	14.08	14.12	15.19	15.69	9.75	14.66
3	18.20	18.44	18.37	17.71	17.69	17.23	14.22	14.36	15.11	15.80	10.14	14.80
4	18.28	18.45	18.01	17.73	17.75	17.28	14.49	14.59	15.16	15.86	10.52	14.89
5	18.34	18.46	17.43	17.73	17.80	17.29	14.72	14.79	15.18	15.91	10.97	14.99
6	18.39	18.47	17.20	17.69	17.85	17.29	14.85	14.98	15.14	15.97	11.55	15.07
7	18.40	18.48	17.32	17.71	17.89	17.20	15.02	15.08	14.84	16.03	12.11	15.18
8	17.06	18.48	17.42	17.70	17.93	16.87	15.19	15.22	14.74	16.07	12.62	15.27
9	16.70	18.48	17.53	17.66	17.96	16.31	15.35	15.24	14.65	16.10	12.97	15.30
10	16.53	18.33	17.61	17.69	17.98	15.94	15.43	14.29	14.73	16.16	12.96	15.37
11	16.44	18.34	17.67	17.72	18.02	15.75	15.45	13.56	14.81	15.76	13.03	15.43
12	16.38	18.32	17.71	17.74	18.06	15.20	15.38	13.82	15.04	15.36	13.37	15.51
13	17.32	18.31	17.77	17.75	18.08	14.90	15.46	14.11	15.26	15.72	13.67	15.60
14	17.89	18.35	17.77	17.80	18.08	15.04	15.54	14.33	15.39	15.75	13.97	15.67
15	18.10	18.36	17.64	17.80	17.99	15.22	15.61	14.43	15.40	15.18	14.15	15.75
16	18.24	18.38	17.48	17.71	17.91	15.35	15.68	14.72	15.51	13.63	14.19	15.82
17	18.30	18.40	17.44	17.46	17.84	15.55	15.71	14.92	15.75	12.33	14.03	15.88
18	18.32	18.43	17.06	17.35	17.72	15.70	15.71	15.09	15.80	11.51	14.17	15.91
19	18.35	18.45	17.41	17.36	17.66	15.66	15.46	15.15	15.44	10.88	13.56	15.98
20	18.38	18.46	17.54	17.39	17.66	14.48	14.83	15.21	14.75	10.11	13.79	16.04
21	18.39	18.47	17.64	17.42	17.59	13.59	14.04	15.30	14.28	9.44	13.97	16.08
22	18.40	18.47	17.69	17.44	17.53	13.37	13.39	15.44	14.31	9.18	14.15	16.13
23	18.43	18.45	17.73	17.45	17.48	13.39	12.82	15.56	14.52	9.08	14.29	16.15
24	18.43	18.43	17.73	17.39	17.43	13.49	12.38	15.64	14.75	9.06	14.43	16.07
25	18.43	18.45	17.67	17.20	17.43	13.60	12.37	15.68	14.93	9.00	14.57	15.98
26	18.44	18.47	17.59	17.01	17.50	13.77	12.64	15.61	15.07	9.26	14.69	16.06
27	18.45	18.48	17.63	16.99	17.44	14.00	12.98	15.67	15.19	9.21	14.81	16.16
28	18.42	18.48	17.65	17.10	17.25	14.16	13.17	15.73	15.31	7.93	14.88	16.24
29	18.35	18.48	17.68	17.31	17.18	14.22	13.37	15.77	15.42	7.48	14.88	16.31
30	18.36	18.49	17.69	17.43	---	14.44	13.66	15.79	15.52	7.77	14.43	16.37
31	18.39	---	17.68	17.53	---	14.44	---	15.79	---	8.51	14.35	---
MAX	18.45	18.49	18.49	17.80	18.08	17.29	15.71	15.79	15.80	16.16	14.88	16.37

CAL YR 1991 LOW 18.49
WTR YR 1992 LOW 18.49



GROUND-WATER, SURFACE-WATER, AND SUBSURFACE SEDIMENT DATA FOR THE MANAGEMENT SYSTEMS 381
EVALUATION AREA IN PIKE COUNTY

Ground-Water Records--Continued

390207083024030. Local number, PI-237-BR NR PIKETON OH. Cooperator number, R6-BR.

LOCATION.--Lat 39°02'07", long 83°02'40", Hydrologic Unit 05060002, at Van Meter Farm, 2.3 miles southwest of Piketon, Ohio.

Owner: The Ohio State University.

AQUIFER.--Ohio Shale.

WELL CHARACTERISTICS.--Well installed by cable tool drilling method, diameter 4.0 in., depth 89.5 ft. below land-surface datum.

INSTRUMENTATION.--Electronic datalogger--60 minute recording interval.

DATUM.--Elevation of land-surface datum is 552.79 ft. above National GVD of 1929. Measuring point: Top of wooden floor of instrument shelter, 6.08 ft. above land-surface datum.

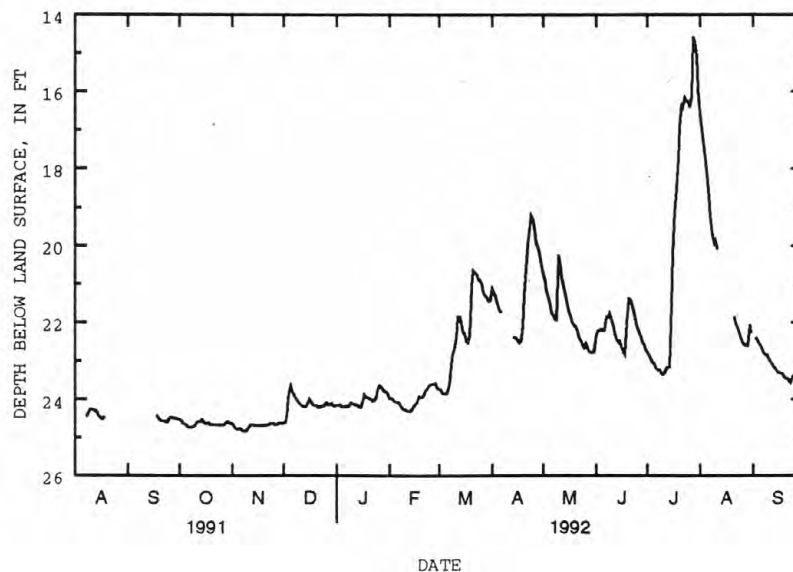
PERIOD OF RECORD.--August 7, 1991 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 24.84 ft. below land-surface datum, November 8-9, 1991; minimum daily low, 14.58 ft. below land-surface datum, July 28, 1992.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24.53	24.64	24.62	24.16	23.97	23.74	21.13	20.71	22.34	22.78	16.58	---
2	24.57	24.72	24.61	24.16	23.97	23.75	21.22	20.91	22.23	22.86	16.99	---
3	24.64	24.77	24.39	24.15	24.00	23.84	21.30	21.16	22.22	22.96	17.30	22.43
4	24.65	24.78	23.82	24.20	24.06	23.84	21.52	21.35	22.20	23.03	17.70	22.51
5	24.69	24.76	23.66	24.20	24.07	23.85	21.67	21.56	22.22	23.07	18.16	22.60
6	24.73	24.77	23.79	24.18	24.07	23.80	21.73	21.76	22.20	23.17	18.73	22.70
7	24.74	24.83	23.88	24.19	24.13	23.63	---	21.84	21.86	23.23	19.22	22.78
8	24.74	24.84	23.97	24.18	24.22	23.11	---	21.94	21.87	23.24	19.67	22.84
9	24.72	24.84	24.04	24.10	24.27	22.83	---	21.94	21.77	23.32	19.94	22.84
10	24.68	24.79	24.10	24.12	24.26	22.68	---	20.24	21.93	23.36	19.87	22.94
11	24.61	24.70	24.16	24.13	24.29	22.41	---	20.53	22.11	23.32	20.07	23.01
12	24.58	24.67	24.17	24.14	24.31	21.86	---	20.82	22.29	23.20	---	23.08
13	24.58	24.67	24.20	24.14	24.31	21.85	---	21.06	22.44	23.17	---	23.15
14	24.53	24.69	24.19	24.21	24.27	22.04	22.40	21.28	22.53	23.15	---	23.20
15	24.58	24.68	24.09	24.21	24.17	22.26	22.42	21.48	22.49	21.55	---	23.28
16	24.63	24.69	24.00	24.10	24.15	22.31	22.48	21.70	22.67	20.19	---	23.30
17	24.64	24.69	24.06	23.88	24.07	22.48	22.53	21.85	22.79	19.10	---	23.32
18	24.62	24.69	24.16	23.94	23.92	22.53	22.49	21.99	22.83	18.51	---	23.34
19	24.66	24.69	24.16	23.94	23.94	22.35	22.11	22.07	22.01	17.74	---	23.41
20	24.66	24.68	24.16	23.98	23.94	21.05	21.29	22.12	21.39	16.93	---	23.45
21	24.66	24.67	24.21	23.99	23.87	20.66	20.60	22.25	21.41	16.31	21.88	23.46
22	24.67	24.66	24.21	24.04	23.79	20.71	19.95	22.40	21.53	16.39	22.04	23.53
23	24.67	24.64	24.18	24.02	23.72	20.74	19.49	22.50	21.73	16.16	22.15	23.58
24	24.68	24.63	24.17	23.92	23.64	20.87	19.21	22.61	21.97	16.24	22.31	23.42
25	24.67	24.64	24.15	23.75	23.63	20.91	19.31	22.67	22.13	16.27	22.43	23.39
26	24.67	24.66	24.10	23.64	23.61	21.02	19.60	22.56	22.25	16.39	22.55	23.42
27	24.66	24.65	24.14	23.68	23.61	21.22	19.93	22.68	22.37	16.15	22.60	23.53
28	24.62	24.64	24.14	23.74	23.59	21.29	20.04	22.76	22.49	14.58	22.61	23.60
29	24.59	24.62	24.12	23.79	23.71	21.36	20.25	22.79	22.60	14.73	22.61	23.65
30	24.62	24.63	24.17	23.80	---	21.45	20.50	22.77	22.69	15.08	22.07	23.69
31	24.64	---	24.17	23.86	---	21.44	---	22.77	---	15.95	22.26	---
MAX	24.74	24.84	24.62	24.21	24.31	23.85	22.53	22.79	22.83	23.36	22.61	23.69

CAL YR 1991 LOW 24.84
WTR YR 1992 LOW 24.84



382 GROUND-WATER, SURFACE-WATER, AND SUBSURFACE SEDIMENT DATA FOR THE MANAGEMENT SYSTEMS
EVALUATION AREA IN PIKE COUNTY

Ground-Water Records--Continued

390207083024020. Local number, PI-236-WT NR PIKETON OH. Cooperator number, R6-WT.

LOCATION.--Lat 39°02'24", long 83°02'40", Hydrologic Unit 05060002, at Van Meter Farm, 2.3 miles southwest of Piketon, Ohio.

Owner: The Ohio State University.

AQUIFER.--Sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Test well installed by cable tool drilling method, diameter 6 in., depth 31.4 ft. below land-surface datum.

INSTRUMENTATION.--Electronic datalogger--60 minute recording interval. Also collected: water temperature and specific conductance. Conductivity/water temperature probe set approximately 2 ft. below the water table.

DATUM.--Elevation of land-surface datum is 552.35 ft. above National GVD of 1929. Measuring point: Top of wooden floor of instrument shelter, 5.68 ft. above land-surface datum.

PERIOD OF RECORD.--August 7, 1991 to current year.

EXTREMES FOR PERIOD OF RECORD.--

WATER LEVEL: Maximum daily low, 24.97 ft. below land-surface datum, October 7-8, 1991; minimum daily low, 13.18 ft. below land-surface datum, July 28, 1992.

SPECIFIC CONDUCTANCE: Maximum, 721 microsiemens per centimeter, March 26, 1992; minimum, 685 microsiemens per centimeter, May 8, 1992.

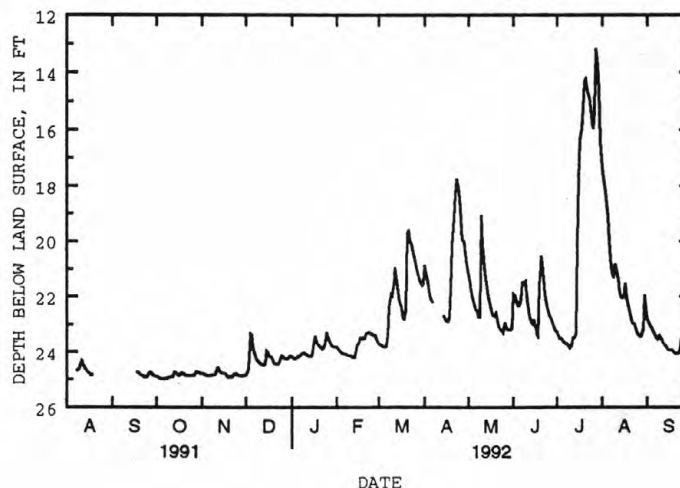
WATER TEMPERATURE: Maximum, 13.7°C, many days in January, 1992; minimum, 11.6°C, May 29, 1992.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24.90	24.79	24.82	24.17	23.82	23.69	20.87	21.20	21.91	23.29	17.35	22.78
2	24.92	24.80	24.74	24.23	23.89	23.73	21.17	21.46	22.00	23.40	17.73	22.96
3	24.95	24.82	24.62	24.24	23.97	23.76	21.46	21.78	22.15	23.51	18.01	23.06
4	24.96	24.84	23.35	24.23	24.03	23.81	21.81	22.04	22.33	23.52	18.41	23.11
5	24.96	24.84	23.41	24.19	24.06	23.81	22.06	22.30	22.33	23.60	19.10	23.24
6	24.96	24.85	23.84	24.13	24.06	23.78	22.18	22.47	22.11	23.64	19.99	23.37
7	24.97	24.85	24.09	24.14	24.08	23.41	---	22.49	21.50	23.70	20.64	23.48
8	24.97	24.83	24.25	24.06	24.12	22.39	---	22.72	21.54	23.70	21.14	23.54
9	24.93	24.83	24.32	24.02	24.13	21.91	---	22.73	21.46	23.79	21.32	23.43
10	24.91	24.81	24.36	24.06	24.14	21.97	---	19.06	21.95	23.86	20.82	23.51
11	24.90	24.63	24.42	24.09	24.16	21.61	---	20.14	22.35	23.77	21.00	23.56
12	24.89	24.58	24.46	24.13	24.21	20.96	---	20.94	22.68	23.49	21.36	23.67
13	24.73	24.72	24.47	24.15	24.21	21.46	---	21.35	22.92	23.48	21.78	23.77
14	24.74	24.76	24.42	24.15	24.04	21.82	22.71	21.67	22.98	23.35	22.02	23.82
15	24.82	24.76	23.97	24.13	23.75	22.18	22.80	22.02	22.82	20.11	22.03	23.91
16	24.86	24.78	24.01	23.66	23.70	22.38	22.88	22.32	23.12	17.75	22.02	23.92
17	24.86	24.81	24.16	23.43	23.48	22.75	22.88	22.51	23.39	16.34	21.53	23.94
18	24.76	24.87	24.19	23.62	23.49	22.81	22.74	22.68	23.44	15.97	22.06	23.94
19	24.79	24.91	24.27	23.75	23.54	22.49	21.70	22.70	21.62	15.23	22.37	24.00
20	24.83	24.90	24.39	23.79	23.50	19.70	20.18	22.61	20.55	14.33	22.57	24.07
21	24.84	24.91	24.43	23.84	23.36	19.59	19.17	22.82	20.82	14.25	22.77	24.07
22	24.86	24.88	24.44	23.87	23.31	19.99	18.32	23.07	21.37	14.67	22.96	24.04
23	24.86	24.81	24.44	23.84	23.27	20.12	17.75	23.19	21.93	14.80	22.98	24.04
24	24.86	24.79	24.33	23.66	23.34	20.41	18.04	23.24	22.34	15.02	23.13	23.51
25	24.85	24.83	24.14	23.27	23.35	20.58	18.46	23.30	22.50	15.75	23.27	23.71
26	24.84	24.84	24.15	23.44	23.40	20.94	19.21	22.94	22.68	15.96	23.38	23.84
27	24.81	24.86	24.23	23.62	23.41	21.13	19.96	23.10	22.80	15.35	23.44	23.96
28	24.70	24.87	24.25	23.72	23.52	21.29	20.02	23.20	22.96	13.18	23.42	24.06
29	24.74	24.86	24.25	23.80	23.62	21.49	20.47	23.20	23.09	13.77	23.18	24.13
30	24.77	24.85	24.21	23.81	---	21.61	20.82	23.19	23.21	14.60	21.94	24.18
31	24.79	---	24.13	23.81	---	21.54	---	23.13	---	16.39	22.44	---
MAX	24.97	24.91	24.82	24.24	24.21	23.81	22.88	23.30	23.44	23.86	23.44	24.18

CAL YR 1991 LOW 24.97

WTR YR 1992 LOW 24.97



GROUND-WATER, SURFACE-WATER, AND SUBSURFACE SEDIMENT DATA FOR THE MANAGEMENT SYSTEMS 383
EVALUATION AREA IN PIKE COUNTY

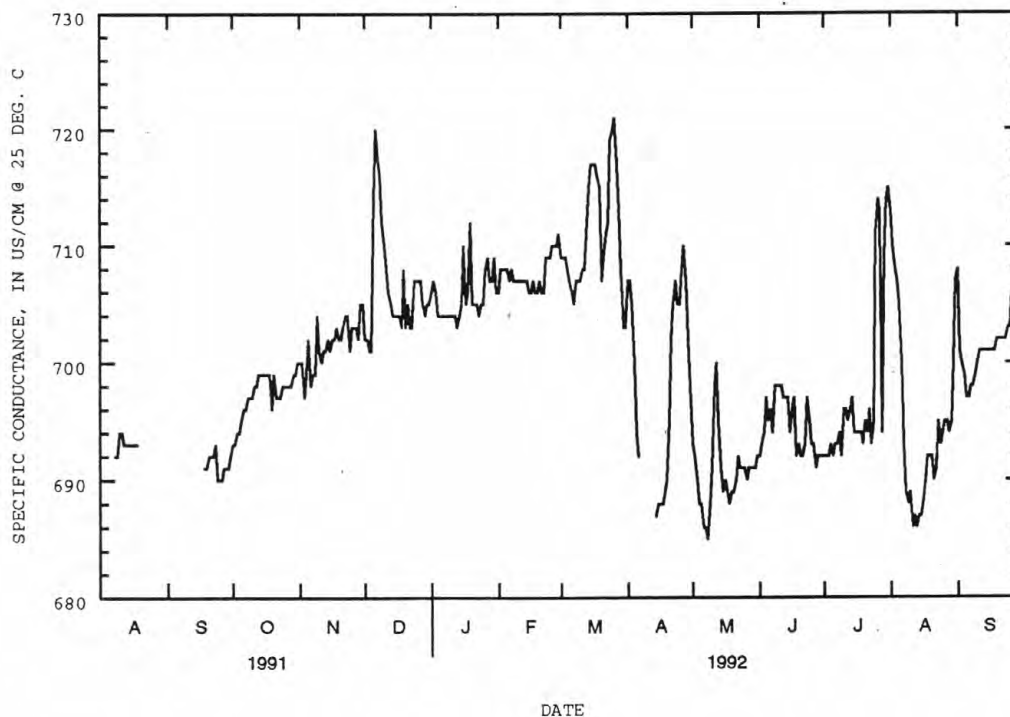
390207083024020. Local number, PI-236-WT NR PIKETON OH

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	693	700	702	706	706	709	707	693	692	692	713	708
2	693	700	702	707	708	709	707	692	693	692	710	701
3	694	697	701	706	708	709	705	690	694	692	708	700
4	694	699	701	704	708	708	700	688	697	693	707	699
5	695	702	714	704	708	707	694	688	695	692	705	697
6	696	698	720	704	707	706	692	686	696	693	700	697
7	696	699	718	704	708	705	---	686	694	693	693	698
8	697	699	716	704	707	707	---	685	698	694	689	698
9	697	704	712	704	707	707	---	688	698	692	683	699
10	697	701	710	704	707	707	---	691	698	696	689	700
11	698	700	708	704	707	708	---	698	698	696	686	701
12	698	701	706	704	707	708	---	700	697	695	687	701
13	699	701	705	703	707	711	---	695	697	696	686	701
14	699	702	704	704	707	715	687	691	697	697	687	701
15	699	701	704	705	706	717	688	689	694	694	687	701
16	699	702	704	710	706	717	688	690	696	694	688	701
17	699	702	704	705	707	717	688	689	697	694	690	701
18	699	703	703	706	706	716	689	688	692	694	692	701
19	696	702	708	712	706	715	690	689	693	693	692	702
20	699	702	703	705	707	707	695	689	692	695	692	702
21	697	703	705	705	706	709	702	690	692	694	690	702
22	697	704	703	705	706	711	705	692	693	696	691	702
23	697	704	703	704	709	712	707	691	697	693	695	702
24	698	701	707	705	709	719	705	691	695	695	693	703
25	698	703	707	705	709	720	705	691	693	711	694	703
26	698	703	707	708	710	721	708	690	693	714	695	706
27	698	703	707	709	710	717	710	691	691	713	695	702
28	698	702	705	707	710	713	707	691	692	694	694	701
29	699	705	704	707	711	708	702	691	692	709	695	703
30	699	705	705	709	---	703	698	691	692	714	700	701
31	700	---	705	706	---	703	---	692	---	715	707	---
MAX	700	705	720	712	711	721	710	700	698	715	713	708

CAL YR 1991 MAX 720

WTR YR 1992 MAX 721



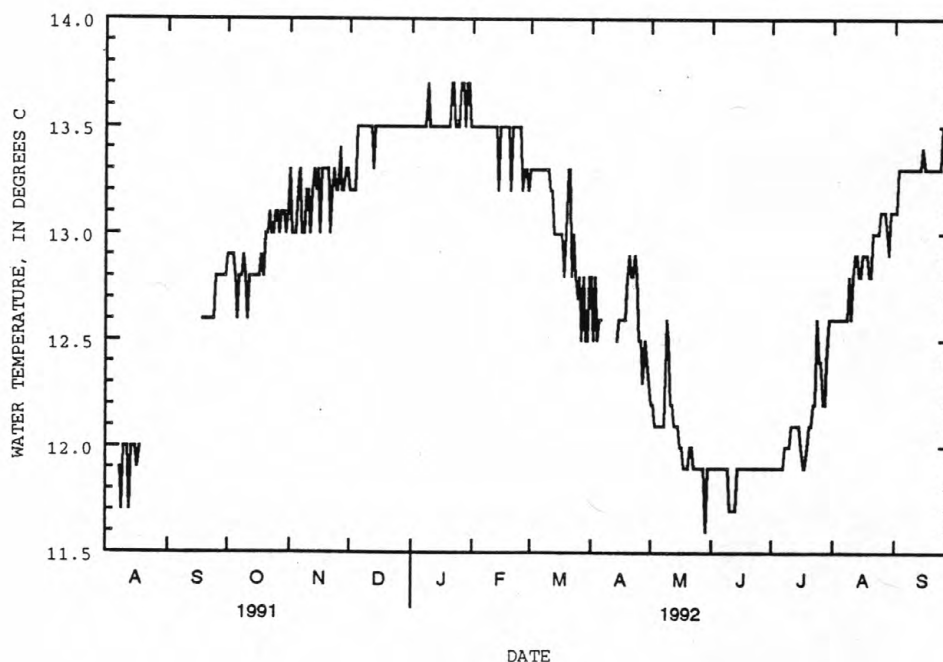
384 GROUND-WATER, SURFACE-WATER, AND SUBSURFACE SEDIMENT DATA FOR THE MANAGEMENT SYSTEMS
EVALUATION AREA IN PIKE COUNTY

390207083024020. Local number, PI-236-WT NR PIKETON OH

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12.9	13.3	13.2	13.5	13.5	13.3	12.8	12.2	11.9	11.9	12.6	13.1
2	12.9	13.0	13.2	13.5	13.5	13.3	12.5	12.2	11.9	11.9	12.6	13.1
3	12.9	13.0	13.2	13.5	13.5	13.3	12.8	12.1	11.9	11.9	12.6	13.3
4	12.9	13.0	13.2	13.5	13.5	13.3	12.5	12.1	11.9	11.9	12.6	13.3
5	12.8	13.2	13.5	13.5	13.5	13.3	12.6	12.1	11.9	11.9	12.6	13.3
6	12.6	13.3	13.5	13.5	13.5	13.3	12.6	12.1	11.9	11.9	12.6	13.3
7	12.8	13.0	13.5	13.5	13.5	13.3	---	12.1	11.9	11.9	12.6	13.3
8	12.8	13.0	13.5	13.5	13.5	13.3	---	12.1	11.9	12.0	12.6	13.3
9	12.9	13.2	13.5	13.7	13.5	13.3	---	12.6	11.9	12.0	12.8	13.3
10	12.8	13.2	13.5	13.5	13.5	13.3	---	12.5	11.7	12.0	12.6	13.3
11	12.6	13.0	13.5	13.5	13.5	13.2	---	12.2	11.7	12.1	12.8	13.3
12	12.8	13.2	13.5	13.5	13.5	13.2	---	12.2	11.7	12.1	12.9	13.3
13	12.8	13.3	13.3	13.5	13.5	13.0	---	12.1	11.7	12.1	12.9	13.3
14	12.8	13.2	13.5	13.5	13.2	13.0	12.5	12.1	11.9	12.1	12.8	13.3
15	12.8	13.3	13.5	13.5	13.5	13.0	12.6	12.1	11.9	12.1	12.8	13.4
16	12.8	13.0	13.5	13.5	13.5	13.0	12.6	12.0	11.9	12.0	12.9	13.3
17	12.8	13.3	13.5	13.5	13.5	13.0	12.6	12.0	11.9	11.9	12.9	13.3
18	12.9	13.3	13.5	13.5	13.5	12.8	12.6	11.9	11.9	11.9	12.9	13.3
19	12.8	13.3	13.5	13.5	13.5	13.0	12.8	11.9	11.9	12.0	12.8	13.3
20	13.0	13.3	13.5	13.5	13.2	13.3	12.9	11.9	11.9	12.1	12.8	13.3
21	13.0	13.0	13.5	13.7	13.5	13.3	12.8	12.0	11.9	12.1	13.0	13.3
22	13.1	13.2	13.5	13.7	13.5	12.8	12.8	12.0	11.9	12.2	13.0	13.3
23	13.0	13.3	13.5	13.5	13.5	13.0	12.9	11.9	11.9	12.2	13.0	13.3
24	13.0	13.2	13.5	13.5	13.5	12.8	12.8	11.9	11.9	12.6	13.0	13.3
25	13.1	13.2	13.5	13.5	13.5	12.7	12.5	11.9	11.9	12.4	13.1	13.5
26	13.1	13.4	13.5	13.7	13.2	12.8	12.5	11.9	11.9	12.4	13.1	13.5
27	13.0	13.2	13.5	13.7	13.3	12.5	12.3	11.9	11.9	12.2	13.1	13.5
28	13.1	13.2	13.5	13.5	13.3	12.8	12.5	11.9	11.9	12.2	13.0	13.3
29	13.1	13.3	13.5	13.7	13.2	12.5	12.4	11.6	11.9	12.4	12.9	13.5
30	13.0	13.3	13.5	13.7	---	12.5	12.3	11.9	11.9	12.6	13.1	13.5
31	13.1	---	13.5	13.5	---	12.8	---	11.9	---	12.6	13.1	---
MAX	13.1	13.4	13.5	13.7	13.5	13.3	12.9	12.6	11.9	12.6	13.1	13.5

CAL YR 1991 MAX 13.5
WTR YR 1992 MAX 13.7



**GROUND-WATER, SURFACE-WATER, AND SUBSURFACE SEDIMENT DATA FOR THE MANAGEMENT SYSTEMS 385
EVALUATION AREA IN PIKE COUNTY**

Ground-Water Records--Continued

390224083020120. Local number, PI-266-WT NR PIKETON OH. Cooperator number, S14-WT.

LOCATION.--Lat 39°02'24", long 83°02'01", Hydrologic Unit 05060002, at Van Meter Farm, 1.7 miles southwest of Piketon, Ohio.

Owner: The Ohio State University.

AQUIFER.--Sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Test well installed by cable tool drilling method, diameter 6.0 in., depth 29 ft. below land-surface datum.

INSTRUMENTATION.--Electronic datalogger--60 minute recording interval. Also collected: water temperature and specific conductance. Conductivity/water temperature probe set approximately 2 ft. below the water table.

DATUM.--Elevation of land-surface datum is 553.44 ft. above National GVD of 1929. Measuring point: Top of PVC casing, 2.15 ft. above land-surface datum.

PERIOD OF RECORD.--August 1, 1991 to current year.

EXTREMES FOR PERIOD OF RECORD.--

WATER LEVEL: Maximum daily low, 20.56 ft. below land-surface datum, February 20-23, 1991; minimum daily low, 15.92 ft. below land-surface datum, August 11, 1992.

SPECIFIC CONDUCTANCE: Maximum, 753 microsiemens per centimeter, December 20-21, 1991; minimum, 686 microsiemens per centimeter, August 4-5, 1992.

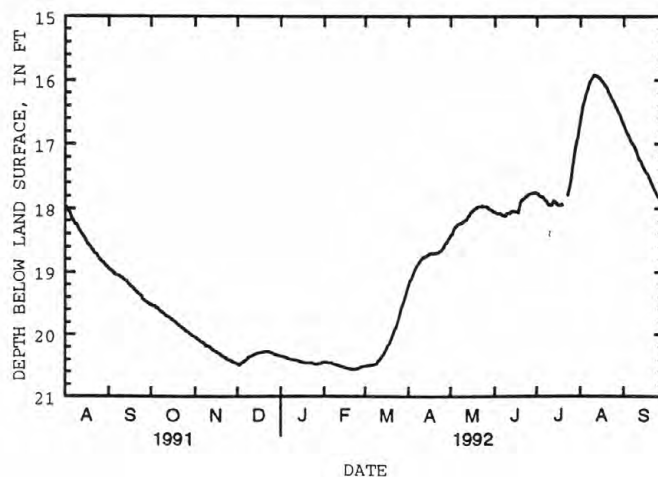
WATER TEMPERATURE: Maximum, 14.7°C, October 12-18, 20-31, and December 1, 1991; minimum, 11.8°C, several days in late May and early June, 1992.

**DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MAXIMUM VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19.51	20.04	20.47	20.34	20.45	20.51	19.21	18.43	18.06	17.76	16.63	16.71
2	19.53	20.06	20.49	20.35	20.45	20.51	19.15	18.39	18.07	17.78	16.51	16.75
3	19.53	20.08	20.49	20.35	20.45	20.50	19.09	18.33	18.08	17.80	16.39	16.81
4	19.55	20.09	20.46	20.36	20.46	20.50	19.04	18.30	18.08	17.82	16.28	16.86
5	19.57	20.11	20.45	20.37	20.46	20.49	18.98	18.28	18.08	17.82	16.21	16.90
6	19.58	20.12	20.43	20.38	20.46	20.49	18.94	18.26	18.10	17.85	16.15	16.95
7	19.61	20.14	20.41	20.39	20.47	20.49	18.90	18.25	18.11	17.88	16.08	16.99
8	19.63	20.16	20.39	20.39	20.48	20.48	18.86	18.24	18.12	17.89	16.02	17.03
9	19.65	20.18	20.36	20.40	20.49	20.47	18.83	18.22	18.11	17.93	15.97	17.07
10	19.66	20.18	20.35	20.40	20.49	20.43	18.80	18.21	18.08	17.95	15.94	17.12
11	19.68	20.19	20.34	20.41	20.50	20.41	18.78	18.19	18.07	17.95	15.92	17.18
12	19.70	20.21	20.33	20.42	20.51	20.38	18.76	18.17	18.07	17.93	15.93	17.23
13	19.71	20.23	20.32	20.42	20.52	20.35	18.76	18.13	18.05	17.89	15.94	17.27
14	19.73	20.24	20.31	20.43	20.52	20.31	18.74	18.11	18.04	17.90	15.96	17.32
15	19.74	20.26	20.30	20.44	20.53	20.27	18.73	18.07	18.04	17.92	15.98	17.37
16	19.76	20.27	20.29	20.45	20.54	20.23	18.72	18.05	18.05	17.95	16.01	17.41
17	19.78	20.29	20.29	20.45	20.54	20.18	18.71	18.02	18.05	17.95	16.04	17.44
18	19.79	20.30	20.28	20.46	20.55	20.14	18.70	18.01	18.06	17.95	16.07	17.48
19	19.82	20.31	20.28	20.46	20.55	20.09	18.70	17.99	17.96	17.94	16.10	17.53
20	19.83	20.33	20.28	20.46	20.56	20.04	18.70	17.98	17.89	---	16.14	17.58
21	19.85	20.35	20.27	20.46	20.56	19.97	18.69	17.97	17.86	---	16.19	17.62
22	19.87	20.36	20.27	20.46	20.56	19.92	18.69	17.97	17.85	---	16.23	17.67
23	19.89	20.37	20.27	20.46	20.56	19.86	18.68	17.96	17.82	17.79	16.27	17.72
24	19.90	20.39	20.28	20.47	20.55	19.79	18.66	17.97	17.81	17.71	16.32	17.76
25	19.92	20.40	20.29	20.48	20.55	19.72	18.63	17.97	17.79	17.57	16.36	17.80
26	19.94	20.41	20.29	20.48	20.54	19.64	18.61	17.97	17.77	17.40	16.41	17.83
27	19.95	20.43	20.32	20.48	20.52	19.56	18.56	17.99	17.76	17.26	16.44	17.87
28	19.98	20.44	20.32	20.47	20.52	19.48	18.53	18.01	17.76	17.12	16.49	17.92
29	19.99	20.45	20.32	20.47	20.51	19.42	18.49	18.02	17.75	17.00	16.55	17.96
30	20.01	20.46	20.33	20.46	---	19.34	18.46	18.03	17.75	16.88	16.61	18.00
31	20.03	---	20.34	20.45	---	19.28	---	18.05	---	16.74	16.66	---
MAX	20.03	20.46	20.49	20.48	20.56	20.51	19.21	18.43	18.12	17.95	16.66	18.00

CAL YR 1991 LOW 20.49

WTR YR 1992 LOW 20.56

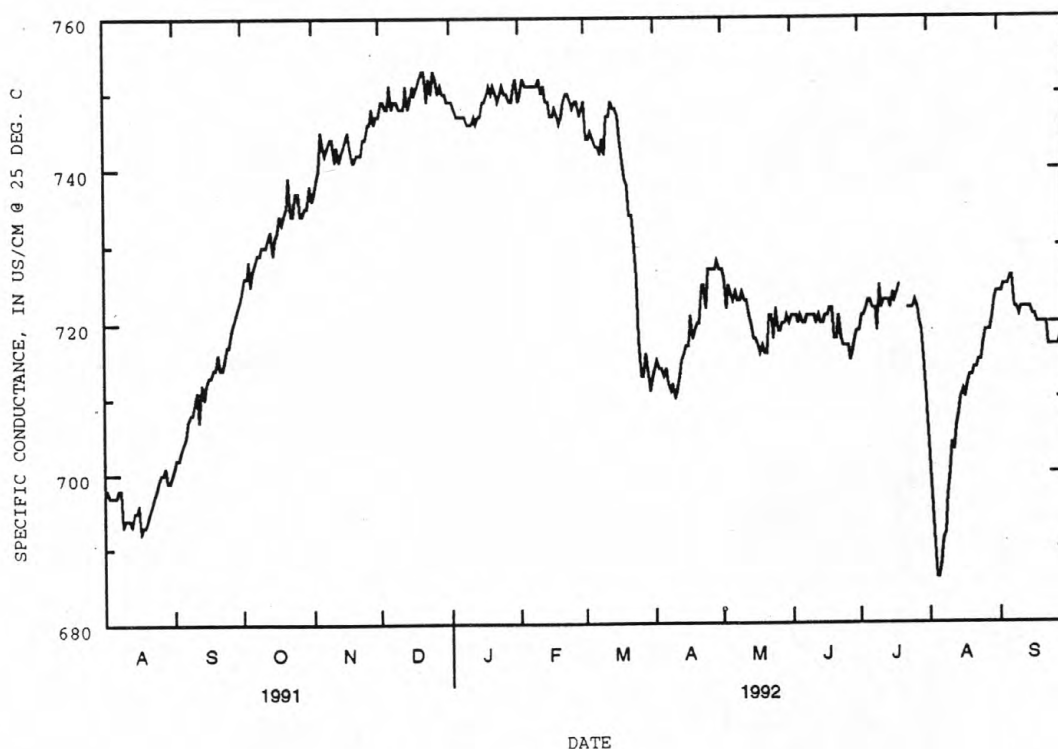


386 GROUND-WATER, SURFACE-WATER, AND SUBSURFACE SEDIMENT DATA FOR THE MANAGEMENT SYSTEMS
EVALUATION AREA IN PIKE COUNTY

390224083020120. Local number, PI-266-WT NR PIKETON OH

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	724	736	747	749	749	749	714	727	721	719	704	724
2	726	737	749	749	750	744	715	726	721	721	697	724
3	726	739	749	748	752	744	714	722	721	721	692	725
4	728	740	748	747	751	745	714	725	720	722	686	725
5	725	745	748	747	751	744	713	724	721	723	686	725
6	727	743	751	747	751	743	714	723	720	723	688	726
7	728	742	748	747	751	743	712	724	720	722	691	726
8	729	743	749	747	751	742	711	723	721	722	692	722
9	729	744	749	746	751	744	712	723	721	719	697	722
10	730	744	748	746	752	742	710	724	721	725	700	721
11	730	741	748	746	750	747	711	723	721	722	704	722
12	730	743	748	747	751	747	713	723	720	723	703	722
13	731	741	751	746	749	749	715	721	721	723	706	722
14	732	742	748	747	749	748	716	720	720	723	708	722
15	729	743	749	747	747	748	717	718	720	722	710	722
16	731	744	751	749	747	747	717	718	721	724	711	721
17	732	745	750	749	748	744	721	717	721	723	710	721
18	734	743	751	750	747	741	718	716	722	724	712	720
19	733	741	752	751	746	739	719	717	722	725	713	720
20	734	741	753	750	747	738	720	716	718	---	713	720
21	735	742	753	751	749	734	720	716	718	---	714	720
22	739	742	749	750	750	734	725	721	721	---	714	720
23	734	742	752	749	750	731	725	721	718	722	715	717
24	734	744	750	750	740	726	722	718	717	722	717	717
25	737	744	753	751	748	718	727	722	717	722	717	717
26	737	746	752	750	749	713	727	719	717	723	719	717
27	734	746	750	750	749	713	727	719	715	722	719	717
28	734	748	751	749	747	716	727	720	716	720	719	718
29	735	746	750	749	748	714	728	720	718	719	721	718
30	735	747	750	751	---	711	727	721	719	714	723	720
31	738	---	749	752	---	713	---	720	---	710	724	---
MAX	739	748	753	752	752	749	728	727	722	725	724	726
CAL YR 1991	MAX 753											
WTR YR 1992	MAX 753											

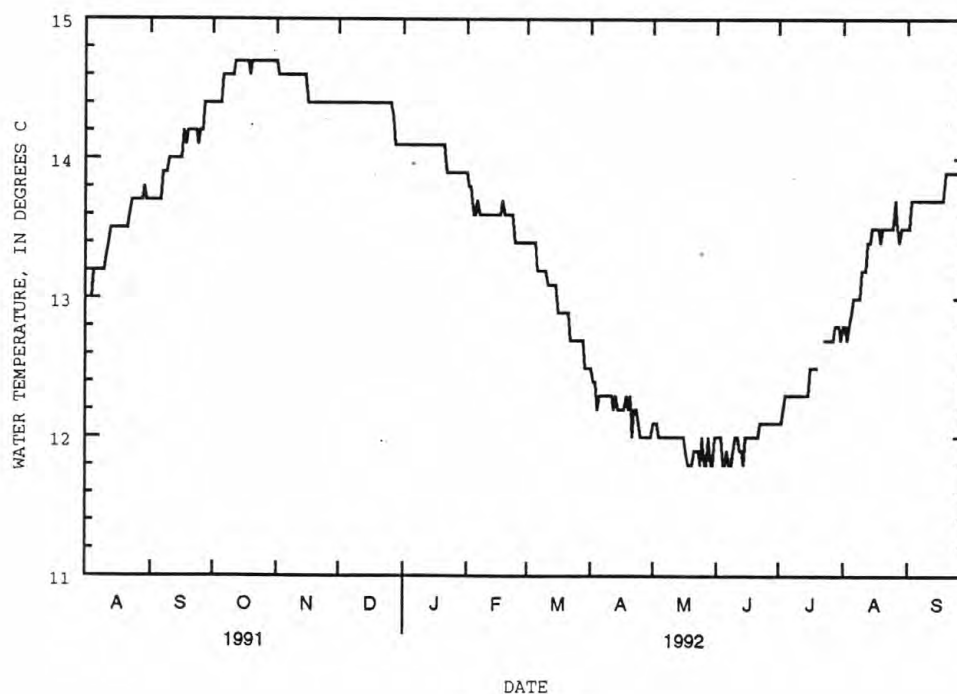


**GROUND-WATER, SURFACE-WATER, AND SUBSURFACE SEDIMENT DATA FOR THE MANAGEMENT SYSTEMS 387
EVALUATION AREA IN PIKE COUNTY**

390224083020120 Local number, PI-266-WT NR PIKETON OH

**WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MAXIMUM VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14.4	14.7	14.4	14.1	13.9	13.4	12.5	12.1	12.0	12.1	12.8	13.5
2	14.4	14.6	14.4	14.1	13.8	13.4	12.4	12.1	12.0	12.1	12.8	13.5
3	14.4	14.6	14.4	14.1	13.8	13.4	12.4	12.1	12.0	12.2	12.7	13.7
4	14.4	14.6	14.4	14.1	13.6	13.4	12.2	12.0	11.8	12.3	12.8	13.7
5	14.4	14.6	14.4	14.1	13.6	13.4	12.3	12.0	11.8	12.3	12.9	13.7
6	14.6	14.6	14.4	14.1	13.7	13.2	12.3	12.0	11.9	12.3	13.0	13.7
7	14.6	14.6	14.4	14.1	13.6	13.2	12.3	12.0	11.8	12.3	13.0	13.7
8	14.6	14.6	14.4	14.1	13.6	13.2	12.3	12.0	11.8	12.3	13.0	13.7
9	14.6	14.6	14.4	14.1	13.6	13.2	12.3	12.0	11.9	12.3	13.0	13.7
10	14.6	14.6	14.4	14.1	13.6	13.2	12.3	12.0	12.0	12.3	13.2	13.7
11	14.6	14.6	14.4	14.1	13.6	13.1	12.3	12.0	12.0	12.3	13.2	13.7
12	14.7	14.6	14.4	14.1	13.6	13.1	12.2	12.0	11.9	12.3	13.2	13.7
13	14.7	14.6	14.4	14.1	13.6	13.1	12.3	12.0	11.9	12.3	13.4	13.7
14	14.7	14.6	14.4	14.1	13.6	13.1	12.2	12.0	11.8	12.3	13.4	13.7
15	14.7	14.6	14.4	14.1	13.6	13.1	12.2	12.0	12.0	12.3	13.5	13.7
16	14.7	14.4	14.4	14.1	13.6	12.9	12.2	12.0	12.0	12.5	13.5	13.7
17	14.7	14.4	14.4	14.1	13.6	12.9	12.2	11.9	12.0	12.5	13.5	13.7
18	14.7	14.4	14.4	14.1	13.7	12.9	12.3	11.8	12.0	12.5	13.5	13.7
19	14.6	14.4	14.4	14.1	13.6	12.9	12.2	11.8	12.0	12.5	13.4	13.9
20	14.7	14.4	14.4	14.1	13.6	12.9	12.3	11.8	12.0	---	13.5	13.9
21	14.7	14.4	14.4	14.1	13.6	12.9	12.0	11.9	12.0	---	13.5	13.9
22	14.7	14.4	14.4	13.9	13.6	12.7	12.2	11.9	12.1	---	13.5	13.9
23	14.7	14.4	14.4	13.9	13.6	12.7	12.2	11.9	12.1	12.7	13.5	13.9
24	14.7	14.4	14.4	13.9	13.4	12.7	12.1	11.8	12.1	12.7	13.5	13.9
25	14.7	14.4	14.4	13.9	13.4	12.7	12.0	12.0	12.1	12.7	13.5	13.9
26	14.7	14.4	14.4	13.9	13.4	12.7	12.0	11.8	12.1	12.7	13.7	13.9
27	14.7	14.4	14.3	13.9	13.4	12.7	12.0	11.8	12.1	12.7	13.5	13.9
28	14.7	14.4	14.1	13.9	13.4	12.7	12.0	12.0	12.1	12.8	13.4	13.9
29	14.7	14.4	14.1	13.9	13.4	12.5	12.0	11.8	12.1	12.8	13.5	13.9
30	14.7	14.4	14.1	13.9	---	12.5	12.0	11.8	12.1	12.8	13.5	14.1
31	14.7	---	14.1	13.9	---	12.5	---	12.0	---	12.7	13.5	---
MAX	14.7	14.7	14.4	14.1	13.9	13.4	12.5	12.1	12.1	12.8	13.7	14.1
CAL YR 1991	MAX 14.7											
WTR YR 1992	MAX 14.7											



388 GROUND-WATER, SURFACE-WATER, AND SUBSURFACE SEDIMENT DATA FOR THE MANAGEMENT SYSTEMS
EVALUATION AREA IN PIKE COUNTY

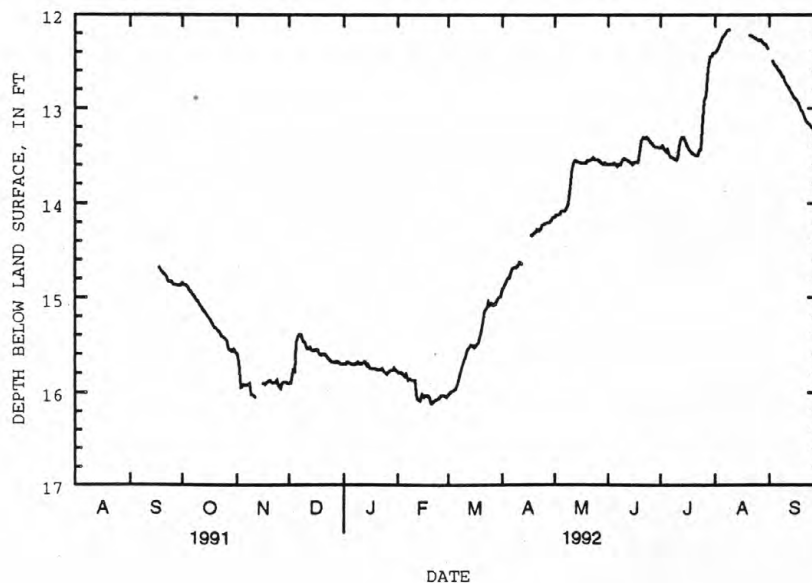
Ground-Water Records--Continued

390227083013330. Local number, PI-222-BR NR PIKETON OH. Cooperator number, R1-BR.
LOCATION.--Lat 39°02'27", long 83°01'33", Hydrologic Unit 05060002, at Van Meter Farm, 1.4 miles south of Piketon, Ohio
Owner: The Ohio State University.
AQUIFER.--Ohio Shale.
WELL CHARACTERISTICS.--Well installed by cable tool drilling method, diameter 4.0 in., depth 83.25 ft. below land-surface datum.
INSTRUMENTATION.--Electronic datalogger--60 minute recording interval.
DATUM.--Elevation of land-surface datum is 550.93 ft. above National GVD of 1929. Measuring point: Top of wooden floor of instrument shelter, 5.49 ft. above land-surface datum.
PERIOD OF RECORD.--September 17, 1991 to current year.
EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 16.12 ft. below land-surface datum, February 20-21, 1992; minimum daily low, 12.16 ft. below land-surface datum, August 9, 1992.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14.85	15.59	15.91	15.70	15.78	16.02	14.91	14.15	13.59	13.42	12.41	---
2	14.86	15.68	15.90	15.70	15.80	16.00	14.89	14.12	13.59	13.40	12.38	---
3	14.87	15.95	15.77	15.68	15.79	15.99	14.85	14.12	13.59	13.44	12.35	12.50
4	14.88	15.94	15.78	15.69	15.81	15.98	14.80	14.11	13.58	13.46	12.30	12.54
5	14.92	15.92	15.48	15.70	15.83	15.97	14.79	14.08	13.59	13.44	12.25	12.56
6	14.94	15.93	15.41	15.70	15.81	15.93	14.74	14.08	13.61	13.50	12.22	12.59
7	14.97	15.92	15.39	15.71	15.87	15.87	14.69	14.08	13.59	13.52	12.20	12.61
8	14.99	15.91	15.40	15.70	15.86	15.79	14.68	14.04	13.59	13.52	12.17	12.65
9	15.02	16.02	15.46	15.68	15.87	15.72	14.68	14.00	13.55	13.54	12.16	12.67
10	15.04	16.02	15.48	15.70	15.87	15.65	14.66	13.83	13.53	13.55	---	12.72
11	15.08	16.05	15.54	15.70	15.87	15.63	14.63	13.63	13.54	13.52	---	12.75
12	15.11	---	15.54	15.69	16.07	15.55	14.64	13.56	13.55	13.37	---	12.78
13	15.14	---	15.53	15.67	16.08	15.53	---	13.55	13.56	13.31	---	12.81
14	15.16	---	15.56	15.72	16.09	15.50	---	13.56	13.58	13.31	---	12.84
15	15.19	---	15.56	15.71	16.02	15.51	---	13.57	13.59	13.36	---	12.88
16	15.22	15.91	15.55	15.75	16.05	15.53	---	13.58	13.57	13.39	---	12.90
17	15.24	15.92	15.55	15.75	16.03	15.50	---	13.58	13.57	13.43	---	12.92
18	15.28	15.90	15.60	15.75	16.03	15.49	14.34	13.58	13.57	13.46	---	12.96
19	15.32	15.88	15.61	15.75	16.05	15.44	14.32	13.58	13.43	13.48	---	13.01
20	15.32	15.87	15.60	15.76	16.12	15.35	14.31	13.55	13.34	13.49	---	13.04
21	15.35	15.90	15.60	15.76	16.12	15.23	14.28	13.55	13.31	13.50	12.22	13.08
22	15.37	15.90	15.62	15.76	16.09	15.14	14.29	13.54	13.32	13.50	12.23	13.13
23	15.41	15.90	15.64	15.75	16.08	15.12	14.27	13.52	13.31	13.45	12.24	13.16
24	15.42	15.87	15.66	15.78	16.07	15.05	14.23	13.54	13.33	13.43	12.26	13.17
25	15.44	15.95	15.68	15.80	16.06	15.08	14.22	13.54	13.36	13.11	12.27	13.20
26	15.45	15.96	15.68	15.81	16.03	15.06	14.21	13.54	13.38	12.92	12.28	13.21
27	15.55	15.91	15.69	15.78	16.03	15.08	14.20	13.56	13.40	12.86	12.27	13.27
28	15.55	15.89	15.67	15.77	16.04	15.07	14.20	13.58	13.41	12.58	12.30	13.31
29	15.57	15.89	15.69	15.77	16.05	15.04	14.18	13.59	13.41	12.45	12.32	13.34
30	15.55	15.91	15.70	15.74	---	15.00	14.15	13.58	13.42	12.44	12.32	13.36
31	15.58	---	15.70	15.77	---	14.99	---	13.59	---	12.41	12.36	---
MAX	15.58	16.05	15.91	15.81	16.12	16.02	14.91	14.15	13.61	13.55	12.41	13.36

CAL YR 1991 LOW 16.05
WTR YR 1992 LOW 16.12



**GROUND-WATER, SURFACE-WATER, AND SUBSURFACE SEDIMENT DATA FOR THE MANAGEMENT SYSTEMS 389
EVALUATION AREA IN PIKE COUNTY**

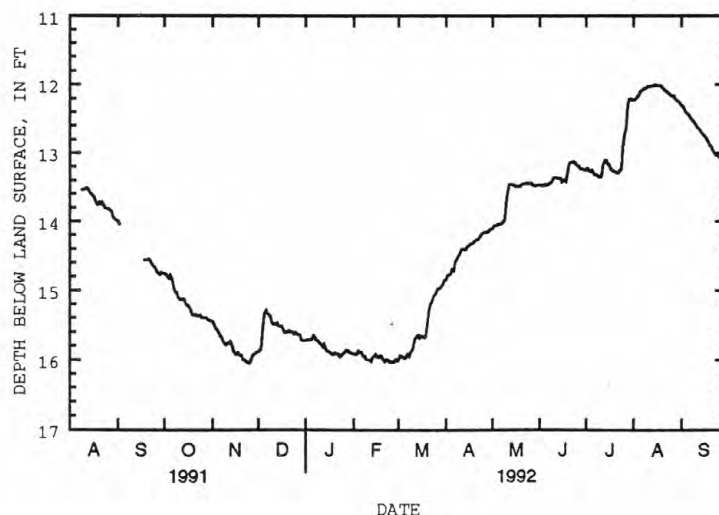
Ground-Water Records--Continued

390227083013320. Local number, PI-221-WT NR PIKETON OH. Cooperator number, R1-WT.
 LOCATION.--Lat 39°02'27", long 83°01'33", Hydrologic Unit 05060002, at Van Meter Farm, 1.4 miles south of Piketon Ohio.
 Owner: The Ohio State University.
 AQUIFER.--Sand and gravel of Pleistocene age.
 WELL CHARACTERISTICS.--Test well installed by cable tool drilling method, diameter 6.0 in., depth 28 ft. below land-surface datum.
 INSTRUMENTATION.--Electronic datalogger--60 minute recording interval. Also collected: water temperature and specific conductance. Conductivity/water temperature probe set approximately 2 ft. below the water table.
 DATUM.--Elevation of land-surface datum is 551.07 ft. above National GVD of 1929. Measuring point: Top of wooden floor of instrument shelter, 5.72 ft. above land-surface datum.
 PERIOD OF RECORD.--August 8, 1991 to current year.
 EXTREMES FOR PERIOD OF RECORD.--
 WATER LEVEL: Maximum daily low, 16.05 ft. below land-surface datum, November 25, 1991; minimum daily low, 12.01 ft. below land-surface datum, August 15, 1992.
 SPECIFIC CONDUCTANCE: Maximum, 780 microsiemens per centimeter, December 3-4, 1991; minimum, 683 microsiemens per centimeter, September 29, 1991.
 WATER TEMPERATURE: Maximum, 13.9°C, October 23-24, 1991; minimum, 10.5°C, May 15 and 17-20, 1992.

**DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MAXIMUM VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14.76	15.45	15.88	15.72	15.91	15.99	14.84	14.10	13.47	13.24	12.22	12.31
2	14.76	15.49	15.86	15.71	15.92	15.94	14.78	14.07	13.47	13.22	12.21	12.32
3	14.81	15.53	15.85	15.71	15.92	15.95	14.78	14.07	13.48	13.25	12.19	12.37
4	14.82	15.57	15.53	15.71	15.87	15.97	14.76	14.06	13.46	13.27	12.16	12.41
5	14.79	15.60	15.34	15.70	15.89	15.98	14.69	14.04	13.47	13.25	12.11	12.43
6	14.84	15.66	15.29	15.66	15.89	15.96	14.71	14.04	13.46	13.30	12.09	12.46
7	14.95	15.68	15.34	15.69	15.95	15.92	14.59	14.03	13.44	13.32	12.07	12.48
8	15.03	15.72	15.36	15.72	15.95	15.95	14.56	14.00	13.44	13.32	12.05	12.52
9	15.03	15.78	15.40	15.73	15.99	15.89	14.51	13.96	13.39	13.35	12.05	12.54
10	15.10	15.79	15.46	15.76	16.00	15.85	14.48	13.72	13.36	13.36	12.03	12.59
11	15.13	15.76	15.49	15.79	16.00	15.77	14.40	13.52	13.36	13.33	12.03	12.63
12	15.13	15.76	15.49	15.82	16.02	15.70	14.40	13.46	13.37	13.18	12.03	12.64
13	15.12	15.74	15.47	15.78	15.97	15.66	14.41	13.46	13.37	13.10	12.02	12.67
14	15.14	15.81	15.52	15.86	15.96	15.65	14.40	13.46	13.37	13.10	12.02	12.70
15	15.20	15.87	15.52	15.87	15.92	15.69	14.37	13.47	13.42	13.15	12.01	12.74
16	15.22	15.92	15.52	15.88	15.96	15.66	14.35	13.49	13.39	13.18	12.02	12.76
17	15.24	15.92	15.55	15.90	15.97	15.67	14.33	13.49	13.39	13.22	12.02	12.79
18	15.28	15.90	15.61	15.92	15.94	15.68	14.32	13.49	13.41	13.25	12.02	12.83
19	15.35	15.94	15.61	15.92	15.95	15.66	14.30	13.49	13.26	13.26	12.04	12.88
20	15.36	15.94	15.60	15.90	16.00	15.50	14.28	13.46	13.15	13.27	12.06	12.91
21	15.35	16.00	15.58	15.91	16.02	15.28	14.26	13.45	13.13	13.29	12.08	12.95
22	15.37	16.00	15.60	15.92	15.99	15.21	14.26	13.45	13.13	13.29	12.10	13.00
23	15.37	16.02	15.60	15.96	16.00	15.15	14.22	13.44	13.12	13.24	12.12	13.03
24	15.36	16.04	15.63	15.94	16.03	15.09	14.19	13.45	13.15	13.22	12.14	13.04
25	15.40	16.05	15.61	15.91	16.02	15.05	14.17	13.44	13.18	12.92	12.16	13.06
26	15.40	16.02	15.63	15.89	16.03	15.01	14.16	13.44	13.19	12.71	12.17	13.08
27	15.40	15.96	15.64	15.86	16.03	14.97	14.16	13.46	13.22	12.66	12.17	13.13
28	15.40	15.93	15.65	15.86	15.99	14.97	14.15	13.48	13.22	12.30	12.21	13.17
29	15.42	15.91	15.71	15.89	16.01	14.95	14.13	13.48	13.23	12.21	12.23	13.21
30	15.43	15.89	15.72	15.90	---	14.91	14.11	13.47	13.24	12.20	12.24	13.24
31	15.44	---	15.72	15.91	---	14.85	---	13.47	---	12.22	12.28	---
MAX	15.44	16.05	15.88	15.96	16.03	15.99	14.84	14.10	13.48	13.36	12.28	13.24

CAL YR 1991 LOW 16.05
 WTR YR 1992 LOW 16.05



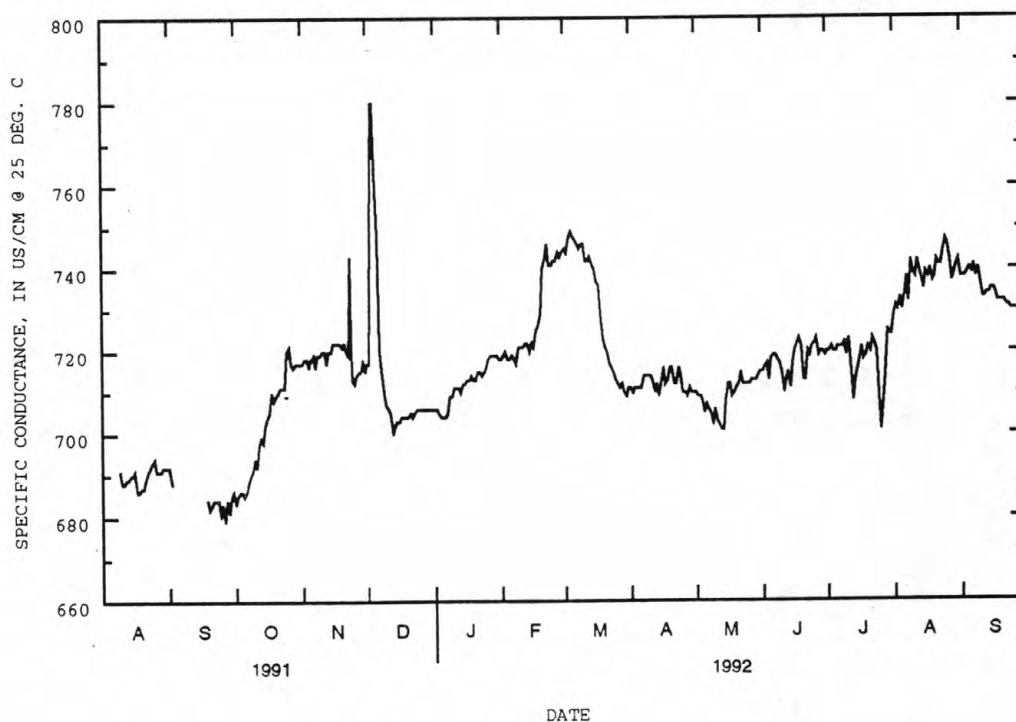
390 GROUND-WATER, SURFACE-WATER, AND SUBSURFACE SEDIMENT DATA FOR THE MANAGEMENT SYSTEMS
EVALUATION AREA IN PIKE COUNTY

390227083013320. Local number, PI-221-WT NR PIKETON OH

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	683	717	717	706	718	745	711	710	715	720	729	738
2	685	718	717	706	719	744	710	709	716	720	731	738
3	686	718	780	705	720	748	711	709	717	721	730	738
4	686	716	780	704	718	749	711	708	713	720	733	739
5	685	718	759	704	718	748	711	705	718	720	730	740
6	686	719	748	704	719	747	711	707	719	721	734	739
7	688	716	720	705	718	746	714	706	719	721	738	741
8	690	719	714	709	717	745	714	705	718	721	732	738
9	691	719	710	709	721	746	714	702	717	722	742	740
10	694	720	707	711	721	746	714	706	715	719	739	737
11	692	720	706	711	721	742	713	703	710	723	738	733
12	697	717	705	711	722	742	710	702	713	717	742	733
13	699	720	700	710	722	743	712	701	715	708	740	734
14	698	720	702	712	720	741	709	701	711	713	737	734
15	702	722	703	712	722	740	713	708	717	715	735	735
16	704	722	703	713	721	737	716	712	720	718	739	735
17	705	722	704	713	725	736	712	712	722	721	738	734
18	710	722	704	714	726	729	713	709	723	718	740	732
19	708	721	704	713	729	723	716	710	721	719	737	732
20	709	722	704	713	740	721	716	711	713	721	738	732
21	710	720	705	715	742	720	712	712	713	720	742	732
22	711	719	704	715	746	717	712	715	720	723	741	731
23	711	743	705	714	741	716	716	712	719	722	741	731
24	711	713	706	715	741	715	714	712	721	720	745	730
25	720	712	706	715	742	713	710	712	722	709	747	730
26	721	714	706	718	742	712	710	712	723	701	746	730
27	717	715	706	719	744	711	709	713	719	708	742	730
28	716	715	706	719	743	712	711	713	720	714	737	730
29	717	718	706	719	744	710	710	713	720	725	739	728
30	717	715	706	719	---	709	710	714	719	724	741	729
31	717	---	706	718	---	711	---	715	---	724	742	---
MAX	721	743	780	719	746	749	716	715	723	725	747	741

CAL YR 1991 MAX 780
WTR YR 1992 MAX 780



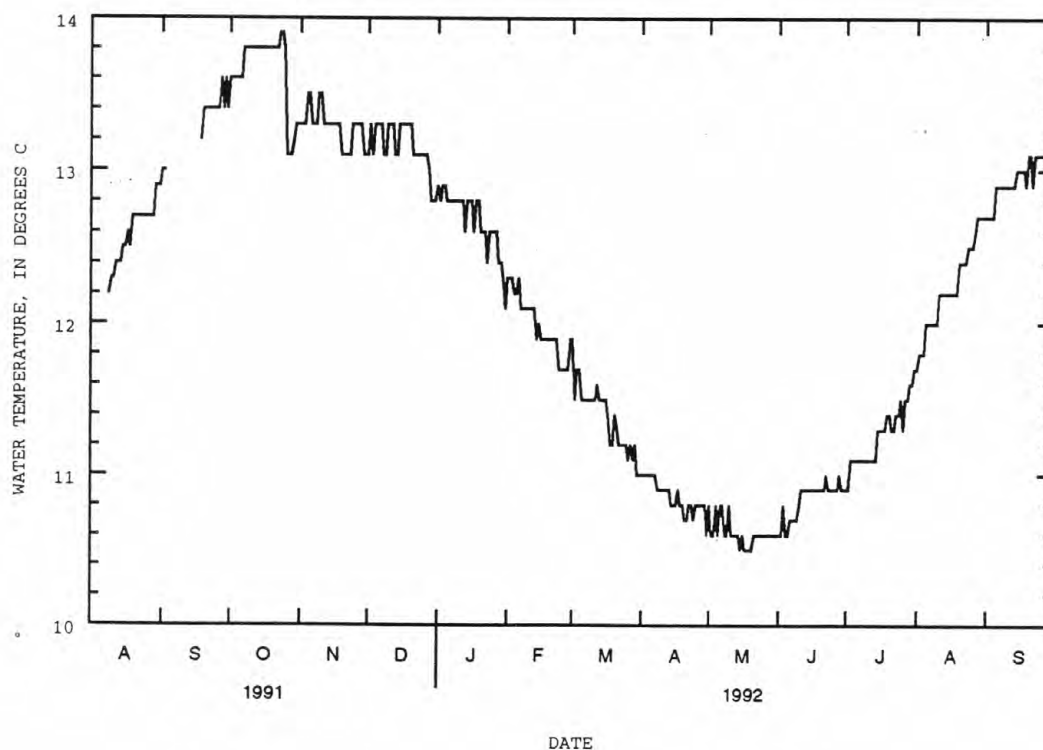
**GROUND-WATER, SURFACE-WATER, AND SUBSURFACE SEDIMENT DATA FOR THE MANAGEMENT SYSTEMS 391
EVALUATION AREA IN PIKE COUNTY**

390227083013320. Local number, PI-221-WT NR PIKETON OH

**WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MAXIMUM VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13.6	13.3	13.1	12.9	12.3	11.9	11.0	10.8	10.6	10.9	11.7	12.7
2	13.6	13.3	13.3	12.8	12.3	11.5	11.0	10.6	10.6	10.9	11.8	12.7
3	13.6	13.3	13.1	12.9	12.3	11.7	11.0	10.6	10.8	11.1	11.8	12.7
4	13.6	13.5	13.3	12.9	12.2	11.7	11.0	10.8	10.6	11.1	11.8	12.7
5	13.6	13.5	13.3	12.8	12.2	11.5	11.0	10.6	10.6	11.1	12.0	12.9
6	13.6	13.3	13.3	12.8	12.3	11.5	11.0	10.8	10.7	11.1	12.0	12.9
7	13.8	13.3	13.3	12.8	12.1	11.5	11.0	10.8	10.7	11.1	12.0	12.9
8	13.8	13.3	13.1	12.8	12.1	11.5	10.9	10.6	10.7	11.1	12.0	12.9
9	13.8	13.5	13.1	12.8	12.1	11.5	10.9	10.6	10.7	11.1	12.0	12.9
10	13.8	13.5	13.3	12.8	12.1	11.5	10.9	10.8	10.8	11.1	12.0	12.9
11	13.8	13.3	13.3	12.8	12.1	11.5	10.9	10.6	10.9	11.1	12.2	12.9
12	13.8	13.3	13.3	12.8	12.1	11.6	10.9	10.6	10.9	11.1	12.2	12.9
13	13.8	13.3	13.1	12.6	12.1	11.5	10.9	10.6	10.9	11.1	12.2	12.9
14	13.8	13.3	13.1	12.8	11.9	11.5	10.8	10.6	10.9	11.1	12.2	13.0
15	13.8	13.3	13.3	12.8	12.0	11.5	10.8	10.5	10.9	11.3	12.2	13.0
16	13.8	13.3	13.3	12.8	11.9	11.5	10.8	10.6	10.9	11.3	12.2	13.0
17	13.8	13.3	13.3	12.6	11.9	11.4	10.9	10.5	10.9	11.3	12.2	13.0
18	13.8	13.3	13.3	12.8	11.9	11.2	10.8	10.5	10.9	11.3	12.2	12.9
19	13.8	13.1	13.3	12.8	11.9	11.2	10.8	10.5	10.9	11.4	12.2	13.1
20	13.8	13.1	13.3	12.6	11.9	11.4	10.7	10.5	10.9	11.4	12.4	13.1
21	13.8	13.1	13.1	12.6	11.9	11.3	10.7	10.6	10.9	11.3	12.4	12.9
22	13.8	13.1	13.1	12.6	11.9	11.2	10.8	10.6	11.0	11.3	12.4	13.1
23	13.9	13.1	13.1	12.4	11.9	11.2	10.8	10.6	10.9	11.4	12.4	13.1
24	13.9	13.3	13.1	12.6	11.7	11.2	10.7	10.6	10.9	11.4	12.5	13.1
25	13.8	13.3	13.1	12.6	11.7	11.2	10.8	10.6	10.9	11.5	12.5	13.1
26	13.1	13.3	13.1	12.6	11.7	11.1	10.8	10.6	10.9	11.3	12.5	13.1
27	13.1	13.3	13.1	12.6	11.7	11.2	10.8	10.6	10.9	11.5	12.6	13.1
28	13.1	13.3	13.0	12.4	11.7	11.1	10.8	10.6	11.0	11.5	12.7	13.1
29	13.2	13.1	12.8	12.4	11.9	11.2	10.8	10.6	10.9	11.6	12.7	13.3
30	13.3	13.1	12.8	12.3	---	11.0	10.6	10.6	10.9	11.6	12.7	13.3
31	13.3	---	12.8	12.1	---	11.0	---	10.6	---	11.7	12.7	---
MAX	13.9	13.5	13.3	12.9	12.3	11.9	11.0	10.8	11.0	11.7	12.7	13.3

CAL YR 1991 MAX 13.9
WTR YR 1992 MAX 13.9



392 GROUND-WATER, SURFACE-WATER, AND SUBSURFACE SEDIMENT DATA FOR THE MANAGEMENT SYSTEMS
EVALUATION AREA IN PIKE COUNTY

Ground-Water Records--Continued

390229083022920. Local number, PI-230-WT NR PIKETON OH. Cooperator number, R4-WT.

LOCATION.--Lat 39°02'29", long 83°02'29", Hydrologic Unit 05060002, at Van Meter Farm, 1.9 miles southwest of Piketon, Ohio.

Owner: The Ohio State University.

AQUIFER.--Sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Test well installed by cable tool drilling method, diameter 6.0 in., depth 32 ft. below land-surface datum.

INSTRUMENTATION.--Electronic datalogger--60 minute recording interval.

DATUM.--Elevation of land-surface datum is 549.22 ft. above National GVD of 1929. Measuring point: Top of PVC casing, 5.64 ft. above land-surface datum.

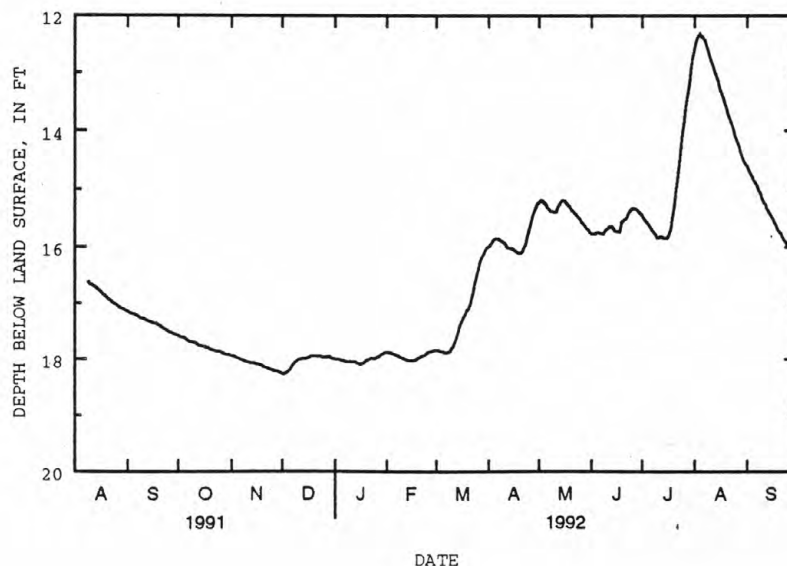
PERIOD OF RECORD.--August 8, 1991 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 18.27 ft. below land-surface datum, December 2, 1991; minimum daily low, 12.32 ft. below land-surface datum, August 4, 1992.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17.58	17.94	18.26	18.00	17.88	17.84	15.99	15.22	15.76	15.45	12.58	14.61
2	17.60	17.95	18.27	18.00	17.88	17.84	15.97	15.19	15.76	15.49	12.45	14.67
3	17.61	17.96	18.25	18.00	17.89	17.85	15.93	15.20	15.76	15.54	12.36	14.73
4	17.62	17.98	18.23	18.01	17.90	17.86	15.88	15.23	15.74	15.58	12.32	14.79
5	17.64	17.99	18.22	18.02	17.91	17.87	15.86	15.27	15.74	15.61	12.35	14.84
6	17.66	18.00	18.17	18.03	17.92	17.89	15.86	15.32	15.75	15.66	12.38	14.89
7	17.68	18.01	18.13	18.04	17.93	17.89	15.86	15.35	15.76	15.70	12.43	14.95
8	17.69	18.03	18.08	18.04	17.95	17.88	15.88	15.38	15.76	15.74	12.51	15.01
9	17.70	18.04	18.04	18.04	17.97	17.86	15.90	15.38	15.72	15.79	12.61	15.07
10	17.71	18.05	18.02	18.04	17.98	17.82	15.92	15.39	15.69	15.83	12.70	15.15
11	17.72	18.06	18.00	18.05	17.99	17.77	15.95	15.38	15.66	15.83	12.80	15.22
12	17.74	18.07	18.00	18.05	18.00	17.70	16.01	15.31	15.64	15.81	12.89	15.27
13	17.76	18.07	17.99	18.05	18.01	17.63	16.02	15.25	15.64	15.82	12.97	15.33
14	17.76	18.07	17.99	18.07	18.02	17.53	16.03	15.20	15.67	15.84	13.07	15.39
15	17.77	18.08	17.99	18.08	18.02	17.42	16.03	15.19	15.72	15.84	13.16	15.45
16	17.78	18.09	17.98	18.09	18.03	17.34	16.05	15.20	15.73	15.84	13.27	15.50
17	17.80	18.09	17.97	18.08	18.03	17.26	16.07	15.23	15.72	15.78	13.36	15.55
18	17.80	18.10	17.95	18.07	18.01	17.21	16.10	15.27	15.73	15.67	13.44	15.62
19	17.82	18.12	17.95	18.05	17.99	17.14	16.11	15.30	15.56	15.50	13.53	15.68
20	17.83	18.14	17.95	18.01	17.98	17.10	16.11	15.35	15.54	15.31	13.62	15.73
21	17.84	18.15	17.94	18.01	17.96	17.02	16.08	15.38	15.52	15.08	13.71	15.77
22	17.85	18.16	17.94	17.99	17.95	16.91	16.02	15.41	15.49	14.84	13.80	15.82
23	17.86	18.17	17.95	17.98	17.93	16.78	15.96	15.44	15.43	14.58	13.89	15.88
24	17.87	18.18	17.96	17.99	17.91	16.64	15.84	15.48	15.37	14.35	13.99	15.93
25	17.87	18.19	17.97	17.99	17.89	16.50	15.72	15.52	15.33	14.04	14.09	15.96
26	17.89	18.20	17.97	17.97	17.87	16.38	15.60	15.56	15.32	13.81	14.18	15.99
27	17.90	18.21	17.97	17.96	17.86	16.26	15.49	15.59	15.33	13.59	14.25	16.03
28	17.91	18.22	17.96	17.93	17.85	16.19	15.39	15.63	15.35	13.39	14.35	16.07
29	17.92	18.23	17.96	17.91	17.84	16.13	15.31	15.67	15.38	13.19	14.44	16.11
30	17.92	18.24	17.99	17.90	---	16.07	15.25	15.70	15.41	12.96	14.51	16.15
31	17.93	---	17.99	17.88	---	16.02	---	15.74	---	12.73	14.56	---
MAX	17.93	18.24	18.27	18.09	18.03	17.89	16.11	15.74	15.76	15.84	14.56	16.15

CAL YR 1991 LOW 18.27
WTR YR 1992 LOW 18.27



**GROUND-WATER, SURFACE-WATER, AND SUBSURFACE SEDIMENT DATA FOR THE MANAGEMENT SYSTEMS 393
EVALUATION AREA IN PIKE COUNTY**

Ground-Water Records--Continued

390229083025020. Local number, PI-233-WT NR PIKETON OH. Cooperation number, R5-WT.

LOCATION.--Lat 39°02'29", long 83°02'50", Hydrologic Unit 0506002, at Van Meter Farm, 2.0 miles southwest of Piketon, Ohio.

Owner: The Ohio State University.

AQUIFER.--Sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Test well installed by cable tool drilling method, diameter 6.0 in., depth 28 ft. below land surface datum.

INSTRUMENTATION.--Electronic datalogger--60 minute recording interval.

DATUM.--Elevation of land-surface datum is 546.21 ft. above National GVD of 1929. Measuring point: top of PVC casing, 9.63 ft. above land-surface datum.

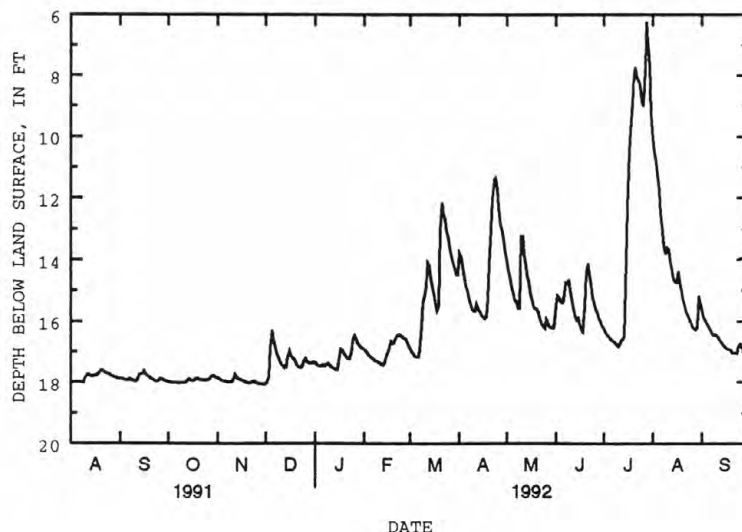
PERIOD OF RECORD.--August 8, 1991 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 18.08 ft. below land-surface datum, November 30, 1991; minimum daily low, 6.25 ft. below land-surface datum, July 28, 1992.

**DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MAXIMUM VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17.99	17.87	18.05	17.36	16.91	16.90	13.79	14.03	15.50	16.25	10.07	15.63
2	18.00	17.89	17.99	17.41	16.97	16.98	13.92	14.31	15.16	16.35	10.49	15.83
3	18.02	17.92	17.82	17.46	17.04	17.06	14.17	14.59	15.24	16.45	10.82	15.97
4	18.02	17.94	16.88	17.47	17.12	17.14	14.57	14.85	15.38	16.50	11.21	16.05
5	18.02	17.96	16.29	17.47	17.18	17.16	14.85	15.09	15.40	16.58	11.79	16.15
6	18.01	17.98	16.59	17.42	17.21	17.17	15.03	15.30	15.28	16.63	12.50	16.27
7	18.02	17.99	16.85	17.46	17.25	16.95	15.24	15.37	14.73	16.67	13.08	16.37
8	18.03	17.99	17.06	17.42	17.29	16.16	15.45	15.56	14.75	16.70	13.57	16.45
9	18.02	18.00	17.21	17.38	17.32	15.39	15.61	15.57	14.63	16.76	13.82	16.42
10	18.02	18.00	17.31	17.43	17.34	15.14	15.66	13.24	14.98	16.83	13.63	16.48
11	18.02	17.86	17.39	17.49	17.38	14.86	15.66	13.23	15.30	16.80	13.69	16.51
12	18.02	17.74	17.48	17.52	17.43	14.09	15.44	13.82	15.58	16.64	14.03	16.60
13	17.92	17.84	17.52	17.54	17.44	14.18	15.60	14.23	15.84	16.58	14.35	16.69
14	17.89	17.88	17.50	17.58	17.36	14.56	15.71	14.52	15.96	16.50	14.63	16.75
15	17.92	17.90	17.17	17.58	17.15	14.89	15.80	14.81	15.90	14.88	14.73	16.83
16	17.95	17.92	16.98	17.33	17.03	15.13	15.88	15.13	16.10	12.32	14.74	16.87
17	17.95	17.94	17.12	16.91	16.85	15.47	15.89	15.33	16.29	10.50	14.37	16.91
18	17.88	17.98	17.20	16.94	16.66	15.65	15.83	15.54	16.35	9.80	14.74	16.92
19	17.87	18.01	17.28	17.05	16.72	15.48	15.26	15.59	15.52	8.93	15.04	16.96
20	17.90	18.02	17.37	17.11	16.68	13.05	14.15	15.60	14.43	8.01	15.28	17.03
21	17.91	18.03	17.46	17.18	16.54	12.16	13.00	15.72	14.13	7.74	15.49	17.03
22	17.92	18.02	17.51	17.22	16.47	12.53	12.08	15.92	14.43	8.09	15.68	17.05
23	17.92	17.97	17.52	17.22	16.43	12.72	11.39	16.08	14.83	8.14	15.79	17.06
24	17.92	17.97	17.49	17.04	16.47	13.07	11.36	16.16	15.20	8.32	15.92	16.79
25	17.93	18.02	17.32	16.61	16.51	13.29	11.70	16.21	15.44	8.83	16.06	16.74
26	17.91	18.04	17.23	16.46	16.55	13.63	12.30	15.95	15.61	9.01	16.18	16.86
27	17.90	18.05	17.32	16.61	16.58	13.92	12.89	16.09	15.74	8.41	16.26	16.95
28	17.80	18.05	17.36	16.72	16.67	14.11	13.01	16.18	15.89	6.25	16.27	17.04
29	17.78	18.06	17.38	16.82	16.80	14.29	13.38	16.20	16.03	6.90	16.19	17.11
30	17.83	18.08	17.38	16.85	---	14.49	13.72	16.21	16.15	7.67	15.17	17.16
31	17.85	---	17.33	16.89	---	14.48	---	16.19	---	9.24	15.37	---
MAX	18.03	18.08	18.05	17.58	17.44	17.17	15.89	16.21	16.35	16.83	16.27	17.16

CAL YR 1991 LOW 18.08
WTR YR 1992 LOW 18.08



394 GROUND-WATER, SURFACE-WATER, AND SUBSURFACE SEDIMENT DATA FOR THE MANAGEMENT SYSTEMS
EVALUATION AREA IN PIKE COUNTY

Ground-Water Records--Continued

390233083015520. Local number, PI-260-WT NR PIKETON OH. Cooperator number, S10-WT.
LOCATION.--Lat 39°02'33", long 83°01'55", Hydrologic Unit 05060002, at Van Meter Farm, 1.5 miles southwest of Piketon,
Ohio.

Owner: The Ohio State University.

AQUIFER.--Sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Test well installed by cable tool drilling method, diameter 6.0 in., depth 35 ft. below land-
surface datum.

INSTRUMENTATION.--Electronic datalogger--60 minute recording interval. Also collected: water temperature and spe-
cific conductance. Conductivity/water temperature probe set approximately 2 ft. below the water table.

DATUM.--Elevation of land-surface datum is 553.68 ft. above National GVD of 1929. Measuring point: Top of PVC casing,
1.92 ft. above land-surface datum.

PERIOD OF RECORD.--September 17, 1991 to current year.

EXTREMES FOR PERIOD OF RECORD.--

WATER LEVEL: Maximum daily low, 20.19 ft. below land-surface datum, February 18-20, 1992; minimum daily low,
15.89 ft. below land-surface datum, August 13-15, 1992.

SPECIFIC CONDUCTANCE: Maximum, 903 microsiemens per centimeter, November 13, 1991; minimum, 779 microsiemens per
centimeter, September 24, 1991.

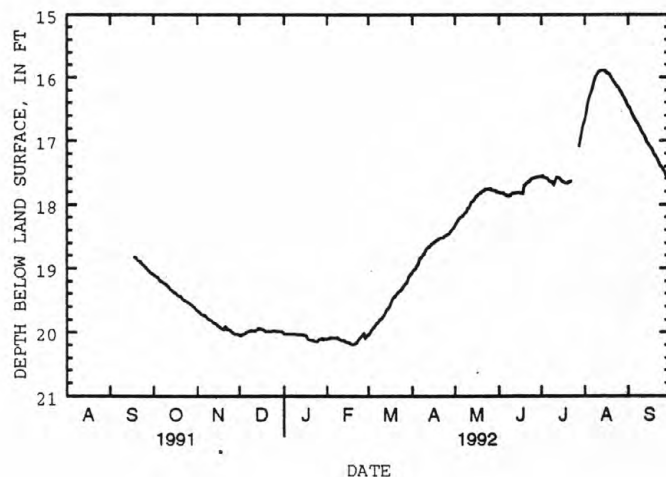
WATER TEMPERATURE: Maximum, 14.6°C, November 24-30 and many days in December, 1992; minimum, 12.7°C, end of June
and many days in July, 1992.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19.10	19.66	20.05	20.02	20.11	20.04	19.06	18.33	17.81	17.55	16.67	16.46
2	19.12	19.68	20.06	20.02	20.10	20.01	19.03	18.29	17.82	17.55	16.57	16.49
3	19.13	19.70	20.04	20.02	20.08	19.97	19.01	18.26	17.82	17.57	16.45	16.55
4	19.15	19.72	20.02	20.03	20.09	19.94	18.96	18.23	17.82	17.58	16.34	16.59
5	19.18	19.73	20.01	20.03	20.09	19.91	18.94	18.20	17.84	17.58	16.28	16.63
6	19.20	19.73	20.00	20.03	20.09	19.88	18.86	18.18	17.85	17.61	16.20	16.67
7	19.21	19.75	19.99	20.03	20.09	19.85	18.83	18.16	17.87	17.64	16.12	16.71
8	19.23	19.77	19.98	20.03	20.08	19.84	18.80	18.13	17.87	17.64	16.04	16.75
9	19.24	19.79	19.96	20.03	20.11	19.81	18.77	18.11	17.86	17.67	15.99	16.78
10	19.26	19.80	19.97	20.04	20.12	19.78	18.73	18.06	17.84	17.69	15.94	16.83
11	19.28	19.81	19.97	20.04	20.13	19.76	18.69	18.04	17.82	17.64	15.91	16.86
12	19.30	19.84	19.97	20.04	20.13	19.73	18.67	18.00	17.82	17.57	15.90	16.91
13	19.33	19.85	19.96	20.04	20.13	19.69	18.65	17.96	17.82	17.57	15.89	16.96
14	19.35	19.86	19.93	20.04	20.15	19.65	18.63	17.94	17.81	17.58	15.89	17.01
15	19.37	19.88	19.93	20.05	20.16	19.62	18.61	17.91	17.81	17.61	15.89	17.05
16	19.39	19.90	19.94	20.05	20.16	19.59	18.59	17.88	17.82	17.63	15.91	17.09
17	19.40	19.91	19.95	20.06	20.17	19.54	18.57	17.86	17.83	17.65	15.93	17.12
18	19.42	19.93	19.95	20.11	20.19	19.48	18.56	17.84	17.83	17.67	15.94	17.16
19	19.44	19.94	19.98	20.12	20.19	19.45	18.55	17.82	17.71	17.67	15.97	17.21
20	19.44	19.95	19.98	20.13	20.19	19.42	18.53	17.80	17.68	17.67	16.01	17.23
21	19.47	19.91	19.98	20.13	20.18	19.40	18.52	17.79	17.66	17.65	16.04	17.28
22	19.49	19.93	19.99	20.13	20.16	19.37	18.52	17.78	17.65	17.64	16.07	17.33
23	19.51	19.95	19.99	20.14	20.13	19.35	18.51	17.76	17.62	---	16.10	17.38
24	19.52	19.95	19.97	20.15	20.10	19.33	18.49	17.76	17.60	---	16.14	17.40
25	19.53	19.98	19.97	20.15	20.07	19.30	18.48	17.76	17.58	---	16.16	17.45
26	19.54	20.00	19.97	20.11	20.04	19.27	18.46	17.75	17.58	---	16.20	17.48
27	19.56	20.01	19.98	20.11	20.01	19.24	18.45	17.77	17.57	---	16.22	17.53
28	19.58	20.02	19.98	20.10	20.09	19.21	18.42	17.78	17.56	17.08	16.27	17.57
29	19.60	20.03	19.98	20.12	20.06	19.14	18.40	17.78	17.56	16.97	16.32	17.61
30	19.61	20.04	19.98	20.11	---	19.11	18.36	17.79	17.56	16.86	16.36	17.65
31	19.64	---	19.98	20.11	---	19.09	---	17.81	---	16.75	16.41	---
MAX	19.64	20.04	20.06	20.15	20.19	20.04	19.06	18.33	17.87	17.69	16.67	17.65

CAL YR 1991 LOW 20.06

WTR YR 1992 LOW 20.19



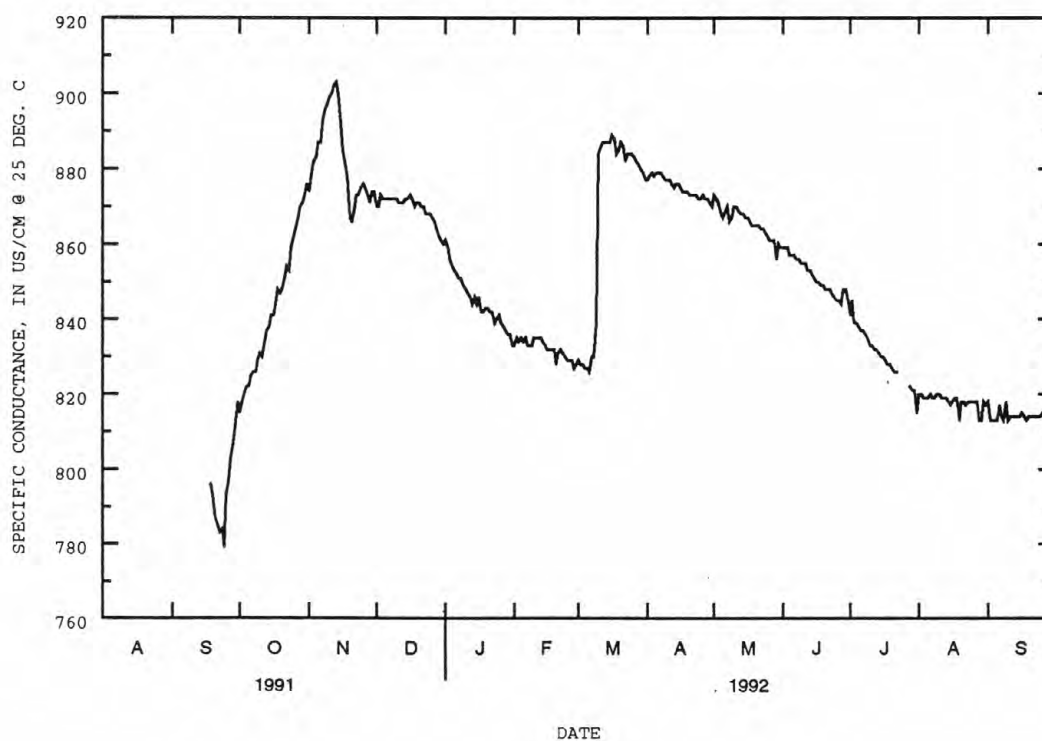
**GROUND-WATER, SURFACE-WATER, AND SUBSURFACE SEDIMENT DATA FOR THE MANAGEMENT SYSTEMS 395
EVALUATION AREA IN PIKE COUNTY**

390233083015520. Local number, PI-260-WT NR PIKETON OH

**SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MAXIMUM VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	815	874	870	861	833	829	877	873	859	841	820	818
2	818	878	870	859	835	828	878	872	859	845	820	813
3	820	882	873	856	834	828	879	871	859	839	819	813
4	822	883	872	854	835	827	878	868	857	839	819	813
5	822	887	872	853	834	827	879	867	857	838	819	813
6	825	887	872	852	835	826	879	869	857	837	820	817
7	826	893	872	851	833	830	879	870	856	837	819	814
8	826	896	872	851	833	830	878	866	856	836	819	813
9	829	897	872	849	833	839	877	867	855	835	820	818
10	831	899	872	848	835	884	877	870	855	833	820	813
11	830	900	871	847	835	886	877	870	855	833	819	814
12	834	902	871	846	835	887	876	869	853	832	819	814
13	837	903	871	844	835	887	875	868	853	832	819	814
14	838	900	872	846	834	887	876	868	852	831	818	814
15	841	892	872	844	833	887	876	867	851	830	817	814
16	841	885	873	846	832	889	875	867	850	830	818	815
17	844	881	872	842	832	888	874	866	850	829	819	814
18	848	878	870	842	832	884	874	865	849	828	819	813
19	847	867	871	843	832	885	874	865	849	828	813	814
20	848	866	871	843	828	887	873	865	848	827	818	814
21	851	869	870	842	831	886	873	865	848	826	818	814
22	854	873	870	842	832	882	873	864	848	826	817	814
23	853	873	868	839	831	884	873	864	847	---	818	814
24	859	875	868	840	830	884	872	863	846	---	818	814
25	862	876	868	841	829	884	872	862	845	---	818	815
26	864	875	867	839	829	883	873	861	845	---	818	814
27	867	873	866	838	829	882	872	861	844	---	818	814
28	870	871	864	837	827	881	872	861	848	822	813	814
29	871	874	862	836	828	880	871	856	848	821	813	814
30	873	874	861	836	---	879	870	860	846	821	818	814
31	876	---	860	833	---	877	---	859	---	815	817	---
MAX	876	903	873	861	835	889	879	873	859	845	820	818

CAL YR 1991 MAX 903
WTR YR 1992 MAX 903



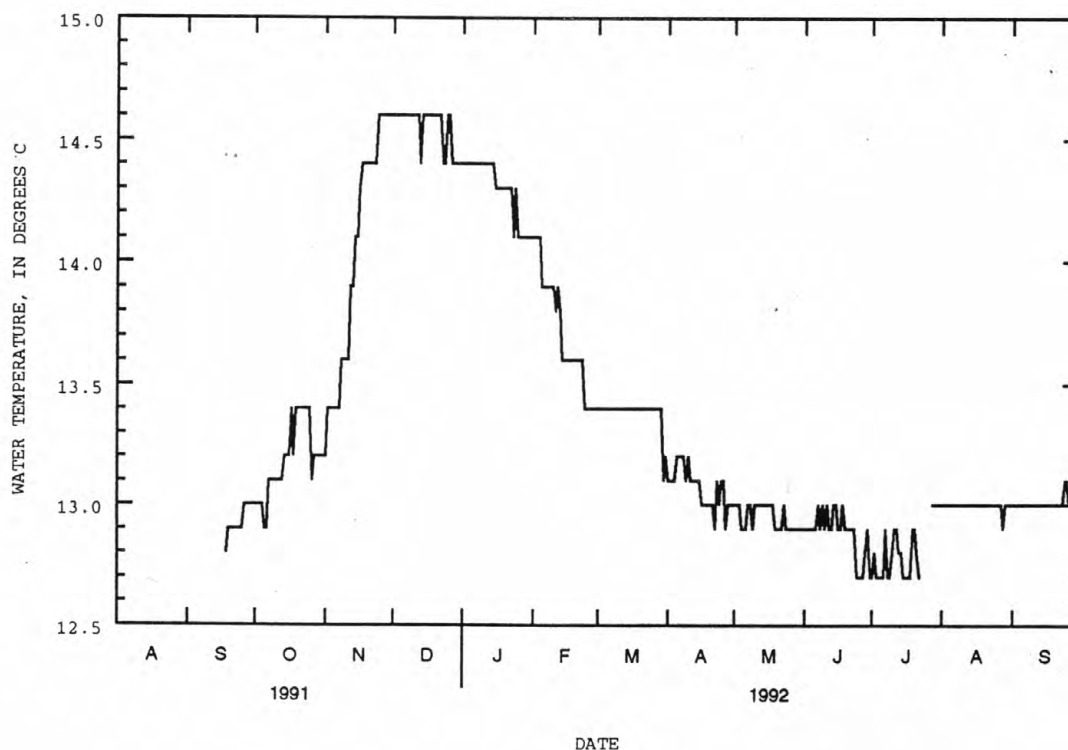
396 GROUND-WATER, SURFACE-WATER, AND SUBSURFACE SEDIMENT DATA FOR THE MANAGEMENT SYSTEMS
EVALUATION AREA IN PIKE COUNTY

390233083015520. Local number, PI-260-WT NR PIKETON OH

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13.0	13.2	14.6	14.4	14.1	13.4	13.1	13.0	12.9	12.7	13.0	13.0
2	13.0	13.4	14.6	14.4	14.1	13.4	13.1	13.0	12.9	12.8	13.0	13.0
3	13.0	13.4	14.6	14.4	14.1	13.4	13.1	13.0	12.9	12.7	13.0	13.0
4	13.0	13.4	14.6	14.4	14.1	13.4	13.1	12.9	12.9	12.7	13.0	13.0
5	12.9	13.4	14.6	14.4	13.9	13.4	13.2	12.9	12.9	12.7	13.0	13.0
6	12.9	13.4	14.6	14.4	13.9	13.4	13.2	12.9	12.9	12.7	13.0	13.0
7	13.1	13.4	14.6	14.4	13.9	13.4	13.2	13.0	13.0	12.9	13.0	13.0
8	13.1	13.6	14.6	14.4	13.9	13.4	13.2	13.0	12.9	12.7	13.0	13.0
9	13.1	13.6	14.6	14.4	13.9	13.4	13.1	12.9	13.0	12.7	13.0	13.0
10	13.1	13.6	14.6	14.4	13.9	13.4	13.2	13.0	12.9	12.8	13.0	13.0
11	13.1	13.6	14.6	14.4	13.8	13.4	13.1	13.0	13.0	12.9	13.0	13.0
12	13.1	13.9	14.6	14.4	13.9	13.4	13.1	13.0	12.9	12.9	13.0	13.0
13	13.1	13.9	14.4	14.4	13.8	13.4	13.1	13.0	12.9	12.8	13.0	13.0
14	13.2	14.1	14.6	14.4	13.6	13.4	13.1	13.0	13.0	12.8	13.0	13.0
15	13.2	14.1	14.6	14.3	13.6	13.4	13.1	13.0	13.0	12.7	13.0	13.0
16	13.2	14.3	14.6	14.3	13.6	13.4	13.0	13.0	12.9	12.7	13.0	13.0
17	13.4	14.4	14.6	14.3	13.6	13.4	13.0	13.0	12.9	12.7	13.0	13.0
18	13.2	14.4	14.6	14.3	13.6	13.4	13.0	13.0	13.0	12.7	13.0	13.0
19	13.4	14.4	14.6	14.3	13.6	13.4	13.0	12.9	12.9	12.9	13.0	13.0
20	13.4	14.4	14.6	14.3	13.6	13.4	13.0	12.9	12.9	12.9	13.0	13.0
21	13.4	14.4	14.6	14.3	13.6	13.4	13.0	12.9	12.9	12.8	13.0	13.0
22	13.4	14.4	14.6	14.3	13.6	13.4	12.9	12.9	12.9	12.7	13.0	13.0
23	13.4	14.4	14.4	14.1	13.6	13.4	13.1	13.0	12.9	---	13.0	13.0
24	13.4	14.6	14.4	14.3	13.4	13.4	13.0	12.9	12.7	---	13.0	13.1
25	13.4	14.6	14.6	14.1	13.4	13.4	13.1	12.9	12.7	---	13.0	13.1
26	13.1	14.6	14.6	14.1	13.4	13.4	13.1	12.9	12.7	---	13.0	13.0
27	13.2	14.6	14.4	14.1	13.4	13.4	12.9	12.9	12.7	---	13.0	13.0
28	13.2	14.6	14.4	14.1	13.4	13.4	13.0	12.9	12.8	13.0	12.9	13.1
29	13.2	14.6	14.4	14.1	13.4	13.4	13.0	12.9	12.9	13.0	13.0	13.1
30	13.2	14.6	14.4	14.1	---	13.1	13.0	12.9	12.7	13.0	13.0	13.1
31	13.2	---	14.4	14.1	---	13.2	---	12.9	---	13.0	13.0	---
MAX	13.4	14.6	14.6	14.4	14.1	13.4	13.2	13.0	13.0	13.0	13.0	13.1

CAL YR 1991 MAX 14.6
WTR YR 1992 MAX 14.6



GROUND-WATER, SURFACE-WATER, AND SUBSURFACE SEDIMENT DATA FOR THE MANAGEMENT SYSTEMS 397
EVALUATION AREA IN PIKE COUNTY

Ground-Water Records--Continued

390239083015130. Local number, PI-225-BR NR PIKETON OH. Cooperator number, R2-BR.

LOCATION.--Lat 39°02'39", long 83°01'51", Hydrologic Unit 05060002, at Van Meter Farm, 1.3 miles southwest of Piketon, Ohio.

Owner: The Ohio State University.

AQUIFER.--Ohio Shale.

WELL CHARACTERISTICS.--Well installed by cable tool drilling method, diameter 4.0 in., depth 90.0 ft. below land-surface datum.

INSTRUMENTATION.--Electronic datalogger--60 minute recording interval.

DATUM.--Elevation of land-surface datum is 552.09 ft. above National GVD of 1929. Measuring point: Top of PVC casing, 2.96 ft. above land-surface datum.

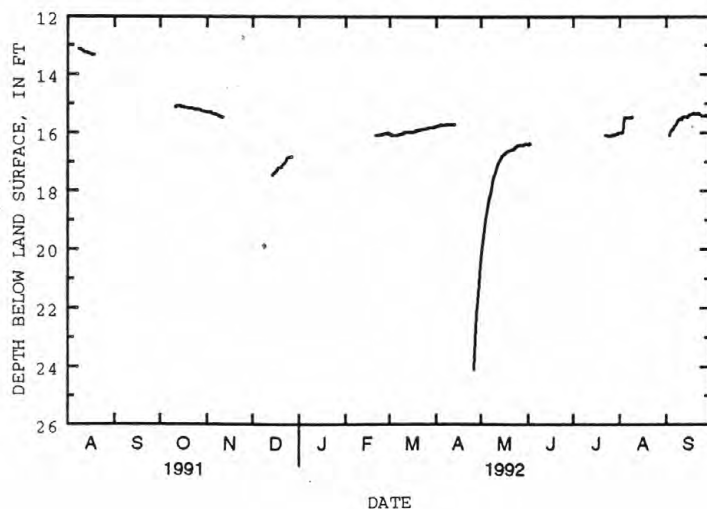
PERIOD OF RECORD.--August 7, 1991 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 24.09 ft. below land-surface datum, April 26, 1992; minimum daily low, 13.12 ft. below land-surface datum, August 7, 1991.

REMARKS.--The sudden increase in water-level depth below land surface in April, 1992 was caused by pumping the well dry prior to a water-quality sampling event.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	15.28	---	---	---	16.05	15.78	20.29	16.40	---	16.01	---
2	---	15.28	---	---	---	16.09	15.76	19.74	16.39	---	16.01	---
3	---	15.30	---	---	---	16.09	15.75	19.35	---	---	15.97	16.09
4	---	15.33	---	---	---	16.09	15.72	18.97	---	---	15.50	15.94
5	---	15.35	---	---	---	16.09	15.74	18.61	---	---	15.50	15.88
6	---	15.36	---	---	---	16.08	15.74	18.33	---	---	15.50	15.79
7	---	15.37	---	---	---	16.06	15.73	18.10	---	---	15.50	15.71
8	---	15.41	---	---	---	16.04	15.72	17.82	---	---	15.49	15.63
9	---	15.45	---	---	---	16.04	15.71	17.56	---	---	15.47	15.55
10	---	15.45	---	---	---	16.02	15.70	17.38	---	---	---	15.51
11	15.10	15.46	---	---	---	15.98	15.70	17.22	---	---	---	15.53
12	15.07	---	---	---	---	15.98	15.70	17.08	---	---	---	15.44
13	15.07	---	---	---	---	15.97	15.71	16.96	---	---	---	15.45
14	15.07	---	17.45	---	---	15.97	---	16.87	---	---	---	15.44
15	15.12	---	17.40	---	---	15.97	---	16.78	---	---	---	15.46
16	15.12	---	17.37	---	---	15.98	---	16.73	---	---	---	15.37
17	15.13	---	17.29	---	---	15.97	---	16.69	---	---	---	15.37
18	15.13	---	17.20	---	---	15.95	---	16.66	---	---	---	15.36
19	15.15	---	17.20	---	---	15.92	---	16.62	---	---	---	15.34
20	15.16	---	17.18	---	---	15.91	---	16.60	---	---	---	15.35
21	15.16	---	17.10	---	16.10	15.91	---	16.59	---	---	---	15.35
22	15.16	---	17.04	---	16.10	15.90	---	16.58	---	16.08	---	15.34
23	15.18	---	16.97	---	16.09	15.87	---	16.54	---	16.08	---	15.38
24	15.19	---	16.88	---	16.07	15.87	---	16.47	---	16.12	---	15.42
25	15.18	---	16.86	---	16.07	15.86	---	16.45	---	16.11	---	15.43
26	15.19	---	16.85	---	16.05	15.85	24.09	16.42	---	16.11	---	15.42
27	15.20	---	16.84	---	16.02	15.83	23.08	16.43	---	16.07	---	15.41
28	15.24	---	---	---	16.02	15.83	22.23	16.43	---	16.08	---	15.45
29	15.26	---	---	---	16.00	15.83	21.51	16.42	---	16.07	---	15.46
30	15.27	---	---	---	---	15.82	20.84	16.39	---	16.05	---	15.37
31	15.28	---	---	---	---	15.80	---	16.39	---	16.01	---	---
MAX	15.28	15.46	17.45	---	16.10	16.09	24.09	20.29	16.40	16.12	16.01	16.09
CAL YR 1991	LOW 17.45											
WTR YR 1992	LOW 24.09											



398 GROUND-WATER, SURFACE-WATER, AND SUBSURFACE SEDIMENT DATA FOR THE MANAGEMENT SYSTEMS
EVALUATION AREA IN PIKE COUNTY

Ground-Water Records--Continued

390239083015120. Local number, PI-224-WT NR PIKETON OH. Cooperator number, R2-WT.

LOCATION.--Lat 39°02'39", long 83°01'51", Hydrologic Unit 05060002, at Van Meter Farm, 1.3 miles southwest of Piketon, Ohio.

Owner: The Ohio State University.

AQUIFER.--Sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Test well installed by cable tool drilling method, diameter 6.0 in., depth 34.8 ft. below land-surface datum.

INSTRUMENTATION.--Electronic datalogger--60 minute recording interval. Also collected: water temperature and specific conductance. Conductivity/water temperature probe set approximately 2 ft. below the water table.

DATUM.--Elevation of land-surface datum is 549.90 ft. above National GVD of 1929. Measuring point: Top of PVC casing, 3.03 ft. above land-surface datum.

PERIOD OF RECORD.--August 1, 1991 to current year.

EXTREMES FOR PERIOD OF RECORD.--

WATER LEVEL: Maximum daily low, 15.88 ft. below land-surface datum, February 21, 1992; minimum daily low, 11.82 ft. below land-surface datum, August 14 and 18-19, 1992.

SPECIFIC CONDUCTANCE: Maximum, 934 microsiemens per centimeter, November 5, 1991; minimum, 751 microsiemens per centimeter, August 1-2, 1991.

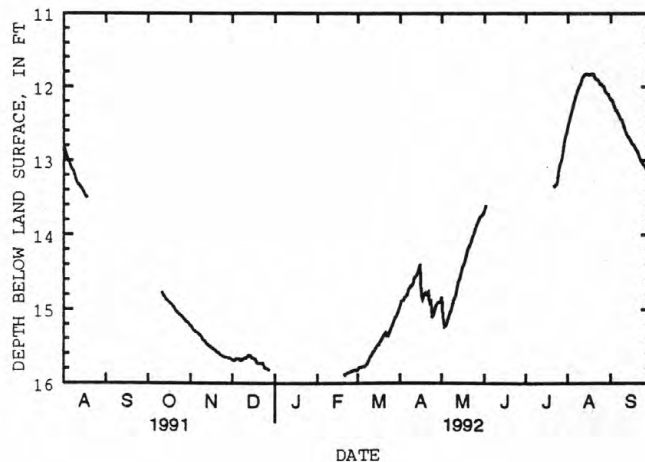
WATER TEMPERATURE: Maximum, 13.6°C, August 10-18, 1991; minimum, 12.1°C, April 14, 21, and 30, and May 9, 24, and 30, 1992.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	15.23	15.68	---	---	15.81	14.94	14.84	13.67	---	12.54	12.17
2	---	15.25	15.69	---	---	15.79	14.89	15.11	13.62	---	12.47	12.19
3	---	15.28	15.69	---	---	15.78	14.88	15.24	---	---	12.36	12.24
4	---	15.29	15.67	---	---	15.78	14.84	15.22	---	---	12.30	12.31
5	---	15.31	15.67	---	---	15.77	14.83	15.16	---	---	12.23	12.33
6	---	15.32	15.67	---	---	15.77	14.80	15.10	---	---	12.15	12.36
7	---	15.34	15.69	---	---	15.76	14.73	15.05	---	---	12.11	12.40
8	---	15.35	15.68	---	---	15.73	14.70	15.01	---	---	12.05	12.44
9	---	15.38	15.67	---	---	15.69	14.68	14.93	---	---	11.99	12.45
10	---	15.41	15.66	---	---	15.64	14.66	14.87	---	---	11.96	12.50
11	14.79	15.43	15.66	---	---	15.62	14.58	14.81	---	---	11.88	12.59
12	14.82	15.46	15.64	---	---	15.59	14.57	14.72	---	---	11.86	12.64
13	14.84	15.47	15.62	---	---	15.55	14.54	14.63	---	---	11.84	12.67
14	14.87	15.49	15.62	---	---	15.52	14.49	14.59	---	---	11.82	12.69
15	14.89	15.50	15.66	---	---	15.49	14.40	14.53	---	---	11.83	12.72
16	14.90	15.52	15.66	---	---	15.48	14.82	14.45	---	---	11.84	12.77
17	14.93	15.53	15.67	---	---	15.45	14.87	14.39	---	---	11.83	12.79
18	14.94	15.54	15.68	---	---	15.42	14.82	14.33	---	---	11.82	12.82
19	14.97	15.56	15.73	---	---	15.39	14.79	14.26	---	---	11.82	12.85
20	14.99	15.58	15.73	---	---	15.35	14.80	14.19	---	---	11.86	12.88
21	15.02	15.59	15.73	---	15.88	15.32	14.78	14.16	---	---	11.89	12.92
22	15.04	15.60	15.73	---	15.87	15.36	14.92	14.12	---	13.35	11.90	12.97
23	15.06	15.62	15.73	---	15.86	15.36	14.90	14.06	---	13.33	11.93	13.01
24	15.08	15.63	15.78	---	15.85	15.32	15.10	13.99	---	13.32	11.96	13.05
25	15.09	15.64	15.80	---	15.84	15.27	15.08	13.94	---	13.18	11.96	13.07
26	15.11	15.65	15.80	---	15.83	15.21	15.02	13.89	---	13.07	11.99	13.10
27	15.13	15.65	15.81	---	15.82	15.16	14.95	13.84	---	13.00	12.00	13.14
28	15.15	15.66	---	---	15.81	15.12	14.92	13.80	---	12.90	12.06	13.19
29	15.17	15.66	---	---	15.82	15.09	14.91	13.76	---	12.77	12.09	13.22
30	15.19	15.67	---	---	---	15.05	14.90	13.74	---	12.68	12.10	13.25
31	15.21	---	---	---	---	15.00	---	13.71	---	12.63	12.15	---
MAX	15.21	15.67	15.81	---	15.88	15.81	15.10	15.24	13.67	13.35	12.54	13.25

CAL YR 1991 LOW 15.81

WTR YR 1992 LOW 15.88

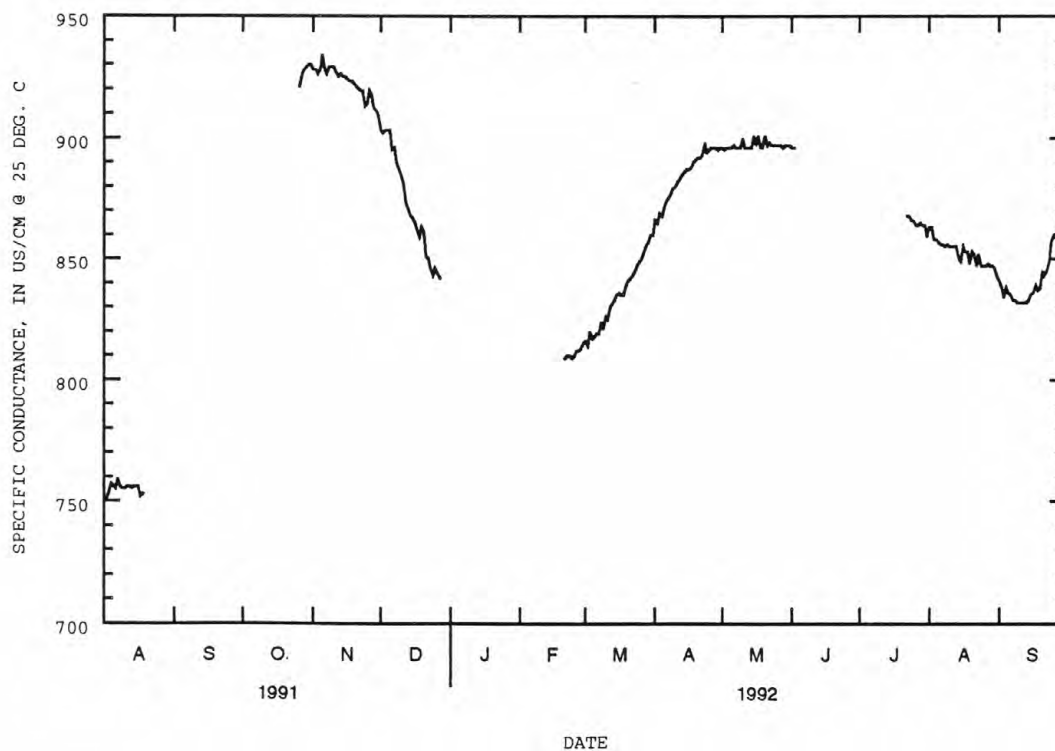


GROUND-WATER, SURFACE-WATER, AND SUBSURFACE SEDIMENT DATA FOR THE MANAGEMENT SYSTEMS 399
EVALUATION AREA IN PIKE COUNTY

390239083015120. Local number, PI-224-WT NR PIKETON OH

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	928	903	---	---	816	866	896	896	---	863	841
2	---	928	902	---	---	814	865	895	896	---	863	838
3	---	926	903	---	---	820	869	896	---	---	858	834
4	---	928	903	---	---	817	868	896	---	---	858	838
5	---	934	903	---	---	818	872	896	---	---	857	836
6	---	928	895	---	---	819	874	897	---	---	856	835
7	---	926	896	---	---	819	875	896	---	---	856	833
8	---	929	890	---	---	824	877	896	---	---	855	833
9	---	929	887	---	---	821	879	896	---	---	856	832
10	---	929	884	---	---	826	880	900	---	---	855	832
11	---	927	881	---	---	825	882	896	---	---	855	832
12	---	925	873	---	---	830	883	896	---	---	855	832
13	---	926	871	---	---	832	885	896	---	---	855	832
14	---	925	868	---	---	833	886	896	---	---	850	833
15	---	925	867	---	---	835	887	901	---	---	849	835
16	---	924	865	---	---	836	887	897	---	---	855	836
17	---	923	862	---	---	835	888	901	---	---	853	839
18	---	923	859	---	---	835	890	896	---	---	853	837
19	---	922	863	---	---	839	891	896	---	---	848	838
20	---	921	861	---	---	841	892	901	---	---	853	845
21	---	920	851	---	809	842	892	897	---	---	852	843
22	---	919	850	---	810	843	893	898	---	868	847	845
23	---	919	846	---	810	845	898	897	---	868	852	849
24	---	913	843	---	809	847	894	897	---	866	847	857
25	---	914	846	---	810	849	895	897	---	866	847	860
26	921	919	844	---	812	850	896	897	---	864	847	859
27	926	917	842	---	812	853	896	897	---	864	848	864
28	928	912	---	---	813	856	896	896	---	865	847	869
29	929	911	---	---	815	857	895	897	---	864	847	867
30	930	909	---	---	---	860	896	897	---	864	846	870
31	930	---	---	---	---	860	---	897	---	859	843	---
MAX	930	934	903	---	815	860	898	901	896	868	863	870
CAL YR 1991 MAX 934 WTR YR 1992 MAX 934												

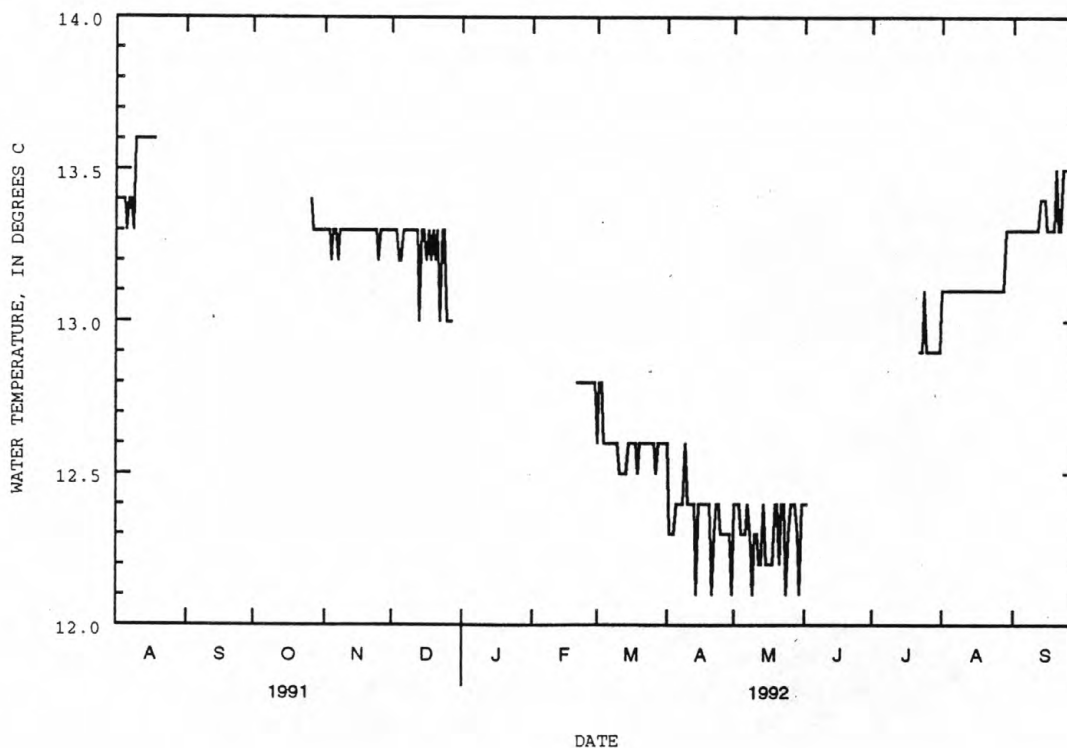


400 GROUND-WATER, SURFACE-WATER, AND SUBSURFACE SEDIMENT DATA FOR THE MANAGEMENT SYSTEMS
EVALUATION AREA IN PIKE COUNTY

390239083015120. Local number, PI-224-WT NR PIKETON OH

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	13.3	13.3	---	---	12.6	12.6	12.4	12.4	---	13.1	13.3
2	---	13.3	13.3	---	---	12.8	12.3	12.4	12.4	---	13.1	13.3
3	---	13.3	13.3	---	---	12.8	12.3	12.4	---	---	13.1	13.3
4	---	13.2	13.2	---	---	12.6	12.3	12.3	---	---	13.1	13.3
5	---	13.3	13.2	---	---	12.6	12.4	12.3	---	---	13.1	13.3
6	---	13.3	13.3	---	---	12.6	12.4	12.3	---	---	13.1	13.3
7	---	13.2	13.3	---	---	12.6	12.4	12.4	---	---	13.1	13.3
8	---	13.3	13.3	---	---	12.6	12.4	12.3	---	---	13.1	13.3
9	---	13.3	13.3	---	---	12.6	12.6	12.1	---	---	13.1	13.3
10	---	13.3	13.3	---	---	12.6	12.4	12.3	---	---	13.1	13.3
11	---	13.3	13.3	---	---	12.5	12.4	12.3	---	---	13.1	13.3
12	---	13.3	13.3	---	---	12.5	12.4	12.2	---	---	13.1	13.3
13	---	13.3	13.0	---	---	12.5	12.4	12.2	---	---	13.1	13.4
14	---	13.3	13.3	---	---	12.5	12.1	12.4	---	---	13.1	13.4
15	---	13.3	13.3	---	---	12.6	12.4	12.2	---	---	13.1	13.4
16	---	13.3	13.2	---	---	12.6	12.4	12.2	---	---	13.1	13.3
17	---	13.3	13.3	---	---	12.6	12.4	12.2	---	---	13.1	13.3
18	---	13.3	13.2	---	---	12.6	12.4	12.2	---	---	13.1	13.3
19	---	13.3	13.3	---	---	12.5	12.4	12.4	---	---	13.1	13.3
20	---	13.3	13.2	---	---	12.6	12.4	12.4	---	---	13.1	13.5
21	---	13.3	13.3	---	12.8	12.6	12.1	12.2	---	---	13.1	13.3
22	---	13.3	13.0	---	12.8	12.6	12.3	12.4	---	12.9	13.1	13.3
23	---	13.3	13.3	---	12.8	12.6	12.4	12.4	---	12.9	13.1	13.5
24	---	13.3	13.3	---	12.8	12.6	12.4	12.1	---	13.1	13.1	13.5
25	---	13.2	13.0	---	12.8	12.6	12.3	12.3	---	12.9	13.1	13.5
26	13.4	13.3	13.0	---	12.8	12.6	12.3	12.4	---	12.9	13.1	13.5
27	13.3	13.3	13.0	---	12.8	12.5	12.3	12.4	---	12.9	13.1	13.3
28	13.3	13.3	---	---	12.8	12.6	12.3	12.4	---	12.9	13.1	13.5
29	13.3	13.3	---	---	12.8	12.6	12.3	12.3	---	12.9	13.3	13.5
30	13.3	13.3	---	---	---	12.6	12.1	12.1	---	12.9	13.3	13.5
31	13.3	---	---	---	---	12.6	---	12.4	---	12.9	13.3	---
MAX	13.4	13.3	13.3	---	12.8	12.8	12.6	12.4	12.4	13.1	13.3	13.5
CAL YR 1991	MAX	13.6										
WTR YR 1992	MAX	13.5										



**GROUND-WATER, SURFACE-WATER, AND SUBSURFACE SEDIMENT DATA FOR THE MANAGEMENT SYSTEMS 401
EVALUATION AREA IN PIKE COUNTY**

Ground-Water Records--Continued

390241083020520. Local number, PI-245-WT NR PIKETON OH. Cooperator number, S5-WT.

LOCATION.--Lat 39°02'41", long 83°02'05", Hydrologic Unit 05060002, at Van Meter Farm, 1.4 miles southwest of Piketon, Ohio.

Owner: The Ohio State University.

AQUIFER.--Sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Test well installed by cable tool drilling method, diameter 6.0 in., depth 36 ft. below land-surface datum.

INSTRUMENTATION.--Electronic datalogger--60 minute recording interval. Also collected: water temperature and specific conductance. Conductivity/water temperature probe set approximately 2 ft. below the water table.

DATUM.--Elevation of land-surface datum is 550.03 ft. above National GVD of 1929. Measuring point: Top of PVC casing, 2.90 ft. above land-surface datum.

PERIOD OF RECORD.--August 1, 1991 to current year.

EXTREMES FOR PERIOD OF RECORD.--

WATER LEVEL: Maximum daily low, 17.12 ft. below land-surface datum, January 17-19, February 16-25, 1992; minimum daily low, 12.55 ft. below land-surface datum, August 11 and 13, 1992.

SPECIFIC CONDUCTANCE: Maximum, 850 microsiemens per centimeter, June 22-24, 1992; minimum, 586 microsiemens per centimeter, October 24, 1991.

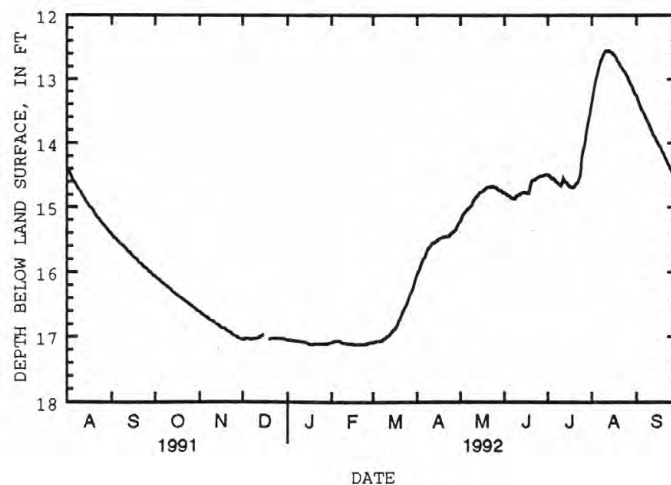
WATER TEMPERATURE: Maximum, 16.°C, October 18 and 24, 1991; minimum, 12.0°C, all of May and June, 1992.

REMARKS.--Declining specific conductance values in October, 1991 were caused by a decline in water table elevation to the level of the specific conductance/temperature probe. The probe was lowered 2 ft. at the end of October, 1991.

**DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MAXIMUM VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16.07	16.61	17.05	17.05	17.09	17.09	16.03	15.21	14.78	14.49	13.38	13.27
2	16.08	16.63	17.05	17.05	17.08	17.08	15.97	15.16	14.79	14.50	13.25	13.32
3	16.11	16.65	17.03	17.05	17.07	17.08	15.92	15.12	14.81	14.53	13.11	13.38
4	16.12	16.66	17.02	17.06	17.07	17.07	15.86	15.09	14.81	14.55	12.99	13.43
5	16.15	16.68	17.03	17.06	17.07	17.07	15.81	15.05	14.83	14.54	12.91	13.48
6	16.16	16.69	17.04	17.07	17.07	17.07	15.77	15.03	14.85	14.58	12.83	13.53
7	16.18	16.71	17.04	17.07	17.07	17.07	15.72	15.01	14.86	14.60	12.74	13.57
8	16.20	16.73	17.04	17.07	17.09	17.04	15.67	14.99	14.86	14.61	12.67	13.62
9	16.21	16.74	17.03	17.07	17.10	17.03	15.63	14.96	14.83	14.64	12.62	13.66
10	16.23	16.75	17.03	17.08	17.10	17.01	15.60	14.90	14.81	14.66	12.58	13.71
11	16.25	16.77	17.02	17.08	17.10	17.00	15.56	14.87	14.80	14.62	12.55	13.77
12	16.27	16.79	17.01	17.08	17.11	16.97	15.55	14.84	14.79	14.55	12.56	13.81
13	16.30	16.80	17.00	17.08	17.11	16.95	15.55	14.82	14.77	14.59	12.55	13.87
14	16.31	16.82	16.99	17.09	17.11	16.93	15.52	14.78	14.76	14.61	12.57	13.91
15	16.33	16.83	16.98	17.10	17.11	16.90	15.51	14.76	14.76	14.64	12.58	13.96
16	16.35	16.85	---	17.11	17.12	16.88	15.49	14.75	14.77	14.66	12.61	13.99
17	16.37	16.86	---	17.12	17.12	16.85	15.48	14.73	14.77	14.68	12.63	14.03
18	16.38	16.87	---	17.12	17.12	16.82	15.47	14.71	14.77	14.69	12.66	14.07
19	16.40	16.88	---	17.12	17.12	16.77	15.46	14.69	14.63	14.68	12.71	14.13
20	16.42	16.90	17.04	17.11	17.12	16.72	15.46	14.68	14.58	14.66	12.75	14.16
21	16.43	16.91	17.03	17.11	17.12	16.65	15.45	14.68	14.57	14.63	12.79	14.21
22	16.45	16.93	17.03	17.11	17.12	16.60	15.45	14.67	14.57	14.60	12.82	14.27
23	16.46	16.94	17.02	17.11	17.12	16.56	15.44	14.66	14.55	14.54	12.85	14.32
24	16.48	16.96	17.02	17.11	17.12	16.51	15.42	14.68	14.53	14.49	12.89	14.35
25	16.50	16.97	17.03	17.11	17.12	16.46	15.40	14.68	14.52	14.22	12.93	14.40
26	16.51	16.99	17.02	17.11	17.10	16.40	15.38	14.69	14.51	14.12	12.97	14.44
27	16.53	17.00	17.03	17.11	17.10	16.34	15.36	14.71	14.51	14.01	13.01	14.49
28	16.55	17.01	17.03	17.11	17.09	16.29	15.33	14.73	14.50	13.86	13.07	14.53
29	16.57	17.02	17.03	17.11	17.09	16.23	15.29	14.73	14.49	13.74	13.12	14.57
30	16.58	17.04	17.04	17.10	---	16.16	15.25	14.75	14.48	13.61	13.17	14.61
31	16.60	---	17.05	17.09	---	16.09	---	14.77	---	13.48	13.23	---
MAX	16.60	17.04	17.05	17.12	17.12	17.09	16.03	15.21	14.86	14.69	13.38	14.61

CAL YR 1991 LOW 17.05
WTR YR 1992 LOW 17.12



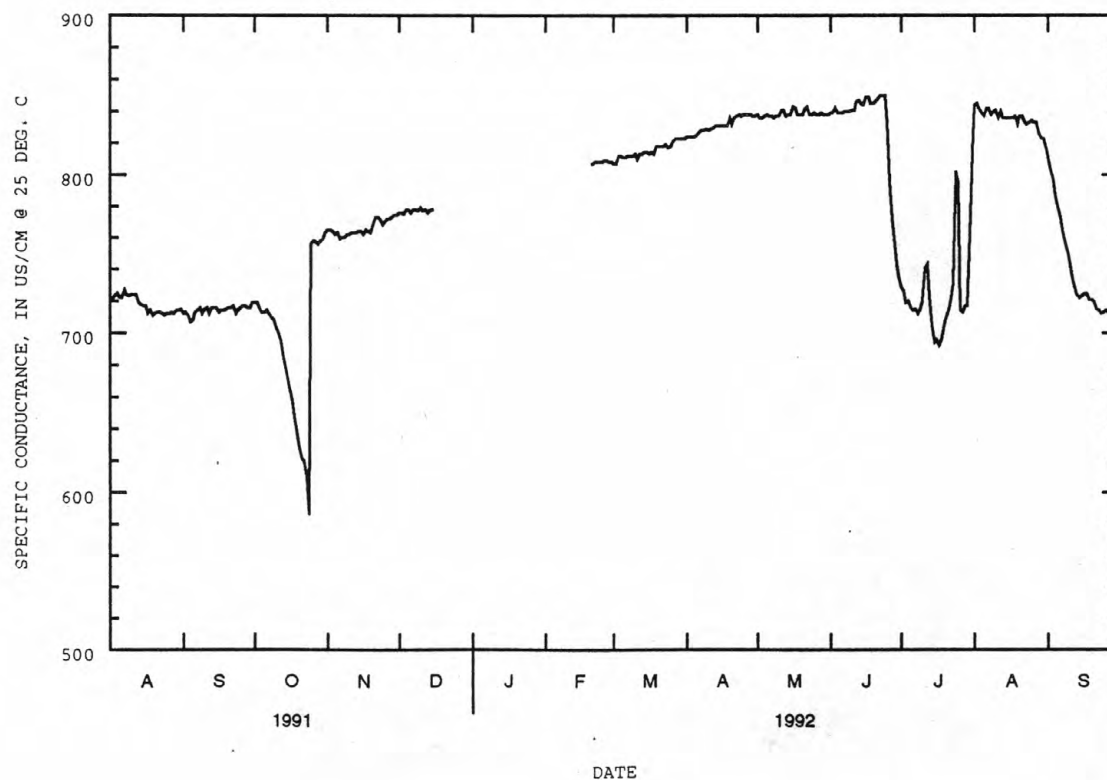
402 GROUND-WATER, SURFACE-WATER, AND SUBSURFACE SEDIMENT DATA FOR THE MANAGEMENT SYSTEMS
EVALUATION AREA IN PIKE COUNTY

390241083020520. Local number, PI-245-WT NR PIKETON OH

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	719	765	776	---	---	807	824	838	839	729	844	811
2	719	765	776	---	---	807	824	836	839	726	845	803
3	715	764	775	---	---	812	824	836	842	719	842	797
4	713	762	778	---	---	812	824	837	839	720	839	787
5	713	763	778	---	---	811	825	838	839	716	837	779
6	714	759	776	---	---	811	827	837	839	714	842	773
7	712	760	778	---	---	812	828	837	840	715	842	765
8	710	760	778	---	---	812	828	836	840	712	838	757
9	708	762	777	---	---	812	829	837	840	715	840	751
10	704	762	779	---	---	813	828	837	841	720	841	745
11	700	763	777	---	---	810	829	841	841	741	836	735
12	695	763	778	---	---	813	830	841	846	743	840	728
13	687	763	776	---	---	813	831	837	847	723	836	724
14	679	764	777	---	---	814	831	838	844	705	836	722
15	673	764	778	---	---	814	831	838	844	694	836	723
16	665	762	---	---	---	813	831	843	849	696	836	725
17	658	765	---	---	---	814	831	842	849	692	836	725
18	648	764	---	---	---	813	831	838	845	696	837	721
19	638	763	---	---	---	818	836	838	845	705	832	721
20	628	768	---	---	---	818	832	838	846	710	837	720
21	621	773	---	---	807	818	836	842	848	714	837	715
22	620	773	---	---	808	818	837	843	850	722	833	714
23	610	772	---	---	808	819	838	838	850	731	832	712
24	586	768	---	---	808	817	837	838	850	802	833	713
25	756	770	---	---	808	818	838	839	833	795	834	714
26	758	772	---	---	809	821	838	838	796	714	833	713
27	757	772	---	---	809	823	838	838	772	713	833	711
28	756	773	---	---	808	823	838	839	760	717	826	711
29	758	774	---	---	808	823	837	838	743	717	823	707
30	759	774	---	---	---	823	837	838	736	762	823	711
31	763	---	---	---	---	823	---	838	---	814	817	---
MAX	763	774	779	---	809	823	838	843	850	814	845	811

CAL YR 1991 MAX 779
WTR YR 1992 MAX 850

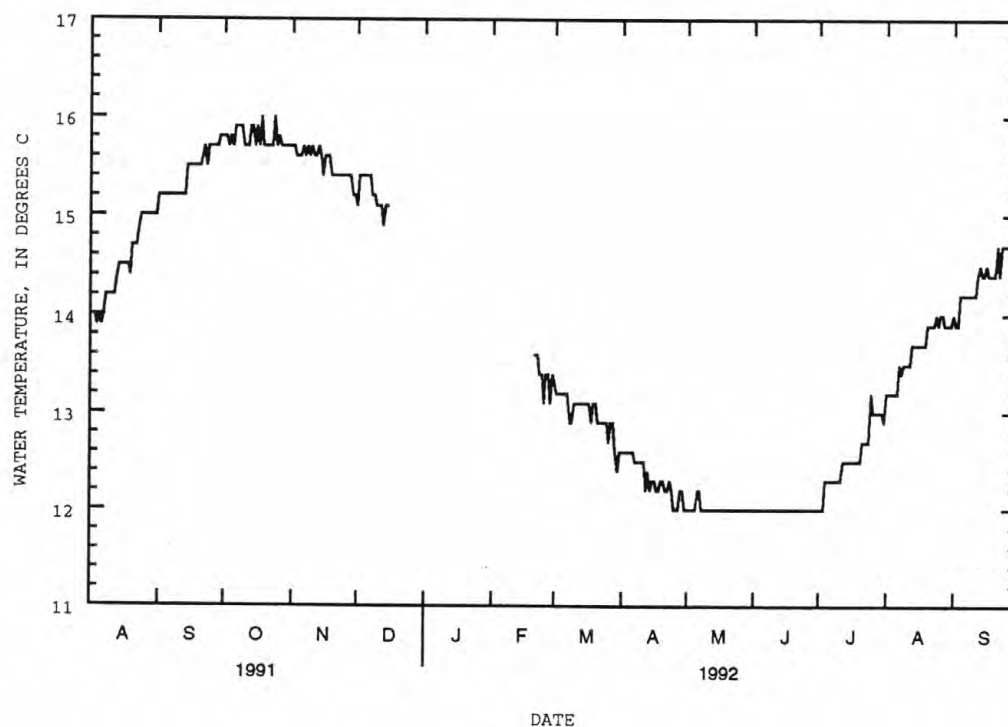


GROUND-WATER, SURFACE-WATER, AND SUBSURFACE SEDIMENT DATA FOR THE MANAGEMENT SYSTEMS EVALUATION AREA IN PIKE COUNTY 403

390241083020520. Local number, PI-245-WT NR PIKETON OH

**WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MAXIMUM VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15.8	15.7	15.1	---	---	13.3	12.6	12.0	12.0	12.0	13.2	14.0
2	15.8	15.7	15.4	---	---	13.2	12.6	12.0	12.0	12.0	13.2	13.9
3	15.7	15.6	15.4	---	---	13.2	12.6	12.0	12.0	12.0	13.2	13.9
4	15.8	15.6	15.4	---	---	13.2	12.6	12.0	12.0	12.3	13.2	14.2
5	15.7	15.6	15.4	---	---	13.2	12.6	12.0	12.0	12.3	13.2	14.2
6	15.9	15.7	15.4	---	---	13.2	12.6	12.2	12.0	12.3	13.2	14.2
7	15.9	15.6	15.4	---	---	13.2	12.5	12.2	12.0	12.3	13.5	14.2
8	15.9	15.7	15.2	---	---	12.9	12.5	12.0	12.0	12.3	13.4	14.2
9	15.9	15.6	15.2	---	---	12.9	12.5	12.0	12.0	12.3	13.5	14.2
10	15.7	15.7	15.1	---	---	13.1	12.5	12.0	12.0	12.3	13.5	14.2
11	15.7	15.6	15.1	---	---	13.1	12.5	12.0	12.0	12.3	13.5	14.2
12	15.7	15.6	15.1	---	---	13.1	12.2	12.0	12.0	12.5	13.5	14.4
13	15.9	15.7	14.9	---	---	13.1	12.4	12.0	12.0	12.5	13.7	14.5
14	15.9	15.6	15.1	---	---	13.1	12.2	12.0	12.0	12.5	13.7	14.4
15	15.7	15.4	15.1	---	---	13.1	12.3	12.0	12.0	12.5	13.7	14.4
16	15.9	15.6	---	---	---	13.1	12.3	12.0	12.0	12.5	13.7	14.5
17	15.7	15.6	---	---	---	13.1	12.2	12.0	12.0	12.5	13.7	14.4
18	16.0	15.6	---	---	---	12.9	12.2	12.0	12.0	12.5	13.7	14.4
19	15.7	15.4	---	---	---	13.1	12.3	12.0	12.0	12.5	13.7	14.4
20	15.7	15.4	---	---	---	13.1	12.3	12.0	12.0	12.5	13.9	14.4
21	15.7	15.4	---	---	13.6	12.9	12.2	12.0	12.0	12.7	13.9	14.7
22	15.7	15.4	---	---	13.6	12.9	12.2	12.0	12.0	12.7	13.9	14.4
23	15.7	15.4	---	---	13.4	12.9	12.3	12.0	12.0	12.7	13.9	14.7
24	16.0	15.4	---	---	13.4	12.9	12.2	12.0	12.0	12.7	14.0	14.7
25	15.7	15.4	---	---	13.1	12.9	12.0	12.0	12.0	13.2	13.9	14.7
26	15.8	15.4	---	---	13.4	12.7	12.0	12.0	12.0	13.0	14.0	14.7
27	15.7	15.4	---	---	13.4	12.9	12.0	12.0	12.0	13.0	14.0	14.7
28	15.7	15.4	---	---	13.1	12.9	12.2	12.0	12.0	13.0	13.9	14.7
29	15.7	15.2	---	---	13.4	12.6	12.2	12.0	12.0	13.0	13.9	14.7
30	15.7	15.2	---	---	---	12.4	12.0	12.0	12.0	13.0	13.9	14.9
31	15.7	---	---	---	---	12.6	---	12.0	---	12.9	13.9	---
MAX	16.0	15.7	15.4	---	13.6	13.3	12.6	12.2	12.0	13.2	14.0	14.9
CAL YR 1991	MAX 16.0											
WTR YR 1992	MAX 16.0											



GROUND-WATER, SURFACE-WATER, AND SUBSURFACE SEDIMENT DATA FOR THE MANAGEMENT SYSTEMS 219
EVALUATION AREA IN PIKE COUNTY

Ground-Water Records--Continued

390244083023020. Local number, PI-227-WT NR PIKETON OH. Cooperator number, R3-WT.

LOCATION.--Lat 39°02'44", long 83°02'30", Hydrologic Unit 0506002, at Van Meter Farm, 1.6 miles southwest of Piketon, Ohio.

Owner: The Ohio State University.

AQUIFER.--Sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Test well installed by cable tool drilling method, diameter 6.0 in., depth 31 ft. below land-surface datum.

INSTRUMENTATION.--Electronic datalogger--60 minute recording interval.

DATUM.--Elevation of land-surface datum is 548.56 ft. above National GVD of 1929. Measuring point: top of PVC casing, 7.60 ft. above land-surface datum.

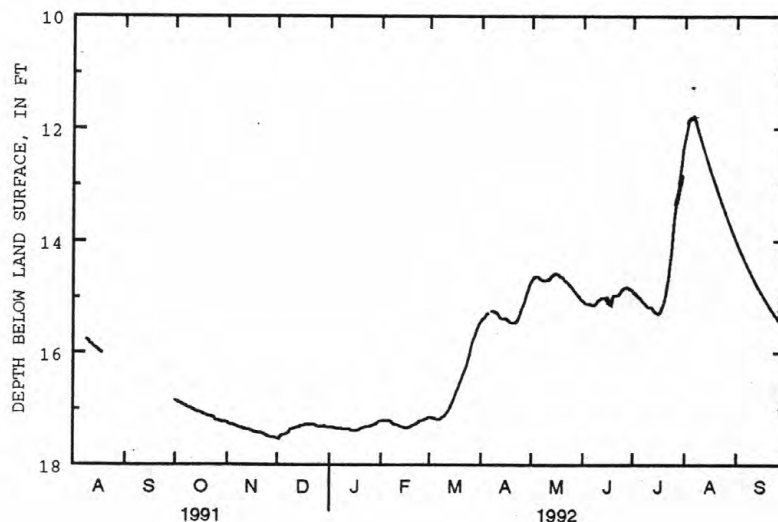
PERIOD OF RECORD.--August 8, 1991 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 17.54 ft. below land-surface datum, December 2, 1991; minimum daily low, 11.82 ft. below land-surface datum, August 5 and 6, 1992.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16.85	17.24	17.53	17.32	17.20	17.15	15.42	14.72	15.08	14.90	12.20	13.90
2	16.86	17.26	17.54	17.32	17.20	17.15	15.39	14.66	15.10	14.93	12.03	13.95
3	16.88	17.27	17.49	17.32	17.20	17.16	15.36	14.64	15.12	14.96	11.91	14.02
4	16.89	17.28	17.46	17.33	17.20	17.16	15.31	14.64	15.12	14.99	11.83	14.08
5	16.91	17.29	17.46	17.34	17.20	17.18	15.29	14.64	15.12	15.01	11.82	14.13
6	16.93	17.30	17.45	17.34	17.21	17.18	15.28	14.68	15.14	15.05	11.82	14.19
7	16.94	17.31	17.44	17.34	17.22	17.18	15.25	14.69	15.14	15.09	11.84	14.25
8	16.96	17.32	17.41	17.34	17.25	17.16	15.25	14.70	15.14	15.11	11.89	14.31
9	16.97	17.33	17.36	17.35	17.27	17.14	15.26	14.70	15.09	15.15	11.97	14.36
10	16.98	17.33	17.35	17.35	17.28	17.11	15.28	14.69	15.06	15.18	12.02	14.44
11	17.00	17.35	17.34	17.36	17.29	17.08	15.30	14.69	15.04	15.17	12.11	14.50
12	17.01	17.36	17.33	17.36	17.30	17.03	15.36	14.66	15.02	15.17	12.20	14.56
13	17.03	17.37	17.32	17.36	17.31	16.98	15.37	14.62	15.01	15.22	12.27	14.60
14	17.04	17.37	17.32	17.38	17.32	16.92	15.38	14.60	15.01	15.26	12.35	14.66
15	17.05	17.38	17.30	17.38	17.33	16.85	15.37	14.58	15.08	15.28	12.43	14.72
16	17.06	17.39	17.30	17.39	17.33	16.78	15.39	14.59	15.11	15.29	12.52	14.78
17	17.08	17.40	17.29	17.38	17.33	16.69	15.42	14.60	15.13	15.27	12.61	14.84
18	17.09	17.41	17.28	17.38	17.32	16.62	15.44	14.63	15.14	15.22	12.71	14.89
19	17.10	17.41	17.28	17.37	17.30	16.54	15.45	14.64	14.97	15.13	12.80	14.94
20	17.11	17.42	17.28	17.34	17.29	16.45	15.46	14.68	14.97	15.02	12.88	14.98
21	17.12	17.43	17.27	17.33	17.27	16.39	15.45	14.71	14.97	14.87	12.96	15.02
22	17.13	17.44	17.27	17.32	17.26	16.32	15.43	14.73	14.96	14.68	13.04	15.09
23	17.14	17.45	17.28	17.31	17.24	16.22	15.39	14.76	14.93	14.45	13.13	15.14
24	17.15	17.46	17.30	17.31	17.21	16.13	15.30	14.80	14.88	14.20	13.22	15.19
25	17.19	17.48	17.31	17.31	17.21	16.01	15.22	14.83	14.85	13.76	13.31	15.23
26	17.19	17.49	17.31	17.30	17.19	15.88	15.14	14.87	14.83	13.53	13.39	15.27
27	17.21	17.50	17.31	17.29	17.18	15.77	15.05	14.91	14.82	13.29	13.47	15.32
28	17.22	17.51	17.31	17.27	17.17	15.68	14.95	14.95	14.83	13.04	13.58	15.36
29	17.23	17.51	17.30	17.26	17.15	15.60	14.86	14.98	14.85	12.85	13.67	15.40
30	17.23	17.52	17.32	17.24	---	15.52	14.77	15.01	14.87	12.62	13.76	15.43
31	17.23	---	17.32	17.22	---	15.47	---	15.05	---	12.37	13.84	---
MAX	17.23	17.52	17.54	17.39	17.33	17.18	15.46	15.05	15.14	15.29	13.84	15.43

CAL YR 1991 LOW 17.54
WTR YR 1992 LOW 17.54



**GROUND-WATER, SURFACE-WATER, AND SUBSURFACE SEDIMENT DATA FOR THE MANAGEMENT SYSTEMS 405
EVALUATION AREA IN PIKE COUNTY**

Ground-Water-Quality Data

In the following water-quality tables, the depth of water below land surface was not actually measured in the multiport wells, but was calculated from an instrumented observation well located approximately 5 ft. away from the sampled multiport well. Therefore, the water levels do not accurately reflect vertical gradients that may be present, and are intended for comparison between sampling rounds only. For wells completed in the Ohio Shale, water levels were measured in the monitoring well at the time of sampling.

390156083014311. Local number, PI-241-MP1 NR PIKETON OH. Cooperator number, R8--MP1.

HYDROLOGIC UNIT.--05060002.

OWNER.--The Ohio State University.

AQUIFER.--Sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Multiport monitoring well installed by cable tool drilling method, diameter 2.5 in., port depth 28.56 ft. below land surface datum.

DATUM.--Elevation of land surface datum is 553.02 ft. above National GVD of 1929. Measuring point: Top of tubing 3.00 ft. above land surface datum.

PERIOD OF RECORD.--April 1991 to current water year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (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)	ALKA- LITY WAT WH TOT FET FIELD MG/L AS CACO3	SULFATE DIS- SOLVED (MG/L AS SO4)
NOV 06...	18.02	627	7.4	13.5	0.5	77	26	20	2.9	270	73
DATE	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	
NOV 06...	30	9.0	378	<0.01	1.3	0.03	<0.01	<0.01	<10	--	
DATE	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	ALA- CHLOR (LASSO) WATER DISSOLV (UG/L)	AMETRYN WATER, DISS, REC, (UG/L)	ATRA- ZINE, WATER, DISS, REC, (UG/L)	METO- LACHLOR WATER DISSOLV (UG/L)	METRI- BUZIN (SENCOR) WATER DISSOLV (UG/L)	PROP- AZINE WATER DISSOLV REC (UG/L)	
NOV 06...	150	150	1.3	0.8	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	
DATE	CYANA- ZINE, WATER, DISS, REC, (UG/L)	DES- ETHYL- ATRA- ZINE, DISS, (UG/L)	DESISO- PROPYL- ATRA- ZINE, DISS, (UG/L)	PROME- TON, WATER, DISS, REC, (UG/L)	PROME- TRYN, WATER, DISS, REC, (UG/L)	SIMA- ZINE, WATER, DISS, REC, (UG/L)					
NOV 06...	<0.20	<0.05	<0.05	<0.05	<0.05	<0.05					

**406 GROUND-WATER, SURFACE-WATER, AND SUBSURFACE SEDIMENT DATA FOR THE MANAGEMENT SYSTEMS
EVALUATION AREA IN PIKE COUNTY**

Ground-Water-Quality Data--Continued

390156083014313. Local number, PI-241-MP3 NR PIKETON OH. Cooperator number, R8-MP3.
HYDROLOGIC UNIT.--05060002.
OWNER.--The Ohio State University.
AQUIFER.--Sand and gravel of Pleistocene age.
WELL CHARACTERISTICS.--Multiport monitoring well installed by cable tool drilling method, diameter 2.5 in., port
depth 19.52 ft. below land surface datum.
DATUM.--Elevation of land surface datum is 553.02 ft. above National GVD of 1929. Measuring point: Top of tubing
3.01 ft. above land surface datum.
PERIOD OF RECORD.--June 1991 to current water year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (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)	ALKA- LINITY WAT WH TOT FET FIELD MG/L AS CACO3	SULFATE DIS- SOLVED (MG/L AS SO4)
NOV 06...	18.02	606	7.4	14.0	0.8	70	26	19	2.9	210	94
DATE	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	
NOV 06...	38	8.7	362	<0.01	0.27	0.03	<0.01	<0.01	10	6	
DATE	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	ALA- CHLOR (LASSO) WATER DISSOLV (UG/L)	AMETRYN WATER, DISS, REC, (UG/L)	ATRA- ZINE, WATER, DISS, REC, (UG/L)	METO- LACHLOR WATER DISSOLV (UG/L)	METRI- BUZIN (SENCOR) WATER DISSOLV (UG/L)	PROP- AZINE WATER DISSOLV REC (UG/L)	
NOV 06...	<10	<1	1.1	0.7	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	
DATE	CYANA- ZINE, WATER, DISS, REC, (UG/L)	DES- ETHYL- ATRA- ZINE, DISS, (UG/L)	DESISO- PROPYL- ATRA- ZINE, DISS, (UG/L)	PROME- TON, WATER, DISS, REC, (UG/L)	PROME- TRYN, WATER, DISS, REC, (UG/L)	SIMA- ZINE, WATER, DISS, REC, (UG/L)					
NOV 06...	<0.20	<0.05	0.1	<0.05	<0.05	.12					

**GROUND-WATER, SURFACE-WATER, AND SUBSURFACE SEDIMENT DATA FOR THE MANAGEMENT SYSTEMS 407
EVALUATION AREA IN PIKE COUNTY**

Ground-Water-Quality Data--Continued

390156083022830. Local number, PI-240-BR NR PIKETON OH. Cooperator number, R7-BR.

HYDROLOGIC UNIT.--05060002.

OWNER.--The Ohio State University.

AQUIFER.--Ohio Shale.

WELL CHARACTERISTICS.--Monitoring well installed by cable tool drilling method, diameter 4.0 in., total depth 81.25 ft. below land surface datum.

DATUM.--Elevation of land surface datum is 544.80 ft. above National GVD of 1929. Measuring point: Top of PVC casing 8.36 ft. above land surface datum.

PERIOD OF RECORD.--June 1991 to current water year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (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)	ALKA- LITY WAT WH TOT FET FIELD MG/L AS CACO3	SULFATE DIS- SOLVED (MG/L AS SO4)
NOV 13...	25.97	2210	7.7	13.0	--	150	42	210	17	190	2.6
DATE	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	
NOV 13...	550	10	1300	<0.01	<0.05	2.0	<0.01	<0.01	330	270	
DATE	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	ALA- CHLOR (LASSO) WATER, DISSOLV (UG/L)	AMETRYN WATER, DISS, REC, (UG/L)	ATRA- ZINE, WATER, DISS, REC (UG/L)	METO- LACHLOR WATER, DISSOLV (UG/L)	METRI- BUZIN (SENCOR) WATER DISSOLV (UG/L)	PROP- AZINE WATER DISSOLV REC (UG/L)	
NOV 13...	710	660	1.6	1.0	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	
DATE	CYANA- ZINE, WATER, DISS, REC, (UG/L)	DES- ETHYL- ATRA- ZINE, DISS, (UG/L)	DESISO- PROPYL- ATRA- ZINE, DISS, (UG/L)	PROME- TON, WATER, DISS, REC, (UG/L)	PROME- TRYN, WATER, DISS, REC, (UG/L)	SIMA- ZINE, WATER, DISS, REC, (UG/L)					
NOV 13...	<0.20	<0.05	<0.05	<0.05	<0.05	<0.05					

**408 GROUND-WATER, SURFACE-WATER, AND SUBSURFACE SEDIMENT DATA FOR THE MANAGEMENT SYSTEMS
EVALUATION AREA IN PIKE COUNTY**

Ground-Water-Quality Data--Continued

390156083022811. Local number, PI-238-MP1 NR PIKETON OH. Cooperator number, R7-MP1.

HYDROLOGIC UNIT.--05060002.

OWNER.--The Ohio State University.

AQUIFER.--Sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Multiport monitoring well installed by cable tool drilling method, diameter 2.5 in., port depth 62.14 ft. below land surface datum.

DATUM.--Elevation of land surface datum is 544.74 ft. above National GVD of 1929. Measuring point: Top of tubing 10.72 ft. above land surface datum.

PERIOD OF RECORD.--April 1991 to current water year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (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)	ALKA- LITY WAT WH TOT FET FIELD MG/L AS CACO3	SULFATE DIS- SOLVED (MG/L AS SO4)
NOV 14...	18.47	806	7.3	13.0	0.0	110	30	13	2.5	370	79
DATE	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	
NOV 14...	67	11	492	<0.01	<0.05	0.10	<0.01	<0.01	5300	5500	
DATE	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	ALA- CHLOR (LASSO) WATER DISSOLV (UG/L)	AMETRYN WATER, DISS, REC, (UG/L)	ATRA- ZINE, WATER, DISS, REC, (UG/L)	METO- LACHLOR WATER DISSOLV (UG/L)	METRI- BUZIN (SENCOR) WATER DISSOLV (UG/L)	PROP- AZINE WATER DISSOLV (UG/L)	
NOV 14...	380	390	0.9	1.0	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	
DATE	CYANA- ZINE, WATER, DISS, REC, (UG/L)	DES- ETHYL- ATRA- ZINE, DISS, (UG/L)	DESISO- PROPYL- ATRA- ZINE, DISS, (UG/L)	PROME- TON, WATER, DISS, REC, (UG/L)	PROME- TRYN, WATER, DISS, REC, (UG/L)	SIMA- ZINE, WATER, DISS, REC, (UG/L)					
NOV 14...	<0.20	<0.05	<0.05	<0.05	<0.05	<0.05					

**GROUND-WATER, SURFACE-WATER, AND SUBSURFACE SEDIMENT DATA FOR THE MANAGEMENT SYSTEMS 409
EVALUATION AREA IN PIKE COUNTY**

Ground-Water-Quality Data--Continued

390156083022812. Local number, PI-238-MP2 NR PIKETON OH. Cooperator number, R7-MF2.
HYDROLOGIC UNIT.--05060002.
OWNER.--The Ohio State University.
AQUIFER.--Sand and gravel of Pleistocene age.
WELL CHARACTERISTICS.--Multiport monitoring well installed by cable tool drilling method, diameter 2.5 in., port depth 41.48 ft. below land surface datum.
DATUM.--Elevation of land surface datum is 544.74 ft. above National GVD of 1929. Measuring point: Top of tubing 10.66 ft. above land surface datum.
PERIOD OF RECORD.--April 1991 to current water year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (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)	ALKA- LINITY WAT WH TOT FET FIELD MG/L AS CACO3	SULFATE DIS- SOLVED (MG/L AS SO4)
NOV 14...	18.47	761	7.3	13.5	2.2	110	32	11	2.7	320	75
DATE	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	
NOV 14...	25	9.3	390	<0.01	0.10	0.06	<0.01	<0.01	1400	1300	
DATE	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	ALA- CHLOR (LASSO) WATER DISSOLV (UG/L)	AMETRYN WATER, DISS, REC, (UG/L)	ATRA- ZINE, WATER, DISS, REC (UG/L)	METO- LACHLOR WATER DISSOLV (UG/L)	METRI- BUZIN (SENCOR) WATER DISSOLV (UG/L)	PROP- AZINE WATER DISSOLV REC (UG/L)	
NOV 14...	600	560	1.4	1.0	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	
DATE	CYANA- ZINE, WATER, DISS, REC, (UG/L)	DES- ETHYL- ATRA- ZINE, DISS, (UG/L)	DESISO- PROPYL- ATRA- ZINE, DISS, (UG/L)	PROME- TON, WATER, DISS, REC, (UG/L)	PROME- TRYN, WATER, DISS, REC, (UG/L)	SIMA- ZINE, WATER, DISS, REC, (UG/L)					
NOV 14...	<0.20	<0.05	<0.05	<0.05	<0.05	<0.05					

410 GROUND-WATER, SURFACE-WATER, AND SUBSURFACE SEDIMENT DATA FOR THE MANAGEMENT SYSTEMS EVALUATION AREA IN PIKE COUNTY

Ground-Water-Quality Data--Continued

390156083022814. Local number, PI-238-MP4 NR PIKETON OH. Cooperator number, R7-MP4.
HYDROLOGIC UNIT.--05060002.
OWNER.--The Ohio State University.
AQUIFER.--Sand and gravel of Pleistocene age.
WELL CHARACTERISTICS.--Multiport monitoring well installed by cable tool drilling method, diameter 3.0 in., port depth 22.19 ft. below land surface datum.
DATUM.--Elevation of land surface datum is 544.74 ft. above National GVD of 1929. Measuring point: Top of tubing 10.67 ft. above land surface datum.
PERIOD OF RECORD.--June 1991 to current water year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (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)	ALKA- LINITY WAT WH TOT FET FIELD MG/L AS CACO3	SULFATE DIS- SOLVED (MG/L AS SO4)
NOV 14...	18.47	722	7.4	14.0	4.6	100	27	9.6	1.8	300	66
DATE	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	
NOV 14...	18	9.1	412	<0.01	2.9	0.03	<0.01	<0.01	20	<3	
DATE	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	ALA- CHLOR (LASSO) WATER DISSOLV (UG/L)	AMETRYN WATER, DISS, REC, (UG/L)	ATRA- ZINE, WATER, DISS, REC (UG/L)	METO- LACHLOR WATER DISSOLV (UG/L)	METRI- BUZIN (SENCOR) WATER DISSOLV (UG/L)	PROP- AZINE WATER DISSOLV REC (UG/L)	
NOV 14...	<10	<1	0.6	0.6	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	
DATE	CYANA- ZINE, WATER, DISS, REC, (UG/L)	DES- ETHYL- ATRA- ZINE, DISS, (UG/L)	DESISO- PROPYL- ATRA- ZINE, DISS, (UG/L)	PROME- TON, WATER, DISS, REC, (UG/L)	PROME- TRYN, WATER, DISS, REC, (UG/L)	SIMA- ZINE, WATER, DISS, REC, (UG/L)					
NOV 14...	<0.20	<0.05	<0.05	<0.05	<0.05	<0.05					

**GROUND-WATER, SURFACE-WATER, AND SUBSURFACE SEDIMENT DATA FOR THE MANAGEMENT SYSTEMS 411
EVALUATION AREA IN PIKE COUNTY**

Ground-Water-Quality Data--Continued

390207083024030. Local number, PI-237-BR NR PIKETON OH. Cooperator number, R6-BR.
HYDROLOGIC UNIT.--05060002.
OWNER.--The Ohio State University.
AQUIFER.--Ohio Shale.
WELL CHARACTERISTICS.--Monitoring well installed by cable tool drilling method, diameter 4.0 in., total depth 89.5 ft. below land surface datum.
DATUM.--Elevation of land surface datum is 552.79 ft. above National GVD of 1929. Measuring point: Top of PVC casing 5.92 ft. above land surface datum.
PERIOD OF RECORD.--April 1991 to current water year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (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)	ALKA- LINITY WAT WH TOT FET FIELD MG/L AS CACO3	SULFATE DIS- SOLVED (MG/L AS SO4)
NOV 13...	24.66	2280	7.4	13.5	--	120	33	260	13	230	<0.1
DATE	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	
NOV 13...	560	11	1280	<0.01	<0.05	2.2	<0.01	<0.01	410	430	
DATE	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	ALA- CHLOR (LASSO) WATER DISSOLV (UG/L)	AMETRYN WATER, DISS, REC, (UG/L)	ATRA- ZINE, WATER, DISS, REC, (UG/L)	METO- LACHLOR WATER DISSOLV (UG/L)	METRI- BUZIN (SENCOR) WATER DISSOLV (UG/L)	PROP- AZINE WATER DISSOLV REC (UG/L)	
NOV 13...	140	120	0.8	0.7	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	
DATE	CYANA- ZINE, WATER, DISS, REC, (UG/L)	DES- ETHYL- ATRA- ZINE, DISS, (UG/L)	DESISO- PROPYL- ATRA- ZINE, DISS, (UG/L)	PROME- TON, WATER, DISS, REC, (UG/L)	PROME- TRYN, WATER, DISS, REC, (UG/L)	SIMA- ZINE, WATER, DISS, REC, (UG/L)					
NOV 13...	<0.20	<0.05	<0.05	<0.05	<0.05	<0.05					

**412 GROUND-WATER, SURFACE-WATER, AND SUBSURFACE SEDIMENT DATA FOR THE MANAGEMENT SYSTEMS
EVALUATION AREA IN PIKE COUNTY**

Ground-Water-Quality Data--Continued

390207083024011. Local number, PI-235-MP1 NR PIKETON OH. Cooperator number, R6-MP1.
HYDROLOGIC UNIT.--05060002.
OWNER.--The Ohio State University.
AQUIFER.--Sand and gravel of Pleistocene age.
WELL CHARACTERISTICS.--Multiport monitoring well installed by cable tool drilling method, diameter 2.5 in., port depth 60.16 ft. below land surface datum.
DATUM.--Elevation of land surface datum is 552.68 ft. above National GVD of 1929. Measuring point: Top of tubing 7.31 ft. above land surface datum.
PERIOD OF RECORD.--April 1991 to current water year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (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)	ALKA- LINITY WAT WH TOT FET FIELD MG/L AS CACO3	SULFATE DIS- SOLVED (MG/L AS SO4)
NOV 13...	25.01	759	7.3	12.5	0.1	93	29	18	3.1	280	94
DATE	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHOPHOS- PHATE DIS- SOLVED (MG/L AS P)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	
NOV 13...	38	9.2	456	<0.01	<0.05	0.05	<0.01	<0.01	2000	1700	
DATE	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	ALA- CHLOR (LASSO) WATER, DISSOLV (UG/L)	AMETRYN WATER, DISS, REC, (UG/L)	ATRA- ZINE, WATER, DISS, REC, (UG/L)	METO- LACHLOR WATER, DISSOLV (UG/L)	METRI- BUZIN (SENCOR) WATER DISSOLV (UG/L)	PROP- AZINE WATER DISSOLV REC (UG/L)	
NOV 13...	460	480	0.6	0.6	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	
DATE	CYANA- ZINE, WATER, DISS, REC, (UG/L)	DES- ETHYL- ATRA- ZINE, DISS, (UG/L)	DESISO- PROPYL- ATRA- ZINE, DISS, (UG/L)	PROME- TON, WATER, DISS, REC, (UG/L)	PROME- TRYN, WATER, DISS, REC, (UG/L)	SIMA- ZINE, WATER, DISS, REC, (UG/L)					
NOV 13...	<0.20	<0.05	<0.05	<0.05	<0.05	<0.05					

**GROUND-WATER, SURFACE-WATER, AND SUBSURFACE SEDIMENT DATA FOR THE MANAGEMENT SYSTEMS 413
EVALUATION AREA IN PIKE COUNTY**

Ground-Water-Quality Data--Continued

390207083024012. Local number, PI-235-MP2 NR PIKETON OH. Cooperator number, R6-MP2.
HYDROLOGIC UNIT.--05060002.
OWNER.--The Ohio State University.
AQUIFER.--Sand and gravel of Pleistocene age.
WELL CHARACTERISTICS.--Multiport monitoring well installed by cable tool drilling method, diameter 2.5 in., port depth 41.72 ft. below land surface datum.
DATUM.--Elevation of land surface datum is 552.68 ft. above National GVD of 1929. Measuring point: Top of tubing 7.28 ft. above land surface datum.
PERIOD OF RECORD.--April 1991 to current water year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (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)	ALKA- LINITY WAT WH TOT FET FIELD MG/L AS CACO3	SULFATE DIS- SOLVED (MG/L AS SO4)
NOV 13...	25.02	580	7.1	12.0	3.2	91	28	7.4	1.8	290	35
DATE	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	
NOV 13...	12	8.9	406	0.01	<0.05	<0.01	0.01	<0.01	30	4	
DATE	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	ALA- CHLOR (LASSO) WATER DISSOLV (UG/L)	AMETRYN WATER, DISS, REC, (UG/L)	ATRA- ZINE, WATER, DISS, REC, (UG/L)	METO- LACHLOR WATER DISSOLV (UG/L)	METRI- BUZIN (SENCOR) WATER DISSOLV (UG/L)	PROP- AZINE WATER DISSOLV (UG/L)	
NOV 13...	<10	3	0.7	0.6	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	
DATE	CYANA- ZINE, WATER, DISS, REC, (UG/L)	DES- ETHYL- ATRA- ZINE, DISS, (UG/L)	DESISO- PROPYL- ATRA- ZINE, DISS, (UG/L)	PROME- TON, WATER, DISS, REC, (UG/L)	PROME- TRYN, WATER, DISS, REC, (UG/L)	SIMA- ZINE, WATER, DISS, REC, (UG/L)					
NOV 13...	<0.20	<0.05	<0.05	<0.05	<0.05	<0.05					

414 GROUND-WATER, SURFACE-WATER, AND SUBSURFACE SEDIMENT DATA FOR THE MANAGEMENT SYSTEMS EVALUATION AREA IN PIKE COUNTY

Ground-Water-Quality Data--Continued

390207083024013. Local number, PI-235-MP3 NR PIKETON OH. Cooperator number, R6-MP3.
HYDROLOGIC UNIT.--05060002.
OWNER.--The Ohio State University.
AQUIFER.--Sand and gravel of Pleistocene age.
WELL CHARACTERISTICS.--Multiport monitoring well installed by cable tool drilling method, diameter 3.0 in., port depth 30.74 ft. below land surface datum.
DATUM.--Elevation of land surface datum is 552.68 ft. above National GVD of 1929. Measuring point: Top of tubing 7.30 ft. above land surface datum.
PERIOD OF RECORD.--Current water year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (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)	ALKA- LINITY WAT WH TOT FET FIELD MG/L AS CACO3	SULFATE DIS- SOLVED (MG/L AS SO4)
NOV 14...	25.06	680	8.0	10.5	0.2	90	29	8.7	1.9	300	49
DATE	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	
NOV 14...	17	9.0	412	<0.01	4.4	0.02	<0.01	<0.01	--	14	
DATE	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	ALA- CHLOR (LASSO) WATER DISSOLV (UG/L)	AMETRYN WATER, DISS, REC, (UG/L)	ATRA- ZINE, WATER, DISS, REC (UG/L)	METO- LACHLOR WATER DISSOLV (UG/L)	METRI- BUZIN (SENCOR) WATER DISSOLV (UG/L)	PROP- AZINE WATER DISSOLV REC (UG/L)	
NOV 14...	--	3	--	0.6	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	
DATE	CYANA- ZINE, WATER, DISS, REC, (UG/L)	DES- ETHYL- ATRA- ZINE, DISS, (UG/L)	DESIPO- PROPYL- ATRA- ZINE, DISS, (UG/L)	PROME- TON, WATER, DISS, REC, (UG/L)	PROME- TRYN, WATER, DISS, REC, (UG/L)	SIMA- ZINE, WATER, DISS, REC, (UG/L)					
NOV 14...	<0.20	<0.05	<0.05	<0.05	<0.05	<0.05					

**GROUND-WATER, SURFACE-WATER, AND SUBSURFACE SEDIMENT DATA FOR THE MANAGEMENT SYSTEMS 415
EVALUATION AREA IN PIKE COUNTY**

Ground-Water-Quality Data--Continued

390224083020111. Local number, PI-265-MP1 NR PIKETON OH. Cooperator number, S14-MP1.
HYDROLOGIC UNIT.--05060002.
OWNER.--The Ohio State University.
AQUIFER.--Sand and gravel of Pleistocene age.
WELL CHARACTERISTICS.--Multiport monitoring well installed by cable tool drilling method, diameter 2.5 in., port depth 61.37 ft. below land surface datum.
DATUM.--Elevation of land surface datum is 553.75 ft. above National GVD of 1929. Measuring point: Top of tubing 3.66 ft. above land surface datum.
PERIOD OF RECORD.--April 1991 to current water year

WATER QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (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)	ALKA- LITY WAT WH TOT PET FIELD MG/L AS CACO3	SULFATE DIS- SOLVED (MG/L AS SO4)
NOV 05...	20.38	577	7.4	12.5	0.0	77	22	15	3.1	220	76
DATE	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	
NOV 05...	21	11	344	<0.01	<0.05	0.11	<0.01	<0.01	2100	2100	
DATE	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	ALA- CHLOR (LASSO) WATER, DISSOLV (UG/L)	AMETRYN WATER, DISS, REC, (UG/L)	ATRA- ZINE, WATER, DISS, REC (UG/L)	METO- LACHLOR WATER, DISSOLV (UG/L)	METRI- BUZIN (SENCOR) WATER DISSOLV (UG/L)	PROP- AZINE WATER DISSOLV REC (UG/L)	
NOV 05...	330	330	1.2	1.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	
DATE	CYANA- ZINE, WATER, DISS, REC, (UG/L)	DES- ETHYL- ATRA- ZINE, DISS, (UG/L)	DESIPO- PROPYL- ATRA- ZINE, DISS, (UG/L)	PROME- TON, WATER, DISS, REC, (UG/L)	PROME- TRYN, WATER, DISS, REC, (UG/L)	SIMA- ZINE, WATER, DISS, REC, (UG/L)					
NOV 05...	<0.20	<0.05	<0.05	<0.05	<0.05	<0.05					

**416 GROUND-WATER, SURFACE-WATER, AND SUBSURFACE SEDIMENT DATA FOR THE MANAGEMENT SYSTEMS
EVALUATION AREA IN PIKE COUNTY**

Ground-Water-Quality Data--Continued

390224083020112. Local number, PI-265-MP2 NR PIKETON OH. Cooperator number, S14-MP2.
HYDROLOGIC UNIT.--05060002.
OWNER.--The Ohio State University.
AQUIFER.--Sand and gravel of Pleistocene age.
WELL CHARACTERISTICS.--Multiport monitoring well installed by cable tool drilling method, diameter 2.5 in., port depth
40.83 ft. below land surface datum.
DATUM.--Elevation of land surface datum is 553.75 ft. above National GVD of 1929. Measuring point: Top of tubing
3.67 ft. above land surface datum.
PERIOD OF RECORD.--April 1991 to current water year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (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)	ALKA- LINITY WAT WH TOT FET FIELD MG/L AS CACO3	SULFATE DIS- SOLVED (MG/L AS SO4)
NOV 05...	20.38	619	7.3	11.5	0.5	83	24	17	3.7	250	79
DATE	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	
NOV 05...	25	9.9	367	<0.01	0.05	0.04	<0.01	<0.01	1200	1100	
DATE	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	ALA- CHLOR (LASSO) WATER DISSOLV (UG/L)	AMETRYN WATER, DISS, REC, (UG/L)	ATRA- ZINE, WATER, DISS, REC (UG/L)	METO- LACHLOR WATER DISSOLV (UG/L)	METRI- BUZIN (SENCOR) WATER DISSOLV (UG/L)	PROP- AZINE WATER DISSOLV REC (UG/L)	
NOV 05...	290	270	1.2	1.0	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	
DATE	CYANA- ZINE, WATER, DISS, REC, (UG/L)	DES- ETHYL- ATRA- ZINE, DISS, (UG/L)	DESISO- PROPYL- ATRA- ZINE, DISS, (UG/L)	PROME- TON, WATER, DISS, REC, (UG/L)	PROME- TRYN, WATER, DISS, REC, (UG/L)	SIMA- ZINE, WATER, DISS, REC, (UG/L)					
NOV 05...	<0.20	<0.05	<0.05	<0.05	<0.05	<0.05					

**GROUND-WATER, SURFACE-WATER, AND SUBSURFACE SEDIMENT DATA FOR THE MANAGEMENT SYSTEMS 417
EVALUATION AREA IN PIKE COUNTY**

Ground-Water-Quality Data--Continued

390224083020114. Local number, PI-265-MP4 NR PIKETON OH. Cooperator number, S14-MP4.
HYDROLOGIC UNIT.--05060002.
OWNER.--The Ohio State University.
AQUIFER.--Sand and gravel of Pleistocene age.
WELL CHARACTERISTICS.--Multiport monitoring well installed by cable tool drilling method, diameter 3.0 in., port depth 21.30 ft. below land surface datum.
DATUM.--Elevation of land surface datum is 553.75 ft. above National GVD of 1929. Measuring point: Top of tubing 3.69 ft. above land surface datum.
PERIOD OF RECORD.--Current water year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (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)	ALKA- LITY WAT WH TOT FET FIELD MG/L AS CACO3	SULFATE DIS- SOLVED (MG/L AS SO4)
NOV 05...	20.38	684	7.3	14.0	4.8	98	29	20	2.9	300	64
DATE	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHOPHOS- PHORUS DIS- SOLVED (MG/L AS P)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	
NOV 05...	35	11	432	<0.01	2.9	0.03	<0.01	<0.01	<10	7	
DATE	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	ALA- CHLOR (LASSO) WATER, DISSOLV (UG/L)	AMETRYN WATER, DISS, REC, (UG/L)	ATRA- ZINE, WATER, DISS, REC, (UG/L)	METO- LACHLOR WATER, DISSOLV (UG/L)	METRI- BUZIN (SENCOR) WATER, DISSOLV (UG/L)	PROP- AZINE WATER DISSOLV REC (UG/L)	
NOV 05...	<10	1	1.0	0.7	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	
DATE	CYANA- ZINE, WATER, DISS, DATE (UG/L)	DES- ETHYL- ATRA- ZINE, REC, (UG/L)	DESISO- PROPYL- ATRA- ZINE, DISS, (UG/L)	PROME- TON, WATER, DISS, (UG/L)	PROME- TRYN, WATER, DISS, REC, (UG/L)	SIMA- ZINE, WATER, DISS, REC, (UG/L)					
NOV 05...	<0.20	<0.05	<0.05	<0.05	<0.05	<0.05					

**418 GROUND-WATER, SURFACE-WATER, AND SUBSURFACE SEDIMENT DATA FOR THE MANAGEMENT SYSTEMS
EVALUATION AREA IN PIKE COUNTY**

Ground-Water-Quality Data--Continued

390227083013330. Local number, PI-222-BR NR PIKETON OH. Cooperator number, R1-BR.
HYDROLOGIC UNIT.--05060002.

OWNER.--The Ohio State University.

AQUIFER.--Ohio Shale.

WELL CHARACTERISTICS.--Monitoring well installed by cable tool drilling method, diameter 4.0 in., total depth 83.25 ft. below land surface datum.

DATUM.--Elevation of land surface datum is 550.93 ft. above National GVD of 1929. Measuring point: Top of PVC casing 5.27 ft. above land surface datum.

PERIOD OF RECORD.--June 1991 to current water year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (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)	ALKA- LITY WAT WH TOT FET FIELD MG/L AS CACO3	SULFATE DIS- SOLVED (MG/L AS SO4)
NOV 12...	16.05	1680	7.3	12.5	--	94	28	170	10	340	0.4
DATE	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	
NOV 12...	390	9.7	882	<0.01	<0.05	1.7	0.02	<0.01	320	310	
DATE	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	ALA- CHLOR (LASSO) WATER, DISSOLV (UG/L)	AMETRYN WATER, DISS, REC, (UG/L)	ATRA- ZINE, WATER, DISS, REC (UG/L)	METO- LACHLOR WATER DISSOLV (UG/L)	METRI- BUZIN (SENCOR) WATER DISSOLV (UG/L)	PROP- AZINE WATER DISSOLV REC (UG/L)	
NOV 12...	180	170	1.8	1.3	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	
DATE	CYANA- ZINE, WATER, DISS, REC, (UG/L)	DES- ETHYL- ATRA- ZINE, DISS, (UG/L)	DESISO- PROPYL- ATRA- ZINE, DISS, (UG/L)	PROME- TON, WATER, DISS, REC, (UG/L)	PROME- TRYN, WATER, DISS, REC, (UG/L)	SIMA- ZINE, WATER, DISS, REC, (UG/L)					
NOV 12...	<0.20	<0.05	<0.05	<0.05	<0.05	<0.05					

**GROUND-WATER, SURFACE-WATER, AND SUBSURFACE SEDIMENT DATA FOR THE MANAGEMENT SYSTEMS 419
EVALUATION AREA IN PIKE COUNTY**

Ground-Water-Quality Data--Continued

390227083013311. Local number, PI-220-MPI NR PIKETON OH. Cooperator number, R1-MPI.
HYDROLOGIC UNIT.--05060002:
OWNER.--The Ohio State University.
AQUIFER.--Sand and gravel of Pleistocene age.
WELL CHARACTERISTICS.--Multiport monitoring well installed by cable tool drilling method, diameter 2.5 in., port depth 59.94 ft. below land surface datum.
DATUM.--Elevation of land surface datum is 551.03 ft. above National GVD of 1929. Measuring point: Top of tubing 7.03 ft. above land surface datum.
PERIOD OF RECORD.--April 1991 to current water year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (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)	ALKA- LITY WAT WH TOT FET FIELD MG/L AS CACO3	SULFATE DIS- SOLVED (MG/L AS SO4)
NOV 14...	15.80	709	7.5	12.5	0.5	86	29	20	3.9	290	71
DATE	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHOPHOS- PHATE DIS- SOLVED (MG/L AS P)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	
NOV 14...	39	8.4	429	<0.01	0.44	<0.01	<0.01	<0.01	30	6	
DATE	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	ALA- CHLOR (LASSO) WATER DISSOLV (UG/L)	AMETRYN WATER, DISS, REC, (UG/L)	ATRA- ZINE, WATER, DISS, REC, (UG/L)	METO- LACHLOR WATER DISSOLV (UG/L)	METRI- BUZIN (SENCOR) WATER DISSOLV (UG/L)	PROP- AZINE WATER DISSOLV (UG/L)	
NOV 14...	<10	2	1.0	0.9	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	
DATE	CYANA- ZINE, WATER, DISS, REC, (UG/L)	DES- ETHYL- ATRA- ZINE, DISS, (UG/L)	DESISC- PROPYL- ATRA- ZINE, DISS, (UG/L)	PROME- TON, WATER, DISS, REC, (UG/L)	PROME- TRYN, WATER, DISS, REC, (UG/L)	SIMA- ZINE, WATER, DISS, REC, (UG/L)					
NOV 14...	<0.20	<0.05	<0.05	<0.05	<0.05	<0.05					

**420 GROUND-WATER, SURFACE-WATER, AND SUBSURFACE SEDIMENT DATA FOR THE MANAGEMENT SYSTEMS
EVALUATION AREA IN PIKE COUNTY**

Ground-Water-Quality Data--Continued

390227083013312. Local number, PI-220-MP2 NR PIKETON OH. Cooperator number, R1-MP2.
HYDROLOGIC UNIT.--05060002.
OWNER.--The Ohio State University.
AQUIFER.--Sand and gravel of Pleistocene age.
WELL CHARACTERISTICS.--Multiport monitoring well installed by cable tool drilling method, diameter 2.5 in., port depth 39.34 ft. below land surface datum.
DATUM.--Elevation of land surface datum is 551.03 ft. above National GVD of 1929. Measuring point: Top of tubing 7.02 ft. above land surface datum.
PERIOD OF RECORD.--April 1991 to current water year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (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)	ALKA- LITY WAT WH TOT FET FIELD MG/L AS CACO3	SULFATE DIS- SOLVED (MG/L AS SO4)
NOV 14...	15.80	677	7.5	13.0	1.5	91	30	8.9	3.3	300	70
DATE	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	
NOV 14...	12	8.3	410	0.02	0.69	0.02	<0.01	<0.01	80	6	
DATE	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	ALA- CHLOR (LASSO) WATER DISSOLV (UG/L)	AMETRYN WATER, DISS, REC, (UG/L)	ATRA- ZINE, WATER, DISS, REC (UG/L)	METO- LACHLOR WATER DISSOLV (UG/L)	METRI- BUZIN (SENCOR) WATER DISSOLV (UG/L)	PROP- AZINE WATER DISSOLV REC (UG/L)	
NOV 14...	<10	8	1.2	1.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	
DATE	CYANA- ZINE, WATER, DISS, REC, (UG/L)	DES- ETHYL- ATRA- ZINE, DISS, (UG/L)	DESIPO- PROPYL- ATRA- ZINE, DISS, (UG/L)	PROME- TON, WATER, DISS, REC, (UG/L)	PROME- TRYN, WATER, DISS, REC, (UG/L)	SIMA- ZINE, WATER, DISS, REC, (UG/L)					
NOV 14...	<0.20	<0.05	<0.05	<0.05	<0.05	<0.05					

**GROUND-WATER, SURFACE-WATER, AND SUBSURFACE SEDIMENT DATA FOR THE MANAGEMENT SYSTEMS 421
EVALUATION AREA IN PIKE COUNTY**

Ground-Water-Quality Data--Continued

390227083013315. Local number, PI-220-MP5 NR PIKETON OH. Cooperator number, R1-MP5.
HYDROLOGIC UNIT.--05060002.
OWNER.--The Ohio State University.
AQUIFER.--Sand and gravel of Pleistocene age.
WELL CHARACTERISTICS.--Multiport monitoring well installed by cable tool drilling method, diameter 3.0 in., port depth 17.51 ft. below land surface datum.
DATUM.--Elevation of land surface datum is 551.03 ft. above National GVD of 1929. Measuring point: Top of tubing 7.03 ft. above land surface datum.
PERIOD OF RECORD.--Current water year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (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)	ALKA- LITY WAT WH TOT FET FIELD MG/L AS CACO3	SULFATE DIS- SOLVED (MG/L AS SO4)
NOV 15...	15.80	767	6.9	13.5	1.0	98	38	3.8	2.3	390	37
DATE	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	
NOV 15...	8.3	8.3	437	<0.01	1.2	0.02	<0.01	<0.01	20	5	
DATE	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	ALA- CHLOR (LASSO) WATER DISSOLV (UG/L)	AMETRYN WATER, DISS, REC, (UG/L)	ATRA- ZINE, WATER, DISS, REC (UG/L)	METO- LACHLOR WATER DISSOLV (UG/L)	METRI- BUZIN (SENCOR) WATER DISSOLV (UG/L)	PROP- AZINE WATER DISSOLV REC (UG/L)	
NOV 15...	<10	2	1.0	1.0	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	
DATE	CYANA- ZINE, WATER, DISS, REC, (UG/L)	DES- ETHYL- ATRA- ZINE, DISS, (UG/L)	DESISO- PROPYL- ATRA- ZINE, DISS, (UG/L)	PROME- TON, WATER, DISS, REC, (UG/L)	PROME- TRYN, WATER, DISS, REC, (UG/L)	SIMA- ZINE, WATER, DISS, REC, (UG/L)					
NOV 15...	<0.20	<0.05	<0.05	<0.05	<0.05	<0.05					

422 GROUND-WATER, SURFACE-WATER, AND SUBSURFACE SEDIMENT DATA FOR THE MANAGEMENT SYSTEMS EVALUATION AREA IN PIKE COUNTY

Ground-Water-Quality Data--Continued

390229083022911. Local number, PI-229-MP1 NR PIKETON OH. Cooperator number, R4-MP1.

HYDROLOGIC UNIT.--05060002.

OWNER.--The Ohio State University.

AQUIFER.--Sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Multiport monitoring well installed by cable tool drilling method, diameter 2.5 in., port depth 60.91 ft below land surface datum.

DATUM.--Elevation of land surface datum is 549.18 ft. above National GVD of 1929. Measuring point: Top of tubing 6.23 ft. above land surface datum.

PERIOD OF RECORD.--April 1991 to current water year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (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)	ALKA- LITY WAT WH TOT FET FIELD MG/L AS CACO3	SULFATE DIS- SOLVED (MG/L AS SO4)
NOV 07...	17.97	979	7.3	12.0	0.1	99	29	53	5.3	260	72
DATE	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	
NOV 07...	140	10	588	<0.01	0.22	0.07	<0.01	0.03	2800	2600	
DATE	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	ALA- CHLOR (LASSO) WATER, DISSOLV (UG/L)	AMETRYN WATER, DISS, REC, (UG/L)	ATRA- ZINE, WATER, DISS, REC (UG/L)	METO- LACHLOR WATER, DISSOLV (UG/L)	METRI- BUZIN (SENCOR) WATER DISSOLV (UG/L)	PROP- AZINE WATER DISSOLV REC (UG/L)	
NOV 07...	440	450	0.8	0.9	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	
DATE	CYANA- ZINE, WATER, DISS, REC, (UG/L)	DES- ETHYL- ATRA- ZINE, DISS, (UG/L)	DESISO- PROPYL- ATRA- ZINE, DISS, (UG/L)	PROME- TON, WATER, DISS, REC, (UG/L)	PROME- TRYN, WATER, DISS, REC, (UG/L)	SIMA- ZINE, WATER, DISS, REC, (UG/L)					
NOV 07...	<0.20	<0.05	<0.05	<0.05	<0.05	<0.05					

**GROUND-WATER, SURFACE-WATER, AND SUBSURFACE SEDIMENT DATA FOR THE MANAGEMENT SYSTEMS 423
EVALUATION AREA IN PIKE COUNTY**

Ground-Water-Quality Data--Continued

390229083022912. Local number, PI-229-MP2 NR PIKETON OH. Cooperator number, R4-MP2.
HYDROLOGIC UNIT.--05060002.
OWNER.--The Ohio State University.
AQUIFER.--Sand and gravel of Pleistocene age.
WELL CHARACTERISTICS.--Multiport monitoring well installed by cable tool drilling method, diameter 2.5 in., port depth 40.41 ft. below land surface datum.
DATUM.--Elevation of land surface datum is 549.18 ft. above National GVD of 1929. Measuring point: Top of tubing 6.22 ft. above land surface datum.
PERIOD OF RECORD.--April 1991 to current water year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (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)	ALKA- LITY WAT WH TOT FET FIELD MG/L AS CACO3	SULFATE DIS- SOLVED (MG/L AS SO4)
NOV 07...	17.97	914	6.9	12.0	1.1	98	31	49	4.3	310	95
DATE	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	
NOV 07...	80	9.3	460	<0.01	<0.05	0.05	<0.01	<0.01	680	--	
DATE	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	ALA- CHLOR (LASSO) WATER DISSOLV (UG/L)	AMETRYN WATER, DISS, REC, (UG/L)	ATRA- ZINE, WATER, DISS, REC (UG/L)	METO- LACHLOR WATER DISSOLV (UG/L)	METRI- BUZIN (SENCOR) WATER DISSOLV (UG/L)	PROP- AZINE WATER DISSOLV REC (UG/L)	
NOV 07...	380	380	0.7	0.7	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	
DATE	CYANA- ZINE, WATER, DISS, REC, (UG/L)	DES- ETHYL- ATRA- ZINE, DISS, (UG/L)	DESISO- PROPYL- ATRA- ZINE, DISS, (UG/L)	PROME- TON, WATER, DISS, REC, (UG/L)	PROME- TRYN, WATER, DISS, REC, (UG/L)	SIMA- ZINE, WATER, DISS, REC, (UG/L)					
NOV 07...	<0.20	<0.05	<0.05	<0.05	<0.05	<0.05					

424 GROUND-WATER, SURFACE-WATER, AND SUBSURFACE SEDIMENT DATA FOR THE MANAGEMENT SYSTEMS EVALUATION AREA IN PIKE COUNTY

Ground-Water-Quality Data--Continued

390229083022914. Local number, PI-229-MP4 NR PIKETON OH. Cooperator number, R4-MP4.
 HYDROLOGIC UNIT.--05060002.
 OWNER.--The Ohio State University.
 AQUIFER.--Sand and gravel of Pleistocene age.
 WELL CHARACTERISTICS.--Multiport monitoring well installed by cable tool drilling method, diameter 3.0 in., port depth 21.05 ft below land surface datum.
 DATUM.--Elevation of land surface datum is 549.18 ft. above National GVD of 1929. Measuring point: Top of tubing 6.25 ft. above land surface datum.
 PERIOD OF RECORD.--Current water year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (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)	ALKA- LITY WAT WH TOT FET FIELD MG/L AS CACO3	SULFATE DIS- SOLVED (MG/L AS SO4)
NOV 07...	17.97	893	6.9	11.0	4.3	110	36	28	2.7	370	60
DATE	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	
NOV 07...	53	11	525	<0.01	3.1	<0.01	<0.01	0.02	<10	9	
DATE	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	ALA- CHLOR (LASSO) WATER DISSOLV (UG/L)	AMETRYN WATER, DISS, REC, (UG/L)	ATRA- ZINE, WATER, DISS, REC (UG/L)	METO- LACHLOR WATER DISSOLV (UG/L)	METRI- BUZIN (SENCOR) WATER DISSOLV (UG/L)	PROP- AZINE WATER DISSOLV REC (UG/L)	
NOV 07...	<10	<1	0.7	0.6	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	
DATE	CYANA- ZINE, WATER, DISS, REC, (UG/L)	DES- ETHYL- ATRA- ZINE, DISS, (UG/L)	DEISO- PROPYL- ATRA- ZINE, DISS, (UG/L)	PROME- TON, WATER, DISS, REC, (UG/L)	PROME- TRYN, WATER, DISS, REC, (UG/L)	SIMA- ZINE, WATER, DISS, REC, (UG/L)					
NOV 07...	<0.20	<0.05	<0.05	<0.05	<0.05	<0.05					

**GROUND-WATER, SURFACE-WATER, AND SUBSURFACE SEDIMENT DATA FOR THE MANAGEMENT SYSTEMS 425
EVALUATION AREA IN PIKE COUNTY**

Ground-Water-Quality Data--Continued

390233083015511. Local number, PI-259-MP1 NR PIKETON OH. Cooperator number, S10-MP1.
HYDROLOGIC UNIT.--05060002.
OWNER.--The Ohio State University.
AQUIFER.--Sand and gravel of Pleistocene age.
WELL CHARACTERISTICS.--Multiport monitoring well installed by cable tool drilling method, diameter 2.5 in., port depth 60.34 ft below land surface datum.
DATUM.--Elevation of land surface datum is 553.66 ft. above National GVD of 1929. Measuring point: Top of tubing 4.43 ft. above land surface datum.
PERIOD OF RECORD.--April 1991 to current water year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (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)	ALKA- LITY WAT WH TOT FET FIELD MG/L AS CACO3	SULFATE DIS- SOLVED (MG/L AS SO4)
NOV 06...	19.73	1140	7.5	12.5	0.3	89	24	100	5.4	190	80
DATE	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	
NOV 06...	230	9.4	640	<0.01	0.21	0.39	<0.01	<0.01	1900	1800	
DATE	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	ALA- CHLOR (LASSO) WATER DISSOLV (UG/L)	AMETRYN WATER, DISS, REC, (UG/L)	ATRA- ZINE, WATER, DISS, REC (UG/L)	METO- LACHLOR WATER DISSOLV (UG/L)	METRI- BUZIN (SENCOR) WATER DISSOLV (UG/L)	PROP- AZINE WATER DISSOLV REC (UG/L)	
NOV 06...	450	460	1.2	1.0	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	
DATE	CYANA- ZINE, WATER, DISS, REC, (UG/L)	DES- ETHYL- ATRA- ZINE, DISS, (UG/L)	DESISO- PROPYL- ATRA- ZINE, DISS, (UG/L)	PROME- TON, WATER, DISS, REC, (UG/L)	PROME- TRYN, WATER, DISS, REC, (UG/L)	SIMA- ZINE, WATER, DISS, REC, (UG/L)					
NOV 06...	<0.20	<0.05	<0.05	<0.05	<0.05	<0.05					

**426 GROUND-WATER, SURFACE-WATER, AND SUBSURFACE SEDIMENT DATA FOR THE MANAGEMENT SYSTEMS
EVALUATION AREA IN PIKE COUNTY**

Ground-Water-Quality Data--Continued

390233083015512. Local number, PI-259-MP2 NR PIKETON OH. Cooperator number, S10-MP2.

HYDROLOGIC UNIT.--05060002.

OWNER.--The Ohio State University.

AQUIFER.--Sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Multiport monitoring well installed by cable tool drilling method, diameter 2.5 in., port depth 40.16 ft. below land surface datum.

DATUM.--Elevation of land surface datum is 553.66 ft. above National GVD of 1929. Measuring point: Top of tubing 4.38 ft. above land surface datum.

PERIOD OF RECORD.--April 1991 to current water year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (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)	ALKA- LITY WAT WH TOT FET FIELD MG/L AS CACO3	SULFATE DIS- SOLVED (MG/L AS SO4)
NOV 06...	19.73	799	7.5	13.0	0.3	92	26	30	6.8	240	83
DATE	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	
NOV 06...	65	9.6	484	0.07	5.5	0.02	<0.01	<0.01	10	<3	
DATE	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	ALA- CHLOR (LASSO) WATER DISSOLV (UG/L)	AMETRYN WATER, DISS, REC, (UG/L)	ATRA- ZINE, WATER, DISS, REC (UG/L)	METO- LACHLOR WATER DISSOLV (UG/L)	METRI- BUZIN (SENCOR) WATER DISSOLV (UG/L)	PROP- AZINE WATER DISSOLV REC (UG/L)	
NOV 06...	120	110	1.2	0.9	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	
DATE	CYANA- ZINE, WATER, DISS, REC, (UG/L)	DES- ETHYL- ATRA- ZINE, DISS, (UG/L)	DESISO- PROPYL- ATRA- ZINE, DISS, (UG/L)	PROME- TON, WATER, DISS, REC, (UG/L)	PROME- TRYN, WATER, DISS, REC, (UG/L)	SIMA- ZINE, WATER, DISS, REC, (UG/L)					
NOV 06...	<0.20	<0.05	<0.05	<0.05	<0.05	<0.05					

**GROUND-WATER, SURFACE-WATER, AND SUBSURFACE SEDIMENT DATA FOR THE MANAGEMENT SYSTEMS 427
EVALUATION AREA IN PIKE COUNTY**

Ground-Water-Quality Data--Continued

390233083015515. Local number, PI-259-MP5 NR PIKETON OH. Cooperator number, S10-MP5.
HYDROLOGIC UNIT.--05060002.
OWNER.--The Ohio State University.
AQUIFER.--Sand and gravel of Pleistocene age.
WELL CHARACTERISTICS.--Multiport monitoring well installed by cable tool drilling method, diameter 3.0 in., port depth 20.74 ft. below land surface datum.
DATUM.--Elevation of land surface datum is 553.66 ft. above National GVD of 1929. Measuring point: Top of tubing 4.40 ft. above land surface datum.
PERIOD OF RECORD.--Current water year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (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)	ALKA- LITY WAT WH TOT FET FIELD MG/L AS CACO3	SULFATE DIS- SOLVED (MG/L AS SO4)
NOV 06...	19.73	892	7.2	14.5	1.4	110	31	32	12	310	83
DATE	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	
NOV 06...	70	11	571	<0.01	3.7	0.21	<0.01	<0.01	<10	<3	
DATE	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	ALA- CHLOR (LASSO) WATER, DISSOLV (UG/L)	AMETRYN WATER, DISS, REC, (UG/L)	ATRA- ZINE, WATER, DISS, REC (UG/L)	METO- LACHLOR WATER, DISSOLV (UG/L)	METRI- BUZIN (SENCOR) WATER DISSOLV (UG/L)	PROP- AZINE WATER DISSOLV REC (UG/L)	
NOV 06...	40	<1	1.0	0.9	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	
DATE	CYANA- ZINE, WATER, DISS, REC, (UG/L)	DES- ETHYL- ATRA- ZINE, DISS, (UG/L)	DESISO- PROPYL- ATRA- ZINE, DISS, (UG/L)	PROME- TON, WATER, DISS, REC, (UG/L)	PROME- TRYN, WATER, DISS, REC, (UG/L)	SIMA- ZINE, WATER, DISS, REC, (UG/L)					
NOV 06...	<0.20	<0.05	<0.05	<0.05	<0.05	<0.05					

**428 GROUND-WATER, SURFACE-WATER, AND SUBSURFACE SEDIMENT DATA FOR THE MANAGEMENT SYSTEMS
EVALUATION AREA IN PIKE COUNTY**

Ground-Water-Quality Data--Continued

390239083015130. Local number, PI-225-BR NR PIKETON OH. Cooperator number, R2-BR.

HYDROLOGIC UNIT.--05060002.

OWNER.--The Ohio State University.

AQUIFER.--Ohio Shale.

WELL CHARACTERISTICS.--Monitoring well installed by cable tool drilling method, diameter 4.0 in., total depth 90.0 ft. below land surface datum.

DATUM.--Elevation of land surface datum is 552.09 ft. above National GVD of 1929. Measuring point: Top of PVC casing 2.96 ft. above land surface datum.

PERIOD OF RECORD.--April 1991 to current water year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (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)	ALKA- LINITY WAT WH TOT FET FIELD MG/L AS CACO3	SULFATE DIS- SOLVED (MG/L AS SO4)
NOV 13...	15.46	6400	7.4	13.0	--	390	110	770	41	140	<0.1
DATE	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	
NOV 13...	2000	11	3930	<0.01	<0.05	6.0	<0.01	<0.01	2700	790	
DATE	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	ALA- CHLOR (LASSO) WATER DISSOLV (UG/L)	AMETRYN WATER, DISS, REC, (UG/L)	ATRA- ZINE, WATER, DISS, REC (UG/L)	METO- LACHLOR WATER DISSOLV (UG/L)	METRI- BUZIN (SENCOR) WATER DISSOLV (UG/L)	PROP- AZINE WATER DISSOLV REC (UG/L)	
NOV 13...	1200	770	2.7	0.5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	
DATE	CYANA- ZINE, WATER, DISS, REC, (UG/L)	DES- ETHYL- ATRA- ZINE, DISS, (UG/L)	DESISO- PROPYL- ATRA- ZINE, DISS, (UG/L)	PROME- TON, WATER, DISS, REC, (UG/L)	PROME- TRYN, WATER, DISS, REC, (UG/L)	SIMA- ZINE, WATER, DISS, REC, (UG/L)					
NOV 13...	<0.20	<0.05	<0.05	<0.05	<0.05	<0.05					

**GROUND-WATER, SURFACE-WATER, AND SUBSURFACE SEDIMENT DATA FOR THE MANAGEMENT SYSTEMS 429
EVALUATION AREA IN PIKE COUNTY**

Ground-Water-Quality Data--Continued

390239083015111. Local number, PI-223-MP1 NR PIKETON OH. Cooperator number, R2-MP1.
HYDROLOGIC UNIT.--05060002.
OWNER.--The Ohio State University.
AQUIFER.--Sand and gravel of Pleistocene age.
WELL CHARACTERISTICS.--Multiport monitoring well installed by cable tool drilling method, diameter 2.5 in., port depth 60.83 ft. below land surface datum.
DATUM.--Elevation of land surface datum is 551.22 ft. above National GVD of 1929. Measuring point: Top of tubing 4.01 ft. above land surface datum.
PERIOD OF RECORD.--April 1991 to current water year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (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)	ALKA- LINITY WAT WH TOT FET FIELD MG/L AS CACO3	SULFATE DIS- SOLVED (MG/L AS SO4)
NOV 04...	16.64	1460	7.6	12.0	0.1	100	30	150	6.0	190	58
DATE	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	
NOV 04...	290	9.7	840	<0.01	0.13	0.28	<0.01	0.02	2400	2500	
DATE	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	ALA- CHLOR (LASSO) WATER DISSOLV (UG/L)	AMETRYN WATER, DISS, REC, (UG/L)	ATRA- ZINE, WATER, DISS, REC (UG/L)	METO- LACHLOR WATER DISSOLV (UG/L)	METRI- BUZIN (GENCOR) WATER DISSOLV (UG/L)	PROP- AZINE WATER DISSOLV REC (UG/L)	
NOV 04...	330	340	1.4	1.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	
DATE	CYANA- ZINE, WATER, DISS, REC, (UG/L)	DES- ETHYL- ATRA- ZINE, DISS, (UG/L)	DESISO- PROPYL- ATRA- ZINE, DISS, (UG/L)	PROME- TON, WATER, DISS, REC, (UG/L)	PROME- TRYN, WATER, DISS, REC, (UG/L)	SIMA- ZINE, WATER, DISS, REC, (UG/L)					
NOV 04...	<0.20	<0.05	<0.05	<0.05	<0.05	<0.05					

**430 GROUND-WATER, SURFACE-WATER, AND SUBSURFACE SEDIMENT DATA FOR THE MANAGEMENT SYSTEMS
EVALUATION AREA IN PIKE COUNTY**

Ground-Water-Quality Data--Continued

390239083015112. Local number, PI-223-MP2 NR PIKETON OH. Cooperator number, R2-MP2.
HYDROLOGIC UNIT.--05060002.
OWNER.--The Ohio State University.
AQUIFER.--Sand and gravel of Pleistocene age.
WELL CHARACTERISTICS.--Multiport monitoring well installed by cable tool drilling method, diameter 2.5 in., port depth 40.30 ft. below land surface datum.
DATUM.--Elevation of land surface datum is 551.22 ft. above National GVD of 1929. Measuring point: Top of tubing 3.96 ft. above land surface datum.
PERIOD OF RECORD.--April 1991 to current water year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (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)	ALKA- LITY WAT WH TOT FET FIELD MG/L AS CACO3	SULFATE DIS- SOLVED (MG/L AS SO4)
NOV 04...	16.64	869	7.5	12.0	0.2	85	23	66	6.7	200	65
DATE	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED. (UG/L AS FE)	
NOV 04...	110	9.6	520	<0.01	1.4	0.09	<0.01	0.01	1100	1200	
DATE	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	ALA- CHLOR (LASSO) WATER, DISSOLV (UG/L)	AMETRYN WATER, DISS, REC, (UG/L)	ATRA- ZINE, WATER, DISS, REC (UG/L)	METO- LACHLOR WATER DISSOLV (UG/L)	METRI- BUZIN (SENCOR) WATER DISSOLV (UG/L)	PROP- AZINE WATER DISSOLV REC (UG/L)	
NOV 04...	510	550	1.5	1.0	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	
DATE	CYANA- ZINE, WATER, DISS, REC, (UG/L)	DES- ETHYL- ATRA- ZINE, DISS, (UG/L)	DESISO- PROPYL- ATRA- ZINE, DISS, (UG/L)	PROME- TON, WATER, DISS, REC, (UG/L)	PROME- TRYN, WATER, DISS, REC, (UG/L)	SIMA- ZINE, WATER, DISS, REC, (UG/L)					
NOV 04...	<0.20	<0.05	<0.05	<0.05	<0.05	<0.05					

**GROUND-WATER, SURFACE-WATER, AND SUBSURFACE SEDIMENT DATA FOR THE MANAGEMENT SYSTEMS 431
EVALUATION AREA IN PIKE COUNTY**

Ground-Water-Quality Data--Continued

390239083015115. Local number, PI-223-MP5 NR PIKETON OH. Cooperator number, R2-MP5.
HYDROLOGIC UNIT.--05060002.
OWNER.--The Ohio State University.
AQUIFER.--Sand and gravel of Pleistocene age.
WELL CHARACTERISTICS.--Multiport monitoring well installed by cable tool drilling method, diameter 3.0 in., port depth 16.49 ft. below land surface datum.
DATUM.--Elevation of land surface datum is 551.22 ft. above National GVD of 1929. Measuring point: Top of tubing 3.94 ft. above land surface datum.
PERIOD OF RECORD.--June 1991 to current water year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (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)	ALKA- LINITY WAT WH TOT FET FIELD MG/L AS CACO3	SULFATE DIS- SOLVED (MG/L AS SO4)
NOV 04...	16.64	940	6.8	10.5	7.1	97	32	68	2.0	300	74
DATE	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHOPHOS- PHATE DIS- SOLVED (MG/L AS P)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	
NOV 04...	80	8.4	564	0.37	4.1	0.05	<0.01	<0.01	--	100	
DATE	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	ALA- CHLOR (LASSO) WATER DISSOLV (UG/L)	AMETRYN WATER, DISS, REC, (UG/L)	ATRA- ZINE, WATER, DISS, REC, (UG/L)	METO- LACHLOR WATER DISSOLV (UG/L)	METRI- BUZIN (SENCOR) WATER DISSOLV (UG/L)	PROP- AZINE WATER DISSOLV (UG/L)	
NOV 04...	830	810	1.8	1.0	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	
DATE	CYANA- ZINE, WATER, DISS, REC, (UG/L)	DES- ETHYL- ATRA- ZINE, DISS, (UG/L)	DESISO- PROPYL- ATRA- ZINE, DISS, (UG/L)	PROME- TON, WATER, DISS, REC, (UG/L)	PROME- TRYN, WATER, DISS, REC, (UG/L)	SIMA- ZINE, WATER, DISS, REC, (UG/L)					
NOV 04...	<0.20	<0.05	<0.05	<0.05	<0.05	<0.05					

**432 GROUND-WATER, SURFACE-WATER, AND SUBSURFACE SEDIMENT DATA FOR THE MANAGEMENT SYSTEMS
EVALUATION AREA IN PIKE COUNTY**

Ground-Water-Quality Data--Continued

390241083020511. Local number, PI-244-MP1 NR PIKETON OH. Cooperator number, S5-MP1.
HYDROLOGIC UNIT.--05060002.

OWNER.--The Ohio State University.

AQUIFER.--Sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Multiport monitoring well installed by cable tool drilling method, diameter 2.5 in., port depth 62.01 ft. below land surface datum.

DATUM.--Elevation of land surface datum is 549.88 ft. above National GVD of 1929. Measuring point: Top of tubing 4.69 ft. above land surface datum.

PERIOD OF RECORD.--April 1991 to current water year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (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)	ALKA- LITY WAT WH TOT FET FIELD MG/L AS CACO3	SULFATE DIS- SOLVED (MG/L AS SO4)
NOV 05...	16.54	1920	7.4	13.0	0.3	220	61	16	4.0	180	32
DATE	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	
NOV 05...	510	9.7	1150	<0.01	0.77	0.35	<0.01	<0.01	5500	5300	
DATE	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	ALA- CHLOR (LASSO) WATER DISSOLV (UG/L)	AMETRYN WATER, DISS, REC, (UG/L)	ATRA- ZINE, WATER, DISS, REC (UG/L)	METO- LACHLOR WATER DISSOLV (UG/L)	METRI- BUZIN (SENCOR) WATER DISSOLV (UG/L)	PROP- AZINE WATER DISSOLV REC (UG/L)	
NOV 05...	1100	1100	0.7	0.7	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	
DATE	CYANA- ZINE, WATER, DISS, REC, (UG/L)	DES- ETHYL- ATRA- ZINE, DISS, (UG/L)	DESISO- PROPYL- ATRA- ZINE, DISS, (UG/L)	PROME- TON, WATER, DISS, REC, (UG/L)	PROME- TRYN, WATER, DISS, REC, (UG/L)	SIMA- ZINE, WATER, DISS, REC, (UG/L)					
NOV 05...	<0.20	<0.05	<0.05	<0.05	<0.05	<0.05					

**GROUND-WATER, SURFACE-WATER, AND SUBSURFACE SEDIMENT DATA FOR THE MANAGEMENT SYSTEMS 433
EVALUATION AREA IN PIKE COUNTY**

Ground-Water-Quality Data--Continued

390241083020512. Local number, PI-244-MP2 NR PIKETON OH. Cooperator number, S5-MP2.
HYDROLOGIC UNIT.--05060002.
OWNER.--The Ohio State University.
AQUIFER.--Sand and gravel of Pleistocene age.
WELL CHARACTERISTICS.--Multiport monitoring well installed by cable tool drilling method, diameter 2.5 in., port depth 41.51 ft. below land surface datum.
DATUM.--Elevation of land surface datum is 549.88 ft. above National GVD of 1929. Measuring point: Top of tubing 4.67 ft. above land surface datum.
PERIOD OF RECORD.--April 1991 to current water year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (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)	ALKA- LINITY WAT WH TOT FET FIELD MG/L AS CACO3	SULFATE DIS- SOLVED (MG/L AS SO4)
NOV 05...	16.54	892	7.6	12.5	0.6	94	24	50	4.4	220	68
DATE	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	
NOV 05...	130	9.9	506	<0.01	0.40	0.10	<0.01	<0.01	2000	2000	
DATE	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	ALA- CHLOR (LASSO) WATER DISSOLV (UG/L)	AMETRYN WATER, DISS, REC, (UG/L)	ATRA- ZINE, WATER, DISS, REC (UG/L)	METO- LACHLOR WATER DISSOLV (UG/L)	METRI- BUZIN (SENCOR) WATER DISSOLV (UG/L)	PROP- AZINE WATER DISSOLV REC (UG/L)	
NOV 05...	350	350	1.1	1.0	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	
DATE	CYANA- ZINE, WATER, DISS, REC, (UG/L)	DES- ETHYL- ATRA- ZINE, DISS, (UG/L)	DESISO- PROPYL- ATRA- ZINE, DISS, (UG/L)	PROME- TON, WATER, DISS, REC, (UG/L)	PROME- TRYN, WATER, DISS, REC, (UG/L)	SIMA- ZINE, WATER, DISS, REC, (UG/L)					
NOV 05...	<0.20	<0.05	<0.05	<0.05	<0.05	<0.05					

**434 GROUND-WATER, SURFACE-WATER, AND SUBSURFACE SEDIMENT DATA FOR THE MANAGEMENT SYSTEMS
EVALUATION AREA IN PIKE COUNTY**

Ground-Water Quality Data--Continued

The following table contains data on the tritium concentrations of ground-water samples collected at the Ohio Management Systems Evaluation Area from April 1991 through September 1992. The purpose of these analyses was to determine the age of ground water at various points along flow paths at the study site.

Tritium Concentration, PCI/L, Water Years October 1990 to September 1992

Latitude- Longitude	USGS Well Name	Cooperator Well Number	Depth of Sampling Port (ft. below land surface)	Date of Sample Collection	Total Tritium (pci/l)	Precision Estimate (pci/l)
-----	-----	-----	-----	-----	-----	-----
3902270830133	PI-222-BR	R1-BR	83.25	9/01/92	<5.7	+ 3.8
3902270830133	PI-220-MP1	R1-MP1	59.94	8/12/92	33	+ 5.1
3902270830133	PI-220-MP3	R1-MP3	25.57	8/12/92	28	+ 4.5
3902390830151	PI-225-BR	R2-BR	90	6/17/91	0.0	+ 0.6
3902390830151	PI-223-MP1	R2-MP1	60.83	6/17/91	82.0	+ 4.2
3902390830151	PI-223-MP2	R2-MP2	16.49	6/17/91	57.0	+ 2.5
3902070830240	PI-237-BR	R6-BR	89.5	9/01/92	<5.7	+ 5.1
3902070830240	PI-235-MP1	R6-MP1	60.16	8/05/92	53	+ 5.1
3902070830240	PI-235-MP3	R6-MP3	81	9/02/92	14.1	+ 5.1
3901560830228	PI-238-MP1	R7-MP1	62.14	9/02/92	45.1	+ 5.1
3901560830228	PI-238-MP3	R7-MP3	26.78	9/02/92	107.2	+ 9.0
3902330830155	PI-259-MP2	S10-MP2	40.16	4/02/91	69.3	+ 2.6
3902330830155	PI-259-MP6	S10-MP6	15.81	4/02/91	48.6	+ 2.3
3902230830206	PI-262-MP1	S12-MP1	28.81	4/03/91	50.5	+ 2.3
3902230830206	PI-262-MP4	S12-MP4	14.96	4/03/91	13.5	+ 2.6

**GROUND-WATER, SURFACE-WATER, AND SUBSURFACE SEDIMENT DATA FOR THE MANAGEMENT SYSTEMS 435
EVALUATION AREA IN PIKE COUNTY**

Ground-Water-Quality Data--Continued

390241083020514. Local number, PI-244-MP4 NR PIKETON OH. Cooperator number, S5-MP4.
HYDROLOGIC UNIT.--05060002.
OWNER.--The Ohio State University.
AQUIFER.--Sand and gravel of Pleistocene age.
WELL CHARACTERISTICS.--Multiport monitoring well installed by cable tool drilling method, diameter 3.0 in., port depth 20.11 ft. below land surface datum.
DATUM.--Elevation of land surface datum is 549.88 ft. above National GVD of 1929. Measuring point: Top of tubing 4.69 ft. above land surface datum.
PERIOD OF RECORD.--Current water year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (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)	ALKA- LINITY WAT WH TOT FET FIELD MG/L AS CACO3	SULFATE DIS- SOLVED (MG/L AS SO4)
NOV 05...	16.54	787	7.4	14.5	3.4	88	28	33	3.0	290	53
DATE	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHOPHOS- PHATE DIS- SOLVED (MG/L AS P)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	
NOV 05...	46	11	438	<0.01	4.5	0.03	<0.01	<0.01	<10	--	
DATE	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	ALA- CHLOR (LASSO) WATER DISSOLV (UG/L)	AMETRYN WATER, DISS, REC, (UG/L)	ATRA- ZINE, WATER, DISS, REC, (UG/L)	METO- LACHLOR WATER DISSOLV (UG/L)	METRI- BUZIN (SENCOR) WATER DISSOLV (UG/L)	PROP- AZINE WATER DISSOLV (UG/L)	
NOV 05...	<10	1	1.0	0.6	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	
DATE	CYANA- ZINE, WATER, DISS, REC, (UG/L)	DES- ETHYL- ATRA- ZINE, DISS, (UG/L)	DESIPO- PROPYL- ATRA- ZINE, DISS, (UG/L)	PROME- TON, WATER, DISS, REC, (UG/L)	PROME- TRYN, WATER, DISS, REC, (UG/L)	SIMA- ZINE, WATER, DISS, REC, (UG/L)					
NOV 05...	<0.20	<0.05	<0.05	<0.05	<0.05	<0.05					

**436 GROUND-WATER, SURFACE-WATER, AND SUBSURFACE SEDIMENT DATA FOR THE MANAGEMENT SYSTEMS
EVALUATION AREA IN PIKE COUNTY**

Surface-Water-Quality Data

390250083030001. Station name, SCIOTO RIVER NR PIKETON OH.
LOCATION.--Hydrologic unit, 05060002. On north side of state highway 124 bridge over Scioto River, 2.7 mi. southwest of Piketon, 0.1 mi. east of Jasper, 2.5 mi. upstream from Big Beaver Creek tributary.
PERIOD OF RECORD.--April 1991 to current water year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (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)	ALKA- LITY WAT WH TOT FET FIELD MG/L AS CACO3	SULFATE DIS- SOLVED (MG/L AS SO4)
NOV 19...	1780	907	8.2	15.5	10.1	79	28	72	6.8	220	140
DATE	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	
NOV 19...	68	2.8	523	0.02	3.6	0.04	0.32	0.28	360	60	
DATE	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	ALA- CHLOR (LASSO) WATER DISSOLV (UG/L)	AMETRYN WATER, DISS, REC, (UG/L)	ATRA- ZINE, WATER, DISS, REC (UG/L)	METO- LACHLOR WATER DISSOLV (UG/L)	METRI- BUZIN (SENCOR) WATER DISSOLV (UG/L)	PROP- AZINE WATER DISSOLV (UG/L)	
NOV 19...	100	89	11	9.1	<0.05	<0.05	1.9	1.9	<0.05	<0.05	
DATE	CYANA- ZINE, WATER, DISS, REC, (UG/L)	DES- ETHYL- ATRA- ZINE, DISS, (UG/L)	DESISO- PROPYL- ATRA- ZINE, DISS, (UG/L)	PROME- TON, WATER, DISS, REC, (UG/L)	PROME- TRYN, WATER, DISS, REC, (UG/L)	SIMA- ZINE, WATER, DISS, REC, (UG/L)					
NOV 19...	0.4	0.47	0.28	<0.05	<0.05	0.09					

Grain-Size-Distribution Data

The following table contains data on the grain-size-distribution of sediment samples collected during drilling activities at the MSEA site, January through March, 1991. The objective of this task is to assess spatial variability of grain-size-distribution in the subsurface, and to determine if microbial ecology and microbial degradation potential in the subsurface sediments are correlated to percent silt and clay. Also, hydraulic conductivities of the sediment samples will be calculated using the grain-size distribution data to assess spatial variability in the hydraulic conductivity of the sand and gravel aquifer.

Latitude- Longitude	Well Name	Sample No. & Depth	pan	Percent of Total Retained by Sieve Openings									
				0.063 (mm)	0.125 (mm)	0.250 (mm)	0.500 (mm)	1.0 (mm)	2.0 (mm)	4.0 (mm)	8.0 (mm)	16.0 (mm)	31.7 (mm)
3902270830133	PI-222-BR	R1											
		12-14.5'	4.7	2.2	2.9	13.9	21.2	13.3	12.0	12.2	9.8	7.8	0.0
		18-20'	6.5	1.6	2.9	11.9	20.7	15.2	12.2	8.5	11.7	8.71	0.0
		26-29'	2.0	0.5	2.5	32.7	29.7	14.6	10.8	5.4	1.7	0.0	0.0
		38-41'	3.4	1.8	6.4	29.0	37.2	5.8	1.7	2.8	6.6	5.3	0.0
		56-59'	2.2	1.3	9.2	25.3	17.1	13.0	14.4	13.8	3.7	0.0	0.0
3902390830151	PI-225-BR	R2											
		12-15'	7.0	0.5	11.3	26.9	43.8	3.3	1.7	2.7	2.8	0.0	0.0
		27-29'	1.9	3.0	11.2	29.5	32.1	13.8	7.0	1.5	0.0	0.0	0.0
		40-42'	2.4	2.6	10.9	31.3	25.4	11.2	6.4	4.3	5.4	0.0	0.0
		58-60'	6.8	5.3	18.2	60.3	8.6	0.4	0.2	0.3	0.0	0.0	0.0
		68-70	2.5	6.1	32.1	49.2	7.8	1.2	0.8	0.3	0.0	0.0	0.0
3902440830230	PI-226-MP1	R3											
		7-9'	3.0	0.9	2.8	11.4	10.7	5.9	7.4	12.2	24.9	20.9	0.0
		13-15'	2.6	0.9	2.6	10.8	12.3	7.3	9.8	16.4	17.7	19.6	0.0
		28-29.5	1.7	4.0	13.1	33.8	27.0	8.3	6.2	3.4	2.5	0.0	0.0
		46-47'	4.1	3.6	16.2	28.9	16.0	10.1	9.5	7.7	4.0	0.0	0.0
		59-61'	2.8	2.3	15.0	24.8	16.5	5.7	6.7	8.6	8.9	0.0	8.7
3902290830229	PI-229-MP1	R4											
		13-14'	6.4	6.3	37.2	36.2	7.7	5.5	0.7	0.1	0.0	0.0	0.0
		29-32'	2.7	1.3	7.9	40.4	34.1	6.1	2.9	2.1	2.5	0.0	0.0
		45.5-47'	2.1	2.7	12.2	39.3	21.7	7.6	5.2	4.6	3.7	0.9	0.0
		59-62'	3.1	2.7	4.0	8.9	15.0	16.3	16.9	17.7	15.4	0.0	0.0
3902290830250	PI-232-MP1	R5											
		5-8'	18.7	22.1	49.0	10.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		11-14'	5.9	6.7	50.9	36.1	0.5	0.0	0.0	0.0	0.0	0.0	0.0
		17-20'	1.6	0.9	3.5	12.6	22.6	10.8	7.2	7.2	12.2	21.5	0.0
		38-41'	1.6	3.1	10.7	42.4	37.2	3.4	0.9	0.6	0.2	0.0	0.0
		47-50'	0.6	1.0	4.1	19.0	28.2	18.1	13.6	8.5	5.4	1.7	0.0
		59-62'	1.2	1.4	7.7	33.0	17.2	7.1	8.5	6.7	9.5	7.7	0.0
3902070830240	PI-237-BR	R6											
		5-7'	67.8	25.0	5.3	1.5	0.3	0.0	0.0	0.0	0.0	0.0	0.0
		11-12'	18.6	19.4	33.7	21.3	4.3	1.4	0.5	0.8	0.0	0.0	0.0
		15-16'	3.3	1.3	2.9	9.7	10.4	9.6	14.2	21.9	26.6	0.0	0.0
		39-40.5'	3.3	4.0	15.9	50.2	20.1	1.7	1.1	1.2	2.5	0.0	0.0
		59-60.5'	3.2	2.2	14.8	54.4	14.2	3.5	2.4	2.7	1.0	1.4	0.0
		61-62	11.8	4.3	6.7	11.5	13.6	8.1	10.3	9.5	7.0	17.2	0.0
3901560830228	PI-240-BR	R7											
		6-8'	3.8	2.2	12.4	39.0	32.3	6.6	2.8	0.9	0.0	0.0	0.0
		14-15'	2.9	1.0	2.6	14.0	16.4	9.1	9.3	12.3	20.2	12.2	0.0
		26-27'	1.2	2.0	19.0	62.7	12.1	2.6	0.3	0.0	0.0	0.0	0.0
		38-39'	1.7	1.6	16.0	47.3	20.4	6.2	3.3	2.4	1.1	0.0	0.0
		58'	0.4	0.4	3.1	9.8	16.1	10.7	12.3	19.2	15.9	12.1	0.0
		60-62'	1.7	2.2	6.1	46.0	29.2	4.8	4.4	4.0	1.6	0.0	0.0
3901560830143	PI-241-MP1	R8											
		4-6'	5.6	5.5	34.6	53.5	0.7	0.1	0.0	0.0	0.0	0.0	0.0
		13-14'	8.5	5.0	19.7	39.5	16.7	3.4	1.7	1.4	0.5	3.5	0.0
		14-15'	4.1	1.4	4.6	23.0	20.5	7.5	8.3	9.4	18.5	2.7	0.0
		28-29.5'	2.6	1.0	4.4	32.3	44.4	10.3	3.8	1.3	0.0	0.0	0.0

438 GROUND-WATER, SURFACE-WATER, AND SUBSURFACE SEDIMENT DATA FOR THE MANAGEMENT SYSTEMS
EVALUATION AREA IN PIKE COUNTY

Grain-Size-Distribution Data--Continued

Latitude- Longitude	Well Name	Sample No. & Depth	Percent of Total Retained by Sieve Openings										
			pan	0.063 (mm)	0.125 (mm)	0.250 (mm)	0.500 (mm)	1.0 (mm)	2.0 (mm)	4.0 (mm)	8.0 (mm)	16.0 (mm)	31.7 (mm)
3902420830156	PI-268-MP	S1											
		7-8'	4.1	1.9	7.7	37.6	19.4	8.1	6.6	5.7	8.0	0.9	0.0
		11-14'	6.8	1.9	4.9	21.2	13.3	10.4	12.2	13.2	15.4	0.6	0.0
		25-26	3.2	2.3	4.0	15.3	19.9	17.7	19.1	12.9	5.7	0.0	0.0
3902450830202	PI-272-MP1	S2											
		12-13.5'	5.9	1.8	2.1	4.7	11.1	13.2	18.3	13.6	12.9	9.7	6.6
		20-21'	6.1	2.8	3.4	10.4	13.2	12.0	14.3	14.7	12.8	10.4	0.0
		24-25.5'	1.1	0.8	1.2	6.1	13.2	15.7	19.0	20.6	15.0	7.4	0.0
3902410830214	PI-275-MP1	S3											
		5-7.5'	5.6	8.1	44.3	41.7	2.4	0.0	0.0	0.0	0.0	0.0	0.0
		14-15.5'	3.9	1.3	2.1	10.7	13.6	9.2	10.1	11.4	15.9	13.5	8.2
		17.5-19'	4.1	1.0	4.1	17.9	25.2	12.3	11.2	11.1	9.0	4.1	0.0
		24-25.5'	2.8	1.3	4.2	28.3	34.9	10.0	6.1	5.8	6.6	0.0	0.0
3902370830206	PI-279-MP1	S4											
		14-15'	4.7	1.8	3.0	7.4	11.8	9.7	9.5	12.0	15.1	16.2	8.7
		15-16'	4.1	1.3	4.9	2.6	17.6	6.9	5.5	5.5	8.2	28.9	14.5
		25-26'	3.1	0.0	14.2	56.3	19.5	3.7	2.2	0.9	0.2	0.0	0.0
3902410830205	PI-244-MP1	S5											
		8.5-10'	6.5	5.3	14.7	46.1	18.5	6.3	2.5	0.1	0.0	0.0	0.0
		12-15'	4.6	1.4	2.4	8.3	11.2	5.6	6.6	9.8	13.8	28.0	8.4
		39-42'	2.3	2.9	35.1	45.3	2.9	0.6	0.5	0.4	2.0	8.0	0.0
		45-48'	4.6	4.0	17.6	21.1	25.7	14.0	7.8	3.8	1.4	0.0	0.0
		56-59'	0.5	1.5	8.7	46.4	7.0	0.5	0.9	2.8	9.3	12.7	9.6
3902340830146	PI-247-MP1	S6											
		10-12'	7.1	3.0	6.1	24.6	18.4	17.2	12.8	6.8	4.0	0.0	0.0
		15-17'	5.0	2.3	8.3	28.2	28.1	13.0	6.3	4.0	4.8	0.0	0.0
		21-24'	2.7	1.4	8.0	26.1	19.9	14.0	8.6	6.3	5.5	7.3	0.0
3902360830150	PI-250-MP1	S7											
		14-16'	2.5	2.5	9.8	42.8	32.3	3.5	1.9	2.6	2.1	0.0	0.0
		22-22.5	4.7	1.5	3.7	14.23	11.84	8.5	10.0	13.3	15.9	16.4	0.0
		22.5-23.5'	2.4	0.8	1.7	17.2	50.3	22.6	3.4	1.1	0.5	0.0	0.0
3902320830204	PI-253-MP1	S8											
		6-7.5'	6.8	8.9	19.6	52.7	12.0	0.1	0.0	0.0	0.0	0.0	0.0
		14-17'	5.0	1.8	3.6	25.3	11.3	4.7	7.4	13.7	18.8	8.4	0.0
		26-29'	2.8	1.3	2.2	6.8	14.0	8.3	9.4	16.9	27.4	10.9	0.0
3902290830158	PI-256-MP1	S9											
		5-7.5'	19.9	43.1	30.7	5.4	0.3	0.1	0.0	0.0	0.6	0.0	0.0
		7.4-7.7'	5.5	5.2	17.8	58.8	12.7	0.0	0.0	0.0	0.0	0.0	0.0
		12.5-13'	14.3	13.6	33.2	26.7	7.1	2.0	1.6	1.4	0.2	0.0	0.0
		25-26'	5.6	4.2	3.0	4.0	4.7	6.2	9.9	19.2	25.1	18.2	0.0
3902330830155	PI-259-MP1	S10											
		5-7.5'	20.5	14.9	25.8	38.2	0.6	0.0	0.0	0.0	0.0	0.0	0.0
		17-18.5'	6.9	1.2	1.0	4.4	11.2	10.7	11.8	13.5	23.4	15.9	0.0
		43-45'	2.4	2.5	21.3	31.9	26.3	8.3	4.3	2.6	0.3	0.0	0.0
		58-59.5'	1.6	0.6	4.3	55.8	24.0	8.0	4.9	0.7	0.0	0.0	0.0
3902240830155	PI-282-MP1	S11											
		6.8-8'	17.0	17.0	32.5	33.2	0.3	0.0	0.0	0.0	0.0	0.0	0.0
		14-15.5'	6.5	4.2	19.5	50.7	13.1	2.5	1.1	1.3	1.2	0.0	0.0
		20-22'	1.3	0.3	0.4	1.7	2.6	2.4	4.0	8.4	10.2	30.7	38.0
3902230830206	PI-262-MP1	S12											
		6.5-9	1.9	1.5	10.7	59.8	11.2	14.9	0.0	0.0	0.0	0.0	0.0
		12-15'	6.9	6.0	12.6	67.3	7.0	0.1	0.1	0.0	0.0	0.0	0.0
		21-23'	10.1	3.1	5.3	19.2	13.1	5.3	6.6	7.8	14.5	15.1	0.0
		24-25.2'	9.1	2.8	7.1	24.8	43.8	7.5	2.0	1.0	1.8	0.0	0.0
		27-28.5'	8.4	3.3	6.3	31.0	46.6	2.3	0.7	0.8	0.0	0.7	0.0

GROUND-WATER, SURFACE-WATER, AND SUBSURFACE SEDIMENT DATA FOR THE MANAGEMENT SYSTEMS 439
EVALUATION AREA IN PIKE COUNTY

Grain-Size-Distribution Data--Continued

Latitude- Longitude	Well Name	Sample No. & Depth	pan	Percent of Total Retained by Sieve Openings									
				0.063 (mm)	0.125 (mm)	0.250 (mm)	0.500 (mm)	1.0 (mm)	2.0 (mm)	4.0 (mm)	8.0 (mm)	16.0 (mm)	31.7 (mm)
3902160830200	PI-285-MP1	S13											
		5-7.5'	6.6	8.6	44.8	39.7	0.3	0.0	0.0	0.0	0.0	0.0	0.0
		14-15.5'	3.8	1.3	2.5	10.4	13.0	10.3	10.9	12.4	16.3	19.1	0.0
		24-25.5'	3.2	1.4	4.5	30.3	29.0	10.5	6.5	6.3	7.4	1.0	0.0
3902240830201	PI-265-MP1	S14											
		11-14'	3.5	1.1	1.5	12.6	15.7	7.9	11.0	17.0	23.9	5.8	0.0
		29-32'	7.8	2.0	2.8	6.0	7.2	8.4	11.3	14.9	20.4	19.3	0.0
		32-35'	2.4	2.0	10.1	48.1	34.0	2.2	0.9	0.2	0.0	0.0	0.0
		38-41'	2.6	2.9	13.1	63.6	15.7	0.8	0.4	0.8	0.0	0.0	0.0
		60.5-62'	1.2	0.6	2.3	17.0	30.3	13.7	7.7	7.0	9.2	11.2	0.0

440 GROUND-WATER, SURFACE-WATER, AND SUBSURFACE SEDIMENT DATA FOR THE MANAGEMENT SYSTEMS
EVALUATION AREA IN PIKE COUNTY

Total and Organic Carbon Data

The following table contains data on the total and organic carbon content of sediment samples collected during drilling activities at the MSEA, January through March, 1991. The objective of this task is to assess spatial variability of organic carbon in the subsurface, and to determine if microbial degradation potential of sediments (as determined by The Ohio State University researchers) is correlated to organic carbon content. The "well name" heading corresponds to the well location where the samples were collected. Total and organic carbon values are recorded as a percentage of the pretreated, dry sample weight.

Latitude- Longitude	Well Name	Sample No. & Depth	Total Carbon --% of dry weight--	Organic Carbon --% of dry weight--
3902270830133	PI-222-BR	R1		
		5-7.5'	0.83	0.65
		12-14.5'	0.46	0.31
		26-29'	4.43	0.47
		38-41'	4.13	0.58
		57-60'	3.92	0.62
3902390830151	PI-225-BR	72-74'	3.94	3.43
		R2		
		8.5-10'	0.25	0.19
		12-15'	3.12	0.35
		40-42'	3.29	0.55
		50-52'	0.48	0.49
3902440830230	PI-226-MP1	58-60'	0.31	0.35
		R3		
		7-9'	2.82	0.33
		13-15'	2.73	0.25
		28-29.5	3.07	0.24
		59-61'	1.49	0.42
3902290830229	PI-229-MP1	R4		
		5-8'	1.67	0.52
		29-32'	3.40	0.46
		45.5-47'	3.00	0.50
		59-62'	0.91	0.15
3902290830250	PI-232-MP1	R5		
		5-8'	2.16	0.43
		11-14'	2.34	0.43
		20-23'	3.39	0.49
		38-41'	3.15	0.41
		9-62'	1.75	0.29
3902070830240	PI-237-BR	R6		
		5-7'	2.39	1.21
		15-16'	3.06	1.42
		39-40.5'	3.14	0.43
		59-60.5'	3.28	0.46
		61.5-62'	2.87	0.40
3901560830228	PI-240-BR	73-74'	1.59	0.56
		R7		
		5-5.5'	1.25	0.74
		5.5-8'	1.51	0.29
		14-15'	2.95	0.13
		26-27.5	3.46	0.67
3901560830143	PI-241-MP1	44-46'	3.27	0.38
		61-62'	0.61	0.33
		R8		
		4-6'	2.38	0.19
		13-14'	2.66	0.08
		14-15'	2.51	0.01
3902420830156	PI-268-MP1	28-29.5'	3.76	0.39
		S1		
		5-7'	0.78	0.74
		7-8'	2.12	0.32
		11-14'	3.03	1.14
		25-26'	3.08	0.43
3902450830202	PI-272-MP1	S2		
		5-7'	1.10	.03
		12-13'	4.08	0.00
		24-25.5'	3.34	1.39
3902410830214	PI-275-MP1	S3		
		5-8'	1.70	0.57
		6'	1.99	1.83
		17.5-19'	3.23	0.27
3902370830206	PI-279-MP1	S4		
		5-6'	1.16	0.98
		13-14'	3.98	0.30
3902410830205	PI-244-MP1	S5		
		8.5-10'	1.85	0.31
		12-15'	3.32	0.13
		39-42'	2.79	0.74
		56-59'	0.23	0.14

Total and Organic Carbon Data--Continued

Latitude- Longitude	Well Name	Sample No. & Depth	Total Carbon --% of dry weight--	Organic Carbon
3902360830150	PI-250-MP1	S7 5-6.5' 14-16' 22.5-23.5'	.0.81 2.50 3.38	0.60 0.14 0.38
3902320830204	PI-253-MP1	S8 5-6' 6-7.5' 14-17' 15.5' 26-29'	1.93 2.10 2.77 2.22 4.37	0.20 0.01 0.05 0.36 0.59
3902290830158	PI-256-MP1	S9 5-7.5' 12.5-13' 13.1-13.5' 25-26'	2.10 2.27 2.57 5.99	0.38 0.27 0.06 0.22
3902330830155	PI-259-MP1	S10 5-7.5' 43-45' 58-59.5'	1.96 2.72 3.61	0.30 0.61 0.63
3902240830155	PI-282-MP1	S11 5-8' 14-15'	1.44 2.06	0.06 0.38
3902230830206	PI-262-MP1	S12 6.4-9' 12.5-15' 24-26'	1.86 1.70 3.83	0.24 0.10 0.61
3902160830200	PI-285-MP1	S13 5-7.5' 14-15.5' 24-25.5'	2.07 3.40 4.05	0.32 0.16 0.50
3902240830201	PI-265-MP1	S14 6.5-8' 11-14' 32-35' 38-41' 60.5-62'	2.13 2.75 3.36 3.23 3.78	0.33 0.03 0.44 0.65 0.39

The following tables list the results of bacteriological, chemical, and physical measurements collected at twelve locations in the Cuyahoga River in Summit and Cuyahoga Counties, Ohio. Samples were collected and analyzed as part of a study to characterize the recreational-water quality of the Cuyahoga River during runoff periods after rainfall. Other information not included in this report are data collected to determine decay rates for fecal-indicator bacteria. These data will be available in an interpretive report to be published in 1994.

04206000 - CUYAHOGA R AT OLD PORTAGE OH

WATER QUALITY DATA

DATE	TIME	GAGE HEIGHT (FEET) (00065)	DIS- CHARGE, INST. CUBIC	TEMPER- ATURE WATER (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (μS/CM) (00095)	COLI- FORM, FECAL, 0.45 μM-MF (COLS./ 100 ML) (31616)	E. COLI WHOLE WATER TOTAL UREASE (COL / 100 ML) (31633)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDEd (MG/L) (00530)
			FEET						
			PER						
			SECOND						
			(00061)						
			(00010)						
JUL 1992									
13...	0730	5.06	1530	23.0	--	22000	26000	110	--
13...	0940	4.43	1220	23.0	--	16000	12000	110	131
13...	1115	4.12	1060	23.0	--	16000	12000	110	127
13...	1125	4.11	1050	23.0	680	16000	7700	110	128
13...	1130	4.11	1050	23.0	--	13000	11000	--	--
13...	1135	4.09	1040	23.0	692	11000	10000	110	126
13...	1201	4.03	1010	23.0	644	K15000	K12000	110	121
13...	1235	3.92	940	23.0	644	11000	K17000	110	113
13...	1720	3.27	675	23.0	640	13000	K12000	68	65
14...	0500	3.82	760	--	--	97000	--	100	40

K Results based on colony count outside the ideal range.

04206050 - MUD BK AT AKRON-PENINSULA ROAD NR AKRON OH

WATER QUALITY DATA

DATE	TIME	GAGE HEIGHT (FEET) (00065)	DIS- CHARGE, INST. CUBIC	TEMPER- ATURE WATER (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (μS/CM) (00095)	COLI- FORM, FECAL, 0.45 μM-MF (COLS./ 100 ML) (31616)	E. COLI WHOLE WATER TOTAL UREASE (COL / 100 ML) (31633)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE (MG/L) (00530)
			FEET						
			PER						
			SECOND						
			(00061)						
			(00010)						
JUL 1992									
13...	1015	1.38	160	--	--	24000	27000	45	270
13...	1300	1.38	160	23.0	478	--	--	51	192
13...	1800	1.36	148	24.0	610	K6900	K6000	63	158
14...	0512	1.40	170	--	--	--	K4700	57	232

K Results based on colony count outside the ideal range.

04206400 - CUYAHOGA R AT PENINSULA OH

WATER QUALITY DATA

DATE	TIME	TEMPER- ATURE WATER (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (μS/CM) (00095)	COLI- FORM, FECAL, 0.45 μM-MF (COLS./ 100 ML) (31616)	E. COLI WHOLE WATER TOTAL UREASE (COL / 100 ML) (31633)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED (MG/L) (00530)
JUL 1992							
13...	1230	22.5	640	--	67000	93	--
13...	1635	22.5	635	32000	24000	92	92
13...	1650	22.5	635	53000	31000	94	167
13...	1800	22.0	650	36000	36000	94	163
13...	1820	22.0	660	36000	49000	95	163

04206420 - BRANDYWINE C NR JAITE OH

WATER QUALITY DATA

DATE	TIME	COLI- FORM, FECAL, 0.45 μM-MF (COLS./ 100 ML) (31616)	E. COLI WHOLE WATER TOTAL UREASE (COL / 100 ML) (31633)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED (MG/L) (00530)
JUL 1992					
13...	1730	2900	--	120	105
13...	2010	2100	3900	130	105

04208000 - CUYAHOGA R AT INDEPENDENCE OH

WATER QUALITY DATA

DATE	TIME	GAGE HEIGHT (FEET) (00065)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	COLI- FORM, FECAL, 0.45 μM-MF (COLS./ 100 ML) (31616)	E. COLI WHOLE WATER TOTAL UREASE (COL / 100 ML) (31633)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED (MG/L) (00530)
JUL 1992							
14...	0250	4.97	1440	24000	24000	97	368
14...	0330	4.95	1430	32000	K30000	97	332
14...	0415	4.90	1400	37000	K20000	98	314
14...	0500	4.86	1380	K25000	23000	99	309

K Results based on colony count outside the ideal range.

410614081314000 - L CUYAHOGA R AT MEMORIAL PKWY NR AKRON OH

WATER QUALITY DATA

DATE	TIME	DIS-			COLI-	E. COLI		RESIDUE
		CHARGE,		SPE-	FORM,	WHOLE	CHLO-	TOTAL
		INST.		CIFIC	FECAL,	WATER	RIDE,	AT 105
		CUBIC	TEMPER-	CON-	0.45	TOTAL	DIS-	DEG. C,
		FEET	ATURE	DUCT-	μ M-MF	UREASE	SOLVED	SUS-
		PER	WATER	ANCE	(COLS./	(COL /	(MG/L	PENDED
		SECOND	(DEG C)	(μ S/CM)	100 ML)	100 ML)	AS CL)	(MG/L)
		(00061)	(00010)	(00095)	(31616)	(31633)	(00940)	(00530)
JUL 1992								
13...	1400	129	25.0	540	K17000	K36000	62	68

K Results based on colony count outside the ideal range.

410701081313200 - CUYAHOGA R AT CUYAHOGA ST NR AKRON OH

WATER QUALITY DATA

DATE	TIME	DIS-			COLI-	E. COLI		RESIDUE
		CHARGE,		SPE-	FORM,	WHOLE	CHLO-	TOTAL
		INST.		CIFIC	FECAL,	WATER	RIDE,	AT 105
		CUBIC	TEMPER-	CON-	0.45	TOTAL	DIS-	DEG. C,
		FEET	ATURE	DUCT-	μ M-MF	UREASE	SOLVED	SUS-
		PER	WATER	ANCE	(COLS./	(COL /	(MG/L	PENDED
		SECOND	(DEG C)	(μ S/CM)	100 ML)	100 ML)	AS CL)	(MG/L)
		(00061)	(00010)	(00095)	(31616)	(31633)	(00940)	(00530)
JUL 1992								
13...	1230	509	23.5	553	14000	13000	65	45

410741081321700 - CUYAHOGA R AB OLD PORTAGE OH

WATER QUALITY DATA

DATE	TIME	DIS-			COLI-	E. COLI		RESIDUE
		CHARGE,		SPE-	FORM,	WHOLE	CHLO-	TOTAL
		INST.		CIFIC	FECAL,	WATER	RIDE,	AT 105
		CUBIC	TEMPER-	CON-	0.45	TOTAL	DIS-	DEG. C,
		FEET	ATURE	DUCT-	μ M-MF	UREASE	SOLVED	SUS-
		PER	WATER	ANCE	(COLS./	(COL /	(MG/L	PENDED
		SECOND	(DEG C)	(μ S/CM)	100 ML)	100 ML)	AS CL)	(MG/L)
		(00061)	(00010)	(00095)	(31616)	(31633)	(00940)	(00530)
JUL 1992								
13...	1110	912	23.0	783	13000	K11000	100	97

K Results based on colony count outside the ideal range.

BACTERIOLOGICAL AND SELECTED WATER QUALITY DATA OF THE CUYAHOGA RIVER

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410817081334700 - SAND RN AT OLD PORTAGE OH

WATER QUALITY DATA

DATE	TIME	GAGE HEIGHT (FEET) (00065)	DIS- CHARGE, INST. CUBIC	TEMPER- ATURE WATER (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (μS/CM) (00095)	COLI- FORM, FECAL, 0.45 μM-MF (COLS./ 100 ML) (31616)	E. COLI WHOLE WATER TOTAL UREASE (COL / 100 ML) (31633)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED (MG/L) (00530)
			FEET						
			PER						
			SECOND						
JUL 1992									
13...	1015	2.70	--	20.5	545	5500	--	45	214
13...	1745	1.65	5.4	21.0	700	2200	3200	55	115

411011081345100 - CUYAHOGA R AT BOTZUM OH

WATER QUALITY DATA

DATE	TIME	GAGE HEIGHT (FEET) (00065)	DIS- CHARGE, INST. CUBIC	TEMPER- ATURE WATER (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (μS/CM) (00095)	COLI- FORM, FECAL, 0.45 μM-MF (COLS./ 100 ML) (31616)	E. COLI WHOLE WATER TOTAL UREASE (COL / 100 ML) (31633)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED (MG/L) (00530)
			FEET						
			PER						
			SECOND						
JUL 1992									
13...	1205	9.00	1300	22.5	--	28000	22000	98	62
13...	1245	8.88	1250	22.5	670	58000	71000	100	242
13...	1310	8.81	1220	22.5	670	58000	22000	100	225
13...	1320	8.78	1210	22.5	680	77000	22000	--	--
13...	1325	8.76	1200	22.5	680	19000	13000	100	92
13...	1415	8.55	1120	22.5	--	32000	29000	100	111
13...	1500	8.37	1040	22.5	--	K70000	80000	100	783

K Results based on colony count outside the ideal range.

BACTERIOLOGICAL AND SELECTED WATER QUALITY DATA OF THE CUYAHOGA RIVER

411747081341300 - CUYAHOGA R AT JAITE OH

WATER QUALITY DATA

DATE	TIME	GAGE HEIGHT (FEET) (00065)	DIS- CHARGE, INST. CUBIC	TEMPER- ATURE WATER (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (μS/CM) (00095)	COLI- FORM, FECAL, 0.45 μM-MF (COLS./ 100 ML) (31616)	E. COLI WHOLE WATER TOTAL UREASE (COL / 100 ML) (31633)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED (MG/L) (00530)
			FEET						
			PER						
			SECOND						
			(00061)						
			(00010)						
JUL 1992									
13...	1710	8.76	1380	--	--	20000	20000	92	264
13...	1930	8.20	1110	24.0	712	24000	31000	95	335
13...	1952	8.18	1100	25.0	707	43000	46000	97	279
13...	2020	--	--	23.0	737	40000	43000	95	341
13...	2110	--	--	23.0	748	58000	59000	97	299
13...	2250	8.02	1030	24.5	--	69000	26000	95	239
13...	2350	7.99	1010	25.0	695	--	--	88	236
14...	0050	7.97	1000	25.0	668	22000	14000	80	224

412226081344500 - TINKERS C AT DUNHAM RD NR INDEPENDENCE OH

WATER QUALITY DATA

DATE	TIME	HEIGHT	DIS-	COLI-	E. COLI		RESIDUE
			CHARGE,	FORM,	WHOLE	CHLO-	TOTAL
			INST.	FECAL,	WATER	RIDE,	AT 105
			CUBIC	0.45	TOTAL	DIS-	DEG. C,
			GAGE	FEET	μM-MF	UREASE	SUS-
			PER	(COLS./	(COL /	(MG/L	PENDED
(FEET)	SECOND	100 ML)	100 ML)	AS CL)	(MG/L)		
(00065)	(00061)	(31616)	(31633)	(00940)	(00530)		
<hr/>							
JUL 1992							
13...	2345	4.89	210	28000	30000	100	214
14...	0010	4.88	200	45000	23000	100	146
14...	0125	5.06	260	14000	K12000	120	198
14...	0230	4.97	235	37000	--	120	260
14...	0330	4.86	193	73000	47000	130	223

K Results based on colony count outside the ideal range.

SURFACE-WATER QUALITY OF SELECTED RESERVOIRS

The following tables list the results of chemical and physical measurements collected at seven locations directly downstream from selected reservoirs in Ohio. Samples were collected and analyzed as part of a large regional study, the Midwest Continent Herbicide Initiative, designed to determine the occurrence, temporal distribution, and persistence of herbicides in discharge from reservoirs in the upper Midwestern United States.

DATE	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	SILICA, DIS- SOLVED (MG/L AS SIO2)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)
03091500 MAHONING R AT PRICETOWN OH -- LAKE MILTON								
MAY 11...	604	6.9	14.5	0.5	0.01	0.75	0.10	<0.01
JUL 07...	621	6.8	19.5	1.8	0.09	0.71	0.37	<0.01
AUG 17...	510	8.4	22.0	2.9	0.08	1.1	0.08	<0.01
03147500 LICKING R BL DILLON DAM NR DILLON FALLS OH -- DILLON LAKE								
APR 30...	510	7.2	14.0	2.8	<0.01	0.73	0.02	<0.01
JUL 07...	599	7.6	23.5	2.7	0.09	0.54	0.27	<0.01
SEP 10...	432	8.3	21.5	6.4	0.06	0.85	0.21	0.05
03221000 SCIOTO R BL O'SHAUGHNESSY DAM NR DUBLIN OH -- O'SHAUGHNESSY RESERVOIR								
MAY 05...	724	7.7	11.5	7.4	0.06	9.8	0.03	0.04
JUN 30...	606	7.4	20.5	5.4	0.09	11	0.05	0.02
AUG12...	547	8.7	20.5	7.6	<0.01	2.2	0.03	0.08
03225500 OLENTANGY R NR DELAWARE OH -- DELAWARE LAKE								
MAY 05...	502	7.5	14.0	8.1	0.07	7.1	0.13	0.04
JUN 30...	521	7.3	21.5	4.7	0.25	3.3	0.50	0.01
AUG 12...	423	7.9	21.5	9.7	0.07	1.7	0.13	0.01
03228500 BIG WALNUT C AT CENTRAL COLLEGE OH -- HOOVER RESERVOIR								
MAY 06...	484	8.8	12.0	<0.1	0.02	3.2	0.02	<0.01
JUL 20...	500	7.9	19.5	1.6	0.05	2.2	0.08	0.01
SEP 08...	432	7.4	21.5	4.5	0.08	1.3	0.16	<0.01
03228805 ALUM C AT AFRICA OH -- ALUM CREEK LAKE								
MAY 05...	493	7.4	13.5	1.3	0.01	2.2	0.02	<0.01
JUL 20...	501	7.7	24.0	2.0	0.04	1.9	0.04	<0.01
SEP 08...	445	7.6	23.5	3.7	0.04	1.4	0.08	0.01
03230900 DEER C NR PANCOASTBURG OH DEER CREEK LAKE								
MAY 04...	553	8.7	15.5	3.3	0.05	7.1	0.01	<0.01
JUL 30...	498	7.9	23.5	7.3	0.16	4.5	0.15	0.01
SEP 09...	492	7.9	22.5	2.5	0.09	2.1	0.06	<0.01

WATER QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

The following table lists the results of chemical and physical measurements collected at two depths in two Ohio reservoirs--one sample was collected from the upper 1 meter and another from the deepest 1 meter. The following data were collected to determine the effect of stratification on concentrations of water-quality constituents.

DATE	DEPTH AT SAMPLE LOC- ATION, TOTAL (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	SILICA, DIS- SOLVED (MG/L AS SIO2)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)
03147300 DILLON LK NR DILLON FALLS OH									
SEP 15...	3.3	468	8.1	22.5	5.3	0.03	0.53	0.26	0.02
15...	30	570	7.8	21.5	5.6	0.03	0.40	0.60	0.04
03228804 ALUM CREEK LK NR WESTERVILLE OH									
AUG 06...	3.3	454	8.4	24.0	3.4	0.05	2.0	0.02	<0.01
06...	36	458	8.1	20.0	4.3	0.05	1.9	0.06	<0.01

The following table lists the results of dissolved oxygen/temperature profile data collected at the deepest locations of two Ohio reservoirs. The following data were collected to determine the extent of reservoir stratification and relate stratification to concentrations of water-quality constituents.

DISSOLVED OXYGEN/TEMPERATURE PROFILES

DATE	DEPTH (FT)	SPECIFIC CONDUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)	DISSOLVED OXYGEN (MG/L)
03228804 - ALUM CREEK LK NR WESTERVILLE, OH				
Aug 06	3.3	448	23.8	8.0
	6.6	448	23.7	8.1
	9.8	448	23.4	8.1
	13.1	448	23.4	8.7
	16.4	448	23.4	8.0
	19.8	447	23.2	6.5
	23.0	445	22.9	4.8
	26.2	440	22.7	3.0
	29.5	442	22.6	3.0
	32.8	442	22.1	2.3
	36.1	458	20.1	0.4
03147300 - DILLON LK NR DILLON FALLS, OH				
Sept 15	2.7	468	22.3	5.4
	6.0	489	22.2	4.6
	9.2	508	22.2	4.7
	12.5	519	22.1	3.6
	15.8	527	22.0	3.1
	19.1	544	21.8	2.9
	22.4	550	21.7	2.8
	25.6	564	21.5	1.6
	28.9	570	21.3	1.4
	30.6	570	21.3	1.2

401640083333300 . BIG DARBY C NR MIDDLEBURG OH.
LOCATION.--Lat 40°16'40", long 83°33'33", Hydrologic Unit 05060001, near Garwood Cemetery 1.25
miles southwest of Middleburg. EPA STORET NUMBER V07557

[illegible]

401322083272000. BUCK RUN NR MARYSVILLE OH.

LOCATION.--Lat bridge on 40°13'22", long 83°27'20", Hydrologic Unit 05060001, at bridge on Maple Ridge Road near State Route 245.

WATER QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

		DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	E. COLI WATER WHOLE TOTAL UREASE (COL / 100 ML) (31633)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREP-TOCOCCHI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM TOTAL RECOV-ERABLE (MG/L AS CA) (00916)	
MAY 07...	1420	0.40	785	--	16.5	--	K100	K10	K10	300	74	
AUG 21...	1330	--	900	7.6	22.5	5.0	--	--	67	360	94	
DATE		MAGNE-SIUM, TOTAL RECOV-ERABLE (MG/L AS MG) (00927)	SULFATE WHOLE WATER (MG/L AS SO4) (00946)	CHLO-RIDE, WHOLE WATER (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 105 DEG. C, TOTAL (MG/L) (00500)	NITRO-GEN, NI-TRITE + NITRATE TOTAL (MG/L AS N) (00630)	NITRO-GEN, AMMONIA TOTAL (MG/L AS NH4) (71845)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	ARSENIC TOTAL (UG/L AS AS) (01002)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD) (01027)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)
MAY 07...	27	130	79	6	<0.20	0.06	0.040	<2	<0.2	<30	22	
AUG 21...	31	--	--	--	<0.02	2.5	0.150	3	<0.2	<30	<10	
DATE		LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	ALA-CHLOR TOTAL RECOVER (UG/L) (77825)	ATRA-ZINE, TOTAL RECOV-ERABLE (UG/L)	CYANA-ZINE, TOTAL RECOV-ERABLE (UG/L)	ENDRIN TOTAL RECOV-ERABLE (UG/L)	LIN-DANE, TOTAL RECOV-ERABLE (UG/L)	METH-OXY-CHLOR TOTAL REC. (UG/L)	METOLA-CHLOR WATER WHOLE TOT. REC (UG/L) (82612)	SIMA-ZINE, TOTAL RECOV-ERABLE (UG/L)
MAY 07...	<2	<40	<10	0.10	<0.21	<0.76	<0.002	<0.00	<0.006	<1.2	<0.92	
AUG 21...	<2	<40	10	<0.03	0.41	<0.05	<0.010	<0.01	<0.010	0.08	<0.25	

LOCATION.--LAT 40°09'39", long 83°23'58", Hydrologic Unit 05060001, at State Route 38.

[illegible]

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WATER QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	E. COLI WATER WHOLE TOTAL UREASE (COL / 100 ML) (31633)	COLI- FORM, FECAL, 0.7 UM-MF (COLS / 100 ML) (31625)	STREP- TOCOCCHI FECAL, KF AGAR (COLS / 100 ML) (31673)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)
MAY 06...	1745	45	716	7.9	--	16.0	12.9	24	26	42	360
AUG 20...	1150	22	800	8.1	20.5	20.0	7.4	--	--	--	--

[illegible][illegible]

400442083344800. LITTLE DARBY C NR MECHANICSBURG OH.

LOCATION.--Lat 40°04'42", long 83°34'48", Hydrologic Unit 05060001, at bridge on State Route 29,
west of Mechanicsburg.

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML) (31625)	STREP-TOCOCCEI, FECAL, KF AGAR (COLS. PER 100 ML) (31673)	HARD-NESS TOTAL RECOV-ERABLE (MG/L AS CACO3) (00900)	CALCIUM TOTAL RECOV-ERABLE (MG/L AS CA) (00916)
MAY 08...	0930	1.0	688	8.0	14.5	8.5	11.0	67	160	350	83
AUG 20...	--	0.68	700	8.2	19.0	13.0	10.4	--	--	--	--

[illegible][illegible]

400405083330700. LITTLE DARBY C AT MECHANICSBURG OH.

LOCATION.--Lat 40°04'05", long 83°33'07", Hydrologic Unit 05060001, at bridge on State Route 29, south of Mechanicsburg.

EPA STORET NUMBER V06509.

WATER QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

		DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	E. COLI WATER WHOLE TOTAL UREASE (COL / 100 ML) (31633)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREP- TOCOCCHI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	
AUG 20...	1000	4.9	756	8.4	13.5	9.3	520	540	500	420	
DATE		CALCIUM TOTAL RECOV- ERABLE (MG/L AS CA) (00916)	MAGNE- SIUM, TOTAL RECOV- ERABLE (MG/L AS MG) (00927)	NITRO- GEN, NI- TRITE + NITRATE TOTAL (MG/L AS N) (00630)	NITRO- GEN, AMMONIA TOTAL (MG/L AS NH4) (71845)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	ARSENIC TOTAL (UG/L AS AS) (01002)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD) (01027)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU) (01042)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) (01051)
AUG 20...	100	40	2.2	<0.02	<0.020	<2	<0.2	<30	<10	<2	
DATE		NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI) (01067)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)	ALA- CHLOR TOTAL RECOVER (UG/L) (77825)	ATRA- ZINE, TOTAL RECOV- ERABLE (UG/L)	CYANA- ZINE, TOTAL RECOV- ERABLE (UG/L)	ENDRIN TOTAL RECOV- ERABLE (UG/L)	LIN- DANE, TOTAL RECOV- ERABLE (UG/L)	METH- OXY- CHLOR TOTAL REC. (UG/L) (82612)	METOLA- CHLOR WATER WHOLE TOT. REC (UG/L)	SIMA- ZINE, TOTAL RECOV- ERABLE (UG/L)
AUG 20...	<40	<10	<0.03	<0.25	<0.05	<0.010	<0.01	0.027	<0.03	<0.25	

SURFACE WATER AND WATER-QUALITY RECORDS FOR THE BIG DARBY WATERSHED

400630083293400. LITTLE DARBY C AT IRWIN OH.

LOCATION.--Lat 40°06'30", long 83°29'34", Hydrologic Unit 05060001, at bridge on Irwin-Vanese Road.

EPA STORET NUMBER V06506.

WATER QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

		DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	E. COLI WATER WHOLE TOTAL UREASE (COL / 100 ML) (31633)	COLI- FORM, FECAL, 0.7 UM-MF (COLS / 100 ML) (31625)	STREP- TOCOCCHI FECAL, KF AGAR (COLS / 100 ML) (31673)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	
MAY 08...	0900	13	808	8.1	12.0	10.5	9.1	170	140	150	420	
AUG 20...	1300	10	803	8.1	26.0	18.5	11.4	160	190	520	440	
DATE		CALCIUM TOTAL RECOV- ERABLE (MG/L AS CA) (00916)	MAGNE- SIUM, TOTAL RECOV- ERABLE (MG/L AS MG) (00927)	SULFATE WHOLE WATER (MG/L AS SO4) (00946)	CHLO- RIDE, WHOLE WATER (MG/L AS CL) (00940)	NITRO- GEN, NI- TRITE + NITRATE TOTAL (MG/L AS N) (00630)	NITRO- GEN, AMMONIA TOTAL (MG/L AS NH4) (71845)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	ARSENIC TOTAL (UG/L AS AS) (01002)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD) (01027)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU) (01042)
MAY 08...	100	41	110	26	4.3	0.10	0.050	<2	<0.2	<30	<2	
AUG 20...	100	42	--	--	1.5	0.08	0.030	<2	<0.2	<30	<10	
DATE		LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) (01051)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI) (01067)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)	ALA- CHLOR TOTAL RECOVER (UG/L) (77825)	ATRA- ZINE, TOTAL RECOV- ERABLE (UG/L) (UG/L)	CYANA- ZINE, TOTAL RECOV- ERABLE (UG/L) (UG/L)	ENDRIN TOTAL RECOV- ERABLE (UG/L) (UG/L)	LIN- DANE, TOTAL RECOV- ERABLE (UG/L) (UG/L)	METH- OXY- CHLOR TOTAL REC. (UG/L) (UG/L)	METOLA- CHLOR WATER WHOLE TOT.REC (UG/L) (82612)	SIMA- ZINE, TOTAL RECOV- ERABLE (UG/L) (UG/L)
MAY 08...	<2	<40	20	2.2	1.4	<0.63	<0.001	0.01	<0.006	1.6	<0.78	
AUG 20...	<2	<40	<10	<0.03	<0.25	<0.05	<0.010	<0.01	0.030	0.09	<0.25	

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LOCATION.--Lat 40°07'05", long 83°31'36", Hydrologic Unit 05060001, at bridge on Eagle Road.

[illegible]

400921083211700 TREACLE C NR MILFORD CENTER.

LOCATION.--Lat 40°09'21", long 83°21'17", Hydrologic Unit 05060001, at bridge on State Route 4/36.

WATER QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

		DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	E. COLI WATER WHOLE TOTAL UREASE (COL / 100 ML) (31633)	COLI- FORM, FECAL, 0.7 UM-MF (COLS / 100 ML) (31625)	STREP- TOCOCICI FECAL, KF AGAR (COLS / 100 ML) (31673)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	
MAY 08...	1300	12	740	8.4	12.0	12.0	11.4	330	340	510	400	
AUG 20...	--	8.3	741	8.4	17.0	27.0	7.9	630	580	770	400	
DATE		CALCIUM TOTAL RECOV- ERABLE (MG/L AS CA) (00916)	MAGNE- SIUM, TOTAL RECOV- ERABLE (MG/L AS MG) (00927)	SULFATE WHOLE WATER (MG/L AS SO4) (00946)	CHLO- RIDE, WHOLE WATER (MG/L AS CL) (00940)	NITRO- GEN, NI- TRITE + NITRATE TOTAL (MG/L AS N) (00630)	NITRO- GEN, AMMONIA TOTAL (MG/L AS NH4) (71845)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	ARSENIC TOTAL (UG/L AS AS) (01002)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD) (01027)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU) (01042)
MAY 08...	96	39	100	19	4.2	0.06	0.020	<2	<0.2	<30	<2	
AUG 20...	96	39	--	--	3.0	0.06	<0.020	<2	<0.2	<30	<10	
DATE		LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) (01051)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI) (01067)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)	ALA- CHLOR TOTAL RECOVER (UG/L) (77825)	ATRA- ZINE, TOTAL RECOV- ERABLE (UG/L) (UG/L)	CYANA- ZINE, TOTAL RECOV- ERABLE (UG/L) (UG/L)	ENDRIN TOTAL RECOV- ERABLE (UG/L) (UG/L)	LIN- DANE, TOTAL RECOV- ERABLE (UG/L) (UG/L)	METH- OXY- CHLOR TOTAL REC. (UG/L) (UG/L)	METOLA- CHLOR WATER WHOLE TOT. REC (UG/L) (82612)	SIMA- ZINE, TOTAL RECOV- ERABLE (UG/L) (UG/L)
MAY 08...	<2	<40	<1	<0.00	<0.21	<0.63	<0.001	<0.0	<0.003	<0.01	<0.78	
AUG 20...	<2	<40	<10	<0.03	<0.25	<0.05	<0.010	<0.01	<0.010	0.10	<0.25	

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LOCATION.--Lat 40°04'23", long 83°24'09", Hydrologic Unit 05060001, at bridge on Rosedale-Plain City Road.
EPA STORET NUMBER V06503.

[illegible]

400359083282600. SPRING FORK NR ROSEDALE OH.

LOCATION.--Lat 40°03'59", long 83°28'26", Hydrologic Unit 05060001, at bridge on Guy-Cemetery Road.

WATER QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

		DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	E. COLI WATER WHOLE TOTAL UREASE (COL / 100 ML) (31633)	COLI- FORM, FECAL, 0.7 UM-MF (COLS / 100 ML) (31625)	STREP- TOCOCCI FECAL, KF AGAR (COLS / 100 ML) (31673)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	
MAY 07...	1300	5.1	686	7.9	18.0	16.5	13.8	87	54	57	360	
AUG 19...	1345	1.2	739	8.2	--	23.0	12.1	170	180	76	390	
DATE		CALCIUM TOTAL RECOV- ERABLE (MG/L AS CA) (00916)	MAGNE- SIUM, TOTAL RECOV- ERABLE (MG/L AS MG) (00927)	SULFATE WHOLE WATER (MG/L AS SO4) (00946)	CHLO- RIDE, WHOLE WATER (MG/L AS CL) (00940)	NITRO- GEN, NI- TRITE + NITRATE TOTAL (MG/L AS N) (00630)	NITRO- GEN, AMMONIA TOTAL (MG/L AS NH4) (71845)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	ARSENIC TOTAL (UG/L AS AS) (01002)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD) (01027)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU) (01042)
MAY 07...	81	37	92	23	6.1	0.06	0.020	<2	<0.2	<30	<2	
AUG 19...	90	41	--	--	1.6	0.07	<0.020	<2	<0.2	<30	<10	
DATE		LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) (01051)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI) (01067)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)	ALA- CHLOR TOTAL RECOVER (UG/L) (77825)	ATRA- ZINE, TOTAL RECOV- ERABLE (UG/L) (UG/L)	CYANA- ZINE, TOTAL RECOV- ERABLE (UG/L) (UG/L)	ENDRIN TOTAL RECOV- ERABLE (UG/L) (UG/L)	LIN- DANE, TOTAL RECOV- ERABLE (UG/L) (UG/L)	METH- OXY- CHLOR TOTAL REC. (UG/L) (UG/L)	METOLA- CHLOR WATER WHOLE TOT.REC (UG/L) (82612)	SIMA- ZINE, TOTAL RECOV- ERABLE (UG/L) (UG/L)
MAY 07...	<2	<40	<10	0.16	<0.21	<0.76	<0.002	<0.00	<0.006	<1.2	<0.92	
AUG 19...	<2	<40	<10	<0.03	0.33	<0.05	<0.010	<0.01	<0.010	0.20	<0.25	

465

LOCATION.--Lat 39°59'31", long 83°23'22", Hydrologic Unit 05060001, at bridge on Plain City Road.
EPA STORET NUMBER V07536.

[illegible]

LOCATION.--Lat 39°58'20", long 83°21'21", Hydrologic Unit 05060001, at bridge on State Route 42.
EPA STORET NUMBER V07P67.

[illegible]

03230310. LITTLE DARBY C AT WEST JEFFERSON OH.

LOCATION.--Lat 39°57'04", long 83°16'10", Madison County, Hydrologic Unit 05060001, at bridge on Middle Pike 0.4 miles north of West Jefferson.

WATER QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	E. COLI WATER WHOLE TOTAL UREASE (COL / 100 ML) (31633)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREP- TOCOCCHI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	
AUG 19...	1100	40	756	8.1	21.5	7.8	83	110	44	400	
DATE		CALCIUM TOTAL RECOV- ERABLE (MG/L AS CA) (00916)	MAGNE- SIUM, TOTAL RECOV- ERABLE (MG/L AS MG) (00927)	NITRO- GEN, NI- TRITE + NITRATE TOTAL (MG/L AS N) (00630)	NITRO- GEN, AMMONIA TOTAL (MG/L AS NH4) (71845)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	ARSENIC TOTAL (UG/L AS AS) (01002)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD) (01027)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU) (01042)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) (01051)
AUG 19...	95	39	2.8	0.10	0.050	<2	<0.2	<30	<10	<2	
DATE		NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI) (01067)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)	ALA- CHLOR TOTAL RECOVER (UG/L) (77825)	ATRA- ZINE, TOTAL RECOV- ERABLE (UG/L)	CYANA- ZINE, TOTAL RECOV- ERABLE (UG/L)	ENDRIN TOTAL RECOV- ERABLE (UG/L)	LIN- DANE, TOTAL RECOV- ERABLE (UG/L)	METH- OXY- CHLOR TOTAL RECOV- ERABLE (UG/L)	METOLA- CHLOR WATER WHOLE TOT. REC (UG/L) (82612)	SIMA- ZINE, TOTAL RECOV- ERABLE (UG/L)
AUG 19...	<40	<10	<0.03	0.26	<0.05	<0.010	<0.01	<0.010	0.16	<0.25	

LOCATION.--Lat 39°55'07", long 83°15'20",Hydrologic Unit 05060001, at Roberts Road.
EPA STORET NUMBER V07P64.

[illegible]

SURFACE WATER AND WATER-QUALITY RECORDS FOR THE BIG DARBY WATERSHED

469

03230400. BIG DARBY C AT DARBYDALE OH.

LOCATION.--Lat 39°50'55", long 83°11'20", Franklin County, at bridge on State Highway 665, in Darbydale.

EPA STORET NUMBER 603100.

WATER QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	E. COLI WATER WHOLE TOTAL UREASE (COL / 100 ML) (31633)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREP- TOCOCCHI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM TOTAL RECOV- ERABLE (MG/L AS CA) (00916)	
MAY 04...	1445	220	754	8.1	16.0	10.4	34	33	K15	350	82	
AUG 18...	0945	96	780	7.6	20.0	8.5	83	93	75	380	89	
DATE		MAGNE- SIUM, TOTAL RECOV- ERABLE (MG/L AS MG) (00927)	SUBFATE WHOLE WATER (MG/L AS SO4) (00946)	CHLO- RIDE, WHOLE WATER (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 105 DEG. C, TOTAL (MG/L) (00500)	NITRO- GEN, NI- TRITE + NITRATE TOTAL (MG/L AS N) (00630)	NITRO- GEN, AMMONIA TOTAL (MG/L AS NH4) (71845)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	ARSENIC TOTAL (UG/L AS AS) (01002)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD) (01027)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU) (01042)
MAY 04...	35	90	37	15	6.4	0.07	0.040	<2	<0.2	<30	2	
AUG 18...	37	--	--	--	2.7	0.08	0.060	<2	<0.2	<30	<10	
DATE		LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) (01051)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI) (01067)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)	ALA- CHLOR TOTAL RECOVER (UG/L) (77825)	ATRA- ZINE, TOTAL RECOV- ERABLE (UG/L) (01092)	CYANA- ZINE, TOTAL RECOV- ERABLE (UG/L) (01092)	ENDRIN TOTAL RECOV- ERABLE (UG/L) (01092)	LIN- DANE, TOTAL RECOV- ERABLE (UG/L) (01092)	METH- OXY- CHLOR TOTAL RECOV- ERABLE (UG/L) (01092)	METOLA- CHLOR WATER WHOLE TOT. REC (UG/L) (82612)	SIMA- ZINE, TOTAL RECOV- ERABLE (UG/L) (01092)
MAY 04...	<2	<40	<10	0.44	<0.23	<0.81	<0.002	<0.00	<0.006	<1.3	<0.99	
AUG 18...	<2	<40	<10	<0.03	0.38	<0.05	<0.010	<0.01	<0.010	<0.24	<0.25	

LOCATION.--Lat 39°49'48", long 83°10'22", Hydrologic Unit 05060001, at Georgesville-Harrisburg Road.
EPA STORET NUMBER V07504.

WATER QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	E. COLI WATER WHOLE TOTAL UREASE (COL / 100 ML) (31633)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM TOTAL RECOV- ERABLE (MG/L AS CA) (00916)
MAY 05...	0830	212	750	8.2	13.5	9.4	83	110	77	M360	83
AUG 17...	--	115	765	8.6	20.0	8.0	--	--	--	--	--

[illegible][illegible]

SURFACE WATER AND WATER-QUALITY RECORDS FOR THE BIG DARBY WATERSHED

471

395825083111500. HAMILTON D NR ALTON OH.

LOCATION.--Lat 39°58'25", long 83°11'15", Hydrologic Unit 05060001, at bridge on Feder Road.

WATER QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	E. COLI WATER WHOLE TOTAL UREASE (COL / 100 ML) (31633)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREP- TOCOCCHI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	HARD- NESS TOTAL AS CACO3) (00900)	CALCIUM TOTAL RECOV- ERABLE (MG/L AS CA) (00916)
MAY 06...	0920	1.4	785	8.6	21.0	10.5	14.5	1000	1500	680	330	80
AUG 19...	0845	0.21	920	8.3	--	19.0	6.4	1900	2000	730	380	94

DATE	MAGNE- SIUM, TOTAL RECOV- ERABLE (MG/L AS MG) (00927)	SULFATE WHOLE WATER (MG/L AS SO4) (00946)	CHLO- RIDE, WHOLE WATER (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 105 DEG. C, TOTAL (MG/L) (00500)	NITRO- GEN, NI- TRITE + NITRATE TOTAL (MG/L AS N) (00630)	NITRO- GEN, AMMONIA TOTAL (MG/L AS NH4) (71845)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	ARSENIC TOTAL (UG/L AS AS) (01002)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD) (01027)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU) (01042)
MAY 06...	32	72	87	10	6.0	0.07	0.050	<2	<0.2	<30	3
AUG 19...	34	--	--	--	1.2	0.07	0.100	<2	<0.2	<30	<10

DATE	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) (01051)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI) (01067)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)	ALA- CHLOR TOTAL RECOVER (UG/L) (77825)	ATRA- ZINE, TOTAL RECOV- ERABLE (UG/L)	CYANA- ZINE, TOTAL RECOV- ERABLE (UG/L)	ENDRIN TOTAL RECOV- ERABLE (UG/L)	LIN- DANE, TOTAL RECOV- ERABLE (UG/L)	METH- OXY- CHLOR TOTAL REC. (UG/L)	METOLA- CHLOR WATER WHOLE TOT.REC (UG/L) (82612)	SIMA- ZINE, TOTAL RECOV- ERABLE (UG/L)
MAY 06...	<2	<40	<10	<0.02	<0.21	<0.76	<0.002	<0.00	<0.006	<1.2	<0.92
AUG 19...	<2	<40	<10	<0.03	0.41	<0.05	<0.010	<0.01	<0.010	<0.03	<0.25

EPA STORET NUMBER V07553.

WATER QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	TIME	DIS-CHARGE,	SPE-	PH	TEMPER- ATURE AIR (DEG C)	TEMPER- ATURE WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	E. COLI	COLI-	STREP-	CALCIUM TOTAL RECOV- ERABLE (MG/L AS CA)		
		INST.	CUBIC	WATER				WHOLE	WATER	FORM,		TOCOCOCCI	HARD-
		FEET	CON-	FIELD				WHOLE	WHOLE	FECAL,		NESS	
		PER	DUCT-	(STAND-				TEMPER-	TEMPER-	0.7		KF AGAR	TOTAL
SECOND	ANCE	ARDS	ATURE	ATURE	UREASE	UM-MF	(COLS.	(MG/L	AS	CACO3)	(00916)		
(00061)	(US/CM)	UNITS)	(DEG C)	(DEG C)	(MG/L)	100 ML)	100 ML)	100 ML)	CACO3)	(00916)			
MAY													
06...	1130	1.4	774	9.1	17.0	14.0	20.2	5900	3200	7100	330		
AUG													
18...	--	0.31	1100	8.7	--	21.5	13.1	--	--	--	--		

[illegible][illegible]

LOCATION.--Lat 39°55'43", long 83°10'51", Hydrologic Unit 05060001, at bridge on Alton-Hall Road.
EPA STORET NUMBER V07551.

[illegible]

LOCATION.--Lat 39°52'28", long 83°09'12", Hydrologic Unit 05060001, at intersection of Kropp and Grove City roads.
EPA STORET NUMBER V07549.

WATER QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	E. COLI WATER WHOLE TOTAL UREASE (COL / 100 ML) (31633)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREP- TOCOCCHI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)
MAY 07...	1100	7.9	780	8.6	--	10.0	11.7	250	K200	89	320
AUG 18...	0950	3.8	860	8.1	24.0	20.5	7.2	--	--	--	--

[illegible][illegible]

SURFACE WATER AND WATER-QUALITY RECORDS FOR THE BIG DARBY WATERSHED

03230450 HELLBURCH R NR HARRISBURG OH.

LOCATION.--Lat 39°49'50", long 83°09'36", Franklin County, downstream of old abandon bridge
500 ft upstream of Lambert Road.

EPA STORET NUMBER V07P11.

WATER QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	E. COLI WATER WHOLE TOTAL UREASE (COL / 100 ML) (31633)	COLI- FORM, FECAL, 0.7 UM-MF (COLS / 100 ML) (31625)	STREP- TOCOCCI FECAL, KF AGAR (COLS / 100 ML) (31673)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)
MAY 04...	1130	13	760	8.9	23.5	14.5	13.3	49	67	21	300
AUG 18...	1240	5.2	821	7.9	--	19.0	12.0	270	220	K150	350

DATE	CALCIUM TOTAL RECOV- ERABLE (MG/L AS CA) (00916)	MAGNE- SIUM, TOTAL RECOV- ERABLE (MG/L AS MG) (00927)	SULFATE WHOLE WATER (MG/L AS SO4) (00946)	CHLO- RIDE, WHOLE WATER (MG/L AS CL) (00940)	NITRO- GEN, NI- TRITE + NITRATE TOTAL (MG/L AS N) (00630)	NITRO- GEN, AMMONIA TOTAL (MG/L AS NH4) (71845)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	ARSENIC TOTAL (UG/L AS AS) (01002)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD) (01027)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU) (01042)
MAY 04...	69	31	68	82	4.1	0.09	0.040	<2	<0.2	<30	<2
AUG 18...	87	33	--	--	1.3	0.07	0.050	<2	<0.2	<30	<10

DATE	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) (01051)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI) (01067)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)	ALA- CHLOR TOTAL RECOVER (UG/L) (77825)	ATRA- ZINE, TOTAL RECOV- ERABLE (UG/L) (UG/L)	CYANA- ZINE, TOTAL RECOV- ERABLE (UG/L) (UG/L)	ENDRIN TOTAL RECOV- ERABLE (UG/L) (UG/L)	LIN- DANE, TOTAL RECOV- ERABLE (UG/L) (UG/L)	METH- OXY- CHLOR TOTAL REC. (UG/L) (UG/L)	METOLA- CHLOR WATER WHOLE TOT. REC (UG/L) (82612)	SIMA- ZINE, TOTAL RECOV- ERABLE (UG/L) (UG/L)
MAY 04...	<2	<40	<10	<0.02	<0.24	<0.83	<0.002	<0.00	<0.006	<1.3	<1.0
AUG 18...	<2	<40	<10	<0.03	0.33	<0.05	<0.010	<0.01	<0.010	<0.03	<0.25

03230500. BIG DARBY C AT DARBYVILLE OH.

LOCATION.--Lat 39°42'02", long 83°06'37", Pickaway County, Hydrologic Unit 05060001, on left left bank 150 ft downstream from bridge on State Highway 316, 0.4 mi. northeast of Darbyville.
EPA STORET NUMBER 601300.

WATER QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	E. COLI WATER WHOLE TOTAL UREASE (COL / 100 ML) (31633)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREP- TOCOCCHI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM TOTAL RECOV- ERABLE (MG/L AS CA) (00916)	
MAY 06...	1230	234	743	7.9	13.5	11.4	--	73	K22	330	78	
AUG 17...	1120	144	736	7.8	20.5	9.3	180	K63	57	360	87	
DATE		MAGNE- SIUM, TOTAL RECOV- ERABLE (MG/L AS MG) (00927)	SULFATE WHOLE WATER (MG/L AS SO4) (00946)	CHLO- RIDE, WHOLE WATER (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 105 DEG. C, TOTAL (MG/L) (00500)	NITRO- GEN, NI- TRITE + NITRATE TOTAL (MG/L AS N) (00630)	NITRO- GEN, AMMONIA TOTAL (MG/L AS NH4) (71845)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	ARSENIC TOTAL (UG/L AS AS) (01002)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD) (01027)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU) (01042)
MAY 06...	33	90	43	6	5.7	0.07	0.070	<2	<0.2	<30	<2	
AUG 17...	35	--	--	--	3.1	0.70	0.140	<2	<0.2	<30	<10	
DATE		LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) (01051)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI) (01067)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)	ALA- CHLOR TOTAL RECOVER (UG/L) (77825)	ATRA- ZINE, TOTAL RECOV- ERABLE (UG/L)	CYANA- ZINE, TOTAL RECOV- ERABLE (UG/L)	ENDRIN TOTAL RECOV- ERABLE (UG/L)	LIN- DANE, TOTAL RECOV- ERABLE (UG/L)	METH- OXY- CHLOR TOTAL REC. (UG/L)	METOLA- CHLOR WATER WHOLE TOT. REC (UG/L) (82612)	SIMA- ZINE, TOTAL RECOV- ERABLE (UG/L)
MAY 06...	<2	<40	<10	<0.02	<0.24	<0.83	<0.003	<0.00	<0.012	0.16	<1.0	
AUG 17...	<2	<40	10	<0.03	0.37	<0.05	<0.010	<0.01	<0.010	0.21	<0.25	

SURFACE WATER AND WATER-QUALITY RECORDS FOR THE BIG DARBY WATERSHED

479

393820083005300. BIG DARBY C AT FOX.

LOCATION.--Lat 39°38'20", long 83°00'53", Hydrologic Unit 05060001, at bridge on Mclean Mill Road.

EPA STORET NUMBER 600970.

WATER QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

		DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	OXYGEN, DIS- WATER (MG/L) (00300)	E. COLI WATER WHOLE TOTAL (COL / 100 ML) (31633)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREP- TOCOC- CI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM TOTAL RECOV- ERABLE (MG/L AS CA) (00916)	MAGNE- SIUM, TOTAL RECOV- ERABLE (MG/L AS MG) (00927)	
MAY 06...	0930	161	728	7.6	10.4	47	70	27	320	77	30	
DATE		SULFATE DIS- WATER (MG/L AS SO4) (00946)	CHLO- RIDE, DIS- WATER (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 105 DEG. C, TOTAL (MG/L) (00500)	NITRO- GEN, NI- TRITE + NITRATE TOTAL (MG/L AS N) (00630)	NITRO- GEN, AMMONIA TOTAL (MG/L AS NH4) (71845)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	ARSENIC TOTAL (UG/L AS AS) (01002)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD) (01027)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU) (01042)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) (01051)
MAY 06...	90	41	6	5.6	0.08	0.060	<2	<0.2	<30	<2	<2	
DATE		NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI) (01067)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)	ALA- CHLOR TOTAL RECOVER (UG/L) (77825)	ATRA- ZINE, TOTAL RECOV- ERABLE (UG/L)	CYANA- ZINE, TOTAL RECOV- ERABLE (UG/L)	ENDRIN TOTAL RECOV- ERABLE (UG/L)	LIN- DANE, TOTAL RECOV- ERABLE (UG/L)	METH- OXY- CHLOR TOTAL REC. (UG/L)	METOLA- CHLOR WATER WHOLE TOT.REC (UG/L) (82612)	SIMA- ZINE, TOTAL RECOV- ERABLE (UG/L)	
MAY 06...		<40	<10	<0.02	<0.23	<0.83	<0.003	<0.00	<0.012	0.27	<1.0	

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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).

Multiply inch-pound units	By	To obtain SI units
<i>Length</i>		
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)
<i>Area</i>		
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)
<i>Volume</i>		
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)
<i>Flow</i>		
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)
<i>Mass</i>		
tons (short)	9.072×10^{-1}	megagrams (Mg) or metric tons

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