WATER-QUALITY DATA FOR THE OHIO RIVER FROM WILLOW ISLAND DAM TO BELLEVILLE DAM, WEST VIRGINIA AND OHIO, MAY-OCTOBER 1993

By Kimberly F. Miller, Terence Messinger, Marcus C. Waldron, and Carl W. Faulkenburg

---

U.S. GEOLOGICAL SURVEY

Open-File Report 96-127

Prepared in cooperation with the

CITY OF NEW MARTINSVILLE, WEST VIRGINIA

Charleston, West Virginia

1996

U.S. DEPARTMENT OF THE INTERIOR

BRUCE BABBITT, Secretary

U.S. GEOLOGICAL SURVEY

Gordon P. Eaton, Director

For additional information write to:

District Chief
U.S. Geological Survey, WRD
11 Dunbar Street
Charleston, WV 25301

Copies of this report can be purchased from:

U.S. Geological Survey
Branch of Information Services
Box 25286
Denver, CO 80225-0286

TABLES--Continued

CONTENTS

FIGURES

TABLES

WATER-QUALITY DATA FOR THE OHIO RIVER FROM WILLOW ISLAND DAM TO BELLEVILLE DAM, WEST VIRGINIA AND OHIO, MAY-OCTOBER 1993

By Kimberly F. Miller, Terence Messinger, Marcus C. Waldron, and Carl W. Faulkenburg

ABSTRACT

This report contains water-quality data for the Ohio River from river mile 160.6 (1.1 mi upstream from Willow Island Dam) to river mile 203.6 (0.3 mi upstream from Belleville Dam) that were collected during the summer and fall of 1993. The data were collected to establish the water quality of the Ohio River and to use in assessing the proposed effects of hydropower development on the water quality of the Ohio River. Water quality was determined by a combination of synoptic field measurements, laboratory analyses, and continuous-record monitoring. Field measurements of water-quality characteristics were made along a longitudinal transect with 24 mid-channel sampling sites; cross-sectional transects of water-quality measurements were made at 6 of these sites. Water-quality measurements also were made at six sites located on the back-channel (West Virginia) sides of Marietta, Muskingum, and Blennerhassett Islands. At each longitudinal-transect and back-channel sampling site, measurements of specific conductance, pH, water temperature, and dissolved oxygen concentration were made at four depths (surface of the water, about 3.0 ft below the surface, middle of the water column, and near the bottom of the river) constituting a four-point vertical profile. An exception to this protocol was used during the May measurements which were made at three depths (3.3 ft below the surface of the water, middle of the water column, and near the bottom of the river). Beginning with the July 7-8 sampling period and continuing through the remaining sampling dates, a complete depth profile (surface, 3.0 ft, and then intervals of 5.0 ft until bottom) was done at river miles 160.6, 163.0 and 202.8. Cross-sectional transects consisted of three or four detailed vertical profiles of the same characteristics. Water samples were collected at three depths in the mid-channel vertical profile in each cross-sectional transect and were analyzed for concentrations of phytoplankton chlorophyll *a* and chlorophyll *b*. Estimates of the depth of light penetration (Secchi disk transparency) were made at phytoplankton-pigment-sampling locations whenever light and river-surface conditions were appropriate. Each synoptic sampling period was completed in 2 days or less. The entire network was sampled 10 times from May 24 to October 27, 1993; partial sampling of the reach was done July 15 - 16, 1993.

Continuous-record monitoring of water quality consisted of hourly measurements of specific conductance, pH, water temperature, and dissolved oxygen concentration that were recorded at a depth of approximately 6.6 feet at the ends of the upstream and downstream wingwalls at Willow Island Dam. Continuous-recording monitors were operated from May through October 1993.

INTRODUCTION

The U.S. Army Corps of Engineers has constructed and operates more than 60 lock-and-dam facilities in the Ohio River Basin, with 20 facilities on the Ohio River mainstem and the rest on major tributaries in the basin (U.S. Army Corps of Engineers, 1990). The lock-and-dam structures form a system of contiguous navigation pools that ensure year-round navigation on the river. Many dams also contain hydroelectric generators that were installed after construction of the navigation structures. In 1989, the Federal Energy Regulatory Commission (FERC) issued licenses for retrofitting of hydropower at 19 dams in the upper Ohio River Basin, which includes the Allegheny and Monongahela Rivers, and the Ohio River mainstem from Pittsburgh, Pennsylvania, to Huntington, West Virginia (fig. 1). However, many of these licenses have since been surrendered, indicating that perhaps the original licensees do not intend to develop projects.

Some dams scheduled for hydropower development currently are thought to improve the water quality of the river by increasing the rate of gas transfer from the atmosphere to the water (Federal Energy Regulatory Commission, 1988). Water from deep, slow-moving upstream pools is mixed as it passes over or through navigation structures, and the amount of surface area in contact with the atmosphere is increased. If the dissolved oxygen (DO) concentration is less than the saturation concentration, the potential exists for absorption of oxygen into the water, a process known as reaeration.

The amount of oxygen added to the water by reaeration at a dam depends, in part, on flow conditions and design characteristics of the structure (Avery and Novak, 1978). Dams on the upper Ohio River downstream from Wheeling, W. Va., are gated structures that discharge several feet below the surface of the downstream pool and so provide little reaeration (Federal Energy Regulatory Commission, 1988). Other dams, including overflow dams and gated dams with discharge above the downstream pool level, are more efficient aerators and can be important sources of DO during low-flow conditions of summer and early fall. Dams upstream from Wheeling are of the latter type. Hydropower operation at these surface-discharging structures will divert riverflow through underwater intakes where the opportunity for atmospheric gas exchange is smaller. For dams upstream from Wheeling, the loss of reaeration at low flows, combined with the oxygen consumption associated with waste assimilation and the failure of other oxygen-generating processes such as algal photosynthesis, could reduce DO concentrations below acceptable levels and diminish the waste-assimilation capacity of the river (West Virginia Department of Natural Resources, 1989).

A water-quality monitoring program was begun in 1991 in cooperation with the city of New Martinsville, W. Va., and was designed, in part, to address license requirements for development of hydropower at Willow Island Dam (FERC Project No. 6902). This dam is located upstream from Parkersburg, W. Va., and is of the deep-discharge type. The program uses continuous-record monitoring and synoptic sampling of water-quality characteristics near the dam and throughout the downstream navigation pool during the summer and fall to provide basic hydrologic and ecological data on the possible environmental effects of hydropower operation. Synoptic surveys, where water-quality characteristics are analyzed quickly at many locations and depths, have been recommended for incorporation into water-quality impact assessments of proposed hydropower projects at dams and other control structures (Gulliver and others, 1990; Daniil and others, 1991).

The study described in this report was conducted in the Belleville navigation pool, 43-mi section of the Ohio River that begins at river mile 160.6 (1.1 mi upstream from Willow Island Dam)

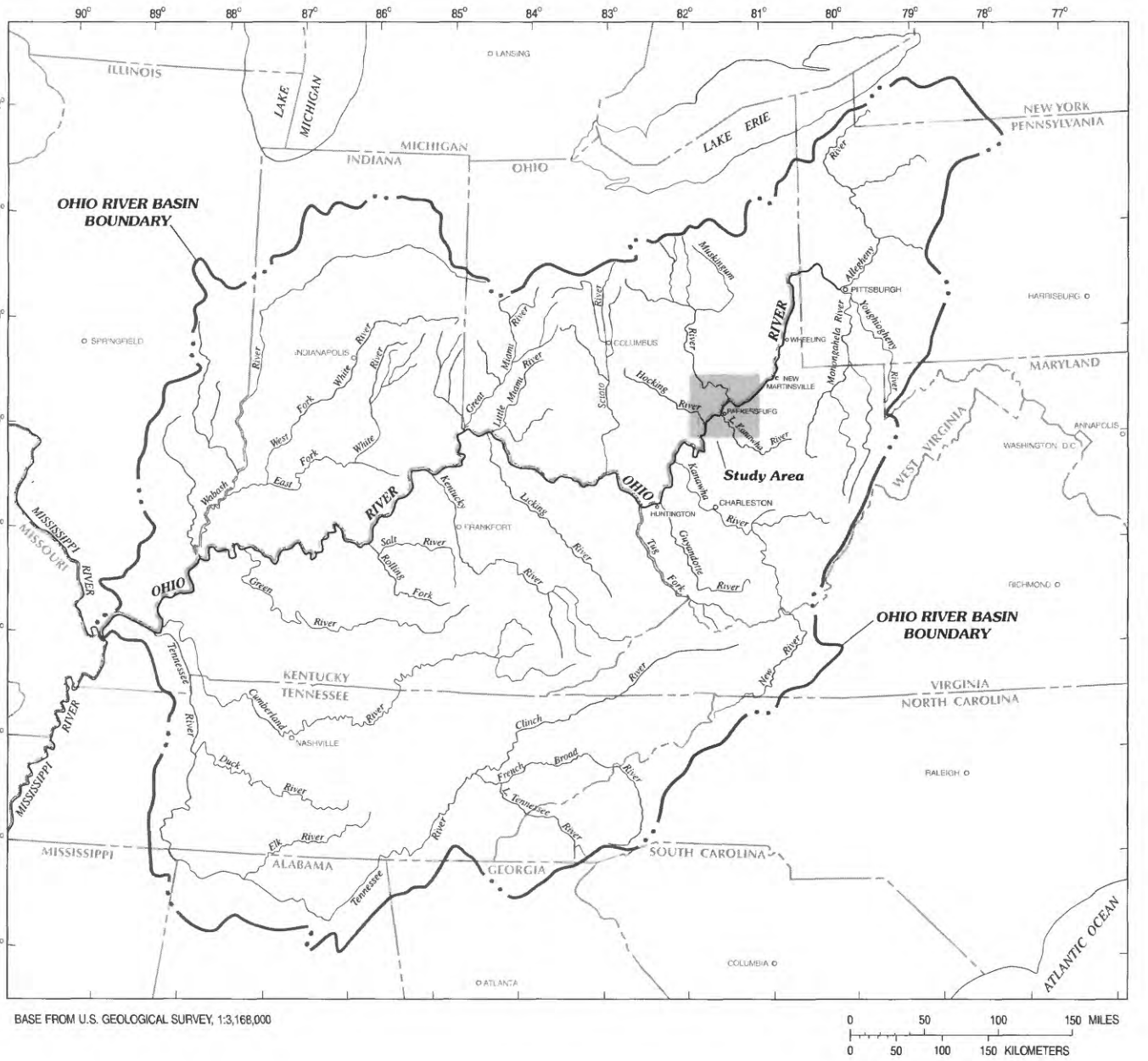

Figure 1. Ohio River drainage basin.

and extends downstream to river mile 203.6 (0.3 mi upstream from Belleville Dam) (fig. 2). The final environmental impact statement for development of hydropower at Willow Island Dam concluded that the dam provides little reaeration to the downstream pool (Federal Energy Regulatory Commission, 1988. p. 3-64).

Purpose and Scope

This report presents data collected in 1993 on the spatial and temporal distribution of selected water-quality characteristics in the Belleville pool of the Ohio River (fig. 2). This report contains water quality of the Belleville pool that was determined by continuous monitoring of conditions near Willow Island Dam and by repeated synoptic sampling of the entire 43-mi pool. Measurements of specific conductance, pH, water temperature, and DO concentration were collected at each sampling site in the network during synoptic-sampling periods of 2 days or less. At the mid-channel sampling site in each cross-sectional transect, water samples were collected from three depths and analyzed for photosynthetic-pigment concentrations. Estimates of the depth of light penetration (Secchi disk transparency) were made at pigment-sampling locations whenever light and river-surface conditions were appropriate. Water-quality measurements were made once in May, three times in July, twice in August, twice in September, and twice in October 1993.

This report also contains data from continuous monitoring. The data consist of hourly measurements of specific conductance, pH, water temperature, and DO concentration that were made at a depth of approximately 6.6 ft at the ends of the upstream and downstream wingwalls at Willow Island Dam. Continuous-recording monitors were in operation from May through October 1993.

Description of Study Area

Drainage area for the Ohio River at Belleville Dam is 39,300 mi^2. Most of the drainage basin up to the dam consists of narrow flood plains and deeply incised tributary valleys. Major tributaries in the study reach include the Muskingum River (drainage area: 8,040 mi^2), the Little Kanawha River (drainage area: 2,320 mi^2), and the Hocking River (drainage area: 1,190 mi^2) (fig. 2). The basin is underlain by bedrock that consists of shale, sandstone, siltstone, limestone, and coal (West Virginia Department of Natural Resources, 1988). The average width of the Belleville pool is 1,327 ft. The average bottom slope is 0.5 ft/mi (Ohio River Valley Water Sanitation Commission, 1988). Although the average depth of the pool is 24 ft, the depth of the main channel increases with distance downstream from the dam.

Streamflow in the upper Ohio River Basin is related to precipitation and to the balance of precipitation and evapotranspiration. The climate of the region is considered temperate with distinct seasonal changes. Mean minimum air temperatures (-4.8°C) are generally recorded during January; mean maximum air temperatures (30.2°C) are generally recorded during July. Average annual air temperature is about 12°C. Annual precipitation in the basin ranges from 20 to 72 in., with heaviest amounts occurring in June or July and minimum amounts occurring in October (West Virginia Department of Natural Resources, 1988). The U.S. Army Corps of Engineers has constructed a system of multipurpose reservoirs on four main tributaries for flood control. These reservoirs also are used to augment flow and maintain navigation during critical periods.

Land use in the study reach is about 16 percent cropland, 12 percent pasture, 46 percent forest, 6 percent urban, and 20 percent other uses (Ohio River Valley Water Sanitation Commission, 1988). Major urban and industrial centers in the reach include Parkersburg, W. Va., and Marietta, Ohio (fig. 2). The reach includes one municipal drinking-water intake (a Ranney well at Parkersburg) and seven industrial water intakes. Industrial activity along the reach is associated mainly with chemical manufacturing and coal-fired electric-power generation. This section of the river is also used to transport petroleum products, chemicals, and other materials. There are 16 river terminals in the study reach, most of which are located between Marietta and Parkersburg (Ohio

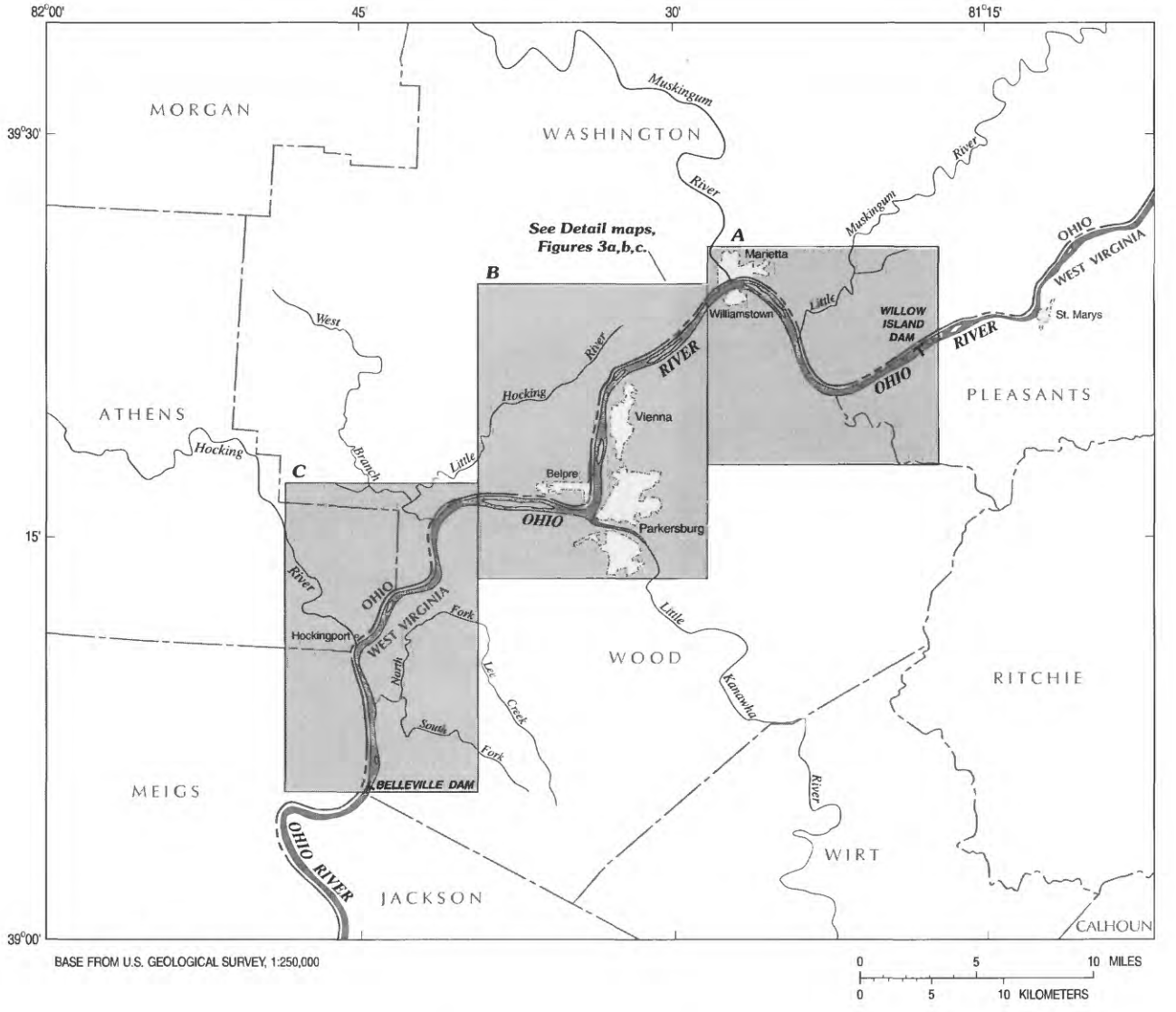

Figure 2. Ohio River study reach.

River Valley Water Sanitation Commission, 1988). The States of West Virginia and Ohio have issued permits for 8 municipal and 22 industrial effluent discharges in the study reach.

DATA-COLLECTION METHODS

Water quality of the Belleville pool was determined by a combination of synoptic field measurements, laboratory analyses, and continuous monitoring. Field measurements were made on May 24, June 10, July 7- 8, July 15-16, July 29, August 12-13, August 25 -26, September 9, September 23-24, October 7-8, and October 26-27, 1993. The sampling periods for May 24 and June 10 were before the implementation of near-sunrise synoptic sampling. Partial sets of field data were collected on July 15-16, August 25-26, and October 26-27. Two continuous-recording monitors were in operation at Willow Island Dam from May 10 through October 27, 1993.

The field-data-collection network for the study consisted of a longitudinal transect with 24 mid-channel sampling sites; cross-sectional transects of water-quality characteristics were made at 6 of these sites. Beginning with the July 7-8 sampling period three of these cross-sectional transects (river miles 183.0, 184.6, and 192.9) had water-quality measurements taken at near sunrise and either the afternoon of the same day of the near-sunrise measurements or the afternoon of the previous day. Water-quality measurements also were made at six sites located on the back-channel (West Virginia) sides of the three largest islands (Marietta, Muskingum, and Blennerhassett) in the Belleville pool. Measurements made at each longitudinal-transect and back-channel sampling site included vertical profiles of specific conductance, pH, water temperature, and DO concentration, at the surface of the water, 3 ft from the surface, the middle of the water column, and at the bottom of the river. However, the longitudinal-transects of river miles 160.6, 163.0, and 202.8 consisted of complete depth profiles (surface of the water, 3.0 ft from the surface, and then at intervals of 5.0 ft until bottom) after and including the July 7-8 sampling period. Cross-sectional transects consisted of three or four detailed vertical profiles of the same characteristics. Water samples of varying depths usually were collected at the mid-channel vertical profile in each cross-sectional transect and analyzed for photosynthetic-pigment concentrations as measures of the abundance of phytoplankton. Estimates of the depth of light penetration (Secchi disk transparency) were made at pigment-sampling locations whenever light and river-surface conditions were appropriate.

Sampling Cross-Sectional Transects

During each sampling period, water-quality measurements were made in cross-sectional transects at six locations shown in figures 3a-3c. Two cross sections were located near Willow Island Dam at the ends of the upstream (river mile 161.4) and downstream (river mile 162.1) wingwalls (fig. 3a). Additional cross sections were located at Parkersburg, W. Va. (river mile 183.0), near the mouth of the Little Kanawha River (river mile 184.6), and at the downstream end of a large chemical manufacturing complex near Little Hocking, Ohio (river mile 192.9) (figs. 3b and 3c). One cross section was located at Belleville Dam at the end of the upstream wingwall (river mile 203.6) (fig. 3c). Beginning with the July 7-8 sampling period and continuing through the sampling season, as weather permitted, the cross sections at river miles 183.0, 184.6, and 192.9 consisted of near-sunrise cross-sectional transect measurements of water quality. These same sampling sites were also measured during the afternoon either on the same day of the near-sunrise measurements or on the previous day.

Cross-sectional transects at the Willow Island Dam and Belleville Dam sites usually consisted of four vertical profiles of specific conductance, pH, water temperature, and DO concentration measurements. Positions of the vertical profiles were located by estimating 25, 50, 75, and 100 percent of the distance from the left bank to the edge of the wingwall and were sampled in random order to minimize the effects of diel changes (changes associated with a 24-hour period which includes both day and night). Cross-sectional transects at other locations consisted of three vertical profiles, with positions determined by estimating 25, 50, and 75 percent of the total width of the river. Weather and river-surface conditions occasionally prevented completion of all vertical profiles in a transect. Complete vertical-profile measurements were made at the surface of the water, about 3.0 and 5.0 ft below the surface, and then at depth intervals of about 5.0 ft until just off of the bottom of the river, using a portable, multiparameter water-quality monitoring system (Hydrolab[1] Surveyor 3). Measuring was begun either at the bottom of the river or at the surface.

---

[1] The use of brand, firm, or trade names in this report is for identification purposes and does not constitute endorsement by the U. S. Geological Survey.

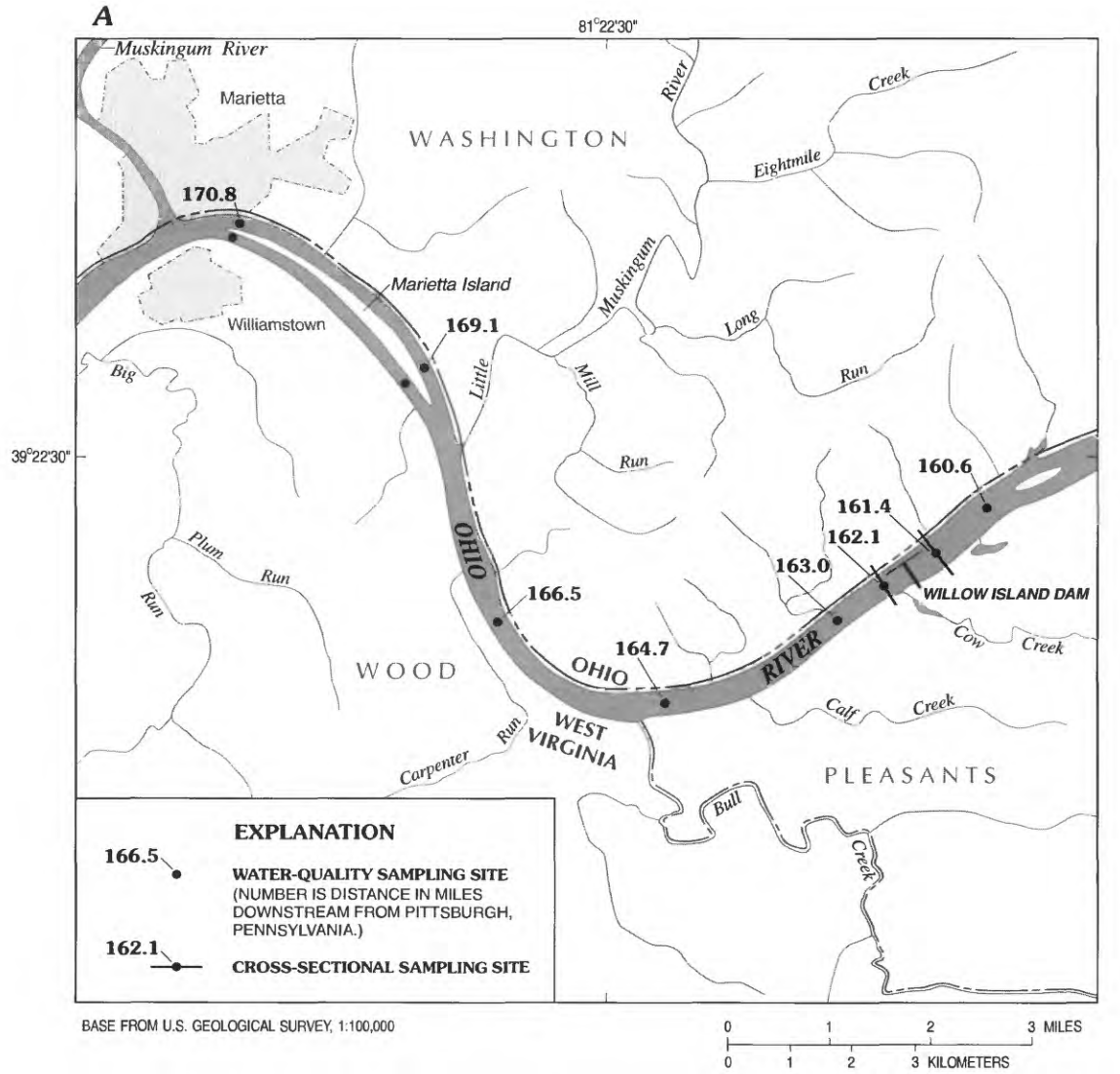

Figure 3a. Water-quality and cross-sectional sampling sites in the eastern (upstream) section of the study reach.

Barometric pressure was recorded before each set of field measurements by use of a Thommen TX altimeter-barometer.

Sampling Longitudinal Transects

Longitudinal transects consisted of measurements of specific conductance, pH, water temperature, and DO concentration made at four depths (surface of the water, about 3.3 ft below the surface, middle of the water column, and near the bottom of the river) at 24 mid-channel sampling sites distributed throughout the Belleville pool. An exception to this protocol is noted for the May 24 sampling period. This sampling period consisted of longitudinal transects measurements of specific conductance, pH, water temperature, and DO concentration at three depths (about 3.3 ft below the surface, middle of the water column, and near the bottom of the river) at 24 mid-channel sampling sites distributed throughout the Belleville pool. Beginning with the July 7-8 sampling period and continuing through the sampling season, a complete depth profile (surface of the water, 3.0 ft below the surface, and then at intervals of 5.0 ft down to the bottom of the river) was measured at three of the original 24 mid-channel longitudinal

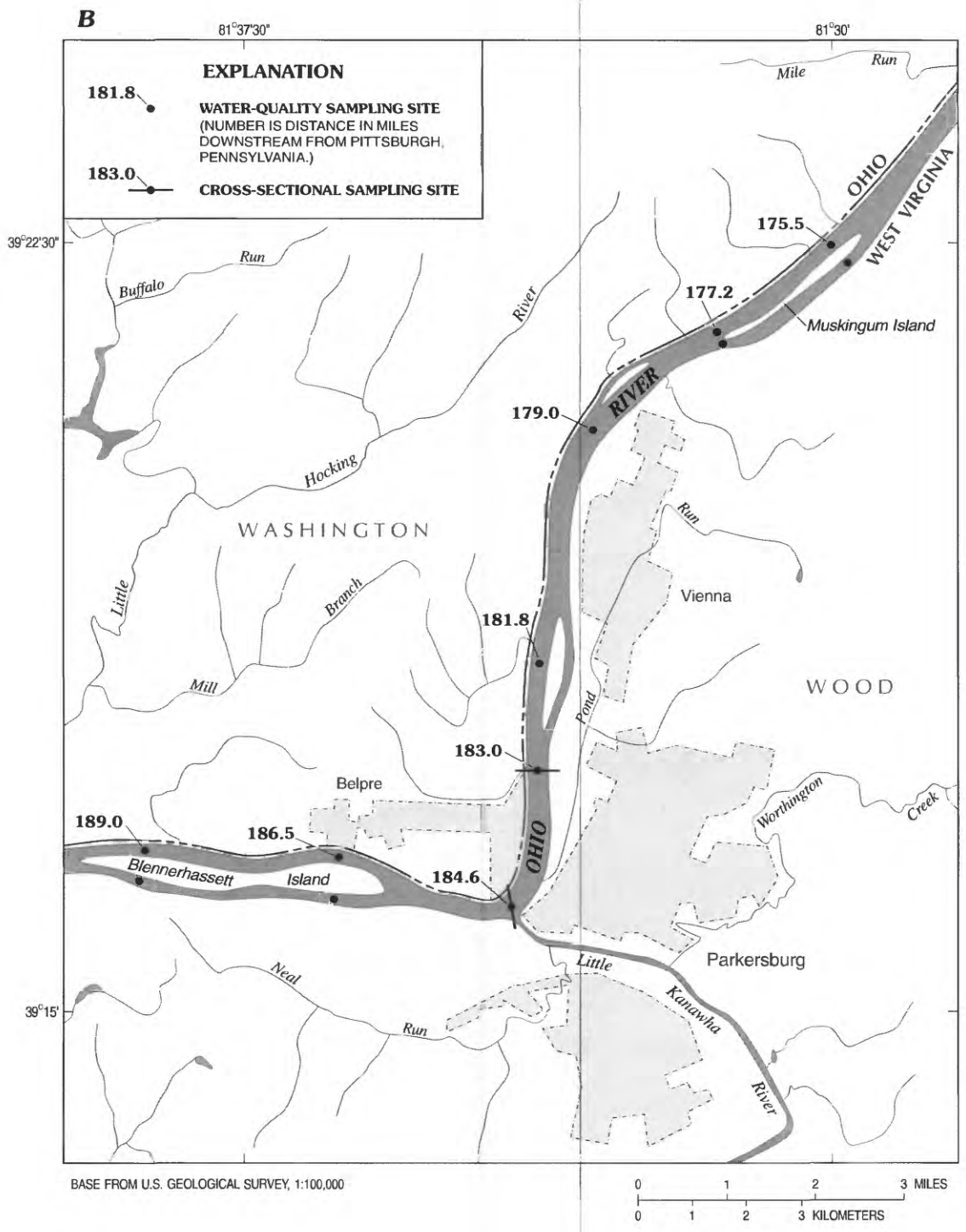

Figure 3b. Water-quality and cross-sectional sampling sites in the middle section of the study reach.

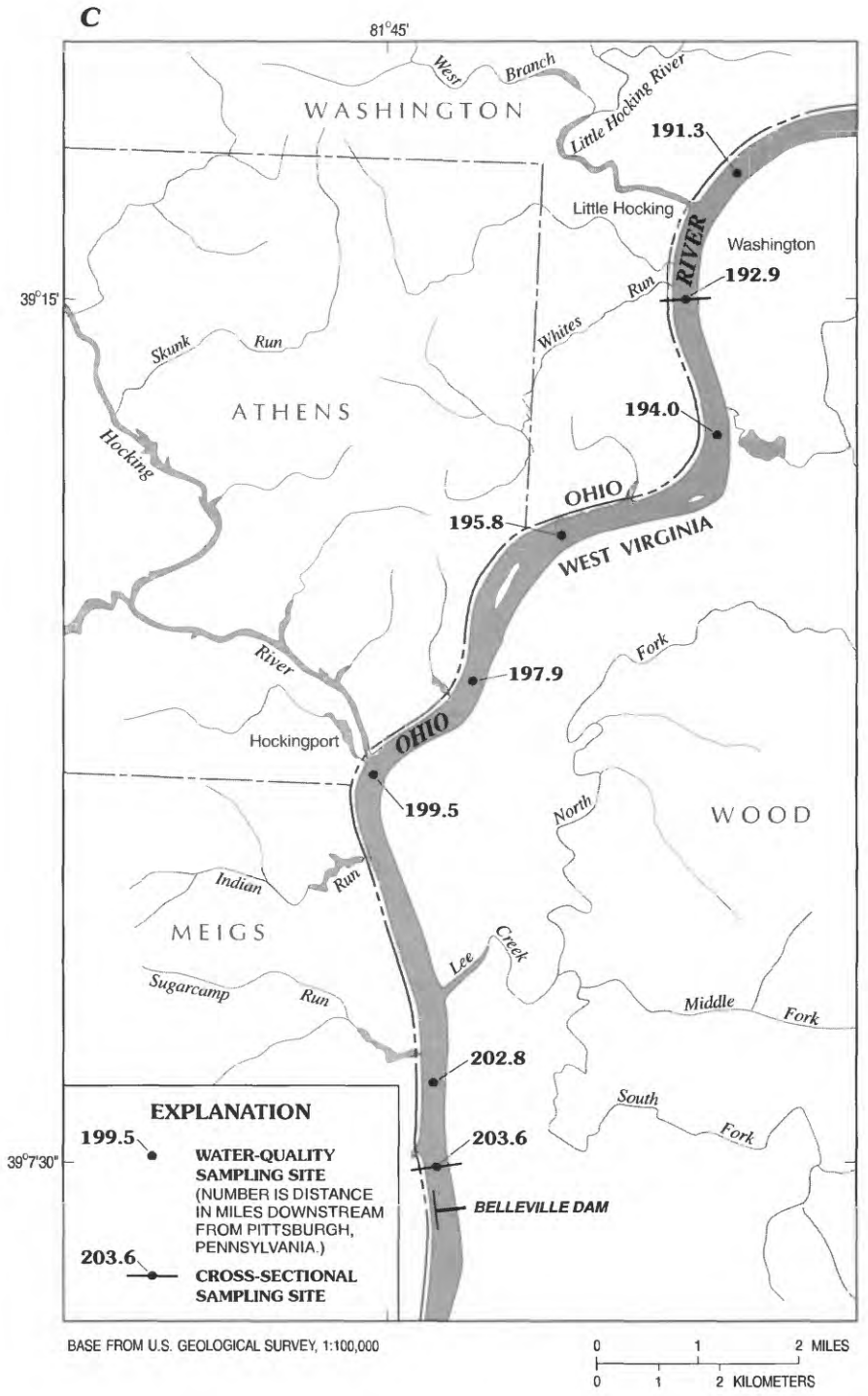

Figure 3c. Water-quality and cross-sectional sampling sites in the western (downstream) section of the study reach.

sampling sites (river miles 160.6, 163.0, and 202.8). Six additional sampling sites were located on the back-channel (West Virginia) sides of Marietta, Muskingum, and Blennerhassett Islands. The locations of the sampling sites are shown in figures 3a-3c. Each location corresponds to the position of a U.S. Coast Guard navigation light or daymark. Sampling methods and instruments were the same as for the cross-sectional transects.

Collection and Analysis of Photosynthetic-Pigment Samples and Light-Penetration Measurements

During most sampling periods, phytoplankton photosynthetic-pigment concentrations were measured at the mid-channel vertical profiles in each of the six cross-sectional transects. At each sampling site, water was collected from four depths (surface of the water, about 3.0 ft below the surface, middle of the water column, and near the bottom of the river) in a 3.2-liter acrylic Kemmerer water sampler and transferred to 1-liter brown plastic bottles. Samples were stored in the dark at 4°C until they were transported to the laboratory for processing.

All water samples were processed within 1 week of collection. Randomly, samples were filtered through glass-fiber filters (GF/C, 1.9-in. diameter) and the filters were shipped on dry ice to the USGS National Water Quality Laboratory in Arvada, Colo., for analysis. Concentrations of chlorophyll *a* and chlorophyll *b* in particulate material deposited on the filters were determined by high-pressure liquid chromatography with fluorometric detection as described by Britton and Greeson (1989, p. 223).

At each photosynthetic-pigment sampling site, an estimate of the depth of light penetration was made by lowering a 9-in.-diameter Secchi disk into the water until the disk was no longer visible from the surface, and the depth was then recorded. All Secchi disk measurements were made between the hours of 1000 and 1600 Eastern Daylight Savings Time (EDT). Secchi-disk depths were not recorded if the sampling time was outside this time window or if high surface waves made accurate measurement impossible.

Continuous-Record Water-Quality Monitoring

Continuous-recording water-quality monitors were installed in May 1993 at sites upstream and downstream from Willow Island Dam (fig. 4). The monitors consisted of Hydrolab H20 multi-parameter data transmitters connected to Handar 570A data-collection platforms that recorded hourly measurements of specific conductance, pH, water temperature, and DO concentration, and transmitted data at 4-hour intervals by way of the Geostationary Operational Environmental Satellite (GOES). The upstream monitor was located at the end of the upstream wingwall on the riverside, about 1,200 ft from the dam (latitude 39°21'45"N, longitude 81°18'56"W), in a section of 6-in. PVC pipe at a fixed depth of 6.6 ft. The downstream monitor was located in a similar position at the end of the downstream wingwall.

Quality Assurance

The portable water-quality monitoring system was calibrated at the beginning of each sampling period in accordance with the recommendations of the manufacturer (Hydrolab Corporation, 1991), and was checked periodically during the day for meter drift. Barometric pressure was recorded before each set of field measurements by use of an analog barometer that was calibrated against a mercury barometer maintained by the National Weather Service Forecast Office in Charleston, W. Va.

The portable monitoring system measures DO concentration electrometrically with a standard membrane electrode. The electrode was calibrated by reading the meter against water-saturated air at known temperature and barometric pressure. As a further check of the accuracy of the DO concentration measurements, the electrode response was tested with a solution of sodium sulfite of sufficient concentration (about 1 g/L) to reduce DO concentration to below the detection limit (0.2 mg/L) of the meter (Skougstad and others, 1979).

At least once during each set of cross-sectional transect measurements, a water sample was collected from a point in the cross section at the same time that electrode measurements were

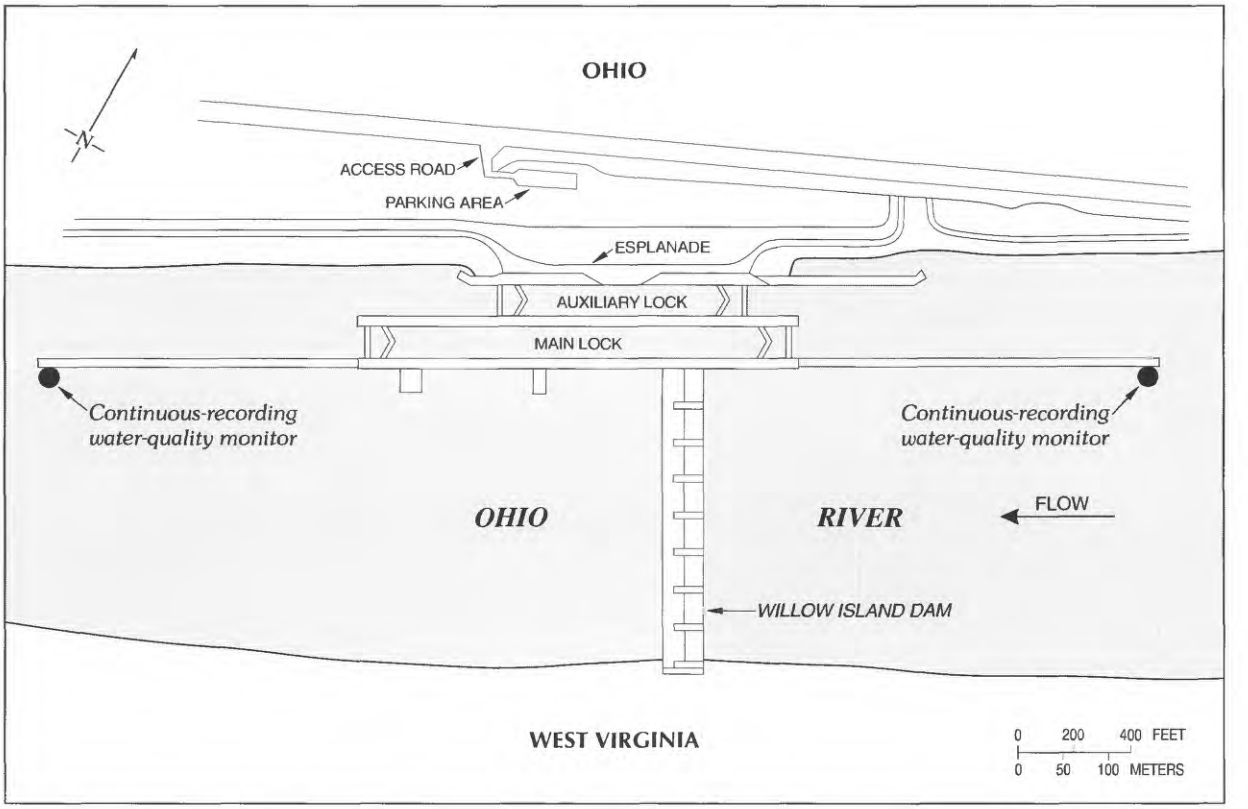

Figure 4. Schematic diagram of Willow Island Dam showing location of continuous-recording water-quality monitors.

recorded, and the DO concentration of the water sample was determined by the Winkler method with azide modification (American Public Health Association and others, 1992, p. 4-100). The meter response was considered accurate if it differed from the results of the Winkler test by no more than 0.2 mg/L. Differences of less than 0.2 mg/L in reported DO concentrations probably are not significant. DO concentration as a percentage of the saturation concentration was calculated using the equations and tables of Weiss (1970).

Secchi disk measurements were always made by the same individual between the hours of 1000 and 1600 EDT. Secchi disk depths were not recorded if the sampling time was outside this time window or if high flows or surface waves made measuring impossible.

The continuous-recording water-quality monitors were serviced and recalibrated according to the manufacturer's instructions at least once every 2 weeks, and more frequently during periods of high water temperatures and low river flows. Two sensor packages were available for each monitoring location so that a precalibrated unit could be installed at a site and the existing unit removed and returned to the laboratory for servicing. Data were transmitted from the Data Collection Platform (DCP) by way of the GOES satellite to a local read-out ground station and from there by way of Internet to Prime, a minicomputer located in Towson, Md. After being transmitted to Prime, the data were processed through Device Conversion & Delivery System (DECODES) and loaded into standard data format into the

Automated Data Processing System (ADAPS). Occasionally, there were interruptions to the satellite transmissions and the process was altered. Amendments to the process included downloading the data from the DCP to a disk and manually processing it through DECODES. Personnel from the USGS West Virginia District performed daily quality control by scanning the unedited data and checking for data interruptions and erroneous values. Raw data were checked for meter drift and corrected when necessary, by assuming a linear rate of change between successive recalibrations.

WATER-QUALITY DATA

Water-quality data collected in the Ohio River from Willow Island Dam to Belleville Dam during May through October 1993 are presented in tables 1 through 38. Data for the cross-sectional and longitudinal transects are presented in tables 1 through 30. The data are arranged according to location of sampling, date, and depth of sampling. Summaries of continuously recorded water-quality data are presented in tables 31 through 38 and are arranged according to date, parameter sampled, and location of sample.

Cross-Sectional and Longitudinal Transect Data

Tables 1 through 30 present water-quality data for cross-sectional and longitudinal transects. Each table contains all water-quality data collected during 1993 at the sampling point indicated. Sampling points are identified by site number and by river mile. The main shipping channel in the Belleville pool is always to the right (the Ohio side) of large islands; the back channel is always to the left (the West Virginia side) of the islands. In this report, locations for both main-channel and back-channel sampling sites are always given as the total distance from the left bank to the middle of the channel and are stored electronically in the U.S. Geological Survey Water Data Storage and Retrieval System (WATSTORE). At locations where cross-sectional-transect data were collected, the location of each depth profile is given as the estimated distance in feet from the left bank of the river and the sampling depth is given in feet below the surface of the water.

Field measurements for the May 24 and June 10 sampling periods do not include near sunrise measurements because that protocol had not been developed. The May 24 sampling also does not contain surface measurements because that protocol had not been implemented. Complete sets of field measurements are reported for the July 7-8, July 29, August 12 -13, September 9, September 23-24, and October 26-27 sampling periods. Sampling sites at river miles 161.4, 162.1, 183.0, 184.6 and 192.9 were the only sampling sites measured during July 15-16 because of time constraints. Severe fog on the river precluded near-sunrise sampling of river mile 192.9 during the August 25-26 sampling period and all near-sunrise sampling during the October 7-8 sampling period.

Chlorophyll concentration is used extensively to estimate phytoplankton biomass. Chlorophyll *a* is abundant in all green plants and constitutes about 1 to 2 percent of phytoplankton dry weight (American Public Health Association and others, 1992, p. 10-17). Chlorophyll *b* is an accessory pigment found in green algae and other phytoplankton taxa. Collected samples were randomly chosen to be processed and analyzed by the National Water Quality Laboratory.

Secchi disk transparency is a measure of the relative amount of light available for photosynthesis (Wetzel and Likens, 1979). The depth at which the Secchi disk disappears from view is affected by the concentration of suspended particles and by light-absorbing characteristics of the water. Occasionally, measurements were missing for river miles 162.1, 183.0, 184.6, and 192.9 because of weather conditions. An incomplete data set exists for river mile 203.6 because the usual time of sampling was not between the hours of 1000 and 1600. Also, the July 7-8 sampling period has an incomplete data set for secchi disk measurements because of equipment failure.

Continuous-Recording Monitor Data

Continuously monitored water-quality data for the Ohio River at the Willow Island Dam monitors from May through October 1993 are summarized in tables 31 through 38. These tables contain daily maximum, minimum, and mean values for specific conductance, water temperature, and DO concentration, and daily maximum, minimum, and median values for pH, for both upstream and downstream continuous-recording monitors. The location of the monitors are identified by site number and as either the upstream or the downstream location (fig. 4). If less than 80 percent of hourly values were recorded for a day, a mean value was not reported for that day. Hourly records are stored permanently in the USGS National Water Information System (NWIS) data base.

SUMMARY

The water-quality data presented in this report were collected during the summer and fall of 1993 as part of a monitoring program designed to assess the effects of hydropower development on water quality in the Belleville navigation pool of the Ohio River (Ohio River miles 160.6 to 203.6). Data-collection methods combined synoptic sampling throughout the pool and continuous monitoring upstream and downstream from Willow Island Dam. The data were collected, in part, to satisfy license requirements (FERC Project No. 6902) for development of hydropower at Willow Island Dam.

Synoptic sampling consisted of collecting measurements of specific conductance, pH, water temperature, and dissolved oxygen (DO) concentration along a longitudinal transect consisting of 24 main-channel sampling sites and 6 sites on the back-channel (West Virginia) sides of Marietta, Muskingum, and Blennerhassett Islands. Longitudinal-transect and back-channel sites were sampled in the middle of the channel at depths of about surface, 3.0 ft below the surface of the water, at the middle of the water column, and near the bottom of the river. Cross-sectional transects of the same water-quality measurements were made at 6 of the 24 main-channel sites. Beginning with the July 7-8 sampling period, three of these cross-sectional transects (river miles 183.0, 184.6, and 192.9) had water-quality measurements taken at near-sunrise and either the afternoon of the same day of the near-sunrise measurements or the afternoon of the previous day. Cross-sectional transects consisted of three or four vertical profiles with measurements at the surface of the water, about 3.0 ft below the surface, and then at depth intervals of about 5.0 ft to the bottom of the river. In addition to these measurements, water samples usually were collected from three depths at the midpoints of the six cross-sectional transects and were analyzed by HPLC and fluorometry for concentrations of phytoplankton chlorophylls *a* and *b*. An estimate of the depth of light penetration (Secchi disk depth) was made at each phytoplankton-pigment sampling site whenever light and river-surface conditions were appropriate. The entire network was sampled 10 times from May 24 to October 27, 1993; partial sampling of the reach was done July 15 - 16, 1993. Beginning with July 7-8 and continuing through the sampling season, as weather permitted, each synoptic sampling period consisted of near-sunrise cross-sectional transect measurements of water quality at river miles 183.0, 184.6, and 192.9. These same sampling sites were also measured during the afternoon either on the same day of the near-sunrise measurements or on the previous day. Exceptions to this protocol were the August 25 - 26 sampling period, where fog prohibited the near-sunrise water-quality measurements of river mile192.9, and the October 26 - 27 sampling period, where fog prohibited all near-sunrise water-quality measurements.

Continuous-recording water-quality monitors were installed at the ends of the upstream and downstream wingwalls at Willow Island Dam. Hourly measurements of specific conductance, pH, water temperature, and DO concentration were recorded beginning in May and continued through October 1993. Maximum, minimum, and mean daily values of specific conductance, water temperature, and DO concentration are reported. Maximum, minimum, and median daily values of pH are reported.

REFERENCES CITED

American Public Health Association, American Water Works Association, and Water Pollution Control Association, 1992, Standard methods for the examination of water and wastewater, 18th ed.: Washington, D.C., p. 4-100.

Avery, S.T., and Novak, Pavel, 1978, Oxygen transfer at hydraulic structures: Journal of the Hydraulics Division, Proceedings of the American Society of Civil Engineers, v. 104, no. HY11, p. 1521-1540.

Britton, L.J., and Greeson, P.E., 1989, Methods for collection and analysis of aquatic biological and microbiological samples: U.S. Geological Survey Techniques of Water-Resources Investigations, book 5, Chap. A4, [variously paged].

Daniil, E.I., Gulliver, J.S., and Thene, J.R., 1991, Water-quality impact assessment for hydropower: Journal of Environmental Engineering, v. 117, no. 2, p. 179-192.

Federal Energy Regulatory Commission, 1988, Hydroelectric development in the upper Ohio River basin--Final environmental impact statement, FERC Docket No. EL85-19-114: Washington, D.C., Federal Energy Regulatory Commission, Office of Hydropower Licensing [variously paged].

Gulliver, J.S., Daniil, E.I., and Thene, J.R., 1990, Assessing hydro projects' effect on DO concentration: Hydro-Review, v. 9, no. 6, p. 62-69.

Hydrolab Corporation, 1991, Surveyor 3. Multiparameter water quality logging system. Operating manual: Austin, Tex., Hydrolab Corporation, 87 p.

Ohio River Valley Water Sanitation Commission, 1988, Ohio River water quality fact book 1988: Cincinnati, Ohio, Ohio River Valley Water Sanitation Commission, 157 p.

Skougstad, M.W., and others, 1979, Methods for determination of inorganic substances in water and fluvial sediments: U.S. Geological Survey Techniques of Water-Resources Investigations, book 5, chap. A1, p. 537-544.

U.S. Army Corps of Engineers, 1990, Ohio River navigation system, 1990: Cincinnati, Ohio, U.S. Army Corps of Engineers, Ohio River Division, 55 p.

Weiss, R.F., 1970, The solubility of nitrogen, oxygen and argon in water and seawater: Deep Sea Research, v. 17, no. 4, p. 721-735.

West Virginia Department of Natural Resources, 1988, Ohio River basin plan: Charleston, W. Va., Department of Natural Resources. 350 p.

_____**1989**, West Virginia water quality status assessment, 1987-1989: Charleston, W. Va., West Virginia Department of Natural Resources, 131 p.

Wetzel, R.G., and Likens, G.E., 1979, Limnological analysis: Philadelphia, W.B. Saunders Company, 357 p.

Tables 1-30 Headnote explanation

At each longitudinal-transect and back-channel sampling site, measurements of specific conductance, pH, water temperature, and dissolved oxygen concentration were made at four depths (surface of the water, about 3.0 ft below the surface, middle of the water column, and near the bottom of the river) constituting a four-point vertical profile. An exception to this protocol was used during the May measurements which were made at three depths (3.3 ft below the surface of the water, middle of the water column, and near the bottom of the river). Beginning with the July 7-8 sampling period and continuing through the remaining sampling dates, a complete depth profile (surface, 3.0 ft, and then intervals of 5.0 ft until bottom) was done at river miles 160.6, 163.0 and 202.8.

Table 1. *Water-quality data for station 392211081181201, Ohio River at river mile 160.6, May to October 1993*

[ft = feet; µS/cm = microsiemens per centimeter; °C = degrees Celsius; mg/L = milligrams per liter; µg/L = micrograms per liter; -- = data not collected]

Date	Time	Sampling depth (ft)	Sample location (ft from left bank)	Specific conductance (µS/cm)	pH (standard units)	Temperature, water (°C)	Transparency (Secchi disk) (ft)	Dissolved oxygen (mg/L)	Dissolved oxygen (percent saturation)	Chlorophyll *a* (µg/L)	Chlorophyll *b* (µg/L)
May											
24	0954	3.6	700	393	7.8	19.9	--	9.0	100	--	--
24	0956	12	700	390	7.7	19.9	--	8.9	100	--	--
24	0956	23	700	391	7.7	19.8	--	8.7	97	--	--
June											
10	0847	.3	700	504	7.2	22.1	--	8.1	94	--	--
10	0848	3.3	700	504	7.3	22.2	--	8.0	93	--	--
10	0854	14	700	504	7.3	22.2	--	8.0	93	--	--
10	0854	29	700	504	7.3	22.2	--	8.1	94	--	--
July											
07	0921	.1	700	499	7.4	29.6	--	7.4	98	--	--
07	0922	3.0	700	499	7.4	29.3	--	7.5	99	--	--
07	0923	4.9	700	495	7.4	28.6	--	7.4	97	--	--
07	0924	10	700	494	7.4	28.1	--	7.3	95	--	--
07	0924	15	700	485	7.4	28.1	--	7.3	95	--	--
07	0925	20	700	485	7.4	28.0	--	7.4	95	--	--
07	0926	25	700	488	7.4	28.0	--	7.4	95	--	--
07	0926	26	700	492	7.4	28.0	--	7.3	94	--	--
29	0813	.5	700	564	7.4	30.1	--	6.7	91	--	--
29	0813	3.1	700	565	7.4	30.0	--	6.7	90	--	--
29	0814	5.2	700	562	7.4	29.7	--	6.7	90	--	--
29	0814	9.3	700	563	7.4	29.5	--	6.7	90	--	--
29	0815	15	700	564	7.3	29.4	--	6.5	87	--	--
29	0815	19	700	560	7.3	29.2	--	6.4	85	--	--
August											
12	0825	.1	700	592	7.4	28.3	--	6.3	82	--	--
12	0826	2.6	700	593	7.4	28.2	--	6.5	85	--	--
12	0826	4.6	700	596	7.4	28.1	--	6.5	85	--	--
12	0827	9.9	700	589	7.4	27.4	--	6.4	83	--	--
12	0827	15	700	596	7.4	27.4	--	6.4	82	--	--
12	0828	20	700	596	7.4	27.3	--	6.4	83	--	--
12	0829	25	700	589	7.4	27.3	--	6.4	83	--	--
12	0829	30	700	596	7.4	27.3	--	6.4	83	--	--
12	0830	33	700	590	7.4	27.3	--	6.3	81	--	--
26	1442	.2	700	605	7.5	30.4	--	6.9	92	--	--
26	1443	3.0	700	604	7.5	30.2	--	6.9	93	--	--
26	1443	5.3	700	600	7.6	29.4	--	7.1	93	--	--
26	1444	9.8	700	598	7.5	28.7	--	6.8	89	--	--
26	1444	15	700	598	7.5	28.4	--	6.5	85	--	--
26	1444	20	700	599	7.4	28.4	--	6.4	84	--	--
26	1445	25	700	598	7.4	28.3	--	6.4	83	--	--
26	1445	28	700	597	7.4	28.3	--	6.3	81	--	--

Table 1. *Water-quality data for station 392211081181201, Ohio River at river mile 160.6, May to October 1993--Continued*

Date	Time	Sampling depth (ft)	Sample location (ft from left bank)	Specific conductance (µS/cm)	pH (standard units)	Temperature, water (°C)	Transparency (Secchi disk) (ft)	Dissolved oxygen (mg/L)	Dissolved oxygen (percent saturation)	Chlorophyll *a* (µg/L)	Chlorophyll *b* (µg/L)
September											
09	1436	0.3	700	552	7.3	27.3	--	5.7	74	--	--
09	1436	3.0	700	552	7.3	27.3	--	5.6	72	--	--
09	1437	5.0	700	556	7.3	27.4	--	5.5	71	--	--
09	1437	10	700	557	7.3	27.4	--	5.5	72	--	--
09	1440	15	700	550	7.3	27.4	--	5.5	71	--	--
09	1439	20	700	549	7.3	27.4	--	5.5	71	--	--
09	1439	26	700	554	7.3	27.3	--	5.4	70	--	--
09	1438	28	700	561	7.3	27.3	--	5.4	70	--	--
23	0900	.1	700	597	7.2	23.7	--	6.8	82	--	--
23	0902	5.3	700	598	7.2	23.7	--	6.5	77	--	--
23	0902	10	700	598	7.2	23.7	--	6.4	77	--	--
23	0903	15	700	598	7.2	23.7	--	6.4	77	--	--
23	0903	20	700	598	7.2	23.7	--	6.4	77	--	--
23	0904	24	700	593	7.2	23.7	--	6.4	76	--	--
October											
07	0931	.1	700	494	7.4	18.7	--	8.1	87	--	--
07	0932	3.2	700	494	7.4	18.7	--	8.0	86	--	--
07	0932	5.2	700	494	7.4	18.7	--	8.0	87	--	--
07	0933	10	700	494	7.4	18.7	--	8.0	87	--	--
07	0933	15	700	494	7.4	18.7	--	8.0	87	--	--
07	0934	20	700	494	7.4	18.7	--	8.0	86	--	--
07	0934	25	700	494	7.4	18.7	--	8.0	86	--	--
27	1353	.1	700	425	7.5	16.2	--	9.6	99	--	--
27	1353	3.0	700	426	7.5	16.2	--	9.6	99	--	--
27	1354	5.1	700	425	7.5	16.2	--	9.5	98	--	--
27	1354	10	700	423	7.4	16.2	--	9.5	98	--	--
27	1355	15	700	425	7.4	16.1	--	9.5	98	--	--
27	1356	20	700	430	7.4	16.1	--	9.5	98	--	--
27	1357	25	700	426	7.4	16.2	--	9.4	98	--	--
27	1357	28	700	433	7.4	16.2	--	9.4	98	--	--

Table 2. *Water-quality data for station 392142081185201, Ohio River at river mile 161.4, May to October 1993*

[ft = feet; µS/cm = microsiemens per centimeter; °C = degrees Celsius; mg/L = milligrams per liter; µg/L = micrograms per liter; -- = data not collected]

Date	Time	Sampling depth (ft)	Sample location (ft from left bank)	Specific conductance (µS/cm)	pH (standard units)	Temperature, water (°C)	Transparency (Secchi disk) (ft)	Dissolved oxygen (mg/L)	Dissolved oxygen (percent saturation)	Chlorophyll *a* (µg/L)	Chlorophyll *b* (µg/L)
May											
24	1043	3.6	300	392	7.8	20.0	--	9.0	100	--	--
24	1043	5.9	300	392	7.8	20.0	--	8.9	100	--	--
24	1044	10	300	391	7.8	19.9	--	8.8	99	--	--
24	1045	16	300	391	7.7	19.8	--	8.5	96	--	--
24	1046	22	300	393	7.7	19.8	--	8.5	95	--	--
24	1030	3.3	600	392	7.7	20.3	4.5	9.1	102	5.4	0.6
24	1030	6.6	600	392	7.7	20.1	--	9.0	101	--	--
24	1029	9.9	600	393	7.7	20.1	--	8.9	100	--	--
24	1029	17	600	391	7.7	19.9	--	8.7	97	--	--
24	1028	23	600	392	7.6	19.8	--	8.6	96	--	--
24	1027	29	600	391	7.7	19.8	--	8.6	96	--	--
24	1017	3.6	900	393	7.8	20.3	--	9.0	101	--	--
24	1018	6.9	900	393	7.8	20.2	--	9.0	101	--	--
24	1018	9.5	900	393	7.8	20.0	--	8.9	100	--	--
24	1019	16	900	393	7.7	19.8	--	8.7	97	--	--
24	1020	23	900	394	7.7	19.8	--	8.7	97	--	--
24	1021	30	900	389	7.7	19.8	--	8.7	97	--	--
24	1021	33	900	392	7.7	19.8	--	8.7	97	--	--
24	1007	3.3	1,200	395	7.8	20.2	--	8.9	100	--	--
24	1007	6.6	1,200	396	7.8	20.3	--	8.9	100	--	--
24	1008	9.5	1,200	394	7.8	20.1	--	8.8	99	--	--
24	1009	16	1,200	394	7.7	19.9	--	8.7	97	--	--
24	1010	23	1,200	390	7.7	19.8	--	8.7	97	--	--
24	1010	30	1,200	391	7.7	19.8	--	8.7	97	--	--
24	1011	35	1,200	395	7.7	19.8	--	8.7	97	--	--
June											
10	0859	.7	300	503	7.3	22.5	--	8.0	94	--	--
10	0900	3.0	300	502	7.3	22.5	--	8.0	93	--	--
10	0901	5.9	300	503	7.3	22.4	--	7.9	93	--	--
10	0902	9.5	300	503	7.3	22.3	--	7.9	92	--	--
10	0905	16	300	503	7.3	22.2	--	7.9	92	--	--
10	0906	23	300	503	7.3	22.2	--	7.9	92	--	--
10	0912	.7	600	504	7.3	22.2	--	8.1	94	--	--
10	0911	3.3	600	503	7.3	22.2	--	7.9	92	--	--
10	0911	6.9	600	503	7.3	22.2	--	7.9	92	--	--
10	0910	9.9	600	503	7.3	22.2	--	7.9	92	--	--
10	0910	17	600	504	7.3	22.2	--	7.9	92	--	--
10	0909	23	600	504	7.3	22.2	--	7.9	92	--	--
10	0908	30	600	504	7.3	22.2	--	7.9	92	--	--
10	0922	.7	900	506	7.3	22.3	--	7.9	93	--	--
10	0921	3.9	900	502	7.3	22.2	--	8.0	93	--	--
10	0921	7.2	900	501	7.3	22.2	--	7.9	92	--	--
10	0920	10	900	502	7.3	22.2	--	7.9	92	--	--
10	0920	17	900	506	7.3	22.2	--	7.9	92	--	--
10	0920	24	900	500	7.3	22.2	--	7.9	92	--	--
10	0919	30	900	496	7.3	22.2	--	7.9	92	--	--
10	0919	33	900	507	7.3	22.2	--	7.9	92	--	--

Table 2. *Water-quality data for station 392142081185201, Ohio River at river mile 161.4, May to October 1993--Continued*

Date	Time	Sampling depth (ft)	Sample location (ft from left bank)	Specific conductance (µS/cm)	pH (standard units)	Temperature, water (°C)	Transparency (Secchi disk) (ft)	Dissolved oxygen (mg/L)	Dissolved oxygen (percent saturation)	Chlorophyll *a* (µg/L)	Chlorophyll *b* (µg/L)
June											
10	0929	0.7	1,200	503	7.3	22.2	--	7.9	93	--	--
10	0929	3.0	1,200	503	7.3	22.2	--	7.9	93	--	--
10	0928	6.3	1,200	502	7.3	22.2	--	7.9	93	--	--
10	0927	9.9	1,200	500	7.3	22.2	--	7.9	93	--	--
10	0927	17	1,200	510	7.3	22.2	--	7.9	93	--	--
10	0926	24	1,200	511	7.3	22.2	--	7.9	92	--	--
10	0926	30	1,200	505	7.3	22.2	--	7.9	92	--	--
10	0925	36	1,200	499	7.3	22.2	--	7.9	93	--	--
10	0924	39	1,200	515	7.3	22.2	--	7.9	93	--	--
July											
07	1015	.1	300	496	7.6	29.3	--	8.2	108	--	--
07	1015	3.1	300	496	7.6	29.1	--	8.2	108	--	--
07	1014	5.3	300	492	7.5	28.8	--	8.0	105	--	--
07	1014	9.9	300	495	7.4	28.5	--	7.1	93	--	--
07	1013	15	300	487	7.4	28.2	--	7.1	92	--	--
07	1012	20	300	491	7.4	28.1	--	6.9	89	--	--
07	1002	.1	600	495	7.5	29.2	4.0	7.9	104	9.2	1.0
07	1002	1.1	600	495	7.5	29.2	--	7.8	103	--	--
07	1001	5.3	600	490	7.4	28.6	--	7.4	97	--	--
07	1001	10	600	491	7.4	28.4	--	7.4	96	--	--
07	1000	15	600	489	7.4	28.3	--	7.2	93	--	--
07	0959	20	600	490	7.3	28.1	--	6.9	89	--	--
07	0959	25	600	492	7.3	27.9	--	6.5	84	--	--
07	0958	30	600	491	7.2	27.7	--	6.0	77	--	--
07	0946	3.2	900	493	7.5	28.9	--	8.0	105	--	--
07	0947	4.8	900	490	7.4	28.7	--	7.2	95	--	--
07	0948	10	900	487	7.4	28.3	--	7.0	91	--	--
07	0948	15	900	492	7.4	28.2	--	7.1	92	--	--
07	0949	20	900	494	7.4	28.1	--	7.1	92	--	--
07	0950	25	900	489	7.2	27.9	--	6.3	81	--	--
07	0950	30	900	492	7.2	27.6	--	5.8	75	--	--
07	0950	33	900	493	7.2	27.5	--	5.7	72	--	--
07	0935	.3	1,200	491	7.5	29.0	--	7.9	104	--	--
07	0936	3.2	1,200	490	7.4	28.7	--	7.4	97	--	--
07	0937	4.9	1,200	489	7.4	28.6	--	7.3	96	--	--
07	0937	10	1,200	487	7.4	28.1	--	7.1	92	--	--
07	0938	15	1,200	492	7.3	28.1	--	7.0	91	--	--
07	0939	20	1,200	486	7.3	28.0	--	6.8	87	--	--
07	0939	25	1,200	494	7.3	27.9	--	6.6	85	--	--
07	0940	30	1,200	489	7.2	27.7	--	5.9	76	--	--
07	0940	35	1,200	491	7.2	27.7	--	5.6	72	--	--
07	0941	39	1,200	492	7.1	27.7	--	5.5	71	--	--
15	1439	.1	600	476	7.4	30.2	4.5	7.4	99	--	--
15	1439	2.9	600	476	7.3	30.2	--	7.4	99	--	--
15	1438	5.1	600	474	7.3	29.9	--	7.3	97	--	--
15	1437	10	600	471	7.2	29.6	--	6.9	91	--	--
15	1437	15	600	474	7.2	29.5	--	6.7	89	--	--
15	1436	20	600	469	7.1	29.3	--	6.2	83	--	--
15	1435	25	600	468	7.1	29.3	--	6.1	82	1.9	.2
15	1434	31	600	471	7.1	29.0	--	5.7	75	--	--

Table 2. *Water-quality data for station 392142081185201, Ohio River at river mile 161.4, May to October 1993--Continued*

Date	Time	Sampling depth (ft)	Sample location (ft from left bank)	Specific conductance (µS/cm)	pH (standard units)	Temperature, water (°C)	Transparency (Secchi disk) (ft)	Dissolved oxygen (mg/L)	Dissolved oxygen (percent saturation)	Chlorophyll *a* (µg/L)	Chlorophyll *b* (µg/L)
July											
29	0909	0.3	300	567	7.5	29.4	--	6.5	87	--	--
29	0910	2.9	300	563	7.4	29.5	--	6.6	88	--	--
29	0910	5.0	300	562	7.4	29.5	--	5.8	78	--	--
29	0911	9.6	300	572	7.4	29.5	--	6.7	89	--	--
29	0911	15	300	556	7.4	29.4	--	6.4	85	--	--
29	0912	20	300	563	7.3	29.0	--	5.6	74	--	--
29	0855	.2	600	543	7.4	29.5	--	5.8	77	4.1	0.3
29	0856	2.9	600	561	7.4	29.5	--	6.4	86	--	--
29	0856	5.6	600	563	7.4	29.5	--	6.7	90	--	--
29	0857	10	600	568	7.4	29.5	--	6.7	90	--	--
29	0858	15	600	558	7.4	29.4	--	6.5	87	--	--
29	0858	20	600	556	7.3	29.1	--	6.2	83	--	--
29	0859	25	600	560	7.3	29.0	--	6.2	82	--	--
29	0859	29	600	563	7.3	29.0	--	6.1	81	--	--
29	0845	.5	900	563	7.4	29.5	--	6.1	81	--	--
29	0846	3.1	900	562	7.4	29.5	--	6.6	88	--	--
29	0846	4.8	900	560	7.4	29.5	--	6.6	88	--	--
29	0847	9.9	900	565	7.4	29.5	--	6.5	88	--	--
29	0848	15	900	566	7.3	29.2	--	6.5	86	--	--
29	0848	20	900	561	7.3	29.1	--	6.4	85	--	--
29	0848	25	900	556	7.3	29.0	--	6.1	80	--	--
29	0849	30	900	557	7.2	29.0	--	5.7	76	--	--
29	0850	33	900	557	7.2	29.0	--	5.8	77	--	--
29	0821	.4	1,200	564	7.4	29.3	--	6.6	88	--	--
29	0822	3.0	1,200	561	7.4	29.3	--	6.5	87	--	--
29	0822	5.1	1,200	562	7.3	29.3	--	6.6	88	--	--
29	0823	9.9	1,200	562	7.3	29.4	--	6.6	88	--	--
29	0823	15	1,200	563	7.3	29.3	--	6.5	87	--	--
29	0824	20	1,200	562	7.3	29.1	--	6.2	83	--	--
29	0825	25	1,200	557	7.3	29.1	--	6.2	82	--	--
29	0825	30	1,200	563	7.3	29.1	--	6.2	82	--	--
29	0826	35	1,200	555	7.3	29.1	--	6.2	82	--	--
29	0827	38	1,200	555	7.3	29.1	--	6.2	82	--	--
August											
12	0904	.1	300	595	7.5	27.8	--	6.8	88	--	--
12	0905	2.6	300	596	7.5	27.7	--	6.7	87	--	--
12	0905	4.9	300	594	7.4	27.6	--	6.5	84	--	--
12	0906	9.9	300	595	7.4	27.6	--	6.4	83	--	--
12	0906	15	300	593	7.4	27.4	--	6.2	80	--	--
12	0908	19	300	590	7.4	27.4	--	7.6	97	--	--
12	0853	.1	600	594	7.5	27.8	--	6.8	88	--	--
12	0854	3.0	600	596	7.5	27.8	--	6.8	88	--	--
12	0854	4.9	600	595	7.5	27.7	--	6.7	87	--	--
12	0855	9.9	600	596	7.4	27.6	--	6.6	85	--	--
12	0855	15	600	594	7.4	27.5	--	6.5	84	--	--
12	0856	20	600	592	7.4	27.5	--	6.4	83	--	--
12	0857	25	600	593	7.4	27.4	--	6.2	80	--	--
12	0857	30	600	592	7.3	27.4	--	6.2	79	--	--

Table 2. *Water-quality data for station 392142081185201, Ohio River at river mile 161.4, May to October 1993--Continued*

Date	Time	Sampling depth (ft)	Sample location (ft from left bank)	Specific conductance (µS/cm)	pH (standard units)	Temperature, water (°C)	Transparency (Secchi disk) (ft)	Dissolved oxygen (mg/L)	Dissolved oxygen (percent saturation)	Chlorophyll *a* (µg/L)	Chlorophyll *b* (µg/L)
August											
12	0845	0.1	900	595	7.5	27.6	--	6.8	88	--	--
12	0846	3.0	900	594	7.5	27.7	--	6.8	88	--	--
12	0846	4.9	900	594	7.5	27.6	--	6.7	87	--	--
12	0847	9.9	900	595	7.4	27.6	--	6.6	86	--	--
12	0847	15	900	593	7.4	27.5	--	6.6	85	--	--
12	0848	20	900	593	7.4	27.5	--	6.6	85	--	--
12	0849	25	900	591	7.4	27.5	--	6.6	85	--	--
12	0849	30	900	596	7.4	27.4	--	6.3	81	--	--
12	0850	33	900	591	7.4	27.4	--	6.3	81	--	--
12	0834	.1	1,200	593	7.4	27.5	--	6.5	84	--	--
12	0835	2.6	1,200	593	7.4	27.5	--	6.6	84	--	--
12	0835	4.6	1,200	593	7.4	27.5	--	6.5	84	--	--
12	0836	9.9	1,200	594	7.4	27.5	--	6.5	84	--	--
12	0836	15	1,200	593	7.4	27.5	--	6.1	79	--	--
12	0837	20	1,200	592	7.4	27.5	--	6.3	81	--	--
12	0838	25	1,200	594	7.4	27.5	--	6.3	81	--	--
12	0838	30	1,200	594	7.4	27.5	--	6.2	80	--	--
12	0839	35	1,200	596	7.4	27.5	--	6.5	83	--	--
12	0839	37	1,200	596	7.4	27.5	--	6.5	83	--	--
26	1436	.2	300	594	7.8	30.9	--	7.5	102	--	--
26	1436	3.1	300	593	8.0	29.9	--	7.8	104	--	--
26	1437	5.1	300	592	8.0	29.2	--	8.7	115	--	--
26	1437	10	300	592	7.6	28.7	--	7.1	92	--	--
26	1438	15	300	592	7.5	28.6	--	6.8	89	--	--
26	1438	20	300	592	7.5	28.5	--	6.4	84	--	--
26	1438	21	300	591	7.5	28.4	--	5.6	73	--	--
26	1432	.3	600	601	7.7	30.7	6.0	6.8	92	--	--
26	1431	3.1	600	597	7.7	29.5	--	6.9	91	--	--
26	1431	5.0	600	596	7.6	29.2	--	6.7	88	--	--
26	1430	10	600	593	7.5	28.7	--	6.5	86	--	--
26	1429	16	600	594	7.5	28.6	--	6.2	81	1.6	0.2
26	1428	20	600	592	7.5	28.5	--	6.4	83	--	--
26	1427	25	600	591	7.4	28.4	--	6.5	84	--	--
26	1426	28	600	588	7.4	28.2	--	5.8	76	--	--
26	1418	.1	900	601	7.6	30.7	--	6.9	94	--	--
26	1420	3.2	900	602	7.6	30.3	--	6.9	93	--	--
26	1418	5.1	900	595	7.6	29.0	--	7.3	96	--	--
26	1419	10	900	595	7.6	28.7	--	7.2	94	--	--
26	1419	15	900	592	7.5	28.6	--	6.9	90	--	--
26	1420	20	900	594	7.5	28.5	--	6.8	88	--	--
26	1420	25	900	593	7.5	28.4	--	6.7	87	--	--
26	1421	30	900	590	7.4	28.3	--	6.4	83	--	--
26	1421	33	900	588	7.4	28.2	--	4.6	59	--	--

Table 2. *Water-quality data for station 392142081185201, Ohio River at river mile 161.4, May to October 1993--Continued*

Date	Time	Sampling depth (ft)	Sample location (ft from left bank)	Specific conductance (µS/cm)	pH (standard units)	Temperature, water (°C)	Transparency (Secchi disk) (ft)	Dissolved oxygen (mg/L)	Dissolved oxygen (percent saturation)	Chlorophyll *a* (µg/L)	Chlorophyll *b* (µg/L)
August											
26	1338	0.2	1,200	593	7.5	30.5	--	7.3	99	--	--
26	1339	3.2	1,200	591	7.6	29.5	--	7.6	101	--	--
26	1339	5.1	1,200	590	7.6	29.0	--	7.4	97	--	--
26	1340	9.9	1,200	590	7.5	28.6	--	6.9	90	--	--
26	1341	15	1,200	591	7.5	28.6	--	6.8	89	--	--
26	1342	20	1,200	589	7.4	28.5	--	6.7	87	--	--
26	1342	25	1,200	591	7.4	28.4	--	5.7	74	--	--
26	1343	30	1,200	591	7.4	28.4	--	5.8	75	--	--
26	1344	33	1,200	586	7.4	28.4	--	5.8	76	--	--
September											
09	1428	.1	300	556	7.3	27.5	--	5.9	77	--	--
09	1429	3.0	300	556	7.3	27.5	--	5.9	77	--	--
09	1429	5.1	300	557	7.3	27.5	--	5.9	76	--	--
09	1430	9.9	300	558	7.3	27.4	--	5.8	75	--	--
09	1430	15	300	559	7.3	27.4	--	5.7	73	--	--
09	1431	20	300	560	7.3	27.4	--	5.6	72	--	--
09	1413	.3	600	556	7.3	27.4	5.0	5.7	73	--	--
09	1414	3.1	600	554	7.3	27.4	--	5.8	75	--	--
09	1414	5.0	600	554	7.3	27.4	--	5.8	75	--	--
09	1415	9.9	600	554	7.3	27.4	--	5.7	74	2.8	0.2
09	1415	15	600	556	7.3	27.4	--	5.6	73	--	--
09	1415	20	600	556	7.3	27.4	--	5.6	72	--	--
09	1416	25	600	557	7.3	27.4	--	5.5	71	2.0	.2
09	1416	29	600	558	7.3	27.4	--	5.4	70	--	--
09	1405	.3	900	555	7.3	27.4	--	5.8	76	--	--
09	1406	3.1	900	557	7.3	27.4	--	5.7	74	--	--
09	1406	4.9	900	556	7.3	27.4	--	5.7	74	--	--
09	1407	9.8	900	554	7.3	27.4	--	5.7	74	--	--
09	1407	15	900	555	7.3	27.4	--	5.6	73	--	--
09	1408	20	900	555	7.3	27.4	--	5.5	72	--	--
09	1408	25	900	555	7.3	27.4	--	5.6	72	--	--
09	1409	30	900	556	7.3	27.4	--	5.5	71	--	--
09	1409	32	900	556	7.3	27.4	--	5.5	71	--	--
09	1355	.3	1,200	553	7.3	27.4	--	5.7	73	--	--
09	1356	2.8	1,200	554	7.3	27.4	--	5.6	73	--	--
09	1356	4.9	1,200	554	7.3	27.4	--	5.6	72	--	--
09	1357	10	1,200	553	7.3	27.4	--	5.6	72	--	--
09	1357	15	1,200	555	7.3	27.4	--	5.6	72	--	--
09	1357	20	1,200	553	7.3	27.4	--	5.5	71	--	--
09	1358	25	1,200	554	7.3	27.4	--	5.5	71	--	--
09	1358	30	1,200	555	7.3	27.4	--	5.5	71	--	--
09	1359	35	1,200	555	7.3	27.4	--	5.5	71	--	--
09	1400	36	1,200	554	7.3	27.4	--	5.5	71	--	--
23	0937	.2	300	598	7.2	23.7	--	6.5	78	--	--
23	0938	2.9	300	593	7.2	23.8	--	6.5	78	--	--
23	0939	4.8	300	595	7.2	23.8	--	6.5	78	--	--
23	0940	9.9	300	597	7.2	23.8	--	6.4	77	--	--
23	0941	15	300	605	7.2	23.7	--	6.4	77	--	--
23	0942	20	300	603	7.2	23.6	--	6.4	77	--	--
23	0942	21	300	605	7.2	23.5	--	6.4	76	--	--

Table 2. *Water-quality data for station 392142081185201, Ohio River at river mile 161.4, May to October 1993--Continued*

Date	Time	Sampling depth (ft)	Sample location (ft from left bank)	Specific conductance (µS/cm)	pH (standard units)	Temperature, water (°C)	Transparency (Secchi disk) (ft)	Dissolved oxygen (mg/L)	Dissolved oxygen (percent saturation)	Chlorophyll *a* (µg/L)	Chlorophyll *b* (µg/L)
September											
23	0932	0.2	600	597	7.2	23.8	--	6.5	78	1.4	0.1
23	0931	2.9	600	595	7.2	23.8	--	6.5	78	--	--
23	0931	5.1	600	598	7.2	23.8	--	6.5	78	--	--
23	0930	10	600	601	7.2	23.8	--	6.5	78	--	--
23	0929	15	600	601	7.2	23.8	--	6.5	78	--	--
23	0928	20	600	599	7.2	23.8	--	6.5	78	--	--
23	0927	25	600	598	7.2	23.7	--	6.5	78	1.4	.1
23	0926	30	600	599	7.2	23.7	--	6.5	78	--	--
23	0918	.3	900	571	7.2	23.7	--	6.5	78	--	--
23	0919	2.7	900	573	7.2	23.7	--	6.5	78	--	--
23	0920	5.1	900	575	7.2	23.7	--	6.4	77	--	--
23	0920	9.9	900	598	7.2	23.7	--	6.4	77	--	--
23	0921	15	900	598	7.2	23.8	--	6.4	77	--	--
23	0921	20	900	598	7.2	23.8	--	6.4	77	--	--
23	0922	25	900	599	7.2	23.8	--	6.4	77	--	--
23	0922	30	900	599	7.2	23.8	--	6.4	77	--	--
23	0923	33	900	599	7.2	23.8	--	6.4	77	--	--
23	0910	.1	1,200	598	7.2	23.8	--	6.8	81	--	--
23	0911	3.0	1,200	598	7.2	23.7	--	6.6	79	--	--
23	0912	4.8	1,200	598	7.2	23.8	--	6.5	78	--	--
23	0912	10	1,200	598	7.2	23.8	--	6.5	78	--	--
23	0913	15	1,200	598	7.2	23.8	--	6.5	78	--	--
23	0913	20	1,200	599	7.2	23.8	--	6.5	78	--	--
23	0914	25	1,200	599	7.2	23.7	--	6.4	77	--	--
23	0914	30	1,200	599	7.2	23.8	--	6.4	77	--	--
23	0915	34	1,200	599	7.2	23.8	--	6.5	78	--	--
October											
07	1009	.2	300	498	7.5	19.1	--	8.1	88	--	--
07	1010	2.9	300	500	7.5	19.1	--	8.1	88	--	--
07	1010	5.2	300	497	7.5	18.8	--	8.0	86	--	--
07	1011	10	300	494	7.5	18.7	--	8.0	86	--	--
07	1011	15	300	497	7.5	18.7	--	8.0	86	--	--
07	1012	21	300	490	7.5	18.7	--	7.9	85	--	--
07	1000	.3	600	499	7.5	19.2	6.0	8.1	88	1.3	.1
07	1001	3.0	600	500	7.5	19.2	--	8.1	88	--	--
07	1001	5.0	600	498	7.5	19.2	--	8.1	88	--	--
07	1002	9.9	600	495	7.5	18.9	--	8.0	87	--	--
07	1002	15	600	491	7.5	18.8	--	8.0	87	--	--
07	1003	20	600	494	7.5	18.7	--	8.0	86	--	--
07	1003	25	600	491	7.5	18.7	--	8.0	86	--	--
07	1004	30	600	491	7.5	18.7	--	8.0	86	--	--
07	1004	31	600	497	7.5	18.7	--	8.0	86	--	--
07	0950	.3	900	504	7.5	19.5	--	8.3	91	--	--
07	0951	2.6	900	501	7.5	19.5	--	8.1	89	--	--
07	0951	4.8	900	502	7.5	19.1	--	8.0	87	--	--
07	0952	9.9	900	501	7.5	18.9	--	8.0	87	--	--
07	0952	15	900	503	7.5	18.8	--	8.0	86	--	--
07	0953	20	900	495	7.5	18.8	--	8.0	86	--	--
07	0953	25	900	502	7.5	18.8	--	8.0	86	--	--
07	0954	30	900	496	7.5	18.8	--	8.0	86	--	--
07	0954	33	900	488	7.5	18.8	--	8.0	86	--	--

Table 2. *Water-quality data for station 392142081185201, Ohio River at river mile 161.4, May to October 1993--Continued*

Date	Time	Sampling depth (ft)	Sample location (ft from left bank)	Specific conductance (µS/cm)	pH (standard units)	Temperature, water (°C)	Transparency (Secchi disk) (ft)	Dissolved oxygen (mg/L)	Dissolved oxygen (percent saturation)	Chlorophyll *a* (µg/L)	Chlorophyll *b* (µg/L)
October											
07	0940	0.3	1,200	503	7.5	19.3	--	8.0	87	--	--
07	0941	3.1	1,200	503	7.5	19.4	--	8.0	87	--	--
07	0941	5.3	1,200	503	7.5	19.3	--	8.0	87	--	--
07	0942	9.9	1,200	501	7.5	19.1	--	8.0	87	--	--
07	0942	15	1,200	497	7.6	18.9	--	8.0	86	--	--
07	0943	20	1,200	498	7.5	18.8	--	8.0	86	--	--
07	0943	25	1,200	497	7.5	18.8	--	8.0	86	--	--
07	0944	30	1,200	497	7.5	18.8	--	8.0	86	--	--
07	0944	35	1,200	494	7.5	18.8	--	8.0	86	--	--
07	0945	38	1,200	501	7.5	18.8	--	8.0	86	--	--
27	1350	.1	300	431	7.5	16.2	--	9.6	99	--	--
27	1351	3.4	300	427	7.5	16.2	--	9.5	99	--	--
27	1351	5.1	300	428	7.5	16.2	--	9.6	99	--	--
27	1352	9.9	300	432	7.4	16.2	--	9.4	98	--	--
27	1352	15	300	429	7.4	16.1	--	9.4	97	--	--
27	1353	20	300	424	7.4	16.1	--	9.4	97	--	--
27	1353	21	300	429	7.4	16.1	--	9.4	97	--	--
27	1335	.3	600	426	7.5	16.2	4.0	9.6	99	--	--
27	1335	2.9	600	425	7.5	16.2	--	9.6	99	--	--
27	1336	5.1	600	428	7.4	16.1	--	9.5	98	--	--
27	1336	10	600	431	7.4	16.1	--	9.5	98	--	--
27	1337	15	600	433	7.4	16.1	--	9.5	98	2.8	0.1
27	1337	20	600	436	7.4	16.1	--	9.5	98	--	--
27	1338	26	600	423	7.4	16.1	--	9.5	98	--	--
27	1338	30	600	416	7.4	16.2	--	9.4	97	--	--
27	1338	33	600	418	7.4	16.2	--	9.4	98	--	--
27	1324	.4	900	427	7.5	16.2	--	9.5	98	--	--
27	1324	2.4	900	430	7.4	16.2	--	9.4	97	--	--
27	1325	3.1	900	428	7.5	16.2	--	9.5	98	--	--
27	1325	4.5	900	427	7.5	16.2	--	9.5	98	--	--
27	1326	9.8	900	427	7.4	16.2	--	9.5	98	--	--
27	1326	15	900	428	7.4	16.2	--	9.5	98	--	--
27	1327	20	900	429	7.4	16.2	--	9.4	98	--	--
27	1327	25	900	427	7.4	16.2	--	9.4	98	--	--
27	1328	30	900	425	7.4	16.2	--	9.4	98	--	--
27	1241	.1	1,200	428	7.4	16.2	--	9.4	97	--	--
27	1241	3.2	1,200	428	7.4	16.2	--	9.4	97	--	--
27	1242	5.3	1,200	428	7.4	16.2	--	9.4	97	--	--
27	1242	10	1,200	428	7.4	16.2	--	9.4	97	--	--
27	1243	15	1,200	428	7.4	16.2	--	9.5	98	--	--
27	1243	20	1,200	428	7.4	16.2	--	9.4	98	--	--
27	1244	24	1,200	428	7.4	16.2	--	9.4	98	--	--

Table 3. *Water-quality data for station 392121081193401, Ohio River at river mile 162.1, May to October 1993*

[ft = feet; µS/cm = microsiemens per centimeter; °C = degrees Celsius; mg/L = milligrams per liter; µg/L = micrograms per liter; -- = data not collected]

Date	Time	Sampling depth (ft)	Sample location (ft from left bank)	Specific conductance (µS/cm)	pH (standard units)	Temperature, water (°C)	Transparency (Secchi disk) (ft)	Dissolved oxygen (mg/L)	Dissolved oxygen (percent saturation)	Chlorophyll *a* (µg/L)	Chlorophyll *b* (µg/L)
May											
24	1144	3.6	300	389	7.8	20.0	--	8.9	100	--	--
24	1145	6.6	300	393	7.8	20.0	--	8.9	100	--	--
24	1145	9.9	300	393	7.8	20.0	--	8.9	100	--	--
24	1146	16	300	393	7.8	20.0	--	8.9	100	--	--
24	1146	22	300	395	7.8	20.0	--	8.9	100	--	--
24	1135	3.6	500	392	7.7	19.9	--	8.8	98	8.8	0.4
24	1134	6.6	500	392	7.7	19.9	--	8.8	98	--	--
24	1134	8.9	500	392	7.7	19.9	--	8.8	98	--	--
24	1133	16	500	393	7.8	19.9	--	8.8	99	--	--
24	1126	3.3	800	392	7.8	19.9	--	8.8	99	--	--
24	1127	6.9	800	392	7.8	19.9	--	8.8	99	--	--
24	1127	9.9	800	392	7.7	19.9	--	8.8	99	--	--
24	1128	16	800	393	7.7	19.9	--	8.8	99	--	--
24	1129	22	800	393	7.7	19.9	--	8.8	99	--	--
24	1120	3.6	1,000	392	7.8	19.9	--	8.9	100	--	--
24	1121	6.9	1,000	393	7.8	19.9	--	8.9	99	--	--
24	1121	10	1,000	393	7.8	20.0	--	8.9	99	--	--
24	1122	13	1,000	393	7.7	19.9	--	8.8	99	--	--
June											
10	1007	.7	300	503	7.3	22.3	--	7.9	93	--	--
10	1006	3.3	300	503	7.3	22.3	--	7.9	92	--	--
10	1006	6.9	300	504	7.3	22.3	--	7.9	93	--	--
10	1006	9.9	300	503	7.3	22.3	--	7.9	93	--	--
10	1005	16	300	503	7.3	22.3	--	7.9	92	--	--
10	1005	23	300	504	7.3	22.3	--	7.9	92	--	--
10	1004	28	300	504	7.3	22.3	--	7.9	92	--	--
10	1012	.7	500	503	7.3	22.3	1.5	8.0	93	8.6	.3
10	1012	3.3	500	503	7.3	22.2	--	8.0	93	--	--
10	1011	6.6	500	503	7.3	22.3	--	8.0	93	--	--
10	1010	9.9	500	504	7.3	22.3	--	8.0	93	--	--
10	1010	16	500	504	7.3	22.3	--	8.0	93	--	--
10	1009	21	500	504	7.3	22.2	--	8.0	94	--	--
10	1022	.7	800	503	7.3	22.3	--	8.1	94	--	--
10	1022	3.3	800	503	7.3	22.3	--	8.0	94	--	--
10	1021	6.6	800	503	7.3	22.3	--	8.0	94	--	--
10	1021	9.2	800	503	7.3	22.3	--	8.0	94	--	--
10	1020	16	800	504	7.3	22.3	--	8.0	93	--	--
10	1020	23	800	504	7.3	22.3	--	8.0	94	--	--
10	1019	30	800	504	7.3	22.3	--	8.0	94	--	--
10	1028	1.0	1,000	503	7.3	22.3	--	8.0	94	--	--
10	1027	3.3	1,000	504	7.3	22.3	--	8.0	94	--	--
10	1027	6.3	1,000	504	7.3	22.3	--	8.0	94	--	--
10	1026	11	1,000	504	7.3	22.3	--	8.0	93	--	--
10	1026	17	1,000	504	7.3	22.3	--	8.0	93	--	--
10	1025	19	1,000	504	7.3	22.3	--	8.0	94	--	--

Table 3. *Water-quality data for station 392121081193401, Ohio River at river mile 162.1, May to October 1993--Continued*

Date	Time	Sampling depth (ft)	Sample location (ft from left bank)	Specific conductance (µS/cm)	pH (standard units)	Temperature, water (°C)	Transparency (Secchi disk) (ft)	Dissolved oxygen (mg/L)	Dissolved oxygen (percent saturation)	Chlorophyll *a* (µg/L)	Chlorophyll *b* (µg/L)
July											
07	1130	0.1	300	492	7.4	28.4	--	7.0	91	--	--
07	1129	3.2	300	494	7.3	28.4	--	7.0	91	--	--
07	1129	4.9	300	492	7.3	28.4	--	7.0	91	--	--
07	1126	10	300	491	7.3	28.4	--	7.0	91	--	--
07	1126	15	300	493	7.4	28.4	--	7.0	91	--	--
07	1124	22	300	488	7.4	28.4	--	7.0	91	--	--
07	1103	.1	500	490	7.3	28.4	--	7.0	90	--	--
07	1104	3.3	500	493	7.3	28.4	--	7.0	91	--	--
07	1103	4.8	500	493	7.3	28.4	--	7.0	91	--	--
07	1103	10	500	493	7.3	28.4	--	7.0	91	5.7	0.5
07	1102	15	500	493	7.3	28.4	--	7.0	91	--	--
07	1102	16	500	493	7.4	28.3	--	7.0	91	--	--
07	1058	.1	800	493	7.3	28.4	--	7.0	91	--	--
07	1057	2.8	800	494	7.3	28.4	--	7.0	91	--	--
07	1057	5.1	800	494	7.3	28.4	--	7.0	91	--	--
07	1056	9.9	800	494	7.3	28.4	--	7.0	91	--	--
07	1055	15	800	493	7.3	28.4	--	7.0	90	--	--
07	1055	20	800	493	7.4	28.4	--	7.0	90	--	--
07	1054	23	800	493	7.4	28.4	--	7.0	91	--	--
07	1050	.1	1,000	494	7.6	28.8	--	8.2	108	--	--
07	1050	3.0	1,000	494	7.3	28.4	--	7.1	93	--	--
07	1049	5.2	1,000	494	7.3	28.4	--	7.1	92	--	--
07	1048	10	1,000	494	7.4	28.4	--	7.1	92	--	--
07	1048	13	1,000	494	7.3	28.4	--	7.1	92	--	--
15	1628	.1	500	477	7.4	29.6	--	7.0	93	3.6	.5
15	1627	3.0	500	477	7.4	29.6	--	7.0	93	--	--
15	1627	5.0	500	477	7.4	29.5	--	7.0	93	--	--
15	1626	10	500	477	7.3	29.5	--	6.9	92	--	--
15	1626	15	500	478	7.4	29.5	--	6.9	92	--	--
15	1625	18	500	477	7.4	29.6	--	7.0	93	--	--
29	1037	.4	300	565	7.4	29.3	--	6.6	89	--	--
29	1037	2.8	300	564	7.3	29.3	--	6.6	87	--	--
29	1038	5.6	300	560	7.3	29.3	--	6.6	88	--	--
29	1038	9.8	300	560	7.3	29.3	--	6.6	87	--	--
29	1040	15	300	560	7.3	29.3	--	6.6	88	--	--
29	1041	19	300	568	7.3	29.3	--	6.6	87	--	--
29	1041	22	300	572	7.3	29.3	--	6.5	87	--	--
29	1018	.2	500	562	7.3	29.3	5.0	6.6	88	--	--
29	1018	3.0	500	566	7.3	29.3	--	6.6	88	3.9	.3
29	1019	5.0	500	565	7.3	29.3	--	6.6	88	--	--
29	1020	9.9	500	561	7.3	29.3	--	6.4	86	--	--
29	1021	15	500	568	7.3	29.3	--	6.5	86	--	--
29	1021	16	500	568	7.3	29.3	--	6.2	83	--	--

Table 3. *Water-quality data for station 392121081193401, Ohio River at river mile 162.1, May to October 1993--Continued*

Date	Time	Sampling depth (ft)	Sample location (ft from left bank)	Specific conductance (µS/cm)	pH (standard units)	Temperature, water (°C)	Transparency (Secchi disk) (ft)	Dissolved oxygen (mg/L)	Dissolved oxygen (percent saturation)	Chlorophyll *a* (µg/L)	Chlorophyll *b* (µg/L)
July											
29	1008	0.3	800	569	7.3	29.0	--	6.3	83	--	--
29	1009	3.3	800	561	7.3	29.3	--	6.5	87	--	--
29	1010	5.1	800	561	7.3	29.3	--	6.6	88	--	--
29	1011	9.9	800	560	7.3	29.3	--	6.6	88	--	--
29	1012	15	800	558	7.3	29.3	--	6.6	88	--	--
29	1012	20	800	563	7.3	29.3	--	6.6	88	--	--
29	1013	23	800	566	7.3	29.3	--	6.6	88	--	--
29	0942	.3	1,000	562	7.4	29.3	--	6.6	88	--	--
29	0943	2.8	1,000	563	7.3	29.3	--	6.6	88	--	--
29	0943	5.1	1,000	564	7.3	29.3	--	6.6	88	--	--
29	0944	9.8	1,000	560	7.3	29.3	--	6.6	88	--	--
29	0944	13	1,000	562	7.4	29.3	--	6.4	86	--	--
August											
12	1006	.1	300	600	7.4	27.6	--	6.3	81	--	--
12	1007	2.6	300	597	7.4	27.6	--	6.6	86	--	--
12	1007	4.9	300	593	7.4	27.6	--	6.6	86	--	--
12	1008	9.5	300	599	7.4	27.6	--	6.6	85	--	--
12	1008	15	300	593	7.4	27.6	--	6.6	85	--	--
12	1009	20	300	596	7.4	27.6	--	6.6	85	--	--
12	1010	23	300	606	7.4	27.6	--	6.6	85	--	--
12	0957	.3	500	595	7.4	27.6	--	5.6	73	--	--
12	0958	3.0	500	595	7.4	27.6	--	6.6	85	--	--
12	0958	4.6	500	596	7.4	27.6	--	6.6	85	--	--
12	0959	9.5	500	596	7.4	27.6	--	6.6	85	--	--
12	0959	15	500	596	7.4	27.6	--	6.6	85	--	--
12	1000	19	500	596	7.4	27.6	--	6.7	87	--	--
12	0949	.1	800	596	7.4	27.6	--	6.6	85	--	--
12	0950	2.6	800	597	7.4	27.6	--	6.5	84	--	--
12	0950	4.6	800	597	7.4	27.6	--	6.6	85	--	--
12	0951	9.9	800	596	7.4	27.6	--	6.6	85	--	--
12	0951	14	800	596	7.4	27.6	--	6.6	85	--	--
12	0952	20	800	596	7.4	27.6	--	6.6	85	--	--
12	0940	.1	1,000	596	7.4	27.6	--	6.8	88	--	--
12	0941	3.0	1,000	596	7.4	27.6	--	6.7	87	--	--
12	0941	4.3	1,000	596	7.4	27.6	--	6.7	86	--	--
12	0942	9.9	1,000	596	7.4	27.6	--	6.6	86	--	--
12	0942	15	1,000	596	7.4	27.6	--	6.7	86	--	--
26	1203	.6	300	589	7.5	28.9	--	6.2	81	--	--
26	1203	3.2	300	589	7.5	28.8	--	6.9	90	--	--
26	1204	5.1	300	588	7.5	28.8	--	6.9	90	--	--
26	1204	10	300	588	7.5	28.8	--	6.8	90	--	--
26	1205	15	300	585	7.5	28.8	--	6.9	90	--	--
26	1205	20	300	593	7.5	28.8	--	6.8	90	--	--
26	1205	23	300	586	7.5	28.8	--	6.8	89	--	--

Table 3. *Water-quality data for station 392121081193401, Ohio River at river mile 162.1, May to October 1993--Continued*

Date	Time	Sampling depth (ft)	Sample location (ft from left bank)	Specific conductance (µS/cm)	pH (standard units)	Temperature, water (°C)	Transparency (Secchi disk) (ft)	Dissolved oxygen (mg/L)	Dissolved oxygen (percent saturation)	Chlorophyll *a* (µg/L)	Chlorophyll *b* (µg/L)
August											
26	1213	0.4	500	587	7.5	29.0	6.0	6.9	91	2.4	0.3
26	1212	3.3	500	589	7.5	28.8	--	6.6	87	--	--
26	1212	5.1	500	587	7.5	28.8	--	6.6	86	--	--
26	1211	9.8	500	588	7.5	28.8	--	6.6	87	--	--
26	1210	15	500	588	7.5	28.8	--	6.4	84	--	--
26	1210	18	500	586	7.5	28.8	--	7.0	91	--	--
26	1221	.6	800	586	7.6	28.9	--	6.9	91	--	--
26	1222	3.2	800	589	7.5	28.9	--	7.0	91	--	--
26	1222	5.3	800	589	7.6	28.9	--	7.0	92	--	--
26	1223	10	800	588	7.5	28.9	--	7.0	91	--	--
26	1223	15	800	588	7.5	28.8	--	7.0	91	--	--
26	1224	20	800	589	7.5	28.8	--	6.9	91	--	--
26	1224	23	800	588	7.5	28.8	--	7.1	93	--	--
26	1231	.5	1,000	586	7.6	28.9	--	7.1	93	--	--
26	1232	3.2	1,000	589	7.6	28.9	--	7.1	93	--	--
26	1232	5.2	1,000	587	7.6	28.9	--	7.0	92	--	--
26	1233	10	1,000	586	7.6	28.9	--	7.0	92	--	--
26	1234	13	1,000	586	7.5	28.9	--	7.0	91	--	--
September											
09	1308	.4	300	557	7.3	27.6	--	5.8	75	--	--
09	1309	3.2	300	557	7.3	27.6	--	5.8	75	--	--
09	1309	5.2	300	558	7.3	27.5	--	5.8	75	--	--
09	1309	8.7	300	557	7.3	27.6	--	5.8	75	--	--
09	1311	15	300	554	7.3	27.6	--	5.8	75	--	--
09	1310	22	300	555	7.3	27.6	--	5.8	75	--	--
09	1251	.2	500	555	7.3	27.5	4.5	5.8	75	2.9	.3
09	1251	2.9	500	556	7.3	27.5	--	5.8	75	--	--
09	1252	4.9	500	557	7.3	27.5	--	5.8	75	--	--
09	1253	9.9	500	559	7.3	27.5	--	5.8	75	2.2	.2
09	1253	15	500	556	7.3	27.5	--	5.8	75	--	--
09	1254	19	500	558	7.3	27.5	--	5.8	75	--	--
09	1244	.1	800	557	7.3	27.5	--	5.9	76	--	--
09	1245	3.0	800	558	7.3	27.5	--	5.8	75	--	--
09	1245	5.1	800	557	7.3	27.5	--	5.8	75	--	--
09	1246	9.2	800	559	7.3	27.5	--	5.8	75	--	--
09	1247	15	800	560	7.3	27.5	--	5.8	75	--	--
09	1247	20	800	556	7.3	27.5	--	5.8	75	--	--
09	1247	24	800	560	7.3	27.5	--	5.8	75	--	--
09	1239	.2	1,000	556	7.3	27.5	--	5.9	76	--	--
09	1239	2.9	1,000	559	7.3	27.6	--	5.9	76	--	--
09	1240	5.1	1,000	558	7.3	27.6	--	5.9	76	--	--
09	1240	9.7	1,000	556	7.3	27.6	--	5.8	76	--	--
09	1241	13	1,000	558	7.3	27.6	--	5.8	76	--	--

Table 3. *Water-quality data for station 392121081193401, Ohio River at river mile 162.1, May to October 1993--Continued*

Date	Time	Sampling depth (ft)	Sample location (ft from left bank)	Specific conductance (µS/cm)	pH (standard units)	Temperature, water (°C)	Transparency (Secchi disk) (ft)	Dissolved oxygen (mg/L)	Dissolved oxygen (percent saturation)	Chlorophyll *a* (µg/L)	Chlorophyll *b* (µg/L)
September											
23	1034	0.1	300	599	7.2	23.7	--	6.6	79	--	--
23	1035	3.2	300	601	7.2	23.8	--	6.5	78	--	--
23	1036	5.0	300	600	7.2	23.8	--	6.5	78	--	--
23	1037	9.8	300	602	7.2	23.8	--	6.5	78	--	--
23	1037	15	300	603	7.2	23.8	--	6.5	78	--	--
23	1038	20	300	604	7.2	23.8	--	6.5	78	--	--
23	1038	22	300	599	7.2	23.8	--	6.5	78	--	--
23	1051	.2	500	601	7.2	23.8	--	6.5	78	--	--
23	1051	3.1	500	601	7.2	23.8	--	6.5	78	--	--
23	1050	5.1	500	602	7.2	23.8	--	6.5	78	--	--
23	1049	10	500	601	7.2	23.8	--	6.5	78	--	--
23	1048	15	500	600	7.2	23.8	--	6.5	78	--	--
23	1047	16	500	601	7.2	23.8	--	6.5	78	--	--
23	1025	.2	800	601	7.2	23.8	--	6.5	78	--	--
23	1026	3.5	800	598	7.2	23.8	--	6.5	78	--	--
23	1027	4.7	800	599	7.2	23.8	--	6.5	78	--	--
23	1028	9.9	800	601	7.2	23.8	--	6.5	78	--	--
23	1028	15	800	605	7.2	23.8	--	6.5	78	--	--
23	1029	21	800	598	7.2	23.8	--	6.5	78	--	--
23	1029	23	800	602	7.2	23.8	--	6.5	78	--	--
23	1017	.2	1,000	598	7.2	23.7	--	6.5	79	--	--
23	1017	3.2	1,000	601	7.2	23.8	--	6.5	78	--	--
23	1018	4.5	1,000	598	7.2	23.8	--	6.5	78	--	--
23	1019	9.9	1,000	603	7.2	23.8	--	6.5	78	--	--
23	1020	15	1,000	602	7.2	23.8	--	6.5	78	--	--
23	1021	18	1,000	600	7.2	23.8	--	6.5	78	--	--
October											
07	1108	.4	300	499	7.5	19.0	--	8.0	86	--	--
07	1109	2.8	300	500	7.5	19.0	--	8.0	86	--	--
07	1109	4.8	300	499	7.5	19.0	--	8.0	86	--	--
07	1110	10	300	501	7.5	19.0	--	8.0	86	--	--
07	1110	15	300	498	7.5	19.0	--	8.0	86	--	--
07	1111	20	300	496	7.5	19.0	--	8.0	86	--	--
07	1111	23	300	504	7.5	19.0	--	8.0	87	--	--
07	1100	.2	500	497	7.5	19.0	5.0	8.0	87	--	--
07	1101	3.0	500	498	7.5	19.0	--	8.0	87	--	--
07	1101	5.1	500	500	7.5	19.0	--	8.0	87	--	--
07	1102	10	500	499	7.5	19.0	--	8.0	86	1.1	0.1
07	1102	15	500	498	7.5	19.0	--	8.0	86	--	--
07	1103	18	500	496	7.5	19.0	--	7.9	86	--	--
07	1051	.5	800	499	7.5	19.1	--	8.1	88	--	--
07	1052	2.8	800	499	7.5	19.1	--	8.0	87	--	--
07	1052	5.1	800	498	7.5	19.1	--	8.1	87	--	--
07	1053	10	800	498	7.5	19.1	--	8.1	88	--	--
07	1053	15	800	498	7.5	19.1	--	8.1	88	--	--
07	1054	20	800	499	7.5	19.1	--	8.1	88	--	--
07	1054	23	800	506	7.5	19.1	--	8.3	90	--	--

Table 3. *Water-quality data for station 392121081193401, Ohio River at river mile 162.1, May to October 1993--Continued*

Date	Time	Sampling depth (ft)	Sample location (ft from left bank)	Specific conductance (µS/cm)	pH (standard units)	Temperature, water (°C)	Transparency (Secchi disk) (ft)	Dissolved oxygen (mg/L)	Dissolved oxygen (percent saturation)	Chlorophyll *a* (µg/L)	Chlorophyll *b* (µg/L)
October											
07	1043	0.4	1,000	499	7.5	19.1	--	8.0	86	--	--
07	1044	3.2	1,000	499	7.5	19.1	--	8.1	88	--	--
07	1044	5.0	1,000	499	7.5	19.1	--	8.1	88	--	--
07	1045	10	1,000	500	7.5	19.1	--	8.1	88	--	--
07	1045	15	1,000	500	7.5	19.1	--	8.1	88	--	--
27	1148	.2	300	430	7.4	16.2	--	9.6	99	--	--
27	1149	2.9	300	430	7.4	16.2	--	9.6	99	--	--
27	1149	5.0	300	430	7.4	16.2	--	9.6	99	--	--
27	1150	10	300	430	7.4	16.2	--	9.6	99	--	--
27	1150	15	300	430	7.4	16.2	--	9.6	99	--	--
27	1151	22	300	430	7.4	16.2	--	9.6	99	--	--
27	1133	.1	500	430	7.4	16.2	--	9.6	100	3.0	0.2
27	1133	3.3	500	430	7.4	16.2	--	9.6	99	--	--
27	1134	5.3	500	430	7.4	16.2	--	9.6	100	--	--
27	1134	10	500	430	7.4	16.2	--	9.6	99	--	--
27	1135	15	500	430	7.4	16.2	--	9.6	99	--	--
27	1135	17	500	430	7.4	16.2	--	9.6	99	--	--
27	1128	.3	800	429	7.4	16.2	--	9.7	100	--	--
27	1131	3.1	800	429	7.4	16.2	--	9.6	100	--	--
27	1130	5.1	800	429	7.4	16.2	--	9.6	100	--	--
27	1130	10	800	429	7.4	16.2	--	9.6	99	--	--
27	1129	15	800	429	7.4	16.2	--	9.7	100	--	--
27	1129	16	800	429	7.4	16.2	--	9.7	100	--	--
27	1118	.2	1,000	428	7.4	16.2	--	9.6	99	--	--
27	1120	2.9	1,000	431	7.4	16.2	--	9.6	100	--	--
27	1120	5.0	1,000	430	7.4	16.2	--	9.6	100	--	--
27	1119	10	1,000	430	7.4	16.2	--	9.6	99	--	--
27	1119	13	1,000	429	7.4	16.2	--	9.5	99	--	--

Table 4. *Water-quality data for station 392055081202001, Ohio River at river mile 163.0, May to October 1993*

[ft = feet; µS/cm = microsiemens per centimeter; °C = degrees Celsius; mg/L = milligrams per liter; µg/L = micrograms per liter; -- = data not collected]

Date	Time	Sampling depth (ft)	Sample location (ft from left bank)	Specific conductance (µS/cm)	pH (standard units)	Temperature, water (°C)	Transparency (Secchi disk) (ft)	Dissolved oxygen (mg/L)	Dissolved oxygen (percent saturation)	Chlorophyll *a* (µg/L)	Chlorophyll *b* (µg/L)
May											
24	1204	3.9	600	395	7.9	20.0	--	9.1	102	--	--
24	1205	9.5	600	393	7.8	20.0	--	9.0	101	--	--
24	1204	17	600	395	7.9	20.0	--	9.0	101	--	--
June											
10	1032	1.0	600	503	7.3	22.3	--	7.9	93	--	--
10	1032	3.9	600	503	7.3	22.3	--	7.9	93	--	--
10	1033	11	600	503	7.3	22.3	--	8.0	93	--	--
10	1033	21	600	503	7.3	22.3	--	8.0	93	--	--
July											
07	1145	.1	600	494	7.4	28.8	--	7.2	95	--	--
07	1145	3.2	600	494	7.4	28.7	--	7.2	94	--	--
07	1145	5.0	600	493	7.4	28.4	--	7.0	91	--	--
07	1146	10	600	493	7.3	28.2	--	6.9	89	--	--
07	1146	15	600	492	7.3	28.2	--	6.8	88	--	--
07	1147	17	600	491	7.3	28.2	--	6.8	87	--	--
29	1047	.3	600	563	7.4	29.3	--	6.7	89	--	--
29	1047	3.4	600	564	7.4	29.3	--	6.6	88	--	--
29	1048	5.0	600	566	7.3	29.3	--	6.6	88	--	--
29	1048	9.9	600	558	7.3	29.3	--	6.5	87	--	--
29	1049	16	600	559	7.3	29.3	--	6.5	87	--	--
August											
12	1021	.3	600	598	7.4	27.7	--	6.5	84	--	--
12	1022	2.6	600	594	7.4	27.6	--	6.2	81	--	--
12	1022	4.9	600	595	7.4	27.6	--	6.6	85	--	--
12	1023	9.9	600	595	7.4	27.6	--	6.5	84	--	--
12	1023	15	600	596	7.4	27.6	--	6.5	84	--	--
26	1157	.5	600	585	7.5	29.6	--	6.3	84	--	--
26	1156	3.3	600	584	7.5	28.9	--	6.2	81	--	--
26	1156	5.2	600	586	7.5	28.8	--	5.8	77	--	--
26	1156	11	600	582	7.5	28.7	--	6.7	88	--	--
26	1155	15	600	583	7.5	28.5	--	6.1	79	--	--
September											
09	1518	.3	600	556	7.3	27.5	--	5.8	75	--	--
09	1519	3.0	600	556	7.3	27.5	--	5.8	75	--	--
09	1519	5.3	600	557	7.3	27.5	--	5.8	76	--	--
09	1519	9.8	600	556	7.3	27.5	--	5.8	75	--	--
09	1520	15	600	556	7.3	27.5	--	5.8	75	--	--
09	1520	16	600	556	7.3	27.5	--	5.8	75	--	--
23	1102	.2	600	600	7.2	23.8	--	6.6	79	--	--
23	1103	2.9	600	600	7.2	23.8	--	6.6	79	--	--
23	1104	5.3	600	600	7.2	23.8	--	6.5	79	--	--
23	1104	9.8	600	599	7.2	23.8	--	6.5	79	--	--
23	1105	15	600	598	7.2	23.8	--	6.5	78	--	--
23	1105	17	600	602	7.2	23.8	--	6.5	78	--	--

Table 4. *Water-quality data for station 392055081202001, Ohio River at river mile 163.0, May to October 1993--Continued*

Date	Time	Sampling depth (ft)	Sample location (ft from left bank)	Specific conductance (µS/cm)	pH (standard units)	Temperature, water (°C)	Transparency (Secchi disk) (ft)	Dissolved oxygen (mg/L)	Dissolved oxygen (percent saturation)	Chlorophyll *a* (µg/L)	Chlorophyll *b* (µg/L)
October											
07	1118	0.4	600	499	7.5	19.1	--	8.0	87	--	--
07	1119	3.2	600	501	7.5	19.0	--	8.0	87	--	--
07	1119	5.2	600	498	7.5	19.0	--	8.0	86	--	--
07	1120	10	600	497	7.5	19.0	--	7.9	85	--	--
07	1120	15	600	502	7.5	19.0	--	8.0	86	--	--
07	1121	17	600	498	7.5	19.0	--	8.0	86	--	--
27	1003	.2	600	430	7.4	16.2	--	9.6	100	--	--
27	1004	3.1	600	431	7.4	16.2	--	9.6	100	--	--
27	1004	5.2	600	431	7.4	16.2	--	9.6	100	--	--
27	1005	9.8	600	430	7.4	16.2	--	9.6	99	--	--
27	1005	15	600	429	7.4	16.2	--	9.6	99	--	--

Table 5. *Water-quality data for station 392025081220701, Ohio River at river mile 164.7, May to October 1993*

[ft = feet; µS/cm = microsiemens per centimeter; °C = degrees Celsius; mg/L = milligrams per liter; µg/L = micrograms per liter; -- = data not collected]

Date	Time	Sampling depth (ft)	Sample location (ft from left bank)	Specific conductance (µS/cm)	pH (standard units)	Temperature, water (°C)	Transparency (Secchi disk) (ft)	Dissolved oxygen (mg/L)	Dissolved oxygen (percent saturation)	Chlorophyll *a* (µg/L)	Chlorophyll *b* (µg/L)
May											
24	1209	3.9	800	393	7.9	19.9	--	9.1	102	--	--
24	1210	6.9	800	395	7.7	19.9	--	9.1	102	--	--
24	1210	14	800	392	7.9	19.9	--	9.1	102	--	--
June											
10	1037	.7	800	504	7.3	22.3	--	8.0	93	--	--
10	1037	3.3	800	505	7.3	22.3	--	8.0	93	--	--
10	1039	9.2	800	508	7.3	22.3	--	8.0	94	--	--
10	1038	18	800	504	7.3	22.3	--	8.0	93	--	--
July											
07	1152	.1	800	494	7.4	28.7	--	7.5	98	--	--
07	1152	3.1	800	490	7.4	28.7	--	7.5	98	--	--
07	1154	6.3	800	493	7.3	28.1	--	6.8	88	--	--
07	1153	13	800	496	7.3	28.1	--	6.8	88	--	--
29	1057	.5	800	559	7.3	29.1	--	6.5	87	--	--
29	1058	2.9	800	557	7.3	29.1	--	6.4	86	--	--
29	1059	5.2	800	559	7.3	29.1	--	6.4	85	--	--
29	1100	8.1	800	558	7.3	29.1	--	6.4	85	--	--
29	1059	14	800	562	7.3	29.1	--	6.4	85	--	--
August											
12	1028	3.0	800	595	7.4	27.5	--	6.5	84	--	--
12	1029	6.6	800	597	7.4	27.5	--	6.5	84	--	--
12	1029	13	800	599	7.4	27.5	--	6.5	84	--	--
26	1148	.4	800	582	7.5	29.7	--	6.5	87	--	--
26	1148	3.2	800	583	7.5	28.7	--	6.7	88	--	--
26	1150	7.0	800	585	7.4	28.6	--	6.6	87	--	--
26	1149	14	800	590	7.4	28.5	--	6.6	86	--	--
September											
09	1158	.1	800	556	7.3	27.6	--	5.9	77	--	--
09	1158	3.3	800	556	7.3	27.6	--	5.9	76	--	--
09	1159	6.4	800	556	7.3	27.6	--	5.8	75	--	--
09	1158	13	800	557	7.3	27.6	--	5.8	75	--	--
23	1111	.2	800	598	7.2	23.8	--	6.8	82	--	--
23	1112	2.9	800	599	7.2	23.8	--	6.6	79	--	--
23	1113	6.6	800	597	7.2	23.8	--	6.6	79	--	--
23	1113	13	800	602	7.2	23.8	--	6.6	79	--	--
October											
07	1127	.3	800	501	7.5	19.1	--	8.0	87	--	--
07	1128	3.0	800	500	7.5	19.2	--	8.0	87	--	--
07	1128	6.4	800	500	7.5	19.1	--	8.0	87	--	--
07	1129	13	800	503	7.5	19.1	--	7.9	86	--	--
27	0952	.3	800	431	7.4	16.2	--	9.6	99	--	--
27	0953	2.9	800	430	7.4	16.2	--	9.6	99	--	--
27	0953	6.5	800	432	7.4	16.2	--	9.6	99	--	--
27	0954	13	800	427	7.4	16.2	--	9.6	99	--	--

Table 6. *Water-quality data for station 392110081234201, Ohio River at river mile 166.5, May to October 1993*

[ft = feet; µS/cm = microsiemens per centimeter; °C = degrees Celsius; mg/L = milligrams per liter; µg/L = micrograms per liter; -- = data not collected]

Date	Time	Sampling depth (ft)	Sample location (ft from left bank)	Specific conductance (µS/cm)	pH (standard units)	Temperature, water (°C)	Transparency (Secchi disk) (ft)	Dissolved oxygen (mg/L)	Dissolved oxygen (percent saturation)	Chlorophyll *a* (µg/L)	Chlorophyll *b* (µg/L)
May											
24	1216	4.3	800	394	7.8	19.9	--	9.1	102	--	--
24	1217	9.9	800	393	7.7	19.8	--	9.0	101	--	--
24	1217	19	800	395	7.8	19.8	--	9.0	101	--	--
June											
10	1044	.7	800	501	7.4	22.3	--	8.0	94	--	--
10	1044	3.9	800	506	7.3	22.3	--	8.1	94	--	--
10	1046	11	800	509	7.3	22.3	--	8.1	94	--	--
10	1045	21	800	499	7.3	22.3	--	8.1	94	--	--
July											
07	1158	.1	800	489	7.3	28.7	--	6.6	86	--	--
07	1159	3.1	800	490	7.2	27.8	--	6.5	83	--	--
07	1200	9.1	800	491	7.2	27.7	--	6.3	81	--	--
07	1159	18	800	486	7.2	27.7	--	6.3	81	--	--
29	1057	.5	800	559	7.3	29.1	--	6.5	87	--	--
29	1058	2.9	800	557	7.3	29.1	--	6.4	86	--	--
29	1059	5.2	800	559	7.3	29.1	--	6.4	85	--	--
29	1100	8.1	800	558	7.3	29.1	--	6.4	85	--	--
29	1059	14	800	562	7.3	29.1	--	6.4	85	--	--
August											
12	1034	.3	800	595	7.3	27.3	--	6.2	80	--	--
12	1035	3.0	800	596	7.3	27.3	--	6.2	80	--	--
12	1035	8.6	800	597	7.3	27.3	--	6.2	80	--	--
12	1036	17	800	595	7.3	27.3	--	6.2	79	--	--
26	1142	.3	800	585	7.4	29.4	--	5.9	79	--	--
26	1143	3.3	800	579	7.4	28.8	--	6.2	81	--	--
26	1144	9.6	800	580	7.4	28.5	--	6.3	82	--	--
26	1143	19	800	579	7.4	28.5	--	6.1	80	--	--
September											
09	1150	.1	800	554	7.3	27.6	--	6.1	79	--	--
09	1151	2.9	800	555	7.2	27.6	--	6.2	80	--	--
09	1152	9.2	800	555	7.3	27.6	--	5.7	74	--	--
09	1151	18	800	555	7.3	27.5	--	6.7	87	--	--
23	1120	.2	800	596	7.2	23.8	--	6.7	80	--	--
23	1120	3.4	800	598	7.2	23.8	--	6.4	77	--	--
23	1122	8.3	800	596	7.2	23.7	--	6.4	77	--	--
23	1121	17	800	597	7.2	23.7	--	6.4	77	--	--
October											
07	1141	.3	800	501	7.5	19.1	--	7.9	86	--	--
07	1142	3.3	800	500	7.5	19.1	--	7.9	86	--	--
07	1142	8.6	800	501	7.5	19.0	--	8.0	86	--	--
07	1143	18	800	502	7.5	19.0	--	7.7	84	--	--
27	0944	.3	800	430	7.4	16.2	--	9.5	99	--	--
27	0945	3.3	800	429	7.4	16.2	--	9.5	99	--	--
27	0945	8.4	800	432	7.4	16.2	--	9.5	99	--	--
27	0946	17	800	432	7.4	16.2	--	9.5	98	--	--

Table 7. *Water-quality data for station 392318081243001, Ohio River at river mile 169.1, main channel, May to October 1993*

[ft = feet; µS/cm = microsiemens per centimeter; °C = degrees Celsius; mg/L = milligrams per liter; µg/L = micrograms per liter; -- = data not collected]

Date	Time	Sampling depth (ft)	Sample location (ft from left bank)	Specific conductance (µS/cm)	pH (standard units)	Temperature, water (°C)	Transparency (Secchi disk) (ft)	Dissolved oxygen (mg/L)	Dissolved oxygen (percent saturation)	Chlorophyll *a* (µg/L)	Chlorophyll *b* (µg/L)
May											
24	1223	3.9	400	392	7.7	19.7	--	8.7	97	--	--
24	1224	7.2	400	397	7.6	19.7	--	8.6	96	--	--
24	1223	13	400	389	7.7	19.7	--	8.6	96	--	--
June											
10	1052	.7	400	503	7.4	22.3	--	8.1	94	--	--
10	1053	3.9	400	503	7.4	22.3	--	8.1	95	--	--
10	1054	11	400	505	7.3	22.3	--	8.1	94	--	--
10	1053	21	400	502	7.3	22.3	--	8.1	94	--	--
July											
07	1206	.1	400	481	7.3	28.5	--	7.2	94	--	--
07	1207	3.1	400	483	7.3	28.5	--	7.3	95	--	--
07	1208	8.1	400	481	7.3	28.5	--	7.2	93	--	--
07	1207	16	400	485	7.3	28.4	--	7.1	92	--	--
29	1114	.4	400	556	7.3	29.3	--	6.4	85	--	--
29	1114	3.4	400	554	7.3	29.3	--	6.4	85	--	--
29	1115	8.1	400	555	7.3	29.3	--	6.3	84	--	--
29	1114	17	400	552	7.3	29.3	--	6.3	84	--	--
August											
12	1042	3.0	400	598	7.4	27.5	--	6.4	82	--	--
12	1043	8.2	400	596	7.3	27.5	--	6.3	81	--	--
12	1043	17	400	601	7.3	27.4	--	6.3	81	--	--
26	1135	.3	400	577	7.4	28.8	--	6.5	85	--	--
26	1136	3.2	400	577	7.4	28.7	--	6.5	85	--	--
26	1137	8.6	400	582	7.4	28.7	--	6.1	79	--	--
26	1136	17	400	577	7.4	28.7	--	6.5	84	--	--
September											
09	1142	.1	400	540	7.3	27.6	--	5.9	76	--	--
09	1143	3.0	400	555	7.3	27.5	--	5.8	75	--	--
09	1144	8.0	400	553	7.3	27.5	--	5.8	75	--	--
09	1143	16	400	555	7.3	27.4	--	5.8	75	--	--
23	1128	.1	400	594	7.2	23.7	--	6.6	79	--	--
23	1129	2.9	400	594	7.2	23.7	--	6.4	77	--	--
23	1130	8.5	400	594	7.2	23.6	--	6.2	75	--	--
23	1129	17	400	592	7.2	23.6	--	6.2	74	--	--
October											
07	1154	.4	400	503	7.5	19.1	--	7.6	83	--	--
07	1155	3.3	400	503	7.5	19.1	--	7.9	86	--	--
07	1155	9.0	400	502	7.5	19.1	--	7.4	80	--	--
07	1156	17	400	502	7.4	19.1	--	7.5	82	--	--
27	0939	.1	400	427	7.4	16.2	--	9.5	98	--	--
27	0939	3.2	400	429	7.4	16.2	--	9.5	98	--	--
27	0940	8.3	400	431	7.4	16.2	--	9.5	98	--	--
27	0940	17	400	432	7.4	16.2	--	9.4	98	--	--

Table 8. *Water-quality data for station 392313081244601, Ohio River at river mile 169.1, back channel, May to October 1993*

[ft = feet; µS/cm = microsiemens per centimeter; °C = degrees Celsius; mg/L = milligrams per liter; µg/L = micrograms per liter; -- = data not collected]

Date	Time	Sampling depth (ft)	Sample location (ft from left bank)	Specific conductance (µS/cm)	pH (standard units)	Temperature, water (°C)	Transparency (Secchi disk) (ft)	Dissolved oxygen (mg/L)	Dissolved oxygen (percent saturation)	Chlorophyll *a* (µg/L)	Chlorophyll *b* (µg/L)
May											
24	1226	3.9	400	395	7.9	19.7	--	9.1	102	--	--
24	1227	9.2	400	394	7.7	19.7	--	9.0	101	--	--
24	1227	16	400	389	7.8	19.7	--	9.0	100	--	--
June											
10	1057	.3	400	502	7.3	22.4	--	7.9	93	--	--
10	1057	3.3	400	503	7.3	22.3	--	8.0	93	--	--
10	1059	6.6	400	504	7.3	22.3	--	8.0	93	--	--
10	1058	11	400	503	7.3	22.3	--	7.9	93	--	--
July											
07	1211	.1	400	481	7.3	29.3	--	6.8	89	--	--
07	1212	3.0	400	483	7.2	28.5	--	6.8	89	--	--
07	1213	5.1	400	481	7.2	28.4	--	6.8	88	--	--
07	1212	10	400	479	7.2	28.2	--	6.7	86	--	--
29	1117	.4	400	554	7.4	29.4	--	6.5	86	--	--
29	1118	3.1	400	554	7.3	29.4	--	6.2	82	--	--
29	1119	4.4	400	552	7.2	29.4	--	6.2	82	--	--
29	1118	7.9	400	550	7.2	29.4	--	6.1	82	--	--
August											
12	1045	3.0	400	596	7.3	27.5	--	6.2	80	--	--
12	1046	6.3	400	593	7.3	27.5	--	6.2	80	--	--
12	1046	13	400	597	7.3	27.5	--	6.1	78	--	--
26	1131	.4	400	576	7.4	29.3	--	6.4	85	--	--
26	1131	3.3	400	574	7.4	28.9	--	6.6	86	--	--
26	1132	6.0	400	576	7.4	28.8	--	6.5	86	--	--
26	1132	11	400	572	7.3	28.6	--	6.3	83	--	--
September											
09	1137	.1	400	554	7.2	27.5	--	5.7	74	--	--
09	1138	3.0	400	554	7.2	27.6	--	5.9	76	--	--
09	1139	6.6	400	555	7.3	27.6	--	5.6	73	--	--
09	1138	14	400	556	7.3	27.6	--	5.8	76	--	--
23	1134	.1	400	593	7.2	23.8	--	6.4	77	--	--
23	1134	3.1	400	594	7.2	23.7	--	6.2	74	--	--
23	1135	5.3	400	594	7.2	23.7	--	6.2	74	--	--
23	1135	10	400	594	7.2	23.6	--	6.1	74	--	--
October											
07	1149	.4	400	504	7.4	19.3	--	7.8	85	--	--
07	1150	3.2	400	505	7.4	19.1	--	7.8	85	--	--
07	1150	11	400	505	7.5	19.1	--	7.7	84	--	--
07	1151	22	400	505	7.4	19.1	--	7.8	84	--	--
27	0933	.4	400	428	7.4	16.2	--	9.3	97	--	--
27	0933	3.3	400	429	7.4	16.2	--	9.3	96	--	--
27	0934	5.0	400	430	7.4	16.2	--	9.3	97	--	--
27	0934	9.8	400	430	7.4	16.2	--	9.2	95	--	--

Table 9. *Water-quality data for station 392419081255001, Ohio River at river mile 170.8, main channel, May to October 1993*

[ft = feet; µS/cm = microsiemens per centimeter; °C = degrees Celsius; mg/L = milligrams per liter; µg/L = micrograms per liter; -- = data not collected]

Date	Time	Sampling depth (ft)	Sample location (ft from left bank)	Specific conductance (µS/cm)	pH (standard units)	Temperature, water (°C)	Transparency (Secchi disk) (ft)	Dissolved oxygen (mg/L)	Dissolved oxygen (percent saturation)	Chlorophyll *a* (µg/L)	Chlorophyll *b* (µg/L)
May											
24	1248	3.9	400	395	7.7	19.7	--	9.0	101	--	--
24	1249	7.6	400	396	7.7	19.7	--	9.0	101	--	--
24	1249	15	400	396	7.8	19.7	--	9.0	100	--	--
June											
10	1111	.1	400	503	7.4	22.3	--	8.0	94	--	--
10	1112	3.3	400	505	7.4	22.3	--	8.1	94	--	--
10	1113	8.9	400	503	7.4	22.3	--	8.1	94	--	--
10	1113	18	400	506	7.4	22.3	--	8.1	94	--	--
July											
07	1223	.1	400	478	7.4	28.6	--	7.3	95	--	--
07	1223	3.1	400	480	7.3	28.2	--	7.1	91	--	--
07	1224	8.1	400	479	7.3	28.1	--	6.9	89	--	--
07	1224	16	400	480	7.3	28.1	--	6.9	89	--	--
29	1131	.4	400	552	7.3	29.6	--	6.5	88	--	--
29	1132	3.4	400	554	7.3	29.5	--	6.2	83	--	--
August											
12	1057	.1	400	595	7.4	27.5	--	6.5	84	--	--
12	1058	3.0	400	596	7.4	27.5	--	6.4	82	--	--
12	1058	7.2	400	601	7.3	27.5	--	6.3	81	--	--
12	1059	15	400	601	7.3	27.4	--	6.3	81	--	--
26	1104	.4	400	575	7.4	29.1	--	6.5	85	--	--
26	1104	3.4	400	573	7.4	28.5	--	6.4	83	--	--
26	1105	7.8	400	578	7.3	28.4	--	6.3	82	--	--
26	1105	16	400	583	7.3	27.8	--	5.6	72	--	--
September											
09	1122	.2	400	552	7.3	27.6	--	5.9	76	--	--
09	1123	3.2	400	553	7.3	27.5	--	5.8	75	--	--
09	1124	7.5	400	553	7.3	27.5	--	5.8	75	--	--
09	1123	15	400	553	7.3	27.5	--	5.8	75	--	--
23	1150	.3	400	593	7.2	23.8	--	6.5	78	--	--
23	1150	3.2	400	592	7.2	23.7	--	6.5	78	--	--
23	1151	8.0	400	592	7.2	23.6	--	6.4	76	--	--
23	1150	15	400	593	7.2	23.6	--	6.4	77	--	--
October											
07	1204	.4	400	504	7.5	19.2	--	8.0	86	--	--
07	1205	3.2	400	504	7.5	19.1	--	7.9	86	--	--
07	1205	8.0	400	504	7.5	19.1	--	7.9	86	--	--
07	1206	15	400	503	7.5	19.1	--	7.7	83	--	--
27	0921	.2	400	427	7.4	16.1	--	9.4	97	--	--
27	0921	3.0	400	426	7.4	16.1	--	9.4	97	--	--
27	0922	7.7	400	429	7.4	16.1	--	9.3	97	--	--
27	0922	15	400	426	7.4	16.1	--	9.3	97	--	--

Table 10. *Water-quality data for station 392411081255901, Ohio River at river mile 170.8, back channel, May to October 1993*

[ft = feet; µS/cm = microsiemens per centimeter; °C = degrees Celsius; mg/L = milligrams per liter; µg/L = micrograms per liter; -- = data not collected]

Date	Time	Sampling depth (ft)	Sample location (ft from left bank)	Specific conductance (µS/cm)	pH (standard units)	Temperature, water (°C)	Transparency (Secchi disk) (ft)	Dissolved oxygen (mg/L)	Dissolved oxygen (percent saturation)	Chlorophyll *a* (µg/L)	Chlorophyll *b* (µg/L)
May											
24	1232	3.9	400	392	7.8	19.7	--	8.9	99	--	--
24	1234	7.6	400	394	7.6	19.7	--	8.8	98	--	--
24	1233	15	400	393	7.8	19.7	--	8.9	99	--	--
June											
10	1102	.1	400	503	7.4	22.4	--	8.0	93	--	--
10	1103	3.3	400	503	7.3	22.4	--	8.0	93	--	--
10	1104	8.9	400	503	7.3	22.3	--	8.0	94	--	--
10	1104	19	400	503	7.3	22.3	--	8.0	94	--	--
July											
07	1218	.1	400	479	7.3	29.1	--	6.9	91	--	--
07	1218	2.9	400	477	7.2	28.3	--	6.8	88	--	--
07	1220	8.1	400	476	7.2	28.1	--	6.6	85	--	--
07	1219	16	400	480	7.2	28.0	--	6.6	84	--	--
29	1123	.5	400	553	7.3	29.6	--	6.3	85	--	--
29	1124	3.0	400	553	7.3	29.6	--	6.3	85	--	--
29	1126	7.5	400	555	7.2	29.6	--	6.2	84	--	--
29	1125	15	400	552	7.2	29.5	--	6.2	83	--	--
August											
12	1050	.1	400	599	7.3	27.6	--	6.2	80	--	--
12	1051	2.6	400	596	7.3	27.5	--	6.1	78	--	--
12	1051	6.6	400	599	7.3	27.5	--	6.0	78	--	--
12	1052	13	400	592	7.3	27.4	--	6.1	78	--	--
26	1125	.5	400	574	7.5	29.0	--	6.3	82	--	--
26	1125	3.1	400	576	7.4	28.6	--	6.0	79	--	--
26	1127	8.2	400	570	7.3	28.3	--	5.7	74	--	--
26	1126	17	400	570	7.3	28.3	--	5.6	73	--	--
September											
09	1130	.1	400	553	7.3	27.6	--	6.7	88	--	--
09	1131	3.1	400	554	7.3	27.6	--	6.4	83	--	--
09	1133	8.3	400	553	7.3	27.6	--	5.7	74	--	--
09	1132	16	400	553	7.3	27.6	--	5.9	76	--	--
23	1141	.1	400	593	7.2	23.9	--	6.4	78	--	--
23	1141	2.7	400	592	7.2	23.7	--	6.2	75	--	--
23	1143	8.4	400	593	7.2	23.7	--	6.2	75	--	--
23	1142	16	400	593	7.2	23.7	--	6.2	75	--	--
October											
07	1211	.4	400	505	7.4	19.2	--	7.5	82	--	--
07	1212	3.4	400	505	7.4	19.1	--	7.8	85	--	--
07	1212	6.9	400	505	7.4	19.1	--	7.8	84	--	--
07	1213	15	400	505	7.4	19.1	--	7.8	85	--	--
27	0928	.3	400	426	7.4	16.2	--	9.3	97	--	--
27	0928	2.9	400	428	7.4	16.2	--	9.3	96	--	--
27	0929	7.5	400	425	7.4	16.2	--	9.3	96	--	--
27	0929	15	400	426	7.4	16.2	--	9.3	96	--	--

Table 11. *Water-quality data for station 392232081295601, Ohio River at river mile 175.5, main channel, May to October 1993*

[ft = feet; µS/cm = microsiemens per centimeter; °C = degrees Celsius; mg/L = milligrams per liter; µg/L = micrograms per liter; -- = data not collected]

Date	Time	Sampling depth (ft)	Sample location (ft from left bank)	Specific conductance (µS/cm)	pH (standard units)	Temperature, water (°C)	Transparency (Secchi disk) (ft)	Dissolved oxygen (mg/L)	Dissolved oxygen (percent saturation)	Chlorophyll *a* (µg/L)	Chlorophyll *b* (µg/L)
May											
24	1400	3.9	400	447	8.2	19.2	--	9.3	102	--	--
24	1402	8.2	400	450	8.2	19.2	--	9.1	101	--	--
24	1402	17	400	451	8.3	19.2	--	9.1	101	--	--
June											
10	1300	3.3	400	520	7.5	22.5	--	8.0	94	--	--
10	1301	12	400	521	7.5	22.5	--	8.0	94	--	--
10	1301	22	400	520	7.5	22.5	--	8.0	94	--	--
July											
07	1410	.1	400	465	7.7	28.4	--	8.1	106	--	--
07	1410	2.9	400	465	7.7	28.4	--	8.2	108	--	--
07	1411	9.3	400	459	7.6	27.0	--	7.1	90	--	--
07	1411	19	400	460	7.6	27.0	--	7.2	92	--	--
29	2008	.2	400	559	7.5	29.4	--	6.6	88	--	--
29	2008	3.2	400	561	7.5	29.4	--	6.2	83	--	--
29	2007	9.8	400	561	7.5	29.4	--	6.1	81	--	--
29	2007	18	400	566	7.5	29.4	--	6.4	85	--	--
August											
12	1235	.1	400	613	7.5	27.9	--	6.4	83	--	--
12	1236	3.0	400	612	7.4	27.5	--	6.1	79	--	--
12	1236	9.2	400	612	7.4	27.4	--	5.8	74	--	--
12	1237	19	400	612	7.4	27.4	--	5.9	76	--	--
26	0845	.4	400	591	7.4	28.3	--	5.9	77	--	--
26	0846	3.3	400	592	7.4	28.4	--	5.9	76	--	--
26	0847	10	400	587	7.4	28.4	--	5.9	77	--	--
26	0846	20	400	591	7.4	28.3	--	5.8	76	--	--
September											
09	1041	.1	400	556	7.4	27.5	--	6.0	78	--	--
09	1041	3.3	400	589	7.4	27.5	--	5.9	77	--	--
09	1042	9.3	400	584	7.4	27.5	--	5.9	76	--	--
09	1041	19	400	592	7.4	27.5	--	5.9	77	--	--
23	1336	.1	400	604	7.1	23.7	--	6.4	76	--	--
23	1336	3.1	400	603	7.1	23.7	--	6.3	76	--	--
23	1338	8.4	400	606	7.2	23.7	--	6.3	75	--	--
23	1337	19	400	605	7.2	23.7	--	6.2	75	--	--
October											
07	1355	.4	400	517	7.5	19.7	--	8.3	91	--	--
07	1356	3.1	400	520	7.5	19.4	--	8.2	89	--	--
07	1356	8.2	400	520	7.5	19.1	--	8.2	89	--	--
07	1357	17	400	526	7.5	19.1	--	8.2	89	--	--
26	1113	.4	400	449	7.6	16.3	--	9.2	95	--	--
26	1115	3.1	400	449	7.6	16.3	--	9.2	95	--	--
26	1115	9.7	400	447	7.6	16.3	--	9.2	95	--	--
26	1114	15	400	451	7.6	16.3	--	9.2	95	--	--
26	1114	20	400	446	7.6	16.3	--	9.1	94	--	--

Table 12. *Water-quality data for station 392227081293701, Ohio River at river mile 175.5, back channel, May to October 1993*

[ft = feet; µS/cm = microsiemens per centimeter; °C = degrees Celsius; mg/L = milligrams per liter; µg/L = micrograms per liter; -- = data not collected]

Date	Time	Sampling depth (ft)	Sample location (ft from left bank)	Specific conductance (µS/cm)	pH (standard units)	Temperature, water (°C)	Transparency (Secchi disk) (ft)	Dissolved oxygen (mg/L)	Dissolved oxygen (percent saturation)	Chlorophyll *a* (µg/L)	Chlorophyll *b* (µg/L)
May											
24	1407	3.6	400	445	8.2	19.3	--	9.2	102	--	--
24	1408	9.2	400	447	8.2	19.2	--	9.2	101	--	--
24	1408	18	400	448	8.2	19.2	--	9.1	101	--	--
June											
10	1310	.3	400	503	7.3	22.6	--	7.9	93	--	--
10	1309	3.3	400	503	7.3	22.6	--	7.9	93	--	--
10	1308	9.5	400	503	7.3	22.5	--	7.9	92	--	--
10	1307	22	400	503	7.3	22.5	--	7.8	92	--	--
July											
07	1414	.1	400	465	7.7	28.3	--	8.2	107	--	--
07	1415	3.0	400	465	7.7	28.2	--	8.2	107	--	--
07	1416	9.8	400	459	7.5	26.9	--	6.9	88	--	--
07	1415	19	400	457	7.5	26.9	--	6.9	88	--	--
29	2004	.3	400	560	7.5	29.4	--	6.4	86	--	--
29	2003	3.0	400	561	7.5	29.5	--	6.5	87	--	--
29	2003	7.5	400	558	7.5	29.5	--	6.4	86	--	--
29	2002	18	400	568	7.5	29.4	--	6.3	84	--	--
August											
12	1240	.1	400	611	7.5	28.3	--	6.6	86	--	--
12	1241	3.0	400	609	7.5	27.9	--	6.6	85	--	--
12	1241	9.9	400	614	7.4	27.3	--	5.9	76	--	--
12	1242	20	400	614	7.4	27.3	--	6.0	76	--	--
26	0841	.4	400	589	7.4	28.3	--	5.6	72	--	--
26	0842	3.4	400	588	7.3	28.3	--	5.7	73	--	--
26	0843	9.7	400	586	7.3	28.3	--	5.6	72	--	--
26	0842	19	400	584	7.3	28.3	--	5.3	69	--	--
September											
09	1035	.1	400	591	7.4	27.4	--	5.9	76	--	--
09	1036	3.3	400	592	7.4	27.4	--	5.8	75	--	--
09	1037	9.3	400	590	7.4	27.4	--	5.8	75	--	--
09	1036	19	400	592	7.4	27.4	--	5.7	73	--	--
23	1340	.3	400	607	7.2	23.7	--	6.6	79	--	--
23	1341	3.2	400	605	7.2	23.7	--	6.2	75	--	--
23	1342	9.6	400	606	7.2	23.6	--	6.1	73	--	--
23	1341	20	400	605	7.2	23.6	--	6.1	73	--	--
October											
07	1401	.2	400	531	7.6	19.7	--	8.1	90	--	--
07	1402	3.1	400	531	7.6	19.5	--	8.2	90	--	--
07	1402	11	400	531	7.6	19.1	--	8.1	89	--	--
07	1403	21	400	537	7.6	19.1	--	8.1	88	--	--
26	1125	.4	400	453	7.6	16.3	--	9.1	94	--	--
26	1127	3.0	400	453	7.6	16.3	--	9.1	94	--	--
26	1126	8.8	400	452	7.6	16.3	--	9.1	94	--	--
26	1126	17	400	452	7.6	16.3	--	9.1	94	--	--

Table 13. *Water-quality data for station 392139081312801, Ohio River at river mile 177.2, main channel, May to October 1993*

[ft = feet; µS/cm = microsiemens per centimeter; °C = degrees Celsius; mg/L = milligrams per liter; µg/L = micrograms per liter; -- = data not collected]

Date	Time	Sampling depth (ft)	Sample location (ft from left bank)	Specific conductance (µS/cm)	pH (standard units)	Temperature, water (°C)	Transparency (Secchi disk) (ft)	Dissolved oxygen (mg/L)	Dissolved oxygen (percent saturation)	Chlorophyll *a* (µg/L)	Chlorophyll *b* (µg/L)
May											
24	1419	3.3	500	435	8.2	20.1	--	9.3	104	--	--
24	1421	9.9	500	447	8.3	19.3	--	9.4	104	--	--
24	1420	17	500	448	8.4	19.2	--	9.4	103	--	--
June											
10	1332	.1	500	535	7.6	22.5	--	8.0	94	--	--
10	1333	3.6	500	533	7.6	22.6	--	8.0	94	--	--
10	1334	9.9	500	545	7.6	22.5	--	8.0	94	--	--
10	1333	19	500	546	7.6	22.5	--	8.0	94	--	--
July											
07	1426	.1	500	447	7.6	29.5	1.5	7.6	101	--	--
07	1426	3.1	500	464	7.6	29.2	--	7.6	101	--	--
07	1427	9.8	500	461	7.5	27.3	--	7.0	90	--	--
07	1427	19	500	462	7.5	27.3	--	7.2	92	--	--
29	1955	.3	500	567	7.5	30.2	--	6.4	87	--	--
29	1954	3.0	500	564	7.6	30.2	--	6.5	88	--	--
29	1954	9.8	500	564	7.6	29.9	--	6.5	88	--	--
29	1953	20	500	567	7.6	29.5	--	6.8	91	--	--
August											
12	1250	.1	500	661	7.5	31.0	--	6.4	88	--	--
12	1251	3.0	500	632	7.4	28.8	--	6.3	83	--	--
12	1251	9.2	500	615	7.4	27.8	--	6.2	81	--	--
12	1252	18	500	616	7.4	27.4	--	6.1	78	--	--
26	0831	.4	500	599	7.4	30.1	--	6.0	81	--	--
26	0832	3.3	500	600	7.4	29.2	--	5.8	76	--	--
26	0833	9.6	500	600	7.3	28.6	--	5.6	74	--	--
26	0832	19	500	600	7.3	28.6	--	5.6	73	--	--
September											
09	1026	.1	500	588	7.3	28.3	--	5.9	77	--	--
09	1027	3.0	500	580	7.3	27.8	--	5.8	75	--	--
09	1027	9.3	500	580	7.4	27.6	--	5.8	75	--	--
09	1027	19	500	582	7.4	27.5	--	5.7	74	--	--
23	1353	.2	500	605	7.2	24.2	--	6.9	84	--	--
23	1353	3.0	500	606	7.2	24.0	--	6.3	76	--	--
23	1354	9.7	500	604	7.2	24.0	--	6.2	74	--	--
23	1353	19	500	607	7.2	23.8	--	6.2	75	--	--
October											
07	1407	.2	500	526	7.5	21.6	--	8.1	93	--	--
07	1408	3.0	500	522	7.5	19.9	--	8.1	90	--	--
07	1408	8.8	500	519	7.5	19.2	--	8.1	89	--	--
07	1409	18	500	519	7.5	19.2	--	8.1	88	--	--
26	1140	.3	500	435	7.5	16.5	--	9.1	94	--	--
26	1140	3.2	500	439	7.5	16.4	--	9.0	94	--	--
26	1141	11	500	439	7.5	16.4	--	9.0	94	--	--
26	1141	23	500	441	7.5	16.4	--	9.0	94	--	--

Table 14. *Water-quality data for station 392131081312301 Ohio River at river mile 177.2, back channel, May to October 1993*

[ft = feet; µS/cm = microsiemens per centimeter; °C = degrees Celsius; mg/L = milligrams per liter; µg/L = micrograms per liter; -- = data not collected]

Date	Time	Sampling depth (ft)	Sample location (ft from left bank)	Specific conductance (µS/cm)	pH (standard units)	Temperature, water (°C)	Transparency (Secchi disk) (ft)	Dissolved oxygen (mg/L)	Dissolved oxygen (percent saturation)	Chlorophyll *a* (µg/L)	Chlorophyll *b* (µg/L)
May											
24	1414	3.3	500	446	8.3	19.3	--	9.5	105	--	--
24	1416	11	500	445	8.2	19.2	--	9.2	101	--	--
24	1415	19	500	445	8.3	19.2	--	9.2	102	--	--
June											
10	1337	.3	500	504	7.4	22.7	--	8.0	94	--	--
10	1337	3.6	500	504	7.3	22.6	--	7.9	93	--	--
10	1339	14	500	502	7.3	22.6	--	7.8	92	--	--
10	1338	28	500	504	7.3	22.6	--	7.8	92	--	--
July											
07	1420	.1	500	463	7.7	28.8	--	8.1	106	--	--
07	1420	3.1	500	462	7.7	28.4	--	7.8	102	--	--
07	1422	9.2	500	458	7.4	27.2	--	6.8	86	--	--
07	1421	19	500	458	7.5	27.1	--	6.8	87	--	--
29	1958	.3	500	565	7.7	29.4	--	6.8	90	--	--
29	1958	3.4	500	563	7.7	29.4	--	6.8	91	--	--
29	1957	11	500	564	7.7	29.4	--	6.6	89	--	--
29	1957	22	500	563	7.7	29.4	--	6.7	90	--	--
August											
12	1246	.1	500	614	7.6	28.4	--	7.2	94	--	--
12	1247	2.6	500	613	7.6	27.7	--	7.0	90	--	--
12	1247	9.9	500	610	7.4	27.2	--	5.9	75	--	--
12	1248	20	500	609	7.3	27.2	--	6.0	76	--	--
26	0835	.5	500	592	7.4	28.1	--	5.7	73	--	--
26	0835	3.4	500	594	7.3	28.1	--	5.5	72	--	--
26	0836	12	500	593	7.3	28.1	--	4.8	62	--	--
26	0836	25	500	599	7.3	28.0	--	4.1	53	--	--
September											
09	1029	.2	500	587	7.4	27.4	--	6.4	83	--	--
09	1030	3.0	500	589	7.4	27.4	--	5.7	73	--	--
09	1031	12	500	590	7.4	27.4	--	5.6	73	--	--
09	1030	25	500	588	7.4	27.4	--	5.6	72	--	--
23	1347	.2	500	609	7.3	23.7	--	6.7	80	--	--
23	1348	3.2	500	606	7.2	23.7	--	6.3	75	--	--
23	1349	9.9	500	614	7.2	23.6	--	6.1	73	--	--
23	1348	20	500	605	7.2	23.6	--	6.1	73	--	--
October											
07	1413	.3	500	530	7.6	20.2	--	7.9	88	--	--
07	1414	3.2	500	530	7.6	19.7	--	8.2	91	--	--
07	1414	10	500	531	7.5	19.1	--	8.1	88	--	--
07	1415	21	500	526	7.5	19.0	--	7.9	86	--	--
26	1135	.3	500	473	7.6	20.8	--	8.7	99	--	--
26	1137	3.6	500	460	7.6	17.0	--	9.1	95	--	--
26	1136	9.0	500	457	7.6	16.4	--	9.2	95	--	--
26	1135	19	500	458	7.6	16.4	--	9.2	95	--	--

Table 15. *Water-quality data for station 392042081330101, Ohio River at river mile 179.0, May to October 1993*

[ft = feet; µS/cm = microsiemens per centimeter; °C = degrees Celsius; mg/L = milligrams per liter; µg/L = micrograms per liter; -- = data not collected]

Date	Time	Sampling depth (ft)	Sample location (ft from left bank)	Specific conductance (µS/cm)	pH (standard units)	Temperature, water (°C)	Transparency (Secchi disk) (ft)	Dissolved oxygen (mg/L)	Dissolved oxygen (percent saturation)	Chlorophyll *a* (µg/L)	Chlorophyll *b* (µg/L)
May											
24	1427	3.9	800	454	8.4	19.3	--	9.6	106	--	--
24	1429	13	800	448	8.3	19.3	--	9.5	105	--	--
24	1428	24	800	447	8.3	19.3	--	9.4	104	--	--
June											
10	1344	.3	800	505	7.4	22.7	--	8.0	94	--	--
10	1344	3.3	800	506	7.4	22.7	--	8.0	94	--	--
10	1346	14	800	506	7.4	22.6	--	7.9	93	--	--
10	1345	28	800	503	7.4	22.5	--	8.0	93	--	--
July											
07	1437	.1	800	456	7.5	27.5	--	6.9	89	--	--
07	1438	3.2	800	459	7.5	27.5	--	7.0	90	--	--
07	1439	10	800	460	7.5	27.3	--	6.8	87	--	--
07	1438	21	800	461	7.5	27.2	--	6.8	88	--	--
29	1947	.9	800	565	7.8	29.7	--	7.0	94	--	--
29	1946	3.0	800	565	7.8	29.7	--	7.3	98	--	--
29	1946	13	800	563	7.6	29.4	--	6.2	83	--	--
29	1945	27	800	562	7.5	29.4	--	6.3	84	--	--
August											
12	1256	.1	800	620	7.6	28.4	--	7.1	93	--	--
12	1257	3.0	800	620	7.6	28.4	--	7.0	92	--	--
12	1257	9.2	800	609	7.4	27.4	--	6.0	77	--	--
12	1258	19	800	622	7.4	27.4	--	6.1	79	--	--
26	0824	.4	800	607	7.4	28.6	--	5.7	74	--	--
26	0824	3.3	800	604	7.4	28.6	--	6.0	78	--	--
26	0826	12	800	606	7.4	28.6	--	6.0	78	--	--
26	0825	25	800	609	7.4	28.6	--	5.4	71	--	--
September											
09	1018	.1	800	585	7.4	27.5	--	6.1	79	--	--
09	1019	2.8	800	586	7.4	27.6	--	6.2	81	--	--
09	1020	12	800	587	7.4	27.6	--	5.7	74	--	--
09	1019	24	800	584	7.4	27.5	--	5.9	76	--	--
23	1403	.2	800	605	7.3	23.8	--	6.4	77	--	--
23	1403	3.2	800	605	7.2	23.8	--	6.2	75	--	--
23	1405	8.9	800	609	7.2	23.8	--	6.2	74	--	--
23	1404	17	800	600	7.2	23.8	--	6.2	75	--	--
October											
07	1426	.1	800	527	7.6	19.9	--	8.1	90	--	--
07	1427	3.1	800	528	7.5	19.6	--	8.0	88	--	--
07	1427	9.3	800	530	7.5	19.3	--	8.1	89	--	--
07	1428	18	800	531	7.5	19.3	--	8.1	88	--	--
26	1140	.3	800	451	7.5	16.6	--	8.5	88	--	--
26	1141	.4	800	447	7.5	16.6	--	9.1	94	--	--
26	1141	2.9	800	447	7.5	16.6	--	9.0	94	--	--
26	1140	20	800	447	7.5	16.6	--	9.0	94	--	--

Table 16. *Water-quality data for station 391822081334701, Ohio River at river mile 181.8, May to October 1993*

[ft = feet; µS/cm = microsiemens per centimeter; °C = degrees Celsius; mg/L = milligrams per liter; µg/L = micrograms per liter; -- = data not collected]

Date	Time	Sampling depth (ft)	Sample location (ft from left bank)	Specific conductance (µS/cm)	pH (standard units)	Temperature, water (°C)	Transparency (Secchi disk) (ft)	Dissolved oxygen (mg/L)	Dissolved oxygen (percent saturation)	Chlorophyll *a* (µg/L)	Chlorophyll *b* (µg/L)
May											
24	1439	3.9	500	451	8.3	19.4	--	9.4	105	--	--
24	1441	11	500	449	8.2	19.4	--	9.3	103	--	--
24	1440	22	500	453	8.2	19.4	--	9.2	102	--	--
June											
10	1356	.1	500	517	7.4	22.7	--	7.8	92	--	--
10	1357	3.3	500	518	7.4	22.6	--	7.9	92	--	--
10	1358	12	500	521	7.4	22.6	--	7.8	92	--	--
10	1357	25	500	521	7.4	22.6	--	7.8	91	--	--
July											
07	1447	.1	500	458	7.6	28.0	--	7.5	98	--	--
07	1447	3.1	500	457	7.6	27.9	--	7.5	96	--	--
07	1449	11	500	453	7.5	27.0	--	6.7	85	--	--
07	1448	23	500	454	7.4	26.9	--	6.5	83	--	--
29	1937	.4	500	562	7.6	29.4	--	6.8	92	--	--
29	1937	3.2	500	564	7.6	29.4	--	6.9	92	--	--
29	1937	8.0	500	558	7.5	29.5	--	6.5	87	--	--
29	1936	17	500	553	7.5	29.5	--	6.7	90	--	--
August											
12	1304	.1	500	627	7.6	28.6	--	7.0	92	--	--
12	1305	3.0	500	623	7.5	28.1	--	6.7	87	--	--
12	1305	11	500	623	7.4	27.6	--	6.0	78	--	--
12	1306	23	500	623	7.4	27.5	--	6.2	80	--	--
26	0814	.4	500	622	7.4	28.6	--	5.9	77	--	--
26	0814	3.2	500	622	7.4	28.6	--	5.9	77	--	--
26	0816	12	500	619	7.4	28.6	--	5.9	77	--	--
26	0815	23	500	628	7.4	28.6	--	5.5	72	--	--
September											
09	1009	.1	500	581	7.3	27.6	--	5.6	73	--	--
09	1010	3.3	500	578	7.3	27.6	--	5.6	72	--	--
09	1011	8.6	500	583	7.3	27.6	--	5.5	72	--	--
09	1010	17	500	576	7.3	27.6	--	5.6	72	--	--
23	1414	.2	500	605	7.3	23.8	--	6.3	76	--	--
23	1414	3.4	500	605	7.2	23.8	--	6.2	74	--	--
23	1416	10	500	603	7.2	23.7	--	6.0	72	--	--
23	1416	21	500	602	7.2	23.7	--	6.0	72	--	--
October											
07	1428	.3	500	532	7.5	19.9	--	7.9	88	--	--
07	1429	3.0	500	532	7.5	19.8	--	7.9	87	--	--
07	1429	11	500	532	7.5	19.3	--	7.8	85	--	--
07	1430	22	500	532	7.5	19.2	--	7.8	85	--	--
26	1152	.4	500	448	7.5	16.8	--	9.0	94	--	--
26	1152	3.0	500	448	7.5	16.8	--	9.0	94	--	--
26	1153	11	500	448	7.5	16.8	--	9.0	94	--	--
26	1153	22	500	448	7.5	16.8	--	8.9	93	--	--

Table 17. *Water-quality data for station 391720081334701, Ohio River at river mile 183.0, May to October 1993*

[ft = feet; µS/cm = microsiemens per centimeter; °C = degrees Celsius; mg/L = milligrams per liter; µg/L = micrograms per liter; -- = data not collected]

Date	Time	Sampling depth (ft)	Sample location (ft from left bank)	Specific conductance (µS/cm)	pH (standard units)	Temperature, water (°C)	Transparency (Secchi disk) (ft)	Dissolved oxygen (mg/L)	Dissolved oxygen (percent saturation)	Chlorophyll *a* (µg/L)	Chlorophyll *b* (µg/L)
May											
24	1505	3.6	300	439	8.3	19.5	--	9.6	106	--	--
24	1506	6.6	300	440	8.3	19.5	--	9.5	105	--	--
24	1507	11	300	440	8.3	19.5	--	9.5	105	--	--
24	1508	16	300	441	8.2	19.4	--	9.4	104	--	--
24	1507	21	300	441	8.2	19.4	--	9.4	104	--	--
24	1454	3.3	700	440	8.2	19.5	--	9.6	107	11.0	0.7
24	1453	6.9	700	442	8.2	19.5	--	9.6	106	--	--
24	1452	10	700	442	8.3	19.5	--	9.7	107	--	--
24	1451	17	700	447	8.3	19.4	--	9.5	106	--	--
24	1450	22	700	442	8.3	19.4	--	9.4	104	--	--
24	1500	3.6	1,000	429	8.2	19.5	--	9.4	105	--	--
24	1501	6.3	1,000	432	8.2	19.5	--	9.4	104	--	--
24	1502	10	1,000	436	8.2	19.5	--	9.3	103	--	--
24	1502	16	1,000	442	8.2	19.4	--	9.3	103	--	--
24	1502	23	1,000	442	8.2	19.4	--	9.2	102	--	--
24	1503	24	1,000	442	8.1	19.4	--	9.2	102	--	--
June											
10	1411	.1	300	507	7.3	22.9	--	7.4	87	--	--
10	1411	3.0	300	504	7.3	22.8	--	7.4	87	--	--
10	1410	6.3	300	509	7.3	22.7	--	7.4	87	--	--
10	1410	9.9	300	504	7.3	22.7	--	7.4	87	--	--
10	1409	17	300	511	7.3	22.7	--	7.4	87	--	--
10	1408	20	300	503	7.3	22.7	--	7.5	88	--	--
10	1419	.3	700	506	7.3	22.7	1.5	7.7	90	5.5	.2
10	1418	3.6	700	503	7.3	22.6	--	7.7	90	--	--
10	1418	6.3	700	503	7.3	22.6	--	7.7	90	--	--
10	1418	11	700	507	7.3	22.6	--	7.7	90	--	--
10	1417	16	700	513	7.3	22.6	--	7.7	91	--	--
10	1416	23	700	500	7.4	22.6	--	7.7	91	--	--
10	1414	29	700	503	7.4	22.6	--	7.7	91	--	--
10	1426	.3	1,000	542	7.6	22.8	--	7.7	91	--	--
10	1425	2.6	1,000	545	7.6	22.7	--	7.7	91	--	--
10	1424	6.3	1,000	548	7.6	22.7	--	7.7	91	--	--
10	1423	9.5	1,000	553	7.6	22.7	--	7.7	91	--	--
10	1422	16	1,000	544	7.6	22.7	--	7.7	91	--	--
10	1421	23	1,000	546	7.6	22.7	--	7.7	91	--	--
July											
07	1510	.1	300	453	8.0	29.3	--	9.2	123	--	--
07	1511	3.0	300	453	7.9	29.1	--	8.9	117	--	--
07	1511	4.8	300	452	7.8	28.7	--	8.4	110	--	--
07	1512	9.9	300	448	7.4	26.9	--	6.5	83	--	--
07	1512	15	300	448	7.4	26.9	--	6.5	83	--	--

Table 17. *Water-quality data for station 391720081334701, Ohio River at river mile 183.0, May to October 1993--Continued*

Date	Time	Sampling depth (ft)	Sample location (ft from left bank)	Specific conductance (µS/cm)	pH (standard units)	Temperature, water (°C)	Transparency (Secchi disk) (ft)	Dissolved oxygen (mg/L)	Dissolved oxygen (percent saturation)	Chlorophyll *a* (µg/L)	Chlorophyll *b* (µg/L)
July											
07	1459	0.1	700	455	7.7	28.7	--	8.1	106	--	--
07	1500	3.1	700	455	7.7	28.3	--	8.0	105	--	--
07	1500	5.0	700	451	7.6	28.0	--	7.2	93	--	--
07	1501	9.8	700	452	7.5	27.0	--	6.9	88	--	--
07	1504	15	700	451	7.4	27.0	--	6.8	86	--	--
07	1503	20	700	452	7.4	27.0	--	6.7	86	--	--
07	1502	25	700	455	7.4	27.0	--	6.7	86	--	--
07	1502	26	700	451	7.4	27.0	--	6.8	86	--	--
07	1454	.1	1,000	454	7.7	28.7	--	7.9	103	--	--
07	1454	2.9	1,000	457	7.6	27.7	--	7.5	97	--	--
07	1455	5.3	1,000	451	7.5	27.3	--	6.9	89	--	--
07	1455	10	1,000	453	7.4	27.0	--	6.7	85	--	--
07	1456	15	1,000	454	7.4	27.0	--	6.7	85	--	--
07	1457	20	1,000	458	7.4	27.0	--	6.6	85	--	--
07	1457	24	1,000	458	7.4	27.0	--	6.6	84	--	--
08	0508	.1	300	--	--	27.6	--	6.9	89	--	--
08	0509	3.0	300	--	--	27.7	--	6.9	89	--	--
08	0509	5.0	300	--	--	27.7	--	6.9	89	--	--
08	0510	10	300	--	--	27.6	--	6.8	88	--	--
08	0510	15	300	--	--	27.5	--	6.6	85	--	--
08	0511	20	300	--	--	27.5	--	6.4	83	--	--
08	0512	22	300	--	--	27.4	--	6.4	82	--	--
08	0509	.1	700	--	--	27.6	--	6.8	88	--	--
08	0510	3.0	700	--	--	27.7	--	6.7	87	--	--
08	0510	5.0	700	--	--	27.7	--	6.7	87	--	--
08	0511	10	700	--	--	27.7	--	6.6	86	--	--
08	0511	15	700	--	--	27.7	--	6.6	86	--	--
08	0512	20	700	--	--	27.7	--	6.6	86	--	--
08	0513	25	700	--	--	27.7	--	6.5	84	--	--
08	0517	.1	1,000	--	--	27.8	--	6.9	90	--	--
08	0518	3.0	1,000	--	--	27.8	--	6.9	90	--	--
08	0518	5.0	1,000	--	--	27.8	--	6.9	90	--	--
08	0519	10	1,000	--	--	27.8	--	6.8	88	--	--
08	0519	15	1,000	--	--	27.8	--	6.8	88	--	--
08	0520	19	1,000	--	--	27.8	--	6.6	86	--	--
08	1337	.1	300	--	--	29.2	--	8.4	111	--	--
08	1338	3.0	300	--	--	28.2	--	7.4	96	--	--
08	1338	5.0	300	--	--	27.8	--	6.9	89	--	--
08	1339	10	300	--	--	27.6	--	6.7	86	--	--
08	1339	15	300	--	--	27.6	--	6.7	86	--	--
08	1340	20	300	--	--	27.6	--	6.8	88	--	--
08	1342	.1	700	--	--	29.2	--	8.2	109	--	--
08	1343	3.0	700	--	--	28.6	--	7.7	101	--	--
08	1343	5.0	700	--	--	28.0	--	6.9	90	--	--
08	1344	10	700	--	--	27.7	--	6.7	86	--	--
08	1344	15	700	--	--	27.6	--	6.6	85	--	--
08	1345	20	700	--	--	27.6	--	6.5	84	--	--
08	1346	25	700	--	--	27.6	--	6.5	84	--	--
08	1346	28	700	--	--	27.6	--	6.6	85	--	--

Table 17. *Water-quality data for station 391720081334701, Ohio River at river mile 183.0, May to October 1993--Continued*

Date	Time	Sampling depth (ft)	Sample location (ft from left bank)	Specific conductance (µS/cm)	pH (standard units)	Temperature, water (°C)	Transparency (Secchi disk) (ft)	Dissolved oxygen (mg/L)	Dissolved oxygen (percent saturation)	Chlorophyll *a* (µg/L)	Chlorophyll *b* (µg/L)
July											
08	1347	0.1	1,000	--	--	30.0	--	8.3	112	--	--
08	1347	3.0	1,000	--	--	29.1	--	8.3	110	--	--
08	1348	5.0	1,000	--	--	28.5	--	7.3	96	--	--
08	1349	10	1,000	--	--	27.8	--	6.8	88	--	--
08	1349	15	1,000	--	--	27.7	--	6.7	86	--	--
08	1350	20	1,000	--	--	27.7	--	6.7	86	--	--
08	1350	21	1,000	--	--	27.7	--	6.8	88	--	--
16	0521	.1	300	541	7.6	28.6	--	6.1	80	--	--
16	0521	3.1	300	545	7.6	28.7	--	6.1	80	--	--
16	0520	5.2	300	542	7.6	28.7	--	6.1	80	--	--
16	0519	10	300	542	7.6	28.7	--	6.1	80	--	--
16	0519	15	300	543	7.6	28.7	--	6.1	80	--	--
16	0519	20	300	541	7.6	28.7	--	6.0	79	--	--
16	0518	25	300	544	7.6	28.7	--	6.1	80	--	--
16	0515	.1	700	546	7.6	28.7	--	5.9	78	--	--
16	0514	2.8	700	547	7.6	28.7	--	5.9	78	--	--
16	0514	4.9	700	547	7.6	28.8	--	5.9	78	--	--
16	0513	10	700	542	7.6	28.8	--	5.9	78	--	--
16	0513	15	700	543	7.6	28.8	--	5.9	78	--	--
16	0511	20	700	547	7.6	28.8	--	6.0	79	--	--
16	0510	25	700	550	7.6	28.8	--	5.9	78	--	--
16	0507	.1	1,000	546	7.6	28.7	--	6.0	79	--	--
16	0507	3.2	1,000	548	7.6	28.7	--	6.0	78	--	--
16	0504	4.9	1,000	547	7.6	28.7	--	6.0	78	--	--
16	0503	10	1,000	548	7.6	28.7	--	5.9	78	--	--
16	0503	15	1,000	547	7.6	28.7	--	5.9	78	--	--
16	0502	19	1,000	547	7.6	28.6	--	5.9	77	--	--
16	1327	.1	300	555	8.0	29.9	--	6.9	92	--	--
16	1326	3.1	300	555	7.9	29.1	--	6.2	81	--	--
16	1326	4.9	300	555	7.8	28.6	--	5.9	77	--	--
16	1325	9.9	300	554	7.8	28.5	--	5.7	75	--	--
16	1324	15	300	552	7.8	28.5	--	5.6	73	--	--
16	1324	20	300	552	7.8	28.4	--	5.6	73	--	--
16	1323	26	300	552	7.8	28.5	--	5.6	73	--	--
16	1318	.1	700	555	7.9	29.6	3.0	6.4	86	--	--
16	1318	2.8	700	556	7.8	29.0	--	6.1	81	--	--
16	1317	5.1	700	556	7.8	28.8	--	5.9	78	--	--
16	1317	10	700	554	7.8	28.6	--	5.7	75	--	--
16	1316	15	700	555	7.8	28.6	--	5.6	73	--	--
16	1316	20	700	557	7.7	28.6	--	5.5	72	--	--
16	1315	25	700	557	7.7	28.6	--	5.5	71	--	--
16	1314	28	700	552	7.7	28.6	--	5.4	71	--	--
16	1310	.1	1,000	556	7.9	29.7	--	6.5	87	--	--
16	1310	3.0	1,000	555	7.9	29.6	--	6.5	87	--	--
16	1309	5.0	1,000	555	7.9	29.4	--	6.5	86	--	--
16	1309	10	1,000	556	7.8	28.7	--	5.7	75	--	--
16	1308	15	1,000	556	7.7	28.6	--	5.6	73	--	--
16	1308	20	1,000	557	7.7	28.6	--	5.5	73	--	--
16	1307	22	1,000	554	7.8	28.6	--	5.5	72	--	--

Table 17. *Water-quality data for station 391720081334701, Ohio River at river mile 183.0, May to October 1993--Continued*

Date	Time	Sampling depth (ft)	Sample location (ft from left bank)	Specific conductance (µS/cm)	pH (standard units)	Temperature, water (°C)	Transparency (Secchi disk) (ft)	Dissolved oxygen (mg/L)	Dissolved oxygen (percent saturation)	Chlorophyll *a* (µg/L)	Chlorophyll *b* (µg/L)
July											
29	0626	0.4	300	570	7.8	29.3	--	7.2	96	--	--
29	0626	2.9	300	569	7.7	29.4	--	7.1	95	--	--
29	0626	5.4	300	570	7.7	29.4	--	7.1	95	--	--
29	0627	9.9	300	570	7.7	29.4	--	7.0	94	--	--
29	0627	15	300	571	7.7	29.4	--	7.0	94	--	--
29	0628	18	300	571	7.7	29.3	--	7.0	93	--	--
29	0621	.4	700	569	7.8	29.4	--	7.2	96	--	--
29	0622	3.2	700	570	7.8	29.4	--	7.2	96	--	--
29	0622	5.2	700	569	7.8	29.4	--	7.2	96	--	--
29	0622	10	700	570	7.8	29.4	--	7.1	95	--	--
29	0623	15	700	570	7.8	29.4	--	7.1	96	--	--
29	0623	20	700	569	7.8	29.4	--	7.2	96	--	--
29	0624	25	700	569	7.8	29.4	--	7.2	96	--	--
29	0624	28	700	570	7.8	29.4	--	7.1	95	--	--
29	0617	.4	1,000	572	7.8	29.4	--	7.2	96	--	--
29	0617	3.1	1,000	572	7.8	29.4	--	7.2	96	--	--
29	0618	5.0	1,000	573	7.8	29.4	--	7.2	96	--	--
29	0618	10	1,000	574	7.8	29.4	--	7.2	96	--	--
29	0619	15	1,000	573	7.8	29.4	--	7.1	95	--	--
29	0619	20	1,000	574	7.8	29.4	--	7.1	95	--	--
29	1337	.3	300	566	7.9	29.9	--	7.5	101	--	--
29	1337	2.8	300	565	7.9	29.9	--	7.5	102	--	--
29	1337	5.6	300	565	7.8	29.8	--	7.8	105	--	--
29	1338	9.8	300	566	7.7	29.5	--	7.1	96	--	--
29	1339	15	300	566	7.7	29.5	--	7.1	95	--	--
29	1340	20	300	566	7.6	29.5	--	6.9	92	--	--
29	1340	21	300	567	7.6	29.5	--	6.4	86	--	--
29	1350	.4	700	564	8.0	29.9	4.0	7.6	102	--	--
29	1349	3.1	700	564	8.0	29.9	--	7.5	102	--	--
29	1349	5.3	700	566	7.9	29.9	--	7.6	103	--	--
29	1348	10	700	564	7.8	29.7	--	7.0	93	--	--
29	1347	15	700	566	7.6	29.4	--	6.5	87	--	--
29	1346	20	700	564	7.6	29.3	--	6.5	87	--	--
29	1345	25	700	561	7.6	29.3	--	6.5	86	6.7	0.4
29	1344	26	700	566	7.6	29.3	--	6.4	85	--	--
29	1407	.2	1,000	565	7.9	30.0	--	6.8	92	--	--
29	1405	2.9	1,000	563	8.0	29.9	--	8.0	109	--	--
29	1403	5.1	1,000	563	7.9	29.9	--	8.0	108	--	--
29	1403	10	1,000	564	7.9	29.8	--	7.7	103	--	--
29	1402	15	1,000	567	7.6	29.3	--	6.6	88	--	--
29	1400	20	1,000	564	7.6	29.3	--	5.9	79	--	--
August											
12	1325	.3	300	624	7.6	28.6	--	7.2	95	--	--
12	1326	2.6	300	623	7.6	28.4	--	7.1	94	--	--
12	1326	4.6	300	624	7.5	27.9	--	6.7	87	--	--
12	1327	9.5	300	622	7.4	27.5	--	6.0	77	--	--
12	1327	15	300	620	7.4	27.4	--	5.9	76	--	--
12	1328	19	300	630	7.4	27.4	--	5.9	75	--	--

Table 17. *Water-quality data for station 391720081334701, Ohio River at river mile 183.0, May to October 1993--Continued*

Date	Time	Sampling depth (ft)	Sample location (ft from left bank)	Specific conductance (µS/cm)	pH (standard units)	Temperature, water (°C)	Transparency (Secchi disk) (ft)	Dissolved oxygen (mg/L)	Dissolved oxygen (percent saturation)	Chlorophyll *a* (µg/L)	Chlorophyll *b* (µg/L)
August											
12	1316	0.1	700	627	7.5	28.5	4.0	6.5	85	--	--
12	1317	3.0	700	626	7.4	27.7	--	6.1	79	--	--
12	1317	4.9	700	629	7.4	27.7	--	6.1	79	--	--
12	1318	9.5	700	630	7.4	27.6	--	6.0	78	--	--
12	1318	15	700	620	7.4	27.6	--	6.0	77	--	--
12	1319	20	700	622	7.4	27.5	--	6.0	77	--	--
12	1320	25	700	629	7.4	27.5	--	6.0	77	--	--
12	1321	29	700	626	7.4	27.5	--	6.0	77	--	--
12	1310	.1	1,000	627	7.6	28.5	--	7.1	93	--	--
12	1311	3.0	1,000	627	7.6	28.3	--	7.0	91	--	--
12	1311	4.9	1,000	626	7.6	28.2	--	7.0	91	--	--
12	1312	9.9	1,000	627	7.4	27.7	--	6.4	83	--	--
12	1312	15	1,000	627	7.4	27.6	--	6.0	78	--	--
12	1313	20	1,000	626	7.4	27.5	--	5.9	76	--	--
13	0418	.1	300	616	7.4	27.5	--	6.2	80	--	--
13	0419	3.0	300	618	7.4	27.5	--	6.2	80	--	--
13	0419	4.9	300	616	7.4	27.5	--	6.2	80	--	--
13	0420	9.9	300	621	7.4	27.5	--	6.2	80	--	--
13	0420	15	300	616	7.4	27.5	--	6.1	79	--	--
13	0421	19	300	616	7.4	27.5	--	6.2	79	--	--
13	0413	.1	700	619	7.4	27.5	--	5.7	73	--	--
13	0414	2.3	700	620	7.4	27.5	--	6.2	79	--	--
13	0414	5.3	700	621	7.4	27.5	--	6.1	79	--	--
13	0415	9.5	700	617	7.4	27.5	--	6.1	79	--	--
13	0415	15	700	622	7.4	27.5	--	6.1	79	--	--
13	0416	20	700	622	7.4	27.5	--	6.1	79	--	--
13	0417	25	700	618	7.4	27.5	--	6.1	78	--	--
13	0417	29	700	620	7.4	27.5	--	6.0	77	--	--
13	0408	.1	1,000	622	7.4	27.5	--	6.2	79	--	--
13	0409	2.6	1,000	620	7.4	27.5	--	6.1	78	--	--
13	0409	4.6	1,000	623	7.4	27.5	--	6.1	78	--	--
13	0410	9.5	1,000	624	7.4	27.5	--	6.0	78	--	--
13	0410	15	1,000	623	7.4	27.5	--	6.0	78	--	--
13	0411	19	1,000	619	7.4	27.5	--	5.9	76	--	--
25	1317	.5	300	639	7.7	29.9	--	7.2	97	--	--
25	1318	3.2	300	637	7.8	29.7	--	7.7	103	--	--
25	1318	5.2	300	636	7.7	29.0	--	6.9	91	--	--
25	1319	10	300	637	7.5	28.6	--	6.1	80	--	--
25	1319	15	300	635	7.4	28.5	--	5.8	76	--	--
25	1320	18	300	635	7.4	28.5	--	5.8	75	--	--
25	1313	.4	700	642	7.7	30.8	4.5	7.2	97	--	--
25	1313	3.1	700	642	7.5	29.1	--	6.8	89	3.8	0.5
25	1312	4.9	700	641	7.5	28.9	--	6.3	83	--	--
25	1312	9.8	700	641	7.4	28.6	--	5.9	76	--	--
25	1310	15	700	641	7.4	28.6	--	5.8	75	--	--
25	1310	20	700	641	7.4	28.6	--	5.8	75	--	--
25	1309	25	700	641	7.4	28.6	--	5.8	75	--	--
25	1308	29	700	642	7.4	28.6	--	5.7	74	--	--

Table 17. *Water-quality data for station 391720081334701, Ohio River at river mile 183.0, May to October 1993--Continued*

Date	Time	Sampling depth (ft)	Sample location (ft from left bank)	Specific conductance (µS/cm)	pH (standard units)	Temperature, water (°C)	Transparency (Secchi disk) (ft)	Dissolved oxygen (mg/L)	Dissolved oxygen (percent saturation)	Chlorophyll *a* (µg/L)	Chlorophyll *b* (µg/L)
August											
25	1257	0.1	1,000	642	7.7	30.6	--	7.0	94	--	--
25	1258	3.1	1,000	640	7.7	29.0	--	7.3	96	--	--
25	1259	5.0	1,000	642	7.6	28.9	--	6.9	90	--	--
25	1259	9.9	1,000	642	7.5	28.7	--	6.1	80	--	--
25	1300	15	1,000	643	7.4	28.6	--	6.0	78	--	--
25	1305	21	1,000	642	7.4	28.6	--	6.1	80	--	--
26	0548	.4	300	627	7.4	28.9	--	6.2	82	--	--
26	0548	3.0	300	627	7.4	28.9	--	6.2	81	--	--
26	0548	5.1	300	626	7.4	28.9	--	6.2	81	--	--
26	0549	10	300	625	7.4	28.9	--	6.2	81	--	--
26	0549	15	300	632	7.4	28.9	--	6.1	80	--	--
26	0549	20	300	633	7.4	28.9	--	6.1	80	--	--
26	0550	25	300	623	7.4	28.8	--	6.0	79	--	--
26	0544	.3	700	630	7.4	28.9	--	6.2	81	--	--
26	0544	3.1	700	627	7.4	28.9	--	5.9	77	--	--
26	0544	5.5	700	631	7.4	28.9	--	6.1	79	--	--
26	0544	10	700	630	7.4	28.9	--	6.0	79	--	--
26	0545	15	700	631	7.3	28.9	--	6.0	78	--	--
26	0545	20	700	632	7.3	28.9	--	6.0	78	--	--
26	0545	25	700	632	7.3	28.9	--	6.0	78	--	--
26	0546	26	700	632	7.3	28.9	--	6.0	78	--	--
26	0540	.4	1,000	630	7.4	28.9	--	5.9	78	--	--
26	0540	3.3	1,000	633	7.4	28.9	--	6.1	80	--	--
26	0541	5.2	1,000	633	7.4	28.9	--	6.1	80	--	--
26	0541	10	1,000	633	7.4	28.9	--	6.1	80	--	--
26	0542	15	1,000	633	7.4	28.9	--	6.1	80	--	--
26	0542	19	1,000	633	7.4	28.9	--	6.0	78	--	--
September											
09	0551	.1	300	579	7.4	27.6	--	5.7	74	--	--
09	0552	3.3	300	579	7.3	27.7	--	5.7	74	--	--
09	0553	4.8	300	580	7.4	27.7	--	5.7	74	--	--
09	0553	9.9	300	582	7.4	27.7	--	5.7	74	--	--
09	0554	20	300	582	7.4	27.6	--	5.7	73	--	--
09	0546	.1	700	578	7.3	27.7	--	5.6	73	3.0	0.2
09	0546	2.9	700	579	7.3	27.7	--	5.7	73	--	--
09	0547	5.2	700	581	7.3	27.7	--	5.6	73	--	--
09	0547	9.9	700	580	7.3	27.7	--	5.6	73	--	--
09	0548	15	700	579	7.3	27.7	--	5.6	73	--	--
09	0548	20	700	577	7.3	27.7	--	5.6	73	--	--
09	0548	25	700	582	7.3	27.7	--	5.5	72	--	--
09	0540	.1	1,000	578	7.3	27.6	--	7.0	91	--	--
09	0541	5.0	1,000	578	7.3	27.7	--	5.6	73	--	--
09	0542	10	1,000	580	7.3	27.7	--	5.6	73	--	--
09	0540	12	1,000	580	7.3	27.7	--	5.8	75	--	--
09	0542	15	1,000	576	7.3	27.7	--	5.6	73	--	--
09	0542	20	1,000	577	7.3	27.7	--	5.6	73	--	--

Table 17. *Water-quality data for station 391720081334701, Ohio River at river mile 183.0, May to October 1993--Continued*

Date	Time	Sampling depth (ft)	Sample location (ft from left bank)	Specific conductance (µS/cm)	pH (standard units)	Temperature, water (°C)	Transparency (Secchi disk) (ft)	Dissolved oxygen (mg/L)	Dissolved oxygen (percent saturation)	Chlorophyll *a* (µg/L)	Chlorophyll *b* (µg/L)
September											
09	1617	0.1	300	580	7.4	27.7	--	6.1	79	--	--
09	1618	3.1	300	581	7.4	27.8	--	6.1	79	--	--
09	1618	4.9	300	580	7.4	27.8	--	6.1	80	--	--
09	1619	9.9	300	577	7.4	27.7	--	6.1	79	--	--
09	1619	15	300	582	7.4	27.8	--	6.2	80	--	--
09	1609	.3	700	580	7.4	27.7	--	6.0	78	3.0	0.2
09	1609	3.0	700	581	7.4	27.7	--	5.9	77	--	--
09	1608	5.0	700	581	7.3	27.7	--	5.8	76	--	--
09	1608	10	700	582	7.3	27.7	--	5.6	73	2.7	.2
09	1607	16	700	583	7.3	27.7	--	5.6	73	--	--
09	1607	20	700	581	7.3	27.6	--	5.6	72	--	--
09	1606	25	700	583	7.3	27.6	--	5.5	72	--	--
09	1605	26	700	578	7.3	27.6	--	5.6	73	--	--
09	1600	.3	1,000	580	7.4	27.8	--	6.0	78	--	--
09	1601	2.9	1,000	580	7.4	27.8	--	5.9	77	--	--
09	1601	5.0	1,000	580	7.4	27.8	--	5.9	77	--	--
09	1602	10	1,000	582	7.3	27.7	--	5.7	74	--	--
09	1602	15	1,000	583	7.3	27.7	--	5.5	72	--	--
09	1603	20	1,000	581	7.3	27.7	--	5.5	71	--	--
23	1422	.1	300	608	7.3	23.9	--	6.3	75	--	--
23	1423	3.1	300	609	7.3	23.9	--	6.3	75	--	--
23	1424	5.0	300	609	7.3	23.9	--	6.2	75	--	--
23	1424	10	300	608	7.3	23.8	--	6.2	75	--	--
23	1425	16	300	609	7.3	23.8	--	6.2	75	--	--
23	1426	20	300	608	7.3	23.8	--	6.1	74	--	--
23	1435	.1	700	609	7.3	23.9	--	6.3	76	--	--
23	1434	3.1	700	609	7.3	23.9	--	6.3	76	1.4	.1
23	1434	5.1	700	610	7.3	23.9	--	6.3	76	--	--
23	1433	9.9	700	610	7.3	23.9	--	6.3	76	--	--
23	1433	15	700	609	7.3	23.8	--	6.1	74	--	--
23	1432	20	700	609	7.3	23.9	--	6.3	75	--	--
23	1431	25	700	610	7.3	23.9	--	6.2	75	--	--
23	1430	29	700	610	7.3	23.8	--	6.1	73	--	--
23	1442	.2	1,000	610	7.3	23.9	--	6.4	77	--	--
23	1443	3.0	1,000	610	7.3	23.9	--	6.3	76	--	--
23	1444	4.9	1,000	610	7.3	23.9	--	6.3	75	--	--
23	1444	10	1,000	611	7.3	23.8	--	6.1	73	--	--
23	1445	15	1,000	610	7.2	23.8	--	6.0	72	--	--
23	1446	20	1,000	612	7.2	23.8	--	6.0	72	--	--
23	1446	23	1,000	612	7.2	23.8	--	6.0	72	--	--
23	1456	25	1,000	618	7.3	23.7	--	6.1	73	--	--
23	1457	30	1,000	615	7.2	23.7	--	6.0	72	--	--

Table 17. *Water-quality data for station 391720081334701, Ohio River at river mile 183.0, May to October 1993--Continued*

Date	Time	Sampling depth (ft)	Sample location (ft from left bank)	Specific conductance (µS/cm)	pH (standard units)	Temperature, water (°C)	Transparency (Secchi disk) (ft)	Dissolved oxygen (mg/L)	Dissolved oxygen (percent saturation)	Chlorophyll *a* (µg/L)	Chlorophyll *b* (µg/L)
September											
24	0612	0.2	300	--	7.1	22.9	--	6.6	78	--	--
24	0613	.3	300	591	7.3	23.3	--	6.2	73	--	--
24	0613	3.0	300	589	7.2	23.4	--	6.0	71	--	--
24	0613	4.8	300	590	7.2	23.4	--	6.0	71	--	--
24	0613	5.1	300	591	7.2	23.4	--	6.0	71	--	--
24	0614	9.8	300	593	7.2	23.4	--	6.0	71	--	--
24	0614	9.8	300	588	7.2	23.4	--	6.0	71	--	--
24	0615	20	300	593	7.2	23.4	--	6.0	71	--	--
24	0615	22	300	593	7.2	23.4	--	6.0	71	--	--
24	0604	.3	700	591	7.2	23.5	--	6.0	71	--	--
24	0604	3.0	700	593	7.2	23.5	--	5.9	71	--	--
24	0605	5.3	700	593	7.2	23.5	--	6.0	71	--	--
24	0605	10	700	595	7.2	23.5	--	6.0	71	--	--
24	0606	15	700	593	7.2	23.5	--	5.9	71	--	--
24	0606	20	700	593	7.2	23.5	--	5.9	71	--	--
24	0607	25	700	596	7.2	23.5	--	5.9	71	--	--
24	0604	26	700	595	7.2	23.5	--	5.9	70	--	--
24	0559	.2	1,000	593	7.2	23.4	--	6.0	71	--	--
24	0559	3.2	1,000	594	7.2	23.4	--	6.0	71	--	--
24	0600	4.9	1,000	593	7.2	23.4	--	6.0	71	--	--
24	0600	10	1,000	593	7.2	23.4	--	6.0	71	--	--
24	0601	15	1,000	592	7.2	23.4	--	5.9	70	--	--
October											
07	1450	.3	300	531	7.5	20.2	--	7.7	85	--	--
07	1451	2.9	300	531	7.5	19.9	--	7.4	82	--	--
07	1451	5.2	300	531	7.5	19.9	--	7.3	80	--	--
07	1452	10	300	531	7.5	19.2	--	7.4	80	--	--
07	1452	15	300	531	7.0	19.2	--	7.3	79	--	--
07	1453	19	300	531	7.5	19.2	--	7.1	77	--	--
07	1442	.2	700	532	7.5	19.6	6.5	7.7	85	--	--
07	1443	2.8	700	532	7.5	19.4	--	7.7	84	--	--
07	1443	5.2	700	532	7.5	19.3	--	7.7	84	--	--
07	1444	10	700	532	7.5	19.3	--	7.7	84	--	--
07	1444	15	700	533	7.5	19.2	--	7.7	84	1.2	0.1
07	1445	20	700	533	7.5	19.2	--	7.7	84	--	--
07	1445	25	700	533	7.5	19.2	--	7.7	84	--	--
07	1446	28	700	533	7.5	19.2	--	7.7	83	--	--
07	1434	.5	1,000	534	7.5	20.2	--	8.0	89	--	--
07	1435	3.3	1,000	534	7.5	20.1	--	7.9	88	--	--
07	1435	5.0	1,000	533	7.5	19.5	--	7.8	86	--	--
07	1436	10	1,000	534	7.5	19.3	--	7.8	85	--	--
07	1436	15	1,000	534	7.5	19.3	--	7.7	84	--	--
07	1437	20	1,000	534	7.5	19.3	--	7.7	84	--	--
07	1437	24	1,000	534	7.5	19.3	--	7.7	84	--	--
26	0627	.4	300	449	7.4	16.8	--	8.3	87	--	--
26	0629	3.0	300	448	7.4	16.8	--	8.3	87	--	--
26	0629	4.9	300	452	7.4	16.8	--	8.3	87	--	--
26	0629	9.8	300	445	7.4	16.8	--	8.3	87	--	--
26	0628	15	300	453	7.4	16.8	--	8.4	88	--	--
26	0628	22	300	459	7.4	16.8	--	8.4	88	--	--

Table 18. *Water-quality data for station 391559081341201, Ohio River at river mile 184.6, May to October 1993*

[ft = feet; µS/cm = microsiemens per centimeter; °C = degrees Celsius; mg/L = milligrams per liter; µg/L = micrograms per liter; -- = data not collected]

Date	Time	Sampling depth (ft)	Sample location (ft from left bank)	Specific conductance (µS/cm)	pH (standard units)	Temperature, water (°C)	Transparency (Secchi disk) (ft)	Dissolved oxygen (mg/L)	Dissolved oxygen (percent saturation)	Chlorophyll *a* (µg/L)	Chlorophyll *b* (µg/L)
May											
24	1617	3.0	300	428	8.2	19.6	--	9.6	107	--	--
24	1617	6.6	300	430	8.1	19.6	--	9.5	106	--	--
24	1617	9.5	300	430	8.1	19.6	--	9.5	106	--	--
24	1616	16	300	423	8.1	19.5	--	9.4	105	--	--
24	1616	24	300	416	8.1	19.5	--	9.3	103	--	--
24	1615	30	300	396	8.0	19.3	--	9.2	102	--	--
24	1614	35	300	387	8.0	19.3	--	9.1	100	--	--
24	1557	3.3	600	424	8.0	19.7	4.0	9.3	104	--	--
24	1556	6.3	600	424	8.0	19.7	--	9.3	103	--	--
24	1556	9.5	600	424	8.0	19.6	--	9.2	103	--	--
24	1555	16	600	429	8.0	19.6	--	9.2	103	8.8	0.5
24	1554	23	600	424	8.1	19.6	--	9.3	103	--	--
24	1554	31	600	430	8.1	19.5	--	9.3	103	--	--
24	1553	36	600	427	8.1	19.5	--	9.3	103	--	--
24	1611	3.3	900	424	8.0	19.7	--	9.2	102	--	--
24	1611	6.3	900	424	7.9	19.6	--	9.0	101	--	--
24	1610	9.9	900	427	7.9	19.6	--	9.0	100	--	--
24	1610	17	900	423	8.0	19.5	--	9.0	100	--	--
24	1609	22	900	428	8.0	19.5	--	9.1	101	--	--
24	1608	24	900	426	8.0	19.5	--	9.1	101	--	--
June											
10	1438	.3	300	506	7.3	22.8	--	7.5	88	--	--
10	1438	3.0	300	506	7.3	22.8	--	7.5	88	--	--
10	1437	6.6	300	507	7.3	22.8	--	7.5	89	--	--
10	1437	9.9	300	506	7.3	22.7	--	7.5	88	--	--
10	1436	18	300	503	7.3	22.7	--	7.5	88	--	--
10	1435	22	300	510	7.3	22.7	--	7.5	89	--	--
10	1435	29	300	512	7.3	22.7	--	7.5	89	--	--
10	1433	36	300	512	7.3	22.7	--	7.5	89	--	--
10	1446	.3	600	520	7.4	22.7	1.5	7.7	90	--	--
10	1446	3.3	600	522	7.4	22.7	--	7.7	90	3.8	.3
10	1445	6.3	600	516	7.4	22.7	--	7.7	90	--	--
10	1445	9.5	600	513	7.4	22.7	--	7.7	90	--	--
10	1444	16	600	510	7.4	22.7	--	7.7	90	--	--
10	1443	30	600	512	7.3	22.7	--	7.6	90	--	--
10	1442	36	600	511	7.3	22.7	--	7.6	89	--	--
10	1443	37	600	510	7.3	22.7	--	7.6	89	--	--
10	1441	39	600	506	7.3	22.7	--	7.6	90	--	--
10	1454	.3	900	556	7.6	23.0	--	7.6	89	--	--
10	1453	3.3	900	554	7.6	22.9	--	7.6	90	--	--
10	1453	6.6	900	553	7.6	22.9	--	7.6	90	--	--
10	1452	9.2	900	549	7.5	22.8	--	7.6	90	--	--
10	1452	16	900	536	7.5	22.7	--	7.7	90	--	--
10	1456	23	900	508	7.4	22.7	--	7.7	91	--	--
10	1451	24	900	539	7.5	22.7	--	7.7	90	--	--

Table 18. *Water-quality data for station 391559081341201, Ohio River at river mile 184.6, May to October 1993--Continued*

Date	Time	Sampling depth (ft)	Sample location (ft from left bank)	Specific conductance (µS/cm)	pH (standard units)	Temperature, water (°C)	Transparency (Secchi disk) (ft)	Dissolved oxygen (mg/L)	Dissolved oxygen (percent saturation)	Chlorophyll *a* (µg/L)	Chlorophyll *b* (µg/L)
July											
07	1612	0.1	300	367	7.7	29.2	--	8.3	110	--	--
07	1613	3.1	300	364	7.5	27.9	--	7.0	91	--	--
07	1614	5.1	300	399	7.4	27.5	--	6.7	87	--	--
07	1614	10	300	441	7.4	27.3	--	6.9	88	--	--
07	1615	15	300	443	7.4	27.1	--	6.6	84	--	--
07	1559	.1	600	427	7.6	28.5	--	8.0	104	--	--
07	1600	2.9	600	444	7.6	28.1	--	7.9	103	--	--
07	1601	5.0	600	449	7.6	28.0	--	7.7	100	--	--
07	1602	10	600	451	7.5	27.4	--	7.1	91	--	--
07	1602	15	600	451	7.4	27.0	--	6.7	86	--	--
07	1606	20	600	450	7.4	27.0	--	6.7	85	--	--
07	1606	25	600	445	7.4	27.0	--	6.6	84	--	--
07	1605	30	600	440	7.4	26.9	--	6.4	81	--	--
07	1604	35	600	432	7.3	26.8	--	5.7	72	11.0	1.0
07	1603	37	600	405	7.3	26.6	--	5.0	63	--	--
07	1552	.1	900	450	7.8	28.6	--	8.0	105	--	--
07	1553	3.1	900	447	7.7	28.6	--	8.3	109	--	--
07	1554	4.9	900	449	7.7	28.4	--	8.0	104	--	--
07	1554	9.9	900	451	7.5	27.5	--	7.2	93	--	--
07	1555	15	900	453	7.5	27.1	--	6.7	85	--	--
07	1556	20	900	452	7.4	27.0	--	6.6	84	--	--
07	1557	23	900	451	7.4	27.1	--	6.6	84	--	--
08	0524	.1	300	--	--	27.5	--	7.0	90	--	--
08	0525	3.0	300	--	--	27.6	--	6.9	89	--	--
08	0525	5.0	300	--	--	27.6	--	7.0	90	--	--
08	0526	10	300	--	--	27.6	--	7.0	90	--	--
08	0526	15	300	--	--	27.6	--	7.0	90	--	--
08	0527	20	300	--	--	27.6	--	7.0	90	--	--
08	0528	25	300	--	--	27.6	--	7.0	90	--	--
08	0528	30	300	--	--	27.5	--	6.7	86	--	--
08	0529	35	300	--	--	26.0	--	2.6	32	--	--
08	0529	37	300	--	--	25.7	--	2.2	27	--	--
08	0530	.1	600	--	--	27.5	--	6.7	86	--	--
08	0531	3.0	600	--	--	27.5	--	6.7	86	--	--
08	0531	5.0	600	--	--	27.5	--	6.7	86	--	--
08	0532	10	600	--	--	27.5	--	6.7	86	--	--
08	0532	15	600	--	--	27.5	--	6.7	86	--	--
08	0533	20	600	--	--	27.5	--	6.6	85	--	--
08	0534	25	600	--	--	27.4	--	6.6	85	--	--
08	0534	30	600	--	--	27.4	--	6.4	82	--	--
08	0535	35	600	--	--	27.4	--	6.4	82	--	--
08	0535	37	600	--	--	27.4	--	6.4	82	--	--
08	0537	.1	900	--	--	27.5	--	6.7	86	--	--
08	0538	3.0	900	--	--	27.5	--	6.5	84	--	--
08	0538	5.0	900	--	--	27.4	--	6.4	82	--	--
08	0539	10	900	--	--	27.4	--	6.3	81	--	--
08	0539	15	900	--	--	27.3	--	6.2	80	--	--

Table 17. *Water-quality data for station 391720081334701, Ohio River at river mile 183.0, May to October 1993--Continued*

Date	Time	Sampling depth (ft)	Sample location (ft from left bank)	Specific conductance (µS/cm)	pH (standard units)	Temperature, water (°C)	Transparency (Secchi disk) (ft)	Dissolved oxygen (mg/L)	Dissolved oxygen (percent saturation)	Chlorophyll *a* (µg/L)	Chlorophyll *b* (µg/L)
October											
26	0620	0.4	700	461	7.4	16.8	--	8.6	90	--	--
26	0621	3.6	700	461	7.4	16.8	--	8.5	89	--	--
26	0621	5.2	700	453	7.4	16.9	--	8.5	89	--	--
26	0622	10	700	460	7.4	16.9	--	8.5	89	--	--
26	0622	15	700	456	7.4	16.9	--	8.5	89	--	--
26	0622	20	700	455	7.4	16.9	--	8.5	89	--	--
26	0623	25	700	460	7.4	16.9	--	8.4	88	--	--
26	0623	26	700	460	7.4	16.9	--	8.4	88	--	--
26	0559	.4	1,000	470	7.4	16.9	--	8.3	88	--	--
26	0601	2.9	1,000	470	7.4	16.9	--	8.4	88	--	--
26	0601	5.1	1,000	466	7.4	16.9	--	8.4	88	--	--
26	0600	10	1,000	472	7.4	16.9	--	8.3	88	--	--
26	0600	15	1,000	466	7.4	16.9	--	8.3	88	--	--
26	0600	20	1,000	473	7.4	16.9	--	8.3	87	--	--
26	0559	22	1,000	471	7.4	16.9	--	8.3	87	--	--
26	1225	.2	300	434	7.5	16.9	--	8.8	92	--	--
26	1225	5.1	300	438	7.5	16.8	--	8.8	92	--	--
26	1226	10	300	436	7.5	16.8	--	8.8	92	--	--
26	1226	15	300	435	7.5	16.7	--	8.8	92	--	--
26	1227	20	300	435	7.5	16.8	--	8.8	92	--	--
26	1227	23	300	443	7.5	16.8	--	8.9	92	--	--
26	1215	.3	700	454	7.6	17.0	5.0	8.9	94	--	--
26	1215	3.1	700	454	7.5	16.9	--	8.9	94	1.8	0.1
26	1216	4.9	700	455	7.5	16.9	--	8.9	94	--	--
26	1216	10	700	453	7.5	16.9	--	8.9	93	--	--
26	1217	15	700	455	7.5	16.9	--	8.9	93	--	--
26	1217	20	700	452	7.5	16.9	--	8.9	93	--	--
26	1217	25	700	458	7.5	16.9	--	8.9	93	--	--
26	1218	26	700	463	7.5	16.9	--	8.9	93	--	--
26	1207	.3	1,000	463	7.5	17.0	--	8.9	93	--	--
26	1209	2.6	1,000	463	7.6	17.0	--	8.8	93	--	--
26	1209	5.3	1,000	465	7.6	16.9	--	8.9	93	--	--
26	1208	10	1,000	459	7.6	16.9	--	8.9	93	--	--
26	1208	15	1,000	468	7.5	16.9	--	8.8	92	--	--
26	1208	20	1,000	465	7.5	16.9	--	8.8	92	--	--
26	1207	22	1,000	467	7.5	16.9	--	8.8	92	--	--

Table 18. *Water-quality data for station 391559081341201, Ohio River at river mile 184.6, May to October 1993--Continued*

Date	Time	Sampling depth (ft)	Sample location (ft from left bank)	Specific conductance (µS/cm)	pH (standard units)	Temperature, water (°C)	Transparency (Secchi disk) (ft)	Dissolved oxygen (mg/L)	Dissolved oxygen (percent saturation)	Chlorophyll *a* (µg/L)	Chlorophyll *b* (µg/L)
July											
08	0711	0.1	300	413	7.3	27.6	--	7.0	90	--	--
08	0712	3.0	300	422	7.3	27.7	--	7.0	91	--	--
08	0712	5.0	300	422	7.3	27.7	--	7.0	91	--	--
08	0713	10	300	452	7.3	27.6	--	7.0	90	--	--
08	0713	15	300	452	7.3	27.6	--	7.0	90	--	--
08	0714	20	300	452	7.3	27.6	--	7.0	90	--	--
08	0715	25	300	452	7.3	27.6	--	6.9	89	--	--
08	0715	30	300	452	7.3	27.6	--	6.9	89	--	--
08	0716	35	300	452	7.3	27.6	--	6.9	89	--	--
08	0716	36	300	452	7.3	27.6	--	7.0	90	--	--
08	0700	.1	600	459	7.3	27.6	--	7.0	90	--	--
08	0701	3.0	600	460	7.3	27.6	--	6.9	89	--	--
08	0701	5.0	600	460	7.3	27.6	--	7.0	90	--	--
08	0702	10	600	460	7.3	27.6	--	6.9	89	--	--
08	0702	15	600	454	7.3	27.6	--	6.8	88	--	--
08	0703	20	600	461	7.3	27.6	--	6.9	89	--	--
08	0704	25	600	454	7.3	27.6	--	6.9	89	--	--
08	0704	30	600	454	7.3	27.6	--	6.8	88	--	--
08	0705	35	600	374	6.9	26.4	--	3.4	43	--	--
08	0705	36	600	317	6.9	26.0	--	2.6	33	--	--
08	0720	.1	900	460	7.3	27.5	--	6.8	88	--	--
08	0721	3.0	900	460	7.3	27.6	--	6.8	88	--	--
08	0721	5.0	900	460	7.3	27.6	--	6.8	88	--	--
08	0722	10	900	460	7.3	27.6	--	6.7	87	--	--
08	0722	15	900	460	7.2	27.5	--	6.6	85	--	--
08	0723	20	900	458	7.2	27.5	--	6.6	85	--	--
08	0724	25	900	458	7.2	27.5	--	6.7	86	--	--
08	0724	27	900	458	7.2	27.5	--	6.9	89	--	--
08	1355	.1	300	--	--	29.0	--	8.2	108	--	--
08	1356	3.0	300	--	--	28.9	--	8.1	107	--	--
08	1356	5.0	300	--	--	28.8	--	7.9	104	--	--
08	1357	10	300	--	--	28.5	--	7.4	97	--	--
08	1357	15	300	--	--	28.3	--	7.1	93	--	--
08	1358	20	300	--	--	28.1	--	6.8	88	--	--
08	1359	25	300	--	--	27.8	--	6.6	85	--	--
08	1359	30	300	--	--	27.8	--	6.6	85	--	--
08	1400	32	300	--	--	27.8	--	6.7	87	--	--
08	1417	.1	600	--	--	28.9	--	8.0	105	--	--
08	1417	3.0	600	--	--	28.8	--	7.9	104	--	--
08	1417	5.0	600	--	--	28.8	--	7.7	101	--	--
08	1418	10	600	--	--	28.6	--	7.3	96	--	--
08	1418	15	600	--	--	28.0	--	6.8	88	--	--
08	1419	20	600	--	--	27.9	--	6.6	85	--	--
08	1420	25	600	--	--	27.7	--	6.2	80	--	--
08	1420	30	600	--	--	27.5	--	5.7	73	--	--
08	1421	35	600	--	--	26.9	--	3.8	49	--	--
08	1421	37	600	--	--	26.0	--	1.9	24	--	--

Table 18. *Water-quality data for station 391559081341201, Ohio River at river mile 184.6, May to October 1993--Continued*

Date	Time	Sampling depth (ft)	Sample location (ft from left bank)	Specific conductance (µS/cm)	pH (standard units)	Temperature, water (°C)	Transparency (Secchi disk) (ft)	Dissolved oxygen (mg/L)	Dissolved oxygen (percent saturation)	Chlorophyll *a* (µg/L)	Chlorophyll *b* (µg/L)
July											
08	1414	0.1	900	--	--	29.2	--	7.4	98	--	--
08	1414	3.0	900	--	--	28.2	--	6.9	90	--	--
08	1415	5.0	900	--	--	28.1	--	6.8	88	--	--
08	1415	10	900	--	--	27.9	--	6.6	85	--	--
08	1415	15	900	--	--	27.8	--	6.4	83	--	--
08	1415	20	900	--	--	27.8	--	6.4	83	--	--
08	1416	25	900	--	--	27.8	--	6.5	84	--	--
08	1416	29	900	--	--	27.8	--	6.6	85	--	--
16	0532	.1	300	537	7.7	28.6	--	6.0	79	4.1	0.4
16	0532	3.3	300	537	7.7	28.6	--	6.0	79	--	--
16	0532	5.0	300	536	7.7	28.6	--	6.1	80	--	--
16	0531	9.9	300	537	7.7	28.6	--	6.0	79	--	--
16	0530	15	300	536	7.6	28.6	--	6.1	80	--	--
16	0530	20	300	533	7.6	28.6	--	6.0	79	--	--
16	0529	25	300	531	7.6	28.6	--	6.0	79	--	--
16	0529	30	300	524	7.6	28.5	--	5.8	76	--	--
16	0528	36	300	440	7.5	28.0	--	3.6	46	--	--
16	0539	.1	600	540	7.7	28.7	--	6.0	79	--	--
16	0538	2.6	600	540	7.7	28.7	--	6.0	79	--	--
16	0538	5.3	600	539	7.7	28.7	--	6.0	79	--	--
16	0538	10	600	536	7.7	28.7	--	6.0	79	--	--
16	0537	15	600	536	7.7	28.7	--	6.0	78	--	--
16	0537	20	600	543	7.7	28.7	--	6.0	78	--	--
16	0536	25	600	537	7.7	28.6	--	5.9	78	--	--
16	0536	30	600	542	7.7	28.6	--	5.9	78	--	--
16	0535	35	600	537	7.7	28.7	--	5.9	78	--	--
16	0544	.1	900	541	7.7	28.6	--	6.0	78	--	--
16	0544	2.9	900	538	7.7	28.6	--	5.9	78	--	--
16	0544	5.0	900	543	7.7	28.6	--	6.0	78	--	--
16	0543	10	900	542	7.7	28.6	--	5.9	78	--	--
16	0543	15	900	543	7.7	28.6	--	5.9	78	--	--
16	0542	20	900	539	7.7	28.6	--	5.9	78	--	--
16	0541	23	900	542	7.7	28.5	--	5.9	77	--	--
16	1247	.1	300	555	7.8	29.7	--	6.4	85	--	--
16	1246	2.9	300	554	7.8	29.4	--	6.6	88	--	--
16	1247	5.3	300	554	7.9	29.0	--	6.7	88	--	--
16	1246	10	300	554	7.8	28.8	--	6.0	79	--	--
16	1245	15	300	554	7.7	28.7	--	5.7	74	--	--
16	1244	20	300	553	7.7	28.6	--	5.6	73	--	--
16	1243	25	300	552	7.7	28.6	--	5.6	74	--	--
16	1243	30	300	545	7.7	28.5	--	5.5	72	--	--
16	1242	35	300	531	7.6	28.4	--	5.3	69	--	--
16	1241	36	300	536	7.7	28.4	--	5.3	69	--	--

Table 18. *Water-quality data for station 391559081341201, Ohio River at river mile 184.6, May to October 1993--Continued*

Date	Time	Sampling depth (ft)	Sample location (ft from left bank)	Specific conductance (µS/cm)	pH (standard units)	Temperature, water (°C)	Transparency (Secchi disk) (ft)	Dissolved oxygen (mg/L)	Dissolved oxygen (percent saturation)	Chlorophyll *a* (µg/L)	Chlorophyll *b* (µg/L)
July											
16	1255	0.1	600	555	7.8	30.0	3.9	6.2	83	--	--
16	1254	2.8	600	556	7.8	29.2	--	5.9	79	--	--
16	1254	5.3	600	555	7.7	28.7	--	5.7	75	--	--
16	1253	9.8	600	552	7.7	28.7	--	5.7	75	--	--
16	1252	15	600	557	7.7	28.6	--	5.6	73	--	--
16	1252	20	600	556	7.7	28.6	--	5.6	73	--	--
16	1251	25	600	551	7.7	28.5	--	5.5	72	--	--
16	1251	30	600	552	7.7	28.5	--	5.5	73	--	--
16	1250	33	600	554	7.7	28.5	--	5.6	73	--	--
16	1302	.1	900	555	7.8	29.5	--	5.9	79	--	--
16	1302	3.1	900	554	7.7	28.7	--	5.6	73	--	--
16	1301	5.1	900	554	7.7	28.7	--	5.5	73	--	--
16	1300	10	900	557	7.7	28.6	--	5.5	72	--	--
16	1300	15	900	552	7.7	28.6	--	5.5	72	--	--
16	1259	21	900	554	7.7	28.5	--	5.5	72	--	--
16	1259	23	900	551	7.7	28.5	--	5.5	72	--	--
29	0611	.3	300	573	7.8	29.6	--	7.4	100	--	--
29	0611	3.0	300	573	7.8	29.6	--	7.5	100	--	--
29	0610	5.4	300	573	7.8	29.6	--	7.5	100	--	--
29	0610	10	300	573	7.8	29.6	--	7.5	100	--	--
29	0609	15	300	575	7.8	29.6	--	7.5	100	--	--
29	0609	20	300	574	7.7	29.6	--	7.4	99	--	--
29	0609	25	300	571	7.7	29.6	--	7.3	98	--	--
29	0608	30	300	540	7.5	29.3	--	6.5	87	--	--
29	0607	35	300	387	7.1	28.3	--	3.9	52	--	--
29	0606	36	300	573	7.8	29.6	--	3.7	50	--	--
29	0600	.3	600	574	7.7	29.6	--	7.3	98	--	--
29	0601	2.9	600	574	7.7	29.5	--	7.3	98	--	--
29	0601	5.3	600	574	7.7	29.6	--	7.3	98	--	--
29	0601	9.8	600	574	7.7	29.6	--	7.2	96	--	--
29	0602	15	600	571	7.7	29.6	--	7.3	98	--	--
29	0602	20	600	572	7.7	29.6	--	7.3	98	--	--
29	0603	25	600	571	7.7	29.6	--	6.9	93	--	--
29	0603	30	600	569	7.7	29.6	--	7.3	98	--	--
29	0604	32	600	570	7.7	29.6	--	7.1	96	--	--
29	0554	.3	900	574	7.7	29.5	--	7.2	96	--	--
29	0555	3.2	900	575	7.7	29.6	--	7.1	96	--	--
29	0555	5.2	900	574	7.7	29.6	--	7.1	95	--	--
29	0556	10	900	574	7.7	29.6	--	7.1	95	--	--
29	0556	15	900	577	7.7	29.6	--	7.1	95	--	--
29	0557	20	900	576	7.7	29.6	--	7.1	95	--	--
29	0558	25	900	576	7.6	29.6	--	7.0	95	--	--
29	0558	28	900	578	7.6	29.5	--	6.9	93	--	--

Table 18. *Water-quality data for station 391559081341201, Ohio River at river mile 184.6, May to October 1993--Continued*

Date	Time	Sampling depth (ft)	Sample location (ft from left bank)	Specific conductance (µS/cm)	pH (standard units)	Temperature, water (°C)	Transparency (Secchi disk) (ft)	Dissolved oxygen (mg/L)	Dissolved oxygen (percent saturation)	Chlorophyll *a* (µg/L)	Chlorophyll *b* (µg/L)
July											
29	1453	0.6	300	567	7.9	29.6	--	7.4	99	--	--
29	1450	2.9	300	567	7.9	29.6	--	7.2	96	--	--
29	1450	5.1	300	567	7.9	29.6	--	7.2	97	--	--
29	1449	10	300	567	7.9	29.6	--	7.1	95	--	--
29	1449	15	300	569	7.8	29.5	--	6.9	93	--	--
29	1448	20	300	561	7.8	29.4	--	6.5	87	--	--
29	1447	25	300	555	7.7	29.4	--	6.9	92	--	--
29	1446	30	300	545	7.6	29.3	--	6.7	89	--	--
29	1445	35	300	367	7.0	28.0	--	2.5	32	--	--
29	1430	.4	600	567	7.9	29.6	--	7.1	95	--	--
29	1431	2.9	600	569	7.9	29.6	--	6.6	89	--	--
29	1432	5.3	600	568	7.9	29.6	--	7.4	100	--	--
29	1432	10	600	567	7.8	29.5	--	7.1	95	--	--
29	1433	15	600	567	7.7	29.4	--	7.0	93	--	--
29	1434	20	600	567	7.7	29.3	--	6.8	91	--	--
29	1434	25	600	574	7.7	29.3	--	6.8	91	--	--
29	1434	28	600	574	7.7	29.3	--	6.7	89	--	--
29	1426	.6	900	569	7.8	29.6	--	7.4	100	--	--
29	1425	3.1	900	568	7.8	29.6	--	7.5	100	--	--
29	1425	5.3	900	569	7.8	29.6	--	6.5	87	--	--
29	1424	10	900	568	7.8	29.5	--	7.3	98	--	--
29	1423	15	900	568	7.7	29.4	--	6.8	91	--	--
29	1422	21	900	569	7.7	29.3	--	6.8	91	--	--
29	1420	25	900	572	7.6	29.3	--	5.4	72	--	--
29	1419	26	900	576	7.7	29.3	--	6.6	89	--	--
August											
12	1351	.1	300	626	7.5	28.3	--	6.4	83	--	--
12	1352	3.0	300	626	7.4	27.9	--	6.1	79	--	--
12	1352	4.9	300	628	7.4	27.8	--	6.1	78	--	--
12	1353	9.9	300	627	7.4	27.7	--	6.0	77	--	--
12	1353	15	300	627	7.4	27.7	--	5.9	77	--	--
12	1354	20	300	626	7.4	27.6	--	5.9	77	--	--
12	1355	25	300	630	7.4	27.6	--	5.9	76	--	--
12	1355	30	300	625	7.4	27.6	--	5.8	75	--	--
12	1356	35	300	615	7.3	27.5	--	5.8	74	--	--
12	1356	37	300	610	7.4	27.6	--	5.9	77	--	--
12	1339	.1	600	627	7.4	28.2	3.8	6.1	80	--	--
12	1340	3.0	600	625	7.4	27.9	--	6.2	80	--	--
12	1340	4.6	600	625	7.4	27.8	--	6.1	79	--	--
12	1341	9.5	600	625	7.4	27.7	--	6.1	78	--	--
12	1341	15	600	631	7.4	27.7	--	6.0	77	--	--
12	1342	20	600	630	7.4	27.7	--	5.9	77	--	--
12	1343	25	600	619	7.4	27.7	--	5.9	77	--	--
12	1343	30	600	620	7.4	27.6	--	5.9	76	--	--
12	1344	34	600	624	7.4	27.6	--	5.9	76	--	--

Table 18. *Water-quality data for station 391559081341201, Ohio River at river mile 184.6, May to October 1993--Continued*

Date	Time	Sampling depth (ft)	Sample location (ft from left bank)	Specific conductance (µS/cm)	pH (standard units)	Temperature, water (°C)	Transparency (Secchi disk) (ft)	Dissolved oxygen (mg/L)	Dissolved oxygen (percent saturation)	Chlorophyll *a* (µg/L)	Chlorophyll *b* (µg/L)
August											
12	1334	0.1	900	625	7.5	28.5	--	6.4	83	--	--
12	1335	3.0	900	625	7.4	28.0	--	6.3	82	--	--
12	1335	4.9	900	626	7.4	27.8	--	6.2	80	--	--
12	1336	9.5	900	627	7.4	27.7	--	6.1	78	--	--
12	1336	15	900	617	7.4	27.7	--	6.0	77	--	--
12	1337	19	900	633	7.4	27.7	--	5.9	77	--	--
12	1338	22	900	635	7.4	27.7	--	5.9	77	--	--
13	0437	.1	300	623	7.4	27.7	--	6.3	81	--	--
13	0438	3.0	300	626	7.4	27.7	--	6.3	81	--	--
13	0438	4.9	300	626	7.4	27.7	--	6.3	81	--	--
13	0439	9.5	300	625	7.4	27.6	--	6.2	80	--	--
13	0439	15	300	625	7.4	27.7	--	6.3	81	--	--
13	0440	20	300	626	7.4	27.6	--	6.2	81	--	--
13	0441	25	300	625	7.4	27.6	--	6.2	80	--	--
13	0441	30	300	622	7.4	27.6	--	6.1	78	--	--
13	0442	35	300	618	7.4	27.6	--	6.0	78	--	--
13	0442	38	300	618	7.4	27.6	--	5.6	73	--	--
13	0432	.1	600	624	7.4	27.6	--	6.3	81	--	--
13	0433	3.0	600	625	7.4	27.6	--	6.3	81	--	--
13	0433	4.9	600	625	7.4	27.6	--	6.2	81	--	--
13	0434	9.9	600	625	7.4	27.7	--	6.2	81	--	--
13	0434	15	600	625	7.4	27.6	--	6.2	80	--	--
13	0435	20	600	625	7.4	27.6	--	6.2	80	--	--
13	0436	25	600	625	7.4	27.6	--	6.2	80	--	--
13	0436	30	600	625	7.4	27.7	--	6.2	80	--	--
13	0437	32	600	625	7.4	27.6	--	6.2	80	--	--
13	0427	.1	900	628	7.4	27.6	--	6.2	80	--	--
13	0428	3.0	900	625	7.4	27.6	--	6.1	79	--	--
13	0428	4.9	900	625	7.4	27.6	--	6.2	80	--	--
13	0429	9.9	900	625	7.4	27.6	--	6.2	80	--	--
13	0429	15	900	625	7.4	27.6	--	6.2	80	--	--
13	0430	20	900	624	7.4	27.6	--	6.2	79	--	--
13	0431	22	900	625	7.4	27.6	--	6.1	79	--	--
25	1351	.3	300	636	7.6	29.2	--	6.7	88	--	--
25	1351	3.1	300	640	7.5	29.0	--	6.7	88	--	--
25	1351	5.0	300	635	7.5	28.9	--	6.7	88	--	--
25	1350	10	300	637	7.5	29.0	--	6.7	88	--	--
25	1349	15	300	632	7.5	28.8	--	6.5	85	--	--
25	1349	20	300	643	7.4	28.7	--	6.3	82	--	--
25	1348	25	300	631	7.4	28.6	--	5.6	73	--	--
25	1347	30	300	642	7.4	28.6	--	6.0	78	--	--
25	1346	33	300	629	7.4	28.6	--	6.2	81	--	--
25	1336	.1	600	639	7.6	30.0	5.0	6.9	92	--	--
25	1337	3.2	600	637	7.5	29.2	--	6.8	90	--	--
25	1341	5.0	600	636	7.6	29.3	--	7.1	94	--	--
25	1340	9.8	600	645	7.5	29.1	--	6.8	89	--	--
25	1340	15	600	635	7.4	28.7	--	6.3	82	--	--
25	1340	20	600	643	7.4	28.7	--	6.2	81	--	--
25	1339	25	600	645	7.4	28.6	--	6.2	81	--	--
25	1338	30	600	635	7.4	28.6	--	6.2	81	1.1	0.1
25	1338	34	600	579	7.3	28.3	--	5.5	71	--	--

Table 18. *Water-quality data for station 391559081341201, Ohio River at river mile 184.6, May to October 1993--Continued*

Date	Time	Sampling depth (ft)	Sample location (ft from left bank)	Specific conductance (µS/cm)	pH (standard units)	Temperature, water (°C)	Transparency (Secchi disk) (ft)	Dissolved oxygen (mg/L)	Dissolved oxygen (percent saturation)	Chlorophyll *a* (µg/L)	Chlorophyll *b* (µg/L)
September											
09	0608	0.1	600	578	7.4	27.6	--	5.7	75	--	--
09	0608	3.3	600	579	7.3	27.7	--	5.7	74	--	--
09	0609	5.0	600	581	7.3	27.7	--	5.7	74	--	--
09	0610	10	600	578	7.4	27.7	--	5.7	74	--	--
09	0610	15	600	578	7.4	27.7	--	5.7	74	--	--
09	0611	20	600	578	7.4	27.7	--	5.6	73	--	--
09	0612	25	600	582	7.4	27.6	--	5.7	73	--	--
09	0613	30	600	581	7.4	27.7	--	5.7	74	--	--
09	0613	34	600	581	7.4	27.6	--	5.6	73	--	--
09	0602	.1	900	578	7.3	27.6	--	5.8	76	--	--
09	0603	2.9	900	579	7.3	27.7	--	5.6	72	--	--
09	0603	4.8	900	--	7.3	27.7	--	5.6	72	--	--
09	0604	10	900	578	7.3	27.7	--	5.6	73	--	--
09	0605	15	900	578	7.3	27.6	--	5.6	72	--	--
09	0605	20	900	579	7.3	27.6	--	5.5	72	--	--
09	0605	21	900	580	7.3	27.6	--	5.5	72	--	--
09	1653	.3	300	577	7.4	27.8	--	5.9	77	--	--
09	1653	3.0	300	578	7.4	27.8	--	5.9	76	--	--
09	1653	5.0	300	578	7.3	27.7	--	5.8	75	--	--
09	1652	9.8	300	577	7.3	27.7	--	5.7	73	--	--
09	1651	15	300	576	7.3	27.6	--	5.6	73	--	--
09	1651	21	300	566	7.3	27.6	--	5.6	73	--	--
09	1650	25	300	541	7.3	27.4	--	5.4	70	--	--
09	1650	30	300	543	7.3	27.4	--	5.3	69	--	--
09	1649	35	300	435	7.2	26.7	--	4.2	53	--	--
09	1649	38	300	383	7.2	26.4	--	4.1	52	--	--
09	1640	.2	600	577	7.4	27.7	--	5.8	76	--	--
09	1639	2.8	600	578	7.3	27.7	--	5.8	76	3.0	0.2
09	1639	5.1	600	579	7.3	27.7	--	5.8	75	--	--
09	1638	9.9	600	576	7.3	27.7	--	5.7	74	--	--
09	1638	15	600	578	7.3	27.7	--	5.6	73	2.7	.2
09	1637	20	600	578	7.3	27.7	--	5.6	72	--	--
09	1635	25	600	560	7.3	27.5	--	5.5	71	--	--
09	1636	30	600	578	7.3	27.7	--	5.5	72	--	--
09	1634	33	600	433	7.2	26.5	--	4.5	57	--	--
09	1628	.1	900	577	7.4	27.7	--	5.8	75	--	--
09	1629	3.0	900	577	7.3	27.7	--	5.7	74	--	--
09	1629	5.2	900	580	7.3	27.8	--	5.7	74	--	--
09	1630	10	900	579	7.3	27.7	--	5.6	73	--	--
09	1630	15	900	579	7.3	27.7	--	5.5	71	--	--
09	1630	20	900	575	7.3	27.7	--	5.5	71	--	--
09	1631	21	900	578	7.3	27.7	--	5.5	71	--	--
23	1516	.3	300	612	7.3	23.8	--	6.4	76	--	--
23	1516	3.1	300	612	7.3	23.8	--	6.4	76	--	--
23	1516	4.8	300	612	7.3	23.8	--	6.4	76	--	--
23	1515	9.8	300	612	7.3	23.8	--	6.3	76	--	--
23	1514	15	300	611	7.3	23.8	--	6.2	74	--	--
23	1514	20	300	598	7.3	23.7	--	6.0	72	--	--
23	1513	25	300	537	7.2	23.6	--	5.8	69	--	--
23	1512	30	300	525	7.1	23.4	--	5.5	66	--	--
23	1512	35	300	380	7.0	22.9	--	4.9	57	--	--

Table 18. *Water-quality data for station 391559081341201, Ohio River at river mile 184.6, May to October 1993--Continued*

Date	Time	Sampling depth (ft)	Sample location (ft from left bank)	Specific conductance (µS/cm)	pH (standard units)	Temperature, water (°C)	Transparency (Secchi disk) (ft)	Dissolved oxygen (mg/L)	Dissolved oxygen (percent saturation)	Chlorophyll *a* (µg/L)	Chlorophyll *b* (µg/L)
September											
23	1508	0.2	600	612	7.3	23.8	5.0	6.3	76	--	--
23	1508	3.1	600	612	7.3	23.8	--	6.3	75	--	--
23	1507	4.8	600	611	7.3	23.8	--	6.3	75	--	--
23	1506	10	600	613	7.3	23.8	--	6.2	75	--	--
23	1505	15	600	613	7.3	23.8	--	6.3	75	--	--
23	1504	21	600	609	7.3	23.8	--	6.2	74	--	--
23	1503	30	600	614	7.3	23.8	--	6.1	74	1.0	0.1
23	1504	35	600	613	7.3	23.8	--	6.1	74	--	--
23	1501	38	600	614	7.3	23.8	--	6.2	75	--	--
23	1453	.1	900	612	7.3	23.7	--	6.1	73	--	--
23	1454	2.9	900	613	7.3	23.8	--	6.1	73	--	--
23	1454	5.1	900	614	7.3	23.8	--	6.1	74	--	--
23	1455	9.8	900	614	7.3	23.8	--	6.1	73	--	--
23	1456	15	900	616	7.3	23.8	--	6.0	72	--	--
23	1458	20	900	612	7.3	23.8	--	6.0	72	--	--
24	0636	.3	300	591	7.2	23.3	--	6.0	71	--	--
24	0635	2.9	300	582	7.2	23.4	--	6.0	71	--	--
24	0636	4.8	300	587	7.2	23.4	--	6.0	71	--	--
24	0635	4.9	300	588	7.2	23.4	--	6.0	71	--	--
24	0634	9.9	300	589	7.2	23.4	--	6.0	71	--	--
24	0634	15	300	588	7.2	23.4	--	6.0	71	--	--
24	0633	20	300	589	7.2	23.4	--	6.0	71	--	--
24	0632	30	300	581	7.2	23.4	--	5.9	70	--	--
24	0631	32	300	591	7.2	23.4	--	6.0	71	--	--
24	0643	.2	600	592	7.2	23.3	--	6.0	71	--	--
24	0643	3.1	600	591	7.2	23.4	--	6.0	71	--	--
24	0642	5.0	600	589	7.2	23.4	--	6.0	71	--	--
24	0642	10	600	590	7.2	23.4	--	6.0	71	--	--
24	0641	15	600	590	7.2	23.4	--	6.0	71	--	--
24	0640	20	600	589	7.2	23.4	--	6.0	71	--	--
24	0640	25	600	588	7.2	23.4	--	6.0	71	--	--
24	0640	30	600	587	7.2	23.4	--	6.0	71	--	--
24	0639	35	600	592	7.2	23.4	--	6.0	72	--	--
24	0647	3.2	900	592	7.2	23.4	--	5.9	70	--	--
24	0648	5.0	900	590	7.2	23.4	--	5.9	70	--	--
24	0648	10	900	589	7.2	23.4	--	5.9	70	--	--
24	0649	16	900	592	7.2	23.4	--	5.9	70	--	--
24	0649	20	900	591	7.2	23.4	--	5.9	70	--	--
24	0650	25	900	592	7.2	23.4	--	5.9	70	--	--
24	0650	30	900	592	7.2	23.4	--	5.9	70	--	--
October											
07	1613	.1	300	535	7.5	20.3	--	7.9	89	--	--
07	1614	3.0	300	535	7.5	20.2	--	7.9	88	--	--
07	1614	5.0	300	535	7.5	20.1	--	7.9	88	--	--
07	1615	10	300	535	7.5	19.5	--	7.9	87	--	--
07	1615	15	300	531	7.5	19.5	--	7.8	86	--	--
07	1616	20	300	531	7.5	19.3	--	7.8	86	--	--
07	1616	25	300	531	7.5	19.3	--	7.7	84	--	--
07	1617	30	300	495	7.4	19.0	--	7.6	83	--	--
07	1617	35	300	487	7.6	19.0	--	7.5	81	--	--
07	1618	36	300	486	7.4	18.9	--	7.5	81	--	--

Table 18. *Water-quality data for station 391559081341201, Ohio River at river mile 184.6, May to October 1993--Continued*

Date	Time	Sampling depth (ft)	Sample location (ft from left bank)	Specific conductance (µS/cm)	pH (standard units)	Temperature, water (°C)	Transparency (Secchi disk) (ft)	Dissolved oxygen (mg/L)	Dissolved oxygen (percent saturation)	Chlorophyll *a* (µg/L)	Chlorophyll *b* (µg/L)
August											
25	1331	0.2	900	638	7.7	30.2	--	7.5	100	--	--
25	1332	3.2	900	636	7.6	29.4	--	7.2	95	--	--
25	1332	5.2	900	637	7.5	29.1	--	6.7	88	--	--
25	1332	10	900	637	7.5	28.7	--	6.3	82	--	--
25	1332	15	900	635	7.4	28.7	--	6.2	81	--	--
25	1333	20	900	637	7.4	28.6	--	6.2	81	--	--
25	1334	25	900	633	7.4	28.6	--	6.2	80	--	--
25	1334	30	900	632	7.4	28.6	--	6.2	81	--	--
25	1335	31	900	634	7.4	28.6	--	6.2	81	--	--
26	0611	.4	300	637	7.4	28.9	--	6.0	78	--	--
26	0611	3.2	300	637	7.4	28.9	--	6.4	84	--	--
26	0611	5.2	300	635	7.4	28.9	--	6.4	84	--	--
26	0610	10	300	633	7.4	28.9	--	6.4	84	--	--
26	0610	15	300	629	7.4	28.9	--	6.4	84	--	--
26	0609	20	300	626	7.4	28.9	--	6.3	83	--	--
26	0609	25	300	625	7.3	28.8	--	6.1	80	--	--
26	0609	30	300	590	7.2	28.6	--	5.7	74	--	--
26	0608	35	300	436	7.1	27.8	--	3.6	47	--	--
26	0607	36	300	425	7.2	27.7	--	3.9	51	--	--
26	0602	.4	600	631	7.4	28.8	--	6.1	80	--	--
26	0602	3.1	600	635	7.4	28.9	--	6.3	83	--	--
26	0603	5.8	600	632	7.4	28.9	--	6.3	83	--	--
26	0603	10	600	635	7.4	28.9	--	6.3	83	--	--
26	0603	15	600	637	7.4	28.9	--	6.3	83	--	--
26	0604	20	600	629	7.4	28.9	--	6.3	82	--	--
26	0604	25	600	636	7.4	28.9	--	6.3	83	--	--
26	0604	30	600	635	7.4	28.9	--	6.3	82	--	--
26	0605	35	600	632	7.4	28.9	--	6.2	81	--	--
26	0605	37	600	625	7.4	28.9	--	6.0	79	--	--
26	0556	.3	900	632	7.4	28.8	--	6.2	82	--	--
26	0558	3.0	900	630	7.4	28.8	--	6.2	81	--	--
26	0559	5.2	900	635	7.4	28.9	--	6.3	82	--	--
26	0559	9.8	900	634	7.4	28.9	--	6.3	82	--	--
26	0559	15	900	628	7.4	28.9	--	6.2	82	--	--
26	0600	20	900	634	7.4	28.9	--	6.2	81	--	--
26	0600	24	900	637	7.4	28.8	--	5.9	77	--	--
September											
09	0622	.3	300	578	7.4	27.5	--	5.7	73	--	--
09	0622	2.8	300	--	7.3	27.6	--	5.6	73	--	--
09	0621	5.2	300	577	7.4	27.6	--	5.6	73	--	--
09	0621	9.9	300	580	7.3	27.6	--	5.6	73	--	--
09	0620	15	300	580	7.3	27.6	--	5.6	73	--	--
09	0620	20	300	574	7.3	27.6	--	5.6	72	--	--
09	0619	25	300	572	7.3	27.5	--	5.5	72	--	--
09	0618	30	300	564	7.3	27.5	--	5.5	71	--	--
09	0618	35	300	540	7.3	27.3	--	5.3	68	--	--
09	0617	38	300	495	7.2	27.1	--	5.0	64	--	--

Table 18. *Water-quality data for station 391559081341201, Ohio River at river mile 184.6, May to October 1993--Continued*

Date	Time	Sampling depth (ft)	Sample location (ft from left bank)	Specific conductance (µS/cm)	pH (standard units)	Temperature, water (°C)	Transparency (Secchi disk) (ft)	Dissolved oxygen (mg/L)	Dissolved oxygen (percent saturation)	Chlorophyll *a* (µg/L)	Chlorophyll *b* (µg/L)
October											
07	1626	0.1	600	535	7.5	20.0	--	7.8	86	--	--
07	1627	3.0	600	535	7.5	20.0	--	8.0	88	--	--
07	1627	5.0	600	535	7.5	19.8	--	7.9	87	--	--
07	1628	10	600	535	7.5	19.4	--	7.8	85	--	--
07	1628	15	600	541	7.5	19.4	--	7.8	85	--	--
07	1629	20	600	534	7.5	19.3	--	7.8	85	--	--
07	1629	25	600	530	7.5	19.3	--	7.8	85	--	--
07	1630	30	600	531	7.5	19.3	--	7.8	85	--	--
07	1630	32	600	528	7.5	19.3	--	7.8	85	--	--
07	1632	.1	900	540	7.5	20.5	--	7.9	88	--	--
07	1633	3.0	900	535	7.5	19.7	--	7.8	86	--	--
07	1633	5.0	900	535	7.5	19.5	--	7.8	86	--	--
07	1634	10	900	541	7.5	19.4	--	7.7	84	--	--
07	1634	15	900	532	7.5	19.3	--	7.7	84	--	--
07	1635	20	900	542	7.5	19.3	--	7.7	84	--	--
07	1635	25	900	535	7.5	19.3	--	7.7	84	--	--
07	1636	26	900	529	7.5	19.3	--	7.7	84	--	--
26	0646	.3	300	442	7.4	16.6	--	8.2	86	--	--
26	0648	2.9	300	442	7.4	16.7	--	8.2	86	--	--
26	0648	4.5	300	442	7.4	16.7	--	8.3	86	--	--
26	0648	9.9	300	442	7.4	16.7	--	8.2	86	--	--
26	0647	15	300	422	7.3	16.4	--	8.2	85	--	--
26	0647	20	300	438	7.3	16.6	--	8.2	86	--	--
26	0647	25	300	402	7.3	16.1	--	8.1	84	--	--
26	0646	31	300	312	7.2	15.1	--	7.9	79	--	--
26	0646	35	300	212	7.3	13.8	--	8.0	78	0.9	0.1
26	0639	.1	600	462	7.4	16.9	--	8.3	87	--	--
26	0640	3.2	600	460	7.4	16.9	--	8.3	87	--	--
26	0640	5.4	600	459	7.4	16.9	--	8.3	87	--	--
26	0640	10	600	457	7.4	16.9	--	8.3	87	--	--
26	0641	15	600	456	7.4	16.9	--	8.3	87	--	--
26	0641	20	600	455	7.4	16.9	--	8.3	87	--	--
26	0641	25	600	461	7.4	16.9	--	8.3	87	--	--
26	0642	30	600	459	7.4	16.8	--	8.3	87	--	--
26	0642	35	600	305	7.2	15.0	--	8.0	80	--	--
26	0642	38	600	293	7.2	14.8	--	8.0	80	--	--
26	0633	.3	900	465	7.4	16.8	--	8.2	86	--	--
26	0633	2.6	900	464	7.4	16.8	--	8.3	87	--	--
26	0633	4.9	900	465	7.4	16.9	--	8.3	87	--	--
26	0634	5.3	900	465	7.4	16.9	--	8.3	87	--	--
26	0634	10	900	467	7.4	16.9	--	8.3	87	--	--
26	0634	15	900	460	7.4	16.9	--	8.3	87	--	--
26	0635	20	900	460	7.4	16.9	--	8.0	84	--	--
26	0635	23	900	468	7.4	16.9	--	8.3	87	--	--

Table 18. *Water-quality data for station 391559081341201, Ohio River at river mile 184.6, May to October 1993--Continued*

Date	Time	Sampling depth (ft)	Sample location (ft from left bank)	Specific conductance (µS/cm)	pH (standard units)	Temperature, water (°C)	Transparency (Secchi disk) (ft)	Dissolved oxygen (mg/L)	Dissolved oxygen (percent saturation)	Chlorophyll *a* (µg/L)	Chlorophyll *b* (µg/L)
October											
26	1300	0.3	300	444	7.5	16.8	--	8.8	92	--	--
26	1306	2.8	300	441	7.5	16.8	--	8.8	91	--	--
26	1305	5.3	300	447	7.5	16.8	--	8.8	92	--	--
26	1305	10	300	443	7.5	16.8	--	8.8	92	--	--
26	1304	15	300	447	7.5	16.8	--	8.8	92	--	--
26	1303	20	300	423	7.4	16.5	--	8.7	90	--	--
26	1302	25	300	438	7.5	16.7	--	8.7	91	--	--
26	1301	30	300	428	7.4	16.5	--	8.6	90	--	--
26	1301	31	300	400	7.4	16.2	--	8.6	88	--	--
26	1249	.3	600	460	7.5	17.0	4.5	8.8	92	--	--
26	1256	2.8	600	458	7.5	17.0	--	8.8	92	--	--
26	1255	5.2	600	458	7.5	16.9	--	8.8	92	--	--
26	1255	10	600	458	7.5	16.9	--	8.8	92	--	--
26	1254	15	600	438	7.5	16.7	--	8.8	91	--	--
26	1253	20	600	446	7.5	16.9	--	8.8	92	--	--
26	1253	25	600	438	7.5	16.7	--	8.7	91	--	--
26	1252	30	600	419	7.5	16.4	--	8.7	90	--	--
26	1251	35	600	366	7.4	15.6	--	8.5	86	0.9	0.1
26	1250	36	600	346	7.4	15.3	--	8.5	86	--	--
26	1241	.3	900	459	7.5	17.0	--	8.8	93	--	--
26	1247	2.8	900	458	7.5	17.0	--	8.8	92	--	--
26	1246	4.8	900	456	7.5	16.9	--	8.8	92	--	--
26	1245	9.8	900	458	7.5	16.9	--	8.8	92	--	--
26	1244	15	900	458	7.5	16.9	--	8.8	92	--	--
26	1243	20	900	460	7.5	16.9	--	8.8	92	--	--
26	1242	26	900	452	7.5	16.9	--	8.8	92	--	--

Table 19. *Water-quality data for station 391628081360401, Ohio River at river mile 186.5, main channel, May to October 1993*

[ft = feet; µS/cm = microsiemens per centimeter; °C = degrees Celsius; mg/L = milligrams per liter; µg/L = micrograms per liter; -- = data not collected]

Date	Time	Sampling depth (ft)	Sample location (ft from left bank)	Specific conductance (µS/cm)	pH (standard units)	Temperature, water (°C)	Transparency (Secchi disk) (ft)	Dissolved oxygen (mg/L)	Dissolved oxygen (percent saturation)	Chlorophyll *a* (µg/L)	Chlorophyll *b* (µg/L)
May											
24	1644	3.3	400	416	8.0	19.6	--	9.6	107	--	--
24	1644	13	400	414	8.1	19.5	--	9.5	106	--	--
24	1643	27	400	411	8.1	19.5	--	9.4	104	--	--
June											
10	1520	.3	400	521	7.4	22.8	--	7.7	91	--	--
10	1520	3.3	400	525	7.4	22.8	--	7.7	90	--	--
10	1522	13	400	529	7.5	22.7	--	7.6	90	--	--
10	1521	27	400	528	7.4	22.7	--	7.6	90	--	--
July											
07	1625	3.1	400	447	7.6	28.3	--	7.9	103	--	--
07	1627	14	400	451	7.4	27.1	--	6.6	85	--	--
07	1626	27	400	455	7.4	27.1	--	6.5	83	--	--
29	1842	.2	400	568	7.8	29.4	--	7.1	95	--	--
29	1843	3.4	400	569	7.8	29.4	--	7.0	93	--	--
29	1844	8.2	400	567	7.8	29.4	--	7.0	94	--	--
29	1843	19	400	566	7.7	29.4	--	6.9	92	--	--
August											
12	1424	.1	400	620	7.4	27.8	--	6.2	81	--	--
12	1425	3.0	400	621	7.4	27.8	--	6.2	81	--	--
12	1425	13	400	620	7.4	27.8	--	6.2	81	--	--
12	1426	27	400	619	7.4	27.7	--	6.1	79	--	--
25	1401	.4	400	629	7.7	30.9	--	7.3	99	--	--
25	1402	3.3	400	625	7.6	29.4	--	7.3	96	--	--
25	1403	13	400	618	7.4	28.5	--	6.1	79	--	--
25	1403	27	400	633	7.4	28.4	--	5.7	74	--	--
September											
09	1702	.2	400	572	7.4	27.6	--	5.9	76	--	--
09	1702	2.9	400	573	7.3	27.6	--	5.7	75	--	--
09	1703	13	400	572	7.3	27.6	--	5.7	74	--	--
09	1702	27	400	575	7.3	27.6	--	5.7	74	--	--
23	1529	.3	400	618	7.3	23.8	--	6.5	78	--	--
23	1530	2.7	400	618	7.3	23.8	--	6.2	74	--	--
23	1532	14	400	619	7.3	23.8	--	6.1	74	--	--
23	1531	27	400	619	7.3	23.8	--	6.1	73	--	--
October											
07	1641	.5	400	537	7.5	20.4	--	7.8	88	--	--
07	1642	3.4	400	535	7.5	20.2	--	7.8	87	--	--
07	1642	14	400	529	7.5	19.3	--	7.6	83	--	--
07	1643	28	400	535	7.4	19.3	--	7.6	83	--	--
26	1335	.1	400	450	7.5	17.3	--	8.2	86	--	--
26	1335	3.0	400	449	7.5	16.8	--	8.2	86	--	--
26	1336	12	400	444	7.5	16.7	--	8.2	85	--	--
26	1336	25	400	443	7.5	16.7	--	8.2	86	--	--

Table 20. *Water-quality data for station 391604081361301, Ohio River at river mile 186.5, back channel, May to October 1993*

[ft = feet; µS/cm = microsiemens per centimeter; °C = degrees Celsius; mg/L = milligrams per liter; µg/L = micrograms per liter; -- = data not collected]

Date	Time	Sampling depth (ft)	Sample location (ft from left bank)	Specific conductance (µS/cm)	pH (standard units)	Temperature, water (°C)	Transparency (Secchi disk) (ft)	Dissolved oxygen (mg/L)	Dissolved oxygen (percent saturation)	Chlorophyll *a* (µg/L)	Chlorophyll *b* (µg/L)
May											
24	1635	3.6	400	421	8.2	19.6	--	9.8	109	--	--
24	1636	13	400	423	8.0	19.5	--	9.5	105	--	--
24	1636	25	400	423	8.1	19.5	--	9.5	105	--	--
June											
10	1514	.1	400	508	7.4	22.8	--	7.6	89	--	--
10	1514	3.3	400	507	7.3	22.8	--	7.5	89	--	--
10	1516	12	400	508	7.3	22.8	--	7.5	89	--	--
10	1515	23	400	505	7.3	22.7	--	7.5	89	--	--
July											
07	1637	.1	400	446	7.7	28.7	--	7.8	102	--	--
07	1637	2.9	400	444	7.6	28.5	--	7.6	100	--	--
07	1639	11	400	448	7.4	27.1	--	6.4	81	--	--
07	1638	22	400	452	7.4	27.1	--	6.4	82	--	--
29	1847	.4	400	566	7.9	29.4	--	7.4	99	--	--
29	1847	3.6	400	567	7.9	29.4	--	7.6	102	--	--
29	1848	11	400	564	7.7	29.3	--	6.7	89	--	--
29	1848	22	400	562	7.7	29.3	--	6.6	88	--	--
August											
12	1400	.1	400	623	7.6	28.7	--	7.1	93	--	--
12	1401	3.0	400	622	7.5	28.2	--	7.0	91	--	--
12	1401	9.5	400	624	7.4	27.7	--	6.1	79	--	--
12	1402	19	400	625	7.4	27.6	--	6.0	78	--	--
25	1357	.3	400	634	7.7	31.1	--	7.5	101	--	--
25	1357	3.1	400	630	7.6	29.0	--	7.1	93	--	--
25	1358	9.6	400	628	7.4	28.5	--	6.2	81	--	--
25	1358	19	400	625	7.4	28.5	--	5.9	77	--	--
September											
09	1710	.1	400	573	7.4	27.7	--	6.0	78	--	--
09	1711	3.0	400	573	7.4	27.7	--	5.9	77	--	--
09	1712	9.3	400	573	7.3	27.6	--	5.7	74	--	--
09	1711	18	400	575	7.3	27.6	--	5.6	73	--	--
23	1524	.1	400	613	7.3	23.8	--	6.2	75	--	--
23	1524	3.2	400	613	7.3	23.8	--	6.3	75	--	--
23	1525	8.7	400	614	7.3	23.8	--	6.1	73	--	--
23	1525	19	400	615	7.3	23.8	--	6.1	74	--	--
October											
07	1606	.1	400	535	7.5	20.6	--	8.0	89	--	--
07	1607	3.2	400	532	7.5	19.4	--	7.8	85	--	--
07	1607	11	400	534	7.4	19.3	--	7.7	84	--	--
07	1608	22	400	534	7.4	19.2	--	7.6	83	--	--
26	1307	.4	400	448	7.5	16.9	--	8.9	93	--	--
26	1307	3.1	400	447	7.5	16.8	--	8.8	91	--	--
26	1307	9.0	400	448	7.5	16.8	--	8.7	91	--	--
26	1307	18	400	452	7.5	16.8	--	8.7	91	--	--

Table 21. *Water-quality data for station 391636081384701, Ohio River at river mile 189.0, main channel, May to October 1993*

[ft = feet; µS/cm = microsiemens per centimeter; °C = degrees Celsius; mg/L = milligrams per liter; µg/L = micrograms per liter; -- = data not collected]

Date	Time	Sampling depth (ft)	Sample location (ft from left bank)	Specific conductance (µS/cm)	pH (standard units)	Temperature, water (°C)	Transparency (Secchi disk) (ft)	Dissolved oxygen (mg/L)	Dissolved oxygen (percent saturation)	Chlorophyll *a* (µg/L)	Chlorophyll *b* (µg/L)
May											
24	1656	3.9	500	407	8.3	19.7	--	10.1	112	--	--
24	1657	12	500	402	8.1	19.6	--	9.6	106	--	--
24	1656	23	500	407	8.1	19.5	--	9.5	105	--	--
June											
10	1544	.1	500	539	7.5	23.1	--	7.5	89	--	--
10	1544	3.3	500	540	7.5	23.0	--	7.5	89	--	--
10	1545	13	500	535	7.4	22.8	--	7.5	88	--	--
10	1544	27	500	536	7.5	22.8	--	7.5	88	--	--
July											
07	1653	.1	500	460	7.8	29.4	--	8.4	111	--	--
07	1653	3.0	500	459	7.5	28.2	--	7.1	93	--	--
07	1655	12	500	454	7.4	27.3	--	6.2	80	--	--
07	1654	25	500	451	7.4	27.2	--	6.2	80	--	--
29	1834	.3	500	569	7.7	29.4	--	7.3	97	--	--
29	1834	3.2	500	570	7.7	29.4	--	7.2	96	--	--
29	1836	13	500	566	7.7	29.4	--	7.1	95	--	--
29	1835	21	500	559	7.6	29.3	--	6.5	87	--	--
August											
12	1432	.3	500	639	7.5	28.9	--	6.5	86	--	--
12	1433	3.0	500	621	7.4	28.1	--	6.3	82	--	--
12	1433	13	500	624	7.4	27.5	--	5.8	75	--	--
12	1434	25	500	624	7.4	27.4	--	5.9	76	--	--
25	1409	.5	500	634	7.7	30.9	--	7.4	100	--	--
25	1410	3.1	500	625	7.6	29.1	--	7.2	95	--	--
25	1412	13	500	631	7.4	28.5	--	6.0	78	--	--
25	1410	26	500	633	7.4	28.4	--	6.1	80	--	--
September											
09	1723	.3	500	576	7.4	27.5	--	5.9	77	--	--
09	1724	2.9	500	575	7.4	27.6	--	5.9	77	--	--
09	1725	14	500	573	7.3	27.5	--	5.5	72	--	--
09	1724	27	500	571	7.3	27.5	--	5.4	70	--	--
23	1540	.3	500	612	7.3	23.8	--	6.3	75	--	--
23	1541	3.0	500	611	7.3	23.8	--	6.2	75	--	--
23	1543	12	500	615	7.3	23.9	--	6.3	76	--	--
23	1541	24	500	611	7.3	23.9	--	6.3	75	--	--
October											
07	1649	.3	500	583	7.6	22.1	--	7.9	91	--	--
07	1650	3.1	500	536	7.5	20.5	--	7.9	89	--	--
07	1650	13	500	536	7.5	19.2	--	7.6	82	--	--
07	1651	26	500	536	7.4	19.2	--	7.3	79	--	--

Table 22. *Water-quality data for station 391616081385001, Ohio River at river mile 189.0, back channel, May to October 1993*

[ft = feet; µS/cm = microsiemens per centimeter; °C = degrees Celsius; mg/L = milligrams per liter; µg/L = micrograms per liter; -- = data not collected]

Date	Time	Sampling depth (ft)	Sample location (ft from left bank)	Specific conductance (µS/cm)	pH (standard units)	Temperature, water (°C)	Transparency (Secchi disk) (ft)	Dissolved oxygen (mg/L)	Dissolved oxygen (percent saturation)	Chlorophyll *a* (µg/L)	Chlorophyll *b* (µg/L)
May											
24	1702	4.3	200	409	8.5	19.7	--	10.3	115	--	--
24	1703	15	200	408	8.1	19.5	--	9.6	107	--	--
24	1703	28	200	410	8.2	19.5	--	9.6	107	--	--
June											
10	1551	.1	200	508	7.4	22.9	--	7.4	89	--	--
10	1552	3.3	200	508	7.3	22.8	--	7.5	88	--	--
10	1553	15	200	508	7.3	22.8	--	7.4	88	--	--
10	1552	32	200	508	7.3	22.8	--	7.4	88	--	--
July											
07	1645	.1	200	452	7.8	29.7	--	8.2	110	--	--
07	1646	2.9	200	450	7.7	28.9	--	7.8	103	--	--
07	1647	13	200	453	7.4	27.2	--	6.1	79	--	--
07	1646	26	200	450	7.4	27.2	--	6.1	79	--	--
29	1826	.3	200	565	7.8	29.5	--	7.6	102	--	--
29	1827	3.3	200	565	7.8	29.5	--	7.5	100	--	--
29	1829	13	200	557	7.6	29.4	--	6.9	92	--	--
29	1828	27	200	572	7.5	29.3	--	6.5	87	--	--
August											
09	1727	.1	200	577	7.4	27.7	--	6.3	82	--	--
09	1728	2.8	200	578	7.4	27.6	--	6.1	80	--	--
09	1730	16	200	578	7.3	27.4	--	5.4	70	--	--
09	1729	30	200	581	7.3	27.4	--	5.4	70	--	--
12	1438	.1	200	620	7.5	28.5	--	6.9	91	--	--
12	1439	2.6	200	619	7.5	28.5	--	6.9	90	--	--
12	1439	16	200	621	7.3	27.3	--	5.6	72	--	--
12	1440	33	200	616	7.3	27.3	--	5.7	73	--	--
September											
23	1549	.2	200	612	7.3	23.9	--	6.4	77	--	--
23	1550	3.2	200	610	7.3	23.9	--	6.4	77	--	--
23	1551	15	200	612	7.3	23.9	--	6.3	76	--	--
23	1550	30	200	614	7.3	23.8	--	6.1	73	--	--
25	1418	.3	200	627	7.8	31.7	--	7.6	105	--	--
25	1418	3.4	200	625	7.8	29.2	--	8.1	106	--	--
25	1420	16	200	625	7.4	28.4	--	5.9	76	--	--
25	1419	32	200	627	7.3	28.2	--	5.1	65	--	--
October											
07	1657	.4	200	536	7.5	20.5	--	7.2	81	--	--
07	1658	3.4	200	538	7.5	19.6	--	7.3	81	--	--
07	1658	14	200	531	7.5	19.2	--	7.5	82	--	--
07	1659	29	200	535	7.4	19.1	--	7.4	81	--	--
26	1350	.2	200	445	7.5	17.1	--	8.2	86	--	--
26	1351	3.2	200	443	7.5	16.8	--	8.2	86	--	--
26	1351	15	200	441	7.4	16.6	--	8.1	84	--	--
26	1350	30	200	439	7.4	16.6	--	8.1	84	--	--

Table 23. *Water-quality data for station 391601081411101, Ohio River at river mile 191.3, May to October 1993*

[ft = feet; µS/cm = microsiemens per centimeter; °C = degrees Celsius; mg/L = milligrams per liter; µg/L = micrograms per liter; -- = data not collected]

Date	Time	Sampling depth (ft)	Sample location (ft from left bank)	Specific conductance (µS/cm)	pH (standard units)	Temperature, water (°C)	Transparency (Secchi disk) (ft)	Dissolved oxygen (mg/L)	Dissolved oxygen (percent saturation)	Chlorophyll *a* (µg/L)	Chlorophyll *b* (µg/L)
May											
24	1710	3.3	600	404	8.2	19.7	--	9.8	109	--	--
24	1711	17	600	401	8.3	19.7	--	10.0	111	--	--
24	1710	33	600	403	8.3	19.7	--	9.9	110	--	--
June											
10	1559	.3	600	506	7.3	23.0	--	7.5	88	--	--
10	1559	3.0	600	508	7.3	22.9	--	7.4	87	--	--
10	1600	18	600	524	7.4	22.8	--	7.5	88	--	--
10	1600	36	600	525	7.4	22.8	--	7.4	88	--	--
July											
07	1707	.1	600	458	7.6	28.7	--	7.8	103	--	--
07	1707	3.0	600	457	7.6	28.6	--	7.4	98	--	--
07	1709	18	600	451	7.3	27.2	--	5.9	75	--	--
07	1708	33	600	456	7.3	27.2	--	5.9	76	--	--
29	1819	.3	600	559	7.6	29.5	--	7.4	99	--	--
29	1820	3.6	600	559	7.6	29.5	--	7.2	96	--	--
29	1821	17	600	556	7.5	29.2	--	6.2	82	--	--
29	1820	34	600	551	7.4	29.1	--	6.3	84	--	--
August											
12	1444	.1	600	620	7.5	28.2	--	6.7	88	--	--
12	1445	3.0	600	620	7.4	28.0	--	6.5	84	--	--
12	1445	17	600	617	7.4	27.6	--	5.9	76	--	--
12	1446	33	600	618	7.4	27.5	--	5.9	76	--	--
12	1446	33	600	616	7.4	27.5	--	5.9	76	--	--
25	1422	.5	600	643	7.8	31.0	--	7.7	104	--	--
25	1425	3.2	600	639	7.7	29.4	--	7.0	90	--	--
25	1427	17	600	632	7.4	28.4	--	5.9	76	--	--
25	1426	33	600	630	7.4	28.4	--	5.5	72	--	--
September											
09	1735	.1	600	586	7.4	27.5	--	5.7	74	--	--
09	1735	3.2	600	585	7.4	27.5	--	5.7	74	--	--
09	1736	18	600	587	7.4	27.5	--	5.7	74	--	--
09	1736	35	600	586	7.4	27.5	--	5.7	74	--	--
23	1602	.2	600	616	7.3	23.9	--	6.3	76	--	--
23	1602	2.9	600	616	7.3	23.9	--	6.3	76	--	--
23	1603	18	600	617	7.3	23.9	--	6.2	74	--	--
23	1603	34	600	611	7.3	23.8	--	6.1	74	--	--
October											
07	1705	.6	600	542	7.5	20.5	--	7.8	88	--	--
07	1706	3.3	600	541	7.5	20.2	--	7.8	87	--	--
07	1706	16	600	542	7.5	19.2	--	7.4	81	--	--
07	1707	31	600	546	7.5	19.2	--	7.4	81	--	--
26	1354	.1	600	456	7.5	17.2	--	8.3	88	--	--
26	1355	3.0	600	443	7.4	16.7	--	8.2	85	--	--
26	1355	18	600	448	7.5	16.6	--	8.1	84	--	--
26	1354	35	600	452	7.5	16.6	--	8.1	84	--	--

Table 24. *Water-quality data for station 391447081414201, Ohio River at river mile 192.9, May to October 1993*

[ft = feet; µS/cm = microsiemens per centimeter; °C = degrees Celsius; mg/L = milligrams per liter; µg/L = micrograms per liter; -- = data not collected]

Date	Time	Sampling depth (ft)	Sample location (ft from left bank)	Specific conductance (µS/cm)	pH (standard units)	Temperature, water (°C)	Transparency (Secchi disk) (ft)	Dissolved oxygen (mg/L)	Dissolved oxygen (percent saturation)	Chlorophyll *a* (µg/L)	Chlorophyll *b* (µg/L)
May											
24	1745	3.3	300	414	8.2	19.6	--	9.7	108	--	--
24	1738	3.9	300	400	8.1	19.6	--	9.5	106	--	--
24	1738	7.2	300	400	8.2	19.6	--	9.7	108	--	--
24	1738	11	300	401	8.2	19.6	--	9.7	108	--	--
24	1739	17	300	402	8.2	19.6	--	9.7	108	--	--
24	1739	23	300	411	8.2	19.6	--	9.6	107	--	--
24	1740	27	300	415	8.2	19.6	--	9.6	107	--	--
24	1745	35	300	416	8.3	19.6	--	9.7	108	--	--
24	1723	3.0	600	405	8.1	19.7	--	9.8	109	--	--
24	1722	6.3	600	404	8.1	19.6	--	9.7	108	--	--
24	1722	9.5	600	407	8.1	19.6	--	9.7	108	8.2	0.5
24	1721	16	600	410	8.1	19.6	--	9.7	109	--	--
24	1720	24	600	399	8.1	19.6	--	9.6	107	--	--
24	1719	29	600	407	8.2	19.6	--	9.6	107	--	--
24	1735	3.3	800	406	8.4	19.8	--	10.4	117	--	--
24	1735	6.3	800	406	8.4	19.8	--	10.4	116	--	--
24	1734	10	800	406	8.2	19.7	--	10.0	112	--	--
24	1734	16	800	405	8.2	19.7	--	9.8	109	--	--
24	1733	23	800	405	8.2	19.7	--	9.7	108	--	--
24	1732	28	800	404	8.2	19.6	--	9.7	108	--	--
June											
10	1614	.1	300	519	7.3	22.9	--	7.3	86	--	--
10	1614	3.0	300	521	7.3	22.8	--	7.3	86	--	--
10	1613	6.9	300	515	7.3	22.8	--	7.3	86	--	--
10	1613	9.9	300	526	7.3	22.7	--	7.3	86	--	--
10	1612	17	300	529	7.3	22.7	--	7.3	86	--	--
10	1612	22	300	521	7.3	22.7	--	7.4	87	--	--
10	1611	29	300	534	7.3	22.7	--	7.3	86	--	--
10	1622	.1	600	519	7.3	22.8	--	7.4	87	--	--
10	1622	3.0	600	520	7.3	22.8	--	7.4	87	--	--
10	1621	6.3	600	518	7.3	22.8	--	7.4	87	--	--
10	1621	9.2	600	521	7.3	22.8	--	7.4	87	--	--
10	1620	17	600	518	7.3	22.8	--	7.4	87	--	--
10	1619	23	600	522	7.3	22.8	--	7.4	87	--	--
10	1619	29	600	520	7.3	22.8	--	7.4	87	--	--
10	1617	36	600	524	7.3	22.8	--	7.3	87	--	--
10	1628	3.0	800	530	7.4	22.9	--	7.4	87	--	--
10	1627	6.3	800	532	7.4	22.9	--	7.4	87	--	--
10	1627	9.2	800	529	7.4	22.9	--	7.4	87	--	--
10	1626	16	800	536	7.4	22.9	--	7.4	88	--	--
10	1626	23	800	540	7.4	22.9	--	7.4	88	--	--
10	1625	27	800	539	7.4	22.9	--	7.4	89	--	--
July											
07	1738	.1	300	462	8.1	29.7	--	9.6	129	--	--
07	1738	3.2	300	463	8.0	29.4	--	8.9	119	--	--
07	1737	4.8	300	464	7.8	29.1	--	8.3	110	--	--
07	1736	10	300	476	7.3	27.5	--	5.9	76	--	--
07	1736	15	300	459	7.3	27.1	--	5.8	74	--	--
07	1734	19	300	458	7.4	27.2	--	5.8	75	--	--
07	1735	24	300	457	7.4	27.1	--	6.0	77	--	--

Table 24. *Water-quality data for station 391447081414201, Ohio River at river mile 192.9, May to October 1993--Continued*

Date	Time	Sampling depth (ft)	Sample location (ft from left bank)	Specific conductance (µS/cm)	pH (standard units)	Temperature, water (°C)	Transparency (Secchi disk) (ft)	Dissolved oxygen (mg/L)	Dissolved oxygen (percent saturation)	Chlorophyll *a* (µg/L)	Chlorophyll *b* (µg/L)
July											
07	1728	0.1	600	465	7.8	29.1	--	8.4	111	--	--
07	1728	3.1	600	465	7.7	29.0	--	8.1	107	--	--
07	1727	5.2	600	464	7.6	28.8	--	7.8	102	--	--
07	1727	10	600	469	7.3	27.4	--	6.0	77	--	--
07	1726	15	600	459	7.3	27.2	--	5.9	76	--	--
07	1725	20	600	458	7.3	27.2	--	5.9	76	--	--
07	1725	25	600	460	7.3	27.1	--	5.9	75	--	--
07	1724	30	600	455	7.3	27.1	--	5.9	75	--	--
07	1722	32	600	453	7.3	27.1	--	5.9	75	--	--
07	1720	.1	800	457	7.5	28.6	--	7.5	99	--	--
07	1719	2.9	800	457	7.5	28.4	--	7.4	97	--	--
07	1719	4.8	800	457	7.4	28.2	--	6.7	87	--	--
07	1718	10	800	455	7.3	27.3	--	5.9	76	--	--
07	1717	15	800	457	7.3	27.3	--	6.1	78	--	--
07	1716	20	800	455	7.3	27.3	--	5.9	76	--	--
07	1716	25	800	455	7.3	27.3	--	5.9	76	--	--
07	1715	27	800	460	7.4	27.3	--	5.9	76	--	--
08	0555	.1	300	--	--	28.0	--	7.1	92	5.6	0.5
08	0556	3.0	300	--	--	28.0	--	7.1	92	--	--
08	0556	5.0	300	--	--	27.9	--	6.8	88	--	--
08	0557	10	300	--	--	27.6	--	6.3	81	--	--
08	0557	15	300	--	--	27.4	--	6.1	79	--	--
08	0558	20	300	--	--	27.4	--	6.1	79	--	--
08	0559	25	300	--	--	27.3	--	6.1	78	--	--
08	0600	.1	600	--	--	28.0	--	7.1	92	--	--
08	0601	3.0	600	--	--	28.0	--	7.1	92	9.7	1.0
08	0601	5.0	600	--	--	28.0	--	7.1	92	--	--
08	0602	10	600	--	--	27.8	--	6.6	86	--	--
08	0602	15	600	--	--	27.5	--	6.4	83	--	--
08	0603	20	600	--	--	27.5	--	6.2	80	--	--
08	0604	25	600	--	--	27.3	--	6.1	78	--	--
08	0604	30	600	--	--	27.3	--	6.0	77	--	--
08	0605	35	600	--	--	27.3	--	6.0	77	--	--
08	0605	36	600	--	--	27.3	--	7.2	92	--	--
08	0607	.1	800	--	--	27.9	--	7.0	91	--	--
08	0608	3.0	800	--	--	27.9	--	7.1	92	--	--
08	0608	5.0	800	--	--	27.9	--	7.1	92	--	--
08	0609	10	800	--	--	27.8	--	6.7	87	--	--
08	0609	15	800	--	--	27.5	--	6.2	80	--	--
08	0610	20	800	--	--	27.5	--	6.1	79	--	--
08	0611	25	800	--	--	27.4	--	6.1	79	--	--
08	0611	29	800	--	--	27.4	--	6.0	77	--	--
08	1434	.1	300	--	--	30.1	--	9.0	121	--	--
08	1435	3.0	300	--	--	28.7	--	7.7	101	--	--
08	1435	5.0	300	--	--	27.6	--	6.1	79	--	--
08	1436	10	300	--	--	27.4	--	6.1	78	--	--
08	1436	15	300	--	--	27.3	--	6.2	79	--	--
08	1437	20	300	--	--	27.3	--	6.2	79	--	--
08	1438	25	300	--	--	27.3	--	6.3	81	--	--

Table 24. *Water-quality data for station 391447081414201, Ohio River at river mile 192.9, May to October 1993--Continued*

Date	Time	Sampling depth (ft)	Sample location (ft from left bank)	Specific conductance (µS/cm)	pH (standard units)	Temperature, water (°C)	Transparency (Secchi disk) (ft)	Dissolved oxygen (mg/L)	Dissolved oxygen (percent saturation)	Chlorophyll *a* (µg/L)	Chlorophyll *b* (µg/L)
July											
08	1440	0.1	600	--	--	29.6	--	8.0	107	--	--
08	1441	3.0	600	--	--	28.7	--	8.0	105	--	--
08	1441	5.0	600	--	--	28.5	--	7.4	97	--	--
08	1442	10	600	--	--	27.4	--	6.2	80	--	--
08	1442	15	600	--	--	27.4	--	6.2	80	--	--
08	1443	20	600	--	--	27.4	--	6.3	81	--	--
08	1444	25	600	--	--	27.4	--	6.3	81	--	--
08	1444	30	600	--	--	27.4	--	6.3	81	--	--
08	1445	35	600	--	--	27.4	--	6.3	81	--	--
08	1445	37	600	--	--	27.4	--	6.4	82	--	--
08	1452	.1	800	--	--	29.3	--	8.0	106	--	--
08	1453	3.0	800	--	--	28.8	--	8.2	108	--	--
08	1453	5.0	800	--	--	28.6	--	8.0	105	--	--
08	1454	10	800	--	--	27.5	--	6.4	82	--	--
08	1454	15	800	--	--	27.5	--	6.4	82	--	--
08	1455	20	800	--	--	27.5	--	6.4	82	--	--
08	1456	25	800	--	--	27.5	--	6.4	82	--	--
08	1456	29	800	--	--	27.5	--	6.5	84	--	--
16	0604	.1	300	551	7.8	29.0	--	6.1	81	--	--
16	0604	2.9	300	550	7.8	29.0	--	6.1	81	--	--
16	0603	4.9	300	549	7.8	29.0	--	6.1	81	--	--
16	0603	9.9	300	555	7.8	29.0	--	6.1	81	--	--
16	0603	15	300	549	7.8	29.0	--	6.1	81	--	--
16	0602	20	300	552	7.8	29.0	--	6.1	81	--	--
16	0601	25	300	555	7.8	29.0	--	6.1	81	--	--
16	0600	29	300	552	7.8	29.0	--	6.1	81	--	--
16	0610	.1	600	541	7.8	29.0	--	6.1	81	--	--
16	0610	2.8	600	547	7.8	29.0	--	6.1	81	--	--
16	0609	4.8	600	545	7.8	29.0	--	6.1	81	--	--
16	0609	9.8	600	549	7.8	29.0	--	6.1	81	--	--
16	0608	15	600	548	7.8	29.0	--	6.1	81	3.0	0.3
16	0608	20	600	545	7.8	29.0	--	6.1	81	--	--
16	0607	25	600	545	7.8	29.0	--	6.1	81	--	--
16	0606	30	600	545	7.8	29.0	--	6.1	81	--	--
16	0616	.1	800	540	7.8	29.0	--	6.1	80	--	--
16	0616	2.8	800	541	7.8	29.0	--	6.1	80	--	--
16	0615	5.2	800	543	7.8	28.9	--	6.1	80	--	--
16	0615	9.8	800	539	7.8	29.0	--	6.1	80	--	--
16	0614	15	800	542	7.8	29.0	--	6.1	80	--	--
16	0614	20	800	542	7.8	29.0	--	6.1	80	--	--
16	0613	25	800	539	7.8	29.0	--	6.1	80	--	--
16	0613	28	800	542	7.8	29.0	--	6.0	80	--	--
16	1202	.1	300	564	7.8	29.5	--	6.3	83	--	--
16	1202	3.0	300	563	7.7	29.1	--	5.9	78	--	--
16	1201	5.3	300	565	7.7	29.0	--	5.8	76	--	--
16	1201	9.9	300	564	7.7	29.0	--	5.7	75	--	--
16	1200	15	300	561	7.7	29.0	--	5.7	75	--	--
16	1159	20	300	563	7.7	28.9	--	5.7	75	--	--
16	1159	25	300	563	7.7	28.9	--	5.6	74	--	--
16	1158	28	300	564	7.7	28.9	--	5.6	74	--	--

Table 24. *Water-quality data for station 391447081414201, Ohio River at river mile 192.9, May to October 1993--Continued*

Date	Time	Sampling depth (ft)	Sample location (ft from left bank)	Specific conductance (µS/cm)	pH (standard units)	Temperature, water (°C)	Transparency (Secchi disk) (ft)	Dissolved oxygen (mg/L)	Dissolved oxygen (percent saturation)	Chlorophyll *a* (µg/L)	Chlorophyll *b* (µg/L)
July											
16	1209	0.1	600	561	7.8	29.8	4.0	6.3	85	--	--
16	1208	3.1	600	560	7.7	29.1	--	5.9	78	--	--
16	1208	5.2	600	558	7.7	29.0	--	5.8	77	--	--
16	1208	9.9	600	557	7.7	29.1	--	5.9	78	--	--
16	1207	15	600	559	7.7	29.0	--	5.8	77	--	--
16	1207	20	600	556	7.7	29.0	--	5.8	76	--	--
16	1206	25	600	561	7.7	29.0	--	5.8	77	--	--
16	1206	30	600	560	7.7	29.0	--	5.8	76	--	--
16	1205	36	600	557	7.7	29.0	--	5.9	77	--	--
16	1218	.1	800	560	7.8	29.9	--	6.6	88	--	--
16	1218	3.1	800	558	7.8	29.1	--	6.0	79	--	--
16	1217	4.9	800	558	7.7	29.1	--	5.9	78	--	--
16	1217	9.8	800	557	7.7	29.0	--	5.8	76	--	--
16	1216	15	800	557	7.7	29.0	--	5.8	76	--	--
16	1216	20	800	558	7.7	29.0	--	5.8	76	--	--
16	1215	25	800	559	7.7	29.0	--	5.7	75	--	--
16	1215	27	800	558	7.7	29.0	--	5.8	76	--	--
29	0536	.1	300	561	7.7	29.1	--	6.9	91	--	--
29	0536	3.0	300	561	7.7	29.1	--	6.8	91	--	--
29	0536	5.0	300	561	7.7	29.1	--	6.8	91	--	--
29	0537	9.9	300	564	7.7	29.1	--	6.8	91	--	--
29	0537	15	300	558	7.7	29.1	--	6.8	90	--	--
29	0537	20	300	560	7.7	29.1	--	6.6	88	--	--
29	0538	25	300	559	7.6	29.1	--	6.4	85	--	--
29	0538	28	300	563	7.6	29.1	--	6.3	84	--	--
29	0530	.4	600	560	7.7	29.1	--	6.7	89	--	--
29	0531	3.2	600	560	7.7	29.1	--	6.7	89	--	--
29	0531	5.1	600	560	7.7	29.1	--	6.7	89	--	--
29	0532	10	600	559	7.7	29.1	--	6.7	89	--	--
29	0532	15	600	560	7.7	29.1	--	6.6	88	--	--
29	0533	20	600	560	7.7	29.1	--	6.6	88	--	--
29	0533	25	600	561	7.6	29.0	--	6.3	84	--	--
29	0534	30	600	562	7.6	29.0	--	6.2	82	--	--
29	0534	33	600	562	7.6	29.0	--	6.1	81	--	--
29	0523	.3	800	562	7.8	29.2	--	6.9	92	--	--
29	0523	2.9	800	562	7.8	29.2	--	6.9	92	--	--
29	0524	5.1	800	562	7.8	29.2	--	7.1	94	--	--
29	0525	10	800	562	7.8	29.2	--	7.1	95	--	--
29	0526	15	800	562	7.8	29.2	--	7.1	94	--	--
29	0527	20	800	562	7.7	29.2	--	6.9	92	--	--
29	0527	25	800	563	7.7	29.2	--	6.8	90	--	--
29	0528	29	800	562	7.7	29.2	--	6.6	88	--	--

Table 24. *Water-quality data for station 391447081414201, Ohio River at river mile 192.9, May to October 1993--Continued*

Date	Time	Sampling depth (ft)	Sample location (ft from left bank)	Specific conductance (µS/cm)	pH (standard units)	Temperature, water (°C)	Transparency (Secchi disk) (ft)	Dissolved oxygen (mg/L)	Dissolved oxygen (percent saturation)	Chlorophyll *a* (µg/L)	Chlorophyll *b* (µg/L)
July											
29	1559	0.4	300	546	8.1	29.7	--	8.3	111	--	--
29	1558	3.0	300	547	8.1	29.7	--	8.4	112	--	--
29	1558	4.9	300	547	8.1	29.7	--	8.3	112	--	--
29	1557	10	300	553	7.5	29.2	--	6.2	83	--	--
29	1557	15	300	549	7.4	29.1	--	5.7	75	--	--
29	1556	20	300	549	7.4	29.0	--	5.7	75	--	--
29	1556	25	300	547	7.4	29.0	--	5.6	74	--	--
29	1555	30	300	543	7.4	29.0	--	5.5	73	--	--
29	1544	.3	600	545	8.0	29.7	3.5	7.6	103	16.0	4.4
29	1543	2.9	600	547	7.9	29.6	--	7.6	103	12.0	3.4
29	1544	5.0	600	545	8.0	29.7	--	7.6	103	--	--
29	1542	9.6	600	545	7.4	29.1	--	5.9	78	--	--
29	1542	15	600	545	7.4	29.1	--	5.7	76	--	--
29	1541	20	600	545	7.4	29.1	--	5.7	75	--	--
29	1541	25	600	544	7.4	29.1	--	5.6	75	--	--
29	1540	30	600	545	7.4	29.1	--	5.8	77	--	--
29	1539	35	600	547	7.4	29.1	--	5.8	78	--	--
29	1537	37	600	549	7.4	29.1	--	6.0	80	--	--
29	1537	38	600	544	7.4	29.1	--	5.6	75	--	--
29	1535	.3	800	545	7.9	29.8	--	6.9	92	--	--
29	1534	3.0	800	545	7.9	29.7	--	7.9	106	--	--
29	1534	5.0	800	546	7.9	29.6	--	7.7	103	--	--
29	1533	9.9	800	548	7.6	29.3	--	6.3	84	--	--
29	1532	15	800	546	7.5	29.2	--	6.1	81	--	--
29	1531	20	800	548	7.5	29.2	--	5.8	78	--	--
29	1530	26	800	541	7.5	29.2	--	6.1	81	--	--
August											
12	1508	.1	300	618	7.6	28.7	--	6.9	91	--	--
12	1509	3.0	300	618	7.6	28.2	--	7.1	93	--	--
12	1509	4.9	300	618	7.5	28.1	--	6.9	89	--	--
12	1510	9.5	300	617	7.4	27.8	--	6.3	81	--	--
12	1510	15	300	617	7.4	27.7	--	6.1	78	--	--
12	1511	20	300	618	7.4	27.7	--	6.1	78	--	--
12	1512	25	300	617	7.4	27.7	--	6.0	77	--	--
12	1512	29	300	618	7.4	27.6	--	6.0	77	--	--
12	1459	.1	600	617	7.7	28.5	--	7.4	97	--	--
12	1500	2.6	600	617	7.6	28.3	--	7.1	93	--	--
12	1500	4.9	600	616	7.6	28.2	--	7.0	92	--	--
12	1501	9.5	600	616	7.4	27.7	--	6.1	78	--	--
12	1501	15	600	618	7.4	27.7	--	6.0	78	--	--
12	1502	20	600	618	7.4	27.7	--	6.0	78	--	--
12	1503	25	600	617	7.4	27.6	--	6.0	78	--	--
12	1503	30	600	617	7.4	27.7	--	6.0	78	--	--
12	1504	36	600	617	7.4	27.7	--	6.1	79	--	--

Table 24. *Water-quality data for station 391447081414201, Ohio River at river mile 192.9, May to October 1993--Continued*

Date	Time	Sampling depth (ft)	Sample location (ft from left bank)	Specific conductance (µS/cm)	pH (standard units)	Temperature, water (°C)	Transparency (Secchi disk) (ft)	Dissolved oxygen (mg/L)	Dissolved oxygen (percent saturation)	Chlorophyll *a* (µg/L)	Chlorophyll *b* (µg/L)
August											
12	1451	0.1	800	616	7.8	28.7	--	7.9	103	--	--
12	1452	2.6	800	616	7.5	27.9	--	6.6	86	--	--
12	1452	4.6	800	617	7.4	27.8	--	6.3	81	--	--
12	1453	9.9	800	616	7.4	27.7	--	6.1	79	--	--
12	1453	15	800	617	7.4	27.6	--	6.0	78	--	--
12	1454	20	800	616	7.4	27.6	--	6.0	77	--	--
12	1455	25	800	617	7.4	27.6	--	6.0	77	--	--
12	1455	29	800	617	7.4	27.6	--	5.9	77	--	--
13	0511	.1	300	623	7.4	27.5	--	5.9	76	--	--
13	0512	2.6	300	622	7.4	27.5	--	5.8	74	--	--
13	0512	4.9	300	624	7.4	27.5	--	5.6	72	--	--
13	0513	9.9	300	623	7.4	27.5	--	5.6	72	--	--
13	0513	15	300	616	7.4	27.5	--	5.6	72	--	--
13	0514	20	300	623	7.3	27.5	--	5.5	70	--	--
13	0515	22	300	621	7.3	27.5	--	5.4	70	--	--
13	0517	.1	600	621	7.4	27.5	--	5.8	75	--	--
13	0518	3.0	600	620	7.4	27.5	--	5.8	75	--	--
13	0518	4.9	600	620	7.4	27.5	--	5.8	75	--	--
13	0519	9.9	600	619	7.4	27.5	--	5.8	75	--	--
13	0519	15	600	622	7.4	27.5	--	5.8	75	--	--
13	0520	20	600	622	7.4	27.5	--	5.8	75	--	--
13	0521	25	600	618	7.4	27.5	--	5.8	75	--	--
13	0521	30	600	623	7.4	27.5	--	5.8	74	--	--
13	0522	35	600	619	7.4	27.5	--	5.8	74	--	--
13	0522	37	600	615	7.4	27.5	--	5.7	74	--	--
13	0522	.1	800	621	7.4	27.4	--	5.8	75	--	--
13	0523	3.0	800	617	7.4	27.4	--	5.8	75	--	--
13	0523	4.9	800	620	7.4	27.4	--	5.8	75	--	--
13	0524	9.9	800	616	7.4	27.4	--	5.8	75	--	--
13	0524	15	800	621	7.4	27.5	--	5.8	74	--	--
13	0525	20	800	619	7.4	27.5	--	5.8	74	--	--
13	0526	25	800	622	7.4	27.5	--	5.8	74	--	--
13	0526	27	800	612	7.4	27.5	--	5.7	74	--	--
25	1448	.4	300	638	8.1	31.0	--	8.4	114	--	--
25	1449	3.2	300	645	7.8	29.2	--	7.7	101	--	--
25	1449	5.2	300	641	7.6	28.8	--	6.4	83	--	--
25	1450	10	300	637	7.5	28.6	--	5.6	73	--	--
25	1450	15	300	647	7.4	28.6	--	5.3	69	--	--
25	1450	20	300	645	7.4	28.5	--	5.2	67	--	--
25	1451	25	300	641	7.4	28.5	--	5.0	65	--	--
25	1452	26	300	644	7.4	28.5	--	5.3	69	--	--
25	1446	.3	600	611	8.0	31.4	5.5	8.3	114	--	--
25	1445	3.2	600	638	7.8	29.6	--	7.9	104	4.9	1.7
25	1445	5.2	600	636	7.5	28.7	--	6.0	79	--	--
25	1444	10	600	638	7.4	28.6	--	5.8	76	--	--
25	1443	15	600	638	7.4	28.6	--	5.6	73	--	--
25	1443	20	600	634	7.4	28.6	--	5.7	74	--	--
25	1442	25	600	638	7.4	28.5	--	5.7	74	--	--
25	1441	30	600	638	7.4	28.5	--	5.7	74	--	--
25	1440	35	600	638	7.4	28.5	--	5.6	73	--	--
25	1439	38	600	635	7.4	28.5	--	5.6	73	--	--

Table 24. *Water-quality data for station 391447081414201, Ohio River at river mile 192.9, May to October 1993--Continued*

Date	Time	Sampling depth (ft)	Sample location (ft from left bank)	Specific conductance (µS/cm)	pH (standard units)	Temperature, water (°C)	Transparency (Secchi disk) (ft)	Dissolved oxygen (mg/L)	Dissolved oxygen (percent saturation)	Chlorophyll *a* (µg/L)	Chlorophyll *b* (µg/L)
September											
09	1743	0.2	800	601	7.4	27.7	--	6.1	79	--	--
09	1743	3.2	800	601	7.4	27.7	--	6.0	78	--	--
09	1744	4.8	800	601	7.4	27.7	--	5.7	75	--	--
09	1744	10	800	600	7.4	27.7	--	5.6	72	--	--
09	1745	15	800	600	7.4	27.6	--	5.5	72	--	--
09	1745	20	800	600	7.4	27.7	--	5.5	71	--	--
09	1746	24	800	600	7.4	27.6	--	5.4	71	--	--
23	1628	.2	300	615	7.3	23.9	--	6.5	78	--	--
23	1629	2.9	300	612	7.3	24.0	--	6.4	77	--	--
23	1629	4.8	300	617	7.3	24.0	--	6.4	77	--	--
23	1630	9.9	300	614	7.3	24.0	--	6.5	78	--	--
23	1631	13	300	611	7.0	24.0	--	6.5	78	--	--
23	1618	.3	600	610	7.3	23.9	--	6.4	77	1.0	0.1
23	1625	2.9	600	616	7.3	23.9	--	6.2	74	--	--
23	1624	5.0	600	611	7.3	23.9	--	6.2	74	--	--
23	1623	10	600	617	7.3	23.9	--	6.2	74	--	--
23	1623	15	600	615	7.3	23.9	--	6.2	74	--	--
23	1621	20	600	609	7.3	23.9	--	6.2	74	--	--
23	1620	26	600	621	7.3	23.9	--	6.2	74	--	--
23	1619	30	600	614	7.3	23.9	--	6.2	74	--	--
23	1619	32	600	608	7.3	23.9	--	6.2	75	--	--
23	1611	.1	800	610	7.3	23.9	--	6.7	81	--	--
23	1612	3.0	800	611	7.3	24.0	--	6.5	78	--	--
23	1613	5.1	800	613	7.3	24.0	--	6.5	78	--	--
23	1613	10	800	612	7.3	23.9	--	6.1	74	--	--
23	1614	15	800	615	7.3	23.9	--	6.1	74	--	--
23	1614	20	800	610	7.3	23.9	--	6.1	73	--	--
23	1615	25	800	611	7.3	23.9	--	6.1	73	--	--
23	1615	27	800	620	7.3	23.9	--	6.1	73	--	--
24	0732	.3	300	601	7.3	23.5	--	6.1	72	--	--
24	0733	2.7	300	602	7.3	23.5	--	6.0	72	--	--
24	0733	5.1	300	600	7.2	23.5	--	6.0	72	--	--
24	0734	10	300	602	7.3	23.5	--	6.0	72	--	--
24	0734	15	300	602	7.3	23.5	--	6.0	72	--	--
24	0734	20	300	601	7.3	23.5	--	6.0	71	--	--
24	0735	25	300	602	7.3	23.5	--	6.0	71	--	--
24	0730	.2	600	602	7.3	23.5	--	6.0	72	--	--
24	0729	3.1	600	604	7.3	23.5	--	6.0	72	--	--
24	0728	4.9	600	603	7.3	23.5	--	6.0	72	--	--
24	0728	10	600	605	7.3	23.5	--	6.0	72	--	--
24	0727	15	600	605	7.3	23.5	--	6.0	72	--	--
24	0727	20	600	603	7.3	23.5	--	6.0	72	--	--
24	0726	25	600	608	7.3	23.5	--	6.0	71	--	--
24	0725	30	600	601	7.3	23.5	--	6.0	71	--	--

Table 24. *Water-quality data for station 391447081414201, Ohio River at river mile 192.9, May to October 1993--Continued*

Date	Time	Sampling depth (ft)	Sample location (ft from left bank)	Specific conductance (µS/cm)	pH (standard units)	Temperature, water (°C)	Transparency (Secchi disk) (ft)	Dissolved oxygen (mg/L)	Dissolved oxygen (percent saturation)	Chlorophyll *a* (µg/L)	Chlorophyll *b* (µg/L)
September											
24	0717	0.6	800	601	7.3	23.5	--	6.1	72	--	--
24	0718	3.2	800	604	7.3	23.5	--	6.0	72	--	--
24	0718	5.3	800	602	7.3	23.5	--	6.0	72	--	--
24	0719	10	800	603	7.3	23.5	--	6.0	72	--	--
24	0720	15	800	605	7.3	23.5	--	6.0	72	--	--
24	0721	20	800	602	7.0	23.5	--	6.0	71	--	--
24	0721	25	800	604	7.3	23.5	--	6.0	71	--	--
24	0721	28	800	602	7.3	23.5	--	5.9	70	--	--
October											
07	1730	.1	300	551	7.5	20.7	--	7.6	85	--	--
07	1731	3.0	300	551	7.5	20.7	--	7.3	82	--	--
07	1731	5.0	300	551	7.5	20.3	--	7.0	78	--	--
07	1732	10	300	546	7.4	19.2	--	6.9	75	--	--
07	1732	15	300	539	7.4	19.2	--	7.1	77	--	--
07	1733	20	300	539	7.4	19.2	--	7.1	77	--	--
07	1733	24	300	545	7.4	19.2	--	6.8	74	--	--
07	1720	.4	600	549	7.5	20.4	--	7.8	87	--	--
07	1721	3.0	600	549	7.5	20.4	--	7.7	86	1.7	0.2
07	1721	4.9	600	549	7.5	20.3	--	7.6	85	--	--
07	1722	10	600	542	7.4	19.3	--	7.2	78	--	--
07	1722	15	600	542	7.5	19.2	--	7.2	79	--	--
07	1723	20	600	541	7.5	19.2	--	7.0	77	--	--
07	1723	25	600	541	7.5	19.2	--	7.2	78	.8	.1
07	1724	29	600	541	7.4	19.2	--	7.1	77	--	--
07	1712	.4	800	545	7.5	20.1	--	7.1	79	--	--
07	1713	2.9	800	543	7.5	19.8	--	7.6	84	--	--
07	1713	4.9	800	545	7.5	19.6	--	7.6	83	--	--
07	1714	10	800	545	7.5	19.5	--	7.5	82	--	--
07	1714	15	800	545	7.5	19.3	--	7.4	81	--	--
07	1715	20	800	542	7.5	19.3	--	7.4	81	--	--
07	1715	25	800	540	7.5	19.3	--	7.4	81	--	--
07	1716	29	800	545	7.4	19.3	--	7.2	79	--	--
26	0716	.3	300	435	7.4	16.5	--	8.1	84	--	--
26	0719	3.2	300	434	7.4	16.5	--	8.1	84	--	--
26	0719	5.1	300	436	7.4	16.5	--	8.1	84	--	--
26	0719	10	300	440	7.4	16.5	--	8.1	84	--	--
26	0718	16	300	436	7.4	16.5	--	8.1	84	--	--
26	0718	20	300	434	7.4	16.5	--	8.1	85	--	--
26	0717	25	300	431	7.4	16.5	--	8.1	85	--	--
26	0717	29	300	447	7.4	16.5	--	8.1	85	--	--
26	0727	.5	600	442	7.4	16.5	--	8.2	85	--	--
26	0730	3.0	600	447	7.4	16.5	--	8.2	85	--	--
26	0730	4.9	600	446	7.4	16.5	--	8.1	85	--	--
26	0730	9.9	600	447	7.4	16.5	--	8.2	85	--	--
26	0729	15	600	446	7.4	16.0	--	8.2	84	--	--
26	0729	20	600	444	7.4	16.5	--	8.2	85	--	--
26	0729	25	600	444	7.4	16.5	--	8.2	85	--	--
26	0728	30	600	440	7.4	16.5	--	8.2	85	--	--
26	0728	34	600	448	7.4	16.5	--	8.1	85	--	--

Table 24. *Water-quality data for station 391447081414201, Ohio River at river mile 192.9, May to October 1993--Continued*

Date	Time	Sampling depth (ft)	Sample location (ft from left bank)	Specific conductance (µS/cm)	pH (standard units)	Temperature, water (°C)	Transparency (Secchi disk) (ft)	Dissolved oxygen (mg/L)	Dissolved oxygen (percent saturation)	Chlorophyll *a* (µg/L)	Chlorophyll *b* (µg/L)
August											
25	1432	0.4	800	636	7.9	30.9	--	7.9	107	--	--
25	1433	3.2	800	635	7.8	29.2	--	7.5	99	--	--
25	1433	5.2	800	634	7.6	28.9	--	6.8	89	--	--
25	1433	10	800	637	7.5	28.8	--	6.3	82	--	--
25	1434	15	800	636	7.5	28.6	--	6.0	78	--	--
25	1435	20	800	635	7.4	28.6	--	5.9	76	--	--
25	1435	25	800	633	7.4	28.6	--	5.8	75	--	--
25	1436	28	800	640	7.4	28.6	--	5.7	74	--	--
September											
09	0654	.1	300	615	7.4	27.7	--	5.6	73	--	--
09	0654	3.0	300	614	7.4	27.7	--	5.6	73	--	--
09	0655	5.2	300	614	7.4	27.7	--	5.6	73	--	--
09	0656	10	300	615	7.4	27.7	--	5.6	73	--	--
09	0656	15	300	614	7.4	27.7	--	5.6	73	--	--
09	0657	20	300	615	7.4	27.7	--	5.6	73	--	--
09	0657	22	300	614	7.4	27.7	--	5.5	72	--	--
09	0648	.1	600	606	7.4	27.8	--	5.7	75	--	--
09	0649	2.8	600	608	7.4	27.8	--	5.6	73	--	--
09	0650	5.1	600	609	7.4	27.8	--	5.6	73	--	--
09	0650	9.8	600	--	7.4	27.8	--	5.6	73	--	--
09	0651	15	600	608	7.4	27.8	--	5.6	73	--	--
09	0651	20	600	610	7.4	27.8	--	5.6	73	--	--
09	0652	25	600	611	7.4	27.8	--	5.6	73	--	--
09	0652	31	600	611	7.4	27.8	--	5.6	72	--	--
09	0642	.1	800	605	7.3	27.6	--	5.5	72	--	--
09	0642	2.8	800	605	7.4	27.7	--	5.6	72	--	--
09	0643	5.0	800	605	7.4	27.7	--	5.5	72	--	--
09	0644	10	800	605	7.4	27.7	--	5.5	72	--	--
09	0644	15	800	606	7.4	27.7	--	5.5	72	--	--
09	0645	20	800	604	7.3	27.7	--	5.5	72	--	--
09	0646	25	800	604	7.4	27.7	--	5.5	72	--	--
09	0647	27	800	604	7.4	27.7	--	5.5	72	--	--
09	1801	.2	300	606	7.5	27.8	--	6.4	84	--	--
09	1802	3.3	300	607	7.5	27.9	--	6.3	82	--	--
09	1802	4.8	300	604	7.4	27.7	--	5.7	75	--	--
09	1803	10	300	604	7.4	27.7	--	5.6	72	--	--
09	1804	12	300	604	7.4	27.7	--	5.5	71	--	--
09	1752	.3	600	596	7.4	27.6	--	5.7	75	--	--
09	1751	3.0	600	595	7.4	27.6	--	5.7	74	3.0	0.2
09	1751	4.9	600	595	7.4	27.6	--	5.7	74	--	--
09	1751	10	600	595	7.4	27.6	--	5.7	74	--	--
09	1753	15	600	596	7.4	27.6	--	5.7	74	--	--
09	1750	20	600	595	7.4	27.7	--	5.7	75	--	--
09	1749	25	600	596	7.4	27.7	--	5.7	74	3.0	.2
09	1749	30	600	596	7.4	27.6	--	5.7	74	--	--
09	1748	35	600	596	7.4	27.6	--	5.7	74	--	--

Table 24. *Water-quality data for station 391447081414201, Ohio River at river mile 192.9, May to October 1993--Continued*

Date	Time	Sampling depth (ft)	Sample location (ft from left bank)	Specific conductance (µS/cm)	pH (standard units)	Temperature, water (°C)	Transparency (Secchi disk) (ft)	Dissolved oxygen (mg/L)	Dissolved oxygen (percent saturation)	Chlorophyll *a* (µg/L)	Chlorophyll *b* (µg/L)
October											
26	0720	0.3	800	449	7.4	16.5	--	8.2	85	--	--
26	0723	3.5	800	452	7.4	16.5	--	8.2	85	--	--
26	0723	5.6	800	454	7.4	16.5	--	8.2	85	--	--
26	0722	10	800	453	7.4	16.5	--	8.2	85	--	--
26	0722	15	800	452	7.4	16.5	--	8.2	85	--	--
26	0721	20	800	458	7.4	16.5	--	8.2	85	--	--
26	0721	25	800	456	7.4	16.0	--	8.1	84	--	--
26	0721	28	800	447	7.4	16.5	--	8.1	84	--	--
26	1401	.3	300	436	7.4	17.2	--	8.1	85	--	--
26	1404	2.9	300	437	7.4	17.0	--	8.1	85	--	--
26	1404	5.0	300	438	7.4	16.7	--	8.0	84	--	--
26	1404	10	300	438	7.4	16.5	--	8.0	84	--	--
26	1402	15	300	440	7.4	16.5	--	8.0	84	--	--
26	1402	20	300	439	7.4	16.5	--	8.0	84	--	--
26	1401	25	300	440	7.4	16.5	--	8.0	84	--	--
26	1401	29	300	440	7.4	16.5	--	8.1	84	--	--
26	1420	.5	600	446	7.5	16.6	4.0	8.1	84	--	--
26	1426	3.0	600	446	7.5	16.6	--	8.1	84	--	--
26	1426	5.1	600	446	7.5	16.6	--	8.1	84	--	--
26	1425	10	600	446	7.5	16.6	--	8.1	84	--	--
26	1424	15	600	446	7.5	16.6	--	8.1	84	--	--
26	1423	20	600	445	7.5	16.6	--	8.1	84	--	--
26	1422	25	600	445	7.5	16.6	--	8.1	84	--	--
26	1421	30	600	445	7.5	16.6	--	8.1	84	1.3	0.1
26	1421	33	600	445	7.5	16.6	--	8.1	84	--	--
26	1430	.1	800	448	7.5	17.1	--	8.1	85	--	--
26	1433	3.0	800	449	7.5	16.7	--	8.1	85	--	--
26	1433	4.9	800	449	7.5	16.7	--	8.1	84	--	--
26	1433	10	800	450	7.4	16.7	--	8.1	84	--	--
26	1432	15	800	450	7.4	16.6	--	8.1	84	--	--
26	1432	20	800	450	7.4	16.6	--	8.0	84	--	--
26	1431	25	800	450	7.4	16.6	--	8.0	84	--	--
26	1431	27	800	450	7.4	16.6	--	8.0	84	--	--

Table 25. *Water-quality data for station 391351081412201, Ohio River at river mile 194.0, May to October 1993*

[ft = feet; µS/cm = microsiemens per centimeter; °C = degrees Celsius; mg/L = milligrams per liter; µg/L = micrograms per liter; -- = data not collected]

Date	Time	Sampling depth (ft)	Sample location (ft from left bank)	Specific conductance (µS/cm)	pH (standard units)	Temperature, water (°C)	Transparency (Secchi disk) (ft)	Dissolved oxygen (mg/L)	Dissolved oxygen (percent saturation)	Chlorophyll *a* (µg/L)	Chlorophyll *b* (µg/L)
May											
24	1745	1.0	600	414	8.2	19.6	--	9.7	108	--	--
24	1746	5.3	600	415	8.2	19.6	--	9.7	108	--	--
24	1746	11	600	416	8.3	19.6	--	9.7	107	--	--
June											
10	1632	.3	600	521	7.3	22.9	--	7.5	88	--	--
10	1632	3.3	600	522	7.3	22.9	--	7.4	87	--	--
10	1633	17	600	520	7.3	22.8	--	7.4	87	--	--
10	1633	34	600	521	7.3	22.8	--	7.3	87	--	--
July											
07	1742	.1	600	462	8.0	29.4	--	9.0	120	--	--
07	1742	3.0	600	463	7.9	29.4	--	8.3	111	--	--
07	1744	16	600	461	7.3	27.4	--	6.2	80	--	--
07	1743	32	600	460	7.3	27.3	--	5.9	76	--	--
29	1810	.3	600	547	8.1	29.6	--	8.8	118	--	--
29	1811	3.5	600	546	8.1	29.7	--	8.7	117	--	--
29	1812	17	600	550	7.5	29.1	--	6.1	81	--	--
29	1811	34	600	551	7.5	29.1	--	6.1	81	--	--
August											
12	1518	.1	600	615	7.6	28.3	--	6.9	91	--	--
12	1519	3.0	600	618	7.5	28.2	--	6.7	87	--	--
12	1519	11	600	618	7.4	27.6	--	6.0	77	--	--
12	1520	16	600	617	7.4	27.6	--	5.9	77	--	--
12	1520	32	600	618	7.4	27.6	--	6.0	77	--	--
25	1500	.3	600	639	7.8	30.6	--	7.5	102	--	--
25	1500	3.1	600	639	7.8	30.3	--	7.6	102	--	--
25	1501	17	600	637	7.4	28.6	--	5.5	71	--	--
25	1501	33	600	636	7.5	28.5	--	5.6	73	--	--
September											
09	0719	.3	600	607	7.3	27.7	--	6.0	79	--	--
09	0720	3.0	600	606	7.3	27.7	--	5.7	74	--	--
09	0722	16	600	605	7.3	27.7	--	5.5	72	--	--
09	0721	32	600	606	7.3	27.7	--	5.5	72	--	--
23	1640	.1	600	611	7.3	23.8	--	6.3	75	--	--
23	1641	2.5	600	610	7.3	23.9	--	6.2	74	--	--
23	1643	18	600	611	7.3	23.9	--	6.1	74	--	--
23	1642	35	600	611	7.3	23.9	--	6.2	74	--	--
October											
08	1026	.1	600	540	7.5	19.4	--	8.0	88	--	--
08	1027	2.8	600	541	7.5	19.4	--	8.0	87	--	--
08	1027	17	600	538	7.5	19.3	--	7.6	83	--	--
08	1028	33	600	545	7.5	19.3	--	7.6	83	--	--
26	1440	.1	600	448	7.5	17.0	--	8.1	85	--	--
26	1441	16	600	448	7.4	16.6	--	8.0	84	--	--
26	1442	32	600	447	7.4	16.6	--	8.0	84	--	--

Table 26. *Water-quality data for station 391302081425101, Ohio River at river mile 195.8, May to October 1993*

[ft = feet; µS/cm = microsiemens per centimeter; °C = degrees Celsius; mg/L = milligrams per liter; µg/L = micrograms per liter; -- = data not collected]

Date	Time	Sampling depth (ft)	Sample location (ft from left bank)	Specific conductance (µS/cm)	pH (standard units)	Temperature, water (°C)	Transparency (Secchi disk) (ft)	Dissolved oxygen (mg/L)	Dissolved oxygen (percent saturation)	Chlorophyll *a* (µg/L)	Chlorophyll *b* (µg/L)
May											
24	1754	3.6	600	417	8.4	19.6	--	9.9	111	--	--
24	1757	20	600	424	8.3	19.6	--	9.8	109	--	--
24	1756	37	600	422	8.3	19.6	--	9.7	108	--	--
June											
10	1639	.1	600	538	7.4	23.1	--	7.3	87	--	--
10	1639	3.3	600	541	7.4	23.1	--	7.3	87	--	--
10	1640	20	600	529	7.3	22.8	--	7.3	86	--	--
10	1640	39	600	524	7.3	22.8	--	7.3	86	--	--
July											
07	1753	.2	600	472	7.8	28.5	--	7.9	104	--	--
07	1754	3.0	600	472	7.7	28.5	--	7.9	104	--	--
07	1756	19	600	468	7.4	27.2	--	6.1	78	--	--
07	1755	35	600	476	7.4	27.1	--	5.9	76	--	--
29	1804	.3	600	559	7.8	29.2	--	7.3	97	--	--
29	1805	3.0	600	559	7.8	29.2	--	6.9	92	--	--
29	1806	19	600	560	7.8	29.2	--	6.8	91	--	--
29	1805	37	600	561	7.6	29.1	--	6.4	86	--	--
August											
12	1525	.1	600	619	7.6	28.6	--	7.1	93	--	--
12	1526	2.6	600	619	7.5	28.2	--	6.8	88	--	--
12	1526	19	600	618	7.4	27.6	--	5.9	76	--	--
12	1527	39	600	618	7.4	27.5	--	6.1	79	--	--
25	1506	.1	600	633	7.6	28.8	--	6.8	89	--	--
25	1507	3.1	600	634	7.6	28.9	--	6.6	87	--	--
25	1506	17	600	634	7.5	28.6	--	5.9	77	--	--
25	1506	33	600	631	7.4	28.5	--	5.5	72	--	--
September											
09	0730	.1	600	610	7.3	27.5	--	5.9	77	--	--
09	0728	3.2	600	608	7.3	27.6	--	5.5	72	--	--
09	0729	19	600	606	7.3	27.6	--	5.4	71	--	--
09	0728	38	600	608	7.3	27.6	--	5.4	71	--	--
23	1649	.2	600	621	7.3	23.8	--	6.4	77	--	--
23	1649	3.7	600	621	7.3	23.8	--	6.4	76	--	--
23	1655	15	600	625	7.3	23.8	--	6.5	78	--	--
23	1650	30	600	628	7.3	23.8	--	6.4	78	--	--
October											
08	1035	.1	600	544	7.5	19.5	--	8.1	89	--	--
08	1036	3.0	600	543	7.4	19.4	--	8.0	88	--	--
08	1036	18	600	542	7.5	19.3	--	8.0	88	--	--
08	1037	37	600	542	7.5	19.3	--	7.8	85	--	--
26	1442	.1	600	444	7.5	17.2	--	8.1	86	--	--
26	1443	2.9	600	440	7.4	16.7	--	8.1	85	--	--
26	1442	19	600	445	7.4	16.6	--	8.0	84	--	--
26	1442	38	600	449	7.4	16.6	--	8.0	84	--	--

Table 27. *Water-quality data for station 391146081440501, Ohio River at river mile 197.9, May to October 1993*

[ft = feet; µS/cm = microsiemens per centimeter; °C = degrees Celsius; mg/L = milligrams per liter; µg/L = micrograms per liter; -- = data not collected]

Date	Time	Sampling depth (ft)	Sample location (ft from left bank)	Specific conductance (µS/cm)	pH (standard units)	Temperature, water (°C)	Transparency (Secchi disk) (ft)	Dissolved oxygen (mg/L)	Dissolved oxygen (percent saturation)	Chlorophyll *a* (µg/L)	Chlorophyll *b* (µg/L)
May											
24	1804	3.6	500	427	8.4	19.6	--	9.9	110	--	--
24	1807	18	500	426	8.4	19.6	--	9.9	110	--	--
24	1805	27	500	427	8.4	19.6	--	9.9	110	--	--
June											
10	1645	.3	500	531	7.3	22.9	--	7.3	86	--	--
10	1646	3.3	500	531	7.3	22.9	--	7.3	86	--	--
10	1647	14	500	534	7.3	22.9	--	7.2	85	--	--
10	1646	30	500	532	7.3	22.8	--	7.2	85	--	--
July											
07	1950	.1	500	516	7.8	27.9	--	8.3	108	--	--
07	1950	3.3	500	515	7.7	27.9	--	8.0	104	--	--
07	1952	20	500	518	7.5	26.8	--	6.2	79	--	--
07	1951	42	500	516	7.5	26.7	--	6.2	78	--	--
29	1759	.3	500	564	8.0	29.4	--	8.1	108	--	--
29	1759	4.0	500	564	8.0	29.4	--	7.7	102	--	--
29	1801	9.8	500	564	8.0	29.4	--	7.6	102	--	--
29	1800	30	500	566	7.7	29.1	--	6.7	89	--	--
August											
12	1533	.1	500	616	7.6	28.5	--	7.1	93	--	--
12	1534	2.6	500	622	7.4	27.8	--	6.6	85	--	--
12	1534	14	500	623	7.4	27.5	--	5.9	76	--	--
12	1535	29	500	613	7.4	27.5	--	5.8	75	--	--
25	1511	.4	500	625	8.0	30.7	--	8.3	112	--	--
25	1512	3.1	500	624	7.9	29.8	--	8.0	106	--	--
25	1513	15	500	626	7.5	28.4	--	5.9	76	--	--
25	1512	30	500	625	7.5	28.4	--	5.6	73	--	--
September											
09	0735	.2	500	607	7.3	27.4	--	5.9	77	--	--
09	0735	3.1	500	609	7.3	27.5	--	5.6	73	--	--
09	0737	21	500	605	7.3	27.5	--	5.5	71	--	--
09	0736	42	500	610	7.3	27.5	--	5.5	72	--	--
23	1714	.3	500	631	7.3	23.7	--	6.2	75	--	--
23	1715	2.9	500	630	7.3	23.8	--	6.2	74	--	--
23	1717	14	500	627	7.3	23.8	--	6.2	74	--	--
23	1716	28	500	631	7.3	23.8	--	6.2	74	--	--
October											
08	1042	.1	500	545	7.5	19.6	--	8.0	88	--	--
08	1043	3.3	500	544	7.5	19.3	--	8.0	87	--	--
08	1043	15	500	547	7.5	19.3	--	8.0	88	--	--
08	1044	30	500	548	7.5	19.3	--	8.0	87	--	--
26	1449	.3	500	442	7.5	17.0	--	8.2	86	--	--
26	1450	3.0	500	443	7.5	16.7	--	8.1	85	--	--
26	1449	15	500	444	7.5	16.6	--	8.1	84	--	--
26	1449	29	500	447	7.4	16.6	--	8.0	84	--	--

Table 28. *Water-quality data for station 391049081451601, Ohio River at river mile 199.5, May to October 1993*

[ft = feet; µS/cm = microsiemens per centimeter; °C = degrees Celsius; mg/L = milligrams per liter; µg/L = micrograms per liter; -- = data not collected]

Date	Time	Sampling depth (ft)	Sample location (ft from left bank)	Specific conductance (µS/cm)	pH (standard units)	Temperature, water (°C)	Transparency (Secchi disk) (ft)	Dissolved oxygen (mg/L)	Dissolved oxygen (percent saturation)	Chlorophyll *a* (µg/L)	Chlorophyll *b* (µg/L)
May											
24	1824	3.9	500	424	8.5	19.6	--	10.0	112	--	--
24	1826	25	500	430	8.4	19.6	--	9.9	111	--	--
24	1825	46	500	553	8.2	18.0	--	9.7	105	--	--
June											
10	1704	.3	500	529	7.3	22.9	--	7.1	84	--	--
10	1704	3.3	500	528	7.3	22.9	--	7.1	84	--	--
10	1706	23	500	537	7.3	22.9	--	7.1	84	--	--
10	1705	45	500	539	7.3	22.8	--	7.1	83	--	--
July											
29	1745	.3	500	557	7.7	29.2	--	7.0	93	--	--
29	1746	3.0	500	555	7.6	29.3	--	6.9	92	--	--
29	1747	22	500	554	7.5	29.0	--	6.1	81	--	--
29	1746	44	500	561	7.5	28.5	--	6.1	81	--	--
August											
12	1540	.1	500	615	7.6	28.2	--	7.2	94	--	--
12	1541	3.0	500	619	7.6	28.1	--	7.1	93	--	--
12	1541	25	500	612	7.4	27.4	--	5.8	75	--	--
12	1542	49	500	667	7.4	26.7	--	5.6	72	--	--
25	1519	.4	500	612	7.5	28.5	--	6.1	80	--	--
25	1520	3.1	500	612	7.5	28.4	--	5.9	77	--	--
25	1521	23	500	612	7.4	28.4	--	5.8	75	--	--
25	1520	45	500	648	7.4	28.0	--	4.9	63	--	--
September											
09	0742	.1	500	611	7.3	27.5	--	5.6	73	--	--
09	0743	2.9	500	608	7.3	27.5	--	5.6	72	--	--
09	0750	24	500	611	7.3	27.5	--	5.5	72	--	--
09	0744	48	500	699	7.4	26.6	--	5.2	66	--	--
23	1727	.3	500	640	7.3	23.8	--	6.2	75	--	--
23	1728	3.1	500	639	7.3	23.8	--	6.2	74	--	--
23	1730	17	500	636	7.3	23.8	--	6.1	73	--	--
23	1729	35	500	635	7.3	23.8	--	6.1	73	--	--
October											
08	1053	.1	500	542	7.5	19.6	--	7.5	83	--	--
08	1054	3.1	500	542	7.5	19.5	--	8.0	88	--	--
08	1054	23	500	544	7.5	19.4	--	8.0	88	--	--
08	1055	44	500	603	7.6	18.7	--	7.8	84	--	--
26	1455	.1	500	441	7.5	17.2	--	8.2	87	--	--
26	1456	2.8	500	438	7.5	16.8	--	8.1	85	--	--
26	1455	20	500	442	7.4	16.6	--	8.0	83	--	--
26	1455	38	500	440	7.4	16.5	--	8.0	83	--	--

Table 29. *Water-quality data for station 390803081443501, Ohio River at river mile 202.8, May to October 1993*

[ft = feet; µS/cm = microsiemens per centimeter; °C = degrees Celsius; mg/L = milligrams per liter; µg/L = micrograms per liter; -- = data not collected]

Date	Time	Sampling depth (ft)	Sample location (ft from left bank)	Specific conductance (µS/cm)	pH (standard units)	Temperature, water (°C)	Transparency (Secchi disk) (ft)	Dissolved oxygen (mg/L)	Dissolved oxygen (percent saturation)	Chlorophyll *a* (µg/L)	Chlorophyll *b* (µg/L)
May											
24	1833	3.9	600	424	8.5	19.6	--	10.2	113	--	--
24	1834	17	600	425	8.4	19.6	--	10.1	113	--	--
24	1833	33	600	431	8.3	19.5	--	9.8	108	--	--
June											
10	1715	.3	600	531	7.3	23.0	--	7.1	84	--	--
10	1716	3.3	600	529	7.3	22.9	--	7.0	83	--	--
10	1718	17	600	526	7.3	22.8	--	7.0	82	--	--
10	1716	38	600	536	7.3	22.8	--	6.9	82	--	--
July											
07	1851	.1	600	556	8.3	28.6	--	10.3	135	--	--
07	1851	3.1	600	557	8.0	28.2	--	9.4	123	--	--
07	1852	5.2	600	557	7.8	27.8	--	8.7	113	--	--
07	1853	9.8	600	550	7.6	26.9	--	6.9	88	--	--
07	1853	15	600	553	7.5	26.8	--	6.5	83	--	--
07	1854	20	600	552	7.5	26.8	--	6.4	82	--	--
07	1855	25	600	557	7.5	26.7	--	6.3	81	--	--
07	1856	30	600	557	7.5	26.7	--	6.3	80	--	--
07	1856	35	600	559	7.5	26.7	--	6.2	79	--	--
07	1857	37	600	562	7.5	26.6	--	6.2	78	--	--
29	1733	.5	600	546	8.1	29.5	--	8.8	118	--	--
29	1734	3.4	600	546	8.1	29.5	--	8.6	115	--	--
29	1734	5.2	600	546	8.1	29.6	--	8.7	116	--	--
29	1735	10	600	545	8.0	29.5	--	8.2	110	--	--
29	1735	15	600	546	7.5	28.9	--	6.5	86	--	--
29	1736	20	600	543	7.5	28.9	--	6.4	85	--	--
29	1737	25	600	539	7.4	28.8	--	6.1	80	--	--
29	1737	30	600	536	7.4	28.6	--	6.1	81	--	--
29	1738	35	600	538	7.4	28.7	--	6.1	81	--	--
29	1738	38	600	537	7.4	28.6	--	6.0	80	--	--
August											
12	1549	.1	600	624	7.5	27.8	--	6.6	86	--	--
12	1550	2.6	600	624	7.5	27.8	--	6.4	82	--	--
12	1550	4.9	600	625	7.4	27.6	--	6.2	80	--	--
12	1551	9.5	600	628	7.4	27.6	--	6.1	79	--	--
12	1551	15	600	619	7.4	27.2	--	5.6	72	--	--
12	1552	20	600	631	7.4	27.2	--	5.6	71	--	--
12	1553	25	600	621	7.4	27.2	--	5.6	71	--	--
12	1553	30	600	618	7.4	27.2	--	5.6	71	--	--
12	1554	35	600	627	7.3	27.2	--	5.6	72	--	--
12	1554	39	600	618	7.3	27.2	--	5.5	71	--	--
25	1527	.4	600	602	8.0	29.3	--	7.8	103	--	--
25	1528	3.3	600	607	7.6	28.6	--	6.5	85	--	--
25	1528	5.1	600	607	7.5	28.5	--	6.2	81	--	--
25	1529	9.9	600	607	7.5	28.4	--	6.0	78	--	--
25	1529	16	600	607	7.5	28.4	--	6.2	80	--	--
25	1530	20	600	606	7.5	28.3	--	6.0	78	--	--
25	1530	25	600	607	7.4	28.2	--	5.8	75	--	--
25	1531	31	600	608	7.4	28.1	--	5.4	70	--	--
25	1531	35	600	606	7.4	28.1	--	5.3	69	--	--
25	1532	40	600	607	7.4	28.1	--	5.3	69	--	--
25	1532	41	600	606	7.4	28.1	--	5.3	68	--	--

Table 29. *Water-quality data for station 390803081443501, Ohio River at river mile 202.8, May to October 1993--Continued*

Date	Time	Sampling depth (ft)	Sample location (ft from left bank)	Specific conductance (µS/cm)	pH (standard units)	Temperature, water (°C)	Transparency (Secchi disk) (ft)	Dissolved oxygen (mg/L)	Dissolved oxygen (percent saturation)	Chlorophyll *a* (µg/L)	Chlorophyll *b* (µg/L)
September											
09	0752	0.1	600	620	7.3	27.5	--	5.7	74	--	--
09	0753	3.2	600	622	7.3	27.5	--	6.1	79	--	--
09	0753	5.0	600	620	7.3	27.5	--	5.8	75	--	--
09	0754	10	600	623	7.3	27.5	--	5.7	73	--	--
09	0755	15	600	618	7.3	27.5	--	5.7	73	--	--
09	0755	20	600	618	7.3	27.5	--	5.6	73	--	--
09	0756	25	600	623	7.3	27.5	--	5.6	72	--	--
09	0756	30	600	625	7.3	27.5	--	5.6	72	--	--
09	0757	36	600	619	7.3	27.5	--	5.5	72	--	--
23	1740	.3	600	643	7.3	23.9	--	6.3	75	--	--
23	1740	2.9	600	643	7.3	23.9	--	6.2	75	--	--
23	1741	4.8	600	643	7.3	23.9	--	6.2	74	--	--
23	1742	10	600	645	7.3	23.9	--	6.2	74	--	--
23	1742	15	600	643	7.3	23.9	--	6.1	74	--	--
23	1743	20	600	645	7.3	23.9	--	6.2	74	--	--
23	1743	25	600	643	7.3	23.9	--	6.2	74	--	--
23	1744	30	600	644	7.3	23.9	--	6.2	74	--	--
23	1745	35	600	644	7.3	23.9	--	6.2	74	--	--
23	1745	38	600	644	7.3	23.9	--	6.1	74	--	--
October											
08	1111	.2	600	541	7.5	19.5	--	8.0	88	--	--
08	1112	3.5	600	541	7.5	19.3	--	8.0	87	--	--
08	1112	5.1	600	541	7.5	19.3	--	8.0	87	--	--
08	1113	9.9	600	541	7.5	19.3	--	8.0	87	--	--
08	1113	15	600	541	7.5	19.3	--	8.0	87	--	--
08	1114	20	600	541	7.5	19.3	--	8.0	87	--	--
08	1114	25	600	542	7.5	19.3	--	7.9	86	--	--
08	1115	30	600	542	7.5	19.3	--	7.9	86	--	--
08	1115	35	600	542	7.5	19.3	--	7.9	86	--	--
26	1508	.1	600	442	7.5	17.1	--	8.2	86	--	--
26	1511	2.9	600	441	7.5	16.9	--	8.1	85	--	--
26	1511	4.7	600	442	7.4	16.6	--	8.0	83	--	--
26	1511	9.8	600	439	7.4	16.5	--	7.9	83	--	--
26	1510	15	600	442	7.4	16.5	--	8.0	83	--	--
26	1510	20	600	437	7.4	16.5	--	7.9	82	--	--
26	1510	25	600	445	7.4	16.5	--	7.9	82	--	--
26	1509	30	600	438	7.4	16.5	--	7.9	82	--	--
26	1509	35	600	438	7.4	16.5	--	7.9	82	--	--
26	1508	39	600	437	7.4	16.5	--	7.9	82	--	--

Table 30. *Water-quality data for station 390721081443001, Ohio River at river mile 203.6, May to October 1993*

[ft = feet; µS/cm = microsiemens per centimeter; °C = degrees Celsius; mg/L = milligrams per liter; µg/L = micrograms per liter; -- = data not collected]

Date	Time	Sampling depth (ft)	Sample location (ft from left bank)	Specific conductance (µS/cm)	pH (standard units)	Temperature, water (°C)	Transparency (Secchi disk) (ft)	Dissolved oxygen (mg/L)	Dissolved oxygen (percent saturation)	Chlorophyll *a* (µg/L)	Chlorophyll *b* (µg/L)
May											
24	1911	3.9	200	418	8.7	19.8	--	10.8	121	--	--
24	1915	6.9	200	423	8.5	19.7	--	10.5	118	--	--
24	1914	10	200	417	8.5	19.7	--	10.4	116	--	--
24	1914	17	200	424	8.4	19.6	--	10.1	113	--	--
24	1914	23	200	429	8.2	19.5	--	9.6	107	--	--
24	1913	30	200	422	8.3	19.5	--	9.6	107	--	--
24	1913	36	200	428	8.3	19.5	--	9.6	107	--	--
24	1912	38	200	431	8.3	19.5	--	9.6	107	--	--
24	1856	3.6	700	422	8.4	19.6	--	10.4	116	--	--
24	1856	6.6	700	425	8.5	19.6	--	10.4	116	--	--
24	1855	9.5	700	428	8.4	19.6	--	10.3	114	--	--
24	1854	16	700	423	8.4	19.6	--	10.1	113	9.0	0.7
24	1854	23	700	425	8.2	19.5	--	9.7	108	--	--
24	1853	30	700	428	8.3	19.5	--	9.7	108	--	--
24	1852	36	700	435	8.3	19.5	--	9.7	108	--	--
24	1851	42	700	435	8.3	19.5	--	9.7	108	--	--
24	1848	3.6	900	423	8.3	19.6	--	10.0	112	--	--
24	1848	6.6	900	427	8.3	19.6	--	10.0	112	--	--
24	1847	10	900	427	8.3	19.6	--	10.0	112	--	--
24	1846	17	900	427	8.3	19.5	--	10.0	111	--	--
24	1846	23	900	423	8.3	19.5	--	9.9	110	--	--
24	1845	30	900	422	8.3	19.5	--	9.9	110	--	--
24	1844	36	900	428	8.3	19.5	--	9.8	109	--	--
24	1843	43	900	423	8.3	19.5	--	9.7	108	--	--
24	1842	49	900	423	8.3	19.5	--	9.7	108	--	--
June											
10	1723	.3	200	523	7.3	23.9	--	6.8	82	--	--
10	1723	3.3	200	520	7.2	23.4	--	6.6	79	--	--
10	1722	5.9	200	519	7.2	23.3	--	6.5	77	--	--
10	1722	9.5	200	527	7.2	23.2	--	6.7	80	--	--
10	1721	11	200	522	7.2	23.2	--	6.7	80	--	--
10	1735	.7	500	528	7.3	23.0	--	7.0	83	--	--
10	1735	3.3	500	527	7.3	23.0	--	7.0	83	--	--
10	1734	6.6	500	528	7.3	22.9	--	7.0	82	--	--
10	1734	11	500	529	7.3	22.9	--	7.0	83	--	--
10	1732	17	500	531	7.3	22.9	--	6.9	82	--	--
10	1731	22	500	526	7.3	22.9	--	7.0	82	--	--
10	1731	30	500	525	7.3	22.9	--	7.0	82	--	--
10	1725	37	500	530	7.3	22.8	--	7.0	83	--	--
10	1740	.1	700	529	7.3	22.9	--	7.0	83	--	--
10	1743	3.0	700	529	7.3	22.9	--	7.0	83	--	--
10	1748	6.9	700	528	7.3	23.0	--	7.1	84	--	--
10	1749	9.5	700	531	7.3	22.9	--	7.0	83	--	--
10	1746	16	700	531	7.3	22.9	--	7.0	82	--	--
10	1746	23	700	528	7.3	22.8	--	7.0	82	--	--
10	1745	29	700	527	7.3	22.8	--	7.0	82	--	--
10	1745	36	700	527	7.3	22.8	--	7.0	82	--	--
10	1744	39	700	532	7.3	22.8	--	7.0	82	--	--

Table 30. *Water-quality data for station 390721081443001, Ohio River at river mile 203.6, May to October 1993--Continued*

Date	Time	Sampling depth (ft)	Sample location (ft from left bank)	Specific conductance (µS/cm)	pH (standard units)	Temperature, water (°C)	Transparency (Secchi disk) (ft)	Dissolved oxygen (mg/L)	Dissolved oxygen (percent saturation)	Chlorophyll *a* (µg/L)	Chlorophyll *b* (µg/L)
June											
10	1756	0.3	900	530	7.3	23.0	--	6.9	82	--	--
10	1755	3.0	900	530	7.3	23.0	--	6.9	82	--	--
10	1755	6.3	900	529	7.3	23.0	--	6.9	82	--	--
10	1754	10	900	532	7.3	23.0	--	6.9	82	--	--
10	1754	16	900	528	7.3	23.0	--	6.9	82	--	--
10	1753	23	900	535	7.3	22.9	--	6.9	82	--	--
10	1753	29	900	532	7.3	23.0	--	6.9	82	--	--
10	1752	37	900	527	7.3	22.9	--	6.9	82	--	--
10	1751	41	900	527	7.3	22.9	--	6.9	82	--	--
July											
07	1935	.1	200	562	8.3	28.6	--	10.3	136	--	--
07	1936	2.9	200	564	8.1	28.3	--	9.5	124	--	--
07	1936	5.0	200	562	8.0	28.2	--	9.2	120	--	--
07	1937	9.8	200	557	7.8	27.5	--	8.1	104	--	--
07	1938	15	200	567	7.6	26.8	--	6.5	83	--	--
07	1938	20	200	565	7.5	26.7	--	6.4	81	--	--
07	1939	25	200	567	7.5	26.7	--	6.3	80	--	--
07	1939	30	200	565	7.5	26.7	--	6.3	79	--	--
07	1939	35	200	562	7.5	26.6	--	6.2	79	--	--
07	1940	38	200	567	7.5	26.7	--	6.2	79	--	--
07	1922	.1	500	561	8.3	28.5	--	10.4	136	12.0	2.1
07	1923	2.9	500	561	8.2	28.5	--	10.3	136	--	--
07	1924	4.9	500	562	8.0	28.2	--	9.2	120	--	--
07	1924	9.8	500	562	7.7	27.3	--	8.1	104	--	--
07	1925	15	500	559	7.6	26.8	--	6.5	82	--	--
07	1928	20	500	559	7.5	26.7	--	6.4	82	--	--
07	1928	25	500	561	7.5	26.7	--	6.4	81	--	--
07	1927	30	500	562	7.5	26.7	--	6.3	80	--	--
07	1926	35	500	569	7.5	26.7	--	6.3	80	--	--
07	1926	38	500	563	7.5	26.7	--	6.2	78	--	--
07	1914	.1	700	562	8.2	28.3	--	9.9	130	--	--
07	1914	2.9	700	560	8.1	28.2	--	9.7	127	--	--
07	1915	4.9	700	558	8.0	28.1	--	9.4	122	--	--
07	1915	9.9	700	558	7.7	27.1	--	7.2	92	--	--
07	1916	15	700	561	7.6	27.0	--	7.0	90	--	--
07	1916	20	700	556	7.6	26.9	--	6.7	85	--	--
07	1917	25	700	554	7.5	26.7	--	6.4	82	--	--
07	1917	30	700	555	7.5	26.7	--	6.4	81	--	--
07	1918	35	700	570	7.5	26.7	--	6.3	81	--	--
07	1918	40	700	571	7.5	26.7	--	6.3	80	--	--
07	1919	41	700	565	7.5	26.7	--	6.3	80	--	--

Table 30. *Water-quality data for station 390721081443001, Ohio River at river mile 203.6, May to October 1993--Continued*

Date	Time	Sampling depth (ft)	Sample location (ft from left bank)	Specific conductance (µS/cm)	pH (standard units)	Temperature, water (°C)	Transparency (Secchi disk) (ft)	Dissolved oxygen (mg/L)	Dissolved oxygen (percent saturation)	Chlorophyll *a* (µg/L)	Chlorophyll *b* (µg/L)
June											
07	1904	0.1	900	562	7.7	27.3	--	7.3	94	--	--
07	1905	2.8	900	562	7.7	27.1	--	7.0	90	--	--
07	1905	5.1	900	560	7.6	26.8	--	6.6	84	--	--
07	1906	9.9	900	561	7.6	26.8	--	6.6	84	--	--
07	1907	15	900	562	7.6	26.8	--	6.6	84	--	--
07	1907	20	900	559	7.6	26.8	--	6.5	83	--	--
07	1908	25	900	560	7.5	26.8	--	6.5	83	--	--
07	1909	30	900	559	7.5	26.7	--	6.5	82	--	--
07	1909	35	900	564	7.5	26.7	--	6.5	82	--	--
07	1910	40	900	559	7.5	26.7	--	6.5	82	--	--
07	1910	45	900	563	7.5	26.7	--	6.5	82	--	--
07	1911	50	900	560	7.5	26.7	--	6.5	82	--	--
July											
16	1108	0.1	500	496	7.6	29.2	4.5	5.9	78	--	--
16	1107	2.8	500	495	7.5	29.1	--	5.8	77	--	--
16	1107	4.7	500	493	7.5	28.8	--	5.6	74	--	--
16	1106	10	500	495	7.5	28.8	--	5.6	73	--	--
16	1106	15	500	493	7.5	28.8	--	5.6	73	--	--
16	1105	20	500	492	7.5	28.8	--	5.5	73	--	--
16	1104	25	500	495	7.5	28.8	--	5.5	73	--	--
16	1104	30	500	503	7.5	28.8	--	5.6	73	--	--
16	1103	35	500	495	7.5	28.8	--	5.5	73	--	--
16	1102	40	500	497	7.5	28.7	--	5.5	72	1.6	0.1
16	1100	42	500	488	7.5	28.7	--	5.5	72	--	--
29	1725	.4	200	537	8.0	29.4	--	8.8	118	--	--
29	1724	2.8	200	536	8.0	29.5	--	8.8	118	--	--
29	1724	4.8	200	537	8.0	29.5	--	8.7	117	--	--
29	1723	10	200	537	7.9	29.4	--	8.4	112	--	--
29	1723	15	200	537	7.8	29.3	--	7.9	105	--	--
29	1722	20	200	536	7.4	28.7	--	6.4	85	--	--
29	1721	25	200	536	7.4	28.7	--	6.4	84	--	--
29	1721	30	200	533	7.4	28.7	--	6.3	83	--	--
29	1720	35	200	537	7.4	28.7	--	6.3	83	--	--
29	1719	38	200	534	7.4	28.7	--	6.3	83	--	--
29	1711	.3	500	537	7.9	29.4	--	8.5	114	--	--
29	1710	2.8	500	538	7.9	29.4	--	8.5	114	--	--
29	1710	4.9	500	537	7.9	29.4	--	7.9	106	--	--
29	1710	9.6	500	539	7.9	29.4	--	8.1	108	--	--
29	1709	15	500	542	7.6	29.1	--	7.3	97	--	--
29	1708	20	500	532	7.5	28.8	--	6.7	88	--	--
29	1708	26	500	540	7.4	28.8	--	6.5	86	--	--
29	1707	30	500	538	7.4	28.7	--	6.4	84	--	--
29	1707	35	500	537	7.4	28.7	--	6.3	83	--	--
29	1705	38	500	536	7.4	28.7	--	6.2	82	--	--

Table 30. *Water-quality data for station 390721081443001, Ohio River at river mile 203.6, May to October 1993--Continued*

Date	Time	Sampling depth (ft)	Sample location (ft from left bank)	Specific conductance (µS/cm)	pH (standard units)	Temperature, water (°C)	Transparency (Secchi disk) (ft)	Dissolved oxygen (mg/L)	Dissolved oxygen (percent saturation)	Chlorophyll *a* (µg/L)	Chlorophyll *b* (µg/L)
August											
12	1608	0.1	700	624	7.5	27.5	--	6.5	83	--	--
12	1609	3.0	700	624	7.4	27.3	--	6.0	77	--	--
12	1609	4.6	700	623	7.4	27.3	--	5.9	76	--	--
12	1610	9.9	700	619	7.4	27.3	--	6.0	77	--	--
12	1610	15	700	630	7.4	27.3	--	5.9	76	--	--
12	1611	20	700	622	7.4	27.3	--	5.9	76	--	--
12	1612	25	700	633	7.4	27.2	--	5.8	74	--	--
12	1612	30	700	625	7.4	27.2	--	5.8	75	--	--
12	1613	35	700	631	7.4	27.2	--	5.7	72	--	--
12	1613	40	700	630	7.4	27.2	--	5.6	72	--	--
12	1614	41	700	626	7.4	27.2	--	5.6	72	--	--
12	1600	.1	900	624	7.4	27.3	--	6.0	76	--	--
12	1601	3.0	900	627	7.4	27.3	--	5.8	75	--	--
12	1601	4.6	900	623	7.4	27.2	--	5.7	73	--	--
12	1602	9.9	900	628	7.4	27.2	--	5.7	73	--	--
12	1602	15	900	620	7.4	27.3	--	5.7	73	--	--
12	1603	20	900	628	7.4	27.3	--	5.7	73	--	--
12	1604	25	900	626	7.4	27.3	--	5.7	73	--	--
12	1604	30	900	622	7.4	27.3	--	5.7	73	--	--
12	1605	35	900	615	7.4	27.3	--	5.7	73	--	--
12	1605	40	900	631	7.4	27.3	--	5.7	73	--	--
12	1606	45	900	632	7.4	27.2	--	5.7	73	--	--
12	1607	49	900	620	7.4	27.3	--	5.8	74	--	--
25	1601	.4	200	606	8.2	30.6	--	7.8	105	--	--
25	1601	3.0	200	602	8.3	29.1	--	9.0	118	--	--
25	1602	5.1	200	602	8.2	28.9	--	8.9	117	--	--
25	1602	10	200	609	7.8	28.5	--	7.3	95	--	--
25	1603	15	200	607	7.6	28.3	--	6.2	80	--	--
25	1603	20	200	609	7.5	28.2	--	5.7	73	--	--
25	1604	25	200	609	7.5	28.1	--	5.1	66	--	--
25	1604	30	200	611	7.4	28.1	--	5.0	64	--	--
25	1604	35	200	603	7.4	28.1	--	4.9	64	--	--
25	1605	38	200	618	7.4	28.0	--	5.3	68	--	--
25	1558	.3	500	603	8.3	29.5	--	8.0	106	--	--
25	1558	3.2	500	604	8.0	29.0	--	7.8	102	--	--
25	1557	4.9	500	607	7.9	28.8	--	7.8	102	--	--
25	1556	9.9	500	605	7.6	28.6	--	6.5	85	--	--
25	1556	15	500	602	7.5	28.5	--	6.4	83	--	--
25	1555	20	500	605	7.5	28.4	--	6.4	83	--	--
25	1554	25	500	604	7.5	28.2	--	5.9	77	--	--
25	1554	30	500	606	7.4	28.1	--	5.6	73	--	--
25	1553	35	500	615	7.4	28.0	--	5.4	70	1.2	0.2
25	1552	38	500	607	7.4	28.1	--	5.4	70	--	--

Table 30. *Water-quality data for station 390721081443001, Ohio River at river mile 203.6, May to October 1993--Continued*

Date	Time	Sampling depth (ft)	Sample location (ft from left bank)	Specific conductance (µS/cm)	pH (standard units)	Temperature, water (°C)	Transparency (Secchi disk) (ft)	Dissolved oxygen (mg/L)	Dissolved oxygen (percent saturation)	Chlorophyll *a* (µg/L)	Chlorophyll *b* (µg/L)
August											
25	1545	0.3	700	606	8.0	29.3	--	8.1	107	--	--
25	1545	3.1	700	607	7.8	28.8	--	6.9	91	--	--
25	1546	4.9	700	604	7.6	28.6	--	6.7	87	--	--
25	1546	10	700	608	7.6	28.5	--	6.4	84	--	--
25	1547	15	700	612	7.5	28.3	--	5.7	75	--	--
25	1547	20	700	600	7.5	28.2	--	5.4	70	--	--
25	1547	25	700	603	7.4	28.2	--	5.2	68	--	--
25	1548	30	700	620	7.4	28.1	--	5.3	69	--	--
25	1549	35	700	613	7.4	28.1	--	5.1	66	--	--
25	1549	40	700	601	7.4	28.1	--	5.0	65	--	--
25	1550	41	700	621	7.4	28.1	--	4.9	63	--	--
25	1537	.1	900	605	8.0	29.7	--	7.9	105	--	--
25	1538	3.1	900	604	7.7	28.8	--	7.2	94	--	--
25	1538	5.0	900	607	7.6	28.4	--	6.4	83	--	--
25	1539	10	900	607	7.5	28.2	--	5.9	77	--	--
25	1539	15	900	608	7.5	28.2	--	5.8	75	--	--
25	1539	20	900	608	7.4	28.2	--	5.2	67	--	--
25	1540	25	900	608	7.4	28.1	--	5.1	66	--	--
25	1540	30	900	608	7.4	28.2	--	5.1	66	--	--
25	1540	35	900	607	7.4	28.1	--	5.2	68	--	--
25	1541	40	900	609	7.4	28.1	--	5.1	66	--	--
25	1541	45	900	609	7.4	28.1	--	5.1	66	--	--
25	1542	49	900	611	7.4	28.1	--	4.8	62	--	--
September											
09	0900	.1	200	623	7.3	27.4	--	5.9	76	--	--
09	0901	2.9	200	622	7.3	27.4	--	5.6	72	--	--
09	0902	5.3	200	624	7.3	27.4	--	5.6	72	--	--
09	0902	10	200	624	7.3	27.4	--	5.6	72	--	--
09	0903	15	200	624	7.3	27.4	--	5.5	72	--	--
09	0904	20	200	624	7.3	27.4	--	5.5	71	--	--
09	0905	25	200	624	7.3	27.4	--	5.5	71	--	--
09	0905	30	200	621	7.3	27.4	--	5.5	71	--	--
09	0906	35	200	621	7.3	27.4	--	5.5	71	--	--
09	0906	38	200	620	7.3	27.4	--	5.5	71	--	--
09	0837	.2	500	623	7.3	27.4	--	5.7	73	2.2	0.2
09	0838	2.9	500	623	7.3	27.4	--	5.6	72	--	--
09	0839	5.0	500	623	7.3	27.4	--	5.6	72	--	--
09	0840	10	500	624	7.3	27.4	--	5.5	72	--	--
09	0841	15	500	624	7.3	27.4	--	5.5	72	3.1	.3
09	0842	20	500	624	7.3	27.4	--	5.5	71	--	--
09	0842	25	500	624	7.3	27.4	--	5.5	71	--	--
09	0843	30	500	624	7.3	27.4	--	5.5	71	--	--
09	0843	35	500	622	7.3	27.3	--	5.4	70	2.0	.1
09	0844	38	500	624	7.3	27.3	--	5.4	70	--	--

Table 30. *Water-quality data for station 390721081443001, Ohio River at river mile 203.6, May to October 1993--Continued*

Date	Time	Sampling depth (ft)	Sample location (ft from left bank)	Specific conductance (µS/cm)	pH (standard units)	Temperature, water (°C)	Transparency (Secchi disk) (ft)	Dissolved oxygen (mg/L)	Dissolved oxygen (percent saturation)	Chlorophyll *a* (µg/L)	Chlorophyll *b* (µg/L)
July											
29	1656	0.4	700	536	7.9	29.4	--	7.9	105	--	--
29	1656	3.1	700	535	7.9	29.4	--	7.7	103	--	--
29	1657	5.2	700	540	7.9	29.4	--	8.1	108	--	--
29	1658	9.9	700	541	7.8	29.4	--	7.4	99	--	--
29	1658	15	700	541	7.6	29.0	--	6.6	88	--	--
29	1659	20	700	543	7.5	28.9	--	6.4	84	--	--
29	1659	24	700	533	7.5	28.8	--	6.7	88	--	--
29	1700	30	700	535	7.4	28.8	--	6.6	87	--	--
29	1701	35	700	533	7.4	28.7	--	6.3	84	--	--
29	1701	40	700	538	7.4	28.7	--	6.2	82	--	--
29	1702	41	700	534	7.4	28.6	--	6.1	80	--	--
29	1645	.5	900	537	7.7	29.3	--	7.5	100	--	--
29	1646	3.6	900	537	7.7	29.3	--	7.5	100	--	--
29	1647	5.2	900	537	7.6	29.0	--	6.8	90	--	--
29	1647	10	900	538	7.5	29.0	--	6.7	89	--	--
29	1648	15	900	538	7.5	28.9	--	6.4	85	--	--
29	1648	20	900	537	7.5	28.9	--	6.4	85	--	--
29	1649	25	900	542	7.5	28.9	--	6.3	84	--	--
29	1649	30	900	539	7.5	28.9	--	6.8	90	--	--
29	1650	35	900	533	7.5	28.8	--	6.7	88	--	--
29	1651	40	900	531	7.5	28.8	--	6.6	87	--	--
29	1651	44	900	537	7.4	28.7	--	6.2	81	--	--
29	1652	49	900	549	7.4	28.8	--	6.1	80	--	--
August											
12	1625	.1	200	625	7.6	28.1	--	6.6	86	--	--
12	1626	2.6	200	628	7.5	27.8	--	6.2	81	--	--
12	1626	4.6	200	625	7.5	27.8	--	6.1	79	--	--
12	1627	9.5	200	622	7.4	27.5	--	5.7	74	--	--
12	1627	15	200	627	7.4	27.2	--	5.6	71	--	--
12	1628	20	200	618	7.4	27.2	--	5.6	71	--	--
12	1629	25	200	617	7.4	27.2	--	5.6	71	--	--
12	1629	30	200	616	7.4	27.2	--	5.5	71	--	--
12	1630	35	200	630	7.4	27.2	--	5.6	71	--	--
12	1630	38	200	622	7.4	27.2	--	5.8	74	--	--
12	1617	.1	500	624	7.6	28.1	--	6.7	87	--	--
12	1618	3.0	500	628	7.5	27.9	--	6.3	82	--	--
12	1618	4.6	500	628	7.5	27.7	--	6.1	79	--	--
12	1619	9.5	500	628	7.4	27.5	--	5.9	76	--	--
12	1619	15	500	623	7.4	27.3	--	5.8	74	--	--
12	1620	20	500	626	7.4	27.2	--	5.6	72	--	--
12	1621	25	500	617	7.4	27.2	--	5.6	72	--	--
12	1621	30	500	623	7.4	27.2	--	5.7	72	--	--
12	1622	35	500	622	7.4	27.2	--	5.6	72	--	--
12	1622	38	500	630	7.4	27.2	--	5.7	72	--	--

Table 30. *Water-quality data for station 390721081443001, Ohio River at river mile 203.6, May to October 1993--Continued*

Date	Time	Sampling depth (ft)	Sample location (ft from left bank)	Specific conductance (µS/cm)	pH (standard units)	Temperature, water (°C)	Transparency (Secchi disk) (ft)	Dissolved oxygen (mg/L)	Dissolved oxygen (percent saturation)	Chlorophyll *a* (µg/L)	Chlorophyll *b* (µg/L)
September											
09	0818	0.2	700	619	7.3	27.4	--	5.7	74	--	--
09	0819	2.9	700	622	7.3	27.4	--	5.8	75	--	--
09	0819	5.2	700	619	7.3	27.5	--	5.6	72	--	--
09	0820	10	700	618	7.3	27.5	--	5.5	72	--	--
09	0821	15	700	621	7.3	27.5	--	5.5	72	--	--
09	0821	20	700	628	7.3	27.5	--	5.5	72	--	--
09	0822	25	700	628	7.3	27.5	--	5.5	72	--	--
09	0823	30	700	622	7.3	27.5	--	5.5	72	--	--
09	0824	35	700	621	7.3	27.5	--	5.5	71	--	--
09	0824	40	700	621	7.3	27.5	--	5.5	71	--	--
09	0806	.1	900	626	7.3	27.5	--	5.9	76	--	--
09	0808	2.9	900	626	7.3	27.5	--	5.6	72	--	--
09	0809	5.1	900	623	7.3	27.5	--	5.6	72	--	--
09	0809	9.9	900	624	7.3	27.5	--	5.6	72	--	--
09	0810	15	900	627	7.3	27.5	--	5.5	72	--	--
09	0811	20	900	624	7.3	27.5	--	5.5	72	--	--
09	0811	25	900	625	7.3	27.5	--	5.5	72	--	--
09	0812	30	900	627	7.3	27.5	--	5.5	72	--	--
09	0812	35	900	623	7.3	27.5	--	5.5	72	--	--
09	0813	40	900	610	7.3	27.5	--	5.5	72	--	--
09	0814	45	900	625	7.3	27.5	--	5.5	72	--	--
09	0814	49	900	630	7.3	27.5	--	5.5	72	--	--
23	1831	.2	200	639	7.3	23.9	--	6.4	77	--	--
23	1832	3.0	200	634	7.3	23.9	--	6.4	77	--	--
23	1832	4.8	200	636	7.3	23.9	--	6.4	77	--	--
23	1833	9.9	200	635	7.3	23.9	--	6.4	77	--	--
23	1834	15	200	638	7.3	23.9	--	6.4	77	--	--
23	1834	20	200	640	7.3	23.9	--	6.4	77	--	--
23	1835	25	200	637	7.3	23.9	--	6.4	77	--	--
23	1835	30	200	636	7.3	23.8	--	6.2	75	--	--
23	1836	35	200	639	7.2	23.8	--	5.8	70	--	--
23	1837	38	200	637	7.2	23.8	--	5.8	70	--	--
23	1827	.1	500	641	7.3	23.9	--	6.2	74	--	--
23	1826	2.9	500	637	7.3	23.9	--	6.2	74	--	--
23	1825	5.0	500	643	7.3	23.9	--	6.2	75	--	--
23	1824	10	500	637	7.3	23.9	--	6.2	74	--	--
23	1823	15	500	638	7.3	23.9	--	6.1	73	2.1	0.2
23	1822	20	500	645	7.2	23.9	--	5.9	71	--	--
23	1821	25	500	644	7.2	23.9	--	5.9	71	--	--
23	1821	30	500	642	7.2	23.9	--	5.9	70	--	--
23	1820	35	500	637	7.2	23.9	--	5.8	70	--	--
23	1819	38	500	634	7.2	23.8	--	5.8	70	--	--

Table 30. *Water-quality data for station 390721081443001, Ohio River at river mile 203.6, May to October 1993--Continued*

Date	Time	Sampling depth (ft)	Sample location (ft from left bank)	Specific conductance (µS/cm)	pH (standard units)	Temperature, water (°C)	Transparency (Secchi disk) (ft)	Dissolved oxygen (mg/L)	Dissolved oxygen (percent saturation)	Chlorophyll *a* (µg/L)	Chlorophyll *b* (µg/L)
September											
23	1807	0.3	700	637	7.3	23.9	--	6.1	73	--	--
23	1807	2.9	700	637	7.3	23.9	--	6.1	73	--	--
23	1809	5.0	700	638	7.2	23.9	--	6.1	73	--	--
23	1809	9.9	700	638	7.2	23.9	--	6.1	73	--	--
23	1809	15	700	640	7.2	23.9	--	6.0	72	--	--
23	1810	20	700	640	7.2	23.9	--	5.9	71	--	--
23	1811	25	700	640	7.2	23.9	--	5.9	71	--	--
23	1811	30	700	640	7.2	23.9	--	5.9	71	--	--
23	1811	35	700	640	7.2	23.9	--	5.9	71	--	--
23	1811	40	700	640	7.2	23.9	--	5.9	71	--	--
23	1813	41	700	640	7.2	23.9	--	5.9	71	--	--
23	1753	.3	900	638	7.2	23.8	--	6.1	73	--	--
23	1754	3.0	900	638	7.2	23.9	--	6.0	72	--	--
23	1755	5.1	900	638	7.2	23.9	--	5.9	71	--	--
23	1755	10	900	638	7.2	23.9	--	6.0	72	--	--
23	1756	15	900	638	7.2	23.9	--	5.9	71	--	--
23	1758	20	900	639	7.2	23.9	--	5.9	71	--	--
23	1758	25	900	639	7.2	23.9	--	5.9	71	--	--
23	1759	30	900	639	7.2	23.9	--	5.9	71	--	--
23	1800	35	900	639	7.2	23.9	--	5.9	71	--	--
23	1800	40	900	639	7.2	23.9	--	5.9	71	--	--
23	1801	45	900	639	7.2	23.9	--	5.9	71	--	--
23	1801	49	900	639	7.2	23.9	--	5.9	71	--	--
October											
08	1157	.2	200	542	7.6	19.6	--	8.0	88	--	--
08	1158	3.2	200	541	7.6	19.4	--	8.0	87	--	--
08	1158	5.1	200	540	7.5	19.3	--	7.9	86	--	--
08	1159	10	200	540	7.5	19.2	--	7.8	85	--	--
08	1159	15	200	534	7.5	19.2	--	7.8	85	--	--
08	1200	20	200	533	7.5	19.2	--	7.8	85	--	--
08	1200	25	200	533	7.5	19.2	--	7.8	85	--	--
08	1201	30	200	531	7.5	19.2	--	7.8	85	--	--
08	1201	35	200	540	7.5	19.2	--	7.7	84	--	--
08	1202	38	200	538	7.5	19.2	--	7.5	81	--	--
08	1148	.1	500	541	7.6	19.5	--	8.0	88	--	--
08	1149	3.2	500	538	7.6	19.3	--	8.0	88	--	--
08	1149	5.2	500	539	7.5	19.3	--	7.9	86	--	--
08	1150	10	500	538	7.5	19.2	--	7.8	85	--	--
08	1150	15	500	542	7.5	19.2	--	7.8	85	--	--
08	1151	20	500	545	7.5	19.2	--	7.8	85	--	--
08	1151	25	500	544	7.5	19.2	--	7.8	85	--	--
08	1152	30	500	536	7.5	19.2	--	7.8	85	--	--
08	1152	35	500	545	7.5	19.2	--	7.7	84	--	--
08	1153	38	500	541	7.5	19.2	--	7.8	85	--	--

Table 30. *Water-quality data for station 390721081443001, Ohio River at river mile 203.6, May to October 1993--Continued*

Date	Time	Sampling depth (ft)	Sample location (ft from left bank)	Specific conductance (µS/cm)	pH (standard units)	Temperature, water (°C)	Transparency (Secchi disk) (ft)	Dissolved oxygen (mg/L)	Dissolved oxygen (percent saturation)	Chlorophyll *a* (µg/L)	Chlorophyll *b* (µg/L)
October											
08	1139	0.2	700	539	7.5	19.6	--	8.0	88	--	--
08	1140	3.3	700	541	7.5	19.3	--	7.9	87	--	--
08	1140	5.0	700	542	7.5	19.3	--	7.9	86	--	--
08	1141	10	700	541	7.5	19.2	--	7.8	85	--	--
08	1141	15	700	539	7.5	19.2	--	7.8	85	--	--
08	1142	20	700	544	7.5	19.2	--	7.8	85	--	--
08	1142	25	700	538	7.5	19.2	--	7.8	85	--	--
08	1143	30	700	539	7.5	19.2	--	7.8	85	--	--
08	1143	35	700	539	7.5	19.2	--	7.8	85	--	--
08	1144	40	700	538	7.5	19.2	--	7.8	85	--	--
08	1145	42	700	537	7.5	19.2	--	7.7	84	--	--
08	1121	.1	900	537	7.6	19.3	--	7.9	87	--	--
08	1122	5.1	900	538	7.5	19.2	--	7.8	85	--	--
08	1122	9.8	900	534	7.5	19.2	--	7.8	85	--	--
08	1123	15	900	538	7.5	19.2	--	7.8	85	--	--
08	1123	20	900	536	7.5	19.2	--	7.8	85	--	--
08	1124	25	900	550	7.5	19.2	--	7.8	85	--	--
08	1124	30	900	537	7.6	19.2	--	7.8	85	--	--
08	1125	35	900	553	7.5	19.2	--	7.8	85	--	--
08	1125	40	900	534	7.5	19.2	--	7.8	85	--	--
08	1126	45	900	550	7.5	19.2	--	7.8	85	--	--
08	1126	49	900	541	7.5	19.2	--	7.8	85	--	--
26	1550	.2	200	440	7.5	17.2	--	8.1	86	--	--
26	1550	2.9	200	440	7.5	16.9	--	8.1	85	--	--
26	1550	4.7	200	441	7.5	16.8	--	8.0	84	--	--
26	1551	10	200	439	7.4	16.5	--	7.9	82	--	--
26	1551	15	200	442	7.4	16.5	--	7.9	82	--	--
26	1552	20	200	442	7.4	16.5	--	7.9	82	--	--
26	1553	25	200	438	7.4	16.5	--	7.9	82	--	--
26	1554	30	200	441	7.4	16.5	--	7.9	82	--	--
26	1555	35	200	441	7.4	16.5	--	7.9	82	--	--
26	1556	36	200	434	7.4	16.5	--	7.9	82	--	--
26	1540	.5	500	441	7.5	17.1	--	8.0	84	--	--
26	1547	5.0	500	438	7.4	16.5	--	7.9	82	--	--
26	1547	9.9	500	442	7.4	16.5	--	7.9	82	--	--
26	1547	15	500	435	7.4	16.5	--	7.9	82	--	--
26	1546	20	500	444	7.4	16.5	--	7.9	82	--	--
26	1545	25	500	437	7.4	16.5	--	7.9	82	--	--
26	1543	30	500	448	7.4	16.3	--	7.9	82	--	--
26	1542	35	500	442	7.4	16.5	--	7.9	82	--	--
26	1541	37	500	448	7.4	16.5	--	7.9	82	--	--

Table 30. *Water-quality data for station 390721081443001, Ohio River at river mile 203.6, May to October 1993--Continued*

Date	Time	Sampling depth (ft)	Sample location (ft from left bank)	Specific conductance (µS/cm)	pH (standard units)	Temperature, water (°C)	Transparency (Secchi disk) (ft)	Dissolved oxygen (mg/L)	Dissolved oxygen (percent saturation)	Chlorophyll *a* (µg/L)	Chlorophyll *b* (µg/L)
October											
26	1527	0.4	700	442	7.5	17.0	--	8.1	85	--	--
26	1532	3.1	700	442	7.4	16.6	--	8.0	83	--	--
26	1532	5.2	700	439	7.5	16.7	--	8.0	83	--	--
26	1531	9.9	700	438	7.4	16.5	--	7.9	82	--	--
26	1531	15	700	443	7.4	16.5	--	7.9	82	--	--
26	1530	20	700	447	7.4	16.5	--	7.9	82	--	--
26	1530	25	700	446	7.4	16.5	--	7.9	82	--	--
26	1529	30	700	443	7.4	16.5	--	7.9	82	--	--
26	1529	35	700	440	7.4	16.5	--	7.9	82	--	--
26	1528	40	700	436	7.4	16.5	--	7.9	82	--	--
26	1527	45	700	433	7.4	16.5	--	7.9	82	--	--
26	1518	.2	900	442	7.4	16.6	--	7.9	82	--	--
26	1526	3.3	900	444	7.4	16.5	--	7.9	82	--	--
26	1526	5.1	900	443	7.4	16.5	--	7.9	82	--	--
26	1525	10	900	442	7.4	16.6	--	7.9	82	--	--
26	1525	15	900	444	7.4	16.5	--	7.9	82	--	--
26	1524	20	900	444	7.4	16.5	--	7.9	82	--	--
26	1523	25	900	447	7.4	16.5	--	7.9	82	--	--
26	1523	30	900	446	7.4	16.5	--	7.9	82	--	--
26	1522	35	900	442	7.4	16.5	--	7.9	82	--	--
26	1521	40	900	448	7.4	16.5	--	7.9	82	--	--
26	1519	45	900	436	7.4	16.5	--	7.9	82	--	--
26	1519	49	900	446	7.4	16.5	--	7.9	82	--	--

Table 31. *Daily maximum, minimum, and mean specific conductance at station 392145081185601, from the Willow Island Dam (upstream) continuous-recording water-quality monitor, May to October 1993*

[---, value not determined]

Day	Specific conductance, in microsiemens per centimeter at 25 degrees Celsius								
	May			June			July		
	Maximum	Minimum	Mean	Maximum	Minimum	Mean	Maximum	Minimum	Mean
1	---	---	---	438	428	432	457	443	449
2	---	---	---	444	435	440	471	454	465
3	---	---	---	462	442	453	469	458	464
4	---	---	---	472	452	461	463	456	458
5	---	---	---	473	468	470	478	463	473
6	---	---	---	471	453	460	489	476	483
7	---	---	---	478	454	465	491	482	488
8	---	---	---	483	477	481	488	469	477
9	---	---	---	530	483	512	470	463	466
10	---	---	---	510	503	505	473	464	468
11	318	308	312	506	483	490	483	470	476
12	327	318	323	483	476	479	490	482	487
13	331	325	329	479	475	477	489	478	483
14	343	329	335	475	444	463	496	478	487
15	348	343	344	445	417	429	500	494	498
16	349	340	343	417	412	415	506	499	502
17	357	346	350	414	410	412	503	498	501
18	352	345	349	414	411	412	501	498	500
19	351	344	347	419	413	415	515	498	502
20	357	350	354	421	417	418	526	515	520
21	365	355	359	424	420	421	527	521	524
22	376	363	369	437	421	427	532	523	525
23	380	374	376	454	437	446	531	525	527
24	383	376	378	464	453	456	533	528	530
25	393	369	385	459	449	452	545	532	539
26	402	393	396	453	447	449	548	545	547
27	411	402	406	448	440	444	551	546	548
28	419	411	414	445	435	439	551	547	549
29	426	416	419	436	432	434	559	549	554
30	443	424	434	446	434	438	549	536	540
31	443	428	439	---	---	---	541	535	537
Month	---	---	---	530	410	450	559	443	502

Table 31. *Daily maximum, minimum, and mean specific conductance at station 392145081185601, from the Willow Island Dam (upstream) continuous-recording water-quality monitor, May to October 1993--Continued*

Day	Specific conductance, in microsiemens per centimeter at 25 degrees Celsius								
	August			September			October		
	Maximum	Minimum	Mean	Maximum	Minimum	Mean	Maximum	Minimum	Mean
1	569	538	552	624	618	621	486	478	481
2	590	569	583	622	609	615	508	486	497
3	597	587	592	646	611	620	517	508	514
4	596	586	590	652	613	628	526	516	522
5	591	580	587	620	575	603	524	504	515
6	584	580	582	580	541	554	504	494	500
7	591	584	587	549	542	545	500	486	491
8	593	584	589	555	548	552	495	488	492
9	587	581	584	557	553	555	495	484	489
10	591	582	585	572	556	565	485	476	479
11	598	583	587	583	572	578	491	477	483
12	601	593	597	587	582	585	508	490	499
13	595	586	590	596	585	590	546	506	521
14	589	585	586	603	593	597	569	546	560
15	592	586	588	605	602	604	581	568	574
16	593	589	591	603	587	596	580	554	572
17	595	589	591	588	584	586	554	519	534
18	609	591	599	---	---	---	519	505	513
19	616	608	613	---	---	---	505	487	497
20	624	615	620	578	571	574	487	470	476
21	622	612	618	588	577	584	474	459	465
22	612	590	599	600	588	591	473	454	468
23	591	581	585	---	---	---	454	416	434
24	592	581	584	604	599	602	418	411	414
25	589	576	585	601	588	592	420	411	417
26	597	587	593	601	590	597	411	406	408
27	615	597	603	610	599	605	---	---	---
28	616	608	612	605	579	597	---	---	---
29	611	602	605	579	517	550	---	---	---
30	608	600	604	517	484	493	---	---	---
31	618	605	612	---	---	---	---	---	---
Month	624	538	593	---	---	---	---	---	---

Table 32. *Daily maximum, minimum, and median pH at station 392145081185601, from the Willow Island Dam (upstream) continuous-recording water-quality monitor, May to October 1993*

[---, value not determined]

Day	pH, in standard units								
	May			June			July		
	Maximum	Minimum	Mean	Maximum	Minimum	Mean	Maximum	Minimum	Mean
1	---	---	---	7.5	7.4	7.5	7.3	7.1	7.1
2	---	---	---	7.5	7.4	7.4	7.3	7.2	7.2
3	---	---	---	7.4	7.3	7.4	7.4	7.2	7.2
4	---	---	---	7.3	7.2	7.2	7.3	7.1	7.2
5	---	---	---	7.2	7.2	7.2	7.3	7.2	7.2
6	---	---	---	7.3	7.2	7.2	7.5	7.2	7.2
7	---	---	---	7.3	7.2	7.2	7.7	7.3	7.4
8	---	---	---	7.3	7.2	7.2	7.7	7.2	7.4
9	---	---	---	7.3	7.2	7.2	7.4	7.2	7.3
10	---	---	---	7.3	7.3	7.3	7.6	7.2	7.3
11	8.2	7.7	7.9	7.3	7.2	7.2	7.4	7.2	7.3
12	8.1	7.8	7.9	7.3	7.2	7.2	7.3	7.1	7.2
13	8.1	7.7	7.8	7.3	7.2	7.2	7.2	7.1	7.1
14	7.9	7.6	7.7	7.2	7.1	7.2	7.3	7.1	7.2
15	7.7	7.5	7.6	7.2	7.1	7.1	7.4	7.1	7.2
16	7.9	7.6	7.7	7.1	7.1	7.1	7.6	7.2	7.3
17	8.2	7.6	7.7	7.1	7.1	7.1	7.4	7.2	7.3
18	8.3	7.6	7.7	7.2	7.1	7.1	7.5	7.2	7.3
19	7.9	7.6	7.7	7.2	7.1	7.1	7.4	7.2	7.3
20	8.0	7.6	7.7	7.2	7.1	7.1	7.3	7.2	7.3
21	7.9	7.6	7.7	7.2	7.1	7.1	7.5	7.3	7.4
22	8.2	7.6	7.7	7.2	7.1	7.1	7.5	7.2	7.3
23	7.8	7.7	7.7	7.3	7.1	7.1	7.4	7.2	7.3
24	7.8	7.6	7.7	7.4	7.1	7.1	7.4	7.2	7.3
25	8.1	7.7	7.8	7.4	7.1	7.1	7.5	7.3	7.4
26	8.1	7.7	7.9	7.4	7.1	7.2	7.5	7.3	7.3
27	8.1	7.7	7.9	7.4	7.1	7.2	7.4	7.3	7.3
28	7.9	7.6	7.7	7.4	7.2	7.2	7.5	7.3	7.4
29	8.0	7.6	7.6	7.2	7.1	7.2	7.5	7.3	7.4
30	8.0	7.5	7.6	7.2	7.1	7.1	7.5	7.4	7.4
31	7.8	7.5	7.5	---	---	---	7.4	7.4	7.4
Month	---	---	---	7.5	7.1	---	7.7	7.1	---

Table 32. *Daily maximum, minimum, and median pH at station 392145081185601, from the Willow Island Dam (upstream) continuous-recording water-quality monitor, May to October 1993--Continued*

Day	pH, in standard units								
	August			September			October		
	Maximum	Minimum	Mean	Maximum	Minimum	Mean	Maximum	Minimum	Mean
1	7.5	7.4	7.4	7.5	7.4	7.4	7.3	7.3	7.3
2	7.6	7.4	7.5	7.5	7.4	7.4	7.3	7.3	7.3
3	7.6	7.5	7.5	7.4	7.4	7.4	7.3	7.3	7.3
4	7.6	7.5	7.6	7.4	7.3	7.4	7.3	7.2	7.3
5	7.7	7.5	7.6	7.4	7.4	7.4	7.3	7.2	7.2
6	7.6	7.5	7.6	7.4	7.4	7.4	7.3	7.2	7.2
7	7.6	7.5	7.5	7.5	7.4	7.4	7.3	7.2	7.2
8	7.8	7.5	7.5	7.6	7.4	7.4	7.3	7.2	7.2
9	7.8	7.4	7.5	7.4	7.2	7.4	7.2	7.2	7.2
10	7.7	7.6	7.6	7.4	7.3	7.3	7.2	7.2	7.2
11	7.7	7.4	7.6	7.5	7.3	7.4	7.3	7.2	7.2
12	7.4	7.4	7.4	7.5	7.4	7.4	7.3	7.2	7.3
13	7.5	7.4	7.4	7.6	7.4	7.4	7.3	7.3	7.3
14	7.6	7.3	7.4	7.7	7.4	7.5	7.3	7.3	7.3
15	7.7	7.4	7.4	7.5	7.4	7.4	7.4	7.3	7.3
16	7.6	7.4	7.4	7.5	7.4	7.4	7.3	7.3	7.3
17	7.6	7.4	7.4	7.5	7.4	7.4	7.3	7.3	7.3
18	7.6	7.3	7.4	---	---	---	7.3	7.3	7.3
19	7.6	7.4	7.4	---	---	---	7.3	7.2	7.2
20	7.5	7.4	7.4	7.4	7.4	7.4	7.2	7.2	7.2
21	7.6	7.4	7.5	7.4	7.4	7.4	7.2	7.2	7.2
22	7.7	7.4	7.5	7.4	7.2	7.4	7.2	7.2	7.2
23	7.6	7.4	7.5	---	---	---	7.2	7.2	7.2
24	7.7	7.4	7.5	7.4	7.2	7.2	7.3	7.2	7.2
25	7.6	7.4	7.5	7.3	7.2	7.2	7.4	7.3	7.4
26	7.7	7.4	7.6	7.3	7.2	7.2	7.5	7.4	7.4
27	7.5	7.4	7.4	7.2	7.2	7.2	---	---	---
28	7.4	7.3	7.4	7.2	7.2	7.2	---	---	---
29	7.4	7.3	7.4	7.3	7.2	7.2	---	---	---
30	7.6	7.3	7.4	7.3	7.2	7.3	---	---	---
31	7.6	7.4	7.4	---	---	---	---	---	---
Month	7.8	7.3	---	---	---	---	---	---	---

Table 33. *Daily maximum, minimum, and mean water temperature at station 392145081185601, from the Willow Island Dam (upstream) continuous-recording water-quality monitor, May to October 1993*

[---, value not determined]

Day	Water temperature, in degrees Celsius								
	May			June			July		
	Maximum	Minimum	Mean	Maximum	Minimum	Mean	Maximum	Minimum	Mean
1	---	---	---	21.6	21.3	21.5	27.5	26.5	26.7
2	---	---	---	21.4	21.2	21.3	27.4	26.4	26.6
3	---	---	---	21.8	21.0	21.4	27.5	26.5	26.8
4	---	---	---	21.7	21.2	21.3	28.0	26.9	27.2
5	---	---	---	21.2	21.0	21.1	28.3	27.3	27.7
6	---	---	---	21.3	20.8	20.9	28.5	27.7	28.0
7	---	---	---	21.6	21.0	21.2	28.7	28.1	28.3
8	---	---	---	22.4	21.4	21.9	29.0	28.2	28.5
9	---	---	---	22.6	22.2	22.4	29.4	28.3	28.8
10	---	---	---	23.3	22.2	22.6	29.7	28.6	29.1
11	19.8	18.5	18.9	23.4	22.4	22.8	29.3	28.7	29.0
12	19.8	19.2	19.4	23.2	22.4	22.7	30.1	29.0	29.3
13	19.9	19.3	19.5	24.0	22.7	23.1	30.3	28.8	29.2
14	20.4	19.3	19.7	24.2	22.8	23.2	29.6	29.0	29.2
15	20.1	19.4	19.7	23.8	23.0	23.3	30.1	29.6	29.7
16	20.3	20.0	20.2	24.1	23.3	23.7	30.3	29.1	29.5
17	20.5	19.9	20.2	24.5	23.4	23.9	30.0	28.8	29.1
18	20.7	20.3	20.4	24.8	24.0	24.3	29.7	29.0	29.3
19	20.4	20.2	20.3	25.7	24.5	24.8	29.7	29.1	29.3
20	20.6	19.8	20.0	25.8	24.9	25.2	29.4	29.1	29.2
21	20.3	19.6	19.9	25.9	25.2	25.5	29.8	29.1	29.5
22	20.3	19.5	19.8	26.5	25.1	25.5	30.4	28.9	29.3
23	19.9	19.7	19.8	27.1	25.4	25.9	29.8	28.8	29.1
24	20.2	19.7	20.0	27.6	25.6	26.1	29.6	28.8	29.0
25	20.9	19.9	20.2	26.9	25.8	26.3	29.1	28.5	28.7
26	21.5	20.2	20.5	26.9	26.2	26.4	29.5	28.8	29.0
27	21.2	20.4	20.7	26.8	26.2	26.4	29.4	28.8	29.1
28	21.3	20.8	20.9	27.3	26.5	26.8	30.2	29.0	29.4
29	22.2	21.0	21.4	27.2	26.4	26.7	29.8	29.2	29.4
30	22.1	21.1	21.5	27.5	26.4	26.7	29.4	28.7	28.9
31	22.0	21.5	21.7	---	---	---	28.8	28.4	28.6
Month	---	---	---	27.6	20.8	23.8	30.4	26.4	28.7

Table 33. *Daily maximum, minimum, and mean water temperature at station 392145081185601, from the Willow Island Dam (upstream) continuous-recording water-quality monitor, May to October 1993--Continued*

[---, value not determined]

Day	Water temperature, in degrees Celsius								
	August			September			October		
	Maximum	Minimum	Mean	Maximum	Minimum	Mean	Maximum	Minimum	Mean
1	28.8	28.5	28.6	29.7	29.3	29.4	21.1	20.8	20.9
2	28.7	28.5	28.6	29.6	29.0	29.3	20.9	20.3	20.7
3	28.6	28.3	28.5	29.5	29.0	29.2	20.3	19.7	19.9
4	28.7	28.3	28.5	29.2	28.5	28.7	19.7	19.3	19.5
5	28.5	28.3	28.4	29.1	28.4	28.7	20.2	19.0	19.5
6	28.3	27.8	28.0	29.0	28.7	28.8	19.9	18.9	19.2
7	27.8	27.5	27.6	28.7	28.4	28.6	19.8	19.0	19.3
8	28.0	27.3	27.6	28.5	27.9	28.2	19.4	18.9	19.1
9	27.8	27.1	27.4	27.9	27.2	27.5	19.3	19.1	19.1
10	27.9	27.2	27.5	27.2	26.7	27.0	19.1	18.6	18.8
11	28.0	27.3	27.5	26.7	26.2	26.4	19.2	18.3	18.6
12	27.8	27.3	27.5	26.2	25.7	25.9	18.4	17.9	18.2
13	28.5	27.4	27.9	26.2	25.6	25.8	17.9	17.5	17.6
14	28.5	27.6	27.9	26.4	25.9	26.0	17.5	17.1	17.2
15	29.3	27.7	28.1	26.1	25.6	25.9	17.6	17.0	17.2
16	28.8	28.0	28.3	25.6	25.1	25.3	17.4	17.2	17.3
17	29.3	28.1	28.3	25.2	24.9	25.0	17.4	17.3	17.4
18	29.1	28.1	28.4	---	---	---	18.3	17.3	17.5
19	29.5	28.3	28.6	---	---	---	17.6	17.4	17.4
20	29.0	28.3	28.6	24.5	24.2	24.3	17.4	17.2	17.3
21	29.0	28.4	28.6	24.2	24.0	24.1	17.5	17.3	17.4
22	28.7	28.0	28.3	24.0	23.8	23.9	17.4	17.0	17.2
23	29.2	28.2	28.4	---	---	---	17.5	16.8	17.1
24	28.9	28.3	28.5	23.8	23.5	23.6	17.0	16.7	16.9
25	29.0	28.1	28.5	23.6	23.1	23.2	17.8	16.5	16.9
26	29.5	28.5	28.9	23.2	23.0	23.1	16.8	16.2	16.4
27	29.8	28.8	29.1	23.3	22.5	23.0	---	---	---
28	29.6	28.9	29.2	22.5	21.8	22.0	---	---	---
29	29.5	29.0	29.2	21.8	21.3	21.6	---	---	---
30	30.2	28.9	29.3	21.3	21.0	21.2	---	---	---
31	29.9	29.1	29.4	---	---	---	---	---	---
Month	30.2	27.1	28.4	---	---	---	---	---	---

Table 34. *Daily maximum, minimum, and mean dissolved oxygen concentrations at station 392145081185601, from the Willow Island Dam (upstream) continuous-recording water-quality monitor, May to October 1993*

[---, value not determined]

Day	Dissolved oxygen concentration, in milligrams per liter								
	May			June			July		
	Maximum	Minimum	Mean	Maximum	Minimum	Mean	Maximum	Minimum	Mean
1	---	---	---	8.9	8.5	8.7	7.6	6.6	6.9
2	---	---	---	8.8	8.4	8.6	7.6	6.8	7.2
3	---	---	---	8.4	8.0	8.2	8.5	6.7	7.2
4	---	---	---	8.1	7.5	7.8	8.0	6.4	6.9
5	---	---	---	7.6	7.4	7.5	7.6	6.5	6.9
6	---	---	---	7.5	7.3	7.4	7.9	6.6	7.0
7	---	---	---	7.5	7.3	7.4	8.0	6.4	7.1
8	---	---	---	7.4	6.8	7.2	8.0	6.6	7.3
9	---	---	---	7.8	6.8	7.2	7.4	6.6	6.9
10	---	---	---	7.9	7.5	7.8	7.9	6.5	6.9
11	10.7	9.8	10.2	7.5	7.0	7.2	7.0	6.6	6.8
12	10.3	9.9	10.1	7.6	7.3	7.4	7.2	6.2	6.5
13	10.4	9.8	10.0	8.0	7.4	7.6	6.9	6.2	6.5
14	10.1	9.5	9.7	7.7	7.2	7.5	7.3	6.1	6.6
15	9.7	9.2	9.5	7.4	7.1	7.2	7.8	6.7	7.1
16	9.9	9.3	9.5	7.5	7.1	7.3	8.7	6.8	7.3
17	10.5	9.2	9.6	7.5	7.1	7.3	7.9	6.6	7.2
18	10.6	9.2	9.5	7.9	7.2	7.5	8.2	6.9	7.4
19	9.8	9.0	9.4	7.9	7.3	7.5	7.6	6.8	7.2
20	10.3	9.1	9.5	7.8	7.0	7.4	7.4	6.9	7.2
21	10.0	9.3	9.6	7.5	6.9	7.2	8.7	6.9	7.6
22	10.6	9.3	9.7	8.0	6.9	7.1	8.7	6.9	7.5
23	9.9	9.7	9.8	8.1	6.8	7.2	7.7	6.6	7.0
24	9.9	9.4	9.6	8.4	6.8	7.3	7.4	6.4	6.8
25	10.9	9.7	10.2	8.7	6.9	7.6	7.9	6.9	7.2
26	10.6	10.0	10.2	8.6	7.1	7.7	7.7	6.5	7.0
27	10.3	9.5	9.9	9.0	7.4	7.8	7.0	6.4	6.7
28	9.8	9.4	9.6	8.9	7.7	8.0	7.6	6.6	6.9
29	10.1	9.2	9.5	7.7	7.1	7.4	7.4	6.7	7.0
30	10.1	9.0	9.4	7.6	6.7	7.0	7.3	6.8	7.0
31	9.6	8.7	9.0	---	---	---	7.1	6.6	6.8
Month	---	---	---	9.0	6.7	7.5	8.7	6.1	7.0

Table 34. *Daily maximum, minimum, and mean dissolved oxygen concentrations at station 392145081185601, from the Willow Island Dam (upstream) continuous-recording water-quality monitor, May to October 1993--Continued*

Day	Dissolved oxygen concentration, in milligrams per liter								
	August			September			October		
	Maximum	Minimum	Mean	Maximum	Minimum	Mean	Maximum	Minimum	Mean
1	7.3	6.8	7.0	7.4	6.8	7.0	8.0	7.9	7.9
2	7.5	6.9	7.1	7.3	6.6	6.8	8.0	7.9	8.0
3	7.6	7.1	7.2	6.9	6.5	6.7	8.3	8.0	8.2
4	7.8	7.2	7.4	6.9	6.4	6.6	8.7	8.3	8.5
5	7.9	7.2	7.5	6.5	6.1	6.2	9.1	8.6	8.8
6	7.8	7.3	7.5	6.4	6.0	6.1	9.5	8.9	9.1
7	7.5	7.1	7.3	6.7	5.9	6.2	9.4	9.0	9.2
8	8.7	7.0	7.5	7.1	5.9	6.3	9.3	9.1	9.2
9	8.6	7.4	7.7	6.2	5.8	6.0	9.2	8.9	9.0
10	8.5	7.7	8.1	6.0	5.6	5.8	9.1	8.9	9.0
11	8.1	7.1	7.8	6.6	5.6	6.0	9.3	9.0	9.2
12	7.5	7.0	7.3	6.8	6.1	6.3	9.5	9.2	9.3
13	7.5	7.0	7.2	7.1	6.0	6.4	9.5	9.4	9.4
14	7.8	6.7	7.0	7.6	6.2	6.7	9.5	9.3	9.4
15	8.2	6.7	7.2	6.8	6.3	6.6	9.6	9.3	9.4
16	7.7	6.7	7.1	7.1	6.6	6.8	9.5	9.3	9.4
17	7.6	6.6	6.8	7.0	6.7	6.8	9.3	9.3	9.3
18	7.6	6.5	6.8	---	---	---	9.4	9.2	9.3
19	8.1	6.6	7.1	---	---	---	9.2	9.0	9.1
20	8.1	6.5	6.8	6.7	6.6	6.7	9.2	9.0	9.1
21	7.7	6.8	7.1	6.7	6.5	6.6	9.2	9.2	9.2
22	8.0	6.6	7.2	7.3	6.6	6.8	9.5	9.2	9.4
23	8.1	6.9	7.3	---	---	---	9.5	9.2	9.4
24	8.3	6.9	7.3	8.0	7.0	7.3	9.5	9.2	9.4
25	7.6	6.9	7.2	7.3	7.1	7.2	10.1	9.5	9.8
26	8.2	6.9	7.5	7.6	7.2	7.4	10.6	10.1	10.2
27	7.6	6.8	7.1	7.6	7.3	7.4	---	---	---
28	7.2	6.7	6.9	7.8	7.5	7.7	---	---	---
29	7.9	6.8	7.2	7.9	7.7	7.8	---	---	---
30	8.5	7.1	7.6	7.9	7.8	7.9	---	---	---
31	8.3	7.0	7.4	---	---	---	---	---	---
Month	8.7	6.5	7.3	---	---	---	---	---	---

Table 35. *Daily maximum, minimum, and mean specific conductance at station 392125081193601, from the Willow Island Dam (downstream) continuous-recording water-quality monitor, May to October 1993*

[---, value not determined]

Day	Specific conductance, in microsiemens per centimeter at 25 degrees Celsius								
	May			June			July		
	Maximum	Minimum	Mean	Maximum	Minimum	Mean	Maximum	Minimum	Mean
1	---	---	---	425	418	420	454	443	447
2	---	---	---	433	423	428	469	454	462
3	---	---	---	450	433	443	466	462	465
4	---	---	---	458	443	448	462	457	458
5	---	---	---	462	456	459	476	460	470
6	---	---	---	462	446	454	485	476	481
7	---	---	---	464	446	452	487	481	485
8	---	---	---	471	462	469	482	467	475
9	---	---	---	522	469	501	467	461	463
10	---	---	---	512	504	507	467	461	464
11	307	299	302	509	485	493	478	466	470
12	318	307	312	486	478	481	484	476	482
13	322	317	320	480	476	478	484	478	481
14	334	321	326	477	449	467	488	478	481
15	338	330	335	449	420	434	516	487	499
16	340	334	336	422	414	418	518	515	516
17	347	340	344	415	413	414	518	517	517
18	348	343	346	414	413	413	523	517	519
19	347	342	343	417	414	416	576	516	551
20	354	347	350	422	417	419	576	576	576
21	362	354	357	426	421	423	576	576	576
22	374	362	367	436	423	428	576	526	561
23	380	372	376	455	436	445	533	526	530
24	385	377	380	459	453	456	536	532	534
25	386	382	384	460	450	454	549	535	541
26	392	384	388	453	450	452	554	545	552
27	400	392	396	450	444	447	555	552	553
28	408	400	405	446	436	441	578	552	553
29	415	407	409	437	432	434	562	550	557
30	431	414	422	443	434	437	555	541	545
31	434	421	430	---	---	---	546	539	541
Month	---	---	---	522	413	448	578	443	510

Table 35. *Daily maximum, minimum, and mean specific conductance at station 392125081193601, from the Willow Island Dam (downstream) continuous-recording water-quality monitor, May to October 1993--Continued*

Day	Specific conductance, in microsiemens per centimeter at 25 degrees Celsius								
	August			September			October		
	Maximum	Minimum	Mean	Maximum	Minimum	Mean	Maximum	Minimum	Mean
1	575	542	556	625	618	623	482	476	479
2	595	574	587	625	613	619	505	482	493
3	603	591	597	636	613	618	514	505	510
4	603	593	596	647	612	628	523	513	518
5	599	590	595	617	580	603	522	504	515
6	593	590	591	580	541	554	504	491	498
7	602	593	597	546	541	543	494	485	489
8	604	597	601	551	544	548	493	485	489
9	598	593	595	559	550	554	492	483	488
10	598	595	596	573	557	565	483	475	478
11	599	595	596	585	572	578	486	476	480
12	600	597	598	591	583	588	504	486	495
13	599	591	594	599	590	594	540	500	517
14	594	590	591	604	596	599	566	534	555
15	595	592	593	607	603	605	577	564	570
16	597	594	595	607	591	600	578	556	572
17	599	592	595	591	587	590	556	519	537
18	613	598	605	588	585	587	519	507	513
19	621	612	618	588	579	585	507	488	498
20	630	620	626	579	575	577	488	468	475
21	630	620	627	590	579	585	472	457	463
22	624	601	611	595	590	593	472	454	467
23	603	594	598	---	---	---	454	415	435
24	597	592	596	602	597	599	416	410	412
25	600	593	596	599	586	592	418	410	415
26	607	594	601	598	587	594	410	405	407
27	614	599	609	606	596	601	---	---	---
28	620	614	618	603	582	596	---	---	---
29	618	609	614	582	517	552	---	---	---
30	610	608	609	517	482	495	---	---	---
31	618	610	614	---	---	---	---	---	---
Month	630	542	600	---	---	---	---	---	---

Table 36. *Daily maximum, minimum, and median pH at station 392125081193601, from the Willow Island Dam (downstream) continuous-recording water-quality monitor, May to October 1993*

[---, value not determined]

Day	pH, in standard units								
	May			June			July		
	Maximum	Minimum	Mean	Maximum	Minimum	Mean	Maximum	Minimum	Mean
1	---	---	---	7.5	7.4	7.4	7.3	7.3	7.3
2	---	---	---	7.4	7.4	7.4	7.4	7.3	7.3
3	---	---	---	7.4	7.3	7.4	7.4	7.3	7.3
4	---	---	---	7.3	7.3	7.3	7.3	7.3	7.3
5	---	---	---	7.3	7.3	7.3	7.4	7.3	7.3
6	---	---	---	7.3	7.3	7.3	7.4	7.3	7.4
7	---	---	---	7.3	7.3	7.3	7.5	7.4	7.4
8	---	---	---	7.3	7.3	7.3	7.5	7.4	7.5
9	---	---	---	7.4	7.3	7.3	7.5	7.4	7.4
10	---	---	---	7.4	7.4	7.4	7.5	7.4	7.4
11	7.6	7.4	7.5	7.4	7.3	7.3	7.5	7.4	7.4
12	7.6	7.5	7.5	7.4	7.3	7.4	7.4	7.4	7.4
13	7.6	7.4	7.5	7.3	7.3	7.3	7.4	7.4	7.4
14	7.5	7.4	7.4	7.3	7.3	7.3	7.5	7.4	7.4
15	7.5	7.3	7.4	7.3	7.2	7.3	---	---	---
16	7.5	7.4	7.4	7.3	7.2	7.2	7.4	7.3	7.3
17	7.6	7.4	7.5	7.2	7.2	7.2	7.4	7.3	7.3
18	7.6	7.4	7.4	7.2	7.2	7.2	7.4	7.3	7.3
19	7.5	7.4	7.4	7.3	7.2	7.3	7.6	7.3	7.6
20	7.6	7.4	7.5	7.2	7.2	7.2	7.6	7.6	7.6
21	7.6	7.4	7.5	7.3	7.1	7.2	7.6	7.6	7.6
22	7.7	7.5	7.6	7.2	7.1	7.1	7.6	7.3	7.6
23	7.7	7.5	7.5	7.2	7.1	7.2	7.3	7.3	7.3
24	7.7	7.5	7.5	7.2	7.2	7.2	7.3	7.3	7.3
25	7.7	7.6	7.6	7.3	7.2	7.2	7.4	7.3	7.4
26	7.8	7.6	7.7	7.3	7.3	7.3	7.4	7.3	7.3
27	7.7	7.6	7.7	7.4	7.3	7.3	7.4	7.3	7.3
28	7.7	7.5	7.6	7.4	7.3	7.4	7.4	7.4	7.4
29	7.7	7.5	7.6	7.3	7.3	7.3	7.4	7.2	7.3
30	7.7	7.5	7.6	7.3	7.2	7.2	7.3	7.2	7.2
31	7.6	7.4	7.5	---	---	---	7.2	7.1	7.2
Month	---	---	---	7.5	7.1	---	---	---	---

Table 36. *Daily maximum, minimum, and median pH at station 392125081193601, from the Willow Island Dam (downstream) continuous-recording water-quality monitor, May to October 1993-Continued*

Day	pH, in standard units								
	August			September			October		
	Maximum	Minimum	Mean	Maximum	Minimum	Mean	Maximum	Minimum	Mean
1	7.2	7.1	7.2	7.3	7.3	7.3	7.4	7.3	7.3
2	7.3	7.2	7.2	7.3	7.2	7.3	7.4	7.3	7.4
3	7.4	7.3	7.3	7.3	7.2	7.3	7.4	7.3	7.3
4	7.4	7.3	7.3	7.3	7.2	7.2	7.3	7.2	7.3
5	7.4	7.3	7.4	7.3	7.2	7.2	7.3	7.3	7.3
6	7.4	7.3	7.4	7.3	7.2	7.2	7.3	7.1	7.3
7	7.3	7.3	7.3	7.3	7.2	7.2	7.4	7.2	7.4
8	7.4	7.3	7.3	7.3	7.2	7.3	7.4	7.4	7.4
9	7.5	7.4	7.4	7.3	7.2	7.3	7.4	7.3	7.3
10	7.4	7.4	7.4	7.4	7.3	7.3	7.4	7.3	7.3
11	7.6	7.4	7.4	7.4	7.3	7.4	7.4	7.4	7.4
12	7.5	7.5	7.5	7.5	7.4	7.4	7.5	7.4	7.4
13	7.6	7.5	7.5	7.4	7.4	7.4	7.5	7.4	7.5
14	7.5	7.4	7.5	7.5	7.4	7.5	7.5	7.4	7.4
15	7.5	7.4	7.4	7.5	7.4	7.5	7.5	7.5	7.5
16	7.5	7.4	7.4	7.5	7.4	7.5	7.5	7.5	7.5
17	7.5	7.4	7.4	7.5	7.4	7.4	7.5	7.4	7.5
18	7.5	7.4	7.4	7.4	7.4	7.4	7.5	7.4	7.4
19	7.5	7.4	7.5	7.4	7.4	7.4	7.4	7.4	7.4
20	7.4	7.3	7.4	7.4	7.4	7.4	7.4	7.4	7.4
21	7.6	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4
22	7.5	7.4	7.4	7.4	7.3	7.4	7.4	7.4	7.4
23	7.5	7.4	7.4	---	---	---	7.4	7.4	7.4
24	7.5	7.4	7.4	7.4	7.3	7.3	7.5	7.4	7.4
25	7.5	7.3	7.4	7.3	7.2	7.2	7.6	7.5	7.5
26	---	---	---	7.3	7.2	7.3	7.6	7.6	7.6
27	---	---	---	7.3	7.3	7.3	---	---	---
28	---	---	---	7.4	7.3	7.3	---	---	---
29	---	---	---	7.4	7.3	7.4	---	---	---
30	---	---	---	7.3	7.3	7.3	---	---	---
31	7.3	7.3	7.3	---	---	---	---	---	---
Month	---	---	---	---	---	---	---	---	---

Table 37. *Daily maximum, minimum, and mean water temperature at station 392125081193601, from the Willow Island Dam (downstream) continuous-recording water-quality monitor, May to October 1993*

[---, value not determined]

Day	Water temperature, in degrees Celsius								
	May			June			July		
	Maximum	Minimum	Mean	Maximum	Minimum	Mean	Maximum	Minimum	Mean
1	---	---	---	21.6	21.3	21.5	26.9	26.6	26.7
2	---	---	---	21.4	21.2	21.3	26.7	26.5	26.6
3	---	---	---	21.5	21.0	21.3	27.1	26.6	26.8
4	---	---	---	21.5	21.2	21.2	27.3	27.0	27.1
5	---	---	---	21.2	20.9	21.1	27.9	27.2	27.6
6	---	---	---	21.1	20.8	20.9	28.2	27.8	27.9
7	---	---	---	21.5	21.0	21.2	28.5	28.2	28.3
8	---	---	---	22.2	21.5	21.7	28.7	28.3	28.6
9	---	---	---	22.6	22.2	22.4	28.9	28.6	28.7
10	---	---	---	23.0	22.1	22.5	29.2	28.9	29.0
11	---	---	---	23.1	22.4	22.8	29.2	28.9	29.1
12	19.5	19.3	19.5	22.9	22.3	22.6	29.4	29.0	29.2
13	---	---	---	23.1	22.7	22.9	29.5	29.0	29.2
14	---	---	---	23.3	22.7	23.0	29.5	29.2	29.3
15	20.1	19.5	19.8	23.5	22.9	23.2	---	---	---
16	---	---	---	24.0	23.2	23.6	29.5	29.1	29.3
17	---	---	---	24.1	23.3	23.7	29.4	28.8	29.1
18	---	---	---	24.4	24.0	24.2	29.4	28.9	29.2
19	---	---	---	25.0	24.3	24.7	---	---	---
20	---	---	---	25.3	25.0	25.1	---	---	---
21	---	---	---	25.4	25.2	25.3	---	---	---
22	---	---	---	25.7	25.1	25.4	---	---	---
23	---	---	---	26.0	25.4	25.6	29.3	28.9	29.1
24	---	---	---	26.1	25.5	25.8	29.2	28.8	29.0
25	20.4	20.0	20.2	26.4	26.0	26.2	29.1	28.6	28.9
26	20.7	20.2	20.5	26.5	26.2	26.3	29.2	28.8	29.0
27	21.0	20.3	20.6	26.5	26.1	26.3	29.4	28.8	29.1
28	21.3	20.7	21.0	26.8	26.5	26.6	29.7	29.3	29.4
29	21.6	21.0	21.3	26.8	26.5	26.6	---	---	---
30	21.7	21.1	21.4	26.9	26.5	26.6	29.2	28.6	28.8
31	21.8	21.6	21.7	---	---	---	28.8	28.5	28.6
Month	---	---	---	26.9	20.8	23.7	---	---	---

Table 37. *Daily maximum, minimum, and mean water temperature at station 392125081193601, from the Willow Island Dam (downstream) continuous-recording water-quality monitor, May to October 1993--Continued*

Day	Water temperature, in degrees Celsius								
	August			September			October		
	Maximum	Minimum	Mean	Maximum	Minimum	Mean	Maximum	Minimum	Mean
1	28.7	28.4	28.6	29.4	29.1	29.3	21.1	20.7	20.9
2	28.7	28.4	28.6	29.3	29.1	29.2	20.9	20.3	20.6
3	28.7	28.2	28.5	29.3	29.0	29.1	20.3	19.6	19.9
4	28.6	28.2	28.4	29.0	28.5	28.7	19.6	19.3	19.4
5	28.5	28.1	28.3	28.9	28.4	28.6	19.4	19.0	19.2
6	28.2	27.7	27.9	28.9	28.7	28.8	---	---	---
7	27.7	27.4	27.6	28.7	28.5	28.6	19.2	18.8	19.1
8	27.7	27.2	27.5	28.5	27.9	28.1	19.2	18.9	19.0
9	27.7	27.1	27.4	27.9	27.3	27.6	19.1	18.9	19.0
10	27.6	27.3	27.4	27.3	26.8	27.1	18.9	18.4	18.6
11	---	---	---	26.8	26.3	26.5	18.5	18.1	18.3
12	---	---	---	26.3	25.8	26.0	18.2	17.8	18.1
13	---	---	---	26.1	25.7	25.9	17.8	17.3	17.5
14	---	---	---	26.3	26.0	26.1	17.3	17.0	17.1
15	---	---	---	26.1	25.7	26.0	17.2	16.9	17.0
16	28.1	28.0	28.0	25.7	25.2	25.4	17.2	17.0	17.1
17	28.2	28.0	28.1	25.2	25.0	25.1	17.3	17.2	17.3
18	---	---	---	25.1	24.9	25.0	17.5	17.2	17.3
19	28.6	28.3	28.4	24.9	24.5	24.7	17.4	17.3	17.3
20	28.6	28.3	28.4	24.5	24.2	24.4	17.3	17.2	17.2
21	---	---	---	24.3	24.2	24.3	17.3	17.2	17.3
22	28.5	27.9	28.2	24.2	23.8	24.0	17.2	16.9	17.1
23	28.6	28.0	28.2	---	---	---	17.1	16.7	16.9
24	---	---	---	23.6	23.4	23.5	17.0	16.6	16.8
25	---	---	---	23.4	23.0	23.2	16.8	16.5	16.7
26	29.0	28.6	28.8	23.1	22.9	23.0	16.5	16.1	16.3
27	---	---	---	23.1	22.5	22.9	---	---	---
28	29.3	28.9	29.1	22.5	21.7	21.9	---	---	---
29	29.4	29.0	29.2	21.7	21.3	21.6	---	---	---
30	29.4	29.1	29.3	21.3	21.0	21.1	---	---	---
31	29.6	29.2	29.3	---	---	---	---	---	---
Month	---	---	---	---	---	---	---	---	---

Table 38. *Daily maximum, minimum, and mean dissolved oxygen concentrations at station 392125081193601, from the Willow Island Dam (downstream) continuous-recording water-quality monitor, May to October 1993*

[---, value not determined]

Day	Dissolved oxygen concentration, in milligrams per liter								
	May			June			July		
	Maximum	Minimum	Mean	Maximum	Minimum	Mean	Maximum	Minimum	Mean
1	---	---	---	9.2	9.0	9.1	7.2	6.9	7.1
2	---	---	---	9.0	8.7	8.9	8.1	7.1	7.5
3	---	---	---	8.7	8.3	8.5	7.9	7.5	7.6
4	---	---	---	8.3	7.9	8.1	7.7	7.2	7.4
5	---	---	---	7.9	7.8	7.9	7.9	7.4	7.6
6	---	---	---	7.8	7.8	7.8	8.7	7.7	8.0
7	---	---	---	7.8	7.7	7.8	9.0	8.4	8.7
8	---	---	---	8.1	7.3	7.7	9.2	8.7	8.9
9	---	---	---	8.4	7.1	7.6	9.0	8.7	8.9
10	---	---	---	8.5	8.1	8.3	9.1	8.6	8.8
11	10.7	10.4	10.5	8.1	7.4	7.6	9.1	8.8	9.0
12	10.5	10.3	10.4	7.9	7.6	7.8	8.9	8.6	8.7
13	10.3	10.0	10.2	7.9	7.6	7.8	8.9	7.0	8.3
14	10.2	9.7	9.9	7.9	7.5	7.7	7.2	6.9	7.1
15	9.8	9.5	9.7	7.5	7.2	7.3	---	---	---
16	9.9	9.5	9.7	7.5	6.9	7.3	7.9	7.1	7.4
17	10.0	9.4	9.6	7.4	7.0	7.2	7.7	7.1	7.4
18	10.1	9.4	9.6	7.1	6.9	7.0	7.7	7.2	7.4
19	9.7	9.3	9.5	7.1	6.9	7.0	7.3	6.2	6.7
20	9.8	9.2	9.5	7.1	6.7	6.9	6.2	6.2	6.2
21	9.8	9.3	9.6	7.0	6.8	6.9	6.2	6.2	6.2
22	9.9	9.4	9.6	7.1	6.7	6.9	7.9	6.2	6.7
23	9.9	9.4	9.5	7.1	6.8	7.0	7.7	7.2	7.4
24	9.6	9.3	9.5	7.2	6.8	7.0	7.5	7.2	7.3
25	10.2	9.4	9.8	7.6	7.0	7.3	7.8	7.3	7.6
26	10.3	10.0	10.1	7.6	7.2	7.4	7.6	6.8	7.3
27	10.2	9.9	10.0	8.0	7.4	7.7	7.3	6.8	7.1
28	10.0	9.5	9.8	8.0	7.6	7.8	7.3	7.1	7.2
29	10.0	9.5	9.8	7.6	7.1	7.3	7.3	7.1	7.2
30	9.9	9.4	9.7	7.1	6.8	7.0	7.2	6.8	7.0
31	9.6	9.1	9.3	---	---	---	7.0	6.7	6.8
Month	---	---	---	9.2	6.7	7.6	---	---	---

Table 38. *Daily maximum, minimum, and mean dissolved oxygen concentrations at station 392125081193601, from the Willow Island Dam (downstream) continuous-recording water-quality monitor, May to October 1993--Continued*

Day	Dissolved oxygen concentration, in milligrams per liter								
	August			September			October		
	Maximum	Minimum	Mean	Maximum	Minimum	Mean	Maximum	Minimum	Mean
1	6.9	6.7	6.8	6.5	6.3	6.4	7.7	7.6	7.7
2	6.9	6.8	6.9	6.3	6.1	6.2	7.9	7.6	7.7
3	7.1	6.7	6.9	6.4	6.0	6.2	8.0	7.8	7.9
4	7.1	6.9	6.9	6.3	6.0	6.1	8.3	8.0	8.1
5	7.1	6.8	7.0	6.6	5.9	6.0	8.6	8.3	8.4
6	7.1	6.9	7.0	6.1	5.9	6.0	9.1	8.5	8.8
7	6.9	6.6	6.8	6.2	5.8	6.0	9.0	8.9	9.0
8	7.3	6.5	6.8	6.4	6.0	6.2	9.0	8.9	9.0
9	7.5	6.8	7.1	6.4	5.9	6.2	9.0	8.8	8.8
10	7.4	7.1	7.2	6.2	5.9	6.0	8.9	8.7	8.8
11	7.3	7.1	7.2	6.5	5.8	6.1	9.0	8.9	9.0
12	7.1	6.9	7.1	6.7	6.3	6.5	9.2	9.0	9.1
13	7.0	6.7	6.9	6.5	6.2	6.3	9.4	9.2	9.3
14	7.0	6.6	6.8	6.8	6.4	6.6	9.3	9.2	9.3
15	7.3	6.7	6.9	6.8	6.6	6.7	9.3	9.2	9.2
16	6.9	6.7	6.8	7.1	6.7	6.9	9.4	9.1	9.3
17	6.8	6.6	6.7	7.0	6.7	6.8	9.3	9.2	9.2
18	7.1	6.4	6.7	6.8	6.5	6.7	9.2	9.1	9.2
19	7.0	6.6	6.8	6.7	6.5	6.6	9.1	9.0	9.1
20	6.7	6.5	6.6	6.7	6.6	6.6	9.2	9.0	9.1
21	7.4	6.6	6.9	6.6	6.4	6.5	9.2	9.1	9.2
22	7.2	6.7	6.9	7.0	6.5	6.7	9.5	9.2	9.3
23	7.2	6.8	7.0	---	---	---	9.5	9.2	9.3
24	7.1	6.7	6.9	7.0	6.7	6.9	9.4	9.2	9.4
25	7.4	6.9	7.1	6.9	6.8	6.9	10.0	9.4	9.7
26	7.4	6.8	7.1	7.3	6.8	7.0	10.3	10.0	10.2
27	6.8	6.3	6.5	7.3	7.1	7.2	---	---	---
28	6.3	6.1	6.2	7.6	7.3	7.4	---	---	---
29	6.3	6.0	6.2	7.6	7.5	7.6	---	---	---
30	6.6	6.3	6.4	7.7	7.5	7.6	---	---	---
31	6.6	6.3	6.5	---	---	---	---	---	---
Month	7.5	6.0	6.8	---	---	---	---	---	---

CONVERSION FACTORS AND ABBREVIATIONS

Multiply	By	To obtain
inch (in.)	25.4	millimeter
foot (ft)	0.3048	meter
foot per mile (ft/mi)	0.1894	meter per kilometer
mile (mi)	1.609	kilometer
square mile (mi^2)	2.590	square kilometer

Temperature is given in degrees Celsius ($^{\circ}C$), which can be converted to degrees Fahrenheit ($^{\circ}F$) by use of the following equation:

$$F = 1.8(^{\circ}C) + 32$$

River Mile: A unit of length applied to the main stem of a river to denote location. Typically, the mouth of a river is designated river mile zero and river mile length is measured upstream from this point. River mile zero on the Ohio River has been designated as the river's origin in Pittsburgh, Pa., however, and river mile length is measured downstream from this point.

Abbreviated water-quality units used in this report: Chemical concentrations and water temperature are given in metric units. Chemical concentration is given in grams per liter (g/L), milligrams per liter (mg/L), or micrograms per liter (µg/L). Milligrams per liter is a unit expressing the concentration of chemical constituents in solution as weight (milligrams) of solute per unit volume (liter) of water. One thousand milligrams per liter is equivalent to one gram per liter. One thousand micrograms per liter is equivalent to one milligram per liter. For concentrations less than 7,000 mg/L, the numerical value is the same as for concentrations in parts per million.

Specific conductance of water is expressed in microsiemens per centimeter at 25 degrees Celsius (µS/cm). This unit is equivalent to micromhos per centimeter at 25 degrees Celsius (µmho/cm), formerly used by the U.S. Geological Survey.