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Water Resources Data for Oklahoma

Water Year 1975

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Prepared in cooperation with the State of Oklahoma
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CALENDAR FOR WATER YEAR 1975

1974

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Water Resources Data for Oklahoma

Water Year 1975



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16. Abstracts

Water resources data for the 1975 water year for Oklahoma consist of records of stage, discharge, and water quality of streams; stage, contents, and water quality of lakes or reservoirs. This report contains discharge records for 134 gaging stations; stage and contents for 22 lakes or reservoirs; water quality for 59 gaging stations, 2 partial-record flow stations, 3 lakes. Also included are 68 crest-stage partial-record stations and 1 low-flow partial-record station. Additional water data were collected at various sites, not part of the systematic data collection program, and are published as miscellaneous measurements. These data represent that part of the National Water Data System operated by the U.S. Geological Survey and cooperating State and Federal agencies in Oklahoma.

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Preface

This report was prepared by personnel of the Oklahoma District, Water Resources Division, U.S. Geological Survey, in cooperation with the State of Oklahoma and other agencies, and prepared under the supervision of J.H. Irwin, District Chief, and A. Clebsch, Jr., Regional Hydrologist, Central Region.

This report is one of a series issued state by state under the general direction of J.S. Cragwall, Jr., Chief Hydrologist, and G.W. Whetstone, Assistant Chief Hydrologist for Scientific Publications and Data Management.

Prepared in cooperation with

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Oklahoma Department of Highways
Oklahoma State Department of Health,
Environmental Health Service
City of Oklahoma City
Corps of Engineers, U.S. Army
Bureau of Reclamation, U.S. Department of the Interior
Environmental Protection Agency

For additional information write to
District Chief, Water Resources Division
U.S. Geological Survey
Room 621, Old Post Office Building
Oklahoma City, Okla. 73102

1976

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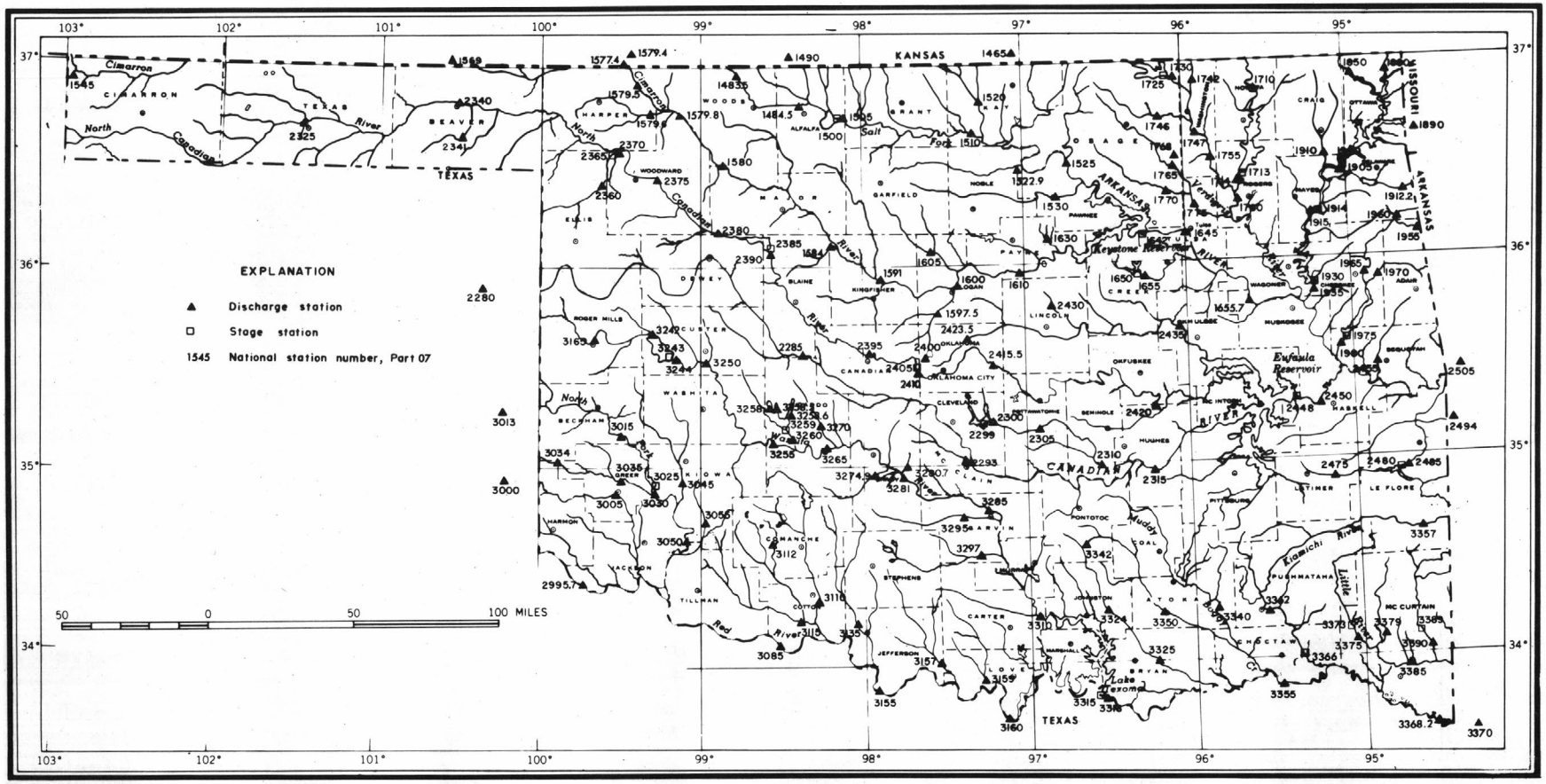

Figure 1.--Map of Oklahoma showing location of continuous-record surface-water stations, water year 1975

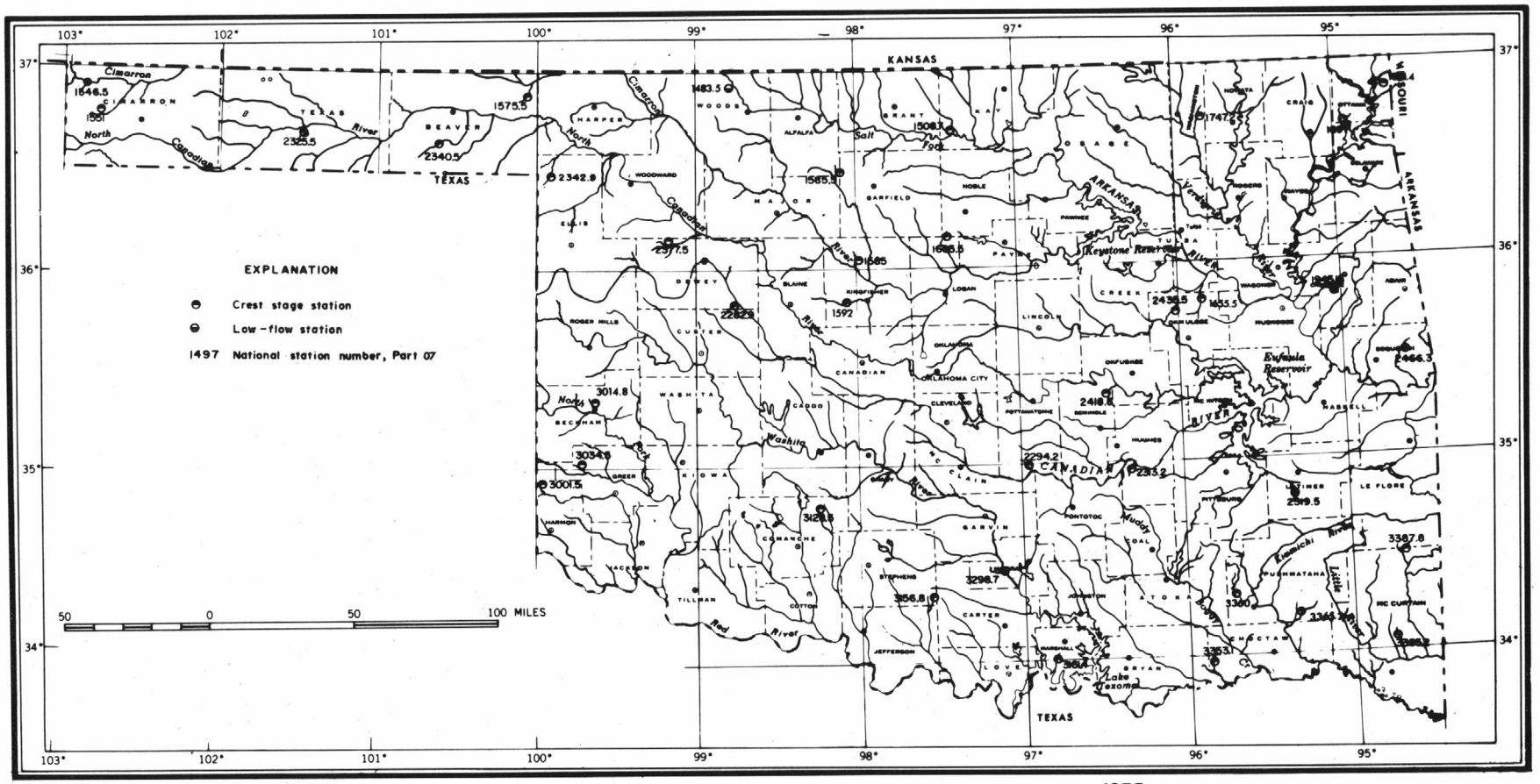

Figure 2. -- Map of Oklahoma showing location of partial record stations, water year 1975.

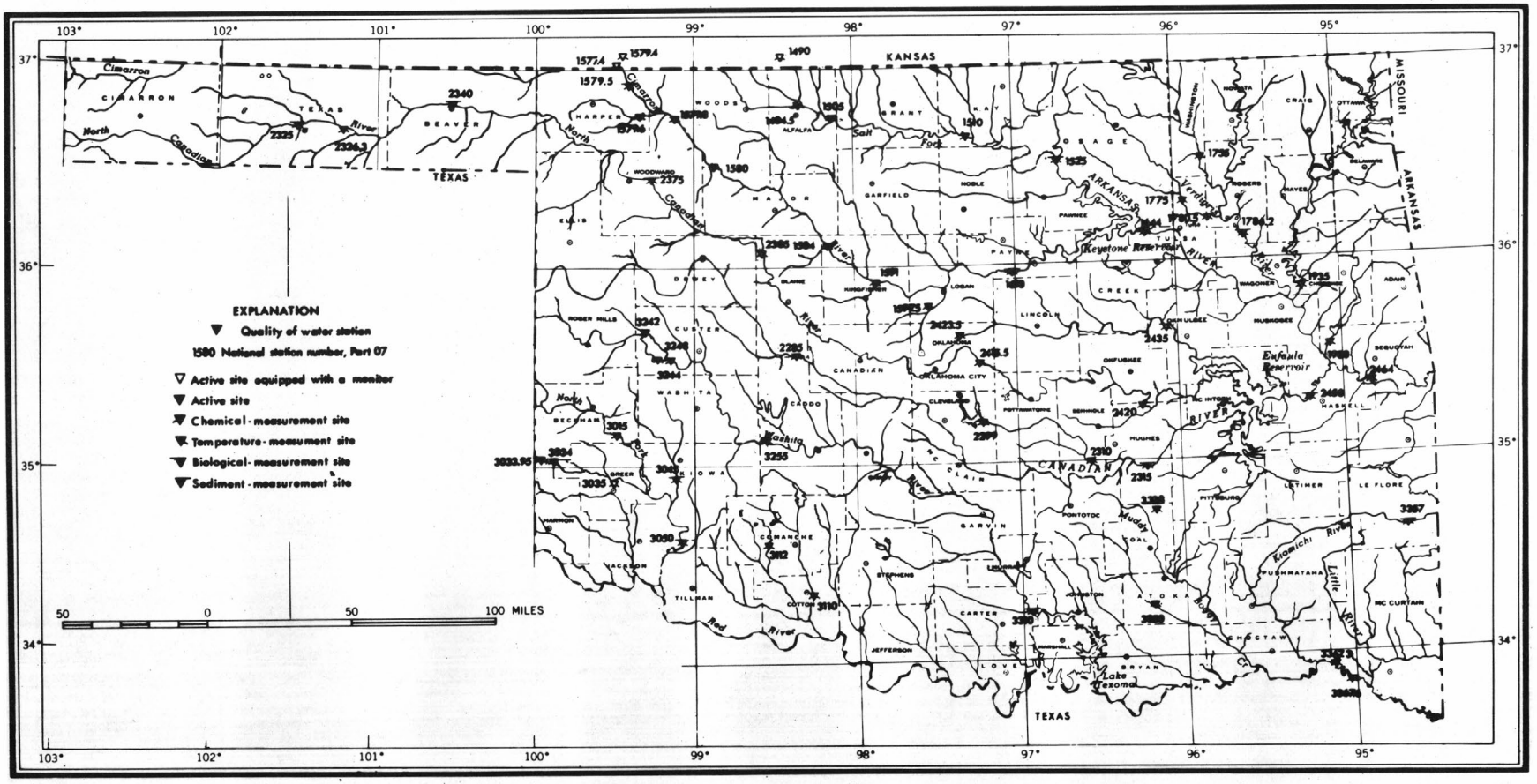

Figure 3. -- Map of Oklahoma showing location of water-quality stations, water year 1975.

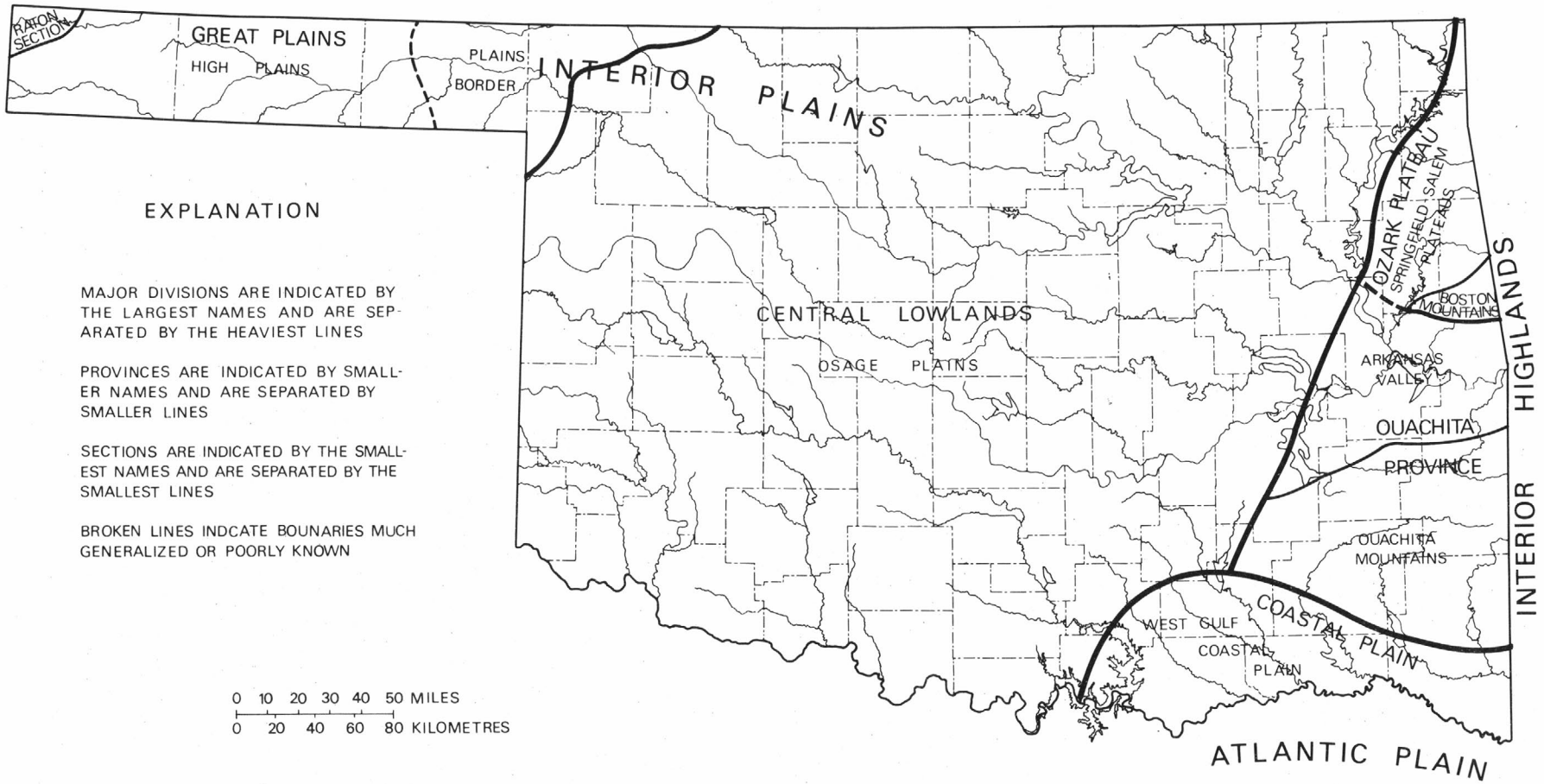

Figure 4.--Map showing physiographic regions in Oklahoma.

WATER RESOURCES DATA FOR OKLAHOMA, 1975

Section 1. Surface-Water Records
Section 2. Water-Quality Records

INTRODUCTION

Water resources data for the 1975 water year for Oklahoma consist of records of stage, discharge, and water quality of streams; stage, contents, and water quality of lakes and reservoirs. This report contains discharge records for 134 gaging stations; stage and contents for 22 lakes and reservoirs; water quality for 57 gaging stations, 2 partial-record flow station, and 3 lakes. Also included are data for 69 crest-stage partial-record stations and 1 low-flow partial-record station. Additional water data were collected at various sites, not part of the systematic data collection program, and are published as miscellaneous measurements. These data represent that part of the National Water Data System operated by the U.S. Geological Survey and cooperating State and Federal agencies in Oklahoma.

Records of discharge (or stage) of streams, and contents (or stage) of lakes and reservoirs were first published in a series of U.S. Geological Survey water-supply papers entitled, "Surface Water Supply of the United States". Through water year 1960, these water-supply papers were in an annual series and then in a 5-year series for 1961-65 and 1966-70. Records of chemical quality, water temperatures, and suspended sediment were published from 1941 to 1963 in an annual series of water-supply papers entitled, "Quality of Surface Waters of the United States".

Beginning with the 1961 water year and continuing through water year 1974, streamflow data have been released by the Geological Survey in annual reports on a State-boundary basis. Water-quality records beginning with the 1964 water year have been similarly released either in separate reports or in conjunction with streamflow records. These reports provided rapid release of preliminary water data shortly after the end of the water year. The final data were then released in the water-supply paper series mentioned above. Beginning with the 1975 water year, water data will be released on a State-boundary basis in final form and will not be republished in the water-supply paper series. The 1975 and subsequent water year reports will be in a series which will carry an identification number consisting of the two-letter State abbreviation, the last two digits of the water year, and the volume number. For example, this report is identified as "U.S. Geological Survey Water-Data Report OK-75-1".

These reports are for sale to the public for a nominal fee from the National Technical Information Service, U.S. Department of Commerce, Springfield, Virginia, 22151. For more information on publications available, see "PUBLICATIONS" on subsequent pages.

COOPERATION

The U.S. Geological Survey and organizations of the State of Oklahoma have had cooperative agreements for the systematic collection of streamflow records since 1935, and for water-quality records since 1941. Organizations that assisted in collecting data through cooperative agreement with the Survey are:

Oklahoma Water Resources Board, Lloyd E. Church, Chairman, suceeded by Gerald E. Borelli; Forrest Nelson, executive director.

Oklahoma Department of Highways, Richard A. Ward, Director.

Oklahoma City Water Department, Charles Baker, Director of water services.

Oklahoma State Department of Health, Environmental Health Services, Loyd F. Pummill, chief.

Assistance in the form of funds or services was given by the Corps of Engineers, U.S. Army, in collecting records for 88 gaging stations published in this report. Assistance for 8 stations was furnished by the Bureau of Reclamation, U.S. Department of the Interior. Also furnishing assistance was the Environmental Protection Agency.

The following organizations aided in collecting records:

Grand River Dam Authority; Central Oklahoma Master Conservancy District; Fort Cobb Reservoir Master Conservancy District; Lugert-Altus Irrigation District; the cities of Ada, Altus, Edmond, Guthrie, Lawton, Shawnee, and Tulsa; the Department of Transportation, Federal Highway Administration; and the Agricultural Research Service, U.S. Department of Agriculture.

Organizations that supplied data are acknowledged in station descriptions.

DEFINITION OF TERMS

Terms related to streamflow, water-quality, and other hydrologic data, as used in this report, are defined below. See also table for converting English units to International System of units (SI) on page 29.

Acre-foot (AC-FT, ac-ft) is a quantity of water required to cover 1 acre to a depth of 1 foot (.3048 m) and is equivalent to 43,560 cubic feet or about 326,000 gallons or 1,233 cubic metres.

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

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

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

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

Fecal streptococcal bacteria are bacteria found also in the intestine of warmblooded animals. Their presence in water is considered to verify fecal pollution. They are characterized as gram-positive, cocci bacteria which are

capable of growth in brain-heart infusion broth. In the laboratory they are defined as all the organisms which produce red or pink colonies within 48 hours at 35°C ± 1.0°C on M-enterrococcus medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 ml of sample.

Bed material is the shifting portion of fragmented alluvial material of which the streambed is composed.

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

Cfs-day is the volume of water represented by a flow of 1 cubic foot per second for 24 hours. It is equivalent to 86,400 cubic feet, approximately 1.9835 acre-feet, or about 646,000 gallons or 2,445 cubic metres. It represents a runoff of approximately 0.0372 inches from 1 square mile or 0.3468 millimetre from 1 square kilometre.

Chemical oxygen demand (COD) indicates the quantity of oxidizable compounds in water and varies with water composition(s), temperature, period of contact, and other factors.

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

Coliform organisms are a group of bacteria used as an indicator of the sanitary quality of the water. The number of coliform colonies per 100 millilitres is determined by the immediate incubation membrane filter method.

Color of water as considered in this report is that due only to substances in solution. It may be of natural mineral, animal, or vegetable origin. Color may be caused by metallic substances, humus material, peat, algae, weeds, or protozoa. Industrial wastes may also color water.

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

Continuing water-quality record site is a specified site which meets one or all conditions listed:

1. When chemical samples are collected daily or monthly for 10 or more months during the water year.

2. When water temperature records include observations taken once or more times daily.

3. When sediment discharge records include those periods for which sediment loads are computed and are considered to be representative of the runoff for the water year.

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

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

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

Discharge is the volume of water (or more broadly, total fluids), that passes a given point within a given period of time.

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

Instantaneous discharge is the discharge at a given time.

Dissolved (as used in tables of chemical analyses) refers to the amount of a substance present in true chemical solution. In practice, however, the term includes all forms of the substance that will pass through a 0.45-micrometre membrane filter, and thus may include some very small (colloidal) suspended particles. Analyses are performed on filtered samples.

Dissolved oxygen (DO) is the amount of oxygen, measured in mg/l, dissolved in water. In surface water it is necessary for the support of aquatic life and the aerobic decomposition of organic material, and thus is one of the most important indicators of the biological, chemical, and sanitary quality of the water.

Drainage area of a stream at a specific location is that area, measured in horizontal plane, enclosed by a topographic divide from which direct surface runoff from precipitation normally drains by gravity into the river above the specified point.

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

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

Gaging station is a particular site on a stream, canal, lake, or reservoir where systematic observations of gage height or discharge are obtained. When used in connection with a discharge record, the term is applied only to those gaging stations where a continuous record of discharge is computed.

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

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

Milligrams per litre (MG/L, mg/l) is a unit for expressing the concentration of chemical constituents in solution. Milligrams per litre represents the weight of solute per unit volume of water. Milligrams or micrograms per litre may be converted to milliequivalents (one thousandth of a gram-equivalent weight of a constituent) per litre by multiplying by the factors in table 1, page 7. Concentration of suspended sediment also is expressed in mg/l, and is based on the weight of sediment per litre of water-sediment mixture. Sediment concentrations may be converted to parts per million by using the factors in table 2, p. 8.

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

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

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

Organism count/volume refers to the number of organisms collected and enumerated in a sample and adjusted to the number per sample volume, usually millilitres (ml) or litres (l). Numbers of planktonic organisms can be expressed in these terms.

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

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

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

Particle-size classification, used in this report agrees with recommendations made by the American Geophysical Union Subcommittee on Sediment Terminology. The classification is as follows:

Classification	Size (mm)	Method of analysis
Clay.....	0.00024 - 0.044	Sedimentation.
Silt.....	.004 - .062	Sedimentation.
Sand.....	.062 - 2.0	Sedimentation or sieve.
Gravel.....	2.0 - 64.0	Sieve.

Table 1.--Factors for conversion of chemical constituents in milligrams or micrograms per litre to milliequivalents per litre.

Ion	Multiply by	Ion	Multiply by
Aluminum (Al^{+3})*....	0.11119	Iodide (I^{-1}).....	0.00788
Ammonia as NH_4^{+1}....	.05544	Iron (Fe^{+3})*.....	.05372
Barium (Ba^{+2}).....	.01456	Lead (Pb^{+2})*.....	.00965
Bicarbonate (HCO_3^{-1})	.01639	Lithium (Li^{+1})*...	.14411
Bromide (Br^{-1}).....	.01251	Magnesium (Mg^{+2})..	.08226

Table 1.--Factors for conversion of chemical constituents in milligrams or micrograms per litre to milliequivalents per litre.--Continued.

Ion	Multiply by	Ion	Multiply by
Calcium (Ca^{+2}).....	0.04990	Manganese (Mn^{+2})*...	0.03640
Carbonate (CO_3^{-2})...	.03333	Nickel (Ni^{+2})*.....	.03406
Chloride (Cl^{-1}).....	.02821	Nitrate (NO_3^{-1}).....	.01613
Chromium (Cr^{+6})*....	.11539	Nitrite (NO_2^{-1}).....	.02174
Cobalt (Co^{+2})*.....	.03394	Phosphate (PO_4^{-3})...	.03159
Copper (Cu^{+2})*.....	.03148	Potassium (K^{+1}).....	.02557
Cyanide (CN^{-1}).....	.03844	Sodium (Na^{+1}).....	.04350
Fluoride (F^{-1}).....	.05264	Strontium (Sr^{+2})*...	.02283
Hydrogen (H^{+1}).....	.99209	Sulfate (SO_4^{-2}).....	.02082
Hydroxide (OH^{-1})....	.05880	Zinc (Zn^{+2})*.....	.03060

*Constituent reported in micrograms per litre; multiply by factor and divide results by 1,000.

Table 2.--Factors for conversion of sediment concentration in milligrams per litre to parts per million*
(All values calculated to three significant figures)

Range of concentration in 1000 mg/l	Divide by	Range of concentration in 1000 mg/l	Divide by	Range of concentration in 1000 mg/l	Divide by	Range of concentration in 1000 mg/l	Divide by
0 - 8	1.00	201-217	1.13	411-424	1.26	619-634	1.39
8.05- 24	1.01	218-232	1.14	427-440	1.27	636-650	1.40
24.2 - 40	1.02	234-248	1.15	443-457	1.28	652-666	1.41
40.5 - 56	1.03	250-264	1.16	460-473	1.29	668-682	1.42
56.5 - 72	1.04	266-280	1.17	476-489	1.30	684-698	1.43
72.5 - 88	1.05	282-297	1.18	492-506	1.31	700-715	1.44
88.5 -104	1.06	299-313	1.19	508-522	1.32	717-730	1.45
105 -120	1.07	315-329	1.20	524-538	1.33	732-747	1.46
121 -136	1.08	331-345	1.21	540-554	1.34	749-762	1.47
137 -152	1.09	347-361	1.22	566-570	1.35	765-780	1.48
153 -169	1.10	363-378	1.23	572-585	1.36	782-796	1.49
170 -185	1.11	380-393	1.24	587-602	1.37	798-810	1.50
186 -200	1.12	395-409	1.25	604-617	1.38		

*Based on water density of 1.00 g/ml and a specific gravity of sediment of 2.65.

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

Pesticides include insecticides and herbicides.

Insecticides are substances or a mixture of substances intended to prevent, destroy, or repel insects.

Technical names for insecticides analyzed are:

Aldrin should contain not less than 95 percent of 1, 2, 3, 4, 10, 10-hexachloro-1, 4, 4a, -5, 8, 8a-hexahydro-1, 4-endoexo-5, 8-dimethanonapthalene.

Chlordane 1, 2, 4, 5, 6, 7, 8, 8-octachloro-3a, 4, 7, 7a-tetrahydro-4, 7-methanoindane.

DDD 1, 1-dichloro-2, 2-bis (p-chlorophenyl) ethane.

DDE 1, 1-dichloro-2, 2-bis (p-chlorphenyl) ethylene.

DDT 1, 1, 1-trichloro-2, 2-bis (p-chlorophenyl) ethane.

Diazinon 0, 0-diethyl 0- (2-isopropyl-4-methyl-6-pyrimidinyl) phosphorothioate.

Dieldrin should contain not less than 85 percent of 1, 2, 3, 4, 10, 10-hexachloro-6, 7-epoxy-1, 4, 4a, 5, 6, 7, 8, 8a-octahydro-1, 4-endo, exo-5, 8-dimethanonaphthalene.

Endrin 1, 2, 3, 4, 10, 10-hexachloro-6, 7-epoxy-1, 4, 4a, 5, 6, 7, 8, 8a-octahydro-1, 4-endo-endo-5, 8-dimethanonaphthalene.

Heptachlor 1, 4, 5, 6, 7, 8, 8-heptachloro-3a, 4, 7, 7a-tetrahydro-4, 7-methanoindene.

Heptachlor epoxide 1, 4, 5, 6, 7, 8, 8-heptachloro-2, 3-epoxy-3a, 4, 7, 7a-tetrahydro-4, 7-methanoindan.

Lindane 1, 2, 3, 4, 5, 6-hexachlorocyclohexane, 99 percent or more of gamma isomer.

Methyl parathion 0, 0-dimethyl 0-para-nitrophenyl phosphorothioate.

Malathion S- 1,2-bis (ethoxycarbonyl) ethyl O, O-dimethyl phosphorodithioate.

Parathion O, O-diethyl O-para-nitrophenyl phosphorothioate.

Herbicides are substances or a mixture of substances intended to control or destroy any vegetation.

Technical names for herbicides analyzed are:

2, 4-D 2, 4-dichlorophenoxyacetic acid.

2, 4, 5-T 2, 4, 5-trichlorophenoxyacetic acid.

Silvex 2-(2, 4, 5-trichlorophenyoxy-) propionic acid.

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

Blue-green algae are a group of phytoplankton organisms having a blue pigment, in addition to the green pigment called chlorophyll. Blue-green algae often cause nuisance conditions in water. Their concentrations are expressed as number of cells per 100 ml of sample.

Diatoms are the unicellular or colonial algae having a siliceous shell. Their concentrations are expressed as number of cells per 100 ml of sample.

Green algae have chlorophyll pigments similar in color to those of higher green plants. Some forms produce algal mats or floating "moss" in lakes. Their concentrations are expressed as number of cells per 100 ml of sample.

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

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

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

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

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

Total sediment discharge or total sediment load is the sum of the suspended-sediment discharge and the bedload discharge. It is the total quantity of sediment, as measured by dry weight or volume, that is discharged during a given time.

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

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

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

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

Specific conductance is a measure of the ability of a water to conduct an electrical current and is expressed in micromhos per centimetre at 25°C. Because the specific conductance is related to the number and specific chemical types of ions in solution, it can be used for approximating the dissolved-solids content in the water. Commonly, the amount of dissolved solids (in milligrams per litre) is about 65 percent of the specific conductance (in micromhos per cm at 25°C). This relation is not constant from stream to stream or from well to well, and it may even vary in the same source with changes in the composition of the water.

Stage-discharge relation is the relation between gage height and the amount of water flowing in a channel, expressed as volume per unit of time.

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

Thermograph is a thermometer that continuously and automatically records, on a chart, the water temperature of a stream. "Temperature recorder" is the term used to describe the thermograph or a digital mechanism that automatically records water temperature on paper tape.

Tons per acre-foot indicates the dry weight of dissolved solids in 1 acre-foot of water. It is computed by multiplying the concentration in milligrams per litre by 0.00136.

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

Total (as used in tables of chemical analyses) refers to the amount of substance that is present both in solution and in suspension. Analyses are performed on representative samples of water-suspended sediment mixtures.

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

WRD is used as an abbreviation for "Water-Resources Data" in the summary REVISIONS paragraph to refer to previously published State annual basic-data reports.

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

SPECIAL NETWORKS AND PROGRAMS

Some of the stations for which data are published in this report are included in special networks and programs. These stations are identified by their title, set in parentheses, under the station name.

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

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

Pesticide program is a network of regularly sampled water-quality stations where additional monthly samples are collected to determine the concentration and distribution of pesticides in streams whose waters are used for irrigation or in streams in areas where potential contamination could result from the application of the commonly used insecticides and herbicides.

Pesticides are chemical compounds used to control the growth of undesirable plants and animals. Major categories of pesticides include insecticides, miticides, fungicides, herbicides, and rodenticides. Since the first application of DDT as an insecticide in the early 1930's, there have been almost 60,000 pesticide formulations registered, each containing at

least one of the approximately 800 different basic pesticide compounds. The United States annually produces about 1 billion pounds of these compounds. Although efforts are being made to substitute many of the chlorinated hydrocarbon pesticides with more specific, fast-acting, and easily degradable compounds, chlorinated hydrocarbon pesticides are still commonly used in many areas of the country.

DOWNSTREAM ORDER AND STATION NUMBER

Stations are listed in downstream direction along the main stream, and stations on tributaries are listed between stations on the main stream in the order in which those tributaries enter the main stream. Stations on tributaries entering above all mainstream stations are listed before the first mainstream station. Stations on tributaries to tributaries are listed in a similar manner. In the lists of gaging stations and water-quality stations in the front of this report the rank of tributaries is indicated by indention, each indention representing one rank.

As an added means of identification, each gaging station, partial-record station, and water-quality station has been assigned a station number. These are in the same downstream order used in this report. In assigning station numbers, no distinction is made between partial-record stations and gaging stations; therefore, the station number for a partial-record station indicates downstream order position in a list made up of both types of stations. Water-quality stations located at or near gaging stations or partial-record stations have the same number as the gaging or partial-record station. Gaps are left in the series of numbers to allow for new stations that may be established; hence, the numbers are not consecutive. The complete 8-digit number for each station, such as 07245000, which appears just to the left of the station name includes the 2-digit part number "07" plus the 6-digit downstream order number "245000". In this report, the records are listed in downstream order by parts. The part number refers to an area whose boundaries coincide with certain natural drainage lines. Records in this report are in Part 7 (Lower Mississippi River basin). All records for a drainage basin encompassing more than one State can be arranged in downstream order by assembling pages from the various State reports by station number to include all records in the basin.

EXPLANATION OF SURFACE WATER RECORDS

Collection and computation of data

The base data collected at gaging stations consist of records of stage and measurements of discharge of streams or canals, and stage, surface area, and contents of lakes or reservoirs. In addition, observations of factors affecting the stage-discharge relation or the stage-capacity relation, weather records, and other information are used to supplement base data in determining the daily flow or volume of water in storage. Records of stage are obtained from direct readings on a nonrecording gage or from a water-stage recorder that gives either a continuous graph of the fluctuations or a tape punched at 15-, 30- or 60-minute intervals. Measurements of discharge are made with a current meter, using the general methods adopted by the Geological Survey on the basis of experience in stream gaging since 1888. These methods are described in standard textbooks, in Water-Supply Paper 888, and in U.S. Geological Survey Techniques of Water Resources Investigations, book 3, chapter A6. Surface areas of lakes or reservoirs are determined from instrument surveys using standard methods. The configuration of the reservoir bottom is determined by sounding at many points.

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

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

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

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

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

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

The data in this report generally comprise a description of the station and tabulations of daily and monthly figures. For gaging stations on streams or canals a table showing the

daily discharge and monthly and yearly discharge is given. For gaging stations on lakes and reservoirs a monthly summary table of stage and contents or a table showing the daily contents is given. Tables of daily mean gage heights are included for some streamflow stations and for some reservoir stations. Records are published for the water year, which begins on October 1 and ends on September 30. A calendar for the current water year is shown on the reverse side of the front cover to facilitate finding the day of the week for any date.

The description of the gaging stations gives the location, drainage area, period of record, type and history of gages, average discharge, extremes of discharge or contents, general remarks, and notations of revisions of previously published records. The location of the gaging station and the drainage area are obtained from the most accurate maps available. River mileage, given under "LOCATION" for some stations, is that determined and used by the Corps of Engineers or other agencies. Periods for which there are published records for the present station or for stations generally equivalent to the present one are given under "PERIOD OF RECORD." The type of gage currently in use, the datum of the present gage above mean sea level, and a condensed history of the types, locations, and datums of previous gages used during the period of record are given under "GAGE." In references to datum of gage, the phrase "mean sea level" denotes "Sea Level Datum of 1929" as used by the Topographic Division of the Geological Survey unless otherwise qualified. The average discharge for the number of years indicated is given under "AVERAGE DISCHARGE"; it is not given for stations having fewer than 5 complete years of record or for stations where changes in water development during the period of record cause the figure to have little significance. The maximum discharge (or contents) and the maximum gage height, the minimum discharge if there is little or no regulation (or minimum contents) and the minimum gage height if it is significant are given under "EXTREMES." The minimum daily discharge is given if there is extensive regulation (also the minimum discharge and gage height if they are abnormally low). In the first paragraph headed "Current year", the data given are for the complete current water year unless otherwise specified. In the second paragraph under "EXTREMES" headed "Period of record:" the data given are for the period of record given in the third or last paragraph under "EXTREMES." Unless otherwise qualified, the maximum discharge (or contents) corresponds to the crest stage obtained by use of a water-stage recorder (graphic or digital), a crest-stage gage, or a nonrecording gage read at the time of the crest. If the maximum gage height did not occur at the same time as the maximum discharge (or contents), it is given separately. Information pertaining to the

accuracy of the discharge records, to conditions that affect the natural flow at the gaging station, and availability of Water Quality records, is given under "REMARKS" for reservoir stations information on the dam forming the reservoir, the capacity, outlet works and spillway, and purpose and use of the reservoir, is also given under "REMARKS".

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

The daily table for stream-gaging stations gives the mean discharge for each day and is followed by monthly and yearly summaries. In the monthly summary below the daily table, the line headed "TOTAL" gives the sum of the daily figures. The line headed "MEAN" gives the average flow in cubic feet per second during the month. The lines headed "MAX" and "MIN" give the maximum and minimum daily discharges, respectively, for the month. Discharge for the month also may be expressed in cubic feet per second per square mile (line headed "CFSM"), or

in inches (line headed "IN"), or in acre-feet (line headed "AC-FT"). Figures for cubic feet per second per square mile and runoff in inches are omitted if there is extensive regulation or diversion, if the drainage area includes large noncontributing areas, or if the average annual rainfall over the drainage basin is usually less than 20 inches.

In the yearly summary below the monthly summary, the figures following "MAX" are the maximum daily discharges for the calendar and water years; likewise, those following "MIN" are the minimum daily discharges.

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

Peak discharges and their times of occurrence and corresponding gage heights for many stations are listed below the yearly summary. All independent peaks above the selected base are given. The base discharge, which is given in parentheses, is selected so that an average of about three peaks a year can be presented. Peak discharges are not published for any canals, ditches, drains, or for any stream for which the peaks are subjected to substantial control by man. Time of day is expressed in 24-hour local standard time; for example, 12:30 a.m. is 0030, 1:30 p.m. is 1330.

For most gaging stations on lakes and reservoirs the data presented comprise a description of the station and a monthly summary table of stage and contents. For some reservoirs a table showing daily contents or stage is given. A skeleton table of capacity at given stages is published for all reservoirs for which records are published on a daily basis, but is not published for reservoirs for which only monthly data are given.

Data collected at partial-record stations and miscellaneous sites are given in three tables at the end of the surface-water records in this report. The first is a table of discharge

measurements at low-flow partial-record stations, the second is a table of annual maximum stage and discharge at crest-stage stations, and the third is a table of discharge measurements at miscellaneous sites.

Accuracy of data

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

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

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

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

Publications

In each water-supply paper entitled, "Surface Water Supply of the United States", there is a list of numbers of preceding water-supply papers containing streamflow information for the area covered by that report. In addition, there is a list of numbers of water-supply papers containing detailed information on major floods in the area. Records for stations in Oklahoma

for the period October 1960 to September 1965 are in Water-Supply Papers 1920 and 1921, October 1966 to September 1970 are in Water-Supply Papers 2120 and 2121.

Two series of summary reports entitled, "Compilation of Records of Surface Waters of the United States" have been published; the first series covers the entire period of record through September 1950 and the second series covers the period October 1950 to September 1960. These reports contain summaries of monthly and annual discharge and monthend storage for all previously published records, as well as some records not contained in the annual series of water-supply papers. All records were reexamined and revised where warranted. Estimates of discharge were made to fill short gaps whenever practical. The yearly summary table for each gaging station lists the numbers of the water-supply papers in which daily records were published for that station. Records for stations in Oklahoma are compiled in Water-Supply Papers 1311 through 1950 and in 1731 for October 1950 to September 1960.

Special reports on major floods or droughts or of other hydrologic studies for the area have been issued in publications other than water-supply papers. Information relative to these reports may be obtained from the district office.

Other data available

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

SURFACE WATER HYDROLOGIC CONDITIONS

The runoff was above normal in all sections of Oklahoma except the panhandle area where yearly mean discharges were well below average. Cimarron River near Kenton had the lowest mean discharge of record (25 years) and Beaver River at Beaver the second lowest in 38 years. In May the mid- and lower-Cimarron basin recorded peak in the 10 year recurrence interval. July 27 a new peak of record occurred at Spavinaw Creek near Sycamore (recurrence interval of 50 years); also in July, bankfull stages occurred on the Washita River from Carnegie to Durwood and substantial runoff on the North Canadian River from El Reno to Lake Eufaula. Washita River near Durwood, index station, in south-central Oklahoma was 243 percent of median for the year.

Reservoir contents at state lakes was near or above normal throughout the year. In July Lake Altus in southwest Oklahoma spilled for the first time since 1968 and was 200 percent of the September monthly average for 30 years of record.

EXPLANATION OF WATER-QUALITY RECORDS

Collection and examination of data

Water samples for analyses usually are collected at or near gaging stations. The discharge records at these stations are used in conjunction with the computations of the chemical constituents and sediment loads in this report.

Descriptive statements are given for water-quality stations located at or near streamflow stations. Given are location, drainage area, periods of record for the various water-quality data, extremes of pertinent data, and general remarks, in a format similar to that used for streamflow gaging stations.

Water-quality information is presented for chemical, biological, and microbiological quality, water temperature, and fluvial sediment. Chemical quality includes concentrations of individual constituents and certain properties of characteristics such as hardness, sodium-adsorption-ratio, specific conductance, and pH. The biological information includes qualitative and quantitative analyses of plankton, bottom organisms, and particulate inorganic and amorphous matter present. Microbiological information includes quantitative identification of certain bacteriological indicator organisms. Water-temperature data represent once-daily observations except for stations where a continuous temperature recorder (thermograph) furnished information from which daily means are obtained. Fluvial-sediment information is given for suspended-sediment discharges and concentrations and for particle-size distribution of suspended sediment and bed material.

Prior to the 1968 water year, data for chemical constituents and concentration of suspended sediment were reported in parts per million (ppm) and water temperatures were reported in degrees Fahrenheit (°F). In October 1967 the U.S. Geological Survey began reporting data for chemical constituents and concentrations of suspended sediment in milligrams per litre (mg/l) and water temperatures in degrees Celsius (°C). In waters with a density of 1.000 g/ml (grams per millilitre), parts per million and milligrams per litre can be considered equal. In waters greater than 1.000 g/ml, values in parts per million should be multiplied by the density to convert to milligrams per litre. Temperatures reported in degrees Celsius may be converted to degrees Fahrenheit by using table 3, p. 24.

In October 1968, the Geological Survey began reporting many of the chemical constituents as well as the minor elements in micrograms per litre instead of milligrams per litre. (See "Definition of Terms", p. 3 and table for converting English Units to SI Units, p. 29).

Solutes

Most methods for collecting and analyzing water samples to determine the kinds and concentrations of solutes are described by Brown, Skougstad, and Fishman. The method for determining elemental constituents by emission spectrographic techniques is described by Barnett and Mallory. Analysis of pesticides, herbicides, and organic substances in water are described by Goerlitz and Lamar, Lamar, Goerlitz, and Law, and Goerlitz and Brown. The collection and analysis of aquatic, biological and microbiological samples are described by Slack and others.

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

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

The daily chemical quality data in this report generally represent samples for the 5th, 15th, and 25th of each month. The remainder of the data represent maximum, median, and minimum for the month or equal volume composites for 2- to 15-day periods. The composite periods are selected on the basis of specific conductance of the daily samples and fluctuation of water discharge.

For chemical-quality stations equipped with digital monitors, the records consist of daily maximum, minimum, and mean values for each constituent measured and are based upon hourly punches beginning at 0100 hours and ending at 2400 hours for the day of record. More detailed records (hourly values) may be obtained from the U.S. Geological Survey district office at the address given on the back of the title page of this report.

Temperature

Water temperatures are measured at most of the water-quality stations. In addition, water temperatures are taken at time of discharge measurements for surface-water stations. For daily stations, the water temperature is taken about the same time each day when sample is collected. Large streams have a small diurnal temperature change while small, shallow streams may have a daily range of several degrees and may follow closely the changes in air temperature. Some streams may be affected by waste-water discharges.

At stations where continuously recording thermographs are present, the records consist of mean daily temperatures for each day and the monthly averages.

Table 3.--Degrees Celcius (°C) to degrees Fahrenhit (°F)*
(Temperature reported to nearest 0.5°C)

°C	°F	°C	°F	°C	°F	°C	°F	°C	°F
0.0	32	10.0	50	20.0	68	30.0	86	40.0	104
.5	33	10.5	51	20.5	69	30.5	87	40.5	105
1.0	34	11.0	52	21.0	70	31.0	88	41.0	106
1.5	35	11.5	53	21.5	71	31.5	89	4.15	107
2.0	36	12.0	54	22.0	72	32.0	90	42.0	108
2.5	36	12.5	54	22.5	72	32.5	90	42.5	108
3.0	37	13.0	55	23.0	73	33.0	91	43.0	109
3.5	38	13.5	56	23.5	74	33.5	92	43.5	110
4.0	39	14.0	57	24.0	75	34.0	93	44.0	111
4.5	40	14.5	58	24.5	76	34.5	94	44.5	112
5.0	41	15.0	59	25.0	77	35.0	95	45.0	113
5.5	42	15.5	60	25.5	78	35.5	96	45.5	114
6.0	43	16.0	61	26.0	79	36.0	97	46.0	115
6.5	44	16.5	62	26.5	80	36.5	98	46.5	116
7.0	45	17.0	63	27.0	81	37.0	99	47.0	117
7.5	45	17.5	63	27.5	81	37.5	99	47.5	117
8.0	46	18.0	64	28.0	82	38.0	100	48.0	118
8.5	47	18.5	65	28.5	83	38.5	101	48.5	119
9.0	48	19.0	66	29.0	84	39.0	102	49.0	120
9.5	49	19.5	67	29.5	85	39.5	103	49.5	121

*C = 5/9 (°F - 32) or °F = 9/5 (°C) + 32.

Sediment

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

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

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

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

Publications

The annual series of water-supply papers that contain information on quality of surface waters in Oklahoma are listed below.

Year	WSP	Year	WSP	Year	WSP	Year	WSP
1941	942	1949	1163	1957	1522	1965	1964
1942	950	1950	1188	1958	1573	1966	1994
1943	970	1951	1199	1959	1644	1967	2014
1944	1022	1952	1252	1960	1744	1968	2096
1945	1030	1953	1292	1961	1884	1969	2146
1946	1050	1954	1352	1962	1944	1970	2156
1947	1102	1955	1402	1963	1950		
1948	1133	1956	1452	1964	1957		

SELECTED REFERENCES

American Public Health Association, and others 1971, Standard methods for the examination of water and wastewater, 13th ed.: Am. Public Health Assoc., New York, 874 p.

Barker, F. B., and Johnson, J. O., 1964, Determination of radium in water: U.S. Geol. Survey Water-Supply Paper 1696-B, 29 p.

Barker, F. B., and others, 1965, Determination of uranium in natural water: U.S. Geol. Survey Water-Supply Paper 1696-C, 25 p.

Barker, F. B., and Robinson, B. P., 1963, Determination of beta activity in water: U.S. Geol. Survey Water-Supply Paper 1696-A, 32 p.

Barnett, P. R., and Mallory, Jr., E. C., 1971, Determination of minor elements in water by emission spectroscopy: U.S. Geol. Survey Techniques of Water Resources Inv., book 5, chap. A2, 31 p.

Brown, Eugene, Skougstad, M. W., and Fishman, M. J., 1970, Methods for collection and analysis of water samples for dissolved minerals and gases: U.S. Geol. Survey Techniques of Water-Resources Inv., book 5, chap. A1, 160 p.

Carter, R. W., and Davidian, Jacob, 1968, General procedures for gaging streams: U.S. Geol. Survey Techniques of Water-Resources Inv., book 3, chap. A6, 13 p.

Colby, B. R., 1963, Fluvial sediments--a summary of source, transportation, deposition, and measurement of sediment discharge: U.S. Geol. Survey Bull. 1181-A, 47 p.

Colby, B. R. and Hembree, C. H., 1955, Computations of total sediment discharge, Niobrara River near Cody, Nebraska: U.S. Geol. Survey Water-Supply Paper 1357, 187 p.

Colby, B. R., and Hubbell, D. W., 1961, Simplified methods for computing total sediment discharge with the modified Einstein procedure: U.S. Geol. Survey Water-Supply Paper 1593, 17 p.

Corbett, D. M., and others, 1943, reprinted 1957, Stream-gaging procedures, a manual describing methods and practices of the Geological Survey: U.S. Geol. Survey Water-Supply Paper 888, 245 p.

Goerlitz, D. F., and Brown, Eugene, 1972, Methods for analysis of organic substances in water: U.S. Geol. Survey Techniques of Water-Resources Inv., book 5 chap. A3, 40 p.

Goerlitz, D. F., and Lamar, W. L., 1967, Determination of phenoxy acid herbicides in water by electron-capture and microcoulometric gas chromatography: U.S. Geol. Survey Water-Supply Paper 1817-C, 21 p.

Guy, H. P., 1969, Laboratory theory and methods for sediment analysis: U.S. Geol. Survey Techniques of Water-Resources Inv., book 5, chap. C1, 57 p.

_____ 1970, Fluvial sediment concepts: U.S. Geol. Survey Techniques of Water-Resources Inv., book 3, chap. C1, 55 p.

Guy, H. P., and Norman, V. W., 1970, Field methods for measurement of fluvial sediment: U.S. Geol. Survey Techniques of Water-Resources Inv., book 3, chap. C2, 59 p.

Hem, J. D., 1971, Study and interpretation of the chemical characteristics of natural water - 2d ed: U.S. Geol. Survey Water-Supply Paper 1473, 363 p.

Lamar, W. L., Goerlitz, D. F., and Law, L. M., 1965, Identification and measurement of chlorinated organic pesticides in water by electron-capture gas chromatography: U.S. Geol. Survey Water-Supply Paper 1817-B, 12 p.

Langbein, W. B., and Iseri, K. T., 1960, General introduction and hydrologic definitions: U.S. Geol. Survey Water-Supply Paper 1541-A, 29 p.

Lohman, S. W., and others, 1972, Definitions of selected groundwater terms--revisions and conceptual refinements: U.S. Geol. Survey Water-Supply Paper 1988, p. 2.

Porterfield, George, 1972, Computations of fluvial sediment discharges: U.S. Geol. Survey Techniques of Water Resources Inv., book 3, chap. C3, 66 p.

Ritter, J. R., and Helley, E. J., 1969, Optical method for determining particle sizes of coarse sediment: U.S. Geol. Survey Techniques of Water-Resources Inv., book 5, chap. C3, 33 p. (open file).

Rose, Arthur and Elizabeth, 1966, The condensed chemical dictionary: Reinhold Pub. Corp., New York, 7th ed., p. 257.

Slack, K. V., and others, 1973, Methods for collection and analysis of aquatic, biological and microbiological samples: U.S. Geol. Survey Techniques of Water Resources Inv., book 5, chap. A-4, 165 p.

U.S. Inter-Agency Committee on Water Resources, Subcommittee on Sedimentation, A study of methods used in measurement and analysis of sediment loads in streams. Published by the St. Anthony Falls Hydraulic Laboratory, Minneapolis, Minn.

____ 1941, Methods of analyzing sediment samples: Rept. 4.

U.S. Inter-Agency Committee on Water Resources, Subcommittee on Sedimentation, A study of methods used in measurement and analysis of sediment loads in streams. Published by the St. Anthony Falls Hydraulic Laboratory, Minneapolis, Minn.

____ 1953, Accuracy of sediment size analyses made by the bottom-withdrawal-tube method: Rept. 10.

____ 1957, the Development and calibration of visual-accumulation tube: Rept. 11.

____ 1957, Some fundamentals of particle size analysis: Rept. 12.

____ 1959, Federal Inter-agency sedimentation instruments and reports: Rept. AA.

____ 1961, The single stage sampler for suspended sediment: Rept. 13.

____ 1963, Determinations of fluvial sediment discharge: Rept. 14.

FACTORS FOR CONVERTING ENGLISH UNITS TO INTERNATIONAL SYSTEM (SI) UNITS

The following factors may be used to convert the English units published herein to the International System of Units (SI). Subsequent reports will contain both the English and SI unit equivalents in the station manuscript descriptions until such time that all data will be published in SI units.

Multiply English Units	By	To obtain SI units
Length		
inches (in)	25.4	millimetre (mm)
	.0254	metres (m)
feet (ft)	.3048	metres (m)
miles (mi)	1.609	kilometres (km)
Area		
acres	4047	square metres (m^2)
	.4047	*square hectometre (hm^2)
square miles (mi^2)	2.590	square kilometres (km^2)
Volume		
gallons (gal)	3.785	**litres (l)
	3.785×10^{-3}	cubic metres (m^3)
cubic feet (ft^3)	28.32	cubic decimetres (dm^3)
	.02832	cubic metres (m^3)
cfs-day (ft^3/s day)	2447	cubic metres (m^3)
	2.447×10^{-3}	cubic hectometres (hm^3)
acre-feet (acre-ft)	1233	cubic metres (m^3)
	1.233×10^{-3}	cubic hectometres (hm^3)
	1.233×10^{-6}	cubic kilometres (km^3)
Flow		
cubic feet per second (ft^3/s)	28.32	litres per second (l/s)
	.02832	cubic metres per second (m^3/s)
gallons per minute (gpm)	.06309	litres per second (l/s)
	6.309×10^{-5}	cubic metres per second (m^3/s)
Mass		
ton (short)	.9072	tonne (t)

*The unit hectare is approved for use with the International System (SI) for a limited time. See NBS Special Bulletin 330, p. 15, 1972 edition.

**The unit litre is accepted for use with the International System (SI). See NBS Special Bulletin 300, p. 13, 1972 edition.

07146500 ARKANSAS RIVER AT ARKANSAS CITY, KS

LOCATION.--Lat 37°03'23", long 97°03'32", in NE 1/4 NE 1/4 NE 1/4 sec.35, T.34 S., R.3 E., Cowley County, near left bank at downstream side of bridge on U.S. Highway 166, 0.1 mi (0.2 km) downstream from St. Louis - San Francisco Railway Co. bridge, 0.5 mi (0.8 km) west of Arkansas City, 5.4 mi (8.7 km) upstream from Walnut River and at mile 701.4 (1,128.6 km).

DRAINAGE AREA.--43,713 mi^2 (113,220 km^2), of which 7,607 mi^2 (19,700 km^2) is probably noncontributing.

PERIOD OF RECORD.--September 1902 to September 1906, September 1921 to current year. Published as "near Arkansas City" 1903-4. Monthly discharge only for some periods, published in WSP 1311.

GAGE.--Water-stage recorder. Datum of gage is 1,050.04 ft (320.052 m) above mean sea level (levels by Corps of Engineers). Sept. 23, 1902, to July 31, 1906, nonrecording gage at site 0.5 mi (0.8 km) upstream at datum 9.5 ft (2.90 m) higher. Sept. 10, 1921, to Sept. 27, 1929, nonrecording gage and Sept. 28, 1929, to Aug. 28, 1956, water-stage recorder at site 0.5 mi (0.8 km) upstream at datum 2.97 ft (0.905 m) higher than present datum.

AVERAGE DISCHARGE.--58 years, 1,825 ft^3/s (51.68 m^3/s), 1,322,000 acre-ft/yr (1.63 km^3/yr).

EXTREMES.--Current year: Maximum discharge, 32,800 ft^3/s (929 m^3/s) June 19, gage height, 19.85 ft (6.050 m); minimum, 504 ft^3/s (14.3 m^3/s) Sept. 30.
Period of record: Maximum discharge, 103,000 ft^3/s (2,920 m^3/s) June 10, 1923, gage height, 25.46 ft (7.760 m), from floodmarks, site and datum then in use, from rating curve extended above 8,000 ft^3/s (226.6 m^3/s) on basis of field estimate, maximum gage height, 25.55 ft (7.788 m) May 18, 1957; minimum discharge, 1.0 ft^3/s (0.028 m^3/s) Oct. 9, 1921, result of diversion by local power canal.
Maximum stage known since at least 1877, 25.55 ft (7.788 m) May 18, 1957, from information by local residents.

REMARKS.--Records good. Flow moderately regulated by John Martin Reservoir since 1943 (see sta 07130000) and Cheney Reservoir since 1964 (see sta 07144790). Diversions above station for irrigation. Records of chemical and biological analyses, water temperatures, suspended sediment loads and specific conductance for the current year are published in the 1975 Kansas State report.

REVISIONS (WATER YEARS).--WSP 1311: 1905. WSP 1341: 1922-23, 1927, 1929, 1931, 1933, 1940, 1945-46(M), drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	604	2900	930	1430	2990	4630	1870	1500	3450	7920	874	1700
2	586	2100	912	1480	2080	6990	1810	1480	2640	7920	848	2400
3	580	17500	904	1480	1980	9190	1790	1470	5440	7250	824	2300
4	568	17100	912	1490	3470	6420	1760	1480	14000	5800	800	3220
5	568	13200	950	1520	5140	4050	1710	1420	10300	4920	776	2710
6	550	7970	977	1630	4420	3040	1680	1390	6660	4340	764	2200
7	550	3700	1040	1830	3050	2840	1680	1360	4450	3980	732	1500
8	550	2370	1250	2180	2080	2780	1760	1330	3470	3780	705	1160
9	556	1870	1260	2180	1860	2600	2910	1310	3580	3660	672	1100
10	556	1610	1240	2280	1410	2460	4180	1610	14300	3530	639	1030
11	598	1520	1360	2140	1680	2710	2670	1380	11900	3390	601	902
12	1230	1470	2870	1880	1960	3090	2070	1290	10900	3220	567	964
13	1350	1400	3500	1520	1930	2740	1840	1600	7210	2940	556	797
14	1210	1300	2780	1380	1960	2720	1770	4120	5270	2550	632	766
15	1100	1240	2240	1420	1870	2520	1750	4010	4010	2400	968	729
16	1000	1200	2000	1580	1820	2550	1780	2760	3360	2260	710	704
17	970	1160	1890	1820	1630	3440	1960	1910	9320	1940	613	728
18	1230	1140	1870	1860	1410	3650	2060	1570	22500	1760	580	752
19	1410	1110	1820	1770	1380	2860	2050	1420	26200	1680	778	782
20	1190	1090	1820	1690	1590	2660	1970	1330	9500	1600	847	709
21	1030	1090	1750	1680	1830	2460	1920	1280	5500	1480	2220	662
22	960	1070	1570	1670	2250	2380	1860	1260	5520	1330	1530	629
23	920	1050	1500	1680	2210	2240	1860	2350	5280	1270	1070	602
24	920	1030	1440	1670	1890	1990	1820	3290	13500	1200	839	585
25	1000	1020	1420	1660	1820	1890	1830	2920	10400	1140	720	570
26	1290	1010	1380	1650	2480	1810	1810	4780	9020	1100	660	565
27	1080	960	1350	1630	3650	2000	1790	6560	7580	1080	639	550
28	1020	950	1360	1590	4140	2490	1780	3300	6780	1010	649	537
29	1060	950	1370	1590	---	3140	1820	6760	6640	972	632	527
30	1980	950	1370	2070	---	2450	1730	6340	7680	944	994	510
31	2140	---	1380	4850	---	2050	---	5010	---	902	937	---
TOTAL	30356	93030	48415	56300	65980	98840	59290	79590	256360	89268	25376	32890
MEAN	979	3101	1562	1816	2356	3188	1976	2567	8545	2880	819	1096
MAX	2140	17500	3500	4850	5140	9190	4180	6760	26200	7920	2220	3220
MIN	550	950	904	1380	1380	1810	1680	1260	2640	902	556	510
AC-FT	60210	184500	96030	111700	130900	196000	117600	157900	508500	177100	50330	65240

CAL YR 1974 TOTAL 995878 MEAN 2728 MAX 33600 MIN 550 AC-FT 1975000
WTR YR 1975 TOTAL 935695 MEAN 2564 MAX 26200 MIN 510 AC-FT 1856000

PEAK DISCHARGE (BASE, 10,000 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
11-3	1800	17.85	22,400	6-19	0300	19.85	32,800
6-4	0800	15.62	15,100	6-24	1600	15.92	14,800
6-10	1500	16.17	16,700				

07148350 SALT FORK ARKANSAS RIVER NEAR WINCHESTER, OKLA.

LOCATION.--Lat 36°57'45", long 98°46'55", in NE 1/4 SE 1/4 sec.26, T.29 N., R.15 W., Woods County, near left bank on downstream side of pier of county road bridge, 1 mi (1.6 km) northeast of Winchester, 2.5 mi (4.0 km) upstream from Greenwood Creek, 4.9 mi (7.9 km) downstream from Yellowstone Creek, 5 mi (8.0 km) downstream from State line, 19 mi (30.6 km) northwest of Alva, and at mile 156.2 (251.3 km).

DRAINAGE AREA.--856 mi^2 (2,220 km^2).

PERIOD OF RECORD.--October 1959 to current year. Monthly discharge only for some periods, published in WSP 1731.

GAGE.--Water-stage recorder. Datum of gage is 1,409.6 ft (429.6 m) above mean sea level.

AVERAGE DISCHARGE.--16 years, 88.4 ft^3/s (2.503 m^3/s), 64,050 acre-ft/yr (79.0 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 6,560 ft^3/s (186 m^3/s) June 7, gage height, 11.06 ft (3.371 m); minimum daily, 0.30 ft^3/s (0.008 m^3/s) Sept. 11.
Period of record: Maximum discharge, 52,000 ft^3/s (1,473 m^3/s) Aug. 19, 1961, gage height, 13.95 ft (4.252 m), from rating curve extended above 17,400 ft^3/s (493 m^3/s); no flow at times in 1961, 1964-72. Flood in May 1957 reached a stage of 15.4 ft (4.69 m), from information by county engineer.

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

REVISIONS (WATER YEARS).--WSP 1731: Drainage area. WSP 1921: 1960.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	31	67	36	61	66	117	78	52	225	204	49	.40
2	28	105	45	69	68	109	73	64	167	139	35	.39
3	25	394	54	76	74	102	69	75	135	112	28	.41
4	25	320	62	74	94	102	70	71	115	90	24	.38
5	25	195	56	79	70	106	67	59	289	76	20	.34
6	28	153	58	76	50	107	63	50	297	66	17	.42
7	32	123	58	74	56	85	65	42	4080	60	13	.38
8	36	107	51	71	64	72	75	40	1220	54	9.7	.33
9	39	106	50	69	56	74	75	38	624	50	8.3	.33
10	36	99	55	66	120	96	71	134	386	48	7.0	.35
11	32	88	73	50	113	114	69	463	296	47	4.8	.30
12	31	78	76	40	114	111	65	265	194	45	3.7	.35
13	41	83	71	60	99	103	68	1710	149	43	3.4	.40
14	51	76	66	112	100	104	95	904	113	41	2.8	.56
15	55	74	61	85	99	104	113	406	89	38	5.2	.98
16	47	71	59	90	80	104	100	265	75	34	6.3	.78
17	41	73	59	78	52	104	85	199	211	32	4.1	.59
18	34	69	60	71	100	102	78	166	119	28	2.9	.77
19	33	63	60	66	133	91	76	142	71	25	3.0	.54
20	44	59	58	60	110	79	70	119	56	24	1.6	.46
21	108	58	57	63	110	69	66	95	95	22	1.4	.52
22	105	59	60	59	122	72	63	85	105	17	1.3	.47
23	85	61	57	61	120	72	65	89	62	15	1.0	.39
24	82	59	51	60	125	69	61	89	72	17	.82	.41
25	78	57	51	58	148	66	56	96	777	22	.79	.55
26	127	59	56	57	154	63	52	76	350	19	.87	.58
27	120	57	59	55	134	102	50	75	191	16	.91	.54
28	90	59	58	54	124	123	50	73	149	13	1.1	.50
29	88	56	55	54	---	107	54	244	526	65	.63	.54
30	83	40	52	61	---	94	54	261	552	72	.60	.64
31	74	---	57	67	---	87	---	246	---	33	.55	---
TOTAL	1754	2968	1781	2076	2755	2910	2096	6693	11790	1567	258.77	14.60
MEAN	56.6	98.9	57.5	67.0	98.4	93.9	69.9	216	393	50.5	8.35	.49
MAX	127	394	76	112	154	123	113	1710	4080	204	49	.98
MIN	25	40	36	40	50	63	50	38	56	13	.55	.30
AC-FT	3480	5890	3530	4120	5460	5770	4160	13280	23390	3110	513	29

CAL YR 1974 TOTAL 34503.15 MEAN 94.5 MAX 3540 MIN .20 AC-FT 68440
WTR YR 1975 TOTAL 36663.37 MEAN 100 MAX 4080 MIN .30 AC-FT 72720

PEAK DISCHARGE (BASE, 5,000 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE
6-7	2045	11.06	6,560

07148450 SALT FORK ARKANSAS RIVER NEAR INGERSOLL, OKLA.

LOCATION.--Lat 36°49'18", long 98°21'35", in SW 1/4 NW 1/4, sec.14, T.27 N., R.11 W., Alfalfa County, on downstream right bank near end of bridge on State Highways 8 and 58, 2.0 mi (3.2 km) upstream from Medicine Lodge River, 2.5 mi (4.0 km) northeast of Ingersoll and at mile 120.3 (194 km).

DRAINAGE AREA.--1,140 mi^2 (2,953 km^2).

PERIOD OF RECORD.--September 1961 to September 1962, October 1974 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,170.30 ft (356.707 m) above mean sea level (State Highway Department bench mark).

EXTREMES.--Current year: Maximum discharge, 3,710 ft^3/s (105 m^3/s) June 8, gage height, 9.38 ft (2.859 m); minimum daily, 1.9 ft^3/s (0.05 m^3/s) Sept. 13.
Period of record: Maximum discharge, 5,340 ft^3/s (151 m^3/s) Oct. 12, 1973, gage height, 11.5 ft (3.51 m) from graph of wire-weight reading; minimum daily, 0.30 ft^3/s (0.008 m^3/s) Sept. 5, 6, 1962.

REMARKS.--Records good. See pg. 196 for water-quality record.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	52	97	87	102	111	271	119	74	318	378	87	5.5
2	50	121	81	112	113	239	112	85	324	237	56	4.3
3	50	506	89	114	117	188	102	107	242	188	50	4.0
4	49	576	101	117	127	166	102	109	196	174	42	3.4
5	45	458	118	117	110	160	99	98	183	169	38	3.4
6	40	375	122	118	90	163	97	89	333	156	30	3.1
7	42	276	118	122	84	159	100	79	1290	139	30	3.1
8	44	237	111	123	90	138	121	76	3340	126	26	3.1
9	44	223	104	123	75	124	113	77	2260	120	24	3.1
10	43	207	99	120	100	118	110	84	1150	111	21	3.1
11	44	196	115	116	143	134	100	214	1070	107	19	2.3
12	46	178	129	80	155	142	91	509	708	96	17	2.1
13	61	169	142	75	165	140	91	395	530	81	15	1.9
14	64	154	142	86	145	134	98	2750	408	76	15	2.6
15	64	141	129	100	139	130	123	1200	327	70	15	3.1
16	66	129	117	108	110	128	148	693	262	64	16	3.4
17	67	123	112	133	90	127	135	503	221	58	13	3.4
18	65	135	110	121	100	131	120	407	307	53	98	4.0
19	59	135	109	113	130	128	109	327	227	51	38	4.0
20	54	131	110	112	188	117	105	288	166	49	24	3.4
21	52	127	108	105	184	110	100	244	141	41	17	4.5
22	51	123	106	104	195	105	95	217	312	40	14	5.5
23	51	123	105	103	207	105	94	195	204	37	13	5.5
24	51	118	99	101	201	100	92	180	146	37	10	5.1
25	54	113	95	105	215	96	92	342	132	33	9.1	4.5
26	60	110	90	106	246	91	90	264	589	32	8.7	4.5
27	109	106	91	102	262	104	84	190	295	32	7.9	4.3
28	145	105	97	98	232	167	82	155	205	32	7.5	4.3
29	128	101	104	96	---	172	80	311	159	32	7.1	4.5
30	110	99	103	100	---	149	78	518	462	45	6.7	4.8
31	105	---	103	106	---	128	---	419	---	91	5.9	---
TOTAL	1965	5692	3346	3338	4124	4364	3082	11199	16507	2955	780.9	113.8
MEAN	63.4	190	108	108	147	141	103	361	550	95.3	25.2	3.79
MAX	145	576	142	133	262	271	148	2750	3340	378	98	5.5
MIN	40	97	81	75	75	91	78	74	132	32	5.9	1.9
AC-FT	3900	11290	6640	6620	8180	8660	6110	22210	32740	5860	1550	226

CAL YR 1974 TOTAL 48416.74 MEAN 133 MAX 2430 MIN .35 AC-FT 96030
WTR YR 1975 TOTAL 57466.70 MEAN 157 MAX 3340 MIN 1.9 AC-FT 114000

PEAK DISCHARGE (BASE, 5,000 FT^3/S).--No peak above base.

07149000 MEDICINE LODGE RIVER NEAR KIOWA, KS

LOCATION.--Lat 37°02'17", long 98°28'04", in SE 1/4 SW 1/4 sec.36, T.34 S., R.11 W., Barber County, at downstream side of bridge on State Highway 14, 200 ft (61 m) downstream from the Atchison, Topeka and Santa Fe Railway Co. bridge, 1.5 mi (2.4 km) northeast of Kiowa, and at mile 22.2 (35.7 km).

DRAINAGE AREA.--903 mi^2 (2,340 km^2).

PERIOD OF RECORD.--May 1895 to October 1896, October 1937 to September 1950, October 1954 to September 1955, June 1959 to current year. Published as Medicine River near Kiowa 1895-96. All figures of discharge above 2,000 ft^3/s (57 m^3/s) for June and July 1896, published in Eighteenth Annual Report of the Geological Survey (Part 4), have been found to be unreliable and should not be used.

GAGE.--Water-stage recorder. Datum of gage is 1,286.99 ft (382.275 m) above mean sea level (levels by Corps of Engineers). May 1895 to October 1896, nonrecording gage at site 2.0 mi (3.2 km) upstream at different datum. Feb. 11 to Mar. 2, 1938, nonrecording gage and Mar. 3, 1938, to Sept. 30, 1944, water-stage recorder at present site at datum 3.00 ft (0.914 m) higher. Oct. 1, 1944, to Sept. 30, 1950, and Oct. 1, 1954, to Sept. 30, 1955, water-stage recorder at present site and datum.

AVERAGE DISCHARGE.--30 years (1937-50, 1954-55, 1959-75), 141 ft^3/s (3.993 m^3/s), 102,200 acre-ft/yr (126 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 1,740 ft^3/s (49.3 m^3/s) June 24, gage height, 6.88 ft (2.097 m); minimum, 11 ft^3/s (0.312 m^3/s) Aug. 13-14.
Period of record: Maximum discharge, 16,000 ft^3/s (453 m^3/s) Oct. 22, 1941, gage height, 11.75 ft (3.581 m), present datum; maximum gage height, 12.10 ft (3.688 m) Oct. 12, 1973; no flow at times in most years.
Floods of May 8, 1922, and June 1957 reached stages of about 16 ft (4.9 m) and 15.5 ft (4.7 m), respectively, present site and datum, from the Atchison, Topeka and Santa Fe Railway Co. records and information by local resident.

REMARKS.--Records good, except those for winter periods, which are poor. See pg. 202 for water-quality record.

REVISIONS (WATER YEARS).-- WSP 1391: 1938(M), 1942(M). WSP 1921: Drainage area.
See also PERIOD OF RECORD.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	64	135	116	128	112	204	170	116	300	212	24	86
2	62	146	118	128	112	191	167	122	221	170	32	52
3	60	235	118	125	118	179	158	124	184	148	36	34
4	58	525	121	125	110	176	149	128	168	142	30	25
5	56	322	121	133	100	179	146	124	176	136	25	19
6	56	238	123	140	90	185	143	116	186	128	23	17
7	64	191	126	143	80	179	149	110	180	122	20	16
8	74	173	123	143	70	164	156	102	176	114	17	14
9	76	164	116	140	50	164	158	96	385	108	16	14
10	76	158	118	130	95	185	146	100	499	96	15	13
11	76	149	140	110	175	197	140	118	266	94	14	12
12	78	138	173	90	167	200	138	112	200	86	13	13
13	88	130	170	80	135	197	144	475	166	78	12	14
14	100	123	149	85	130	191	172	534	146	74	12	15
15	114	121	135	95	128	191	227	289	130	64	13	18
16	100	121	123	110	90	191	221	202	124	56	16	23
17	90	121	116	120	70	194	184	166	962	50	16	26
18	88	121	118	121	80	194	170	146	494	50	17	29
19	90	116	123	116	90	185	160	134	358	46	36	32
20	90	112	126	108	160	176	148	120	208	42	32	30
21	90	112	128	108	173	167	140	110	186	40	24	29
22	90	112	128	102	191	161	134	98	566	38	20	28
23	88	110	128	100	191	158	136	116	796	34	17	26
24	94	110	126	100	182	146	140	162	1390	32	15	25
25	106	110	121	102	194	138	138	144	1070	32	13	23
26	118	112	118	102	210	133	136	118	434	36	13	22
27	232	114	121	100	214	167	134	108	269	32	13	22
28	173	118	123	98	207	214	134	114	251	30	13	22
29	149	121	123	98	---	221	124	184	597	26	14	23
30	138	118	126	110	---	191	120	338	310	24	13	24
31	138	---	128	116	---	173	---	501	---	23	111	---
TOTAL	2976	4676	3943	3506	3724	5591	4582	5447	11398	2363	685	746
MEAN	96.0	156	127	113	133	180	153	176	380	76.2	22.1	24.9
MAX	232	525	173	143	214	221	227	534	1390	212	111	86
MIN	56	110	116	80	50	133	120	96	124	23	12	12
AC-FT	5900	9270	7820	6950	7390	11090	9090	10800	22610	4690	1360	1480

CAL YR 1974 TOTAL 57996.7 MEAN 159 MAX 2580 MIN 5.7 AC-FT 115000
WTR YR 1975 TOTAL 49637.0 MEAN 136 MAX 1390 MIN 12 AC-FT 98450

PEAK DISCHARGE (BASE, 3,700 CFS).--No peak above base.

07150000 GREAT SALT PLAINS LAKE NEAR JET, OKLA.

LOCATION.--Lat 36°44'40", long 98°08'08", in NW 1/4 SE 1/4 sec.11, T.26 N., R.9 W., Alfalfa County, at right end of Great Salt Plains Dam on Salt Fork Arkansas River, 4.5 mi (7.2 km) upstream from Wagon Creek, 5.5 mi (8.8 km) northeast of Jet, and at mile 103.3 (166.2 km).

DRAINAGE AREA.--3,200 mi^2 (8,288 km^2), of which 8 mi^2 (20.7 km^2) is probably noncontributing.

PERIOD OF RECORD.--July 1941 to current year. Prior to October 1970, published as Great Salt Plains Reservoir near Jet.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level.

EXTREMES.--Current year: Maximum contents, 58,440 acre-ft (72.1 hm^3) June 10, elevation, 1,127.63 ft (343.702 m); minimum, 27,460 acre-ft (33.9 hm^3) Sept. 29, elevation, 1,124.53 ft (342.757 m). Period of record: Maximum contents, 189,400 acre-ft (234 hm^3) July 2, 1951, elevation, 1,134.38 ft (345.759 m); minimum, 17,180 acre-ft (21.2 hm^3) Sept. 6, 1973, elevation, 1,123.16 ft (342.339 m).

REMARKS.--Reservoir is formed by earth dam. Outlet works consist of 310 ft (94.5 m) uncontrolled concrete spillway containing a series of three weirs to form a cascade. Storage began in June 1941; conservation pool was first filled Oct. 21, 1941. Capacity, 257,700 acre-ft (318 hm^3) at elevation 1,138.5 ft (347.01 m), crest of upper weir, and 31,420 acre-ft (38.7 hm^3) at elevation 1,125.0 ft (342.90 m), crest of intermediate weir and conservation pool. Reservoir is used for flood control and as a wildlife refuge. Figures given herein represent total contents. Revised capacity table, based on survey in 1971, used since Oct. 1, 1972.

COOPERATION.--Records furnished by Corps of Engineers.

REVISIONS.--WSP 1117: Drainage area

Capacity table (elevation, in feet, and contents, in acre-feet)

1,124	23,280	1,127	51,180
1,125	31,420	1,128	62,940
1,126	40,700		

CONTENTS, IN ACRE-FEET, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33630	35270	34810	35360	38750	40210	36660	34990	48550	43000	32830	31250
2	33630	38750	34720	37220	38270	40210	36660	37890	47550	42090	32650	31160
3	33720	50410	34720	36650	38940	40700	36380	37790	45370	41090	32560	30990
4	33900	52640	34630	36570	39230	39910	35910	37320	43710	39910	32470	30730
5	33900	50740	34720	36570	39130	39720	35910	36660	42900	38940	32560	30390
6	32920	49420	35270	36380	38560	39520	35640	36470	44530	37890	32390	30730
7	33360	47260	34990	35910	38080	38560	36660	35730	46100	37320	31680	30300
8	33810	45160	34990	35450	37790	38170	37410	35640	50740	36660	31510	30050
9	33810	43920	34990	35450	37410	38940	37030	35640	53430	35910	31250	29880
10	33810	42700	35360	35540	37130	38650	37030	36380	58080	36850	31250	29960
11	33810	41390	36100	35450	37030	38940	36850	37320	57610	36190	30900	28450
12	33630	40300	36100	35270	36940	38750	36850	36380	55150	35540	30560	29030
13	34450	39330	35820	35180	36660	38560	37130	43510	52080	35180	30560	29290
14	34450	38560	35820	34990	36660	38270	36380	49530	49530	34720	30390	28950
15	34540	37790	35820	34990	36850	38270	36570	55960	46520	34260	30990	28620
16	34540	37510	35910	34990	37410	38080	36850	56660	44330	34080	30560	28620
17	34540	37130	35640	35080	36850	37790	36380	54340	43410	33810	30730	28620
18	34260	37220	35640	34990	36850	38460	36290	51400	46520	33630	31250	28200
19	34450	36660	35730	34990	36850	38080	35730	48550	47910	33190	33630	28700
20	34170	36380	35540	34900	37510	37960	35450	45570	46840	33190	33630	28530
21	34080	35910	35450	34810	37320	37510	35450	43710	45780	33190	33190	28620
22	34260	35910	35450	34810	38360	37030	35730	43100	44120	32740	33010	28450
23	34080	35730	35450	34720	38560	36850	35730	42290	43710	32830	32920	28040
24	34450	35540	35450	34630	38560	36190	35450	43200	45780	33010	32560	28040
25	34720	35080	35360	34450	38750	35080	35270	44740	48980	32830	31950	28040
26	34990	35180	35270	34260	38940	33810	35180	46200	49420	32830	32030	27790
27	35080	35180	35270	34260	38940	37220	35910	45370	48230	32740	32210	27710
28	35450	34990	35180	34350	39520	37220	34990	46520	46100	32470	32120	27710
29	35450	34900	35180	34350	---	37220	35180	50080	44740	33540	32120	27540
30	35450	34900	35360	38170	---	37320	34990	48770	44020	33360	31680	27620
31	35360	---	35640	39230	---	36660	---	48550	---	33270	31950	---
MAX	35450	52640	36100	39230	39520	40700	37410	56660	58080	43000	33630	31250
MIN	32920	34900	34630	34260	36660	33810	34990	34990	42900	32470	30390	27540
(†)	1,125.44	1,125.39	1,125.47	1,125.85	1,125.88	1,125.58	1,125.40	1,126.76	1,126.33	1,125.21	1,125.06	1,124.55
(‡)	+1,460	-460	+740	+3,590	+290	-2,860	-1,670	+13,560	-4,530	-10,750	-1,320	-4,330

CAL YR 1974.....‡ -830
WTR YR 1975.....‡ -6,280

† Elevation, in feet, at end of month.
‡ Change in contents, in acre-ft.

07150500 SALT FORK ARKANSAS RIVER NEAR JET, OKLA.

LOCATION.--Lat 36°45'11", long 98°07'44", in NE 1/4 NE 1/4 sec.11, T.26 N., R.9 W., Alfalfa County, near center of span on downstream side of county road bridge, 0.6 mi (0.97 km) downstream from Great Salt Plains Dam, 4 mi (6.4 km) upstream from Wagon Creek, 6 mi (9.7 km) northeast of Jet, and at mile 102.7 (165.2 km).

DRAINAGE AREA.--3,202 mi^2 (8,293 km^2), of which 8 mi^2 (20.7 km^2) is probably noncontributing.

PERIOD OF RECORD.--October 1937 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,092.20 ft (332.903 m) above mean sea level (levels by Corps of Engineers). Prior to Mar. 17, 1938, nonrecording gage at site 2.5 miles (4.0 km) upstream at datum 13.46 ft (4.103 m) higher. Mar. 17, 1938, to Apr. 26, 1953, water-stage recorder at site 200 ft (61.0 m) upstream, datum 5.00 ft (1.524 m) higher prior to Oct. 1, 1950.

AVERAGE DISCHARGE.--38 years, 369 ft^3/s (10.45 m^3/s), 267,300 acre-ft/yr (330 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 3,590 ft^3/s (102 m^3/s) June 11, gage height, 7.27 ft (2.216 m); minimum daily, 7.4 ft^3/s (0.21 m^3/s) Sept. 19, 20.
Period of record: Maximum discharge, 25,000 ft^3/s (733 m^3/s) May 19, 1938, gage height, 13.80 ft (4.206 m), present datum; no flow at times in 1939-41, 1944, 1955-56.

REMARKS.--Records good. Flow regulated since June 1941 by Great Salt Plains Lake (see sta. 07150000).
See pg. 208 for water-quality record.

REVISIONS.--WSP 1117: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	118	424	265	302	725	756	372	225	2140	1440	139	16
2	74	419	243	370	683	769	433	364	2000	1310	127	25
3	166	1540	233	404	684	782	364	546	1760	1170	112	30
4	206	2180	227	377	764	784	359	516	1540	1060	101	27
5	160	2220	238	403	755	777	311	413	1360	932	93	26
6	94	2050	260	355	705	740	298	451	1190	767	89	25
7	121	1840	271	363	640	670	247	355	1620	626	60	25
8	142	1620	255	358	547	630	454	316	1950	566	39	24
9	143	1440	271	356	630	605	432	257	2720	484	27	24
10	150	1300	261	437	529	692	385	347	3210	538	25	24
11	162	1150	361	323	522	679	395	448	3560	504	24	24
12	128	1030	367	344	500	671	395	434	3360	421	38	22
13	182	916	360	331	503	641	367	817	2880	349	41	12
14	192	834	472	298	482	620	419	1610	2410	305	34	11
15	219	758	358	306	471	562	398	2650	2010	285	40	11
16	225	656	349	313	542	587	429	3230	1650	263	34	12
17	231	617	329	322	501	545	408	3100	1380	251	38	9.7
18	223	599	356	336	476	594	441	2660	1430	213	59	7.5
19	216	561	324	310	467	585	365	2240	1960	177	152	7.4
20	203	512	338	348	487	550	335	1830	2000	144	169	7.4
21	217	476	312	274	530	535	320	1550	1830	142	159	7.6
22	204	451	316	335	540	474	307	1280	1640	130	131	8.2
23	203	460	278	367	614	562	377	1280	1490	106	106	8.3
24	207	400	289	368	626	472	321	1150	1520	114	100	9.0
25	249	367	301	338	614	289	261	1420	1960	101	51	6.3
26	286	363	294	313	619	179	259	1570	2250	102	28	8.8
27	302	336	314	330	667	409	304	1580	2190	100	33	8.8
28	313	277	280	319	678	418	303	1550	1940	89	59	9.8
29	365	285	306	315	---	424	254	1770	1680	114	49	9.7
30	378	329	283	429	---	446	256	2050	1540	158	27	10
31	444	---	318	745	---	440	---	2130	---	147	16	---
TOTAL	6523	26410	9429	11089	16501	17907	10569	40159	60170	13108	2202	458.5
MEAN	210	880	304	358	589	578	352	1295	2006	423	71.0	15.3
MAX	444	2220	472	745	764	784	454	3230	3560	1440	169	30
MIN	74	277	227	274	467	179	247	225	1190	89	16	7.4
AC-FT	12940	52380	18700	22000	32730	35520	20960	79620	119300	26000	4370	909

CAL YR 1974 TOTAL 167673.1 MEAN 459 MAX 2300 MIN 2.5 AC-FT 332600
WTR YR 1975 TOTAL 214505.5 MEAN 588 MAX 3560 MIN 7.4 AC-FT 425500

ARKANSAS RIVER BASIN

07151000 SALT FORK ARKANSAS RIVER AT TONKAWA, OKLA.

LOCATION.--Lat 36°40'13", long 97°18'33", in NW 1/4 SE 1/4 sec.4, T.25 N., R.1 W., Kay County, near right bank on downstream side of pier of bridge on U.S. Highway 77 in Tonkawa, 4 mi (6.4 km) downstream from Thompson Creek, 7.8 mi (12.6 km) upstream from Chikaskia River, and at mile 33.8 (54.4 km).

DRAINAGE AREA.--4,528 mi^2 (11,728 km^2) of which 8 mi^2 (20.7 km^2) is probably noncontributing.

PERIOD OF RECORD.--September 1903 to October 1905 (gage heights only), October 1935 to current year. Monthly discharge only for some periods, published as Arkansas River (Salt Fork) near Tonkawa 1903-4 and as "near Tonkawa" 1905.

GAGE.--Water-stage recorder. Datum of gage is 930.22 ft (283.531 m) above mean sea level (Corps of Engineers bench mark). September 1903 to October 1905, nonrecording gage near present site at different datum. Jan. 2, 1936, to Jan. 23, 1939 nonrecording gage, and Jan. 24, 1939, to June 20, 1960, water-stage recorder at site 100 ft (30.5 m) upstream at same datum.

AVERAGE DISCHARGE.--40 years, 705 ft^3/s (19.97 m^3/s), 510,800 acre-ft/yr (630 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 31,300 ft^3/s (886 m^3/s) Nov. 5, gage height, 23.06 ft (7.029 m); minimum, 79 ft^3/s (2.24 m^3/s) Sept. 30.
Period of record: Maximum discharge, 97,300 ft^3/s (2,760 m^3/s) Oct. 11, 1973, gage height, 28.98 ft (8.833 m); no flow Aug. 31 to Oct. 12, Oct. 14-16, 1956.
Flood of June 10, 1923, reached a stage of 26.8 ft (8.17 m), from information by Corps of Engineers. Flood of July 11, 1904, reached a stage of 14.6 ft (4.45 m), datum then in use.

REMARKS.--Records good. Some regulation since June 1941 by Great Salt Plains Lake, 69.5 miles (111.8 km) upstream (see sta. 07150000). See pg. 214 for water-quality record.

REVISIONS.--WSP 1117: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	242	2600	466	498	6240	6420	697	423	3610	5400	264	141
2	220	4240	488	623	4440	5630	826	646	3050	2890	262	128
3	201	14800	448	905	2770	4670	755	1640	2780	2030	260	120
4	190	26100	428	1000	3200	3880	776	2260	2450	1710	260	116
5	187	28700	422	969	4610	2400	706	1150	2210	1520	230	120
6	455	17300	423	1510	3530	1510	675	853	2000	1360	216	120
7	287	7030	442	1960	2070	1260	652	671	8420	1200	211	118
8	219	4210	448	1730	1360	1440	641	622	17100	1050	196	115
9	195	3240	452	1440	1260	1320	734	524	17900	926	186	114
10	203	2940	438	1210	1060	1300	1200	457	12900	877	175	114
11	200	2640	533	954	797	1960	974	412	15400	828	164	111
12	196	2240	1130	765	788	3540	775	491	10300	813	155	106
13	200	1910	1480	569	769	3010	731	2780	7010	744	150	107
14	199	1650	1310	576	723	2390	731	12300	7460	660	146	108
15	204	1450	926	529	658	2160	722	10500	4790	583	172	111
16	244	1310	641	490	600	1730	751	6560	3520	530	200	107
17	238	1180	640	484	580	1320	707	4740	3200	493	173	107
18	237	1080	576	482	560	1340	728	3840	2670	459	162	106
19	251	953	536	481	550	2070	688	3360	2650	440	177	103
20	228	925	542	494	540	1690	696	2900	2600	403	236	99
21	214	858	509	470	700	1490	607	2450	2730	369	283	95
22	208	785	503	496	1310	1320	566	2080	2750	333	289	93
23	208	729	479	443	1270	1120	553	6080	3080	314	241	91
24	211	695	463	472	1170	936	531	7540	3370	319	218	88
25	224	664	431	494	1230	914	587	4220	5700	350	207	88
26	235	604	438	500	2410	1030	531	6210	7760	302	422	87
27	248	565	446	465	3890	1380	473	8130	6160	280	199	87
28	291	546	446	442	5070	1570	449	5530	4200	265	162	86
29	350	510	445	445	---	1890	471	3660	2970	252	147	86
30	463	466	433	742	---	1230	484	4970	3170	239	143	86
31	2050	---	537	6310	---	965	---	5540	---	242	151	---
TOTAL	9278	132920	18099	28948	54135	65085	20597	113629	173710	26181	6466	3158
MEAN	299	4431	584	934	1933	2100	687	3665	5790	845	209	105
MAX	2050	28700	1480	6310	6240	6420	1200	12300	17900	3400	422	141
MIN	187	466	422	442	540	914	449	412	2000	239	143	86
AC-FT	18400	263600	35900	57420	107400	129100	40850	225400	344600	51930	12830	6260

CAL YR 1974 TOTAL 490920 MEAN 1345 MAX 28700 MIN 82 AC-FT 973700
WTR YR 1975 TOTAL 652206 MEAN 1787 MAX 28700 MIN 86 AC-FT 1294000

PEAK DISCHARGE (BASE, 11,000 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE
11-5	0345	23.06	31,300
5-14	1615	16.33	13,100
6-9	0830	19.51	19,700
6-11	0300	18.17	16,800

07152000 CHIKASKIA RIVER NEAR BLACKWELL, OKLA.

LOCATION.--Lat 36°48'31", long 97°16'39", in NE 1/4 NW 1/4 sec.23, T.27 N., R.1 W., Kay County, near right bank on downstream side of pier of St. Louis-San Francisco Railway Co. bridge at northeast edge of Blackwell, 0.2 mi (0.32 km) downstream from Bitter Creek, and at mile 28.2 (45.4 km).

DRAINAGE AREA.--1,859 mi^2 (4,815 km^2).

PERIOD OF RECORD.--October 1935 to current year. Monthly discharge only for some periods, published in WSP 1311.

GAGE.--Water-stage recorder. Datum of gage is 967.41 ft (29.487 m) above mean sea level (levels by Corps of Engineers). See WSP 1921 for history of changes prior to April, 1952.

AVERAGE DISCHARGE.--40 years, 491 ft^3/s (13.91 m^3/s), 355,700 acre-ft/yr (439 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 30,300 ft^3/s (858 m^3/s) Nov. 3, gage height, 31.83 ft (9.702 m); minimum, 56 ft^3/s (1.59 m^3/s) Aug. 13.
Period of record: Maximum discharge, 85,000 ft^3/s (2,410 m^3/s), June 22, 1942, gage height, 33.3 ft (10.15 m), from floodmark, present site and datum; no flow at times in 1954, 1956.
Flood of June 10, 1923 reached a stage of about 34 ft (10.4 m), present site and datum, from information by local residents, discharge 100,000 ft^3/s (2,830 m^3/s).

REMARKS.--Records fair. Some regulation at low flow by Lake Blackwell, capacity, 3,600 acre-ft (4.44 hm^3), 12.6 mi (20.3 km) above station. Small diversion made from reservoir for municipal supply of city of Blackwell.

REVISIONS.--WSP 1117: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	150	1910	286	285	3910	4700	365	276	816	731	94	162
2	174	1240	288	318	784	4940	236	281	543	501	69	151
3	154	13100	259	370	516	3490	201	331	475	432	70	142
4	146	11500	261	376	3560	1300	214	313	1370	365	73	140
5	129	8990	261	361	5460	860	249	302	769	342	74	130
6	163	2010	262	435	1370	790	259	290	759	314	76	100
7	142	987	279	737	531	950	274	275	507	298	77	82
8	125	709	298	1580	549	804	561	254	450	278	76	74
9	120	642	299	1240	360	618	2120	255	1640	266	72	66
10	114	642	283	963	345	683	935	255	4380	257	70	72
11	113	624	314	580	447	906	548	265	6680	238	66	79
12	110	532	1020	349	464	2330	439	291	4570	226	63	86
13	312	451	1530	259	415	1560	432	1390	848	215	59	86
14	963	420	832	274	380	1060	425	7780	526	208	64	84
15	337	397	533	321	376	717	439	8490	404	207	92	96
16	229	390	417	353	389	675	455	2090	354	201	116	93
17	191	378	366	325	280	681	424	713	2700	193	125	91
18	168	378	342	305	294	688	410	522	18700	185	118	89
19	152	359	330	302	383	610	377	452	9340	178	193	87
20	145	356	321	300	410	524	372	414	2140	172	868	87
21	131	348	313	296	494	478	338	353	1160	167	684	86
22	130	337	302	284	864	442	316	313	1680	160	278	86
23	130	328	295	269	622	418	312	2500	2020	155	208	86
24	130	319	291	265	482	404	308	2560	6460	158	166	84
25	129	321	282	265	543	391	302	2950	5060	173	301	82
26	141	306	279	265	1290	367	299	5640	1760	193	977	80
27	161	299	276	265	2880	536	294	7420	981	151	211	79
28	184	298	270	258	4360	2030	290	2700	740	110	184	77
29	528	297	268	252	---	1790	285	2210	854	93	172	76
30	1490	286	267	561	---	681	280	2700	2220	100	167	72
31	1940	---	278	6600	---	502	---	1690	---	100	168	---
TOTAL	9231	44154	11902	19593	32758	36925	12759	56275	80906	7387	6031	2805
MEAN	298	1638	384	632	1170	1191	425	1815	2697	238	195	93.5
MAX	1940	13100	1530	6600	5460	4940	2120	8490	18700	731	977	162
MIN	110	286	259	239	280	367	201	254	354	93	59	66
AC-FT	18310	97500	23610	38860	64980	73240	25310	111600	160500	14650	11960	5560

CAL YR 1974 TOTAL 245691 MEAN 673 MAX 13800 MIN 24 AC-FT 487300
WTR YR 1975 TOTAL 325726 MEAN 892 MAX 18700 MIN 59 AC-FT 646100

PEAK DISCHARGE (BASE, 8,000 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
11-3	1630	31.83	30,300	5-15	0345	25.53	9,380
11-4	1530	31.49	27,100	5-27	0430	23.72	8,220
				6-18	1715	31.81	26,500

07152290 GREASY CREEK NEAR WATCHORN, OKLA.

LOCATION.--Lat 35°27'22", long 96°59'38", on west line, sec.21, T.23 N., R.3 E., Pawnee County, near left wingwall on downstream side at county road bridge, 2.5 mi (4.0 km) north of abandoned townsite of Watchorn, 18 mi (29 km) southeast of Ponca City, and at mile 3.2 (5.1 km).

DRAINAGE AREA.--28 mi^2 (73 km^2).

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

GAGE.--Water-stage recorder. Datum of gage is 831.96 ft (253.581 m) above mean sea level (Benham, Blair and Affiliate).

EXTREMES.--1974: Maximum discharge during period July to September, 3,300 ft^3/s (93.4 m^3/s) Aug. 9, gage height, 17.0 ft (5.18 m) from high-water mark; no flow at times.
Current year: Maximum discharge, 1,870 ft^3/s (53.0 m^3/s) Oct. 28, gage height, 14.17 ft (4.319 m); maximum gage height, 23.08 ft (7.035 m) Nov. 3 (backwater from Arkansas River); no flow at times.
Period of record: Maximum discharge, 3,300 ft^3/s (93.4 m^3/s) Aug. 9, 1974, gage height, 17.0 ft (5.18 m) from high-water mark; maximum gage height, 23.08 ft (7.035 m) Nov. 3, 1974 (backwater from Arkansas River); no flow at times each year.

REMARKS.--Records poor.

DISCHARGE, IN CUBIC FEET PER SECOND, FOR PERIOD JULY 1974 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1										---	0	.21
2										---	0	685
3										---	0	40
4										---	0	9.9
5										---	0	15
6										---	0	1.1
7										---	0	1.2
8										---	0	1.0
9										---	1030	.75
10										---	433	.70
11										---	14	.66
12										---	3.4	.54
13										---	1.4	.50
14										---	.86	.50
15										---	.90	.50
16										---	.62	.58
17										---	.42	.58
18										0	.26	.54
19										0	.76	657
20										0	.03	41
21										0	.08	17
22										0	1.1	4.1
23										0	34	.85
24										0	12	3.9
25										0	1.2	17
26										0	.24	4.1
27										0	1.2	1.1
28										0	4.8	.42
29										0	3.2	.09
30										0	4.0	.03
31										0	1.8	---
TOTAL											1549.27	1505.85
MEAN											50.0	50.2
MAX											1030	685
MIN											0	.03
AC-FT											3070	2990

07152290 GREASY CREEK NEAR WATCHORN, OKLA.--continued.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.16	15	1.5	8.4	9.5	6.3	3.8	3.1	3.8	3.8	.30	.64
2	.12	75	1.5	1.9	2.0	5.4	3.8	26	2.8	2.8	.32	.52
3	0	650	1.4	1.6	1.8	5.4	3.4	49	1.9	2.8	.29	.41
4	0	220	1.3	1.2	6.1	5.4	3.1	6.4	1.8	1.9	.26	.20
5	0	69	3.3	1.2	2.0	4.7	2.5	1.7	1.8	1.2	.25	.09
6	.36	10	4.3	1.2	1.8	4.0	2.1	1.2	53	1.0	.23	.10
7	.34	5.6	13	1.2	1.7	4.0	6.8	.90	692	.80	.23	.08
8	.58	4.3	7.7	1.1	1.6	4.0	34	.12	42	.62	.23	.05
9	.75	4.0	5.7	1.0	1.6	61	1.9	.06	212	.56	.25	.01
10	.99	3.9	9.3	30	1.6	28	1.6	.75	163	4.0	.27	.01
11	.75	2.8	258	1.6	2.3	3.8	1.6	1.4	8.2	1.6	.23	.01
12	.80	2.1	38	1.1	1.6	3.8	1.7	1.7	7.2	.66	.22	0
13	.95	1.1	9.8	.85	1.3	3.4	1.5	148	7.2	.42	.19	0
14	2.1	.38	8.1	1.0	1.1	2.8	1.6	499	12	.50	.23	0
15	2.2	.16	6.4	1.2	.98	1.9	1.3	1.9	4.0	.46	14	0
16	3.0	.16	5.2	1.2	1.6	1.9	.96	1.6	12	.33	1.1	0
17	2.6	.26	4.6	.95	4.6	1.9	.79	1.6	54	.25	.51	0
18	2.9	.30	4.3	1.0	31	12	.90	1.6	3.8	.25	1.2	0
19	3.4	.58	4.0	1.0	34	1.9	.52	1.6	3.6	.25	6.0	0
20	3.4	.80	4.0	.70	5.4	1.9	.52	3.0	3.6	.27	1.4	0
21	3.4	.80	3.9	.66	5.4	1.9	.54	1.8	3.6	.29	1.2	0
22	3.6	.70	3.9	.50	14	1.9	.54	29	3.6	.26	3.0	0
23	3.8	.85	3.9	.42	6.3	1.9	.54	620	73	.19	3.8	0
24	3.9	1.1	3.8	.54	6.3	1.9	.66	3.9	3.9	.88	3.9	0
25	11	1.1	3.7	.58	6.0	1.8	.75	2.8	3.8	1.6	3.9	0
26	12	.95	3.5	.50	5.4	3.0	1.0	177	3.8	1.3	3.8	0
27	5.8	1.2	3.9	.42	5.4	240	1.2	3.8	3.8	1.0	2.5	0
28	750	1.6	4.0	.30	6.3	8.4	2.0	9.5	3.8	.70	1.7	0
29	70	1.5	4.0	.30	---	3.9	2.4	7.2	3.8	.50	1.3	0
30	110	1.6	80	15	---	3.9	3.5	3.8	3.8	.35	.67	0
31	400	---	130	150	---	3.8	---	3.8	---	.30	.66	---
TOTAL	1399.10	1076.84	636.0	228.62	168.68	435.9	87.52	1613.23	1396.6	31.84	54.14	2.12
MEAN	45.1	35.9	20.5	7.37	6.02	14.1	2.92	52.0	46.6	1.03	1.75	.071
MAX	750	650	258	150	34	240	34	620	692	4.0	14	.64
MIN	0	.16	1.3	.30	.98	1.8	.52	.06	1.8	.19	.19	0
AC-FT	2780	2140	1260	453	335	865	174	3200	2770	63	107	4.2

WTR YR 1975 TOTAL 7130.59 MEAN 19.5 MAX 750 MIN 0 AC-FT 14140

07152500 ARKANSAS RIVER AT RALSTON, OKLA.

LOCATION.--Lat 36°30'09", long 96°43'22", in NW 1/4 sec.1, T.23 N., R.5 E., Osage County, near left bank on downstream side of pier of bridge on State Highway 18 at Ralston, 2 mi (3.2 km) downstream from Salt Creek, 2 mi (3.2 km) upstream from Grayhorse Creek, and at mile 594.0 (955.7 km).

DRAINAGE AREA.--54,465 mi^2 (141,064 km^2), of which 7,615 mi^2 (19,723 km^2) is probably noncontributing.

PERIOD OF RECORD.--October 1925 to current year. Monthly discharge only for some periods, published in WSP 1311. Gage-height records collected in this vicinity since 1922 are contained in reports of U.S. Weather Bureau.

GAGE.--Water-stage recorder. Datum of gage is 776.70 ft (236.738 m) above mean sea level. Oct. 1, 1925, to Nov. 13, 1935, nonrecording gage at site of former highway bridge 1,200 ft (366 m) downstream at same datum. Nov. 14, 1935, to Feb. 23, 1939, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--50 years, 4,826 ft^3/s (136.7 m^3/s), 3,496,000 acre-ft/yr (4.31 km^3/yr).

EXTREMES.--Current year: Maximum discharge, 111,000 ft^3/s (3,140 m^3/s) Nov. 5, gage height, 18.62 ft (5.675 m); minimum, 892 ft^3/s (25.3 m^3/s) Sept. 30.
Period of record: Maximum discharge, 211,000 ft^3/s (5,980 m^3/s) Oct. 13, 1973, gage height, 22.98 ft (7.004 m); minimum, 14 ft^3/s (0.40 m^3/s) Oct. 12, 1956.
Flood of June 11, 1923, reached a stage of 23.8 ft (7.25 m), referred to outside gage on basis of stages observed in 1923 and 1944 at site 1,200 ft (366 m) downstream.

REMARKS.--Records good. Some regulation by John Martin Reservoir in Colorado and Great Salt Plains Lake (see sta. 07150000). See pg. 220 for water-quality record.

REVISIONS.--WSP 1341: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1700	16500	4320	6000	32700	17900	8650	3780	20100	11800	2110	1530
2	1640	21500	4150	6240	27200	20100	7000	5360	14100	12600	2040	1650
3	1600	56000	4090	6840	16800	20900	6440	6720	10000	11600	1990	1820
4	1500	92100	4180	7310	13500	20600	5870	6130	10100	10600	1950	2180
5	1420	107000	4200	7100	16200	16600	5500	6200	20900	9350	1890	2220
6	1410	77600	4280	6710	23400	11700	5120	5060	25500	7970	1840	2450
7	1440	42500	4650	7480	19900	8860	5060	4230	21900	7180	1830	2720
8	1540	22800	4600	7690	13200	7830	6240	3800	19200	6490	1800	2430
9	1410	16700	4610	7820	8430	7580	6120	3510	27600	6010	1700	2120
10	1360	14500	4720	8620	6600	8410	6210	3330	31200	5840	1640	1750
11	1310	13300	7620	7930	5600	7910	9050	3340	41900	5490	1580	1610
12	1280	12300	8140	6870	4850	8560	9640	3700	49200	5280	1480	1670
13	1270	10800	8860	5960	4780	10500	7150	3980	40700	5060	1440	1420
14	1350	9520	14400	5250	4740	11800	6240	22600	28200	4980	1440	1860
15	1710	8620	13600	4430	4500	9740	5690	46500	19700	4680	1580	1870
16	2390	7840	10500	3820	4480	8300	5360	36700	13500	4250	1660	1570
17	2190	7250	7450	3610	4480	7360	5250	23100	14100	4000	1730	1440
18	1850	6830	6950	3600	4750	9180	5180	12400	14900	3780	2250	1330
19	1640	6420	6290	3630	4850	11700	5150	9270	48300	3510	2170	1350
20	1560	6060	5840	3660	4580	12400	5090	7650	65000	3310	2140	1280
21	1760	5890	5530	3540	5320	9960	4900	6580	35100	3130	2240	1260
22	1720	5720	5320	3380	7660	8270	4620	5850	18400	3000	2560	1210
23	1600	5490	5080	3280	10800	7260	4250	15000	15800	2820	3030	1170
24	1500	5240	4790	3170	11600	6580	4210	30900	19000	2760	2940	1110
25	1600	5080	4510	3010	10300	5980	4120	27000	24300	2720	2440	1060
26	1740	4940	4340	2970	9770	5550	4060	26400	30500	2710	2240	1020
27	1880	4770	4200	2940	11900	9570	4050	40400	23300	2600	3340	978
28	3290	4620	4110	2870	14700	12200	4010	37000	17700	2470	5090	953
29	8090	4520	4040	2790	---	14400	3830	24300	13800	2360	2660	917
30	11800	4430	4000	3510	---	13300	3780	14200	11500	2270	1990	903
31	35500	---	5810	17800	---	11800	---	20700	---	2180	1710	---
TOTAL	101850	606840	185180	169830	307590	342800	167840	465690	745500	162800	66500	46851
MEAN	3285	20230	5974	5478	10990	11060	5595	15020	24850	5252	2145	1562
MAX	35500	107000	14400	17800	32700	20900	9640	46500	65000	12600	5090	2720
MIN	1270	4430	4000	2790	4480	5550	3780	3330	10000	2180	1440	903
AC-FT	202000	1204000	367300	336900	610100	679900	332900	923700	1479000	322900	131900	92930

CAL YR 1974 TOTAL 3292610 MEAN 9021 MAX 107000 MIN 780 AC-FT 6531000
WTR YR 1975 TOTAL 3369271 MEAN 9231 MAX 107000 MIN 903 AC-FT 6683000

PEAK DISCHARGE (BASE, 30,000 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-30	2400	11.24	38,800	6-11	2330	13.12	54,300
11-5	1145	18.62	111,000	6-20	1130	14.73	69,600
2-1	1345	10.95	36,600	6-26	0445	10.35	32,200
5-27	1630	11.99	44,700				

07153000 BLACK BEAR CREEK AT PAWNEE, OKLA.

LOCATION.--Lat 36°20'37", long 96°47'57", on east line of SE 1/4 NE 1/4 sec.31, T.22 N., R.5 E., Pawnee County, on downstream side of left pier of bridge on State Highway 18 in north Pawnee, 300 ft (91.4 m) downstream from Skedee Creek, and at mile 23.4 (37.7 km).

DRAINAGE AREA.--576 mi^2 (1,492 km^2).

PERIOD OF RECORD.--July 1944 to current year.

GAGE.--Water-stage recorder. Datum of gage is 802.73 ft (244.672 m) above mean sea level (levels by Corps of Engineers). Prior to Sept. 21, 1944, nonrecording gage at present site and datum except for Aug. 27, 1953, to Apr. 29, 1954, nonrecording gage at site 500 ft (152 m) downstream at same datum.

AVERAGE DISCHARGE.--31 years, 185 ft^3/s (5.239 m^3/s), 134,000 acre-ft/yr (165 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 17,100 ft^3/s (484 m^3/s) Nov. 4, gage height, 26.87 ft (8.190 m); minimum daily, 1.2 ft^3/s (0.034 m^3/s) Sept. 20.
Period of record: Maximum discharge, 30,200 ft^3/s (855 m^3/s) Oct. 3, 1959, gage height, 31.43 ft (9.580 m); no flow at times in many years.
Flood of May 19, 1943, reached a stage of 28.19 ft (8.592 m), from floodmark, discharge, 17,800 ft^3/s (504 m^3/s).

REMARKS.--Records good.

REVISIONS.--WSP 1117: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	122	7260	162	1000	3200	573	358	86	419	93	137	21
2	100	6930	161	684	2590	447	300	620	300	87	95	17
3	81	9860	144	1250	1010	338	221	1480	220	76	72	14
4	69	16000	124	1130	1430	268	189	864	178	67	58	13
5	61	9890	106	707	1800	229	172	398	193	62	50	12
6	52	4950	129	525	1030	211	159	262	324	57	45	9.8
7	44	2270	179	508	562	197	171	186	2740	52	36	9.3
8	40	1930	175	422	422	167	515	138	2940	48	29	10
9	41	1740	147	293	341	198	415	112	4860	46	25	9.3
10	41	1660	129	327	246	810	250	96	4580	51	22	8.8
11	38	1450	799	317	230	638	187	86	4500	258	19	22
12	34	1050	948	193	233	411	158	87	6070	218	18	68
13	32	788	522	130	198	342	149	693	5670	67	16	36
14	42	656	346	109	183	247	152	4810	3170	67	17	29
15	45	543	243	127	172	198	149	4090	3790	54	19	29
16	39	459	190	130	167	186	140	3700	1500	48	21	21
17	36	393	156	122	191	184	131	1100	1160	44	33	14
18	35	341	143	117	335	397	136	642	739	38	134	14
19	34	300	125	120	390	359	116	461	544	33	208	13
20	32	261	116	102	359	288	106	341	433	30	79	1.2
21	31	250	109	99	503	221	99	248	357	28	60	1.6
22	29	240	104	99	966	170	93	207	387	29	49	3.2
23	28	225	99	103	1100	147	98	2640	572	27	41	9.5
24	36	210	97	104	870	133	110	2770	587	27	32	9.0
25	1690	208	91	102	768	105	117	2430	297	129	26	8.7
26	1640	201	87	94	844	97	121	1660	350	207	24	8.6
27	855	185	87	87	807	1750	118	2580	363	171	26	8.5
28	1580	178	90	80	663	2300	133	1760	180	81	54	8.5
29	2070	171	93	78	---	1370	112	2060	135	58	61	8.1
30	4330	164	94	415	---	658	101	997	107	49	46	7.8
31	8410	---	312	2920	---	448	---	754	---	232	35	---
TOTAL	21717	70763	6307	12494	21610	14087	5276	38338	47665	2554	1587	444.9
MEAN	701	2359	203	403	772	454	176	1237	1589	82.4	51.2	14.8
MAX	8410	16000	948	2920	3200	2300	515	4810	6070	258	208	68
MIN	28	164	87	78	167	97	93	86	107	27	16	1.2
AC-FT	43080	140400	12510	24780	42860	27940	10460	76040	94540	5070	3150	882

CAL YR 1974 TOTAL 241676.9 MEAN 662 MAX 16000 MIN 1.6 AC-FT 479400
WTR YR 1975 TOTAL 242842.9 MEAN 665 MAX 16000 MIN 1.2 AC-FT 481700

PEAK DISCHARGE (BASE, 4,000 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-30	2400	22.35	9,880	6-12	2230	17.91	6,660
11-04	1200	26.87	17,100	6-15	1315	12.96	4,130
5-14	0615	14.71	4,980				

07154500 CIMARRON RIVER NEAR KENTON, OKLA.

LOCATION.--Lat 36°55'36", long 102°57'31", in SE 1/4 sec.4, T.5 N., R.1 E., Cimarron County, near right bank on downstream side of pier of county road bridge, 1.5 mi (2.41 km) upstream from North Carrizo Creek, 1.7 mi (2.74 km) northeast of Kenton, 2.2 mi (3.54 km) downstream from Carrizozo Creek, and at mile 594.0 (955.7 km).

DRAINAGE AREA.--1,106 mi^2 (2,865 km^2), of which 68 mi^2 (176.1 km^2) is probably noncontributing.

PERIOD OF RECORD.--April 1904 to July 1905 (gage heights only), October 1950 to current year.

GAGE.--Water-stage recorder. Datum of gage is 4,262.08 ft (1,299.082 m) above mean sea level, (levels by State Highway Department). April 1904 to July 1905 nonrecording gage at site 0.9 mi (1.45 km) upstream at different datum. Oct. 1, 1950, to Sept. 19, 1967, water-stage recorder at same site and at datum 5.00 ft (1.524 m) higher.

AVERAGE DISCHARGE.--25 years (1950-75), 22.1 ft^3/s (0.626 m^3/s), 16,010 acre-ft/yr (19.7 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 1,180 ft^3/s (33.4 m^3/s) June 23, gage height, 9.59 ft (2.923 m); no flow at times.
Period of record: Maximum discharge, 43,400 ft^3/s (1,230 m^3/s) Oct. 17, 1965, gage height, 22.32 ft (6.803 m), present datum, from rating curve extended above 7,000 ft^3/s (198 m^3/s) on basis of contracted-opening measurement of peak flow; no flow at times in most years.

REMARKS.--Records fair except for winter periods which are poor. Extensive diversions for irrigation above station.
REVISIONS (WATER YEARS).--WSP 1711: 1956(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	.17	.15	.09	.11	.18	.10	.17	0	.03	0	0
2	0	.17	.12	.07	.13	.17	.11	.17	0	.01	168	0
3	0	.17	.10	.05	.13	.17	.10	.12	0	0	6.0	0
4	0	.17	.08	.03	.13	.13	.07	.10	0	0	1.1	0
5	0	.19	.09	.08	.14	.12	.07	.09	0	0	.24	0
6	0	.21	.10	.12	.08	.08	.07	.05	0	0	.09	0
7	0	.21	.09	.14	.06	.10	.08	.04	0	0	.01	0
8	0	.21	.10	.14	.06	.10	.03	.03	0	0	0	0
9	0	.21	.09	.13	.03	.10	.12	.03	0	46	0	0
10	0	.21	.16	.16	.07	.12	.28	.04	.03	17	0	0
11	0	.21	.12	.07	.10	.15	.28	.02	.02	.99	0	0
12	.49	.21	.07	.04	.10	.14	.20	.02	0	.60	0	0
13	3.6	.21	.16	.06	.10	.14	.17	.01	0	25	0	0
14	.16	.21	.06	.10	.10	.13	.16	.01	0	.50	0	49
15	.13	.21	.07	.14	.10	.12	.12	0	0	.10	0	1.8
16	.13	.21	.08	.15	.10	.13	.10	0	0	.04	0	.40
17	.13	.21	.07	.14	.10	.13	.10	0	0	.01	0	.16
18	.13	.21	.07	.12	.11	.12	.17	0	0	0	0	.10
19	.13	.21	.05	.14	.10	.11	.19	0	0	0	0	.05
20	.14	.21	.06	.15	.11	.11	.13	0	0	0	0	.01
21	.15	.21	.08	.12	.15	.10	.14	0	0	0	0	0
22	.15	.21	.08	.10	.18	.10	.14	0	0	0	0	0
23	.15	.21	.08	.13	.22	.05	.10	0	43	0	0	0
24	.16	.21	.26	.16	.16	.06	.12	0	76	0	0	0
25	.16	.21	.08	.13	.21	.09	.12	0	.73	0	0	0
26	.16	.25	.04	.13	.19	.10	.09	0	.20	0	0	0
27	.16	.25	.03	.13	.21	.06	.10	0	.08	0	0	0
28	.16	.25	.02	.11	.21	.09	.05	0	.05	0	5.9	0
29	.13	.25	.02	.07	---	.12	.12	0	.04	0	.42	0
30	.15	.21	.02	.11	---	.12	.15	0	.03	0	.16	0
31	.17	---	.10	.13	---	.10	---	0	---	0	.05	---
TOTAL	6.74	6.28	2.70	3.44	3.51	3.54	3.78	.90	120.18	90.28	182.45	51.54
MEAN	.22	.21	.087	.11	.13	.11	.13	.029	4.01	2.91	5.88	1.72
MAX	3.6	.25	.26	.16	.22	.18	.28	.17	76	46	168	49
MIN	0	.17	.02	.03	.03	.06	.03	0	0	0	0	0
AC-FT	13	12	5.4	6.8	7.0	7.0	7.5	1.8	238	179	362	102

CAL YR 1974 TOTAL 1844.22 MEAN 5.05 MAX 487 MIN 0 AC-FT 3660
WTR YR 1975 TOTAL 475.32 MEAN 1.30 MAX 168 MIN 0 AC-FT 943

PEAK DISCHARGE (BASE, 2,000 FT^3/S).--No peak above base.

07156900 CIMARRON RIVER NEAR FORGAN, OKLA.

LOCATION.--Lat 34°00'45", long 100°29'39", in SE 1/4 SE 1/4 sec.8, T.35 S., R.24 E., Mead County, Kans., near center of sapn on downstream side of pier of bridge on Kansas State Highway 23, 0.8 mi (1.3 km) north of Oklahoma-Kansas State line, 7.8 mi (12.5 km) north of Forgan, and at mile 375.7 (604.5 km).

DRAINAGE AREA.--8,536 mi^2 (22,108 km^2), of which 4,316 mi^2 (11,178 km^2) is probably noncontributing.

PERIOD OF RECORD.--October 1965 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 2,325 ft (708.7 m) (from topographic map).

AVERAGE DISCHARGE.--10 years, 83.6 ft^3/s (2.368 m^3/s), 60,570 acre-ft/yr (74.7 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 2,660 ft^3/s (75.3 m^3/s), Aug. 2, gage height, 4.79 ft (1.460 m); minimum daily, 28 ft^3/s (.79 m^3/s) Feb. 27, Mar. 24.
Period of record: Maximum discharge, 21,200 ft^3/s (600 m^3/s) Oct. 20, 1965, gage height, 8.10 ft (2.469); minimum, 18 ft^3/s (.510 m^3/s) Jan. 4, 1974.

REMARKS.--Records good. Extensive diversion for irrigation above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	57	56	53	73	97	35	39	63	91	71	1440	47
2	62	54	59	74	93	51	35	90	76	70	1310	47
3	62	64	58	80	79	62	57	68	70	69	162	49
4	58	56	62	76	95	73	61	60	66	66	83	50
5	47	54	63	70	98	65	58	57	69	65	67	50
6	54	53	60	72	70	64	83	47	67	63	62	50
7	52	54	58	74	60	58	94	45	66	62	60	51
8	53	63	57	72	70	58	91	47	66	59	57	50
9	50	60	58	72	95	69	86	51	66	61	59	49
10	48	58	58	81	120	65	83	55	66	104	60	47
11	45	54	64	79	75	64	76	56	65	64	55	45
12	48	56	60	40	65	54	67	56	63	53	56	47
13	71	56	60	44	61	48	104	83	63	53	59	48
14	50	56	62	60	43	48	78	86	63	48	64	48
15	39	59	62	80	49	56	66	66	62	46	58	48
16	38	60	61	96	52	52	64	58	63	45	54	60
17	37	61	63	104	35	52	67	54	63	42	53	58
18	35	61	63	92	32	46	65	51	60	44	52	51
19	34	59	61	92	36	39	67	46	59	43	52	45
20	35	57	61	91	42	39	71	41	61	45	53	43
21	36	59	61	96	30	38	67	44	122	42	53	45
22	37	59	62	87	33	43	71	57	83	42	51	46
23	41	59	62	83	29	34	68	61	70	40	50	47
24	42	57	64	84	39	28	60	53	67	40	51	50
25	43	57	62	77	38	30	65	51	69	40	50	55
26	52	56	66	74	34	45	68	49	68	41	57	53
27	62	56	74	78	28	40	64	50	69	38	56	48
28	63	59	72	77	34	40	63	60	69	38	56	50
29	59	58	72	79	---	50	62	144	68	36	53	53
30	74	55	68	69	---	40	61	168	69	36	55	55
31	74	---	73	69	---	38	---	102	---	33	51	---
TOTAL	1560	1726	1939	2435	1632	1524	2061	2019	2081	1599	4499	1485
MEAN	50.3	57.5	62.5	78.5	58.3	49.2	68.7	65.1	69.4	51.6	145	49.5
MAX	74	64	74	104	120	73	104	168	122	104	1440	60
MIN	34	53	53	40	28	28	35	41	59	33	50	43
AC-FT	3090	3420	3850	4830	3240	3020	4090	4000	4130	3170	8920	2950

CAL YR 1974 TOTAL 20725 MEAN 56.8 MAX 170 MIN 18 AC-FT 41110
WTR YR 1975 TOTAL 24560 MEAN 67.3 MAX 1440 MIN 28 AC-FT 48710

PEAK DISCHARGE (BASE, 3,000 FT^3/S).--No peak above base.

07157740 CIMARRON RIVER NEAR BUTTERMILK, KANS.

LOCATION.--Lat 37°01'36", long 99°28'45", NW 1/4 sec.3, T.35 S., R.20 W., Comanche County, Kansas, near left abutment of county road bridge, 0.5 mi (.8 km), from Bluff Creek, 2 mi (3.2 km) north of Kansas-Oklahoma State line, 11.5 mi (18.5 km) southwest of Buttermilk, and at mile 304.8 (490.4 km).

DRAINAGE AREA.--11,120 mi^2 (28,800 km^2), of which 4,737 mi^2 (12,270 km^2) is probably noncontributing.

PERIOD OF RECORD.--September, 1973 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,704.57 ft (519.553 m) above mean sea level.

EXTREMES.--Current year: Maximum discharge, 1,910 ft^3/s (54.1 m^3/s) Aug. 2, gage height, 5.37 ft (1.637 m); no flow at times.
Peirod of record: Maximum discharge, 6,690 ft^3/s (189 m^3/s) Sept. 26, 1973, gage height, 8.29 ft (2.527 m); no flow at times each year.

REMARKS.--Records fair. Extensive diversions for irrigation above station. See pg. 230 for water-quality record.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	38	112	79	205	85	111	77	8.0	251	7.0	556	
2	30	114	84	197	94	106	71	28	188	5.2	787	
3	27	192	75	186	98	98	70	55	130	3.8	886	
4	23	211	83	183	110	113	74	40	101	3.0	276	
5	24	171	179	128	84	126	66	29	117	2.5	171	
6	23	134	166	126	60	125	57	22	117	2.1	115	
7	63	107	121	139	64	107	52	16	156	1.9	77	
8	67	102	108	131	68	97	87	10	175	1.2	50	
9	77	99	102	126	60	95	93	7.2	503	1.5	23	
10	72	94	124	114	80	110	88	8.9	209	1.3	4.5	
11	56	93	121	80	140	155	101	38	133	1.1	2.4	
12	45	91	151	60	221	161	77	62	107	.80	.27	
13	67	85	142	74	138	132	66	69	85	.64	.95	
14	94	84	135	95	101	122	89	100	65	.50	.27	
15	88	80	129	78	97	102	148	118	49	.40	1.3	
16	77	80	124	145	80	106	148	95	39	.32	1.0	
17	67	82	129	162	54	122	92	69	39	.18	32	
18	63	85	120	98	64	122	63	45	39	.06	17	
19	54	86	129	90	60	105	50	24	28	0	51	
20	51	80	123	84	90	99	45	14	16	0	3.1	
21	47	77	121	80	172	91	36	8.9	15	0	1.3	
22	47	79	124	76	129	84	34	8.0	103	0	0	
23	45	82	127	77	116	93	33	7.2	114	0	0	
24	49	85	126	80	124	77	28	6.2	70	0	0	
25	56	85	136	82	159	71	24	8.2	47	0	0	
26	56	86	140	82	113	63	24	12	40	0	0	
27	72	88	137	76	99	85	21	6.7	36	0	0	
28	78	90	109	75	106	115	13	6.6	30	0	0	
29	77	95	165	74	---	105	11	41	20	0	0	
30	86	61	241	72	---	92	8.5	95	15	0	0	
31	97	---	214	80	---	81	---	424	---	36	0	---
TOTAL	1816	3010	4064	3355	2866	3271	1846.5	1481.9	3037	69.50	3056.09	0
MEAN	58.6	100	131	108	102	106	61.6	47.8	101	2.24	98.6	0
MAX	97	211	241	205	221	161	148	424	503	36	886	0
MIN	23	61	75	60	54	63	8.5	6.2	15	0	0	0
AC-FT	3600	5970	8060	6650	5680	6490	3660	2940	6020	138	6060	0

CAL YR 1974 TOTAL 30773.58 MEAN 84.3 MAX 980 MIN 0 AC-FT 61040
WTR YR 1975 TOTAL 27872.99 MEAN 76.4 MAX 886 MIN 0 AC-FT 55290

PEAK DISCHARGE (BASE, 3,000 FT^3/S).--No peak above base.

07157940 BLUFF CREEK NEAR BUTTERMILK, KANS.

LOCATION.--Lat. 37°01'55", long. 99°28'45", NW 1/4 sec.3, T.35 S., R.20 W., Comanche County, Kansas, near left bank of county road bridge, 2.2 mi (3.5 km) north of Kansas-Oklahoma State line, 11.3 mi (18.2 km) southwest of Buttermilk, and at mile 0.3 (.5 km).

DRAINAGE AREA.--657 mi^2 (1,702 km^2), of which 76 mi^2 (197 km^2) is probably noncontributing.

PERIOD OF RECORD.--September 1973 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,700.33 ft (518.261 m) above mean sea level.

EXTREMES.--Current year: Maximum discharge, 3,110 ft^3/s (88.1 m^3/s) June 24, gage height, 10.19 ft (3.106 m); minimum daily, 2.4 ft^3/s (.068 m^3/s) Sept. 29, 30.
Period of record: Maximum discharge, 16,000 ft^3/s (453 m^3/s) Sept. 26, 1973, gage height, 14.35 ft (4.374 m); minimum daily, 1.8 ft^3/s (.051 m^3/s) July 11, 1974.

REMARKS.--Records good. See pg. 236 for water-quality record.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	28	20	38	33	40	41	33	73	276	717	8.8
2	12	28	18	40	33	39	38	36	59	246	149	7.5
3	11	43	22	41	34	38	38	36	50	222	123	6.0
4	11	51	24	40	37	39	37	35	46	204	46	4.0
5	10	45	29	41	33	40	36	33	57	186	35	3.6
6	10	38	29	39	27	40	36	33	50	171	29	3.8
7	13	35	24	41	30	37	36	31	2470	150	25	3.5
8	20	34	23	41	27	35	38	30	721	112	21	3.1
9	19	33	24	41	25	37	37	32	336	77	19	3.0
10	16	35	25	42	33	42	36	30	223	62	17	2.8
11	15	33	26	43	48	44	35	73	140	56	15	2.8
12	14	31	32	40	43	42	34	68	100	50	13	2.9
13	23	30	31	41	36	40	39	56	62	44	12	3.1
14	30	28	29	51	38	40	58	88	56	45	12	3.4
15	25	27	28	56	38	39	57	57	50	40	11	4.0
16	21	25	27	47	35	41	49	46	45	36	11	3.8
17	18	27	27	45	25	41	45	41	56	31	9.7	3.4
18	17	31	28	41	28	39	43	38	75	26	8.9	3.4
19	16	27	26	41	32	37	40	34	53	24	8.1	3.1
20	15	24	27	39	50	38	38	31	42	22	8.6	3.0
21	15	24	26	37	46	39	35	28	50	21	8.2	2.8
22	15	28	27	37	44	38	34	27	186	19	6.9	2.9
23	17	28	27	37	42	38	35	29	384	18	6.2	2.7
24	18	27	25	36	43	36	39	28	1380	17	5.9	2.7
25	18	26	26	36	44	34	46	26	387	15	5.4	2.7
26	19	26	27	35	42	34	42	25	291	13	5.2	2.8
27	21	26	29	35	40	46	43	24	339	12	4.9	2.7
28	21	25	30	35	40	59	41	24	1160	11	5.0	2.5
29	20	25	34	34	---	46	38	45	465	10	6.9	2.4
30	21	23	37	34	---	43	35	105	324	13	9.7	2.4
31	24	---	36	34	---	42	---	119	---	64	9.8	---
TOTAL	537	911	847	1238	1028	1243	1199	1341	9730	2293	1364.4	105.6
MEAN	17.3	30.4	27.3	39.9	36.7	40.1	40.0	43.3	324	74.0	44.0	3.52
MAX	30	51	37	56	50	59	58	119	2470	276	717	8.8
MIN	10	23	18	34	25	34	34	24	42	10	4.9	2.4
AC-FT	1070	1810	1680	2460	2040	2470	2380	2660	19300	4550	2710	209

CAL YR 1974 TOTAL 15468.9 MEAN 42.4 MAX 723 MIN 1.8 AC-FT 30720
WTR YR 1975 TOTAL 21837.0 MEAN 59.8 MAX 2470 MIN 2.4 AC-FT 43310

PEAK DISCHARGE (BASE, 1,000 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
6-7	1030	10.17	3,090	6-28	1130	9.21	2,260
6-24	0030	10.19	3,110	8-1	0745	7.76	1,320

07157950 CIMARRON RIVER NEAR BUFFALO, OKLA.

LOCATION.--Lat 36°55'28", long 99°23'56", in NW 1/4 SW 1/4 sec.7, T.28 N., R.20 W., Harper County, on left bank 800 ft (244 m) downstream from unnamed tributary, 6 miles (9.7 km) upstream from Keno Creek, 7 mi (11.3 km) upstream from bridge on U.S. Highway 64, 14 mi (22.5 km) northeast of Buffalo, and at mile 296.0 (476.3 km).

DRAINAGE AREA.--11,930 mi² (30,900 km²), of which 4,813 mi² (12,466 km²) is probably noncontributing.

PERIOD OF RECORD.--May 1960 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,650 ft (502.9 m), from river profile map.

AVERAGE DISCHARGE.--15 years, 159 ft³/s (4.503 m³/s), 115,200 acre-ft/yr (142 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 4,870 ft³/s (138 m³/s) June 24, gage hieght, 3.84 ft (1.170 m); no flow at times.
Period of record: Maximum discharge, 26,400 ft³/s (748 m³/s) Sept. 26, 1973, gage height, 5.57 ft (1.698 m); no flow at times each year.

REMARKS.--Records good. Extensive diversions for irrigation above station. See pg. 242 for water-quality record.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	54	121	73	140	125	146	186	83	450	167	2480	3.9
2	49	145	70	170	128	136	179	107	290	145	702	3.3
3	48	208	76	174	143	138	160	85	224	130	1330	2.4
4	45	279	99	173	151	145	165	74	186	120	248	1.9
5	43	204	158	164	160	160	157	68	233	111	119	1.1
6	51	162	200	156	82	157	139	65	229	103	97	.75
7	47	131	140	184	103	121	131	61	2800	92	80	.71
8	67	125	120	189	118	112	143	56	1750	83	63	.34
9	78	139	110	161	65	129	147	54	1450	71	50	0
10	77	148	133	181	134	151	160	61	587	60	40	0
11	70	135	167	181	194	196	133	278	385	51	33	0
12	64	121	235	99	307	197	110	267	287	45	26	0
13	80	109	230	84	171	175	135	526	160	42	22	0
14	95	98	198	107	145	163	136	365	120	44	21	.42
15	103	100	175	120	144	157	166	260	102	38	27	1.6
16	81	99	157	187	128	151	236	217	94	34	23	2.1
17	68	101	140	284	82	153	187	188	93	32	23	1.9
18	60	113	128	198	134	144	154	169	97	30	31	2.1
19	59	109	115	161	159	127	118	141	93	28	30	1.7
20	57	98	111	159	346	129	101	121	87	26	31	1.2
21	55	97	110	144	263	126	98	109	83	24	21	1.3
22	50	104	120	125	270	141	106	124	143	21	13	1.0
23	56	107	122	122	225	150	107	134	242	23	8.0	.41
24	57	107	110	146	192	152	100	111	2430	26	2.8	.04
25	61	110	89	156	206	137	93	106	346	22	1.6	.09
26	69	115	67	142	186	134	92	106	229	19	1.4	.44
27	80	115	74	130	164	210	94	104	225	17	2.1	.30
28	84	114	87	125	149	246	100	99	1450	14	2.3	.17
29	76	118	114	122	---	219	93	246	395	19	1.4	.37
30	78	93	206	124	---	202	86	307	202	14	2.3	.66
31	93	---	161	123	---	190	---	684	---	49	3.6	---
TOTAL	2055	3825	4095	4751	4674	4894	4012	5576	15462	1700	5536.0	30.20
MEAN	66.3	128	132	153	167	158	134	173	515	54.8	179	1.01
MAX	103	279	235	284	346	246	236	684	2800	167	2480	3.9
MIN	43	93	67	84	65	112	86	54	83	14	1.4	0
AC-FT	4080	7590	8120	9420	9270	9710	7960	11060	30670	3370	10980	60

CAL YR 1974 TOTAL 48411.06 MEAN 133 MAX 1520 MIN 0 AC-FT 96020
WTR YR 1975 TOTAL 56410.20 MEAN 155 MAX 2800 MIN 0 AC-FT 111900

PEAK DISCHARGE (BASE, 3,000 FT³/S)

DATE	TIME	G.HT.	DISCHARGE
6-7	1430	3.76	4,370
6-24	0615	3.84	4,870
8-1	0630	3.77	4,430

07157960 BUFFALO CREEK NEAR LOVEDALE, OKLA.

LOCATION.--Lat 36°46'08", long 99°21'58", in NW 1/4 NW 1/4 sec.4, T.26 N., R.20 W., Harper County, near center of channel on downstream side of pier of bridge on State Highway 34, 1.2 mi (1.9 km) east of Lovedale, 1.3 mi (2.1 km) upstream from Sleeping Bear Creek, and at mile 7.6 (12.2 km).

DRAINAGE AREA.--408 mi^2 (1,057 km^2).

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

GAGE.--Water-stage recorder. Datum of gage is 1,602.56 ft (488.460 m) above mean sea level (State Highway Department bench mark).

AVERAGE DISCHARGE.--9 years, 10.6 ft^3/s (0.300 m^3/s), 7,680 acre-ft/yr (9.47 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 472 ft^3/s (13.4 m^3/s) May 13, gage height, 7.57 ft (2.307 m); no flow Aug. 5 to Sept. 30.
Period of record: Maximum discharge, 15,800 ft^3/s (447 m^3/s) Aug. 9, 1967 gage height, 14.80 ft (4.511 m), extended above 7,000 ft^3/s (198 m^3/s); no flow each year.

REMARKS.--Records fair. See pg. 254 for water-quality record.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.0	11	6.5	7.9	10	13	12	14	25	2.5	.67	
2	5.5	16	6.5	9.7	9.9	13	11	14	21	2.2	.62	
3	4.9	31	7.1	11	13	12	11	48	15	2.0	.36	
4	4.4	48	8.1	11	15	13	11	31	11	1.9	.12	
5	4.1	38	9.0	10	15	14	11	20	12	1.7	0	
6	4.1	27	9.2	10	11	14	11	14	30	1.5	0	
7	5.5	21	8.6	9.9	10	12	12	9.0	233	1.4	0	
8	7.5	16	7.8	9.6	9.0	12	13	6.7	108	1.3	0	
9	9.4	15	7.5	9.6	8.0	13	13	5.4	41	1.7	0	
10	9.4	13	9.5	9.6	12	16	13	43	25	1.5	0	
11	8.3	12	12	8.0	16	17	12	21	18	1.4	0	
12	7.3	11	13	6.6	12	18	13	10	14	1.2	0	
13	8.6	11	12	8.4	12	16	15	236	10	1.1	0	
14	9.2	9.8	11	14	11	15	18	206	8.2	1.3	0	
15	10	9.3	10	16	11	14	20	76	6.3	1.1	0	
16	9.8	9.3	9.1	16	10	14	20	40	5.4	.76	0	
17	9.1	9.3	8.9	17	8.0	14	16	25	4.7	.51	0	
18	7.5	9.5	8.6	18	8.5	14	17	17	4.0	.41	0	
19	6.6	9.9	8.5	16	11	14	16	13	3.4	.34	0	
20	6.3	9.4	8.3	15	14	13	15	10	3.1	.28	0	
21	6.0	9.4	8.1	14	15	13	15	7.8	3.6	.22	0	
22	5.8	9.6	8.2	12	16	14	15	7.3	7.3	.12	0	
23	6.0	9.4	7.6	11	16	13	16	7.4	5.7	.08	0	
24	6.3	9.1	7.0	12	14	11	16	7.0	3.8	.53	0	
25	6.8	8.7	6.4	12	16	10	16	6.8	3.1	.79	0	
26	6.8	8.2	6.4	11	16	10	16	5.8	2.8	.63	0	
27	7.5	7.8	6.8	11	15	14	16	5.6	22	.52	0	
28	8.7	7.6	7.2	11	14	18	15	5.9	17	.42	0	
29	9.1	7.2	7.4	10	---	16	15	13	4.6	.45	0	
30	9.4	6.7	7.3	11	---	15	15	21	2.9	.51	0	
31	11	---	7.8	11	---	13	---	24	---	.46	0	---
TOTAL	226.9	420.6	261.4	359.3	348.4	428	437	970.7	670.9	30.83	1.79	0
MEAN	7.32	14.0	8.43	11.6	12.4	13.8	14.6	31.3	22.4	.99	.058	0
MAX	11	48	13	18	16	18	20	236	233	2.5	.67	0
MIN	4.1	6.7	6.4	6.6	8.0	10	11	5.4	2.8	.08	0	0
AC-FT	450	834	518	713	691	849	867	1930	1330	61	3.6	0

CAL YR 1974 TOTAL 9771.92 MEAN 26.8 MAX 2180 MIN 0 AC-FT 19380
WTR YR 1975 TOTAL 4155.82 MEAN 11.4 MAX 236 MIN 0 AC-FT 8240

PEAK DISCHARGE (BASE, 1,000 FT^3/S).--No peak above base.

07157980 CIMARRON RIVER NEAR FREEDOM, OKLA.

LOCATION.--Lat 36°45'18", long 99°06'58", in SE 1/4 SE 1/4 sec.3, T.26 N., R.18 W., Woodward County, near right bank of State Highway 50, 1.0 mi (1.6 km) south of Freedom, 1.1 mi (1.8 km) upstream from unnamed tributary and at mile 272.4 (438 km).

DRAINAGE AREA.--12,706 mi^2 (32,909 km^2), of which 4,813 mi^2 (12,466 km^2) is probably noncontributing.

PERIOD OF RECORD.--October 1973 to current year.

GAGE.--Nonrecording gage. Datum of gage is 1,503.99 ft (458.416 m) above mean sea level (State Highway Department bench mark).

EXTREMES.--Current year: Maximum discharge, 7,880 ft^3/s (223 m^3/s) June 7, gage height, 8.86 ft (2.701 m); no flow Aug. 25 to Sept. 30.
Period of record: Maximum discharge, 12,000 ft^3/s (340 m^3/s) Oct. 10, 1973, gage height, 9.25 ft (2.819 m); no flow at times each year.

REMARKS.--Records poor. Extensive diversions for irrigation above station. See pg. 260 for water-quality record.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	46	137	86	228	186	192	180	90	460	272	1390	
2	41	198	80	210	176	176	171	190	400	216	713	
3	36	210	100	234	222	163	159	228	304	176	675	
4	32	450	107	216	280	171	159	154	216	167	480	
5	30	400	150	192	150	210	163	127	288	154	180	
6	40	360	222	176	120	228	150	101	320	146	111	
7	51	264	204	180	127	204	163	93	3750	130	78	
8	72	198	127	192	130	163	192	88	2670	130	64	
9	80	264	104	204	130	163	196	78	1300	120	54	
10	87	256	114	222	154	216	192	320	1600	111	44	
11	91	171	180	222	186	248	210	460	750	74	40	
12	101	150	248	137	216	272	192	228	400	58	36	
13	121	137	248	111	256	216	288	4220	288	52	32	
14	121	114	256	127	272	204	272	1060	216	46	15	
15	130	107	222	150	228	186	180	400	198	37	10	
16	124	104	204	176	171	198	192	256	186	28	20	
17	104	99	198	240	127	210	240	198	171	22	15	
18	91	99	186	272	134	210	176	180	171	16	12	
19	86	130	180	256	150	204	130	146	167	15	11	
20	83	104	186	198	240	186	117	117	158	14	10	
21	81	91	186	186	376	176	104	101	154	13	7.5	
22	76	94	180	176	320	180	101	96	163	30	5.5	
23	76	94	180	171	272	180	114	104	336	30	1.5	
24	76	91	176	167	240	171	104	200	2670	25	.60	
25	186	99	150	171	272	163	101	250	606	20	0	
26	150	114	134	171	280	159	111	200	280	16	0	
27	114	111	137	171	256	469	130	175	256	14	0	
28	114	99	158	167	216	410	117	160	272	11	0	
29	114	99	167	167	---	280	99	204	280	10	0	
30	114	90	198	192	---	240	99	256	280	10	0	
31	130	---	240	204	---	204	---	280	---	27	0	---
TOTAL	2798	4934	5308	5886	5687	6652	4804	10760	19310	2190	4005.10	0
MEAN	90.3	164	171	190	210	215	160	347	644	70.6	129	0
MAX	186	450	256	272	376	469	288	4220	3750	272	1390	0
MIN	30	90	80	111	120	159	99	78	154	10	0	0
AC-FT	5550	9790	10530	11670	11680	13190	9530	21340	38300	4340	7940	0

CAL YR 1974 TOTAL 75205.75 MEAN 206 MAX 4130 MIN 0 AC-FT 149200
WTR YR 1975 TOTAL 72534.10 MEAN 199 MAX 4220 MIN 0 AC-FT 143900

PEAK DISCHARGE (BASE, 8,000 FT^3/S).--No peak above base.

07158000 CIMARRON RIVER NEAR WAYNOKA, OKLA.

LOCATION.--Lat 36°31'02", long 98°52'45", near center of sec.35, T.24 N., R.16 W., Woods County, near left bank on downstream side of bridge on U.S. Highway 281, 0.8 mi (1.39 km) downstream from Main Creek, 5 mi (8.0 km) south of Waynoka, and at mile 247.0 (397 km).

DRAINAGE AREA.--13,334 mi^2 (34,535 km^2), of which 4,830 mi^2 (12,510 km^2) is probably noncontributing.

PERIOD OF RECORD.--September 1903 to December 1905 (gage heights and discharge measurements only), October 1937 to current year. Monthly discharge only for some periods, published in WSP 1311.

GAGE.--Water-stage recorder. Datum of gage is 1,367.50 ft (416.814 m) above mean sea level (levels by Corps of Engineers). September 1903 to December 1905, nonrecording gage at The Atchison, Topeka and Santa Fe Railway Co. bridge 5 mi (8.0 km) upstream at different datum. Feb. 4, to Mar. 3, 1938, nonrecording gage and Mar. 4, 1938, to Oct. 24, 1956, water-stage recorder, on former highway bridge 50 ft (15.2 m) downstream at present datum.

AVERAGE DISCHARGE.--38 years (1937-75), 355 ft^3/s (10.05 m^3/s), 257,200 acre-ft/yr (317 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 13,100 ft^3/s (371 m^3/s) June 9, gage height, 8.36 ft (2.548 m); no flow at times.
Period of record: Maximum discharge, 94,500 ft^3/s (2,676 m^3/s) May 16, 1957, gage height, 15.10 ft (4.602 m), from rating curve extended above 45,000 ft^3/s (1,274 m^3/s) on basis of contracted-opening measurement of peak flow; no flow at times in most years.
A stage of about 14 ft (4.3 m) occurred probably in 1914.

REMARKS.--Records good. Extensive diversions for irrigation above station. See pg. 266 for water-quality record.

REVISIONS (WATER YEARS).--WSP 897: 1939. WSP 1341: Drainage area. WSP 1731: 1950(M). WSP 1921: 1960.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	54	126	173	279	312	338	284	94	786	412	32	
2	52	221	153	265	295	307	266	95	826	307	772	
3	47	1580	165	278	298	288	246	142	580	256	436	
4	39	401	170	315	326	284	239	157	436	251	895	
5	36	424	183	316	344	290	226	157	569	228	387	
6	39	456	182	306	310	295	221	116	759	205	208	
7	48	392	221	294	243	290	217	99	3620	196	142	
8	70	338	221	284	275	280	251	84	7080	184	110	
9	69	323	197	278	246	280	258	79	7700	191	99	
10	83	326	191	258	213	319	236	126	5030	233	80	
11	86	284	221	259	250	346	251	224	2620	180	62	
12	88	240	239	220	277	356	251	196	1160	151	46	
13	129	210	233	189	325	363	246	2580	856	117	13	
14	128	207	223	196	298	348	299	2840	589	105	12	
15	103	220	205	212	273	335	274	1020	407	93	17	
16	107	219	184	222	282	329	251	628	351	78	27	
17	101	213	182	230	246	318	249	466	311	62	29	
18	79	212	185	288	228	302	245	394	272	50	17	
19	68	192	197	287	242	297	217	354	262	42	7.7	
20	62	182	203	268	262	280	187	287	280	36	1.6	
21	62	177	222	255	353	265	157	241	264	31	.92	
22	65	171	217	249	378	265	135	217	261	25	0	
23	71	165	220	249	372	260	140	236	231	24	0	
24	79	169	221	250	346	250	135	256	279	40	0	
25	92	172	225	245	355	240	123	570	1070	40	0	
26	245	173	213	251	370	228	121	247	598	31	0	
27	156	183	215	241	376	305	125	200	452	22	0	
28	129	183	212	239	347	427	122	189	379	16	0	
29	126	186	213	248	---	357	116	954	584	29	0	
30	120	197	209	261	---	343	102	1400	961	110	0	
31	125	---	239	297	---	306	---	736	---	54	0	---
TOTAL	2760	8542	6334	8029	8442	9491	6190	15414	39775	3799	3394.22	0
MEAN	89.0	285	204	259	302	306	206	497	1326	123	109	0
MAX	245	1580	239	316	378	427	299	2840	7700	412	895	0
MIN	36	126	153	189	213	228	102	79	231	16	0	0
AC-FT	5470	16940	12560	15930	16740	18830	12280	30570	78890	7540	6730	0

CAL YR 1974 TOTAL 109479.48 MEAN 300 MAX 15600 MIN 0 AC-FT 217200
WTR YR 1975 TOTAL 112170.22 MEAN 307 MAX 7700 MIN 0 AC-FT 222500

PEAK DISCHARGE (BASE, 10,000 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE
6-9	1000	8.36	13,100

07158400 SALT CREEK NEAR OKEENE, OKLA.

LOCATION.--Lat 36°06'11", long 98°11'36", in SW 1/4 sec.20, T.19 N., R.9 W., Kingfisher County, near left bank on downstream wingwall of county bridge, 2.2 mi (3.5 km) downstream from Spring Creek, 7.0 mi (11.3 km) east of Okeene, and at mile 2.2 (3.5 km).

DRAINAGE AREA.--196 mi^2 (508 km^2).

PERIOD OF RECORD.--June 1961 to September 1967, December 1973 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,085.25 ft (330.784 m) above mean sea level.

AVERAGE DISCHARGE.--7 years (1962-67, 75), 46.6 ft^3/s (1.320 m^3/s), 33,760 acre-ft/yr (41.6 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 9,610 ft^3/s (272 m^3/s) May 14, gage height, 15.89 ft (4.843 m); minimum daily, 7.4 ft^3/s (0.21 m^3/s) Sept. 26.
Period of record: Maximum discharge, 12,700 ft^3/s (360 m^3/s) Sept. 19, 1974, gage height, 16.90 ft (5.151 m); minimum daily, 0.90 ft^3/s (0.003 m^3/s) July 13, 14, 1966.

REMARKS.--Records good. See pg. 272 for water-quality record.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	127	23	29	225	183	65	30	29	37	10	12
2	20	1490	26	25	163	146	56	84	20	30	25	12
3	19	4860	25	21	180	122	53	84	14	29	26	11
4	17	569	25	24	191	113	52	40	10	34	20	11
5	16	247	26	35	70	107	49	33	9.0	29	19	11
6	15	172	26	51	42	98	49	32	29	28	18	9.9
7	18	170	25	38	43	82	56	29	329	27	16	9.7
8	18	158	23	34	38	69	150	27	78	24	16	9.7
9	17	157	21	32	32	65	72	25	1330	23	15	9.7
10	16	146	25	30	36	233	54	222	5540	51	14	10
11	15	93	71	28	51	95	50	137	1050	34	13	10
12	15	63	67	21	37	114	48	34	215	16	13	11
13	14	58	37	23	33	87	50	2600	156	14	13	12
14	17	53	32	25	32	78	66	4020	129	13	13	11
15	17	46	30	25	30	75	52	332	107	13	15	11
16	15	44	28	25	26	96	47	191	91	12	24	11
17	14	37	28	24	23	120	45	143	210	12	15	11
18	14	35	28	24	29	1510	45	112	104	11	14	10
19	13	34	28	24	44	204	40	85	66	11	13	10
20	13	33	28	23	54	128	38	66	54	9.6	13	9.7
21	13	33	27	22	143	111	36	46	48	9.3	13	9.7
22	13	33	27	21	252	104	36	539	46	9.3	13	9.7
23	13	32	26	20	57	96	38	1660	45	9.0	13	9.0
24	13	29	25	20	115	76	39	718	41	10	13	8.1
25	76	26	24	20	299	69	37	1490	40	15	12	7.8
26	50	28	23	21	447	67	37	112	37	12	40	7.4
27	33	27	23	20	359	569	37	48	35	11	20	8.7
28	645	27	23	20	310	155	37	35	32	11	14	8.4
29	198	26	23	19	---	93	35	1280	30	10	12	8.4
30	162	23	23	167	---	82	34	518	53	10	21	8.4
31	277	---	30	283	---	75	---	54	---	10	26	---
TOTAL	1818	8860	896	1194	3361	5222	1505	14826	9977.0	574.2	522	298.3
MEAN	58.6	296	28.9	38.5	120	168	50.2	478	333	18.5	16.8	9.94
MAX	645	4860	71	283	447	1510	150	4020	5540	51	40	12
MIN	13	23	21	19	23	65	34	25	9.0	9.0	10	7.4
AC-FT	3610	17610	1780	2370	6670	10360	2990	29410	19790	1140	1040	592

CAL YR 1974 TOTAL 31543.4 MEAN 86.4 MAX 4860 MIN 3.7 AC-FT 62570
WTR YR 1975 TOTAL 49073.5 MEAN 134 MAX 5540 MIN 7.4 AC-FT 97340

PEAK DISCHARGE (BASE, 2,000 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
11-3	1145	14.96	6,920	5-25	0315	12.56	3,550
3-18	0645	9.99	2,300	5-29	1515	10.42	2,410
5-14	0200	15.89	9,610	6-10	1845	15.74	8,700
5-23	0330	12.17	3,300				

07159100 CIMARRON RIVER NEAR DOVER, OKLA.

LOCATION.--Lat 35°57'06", long 97°54'51", in SW 1/4 NE 1/4 sec.14, T.17 N., R.7 W., Kingfisher County, near right bank on downstream bridge on U.S. Highway 81, 1.0 mi (1.6 km) downstream from Turkey Creek, 2.0 mi (3.2 km) south of Dover, 2.5 mi (4.0 km) upstream from Kingfisher Creek, and at mile 160.6 (258.4 km).

DRAINAGE AREA.--15,713 mi^2 (40.697 km^2), of which 4,926 mi^2 (12,758 km^2) is probably noncontributing.

PERIOD OF RECORD.--October 1973 to current year.

EXTREMES.--Current year: Maximum discharge, 59,100 ft^3/s (1,670 m^3/s) Nov. 3, gage height, 21.60 ft (6.584 m); minimum daily, 61 ft^3/s (1.73 m^3/s) Sept. 30.
Period of record: Maximum discharge, 62,000 ft^3/s (1,760 m^3/s) Oct. 11, 1973, gage height, 21.81 ft (6.648 m) from high-water mark; minimum daily, 24 ft^3/s (0.68 m^3/s) July 28, 1974.

REMARKS.--Records fair. See pg. 278 for water-quality record.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	216	1490	357	401	2340	4360	974	434	3490	668	334	170
2	210	2740	351	542	1480	4170	892	518	2000	936	579	160
3	195	32400	346	1010	953	3250	829	1010	1570	724	384	159
4	179	30700	343	807	1190	2120	784	991	1470	594	311	140
5	171	9170	337	718	1270	1620	747	769	1350	535	595	133
6	164	4600	339	718	1010	1370	713	633	1350	510	547	144
7	172	2930	339	612	721	1310	706	536	3250	590	600	140
8	176	2350	343	557	612	1240	791	474	5750	462	356	135
9	176	1950	346	491	528	1170	1250	419	12600	454	272	134
10	174	1760	376	411	433	1960	1140	496	24700	434	222	133
11	170	1320	450	394	486	1940	908	1040	21400	501	194	135
12	168	996	544	370	463	1620	777	916	8290	466	176	187
13	168	831	550	350	430	1750	755	2600	4200	406	159	139
14	185	725	526	330	429	1450	777	18000	2730	358	150	132
15	196	664	497	304	441	1260	784	11100	2040	326	165	126
16	232	612	473	282	495	1230	777	6270	1650	301	178	122
17	226	574	449	282	448	1220	777	3500	1430	283	181	127
18	203	543	412	288	480	3840	699	2840	1460	265	167	123
19	188	511	409	289	507	4780	659	2160	1130	254	172	108
20	185	485	401	299	508	2560	640	1900	980	247	215	99
21	176	465	392	329	826	1640	590	1390	871	235	191	97
22	162	453	381	313	1390	1330	553	780	795	229	166	97
23	154	434	374	292	1170	1200	518	5520	757	222	155	91
24	157	419	359	278	1020	1080	496	5250	727	240	149	80
25	242	412	357	268	1310	971	479	9150	2280	249	145	76
26	348	402	351	268	5190	901	464	6400	1330	245	167	75
27	282	393	348	258	5390	1400	464	4020	1520	235	233	73
28	451	380	350	253	5100	3200	454	2200	1170	231	175	69
29	2220	369	342	248	---	2020	459	2960	822	224	159	68
30	1100	358	344	358	---	1410	454	9410	727	232	148	61
31	2070	---	386	5020	---	1090	---	6730	---	494	155	---
TOTAL	11116	101436	12172	17340	36620	60482	21310	110416	113839	12150	7800	3533
MEAN	359	3381	393	559	1308	1951	710	3562	3795	392	252	118
MAX	2220	32400	550	5020	5390	4780	1250	18000	24700	936	600	187
MIN	154	358	337	248	429	901	454	419	727	222	145	61
AC-FT	22050	201200	24140	34390	72640	120000	42270	219000	225800	24100	15470	7010

CAL YR 1974 TOTAL 388094 MEAN 1063 MAX 32400 MIN 24 AC-FT 769800
WTR YR 1975 TOTAL 508214 MEAN 1392 MAX 32400 MIN 61 AC-FT 1008000

PEAK DISCHARGE (BASE, 12,000 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
11-3	2300	21.60	59,100	5-25	1615	17.19	13,000
5-14	1145	18.85	25,400	6-11	0200	19.66	33,100

07159750 COTTONWOOD CREEK AT SEWARD, OKLA.

LOCATION.--Lat 35°47'43", long 97°29'32", in SW 1/4 sec.2, T.15 N., R.3 W., Logan County, on downstream right bank, 0.3 mi (0.5 km) west of Seward, 7.7 mi (12.4 km) southwest of Guthrie, and at mile 19.2 (30.9 km).

DRAINAGE AREA.--316 mi^2 (818 km^2).

PERIOD OF RECORD.--March 1973 to current year.

GAGE.--Water-stage recorder. Datum of gage is 946.49 ft (288.490 m) above mean sea level.

EXTREMES.--Current year: Maximum discharge, 29,900 ft^3/s (847 m^3/s) Nov. 2, gage height, 23.99 ft (7.312 m); minimum, 22 ft^3/s (0.62 m^3/s) July 23, 24.
Period of record: Maximum discharge, 29,900 ft^3/s (847 m^3/s) Nov. 2, 1974, gage height, 23.99 ft (7.312 m); minimum, 9.9 ft^3/s (0.28 m^3/s) Aug. 22, 1974.

REMARKS.--Records fair. Low flow sustained by part of sewage effulent from Oklahoma City. See pg. 284 for water-quality record.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	30	2710	88	154	1920	159	130	50	169	62	388	75
2	30	6710	83	239	593	145	117	212	120	58	301	69
3	28	11300	82	1230	400	133	105	635	93	51	265	63
4	27	5900	80	559	592	131	96	173	83	49	209	59
5	26	2360	78	302	482	136	94	148	80	52	175	56
6	30	1020	80	227	400	133	91	139	80	42	180	50
7	28	758	83	181	329	126	92	110	921	36	181	46
8	28	724	80	165	239	117	375	73	644	35	146	43
9	30	645	70	215	205	113	278	60	462	36	127	40
10	29	580	66	209	174	219	216	57	352	44	116	38
11	27	520	254	200	200	218	198	98	257	66	108	39
12	27	430	391	249	154	292	171	213	164	51	102	54
13	27	367	236	200	126	190	149	319	107	40	98	80
14	50	307	154	165	165	146	153	2550	90	36	95	75
15	240	229	123	126	196	129	143	1390	80	33	303	78
16	85	133	103	96	214	127	127	403	70	29	870	84
17	53	174	89	74	229	130	98	271	190	27	577	63
18	42	264	81	92	219	139	87	234	674	24	520	50
19	35	249	81	89	224	328	86	195	325	25	488	45
20	33	149	73	79	229	197	71	167	214	25	373	40
21	30	123	69	74	183	150	65	149	153	25	285	36
22	29	123	66	74	261	129	58	135	144	24	191	35
23	29	117	65	74	516	119	60	1430	307	23	155	35
24	29	107	61	62	336	111	60	2010	777	664	137	35
25	47	96	60	71	271	99	56	514	377	5950	128	38
26	378	92	58	65	214	93	54	310	232	2600	119	39
27	252	94	59	68	180	144	53	257	172	804	110	35
28	343	89	60	68	165	332	55	221	143	609	132	33
29	1250	86	60	68	---	251	63	269	114	534	106	31
30	509	85	59	160	---	183	54	311	82	970	92	31
31	4490	---	71	2570	---	147	---	240	---	1460	83	---
TOTAL	8291	36541	3063	8205	9416	5066	3455	13343	7676	14484	7160	1495
MEAN	267	1218	98.8	265	336	163	115	430	256	467	231	49.8
MAX	4490	11300	391	2570	1920	332	375	2550	921	5950	870	84
MIN	26	85	58	62	126	93	53	50	70	23	83	31
AC-FT	16450	72480	6080	16270	18680	10050	6850	26470	15230	28730	14200	2970

CAL YR 1974 TOTAL 106807 MEAN 293 MAX 11300 MIN 11 AC-FT 211900
WTR YR 1975 TOTAL 118195 MEAN 324 MAX 11300 MIN 23 AC-FT 234400

PEAK DISCHARGE (BASE, 3,000 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-31	1730	20.91	6,470	5-14	1330	19.47	3,200
11-2	2130	23.99	29,900	7-25	0715	21.36	8,200
1-31	2400	20.58	5,380				

07160000 CIMARRON RIVER NEAR GUTHRIE, OKLA.

LOCATION.--Lat 35°55'10", long 97°25'35", in NE 1/4 SE 1/4 sec.29, T.17 N., R.2 W., Logan County, on left bank 125 ft (38.1 m) upstream from the Atchison, Topeka and Santa Fe Railway Co. bridge, 1.2 mi (1.9 km) downstream from Cottonwood Creek, 2.5 mi (4.0 km) north of Guthrie, 6.5 mi (10.5 km) upstream from Skeleton Creek, and at mile 121.8 (196.0 km).

DRAINAGE AREA.--16,892 mi^2 (43,750 km^2), of which 4,926 mi^2 (12,758 km^2) is probably noncontributing.

PERIOD OF RECORD.--October 1937 to current year. Monthly discharge only for some periods, published in WSP's 1311 and 1731.

GAGE.--Water-stage recorder. Datum of gage is 900.50 ft (274.472 m) above mean sea level (Corps of Engineers bench mark). Prior to Mar. 19, 1939, nonrecording gage at railway bridge 125 ft (38.1 m) downstream at same datum. Since Sept. 14, 1967, supplementary water-stage recorder, at site 2,000 ft (609.7 m) downstream and at datum 4.00 ft (1.219 m) lower.

AVERAGE DISCHARGE.--38 years, 900 ft^3/s (25.49 m^3/s), 652,000 acre-ft/yr (804 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 63,900 ft^3/s (1,810 m^3/s) Nov. 4, gage height, 12.87 ft (3.923 m); minimum, 135 ft^3/s (3.82 m^3/s) Sept. 30.
Period of record: Maximum discharge, 158,000 ft^3/s (4,470 m^3/s) May 17, 1957, gage height, 18.58 ft (5.663 m); minumum, 0.1 ft^3/s (0.003 m^3/s) Nov. 2, 1939.

REMARKS.--Records fair.

REVISIONS.--WSP 1341: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	317	7400	830	617	9580	3600	1470	670	5420	710	1070	266
2	309	6260	800	710	3650	2990	1320	949	2850	662	772	254
3	317	39300	780	2610	2560	2980	1200	3450	1800	805	1090	243
4	329	56200	750	2390	2710	2280	1100	3020	1490	650	954	233
5	333	20700	720	1400	3560	1570	1050	1600	1400	568	609	217
6	337	9780	716	1260	2540	1340	1010	1260	1470	512	672	208
7	345	6450	710	1180	1750	1240	980	1060	3700	540	637	199
8	350	4960	704	1040	1330	1170	1080	922	5000	595	710	189
9	358	4110	692	1010	1100	1100	1340	821	9800	540	541	181
10	367	3730	710	896	900	1350	1520	769	16500	485	462	172
11	367	3200	680	854	850	2410	1390	1120	34900	512	416	168
12	367	2330	805	790	820	1980	1160	1570	13200	568	376	192
13	367	1830	854	847	800	1660	1060	2520	7210	512	342	194
14	372	1530	770	820	800	1630	1010	16000	4420	485	313	237
15	386	1320	680	800	800	1350	1020	19400	3020	485	361	233
16	405	1200	668	780	790	1260	1010	7590	2230	460	1810	223
17	399	1110	662	760	800	1220	987	3860	1850	435	1370	214
18	390	1080	662	740	820	1610	973	2330	3580	422	866	198
19	390	1060	716	720	820	6500	912	1640	3310	435	720	188
20	390	1050	704	700	900	4560	873	1280	1670	435	591	175
21	390	1030	662	680	1100	2200	845	1070	1310	430	519	174
22	392	1010	680	660	1580	1700	815	962	1250	430	437	169
23	384	1000	674	640	2340	1570	784	5720	1240	426	376	162
24	385	985	698	620	2000	1180	760	15300	1180	1500	343	157
25	536	980	686	610	2180	1060	743	6410	1180	5700	321	151
26	932	974	639	600	3130	1170	726	10300	1600	7290	323	153
27	1020	970	617	600	4830	1420	708	5820	1230	2870	286	148
28	1130	950	622	635	4030	3610	696	3980	1280	1620	335	142
29	2320	930	634	629	---	3980	680	2740	1020	1380	341	143
30	3030	910	600	711	---	2480	678	5520	770	1240	312	140
31	5180	---	600	5430	---	1790	---	9400	---	1780	287	---
TOTAL	22894	184339	21725	32739	59070	67960	29900	139073	136880	35482	18582	5723
MEAN	739	6145	701	1056	2110	2192	997	4486	4563	1145	599	191
MAX	5180	56200	854	5430	9580	8500	1520	19400	34900	7290	1810	266
MIN	309	910	600	600	790	1060	678	670	770	422	286	140
AC-FT	45410	365600	43090	64940	117200	134800	59310	275900	271500	70380	36860	11350

CAL YR 1974 TOTAL 596255 MEAN 1634 MAX 56200 MIN 61 AC-FT 1183000
WTR YR 1975 TOTAL 754367 MEAN 2067 MAX 56200 MIN 140 AC-FT 1496000

PEAK DISCHARGE (BASE, 16,000 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
11-4	1245	12.87	63,900	5-24	1200	7.90	17,100
5-14	1400	9.75	28,800	6-11	1200	10.85	41,100

07160500 SKELETON CREEK NEAR LOVELL, OKLA.

LOCATION.--Lat 36°03'36", long 97°35'05", in NW 1/4 SW 1/4 sec.1, T.18 N., R.4 W., Logan County, near right bank on downstream side of pier of bridge on State Highway 74, 2 mi (3.2 km) upstream from Otter Creek, 2.8 mi (4.5 km) east of Lovell, and at mile 14.6 (23.5 km).

DRAINAGE AREA.--410 mi^2 (1,062 km^2).

PERIOD OF RECORD.--October 1949 to current year.

GAGE.--Water-stage recorder. Datum of gage is 914.76 ft (278.819 m) above mean sea level (State Highway Department bench mark). Prior to Dec. 5, 1949, nonrecording gage at site 60 ft (18.3 m) downstream at datum 0.30 ft (91.4 mm) lower.

AVERAGE DISCHARGE.--26 years, 122 ft^3/s (3.455 m^3/s), 88,390 acre-ft/yr (109 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 22,700 ft^3/s (643 m^3/s) Nov. 3, gage height, 29.40 ft (8.961 m); minimum daily, 12 ft^3/s (0.34 m^3/s) Aug. 24, 25.
Period of record: Maximum discharge, 75,200 ft^3/s (2,130 m^3/s) May 16, 1957, gage height, 34.58 ft (10.540 m); no flow at times in 1953-54, 1956.
Flood of Aug. 17, 1932, reached a stage of 32.0 ft (9.75 m), from floodmarks.

REMARKS.--Records good.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29	2530	80	323	4100	713	147	49	152	99	31	19
2	29	2070	79	342	1040	412	129	180	121	73	29	18
3	25	14100	81	1180	515	280	117	797	103	64	127	17
4	22	11100	78	745	1090	202	109	305	92	55	59	17
5	22	3750	81	433	1110	202	108	102	180	56	33	16
6	23	587	80	601	418	191	102	78	454	48	25	15
7	24	324	93	515	225	180	109	62	791	45	24	13
8	36	466	100	196	214	151	146	53	2570	43	23	13
9	32	350	80	142	177	145	167	49	4370	61	22	16
10	27	485	72	118	147	625	114	162	7320	104	51	14
11	25	350	212	103	178	461	98	212	8560	145	18	14
12	23	223	394	81	173	312	93	124	2910	61	17	17
13	22	190	232	62	151	260	96	290	355	46	16	15
14	26	162	130	79	147	171	105	2620	228	40	15	18
15	25	151	100	79	135	149	118	4780	194	38	19	17
16	27	141	86	76	130	158	98	723	154	36	22	16
17	26	145	72	76	139	159	87	171	139	35	73	20
18	24	140	69	74	174	617	81	130	129	33	30	18
19	21	139	69	73	179	1220	78	109	116	31	19	18
20	20	133	69	71	243	353	71	96	101	30	17	18
21	19	122	69	67	765	224	67	83	94	29	15	18
22	18	119	66	63	1230	178	64	100	86	27	14	17
23	16	114	63	59	733	156	67	2070	83	29	14	15
24	18	106	64	62	461	134	68	5320	132	170	12	15
25	840	96	64	63	1000	114	67	1690	1970	116	12	18
26	1800	94	64	63	1280	107	64	457	1690	182	32	14
27	781	92	64	58	1410	1180	63	222	275	57	148	17
28	665	90	64	53	1110	1420	63	170	132	38	70	14
29	2070	87	64	53	---	392	59	199	99	34	67	18
30	1370	86	64	188	---	209	55	656	107	92	27	16
31	2700	---	266	2850	---	167	---	314	---	49	18	---
TOTAL	10805	38542	3169	8948	18674	11242	2810	22373	33707	1966	1099	491
MEAN	349	1285	102	289	667	363	93.7	722	1124	63.4	35.5	16.4
MAX	2700	14100	394	2850	4100	1420	167	5320	8560	182	148	20
MIN	16	86	63	53	130	107	55	49	83	27	12	13
AC-FT	21430	76450	6290	17750	37040	22300	5570	44380	66860	3900	2180	974

CAL YR 1974 TOTAL 138121.2 MEAN 378 MAX 14100 MIN 3.4 AC-FT 274000
WTR YR 1975 TOTAL 153826.0 MEAN 421 MAX 14100 MIN 12 AC-FT 305100

PEAK DISCHARGE (BASE, 2,300 FT^3/S REVISED)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
11-1	0315	17.83	3,050	5-24	1130	24.10	6,170
11-3	1630	29.40	22,700	6-11	0200	27.26	10,500
2-1	0600	22.55	5,060	6-25	1830	16.61	2,500
5-15	0515	23.86	6,020				

07161000 CIMARRON RIVER AT PERKINS, OKLA.

LOCATION.--Lat 35°57'32", long 97°01'49", in SW 1/4 SW 1/4 sec.7, T.17 N., R.3 E., Payne County, near right bank at downstream side of bridge on U.S. Highway 177, 1.0 mi (1.6 km) south of Perkins, 1.5 mi (2.4 km) upstream from Dugout Creek, 4.0 mi (6.4 km) downstream from Wildhorse Creek, and at mile 87.3 (140.5 km).

DRAINAGE AREA.--17,852 mi^2 (46,237 km^2) of which 4,926 mi^2 (12,758 km^2) is probably noncontributing.

PERIOD OF RECORD.--June 1939 to current year. Monthly discharge only for some periods, published in WSP 1311. Gage-height records collected at same site since 1927 are contained in reports of U.S. Weather Bureau.

GAGE.--Water-stage recorder. Datum of gage is 819.88 ft (249.899 m) above mean sea level (levels by Corps of Engineers). Prior to June 26, 1940, and Jan. 9, to Apr. 7, 1957, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--36 years, 1,212 ft^3/s (34.32 m^3/s), 878,100 acre-ft/yr (1.08 km^3/yr).

EXTREMES.--Current year: Maximum discharge, 100,000 ft^3/s (2,830 m^3/s) Nov. 4, gage height, 16.85 ft (5.136 m); minimum daily, 197 ft^3/s (5.579 m^3/s) Sept. 30.
Period of record: Maximum discharge, 149,000 ft^3/s (4,220 m^3/s) May 17, 1957, gage height, 19.53 ft (5.953 m); minimum, 0.8 ft^3/s (0.023 m^3/s) Dec. 8, 1954.
Flood of Oct. 4, 5, 1926, reached a stage of 17.0 ft (5.18 m) from floodmarks, from information by Corps of Engineers.

REMARKS.--Records fair. See pg. 288 for water-quality record.

REVISIONS.--WSP 1341: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	728	14000	1790	2300	17200	5790	2790	886	8140	1660	2590	408
2	647	19400	1750	2920	8970	5040	2310	1940	5320	1530	1880	373
3	582	51100	1730	3310	5080	4470	2060	4450	3740	1410	1560	356
4	532	93200	1710	2870	4550	4160	1830	5710	2880	1550	2090	339
5	480	57000	1690	4100	5790	3400	1710	3740	2570	1320	1650	320
6	444	16800	1690	3310	5200	2800	1550	2540	2410	1140	1280	310
7	435	9280	1710	2900	3630	2600	1600	2040	3020	1000	1310	298
8	436	7300	1730	2720	2820	2420	2020	1760	6520	939	1310	294
9	446	6460	1720	2190	2440	2350	1840	1530	16300	957	1350	286
10	470	6060	1710	2000	2240	3860	2030	1540	29800	880	1130	281
11	462	5790	2360	1820	1960	4120	2040	1580	45000	867	1020	274
12	452	4850	2730	1620	1870	4120	1800	2260	22300	921	918	289
13	437	3970	2860	1630	1900	3290	1500	3770	11500	861	828	294
14	563	3430	2640	1520	1760	2940	1380	14600	7190	773	781	318
15	548	3100	2230	1420	1700	2620	1300	33200	4930	672	766	368
16	614	2860	2020	1500	1740	2320	1300	16300	3860	611	871	341
17	609	2720	1840	1480	1840	2260	1250	7690	3250	574	2500	313
18	575	2630	1700	1410	1940	2240	1210	5160	2940	546	1740	309
19	543	2540	1620	1350	1930	6310	1190	4010	4980	531	1240	289
20	489	2440	1570	1340	2040	9180	1100	3370	3200	505	1030	274
21	450	2350	1510	1340	2190	5010	1030	2940	2480	490	863	263
22	432	2270	1460	1310	3660	3580	1000	2650	2300	477	760	255
23	416	2170	1420	1320	5200	2950	965	8350	2210	461	657	244
24	398	2090	1390	1280	4810	2600	939	24400	2190	1250	575	229
25	555	2030	1370	1240	4050	2440	904	16900	2900	2660	513	225
26	2480	1960	1340	1220	5050	2210	874	10400	4850	9270	520	212
27	4220	1900	1330	1200	6520	3030	864	8810	4520	5400	568	212
28	3580	1860	1310	1170	6790	5100	875	6060	2480	2950	518	210
29	5540	1840	1310	1160	---	4780	846	4840	2360	3380	601	200
30	10600	1820	1270	1340	---	4600	814	4000	1910	3160	540	197
31	20800	---	1440	7020	---	3550	---	9580	---	2510	461	---
TOTAL	59963	335220	53950	63310	114870	116340	42921	217006	218050	51255	34420	8581
MEAN	1934	11170	1740	2042	4103	3753	1431	7000	7268	1653	1110	286
MAX	20800	93200	2860	7020	17200	9180	2790	33200	45000	9270	2590	408
MIN	398	1820	1270	1160	1700	2210	814	886	1910	461	461	197
AC-FT	118900	664900	107000	125600	227800	230800	85130	430400	432500	101700	68270	17020

CAL YR 1974 TOTAL 1052433 MEAN 2883 MAX 93200 MIN 93 AC-FT 2088000
WTR YR 1975 TOTAL 1315886 MEAN 3605 MAX 93200 MIN 197 AC-FT 2610000

PEAK DISCHARGE (BASE, 16,000 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
11-4	1330	16.85	100,000	5-24	1845	11.37	30,300
2-1	1200	9.65	19,200	6-11	1500	13.50	52,000

07163000 COUNCIL CREEK NEAR STILLWATER, OKLA.

LOCATION.--Lat 36°07'07", long 96°52'00", in SE 1/4 SW 1/4 sec.15, T.19 N., R.4 E., Payne County, on right bank 200 ft (61.8 m) upstream from bridge on State Highway 51, 10.0 mi (16.1 km) east of Stillwater, and at mile 10.0 (16.1 km).

DRAINAGE AREA.--31 mi^2 (80.3 km^2).

PERIOD OF RECORD.--March 1934 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 838.28 ft (255.077 m) above mean sea levle, adjustment of 1912. Prior to May 4, 1934, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--41 years, 11.5 ft^3/s (0.326 m^3/s), 5.04 in/yr (128 mm/yr), 8,330 acre-ft/yr (10.3 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 4,400 ft^3/s (125 m^3/s) Nov. 3, gage height, 12.87 ft (3.923 m); minimum, 0.12 ft^3/s (0.003 m^3/s) Sept. 8-11.
Period of record: Maximum discharge, 25,000 ft^3/s (708 m^3/s) Oct. 2, 1959, gage height, 18.9 ft (5.76 m), from floodmarks, from rating curve extended above 2,500 ft^3/s (70.8 m^3/s) on basis of slope-area measurements at gage heights 13.4 (4.08 m) and 17.5 ft (5.33 m); no flow at times in each year except 1975.
Flood of Apr. 27, 1912, reached a stage of 16.6 ft (5.06 m) at gage, based on floodmarks set by local resident at site 900 ft (274 m) downstream.

REMARKS.--Records good.

REVISIONS.--WSP 1211: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.9	31	4.4	18	26	7.7	153	160	7.5	2.4	1.0	.19
2	1.9	2300	4.4	116	18	6.8	20	200	7.4	2.2	1.1	.18
3	1.8	2610	4.1	64	28	6.5	10	35	5.7	2.0	1.1	.15
4	1.7	284	4.0	19	189	6.8	6.4	14	5.2	1.9	1.2	.15
5	1.5	40	4.3	13	52	7.0	8.1	15	5.6	1.8	.96	.15
6	1.5	22	7.5	9.2	15	6.7	7.8	15	4.9	1.6	.88	.15
7	1.6	17	11	8.0	11	6.4	6.0	14	46	1.5	1.0	.15
8	1.4	14	5.3	7.2	12	5.4	5.1	14	7.5	1.3	.81	.14
9	1.4	19	4.1	6.7	8.4	61	7.3	250	62	1.3	.50	.12
10	1.6	84	5.9	16	8.7	168	6.5	16	263	1.4	.42	.15
11	.73	29	175	7.4	9.4	36	6.5	190	16	1.6	.38	.19
12	.67	14	24	4.8	7.8	23	6.0	300	15	1.1	.28	.61
13	1.5	11	11	4.5	7.6	11	6.0	912	665	.97	.26	.22
14	27	8.9	8.2	4.9	7.5	8.4	6.2	822	39	.97	.31	.19
15	4.1	7.9	6.9	5.2	7.0	8.2	6.4	18	16	.90	.83	1.5
16	1.9	7.6	5.9	5.1	8.5	9.3	6.6	16	9.4	.83	.64	.69
17	1.4	7.3	5.4	4.8	21	8.6	6.4	8.8	20	.69	6.0	.43
18	1.4	7.0	5.6	5.1	25	90	6.2	8.9	8.2	.65	3.0	.38
19	1.0	7.3	5.1	4.9	14	20	6.0	7.5	5.6	.60	.95	.35
20	1.5	6.9	4.9	4.4	11	11	6.3	7.3	4.9	.62	.47	.25
21	.90	6.6	4.7	4.6	9.6	8.9	6.0	5.6	4.6	.59	.33	.25
22	.82	6.8	4.7	4.1	169	7.6	5.8	5.2	4.6	.49	.28	.28
23	.86	6.7	4.5	4.2	41	7.3	20	496	4.6	.45	.26	.25
24	1.2	5.5	4.2	4.7	20	6.0	16	20	12	143	.22	.23
25	84	4.7	4.0	4.6	14	5.4	13	11	4.5	9.4	.19	.25
26	11	5.0	4.3	4.2	10	24	11	373	3.9	58	.39	.28
27	4.6	4.9	5.0	4.1	8.9	69	9.5	24	3.4	6.7	.39	.26
28	577	4.4	4.7	4.0	8.3	17	8.8	14	3.1	2.3	1.2	.23
29	44	4.4	4.7	4.0	---	13	5.0	27	2.9	1.6	.42	.26
30	1330	4.4	4.6	339	---	11	4.6	14	2.6	1.3	.25	.30
31	210	---	107	266	---	9.0	---	10	---	1.1	.22	---
TOTAL	2321.88	5581.3	459.4	971.7	767.7	686.0	394.5	4023.3	1260.1	251.26	26.24	8.93
MEAN	74.9	186	14.8	31.3	27.4	22.1	13.2	130	42.0	8.11	.85	.30
MAX	1330	2610	175	339	189	168	153	912	665	143	6.0	1.5
MIN	.67	4.4	4.0	4.0	7.0	5.4	4.6	5.2	2.6	.45	.19	.12
CFSM	2.42	6.00	.48	1.01	.88	.71	.43	4.19	1.35	.26	.03	.010
IN.	2.79	6.70	.55	1.17	.92	.82	.47	4.83	1.51	.30	.03	.01
AC-FT	4610	11070	911	1930	1520	1360	782	7980	2500	498	52	18

CAL YR 1974 TOTAL 12909.31 MEAN 35.4 MAX 2610 MIN 0 CFSM 1.14 IN 15.49 AC-FT 25610
WTR YR 1975 TOTAL 16752.31 MEAN 45.9 MAX 2610 MIN .12 CFSM 1.48 IN 20.10 AC-FT 33230

PEAK DISCHARGE (BASE, 1,200 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-28	1100	7.95	2,160	1-30	2315	7.96	2,160
10-30	2000	12.15	3,910	5-13	2400	12.84	4,370
11-3	0815	12.87	4,400	6-13	1500	8.76	2,520

07164200 KEYSTONE LAKE NEAR SAND SPRINGS, OKLA.

LOCATION.--Lat 36°09'05", long 96°15'05", in SW 1/4 SE 1/4 sec.4, T.19 N., R.10 E., Tulsa County, in stair tower of intake structure near left end of Keystone Dam on Arkansas River, 8.5 mi (13.7 km) west of Sand Springs, and at mile 538.8 (866.9 km).

DRAINAGE AREA.--74,506 mi² (192,971 km²), of which 12,541 mi² (32,481 km²) is probably noncontributing.

PERIOD OF RECORD.--September 1964 to current year. Prior to October 1970 published as Keystone Reservoir near Sand Springs.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level. Prior to Nov. 1, 1964, nonrecording gage nearby at same datum.

EXTREMES.--Current year: Maximum contents, 1,886,000 acre-ft (2.33 km³) Nov. 6, elevation, 754.86 ft (238.081 m); minimum, 498,100 acre-ft (614 hm³) Sept. 26, elevation, 717.98 ft (218.840 m).
Period of record: Maximum contents, 1,886,000 acre-ft (2.33 km³) Nov. 6, 1974, elevation, 754.86 ft (230.081 m); minimum since power pool was first filled, 297,800 acre-ft (376 hm³) Jan. 19, 1965, elevation, 705.07 ft (214.903 m).

REMARKS.--Reservoir is formed by rolled-fill earth dam. Spillway is concrete ogee weir controlled by 18 40-foot (12.2 m) taintor gates. Outlet works consist of nine sluices. Regulated storage began Sept. 11, 1964; power pool was first filled Nov. 20, 1964. Capacity, 1,836,000 acre-ft (2.26 km³), at elevation 754.0 ft (229.82 m), top of flood control pool, 618,000 acre-ft (762 hm³), at elevation 723.0 ft (220.37 m) top of power pool, 520,700 acre-ft (642 hm³) at elevation 719.0 ft (219.15 m). Crest of controlled spillway, and 287,500 acre-ft (354 hm³) at elevation 706.0 ft (215.19 m), minimum power pool. Figures given herein represent total contents. Reservoir is designed for flood control, power development, and conservation. Revised capacity table, based on survey in 1969, used since Oct. 1, 1972.

COOPERATION.--Records furnished by Corps of Engineers.

Capacity table (elevation, in feet, and contents, in acre-feet)

717	477,400	739	1,137,000
724	644,400	747	1,478,000
731	852,900	755	1,894,000

CONTENTS, IN ACRE-FEET, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	643100	910900	819200	749400	757100	758000	787200	617200	931000	740500	632100	566200
2	632600	1056000	810400	749100	841900	767900	769700	635300	891500	745200	632600	556800
3	623700	1341000	807200	748800	886900	777700	748500	654200	835800	744000	631600	546900
4	615900	1589000	802500	750600	906000	781400	732800	658800	771000	735400	629000	537900
5	620100	1830000	799100	755600	917600	775200	722500	657200	735400	725100	622700	530500
6	625300	1886000	804400	753600	937100	756500	718600	653100	733400	710800	617500	535500
7	623700	1825000	804100	749100	947400	726900	721900	647100	758300	700100	617700	541600
8	627600	1724000	801000	745500	941200	696400	729200	639800	745200	698100	610800	537900
9	629000	1635000	797800	741700	921500	672700	734300	631600	749700	695000	608200	538600
10	621900	1584000	796300	739600	897100	656100	734600	628200	776100	691800	601300	539700
11	614100	1545000	810100	736000	870800	655800	735100	625300	818600	691300	593400	536200
12	619800	1513000	822700	729200	840000	642000	734300	617200	897100	691000	584300	533200
13	625800	1491000	831300	720400	811300	630800	729600	642300	907600	687000	580600	532100
14	628400	1463000	847100	709300	794100	637200	722200	745500	905300	687900	580400	530000
15	625000	1432000	865300	697500	783800	643900	710800	862600	864300	679700	579600	531100
16	621900	1400000	876700	683900	779200	656700	702100	932700	809800	664900	583300	527400
17	619300	1366000	879600	669100	774000	666800	698700	954000	764900	648200	589600	527000
18	613300	1330000	878000	654700	770700	680200	695800	942900	730400	637400	600000	522100
19	615700	1281000	873700	640400	754500	700100	690400	918900	736600	622400	603800	522300
20	619000	1250000	868500	626100	726600	727200	686500	891100	796300	630800	604300	526000
21	614400	1206000	863000	623700	711100	748500	683600	861000	809100	626600	596200	530000
22	605100	1164000	856500	617700	736000	749400	676000	830400	780100	621900	589400	522100
23	593700	1124000	849600	611500	759800	749100	667400	837100	749100	618500	582800	513000
24	590900	1081000	840900	609000	771900	733100	659900	873400	731300	613600	589400	502800
25	597500	1036000	834800	605900	771300	710500	651700	923900	725100	619500	596700	500500
26	606400	991400	824600	601800	759500	689600	643300	957200	731300	621900	613100	498300
27	615700	947700	810100	598500	750600	725700	634800	1004000	728600	649600	604300	501300
28	651200	906000	794700	594400	751200	755300	627400	1042000	714600	654500	599200	504300
29	670700	863900	780100	598500	---	779200	623700	1047000	717500	648200	593700	502600
30	691600	837100	766400	614100	---	795600	619800	1007000	737800	647200	593900	506100
31	848700	---	756500	676600	---	797800	---	960000	---	637200	587300	---
MAX	848700	1886000	879600	755600	947400	797800	787200	1047000	931000	745200	632600	566200
MIN	590900	837100	756500	594400	711100	630800	619800	617200	714600	613600	579600	498300
(†)	730.87	730.51	727.92	725.17	727.74	729.27	723.07	734.21	727.29	723.73	721.80	718.35
(‡)	+195,600	-11,600	-80,600	-79,900	+74,600	+46,600	-178,000	+340,200	-222,200	-100,600	-49,900	-81,200

CAL YR 1974.....‡ -32,000
WTR YR 1975.....‡-147,000

† Elevation, in feet, at end of month.
‡ Change in contents, in acre-feet.

07164500 ARKANSAS RIVER AT TULSA, OKLA.

LOCATION.--Lat 36°08'37", long 96°00'13", in NW 1/4 sec.11, T.19 N., R.12 E., Tulsa County, near left bank on downstream side of pier of bridge on U.S. Highway 66 in Tulsa, 10.1 mi (16.3 km) upstream from Polecat Creek, 15.1 mi (24.3 km) downstream from Keystone Dam, and at mile 523.7 (842.6 km).

DRAINAGE AREA.--74,615 mi^2 (193,253 km^2), of which 12,541 mi^2 (32,481 km^2) is probably noncontributing.

PERIOD OF RECORD.--October 1925 to current year. Monthly discharge only for some periods, published in WSP 1311. Gage-height records collected in this vicinity since 1904 are published in reports of the U.S. Weather Bureau.

GAGE.--Water-stage recorder. Datum of gage is 615.23 ft (187.522 m) above mean sea level (Corps of Engineers bench mark). Prior to Feb. 2, 1939, nonrecording gage and Feb. 2, 1939, to Sept. 30, 1952, water-stage recorder at datum 3.00 ft (0.914 m) higher.

AVERAGE DISCHARGE.--50 years, 6,796 ft^3/s (192.5 m^3/s), 4,924,000 acre-ft/yr (6.07 km^3/yr).

EXTREMES.--Current year: Maximum discharge, 101,000 ft^3/s (2,860 m^3/s) Nov. 6, gage height, 13.63 ft (4.154 m); minimum daily, 240 ft^3/s (6.80 m^3/s) Sept. 21.
Period of record: Maximum discharge, 246,000 ft^3/s (6,970 m^3/s) Oct. 5, 1959, gage height, 22.00 ft (6.706 m); minimum, 27 ft^3/s (0.76 m^3/s) Oct. 12, 13, 1956.
Maximum stage since 1904, 22.8 ft (6.949 m) June 13, 1923, present datum, from reports of U.S. Weather Bureau.

REMARKS.--Records good. Except for 109 mi^2 (282 km^2) intervening area, flow completely regulated by Keystone Lake (see sta. 07164200) since September 1964. Prior minor regulation by John Martin Lake in Colorado and by Great Salt Plains Lake (see sta. 07150000). Records of chemical analyses and of water temperatures for site 7 miles (11.3 km) upstream (Published as "at Sand Springs Bridge near Tulsa")
See pg. 302 for water-quality record.

COOPERATION.--Gage-height record and 15 discharge measurements furnished by Corps of Engineers; records computed by Geological Survey.

REVISIONS.--WSP 1341: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8490	13000	13000	12500	7630	22500	19400	7290	46800	12000	6190	12200
2	8260	17900	10900	12800	7610	22600	19100	7150	45800	12000	6020	6500
3	6350	25000	6770	12700	8790	22600	19100	6050	45900	13400	4360	6640
4	6760	45200	6540	12600	15400	22600	18200	8900	49400	16300	4680	6540
5	3330	75800	6550	12700	21000	25700	13200	13600	42400	16300	6430	6280
6	384	100000	6930	12700	20700	28200	9780	13600	30900	16300	6450	2780
7	2160	99400	6660	12700	22500	27500	9410	10400	21400	14600	2970	250
8	1230	93800	6530	12700	25400	26800	9410	10600	34500	9100	4760	1690
9	307	77000	6540	12800	25200	25800	8880	8970	41000	8960	4220	3570
10	4540	61100	6560	12800	25900	25400	9010	8680	46500	8700	4630	2320
11	6610	43900	7200	12800	25700	24200	8520	7300	53400	8000	7220	3790
12	3310	36800	6640	12700	25100	23700	12400	7840	57800	5870	5820	4100
13	492	27800	6510	13000	24900	24700	12400	7660	61100	7540	5020	2600
14	1870	27700	6490	13300	21300	13300	12400	10000	60400	6210	3050	2800
15	4630	26400	6480	13200	14600	13100	12000	14000	54500	9140	3940	2980
16	4930	26500	6420	13200	14500	8260	12500	25500	51800	11500	1750	4070
17	4890	26700	7120	13300	11800	6880	9830	30000	45000	12100	263	4690
18	6210	27300	8820	13300	12300	7000	9470	30200	32900	8700	1130	2150
19	3120	28600	9260	13300	18400	7910	9940	29900	29600	12100	3230	4260
20	1780	28800	9490	13300	23600	6310	9670	29500	32900	2800	3710	565
21	2430	28400	7780	8640	19300	7200	8230	29000	38200	2200	5800	240
22	6970	28600	10300	7560	11400	12500	9530	28600	38200	5830	6280	2160
23	8010	28900	7160	8890	9630	12500	11700	28400	35000	5900	6030	5830
24	5430	28200	11600	8410	14600	13600	11200	28700	29300	5320	3190	6110
25	6310	27900	6620	7260	21000	18900	10300	29700	26600	5920	371	3720
26	3070	28000	9960	7230	24000	18800	10200	30200	29300	6610	457	2750
27	1380	27700	11900	7360	23900	19600	10600	30500	31500	3480	4410	1970
28	4960	27100	12100	7310	23200	13400	10400	32600	30600	2480	7450	275
29	13100	27200	12200	3300	---	13200	8810	37700	22600	7750	7240	599
30	14100	21000	12200	7570	---	12900	8030	43100	2520	8320	4710	1950
31	13100	---	12400	9450	---	15400	---	48000	---	7630	3500	---
TOTAL	158513	1181700	265630	341380	519360	543060	343620	653640	1167820	273060	135281	106379
MEAN	5113	39390	8569	11010	18550	17520	11450	21090	38930	8808	4364	3546
MAX	14100	100000	13000	13300	25900	28200	19400	48000	61100	16300	7450	12200
MIN	307	13000	6420	3300	7610	6310	8030	6050	2520	2200	263	240
AC-FT	314400	2344000	526900	677100	1030000	1077000	681600	1296000	2316000	541600	268300	211000

CAL YR 1974 TOTAL 5125515 MEAN 14040 MAX 100000 MIN 307 AC-FT 10170000
WTR YR 1975 TOTAL 5689443 MEAN 15590 MAX 100000 MIN 240 AC-FT 11290000

07165000 HEYBURN LAKE NEAR HEYBURN, OKLA.

LOCATION.--Lat 35°56'52", long 96°17'55", in SE 1/4 sec.13, T.17 N., R.9 E., Creek County, at intake structure at right abutment of Heyburn Dam on Polecat Creek, 2.5 mi (4.0 km) northwest of Heyburn, 3.4 mi (5.5 km) upstream from bridge on U.S. Highway 66, 11.0 mi (17.7 km) southwest of Sapulpa, and at mile 48.6 (28.2 km).

DRAINAGE AREA.--123 mi² (318.6 km²).

PERIOD OF RECORD.--October 1950 to current year. Prior to October 1970, published as Heyburn Reservoir near Heyburn.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level.

EXTREMES.--Current year: Maximum contents, 32,210 acre-ft (39.7 hm³) Nov. 4, elevation, 776.85 ft (236.784 m); minimum, 6,330 acre-ft (7.80 hm³) Aug. 13, elevation, 761.17 ft (232.005 m).
Period of record: Maximum contents, 32,210 acre-ft (39.7 hm³) Nov. 4, 1974, elevation, 776.85 ft (236.784 m); minimum since conservation pool was first filled, 5,780 acre-ft (7.13 hm³), Aug. 23, 1972, elevation 758.66 ft (231.240 m).

REMARKS.--Reservoir is formed by an earth dam. Outlet works consist of an 8.25 ft (2.515 m) diameter concrete conduit extending from an uncontrolled concrete drop inlet at the upstream side of dam to a concrete stilling basin near downstream toe of dam and three 36-inch (.91 m) gated low-flow pipes which drain into the conduit below the drop inlet. Spillway is 200-foot (61.0 m) channel in a natural saddle about 1,000 ft (304.8 m) west of right abutment. Storage began Sept. 29, 1950; conservation pool was first filled Mar. 10, 1951. Capacity, 144,800 acre-ft (179 hm³), at elevation 802.0 ft (244.45 m) maximum pool, 55,030 acre-ft (67.9 hm³), at elevation 784.0 ft (238.96 m), spillway crest and top of flood-control pool, and 6,620 acre-ft (8.2 hm³) at elevation 761.5 (232.11 m), conservation pool. Dead storage, 226 acre-ft (3,280 m³) below elevation 740.0 ft (225.55 m), invert of low-flow sluices. Reservoir was designed for flood control and conservation. Figures given herein represent total contents. Revised capacity table, based on survey in 1971, used since Oct. 1, 1972.

COOPERATION.--Records furnished by Corps of Engineers.

Capacity table (elevation, in feet, and contents, in acre-feet)

761	6,180	770	17,500
764	9,240	773	23,140
767	13,020	777	32,640

CONTENTS, IN ACRE-FEET, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6930	9660	6920	7200	9010	7290	7690	6980	7210	6760	6560	6850
2	6880	22760	6920	8460	8550	7220	7340	8440	7130	6750	6550	6820
3	6840	32020	6910	8220	8450	7170	7100	8210	7050	6740	6540	6780
4	6810	29910	6900	7870	8590	7150	7030	7830	7000	6730	6510	6760
5	6780	26280	6910	7640	8740	7130	7030	7590	7000	6710	6500	6740
6	6770	22780	7780	7480	8260	7120	7030	7510	7010	6680	6480	6710
7	6750	19340	7790	7350	7910	7100	7650	7390	7390	6670	6460	6680
8	6740	16190	7580	7270	7710	7070	9170	7260	7260	6650	6430	6650
9	6740	13450	7410	7220	7530	7210	8510	7170	7340	6640	6410	6640
10	6730	11910	7500	7200	7430	7690	8070	7120	7300	6620	6390	6630
11	6720	9980	8410	7150	7370	8050	7780	7110	7200	6590	6380	6640
12	6750	8870	8140	7080	7280	8080	7580	7060	7110	6560	6330	6620
13	6770	8240	7840	7040	7220	7830	7480	9480	7040	6530	6340	6600
14	6850	7850	7620	7010	7190	7620	7420	10190	7000	6590	6460	6590
15	6830	7590	7460	7000	7150	7480	7310	9010	6970	6590	7290	6600
16	6810	7440	7320	6990	7760	7460	7250	8280	6950	6570	7200	6590
17	6800	7310	7230	6980	7740	7400	7210	7840	7000	6560	7110	6590
18	6770	7230	7170	6970	7590	7790	7190	7550	6980	6550	7150	6590
19	6770	7180	7120	6960	7460	7710	7140	7350	6950	6530	7070	6570
20	6750	7130	7070	6940	7340	7570	7080	7240	6960	6530	7000	6560
21	6730	7100	7030	6940	7280	7460	7060	7160	6880	6510	6980	6540
22	6720	7050	7010	6930	9370	7350	7040	6950	6850	6490	6910	6540
23	6710	7040	7000	6910	8740	7270	7040	7350	6870	6470	6850	6510
24	6740	7000	6980	6930	8220	7170	7040	7300	6870	6550	6800	6490
25	6960	6990	6960	6930	7890	7110	7020	7220	6850	6620	6770	6480
26	7000	6970	6940	6920	7640	7200	7010	7470	6830	6640	7270	6460
27	6980	6950	6940	6920	7490	11160	7030	7370	6810	6660	7170	6460
28	8940	6950	6940	6910	7390	10540	7050	7540	6790	6640	7070	6450
29	8530	6950	6940	6910	---	9370	7030	7640	6780	6610	7000	6440
30	10290	6950	6950	7530	---	8570	7000	7470	6770	6610	6950	6440
31	11430	---	7190	9510	---	8110	---	7320	---	6570	6890	---
MAX	11430	32020	8410	9510	9370	11160	9170	10190	7390	6760	7290	6850
MIN	6710	6950	6900	6910	7150	7070	7000	6950	6770	6470	6330	6440
(†)	765.80	761.85	762.10	764.23	762.29	762.98	761.91	762.23	761.67	761.45	761.79	761.30
(‡)	+4,450	-4,480	+240	+2,320	-2,120	+720	-1,110	+320	-550	-200	+320	-450

CAL YR 1974.....‡ +300
WTR YR 1975.....‡ -540

† Elevation, in feet, at end of month
‡ Change in contents, in acre-ft.

07165500 POLECAT CREEK BELOW HEYBURN LAKE, NEAR HEYBURN, OKLA.

LOCATION.--35°56'42", 96°17'39", in NW 1/4 NW 1/4 sec.19, T.17 N., R.10 E., Creek County, on right bank of outlet channel, 1,100 ft (335 m) downstream from Heyburn dam, 3.2 mi (5.1 km) upstream from bridge on U.S. Highway 66, 11 mi (17.7 km) southwest of Sapulpa, and at mile 48.4 (77.9 km).

DRAINAGE AREA.--123 mi^2 (319 km^2).

PERIOD OF RECORD.--October 1943 to current year. Prior to October 1956, published as Polecat Creek at Heyburn and October 1956 to September 1970 as Polecat Creek below Heyburn Reservoir near Heyburn.

GAGE.--Water-stage recorder. Datum of gage is 718.00ft (218.846 m) above mean sea level. Oct. 1, 1943 to Feb. 21, 1949, nonrecording gage and Feb. 22, 1949 to Feb. 16, 1956, water-stage recorder at site 3.2 mi (5.1 km) downstream at datum 706.47 ft (215.332 m). Mar. 8, 1958 to Sept. 30, 1971, water-stage recorder at intake structure at right abutment of Heyburn Dam 1,100 ft (335 m) upstream at datum 760.00 ft (231.648 m), present site used supplementary gage.

AVERAGE DISCHARGE.--32 years, 55.1 ft^3/s (1.560 m^3/s), 39,920 acre-ft/yr (49.2 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 2,080 ft^3/s (58.9 m^3/s) Nov. 4, computed from outflow 1,100 ft (335 m) upstream, gage height, 14.8 ft (4.51 m) from HWM; no flow Sept. 14, 15, 18, 26-29.
Period of record: Maximum discharge, 17,300 ft^3/s (490 m^3/s) June 23, 1948 and May 19, 1949, from rating curve extended above 6,100 ft^3/s (173 m^3/s); maximum gage height, 28.53 ft (8.696 m) May 19, 1949, site and datum then in use; no flow at times in most years.
Flood of Sept. 4, 1940, reached a stage of 31.5 ft (9.60 m), from flood mark, at former site and datum.

REMARKS.--Records good. Flow regulated since September 1950 by Heyburn Lake (see sta. 07165000) with occasional prior regulation from March 1950 by lake construction operations.

COOPERATION.--Gage-height record, 25 discharge measurements and 1 observations of no flow furnished by Corps of Engineers; records computed by Geological Survey.

REVISIONS.--WSP 1117. Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	63	1060	20	53	678	75	290	26	55	2.8	.71	16
2	52	1180	18	159	532	61	228	127	41	2.4	.80	11
3	42	1990	18	389	454	51	157	368	33	2.3	.97	7.7
4	34	2050	18	270	435	47	66	246	26	2.6	.84	4.5
5	25	2010	17	178	533	44	33	155	23	2.2	.70	3.8
6	17	1870	65	125	408	42	33	112	21	1.5	.75	2.2
7	10	1810	195	92	264	41	66	93	61	1.1	.80	.84
8	3.3	1750	159	72	181	37	614	69	70	.97	.61	.19
9	2.9	1690	110	59	128	36	515	53	61	1.1	.67	.12
10	2.1	1630	85	55	93	121	332	44	72	1.2	.53	3.3
11	1.7	1190	286	53	78	162	212	39	56	1.2	.68	1.2
12	2.3	651	355	45	65	295	143	37	42	1.4	.57	2.3
13	3.5	395	247	37	56	238	107	81	31	.94	.52	.11
14	10	238	167	34	49	162	92	1170	26	.82	.58	0
15	11	149	119	31	44	117	77	796	21	.88	27	0
16	9.2	106	88	29	77	103	64	472	16	.73	47	7.3
17	7.5	82	68	28	170	92	56	285	21	.79	35	.11
18	6.9	68	57	27	148	122	53	175	24	.89	39	0
19	5.8	59	49	29	112	179	46	117	20	.99	33	1.5
20	4.3	49	43	25	86	144	40	87	15	1.1	25	.10
21	3.1	43	39	24	69	110	35	70	12	1.1	20	.32
22	2.2	38	35	23	290	86	32	128	9.4	1.0	17	.26
23	1.8	36	32	22	614	70	32	108	11	3.9	13	.12
24	1.7	32	31	22	417	57	31	81	13	3.6	9.2	.76
25	10	28	27	22	275	46	30	71	12	3.5	5.8	.19
26	24	25	26	21	179	41	28	79	9.3	1.6	53	0
27	25	23	25	21	126	698	27	94	7.3	.95	60	0
28	242	21	24	20	94	1170	30	74	5.1	.90	46	0
29	512	19	24	20	---	901	31	141	4.6	.94	35	0
30	397	20	23	25	---	553	30	110	4.0	.90	26	.36
31	1560	---	35	697	---	354	---	76	---	.75	20	---
TOTAL	3092.3	20312	2505	2707	6655	6255	3530	5584	822.7	47.05	520.73	64.28
MEAN	99.8	677	80.8	87.3	238	202	118	180	27.4	1.52	16.8	2.14
MAX	1560	2050	355	697	678	1170	614	1170	72	3.9	60	16
MIN	1.7	19	17	20	44	36	27	26	4.0	.73	.52	0
AC-FT	6130	40290	4970	5370	13200	12410	7000	11080	1630	93	1030	127

CAL YR 1974 TOTAL 59294.50 MEAN 162 MAX 2050 MIN 0 AC-FT 117600
WTR YR 1975 TOTAL 52095.06 MEAN 143 MAX 2050 MIN 0 AC-FT 103300

07165570 ARKANSAS RIVER NEAR HASKELL, OKLA.

LOCATION.--Lat 35°49'23", long 95°38'39", in NE 1/4 sec.31, T.16 N., R.16 E., Muskogee County, near right bank on downstream side of bridge on State Highway 104, 2 mi (3.2 km) east of Haskell, 23.5 mi (37.8 km) upstream from Verdigris River, and at mile 483.7 (778.3 km).

DRAINAGE AREA.--75,473 mi² (195,475 km²), of which 12,541 mi² (32,481 km²) probably is noncontributing.

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

GAGE.--Water-stage recorder. Datum of gage is 530.00 ft (161.544 m) above mean sea level.

EXTREMES.--Current year: Maximum discharge, 108,000 ft³/s (3,060 m³/s) Nov. 6, gage height, 17.30 ft (5.273 m); minimum daily, 531 ft³/s (15.0 m³/s) Sept. 30.
Period of record: Maximum discharge, 108,000 ft³/s (3,060 m³/s) Nov. 6, 1974, gage height, 17.30 ft (5.273 m): minimum daily, 531 ft³/s (15.0 m³/s) Sept. 30, 1975.

REMARKS.--Records fair. Flow regulated by Keystone Lake (see sta. 07164200), 55.1 mi (88.7 km) upstream. See pg. 319 for water-quality record.
COOPERATION.--Gage-height record and 29 discharge measurements furnished by Corps of Engineers; records computed by Geological Survey.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8090	20000	16600	13300	11800	22600	19000	8890	48400	6420	7810	4550
2	9510	18600	13700	13300	10100	21900	20700	9370	47500	13200	6970	12300
3	8990	36300	9940	15300	9830	22000	20000	16100	46400	12900	5620	6860
4	7460	61200	7400	14100	12100	22000	19900	10500	48200	15200	4570	6920
5	7550	71300	7070	13600	22100	25300	18000	10800	48400	16500	4920	7010
6	3460	97100	7500	13300	24100	28100	14100	14200	37100	16400	6700	6890
7	927	101000	7770	13200	22400	29100	11000	13700	34200	16300	6530	3300
8	1360	100000	7600	13100	25200	27900	12300	11000	23500	13000	3200	1280
9	1580	83400	7500	13000	25400	27100	13200	10700	37200	9610	5260	2310
10	690	74400	7500	13200	25100	27800	11300	9680	41200	9110	4470	3770
11	3640	53300	7500	13000	25000	27000	10800	8460	51500	9020	5150	2720
12	6410	46300	8050	12900	24600	25900	10800	7720	53800	7180	7210	4320
13	3920	32600	7800	12900	24600	27300	13400	8550	58300	6540	6270	4120
14	1390	29400	7650	12800	24300	20800	13400	18400	60000	7610	5050	2990
15	2120	28500	7300	13000	17100	14800	13300	16000	59300	6290	5780	3110
16	5000	27900	7100	13000	14500	13600	13400	21300	56300	9310	5950	3250
17	5600	27300	6910	13100	14100	10100	12700	29000	53500	11600	2640	4130
18	5490	26800	8050	13000	12500	11300	10200	30700	41900	11800	1480	5010
19	6720	27700	9540	13200	12700	13400	9990	30600	33700	8550	1960	2850
20	4120	28900	10000	13300	19200	10100	10000	30300	31900	11000	3190	3510
21	2320	28400	9810	12500	22800	8820	9610	29700	37700	2650	3640	1250
22	2750	28000	9070	8810	20300	10200	8590	28900	40000	3470	6190	660
23	7440	28300	10400	8660	17700	13800	9990	28400	38900	5540	6400	1420
24	8450	27700	8400	9230	12300	13400	11400	28100	34100	5530	6280	5410
25	5880	27400	11500	8360	16200	17500	10800	33900	29000	5790	3460	6030
26	7030	27400	7850	7680	23800	20100	10300	31800	26600	6170	1260	3630
27	4260	27500	10800	7640	24700	24900	10300	30600	30900	7090	1170	2610
28	2270	26800	12500	7710	24000	30100	10800	29700	32100	3250	5070	1960
29	10200	26400	12600	7630	---	23300	10400	33700	31700	3440	7720	703
30	15600	26600	12500	4050	---	17600	9630	38300	14800	8150	7550	531
31	24300	---	13000	9670	---	15600	---	47200	---	8710	4470	---
TOTAL	184527	1266500	290910	357540	538530	623420	379310	676270	1228100	277330	153940	115404
MEAN	5952	42220	9384	11530	19230	20110	12640	21820	40940	8946	4966	3847
MAX	24300	101000	16600	15300	25400	30100	20700	47200	60000	16500	7810	12300
MIN	690	18600	6910	4050	9830	8820	8590	7720	14800	2650	1170	531
AC-FT	366000	2512000	577000	709200	1068000	1237000	752400	1341000	2436000	550100	305300	228900

CAL YR 1974 TOTAL 5514057 MEAN 15110 MAX 101000 MIN 690 AC-FT 10940000
WTR YR 1975 TOTAL 6091781 MEAN 16690 MAX 101000 MIN 531 AC-FT 12080000

07171000 VERDIGRIS RIVER NEAR LENAPAH, OKLA.

LOCATION.--Lat 36°51'05", long 95°35'06", at center of sec.3, T.27 N., R.16 E., Nowata County, near right bank on downstream side of bridge on State Highway 10, 2.8 mi (4.5 km) east of Lenapah, 4.5 mi (7.2 km) upstream from Cedar Creek, and at mile 144.6 (232.7 km).

DRAINAGE AREA.--3,639 mi^2 (942.5 km^2).

PERIOD OF RECORD.--October 1938 to current year. Monthly discharge only for some periods, published in WSP 1311.

GAGE.--Water-stage recorder. Datum of gage is 644.89 ft (196.562 m) above mean sea level.

AVERAGE DISCHARGE.--37 years, 2,274 ft^3/s (64.40 m^3/s), 1,648,000 acre-ft/yr (2.03 km^3/yr).

EXTREMES.--Current year: Maximum discharge, 46,700 ft^3/s (1,320 m^3/s) Nov. 4, gage height, 34.96 ft (10.656 m); minimum, 26 ft^3/s (0.74 m^3/s) Aug. 13, 14.
Period of record: Maximum discharge, 137,000 ft^3/s (3,880 m^3/s) May 20, 1943, gage height, 40.44 ft (12.326 m), from floodmarks; no flow at times in 1939-40, 1956.

REMARKS.--Records good. Some regulation, by dams in Kansas, since April 1949.

COOPERATION.--Gage-height record and 30 discharge measurements furnished by Corps of Engineers; records computed by Geological Survey.

REVISIONS (WATER YEARS).--WSP 977: 1942(M). WSP 1117: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1510	20700	4500	3640	22000	6900	5110	1420	5280	2760	48	759
2	1160	20900	3590	3770	12300	6200	7600	1100	5620	2600	46	345
3	1000	35100	3480	5200	3140	5050	8410	1430	6940	1800	50	217
4	654	45700	3400	3460	4280	4230	8200	1720	9750	912	50	157
5	313	41100	3430	2680	11700	3980	7250	1240	8120	644	47	121
6	276	37800	3270	2260	13900	3340	5830	1010	8160	522	47	101
7	265	29700	3180	3590	12100	2270	5280	972	6670	586	47	97
8	249	9590	2430	4320	9890	1830	5550	922	5540	501	44	149
9	236	5010	1630	4470	8810	1560	6620	706	4100	377	39	116
10	228	6220	1350	4280	8380	1830	6120	884	6370	349	36	98
11	222	7290	6120	3840	5870	3430	4860	1250	7510	247	33	92
12	996	7470	9350	2990	5000	5930	2890	806	5160	183	30	110
13	3080	9300	8180	2380	4860	7220	1870	691	2030	169	28	158
14	5030	11500	5610	2210	4790	5150	1610	3200	2360	165	37	184
15	2610	12500	5210	2000	4780	4710	1640	9090	5100	160	4360	162
16	1840	12500	4880	1890	3580	5850	1940	6570	6700	156	2830	121
17	1940	12400	4660	1660	5010	9010	2270	4180	16700	160	893	101
18	2190	12400	4530	1570	4680	8980	2450	4250	22800	155	2760	95
19	1490	12300	4440	1500	4920	11000	1920	4070	18700	138	3300	113
20	1020	12200	3560	1280	5170	11500	1430	3910	7780	125	927	142
21	654	12100	3040	2170	5690	7620	1140	1870	9240	123	376	100
22	528	11900	2420	2820	6400	5780	1070	921	11100	133	231	92
23	429	11700	2040	2660	7660	4820	1020	2210	11800	146	183	87
24	358	11500	1990	2550	4460	4580	914	3730	12900	130	150	83
25	310	11300	1960	2230	4870	4070	900	2330	11200	121	130	77
26	416	11100	1820	1910	8190	3340	2090	1180	9210	100	108	69
27	719	8930	1450	1780	9030	6580	1380	1220	6940	91	87	69
28	2070	6300	1360	1230	8420	15800	1740	1950	4690	77	80	61
29	4710	8690	1230	1220	---	15000	1750	2440	3470	64	104	61
30	5040	8070	1120	1690	---	6850	1720	4120	2930	57	643	54
31	16900	---	1550	20800	---	4270	---	4140	---	52	2230	---
TOTAL	58443	463270	106780	100050	209880	188680	102574	75532	244870	13803	19974	4191
MEAN	1885	15440	3445	3227	7496	6086	3419	2437	8162	445	644	140
MAX	16900	45700	9350	20800	22000	15800	8410	9090	22800	2760	4360	759
MIN	222	5010	1120	1220	3140	1560	900	691	2030	52	28	54
AC-FT	115900	918900	211800	198400	416300	374200	203500	149800	485700	27380	39620	8310

CAL YR 1974 TOTAL 1860095 MEAN 5096 MAX 68800 MIN 42 AC-FT 3689000
WTR YR 1975 TOTAL 1588047 MEAN 4351 MAX 45700 MIN 28 AC-FT 3150000

PEAK DISCHRAGE (BASE, 23,000 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE
11-4	1330	34.96	46,700
1-31	2230	26.45	24,400
6-18	0545	25.79	23,800

07171300 OOLOGAH LAKE NEAR OOLOGAH, OKLA.

LOCATION.--Lat 36°25'19", long 95°40'43", in NE 1/4 NW 1/4 sec.2, T.22 N., R.15 E., Rogers County, in gage tower 1,000 ft (304.8 m) from left end of dam on Verdigris River, 2.0 mi (3.2 km) southeast of Oologah, and at mile 90.3 (145.3 km).

DRAINAGE AREA.--4,339 mi² (11,238 km²).

PERIOD OF RECORD.--May 1963 to current year. Prior to October 1970 published as Oologah Reservoir near Oologah.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level.

EXTREMES.--Current year: Maximum contents, 1,321,000 acre-ft (1.63 km³) Nov. 11, elevation, 657.35 ft (200.360 m); minimum, 497,900 acre-ft (614 hm³) Aug. 13, elevation, 636.06 ft (193.871 m).
Period of record: Maximum contents, 1,426,000 acre-ft (1.76 km³) Apr. 26, 1973, elevation, 659.33 ft (200.964 m); minimum since conservation pool first filled 33,750 acre-ft (41.6 hm³) Aug. 28, Oct. 27, 1969, elevation, 602.87 ft (183.755 m).

REMARKS.--Reservoir is formed by earth dam with concrete outlet structure and emergency spillway. Storage began May 15, 1963; conservation pool was first filled Apr. 4, 1964. Cpaacity, 1,519,000 acre-ft (1.87 km³) at elevation 661.0 ft (201.47 m), top of flood control pool 553,400 acre-ft (682 hm³) at elevation 638.0 ft (194.46 m), conservation pool, revised. Dead storage, 9,300 acre-ft (11.5 hm³) below elevation 592.0 ft (180.44 m). Figures given herein represent total contents. Reservoir is used for flood control and conservation.

COOPERATION.--Records furnished by Corps of Engineers.

Capacity table (elevation, in feet, contents, in acre-feet)

636	496,300	648	896,300
640	614,200	653	1,109,000
644	747,000	658	1,354,000

CONTENTS, IN ACRE-FEET, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	583200	679200	894300	717100	651800	729300	736200	546800	631000	637800	507700	532700
2	581000	746300	882400	714300	685400	724100	720900	548500	633300	637800	507400	533600
3	577400	886400	876100	717100	688700	706800	708100	551100	635600	637500	507100	533900
4	574000	994700	866600	711600	686100	689300	701100	554600	646000	635200	506000	533300
5	574900	1088000	857900	703600	689700	671400	700100	555700	656400	631000	504800	535000
6	575800	1164000	863800	696300	695200	652500	697600	556000	663900	626400	504000	533000
7	572800	1234000	859600	690600	699000	639400	694900	556600	671400	622400	503400	531300
8	569700	1271000	849400	685700	708800	627400	694200	555400	672000	613500	502800	530100
9	564800	1285000	839400	682500	704600	620000	694200	554900	671400	603100	502000	528700
10	560000	1309000	831600	676900	709100	613200	695900	555100	672700	594200	501100	526100
11	556000	1317000	842700	677900	703900	616900	688400	555400	681500	578900	500100	525000
12	573700	1304000	849000	667500	691900	626400	678600	555400	678600	565700	499000	527800
13	588700	1288000	853500	665900	683100	629000	662600	551400	670700	556900	498400	526100
14	592400	1260000	850900	664900	675600	626700	646000	555700	663900	549700	499000	524100
15	594200	1238000	849400	664600	671700	623300	627100	569400	660300	544800	507700	524400
16	595100	1216000	845300	663200	666200	625200	613500	583200	662300	544800	513200	525200
17	593000	1196000	840900	656400	669400	642100	605600	591800	693900	544200	516600	525500
18	592700	1171000	835300	648600	668800	660300	602500	598200	722700	538200	521200	529600
19	585600	1152000	831300	642700	667600	682500	597300	601900	735200	525000	527500	531600
20	578600	1129000	825700	629000	664900	704600	589300	607400	728200	512300	529300	532700
21	569700	1105000	818300	629300	673700	716400	581400	607400	717100	506300	529800	531900
22	563600	1081000	810500	621200	698300	708400	570300	606500	712200	506000	530400	531900
23	557700	1064000	802000	609200	710900	700800	562000	608900	701100	506300	529800	532100
24	554900	1038000	793200	595800	714000	692900	555100	613500	691000	508000	527000	531900
25	555400	1012000	781700	580100	716400	678600	549100	616000	676900	509400	527500	530700
26	554900	990900	770300	566300	720600	664900	548800	620000	662600	509700	529000	530100
27	554000	963000	761200	557700	726100	692600	547700	616600	650200	509700	529000	529300
28	566900	932700	750100	545100	730300	731700	548200	617800	646000	509700	528700	531000
29	576800	915300	742100	537300	---	762300	548200	620300	644000	508900	527800	530100
30	591500	910500	731700	543400	---	764700	549100	625200	690100	508900	529600	532700
31	638500	---	723000	602200	---	750500	---	626400	---	508000	530700	---
MAX	638500	1317000	894300	717100	730300	764700	736200	626400	735200	637800	530700	535000
MIN	554000	679200	723000	537300	651800	613200	547700	546800	631000	506000	498400	524100
(†)	640.77	648.36	643.31	639.61	643.52	644.10	637.85	640.40	640.82	636.42	637.21	637.28
(‡)	+56,200	+272,000	-187,500	-120,800	+128,100	+20,200	-201,400	+77,300	+13,700	-132,100	+22,700	+2,000

CAL YR 1974.....‡-229,500
WTR YR 1975.....‡ -49,600

† Elevation, in feet, at end of month.
‡ Change in contents, in acre-ft.

07171400 VERDIGRIS RIVER NEAR OOLOGAH, OKLA.

LOCATION.--Lat 36°25'17", long 95°41'01", in NW 1/4 sec.2, T.22 N., R.15 E., Rogert County, on right bank 0.3 mi (0.48 km) downstream from Oologah Dam, 1.2 mi (1.9 km) upstream from Fourmile Creek, 2 mi (3.2 km) southeast of Oologah, and at mile 90.0 (144.8 km).

DRAINAGE AREA.--4,339 mi^2 (11,238 km^2).

PERIOD OF RECORD.--June 1961 to current year.

GAGE.--Water-stage recorder. Datum of gage is 552.00 ft (168.250 m) above mean sea level.

AVERAGE DISCHARGE.--14 years, 2,785 ft^3/s (78.87 m^3/s), 2,018,000 acre-ft/yr (2.49 km^3/yr).

EXTREMES.--Current year: Maximum discharge, 25,600 ft^3/s (725 m^3/s) Nov. 15, gage height, 34.58 ft (10.540 m); no flow Sept. 24-30 Low-water dam built 250 ft (76 m) above gage .
Period of record: Maximum discharge, 30,000 ft^3/s (850 m^3/s) May 16, 1973, gage height, 38.05 ft (11.598 m); no flow Mar. 16-26, 1967, Sept. 2, 1969, and Sept. 24-30, 1975.
Flood in May 1943 reached a stage of 65.2 ft (19.87 m), from floodmarks. Flood of May 9, 1961, reached a stage of 52.8 ft (16.09 m).

REMARKS.--Records good. Some regulation by several dams in Kansas prior to May 1963 and completely regulated thereafter by Oologah Lake (see sta. 07171300). See pg. 323 for water-quality record.

COOPERATION.--Gage-height record and 21 discharge measurements furnished by Corps of Engineers; records computed by Geological Survey.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	964	1010	11800	7110	169	8590	14500	2200	4280	3880	73	1.5
2	1440	2110	9750	7110	151	9510	14400	1480	5170	2570	76	1.8
3	1860	4200	7110	7110	2420	12200	14400	52	5180	2570	76	1.7
4	1560	65	7300	7120	8130	14300	12400	47	5750	2570	73	1.1
5	944	65	7290	7090	10600	14200	8310	687	6260	2560	73	.42
6	943	65	7410	7080	10500	14100	7620	1260	6760	2560	73	.19
7	943	65	7390	7060	10400	11800	7620	1240	5880	3650	76	313
8	1950	65	7330	7050	10400	7480	7780	1240	6130	5200	73	531
9	2770	63	7290	7030	7980	7450	7650	1250	7560	6050	73	526
10	2760	66	7270	7030	5850	7580	7640	1240	7540	6030	73	524
11	1990	4130	7290	7030	10800	7590	7620	1250	7550	7660	73	444
12	488	13200	7410	6000	10800	7650	8700	1240	7560	7260	73	506
13	509	18500	7400	3720	10700	7550	10400	3070	7550	4920	73	503
14	509	23500	7350	3040	9070	7500	11000	59	7540	4150	76	503
15	509	25600	7300	3040	7990	7480	11000	51	7520	1560	76	222
16	1660	25300	7280	3040	6480	6040	8640	48	7520	117	73	19
17	3270	25200	7270	4760	5500	2850	6440	46	5450	119	73	19
18	4050	25100	7260	5890	5470	181	5800	43	8900	3830	74	19
19	4410	25000	7250	5890	5470	160	5790	1370	15500	7750	76	30
20	4390	24900	7240	5870	5470	147	5790	2390	15400	7160	48	20
21	4390	24900	7230	5850	4720	3630	5780	2380	15300	2860	30	16
22	4380	25000	7220	5860	2580	9500	5770	2380	15200	78	23	11
23	3770	25000	7200	7880	2490	9470	5750	2380	17200	78	23	.18
24	1760	24800	7200	10900	3940	10100	5740	2410	19700	85	23	0
25	985	24700	7170	10800	5810	11200	4300	2380	19700	75	23	0
26	985	24500	7160	9800	6890	10300	2160	2380	19600	74	23	0
27	996	24400	7140	7100	6850	4620	2170	2430	15600	76	23	0
28	985	24200	7130	6890	6860	259	2170	2380	8050	76	27	0
29	985	18400	7110	6860	---	1370	2160	2360	5210	76	21	0
30	985	11900	7110	7180	---	6890	2210	2410	5200	76	2.7	0
31	1010	---	7120	3660	---	12500	---	2390	---	73	2.1	---
TOTAL	59150	446004	231780	201670	184490	284197	221950	46563	291760	85793	1674.8	4212.89
MEAN	1908	14870	7477	6505	6589	9135	7398	1502	9725	2768	54.0	140
MAX	4410	25600	11800	10900	10800	14300	14500	3070	19700	7750	76	531
MIN	488	63	7110	3040	151	147	2170	43	4280	73	2.1	0
AC-FT	117300	884600	459700	400000	365900	563800	440200	92360	578700	170200	3320	8360

CAL YR 1974 TOTAL 2342826.00 MEAN 6418 MAX 27400 MIN 46 AC-FT 4647000
WTR YR 1975 TOTAL 2009244.89 MEAN 5505 MAX 25600 MIN .00 AC-FT 3985000

07172500 HULAH LAKE NEAR HULAH, OKLA.

LOCATION.--Lat 36°55'44", long 96°05'18", in SE 1/4 sec.2, T.28 N., R.11 E., Osage County, in stair tower at right end of Hulah Dam on Caney River, 0.5 mi (.80 km) downstream from Hickory Creek, 2.0 mi (3.2 km) west of Hulah, 15.7 mi (25.3 km) upstream from Little Caney River, and at mile 96.2 (154.8 km).

DRAINAGE AREA.--732 mi² (1,896 km²).

PERIOD OF RECORD.--April 1950 to current year. Prior to October 1970 published as Hulah Reservoir near Hulah.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level. Prior to Feb. 15, 1951, nonrecording gage at same site and datum.

EXTREMES.--Current year: Maximum contents, 208,500 acre-ft (257 hm³) Nov. 11, elevation, 757.88 ft (231.002 m); minimum, 31,730 acre-ft (39.1 hm³) Aug. 13, elevation, 732.16 ft (223.162 m).
Period of record: Maximum contents, 293,400 acre-ft (362 hm³) June 23, 1957, elevation, 764.87 ft (233.132 m); minimum since conservation pool was first filled, 11,250 acre-ft (13.9 hm³) Mar. 20, 1957, elevation, 723.22 ft (220.437 m).

REMARKS.--Reservoir is formed by an earth dam. Spillway is 472-ft (143.9 m) concrete ogee-type weir controlled by 10 taintor gates. Outlet works consist of nine rectangular sluices, two 24-inch (0.61 m) gated pipes, and one 10-inch (254 mm) water-supply pipe. Closure for diversion made Feb. 6, 1950; regulated storage began Oct. 25, 1950; conservation pool was first filled Sept. 24, 1951. Capacity, 292,600 acre-ft (361 hm³) below elevation 706.0 ft (215.19 m), crest of spillway, and 34,660 acre-ft (42.7 hm³) at herein represent total contents. Reservoir is used for flood control, conservation, and municipal water supply. Revised capacity table, based on survey in 1958, used since Oct. 1, 1958.

COOPERATION.--Records furnished by Corps of Engineers.

Capacity table (elevation, in feet, and contents, in acre-feet)

732	31,200	747	109,500
737	50,860	752	150,600
742	76,720	758	209,800

CONTENTS, IN ACRE-FEET, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	35840	75810	97060	60040	80910	52080	56950	35620	44190	34590	32980	36990
2	35840	101600	93230	60820	84630	49380	51900	36030	40950	34700	32920	36920
3	35840	151400	89600	61470	87380	46480	46090	36880	41030	34770	32820	36810
4	35810	175300	86030	61360	93890	43610	43610	37100	39360	34840	32720	36700
5	35810	184700	82620	61120	95210	40860	41480	37100	38030	34880	32620	36550
6	35920	191300	80000	60970	93230	38060	39280	37180	37250	34840	32590	36440
7	35880	196800	77230	60480	90460	36770	37950	37290	37060	34840	32490	36290
8	35880	200600	74040	59740	87750	36730	41070	37210	36660	34810	32420	36180
9	35880	204000	70620	58860	84690	37060	40460	37400	36030	34730	32290	36030
10	35840	207200	67720	58570	81640	37210	38990	38180	35770	34620	32190	35990
11	35810	208300	73130	57730	77980	37660	38100	38290	35440	34550	32060	36070
12	35840	206600	73870	56510	74900	39920	37580	38180	35070	34400	31890	35880
13	35840	203900	72330	55090	71650	39960	37030	46690	35100	34330	31760	35770
14	35840	200800	70280	53700	68300	37880	36770	71650	35250	34360	32550	35660
15	35770	197100	67830	52390	64590	35660	36290	74900	35250	34330	34220	35620
16	35700	192800	65280	51040	61730	33700	35660	73470	35440	34220	35180	35550
17	35660	188400	62310	49600	58910	34220	35400	71020	39360	34140	35400	35580
18	35620	184000	59550	48160	57150	41190	35620	68140	40170	34070	36140	35550
19	35580	176700	57680	46730	54940	44640	35730	64960	39320	33990	37550	35550
20	35510	167400	56800	45290	52660	44020	35840	61470	38100	33920	37800	35440
21	35440	158200	57440	43900	51760	41770	35880	58080	36810	33810	37840	35330
22	35400	149300	58080	42300	53420	39280	35880	54700	35700	33740	37800	35250
23	35400	140800	58660	40660	56070	36880	35960	56220	34920	33620	37690	35140
24	35580	132400	58420	39400	57440	35660	36030	56070	34840	33590	37550	35030
25	35990	124300	56950	38620	57200	35470	35990	56170	34840	33510	37550	34960
26	36070	116800	57440	37730	57540	35580	35960	54890	34620	33480	37440	34840
27	36210	111800	57880	36880	56170	47890	36030	53960	34550	33400	37320	34730
28	38140	108100	58420	35990	54010	53600	36030	53600	34510	33330	37320	34730
29	39770	104600	58810	35360	---	57540	35920	52840	34440	33220	37250	34660
30	47980	100900	58270	47800	---	60720	35810	50320	34400	33150	37180	34590
31	72100	---	60180	74720	---	60580	---	47300	---	33050	37100	---
MAX	72100	208300	97060	74720	95210	60720	56950	74900	44190	34880	37840	36990
MIN	35400	75810	56800	35360	51760	33700	35400	35620	34400	33050	31760	34590
(†)	741.19	745.79	738.96	741.65	737.70	739.04	733.31	736.21	732.93	732.56	733.66	732.98
(‡)	+36,290	+28,800	-40,720	+14,540	-20,710	+6,570	-24,770	+11,490	-12,900	-1,350	+4,050	-2,510

CAL YR 1974.....‡ +18,370
WTR YR 1975.....‡ -1,220

† Elevation, in feet, at end of month.
‡ Change in contents, in acre-ft.

07173000 CANEY RIVER NEAR HULAH, OKLA.

LOCATION.--Lat 36°55'06", long 96°04'15", in NW 1/4 SE 1/4 sec.12, T.28 N., R.11 E., Osage County, on left bank 1,000 ft (304.8 m) downstream from the Atchison, Topeka, and Santa Fe Railway Co. bridge, 0.9 mi (1.5 km) downstream from Hulah Dam, 1.5 mi (2.4 km) upstream from Opossum Creek, 2.5 mi (4.0 km) west of Hulah, and at mile 95.3 (153.3 km).

DRAINAGE AREA.--736 mi^2 (1,906 km^2).

PERIOD OF RECORD.--October 1937 to current year.

GAGE.--Water-stage recorder. Datum of gage is 681.96 ft (207.861 m), above mean sea level. Prior to Feb. 18, 1939, nonrecording gage and Feb. 18, 1959, to Sept. 30, 1948, water-stage recorder, at county road bridge, 0.8 mi (1.3 km) upstream at datum 3.00 ft (.914 m) higher.

AVERAGE DISCHARGE.--38 years, 364 ft^3/s (10.31 m^3/s), 263,700 acre-ft/yr (325 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 4,840 ft^3/s (137 m^3/s) Nov. 20, gage height, 10.76 ft (3.280 m); minimum daily, 4.9 ft^3/s (0.14 m^3/s) Mar. 30.
Period of record: Maximum discharge, 51,000 ft^3/s (1,444 m^3/s) Apr. 10, 1944, gage height, 39.45 ft (12.024 m), former site and datum; no flow at times in 1939-40, 1946, 1962.
A stage of 40.2 ft (12.25 m) occurred at former site and datum, date unknown, from floodmark, from information by Corps of Engineers.

REMARKS.--Records good. Flow completely regulated since February 1950 by Hulah Lake (see sta. 07172500). About 5 to 9 ft^3/s (0.14 to 0.25 m^3/s) is diverted above station by city of Bartlesville for municipal water supply.

COOPERATION.--Gage-height record and 21 discharge measurements furnished by Corps of Engineers; records computed by Geological Survey.

REVISIONS.--WSP 1117: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	13	1780	1040	32	2010	2470	253	1930	28	22	25
2	13	13	1780	1040	32	1990	2830	253	1910	28	22	25
3	13	13	1780	1040	32	1970	2770	254	1920	25	22	25
4	13	13	1780	1040	878	1950	2000	255	1880	23	22	25
5	13	13	1780	1040	2180	1940	1540	248	1890	23	21	24
6	13	13	1780	1040	2160	1930	1540	248	1250	23	21	24
7	13	13	1780	1040	2160	1060	1520	248	651	23	25	24
8	13	13	1780	1040	2160	391	1530	241	652	23	25	24
9	13	13	1780	1040	2150	391	1530	237	640	23	25	24
10	13	13	1780	1040	2140	666	1510	234	630	23	25	24
11	13	530	1780	1040	2130	926	1080	234	631	23	25	25
12	14	1710	1780	1040	2120	930	793	234	498	23	25	25
13	14	2090	1780	1040	2110	1430	797	255	227	23	25	24
14	14	2090	1770	1040	2090	1810	794	282	161	23	26	24
15	14	2280	1770	1040	2080	1800	793	1110	158	23	27	24
16	14	2540	1770	1020	2060	1790	795	2010	159	23	26	24
17	14	2540	1770	1020	2060	669	542	1990	164	23	26	24
18	14	2530	1770	1020	2040	459	305	1980	591	22	26	24
19	13	3490	1080	1010	2030	494	243	1970	1000	22	26	24
20	13	4820	763	1000	2030	1440	245	1960	995	22	26	24
21	13	4740	9.9	1000	2030	1910	247	1940	992	22	25	24
22	13	4600	9.7	997	1080	1890	245	1920	990	22	26	24
23	13	4520	9.5	992	6.2	1860	250	1920	816	22	26	24
24	13	4520	404	875	447	1050	252	1970	500	22	26	24
25	14	4510	921	653	1630	486	250	1970	345	22	25	24
26	14	4510	11	653	2040	486	253	1970	349	22	25	24
27	14	2700	10	653	2030	561	254	2020	254	22	25	24
28	15	1780	10	653	2030	210	251	2040	182	22	26	24
29	346	1780	9.7	485	---	6.0	249	2030	176	22	25	24
30	440	1780	651	364	---	4.9	250	1960	114	22	25	24
31	13	---	1050	146	---	1100	---	1950	---	22	25	---
TOTAL	1175	60190	36926.8	28141	45997.2	35569.9	28128	36186	22657	711	767	726
MEAN	37.9	2006	1191	908	1643	1148	938	1167	755	22.9	24.7	24.2
MAX	440	4820	1780	1040	2180	2010	2830	2040	1930	28	27	25
MIN	13	13	9.5	146	6.2	4.9	243	234	114	22	21	24
AC-FT	2330	119400	73250	55820	91240	70590	55790	71770	44940	1410	1520	1440

CAL YR 1974 TOTAL 306518.5 MEAN 840 MAX 5830 MIN 7.8 AC-FT 608000
WTR YR 1975 TOTAL 297196.9 MEAN 814 MAX 4820 MIN 4.9 AC-FT 589500

07174200 LITTLE CANEY RIVER BELOW COTTON CREEK NEAR COPAN, OKLA.

LOCATION.--Lat 36°53'42", long 95°58'00", in W 1/2 sec.19, T.28 N., R.13 E., Washington County, near right bank on downstream side of pier of bridge on State Highway 10, 2 mi (3.2 km) west of Copan, 4.2 mi (6.8 km) downstream from Cotton Creek, and at mile 8.8 (14.2 km).

DRAINAGE AREA.--502 mi^2 (1,300 km^2).

PERIOD OF RECORD.--October 1958 to current year. Prior to October 1962, published as Caney Creek below Cotton Creek, near Copan.

GAGE.--Water-stage recorder. Datum of gage is 672.23 ft (204,900 m) above mean sea level. Since Nov. 16, 1962, auxiliary water-stage recorder 6.0 mi (9.7 km) downstream, at datum 10 ft (3.048 m) lower.

AVERAGE DISCHARGE.--17 years, 282 ft^3/s (7.986 m^3/s), 204,300 acre-ft/yr (252 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 12,100 ft^3/s (343 m^3/s) Nov. 4, gage height, 23.80 ft (7.254 m); minimum, 0.48 ft^3/s (0.014 m^3/s) Sept. 10.
Period of record: Maximum discharge, 23,700 ft^3/s (671 m^3/s) May 9, 1961, gage height, 24.94 ft (7.602 m); no flow at times in 1962-66, 1971.
Flood in April 1944 reached a stage of 29.3 ft (8.93 m), from floodmarks.

REMARKS.--Records good.

COOPERATION.--Gage-height record and 26 discharge measurements furnished by Corps of Engineers; records computed by Geological Survey.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	333	4860	66	1070	6000	672	889	116	570	47	3.0	7.2
2	196	5220	64	674	5230	508	615	109	408	39	2.9	5.6
3	112	9110	61	1230	3080	385	445	290	777	34	2.8	4.8
4	71	10700	58	966	2080	322	352	539	1830	30	3.1	4.6
5	50	6920	56	668	2590	291	298	354	1260	27	2.3	3.7
6	40	7310	125	555	1750	270	259	245	852	23	2.1	2.6
7	36	5990	293	497	983	245	242	192	526	21	2.2	2.1
8	31	4760	203	419	670	224	978	171	388	21	1.9	1.5
9	27	3180	151	341	472	197	1240	145	302	29	2.0	.73
10	25	2230	127	348	366	318	792	145	339	22	1.9	1.3
11	23	1770	1550	433	331	663	540	141	804	18	2.1	6.5
12	21	1170	1970	334	293	1400	401	124	643	14	1.8	5.7
13	21	776	1150	248	260	1620	324	175	385	12	2.0	3.9
14	21	521	701	206	246	1120	318	2350	716	10	8.9	4.3
15	20	375	467	183	236	732	333	3090	187	8.8	536	2.0
16	21	289	334	166	513	613	295	2630	117	8.1	610	1.0
17	20	232	264	155	994	682	258	1550	1490	8.5	194	.70
18	19	192	222	144	679	948	257	1030	1610	11	143	.64
19	17	170	194	141	847	2240	245	676	817	8.5	246	2.3
20	16	163	165	137	656	1560	206	475	455	7.2	90	2.0
21	14	156	148	125	547	967	173	347	286	6.3	46	1.3
22	11	142	130	116	1010	630	153	264	205	5.6	30	.88
23	11	121	119	109	1360	464	161	532	223	5.5	22	.70
24	12	112	108	103	694	364	152	551	242	5.4	17	.75
25	34	98	100	105	930	260	130	653	188	5.2	14	.76
26	117	87	91	105	1180	233	115	772	142	5.5	10	.92
27	130	82	86	98	1150	1430	106	664	110	19	11	.98
28	402	77	86	91	895	3670	165	634	83	11	14	1.0
29	1400	72	87	85	---	3520	178	902	67	9.1	13	1.1
30	1380	69	86	269	---	2250	136	1330	55	5.7	12	1.3
31	3760	---	502	4250	---	1340	---	842	---	4.1	9.0	---
TOTAL	8897	68974	9764	14375	36042	30178	10758	22038	16079	481.5	2056.0	72.86
MEAN	287	2299	315	464	1287	973	359	711	536	15.5	66.3	2.43
MAX	3760	10700	1970	4250	6000	3670	1240	3090	1830	47	610	7.2
MIN	11	69	56	85	236	197	106	109	55	4.1	1.8	.64
AC-FT	17650	136800	19370	28510	71490	59860	21340	43710	31890	955	4080	145

CAL YR 1974 TOTAL 269794.50 MEAN 739 MAX 22000 MIN 1.5 AC-FT 535100
WTR YR 1975 TOTAL 219715.36 MEAN 602 MAX 10700 MIN .64 AC-FT 435800

PEAK DISCHARGE (BASE, 5,000 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE
11-4	0015	23.80	12,100
2-1	1130	22.75	6,160

07174600 SAND CREEK AT OKESA, OKLA.

LOCATION.--Lat 36°43'10", long 96°07'56", in NW 1/4 NW 1/4 sec.21, T.26 N., R.11 E., Osage County, on downstream side of left abutment of county road bridge, 0.5 mi (0.80 km) northeast of Okesa, 9 mi (14.5 km) southwest of Bartlesville, and at mile 17.2 (27.7 km).

DRAINAGE AREA.--139 mi^2 (360 km^2).

PERIOD OF RECORD.--October 1959 to current year.

GAGE.--Water-stage recorder. Datum of gage is 689.20 ft (210.068 m) above mean sea level. Prior to May 25, 1960, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--16 years, 73.0 ft^3/s (2.067 m^3/s), 52,890 acre-ft/yr (65.2 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 9,370 ft^3/s (265 m^3/s) Nov. 3, gage height, 19.53 ft (5.953 m); minimum, 0.10 ft^3/s (0.003 m^3/s) Aug. 6, 7.

Period of record: Maximum discharge, 14,700 ft^3/s (416 m^3/s) Sept. 13, 1961, gage height, 27.7 ft (8.44 m), from floodmarks; no flow at times in each year except 1975.

REMARKS.--Records good.

COOPERATION.--Gage-height record, 21 discharge measurements furnished by Corps of Engineers; records computed by Geological Survey.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.5	324	20	320	407	62	125	39	90	13	.96	5.2
2	5.5	2340	19	193	323	38	96	155	68	11	.53	4.5
3	4.5	6710	18	430	201	26	75	254	112	9.7	.34	3.6
4	3.8	2310	18	272	520	21	65	116	162	8.1	.25	3.2
5	3.1	463	18	195	628	26	59	64	834	6.9	.17	2.2
6	2.7	220	130	171	238	20	53	45	261	6.2	.11	1.7
7	2.7	145	514	132	132	9.0	61	36	111	5.6	.18	1.6
8	3.0	120	135	102	115	2.6	539	30	73	5.3	.39	1.4
9	3.3	111	70	83	98	1.8	232	120	96	4.6	.73	1.1
10	3.5	205	56	105	73	7.7	119	678	113	3.5	.84	1.1
11	3.2	234	1730	150	72	24	85	122	91	3.3	.66	1.1
12	13	131	519	82	69	53	67	60	65	2.9	.84	1.8
13	24	94	207	51	65	29	62	437	43	2.2	.75	1.6
14	36	74	136	43	60	6.0	81	3790	34	2.7	1.5	2.0
15	17	58	104	43	57	4.8	86	339	28	3.6	89	3.6
16	11	50	80	44	75	7.9	69	162	24	3.6	412	4.0
17	7.2	46	66	44	137	39	56	98	953	3.7	81	4.0
18	5.1	44	54	42	254	240	49	70	207	3.5	52	3.8
19	3.8	42	53	41	272	362	42	53	91	2.8	69	4.2
20	2.9	40	46	40	160	167	35	41	52	1.9	51	3.8
21	2.7	36	43	35	130	124	31	35	35	1.3	35	3.8
22	2.4	34	41	32	673	98	29	30	29	1.0	21	3.8
23	2.4	32	38	30	478	84	29	742	26	.87	14	3.3
24	2.6	29	36	28	215	70	31	233	27	1.1	9.8	2.6
25	494	27	32	29	285	56	32	458	30	1.5	6.6	2.3
26	341	23	28	29	357	49	31	233	27	1.8	5.4	1.7
27	85	21	28	29	186	1850	29	254	20	1.9	4.5	1.1
28	859	20	28	27	105	699	72	285	14	1.5	6.8	.62
29	1290	20	30	25	---	427	53	1670	[illegible]	1.3	9.6	.46
30	676	20	31	425	---	265	42	234	[illegible]	1.4	9.3	.45
31	4320	---	483	3270	---	177	---	134	---	1.2	6.8	---
TOTAL	8216.9	14023	4616	6542	6385	5045.8	2435	11017	3759	118.97	891.05	75.63
MEAN	265	467	149	211	228	163	81.2	355	125	3.84	28.7	2.52
MAX	4320	6710	1730	3270	673	1850	539	3790	953	13	412	5.2
MIN	2.4	20	18	25	57	1.8	29	30	16	.87	.11	.45
AC-FT	16300	27810	9160	12980	12660	10010	4830	21850	7460	236	1770	150

CAL YR 1974 TOTAL 76350.78 MEAN 209 MAX 13200 MIN 0 AC-FT 151400
WTR YR 1975 TOTAL 63125.35 MEAN 173 MAX 6710 MIN .11 AC-FT 125200

07174700 CANEY RIVER NEAR OCHELATA, OKLA.

LOCATION.--Lat 36°38'26", long 95°56'02", in SW 1/4 SW 1/4 sec.16, T.25 N., R.13 E., Washington County, near right bank on downstream side of pier of bridge on U.S. Highway 75, 3.5 mi (5.6 km) upstream from Fish Creek, 4.0 mi (6.4 km) northeast of Ochelata, 8.0 mi (12.9 km) southeast of Bartlesville, and at mile 53.8 (86.6 km).

DRAINAGE AREA.--1,753 mi^2 (4,540 km^2).

PERIOD OF RECORD.--April 1956 to current year.

GAGE.--Water-stage recorder. Datum of gage is 611.98 ft (186.532 m), above mean sea level.

AVERAGE DISCHARGE.--19 years, 1,009 ft^3/s (28.57 m^3/s), 731,000 acre-ft/yr (901 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 22,800 ft^3/s (646 m^3/s) Nov. 4, gage height, 37.77 ft (11.512 m); minimum, 33 ft^3/s (0.93 m^3/s) Sept. 28.
Period of record: Maximum discharge, 33,800 ft^3/s (957 m^3/s) June 13, 1957, gage height, 38.82 ft (11.832 m); minimum, 0.4 ft^3/s (.011 m^3/s) Sept. 28, 29, 1956.

REMARKS.--Records good. Some regulation by Hulah Lake 42.4 mi (68.2 km) upstream. (See sta. 07172500).

COOPERATION.--Gage-height record 17 discharge measurements furnished by Corps of Engineers; records computed by Geological Survey.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	487	11700	2240	3410	9690	3310	3090	565	3110	228	40	54
2	303	8750	2220	2770	7080	3030	3950	637	2800	125	38	51
3	207	16700	2200	3610	5880	2810	4040	1280	2750	104	39	47
4	139	22000	2170	3380	4360	2660	3770	1360	3640	97	37	47
5	86	18900	2160	2630	5700	2550	2560	1180	4580	96	35	46
6	93	15700	2690	2230	6040	2490	2020	855	4490	97	34	44
7	99	13300	3830	2030	4450	2450	1980	709	2250	97	37	42
8	83	9730	3050	1870	3610	1320	3010	654	1280	97	34	42
9	65	6160	2500	1740	3270	729	4020	791	1110	96	37	42
10	59	4360	2330	1700	3020	1240	3130	1680	1950	91	37	44
11	55	3570	5810	1920	2900	2960	2550	1090	2390	85	37	48
12	220	3160	7900	1780	2850	4690	1760	585	1820	78	37	97
13	307	3260	5070	1550	2760	4020	1390	643	1100	70	35	59
14	688	3100	3580	1410	2690	3850	1350	6580	756	65	68	41
15	286	2770	2990	1370	2650	3420	1390	7030	762	60	370	39
16	149	2920	2640	1340	2860	3180	1340	5230	345	56	1840	41
17	107	3120	2490	1320	4080	3160	1250	4980	3240	52	901	41
18	86	3060	2350	1300	3770	2030	915	3900	3700	48	524	42
19	69	3020	2270	1290	3720	5360	709	3290	2480	45	453	71
20	62	4210	1620	1260	3540	3340	658	2920	1950	43	366	51
21	58	5280	1010	1240	3150	3420	603	2690	1550	41	201	38
22	54	5290	266	1200	4350	3210	556	2550	1340	40	141	36
23	51	5140	212	1190	6700	2650	558	3020	1250	39	105	35
24	50	4960	193	1190	2590	2640	565	3700	1080	40	84	35
25	1020	4780	659	1000	2330	1440	548	3290	836	40	70	35
26	1970	4590	1000	796	3720	825	518	3770	580	38	63	34
27	559	4360	202	782	4060	3170	497	3250	535	41	57	33
28	2740	2970	142	758	3660	9060	617	3060	388	53	62	33
29	4910	2310	141	753	---	7010	710	4300	289	62	63	36
30	4090	2270	140	892	---	4800	641	4110	273	49	60	35
31	12600	---	1260	10500	---	2790	---	3510	---	44	54	---
TOTAL	31752	201440	67335	60211	115680	97834	50695	83209	54624	2217	5960	1339
MEAN	1024	6715	2172	1942	4131	3156	1690	2684	1821	71.5	192	44.6
MAX	12600	22000	7900	10500	9890	9060	4040	7030	4580	228	1840	97
MIN	50	2270	140	753	2330	729	497	565	273	38	34	33
AC-FT	62980	399600	133600	119400	229500	194100	100600	165000	108300	4400	11820	2660

CAL YR 1974 TOTAL 832334 MEAN 2280 MAX 27600 MIN 24 AC-FT 1651000
WTR YR 1975 TOTAL 772296 MEAN 2116 MAX 22000 MIN 33 AC-FT 1532000

PEAK DISCHARGE (BASE, 7,500 FT^3/S)

DATE	TIME	G.HT	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-31	2115	33.88	14,300	2-23	0315	25.48	7,930
11-4	0700	37.77	22,800	3-28	0730	28.29	9,720
12-12	0215	26.86	8,710	5-14	2230	27.79	9,440
1-31	1830	32.23	12,800				

07175500 CANEY RIVER NEAR RAMONA, OKLA.

LOCATION.--Lat 36°30'31", long 95°50'36", in NE 1/4 NW 1/4 sec.5, T.23 N., R.14 E., Washington County, near left bank on downstream side of pier of county road bridge, 1 mi (1.6 km) upstream from Buck Creek, 2.2 mi (3.5 km) downstream from Double Creek, 4.5 mi (7.2 km) southeast of Ramona, and at mile 32.0 (51.5 km).

DRAINAGE AREA.--1,955 mi^2 (5,063 km^2).

PERIOD OF RECORD.--October 1935 to February 1939 (published as "near Collinsville"), September 1945 to current year. Monthly discharge only for some periods, published in WSP 1311.

GAGE.--Water-stage recorder. Datum of gage is 586.43 ft (178.744 m) above mean sea level. Dec. 4, 1935, to Feb. 28, 1939, nonrecording gage at site 16.2 mi (26.1 km) downstream at datum 21.41 ft (6.526 m) lower. Sept. 1, 1945, to Feb. 15, 1946, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--33 years, 972 ft^3/s (27.53 m^3/s), 704,200 acre-ft/yr (868 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 28,600 ft^3/s (810 m^3/s) Nov. 4, gage height, 29.85 ft (9.098 m); minimum, 30 ft^3/s (0.85 m^3/s) Aug. 11, 12.
Period of record: Maximum discharge, 38,500 ft^3/s (1,090 m^3/s) Oct. 3, 1945, gage height, 30.12 ft (9.181 m); no flow Aug. 9 to Sept. 15, 1936, Sept. 11 to Nov. 3, 1956.

REMARKS.--Records fair. Some regulation since February 1950 by Hulah Lake (see sta. 07172500).
See pg. 324 for water-quality record.

COOPERATION.--Gage-height record and 20 discharge measurements furnished by Corps of Engineers; records computed by Geological Survey.

REVISIONS (WATER YEARS).--WSP 1117: Drainage area. WSP 1241: 1939.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	603	10500	2340	3030	9240	3490	2980	630	3190	328	47	58
2	371	10700	2310	3260	8600	3160	3780	597	3070	193	41	56
3	264	20100	2290	4020	7560	2910	4060	1080	2880	139	38	53
4	182	24200	2270	3820	4820	2800	3690	1350	3270	127	34	48
5	129	21300	2240	3110	5200	2740	3210	1210	4390	114	37	47
6	92	19000	3040	2500	6120	2620	2220	926	4880	112	34	44
7	102	17000	4470	2230	5200	2600	2100	772	4040	110	31	43
8	97	13100	3680	2050	4030	2060	2090	701	1770	107	34	40
9	85	9250	2810	1860	3520	1050	4110	778	1380	104	33	39
10	68	7560	2520	1770	3200	1830	3570	1550	1830	107	32	40
11	64	5760	5310	1900	3040	3690	2620	1530	3050	120	32	47
12	71	4130	7610	1960	2970	6520	2200	710	2170	99	31	74
13	535	3770	6600	1680	2890	5120	1570	660	1580	65	32	89
14	1630	3690	4370	1520	2810	4260	1480	6180	867	78	33	57
15	867	3300	3270	1460	2760	3930	1490	7520	1040	77	89	50
16	332	3170	2840	1410	2980	3600	1480	6090	582	73	1170	48
17	210	3430	2590	1390	4230	3490	1390	5430	3770	67	1350	48
18	147	3410	2450	1370	4150	2840	1160	4420	4520	66	805	46
19	104	3370	2350	1360	3780	3080	834	3480	3030	64	468	96
20	86	3760	1980	1340	3750	3700	672	2940	2650	60	504	123
21	76	4870	1400	1320	3360	3400	626	2610	1740	55	284	70
22	68	5150	584	1290	4080	3440	575	2490	1460	49	177	54
23	65	5080	368	1270	7000	3070	561	3100	1320	49	124	49
24	61	4910	340	1270	4820	2850	561	3760	1210	58	95	47
25	672	4760	403	1200	2490	2220	550	3300	1020	56	79	44
26	2750	4600	1200	918	3450	1180	526	3700	626	50	69	44
27	1250	4430	571	883	4070	3430	498	3570	572	45	62	43
28	2870	3670	297	856	3870	7800	561	5150	512	45	54	44
29	5640	2480	283	847	---	8000	695	3720	373	61	62	40
30	4690	2370	278	1200	---	6680	695	4450	336	68	62	36
31	8290	---	775	8000	---	4080	---	3730	---	54	59	---
TOTAL	32471	232820	73839	62114	123990	111620	53754	86134	62728	2820	6017	1624
MEAN	1047	7761	2382	2004	4428	3601	1792	2779	2091	91.0	194	54.1
MAX	8290	24200	7610	8000	9240	8000	4110	7520	4880	328	1350	123
MIN	61	2370	278	847	2490	1050	498	547	336	45	31	36
AC-FT	64410	461800	146500	123200	245900	221400	106600	170800	124400	5590	11930	3220

CAL YR 1974 TOTAL 917249 MEAN 2513 MAX 30700 MIN 16 AC-FT 1819000
WTR YR 1975 TOTAL 849931 MEAN 2329 MAX 24200 MIN 31 AC-FT 1686000

PEAK DISCHARGE (BASE, 7,500 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT	DISCHARGE
11-4	0800	29.85	28,600	3-29	abt0200	26.5	8,400
12-12	1630	24.78	7,710	5-15	1115	24.90	7,760
2-2	abt0200	28.4	10,400				

07176000 VERDIGRIS RIVER NEAR CLAREMORE, OKLA.

LOCATION.--Lat 36°18'26", long 95°41'52", in SE 1/4 SW 1/4 sec.10, T.21 N., R.15 E., Rogers County, near left bank on downstream side of pier of bridge on State Highway 20, 2.3 mi (3.7 km) downstream from Caney River, 4.5 mi (7.2 km) west of Claremore, 12.4 mi (20.0 km) upstream from Bird Creek, and at mile 76.0 (122.3 km).

DRAINAGE AREA.--6,534 mi^2 (16,923 km^2).

PERIOD OF RECORD.--October 1935 to current year. Monthly discharge only for some periods, published in WSP 1311.

GAGE.--Water-stage recorder. Datum of gage is 538.62 ft (164.171 m) above mean sea level. Prior to Feb. 24, 1939, and May 17 to Aug. 24, 1967, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--40 years, 3,756 ft^3/s (106.4 m^3/s), 2,721,000 acre-ft/yr (3.35 km^3/yr).

EXTREMES.--Current year: Maximum discharge, 29,000 ft^3/s (821 m^3/s) Nov. 5, gage height, 28.32 ft (8.632 m); minimum, 40 ft^3/s (1.13 m^3/s) Sept. 27-30.
Period of record: Maximum discharge, 182,000 ft^3/s (5,150 m^3/s) May 21, 1943, gage height, 55.05 ft (16.779 m); no flow at times in 1936, 1939-40, 1956.

REMARKS.--Records good. Flow regulated since May 1963 by Oologah Lake 14.3 mi (23.0 km) upstream (see sta. 07171300); some regulation by dams in Kansas since 1949 and by Hulah Lake since 1950. (See sta. 07172500).

COOPERATION.--Gage-height record and 21 discharge measurements furnished by Corps of Engineers; records computed by Geological Survey.

REVISIONS.--WSP 1117: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2010	11800	14100	8790	10300	11800	16100	2750	6920	4700	141	80
2	1930	14600	12900	10600	10500	12800	17800	2570	8060	3040	137	75
3	2370	23300	9140	11400	11300	14300	18500	1010	7820	2930	137	72
4	2090	27600	9370	11300	14800	17200	17400	1330	8300	2870	136	67
5	1120	28700	9340	10600	16900	17100	12400	1640	9990	2820	135	59
6	1050	25900	9610	9750	16700	16800	10200	2330	12100	2820	138	54
7	1010	21900	11900	9300	16800	15600	9720	2020	13100	3540	138	128
8	1790	18400	11600	9070	15300	9690	10700	1870	8830	4960	133	583
9	2970	16100	10400	8880	13100	8850	11500	1930	8870	6010	131	574
10	2940	14200	9770	8750	7700	9420	11700	2510	8680	6000	131	567
11	2500	12700	12300	8700	13800	10200	10800	2840	9970	6930	131	507
12	808	17600	14900	8210	13800	14400	10900	2360	9920	7330	133	567
13	911	20700	15600	5660	13700	14200	12000	3320	9150	5020	132	577
14	3310	24900	13700	4480	12400	12300	12700	5850	8460	3920	136	609
15	2910	26600	11200	4370	10600	11700	12600	7730	8130	2290	157	488
16	2150	26000	10300	4320	9630	10300	11000	7790	8090	194	275	98
17	3670	26500	9910	5490	9380	7440	8170	6210	9450	187	1770	70
18	4340	26000	9740	7180	9770	4100	7100	5350	11900	2220	1360	67
19	4760	26500	9570	7170	9290	3360	6750	4840	19200	7180	606	98
20	4710	26400	9450	7150	9130	3920	6480	5470	17900	6970	564	143
21	4670	27100	8860	7090	8370	5630	6360	5040	17200	3750	475	141
22	4650	25000	8300	7040	7470	12900	6300	4800	16700	159	291	95
23	4520	26100	7650	8130	8080	12800	6240	5340	17400	120	196	71
24	2130	27800	7510	12100	11100	12700	6220	5840	20600	135	161	54
25	1040	27500	7440	12100	8980	13900	5410	6380	20500	171	138	48
26	3420	27300	7770	11300	9850	12700	2700	5860	20100	140	128	45
27	3520	27000	8140	8110	10700	9420	2660	6310	17600	138	110	42
28	5040	26700	7510	7740	10900	8630	2640	5600	9790	133	100	42
29	8440	22800	7350	7700	---	9950	2700	6800	5630	126	96	42
30	7000	14400	7320	8140	---	14300	2830	6700	5510	130	92	42
31	11800	---	7420	14200	---	17900	---	6370	---	143	85	---
TOTAL	105779	694500	310270	264820	321150	336710	280380	136760	355870	87076	8697	6105
MEAN	3412	23150	10010	8543	11470	11510	9353	4412	11860	2809	281	204
MAX	11800	28700	15600	14200	16900	17900	18500	7790	20600	7330	1770	609
MIN	808	11800	7320	4320	7470	3360	2640	1010	5510	120	85	42
AC-FT	209800	1378000	615400	525300	637000	707300	556500	271300	705900	172700	17250	12110

CAL YR 1974 TOTAL 3356057 MEAN 9195 MAX 35400 MIN 108 AC-FT 6657000
WTR YR 1975 TOTAL 2928317 MEAN 8023 MAX 28700 MIN 42 AC-FT 5808000

PEAK DISCHARGE (BASE, 24,000 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE
11-5	0630	28.32	29,000
11-23	0145	27.70	28,200

07176500 BIRD CREEK AT AVANT, OKLA.

LOCATION.--Lat 36°29'11", long 96°03'45", in NW 1/4 sec.7, T.23 N., R.12 E., Osage County, near left bank on downstream side of pier of county road bridge at Avant, 1.5 mi (2.4 km) upstream from Candy Creek, and at mile 54.2 (87.2 km).

DRAINAGE AREA.--364 mi^2 (943 km^2).

PERIOD OF RECORD.--August 1945 to current year.

GAGE.--Water-stage recorder. Datum of gage is 651.28 ft (198.510 m) above mean sea level.

AVERAGE DISCHARGE.--30 years, 202 ft^3/s (5.721 m^3/s), 146,300 acre-ft/yr (180 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 23,900 ft^3/s (677 m^3/s) Nov. 3, gage height, 29.78 ft (9.077 m); minimum, 8.5 ft^3/s (0.24 m^3/s) Sept. 7-10.
Period of record: Maximum discharge, 32,400 ft^3/s (918 m^3/s), Oct. 2, 1959, gage height, 31.40 ft (9.571 m); maximum gage height, 32.03 ft (9.763 m) Mar. 11, 1974; no flow at times in most years.

REMARKS.--Records good. Small diversions above station for municipal water supply of cities of Pawhuska and Barnsdall.

COOPERATION.--Gage height record, 23 discharge measurements furnished by Corps of Engineer; records computed by Geological Survey.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	89	2630	54	1190	1410	196	339	91	248	42	14	18
2	81	6180	53	799	1180	165	198	896	218	38	14	16
3	79	20900	51	1680	646	141	155	1650	274	35	12	13
4	74	11000	51	824	1540	134	135	344	307	34	12	12
5	47	2260	51	444	2120	135	130	144	2580	31	12	11
6	30	1010	1250	372	978	138	120	92	1690	29	11	9.7
7	26	541	1510	275	435	137	165	64	592	28	11	8.8
8	26	393	444	207	331	121	1600	54	293	27	12	8.5
9	27	324	186	176	266	169	749	44	741	25	13	8.5
10	28	1420	139	303	194	1870	291	37	1370	29	13	9.3
11	27	1170	4520	391	171	2660	199	32	1070	28	12	11
12	405	445	2040	196	170	1630	164	29	317	26	12	14
13	559	270	922	130	154	611	146	1180	174	25	11	101
14	1990	200	505	112	146	273	180	9870	973	23	15	46
15	361	160	340	116	177	198	200	1320	408	24	564	27
16	119	144	247	115	540	443	173	482	173	24	147	21
17	72	137	201	115	605	373	153	251	4810	23	53	18
18	53	129	180	111	788	1130	144	168	1580	20	71	18
19	41	129	170	112	914	1190	138	127	555	20	76	24
20	33	121	156	106	486	373	132	91	262	19	52	31
21	30	112	148	102	375	239	126	81	165	19	35	28
22	30	108	142	98	3090	184	130	70	126	19	28	24
23	27	117	138	93	1940	160	140	1530	109	18	21	20
24	27	80	129	92	623	155	148	1020	101	30	16	16
25	2410	62	124	96	685	107	149	2310	119	47	13	14
26	2020	57	117	96	566	103	144	6810	101	37	12	13
27	499	54	116	98	343	4430	144	4440	76	30	12	12
28	5170	52	120	93	242	3210	229	1180	61	24	44	12
29	4610	52	122	81	---	1750	223	3660	53	20	53	11
30	2030	54	124	961	---	620	159	937	46	17	34	11
31	14000	---	1240	8860	---	521	---	415	---	15	23	---
TOTAL	35020	50311	15592	18444	21315	23746	7103	39419	19592	826	1428	586.8
MEAN	1130	1677	503	595	761	766	237	1272	653	26.6	46.1	19.6
MAX	14000	20900	4520	8860	3090	4430	1600	9870	4810	47	564	101
MIN	26	52	51	81	146	103	120	29	46	15	11	8.5
AC-FT	69460	99790	30930	36580	42280	47100	14090	78190	38860	1640	2830	1160

CAL YR 1974 TOTAL 250508.60 MEAN 686 MAX 28500 MIN 0 AC-FT 496900
WTR YR 1975 TOTAL 233382.80 MEAN 639 MAX 20900 MIN 8.5 AC-FT 462900

PEAK DISCHARGE (BASE, 6,000 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-28	1930	13.94	8,560	3-11	1515	11.23	6,980
10-31	0915	24.13	16,500	3-27	2100	14.8	9,080
11-3	1145	29.78	23,900	5-14	0915	19.51	12,500
12-11	1300	10.93	6,530	5-26	2030	19.69	12,800
1-31	0700	19.73	12,700	5-29	0330	11.64	7,300
2-22	1900	11.46	7,160	6-17	1230	11.53	7,240

07176800 CANDY CREEK NEAR WOLCO, OKLA.

LOCATION.--Lat 36°32'06", long 96°02'54", in NW 1/4 NW 1/4 sec.29, T.29 N., R.12 E., Osage County, 1.3 mi (2.1 km) east of Wolco, 3.3 mi (5.3 km) northeast of Avant, and at mile 5.6 (9.0 km).

DRAINAGE AREA.--30.6 mi^2 (79.3 km^2).

PERIOD OF RECORD.--October 1969 to current year.

GAGE.--Water-stage recorder. Datum of gage is 673.00 ft (205.130 m) above mean sea level.

AVERAGE DISCHARGE.--6 years, 36.5 ft^3/s (1.034 m^3/s), 26,440 acre-ft/yr (32.6 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 7,100 ft^3/s (201 m^3/s) Nov. 3, gage height, 15.94 ft (4.859 m); no flow at times.
Period of record: Maximum discharge, 9,520 ft^3/s (270 m^3/s) Mar. 10, 1974, gage height, 18.16 ft (5.535 m); no flow at times each year.

REMARKS.--Records good.

COOPERATION.--Gage-height record, 21 discharge measurements furnished by Corps of Engineers; records computed by Geological Survey.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.0	84	3.0	39	98	15	21	7.1	12	1.9	0	.35
2	3.0	1310	3.0	76	78	12	16	84	62	1.6	.04	.22
3	2.6	2240	3.0	112	49	10	13	90	56	1.4	0	.22
4	1.9	392	3.0	44	146	9.6	11	23	26	1.2	0	.17
5	1.7	78	3.0	28	112	9.6	9.6	12	320	1.1	0	.07
6	1.3	38	149	20	46	9.6	8.7	7.6	53	.86	.07	.11
7	1.1	25	89	15	29	9.2	10	5.7	23	.62	0	.18
8	1.1	20	30	12	26	8.0	165	4.4	15	.55	.11	.07
9	1.1	17	15	9.9	19	18	39	3.5	25	.53	.11	.11
10	1.1	114	16	11	15	173	20	32	178	1.2	.21	.04
11	1.1	67	499	13	15	451	13	9.5	80	.84	.11	.02
12	221	30	73	12	14	162	9.6	5.5	24	.54	.06	.33
13	84	20	35	8.0	13	60	8.6	606	13	.44	0	.11
14	515	14	23	6.2	11	54	12	801	8.9	.40	.54	0
15	58	11	17	5.4	9.9	27	12	54	9.7	.33	2.0	0
16	27	9.1	13	5.0	95	48	8.9	22	7.5	.30	5.0	0
17	16	7.9	11	5.0	93	52	7.2	12	404	.22	6.1	.18
18	11	7.4	9.5	4.8	46	82	6.3	8.1	47	.11	76	.33
19	8.9	6.9	8.5	4.5	33	51	5.4	6.0	19	0	56	.65
20	6.9	5.9	7.9	4.5	24	28	4.7	4.9	9.9	0	18	.50
21	5.8	5.6	7.0	4.3	19	20	4.3	4.2	6.6	0	6.1	.33
22	5.3	5.0	6.6	4.0	440	16	3.7	3.6	5.3	0	3.5	.18
23	4.8	4.8	5.6	3.7	112	14	4.0	35	4.3	0	2.3	.22
24	4.7	4.3	5.3	3.7	54	11	4.0	16	4.1	.29	1.6	.19
25	493	3.5	4.8	3.7	48	7.9	3.9	28	7.3	1.6	.98	.22
26	155	3.6	4.5	3.7	32	7.4	3.8	561	4.9	1.1	.62	.22
27	51	3.4	4.5	3.4	23	561	3.8	59	3.7	.77	.52	.29
28	964	3.2	4.5	3.4	19	196	7.8	39	2.9	.54	.44	.22
29	147	3.0	4.5	3.4	---	101	10	108	2.6	.29	.48	.33
30	780	3.0	4.5	472	---	44	7.6	30	2.2	.15	.50	.29
31	834	---	49	607	---	29	---	18	---	.06	.39	---
TOTAL	4411.4	4536.6	1111.7	1547.6	1718.9	2256.3	454.1	2700.1	1436.9	18.94	101.78	6.15
MEAN	142	151	35.9	49.9	61.4	72.8	15.1	87.1	47.9	.61	5.86	.21
MAX	964	2240	499	607	440	561	165	801	404	1.9	76	.65
MIN	1.1	3.0	3.0	3.4	9.9	7.4	3.7	3.5	2.2	0	0	0
AC-FT	8750	9000	2210	3070	3410	4480	901	5360	2850	38	361	12

CAL YR 1974 TOTAL 23288.03 MEAN 63.8 MAX 3850 MIN 0 AC-FT 46190
WTR YR 1975 TOTAL 20380.47 MEAN 55.8 MAX 2240 MIN 0 AC-FT 40420

PEAK DISCHARGE (BASE, 2,500 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-28	1045	10.59	2,950	1-30	2245	11.30	3,390
10-30	2300	14.60	5,890	3-27	1215	9.91	2,560
11-2	2045	11.14	3,300	5-13	2215	14.07	5,460
11-3	0700	15.94	7,100	5-26	1045	11.66	3,650

07177000 HOMINY CREEK NEAR SKIATOOK, OKLA.

LOCATION.--Lat 36°20'55", long 96°06'35", in SW 1/4 SE 1/4 sec.27, T.22 N., R.11 E., Osage County, near left bank on downstream side of pier of bridge on State Highway 20, 1.0 mi (1.6 km) upstream from Tall Chief Creek, 6.0 mi (9.7 km) west of Skiatook, and at mile 16.7 (26.9 km).

DRAINAGE AREA.--340 mi^2 (881 km^2).

PERIOD OF RECORD.--March 1944 to current year.

GAGE.--Water-stage recorder. Datum of gage is 619.66 ft (188.872 m) above mean sea level. Prior to May 26, 1945, nonrecording gage and May 26, 1945, to Sept. 30, 1958, water-stage recorder at site 600 ft (182.9 m) upstream at same datum.

AVERAGE DISCHARGE.--31 years, 192 ft^3/s (5.437 m^3/s), 139,100 acre-ft/yr (172 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 24,800 ft^3/s (702 m^3/s) Nov. 4, gage height, 37.03 ft (11.287 m); minimum, 6.5 ft^3/s (0.18 m^3/s) Aug. 13, 14.
Period of record: Maximum discharge, 35,600 ft^3/s (1,010 m^3/s) Oct. 3, 1959, gage height, 38.82 ft (11.832 m); no flow at times in 1946, 1952-58, 1963-66.
Flood in May 1943 reached a stage of 35.0 ft (10.67 m) from floodmark.

REMARKS.--Records good.

COOPERATION.--Gage-height record and 24 discharge measurements furnished by Corps of Engineers; records computed by Geological Survey.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	71	6460	70	1170	4450	152	221	91	151	43	19	21
2	58	3860	69	580	676	134	170	644	121	41	17	17
3	49	18800	68	1500	424	119	139	1810	115	34	15	15
4	42	22900	66	700	685	111	120	457	101	37	14	13
5	38	7540	65	372	1520	109	109	182	356	35	13	11
6	35	992	575	261	699	115	101	125	815	34	11	8.4
7	32	447	1680	213	298	112	104	101	784	32	11	7.8
8	31	324	532	170	232	103	447	86	491	31	11	7.6
9	32	277	219	149	217	100	676	74	640	30	10	7.4
10	32	976	145	160	161	1510	239	65	1470	30	9.1	7.3
11	30	1230	2620	268	142	2300	155	60	828	30	7.9	7.0
12	38	463	2830	192	147	5410	124	56	219	33	7.1	7.8
13	163	273	536	118	135	601	110	231	148	29	6.9	7.9
14	1770	208	286	93	121	282	115	9000	1130	23	7.2	8.4
15	695	168	212	91	115	196	126	7060	429	21	11	9.8
16	175	145	169	92	312	326	114	644	139	19	17	10
17	99	133	139	93	616	564	97	205	1620	19	23	95
18	71	126	122	90	435	859	91	148	1590	18	72	741
19	49	120	112	88	445	983	84	119	274	17	522	149
20	37	114	105	86	321	571	77	101	147	17	466	53
21	30	106	96	82	217	215	70	87	107	16	115	34
22	25	98	90	77	1590	160	66	78	91	16	49	24
23	23	94	85	74	3520	133	66	557	94	16	29	19
24	21	88	81	72	694	113	67	1490	90	17	22	16
25	1740	82	76	72	401	96	80	1170	125	20	19	14
26	3190	77	72	74	342	85	115	2190	84	80	41	12
27	756	72	70	75	224	2290	82	4620	70	49	239	11
28	3510	69	71	72	166	5310	95	853	60	39	170	9.3
29	6530	70	72	68	---	2130	139	1270	52	31	93	8.4
30	2260	72	77	470	---	574	111	491	47	25	49	7.3
31	9250	---	317	6860	---	313	---	211	---	22	27	---
TOTAL	30887	66384	11727	14482	19307	25674	4810	34276	12588	909	1923.2	1359.4
MEAN	996	2213	378	467	690	764	160	1106	420	29.3	62.0	45.3
MAX	9250	22900	2830	6860	4450	5310	947	9000	1620	80	466	741
MIN	21	69	65	68	115	85	66	56	47	16	6.9	7.0
AC-FT	61260	131700	23260	28730	38300	46960	9540	67990	24970	1800	3810	2700

CAL YR 1974 TOTAL 239436.70 MEAN 656 MAX 22900 MIN .70 AC-FT 474900
WTR YR 1975 TOTAL 222326.60 MEAN 609 MAX 22900 MIN 6.9 AC-FT 441000

PEAK DISCHARGE (BASE, 5,000 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-29	1200	28.20	6,880	3-11	2400	26.18	5,730
10-31	2100	31.64	10,300	3-28	1015	26.47	5,900
11-4	0345	37.03	24,800	5-14	2130	32.02	10,800
1-31	2145	29.36	7,720	5-27	1230	25.72	5,420

07177500 BIRD CREEK NEAR SPERRY, OKLA.

LOCATION.--Lat 36°16'42", long 95°57'14", in NW 1/4 NW 1/4 sec.29, T.21 N., R.13 E., Tulsa County, on downstream side of right pier of county road bridge, 1.5 mi (2.4 km) upstream from Delaware Creek, 2.4 mi (3.9 km) downstream from Hominy Creek, 2.5 mi (4.0 km) southeast of Sperry, and at mile 25.0 (40.2 km).

DRAINAGE AREA.--905 mi^2 (2,344 km^2).

PERIOD OF RECORD.--October 1938 to current year. Monthly discharge only for some periods, published in WSP 1311.

GAGE.--Water-stage recorder. Datum of gage is 579.43 ft (176.610 m) above mean sea level.

AVERAGE DISCHARGE.--37 years, 507 ft^3/s (14.36 m^3/s), 367,300 acre-ft/yr (453 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 54,700 ft^3/s (1,550 m^3/s) Nov. 4, gage height, 31.45 ft (9.586 m); minimum, 25 ft^3/s (0.71 m^3/s) Sept. 9-11.
Period of record: Maximum discharge, 90,000 ft^3/s (2,550 m^3/s) Oct. 3, 1959, gage height, 32.60 ft (9.936 m), from rating curve extended above 49,000 ft^3/s (1,390 m^3/s); no flow at times in 1939, 1954-57, 1964-66, 1970.
Flood of May 18, 1943, reached a stage of 31.68 ft (9.656 m), discharge, 72,200 ft^3/s (2,040 m^3/s). Flood in 1915 reached a stage similar to flood of Oct. 31, 1941, 30.14 ft (9.187 m), from information by local residents.

REMARKS.--Records good. See pg. 327 for water-quality record.

COOPERATION.--Gage-height record and 25 discharge measurements furnished by Corps of Engineers; records computed by Geological Survey.

REVISIONS (WATER YEARS).--WSP 1117: Drainage area. WSP 1921: 1943.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	257	19100	174	2640	13300	560	854	278	704	113	46	63
2	202	13700	174	1680	5600	481	646	711	552	107	41	50
3	180	22400	174	3290	1510	424	521	3500	517	98	39	43
4	168	46400	173	2620	1300	384	457	2190	610	91	38	38
5	155	27600	169	1250	3910	371	386	662	1240	86	36	33
6	116	11700	556	676	2950	376	352	408	5070	81	34	31
7	93	2940	3730	723	1150	373	346	307	3290	79	33	29
8	86	1160	2190	578	789	349	1880	248	1620	73	33	26
9	86	939	778	483	684	324	2520	202	835	69	34	25
10	89	2270	462	440	550	2290	1020	166	1900	67	37	25
11	87	3720	3860	673	444	3960	604	172	3180	71	37	25
12	89	1830	7720	686	422	7790	457	139	1130	69	35	30
13	522	965	3490	431	411	3720	388	156	589	69	31	29
14	3360	716	1120	314	365	1090	383	7240	1000	68	32	117
15	3310	574	602	290	359	733	435	15200	1890	61	64	84
16	720	485	621	287	601	600	428	8160	662	59	429	62
17	358	431	495	284	1960	1170	366	1130	3210	57	176	58
18	240	411	417	283	1240	1540	328	604	6280	55	142	486
19	179	388	380	278	1230	2940	301	458	1790	51	383	517
20	141	379	354	274	1090	1450	274	370	827	48	535	162
21	119	353	351	264	742	789	250	315	396	47	423	110
22	104	335	310	249	2140	586	238	277	293	46	151	81
23	98	318	293	236	7280	470	233	497	245	44	97	64
24	91	288	283	229	4210	401	234	3220	237	47	68	55
25	180	232	269	230	1310	339	240	2350	239	78	51	48
26	6110	205	257	232	1220	293	238	4200	271	117	46	43
27	3310	194	250	234	953	3360	238	8720	207	152	92	38
28	4150	183	244	225	676	9470	237	7800	158	104	307	36
29	10400	177	245	213	---	8020	359	3930	140	76	186	32
30	9640	176	240	534	---	6910	354	3250	126	58	152	31
31	11300	---	373	9690	---	1180	---	1080	---	50	91	---
TOTAL	57350	162589	30944	30700	58478	59443	15647	77760	39008	2291	3921	2471
MEAN	1850	5419	998	990	2089	1918	522	2509	1300	73.9	126	82.4
MAX	11300	46400	7720	9690	13300	9470	2620	15200	6280	152	535	517
MIN	86	176	169	213	359	293	233	139	126	46	31	25
AC-FT	113800	322500	61380	60890	116000	117900	31040	154300	77370	4540	7780	4900

CAL YR 1974 TOTAL 576925 MEAN 1581 MAX 46400 MIN 10 AC-FT 1144000
WTR YR 1975 TOTAL 540602 MEAN 1481 MAX 46400 MIN 25 AC-FT 1072000

PEAK DISCHARGE (BASE, 11,000 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-29	2400	25.13	12,200	2-1	0945	26.72	14,500
11-1	1745	28.80	21,100	5-15	1515	27.39	16,500
11-4	0900	31.45	54,700				

07185000 NEOSHO RIVER NEAR COMMERCE, OKLA.

LOCATION.--Lat 36°55'43", long 94°57'26", in SW 1/4 SE 1/4 sec.5, T.28 N., R.22 E., Ottawa County, on downstream side of second pier from left bank of county road bridge, 1.3 mi (2.1 km) upstream from Mud Creek, 2.2 mi (3.5 km) downstream from Four Mile Creek, 4.5 mi (7.2 km) west of Commerce, and at mile 153.4 (246.8 km).

DRAINAGE AREA.--5,876 mi^2 (15,219 km^2).

PERIOD OF RECORD.--June 1939 to current year.

GAGE.--Water-stage recorder. Datum of gage is 748.97 ft (228.286 m) above mean sea level (Corps of Engineers bench mark).

AVERAGE DISCHARGE.--36 years, 3,625 ft^3/s (102.7 m^3/s), 2,626,000 acre-ft/yr (3.24 km^3/yr).

EXTREMES.--Current year: Maximum discharge, 55,500 ft^3/s (1,570 m^3/s) Nov. 5, gage height, 21.49 ft (6.550 m); minimum, 197 ft^3/s (5.58 m^3/s) Aug. 13.
Period of record: Maximum discharge, 267,000 ft^3/s (7,560 m^3/s) July 15, 1951, computed by flood-routing methods from hydrograph defined at Miami, mile 144.2 (232.0 km), by several discharge measurements, gage-height record, and by comparison with computed inflow into Lake O' The Cherokees; maximum gage height, 34.03 ft (10.372 m) July 16, 1951, from floodmark; no flow at times in 1953-54, 1956.

REMARKS.--Records good. Flow regulated to some extent since 1963 by John Redmond Reservoir in Kansas, 190 mi (306 km) upstream.

REVISIONS.--WSP 1117: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2350	19800	5490	3030	28400	6540	4280	2710	4220	13000	516	1500
2	1190	22200	5230	5420	28900	6270	3350	2500	3220	11000	426	1140
3	701	35700	4950	7010	20600	5050	3920	2520	4380	9400	393	984
4	476	48300	4520	5260	6300	4410	4000	3590	6850	9230	378	877
5	352	53800	2890	4310	9060	3770	3760	2820	8150	8530	361	862
6	298	53000	2360	3470	12000	3920	3550	2110	10200	6910	304	847
7	266	44200	3870	3920	9610	5030	3400	4000	11000	6330	256	827
8	245	37300	4220	4450	7060	5020	3570	3590	9740	6010	227	789
9	341	30600	3320	3530	6520	4740	3830	2200	7550	5670	231	628
10	371	14600	2600	3550	6310	4230	4440	2160	9540	5230	232	605
11	341	11100	5710	3420	6280	5350	5240	2070	17600	4070	230	651
12	920	8470	10600	3350	5990	10300	6260	1510	17900	3420	223	713
13	4580	6290	10400	2230	5440	10600	6180	1280	12300	2730	206	682
14	13000	5710	7150	1280	5110	6050	5130	2050	8260	1820	248	604
15	8460	5230	4050	881	4500	5170	4810	2900	9480	1350	1240	562
16	4020	4110	3810	740	3280	6670	4860	2550	9970	1260	3230	549
17	1890	3250	3580	696	4330	12800	4830	1730	17500	1180	1160	533
18	1230	2830	3280	656	5340	15200	4840	1310	26300	1170	1840	516
19	1330	2630	3010	650	5430	15200	4830	1100	28100	1170	2450	1470
20	1860	2790	2610	638	5150	16200	4690	994	27800	1190	1310	2100
21	1830	5850	2180	662	4410	7200	4080	931	22000	979	597	846
22	1770	6540	1750	660	7010	5190	3730	879	8400	667	391	575
23	1700	6400	1550	1670	14300	3730	3550	1050	10300	562	333	420
24	1250	6130	1500	2690	8720	2790	2840	6240	12300	533	282	343
25	714	5650	1440	3410	4980	2370	4730	9150	13700	510	246	305
26	665	5670	1380	3400	7550	2280	10200	5030	12700	491	222	295
27	625	5500	1350	3290	10300	11900	6970	2800	11600	519	219	291
28	1310	5650	1320	3140	11200	20400	3500	2080	11900	511	211	276
29	3970	5530	1320	2780	---	19100	2890	3050	12600	491	210	318
30	2920	5650	1250	2670	---	10800	3160	4010	13000	513	525	391
31	10200	---	1250	22700	---	6240	---	4800	---	567	2870	---
TOTAL	71195	470680	110140	105563	254080	240520	135420	85674	378560	107013	21567	21499
MEAN	2297	15690	3553	3405	9074	7759	4514	2764	12620	3452	696	717
MAX	13000	53800	10600	22700	28900	20400	10200	9130	28100	13000	3230	2100
MIN	245	2630	1250	638	3280	2280	2840	879	3220	491	206	276
AC-FT	141200	933600	218500	20940	504000	477100	268600	169900	750900	212300	42780	42640

CAL YR 1974 TOTAL 2099551 MEAN 5752 MAX 65000 MIN 66 AC-FT 4164000
WTR YR 1975 TOTAL 2001911 MEAN 5485 MAX 53800 MIN 206 AC-FT 3971000

PEAK DISCHARGE (BASE, 20,000 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE
11-5	2345	21.49	55,500
2-2	0800	18.70	29,600
3-28	1715	15.50	21,400
6-19	0915	18.45	28,700

07188000 SPRING RIVER NEAR QUAPAW, OKLA.

LOCATION.--Lat 36°56'04", long 94°44'45", in NE 1/4 SW 1/4 sec.5, T.28 N., R.24 E., Ottawa County, near center of span on downstream side of pier of county road bridge, 0.1 mi (0.2 km) upstream from Rock Creek, 3.0 mi (4.8 km) southeast of Quapaw, and at mile 13.9 (22.4 km). Records include flow of Rock Creek.

DRAINAGE AREA.--2,510 mi^2 (6,501 km^2), includes that of Rock Creek.

PERIOD OF RECORD.--July 1939 to current year.

GAGE.--Water-stage recorder. Datum of gage is 746.25 ft (227.457 m) above mean sea level. Nonrecording gage on right bank at same datum used May 20 to Nov. 16, 1943.

AVERAGE DISCHARGE.--36 years, 1,967 ft^3/s (55.71 m^3/s), 10.64 in/yr (270 mm/yr), 1,425,000 acre-ft/yr (1.76 km^3/yr).

EXTREMES.--Current year: Maximum discharge, 57,000 ft^3/s (1,610 m^3/s) Nov. 5, gage height, 26.41 ft (8.050 m); minimum, 409 ft^3/s (11.6 m^3/s) Aug. 13.
Period of record: Maximum discharge, 190,000 ft^3/s (5,380 m^3/s) May 19, 1943, gage height, 43.4 ft (13.23 m), from floodmark, from rating curve extended above 54,000 ft^3/s (1,530 m^3/s) on basis of slope-area measurement of peak flow; minimum daily, 5.8 ft^3/s (0.16 m^3/s) July 8, 1954.

REMARKS.--Records good. Low and medium flow regulated by Riverton Hydroelectric plant, 15 mi (24 km) above station.

REVISIONS.--WSP 1117: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	943	5520	1710	2220	27700	9070	5160	2490	1150	1010	598	1560
2	839	4640	1570	2870	21200	7420	4440	2370	1110	956	581	1100
3	720	31300	1380	3860	11000	5940	3990	2110	1210	895	564	729
4	651	46000	1520	4210	7140	4380	3640	2120	1290	850	549	603
5	602	54000	1520	3420	5680	4020	3370	2050	1610	813	533	546
6	567	34800	1920	2620	5460	3700	3030	1920	2510	790	434	505
7	549	14600	8100	2310	4160	3570	2640	1810	2950	784	415	466
8	535	8140	6750	2150	3420	3590	2830	2110	2170	801	413	474
9	533	6770	4360	2050	3070	3400	2720	2090	1660	875	414	451
10	525	6280	2770	2510	2820	3400	2590	1840	1980	796	414	435
11	519	7250	5340	3860	2650	4500	2450	1710	2610	756	416	640
12	589	6750	8630	3470	2580	12800	2350	1670	2160	713	415	1250
13	900	5200	6000	2440	2460	19400	2270	1580	1630	692	413	1090
14	3850	4220	4080	2070	2350	12800	2230	1350	1380	671	452	995
15	4090	3680	3240	1960	2270	8130	2170	1460	1470	651	1140	827
16	2850	3210	2770	1890	2230	11300	2100	1430	1320	631	1330	783
17	2010	2880	2510	1670	2900	13200	2040	1350	8000	616	512	722
18	1360	2820	2320	1710	3350	13400	1980	1290	10100	611	593	681
19	1300	2660	2190	1710	2750	13900	1940	1240	6120	607	575	1080
20	1150	2500	2000	1700	2310	10500	1890	1200	2060	656	531	1300
21	1030	2370	1910	1660	2120	6570	1490	1180	1800	607	548	1080
22	938	2250	1900	1600	6200	5460	1650	1170	1530	602	521	969
23	878	2170	1830	1540	21000	4760	1690	1060	1360	626	495	812
24	833	2070	1770	1490	15600	4230	2000	877	1480	611	480	711
25	797	1990	1700	1480	9440	3520	6330	1320	1570	616	462	659
26	768	1910	1640	1470	9000	3430	11100	1640	1280	671	455	608
27	743	1860	1590	1450	9740	8750	4210	1270	1190	837	452	572
28	786	1820	1540	1430	10100	23300	2910	1120	978	830	460	562
29	1100	1770	1510	1410	---	19500	2710	1130	1090	708	465	810
30	1260	1740	1500	1700	---	11200	2580	1650	1040	677	479	966
31	3280	---	1670	24900	---	6590	---	1330	---	636	536	---
TOTAL	37495	273170	89240	90830	200700	265730	92700	48937	67608	22595	16645	24026
MEAN	1210	9106	2879	2930	7166	8572	3090	1579	2254	729	537	801
MAX	4090	54000	8630	24900	27700	23300	11100	2490	10100	1010	1330	1560
MIN	519	1740	1380	1410	2120	3400	1490	877	978	602	413	435
CFSM	.48	3.63	1.15	1.17	2.86	3.42	1.23	.63	.90	.29	.21	.32
IN.	.56	4.05	1.32	1.35	2.97	3.94	1.37	.73	1.00	.33	.25	.36
AC-FT	74370	541800	177000	180200	398100	527100	183900	97070	134100	44820	33020	47660

CAL YR 1974 TOTAL 1372873 MEAN 3761 MAX 73100 MIN 519 CFSM 1.50 IN 20.35 AC-FT 2723000
WTR YR 1975 TOTAL 1229676 MEAN 3369 MAX 54000 MIN 413 CFSM 1.34 IN 18.22 AC-FT 2439000

PEAK DISCHARGE (BASE, 18,000 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE
11-5	0830	26.41	57,000
1-31	1730	19.69	29,400
2-23	1800	17.37	22,200
3-13	0315	16.98	12,100
3-28	2115	18.59	25,800

07189000 ELK RIVER NEAR TIFF CITY, MO.

LOCATION.--Lat 36°37'50", long 94°35'12", in NE 1/4 sec.22, T.22 N., R.34 W., McDonald County, on downstream side of right pier of bridge on State Highway 43, 0.8 mi (1.3 km) downstream from Blackfoot Branch, 2.8 mi (4.5 km) upstream from Buffalo Creek, 3.0 mi (4.8 km) southeast of Tiff City, and at mile 15.8 (25.4 km).

DRAINAGE AREA.--872 mi^2 (2,258 km^2).

PERIOD OF RECORD.--October 1939 to current year.

GAGE.--Water-stage recorder. Datum of gage is 750.61 ft (228.786 m) above mean sea level (levels by Corps of Engineers). Sept. 6, 1960 to Aug. 24, 1961, at site 100 ft (30.5 m) downstream.

AVERAGE DISCHARGE.--36 years, 809 ft^3/s (22.91 m^3/s), 12.60 in/yr (320 mm/yr), 586,100 acre-ft (723 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 53,200 ft^3/s (1,510 m^3/s) Nov. 4, gage height, 23.32 ft (7.108 m); minimum, 122 ft^3/s (3.46 m^3/s) Aug. 14.
Period of record: Maximum discharge, 137,000 ft^3/s (3,880 m^3/s) Apr. 19, 1941, gage height, 28.4 ft (8.66 m), from floodmark, from rating curve extended above 60,000 ft^3/s (1,700 m^3/s) on basis of slope-area measurement of peak flow; minimum daily, 5.1 ft^3/s (0.14 m^3/s), Sept. 5, 6, 1954.

REMARKS.--Records good.

REVISIONS (WATER YEARS).--WSP 927: 1940. WSP 1117: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	308	2490	755	3710	1430	5420	2590	2590	527	339	279	213
2	288	2620	722	2930	1530	5210	2230	1860	529	312	258	192
3	276	14500	693	2320	1510	2740	1970	1790	532	291	236	175
4	263	39600	666	2000	1510	2360	1770	1800	531	274	214	161
5	249	13100	645	1780	1510	2100	1610	1650	570	259	201	151
6	247	5730	686	1650	1500	1910	1480	1470	761	248	190	145
7	246	3890	961	1530	1420	1760	1390	1320	738	650	166	148
8	239	3080	1260	1440	1370	1630	1320	1180	763	757	151	146
9	235	2550	1320	1350	1310	1540	1240	1110	693	632	147	139
10	228	2660	1260	1320	1250	1650	1150	994	641	503	145	137
11	222	4860	1410	1360	1180	1950	1070	940	643	419	138	139
12	239	3830	1880	1330	1140	6050	1010	900	595	369	133	163
13	317	2830	1930	1260	1090	6260	971	823	533	325	128	186
14	1180	2270	1760	1210	1040	4220	943	763	475	290	146	206
15	2660	1900	1600	1160	996	3210	905	710	440	265	219	216
16	1770	1700	1470	1110	964	2630	863	668	391	241	471	237
17	1340	1560	1360	1060	942	2360	824	636	606	223	455	258
18	1090	1450	1270	1020	915	3030	806	603	784	211	349	272
19	923	1360	1190	980	878	6090	787	572	701	204	291	408
20	781	1280	1130	946	836	4850	741	547	609	202	260	738
21	674	1190	1070	907	805	3410	702	530	539	197	237	712
22	586	1110	1020	867	1400	2770	673	506	470	188	216	564
23	537	1050	982	822	8610	2360	681	473	418	181	199	476
24	494	1010	945	796	5580	2070	660	441	406	182	185	419
25	448	958	909	780	3600	1840	646	460	443	260	172	370
26	410	918	872	752	3030	1670	856	466	489	300	163	326
27	383	878	842	723	3020	2440	691	437	522	306	156	291
28	394	838	813	701	3210	6350	702	403	461	638	153	265
29	427	809	789	682	---	5610	901	444	409	494	148	247
30	417	788	768	666	---	4030	1530	792	370	386	171	228
31	1100	---	1010	918	---	3150	---	620	---	323	206	---
TOTAL	18971	122809	33988	40080	53576	102670	33912	28498	16589	10469	6583	8328
MEAN	612	4094	1096	1293	1914	3312	1130	919	553	338	212	278
MAX	2660	39600	1930	3710	8610	6350	2590	2590	784	757	471	738
MIN	222	788	645	666	805	1540	660	403	370	181	128	137
CFSM	.70	4.70	1.26	1.48	2.20	3.80	1.30	1.05	.63	.39	.24	.32
IN.	.81	5.24	1.45	1.71	2.29	4.38	1.45	1.22	.71	.45	.28	.36
AC-FT	37630	243600	67420	79500	106300	203600	67260	56530	32900	20770	13060	16520

CAL YR 1974 TOTAL 537085 MEAN 1471 MAX 39600 MIN 197 CFSM 1.69 IN 22.91 AC-FT 1065000
WTR YR 1975 TOTAL 476475 MEAN 1305 MAX 39600 MIN 128 CFSM 1.50 IN 20.33 AC-FT 945100

PEAK DISCHARGE (BASE, 9,000 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE
11-4	0945	23.32	53,200
2-23	1415	13.04	11,600
3-19	1015	12.33	10,200
3-28	1300	12.54	10,600

07190000 LAKE O' THE CHEROKEES AT LANGLEY, OKLA.

LOCATION.--Lat 36°28'17", long 95°02'19", in SW 1/4 sec.14, T.23 N., R.21 E., Mayes County, on usptream side of pier at intake structure near right end of Pensacola Dam on Neosho River at Langley, 9.9 mi (15.9 km) upstream from Big Cabin Creek, and at mile 77.0 (123.9 km).

DRAINAGE AREA.--10,298 mi^2 (26,672 km^2).

PERIOD OF RECORD.--March 1940 to current year. Prior to October 1940, published as Grand Lake at Langley.

GAGE.--Water-stage recorder. Datum of gage is 1.10 ft (0.335 m) above mean sea level (Corps of Engineers bench mark). Prior to Nov. 14, 1941, nonrecording gage at same site and datum.

EXTREMES.--Current year: Maximum contents, 2,188,000 acre-ft (2.70 km^3) Nov. 7, gage height, 754.85 ft (230.078 m); minimum, 1,371,000 acre-ft (1.69 km^3) Sept. 30, gage height, 737.99 ft (224.939 m).
Period of record: Maximum contents, 2,213,000 acre-ft (2,730 hm^3), May 25, 1957, gage height, 755.27 ft (230.206 m), minimum since power-pool was first filled, 642,900 acre-ft (793 hm^3) Sept. 28, 1954, gage height, 713.41 ft (217.447 m).

REMARKS.--Reservoir is formed by multiple-arch concrete dam, with top of taintor-type spillway gates at gage height 755.0 ft (230.12 m). Storage began Mar. 21, 1940; power-pool was first filled Apr. 19, 1941. Capacity between gage heights 682.0 ft (207.87 m), sill of powerhouse penstock, and 745.0 ft (227.08 m), maximum power pool is 1,492,000 acre-ft (1,840 hm^3). Capacity between gage heights 745.0 ft (227.08 m), and 755.0 ft (230.12 m) is 525,000 acre-ft (647 hm^3) and is reserved for flood control. Dead storage below gage height 682.0 ft (207.87 m) is 180,200 acre-ft (222 hm^3). Figures given herein represent total contents. Reservoir is utilized for power development and flood control.

REVISIONS.--WSP 1117: Drainage area.

Capacity table (gage height, in feet, and contents, in acre-feet)

737	1,332,000	747	1,767,000
740	1,452,000	751	1,970,000
743	1,581,000	755	2,197,000

CONTENTS, IN ACRE-FEET, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1498000	1587000	1749000	1496000	1584000	1824000	1818000	1579000	1637000	1688000	1559000	1446000
2	1488000	1644000	1736000	1497000	1678000	1816000	1796000	1569000	1636000	1685000	1559000	1448000
3	1485000	1852000	1724000	1505000	1740000	1801000	1779000	1561000	1634000	1678000	1556000	1444000
4	1487000	2018000	1712000	1509000	1741000	1787000	1764000	1565000	1636000	1671000	1553000	1436000
5	1489000	2113000	1698000	1503000	1742000	1774000	1756000	1566000	1647000	1665000	1548000	1439000
6	1493000	2170000	1688000	1499000	1750000	1758000	1745000	1562000	1648000	1674000	1542000	1440000
7	1488000	2188000	1692000	1491000	1753000	1754000	1732000	1563000	1656000	1659000	1536000	1440000
8	1487000	2172000	1693000	1484000	1749000	1747000	1723000	1565000	1658000	1650000	1528000	1442000
9	1488000	2162000	1687000	1476000	1736000	1744000	1712000	1566000	1654000	1639000	1523000	1449000
10	1490000	2135000	1682000	1467000	1725000	1733000	1705000	1567000	1658000	1628000	1515000	1449000
11	1493000	2110000	1688000	1468000	1715000	1736000	1697000	1575000	1673000	1624000	1505000	1454000
12	1511000	2090000	1712000	1457000	1708000	1776000	1693000	1572000	1690000	1614000	1500000	1454000
13	1524000	2063000	1730000	1445000	1703000	1804000	1689000	1572000	1698000	1610000	1496000	1454000
14	1558000	2029000	1733000	1431000	1696000	1803000	1683000	1574000	1698000	1606000	1500000	1454000
15	1569000	2005000	1730000	1416000	1689000	1786000	1674000	1584000	1696000	1601000	1503000	1460000
16	1566000	1988000	1722000	1399000	1677000	1776000	1663000	1587000	1699000	1595000	1505000	1462000
17	1554000	1967000	1715000	1389000	1672000	1782000	1651000	1589000	1721000	1594000	1506000	1464000
18	1538000	1944000	1704000	1396000	1668000	1803000	1649000	1590000	1740000	1592000	1500000	1462000
19	1524000	1926000	1693000	1405000	1664000	1824000	1642000	1582000	1754000	1592000	1495000	1457000
20	1526000	1907000	1681000	1399000	1655000	1828000	1632000	1590000	1757000	1591000	1486000	1446000
21	1517000	1891000	1667000	1397000	1649000	1816000	1624000	1586000	1757000	1590000	1475000	1442000
22	1515000	1878000	1654000	1391000	1677000	1803000	1610000	1582000	1735000	1585000	1463000	1429000
23	1513000	1866000	1639000	1391000	1752000	1787000	1597000	1584000	1721000	1586000	1456000	1417000
24	1518000	1850000	1620000	1391000	1765000	1770000	1586000	1598000	1713000	1588000	1454000	1405000
25	1525000	1836000	1604000	1396000	1790000	1756000	1586000	1623000	1709000	1586000	1449000	1395000
26	1530000	1822000	1586000	1405000	1794000	1742000	1611000	1625000	1705000	1588000	1446000	1383000
27	1533000	1806000	1569000	1403000	1808000	1774000	1610000	1615000	1697000	1587000	1440000	1383000
28	1532000	1792000	1551000	1401000	1821000	1840000	1603000	1607000	1693000	1583000	1439000	1387000
29	1527000	1778000	1534000	1405000	---	1863000	1595000	1605000	1689000	1575000	1439000	1377000
30	1530000	1762000	1516000	1408000	---	1855000	1586000	1610000	1688000	1567000	1442000	1371000
31	1548000	---	1503000	1487000	---	1834000	---	1623000	---	1559000	1443000	---
MAX	1569000	2188000	1749000	1509000	1821000	1863000	1818000	1625000	1757000	1688000	1559000	1464000
MIN	1485000	1567000	1503000	1389000	1584000	1733000	1586000	1561000	1634000	1559000	1439000	1371000
(†)	742.26	746.90	741.20	740.84	748.10	748.36	743.11	743.93	745.34	742.50	739.79	737.99
(‡)	+49,000	+214,000	-259,000	-16,000	+334,000	+13,000	-248,000	+37,000	+65,000	-129,000	-116,000	-72,000

CAL YR 1974.....‡ -240,000
WTR YR 1975.....‡ -128,000

† Gage height, in feet, at end of month.
‡ Change in contents, in acre-ft.

07190500 NEOSHO RIVER NEAR LANGLEY, OKLA.
(Below Spring River, known locally as Grand River)

LOCATION.--Lat 36°26'15", long 95°02'44", in SE 1/4 sec.27, T.23 N., R.21 E., Mayes County, on hillside of left bank, 0.5 mi (0.80 km) upstream from bridge on State Highway 82, 1.5 mi (2.4 km) south of Langley, 3.6 mi (5.8 km) downstream from Pensacola Dam, 6.3 mi (10.1 km) upstream from Big Cabin Creek, and at mile 73.4 (118.1 km).

DRAINAGE AREA.--10,335 mi^2 (26,768 km^2).

PERIOD OF RECORD.--October 1939 to current year.

GAGE.--Water-stage recorder. Datum of gage is 607.65 ft (185.212 m) above mean sea level (Corps of Engineers bench mark). Prior to Feb. 16, 1940, nonrecording gage at site 0.1 mile (0.2 km) upstream at same datum. Feb. 10, 1954, to Sept. 30, 1963, water-stage recorder at site 0.5 mi (0.8 km) downstream at same datum. Auxiliary water-stage recorders at sites 2.0 and 3.0 mi (3.2 and 4.8 km) upstream at same datum.

AVERAGE DISCHARGE.--36 years, 7,123 ft^3/s (201.7 m^3/s), 5,161,000 acre-ft/yr (6.36 km^3/yr).

EXTREMES.--Current year: Maximum discharge, 84,600 ft^3/s (2,400 m^3/s) Nov. 5, gage height, 31.13 ft (9.488 m); minimum daily, 15 ft^3/s (0.42 m^3/s) at times.
Period of record: Maximum discharge, 300,000 ft^3/s (8,500 m^3/s) May 20, 1943, gage height, 45.5 ft (13.87 m), from floodmarks, from computation of outflow from Lake O' The Cherokees; minimum daily, 9 ft^3/s (0.25 m^3/s), Mar. 25, 1940 (caused by closure of Pensacola Dam).

REMARKS.--Records good. Low flow values of 15 ft^3/s (0.42 m^3/s) consist of estimated base flow (since July 1964). Flow regulated since 1940 by Lake O' The Cherokees (see sta. 07190000).

REVISIONS.--WSP 1117: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5940	12800	14300	12600	12600	24000	21600	12500	15	14300	15	1780
2	5990	13000	14300	12500	12600	23500	20400	12500	6010	14300	984	1730
3	2580	25400	13800	12500	13700	22800	19300	12500	7590	14300	2400	4800
4	15	69200	12500	12500	16700	19400	17900	6920	7350	13400	2690	4860
5	15	75800	12600	12500	16700	16900	14900	7140	8150	12800	3360	143
6	306	69900	12600	12500	17300	16700	14700	7670	12600	12700	3040	41
7	2820	58500	12600	12500	17700	19400	14700	6640	12500	12400	4550	62
8	1060	58900	12600	12500	17000	16900	14900	6850	12600	12400	3780	19
9	15	49200	12600	12400	16900	14500	14700	6320	12600	12400	3580	110
10	15	39900	12600	12500	16600	16900	12600	4430	12700	12400	4700	1010
11	15	31200	12700	12500	16400	17900	12500	185	12700	10200	4930	2800
12	15	22900	12700	12500	14600	18500	12600	6730	12700	9810	3340	94
13	722	22900	12600	12500	12800	25700	12700	2990	12700	7980	1670	20
14	8950	22400	12700	12400	12700	28900	12700	2000	12600	7850	721	18
15	12600	18300	12700	12400	12600	28200	12700	15	12600	6800	4660	311
16	12600	16800	12600	12400	12700	27600	12700	4310	12600	4560	5410	25
17	12600	14300	12700	8940	12600	27100	12700	2510	17300	2470	1570	1490
18	12600	14400	12700	15	12700	27600	12600	2260	26600	2450	5860	5510
19	11700	14400	12600	15	12700	28600	12700	5360	27500	1490	5150	8260
20	2620	14600	12500	5410	12700	29200	12600	161	27700	2840	6800	9580
21	8330	14200	12700	6410	12600	25900	12400	4570	27900	3610	6200	6710
22	4440	14500	12700	5320	12600	21100	12500	4680	22000	3370	6780	6480
23	4340	14700	12700	3890	15700	20400	12600	1870	18700	969	4060	7040
24	91	14800	12600	5760	19900	18900	12600	56	18400	15	1120	7350
25	17	14900	12700	2990	20300	17100	12500	660	17900	2720	3020	7120
26	15	15400	12600	1510	20300	16300	12600	7940	15900	15	3040	7940
27	15	15600	12600	7200	20400	15100	12600	12400	17100	4530	4120	829
28	7380	15300	12600	4470	22100	24800	12700	6050	16100	4430	1100	17
29	9340	15100	12600	5910	---	26200	12600	5610	16000	5670	425	6330
30	6720	14700	12600	7190	---	37500	12500	3390	15300	5680	636	6800
31	12700	---	12600	10100	---	26400	---	15	---	5120	2580	---
TOTAL	146566	816000	396000	274830	434200	706000	418000	157232	452415	223979	102291	99279
MEAN	4728	27200	12770	8865	15510	22770	13930	5072	15080	7225	3300	3309
MAX	12700	75800	14300	12600	22100	37500	21600	12500	27900	14300	6800	9580
MIN	15	12800	12500	15	12600	14500	12400	15	15	15	15	17
AC-FT	290700	1619000	785500	545100	861200	1400000	829100	311900	897400	444300	202900	196900

CAL YR 1974 TOTAL 4623853 MEAN 12670 MAX 86400 MIN 15 AC-FT 9171000
WTR YR 1975 TOTAL 4226792 MEAN 11580 MAX 75800 MIN 15 AC-FT 8384000

07191000 BIG CABIN CREEK NEAR BIG CABIN, OKLA.

LOCATION.--Lat 36°34'06", long 95°09'07", in NE 1/4 NE 1/4 sec.15, T.24 N., R.20 E., Craig County, on downstream side of right bank end of county road bridge, 4.9 mi (7.9 km) northeast of Big Cabin, 0.9 mi (1.4 km) downstream from White Oak Creek, 6.8 mi (10.9 km) upstream from Mustang Creek and at mile 13.0 (20.9 km).

DRAINAGE AREA.--450 mi² (1,166 km²).

PERIOD OF RECORD.--October 1947 to current year.

GAGE.--Water-stage recorder. Datum of gage is 622.00 ft (189.586 m) above mean sea level (levels by Corps of Engineers). Prior to Sept. 30, 1972, water-stage recorder at site 4.5 mi (7.2 km) downstream at same datum and present site used as supplemental gage.

AVERAGE DISCAHRGE.--28 years, 334 ft³/s (9.459 m³/s), 9.73 in/yr (247 mm/yr), 242,000 acre-ft/yr (298 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 40,100 ft³/s (1,140 m³/s) Nov. 4, gage height, 44.58 ft (13.588 m); minimum, 1.1 ft³/s (0.031 m³/s) Sept. 4, 7-10.
Period of record: Maximum discharge, 52,000 ft³/s (1,470 m³/s) Oct. 3, 1959, gage height, 34.55 ft (10.531 m), at former site; minimum, 0.10 ft³/s (.003 m³/s) at times in 1954, 1956 and 1963.
Flood of May 18, 1943, reached a stage of 34.96 ft (10.656 m) at former site, discharge, 63,000 ft³/s (1,780 m³/s), by slope-area measurement of peak flow.

REMARKS.--Records good. Low flow sustained by sewage from City of Vinita

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	35	4420	66	784	6510	548	315	48	119	10	3.1	1.5
2	34	3070	67	962	967	361	249	74	250	9.0	2.8	1.3
3	34	22400	69	2460	620	267	208	228	1750	8.3	2.6	1.2
4	33	35400	69	649	579	239	182	145	1070	7.5	2.4	1.1
5	33	11700	69	349	1440	263	163	84	835	6.9	2.3	1.2
6	31	816	986	266	646	251	145	61	830	6.5	2.3	1.3
7	31	484	1970	214	312	210	137	49	282	64	2.3	1.2
8	14	386	640	187	276	178	389	42	237	90	2.1	1.2
9	7.6	303	290	168	244	172	436	39	142	43	2.0	1.2
10	6.3	1150	208	520	200	1500	225	34	410	33	2.0	1.2
11	5.8	1890	4410	553	182	2590	163	27	646	27	2.0	1.5
12	1520	552	2710	226	207	6370	136	21	231	19	1.9	11
13	3720	337	601	147	182	1870	122	18	122	9.8	1.9	7.5
14	6050	253	389	117	172	589	134	16	75	7.1	2.0	4.7
15	3490	202	305	112	160	594	149	15	61	5.7	55	3.9
16	427	175	240	114	231	581	136	14	51	4.5	250	4.2
17	247	162	197	114	715	561	113	14	2700	4.3	76	4.1
18	173	152	176	111	370	1050	102	13	1130	3.7	36	5.9
19	132	149	162	114	245	954	106	13	260	3.8	21	706
20	106	137	143	120	192	436	84	12	132	3.5	8.7	162
21	83	123	129	111	168	298	69	11	82	3.3	6.2	74
22	68	113	120	99	2740	233	67	11	59	4.8	5.0	31
23	60	105	112	88	4470	203	62	11	48	5.1	3.8	14
24	55	93	105	84	732	173	58	13	40	21	2.9	9.2
25	72	80	97	101	861	137	50	162	35	85	2.4	6.9
26	165	72	87	111	2640	120	48	123	31	35	2.1	5.5
27	139	68	84	100	2700	3510	46	72	24	18	2.1	4.0
28	1680	65	85	86	939	8940	45	80	16	9.6	2.8	3.0
29	2740	62	87	81	---	3210	45	1670	12	6.2	2.6	4.2
30	496	65	87	565	---	684	73	581	11	4.4	2.0	4.2
31	6670	---	448	11200	---	434	---	224	---	3.5	1.6	---
TOTAL	28357.7	84984	15208	20913	29700	37526	4257	3925	11691	562.5	519.9	1079.2
MEAN	915	2833	491	675	1061	1211	142	127	390	18.1	16.8	36.0
MAX	6670	35400	4410	11200	6510	8940	436	1670	2700	90	258	706
MIN	5.8	62	66	81	160	120	45	11	11	3.3	1.6	1.1
CFSM	2.00	6.20	1.07	1.48	2.32	2.65	.31	.28	.85	.04	.04	.08
IN.	2.31	6.92	1.24	1.70	2.42	3.05	.35	.32	.95	.05	.04	.09
AC-FT	56250	168600	30170	41480	58910	74430	8440	7790	23190	1120	1030	2140

CAL YR 1974 TOTAL 287455.3 MEAN 788 MAX 35400 MIN 1.2 CFSM 1.72 IN 23.40 AC-FT 570200
WTR YR 1975 TOTAL 238725.3 MEAN 654 MAX 35400 MIN 1.1 CFSM 1.43 IN 19.43 AC-FT 473500

PEAK DISCHARGE (BASE, 9,000 FT³/S)

DATE	TIME	G.HT.	DISCHARGE
10-31	1815	31.30	9,240
11-4	0600	44.58	40,100
1-31	2100	34.79	13,500
3-28	0145	32.22	10,100

07191220 SPAVINAW CREEK NEAR SYCAMORE, OKLA.

LOCATION.--Lat 36°19'57", long 94°38'24", in NE 1/4 NW 1/4 sec.4, T.21 N., R.25 E., Delaware County, on right bank 1.8 mi (2.9 km) upstream from Cherokee Creek, 4.8 mi (7.7 km) northeast of Row, 6.5 mi (10.5 km) southeast of Sycamore, and at mile 35.0 (56.3 km).

DRAINAGE AREA.--133 mi^2 (344 km^2).

PERIOD OF RECORD.--October 1961 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 875 ft (226.7 m), from topographic map.

AVERAGE DISCHARGE.--14 years, 117 ft^3/s (3.313 m^3/s), 11.95 in/yr (304 mm/yr), 84, 770 acre-ft/yr (105 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 39,800 ft^3/s (1,130 m^3/s) July 27, gage height, 22.07 ft (6.727 m); minimum, 36 ft^3/s (1.02 m^3/s) July 21, 25, 26.
Period of record: Maximum discharge, 39,800 ft^3/s (1,130 m^3/s) July 27, 1975, gage height, 22.07 ft (6.727 m); minimum, 1.2 ft^3/s (.034 m^3/s) Aug. 9, 1964.
According to local residents, a flood of approximately the same magnitude as the July 27, 1975 flood occurred in the early 1880's.

REMARKS.--Records good.

REVISIONS (WATER YEARS).--WSP 2121: 1965(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	57	424	106	698	183	460	410	330	169	56	193	49
2	55	453	104	502	233	416	352	291	141	55	156	51
3	54	3290	101	401	255	353	302	371	120	53	131	54
4	53	6250	99	337	249	302	265	343	107	53	113	53
5	51	1200	96	283	236	261	239	290	113	52	104	52
6	50	851	100	259	221	233	219	243	117	49	94	50
7	49	594	112	209	208	212	206	205	170	48	84	49
8	48	461	135	186	195	191	196	175	169	46	76	51
9	47	378	142	167	179	179	184	155	153	45	74	52
10	46	660	136	164	164	226	172	138	280	44	70	51
11	45	902	153	165	154	267	162	125	144	43	67	50
12	45	640	191	157	144	601	152	116	115	43	64	49
13	45	492	206	146	134	581	147	109	102	42	62	49
14	51	391	193	137	126	455	142	104	92	41	61	50
15	55	327	177	130	120	377	136	100	85	41	64	52
16	67	278	160	123	116	330	131	97	80	40	73	53
17	73	242	144	117	112	295	128	94	109	39	84	57
18	71	215	133	113	107	935	126	92	106	38	86	61
19	68	196	124	109	105	1140	122	89	103	38	80	1400
20	65	177	117	106	102	694	117	87	97	37	74	724
21	62	162	112	103	100	516	112	85	89	36	70	424
22	60	149	108	100	174	431	109	84	82	37	66	318
23	58	141	105	98	736	373	108	82	78	37	63	246
24	56	133	102	97	572	323	107	80	75	37	60	189
25	54	125	98	95	448	284	109	79	72	37	57	153
26	52	119	95	93	415	255	107	80	66	37	55	131
27	51	116	92	91	436	864	104	80	63	11700	53	115
28	51	113	90	89	486	1230	101	81	61	1060	51	106
29	51	111	88	88	---	847	254	249	59	497	50	97
30	52	108	87	87	---	628	303	261	58	335	49	88
31	191	---	275	120	---	496	---	207	---	250	48	---
TOTAL	1833	19698	3981	5550	6712	14575	5382	4922	3275	14966	2434	4924
MEAN	59.1	657	128	179	240	470	179	159	109	483	78.5	164
MAX	191	6250	275	698	736	1230	410	371	280	11700	193	1400
MIN	45	108	87	87	100	179	104	79	58	36	48	49
CFSM	.44	4.94	.96	1.35	1.80	3.53	1.35	1.20	.82	3.63	.59	1.23
IN.	.51	5.51	1.11	1.55	1.88	4.08	1.51	1.38	.92	4.19	.68	1.38
AC-FT	3640	39070	7900	11010	13310	28910	10680	9760	6500	29690	4830	9770

CAL YR 1974 TOTAL 83966 MEAN 230 MAX 8700 MIN 30 CFSM 1.73 IN 23.49 AC-FT 166500
WTR YR 1975 TOTAL 88252 MEAN 242 MAX 11700 MIN 36 CFSM 1.82 IN 24.88 AC-FT 175000

PEAK DISCHARGE (BASE, 2,500 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE
11-4	0215	17.16	16,200
7-27	1000	22.07	39,800

07191400 LAKE HUDSON NEAR LOCUST GROVE, OKLA.

LOCATION.--Lat 36°13'54", long 95°11'36", in SE 1/4 NW 1/4 sec.9, T.20 N., R.20 E., Mayes County, at left side of Robert S. Kerr dam, 2.0 mi (3.2 km) northwest of Locust Grove, 3.5 mi (5.6 km) downstream from Salina Creek, and at mile 47.3 (76.1 km).

DRAINAGE AREA.--11,534 mi^2 (29,873 km^2).

PERIOD OF RECORD.--October 1964 to current year.

GAGE.--Remote-controlled indicator and nonrecording gage. Datum of gage is at mean sea level (levels by Grand River Dam Authority).

EXTREMES.--Current year: Maximum contents, 436,300 acre-ft (538 hm^3) Nov. 9, elevation, 635.56 ft (193.719 m); minimum, 190,800 acre-ft (235 hm^3) Dec. 19, elevation, 618.11 ft (188.400 m).
Period of record: Maximum contents, 436,300 acre-ft (538 hm^3), Nov. 9, 1974, elevation, 635.56 ft (193.719 m); minimum since power pool first filled, 183,100 acre-ft (226 hm^3) Dec. 24, 1967, elevation, 617.38 ft (188.177 m).

REMARKS.--Reservoir is formed by earth dam and gated concrete spillway. Storage began Nov. 12, 1963; power pool first filled June 12, 1964. Capacity, 444,500 acre-ft (548 hm^3) at elevation 636.0 ft (193.85 m), top of taintor gates, 200,300 acre-ft (247 hm^3) at elevation 619.0 ft (188.67 m) power pool, and 48,630 acre-ft (60.0 hm^3) at elevation 599.0 ft (182.58 m), top of spillway crest. Figures given herein represent total contents. Reservoir was designed for flood control and power development.

COOPERATION.--Records furnished by Grand River Dam Authority.

MONTHEND ELEVATION AND CONTENTS, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30	619.71	208,100	--
Oct. 31	620.62	218,400	+10,300
Nov. 30	622.16	236,400	+18,000
Dec. 31	619.38	204,500	-31,900
CAL YR 1974	--	--	-32,800
Jan. 31	619.60	206,900	+2,400
Feb. 28	621.52	228,800	+21,900
Mar. 31	626.22	288,200	+59,400
Apr. 30	618.92	199,400	-88,800
May 31	619.67	207,600	+8,200
June 30	620.11	212,600	+5,000
July 31	619.90	210,200	-2,400
Aug. 31	620.06	212,000	+1,800
Sept. 30	619.58	206,700	-5,300
WTR YR 1975	--	--	-1,400

07191500 NEOSHO RIVER NEAR CHOUTEAU, OKLA.

LOCATION.--Lat 36°14'13", long 95°13'35", in SE 1/4 SE 1/4 sec.1, T.20 N., R.19 E., Mayes County, at county road bridge between Locust Grove and Pryor, 2.5 mi (4.0 km) downstream from Lake Hudson, 5.0 mi (8.0 km) upstream from Pryor Creek, and 7.5 mi (12.1 km) northeast of Chouteau, and at mile 44.7 (71.9 km).

DRAINAGE AREA.--11,546 mi^2 (29,904 km^2).

PERIOD OF RECORD.--October 1937 to September 1950, October 1963 to current year.

GAGE.--Water-stage recorder. Datum of gage is 551.83 ft (168.198 m) above mean sea level (levels by Corps of Engineers). Prior to Apr. 3, 1941, nonrecording gage at bridge on State Highway 33, 5.7 mi (9.2 km) downstream, at datum 15.46 ft (9.112 m) lower. Auxiliary water-stage recorder since Oct. 4, 1963, at former site and supplemental water-stage recorder since Apr. 6, 1964 at Kerr Dam 2.5 mi (4.0 km) upstream.

AVERAGE DISCHARGE.--25 years, 8,729 ft^3/s (247.2 m^3/s), 6,324,000 acre-ft/yr (7.80 km^3/yr).

EXTREMES.--Current year: Maximum discharge, 97,500 ft^3/s (2,760 m^3/s) Nov. 5; maximum gage height, 31.60 ft (9.632 m); minimum daily discharge, 30 ft^3/s (0.85 m^3/s) at times.
Period of record: Maximum discharge, 400,000 ft^3/s (11,328 m^3/s) May 20, 1943, gage height, 45.00 ft (13.716 m), from rating curve extended above 140,000 ft^3/s (3,965 m^3/s) on basis of slope-area measurement of peak flow; minimum daily, 12 ft^3/s (.32 m^3/s) Nov. 13, 1963 (caused by closure of Kerr Dam).

REMARKS.--Records good. Flow regulated since 1940 by Lake O' The Cherokees (see station 07190000), and completely regulated since 1963 by Lake Hudson (see sta. 07191400).

REVISIONS.--WSP 1117: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11300	25500	14800	9960	18100	22300	30400	11300	170	14500	3010	947
2	3950	26200	21100	17500	3300	21500	30700	12900	11300	17400	1420	3780
3	2390	36800	25900	15200	18800	27000	31300	16900	8400	19200	515	4800
4	177	84000	19100	18100	18500	27500	32400	927	10600	9750	2590	2350
5	128	95000	11600	10300	21600	18700	18400	12000	11700	13100	5110	465
6	127	82000	13700	14400	23700	23900	15200	9610	16800	13600	3570	141
7	278	71000	18400	14500	14100	22300	23000	9920	13400	13000	4760	140
8	4740	67500	11000	14900	18400	21300	21900	6520	10700	8300	3550	135
9	1020	66000	11400	12500	18100	14800	13700	2910	10200	11100	4030	137
10	43	58000	9800	13600	16600	22100	19900	5070	13200	13500	4640	1310
11	331	53000	20400	13900	22500	23900	15400	213	16800	7580	6960	136
12	30	44000	23200	11600	19400	24500	10200	6180	17900	5240	3610	130
13	30	37000	13800	11400	16300	26600	10200	5640	17300	5310	195	126
14	16800	36000	12000	15000	13400	33200	13100	2880	15500	3760	175	126
15	23700	35200	12800	13600	14000	33100	12800	203	8570	5970	3160	126
16	12100	28500	19300	10900	11800	33100	12900	3420	10400	4200	5210	126
17	14100	30500	7490	11700	13500	25200	16400	1530	23000	190	1840	124
18	12700	32000	16800	293	12300	27800	11200	2340	30500	4030	11200	6150
19	9040	27500	17900	260	13100	32000	12000	3640	17400	3230	3590	18000
20	1830	28000	9760	5960	14800	32200	12700	1550	26000	1850	6020	23200
21	7200	22000	12800	7340	14900	32500	14000	9680	30000	2000	5450	17000
22	7130	22800	7250	5590	20300	32600	14400	4880	26600	2970	7530	7700
23	4680	21000	19500	5210	17100	34900	9260	1070	25900	2760	2960	10900
24	1280	22000	14500	6320	18700	25100	20700	182	20200	186	189	7980
25	30	23000	5980	2060	23900	22700	12200	186	15800	1180	2980	5100
26	30	28000	20300	769	23900	32800	5390	8760	19100	187	2310	7790
27	30	18700	11300	7870	25200	22000	10200	12200	18000	11000	4480	223
28	11500	14600	12800	4700	28100	29900	16800	7140	18000	17900	427	117
29	11300	15300	7240	5690	---	34900	17000	6520	14900	9430	392	5300
30	9150	12800	18600	12700	---	32800	12500	6830	11100	7200	177	7180
31	17100	---	14500	21200	---	30900	---	174	---	204	1970	---
TOTAL	184244	1163900	455020	315022	494200	842100	496250	173275	489240	229827	104020	131739
MEAN	5943	38800	14680	10160	17650	27160	16540	5590	16310	7414	3355	4391
MAX	23700	95000	25900	21200	28100	34900	32400	16900	30500	19200	11200	23200
MIN	30	12800	5980	260	3300	14800	5390	174	170	186	175	117
AC-FT	365400	2309000	902500	624800	980200	1670000	984300	343700	970400	455900	206300	261300

CAL YR 1974 TOTAL 5619445 MEAN 15400 MAX 95000 MIN 30 AC-FT 11150000
WTR YR 1975 TOTAL 5078837 MEAN 13910 MAX 95000 MIN 30 AC-FT 10070000

07193000 FORT GIBSON LAKE NEAR FORT GIBSON, OKLA.

LOCATION.--Lat 35°52'16", long 95°13'43", in NW 1/4 NW 1/4 sec.18, T.16 N., R.20 E., Cherokee County, in control tower near left end of Fort Gibson Dam on Neosho River, 4.0 mi (6.4 km) north of Fort Gibson, and at mile 7.7 (12.4 km).

DRAINAGE AREA.--12,492 km² (32,354 km²).

PERIOD OF RECORD.--October 1949 to current year. Prior to October 1970 published as Fort Gibson Reservoir near Fort Gibson.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level. Prior to Jan. 13, 1950, nonrecording gage at same site and datum.

EXTREMES.--Current year: Maximum contents, 1,270,000 acre-ft (1.57 km³) Nov. 9, elevation, 581.71 ft (177.305 m); minimum, 320,000 acre-ft (395 hm³) May 12, elevation, 551.51 ft (168.100 m).
Period of record: Maximum contents, 1,278,000 acre-ft (1.58 km³) May 12, 1961, elevation, 581.88 ft (177.357 m); minimum since first use of power pool, 303,800 acre-ft (375 hm³) May 26, 1955, elevation, 550.56 ft (167.811 m).

REMARKS.--Reservoir is formed by concrete-gravity and earth-fill dam. Regulated storage began Sept. 5, 1949; power pool was first maintained in 1953. Capacity, 1,284,000 acre-ft (1.58 km³) at elevation 582.0 ft (177.39 m), flood-control pool, 365,200 acre-ft (450 hm³) at elevation 554.0 ft (168.86 m), maximum power pool, and 311,300 acre-ft (384 hm³) at elevation 551.0 ft (167.94 m) (minimum power pool). Figures given herein represent total contents. Reservoir was designed for flood control and power development.

COOPERATION.--Records furnished by Corps of Engineers.

REVISIONS (WATER YEARS).--WSP 1731: 1950(M).

Capacity table (elevation, in feet, and contents, in acre-feet)

551	331,300	569	744,100
557	425,400	575	963,900
563	567,500	582	1,284,000

CONTENTS, IN ACRE-FEET, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	364100	490200	374900	381500	429600	524800	541100	388300	370300	374700	358900	342900
2	363700	553600	376400	397900	421200	516400	522100	396100	382100	374700	357600	346000
3	360600	633800	396100	410300	428600	529100	503600	402500	387500	385700	354600	350300
4	355700	837100	407800	426900	432300	537100	493600	377200	395900	384700	350300	347000
5	356100	1040000	394500	425800	439100	526400	477900	377600	398500	384100	351200	343600
6	357200	1180000	397300	435300	444800	537100	459500	375600	412000	388700	355100	343600
7	353800	1249000	408200	438000	436400	527100	457600	373200	419300	389900	357600	343600
8	357200	1268000	399300	436400	435600	514200	454700	366500	400500	383700	358000	340700
9	353200	1245000	401700	430600	427700	476600	436000	351900	378500	384500	361800	340700
10	350600	1218000	390900	431100	410900	461100	433200	340700	376300	392300	368000	342200
11	348300	1176000	405500	430000	396500	446800	417800	320500	390100	382500	376200	344900
12	348700	1106000	421800	419300	389700	436900	395300	323500	395100	369000	372800	344300
13	350800	1058000	421800	412800	384100	421000	381900	333500	400900	365200	363300	344300
14	375100	1022000	417000	412200	380500	413800	361500	335700	401700	357200	358200	344200
15	400900	994100	408800	408600	381700	409000	376800	333500	394100	360100	359500	346700
16	394900	959000	417000	400500	378300	409000	370900	334400	393300	359500	361800	348100
17	387500	921500	399900	397900	380700	429600	380700	335000	419100	350800	357600	346000
18	390500	889400	401700	397200	380900	476600	376500	339100	451400	350300	368800	349900
19	384100	850900	406500	357800	381300	538600	377900	341100	438000	351900	365800	408600
20	369200	809300	394900	359500	382500	574300	377400	337500	431700	354800	368600	430600
21	362700	757600	387100	368800	388100	590500	378900	350100	432800	354000	369000	427100
22	362200	708400	370000	365200	433000	587100	382100	349700	427100	352700	368900	395300
23	363300	661000	378700	361800	465500	567500	374900	339100	419300	353800	366700	386500
24	351500	610600	379900	364100	471500	535600	393100	342400	404500	347600	359900	383300
25	343300	561500	362500	361200	485200	500300	392500	353800	380500	345100	354000	376400
26	343600	519600	377400	357600	496200	485000	376600	367100	372200	346300	354000	374500
27	344200	474000	372400	361600	508400	466400	369000	374500	376000	359300	355700	376400
28	357400	429000	369000	361000	524800	534400	380700	367300	382500	356300	350800	377900
29	374700	406300	358000	361200	---	584000	391700	371500	383700	352900	344300	372800
30	388700	389500	369400	376400	---	583500	395700	372800	376000	375600	341600	375300
31	443000	---	379500	400900	---	582300	---	372600	---	363700	344500	---
MAX	443000	1268000	421800	438000	524800	590500	541100	402500	451400	392300	376200	430600
MIN	343300	389500	358000	357600	378300	409000	369000	320500	370300	345100	341600	340700
(†)	557.82	555.25	554.75	555.82	561.33	562.80	555.56	554.39	554.57	553.92	552.89	554.[illegible]
(‡)	+92,200	-53,500	-10,000	+21,400	+123,900	+37,500	-166,600	-23,100	+3,400	-12,300	-19,200	+30,800

CAL YR 1974.....‡ -70,600
WTR YR 1975.....‡ +24,500

† Elevation, in feet, at end of month.
‡ Change in contents, in acre-ft.

07193500 NEOSHO RIVER BELOW FORT GIBSON LAKE, NEAR FORT GIBSON, OKLA.

LOCATION.--Lat 35°51'15", long 95°13'45", in SE 1/4 NW 1/4 sec.19, T.16 N., R.20 E., Cherokee County, on left bank 1.1 mi (1.8 km) downstream from Fort Gibson Dam, 4.5 mi (7.2 km) north of Fort Gibson, and at mile 6.6 (10.6 km).

DRAINAGE AREA.--12,495 mi^2 (32,362 km^2).

PERIOD OF RECORD.--May 1950 to current year. Prior to October 1970 published as Neosho River below Fort Gibson Reservoir, near Fort Gibson.

GAGE.--Water-stage recorder. Datum of gage is 483.75 ft (147.447 m) above mean sea level. May 11, 1950, to Aug. 20, 1951, nonrecording gage and Aug. 21, 1951, to June 11, 1952, water-stage recorder, at site 4.4 mi (7.1 km) downstream at datum 8.00 ft (2.438 m) lower and used as auxiliary gage since June 10, 1971.

AVERAGE DISCHARGE.--25 years, 7,934 (225 m^3/s), 5,748,000 acre-ft/yr (7.09 km^3/yr).

EXTREMES.--1971 water year: Maximum discharge, 21,700 ft^3/s (615 m^3/s) Oct. 28, gage height, 11.23 ft (3.423 m); minimum daily, 15 ft^3/s (0.42 m^3/s) at times.
Current year: Maximum discharge, 93,900 ft^3/s (2,660 m^3/s) Nov. 10, maximum gage height, 24.47 ft (7.458 m) Nov. 10; minimum daily discharge, 15 ft^3/s (0.42 m^3/s) at times.
Period of record: Maximum discharge, 223,000 ft^3/s (6,320 m^3/s) May 26, 1957, gage height, 37.60 ft (11.460 m); minimum, 12 ft^3/s (0.34 m^3/s), Oct. 10, 1957, Aug. 23, 1964.
Flood in May 1943 reached a stage of 43.0 ft (13.11 m), from high-water profile by Corps of Engineers.

REMARKS.--Records good. Flow completely regulated by Fort Gibson Lake (See sta. 07193000). 1971 water year not previously published. See pg. 344 for water-quality record.

COOPERATION.--Gage-height record and 19 discharge measurements furnished by Corps of Engineers, records computed by Geological Survey.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9990	15500	4100	2030	6650	15700	240	15	9240	11100	637	2460
2	8160	15700	1980	3250	7070	15500	1200	15	10800	11100	6420	213
3	4870	15500	1660	700	6160	15500	15	320	11300	11100	5080	1110
4	2990	12900	1100	10300	6620	15700	15	230	11000	10800	6090	30
5	3670	11100	179	16900	7370	14300	1300	330	10800	8320	6650	860
6	4220	10900	139	16500	1700	12300	900	220	10900	7640	8590	15
7	3600	4180	3420	16800	2600	11700	350	450	10800	8170	4460	3420
8	3600	922	5660	16700	6890	11200	150	15	10600	8430	4210	3120
9	6530	6620	6830	16700	7780	11700	150	15	11000	8130	5840	2830
10	11000	6970	6690	13300	7090	11600	150	390	11100	7390	6930	3130
11	11000	7230	5230	10400	6870	11800	230	3100	12800	29	9190	443
12	11200	7410	7430	11300	1800	11500	340	550	14400	5510	6980	198
13	11200	8000	3800	11500	2300	11300	230	4500	14400	10600	5690	2380
14	3530	5590	3800	12200	1600	8260	550	3400	14400	8160	2930	1530
15	5290	2760	4210	12700	3000	4500	150	900	12400	11100	2550	329
16	10900	2460	4700	12900	2500	4700	800	15	11100	11100	4760	532
17	10900	4600	3230	12800	6000	4600	15	3000	11100	11100	5850	852
18	10900	4540	4640	12900	7670	4500	150	2900	11100	11000	5720	802
19	10900	3800	800	12100	8140	5600	220	1000	11100	11000	6500	15
20	11000	4750	700	11700	4350	2100	340	2000	11200	10700	6740	1440
21	11100	1700	5680	11300	2000	1200	230	2200	11100	8780	6250	876
22	11300	1160	5180	6290	8020	5650	560	1600	11000	10700	3150	1070
23	11400	6640	2660	6750	7590	6170	230	15	11000	10800	5400	1650
24	11400	8150	2340	3330	10800	6330	15	6400	12300	10100	7090	1720
25	11400	7420	350	4640	11500	6870	160	7780	13300	2640	6330	38
26	7560	1570	1100	4630	13500	5760	230	11300	13400	6670	5150	1780
27	6790	952	350	5350	15700	800	500	11100	13300	10800	6030	3630
28	16800	1970	4540	4300	15700	700	15	10800	12400	9200	2550	4820
29	20900	84	4090	3800	---	2500	430	9990	11200	9110	104	4440
30	18900	3830	4440	5510	---	1100	540	6350	11200	8700	2310	5400
31	15500	---	4740	2500	---	800	---	6190	---	4470	2510	---
TOTAL	298500	184908	105968	292080	188970	241940	10405	97090	351740	274449	158691	51133
MEAN	9629	6164	3418	9422	6749	7805	347	3132	11720	8853	5119	1704
MAX	20900	15700	7430	16900	15700	15700	1300	11300	14400	11100	9190	5400
MIN	2990	84	139	700	1600	700	15	15	9240	29	104	15
AC-FT	592100	366800	210200	579300	374800	479900	20640	192600	697700	544400	314800	101400

CAL YR 1970 TOTAL 2928565 MEAN 8023 MAX 51700 MIN 20 AC-FT 5809000
WTR YR 1971 TOTAL 2255874 MEAN 6180 MAX 20900 MIN 15 AC-FT 4475000

07193500 NEOSHO RIVER BELOW FORT GIBSON LAKE, NEAR FORT GIBSON, OKLA.--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4900	9980	20300	11800	11000	25100	42500	16000	2210	15600	5250	1660
2	4280	14600	18500	11600	11100	26400	41900	16000	5270	15700	2210	2720
3	3650	19200	16500	11500	17500	22000	42000	16200	6930	13800	2120	2500
4	3190	1110	16700	11400	21000	24200	38700	16000	7000	12600	4660	4230
5	188	732	16700	11500	21000	24600	28400	13000	12200	12800	4130	3500
6	486	2600	16600	11300	21100	20800	26100	11600	13700	12700	2450	41
7	2010	34300	16500	14400	21000	26800	25700	9580	16100	12200	3470	18
8	3580	59500	16500	16500	20900	29600	25700	11700	20200	11900	2090	2050
9	3610	77200	16700	16600	21000	35900	24600	11700	22600	11700	3460	34
10	1470	77100	16800	16400	26600	35000	23700	11900	16300	10800	1270	104
11	2090	69800	16500	16500	27500	34400	23300	11900	14400	10600	1670	19
12	22	72800	16400	16400	24900	35300	22900	3810	16700	10500	5080	15
13	26	63500	16500	16400	21200	38600	18300	2150	16700	9000	5990	15
14	6420	52100	16700	16500	16400	39700	15500	1460	16900	7900	4950	23
15	14000	50200	16700	16300	14000	38200	15400	1850	14700	4800	5960	20
16	18300	50400	16600	16300	14000	35700	15000	2390	12600	4700	5450	15
17	18000	46400	16600	13700	14000	17700	13500	1120	12500	4750	5400	1500
18	12700	46100	16700	11700	14000	14800	13400	15	18200	4000	7900	3930
19	11800	47400	16600	11300	14000	7540	13400	3300	26700	3000	6150	12400
20	11800	48200	16600	5420	13900	16400	13400	3850	30700	15	5300	23300
21	11300	47200	16500	3640	14000	25800	13400	3400	31000	2700	5490	23500
22	8000	46700	16500	7660	8540	37900	11800	6000	31100	3850	8770	23000
23	5800	46600	16400	7020	6480	40600	9100	6680	30700	3000	5200	16600
24	6990	45000	15200	5750	17900	40500	10400	15	30100	4210	3440	11400
25	5390	44900	14100	4340	22000	40100	12300	15	29200	2960	5460	9360
26	16	44600	14200	3330	22100	40400	14000	3540	23700	31	3650	9410
27	37	41700	14200	6470	22300	33000	12500	9520	17900	1420	4180	181
28	6090	36800	14100	5590	22400	14900	12000	11400	15900	7750	3520	15
29	5240	26700	14100	5830	---	15000	13000	9970	15600	11300	3930	7340
30	3610	20600	13300	6830	---	34600	14200	10600	15500	11500	1710	6740
31	8990	---	11800	11000	---	43300	---	1140	---	6680	28	---
TOTAL	183985	1244022	498100	340980	501820	914840	606100	227805	543310	244466	130338	165640
MEAN	5935	41470	16070	11000	17920	29510	20200	7349	18110	7886	4204	5521
MAX	18300	77200	20300	16600	27500	43300	42500	16200	31100	15700	8770	23500
MIN	16	732	11800	3330	6480	7540	9100	15	2210	15	28	15
AC-FT	364900	2468000	988000	676300	995400	1815000	1202000	451900	1078000	484900	258500	328500

CAL YR 1974 TOTAL 6029341 MEAN 16520 MAX 77200 MIN 15 AC-FT 11960000
WTR YR 1975 TOTAL 5601406 MEAN 15350 MAX 77200 MIN 15 AC-FT 11110000

07195500 ILLINOIS RIVER NEAR WATTS, OKLA.

LOCATION.--Lat 36°07'48", long 94°34'12", in NE 1/4 sec.18, T.19 N., R.26 E., Adair County, near right bank on downstream side of pier of bridge on U.S. Highway 59, 1.5 mi (2.4 km) north of Watts, 4.5 mi (7.2 km) downstream from Cincinnati Creek, and at mile 106.2 (170.9 km).

DRAINAGE AREA.--635 mi^2 (1,645 km^2).

PERIOD OF RECORD.--August 1955 to current year.

GAGE.--Water-stage recorder. Datum of gage is 893.78 ft (272.424 m) above mean sea level.

AVERAGE DISCHARGE.--20 years, 622 ft^3/s (17.62 m^3/s), 13.31 in/yr (338 mm/yr), 450,600 acre-ft/yr (556 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 25,500 ft^3/s (722 m^3/s) Nov. 4, gage height, 21.50 ft (6.553 m); minimum daily, 202 ft^3/s (5.72 m^3/s) Sept. 9.
Period of record: Maximum discharge, 68,000 ft^3/s (1,930 m^3/s) July 25, 1960, gage height, 25.96 ft (7.913 m), from rating curve extended above 51,000 ft^3/s (1,440 m^3/s); minimum, 8.6 ft^3/s (0.24 m^3/s) Oct. 26, 1955, Sept. 19, Oct. 14, 1956.

REMARKS.--Records good. Some regulations at low flow by Lake Francis Dam, 0.8 mile (1.29 km) above station. Since July 2, 1957, small diversion above station for municipal water supply for city of Siloam Springs, Ark.

COOPERATION.--Gage-height record and 18 discharge measurements furnished by Corps of Engineers; records computed by Geological Survey.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	469	3090	508	2900	1150	2030	1630	1060	769	384	330	291
2	429	3040	493	1680	1670	1680	1450	926	414	352	312	258
3	400	10300	480	1340	1450	1430	1290	1480	554	340	292	241
4	389	21100	470	1130	1320	1280	1140	1310	532	360	275	231
5	354	7080	462	977	1230	1170	1050	1010	705	326	261	218
6	313	3400	532	857	1190	1090	971	861	812	300	250	222
7	304	2330	1320	793	1020	984	922	762	1010	283	256	217
8	296	1720	1130	736	932	917	927	682	1100	274	259	206
9	289	1420	841	698	878	885	961	619	753	270	244	202
10	281	2620	727	1260	789	1960	873	578	737	299	232	276
11	270	4790	745	1510	745	2100	810	547	1380	308	220	337
12	259	2590	876	982	712	3440	765	527	978	281	213	362
13	254	1880	794	807	663	3210	738	500	737	265	209	431
14	285	1530	725	728	623	2160	729	474	626	251	238	371
15	311	1220	669	688	598	1750	720	455	917	243	446	425
16	351	1110	629	655	584	1500	690	442	975	240	671	987
17	323	1020	597	617	620	1360	665	428	1040	236	532	671
18	298	949	571	584	622	3570	637	416	1350	230	410	503
19	281	878	543	565	582	6640	628	405	938	232	347	7660
20	263	826	519	551	556	2900	607	883	738	233	330	7760
21	256	752	502	514	523	2090	573	791	629	223	357	1920
22	237	664	488	499	6140	1800	557	605	556	221	309	1250
23	244	651	466	482	11400	1570	558	508	502	232	282	977
24	246	632	445	473	4000	1310	543	467	463	273	267	795
25	250	602	443	469	2880	1160	799	471	613	280	245	678
26	266	578	430	468	2900	1080	852	438	539	307	228	595
27	252	552	421	449	2730	2440	631	418	457	926	231	533
28	282	539	420	437	2390	8790	944	409	418	2660	260	482
29	293	522	417	426	---	4020	1280	2190	387	583	252	445
30	351	520	412	421	---	2660	1080	2100	389	434	293	413
31	1250	---	1200	487	---	2050	---	988	---	369	330	---
TOTAL	10346	78905	19275	25183	50897	71026	26000	23750	22018	12215	9381	29957
MEAN	334	2630	622	812	1818	2291	867	766	734	394	303	999
MAX	1250	21100	1320	2900	11400	8790	1630	2190	1380	2660	671	7760
MIN	237	520	412	421	523	885	543	405	387	221	209	202
CFSM	.53	4.14	.98	1.28	2.86	3.61	1.37	1.21	1.16	.62	.48	1.57
IN.	.61	4.62	1.13	1.48	2.98	4.16	1.52	1.39	1.29	.72	.55	1.75
AC-FT	20520	156500	38230	49950	101000	140900	51570	47110	43670	24230	18610	59420

CAL YR 1974 TOTAL 386446 MEAN 1059 MAX 24700 MIN 46 CFSM 1.67 IN 22.64 AC-FT 766500
WTR YR 1975 TOTAL 378953 MEAN 1038 MAX 21100 MIN 202 CFSM 1.63 IN 22.20 AC-FT 751700

PEAK DISCHARGE (BASE, 6,500 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
11-4	1345	21.50	25,500	3-28	0645	16.39	14,100
2-23	0445	18.49	18,200	7-28	0200	11.57	6,680
3-19	0300	14.50	10,900	9-19	2300	18.89	18,800

07196000 FLINT CREEK NEAR KANSAS, OKLA.

LOCATION.--Lat 36°11'54", long 94°42'30", in SW 1/4 sec.24, T.20 N., R.24 E., Delaware County, near left bank on downstream side of pier of bridge on State Highway 33, 6.0 mi (9.7 km) southeast of Kansas, 6.0 mi (9.7 km) downstream from Sager Creek, and at mile 2.8 (4.5 km).

DRAINAGE AREA.--110 mi^2 (285 km^2).

PERIOD OF RECORD.--August 1955 to current year.

GAGE.--Water-stage recorder. Datum of gage is 854.59 ft (260.479 m) above mean sea level.

AVERAGE DISCHARGE.--20 years, 121 ft^3/s (3.427 m^3/s), 14.93 in/yr (379 mm/yr), 87,660 acre-ft/yr (108 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 16,000 ft^3/s (453 m^3/s) Nov. 4, gage height, 13.70 ft (4.176 m); minimum daily, 51 ft^3/s (1.44 m^3/s) July 15, 16, Aug. 13.
Period of record: Maximum discharge, 23,600 ft^3/s (668 m^3/s) Aug. 14, 1961, gage height, 15.66 ft (4,773 m), from rating curve extended above 7,200 ft^3/s (204 m^3/s); minimum dialy, 0.6 ft^3/s (0.017 m^3/s) Oct. 11-13, 1956.
Flood in 1928 reached a stage of 20.2 ft, from information by local resident.

REMARKS.--Records good. Small diversion above station for irrigation.

COOPERATION.--Gage-height record and 22 discharge measurements furnished by Corps of Engineers; records computed by Geological Survey.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	134	612	114	556	201	384	378	223	312	105	91	74
2	126	611	111	406	316	343	347	225	257	80	82	64
3	119	4290	107	356	289	317	321	337	195	72	75	60
4	111	5640	106	317	266	295	300	292	160	70	68	58
5	105	1160	101	283	264	271	279	251	158	68	65	56
6	100	713	118	252	259	248	257	224	149	66	62	61
7	97	529	161	221	241	221	245	196	703	65	61	57
8	93	434	162	198	227	198	234	172	408	64	63	54
9	91	384	156	180	206	194	214	153	285	63	59	53
10	88	878	149	186	188	429	195	141	311	72	56	65
11	84	872	164	183	177	442	181	129	461	68	54	60
12	82	558	179	165	163	750	171	121	282	59	53	135
13	81	447	182	154	150	553	165	116	243	53	51	114
14	162	384	174	147	142	430	158	111	219	52	78	91
15	190	347	163	140	133	373	152	107	357	51	182	105
16	162	317	152	133	127	337	147	102	239	51	192	146
17	142	290	142	133	123	314	137	98	459	55	140	122
18	125	266	132	121	118	1020	134	94	390	63	112	109
19	112	249	124	115	113	815	132	93	297	62	96	3570
20	103	227	119	110	109	512	126	116	259	62	85	938
21	95	202	113	107	105	410	125	107	230	58	76	474
22	90	183	108	103	534	356	123	97	201	57	71	349
23	85	169	105	99	570	319	120	92	186	59	66	277
24	82	156	102	100	429	292	117	89	167	60	61	232
25	79	146	97	97	379	272	114	99	159	61	57	195
26	77	137	95	94	407	259	110	99	132	60	56	166
27	73	130	93	92	440	766	106	93	120	708	55	144
28	85	125	91	93	419	853	213	103	112	322	62	127
29	96	122	89	91	---	644	216	2200	105	163	63	118
30	93	119	89	88	---	494	230	598	92	123	85	110
31	710	---	585	138	---	424	---	385	---	103	100	---
TOTAL	3872	20697	4383	5458	7095	13535	5747	7263	7648	3075	2477	8184
MEAN	125	690	141	176	253	437	192	234	255	99.2	79.9	273
MAX	710	5640	585	556	570	1020	378	2200	703	708	192	3570
MIN	73	119	89	88	105	194	106	89	92	51	51	53
CFSM	1.14	6.27	1.28	1.60	2.30	3.97	1.75	2.13	2.32	.90	.73	2.48
IN.	1.31	7.00	1.48	1.85	2.40	4.58	1.94	2.46	2.59	1.04	.84	2.77
AC-FT	7680	41050	8690	10830	14070	26850	11400	14410	15170	6100	4910	16230

CAL YR 1974 TOTAL 93743 MEAN 257 MAX 12300 MIN 36 CFSM 2.34 IN 31.70 AC-FT 185900
WTR YR 1975 TOTAL 89434 MEAN 245 MAX 5640 MIN 51 CFSM 2.23 IN 30.24 AC-FT 177400

PEAK DISCHARGE (BASE, 2,500 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
11-4	0145	13.70	16,000	7-27	1800	8.95	3,050
5-29	0730	9.45	4,330	9-19	0915	11.53	9,060

07196500 ILLINOIS RIVER NEAR TAHLEQUAH, OKLA.

LOCATION.--Lat 35°55'17", long 94°55'15", in SE 1/4 sec.26, T.17 N., R.22 E., Cherokee County, near center of span on downstream side of pier of bridge 0.2 mi (0.3 km) downstream from U.S. Highway 62, 2.2 mi (3.5 km) northeast of Tahlequah, 6.5 mi (10.5 km) upstream from Baron Fork, and at mile 55.8 (89.8 km).

DRAINAGE AREA.--959 mi^2 (2,484 km^2).

PERIOD OF RECORD.--October 1935 to current year. Monthly discharge only for some periods, published in WSP 1311.

GAGE.--Water-stage recorder. Datum of gage is 664.14 ft (202.430 m) above mean sea level (Corps of Engineers bench mark). Prior to Feb. 23, 1939, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--40 years, 917 ft^3/s (25.97 m^3/s), 12.98 in/yr (330 mm/yr), 664,400 acre-ft/yr (819 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 31,700 ft^3/s (898 m^3/s) Nov. 4, gage height, 18.58 ft (5.663 m); minimum, 296 ft^3/s (8.38 m^3/s) Aug. 14.
Period of record: Maximum discharge, 150,000 ft^3/s (4,250 m^3/s) May 10, 1950, gage height, 27.94 ft (8.516 m), from rating curve extended above 77,000 ft^3/s (2,180 m^3/s) on basis of slope-area measurement of peak flow; minimum daily, 0.1 ft^3/s (.003 m^3/s) Oct. 10-14, 1956.
Flood in January 1916 reached a stage of about 26 ft (7.9 m).

REMARKS.--Records good.

REVISIONS.--WSP 1117: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	956	5740	722	2710	746	5790	3090	1570	1970	606	808	459
2	857	5660	701	4010	1740	3360	2590	1550	1430	602	646	439
3	786	6480	676	2980	2580	2920	2250	1780	955	560	529	398
4	727	23900	653	2490	2500	2600	1980	2290	854	523	455	365
5	683	25900	635	2090	2370	2320	1750	2100	805	518	412	343
6	638	10400	679	1780	2220	2100	1580	1700	869	497	394	330
7	590	5040	788	1540	2120	1900	1450	1420	1120	469	378	317
8	553	3620	1480	1370	1890	1710	1380	1210	1740	446	363	313
9	526	2920	1580	1220	1710	1590	1330	1080	1640	423	363	325
10	502	2890	1290	1160	1580	1750	1300	1020	1220	424	353	416
11	481	4790	1160	1530	1450	2460	1190	880	1350	442	336	354
12	461	6330	1160	1950	1340	3560	1100	802	1950	443	320	493
13	448	4050	1290	1450	1260	4810	1030	754	1590	446	305	563
14	544	3150	1240	1200	1180	4390	992	720	1240	451	360	610
15	749	2650	1150	1070	1100	3290	953	678	1240	448	476	761
16	781	2220	1050	981	1060	2780	927	647	1420	437	797	870
17	778	1950	973	922	1030	2430	887	621	1920	429	920	1230
18	731	1760	909	875	1040	2930	847	603	2360	437	862	1150
19	669	1610	855	813	1050	6480	802	585	2420	442	707	1500
20	614	1460	801	775	1020	7990	772	592	1910	444	598	10400
21	571	1340	755	745	974	4260	744	906	1540	442	527	11100
22	535	1210	722	700	1150	3220	709	1010	1280	446	512	3190
23	502	1100	693	669	6200	2780	691	836	1080	447	481	2090
24	477	993	659	649	11500	2430	677	714	953	457	444	1620
25	470	943	631	631	5390	2040	655	665	872	481	412	1330
26	462	896	612	616	4200	1810	766	660	905	543	387	1100
27	461	848	596	608	4310	2080	937	649	868	565	360	944
28	486	799	577	590	4170	4490	928	604	763	1460	354	832
29	546	769	567	571	---	9630	1190	3360	694	3140	370	749
30	582	742	559	559	---	5600	1680	5590	645	1520	397	687
31	2260	---	825	606	---	3850	---	3300	---	1040	410	---
TOTAL	20426	132210	26990	39660	68880	108350	37177	40916	39603	20028	15038	45316
MEAN	659	4407	871	1286	2460	3495	1239	1320	1320	646	485	1511
MAX	2260	25900	1580	4010	11500	9630	3090	5590	2420	3140	920	11100
MIN	448	742	559	559	746	1590	655	585	645	423	305	313
CFSM	.69	4.60	.91	1.34	2.57	3.64	1.29	1.38	1.38	.67	.51	1.58
IN.	.79	5.13	1.05	1.55	2.67	4.20	1.44	1.59	1.54	.78	.58	1.76
AC-FT	40510	262200	53530	79060	136600	214900	73740	81160	78550	39730	29830	89890

CAL YR 1974 TOTAL 629563 MEAN 1725 MAX 56600 MIN 189 CFSM 1.80 IN 24.42 AC-FT 1249000
WTR YR 1975 TOTAL 594796 MEAN 1630 MAX 25900 MIN 305 CFSM 1.70 IN 23.07 AC-FT 1180000

PEAK DISCHARGE (BASE, 7,000 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
11-4	1915	18.58	31,700	3-29	1030	13.18	11,500
11-12	0545	10.88	7,140	5-30	0245	10.73	7,000
2-24	0815	14.43	14,400	9-21	0400	14.58	16,100
3-20	0530	12.50	10,100				

07197000 BARON FORK AT ELDON, OKLA.

LOCATION.--Lat 35°55'16", long 94°50'18", in SE 1/4 sec.27, T.17 N., R.23 E., Cherokee County, on downstream side of left pier of bridge on State Highway 51, 0.4 mi (0.6 km) southeast of Eldon, 6.0 mi (9.7 km) downstream from Tyner Creek, and at mile 8.8 (14.2 km).

DRAINAGE AREA.--307 mi^2 (795 km^2).

PERIOD OF RECORD.--October 1948 to current year. Prior to October 1970 published as Barren Fork at Eldon.

GAGE.--Water-stage recorder. Datum of gage is 701.14 ft (213.707 m) above mean sea level (levels by Corps of Engineers). Prior to Dec. 14, 1948, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--27 years, 301 ft^3/s (8.524 m^3/s), 13.30 in/yr (338 mm/yr), 218,100 acre-ft/yr (269 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 17,500 ft^3/s (496 m^3/s) Nov. 4, gage height, 19.11 ft (5.825 m); minimum, 46 ft^3/s (1.30 m^3/s) Aug. 13.
Period of record: Maximum discharge, 37,600 ft^3/s (1,070 m^3/s) Apr. 3, 1957, gage height, 20.33 ft (6.197 m), maximum gage height, 21.23 ft (6.471 m), Nov. 25, 1973; minimum, 1.7 ft^3/s (0.048 m^3/s), Oct. 25, 1956.
Flood of Apr. 15, 1945, reached a stage of 23.8 ft (7.25 m), from information by local resident.

REMARKS.--Records good.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	353	2820	248	1130	654	1090	854	560	219	151	76	72
2	313	1710	239	895	826	935	742	516	204	143	72	67
3	279	8170	230	758	808	814	653	1050	191	138	68	63
4	251	10900	223	657	786	729	586	874	180	137	65	59
5	226	3270	216	578	748	667	535	694	187	133	63	56
6	211	1830	246	516	729	615	491	590	204	127	62	54
7	198	1270	866	468	640	570	462	517	226	123	60	52
8	192	1010	746	426	588	525	460	457	257	118	57	53
9	184	852	591	391	539	496	467	405	237	114	55	53
10	177	1290	513	487	489	596	432	375	223	122	53	62
11	168	2060	498	621	455	661	400	344	244	135	51	68
12	159	1300	532	478	421	1180	375	308	224	125	49	83
13	153	1030	488	411	384	1330	361	280	210	114	47	94
14	160	854	452	373	356	1050	362	259	200	105	75	93
15	203	732	423	349	335	893	353	243	271	99	134	206
16	235	648	394	330	319	796	337	227	259	90	141	575
17	203	580	367	310	326	732	323	214	410	85	116	411
18	183	526	343	295	326	1940	314	204	654	83	115	308
19	169	483	322	283	306	2600	306	195	532	81	103	277
20	159	443	302	270	289	1440	292	436	419	78	92	365
21	152	406	286	258	276	1090	278	454	358	75	84	318
22	143	379	272	246	3310	911	267	359	315	72	77	250
23	136	357	261	234	4500	793	262	300	276	70	72	208
24	131	337	250	227	1960	700	255	265	247	101	69	184
25	128	318	239	225	1390	622	1210	274	225	100	65	166
26	125	300	230	221	1340	571	596	262	204	110	62	148
27	123	286	224	214	1340	1010	418	271	190	132	60	135
28	130	274	219	208	1240	3210	669	250	175	113	60	122
29	140	265	214	202	---	1840	746	259	170	98	65	116
30	172	258	211	198	---	1280	594	252	159	88	67	107
31	970	---	443	229	---	1020	---	240	---	81	76	---
TOTAL	6526	44958	11088	12488	25682	32706	14400	11934	7870	3341	2311	4825
MEAN	211	1499	358	403	917	1055	480	385	262	108	74.5	161
MAX	970	10900	866	1130	4500	3210	1210	1050	654	151	141	575
MIN	123	258	211	198	276	496	255	195	159	70	47	52
CFSM	.69	4.88	1.17	1.31	2.99	3.44	1.56	1.25	.85	.35	.24	.52
IN.	.79	5.45	1.34	1.51	3.11	3.96	1.74	1.45	.95	.40	.28	.58
AC-FT	12940	89170	21990	24770	50940	64870	28560	23670	15610	6630	4580	9570

CAL YR 1974 TOTAL 177018 MEAN 485 MAX 10900 MIN 34 CFSM 1.58 IN 21.45 AC-FT 351100
WTR YR 1975 TOTAL 176129 MEAN 488 MAX 10900 MIN 47 CFSM 1.59 IN 21.58 AC-FT 353300

PEAK DISCHARGE (BASE, 6,000 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE
11-3	0745	17.16	12,900
11-4	1100	19.11	17,500
2-23	0100	15.45	9,660

07197500 TENKILLER FERRY LAKE NEAR GORE, OKLA.

LOCATION.--Lat 35°35'48", long 95°02'57", in SE 1/4 SW 1/4 sec.14, T.13 N., R.21 E., Sequoyah County, at gage tower on right bank, 0.6 mile (1.0 km) upstream from Tenkiller Ferry Dam on Illinois River, 6.0 mi (9.7 km) northeast of Gore, and at mile 12.8 (20.6 km).

DRAINAGE AREA.--1,610 mi² (4,170 km²).

PERIOD OF RECORD.--July 1952 to current year. Prior to October 1970 published as Tenkiller Ferry Reservoir near Gore.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level. Prior to Apr. 5, 1953, nonrecording gage at same site and datum.

EXTREMES.--Current year: Maximum contents, 1,012,000 acre-ft (1.25 km³) Nov. 13, elevation, 655.61 ft (199.830 m); minimum, 615,000 acre-ft (758 hm³) Feb. 21, elevation, 628.89 ft (191.686 m).
Period of record: Maximum contents, 1,217,600 acre-ft (1,500 hm³) June 5, 1957, elevation, 666.36 ft (203.107 m); minimum since conservation pool was first filled, 305,700 acre-ft (377 hm³) Oct. 21, 1954, elevation, 597.50 ft (182.118 m).

REMARKS.--Reservoir is formed by earth dam. Spillway consists of 590-ft (179.8 m) concrete modified ogee weir in right abutment controlled by 10 taintor gates. Outlet works consist of a 19-foot (5.8 m) diameter tunnel in right abutment controlled by two vertical-lift gates. A similar tunnel conducts water to two hydroelectric turbines. Closure was made for diversion in July 1950 and regulated storage began in July 1952; conservation pool was first filled Apr. 9, 1953. Capacity, 1,231,000 acre-ft (1,520 hm³) at elevation 667.0 ft (203.302 m), flood-control pool, 791,900 acre-ft (976 hm³) at elevation, 642.0 ft (195.68 m), spillway crest, 628,700 acre-ft at elevation 630.0 ft (192.02 m), maximum power pool, and 283,100 acre-ft (349 hm³) at elevation 594.5 ft (181.20 m), conservation and minimum power pool. Figures given herein represent total contents. Reservoir is used for flood control and for power development.

COOPERATION.--Records furnished by Corps of Engineers.

Capacity table (elevation, in feet, and contents, in acre-feet)

628	604,100	644	821,300
633	667,200	650	915,600
638	734,700	656	1,019,000

CONTENTS, IN ACRE-FEET, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	683300	669800	864100	700000	644300	657200	702700	660100	677300	659700	646200	635300
2	680200	707600	854100	705000	651500	645800	688600	665900	674500	658900	647200	632900
3	677000	751700	843900	707600	656200	638700	678200	674500	673100	657800	648100	630700
4	672200	827600	835800	708200	660000	641900	674700	679000	671400	658900	647600	628300
5	667900	897000	831600	707500	661300	648500	674100	680400	670600	660000	646200	626400
6	663100	929700	831300	705900	661400	654500	671900	681100	669200	660900	644700	626500
7	659100	944800	830200	703700	661000	658300	670600	680000	678500	661000	643400	626700
8	657000	955600	829100	701500	660400	659700	669400	677700	681700	660300	642400	625100
9	655300	966300	827600	698500	657900	661700	667200	674500	682800	658800	642000	625600
10	652900	981000	826000	696300	655700	663300	665100	671800	682800	658000	639900	626000
11	651000	994200	824100	694700	653300	667900	662400	668800	681200	657000	638200	626900
12	648200	1008000	822200	692700	650300	676600	659600	664700	680300	657600	636400	627500
13	646500	1011000	820100	690100	646800	687900	656700	663300	681600	658300	634600	628000
14	645700	1008000	817600	687000	643200	697900	654200	661300	682300	656600	636200	628900
15	643200	1003000	815000	683700	639400	705200	653600	659600	681200	654400	637200	633600
16	643400	996900	811700	679800	635500	711200	652800	658000	680300	652400	640300	636100
17	642700	990300	808600	676000	631800	715900	652000	659600	690600	650400	642400	639400
18	641800	982600	802800	672300	627500	725100	651000	661300	691300	648500	644300	642400
19	643100	975300	794500	668000	623300	730500	650300	659600	691200	649000	645500	644400
20	644700	967300	786800	663400	618600	733900	652400	659200	689600	649500	643900	655900
21	642800	958600	778800	662400	618100	727500	651500	660000	687000	648900	642300	676200
22	641100	949800	770400	660800	637800	716600	650200	660800	683800	647600	641300	677900
23	638700	941400	762200	659100	661200	704500	649500	660000	680000	646000	641000	676800
24	637300	932100	754000	657000	687400	691000	648900	662100	676000	643400	641500	674300
25	635200	922200	745400	652700	688400	681700	649600	664800	671500	643400	640000	671100
26	636100	912700	736200	648300	682100	677400	653400	666900	666800	644300	637900	667500
27	637200	902500	725500	644700	674900	684900	656700	666900	663500	645200	638500	665900
28	639300	893400	715100	642700	666700	700800	658600	666000	663400	644100	637200	664200
29	640400	884200	704700	640600	---	722900	659900	668800	663800	647700	635100	662400
30	641000	873900	696800	639000	---	725700	661400	677000	661700	647900	636100	660500
31	655700	---	698000	639600	---	715800	---	678700	---	646800	635700	---
MAX	683300	1011000	864100	708200	688400	733900	702700	681100	691300	661000	648100	677900
MIN	635200	869800	696800	639000	618100	638700	648900	658000	661700	643400	634600	625100
(†)	632.12	647.40	635.35	630.89	632.96	636.64	632.56	633.88	632.58	631.44	630.57	632.49
(‡)	-30,600	+218,200	-175,900	-58,400	+27,100	+49,100	-54,400	+17,300	-17,000	-14,900	-11,100	+24,800

CAL YR 1974.....‡ -12,200
WTR YR 1975.....‡ -25,800

† Elevation, in feet, at end of month.
‡ Change in contents, in acre-ft.

07198000 ILLINOIS RIVER NEAR GORE, OKLA.

LOCATION.--Lat 35°34'23", long 95°04'07", in NE 1/4 SW 1/4 sec.27, T.13 N., R.21 E., Sequoyah County, on right bank 4.3 mi (6.9 km) downstream from Tenkiller Ferry Dam, 4.5 mi (7.2 km) northeast of Gore, and at mile 8.5 (13.7 km).

DRAINAGE AREA.--1,626 mi^2 (4,211 km^2).

PERIOD OF RECORD.--March 1924 to April 1926, April 1939 to current year. Monthly discharge only for some periods, published in WSP 1311.

GAGE.--Water-stage recorder. Datum of gage is 473.00 ft (144.170 m) above mean sea level. See WSP 1921 for history of changes prior to Feb. 19, 1952.

AVERAGE DISCHARGE.--37 years (1924-25, 1939-75), 1,579 ft^3/s (44.72 m^3/s), 1,144,000 acre-ft/yr (1.41 km^3/yr) adjusted for storage.

EXTREMES.--Current year: Maximum discharge, 12,000 ft^3/s (340 m^3/s) Mar. 30, gage height, 12.28 ft (3.743 m); minimum, 18 ft^3/s (0.51 m^3/s) Mar. 6.
Period of record: Maximum discharge, 180,000 ft^3/s (5,100 m^3/s) May 11, 1950, gage height, 29.6 ft (9.02 m), present site and datum, from floodmark, from rating curve extended above 42,000 ft^3/s (1,190 m^3/s) by velocity-area studies; minimum, 2.0 ft^3/s (0.057 m^3/s) Sept. 16, 1959.

REMARKS.--Records good. Except for 16 mi^2 (41 km^2) intervening area, flow completely regulated since July 1952 by Tenkiller Ferry Lake (see sta. 07197500). See pg. 351 for water-quality record.

COOPERATION.--Gage-height record and 22 discharge measurements furnished by Corps of Engineers; records computed by Geological Survey.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3220	3100	6240	3690	776	11300	11700	3290	3190	1680	920	787
2	2850	1450	6200	3660	346	11300	11600	3300	3160	1120	146	1710
3	2870	1160	6190	3640	2240	8560	9840	2380	2090	1300	137	1520
4	3430	2300	5380	3630	2470	2510	5140	2340	2150	163	608	1490
5	3350	744	3380	3630	3770	32	3520	3290	1830	152	1040	1350
6	3350	714	3550	3620	3770	18	3510	3340	1840	137	1200	169
7	3240	439	3480	3620	3760	792	3480	3520	1640	968	879	134
8	1890	280	3430	3620	3750	1790	3510	3600	786	890	689	1010
9	1570	150	3400	3620	3740	1790	3500	3570	1820	1160	505	343
10	1870	615	3390	3640	3720	1820	3490	3560	1950	992	1320	318
11	1770	2200	3410	3650	3720	1800	3470	3560	2650	966	1180	524
12	2020	2290	3390	3640	3740	1840	3460	3490	2580	164	1120	166
13	1660	4840	3390	3660	3760	1800	3460	2200	1830	133	1150	154
14	2070	6460	3400	3640	3770	1790	3340	2300	1920	1260	88	127
15	2010	6460	3390	3640	3780	1780	2220	2190	1990	1380	99	626
16	1050	6440	3390	3640	3780	1780	2240	2070	2190	1330	109	339
17	1390	6410	3390	3650	3790	1770	2310	304	2430	1310	101	118
18	1480	6390	4470	3660	3800	3980	2310	211	3400	1330	459	105
19	151	6380	5570	3660	3830	8130	1980	1810	3340	191	375	568
20	91	6370	5540	3640	3820	10200	643	1720	3320	147	1360	2050
21	1480	6360	5530	2310	3820	10300	1990	1170	3300	1220	1350	1910
22	1520	6370	5520	2070	3830	10300	2160	1160	3330	939	1040	3170
23	1980	6340	5510	2030	2430	10300	2140	1740	3340	1200	684	3140
24	1350	6310	5530	2350	3850	10300	2300	250	3320	1550	168	3150
25	1870	6330	5540	3400	8020	8260	2290	198	3330	766	1070	3160
26	130	6310	5920	3360	11600	4690	430	714	3340	142	1480	3110
27	77	6310	6430	3280	11500	4440	426	1150	2800	132	225	1870
28	75	6000	6440	2170	11400	3380	2120	1490	1090	1230	1140	1930
29	96	6290	6410	2280	---	3290	2230	1750	861	877	1390	1880
30	1430	6270	5390	2210	---	7420	2290	1900	1880	1060	220	1880
31	2580	---	3760	1920	---	11800	---	3160	---	1320	642	---
TOTAL	53920	128082	145960	100250	122582	159262	103099	66687	72697	27209	22894	38808
MEAN	1739	4269	4708	3234	4378	5137	3437	2151	2423	878	739	1294
MAX	3430	6460	6440	3690	11600	11800	11700	3600	3400	1680	1480	3170
MIN	75	150	3380	1920	346	18	426	198	786	132	88	105
AC-FT	107000	254100	289500	198800	243100	315900	204500	132300	144200	53970	45410	76980

CAL YR 1974 TOTAL 990745 MEAN 2714 MAX 12000 MIN 59 AC-FT 1965000
WTR YR 1975 TOTAL 1041450 MEAN 2853 MAX 11800 MIN 18 AC-FT 2066000

07228000 CANADIAN RIVER NEAR CANADIAN, TEX.

LOCATION.--Lat 35°56'06", long 100°22'13", Hemphill County, near left bank on downstream side of pier of bridge on U.S. Highways 60 and 83, 500 ft (150 m) downstream from Panhandle and Santa Fe Railway Co. bridge, 1.2 miles (1.9 km) downstream from Red Deer Creek, 1.6 miles (2.6 km) northeast of Canadian, and at mile 433.9 (698.1 km).

DRAINAGE AREA.--22,866 mi^2 (59,222 km^2), of which 4,688 mi^2 (12,142 km^2) is probably noncontributing.

PERIOD OF RECORD.--July 1924 to August 1925 (gage heights only), January 1938 to current year. Prior to April 1938, monthly discharge only, published in WSP 1311.

GAGE.--Water-stage recorder. Datum of gage is 2,301.50 ft (701.497 m) above mean sea level. July 1, 1924, to Aug. 31, 1925, and Apr. 21 to Dec. 15, 1938, nonrecording gage; Dec. 16, 1938, to Sept. 30, 1953, water-stage recorder and nonrecording gages; all at site 300 ft (91 m) upstream at same datum.

AVERAGE DISCHARGE.--26 years (1938-64) prior to completion of Lake Meredith, 549 ft^3/s (15.55 m^3/s), 397,800 acre-ft/yr (490 hm^3/yr); 11 years (1964-75) regulated, 90.4 ft^3/s (2.560 m^3/s), 65,490 acre-ft/yr (80.7 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 3,180 ft^3/s (90.1 m^3/s) May 29, gage heightt, 5.37 ft (1.637 m); minimum, 0.02 ft^3/s (0.001 m^3/s) Sept. 30, gage height, 3.09 ft (0.942 m); minimum gage height, 3.05 ft (0.930 m) Oct. 5.
Period of record: Maximum discharge, 122,000 ft^3/s (3,460 m^3/s) Sept. 23, 1941, gage height, 9.8 ft (2.99 m) from graph based on gage readings , from rating curves for two channels extended above 8,000 and 54,000 ft^3/s (227 and 1,530 m^3/s); no flow at times most years.
Maximum stage, 20.0 ft (6.10 m) Oct. 2, 1904. Floods of May 2, 1914, and Oct. 5, 1923, reached stages of 12 ft (3.7 m).

REMARKS.--Records good. Extreme low flow is maintained by springs which enter the river about 600 ft (180 m) above gage. Some regulation and diversions from Lake Meredith 75 miles (121 km) upstream (station 07227900).

REVISIONS.--WSP 1341: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.2	44	23	68	86	113	60	14	112	3.6	239	1.1
2	2.7	59	33	90	90	101	56	16	83	1.9	179	.62
3	2.4	73	35	97	92	97	49	17	46	1.4	120	.68
4	1.6	74	33	97	110	93	43	14	24	1.1	116	.68
5	1.3	66	31	93	122	83	40	12	20	.89	128	.62
6	5.0	68	31	86	117	74	37	8.5	16	.62	93	.62
7	11	66	30	86	100	52	46	5.9	9.6	.46	53	.62
8	11	53	28	83	90	51	67	6.2	9.6	.46	33	.62
9	21	48	27	80	70	61	60	6.2	9.6	.51	22	.62
10	31	46	30	80	90	82	65	4.8	37	.35	18	.62
11	36	42	42	80	99	92	65	5.2	51	.56	11	.56
12	33	38	36	74	94	97	71	100	66	12	6.2	.56
13	46	35	36	68	82	88	106	612	158	82	3.9	.81
14	66	31	35	77	74	79	174	927	543	316	4.2	.97
15	60	30	30	108	74	70	210	155	281	132	7.0	.81
16	58	31	28	124	72	65	168	144	84	30	8.5	.89
17	53	31	28	100	67	65	116	71	33	9.1	53	.89
18	40	31	30	97	80	72	77	32	37	4.5	259	.81
19	31	31	28	93	90	69	66	24	20	2.2	42	.74
20	26	26	30	86	170	67	66	12	20	1.4	22	.66
21	21	27	31	83	151	53	51	6.8	13	.89	12	.66
22	19	28	31	74	143	48	48	7.9	12	.81	8.0	.89
23	21	28	30	74	172	39	48	30	10	53	4.8	.74
24	20	26	30	71	192	33	26	23	33	112	3.2	.66
25	20	27	28	74	190	31	24	29	20	108	2.7	.82
26	18	26	31	77	190	32	24	18	14	108	2.0	.85
27	20	24	31	74	167	80	26	8.3	30	253	1.8	.76
28	22	24	53	71	132	75	19	13	17	516	2.0	.72
29	23	23	48	66	---	69	16	529	11	478	1.3	.73
30	26	22	48	61	---	68	14	142	5.9	163	.89	.89
31	42	---	63	64	---	65	---	138	---	86	1.1	---
TOTAL	791.2	1178	1050	2596	3206	2164	1942	3131.8	1825.7	2479.75	1457.59	21.88
MEAN	25.5	39.3	33.9	83.7	115	69.8	64.7	101	60.9	80.0	47.0	.73
MAX	66	74	63	124	192	113	210	927	543	516	259	1.1
MIN	1.3	22	23	66	67	31	14	4.8	5.9	.35	.89	.49
AC-FT	1570	2340	2080	5150	6360	4290	3850	6210	3620	4920	2890	43

CAL YR 1974 TOTAL 18849.10 MEAN 51.6 MAX 4150 MIN .20 AC-FT 37390
WTR YR 1975 TOTAL 21843.92 MEAN 59.8 MAX 927 MIN .35 AC-FT 43330

PEAK DISCHARGE (BASE, 8,900 FT^3/S).--No peak above base.

07228500 CANADIAN RIVER AT BRIDGEPORT, OKLA.

LOCATION.--Lat 35°34'00", long 98°22'45", in SE 1/4 SW 1/4 sec.28, T.13 N., R.11 W., Blaine County, on downstream side of left abutment of Chicago, Rock Island and Pacific Railroad Co. bridge, 1.0 mi (1.6 km) north of Bridgeport, 2.8 mi (4.5 km) upstream from Lumpmouth Creek, and at mile 267.1 (429.8 km).

DRAINAGE AREA.--25,229 mi^2 (65,343 km^2), of which 4,801 mi^2 (12,435 km^2) is probably noncontributing.

PERIOD OF RECORD.--October 1944 to September 1964; October 1969 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,384.25 ft (421.919 m) above mean sea level (levels by Corps of Engineers). Prior to Oct. 1, 1947, at site 0.2 mi (0.3 km) downstream at same datum. Oct. 1, 1947, to Sept. 30, 1948, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--26 years, 419 ft^3/s (11.87 m^3/s), 303,600 acre-ft/yr (374 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 25,200 ft^3/s (714 m^3/s) Nov. 4, gage height, 10.30 ft (3.139 m); minimum daily, 28 ft^3/s (0.79 m^3/s) July 23.
Period of record: Maximum discharge, about 150,000 ft^3/s (4,250 m^3/s) June 23, 1948, gage-height, 14.60 ft (4.450 m), from floodmarks, from rating curve extended above 50,000 ft^3/s (1,420 m^3/s), no flow at times in 1946, 1951-56, 1964, 1970.
Flood in May 1914 reached a stage of about 19.4 ft (5.91 m), a higher stage probably occurred during flood in October 1904.

REMARKS.--Records fair. Occasional slight regulation by Conchas Reservoir in New Mexico, and by Lake Meredith in Texas since 1964. See pg. 353 for water-quality record.

REVISION.--WSP 1341: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	58	169	123	242	394	458	435	145	956	52	232	44
2	52	7960	122	343	385	398	426	271	474	58	1150	42
3	48	12900	123	369	488	386	344	533	419	62	193	42
4	42	19400	123	335	764	384	340	286	316	131	134	40
5	39	888	121	312	525	448	314	220	305	51	118	39
6	37	346	123	280	399	486	299	166	259	43	92	37
7	39	247	123	251	257	450	285	132	1650	129	73	34
8	48	306	121	251	305	455	946	103	734	84	60	32
9	52	278	116	282	242	482	526	99	466	59	54	31
10	52	280	123	294	241	757	399	104	10900	251	50	32
11	48	224	185	283	337	694	340	166	9870	137	44	40
12	45	209	237	211	315	707	283	201	1600	65	41	60
13	44	189	248	108	346	567	284	3860	592	51	41	52
14	149	178	260	169	330	541	374	11700	355	50	62	48
15	109	169	264	211	298	512	353	2590	321	45	77	47
16	94	165	254	230	247	595	310	1500	316	36	76	48
17	85	159	244	199	257	624	275	540	1200	33	64	51
18	71	150	220	206	322	1410	266	270	790	32	60	53
19	57	146	182	240	390	619	224	239	426	31	51	48
20	50	140	170	217	423	490	199	244	244	31	48	46
21	47	135	168	232	834	458	180	237	235	30	47	45
22	44	132	161	224	565	474	175	312	436	29	44	47
23	45	129	155	206	644	458	178	967	203	28	42	47
24	51	125	150	206	687	426	181	341	185	2320	40	43
25	103	123	145	202	644	398	160	240	177	1780	37	37
26	120	119	143	193	811	398	156	177	99	1150	567	36
27	108	117	142	171	904	1530	156	159	80	277	99	35
28	218	115	141	162	563	823	168	159	70	890	69	35
29	266	120	140	142	---	442	249	2200	61	224	56	35
30	166	121	140	136	---	391	184	7550	55	177	49	33
31	435	---	232	586	---	398	---	2040	---	134	46	---
TOTAL	2822	45739	5201	7495	12925	17659	9009	37751	33794	8470	5816	1259
MEAN	91.0	1525	168	242	462	570	300	1218	1126	273	123	42.0
MAX	435	19400	264	586	904	1530	946	11700	10900	2320	1150	60
MIN	37	115	116	108	241	384	156	99	55	28	37	31
AC-FT	5600	90720	10320	14870	25640	35030	17870	74880	67030	16800	7570	2500

CAL YR 1974 TOTAL 134153.00 MEAN 368 MAX 23400 MIN .00 AC-FT 266100
WTR YR 1975 TOTAL 185940.00 MEAN 509 MAX 19400 MIN 28 AC-FT 368800

PEAK DISCHARGE (BASE, 6,000 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE
11-4	0800	10.30	25,200
5-14	1100	9.40	15,200
5-30	0730	9.07	12,200
6-10	1430	9.78	19,100

07229100 CANADIAN RIVER NEAR NOBLE, OKLA.

LOCATION.--Lat 35°04'55", long 97°22'52", in N 1/2 sec.14, T.7 N., R.2 W., McClain County, on right bank 80 ft (24.4 m) upstream from the Atchison, Topeka, and Santa Fe Railway Co. bridge, 3.6 mi (5.8 km) upstream from Chouteau Creek, 3.8 mi (6.1 km) south of Noble, and at mile 190.8 (307.0 km).

DRAINAGE AREA.--25,911 mi^2 (67,190 km^2), of which 4,801 mi^2 (12,435 km^2) is probably noncontributing.

PERIOD OF RECORD.--October 1959 to June 1961 (published as "at Purcell"), October 1963 to September 1975 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 1,045.29 ft (318.604 m) above mean sea level. Oct. 1, 1959, to June 30, 1961, water-stage recorder at site 5.9 mi (9.5 km) downstream at datum 28.15 ft (8.580 m) lower. Oct. 1, 1963, to Feb. 28, 1964, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--13 years, 417 ft^3/s (11.81 m^3/s), 302,100 acre-ft/yr (372 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 33,200 ft^3/s (940 m^3/s) May 23, gage height, 7.8 ft (2.38 m) from graph of plotted readings; minimum daily, 25 ft^3/s (0.71 m^3/s) Oct. 5, 6.
Period of record: Maximum discharge, 35,500 ft^3/s (1,010 m^3/s) Sept. 22, 1965, gage height, 8.46 ft (2.579 m); no flow Oct. 8-15, 1963.
Floods in 1904 and 1937 reached a stage of about 18.0 ft (5.49 m), and flood of 1914 reached a stage of 16.9 ft (5.15 m), from information by Corps of Engineers.

REMARKS.--Records poor. Extreme low flow sustained by sewage city of Norman. Occasional slight regulation by reservoirs in Texas and New Mexico.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	116	1240	296	480	1080	785	440	235	3020	420	1100	110
2	90	1140	282	894	1200	1010	380	423	2180	380	1350	100
3	67	21300	296	1580	1250	757	311	3280	1660	250	1800	96
4	40	9460	296	942	1300	850	276	1910	1220	310	1000	92
5	25	9180	296	716	1070	876	239	1310	730	280	450	90
6	25	2180	347	431	636	765	270	942	490	350	250	90
7	64	965	363	340	480	569	371	743	1660	365	170	98
8	44	976	332	318	340	955	1560	521	2900	330	130	92
9	41	730	318	325	501	1260	926	454	1690	290	115	85
10	34	757	318	347	397	2250	636	399	1180	1300	110	105
11	34	600	440	388	354	4040	380	482	8600	760	100	125
12	29	440	541	311	480	3800	304	435	6800	430	99	140
13	43	397	541	227	371	2500	318	2200	4400	300	98	170
14	57	354	674	289	380	848	195	9560	2500	200	96	330
15	41	354	636	311	423	627	210	15000	1500	170	130	500
16	64	318	612	245	431	621	200	2320	1200	140	560	250
17	117	318	589	240	450	660	190	1720	6000	125	420	180
18	103	318	565	230	460	997	180	1140	4500	110	300	150
19	88	318	521	270	531	2500	164	673	3000	100	250	125
20	76	318	470	250	700	1850	154	511	2100	95	200	105
21	64	304	423	250	3000	1310	150	431	1100	92	165	92
22	55	296	354	250	2500	907	151	1500	800	88	155	78
23	46	282	304	230	2000	1130	158	18000	1600	85	150	68
24	51	318	289	216	1800	823	184	4710	2500	83	140	62
25	152	304	252	190	1600	436	178	2780	1600	5000	180	58
26	338	296	264	174	1500	434	166	1880	2100	3500	100	56
27	292	318	264	161	1440	1060	174	1610	2500	2700	200	52
28	569	318	258	165	1030	2140	202	1940	1500	2500	500	49
29	497	318	371	174	---	2380	195	2780	950	5400	220	46
30	366	304	332	211	---	1890	493	6520	550	2700	145	44
31	3320	---	440	894	---	541	---	6430	---	1330	127	---
TOTAL	6948	54721	12284	12049	27704	41571	9755	92839	72530	30183	10812	3638
MEAN	224	1824	396	389	989	1341	325	2995	2418	974	349	121
MAX	3320	21300	674	1580	3000	4040	1560	18000	8600	5400	1800	500
MIN	25	282	252	161	340	434	150	235	490	83	98	44
AC-FT	13780	108500	24370	23900	54950	82460	19350	184100	143900	59870	21450	7220

CAL YR 1974 TOTAL 180483.6 MEAN 494 MAX 21300 MIN 5.0 AC-FT 358000
WTR YR 1975 TOTAL 375034.0 MEAN 1027 MAX 21300 MIN 25 AC-FT 743900

PEAK DISCHARGE (BASE, 8,000 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
11-3	abt1030	7.7	31,100	5-23	abt1030	7.8	33,200
5-15	0300	6.95	17,800	6-11	unknown	5.73	9,090

Note.--Peaks based on graph from plotted readings and high water marks.

07229300 WALNUT CREEK AT PURCELL, OKLA.

LOCATION.--Lat 34°59'56", long 97°22'00", in NW 1/4 NW 1/4 sec.13, T.6 N., R.2 W., McClain County, on downstream side of right bank pier of bridge on U.S. Highway 77, at south edge of Purcell, and at mile 1.0 (1.6 km).

DRAINAGE AREA.--202 mi^2 (523 km^2).

PERIOD OF RECORD.--Occasional low-flow measurements, made in water years 1951-55, 1958-65. October 1965 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,017.68 ft (310.189 m) above mean sea level (Oklahoma State Highway Department bench mark).

AVERAGE DISCHARGE.--10 years, 54.9 ft^3/s (1.555 m^3/s), 39,780 acre-ft/yr (49.1 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 27,200 ft^3/s (770 m^3/s) May 23, gage height, 16.80 ft (5.121 m); minimum daily, 8.3 ft^3/s (0.24 m^3/s) Oct. 5.
Period of record: Maximum discharge, 27,200 ft^3/s (770 m^3/s) May 23, 1975, gage height, 16.80 ft (5.121 m), from rating curve extended above 8,200 ft^3/s (232 m^3/s) on basis of slope-area measurement at gage height, 16.80 ft (5.121 m); no flow at times in 1966-67.

REMARKS.--Records good.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.3	74	25	37	48	40	52	140	135	46	71	33
2	8.9	55	29	85	45	39	48	109	121	46	135	32
3	8.4	82	28	50	57	38	46	365	95	46	171	32
4	8.5	84	28	29	88	38	45	115	102	51	75	31
5	8.3	40	26	25	56	38	44	86	104	47	68	31
6	8.4	32	28	24	46	38	44	74	104	44	63	34
7	10	29	27	24	42	39	47	60	201	51	58	30
8	11	28	26	25	44	39	228	57	376	63	53	29
9	11	29	24	26	40	39	121	54	196	81	55	29
10	11	41	28	35	42	45	110	52	246	259	52	30
11	11	37	40	28	45	51	97	65	132	110	50	30
12	11	30	35	23	42	51	92	61	96	65	48	35
13	11	29	29	21	41	46	92	1200	82	53	45	33
14	14	29	27	31	41	43	92	1870	74	50	46	37
15	14	28	28	33	42	42	91	127	70	46	54	37
16	13	29	27	31	46	47	90	61	70	43	47	32
17	13	29	26	30	51	46	90	44	352	42	50	30
18	13	29	25	31	49	70	90	42	114	42	46	29
19	12	30	25	32	45	60	89	44	72	46	44	28
20	13	30	25	30	44	51	88	65	63	44	40	25
21	12	29	25	31	44	46	88	50	58	42	41	26
22	12	29	25	31	196	47	87	422	93	40	40	27
23	12	29	26	30	78	46	87	12000	206	39	37	25
24	14	28	26	32	54	43	87	370	126	547	36	24
25	24	27	26	33	48	42	87	133	73	318	36	22
26	31	28	27	32	45	43	87	63	61	96	36	22
27	20	28	29	33	41	112	89	116	53	68	39	21
28	214	28	29	32	40	114	92	275	55	4650	41	21
29	56	27	30	32	---	74	98	104	54	1070	36	20
30	327	26	30	33	---	62	439	273	48	299	35	20
31	727	---	37	65	---	56	---	77	---	104	34	---
TOTAL	1668.8	1073	868	1034	1500	1587	2937	18574	3632	8552	1690	855
MEAN	53.8	35.8	28.0	33.4	53.6	51.2	97.9	599	121	276	54.5	28.5
MAX	727	84	40	85	196	114	439	12000	376	4650	171	37
MIN	8.3	26	24	21	40	38	44	42	48	39	34	20
AC-FT	3310	2130	1720	2050	2980	3150	5830	36840	7200	16960	3350	1700

CAL YR 1974 TOTAL 15590.3 MEAN 42.7 MAX 1770 MIN 3.0 AC-FT 30920
WTR YR 1975 TOTAL 43970.8 MEAN 120 MAX 12000 MIN 8.3 AC-FT 87220

PEAK DISCHARGE (BASE, 3,000 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE
5-14	0030	13.51	10,500
5-23	0830	16.80	27,200
7-28	1900	13.72	12,200

07229900 LAKE THUNDERBIRD NEAR NORMAN, OKLA.

LOCATION.--Lat 35°13'15", long 97°13'05", in NW 1/4 SE 1/4 sec.29, T.9 N., R.1 E., Cleveland County, near center of dam on Little River, just downstream from Hog Creek and 13 mi (20.9 km) east of Norman, and at mile 96.4 (115.1 km).

DRAINAGE AREA.-- 256 mi ^{2} (663 km^2).

PERIOD OF RECORD.--March 1965 to current year.

GAGE.--Nonrecording gage at outlet structure and at pump house. Datum of gage is at mean sea level.

EXTREMES.--Current year: Maximum contents, 147,100 acre-ft (181 hm^3) May 30, elevation, 1,043.20 ft (317.967 m); minimum, 111,800 acre-ft (138 hm^3) Oct. 24, elevation, 1,037.69 ft (316.288 m).
Period of record: Maximum contents, 147,100 acre-ft (181 hm^3) May 30, 1975, elevation, 1,043.20 ft (317.967 m), minimum since conservation pool first reached 15,370 acre-ft (19.0 hm^3) Nov. 30, 1965, elevation, 1,011.0 ft (308.153 m).

REMARKS.--Reservoir is formed by an earth dam. Regulated storage began Mar. 1, 1965; minimum conservation pool first filled September 1965. Capacity, 196,200 acre-ft (242 hm^3) at elevation 1,049.4 ft (319.86 m), crest of drop inlet; 119,600 acre-ft (147 hm^3) at elevation 1,039.0 ft (316.687 m), top of conservation pool; 13,640 acre-ft (16.8 hm^3) at elevation 1,010.0 ft (307.848 m), minimum conservation pool. Dead storage, 1,200 acre-ft (1.50 hm^3) below elevation 997.0 ft (303.886 m), sill of gated outlet. Figures given herein represent total contents. Reservoir is used for flood control, irrigation (inactive), and municipal water supplies exported to Del City, Midwest City, and Norman. See pg. 364 for water-quality record.

COOPERATION.--Elevations and data on diversions furnished by Central Oklahoma Master Conservancy District.

MONTHEND ELEVATION AND CONTENTS, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

Date	Elevation (feet)†	Contents (acre-feet)	Change in contents (acre-feet)	Diversions (acre-feet)
Sept. 30	1,038.00	113,600	--	--
Oct. 31	1,039.10	120,200	+6,600	933
Nov. 30	1,039.40	122,000	+1,800	471
Dec. 31	1,039.30	121,400	-600	387
CAL YR 1974	--	--	-1,000	10,413
Jan. 31	1,039.26	121,200	-200	296
Feb. 28	1,039.42	122,100	+900	299
Mar. 31	1,039.74	124,000	+1,900	507
Apr. 30	1,039.15	120,500	-3,500	796
May 31	1,043.17	147,000	+26,500	987
June 30	1,039.08	120,100	-26,900	922
July 31	1,039.59	123,100	+3,000	1,113
Aug. 31	1,038.82	118,500	-4,600	1,052
Sept. 30	1,038.32	115,500	-3,000	1,050
WTR YR 1975	--	--	+1,900	8,813

†Elevation at 0800.

07230000 LITTLE RIVER BELOW LAKE THUNDERBIRD, NEAR NORMAN, OKLA.

LOCATION.--Lat 35°13'14", long 97°13'00", in NE 1/4 SE 1/4 sec.29, T.9 N., R.1 E., Cleveland County, at right bank of outlet channel, 170 ft (51.8 m) upstream from State Highway 9, 1,200 ft (365.8 m) downstream from Lake Thunderbird, 1.0 mi (1.6 km) upstream from Prairie Creek, 13.0 mi (20.9 km) east of Norman, and at mile 96.2 (154.8 km).

DRAINAGE AREA.--257 mi^2 (666 km^2).

PERIOD OF RECORD.--October 1952 to current year. Prior to October 1964, published as Little River below Hog Creek near Norman.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 965.62 ft (294.321 m) above mean sea level. Prior to Nov. 28, 1956, nonrecording gage 800 ft (243.8 m) downstream at same datum. Nov. 28, 1956, to Oct. 14, 1964, water-stage recorder at site 800 ft (243.8 m) downstream at same datum. Oct. 15, 1964, to Sept. 1, 1965, nonrecording gage at site 170 ft (51.8 m) downstream at same datum.

AVERAGE DISCHARGE.--12 years, (1952-64), 58.9 ft^3/s (1.668 m^3/s), 42,640 acre-ft/yr (52.6 hm^3/yr); 10 years, (1965-75), 20.9 ft^3/s (0.592 m^3/s), 15,140 acre-ft/yr (18.7 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 950 ft^3/s (26.9 m^3/s) June 6, gage height, 7.25 ft (2.210 m); minimum daily, 0.65 ft^3/s (0.018 m^3/s) Oct. 1-13, 17-24.
Period of record: Maximum discharge, 34,600 ft^3/s (980 m^3/s) May 25, 1957, gage height, 28.85 ft (8.793 m), from high-water mark, at site then in use, from rating curve extended above 15,000 ft^3/s (425 m^3/s); no flow at times in 1954-56, 1964.

REMARKS.--Records good. Flow completely regulated by Lake Thunderbird since March 1965 (see sta. 07229900). In prior years occasional small diversions above station for irrigation.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.64	.83	157	.78	.83	299	179	.78	320	.85	371	.78
2	.64	.83	157	1.1	.89	301	298	1.0	320	.85	284	.78
3	.64	.83	159	.79	.92	299	298	.82	317	.87	284	.78
4	.64	.83	157	.78	89	118	299	.78	487	.84	192	.78
5	.64	.83	65	.79	152	.79	299	122	628	.84	2.5	.91
6	.64	.83	.89	.83	149	.81	299	174	720	.83	2.6	.81
7	.64	.83	.78	87	240	.79	114	.82	931	.80	2.6	.78
8	.64	.83	.78	157	302	.79	.87	.78	910	.78	2.3	.78
9	.64	.83	.78	157	302	.85	96	.78	901	.78	.78	.82
10	.64	.83	.92	154	302	.79	241	.84	882	.80	.80	.81
11	.64	.83	.92	156	299	.88	296	.90	860	.78	.82	.81
12	.64	.83	.79	154	296	.80	298	.84	845	.77	.78	.87
13	.64	.83	.78	156	117	.78	298	1.4	822	.78	.78	.81
14	.83	.83	.79	155	.83	.73	118	.94	802	.78	.97	.89
15	.74	.83	.76	154	.79	.81	.87	.83	786	.78	.83	.79
16	.74	.83	.78	153	.89	.80	.87	.82	779	.78	.78	.78
17	.64	.83	.78	62	.78	.76	.87	.83	311	.78	.95	.78
18	.64	1.4	.77	.83	.78	.97	.86	.85	300	.78	.82	.78
19	.64	.83	.78	.79	.78	.74	.83	167	503	.78	.78	.78
20	.64	.83	.78	.78	.79	.76	.86	277	503	.78	.78	.84
21	.64	.84	.78	.78	.82	182	.87	273	502	.78	.78	1.1
22	.64	.86	.79	.78	1.3	299	.87	200	502	.78	.78	1.1
23	.64	.84	.82	.79	.78	299	.87	4.3	420	.78	.78	1.1
24	.64	.78	.78	.85	.78	298	.86	.86	268	1.3	.78	1.1
25	.92	125	.78	.75	.79	116	.83	1.3	268	2.2	.78	1.1
26	.92	165	.80	.79	.78	.83	.78	1.9	273	1.1	.78	1.2
27	.74	162	.78	.80	110	1.3	.83	190	164	.89	.89	1.2
28	1.4	161	.78	.78	295	1.2	.82	133	.86	.85	.86	1.2
29	.74	161	.82	.79	---	.80	.79	.93	.87	280	.78	1.2
30	.74	157	.82	.90	---	.79	.85	149	.87	497	.78	1.2
31	.74	---	.86	.98	---	.78	---	323	---	499	.78	---
TOTAL	21.95	951.49	715.91	1561.46	2666.53	2251.55	3147.40	2031.50	15346.60	1300.71	1159.64	27.66
MEAN	.71	31.7	23.1	50.4	95.2	72.0	105	65.5	512	42.0	37.4	.92
MAX	1.4	165	159	157	302	301	299	323	931	499	371	1.2
MIN	.64	.78	.77	.75	.78	.73	.78	.78	.86	.77	.78	.78
AC-FT	44	1890	1420	3100	5290	4430	6240	4030	30440	2580	2300	55

CAL YR 1974 TOTAL 9689.80 MEAN 26.5 MAX 302 MIN .44 AC-FT 19220
WTR YR 1975 TOTAL 31162.20 MEAN 85.4 MAX 931 MIN .64 AC-FT 61810

07230500 LITTLE RIVER NEAR TECUMSEH, OKLA.

LOCATION.--Lat 35°10'25", long 96°55'55", near northwest corner sec.18, T.8 N., R.4 E., Pottawatomie County, on downstream side of center pier of bridge on U.S. Highway 177, 1.5 mi (2.4 km) downstream from Dance Creek, 5.0 mi (8.0 km) south of Tecumseh, and at mile 77.2 (124.2 km).

DRAINAGE AREA.--456 mi^2 (1,181 km^2).

PERIOD OF RECORD.--October 1943 to current year. Monthly discharge only for some periods, published in WSP 1311.

GAGE.--Water-stage recorder. Datum of gage is 898.52 ft (273.869 m) above mean sea level (levels by Corps of Engineers).

AVERAGE DISCHARGE.--21 years (1943-64, 149 ft^3/s (4.22 m^3/s), 107,900 acre-ft/yr (133.0 hm^3/yr); 11 years (1964-75), 88.1 ft^3/s (2.495 m^3/s), 63,830 acre-ft/yr (78.7 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 4,750 ft^3/s (135 m^3/s) May 23, gage height, 15.30 ft (4.663 m); minimum daily, 5.2 ft^3/s (0.15 m^3/s) Oct. 19-22.
Period of record: Maximum discharge, 32,400 ft^3/s (918 m^3/s) May 25, 1957, gage height, 18.84 ft (5.742 m); maximum gage height, 19.68 ft (5.998 m) May 18, 1949; no flow at times in 1952-56, 1963-67. Flood in 1932 reached a stage of 25.58 ft (7.797 m), from floodmark 1969-72.

REMARKS.--Records fair. Flow regulated or diverted since 1965 by Lake Thunderbird, 19.2 mi (30.9 km) upstream. (See sta. 07229900).

REVISIONS.--WSP 1117: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.8	605	161	30	97	222	120	37	493	20	510	13
2	6.5	357	161	147	84	253	302	65	464	19	236	13
3	6.1	1010	161	114	146	264	299	214	446	19	218	13
4	6.1	1130	159	47	189	227	308	64	508	19	209	12
5	5.8	201	146	39	230	67	314	50	974	18	47	12
6	5.8	126	59	34	170	48	320	276	1000	16	21	22
7	7.1	90	35	47	184	45	250	67	1040	25	18	14
8	6.1	67	27	153	211	41	150	43	748	29	16	12
9	7.1	64	24	144	206	42	60	42	1340	19	15	13
10	6.8	191	29	159	211	67	130	79	942	18	14	20
11	6.5	114	108	161	219	62	332	79	830	18	13	13
12	6.5	63	55	151	217	110	326	57	738	16	12	22
13	7.1	54	35	155	182	68	351	483	784	15	12	18
14	17	47	30	155	69	47	280	2050	801	15	14	26
15	9.1	42	28	151	60	42	150	351	786	14	15	23
16	6.8	40	26	149	68	52	55	166	800	14	13	18
17	6.5	39	25	138	81	52	49	111	1340	13	14	16
18	5.5	37	25	38	65	677	46	85	307	12	17	15
19	5.2	37	24	30	56	172	41	105	569	13	11	14
20	5.2	33	23	27	54	114	38	453	598	32	10	12
21	5.2	30	22	27	53	113	37	383	569	14	9.9	12
22	5.2	30	22	26	1080	276	38	367	602	12	9.2	13
23	5.5	30	22	25	214	323	41	3790	675	12	8.7	12
24	6.5	27	22	27	135	314	39	947	367	114	8.3	12
25	37	39	20	29	81	270	35	480	289	633	8.0	11
26	59	155	21	26	57	177	35	253	254	511	16	12
27	18	155	22	25	51	1160	36	227	239	352	28	11
28	1800	155	21	25	204	547	79	571	53	96	74	11
29	273	159	22	25	---	225	40	306	27	139	20	12
30	619	161	21	26	---	100	57	349	22	553	16	11
31	2490	---	32	170	---	60	---	540	---	593	14	---
TOTAL	5460.0	5288	1566	2500	4674	6257	4358	13090	18605	3393	1647.1	438
MEAN	176	176	50.5	80.6	167	202	145	422	620	109	53.1	14.6
MAX	2490	1130	161	170	1080	1160	351	3790	1340	633	510	26
MIN	5.2	27	20	25	51	41	35	37	22	12	8.0	11
AC-FT	10830	10490	3110	4960	9270	12410	8640	25960	36900	6730	3270	869

CAL YR 1974 TOTAL 29920.20 MEAN 82.0 MAX 2490 MIN 0 AC-FT 59350
WTR YR 1975 TOTAL 67278.10 MEAN 184 MAX 3790 MIN 5.2 AC-FT 133400

PEAK DISCHARGE (BASE, 5,000 FT^3/S).--No peak above base.

07231000 LITTLE RIVER NEAR SASAKWA, OKLA.

LOCATION.--Lat 34°59'02", long 96°33'01", in NE 1/4 sec.22, T.6 N., R.7 E., Seminole County, near left abutment on downstream side of county road bridge, 2.8 mi (4.5 km) northwest of Sasakwa, 8.7 mi (14.0 km) downstream from Salt Creek, and at mile 24.1 (38.8 km).

DRAINAGE AREA.--865 mi^2 (2,240 km^2).

PERIOD OF RECORD.--September 1942 to current year. Monthly discharge only for some periods, published in WSP 1311.

GAGE.--Water-stage recorder. Datum of gage is 749.21 ft (228.359 m) above mean sea level (levels by Corps of Engineers). Prior to Apr. 11, 1946, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--33 years, 367 ft^3/s (10.39 m^3/s), 265,900 acre-ft/yr (328 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 7,480 ft^3/s (212 m^3/s) May 14, gage height, 18.50 ft (5.639 m); minimum daily, 11 ft^3/s (0.31 m^3/s) Oct. 11, 12.
Period of record: Maximum discharge, 44,600 ft^3/s (1,260 m^3/s) May 11, 1950, gage height, 33.48 ft (10.205 m); no flow at times most years after 1952.

REMARKS.--Records fair. Flow regulated by Lake Thunderbird 72.3 mi (116.3 km) upstream since March 1965 (see sta 07229900). See pg. 365 for water-quality record.

REVISIONS.--WSP 1117: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29	3010	160	97	262	409	877	276	623	212	333	32
2	25	2520	163	273	415	456	586	213	581	162	448	27
3	21	2810	165	440	672	477	477	1270	574	130	462	23
4	18	3710	164	339	903	475	489	567	538	114	366	21
5	15	1830	167	278	862	479	491	431	496	100	277	19
6	14	1780	170	190	624	440	477	302	477	90	231	33
7	14	1050	172	143	503	320	489	230	927	82	162	30
8	14	613	133	127	440	248	1860	241	930	112	94	20
9	12	417	103	114	407	220	1160	195	1850	105	62	20
10	12	698	86	164	423	296	783	312	1940	93	47	48
11	11	572	108	234	436	271	499	223	1710	89	39	28
12	11	443	138	218	433	1040	436	259	1530	70	34	52
13	13	349	130	171	431	543	463	511	1280	55	31	56
14	31	243	126	200	424	396	504	5600	2350	46	28	52
15	48	184	108	203	386	324	487	2080	1480	39	27	134
16	33	151	93	196	291	470	420	1860	1300	36	32	101
17	26	131	83	195	343	337	284	1380	4370	33	64	65
18	27	121	76	194	262	1880	218	798	4430	30	52	56
19	26	114	73	188	224	1540	172	510	3020	28	33	41
20	22	106	68	146	197	1260	142	533	2180	26	26	33
21	18	99	65	112	179	973	123	455	1310	26	26	28
22	16	94	63	94	3640	613	113	445	1060	25	25	26
23	14	89	62	84	2480	516	112	2900	1320	25	23	26
24	13	82	61	80	1870	518	229	4120	1120	27	22	24
25	21	78	60	85	1380	499	673	3210	959	92	19	22
26	106	74	58	82	852	472	190	3290	826	262	17	21
27	175	70	58	78	593	1720	136	2070	632	568	17	20
28	458	92	58	75	472	4010	1540	1090	511	1010	26	19
29	582	139	57	72	---	3040	703	861	501	904	30	18
30	1060	153	57	71	---	2320	526	1520	315	447	25	18
31	5000	---	103	153	---	1480	---	833	---	247	37	---
TOTAL	7887	21822	3186	5096	20404	28062	15679	38605	41140	5285	3115	1113
MEAN	254	727	103	164	729	905	523	1245	1371	170	100	37.1
MAX	5000	3710	172	440	3640	4010	1880	5600	4430	1010	462	134
MIN	11	70	57	71	179	220	112	195	315	25	17	18
AC-FT	15640	43280	6320	10110	40470	55660	31100	76570	81600	10480	6180	2210

CAL YR 1974 TOTAL 85270.1 MEAN 234 MAX 7490 MIN 1.1 AC-FT 169100
WTR YR 1975 TOTAL 191394.0 MEAN 524 MAX 5600 MIN 11 AC-FT 379600

PEAK DISCHARGE (BASE, 5,000 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-31	0915	16.49	5,950	5-14	0415	18.50	7,480
11-4	0200	15.73	5,420	6-17	1300	17.55	6,960
2-22	1400	16.41	6,090				

07231500 CANADIAN RIVER AT CALVIN, OKLA.

LOCATION.--Lat 34°58'32", long 96°14'24", in NE 1/4 SW 1/4 sec.22, T.6 N., R.10 E., Hughes County, near left bank on downstream side of pier of bridge on U.S. Highway 75, 0.5 mi (0.8 km) northeast of Calvin, 2.5 mi (4.0 km) upstream from Shawnee Creek, 8.5 mi (13.7 km) downstream from Little River, and at mile 93.9 (151.1 km).

DRAINAGE AREA.--27,952 mi^2 (72,396 km^2), of which 4,801 mi^2 (12,435 km^2) is probably noncontributing.

PERIOD OF RECORD.--January 1905 to December 1908 (gage heights and discharge measurements only except for period July 1905 to December 1906), October 1938 to September 1942, July 1944 to current year. Monthly discharge only for some periods, published in WSP 1311. Gage-height records collected in this vicinity since 1904 are contained in reports of U.S. Weather Bureau.

GAGE.--Water-stage recorder and nonrecording gage. Datum of gage is 684.72 ft (208.703 m) above mean sea level. January 1905 to December 1908, nonrecording gage at site 0.8 mi (1.3 km) upstream at datum 2.00 ft (0.611 m) higher. Oct. 1, 1938, to Aug. 12, 1944, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--36 years (1905-6, 1938-42, 1944-75), 1,656 ft^3/s (46.90 m^3/s), 1,200,000 acre-ft/yr (1.48 km^3/yr).

EXTREMES.--Current year: Maximum discharge, 38,100 ft^3/s (1,080 m^3/s) May 24, gage height, 7.64 ft (2.329 m); maximum gage height, 7.73 ft (2.356 m) Oct. 31; minimum daily discharge, 118 ft^3/s (3.34 m^3/s) Oct. 10, 11.

Period of record: Maximum discharge, 174,000 ft^3/s (4,930 m^3/s) May 11, 1950, gage height, 17.35 ft (5.288 m); maximum gage height, 21.00 ft (6.401 m), Aug. 7, 1906, from floodmark, site and datum then in use; no flow at times in 1939, 1954, 1956, 1966-67.

REMARKS.--Records fair. Occasional slight regulation by dams in New Mexico and Texas. See pg. 368 for water-quality record.

COOPERATION.--Gage height record and 34 discharge measurements furnished by Corps of Engineers; records computed by Geological Survey.

REVISIONS (WATER YEARS).--WSP 1341: Drainage area. WSP 1391: 1941.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	470	15800	676	1320	2640	1660	2950	2100	7160	1140	2460	323
2	334	5280	676	1130	3240	1460	2030	1530	3330	870	1640	245
3	255	6070	727	3000	3330	1310	1810	13200	2640	707	1960	208
4	182	29100	676	2850	4180	1240	1600	8780	2050	522	4780	146
5	151	14900	619	1950	5490	1090	1420	3470	1750	656	1960	133
6	138	12600	707	1310	3690	1200	1420	2590	1530	656	1450	159
7	151	5320	748	963	2620	1160	1810	2460	2960	480	1140	192
8	166	3760	676	876	1970	1100	7260	2330	3830	480	625	270
9	129	3050	619	802	1740	1000	5940	2200	6690	522	619	146
10	118	4610	563	802	1560	1200	3430	1960	7920	610	450	176
11	118	4330	758	1250	1390	1380	2790	1850	6270	758	347	258
12	138	1950	883	1090	1350	6810	2030	1740	8960	1960	263	212
13	131	1440	1080	874	1320	4420	1920	1850	7360	758	196	258
14	185	1130	1080	748	1390	2070	2030	21000	7750	522	179	373
15	229	998	959	746	1330	1640	1920	12300	3140	480	179	610
16	300	904	895	701	1270	2890	1810	8300	2510	312	289	810
17	238	912	836	693	1460	2080	1810	3900	12000	258	413	500
18	179	885	727	684	1390	11200	1770	2390	10800	212	717	340
19	162	817	687	660	1240	7070	1510	1830	7400	176	717	254
20	212	771	687	656	1070	4010	1420	1510	3570	176	386	233
21	189	724	637	635	1020	3300	1340	1810	2810	176	317	208
22	167	669	647	588	17300	2430	1260	1130	2160	159	273	192
23	151	616	600	519	13400	1800	1420	13400	1700	159	244	176
24	147	727	557	543	6040	1600	2420	29500	3610	122	340	159
25	208	676	557	554	5160	1490	11600	7460	3500	443	250	159
26	274	628	513	546	3070	1630	1980	4750	3500	11700	182	159
27	1280	582	513	521	1660	5750	1120	3400	4280	11900	141	146
28	1640	538	513	482	1690	11100	6980	3740	2430	6350	172	146
29	5100	497	513	458	---	9310	2790	2560	2080	13500	522	146
30	2040	628	513	453	---	6330	1400	7450	1540	9750	413	146
31	24400	---	769	764	---	3890	---	9650	---	4320	413	---
TOTAL	39582	120912	21611	29148	93010	104640	80990	182120	137230	70834	24237	7483
MEAN	1277	4030	697	940	3322	3375	2700	5875	4574	2285	782	249
MAX	24400	29100	1080	3000	17300	11200	11600	29500	12000	13500	4780	810
MIN	118	497	513	453	1020	1000	1120	1130	1530	122	141	133
AC-FT	78510	239800	42870	57820	184500	207600	160600	361200	272200	140500	48070	14840

CAL YR 1974 TOTAL 497408 MEAN 1363 MAX 34800 MIN 12 AC-FT 986600
WTR YR 1975 TOTAL 911797 MEAN 2498 MAX 29500 MIN 118 AC-FT 1809000

PEAK DISCHARGE (BASE, 25,000 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-31	1200	7.73	34,200	4-25	0215	6.81	31,800
11-4	0415	6.88	32,200	5-14	1615	6.81	28,200
2-22	1800	6.3	26,200	5-24	0330	7.64	38,100

07232500 BEAVER RIVER NEAR GUYMON, OKLA.
(Headwater of the North Canadian River)

LOCATION.--Lat 36°43'24", long 101°29'30", in NW 1/4 SW 1/4 sec.18, T.3 N., R.15 E., Texas County, near center of span on downstream side of pier of bridge on U.S. Highway 64 at Dry Sand Draw, 1.2 mi (1.9 km) upstream from Goff Creek, 2.5 mi (4.0 km) north of Guymon, and at mile 650.7 (1,047.0 km). Records include flow of Dry Sand Draw.

DRAINAGE AREA.--2,139 mi^2 (5,540 km^2) includes that of Dry Sand Draw, of which 964 mi^2 (2,497 km^2) is probably noncontributing.

PERIOD OF RECORD.--October 1937 to current year. Monthly discharge only for some periods, published in WSP 1311. Prior to October 1970 published as North Canadian River near Guymon.

GAGE.--Water-stage recorder. Datum of gage is 2,970.93 ft (905.539 m) above mean sea level (levels by Corps of Engineers).

AVERAGE DISCHARGE.--38 years, 25.9 ft^3/s (0.733 m^3/s), 18,760 acre-ft/yr (23.1 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 1,570 ft^3/s (44.5 m^3/s) May 30, gage height, 9.40 ft (2.865 m); no flow at times.
Period of record: Maximum discharge, 55,400 ft^3/s (1,570 m^3/s) June 15, 1964, gage height, 13.68 ft (4.170 m); maximum gage height, 13.82 ft (4.212 m), Sept. 23, 1941, from floodmark; no flow at times in most years.

REMARKS.--Records good except those for winter periods which are fair. See pg. 378 for water-quality record.

REVISIONS.--WSP 1117: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.92	3.9	2.4	2.0	6.2	4.9	5.9	5.0	14	.07	.24	
2	.82	3.8	3.2	2.5	6.2	4.8	6.7	7.6	11	.02	53	
3	.85	6.1	4.5	2.2	6.5	4.8	6.6	6.8	8.9	0	4.0	
4	.60	4.8	11	2.1	6.5	5.1	6.4	5.4	7.3	0	.93	
5	.56	4.2	8.0	3.0	4.5	4.4	5.9	4.7	6.1	.08	0	
6	.90	3.6	5.7	3.5	2.5	4.2	6.1	4.1	4.6	.10	0	
7	2.0	3.4	5.0	4.0	3.0	5.8	6.6	3.8	3.9	0	0	
8	2.2	3.7	4.5	4.5	3.2	4.3	6.7	3.7	4.7	0	0	
9	2.0	3.6	3.5	5.0	2.7	5.1	6.8	3.8	12	0	0	
10	1.8	3.6	4.5	4.5	3.0	5.2	7.7	4.0	8.6	0	0	
11	1.6	3.9	6.0	3.0	4.0	5.6	9.8	4.2	7.7	.47	0	
12	2.2	4.0	5.0	1.6	5.4	5.5	9.1	5.5	5.4	.14	0	
13	2.9	4.1	4.5	2.1	6.0	6.0	13	5.8	3.7	.06	0	
14	2.5	4.0	4.9	5.0	6.7	6.2	10	4.7	2.5	.02	0	
15	2.8	4.4	4.0	4.0	6.0	5.6	9.0	4.1	2.1	0	0	
16	2.8	4.7	4.5	3.8	4.0	6.3	7.3	3.5	1.7	0	0	
17	2.5	4.6	5.4	4.0	2.8	5.7	6.6	2.8	1.8	0	0	
18	2.5	4.4	6.6	4.2	3.0	5.6	6.6	1.8	2.5	0	0	
19	2.6	4.4	7.1	4.0	4.0	5.2	7.6	1.0	8.6	0	0	
20	2.7	4.1	5.6	3.7	4.5	5.2	6.4	.46	2.8	0	0	
21	2.8	4.2	6.2	3.0	5.0	5.0	5.7	.22	4.7	0	0	
22	2.9	4.4	6.4	2.5	4.3	5.3	5.6	2.2	2.7	0	0	
23	4.0	4.0	5.0	3.3	3.5	5.0	5.4	2.7	2.5	0	0	
24	4.3	4.1	3.5	3.7	4.3	5.0	5.1	1.6	1.5	0	0	
25	4.1	4.5	2.5	4.0	5.0	5.1	6.1	1.2	1.0	0	0	
26	4.2	4.6	2.8	4.5	4.5	5.6	5.9	.31	.80	0	0	
27	4.2	4.6	2.6	5.2	4.6	5.4	6.4	.39	.57	0	0	
28	4.2	4.0	2.3	5.7	4.7	4.8	6.0	4.5	.30	0	0	
29	3.4	3.5	2.6	5.6	---	5.2	5.4	44	.20	0	0	
30	4.9	2.5	2.4	5.7	---	6.1	4.8	432	.15	0	0	
31	4.9	---	2.7	5.8	---	6.4	---	20	---	.01	0	---
TOTAL	81.65	123.7	144.9	117.7	126.6	162.4	209.4	591.88	134.32	.97	58.17	0
MEAN	2.63	4.12	4.67	3.80	4.52	5.24	6.98	19.1	4.48	.03	1.88	0
MAX	4.9	6.1	11	5.8	6.7	6.4	13	432	14	.47	53	0
MIN	.56	2.5	2.3	1.6	2.5	3.8	4.8	.22	.15	0	0	0
AC-FT	162	245	287	233	251	322	415	1170	266	1.9	115	0

CAL YR 1974 TOTAL 2494.58 MEAN 6.83 MAX 304 MIN 0 AC-FT 4950
WTR YR 1975 TOTAL 1751.69 MEAN 4.80 MAX 432 MIN 0 AC-FT 3470

PEAK DISCHARGE (BASE, 2,400 FT^3/S).--No peak above base.

07234000 BEAVER RIVER AT BEAVER, OKLA.
(Headwater of the North Canadian River)

LOCATION.--Lat 36°49'20", long 100°31'05", in SW 1/4 sec.7, T.4 N., R.24 E., Beaver County, near right bank on downstream side of pier of bridge on U.S. Highway 270 at Beaver, 1.5 mi (2.4 km) downstream from Home Creek, 5 mi (8.0 km) upstream from Clear Creek, and at mile 576.0 (926.8 km).

DRAINAGE AREA.--7,955 mi^2 (20,603 km^2), of which 4,270 mi^2 (11,059 km^2) is probably noncontributing.

PERIOD OF RECORD.--March 1904 to December 1905 (gage heights only), October 1937 to current year. Monthly discharge only for some periods, published in WSP 1311. Published as Beaver Creek at Beaver 1904-5, and October 1937 to September 1970 as North Canadian River at Beaver.

GAGE.--Water-stage recorder. Datum of gage is 2,368.16 ft (721.815 m) above mean sea level (levels by Corps of Engineers). Mar. 29, 1904, to Dec. 31, 1905, nonrecording gage in same vicinity at different datum. Mar. 1, 1938, to Sept. 30, 1946, water-stage recorder at present site at datum 3.0 ft (9.91 m) higher.

AVERAGE DISCHARGE.--38 years, 109 ft^3/s (3.087 m^3/s), 78,970 acre-ft/yr (97.4 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 933 ft^3/s (26.4 m^3/s) Aug. 2, gage height, 6.32 ft (1.926 m); no flow at times.
Period of record: Maximum discharge, 70,000 ft^3/s (1,980 m^3/s) Oct. 8, 1946, by slope-area measurement of peak flow in overflow section and extension of rating curve for main channel above 42,000 ft^3/s (1,190 m^3/s); maximum gage height, 14.55 ft (4.435 m) Oct. 8, 1946; no flow at times in each year.

REMARKS.--Records good. See pg. 384 for water-quality record.

REVISIONS.--WSP 1341: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1					0	.17	0	.01	89	4.7	53	
2					0	.08	0	.42	91	1.6	394	
3					0	.07	0	.34	68	0	332	
4					0	.18	0	.26	28	0	430	
5					0	.16	0	.15	7.9	0	224	
6					0	.11	0	0	3.5	0	116	
7					.06	0	.15	0	1.4	0	67	
8					.10	0	.19	0	.46	0	46	
9					.08	.08	.01	0	.24	0	21	
10					.09	.23	.02	0	0	.82	10	
11					.09	.23	.04	0	7.0	0	6.9	
12					.11	.20	.06	0	42	0	3.7	
13					.12	.13	.47	.25	10	0	7.5	
14					.13	.13	.31	.20	2.9	0	8.4	
15					.13	.15	.38	37	.60	0	18	
16					.08	.23	.49	29	0	0	9.1	
17					.08	.22	.39	8.3	0	0	57	
18					.10	.11	.30	.74	0	0	86	
19					.13	.03	.26	0	0	0	37	
20					.13	.02	.19	0	0	0	9.6	
21					.20	0	.10	0	2.2	0	5.5	
22					.29	0	.17	0	23	0	3.4	
23					.28	0	.21	0	7.8	0	2.2	
24					.45	0	.06	0	61	0	1.3	
25					.53	0	.14	0	105	0	.74	
26					.40	0	.14	0	100	485	.41	
27					.36	0	.15	0	83	243	.27	
28					.35	0	0	0	30	143	.17	
29					---	0	0	0	14	87	.10	
30					---	0	.01	.21	8.1	48	.03	
31		---			---	0	---	0	---	27	0	---
TOTAL	0	0	0	0	4.29	2.53	4.24	76.88	786.10	1040.12	1950.32	0
MEAN	0	0	0	0	.15	.082	.14	2.48	26.2	33.6	62.9	0
MAX	0	0	0	0	.53	.23	.49	37	105	485	430	0
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	0	0	0	0	8.5	5.0	8.4	152	1560	2060	3870	0

CAL YR 1974 TOTAL 2501.61 MEAN 6.85 MAX 84 MIN 0 AC-FT 4960
WTR YR 1975 TOTAL 3864.48 MEAN 10.6 MAX 485 MIN 0 AC-FT 7670

PEAK DISCHARGE (BASE, 4,000 FT^3/S).--No peak above base.

07234100 CLEAR CREEK NEAR ELMWOOD, OKLA.

LOCATION.--Lat 36°38'42", long 100°30'07", in SW 1/4 SW 1/4 sec.8, T.2 N., R.24 E., Beaver County, on downstream side of right pile bent of county road bridge, 1,000 ft (304.8 m) downstream from small irrigation dam, 2.8 mi (4.5 km) northeast of Elmwood, and at mile 16.9 (27.2 km).

DRAINAGE AREA.--170 mi^2 (440 km^2).

PERIOD OF RECORD.--October 1965 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 2,550 ft (777 m), from topographic map.

AVERAGE DISCHARGE.--10 years, 8.98 ft^3/s (0.254 m^3/s), 6,510 acre-ft/yr (8.03 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 135 ft^3/s (3.82 m^3/s) May 29, gage height, 3.92 ft (1.195 m); minimum daily, 0.63 ft^3/s (0.018 m^3/s) Aug. 11.
Period of record: Maximum discharge, 20,000 ft^3/s (566 m^3/s) Oct. 16, 1969, gage height, 13.97 ft (4.258 m), from floodmark, from rating curve extended above 12,500 ft^3/s (343 m^3/s) on basis of slope-area measurement at gage height 13.15 ft (4.008 m); no flow part of July 14, 18, 19, 1970, and Oct. 5, 1971.

REMARKS.--Records good. Small diversions for irrigation above station.

REVISIONS (WATER YEAR).--WSP 2121: 1966.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.2	3.6	3.9	3.0	3.3	2.4	1.6	2.6	6.2	1.9	1.1	.76
2	1.2	3.9	4.0	3.1	3.3	2.5	1.6	3.2	5.0	1.8	1.2	.73
3	1.2	4.1	4.2	3.1	3.3	2.4	1.5	3.0	3.1	1.8	1.1	.74
4	1.2	4.0	4.1	3.1	3.4	2.4	1.5	2.8	2.3	1.7	.96	.81
5	1.2	4.0	3.8	3.1	3.4	2.5	1.5	2.8	2.2	1.6	.88	.89
6	1.3	3.8	3.9	3.1	3.1	2.4	1.6	2.8	2.2	1.5	.80	.92
7	1.4	3.8	3.7	3.1	3.1	2.4	5.2	3.0	2.0	1.5	.75	.86
8	1.6	3.8	3.6	3.2	3.2	2.4	4.0	3.1	2.0	1.5	.74	.80
9	1.7	3.7	3.6	3.1	3.1	2.7	2.8	3.2	8.6	1.5	.69	.76
10	1.7	3.8	3.5	3.6	3.1	2.7	2.5	3.3	3.9	1.9	.67	.83
11	1.7	3.8	3.8	3.4	3.0	2.5	2.5	3.3	3.4	1.5	.63	.95
12	1.8	3.7	3.8	3.4	2.7	2.5	2.4	3.5	2.9	1.4	.66	.93
13	2.0	3.9	3.5	3.4	2.7	2.4	2.9	4.8	2.5	1.4	.86	1.0
14	1.9	3.7	3.6	3.3	2.8	2.5	2.5	4.5	2.4	1.5	.91	1.2
15	1.8	3.8	3.6	3.3	2.8	2.4	2.4	3.9	2.3	1.4	1.3	1.2
16	2.0	3.9	3.5	3.3	3.0	2.5	2.4	3.7	2.3	1.5	1.1	1.2
17	2.0	3.8	3.0	3.2	3.2	2.4	2.4	3.5	2.3	1.4	.84	1.2
18	2.1	3.8	2.7	3.3	2.9	2.4	2.5	3.4	2.2	1.5	.73	1.2
19	2.2	3.9	2.7	3.4	2.3	2.4	2.4	3.3	2.1	1.5	.72	1.2
20	2.2	3.8	2.6	3.1	2.6	2.3	2.3	3.3	2.1	.96	.67	1.1
21	2.3	3.9	2.6	3.3	2.7	2.2	2.3	3.2	2.6	1.3	.70	1.2
22	2.3	4.0	2.7	3.2	3.0	2.1	2.5	4.0	2.3	1.4	.67	1.3
23	2.7	4.0	2.7	3.1	2.7	2.1	2.5	4.0	2.2	1.6	.64	1.3
24	2.8	4.0	2.7	3.3	2.6	2.1	2.7	3.7	2.1	1.7	.72	1.3
25	2.8	4.0	2.7	3.3	2.5	2.1	2.5	3.6	2.0	1.5	.77	1.3
26	2.9	3.9	2.8	3.2	2.3	2.1	2.6	3.5	2.0	1.1	.78	.94
27	3.1	4.0	2.9	3.4	2.3	2.2	2.6	3.8	2.1	.89	.77	1.1
28	3.2	4.2	2.9	3.2	2.4	1.9	2.5	4.1	2.0	.81	.81	1.2
29	3.3	4.1	2.9	3.2	---	1.8	2.6	22	1.9	1.1	.85	1.4
30	3.8	4.0	3.0	3.3	---	1.8	2.6	12	1.9	1.0	.81	1.5
31	3.7	---	3.2	3.3	---	1.7	---	8.0	---	.98	.80	---
TOTAL	66.3	116.7	102.2	100.4	80.8	71.2	73.9	138.9	83.1	44.14	25.63	31.82
MEAN	2.14	3.89	3.30	3.24	2.89	2.30	2.46	4.48	2.77	1.42	.83	1.06
MAX	3.8	4.2	4.2	3.6	3.4	2.7	5.2	22	8.6	1.9	1.3	1.5
MIN	1.2	3.6	2.6	3.0	2.3	1.7	1.5	2.6	1.9	.81	.63	.73
AC-FT	132	231	203	199	160	141	147	276	165	88	51	63

CAL YR 1974 TOTAL 842.55 MEAN 2.31 MAX 8.4 MIN 0 AC-FT 1670
WTR YR 1975 TOTAL 935.09 MEAN 2.56 MAX 22 MIN .63 AC-FT 1850

PEAK DISCHARGE (BASE, 500 FT^3/S).--No peak above base.

07236000 WOLF CREEK NEAR FARGO, OKLA.

LOCATION.--Lat 36°23'57", long 99°37'22", in SE 1/4 NE 1/4 sec.11, T.22 N., R.23 W., Ellis County, near right bank on downstream side of pier of county road bridge, 800 ft (243.8 m) downstream from Boggy Creek, 1.2 mi (1.9 km) downstream from Sixteen Mile Creek, 1.5 mi (2.4 km) north of Fargo, and at mile 18.7 (30.1 km).

DRAINAGE AREA.--1,624 mi^2 (4,206 km^2), of which 258 mi^2 (616 km^2) is probably noncontributing.

PERIOD OF RECORD.--October 1942 to current year. Monthly discharge only for some periods, published in WSP 1311.

GAGE.--Water-stage recorder. Datum of gage is 2,044.35 ft (623.118 m) above mean sea level (levels by Corps of Engineers). Prior to Oct. 1, 1962, at same site at datum 10.00 ft (3,048 m) higher.

AVERAGE DISCHARGE.--33 years, 66.7 ft^3/s (1.889 m^3/s), 48,320 acre-ft/yr (59.6 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 1,000 ft^3/s (28.3 m^3/s) May 13, gage height, 12.30 ft (3.749 m); minimum daily, 2.3 ft^3/s (0.07 m^3/s) Sept. 30.
Period of record: Maximum discharge, 81,600 ft^3/s (2,310 m^3/s) June 23, 1957, gage height, 20.0 ft (6.096 m), present datum, from floodmarks, from rating curve extended above 7,000 ft^3/s (198 m^3/s) on basis of contracted-opening measurement of peak flow; no flow at times in most years.
Maximum stage known since at least 1913, that of June 23, 1957, from information by local residents.

REMARKS.--Records good.

REVISIONS.--WSP 1117: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	24	24	30	34	38	38	30	51	14	9.0	4.9
2	16	25	23	32	33	37	39	31	48	13	7.9	5.0
3	16	30	27	32	33	37	39	32	44	13	6.4	4.8
4	15	33	30	32	34	38	39	31	38	14	9.0	4.6
5	15	29	28	31	33	38	37	30	38	13	15	4.4
6	15	28	28	31	25	37	36	29	38	13	17	4.3
7	16	27	26	31	27	35	38	27	57	14	14	4.3
8	17	27	25	30	26	36	47	28	54	14	11	4.1
9	16	26	25	30	24	38	41	29	80	12	7.7	4.2
10	16	26	27	30	34	40	39	30	116	11	5.9	4.0
11	17	25	30	30	40	39	38	26	58	9.9	4.4	3.8
12	16	25	29	27	35	39	38	28	51	9.0	3.1	3.6
13	18	25	29	33	33	37	41	267	44	9.3	3.2	3.8
14	20	25	28	33	32	36	44	280	39	14	5.1	4.1
15	20	26	28	35	33	36	42	214	36	14	14	4.2
16	20	26	27	33	28	37	40	127	36	11	13	4.0
17	20	26	28	32	24	38	37	79	35	8.7	11	3.8
18	19	26	26	31	28	37	36	61	33	7.2	10	3.5
19	18	25	28	32	25	36	36	54	31	7.1	8.8	3.3
20	18	24	28	31	38	35	35	51	29	7.1	8.1	3.1
21	18	24	28	32	39	35	34	50	28	7.0	7.7	3.0
22	19	24	28	31	42	35	33	52	28	6.7	7.5	2.9
23	19	25	27	31	42	35	35	53	27	7.3	7.1	2.9
24	20	25	27	31	41	35	32	51	26	9.4	6.7	2.8
25	22	25	27	31	42	35	32	49	25	10	6.4	2.7
26	22	26	27	31	41	36	31	44	25	9.3	6.3	2.7
27	22	26	28	31	39	44	31	43	24	8.5	6.8	2.5
28	22	26	28	31	39	47	35	43	22	8.4	7.5	2.5
29	22	25	29	31	---	43	32	55	18	28	6.4	2.4
30	23	25	29	32	---	42	30	57	15	13	6.1	2.3
31	25	---	30	34	---	40	---	49	---	10	5.2	---
TOTAL	583	779	854	972	944	1171	1105	2032	1194	345.4	259.3	108.5
MEAN	18.8	26.0	27.5	31.4	33.7	37.8	36.8	65.5	39.8	11.2	8.36	3.62
MAX	25	33	30	35	42	47	47	280	116	28	17	5.0
MIN	15	24	23	27	24	35	30	27	15	6.7	5.1	2.3
AC-FT	1160	1550	1690	1930	1870	2320	2190	4030	2370	686	514	215

CAL YR 1974 TOTAL 11471.6 MEAN 31.4 MAX 671 MIN 1.4 AC-FT 22750
WTR YR 1975 TOTAL 10347.7 MEAN 28.3 MAX 280 MIN 2.3 AC-FT 20520

PEAK DISCHARGE (BASE, 500 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE
5-13	2115	12.30	1,000

07236500 FORT SUPPLY LAKE NEAR FORT SUPPLY, OKLA.

LOCATION.--Lat 36°33'14", long 99°34'16", in NE 1/4 SE 1/4 sec.17, T.24 N., R.22 W., Woodward County, in control tower at left end of Fort Supply Dam on Wolf Creek, 2.0 mi (3.2 km) southeast of Fort Supply and at mile 5.5 (8.8 km).

DRAINAGE AREA.--1,735 mi^2 (4,494 km^2), of which 241 mi^2 (624 km^2) is probably noncontributing.

PERIOD OF RECORD.--June 1942 to current year. Prior to October 1970, published as Fort Supply Reservoir near Fort Supply.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level.

EXTREMES.--Current year: Maximum contents, 16,560 acre-ft (20.4 hm^3) May 16, elevation, 2,005.36 ft (611.234 m); minimum, 11,070 acre-ft (13.6 hm^3) Sept. 30, elevation, 2,002.40 ft (610.332 m).
Period of record: Maximum contents, 99,500 acre-ft corrected (123 hm^3), June 25, 1957, elevation, 2,026.97 ft (617.820 m) corrected, from capacity table then in use; no contents at times November 1942 to January 1943.

REMARKS.--Reservoir is formed by an earth dam. Regulated storage began May 4, 1942; conservation pool first filled in June 1942. Capacity, 100,700 acre-ft (124 hm^3) at elevation 2,028.0 ft (618.134 m), crest of spillway and 13,890 acre-ft (17.1 hm^3) at elevation 2,004.0 ft (610.819 m), conservation pool, designated in 1965. No storage below elevation 1,987.0 ft (605.688 m). Figures given herein represent total contents. Reservoir is used for flood control and conservation. Revised capacity table, based on survey in 1969, used since Oct. 1, 1972.

COOPERATION.--Records furnished by Corps of Engineers.

REVISIONS.--WSP 1117: Drainage area.

Capacity table (elevation, in feet, and contents, in acre-feet)

2,002	10,430	2,005	15,830
2,003	12,080	2,006	17,890
2,004	13,890		

CONTENTS, IN ACRE-FEET, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14290	14730	14650	14040	14150	14650	14310	14170	14460	13800	13240	12150
2	14310	14810	14500	14120	14170	14670	14400	14230	14540	13780	13220	12070
3	14350	14850	14350	14150	14250	14770	14560	14290	14590	13760	13180	12030
4	14360	14960	14270	14150	14210	14770	14630	14290	14570	13740	13150	12000
5	14360	14980	14100	14170	14170	14710	14670	14310	14560	13700	13150	11910
6	14270	15040	14060	14170	14170	14610	14750	14210	14650	13660	13150	11910
7	14310	15080	14080	14170	14140	14610	14830	14150	14710	13650	13080	11860
8	14310	15160	14140	14250	14020	14610	14790	14150	14770	13610	13020	11830
9	14330	15140	14150	14190	14020	14580	14750	14150	14830	13610	12970	11780
10	14360	15160	14170	14270	13980	14590	14730	14270	14920	13610	12910	11790
11	14330	15160	14250	14230	13980	14500	14690	14290	14770	13570	12880	11540
12	14350	15200	14270	14250	13980	14330	14670	14590	14520	13520	12790	11570
13	14440	15200	14360	14230	13930	13660	14790	15370	14350	13520	12790	11570
14	14420	15240	14310	14250	13890	13180	14770	16190	14120	13550	12750	11570
15	14440	15260	14330	14230	13850	13240	14770	16480	14000	13480	12620	11500
16	14440	15300	14330	14310	13910	13350	14810	16540	13830	13420	12840	11520
17	14460	15340	14330	14350	13890	13390	14730	16360	13970	13400	12820	11490
18	14460	15390	14350	14360	13890	13480	14650	16130	14100	13330	12820	11440
19	14460	15390	14350	14360	13890	13550	14610	15910	13910	13280	12750	11420
20	14500	15410	14350	14400	13980	13630	14580	15630	13930	13240	12720	11390
21	14500	15430	14270	14310	14020	13660	14520	15300	13950	13220	12680	11370
22	14500	15490	14210	14310	14120	13800	14580	15040	13690	13150	12640	11320
23	14520	15490	14170	14270	14210	13760	14500	14750	13930	13220	12640	11300
24	14540	15530	14100	14210	14330	13780	14400	14500	13910	13200	12610	11240
25	14540	15570	14040	14170	14400	13850	14460	14150	13950	13170	12400	11240
26	14540	15490	14020	14150	14460	13980	14460	14000	13930	13150	12380	11220
27	14610	15340	13980	14060	14540	14020	14310	14000	13950	13130	12340	11160
28	14650	15060	13980	14040	14610	14080	14230	14040	13890	13110	12340	11140
29	14650	14980	14000	14000	---	14170	14170	14210	13850	13150	12260	11140
30	14710	14790	14000	14040	---	14270	14210	14330	13830	13220	12200	11070
31	14710	---	14040	14040	---	14310	---	14400	---	13200	12170	---
MAX	14710	15570	14650	14400	14610	14770	14830	16540	14920	13800	13240	12150
MIN	14270	14730	13980	14000	13850	13180	14170	14000	13830	13110	12170	11070
(†)	2,004.43	2,004.47	2,004.08	2,004.08	2,004.38	2,004.22	2,004.17	2,004.27	2,003.97	2,003.63	2,003.05	2,002.40
(‡)	+380	+80	-750	0	+570	-300	-100	+190	-570	-630	-1,030	-1,100

CAL YR 1974.....‡ -1,470
WTR YR 1975.....‡ -3,260

† Elevation, in feet, at end of month.
‡ Change in contents, in acre-ft.

07237000 WOLF CREEK NEAR FORT SUPPLY, OKLA.

LOCATION.--Lat 36°34'00", long 99°33'05", in SE 1/4 SE 1/4 sec.9, T.24 N., R.22 W., Woodward County, near left bank on downstream side of pier of bridge on U.S. Highway 270, 1.0 mi (1.6 km) southeast of Fort Supply, 1.6 mi (2.6 km) downstream from Fort Supply Dam, and at mile 3.9 (6.3 km).

DRAINAGE AREA.--1,739 mi^2 (4,504 km^2), of which 241 mi^2 (624 km^2) is probably noncontributing.

PERIOD OF RECORD.--October 1937 to current year. Prior to Oct. 1, 1941, published as "near Supply".

GAGE.--Water-stage recorder. Datum of gage is 1,958.38 ft (596.914 m) above mean sea level (levels by Corps of Engineers). See WSP 1921 for history of changes prior to Sept. 30, 1962.

AVERAGE DISCHARGE.--38 years, 66.2 ft^3/s (1.875 m^3/s), 47,960 acre-ft/yr (59.1 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 337 ft^3/s (9.54 m^3/s) Mar. 13, gage height, 8.11 ft (2.472 m); minimum daily, 0.47 ft^3/s (0.013 m^3/s) Sept. 12.
Period of record: Maximum discharge, 14,200 ft^3/s (403 m^3/s) June 24, 1939, gage height, 15.60 ft (4.775 m), present datum, from rating curve extended above 8,000 ft^3/s (227 m^3/s); no flow at times in most years.
A stage of 19.6 ft (5.97 m), present datum, was reached prior to October 1937, from information by State Highway Department.

REMARKS.--Records good. Flow completely regulated since May 1942 by Fort Supply Lake (see sta. 07236500).

REVISIONS.--WSP 1117: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.6	1.3	96	24	22	17	1.1	14	22	1.6	1.1	.69
2	1.3	2.5	96	25	22	17	1.3	14	21	1.4	1.0	.62
3	1.6	3.3	96	24	26	17	1.4	14	21	1.4	1.0	.69
4	1.3	2.3	96	24	57	43	1.3	14	21	1.4	.92	.72
5	1.1	1.9	94	24	58	57	.73	14	21	1.4	.93	.67
6	1.5	1.7	65	24	57	57	.79	14	21	1.4	.89	.67
7	1.4	1.5	4.5	24	57	57	14	14	21	1.4	.79	.71
8	1.5	1.5	1.6	24	58	57	43	14	20	1.3	.79	.64
9	1.4	1.5	5.5	24	76	57	42	15	20	1.3	.74	.59
10	1.3	1.7	23	25	55	57	43	16	95	1.4	.71	.59
11	.96	1.5	24	24	54	78	43	16	185	1.4	.75	.55
12	1.1	1.7	23	24	54	108	43	16	184	1.3	.77	.47
13	2.3	1.9	23	25	54	245	44	57	149	1.3	.87	.61
14	1.5	2.1	23	24	54	157	43	4.2	107	1.6	.96	.74
15	1.4	2.1	23	24	54	9.4	43	101	104	1.3	1.4	.68
16	1.5	2.3	23	24	54	5.9	43	192	78	1.2	1.1	.64
17	1.3	2.5	22	24	54	4.8	43	192	8.1	1.2	1.0	.69
18	1.3	2.7	23	24	54	3.5	43	195	7.1	1.1	.89	.76
19	1.2	2.7	22	24	35	6.2	43	191	6.7	1.1	.92	.64
20	1.1	2.7	28	24	18	3.8	42	187	5.6	1.1	.87	.63
21	1.1	2.7	63	44	18	1.3	42	186	2.5	1.0	.86	.73
22	1.3	3.5	62	59	18	1.3	42	186	2.1	1.1	.78	.63
23	1.3	3.3	63	59	17	1.1	42	184	2.0	1.4	.78	.63
24	1.1	3.0	63	58	17	3.5	42	184	1.9	1.5	.79	.59
25	1.3	3.0	62	59	17	6.5	42	182	1.9	1.3	.74	.57
26	1.3	38	62	59	17	4.5	42	123	1.8	1.3	.76	.61
27	1.3	103	45	58	17	3.3	42	45	1.8	1.2	.78	.57
28	1.3	101	25	58	17	1.3	27	24	1.8	1.2	.83	.63
29	1.3	100	25	59	---	1.3	14	26	1.8	1.1	.71	.58
30	1.7	98	24	41	---	1.3	14	23	1.6	1.1	.73	.57
31	1.5	---	24	22	---	1.3	---	22	---	1.1	.72	---
TOTAL	42.16	496.9	1329.6	1059	1113	1064.3	927.62	2479.2	1136.7	39.9	26.88	19.10
MEAN	1.36	16.6	42.9	34.2	39.8	35.0	30.9	80.0	37.9	1.29	.87	.64
MAX	2.3	103	96	59	78	245	44	195	185	1.6	1.4	.75
MIN	.96	1.3	1.6	22	17	1.1	.73	4.2	1.6	1.0	.71	.47
AC-FT	84	986	2640	2100	2210	2150	1840	4920	2250	79	53	38

CAL YR 1974 TOTAL 9266.66 MEAN 25.4 MAX 215 MIN .40 AC-FT 18380
WTR YR 1975 TOTAL 9754.36 MEAN 26.7 MAX 245 MIN .47 AC-FT 19350

07237500 NORTH CANADIAN RIVER AT WOODWARD, OKLA.

LOCATION.--Lat 36°26'18", long 99°16'40", in SE 1/4 SE 1/4 sec.25, T.23 N., R.20 W., Woodward County, near right bank on downstream side of pier of bridge on State Highway 15, 200 ft (61.0 m) downstream from The Atchison, Topeka and Santa Fe Railway Co. bridge, 6.0 mi (9.7 km) east of Woodward, 7.2 mi (11.6 km) upstream from Indian Creek, 27.5 mi (44.2 km) downstream from Wolf Creek, and at mile 460.2 (740.5 km).

DRAINAGE AREA.--11,589 mi^2 (30,016 km^2), of which 4,812 mi^2 (12,463 km^2) is probably noncontributing.

PERIOD OF RECORD.--October 1903 to September 1905 (gage heights only), October 1905 to June 1906, October 1938 to current year. Monthly discharge only for some periods, published in WSP 1311. Published as Canadian River (North Fork) near Woodward 1903-6. Gage-height records collected in this vicinity since 1919 are contained in reports of U.S. Weather Bureau.

GAGE.--Water-stage recorder. Datum of gage is 1,830.43 ft (557.915 m) above mean sea level. Prior to July 1906, nonrecording gage at railway bridge 200 ft (61.0 m) upstream at different datum. Oct. 1, 1938, to Oct. 26, 1943, nonrecording gage and Oct. 27, 1943, to July 12, 1951, water-stage recorder, at site 7.8 mi (12.6 km) upstream at datum 37.01 ft (11.281 m) higher than present datum.

AVERAGE DISCHARGE.--37 years (1938-75), 205 ft^3/s (5.806 m^3/s), 148,500 acre-ft/yr (183 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 787 ft^3/s (22.3 m^3/s) Mar. 15, gage height, 6.01 ft (1.832 m); minimum daily, 0.77 ft^3/s (0.022 m^3/s) Sept. 11.
Period of record: Maximum discharge, 42,000 ft^3/s (1,190 m^3/s) Oct. 10, 1946, gage height, 9.80 ft (2.987 m), site and datum then in use; no flow at times in most years.
Flood of Oct. 12, 1923, reached a stage of 11.0 ft (3.35 m), site and datum then in use; from reports of U.S. Weather Bureau.

REMARKS.--Records good. Some regulation since May 1942 by Fort Supply Lake on Wolf Creek 33 mi (5.3 km) upstream (see sta. 07236500). See pg. 386 for water-quality record.

REVISIONS (WATER YEARS).--WSP 1341: Drainage area. WSP 1731: 1951(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	18	63	43	58	69	50	47	85	18	8.3	2.2
2	9.4	19	64	45	53	66	49	53	72	16	8.3	2.4
3	9.3	74	69	49	56	64	47	51	62	16	5.4	2.3
4	9.1	35	77	47	57	67	46	49	55	19	4.9	2.1
5	8.5	27	84	48	67	69	44	58	54	17	4.7	1.6
6	8.8	26	89	47	50	85	43	46	53	14	4.3	1.3
7	11	27	74	50	50	82	46	42	106	13	3.8	1.1
8	10	27	35	49	49	81	55	40	92	12	12	.99
9	9.9	27	26	49	48	86	76	39	214	11	58	.92
10	9.1	25	26	49	61	94	80	63	198	11	44	.88
11	8.3	24	33	46	106	93	80	62	140	11	30	.77
12	8.3	23	40	41	84	99	80	51	256	9.6	20	1.9
13	15	23	36	41	83	142	88	285	295	8.3	14	3.0
14	18	22	36	48	77	407	91	497	283	11	20	3.9
15	14	21	34	45	78	462	92	354	180	9.2	30	3.8
16	12	21	32	55	67	125	91	233	162	7.9	14	2.1
17	11	21	32	51	51	73	88	352	124	7.0	10	1.8
18	10	21	31	52	85	74	86	320	66	6.5	8.5	1.9
19	10	20	31	48	96	68	83	298	52	6.0	6.9	2.0
20	10	20	31	46	85	62	82	279	46	5.5	5.7	1.5
21	10	20	31	46	74	55	79	261	42	5.1	4.0	1.7
22	10	21	39	44	72	50	79	278	38	4.7	3.1	1.6
23	12	20	49	61	52	50	80	275	34	5.3	2.5	1.3
24	13	19	52	68	79	48	78	264	31	8.3	2.1	1.1
25	16	20	53	66	79	46	77	265	29	6.9	1.6	1.7
26	27	20	53	67	74	46	77	247	27	5.8	2.6	2.9
27	19	19	57	68	73	75	79	190	25	5.0	3.3	2.6
28	17	44	57	68	72	60	81	96	23	6.1	3.4	2.7
29	16	66	45	69	---	60	69	194	21	14	3.0	3.0
30	16	63	41	72	---	57	54	119	19	6.5	2.7	3.2
31	20	---	44	80	---	52	---	92	---	6.3	2.7	---
TOTAL	387.7	833	1464	1658	1936	2967	2150	5500	2884	303.0	344.0	60.66
MEAN	12.5	27.8	47.2	53.5	69.1	95.7	71.7	177	96.1	9.77	11.1	2.02
MAX	27	74	89	80	106	462	92	497	295	19	58	3.9
MIN	8.3	18	26	41	48	46	43	39	19	4.7	1.6	.77
AC-FT	769	1650	2900	3290	3840	5890	4260	10910	5720	601	682	120

CAL YR 1974 TOTAL 18579.31 MEAN 50.9 MAX 575 MIN 0 AC-FT 36850
WTR YR 1975 TOTAL 20487.36 MEAN 56.1 MAX 497 MIN .77 AC-FT 40640

PEAK DISCHARGE (BASE, 3,500 FT^3/S).--No peak above base.

07238000 NORTH CANADIAN RIVER NEAR SEILING, OKLA.

LOCATION.--Lat 36°11'06", long 98°55'15", in NW 1/4 sec.28, T.20 N., R.16 W., Major County, near center of span on downstream side of pier of bridge on U.S. Highway 60, 2.0 mi (3.2 km) upstream from Seiling Creek, 2.2 mi (3.5 km) north of Seiling, 2.8 mi (4.5 km) downstream from Deep Creek, and at mile 422.6 (680.0 km).

DRAINAGE AREA.--12,261 mi^2 (31,756 km^2), of which 4,847 mi^2 (12,554 km^2) is probably noncontributing.

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

GAGE.--Water-stage recorder. Datum of gage is 1,675.42 ft (510.668 m) above mean sea level (levels by Corps of Engineers). July 1, 1946, to Aug. 17, 1964, at site 60 ft (18.3 m) downstream and prior to Oct. 1, 1954, at datum 5.00 ft (1.524 m) higher.

AVERAGE DISCHARGE.--29 years, 226 ft^3/s (6.400 m^3/s), 163,700 acre-ft/yr (202 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 7,480 ft^3/s (212 m^3/s) Nov. 3, gage height, 13.21 ft (4.026 m); minimum daily, 3.2 ft^3/s (0.09 m^3/s) Sept. 22.
Period of record: Maximum discharge, 33,000 ft^3/s (935 m^3/s) May 19, 1951, gage height, 15.61 ft (4.758 m), present datum; maximum gage height, 16.00 ft (4.877 m) Oct. 11, 1946, present datum; no flow at times in most years.

REMARKS.--Records good. Some regulation by Fort Supply Lake on Wolf Creek 70.6 mi (113.6 km) upstream. (See sta. 07236500). See pg. 393 for water-quality record.

REVISIONS (WATER YEARS).--WSP 1341: Drainage area. WSP 1731: 1951(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	30	95	105	138	174	84	94	293	103	37	8.7
2	15	185	104	111	122	163	78	96	223	96	29	8.4
3	14	4540	117	113	124	152	75	109	179	83	32	8.0
4	14	883	134	115	133	149	72	104	164	76	26	7.5
5	13	413	140	113	125	149	70	88	209	84	23	7.3
6	14	262	146	112	109	148	69	88	157	66	23	7.1
7	16	198	147	112	98	155	73	77	211	54	21	7.1
8	17	159	135	109	115	148	109	70	225	46	19	6.8
9	17	136	103	111	125	148	106	65	207	40	18	6.5
10	17	121	93	110	128	165	105	68	2590	36	21	6.0
11	16	101	105	106	128	177	113	97	783	35	36	5.7
12	15	86	110	86	155	175	115	101	367	33	30	5.4
13	16	80	117	66	133	173	121	546	332	32	23	5.2
14	21	72	116	91	129	200	132	1060	325	31	23	4.9
15	24	69	112	107	126	315	141	565	301	29	26	4.7
16	28	66	107	103	137	316	139	432	230	27	34	4.7
17	27	64	101	108	121	144	134	298	209	25	31	4.7
18	27	62	102	108	112	151	134	346	214	24	22	4.7
19	24	65	96	108	135	134	130	320	160	23	17	4.4
20	23	63	99	102	160	122	126	300	142	23	14	3.4
21	22	62	96	100	170	111	121	279	130	23	13	3.4
22	22	63	96	95	180	100	116	269	131	22	15	3.2
23	22	64	96	93	162	94	116	292	126	23	11	6.4
24	22	61	108	102	142	84	116	296	122	199	11	4.3
25	23	60	106	109	177	77	115	310	122	45	11	4.1
26	24	61	111	109	199	74	114	300	120	35	11	4.1
27	28	60	115	109	194	100	119	259	120	28	9.9	4.1
28	31	59	118	107	185	129	124	240	120	25	9.6	4.0
29	30	61	121	107	---	107	121	1120	118	25	9.5	4.1
30	29	88	111	113	---	96	109	812	116	33	9.2	4.0
31	30	---	106	130	---	90	---	506	---	39	9.0	---
TOTAL	658	8294	3467	3272	3967	4520	3297	9607	8746	1463	622.2	162.9
MEAN	21.2	276	112	106	142	146	110	310	292	47.2	20.1	5.43
MAX	31	4540	147	130	199	316	141	1120	2590	199	37	8.7
MIN	13	30	93	68	98	74	69	65	116	22	9.0	3.2
AC-FT	1310	16450	6880	6490	7870	8970	6540	19060	17350	2900	1230	323

CAL YR 1974 TOTAL 49149.93 MEAN 135 MAX 5890 MIN 0 AC-FT 97490
WTR YR 1975 TOTAL 48076.10 MEAN 132 MAX 4540 MIN 3.2 AC-FT 95360

PEAK DISCHARGE (BASE, 3,500 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE
11-3	1100	13.21	7,480
6-10	1600	11.74	3,550

07238500 CANTON LAKE NEAR CANTON, OKLA.

LOCATION.--Lat 36°05'03", long 98°36'05", in SE 1/4 NE 1/4 sec.32, T.19 N., R.13 W., Blaine County, near right end of Canton Dam on North Canadian River, 2.0 mi (3.2 km) northwest of Canton, and at mile 394.3 (634.4 km).

DRAINAGE AREA.--12,483 mi^2 (32,331 km^2), of which 4,883 mi^2 (12,647 km^2) is probably noncontributing.

PERIOD OF RECORD.--April 1948 to current year. Prior to October 1970 published as Canton Reservoir near Canton.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level.

EXTREMES.--Current year: Maximum contents, 116,500 acre-ft (144 hm^3) June 27, elevation, 1,615.26 ft (492.331 m); minimum, 64,790 acre-ft (79.9 hm^3) Mar. 4, elevation, 1,607.57 ft (489.987 m).
Period of record: Maximum contents, 258,600 acre-ft (319 hm^3) May 25, 1951, elevation, 1,628.05 ft (496.230 m); minimum since conservation pool was first filled, 867 acre-ft (1.07 hm^3) May 5, 1955, elevation, 1,585.66 ft (483.309 m), from capacity table then in use.

REMARKS.--Reservoir is formed by an earth dam. Regulated storage began Apr. 15, 1948; conservation pool was first filled July 4, 1948. Capacity, 383,800 acre-ft (473 hm^3) at elevation 1,638.0 ft (499.26 m) (flood-control pool), 116,000 acre-ft (143 hm^3) at elevation 1,615.2 ft (492.31 m) (Normal water-supply pool, designated in 1965), 99,400 acre-ft (123 hm^3) at elevation 1,613.0 ft (492 m) (crest of spillway), and 18,460 acre-ft (22.8 hm^3) at elevation 1,596.5 ft (486.61 m) (conservation pool). Dead storage, 4 acre-ft (4,930 m^3) at elevation 1,582.0 ft (482.19 m) (invert of bypass gates). Figures given herein represent total contents. Reservoir was designed for flood control, irrigation, and conservation, but owing to a lack of facilities, it is not being used for irrigation at this time. Revised capacity table, based on survey in 1966, used since Oct. 1, 1967. See pg. 397 for water-quality record.

COOPERATION.--Records furnished by Corps of Engineers.

REVISIONS.--WSP 1341: Drainage area.

Capacity table (elevation, in feet, and contents, in acre-feet)

1,607	61,600	1,612	92,320
1,608	67,210	1,614	106,800
1,610	79,160	1,616	122,500

CONTENTS, IN ACRE-FEET, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	77970	68410	66190	67320	67720	66080	72680	79470	100200	116200	113300	107300
2	76430	71850	66360	67040	67780	65350	72500	79910	100600	116100	113100	107100
3	74660	77290	66470	66920	67890	64900	72560	79910	100600	116200	113000	106800
4	72920	85120	66530	66920	67720	64960	72620	79980	101500	116200	112800	106500
5	71430	86640	66870	67040	67490	65180	72740	80040	101800	116000	112700	106500
6	70550	86040	67380	67040	66980	65740	72860	80230	102100	115800	112300	106000
7	68980	85060	67490	67210	66750	65800	73690	80230	102700	115800	111900	105700
8	68060	83860	67720	66920	67210	65910	73870	80290	103700	115800	111700	105500
9	67660	82970	67550	67610	66640	66750	74540	80540	104700	115800	111500	105300
10	67440	81880	67490	67380	66640	66640	74540	81050	107400	115800	111300	105000
11	67380	80610	67440	67610	66810	66640	74780	81180	110100	115600	111000	104900
12	67610	79160	67040	67210	66870	66640	74900	81310	112500	115400	110700	104400
13	67830	78030	66750	67150	67150	66300	75140	83750	113600	115000	110700	104300
14	67830	76550	67150	67260	67260	66360	75510	85910	114500	114800	110500	104100
15	67780	75140	67320	67490	67320	66920	75690	86840	114700	114600	110900	104100
16	67890	73930	67440	67380	67720	67720	75810	87770	115100	114200	110600	104000
17	67890	72560	67380	67320	67890	66350	76120	88300	115400	114000	110600	103900
18	67950	71080	67440	67380	67780	66750	76670	88840	115500	113900	110300	104000
19	67890	69970	67490	67440	67490	69100	76860	89250	115900	113800	110000	103500
20	67830	68520	67440	67490	67210	69330	76860	89380	116000	113700	109800	103400
21	67720	67490	67320	67490	67440	69740	77100	90260	116000	113400	109500	103300
22	67780	67150	67440	67320	67720	69740	77170	91080	116300	113200	109300	103000
23	67830	67040	67610	67210	67550	70200	77660	91490	116300	113400	108700	102800
24	68010	66580	67440	67210	67320	70320	78030	92660	116400	113700	108400	102600
25	68180	66190	67320	67150	67210	70320	78030	92800	116300	113700	109000	102400
26	68240	66190	67440	67040	67150	69910	78160	93490	116400	113700	108600	102100
27	68350	66020	67440	67040	67150	71670	78840	93910	116400	113600	108300	102100
28	68350	66190	67610	66920	66580	71790	78840	94330	116300	113600	108000	101800
29	68460	66190	67610	66870	---	71790	79220	96440	116300	113400	107900	101700
30	66640	66250	67720	67610	---	71790	79160	97430	116300	113200	107700	101700
31	68460	---	67440	67490	---	72080	---	99300	---	113200	107500	---
MAX	77970	86640	67720	67610	67890	72080	79220	99300	116400	116200	113300	107300
MIN	67380	66020	66190	66870	66580	64900	72500	79470	100200	113200	107500	101700
(†)	1,608.22	1,607.83	1,608.04	1,608.05	1,607.89	1,608.84	1,610.00	1,612.99	1,615.23	1,614.84	1,614.10	1,613.32
(‡)	-11,010	-2,210	+1,190	+50	-910	+5,500	+7,080	+20,140	+17,000	-3,100	-5,700	-5,800

CAL YR 1974..... -40,360
WTR YR 1975..... +22,230

† Elevation, in feet, at end of month.
‡ Change in contents, in acre-ft.

07239000 NORTH CANADIAN RIVER AT CANTON, OKLA.

LOCATION.--Lat 36°04'45", long 98°35'25", in NE 1/4 SW 1/4 sec.33, T.19 N., R.13 W., Blaine County, on right bank 2,700 ft (823.0 m) downstream from Canton Dam, 1.5 mi (2.4 km) northwest of Canton, 4.8 mi (7.7 km) upstream from Minnehaha Creek, and at mile 393.8 (633.6 km).

DRAINAGE AREA.--12,484 mi^2 (22,334 km^2), of which 4,883 mi^2 (12,647 km^2) is probably noncontributing.

PERIOD OF RECORD.--October 1937 to current year. Monthly discharge only for some periods, published in WSP 1311. Gage-height records collected in this vicinity since 1914 are contained in reports of U.S. Weather Bureau.

GAGE.--Water-stage recorder. Datum of gage is 1,562.50 ft (476.250 m) above mean sea level (Corps of Engineers bench mark). Oct. 1, 1937, to Jan. 5, 1955, water-stage recorder at site 2.5 mi (4.0 km) downstream at datum 1.91 ft (0.582 m) lower prior to Oct. 1, 1950, and at datum 6.91 ft (2.106 m) lower thereafter.

AVERAGE DISCHARGE.--38 years, 201 ft^3/s (5.692 m^3/s), 145,600 acre-ft/yr (180 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 917 ft^3/s (26.0 m^3/s) Nov. 5, gage height, 7.96 ft (2.426 m); minimum daily, 7.9 ft^3/s (0.22 m^3/s) Dec. 8.
Period of record: Maximum discharge, 24,800 ft^3/s (702 m^3/s) Oct. 12, 1946, gage height, 12.83 ft (3.911 m), site and datum then in use; no flow at times in most years.
Flood of Oct. 13, 1923, reached a stage of 16.8 ft (5.121 m), at site 300 ft (91.4 m) upstream from former site at datum 1.91 ft (0.582 m) lower than present datum, from reports of U.S. Weather Bureau.

REMARKS.--Records fair. Flow partly regulated by Fort Supply Lake (see station 07236500) for period May 1942 to April 1948 and completely regulated thereafter by Canton Lake (see station 07238500).

REVISIONS.--WSP 1341: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	814	93	48	290	122	518	19	26	35	27	31	31
2	810	102	48	290	122	518	17	30	34	28	31	31
3	805	112	45	190	180	350	17	28	33	28	29	31
4	806	304	45	75	286	127	16	30	33	28	28	31
5	798	670	28	73	286	53	16	30	33	28	30	31
6	779	915	10	72	285	49	16	30	31	27	29	31
7	781	912	9.4	70	195	45	15	31	31	26	29	30
8	577	908	7.9	69	115	44	13	31	35	26	28	31
9	260	904	60	70	115	44	13	31	35	27	29	33
10	98	900	287	69	113	133	13	34	48	27	29	33
11	74	887	300	69	107	246	13	34	34	25	30	34
12	26	887	299	68	106	245	11	33	32	25	28	34
13	24	887	110	69	108	245	11	47	32	25	28	34
14	22	881	35	68	106	149	12	33	32	26	28	33
15	21	881	33	66	105	37	12	32	31	26	31	33
16	21	869	31	65	110	35	11	31	32	26	30	34
17	20	863	56	65	97	35	11	31	34	28	31	34
18	18	852	79	65	184	31	12	31	35	28	32	30
19	18	846	78	60	264	29	12	32	34	27	33	31
20	21	835	77	65	255	27	11	34	33	26	34	31
21	20	616	77	93	255	25	11	31	31	25	35	31
22	20	274	76	112	256	24	11	100	31	27	32	31
23	19	262	77	122	257	24	11	38	31	29	32	32
24	22	266	76	121	261	24	28	35	29	27	30	32
25	23	264	77	120	260	25	36	35	30	29	37	30
26	23	264	76	121	255	26	27	32	29	29	34	28
27	23	160	75	120	252	25	31	32	29	29	33	30
28	22	37	75	120	370	22	26	34	29	29	31	30
29	45	49	75	121	---	21	25	43	29	30	31	30
30	96	49	75	123	---	21	25	37	28	29	30	31
31	95	---	180	122	---	21	---	36	---	28	31	---
TOTAL	7201	16749	2625.3	3223	5427	3218	502	1092	97	845	954	946
MEAN	232	558	84.7	104	194	104	16.7	35.2	32.4	27.3	30.8	31.5
MAX	814	915	300	290	370	518	36	100	48	30	37	34
MIN	18	37	7.9	60	97	21	11	26	28	25	28	28
AC-FT	14280	33220	5210	6390	10760	6380	996	2170	1930	1680	1890	1880

CAL YR 1974 TOTAL 74502.0 MEAN 204 MAX 1210 MIN 1.7 AC-FT 147800
WTR YR 1975 TOTAL 43755.3 MEAN 120 MAX 915 MIN 7.9 AC-FT 86790

07239500 NORTH CANADIAN RIVER NEAR EL RENO, OKLA.

LOCATION.--Lat 35°33'44", long 97°57'32", on east line of sec.32, T.13 N., R.7 W., Canadian County, near left bank on downstream side of pier of bridge on U.S. Highway 81, 2.0 mi (3.2 km) north of courthouse in El Reno, 2.2 mi (3.5 km) downstream from Target Creek, and at mile 307.4 (494.6 km).

DRAINAGE AREA.--13,042 mi^2 (33,779 km^2), of which 4,899 mi^2 (12,688 km^2) is probably noncontributing.

PERIOD OF RECORD.--October 1902 to April 1908, October 1937 to current year. Monthly discharge only for some periods, published in WSO 1311. Gage-height records collected at site 1 mi (1.6 km) upstream March 1914 to March 1934 and at present site thereafter are contained in reports of U.S. Weather Bureau. Published as Canadian River (North Fork) near El Reno 1902-4.

GAGE.--Water-stage recorder. Datum of gage is 1,299.02 ft (395.941 m) above mean sea level (U.S. Weather Bureau bench mark). October 1902 to April 1908, nonrecording gage at site about 50 ft (15.2 m) downstream at different datum.

AVERAGE DISCHARGE.--43 years (1902-7, 1937-75), 228 ft^3/s (6.457 $m^3.s$), 165,200 acre-ft/yr (204 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 4,750 ft^3/s (135 m^3/s) Nov. 4, gage height, 11.70 ft (3.566 m); minimum daily, 28 ft^3/s (0.79 m^3/s) Sept. 10.
Period of record: Maximum discharge, 15,000 ft^3/s (425 m^3/s) Oct. 28, 1941, gage height, 15.98 ft (4.871 m); maximum gage height, 18.20 ft (5.547 m) Sept. 21, 1965; no flow at times in most years.
Flood of Oct. 15, 1923, reached an elevation of 1,326.3 ft (404.256 m) above mean sea level at railroad bridge 1 mi (1.6 km) above station, from reports of U.S. Weather Bureau.

REMARKS.--Records good. Some regulation by Fort Supply Lake (see station 07236500) for period May 1942 to April 1948 and by Canton Lake (see station 07238500) thereafter. See pg. 402 for water-quality record.
REVISIONS.--WSP 1341: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	820	256	154	160	410	448	143	66	446	114	180	37
2	816	1000	144	279	384	502	129	66	310	110	1030	35
3	812	3760	138	590	379	637	119	99	253	104	754	32
4	808	4120	134	469	462	620	112	154	214	99	325	32
5	796	1430	125	376	421	466	106	99	189	97	184	31
6	800	739	123	247	412	278	102	79	174	90	131	29
7	780	789	125	205	364	194	102	71	372	85	102	29
8	760	848	114	184	355	167	271	65	453	79	90	29
9	734	839	96	172	274	158	147	62	294	76	76	29
10	585	859	96	164	227	177	150	64	668	75	71	28
11	376	759	117	159	227	219	113	66	1190	100	65	29
12	205	739	276	149	221	239	101	79	697	87	60	37
13	168	780	327	144	206	329	100	133	421	69	56	40
14	157	780	333	141	201	320	101	1870	285	63	56	42
15	133	739	258	146	197	311	100	2100	219	59	80	44
16	110	749	167	145	201	251	95	792	175	55	75	46
17	97	754	146	136	193	170	88	521	1000	52	71	47
18	87	780	134	131	216	900	86	367	1620	51	71	47
19	80	828	125	130	219	527	81	270	722	52	60	44
20	75	820	150	127	238	338	76	220	395	52	54	42
21	70	808	152	125	475	253	73	191	254	49	50	40
22	66	788	149	122	590	197	71	187	199	47	48	40
23	64	600	147	123	497	175	72	2340	366	44	45	38
24	66	394	143	154	401	158	71	1170	261	667	43	35
25	75	338	140	159	536	145	68	676	645	677	41	34
26	79	312	140	157	626	136	66	478	286	382	39	34
27	82	302	144	154	618	288	71	365	178	210	41	33
28	102	248	143	158	487	417	76	271	147	1990	51	33
29	117	184	141	183	---	338	71	256	128	1180	52	33
30	113	163	140	200	---	195	73	1290	117	380	44	32
31	502	---	151	805	---	162	---	845	---	262	40	---
TOTAL	10535	26505	4872	6544	10039	9715	3034	15312	12678	7477	4085	1081
MEAN	340	884	157	213	359	313	101	494	423	241	132	36.0
MAX	820	4120	333	805	626	900	271	2340	1620	1990	1030	47
MIN	64	163	96	122	193	136	66	62	117	44	39	28
AC-FT	20900	52570	9660	13080	19910	19270	6020	30370	25150	14830	8100	2140

CAL YR 1974 TOTAL 97939.7 MEAN 268 MAX 4120 MIN 1.3 AC-FT 194300
WTR YR 1975 TOTAL 111927.0 MEAN 307 MAX 4120 MIN 28 AC-FT 222000

PEAK DISCHARGE (BASE, 3,100 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE
11-4	0145	11.70	4,750
7-28	1945	11.24	4,060

07240000 LAKE HEFNER CANAL NEAR OKLAHOMA CITY, OKLA.

LOCATION.--Lat 35°33'11", long 98°37'11", in SW 1/4 SW 1/4 sec.34, T.13 N., R.4 W., Oklahoma County, attached to left wing wall just downstream from outlet of inverted siphon, 2,600 ft (792.5 m) upstream from Lake Hefner, 3.0 mi (4.8 km) northeast of Bethany, and 7.6 mi (12.2 km) northwest of the State Capitol in Oklahoma City.

PERIOD OF RECORD.--March 1944 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,200.96 ft (336.053 m) above mean sea level. Prior to Apr. 8, 1947, nonrecording gage at site 2.7 mi (4.3 km) upstream at different datum. Apr. 8, 1947, to Apr. 30, 1950, water-stage recorder at site 3.0 mi (4.8 km) upstream at different datum. May 1, 1950, to May 19, 1954, water-stage recorder and concrete control at present site and datum. May 20, 1954, to Apr. 25, 1957, water-stage recorder and concrete control at site 2,500 ft (762.0 m) downstream at datum 2.80 ft (0.853 m) lower than present datum, also used as auxiliary gage after Apr. 25, 1957.

EXTREMES.--Period of record: Maximum daily discharge, 1,500 ft^3/s (42.5 m^3/s) May 28, 1955; no flow at times in each year.

REMARKS.--Records good. Use of canal began in March 1944. Canal diverts water from North Canadian River just upstream from Lake Overholser (see sta. 07240500) and delivers water to Lake Hefner, capacity, 80,600 acre-ft (99.4 hm^3), for municipal water supply of Oklahoma City. Subsequent to April 1950, small ground-water seepage, when head gates are closed, included in records.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	372	1040	.06	0	.80	.22	.30	0	2.0	0	.15	
2	1.3	283	.06	1.6	.61	.19	.20	0	1.2	0	.02	
3	.51	9.2	.06	1.6	1.0	.23	.15	129	.94	0	.28	
4	.22	5.2	.06	.55	3.0	.28	.14	179	.79	0	.16	
5	.13	1.8	.06	.34	2.9	.28	.12	82	.73	1.1	.01	
6	.10	.90	.11	.14	1.1	.18	.10	20	.65	1.8	0	
7	.09	.65	.11	.20	.53	.13	.06	5.0	8.2	.58	0	
8	.07	.36	.05	.15	.43	.09	.06	2.5	2.2	.08	0	
9	0	.41	.01	.20	.28	.43	.05	.95	1.2	.01	0	
10	0	.34	.07	.22	.46	1.0	.05	.80	.93	.43	0	
11	0	.24	.41	.06	.38	.54	.05	.50	441	.29	0	
12	0	.20	.15	.02	.26	.39	.05	.20	598	.11	0	
13	0	.27	.12	0	.27	.18	.05	.10	7.9	0	0	
14	.05	.18	.10	0	.21	.40	.04	759	3.1	0	0	
15	.02	.19	.09	0	.23	.22	.02	1300	1.2	0	5.8	
16	.01	.20	.04	.06	.46	.25	0	1270	.78	0	2.1	
17	0	.20	.01	.04	.48	.20	0	37	19	0	1.4	
18	0	.20	.02	.06	.36	.56	0	2.8	5.1	0	.89	
19	0	.19	.02	.10	.35	523	0	2.1	2.0	0	.11	
20	0	.15	0	.04	.35	511	0	1.6	.53	0	0	
21	0	.15	0	.01	.35	219	0	1.0	.13	0	0	
22	0	.15	0	0	1.5	1.6	0	6.5	.83	0	0	
23	0	.16	0	0	1.3	.76	0	41	2.0	0	0	
24	0	.11	0	0	.71	.43	0	4.1	1.9	364	0	
25	.02	.10	0	0	.47	.31	0	2.1	218	1210	0	
26	.01	.10	0	0	.27	.52	0	1.6	83	391	0	
27	.01	.10	0	0	.27	.97	0	1.4	2.7	14	0	
28	.23	.09	0	0	.21	.53	0	1.8	.44	4.3	0	
29	.13	.08	0	0	---	.45	0	1.9	.06	21	0	
30	2.5	.07	0	.32	---	.30	0	1.6	0	11	0	
31	960	---	0	.55	---	.30	---	1.9	---	1.7	0	---
TOTAL	1337.40	1344.99	1.61	6.26	19.54	1064.94	1.46	3857.45	1406.51	2021.40	10.92	0
MEAN	43.1	44.8	.05	.20	.70	34.4	.04	124	46.9	65.2	.35	0
MAX	960	1040	.41	1.6	3.0	511	.30	1300	598	1210	5.8	0
MIN	0	.07	0	0	.21	.09	0	0	0	0	0	0
AC-FT	2650	2670	3.2	12	39	2110	2.9	7650	2790	4010	22	0

CAL YR 1974	TOTAL	14948.82	MEAN 41.0	MAX 1230	MIN 0	AC-FT	29650	
WTR YR 1975	TOTAL	11072.46	MEAN 30.3	MAX 1300	MIN 0	AC-FT	21960	

07240500 LAKE OVERHOLSER NEAR OKLAHOMA CITY, OKLA.

LOCATION.--Lat 35°29'11", long 97°39'58", on north line of SW 1/4 sec.30, T.12 N., R.4 W., Oklahoma County, at control tower at left end of dam on North Canadian River, 2.9 mi (4.7 km) upstream from Mustang Creek, 9.0 mi (14 km) west of State Capitol in Oklahoma City, and at mile 281.5 (452.9 km).

DRAINAGE AREA.--13,221 mi^2 (34,242 km^2), of which 4,899 mi^2 (12,688 km^2) is probably noncontributing.

PERIOD OF RECORD.--October 1937 to current year.

GAGE.--Nonrecording gage. Datum of gage is at mean sea level (levels by Oklahoma City Water Department). Prior to Oct. 1, 1955, at same site at datum 1,065.77 ft (324.847 m) elevation. Oct. 1, 1955, to Sept. 30, 1962, water-stage recorder at same site and present datum.

EXTREMES.--Current year: Maximum contents, 16,390 acre-ft (20.2 hm^3) Nov. 5, elevation, 1,241.80 ft (378.501 m); minimum, 11,820 acre-ft (14.6 hm^3) Sept. 30, elevation, 1,238.80 ft (377.586 m).
Period of record: Maximum contents, 20,900 acre-ft (25.8 hm^3) June 14, 1944, elevation, 1,242.67 ft (378,766 m), from capacity table then in use; minimum observed, 1,870 acre-ft (2.31 hm^3) May 14, 1955, elevation, 1,230.62 ft (375.093 m).

REMARKS.--Reservoir is formed by Ambursen-type dam flanked by long earth-fill sections. Storage began in 1917. Dam was partly washed out in 1923 and rebuilt in 1924. Capacity, 17,100 acre-ft (21.1 hm^3) below elevation 1,242.27 ft (378.644 m), top of spillway gates. Dead storage, 1,400 acre-ft (1.73 hm^3) below elevation 1,229.77 ft (374.834 m), sill of outlet works. Figures given herein represent total contents. Water diverted for municipal water supply by Oklahoma City. Revised capacity table used since Oct. 1, 1950.

COOPERATION.--Elevations and capacity table furnished by Oklahoma City Water Department.

MONTHEND ELEVATION AND CONTENTS, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

Date	Elevation (feet)†	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30	1,241.05	15,240	--
Oct. 31	1,241.55	16,010	+770
Nov. 30	1,240.65	14,630	-1,380
Dec. 31	1,240.05	13,720	-910
CAL YR 1974	--	--	-14,800
Jan. 31	1,239.60	13,030	-690
Feb. 28	1,240.50	14,400	+1,370
Mar. 31	1,240.10	13,800	-600
Apr. 30	1,239.55	12,960	-840
May 31	1,241.53	15,980	+3,020
June 30	1,241.20	15,480	-500
July 31	1,241.38	15,750	+270
Aug. 31	1,240.25	14,020	-1,730
Sept. 30	1,238.80	11,820	-2,200
WTR YR 1975	--	--	-3,420

†Elevation at 0800 on following day.

07241000 NORTH CANADIAN RIVER BELOW LAKE OVERHOLSER, NEAR OKLAHOMA CITY, OKLA.

LOCATION.--Lat 35°28'46", long 97°39'47", in southeast corner of SW 1/4 sec.30, T.12 N., R.4 W., Oklahoma County, on left bank 200 ft (61 m) upstream from bridge on State Highway 4, 0.5 mi (0.8 km) downstream from Lake Overholser, 2.4 mi (3.9 km) upstream from Mustang Creek, 9.1 mi (14.6 km) southwest of State Capitol in Oklahoma City, and at mile 281.0 (452.1 km).

DRAINAGE AREA.--13,222 mi^2 (34,245 km^2), of which 4,899 mi^2 (12,688 km^2) is probably noncontributing.

PERIOD OF RECORD.--October 1952 to September 1968, October 1969 to September 1972, October 1973 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,194.66 ft (364.132 m) above mean sea level. Prior to Oct. 1, 1961, at datum 10.00 ft (3.048 m) higher and through Mar. 24, 1971 at site 200 ft (61 m) downstream.

AVERAGE DISCHARGE.--21 years, 107 ft^3/s (3.030 m^3/s), 77,520 acre-ft/yr (95.6 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 12,700 ft^3/s (360 m^3/s) Nov. 3, gage height, 29.18 ft (8.894 m); minimum daily, 9.0 ft^3/s (0.25 m^3/s) May 15.
Period of record: Maximum discharge, 12,700 ft^3/s (360 m^3/s) Nov. 3, 1974, gage height, 29.18 ft (8.894 m); no flow at times in 1952-57.

REMARKS.--Records fair prior to March and poor thereafter. Some regulation by Canton Lake (see sta. 07238500) and Lake Overholser (see sta. 07240500). Diversions above station into Lake Overholser and Lake Hefner Canal (see sta. 0724000).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	173	256	168	111	673	540	280	110	686	310	718	300
2	415	4670	109	329	182	440	240	110	554	300	756	160
3	874	10000	152	928	396	460	210	60	492	240	1150	120
4	880	6960	98	781	767	480	190	10	474	205	500	110
5	749	4200	104	540	694	510	185	350	430	190	340	110
6	616	1800	171	353	351	400	200	220	402	200	450	110
7	769	1090	114	332	384	350	250	200	679	210	410	110
8	813	1040	111	225	357	300	450	180	640	320	370	108
9	737	1050	85	243	289	280	400	195	559	240	330	104
10	500	1030	79	225	238	350	350	205	542	250	270	100
11	400	988	210	193	209	330	300	220	594	265	200	110
12	300	908	165	161	191	410	280	170	207	230	160	125
13	290	859	340	117	173	360	265	135	322	215	100	105
14	260	794	300	188	183	325	255	10	708	205	40	80
15	210	769	320	181	157	300	250	9.0	456	190	22	60
16	170	778	150	152	181	300	245	15	406	185	10	58
17	150	747	148	154	169	400	235	100	740	175	10	56
18	120	852	153	178	170	600	230	400	1410	175	450	56
19	100	771	105	191	190	70	225	370	1060	175	200	57
20	68	689	106	158	181	10	220	350	666	175	280	55
21	55	778	144	108	253	210	190	350	493	175	225	55
22	55	687	138	148	740	240	150	350	441	175	200	54
23	58	683	109	116	693	250	120	1560	460	190	10	55
24	66	499	122	157	496	250	110	1700	726	371	50	55
25	69	352	124	186	469	230	110	1060	526	253	310	55
26	79	362	121	186	539	350	115	810	259	1940	140	56
27	190	339	123	184	597	360	118	701	589	1740	145	56
28	200	300	102	170	575	400	120	562	457	984	150	56
29	20	258	100	151	---	400	115	539	360	2940	50	57
30	10	158	155	154	---	350	111	759	320	2800	10	61
31	25	---	146	733	---	310	---	956	---	1000	10	---
TOTAL	9421	44667	4572	8033	10497	10565	6519	12766.0	16658	17023	8066	2654
MEAN	304	1489	147	259	375	341	217	412	555	549	260	88.5
MAX	880	10000	340	928	767	600	450	1700	1410	2940	1150	300
MIN	10	158	79	108	157	10	110	9.0	207	175	10	54
AC-FT	18690	88600	9070	15930	20820	20960	12930	25320	33040	33770	16000	5260

CAL YR 1974 TOTAL 101650.54 MEAN 278 MAX 10000 MIN .84 AC-FT 201600
WTR YR 1975 TOTAL 151441.00 MEAN 415 MAX 10000 MIN 9.0 AC-FT 300400

07241550 NORTH CANADIAN RIVER NEAR HARRAH, OKLA.

LOCATION.--Lat 35°30'01", long 97°11'37", in SW 1/4 NW 1/4 sec.22, T.12 N., R.1 E., Oklahoma County, near left bank on downstream side of pier of county road bridge, 2.2 mi (3.5 km) northwest of Harrah, 3.8 mi (6.1 km) downstream from Choctaw Creek, and at mile 230.0 (370.1 km).

DRAINAGE AREA.--13,501 mi^2 (34,968 km^2), of which 4,899 mi^2 (12,688 km^2) is probably noncontributing.

PERIOD OF RECORD.--October 1968 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,055.60 ft (321.774 m) above mean sea level.

AVERAGE DISCHARGE.--7 years, 325 ft^3/s (9.204 m^3/s), 235,500 acre-ft/yr (290 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 6,920 ft^3/s (196 m^3/s) Nov. 5, gage height, 17.93 ft (5.465 m); minimum daily, 72 ft^3/s (2.04 m^3/s) Sept. 29.
Period of record: Maximum discharge, 6,920 ft^3/s (196 m^3/s) Nov. 5, 1974, gage height, 17.93 ft (5.465 m); minimum, 23 ft^3/s (0.65 m^3/s) Aug. 8, 1972.

REMARKS.--Records good. Some regulation by Canton Lake (see station 07238500) and by Lake Overholser (see sta. 07240500), where diversions are made into Lake Hefner Canal (see sta. 07240000). Low flow sustained by part of sewage effluent from Oklahoma City. See pg. 407 for water-quality record.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	192	1320	333	413	1000	675	333	243	1300	369	1670	179
2	277	1470	369	351	1090	526	295	297	968	345	988	177
3	477	4110	321	1160	593	481	278	1560	682	333	962	320
4	627	5850	288	1010	927	537	251	844	557	277	1520	187
5	840	6540	298	853	1190	595	240	322	477	218	984	176
6	796	5260	321	703	954	590	231	322	419	277	675	171
7	665	3480	395	573	633	461	248	328	1340	236	538	174
8	829	1770	321	528	541	350	994	278	1220	395	472	164
9	836	1380	266	399	534	297	825	255	1220	277	457	164
10	782	1500	266	427	442	504	550	279	765	283	364	164
11	595	1430	492	387	385	414	400	344	640	328	328	171
12	646	1190	575	344	323	677	364	345	746	279	307	215
13	567	1080	435	325	312	436	328	341	321	262	283	224
14	477	980	435	295	293	383	427	1830	256	246	262	130
15	460	901	266	305	280	398	328	1020	705	234	321	191
16	475	870	277	328	294	395	305	419	333	225	934	115
17	401	847	333	296	357	390	294	292	1600	218	339	94
18	367	814	327	294	322	373	319	246	2450	214	232	92
19	316	870	324	298	287	777	360	785	1710	213	552	90
20	311	870	291	307	295	959	280	666	1420	209	381	85
21	341	752	281	302	284	511	260	515	836	202	312	82
22	301	791	282	261	429	324	257	545	692	204	286	80
23	284	765	306	273	1170	392	258	3840	806	200	271	82
24	285	721	280	280	888	323	258	4050	1090	1210	221	82
25	427	633	273	260	638	295	257	2390	941	2530	192	80
26	662	567	276	300	583	276	252	1470	719	1340	330	78
27	483	552	276	296	620	450	246	1220	310	2570	254	77
28	705	521	276	297	569	603	259	940	592	2290	268	74
29	1170	506	265	294	---	644	267	972	630	2190	272	72
30	847	463	248	284	---	573	250	2170	395	3730	238	74
31	2900	---	331	988	---	418	---	1450	---	3970	202	---
TOTAL	19341	48803	10027	13431	16233	14827	10214	30578	26140	25874	15415	4064
MEAN	624	1627	323	433	580	478	340	986	871	835	497	135
MAX	2900	6540	575	1160	1190	959	994	4050	2450	3970	1670	320
MIN	192	463	248	260	280	276	231	243	256	200	192	72
AC-FT	38360	96800	19890	26640	32200	29410	20260	60650	51850	51320	30580	8060

CAL YR 1974 TOTAL 185007 MEAN 507 MAX 6540 MIN 33 AC-FT 367000
WTR YR 1975 TOTAL 234947 MEAN 644 MAX 6540 MIN 72 AC-FT 466000

PEAK DISCHARGE (BASE, 4,000 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE
11-5	0430	17.93	6,920
5-23	1100	15.24	4,330
7-31	0730	14.75	4,440

07242000 NORTH CANADIAN RIVER NEAR WETUMKA, OKLA.

LOCATION.--Lat 35°15'53", long 96°12'25", in center of SW 1/4 sec.12, T.9 N., R.10 E., Hughes County, near left bank on downstream side of pier of bridge on U.S. Highway 75, 2.3 mi (3.7 km) upstream from Wewoka Creek, 2.5 mi (4.0 km) northeast of Wetumka, and at mile 84.4 (135.8 km).

DRAINAGE AREA.--14,290 mi^2 (37,011 km^2), of which 4,899 mi^2 (12,688 km^2) is probably noncontributing.

PERIOD OF RECORD.--October 1937 to current year. Monthly discharge only for some periods, published in WSP 1311.

GAGE.--Water-stage recorder. Datum of gage is 683.28 ft (208.264 m) above mean sea level. Prior to Jan. 19, 1939, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--38 years, 694 ft^3/s (19.65 m^3/s), 502,800 acre-ft/yr (620 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 10,500 ft^3/s (297 m^3/s) Oct. 31, gage height, 10.42 ft (3.176 m); minimum daily, 219 ft^3/s (6.20 m^3/s) Sept. 25-30.
Period of record: Maximum discharge, 66,000 ft^3/s (1,870 m^3/s) Apr. 15, 1945, gage height, 26.40 ft (8.047 m); no flow Aug. 27 to Oct. 11, 1954, Aug. 25 to Oct. 22, 1956.
Flood in October 1923 reached a stage of 26.9 ft (8.20 m), from information by Corps of Engineers.

REMARKS.--Records fair. Some regulation by Lake Overholser (see sta. 07240500) and other dams upstream. See pg. 413 for water-quality record.

COOPERATION.--Gage-height record and 33 discharge measurements furnished by Corps of Engineers; records computed by Geological Survey.

REVISIONS (WATER YEARS).--WSP 977: 1942. WSP 1341: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	368	8430	842	760	932	1090	1580	863	2240	1080	2520	398
2	327	6080	802	756	1310	1060	1350	662	2650	1060	2740	356
3	301	4730	767	1290	1790	1010	1100	5280	1950	832	3100	334
4	287	6430	704	1380	2300	1040	960	2350	1790	681	2300	299
5	264	6080	672	1110	2290	994	863	1500	1520	652	1390	282
6	260	4320	684	1340	1830	955	801	1890	1330	624	896	334
7	379	4020	667	1340	1700	976	770	1200	2340	569	1430	369
8	672	4900	650	1200	1540	1020	1790	801	2340	527	1130	321
9	771	6080	616	997	1280	1030	2090	624	1890	516	896	304
10	739	7180	633	842	984	1100	2200	652	3660	465	740	291
11	736	6470	736	841	891	1040	1620	596	2410	569	641	291
12	811	3360	870	775	896	1230	1200	516	1890	569	569	334
13	772	2280	875	723	841	1370	993	542	1400	450	532	312
14	715	2010	883	666	776	1260	895	4700	1220	475	532	304
15	696	1880	980	612	713	1190	832	4340	2980	569	532	356
16	659	1740	813	574	694	1190	740	3000	1450	531	455	378
17	533	1700	767	543	885	1050	710	2370	3510	402	516	378
18	447	1620	761	519	884	3650	681	1400	5190	369	548	334
19	413	1510	769	541	791	3410	624	970	3020	360	728	356
20	381	1470	719	515	773	2050	624	839	2750	347	596	291
21	340	1390	667	497	786	1510	624	722	2690	338	490	270
22	312	1430	648	501	3940	1530	569	1010	2140	325	553	258
23	288	1370	642	493	5520	1350	542	2270	1600	316	596	250
24	274	1250	620	505	2940	940	516	5940	1500	312	475	231
25	298	1240	616	508	2430	783	681	4940	1740	338	426	219
26	362	1200	613	485	1930	801	542	5990	1400	450	416	219
27	379	1150	611	490	1430	2870	490	5740	1470	2040	403	219
28	776	1050	599	462	1190	7490	1400	5320	1300	2280	369	219
29	2410	937	596	468	---	6200	863	4140	1130	2080	388	219
30	2120	884	595	492	---	3010	1150	2200	1060	2330	490	219
31	9070	---	721	718	---	1880	---	2010	---	2540	465	---
TOTAL	27160	96191	22138	22983	44264	56099	29800	75447	63610	24996	27862	8945
MEAN	876	3206	714	741	1581	1810	993	2434	2120	806	899	298
MAX	9070	8430	980	1380	5520	7490	2200	5990	5190	2540	3100	398
MIN	260	884	595	462	694	783	490	516	1060	312	369	219
AC-FT	53870	190800	43910	45590	87800	111300	59110	149600	126200	49580	55260	17740

CAL YR 1974 TOTAL 331096 MEAN 907 MAX 9360 MIN 86 AC-FT 656700
WTR YR 1975 TOTAL 499495 MEAN 1368 MAX 9070 MIN 219 AC-FT 990700

PEAK DISCHARGE (BASE, 6,500 FT^3/S REVISED)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-31	1230	10.42	10,500	3-28	abt1500	9.34	7,860
11-4	abt0800	9.98	9,350	5-26	2045	9.87	8,480
11-10	abt1700	9.10	7,380	6-17	1800	8.75	6,670
2-22	abt1700	8.85	6,870				

07242350 DEEP FORK NEAR ARCADIA, OKLA.

LOCATION.--Lat 35°38'58", long 97°21'14", on west line of NW 1/4 NW 1/4 sec.31, T.14 N., R.1 W., Oklahoma County, on left bank at downstream side of county road bridge, 1.9 mi (3.1 km) upstream from Coffee Creek, 2.0 mi (3.2 km) southwest of Arcadia, and at mile 213.1 (342.9 km).

DRAINAGE AREA.--103 mi^2 (267 km^2).

PERIOD OF RECORD.--October 1969 to current year.

GAGE.--Water-stage recorder. Datum of gage is 941.65 ft (287.015 m) above mean sea level. Prior to Nov. 2, 1974 at site 0.3 mi (0.5 km) downstream and at datum 2.5 ft (.762 m) higher.

AVERAGE DISCHARGE.--6 years, 70.5 ft^3/s (1.997 m^3/s), 51,080 acre-ft/yr (63.0 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 14,300 ft^3/s (405 m^3/s) Nov. 2, gage height, 27.9 ft (8.50 m) from floodmark; minimum daily, 14 ft^3/s (0.40 m^3/s) Oct. 30.
Period of record: Maximum discharge, 14,300 ft^3/s (405 m^3/s) Nov. 2, 1974, gage height, 27.9 ft (8.50 m) from floodmark; minimum daily, 14 ft^3/s (0.40 m^3/s) Oct. 30, 1974.

REMARKS.--Records fair. Low flow sustained by part of sewage effluent from Oklahoma City. See pg. 416 for water-quality record.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29	46	53	67	197	68	50	34	116	32	72	30
2	30	5890	43	71	182	65	46	479	118	31	63	31
3	29	1140	43	136	275	65	43	611	113	31	66	30
4	27	265	38	76	378	66	43	98	106	30	68	30
5	32	159	43	58	197	65	42	72	100	27	60	30
6	31	98	48	43	244	65	42	63	101	27	57	28
7	35	81	53	43	92	62	126	58	548	26	62	29
8	29	76	43	38	71	58	435	48	101	26	58	29
9	26	71	38	38	62	110	81	48	262	27	52	29
10	29	76	38	48	53	210	60	102	91	32	48	29
11	27	87	182	36	49	456	54	115	87	30	54	29
12	26	67	71	43	48	196	50	76	75	27	38	115
13	26	50	53	41	48	91	71	461	71	26	33	43
14	41	43	48	43	43	74	53	945	68	25	35	63
15	36	48	43	43	46	68	48	116	64	27	955	49
16	30	53	40	42	58	74	46	94	61	26	90	39
17	25	53	41	38	67	67	43	86	599	26	71	37
18	23	53	38	43	76	123	72	62	110	27	90	39
19	23	53	38	53	87	79	48	96	81	27	60	35
20	22	48	40	48	81	64	38	64	72	26	42	33
21	22	48	43	53	87	59	36	76	67	25	35	33
22	21	50	38	48	315	54	38	98	137	25	33	34
23	22	58	38	48	165	53	38	1950	192	23	32	33
24	22	48	38	38	98	47	38	160	122	1580	31	33
25	48	48	43	136	84	45	36	119	60	396	30	33
26	30	48	38	229	76	48	34	104	52	110	29	52
27	18	48	43	98	73	141	34	104	47	145	28	45
28	61	43	44	213	71	98	53	169	42	269	64	30
29	34	49	43	228	---	77	38	146	37	465	36	29
30	14	61	38	244	---	55	34	190	34	151	34	29
31	203	---	96	532	---	51	---	113	---	85	32	---
TOTAL	1071	8958	1538	2917	3323	2854	1870	6997	3734	3830	2458	1128
MEAN	34.5	299	49.6	94.1	119	92.1	62.3	226	124	124	79.3	37.6
MAX	203	5890	182	532	378	456	435	1950	599	1580	955	115
MIN	14	43	38	38	43	45	34	34	34	23	28	28
AC-FT	2120	17770	3050	5790	6590	5660	3710	13880	7410	7600	4880	2240

CAL YR 1974 TOTAL 36313 MEAN 99.5 MAX 5890 MIN 14 AC-FT 72030
WTR YR 1975 TOTAL 40678 MEAN 111 MAX 5890 MIN 14 AC-FT 80680

PEAK DISCHARGE (BASE, 2,000 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
11-2	abt2000	27.9	14,300	5-23	0600	17.19	4,670
5-3	0045	12.95	2,720	7-24	1500	16.55	4,320
5-13	2400	15.90	4,000				

07243000 DRY CREEK NEAR KENDRICK, OKLA.

LOCATION.--Lat 35°46'55", long 96°51'20", in NW 1/4 NW 1/4 sec.14, T.15 N., R.4 E., Lincoln County, near left bank on downstream side of county road bridge, 1.0 mi (1.6 km) downstream from Beaver Creek and 4.5 mi (7.2 km) west of Kendrick.

DRAINAGE AREA.--69.0 mi^2 (178.7 km^2).

PERIOD OF RECORD.--October 1955 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 825 ft (251.5 m), from topographic map.

AVERAGE DISCHARGE.--20 years, 23.2 ft^3/s (0.657 m^3/s), 16,810 acre-ft/yr (20.7 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 18,000 ft^3/s (510 m^3/s) Nov. 2, gage height, 19.20 ft (5.852 m); minimum, 3.7 ft^3/s (0.10 m^3/s) Aug. 13.
Period of record: Maximum discharge, 18,000 ft^3/s (510 m^3/s) Nov. 2, 1974, gage height, 19.20 ft (5.852 m); no flow at times in most years.

REMARKS.--Records fair.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.1	112	21	18	90	23	33	13	38	12	5.3	9.3
2	4.9	4530	21	174	19	20	29	768	35	11	4.8	8.7
3	4.6	1410	21	113	17	19	25	160	30	10	11	8.3
4	4.7	219	20	43	19	23	25	47	27	9.4	7.0	8.0
5	4.5	71	20	33	17	24	23	32	26	8.9	6.5	7.8
6	4.5	52	24	28	11	21	23	27	25	8.3	6.3	7.5
7	4.5	45	26	27	10	18	158	20	27	11	6.0	7.1
8	4.7	40	20	24	11	15	440	17	25	10	5.4	7.1
9	4.7	35	19	18	14	63	71	15	1040	10	5.0	6.8
10	4.7	273	25	78	20	128	50	20	88	9.1	4.7	6.8
11	4.5	91	167	29	25	228	42	18	43	8.4	4.4	6.9
12	4.3	51	53	20	33	119	38	15	31	8.0	4.1	7.5
13	4.7	47	28	26	30	46	43	689	868	7.7	4.0	8.0
14	9.9	44	24	19	30	36	43	1760	383	7.7	6.5	6.9
15	8.0	39	21	18	28	34	33	112	49	7.5	72	8.7
16	5.7	35	18	13	39	43	31	49	33	7.2	16	8.8
17	5.2	34	17	12	49	36	28	37	141	7.0	26	6.0
18	4.9	30	18	17	43	311	28	32	29	6.8	108	5.0
19	4.9	27	15	15	22	80	22	29	18	7.3	12	4.9
20	4.9	22	15	15	22	50	21	29	15	6.9	7.3	5.4
21	4.9	22	14	14	20	40	21	29	19	6.3	5.9	4.4
22	4.7	22	15	13	399	36	20	140	41	5.8	5.2	4.5
23	4.7	21	14	13	101	33	24	1740	334	6.0	4.8	4.6
24	5.7	19	13	13	50	28	21	108	52	1550	4.3	4.4
25	24	19	12	13	36	25	18	53	26	224	4.1	4.1
26	21	20	13	16	30	33	18	931	19	206	69	4.2
27	16	20	13	14	26	848	19	118	15	29	19	4.2
28	944	20	13	16	25	262	33	234	75	14	18	4.1
29	89	21	13	14	---	110	18	102	24	10	12	4.2
30	510	21	12	50	---	56	17	64	15	8.7	11	4.1
31	1350	---	24	500	---	43	---	46	---	6.5	10	---
TOTAL	3077.9	7412	749	1416	1236	2851	1415	7454	3591	2240.5	485.6	188.3
MEAN	99.3	247	24.2	45.7	44.1	92.0	47.2	240	120	72.3	15.7	6.28
MAX	1350	4530	167	500	399	848	440	1760	1040	1550	108	9.3
MIN	4.3	19	12	12	10	15	17	13	15	5.8	4.0	4.1
AC-FT	6110	14700	1490	2810	2450	5650	2810	14790	7120	4440	963	373

CAL YR 1974 TOTAL 29432.50 MEAN 80.6 MAX 4530 MIN 0 AC-FT 58380
WTR YR 1975 TOTAL 32116.30 MEAN 88.0 MAX 4530 MIN 4.0 AC-FT 63700

PEAK DISCHARGE (BASE, 2,000 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-28	1200	12.60	3,040	5-2	1545	12.10	2,840	6-9	0915	13.19	3,310
10-31	0200	13.80	3,790	5-14	0200	15.08	5,740	6-13	2145	13.81	3,800
11-2	1600	19.20	18,000	5-23	0415	13.99	3,990	7-24	1315	13.05	3,230
3-27	1200	12.25	2,900	5-26	1000	13.14	3,280				

07243500 DEEP FORK NEAR BEGGS, OKLA.

LOCATION.--Lat 35°40'15", long 96°04'08", on line between secs. 19 and 20, T.14 N., R.12 E., Okmulgee County, near left bank on downstream side of pier of county road bridge, 3.0 mi (4.8 km) upstream from Adams Creek, 4.0 mi (6.4 km) south of Beggs, 8.0 mi (12.9 km) downstream from Flat Rock (Checkerboard) Creek, and at mile 85.0 (136.8 km).

DRAINAGE AREA.--2,018 mi² (5,227 km²).

PERIOD OF RECORD.--September 1938 to current year.

GAGE.--Water-stage recorder. Datum of gage is 632.55 ft (192.801 m) above mean sea level. Prior to Aug. 29, 1939, nonrecording gage at site 450 ft (137.2 m) downstream at same datum. Aug. 29, 1939, to June 22, 1953, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--37 years, 852 ft³/s (24.13 m³/s), 617,300 acre-ft/yr (761 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 29,800 ft³/s (844 m³/s) Nov. 6, gage height, 30.36 ft (9.254 m); minimum daily, 77 ft³/s (2.18 m³/s) Sept. 30.
Period of record: Maximum discharge, 66,800 ft³/s (1,890 m³/s) May 11, 1943, gage height, 34.55 ft (10.531 m); no flow at times in 1939, 1954, 1956.

REMARKS.--Records good. See pg. 422 for water-quality record.

COOPERATION.--Gage-height record and 23 discharge measurements furnished by Corps of Engineers; records computed by Geological Survey.

REVISIONS (WATER YEARS0.--WSP 957: 1941. WSP 1117: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	605	5970	556	732	2000	2940	6320	927	8170	1040	2130	220
2	526	8180	533	852	2260	2680	5450	1440	6710	1010	2380	194
3	437	9750	515	1890	2320	2200	4780	3960	5240	865	2550	172
4	347	20900	494	2080	2570	1490	4360	4390	4130	688	2540	154
5	274	27300	487	1540	3040	1160	4030	5590	3410	578	2000	137
6	230	29300	570	1300	3100	1020	3540	5540	2470	505	1090	118
7	197	28800	929	1300	3130	927	2400	4940	1620	448	715	107
8	171	23600	841	1280	3180	845	2800	4490	1580	400	540	99
9	151	17300	682	1180	3240	766	3300	4490	1300	365	451	110
10	139	12700	588	1060	3270	1360	3360	4660	1890	334	386	141
11	131	10300	1200	988	3230	1810	3250	4440	2250	311	332	102
12	123	8700	1960	904	3060	2000	3030	4020	2260	293	289	120
13	119	7500	1670	758	2540	2120	2770	2920	2210	261	257	113
14	128	6620	1280	668	1610	1850	2580	3080	2800	249	236	119
15	129	5750	1200	636	1160	1660	2380	3470	3060	300	232	128
16	141	4900	1150	625	1060	1720	1950	3710	3320	268	203	123
17	144	4280	1030	592	1560	1770	1460	3790	3710	233	188	132
18	144	3920	890	533	1530	2040	1210	3670	4120	209	216	144
19	145	3560	779	516	1220	3400	1050	3540	4790	193	325	141
20	151	2960	696	500	973	3390	914	3730	5060	182	501	137
21	153	1980	630	465	904	3270	779	4210	4520	192	617	130
22	157	1340	575	445	1960	2860	692	4660	4010	177	635	117
23	137	1090	542	429	3530	2480	646	4490	3510	164	568	109
24	121	943	519	400	3790	2320	623	4080	3020	170	472	99
25	122	843	487	400	4040	2190	600	4020	2610	378	378	91
26	155	746	456	406	3980	1790	558	3820	2030	644	638	84
27	393	684	434	396	3710	2370	519	3740	1640	853	1510	80
28	1050	640	428	374	3310	4150	537	4950	1520	1240	817	80
29	2530	597	420	364	---	6900	653	10400	1390	1490	496	78
30	2590	575	411	352	---	7980	848	11200	1200	1670	432	77
31	3940	---	490	696	---	7210	---	9560	---	1860	280	---
TOTAL	15780	251726	23444	24661	71277	81268	67409	141927	95550	17570	24606	3656
MEAN	509	8391	756	796	2546	2622	2247	4578	3185	567	794	122
MAX	3940	29300	1960	2080	4040	7980	6320	11200	8170	1860	2550	220
MIN	119	575	411	352	904	766	519	927	1200	164	188	77
AC-FT	31300	499300	46500	48920	141400	161200	133700	281500	189500	34850	48810	7250

CAL YR 1974 TOTAL 750276 MEAN 2056 MAX 31000 MIN 26 AC-FT 1488000
WTR YR 1975 TOTAL 818876 MEAN 2243 MAX 29300 MIN 77 AC-FT 1624000

PEAK DISCHARGE (BASE, 3,000 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
11-6	2315	30.36	29,800	3-30	0615	20.66	8,110	5-22	1415	18.03	4,750
2-10	0830	15.50	3,270	4-10	0415	15.17	3,370	5-29	2315	22.50	11,500
2-25	1900	17.69	4,080	5-5	1815	18.87	5,770	6-20	0430	18.70	5,140
3-18	2315	15.91	3,470	5-17	0930	16.33	3,810				

07244800 EUFAULA LAKE NEAR BROOKEN, OKLA.

LOCATION.--Lat 35°18'25", long 95°21'45", in SW 1/4 sec.25, T.10 N., R.18 E., McIntosh County, in intake structure near left end of dam on Canadian River, 4.0 mi (6.4 km) northeast of Brooken and at mile 27.0 (43.4 km).

DRAINAGE AREA.--47,522 mi^2 (123,082 km^2), of which 9,700 mi^2 (25,123 km^2) is probably noncontributing.

PERIOD OF RECORD.--February 1964 to current year. Prior to October 1970 published as Eufaula Reservoir near Brooken.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level.

EXTREMES.--Current year: Maximum contents, 3,552,000 acre-ft (4.38 km^3) Nov. 13, elevation, 595.26 ft (181.435 m); minimum, 2,098,000 acre-ft (2.59 km^3) Sept. 13, elevation, 582.66 ft (177.595 m).
Period of record: Maximum contents, 3,791,000 acre-ft (4.67 km^3) Apr. 25, 1973, elevation, 596.95 ft (181.950 m); minimum since power pool first filled, 1,181,800 acre-ft (1,460 hm^3) Nov. 4, 1964, elevation, 570.23 ft (173.806 m).

REMARKS.--Reservoir is formed by an earth dam having a gated, concrete, ogee-type spillway weir controlled by 11, 40-foot (12.2 m) taintor gates. Closure for diversion was made Feb. 1, 1963 and regulated storage began Feb. 10, 1964; minimum power pool was first filled June 17, 1964. Capacity, 3,798,000 acre-ft (4.68 km^3) at elevation 597.0 ft (181.966 m), top of flood control pool, 2,329,000 acre-ft (2.87 km^3) at elevation 585.0 ft (178.308 m), top of power pool, and 864,800 acre-ft (1.07 km^3) at elevation 565.0 ft (172.212 m), bottom of power pool. Dead storage is negligible. Figures given herein represent total contents. Reservoir is used for flood control, sediment control, power development, and other water uses. Revised capacity table, based on survey 1969, used since Oct. 1, 1972.

COOPERATION.--Records furnished by Corps of Engineers.

Capacity table (elevation, in feet, and contents, in acre-feet)

582	2,036,000	590	2,880,000
584	2,228,000	593	3,251,000
587	2,539,000	596	3,655,000

CONTENTS, IN ACRE-FEET, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2330000	2672000	2641000	2451000	2300000	2671000	2600000	2498000	2520000	2407000	2340000	2187000
2	2317000	2777000	2630000	2460000	2342000	2630000	2573000	2504000	2503000	2402000	2342000	2172000
3	2309000	2856000	2614000	2464000	2372000	2590000	2536000	2575000	2484000	2397000	2342000	2157000
4	2299000	2972000	2604000	2463000	2401000	2545000	2516000	2616000	2476000	2393000	2346000	2139000
5	2297000	3062000	2600000	2467000	2432000	2497000	2503000	2622000	2458000	2387000	2350000	2127000
6	2299000	3131000	2656000	2455000	2448000	2461000	2490000	2618000	2443000	2379000	2344000	2124000
7	2292000	3199000	2661000	2450000	2454000	2416000	2497000	2613000	2492000	2369000	2334000	2123000
8	2278000	3271000	2660000	2443000	2455000	2399000	2502000	2601000	2506000	2360000	2327000	2108000
9	2279000	3352000	2657000	2444000	2459000	2384000	2522000	2594000	2508000	2349000	2322000	2104000
10	2270000	3464000	2649000	2448000	2460000	2364000	2512000	2586000	2530000	2340000	2318000	2104000
11	2268000	3534000	2663000	2437000	2462000	2370000	2502000	2567000	2533000	2335000	2305000	2101000
12	2271000	3541000	2664000	2429000	2460000	2415000	2488000	2550000	2528000	2333000	2292000	2099000
13	2274000	3515000	2660000	2422000	2457000	2447000	2472000	2546000	2519000	2333000	2280000	2101000
14	2278000	3494000	2661000	2410000	2454000	2446000	2471000	2581000	2533000	2331000	2276000	2101000
15	2283000	3455000	2650000	2388000	2447000	2447000	2463000	2612000	2538000	2322000	2281000	2119000
16	2284000	3406000	2640000	2363000	2449000	2459000	2456000	2626000	2539000	2317000	2286000	2123000
17	2285000	3355000	2622000	2345000	2443000	2455000	2448000	2622000	2617000	2309000	2290000	2127000
18	2283000	3304000	2613000	2336000	2437000	2476000	2438000	2607000	2662000	2293000	2287000	2130000
19	2285000	3255000	2602000	2332000	2427000	2474000	2423000	2582000	2663000	2293000	2278000	2130000
20	2285000	3194000	2584000	2325000	2420000	2445000	2411000	2564000	2640000	2292000	2267000	2132000
21	2282000	3134000	2566000	2322000	2429000	2421000	2402000	2541000	2610000	2279000	2260000	2132000
22	2278000	3080000	2550000	2311000	2614000	2401000	2390000	2521000	2584000	2268000	2248000	2131000
23	2273000	3014000	2530000	2305000	2740000	2386000	2382000	2498000	2550000	2254000	2242000	2129000
24	2273000	2953000	2520000	2301000	2777000	2361000	2396000	2534000	2519000	2267000	2240000	2124000
25	2273000	2885000	2501000	2292000	2778000	2340000	2483000	2556000	2492000	2265000	2221000	2121000
26	2277000	2827000	2487000	2281000	2763000	2333000	2562000	2556000	2469000	2268000	2211000	2117000
27	2277000	2768000	2471000	2279000	2734000	2341000	2497000	2564000	2451000	2310000	2215000	2117000
28	2300000	2725000	2459000	2267000	2703000	2484000	2510000	2566000	2437000	2322000	2203000	2118000
29	2316000	2680000	2446000	2250000	---	2576000	2513000	2564000	2425000	2329000	2197000	2112000
30	2335000	2662000	2442000	2244000	---	2619000	2505000	2551000	2413000	2337000	2198000	2106000
31	2537000	---	2451000	2254000	---	2620000	---	2537000	---	2340000	2184000	---
MAX	2537000	3541000	2664000	2467000	2778000	2671000	2600000	2626000	2663000	2407000	2350000	2187000
MIN	2268000	2662000	2442000	2244000	2300000	2333000	2382000	2498000	2413000	2254000	2184000	2094000
(†)	586.98	588.11	586.17	584.26	588.47	587.74	586.68	586.98	585.80	585.10	583.60	852.74
(‡)	+203,000	+125,000	-211,000	-197,000	+449,000	-83,000	-115,000	+32,000	-124,000	-73,000	-151,000	-83,000

CAL YR 1974.....‡ -35,000
WTR YR 1975.....‡ -228,000

† Elevation, in feet, at end of month.
‡ Change in contents, in acre-ft.

07245000 CANADIAN RIVER NEAR WHITEFIELD, OKLA.

LOCATION.--Lat 35°15'45", long 95°14'19", in SE 1/4 SE 1/4 sec.12, T.9 N., R.19 E., Haskell County, near right bank on downstream side of pier of bridge on State Highway 2, 0.8 mi (1.3 km) north of Whitefield, 5.5 mi (8.8 km) upstream from Taleka (Snake) Creek, 8.2 mi (13.2 km) downstream from Eufaula Dam, and at mile 18.8 (30.2 km).

DRAINAGE AREA.--47,576 mi² (123,222 km²), of which 9,700 mi² (25,123 km²) is probably noncontributing.

PERIOD OF RECORD.--July 1938 to current year. Monthly discharge only for some periods, published in WSP 1311.

GAGE.--Water-stage recorder. Datum of gage is 478.16 ft (145.743 m) above mean sea level. Prior to Jan. 11, 1939, nonrecording gage and Jan. 11, 1939, to Dec. 10, 1941, June 12, 1947, to Sept. 30, 1948, water-stage recorder, all at site 2.1 mi (3.4 km) downstream at datum 2.80 ft (0.853 m) lower. Dec. 11, 1941, to June 11, 1947, water-stage recorder at present site and datum.

AVERAGE DISCHARGE.--37 years, 5,610 ft³/s (158.9 m³/s), 4,064,000 acre-ft/yr (5.01 km³/yr).

EXTREMES.--Current year: Maximum discharge, 37,300 ft³/s (1,060 m³/s) Nov. 20, gage height, 11.90 ft (3.627 m); minimum daily, 51 ft³/s (1.44 m³/s) Sept. 28.
Period of record: Maximum discharge, 281,000 ft³/s (7,960 m³/s) May 10, 1943, gage height, 25.5 ft (7.77 m); minimum daily, 0.4 ft³/s (.011 m³/s) Oct. 8, 1956.
Maximum stage known since 1898, that of May 10, 1943, from information by local resident.

REMARKS.--Records good. Prior to February 1964, occasional slight regulation by Conchas Lake in New Mexico and, except for 54 mi² (140 km²) of intervening area, completely regulated thereafter by Eufaula Lake (see sta. 07244800). See pg. 425 for water-quality record.

COOPERATION.--Gage height record and 31 discharge measurements furnished by Corps of Engineers; records computed by Geological Survey.

REVISIONS.--WSP 1177: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2810	7870	7390	7460	2730	25500	28000	11100	24000	6980	7790	2920
2	4580	12100	7650	9160	1020	25500	27800	10600	21800	5530	5310	7000
3	4850	4750	8440	7010	6040	27100	27600	11000	18100	5600	4460	8390
4	5530	4670	7540	8180	6550	24500	23300	11600	17900	4740	6490	8490
5	1350	2320	6170	8290	7060	29000	16300	14000	17900	4560	5670	7280
6	163	2140	5570	8920	7310	27500	16000	14300	16000	4820	6950	1400
7	4700	2570	6170	7910	6110	22600	10700	14400	9840	5830	6720	148
8	6500	924	5830	7880	7480	14200	12600	14500	9280	6220	6690	6240
9	1630	543	6100	7750	7650	14500	9190	14500	9860	6380	4630	2940
10	4920	1150	7070	8150	6990	15000	15800	14400	11200	6220	3680	668
11	1900	6510	6670	7750	8380	12700	15600	14400	14700	3480	7210	3160
12	460	19100	7910	7460	7530	8280	15600	14400	15300	749	6300	1360
13	761	26600	8330	7890	7860	10200	15600	14300	14500	234	6570	109
14	7000	29800	8140	8110	7670	14400	11000	15300	14000	2200	7030	92
15	2260	33300	7800	14400	8050	14400	9860	14100	13800	4330	2930	382
16	1500	36000	8790	14400	8100	14600	9910	13900	13200	3690	940	759
17	819	35500	9410	14100	7600	14500	9910	13800	12800	4170	178	140
18	856	35400	7460	6590	6740	21000	11200	16700	10200	7870	4240	78
19	562	36100	10400	6060	8490	32700	9660	20600	22100	2180	5790	206
20	208	36700	9430	5630	10900	32300	9640	19100	26000	412	6320	146
21	707	36500	9400	4100	6090	28800	6500	19100	25900	5110	6200	74
22	2910	36100	10100	5490	10100	20900	9130	19000	25900	6250	7050	225
23	2840	35800	9940	5220	8170	20600	9130	19000	25500	5850	3840	1220
24	2080	35600	9930	5070	13900	17300	9280	19100	25400	3450	1630	906
25	1550	35400	10200	5390	24100	14100	9220	19300	24000	2690	7410	661
26	576	35100	9660	5070	31100	9350	12000	19400	19500	737	6900	752
27	602	32600	8740	6040	30000	12400	14200	19600	16700	649	2200	112
28	232	26700	7460	6900	28000	12800	14300	19500	13600	5730	5520	51
29	243	26400	8400	7710	---	1790	14300	21400	13400	7480	4730	2040
30	2160	21800	8300	8280	---	444	14100	23900	11900	7490	924	3370
31	8460	---	8160	8170	---	6920	---	23900	---	6090	3420	---
TOTAL	75319	658047	253380	240540	240320	552884	417450	515200	514280	139721	155802	61299
MEAN	2430	21950	8173	7759	10580	17830	13920	16620	17140	4507	5019	2043
MAX	8460	36700	10400	14400	31100	32700	28000	23900	26000	8090	7790	8490
MIN	163	543	5570	4100	1020	444	6500	10600	9280	234	178	51
AC-FT	149400	1305000	502500	477100	567800	1097000	828000	1022000	1020000	277100	308600	121600

CAL YR 1974 TOTAL 2764377 MEAN 7574 MAX 37000 MIN 80 AC-FT 5483000
WTR YR 1975 TOTAL 3860026 MEAN 10630 MAX 36700 MIN 51 AC-FT 7696000

07245500 SALLISAW CREEK NEAR SALLISAW, OKLA.

LOCATION.--Lat 35°27'52", long 94°51'43", in SW 1/4 sec.34, T.12 N., R.23 E., Sequoyah County, on downstream side of right pier of abandoned county road bridge, 300 ft (91.4 m) upstream from U.S. Highway 64, 400 ft (121.9 m) downstream from water-supply dam of city of Sallisaw, 3.5 mi (5.6 km) west of Sallisaw, 5 mi (8 km) upstream from Little Sallisaw Creek, and at mile 9.0 (14.5 km).

DRAINAGE AREA.--182 mi^2 (471 km^2).

PERIOD OF RECORD.--October 1942 to current year.

GAGE.--Water-stage recorder. Datum of gage is 474.78 ft (142.713 m) above mean sea level. Prior to Aug. 20, 1953, and as supplementary gage since Feb. 21, 1958, water-stage recorder at site 400 ft (121.9 m) upstream at datum 15.22 ft (4.630 m) higher. Aug. 20, 1953, to Apr. 9, 1963, water-stage recorder at present site at datum 2.00 ft (0.610 m) higher.

AVERAGE DISCHARGE.--33 years, 202 ft^3/s (5.721 m^3/s), 146,300 acer-ft/yr (180 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 6,950 ft^3/s (197 m^3/s) Nov. 3, gage height, 11.35 ft (3.459 m); minimum daily, 7.1 ft^3/s (0.20 m^3/s) Aug. 13.
Period of record: Maximum discharge, 110,000 ft^3/s (3,115 m^3/s) Apr. 15, 1945, gage height, 11.25 ft (3.429 m), site and datum then in use, from rating curve extended above 23,000 ft^3/s (651 m^3/s) on basis of contracted-opening measurements at gage heights 7.96 and 11.25 ft (2.462 and 3.429 m); no flow at times in 1943, 1954, 1956, 1960, 1963, 1964.

REMARKS.--Records good. Small diversion above station for municipal water supply of city of Sallisaw.

COOPERATION.--Gage-height record and 25 discharge measurements furnished by Corps of Engineers; records computed by Geological Survey.

REVISIONS.--WSP 1117: Draingage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	144	1650	86	1010	1050	640	543	228	98	91	21	12
2	112	2210	81	636	1100	655	445	349	76	68	20	11
3	89	3880	78	523	977	475	370	1620	62	55	17	11
4	73	4080	74	414	794	390	316	1100	52	47	17	9.5
5	59	2290	71	346	756	331	274	734	54	41	16	8.7
6	50	1920	572	292	633	287	240	643	79	35	12	8.0
7	44	1740	1190	255	489	260	240	1330	881	32	12	37
8	40	1560	784	230	410	229	287	803	686	35	10	32
9	36	1460	535	207	346	222	309	570	373	38	12	24
10	31	2220	424	445	291	271	280	483	271	35	11	20
11	30	1900	455	447	259	350	240	437	417	43	9.3	18
12	26	1530	460	348	231	1170	215	352	272	42	8.2	16
13	22	1310	394	282	206	991	212	276	191	34	7.1	16
14	529	1040	338	249	191	685	238	223	187	30	19	16
15	673	693	298	228	178	564	241	189	214	28	26	81
16	484	527	261	211	182	536	211	158	205	24	470	161
17	321	422	231	191	207	485	193	137	1950	22	169	132
18	237	309	213	178	200	1370	182	120	1940	21	198	105
19	188	248	196	168	184	1570	174	104	1570	20	105	66
20	127	210	179	156	171	1140	157	99	1220	19	66	48
21	102	182	164	145	160	830	144	102	912	18	45	41
22	86	165	153	134	2630	592	132	88	570	19	35	38
23	76	154	143	125	2260	461	125	79	303	19	28	37
24	75	144	134	124	1700	376	119	84	220	22	24	36
25	64	131	124	143	1550	307	229	102	176	26	20	35
26	57	121	116	121	1510	271	273	90	135	33	18	31
27	52	109	115	114	1410	1230	247	89	105	49	17	27
28	76	100	109	106	1140	1870	283	90	89	38	17	25
29	89	96	109	100	---	1400	330	91	74	31	16	23
30	92	92	109	96	---	1100	269	142	104	26	17	21
31	2110	---	818	881	---	779	---	128	---	23	14	---
TOTAL	6176	32493	9016	8905	21215	22037	7518	11040	13486	1064	1476.6	1146.2
MEAN	199	1083	291	287	758	711	251	356	450	34.3	47.6	38.2
MAX	2110	4080	1190	1010	2630	1870	543	1620	1950	91	470	161
MIN	22	92	71	96	160	222	119	79	52	18	7.1	8.0
AC-FT	12250	64450	17880	17660	42080	43710	14910	21900	26750	2110	2930	2270

CAL YR 1974 TOTAL 129016.4 MEAN 353 MAX 4080 MIN 1.6 AC-FT 255900
WTR YR 1975 TOTAL 135572.6 MEAN 371 MAX 4080 MIN 7.1 AC-FT 268900

PEAK DISCAHRGE (BASE, 4,000 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE
11-3	0200	11.35	6,950
11-4	0700	10.90	6,490
2-22	1400	9.03	4,180

07247500 FOURCHE MALINE NEAR RED OAK, OKLA.

LOCATION.--Lat 34°54'44", long 95°09'20", in NW 1/4 NW 1/4 sec.13, T.5 N., R.20 E., Latimer County, on downstream side of left abutment of county road bridge, 0.1 mi (0.2 km) downstream from Little Fourche Maline, 5.0 mi (8.0 km) southwest of Red Oak, and at mile 41.2 (66.3 km).

DRAINAGE AREA.--122 mi^2 (316 km^2).

PERIOD OF RECORD.--October 1938 to current year. Monthly discharge only for some periods, published in WSP 1311.

GAGE.--Water-stage recorder. Datum of gage is 540.80 ft (164.836 m) above mean sea level. Prior to Apr. 25, 1939, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--37 years, 132 ft^3/s (3.738 m^3/s), 14.69 in/yr (373 mm/yr), 95,630 acre-ft/yr (118 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 2,690 ft^3/s (76.2 m^3/s) Nov. 4, gage height, 15.05 ft (4.587 m); minimum, 0.42 ft^3/s (0.012 m^3/s) Aug. 13, 14, Sept. 11.
Period of record: Maximum discharge, 41,500 ft^3/s (1,175 m^3/s) May 19, 1960, gage height, 24.70 ft (7.556 m), from floodmarks, from rating curve extended above 25,000 ft^3/s (709 m^3/s); no flow at times in most years.
Flood in June 1935 reached a stage of 25.4 ft (7.742 m), from floodmarks.

REMARKS.--Records good. Some regulation by several flood retarding structures.

COOPERATION.--Gage-height record and 28 discharge measurements furnished by Corps of Engineers; records computed by Geological Survey.

REVISIONS (WATER YEARS).--WSP 1117: Drainage area. WSP 1631: 1940.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	54	2110	49	276	1420	511	226	157	105	167	4.6	6.2
2	43	1110	44	191	1000	210	166	117	61	95	3.6	5.9
3	36	1190	40	217	1100	168	129	1500	43	57	3.0	5.7
4	29	2340	36	179	913	146	110	1130	33	47	2.5	5.0
5	24	1670	35	156	819	133	96	699	26	41	2.1	2.6
6	20	992	729	111	667	119	85	417	21	36	1.9	1.5
7	18	869	850	95	407	110	77	450	413	32	1.6	.91
8	19	731	466	86	294	98	236	262	418	27	1.3	.66
9	20	576	260	75	232	109	297	495	318	23	1.1	.59
10	17	1620	181	421	189	286	175	348	293	19	1.0	.59
11	15	1440	285	464	168	236	120	210	237	16	.90	.44
12	12	805	301	272	144	780	93	133	111	14	.80	.98
13	11	574	214	181	122	794	81	79	68	11	.66	.94
14	14	332	162	138	107	532	84	120	360	9.5	.98	1.4
15	65	176	134	120	94	375	75	157	1540	8.0	19	8.3
16	68	132	112	105	96	480	65	89	921	6.8	19	164
17	45	118	95	89	108	434	56	62	1530	6.0	11	86
18	34	100	83	80	87	506	52	49	1300	5.4	9.2	39
19	26	86	75	75	71	491	48	40	683	5.0	9.5	23
20	21	76	68	68	59	331	41	34	473	4.7	7.8	15
21	18	66	61	58	54	238	37	30	244	4.4	5.9	11
22	16	57	56	52	1060	187	33	28	126	4.0	5.0	8.8
23	13	54	51	47	1600	156	31	24	95	3.7	4.1	7.2
24	12	97	49	44	1050	132	36	21	76	3.4	3.4	5.8
25	11	66	44	49	909	111	1690	19	101	3.3	3.0	5.3
26	9.8	71	39	49	837	98	1310	19	93	3.6	2.3	4.9
27	9.8	60	44	44	622	564	812	21	65	4.8	2.0	4.3
28	11	53	42	40	472	1120	747	398	61	8.0	3.0	3.9
29	38	49	43	38	---	960	457	303	236	10	3.2	3.6
30	35	51	45	36	---	876	240	478	189	8.7	3.0	3.2
31	1350	---	117	1430	---	392	---	208	---	6.1	5.5	---
TOTAL	2114.6	17691	4810	5266	14701	11283	7705	8097	10240	690.4	141.94	426.75
MEAN	68.2	590	155	170	525	364	257	261	341	22.3	4.58	14.2
MAX	1350	2340	850	1430	1600	1120	1690	1500	1540	167	19	164
MIN	9.8	49	35	36	54	98	31	19	21	3.3	.66	.44
CFSM	.56	4.84	1.27	1.39	4.30	2.98	2.11	2.14	2.80	.18	.04	.12
IN.	.64	5.39	1.47	1.61	4.48	3.44	2.35	2.47	3.12	.21	.04	.13
AC-FT	4190	35090	9540	10450	29160	22380	15280	16060	20310	1370	282	846

CAL YR 1974 TOTAL 74313.48 MEAN 204 MAX 2880 MIN .98 CFSM 1.67 IN 22.66 AC-FT 147400
WTR YR 1975 TOTAL 83166.69 MEAN 228 MAX 2340 MIN .44 CFSM 1.87 IN 25.36 AC-FT 165000

PEAK DISCHARGE (BASE, 3,000 FT^3/S).--No peak above base.

07248000 WISTER LAKE NEAR WISTER, OKLA.

LOCATION.--Lat 34°56'10", long 94°43'10", in SE 1/4 NE 1/4 sec.1, T.5 N., R.24 E., LeFlore County, in control tower near right end of Wister Dam on Poteau River, 2.0 mi (3.2 km) south of Wister, 2.7 mi (4.3 km) upstream from Casten Creek, and at mile 60.9 (98.0 km).

DRAINAGE AREA.--993 mi^2 (2,572 km^2).

PERIOD OF RECORD.--October 1949 to current year. Prior to October 1970 published as Wister Reservoir near Wister.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level.

EXTREMES.--Current year: Maximum contents, 301,900 acre-ft (372 hm^3) Nov. 13, elevation, 496.48 ft (151.327 m); minimum, 26,620 acre-ft (32.8 hm^3) Apr. 21, elevation, 471.49 ft (143.710 m).
Period of record: Maximum contents, 507,400 acre-ft (626 hm^3) May 27, 1957, elevation, 505.73 ft (154.147 m); minimum since conservation pool was first filled, 4,020 acre-ft (4.96 hm^3) Oct. 16, 1961, elevation, 456.97 ft (139.284 m).

REMARKS.--Reservoir is formed by an earth dam. Regulated storage began Oct. 4, 1949, conservation pool was first filled Dec. 19, 1949. Capacity, 429,600 acre-ft (530 hm^3) at elevation 502.5 ft (153.16 m) crest of spillway and 29,950 acre-ft (36.9 hm^3) at elevation 471.6 ft (143.74 m) conservation pool. Figures given herein represent total contents. Reservoir is used for flood control and recreation. Revised capacity table used since Oct. 1, 1953.

COOPERATION.--Records furnished by Corps of Engineers.

Capacity table (elevation, in feet, and contents, in acre-feet)

471	24,720	486	139,900
476	49,020	491	208,400
481	87,030	497	311,800

CONTENTS, IN ACRE-FEET, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	63690	121300	152100	37570	79060	81400	131400	79660	96090	126300	62070	64660
2	63690	132400	147300	37370	102000	76850	124600	76680	92630	116200	62070	64590
3	63690	147100	142100	37170	118500	71500	115600	108200	88870	105500	61990	64440
4	63540	174400	136900	37020	124900	66250	106000	124000	84860	94160	61850	64290
5	63320	195800	131600	36270	129500	60330	95990	128100	81660	85160	61700	64210
6	63090	206400	142400	35250	131000	54100	85760	130300	80790	72150	61480	64060
7	63090	213500	149500	34060	128300	47000	75350	150600	100400	65340	61340	63840
8	63020	218800	149800	32660	123900	40050	67330	156300	113500	63470	61270	63690
9	63020	224600	147100	31530	118100	34580	59830	158400	122700	63470	61120	64210
10	62950	258800	141800	31530	112000	33590	52100	153400	131200	63540	60910	64140
11	62870	288300	137300	33170	105600	39260	46190	147500	133800	63540	60830	64210
12	62950	299100	132700	33590	98740	49440	40690	141100	130600	63470	60760	64210
13	62950	301300	126000	32980	91580	56500	35010	134600	127200	63470	60620	64140
14	63320	298500	118900	31850	84230	59340	32480	127200	146500	63320	61050	64210
15	63320	290900	111500	30700	76680	57390	31130	119600	172400	63240	60980	65720
16	63320	279700	105200	29360	69750	60690	29830	111900	184900	63240	61770	66250
17	63540	266800	100000	28780	62730	62360	28360	103600	201000	63090	62510	66630
18	63690	257600	95020	28400	55960	63240	27630	95220	214100	62870	62730	67170
19	63690	246200	89520	28080	49140	62510	27260	89520	218800	62800	62870	67480
20	63760	234100	84050	27670	42030	59200	26820	85490	215100	62580	63020	67480
21	63760	221900	78810	27710	38440	54430	26860	82810	208300	62650	63090	67560
22	63690	209500	73530	28160	50360	48720	27220	81310	200600	62580	63020	67560
23	63690	197700	68020	28530	69430	42960	27470	79490	190700	62430	62950	67480
24	63760	192100	62870	28990	80530	37070	29360	77270	185500	62360	62950	67560
25	63760	187300	57660	29240	85220	32980	58990	75260	184800	62290	62730	67480
26	63760	177800	53060	29450	87770	30430	73200	76260	176000	62360	64590	67400
27	63690	170000	49260	29620	87670	37770	82100	77550	166100	62430	64740	67330
28	64140	165400	46300	29790	85220	81660	89060	91680	156000	62360	64810	67170
29	64060	161300	43410	29450	---	120200	89240	99030	146300	62290	64810	67170
30	64440	157100	40530	29410	---	135100	85670	100400	136500	62140	64740	67170
31	96380	---	38750	50110	---	136300	---	99030	---	62070	64740	---
MAX	96380	301300	152100	50110	131000	136500	131400	158400	218800	126300	64810	67560
MIN	62870	121300	38750	27670	38440	30430	26820	75260	80790	62070	60620	63690
(†)	481.99	487.37	474.16	476.18	480.80	485.70	480.85	482.26	485.72	477.96	478.32	478.64
(‡)	+31,640	+60,720	-118,400	+11,360	+35,110	+51,080	-50,630	+13,360	+37,470	-74,430	+2,670	+2,430

CAL YR 1974.....‡ -85,750
WTR YR 1975.....‡ +2,430

† Elevation, in feet, at end of month.
‡ Change in contents, in acre-ft.

07248500 POTEAU RIVER NEAR WISTER, OKLA.

LOCATION.--Lat 34°56'15", long 94°42'54", in NW 1/4 NW 1/4 sec.6, T.5 N., R.25 E., Leflore County, on left bank of outflow channel 700 ft (213.4 m) downstream from Wister Dam, 2.2 mi (3.5 km) southeast of Wister, 2.6 mi (4.2 km) upstream from Caston Creek, and at mile 60.8 (97.8 km).

DRAINAGE AREA.--993 mi^2 (2,572 km^2).

PERIOD OF RECORD.--May 1938 to current year. Monthly discharge only for some periods, published in WSP 1311. Prior to May 21, 1951, records below about 500 ft^3/s (14.2 m^3/s) include flow from Caston Creek, drainage area, 70 mi^2 (181 km^2).

GAGE.--Water-stage recorder. Datum of gage is 445.43 ft (135.767 m) above mean sea level. See WSP 1921 for history of changes prior to June 28, 1953.

AVERAGE DISCHARGE.--37 years, 1,160 ft^3/s (32.85 m^3/s), 840,400 acre-ft/yr (1.04 km^3/yr).

EXTREMES.--Current year: Maximum discharge, 6,530 ft^3/s (185 m^3/s) Nov. 24, gage height, 8.04 ft (2.451 m); minimum daily, 5.0 ft^3/s (0.14 m^3/s) Feb. 2.

Period of record: Maximum discharge, 78,600 ft^3/s (2,230 m^3/s) May 16, 1945, gage height, 37.16 ft (11.326 m), site and datum then in use; no flow at times in 1938-39, 1943, 1947, 1953-54, 1961, 1964. Flood in June 1935 reached a stage of 43.0 ft (13.11 m) at site and datum used in 1938, estimated as 38.5 ft (11.73 m) at site and datum used during 1939-47, on basis of fall determined for flood in 1943.

REMARKS.--Records good. Flow completely regulated by Wister Lake since October 1949. (See sta. 07248000).

COOPERATION.--Gage-height record and 15 discharge measurements furnished by Corps of Engineers; records computed by Geological Survey.

REVISIONS (WATER YEARS).--WSP 1117: Drainage area. WSP 1241: 1939, 1943(M), 1945(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	747	59	3050	1250	166	3960	4690	3960	2090	4980	22	19
2	240	60	3030	1240	5.0	3920	5030	3030	2080	4910	22	19
3	240	61	3020	1240	1070	3870	5200	22	2070	5020	21	19
4	238	61	3000	1240	3030	3820	5370	21	2060	5060	21	19
5	238	63	3280	1240	3050	3750	5260	1840	1690	4960	21	19
6	239	65	3330	1240	3060	3670	5170	3380	1070	4850	22	19
7	176	66	3540	1230	3730	3800	5070	25	29	3480	22	19
8	128	67	3550	1220	4060	3800	4970	760	27	1060	22	19
9	128	67	3540	1220	4030	3670	4870	1920	602	33	22	18
10	126	69	4090	1210	4000	2600	4760	4050	1040	33	21	18
11	94	70	4090	1220	3960	876	4000	4020	2110	33	21	18
12	62	830	4450	1230	3920	53	3490	3990	3120	33	21	17
13	60	2780	4800	1230	3870	1340	3400	3810	3100	33	21	17
14	60	3710	4760	1220	3900	2140	2130	3950	160	33	20	17
15	57	4980	4700	1210	3980	3320	1200	4030	30	33	20	17
16	56	6280	4030	1200	3900	3850	1190	4080	29	33	20	14
17	56	6240	3140	871	3830	3880	1170	4020	30	34	20	13
18	56	6160	3120	635	3760	3830	756	3960	29	34	20	13
19	56	6100	3090	635	3570	4070	505	2960	945	34	20	13
20	56	6210	3060	633	3650	4040	502	2140	3450	34	20	13
21	56	6270	3020	354	2410	3990	295	1480	4300	26	20	13
22	58	6330	2990	152	521	3910	108	1070	4280	20	20	13
23	58	6410	2950	153	12	3820	105	1070	4710	21	20	13
24	58	6420	2920	152	987	3720	106	1060	3740	21	20	13
25	58	6340	2870	152	2900	2860	110	1050	1100	22	20	13
26	58	6250	2830	152	3990	1880	119	546	4220	22	19	13
27	56	5160	2480	232	4000	1070	124	250	4990	22	19	13
28	55	3100	1950	287	3990	15	965	26	4940	21	19	13
29	54	3090	1930	287	---	16	3270	608	4890	21	19	13
30	54	3070	1900	286	---	1350	4000	1640	4910	21	19	13
31	58	---	1580	297	---	3330	---	2100	---	21	19	---
TOTAL	3736	96438	100690	24916	83551.0	90220	77935	66868	67841	34958	633	470
MEAN	121	3215	3248	804	2984	2910	2598	2157	2261	1128	20.4	15.7
MAX	747	6420	4800	1250	4060	4070	5370	4080	4990	5060	22	19
MIN	54	59	1580	152	5.0	15	105	21	27	20	19	13
AC-FT	7410	191300	199700	49420	165700	179000	154600	132600	134600	69340	1260	932

CAL YR 1974 TOTAL 623186.7 MEAN 1707 MAX 6420 MIN 8.7 AC-FT 1236000
WTR YR 1975 TOTAL 648258.0 MEAN 1776 MAX 6420 MIN 5.0 AC-FT 1286000

07250550 ARKANSAS RIVER AT DAM NO. 13, NEAR VAN BUREN, ARK.

LOCATION.--Lat 35°20'56", long 94°17'54", in sec.28, T.8 N., R.31 W., Sebastian County, in Dam No. 13 control house on right bank, and at mile 308.9 (497.0 km).

DRAINAGE AREA.--150,547 mi^2 (389,917 km^2), of which 22,241 mi^2 (57,604 km^2) is probably noncontributing.

PERIOD OF RECORD.--October 1927 to current year. Prior to October 1969, published as 07250500 Arkansas River at Van Buren. Gage-height records collected at Fort Smith, 16.3 mi (26.2 km) upstream from 1879 to December 1955, are contained in reports of National Weather Service.

GAGE.--Water-stage and gate position recorder. Datum of gage is at mean sea level (levels by Corps of Engineers). Prior to Oct. 1, 1934, nonrecording gage, and Oct. 1, 1934, to Dec. 20, 1969, recording gage at site 7.9 mi (12.7 km) upstream at datum 372.36 ft (113.495 m) higher.

AVERAGE DISCHARGE.--48 years, 32,000 ft^3/s (906 m^3/s), 23,180,000 acre-ft/yr (28,600 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 211,000 ft^3/s (5,980 m^3/s) Nov. 11, tailwater elevation, 394.77 ft (120.326 m); minimum daily discharge, 87 ft^3/s (2.46 m^3/s) Sept. 13.
Period of record: Maximum discharge, 850,000 ft^3/s (24,100 m^3/s) May 12, 1943, gage height, 38.0 ft (11.58 m), from floodmark, site and datum then in use; maximum gage height, 38.10 ft (11.613 m), former site and datum, Apr. 16, 1945; minimum daily discharge, 16 ft^3/s (0.45 m^3/s) Dec. 7, 1970.
Maximum stage since at least 1833, that of Apr. 16, 1945, and maximum discharge since at least 1833, that of May 12, 1943. Flood in June 1833 reached a stage of 38 ft (11.6 m) on Fort Smith gage, from records collected by National Weather Service. Flood of Apr. 16, 1927, reached a stage of 35.0 ft (10.67 m), former site and datum, from information by local resident.

REMARKS.--Records good. Beginning Apr. 26, 1970, daily discharge computed from relation between discharge, head, and gage openings. Flow regulated by many locks, dams, and reservoirs upstream.

REVISIONS (WATER YEARS).--WSP 1211: 1934-26. WSP 1561: 1954. WSP 2121: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20600	134000	102000	65900	68400	126000	114000	49500	87800	58600	16400	363
2	16000	117000	75100	55800	84100	120000	121000	51400	81800	43800	15500	18300
3	10400	128000	53300	65600	80400	118000	127000	97300	80500	42300	10500	20300
4	19600	162000	44900	73500	70800	124000	124000	84200	75700	43700	18600	15700
5	13900	185000	41900	64800	74200	124000	111000	61600	76500	42900	18100	15600
6	6700	188000	58600	59700	84500	114000	88300	51600	91300	42700	13500	5880
7	20000	182000	86500	53400	91200	113000	76000	73100	103000	42500	17100	2460
8	17400	189000	75200	53600	85200	110000	66800	68400	106000	38900	17500	13200
9	13800	195000	69100	55100	79600	96100	63000	52400	89500	39000	15400	9190
10	14700	203000	54400	56600	77200	96000	63800	50700	75100	36800	10100	8880
11	13500	209000	61000	62400	75500	108000	78500	51000	90000	35400	16500	11700
12	5700	194000	72000	61400	84800	119000	72400	49500	98000	28600	13500	6510
13	4740	183000	61600	57300	84400	122000	66200	42200	103000	28500	15500	87
14	15500	171000	77200	53900	77500	114000	66100	44500	109000	29800	15900	136
15	41100	154000	63900	52000	71400	111000	64000	46100	117000	26000	16900	5690
16	43000	149000	53400	51800	60200	97000	54900	61900	122000	20600	27200	19000
17	30700	150000	54400	54500	56300	94800	54500	59500	122000	20900	14800	9000
18	19000	154000	57200	51900	57900	78500	47200	62500	136000	15800	23000	9960
19	15100	154000	55900	55200	59500	97800	46800	62800	142000	17200	15300	17700
20	15000	153000	57100	48600	57800	107000	42400	62800	135000	20100	18800	26300
21	21600	154000	55900	37800	58800	105000	42100	62900	128000	17900	18600	17200
22	20200	154000	55100	33800	90600	117000	41000	61800	124000	19600	21800	24800
23	18300	154000	55400	33900	138000	110000	40800	56900	121000	23000	17300	27100
24	17700	154000	59600	33600	125000	109000	41200	61400	121000	11800	9060	26700
25	20100	154000	56300	33200	104000	104000	50700	57300	116000	10900	15600	20900
26	10700	154000	47300	33600	110000	89200	60700	67700	108000	9060	14600	22000
27	14500	154000	47900	32900	121000	89500	52600	79200	104000	4050	11900	10400
28	25000	146000	55300	32800	131000	132000	43800	88600	95300	16200	19200	5310
29	25500	135000	55000	32500	---	145000	44000	95000	86600	31900	22400	14000
30	42000	124000	54700	29500	---	120000	49200	92300	73700	29700	13900	13300
31	76800	---	54000	43800	---	105000	---	92200	---	23100	9630	---
TOTAL	648840	4837000	1891200	1530400	2359300	3415900	2054200	1998300	3118800	871310	504090	399666
MEAN	20930	161200	61010	49370	84260	110200	68470	64460	104000	28110	16260	13320
MAX	76800	209000	102000	73500	138000	145000	127000	97300	142000	58600	27200	28300
MIN	4740	117000	41900	29500	56300	78500	40800	42200	73700	4050	9060	87
AC-FT	1287000	9594000	3751000	3036000	4680000	6775000	4075000	3964000	6186000	1728000	999900	792700

CAL YR 1974 TOTAL 22408852 MEAN 61390 MAX 209000 MIN 252 AC-FT 44450000
WTR YR 1975 TOTAL 23629006 MEAN 64740 MAX 209000 MIN 87 AC-FT 46870000

07299570 RED RIVER NEAR QUANAH, TEX.

LOCATION.--Lat 34°24'47", long 99°44'03", Hardeman County, on right bank at downstream side of bridge on State Highway 283, 8 miles (13 km) north of Quanah, 30 miles (48 km) upstream from Salt Fork Red River, and at mile 1,030 (1,657 km).

DRAINAGE AREA.--8,321 mi^2 (21,551 km^2), of which 4,769 mi^2 (12,352 km^2) is probably noncontributing.

PERIOD OF RECORD.--November 1959 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,412.97 ft (430.673 m) above mean sea level.

AVERAGE DISCHARGE.--15 years (1960-75), 139 ft^3/s (3.936 m^3/s), 100,700 acre-ft/yr (124 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 22,800 ft^3/s (646 m^3/s) June 24, gage height, 11.35 ft (3.459 m); minimum, 0.25 ft^3/s (0.007 m^3/s) May 21.
Period of record: Maximum discharge, 64,000 ft^3/s (1,810 m^3/s) June 7, 1960, gage height, 16.00 ft (4.877 m), from rating curve extended above 32,000 ft^3/s (906 m^3/s); no flow at times.
Maximum stage since at least 1891 occurred in 1896, about 23 ft (7.0 m); second highest stage occurred June 1, 1957, 21.2 ft (6.46 m), from information by local resident.

REMARKS.--Records good. Several small diversions above station for irrigation.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	59	124	3.1	67	153	.6	4.7	.75	191	63	17	4.5
2	43	389	4.7	96	184	.6	2.0	1.5	48	50	12	4.5
3	30	284	6.6	107	244	21	1.3	2.3	30	41	7.0	4.5
4	22	144	7.9	107	282	21	1.1	8.8	17	64	4.4	25
5	15	110	8.8	93	232	19	1.1	7.3	9.3	392	2.7	14
6	15	92	11	67	190	15	2.2	1.5	5.4	603	2.0	6.1
7	11	74	9.6	56	134	11	33	.87	3.9	235	1.3	4.6
8	10	71	8.8	44	98	7.1	430	1.1	5.4	138	1.1	3.5
9	9.4	94	7.1	34	68	12	108	1.2	2.5	212	1.5	3.6
10	6.7	153	14	25	62	14	43	1.3	122	177	1.4	3.9
11	6.1	126	56	16	48	13	33	1.6	642	439	1.6	20
12	5.1	82	75	9.3	37	17	22	1.7	99	377	1.6	33
13	24	70	73	5.9	29	12	32	1.5	81	218	1.8	240
14	107	53	58	15	22	10	56	3.3	77	136	17	205
15	190	37	42	18	24	12	63	1.7	41	89	365	123
16	99	30	35	18	62	31	45	1.1	20	68	222	87
17	78	29	27	16	128	112	24	.87	11	43	287	59
18	54	29	25	16	185	320	12	.77	6.7	38	123	35
19	39	28	17	17	190	71	1.9	1.9	5.7	38	56	20
20	28	22	16	10	161	40	1.0	1.4	7.5	37	33	16
21	22	17	14	9.7	104	22	.75	4.3	141	21	17	58
22	29	15	13	5.9	128	14	1.5	18	1410	12	10	30
23	48	12	12	5.9	117	7.9	1.5	15	1050	13	6.4	33
24	157	6.6	10	6.7	107	4.5	1.2	4.5	5150	677	5.1	22
25	235	5.3	8.0	7.7	85	3.6	1.1	2.2	4930	1060	4.4	15
26	185	5.0	11	7.1	64	3.9	1.2	1.5	504	393	11	11
27	140	4.9	16	6.9	50	16	1.2	2.2	244	221	7.2	9.9
28	120	4.9	18	5.7	42	11	1.3	1.6	162	297	14	9.3
29	104	3.8	21	5.5	---	8.9	.89	434	117	155	33	8.9
30	101	2.3	32	24	---	10	.74	1340	87	59	12	7.9
31	148	---	61	129	---	7.0	---	684	---	27	5.5	---
TOTAL	2140.3	2117.8	721.6	1052.3	3230	928.9	927.68	2549.76	15220.4	6393	1284.0	1117.2
MEAN	69.0	70.6	23.3	33.9	115	30.0	30.9	82.3	507	206	41.4	37.2
MAX	235	389	75	129	282	320	430	1340	5150	1060	365	240
MIN	5.1	2.3	3.1	5.7	22	3.6	.74	.75	2.5	12	1.1	3.5
AC-FT	4250	4200	1430	2090	6410	1840	1840	5060	30190	12680	2550	2220

CAL YR 1974 TOTAL 56119.58 MEAN 154 MAX 9580 MIN .02 AC-FT 111300
WTR YR 1975 TOTAL 37682.94 MEAN 103 MAX 5150 MIN .74 AC-FT 74740

PEAK DISCHARGE (BASE, 5,000 FT^3/S).--June 24 (2100) 22,800 ft^3/s (11.35 ft).

07300000 SALT FORK RED RIVER NEAR WELLINGTON, TEX.
(National stream-quality accounting network)

LOCATION.--Lat 34°57'27", long 100°13'14", Collingsworth County, near center of stream on downstream side of bridge on U.S. Highway 83, 4 miles (6 km) downstream from Fort Worth and Denver (Burlington) Railway Co. bridge, 4.5 miles (7.2 km) south of Lutie, and 7.2 miles (11.6 km) north of Wellington.

DRAINAGE AREA.--1,222 mi^2 (3,165 km^2), of which 209 mi^2 (541 km^2) is probably noncontributing.

PERIOD OF RECORD.--June 1952 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,941.41 ft (591.742 m) above mean sea level.

AVERAGE DISCHARGE.--14 years (1952-66) prior to completion of Greenbelt Lake, 72.6 ft^3/s (2.056 m^3/s), 52,600 acre-ft/yr (64.9 hm^3/yr); 9 years (1966-75) regulated, 42.6 ft^3/s (1.206 m^3/s), 30,860 acre-ft/yr (38.1 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 48,300 ft^3/s (1,370 m^3/s) June 24, gage height, 12.70 ft (3.871 m); minimum daily, 4.9 ft^3/s (0.14 m^3/s) Dec. 6.
Period of record: Maximum discharge, 146,000 ft^3/s (4,130 m^3/s) May 16, 1957, gage height, 19.00 ft (5.791 m), from rating curve extended above 11,000 ft^3/s (312 m^3/s) on basis of slope-area measurement of 63,400 ft^3/s (1,800 m^3/s); minimum, 0.1 ft^3/s (0.003 m^3/s) June 19, 1952.

REMARKS.--Discharge records fair. Flow partly regulated since December 1966 (revised) by Greenbelt Lake (station 07299840). Water-quality records for the current year are published in the Texas State report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	84	6.2	41	81	30	31	20	54	26	16	7.3
2	15	129	8.4	39	93	25	28	25	39	20	19	7.3
3	14	237	9.2	62	121	22	30	26	35	15	17	7.1
4	13	93	9.2	54	121	20	25	28	26	20	16	7.9
5	13	43	8.4	43	110	20	26	37	25	41	17	8.6
6	14	31	4.9	37	52	22	28	39	26	41	18	9.3
7	18	41	5.5	33	45	19	70	33	27	26	19	10
8	18	57	7.6	31	64	14	141	37	25	28	18	11
9	16	75	12	28	57	15	87	37	22	29	19	11
10	14	70	13	26	43	26	57	45	177	51	21	11
11	13	31	26	22	54	28	117	50	122	50	23	11
12	16	26	31	19	45	31	106	75	78	30	22	10
13	96	23	28	15	37	31	64	125	59	25	25	10
14	195	20	18	15	33	31	141	87	45	37	390	12
15	93	20	12	20	33	31	87	78	34	42	85	11
16	64	20	11	28	43	72	43	70	32	25	30	9.5
17	50	22	10	31	64	70	28	75	32	17	19	9.7
18	41	20	12	30	78	62	19	84	31	15	20	9.7
19	35	19	14	30	84	67	16	310	29	14	15	9.4
20	35	16	14	28	75	50	15	185	24	13	13	9.5
21	33	16	13	28	59	33	15	195	30	13	12	15
22	47	11	13	26	54	23	16	249	3290	13	13	15
23	78	11	13	25	50	22	18	266	462	142	13	13
24	106	11	13	26	60	18	18	190	9080	94	14	12
25	100	11	11	28	81	16	16	195	419	67	15	12
26	70	10	11	31	52	18	16	243	150	59	12	12
27	57	10	13	31	39	47	35	257	78	52	11	12
28	57	9.2	15	26	31	52	35	243	70	33	10	12
29	64	8.4	16	26	---	41	19	2300	47	28	9.2	11
30	81	6.2	26	39	---	31	18	176	35	22	8.4	10
31	100	---	47	54	---	30	---	72	---	20	7.9	---
TOTAL	1564	1180.8	451.4	972	1759	1017	1385	5832	14603	1108	949.5	316.3
MEAN	51.1	39.4	14.6	31.4	62.8	32.8	46.2	188	487	35.7	30.6	10.5
MAX	195	237	47	62	121	72	141	2300	9080	142	390	15
MIN	13	6.2	4.9	15	31	14	15	20	22	13	7.9	7.1
AC-FT	3140	2340	895	1930	3490	2020	2750	11570	28970	2200	1880	627

CAL YR 1974 TOTAL 14067.6 MEAN 38.5 MAX 1010 MIN 1.6 AC-FT 27900
WTR YR 1975 TOTAL 31156.0 MEAN 85.4 MAX 9080 MIN 4.9 AC-FT 61800

PEAK DISCHARGE (BASE, 5,000 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE
5-29	1045	8.57	13,200
6-22	0300	7.20	6,810
6-24	0800	12.70	48,300

07300500 SALT FORK RED RIVER AT MANGUM, OKLA.

LOCATION.--Lat 34°51'32", long 99°30'28", in SW 1/4 SE 1/4 sec.34, T.5 N., R.22 W., Greer County, near left bank on downstream side of pier of bridge on State Highway 34, 0.5 mi (0.8 km) south of Mangum, 13.0 mi (21 km) downstream from Fish Creek, and at mile 35.5 (57.1 km).

DRAINAGE AREA.--1,566 mi^2 (4,056 km^2), of which 209 mi^2 (541 km^2) is probably noncontributing.

PERIOD OF RECORD.--April 1905 to June 1906, October 1937 to current year. Monthly discharge only for some periods, published in WSP 1311.

GAGE.--Water-stage recorder. Datum of gage is 1,490.87 ft (454.417 m) above mean sea level (levels by Bureau of Reclamation). Apr. 11, 1905, to June 30, 1906, nonrecording gage at site 0.2 mi (0.3 km) upstream at different datum. Oct. 1, 1937, to Nov. 8, 1938, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--38 years (1937-75), 87.8 ft^3/s (2.486 m^3/s), 63,610 acre-ft/yr (78.4 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 29,900 ft^3/s (847 m^3/s) June 24, gage height, 13.10 ft (3.993 m); minimum daily, 6.8 ft^3/s (0.19 m^3/s) Aug. 13.
Period of record: Maximum discharge, 72,000 ft^3/s (2,039 m^3/s) May 16, 1957, gage height, 14.55 ft (4.435 m); maximum gage height 14.7 ft (4.48 m) June 16, 1938; no flow at times in each year except 1975.

REMARKS.--Records good.

REVISIONS (WATER YEARS).--WSP 1211: Drainage area. WSP 1241: 1938.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	38	42	31	78	77	80	51	22	152	106	65	17
2	33	2540	32	98	82	68	45	19	100	89	57	15
3	30	220	36	86	117	58	43	18	73	72	48	14
4	27	138	41	83	116	56	41	17	54	62	31	13
5	26	112	39	89	130	53	41	17	42	55	25	12
6	24	101	38	69	127	50	41	17	35	48	20	11
7	24	91	38	57	97	45	142	16	30	77	17	11
8	27	87	36	55	84	43	203	14	27	97	14	11
9	30	105	35	55	81	44	123	13	22	104	12	10
10	30	112	37	51	74	46	114	12	101	62	9.8	9.9
11	27	96	56	49	85	46	86	11	80	77	8.5	9.1
12	25	85	67	38	83	50	75	12	69	73	7.4	11
13	27	68	74	29	69	49	117	18	42	55	6.8	21
14	57	56	76	38	62	51	104	23	26	47	1360	27
15	113	53	62	44	55	49	86	25	19	38	313	28
16	83	52	54	56	68	56	96	25	17	31	192	26
17	51	53	51	52	90	65	82	22	18	34	178	24
18	38	56	47	49	98	100	72	19	16	27	107	21
19	30	56	41	51	111	98	60	18	14	31	72	17
20	26	54	39	51	133	80	50	17	14	24	55	15
21	23	51	39	47	137	75	40	17	228	23	44	18
22	23	49	41	47	138	61	36	27	1660	22	38	20
23	36	46	40	48	129	48	34	29	330	19	33	21
24	139	40	37	47	130	38	32	26	9070	296	28	19
25	85	39	35	47	132	35	30	22	3470	219	24	16
26	39	38	36	48	118	36	29	19	448	576	25	15
27	30	37	38	49	124	59	28	16	300	308	21	14
28	31	36	41	49	100	49	31	14	276	184	22	14
29	28	34	43	47	---	51	29	22	210	79	22	14
30	43	33	48	79	---	56	25	814	190	58	23	13
31	55	---	67	85	---	57	---	194	---	45	19	---
TOTAL	1298	4580	1395	1771	2847	1752	1986	1555	17133	2838	2897.5	487.0
MEAN	41.9	153	45.0	57.1	102	56.5	66.2	50.2	571	91.5	93.5	16.2
MAX	139	2540	76	98	138	100	203	814	9070	376	1360	28
MIN	23	33	31	29	55	35	25	11	14	19	6.8	9.1
AC-FT	2570	9080	2770	3510	5650	3480	3940	3080	33980	5630	5750	966

CAL YR 1974 TOTAL 25938.99 MEAN 71.1 MAX 3380 MIN 0 AC-FT 51450
WTR YR 1975 TOTAL 40539.50 MEAN 111 MAX 9070 MIN 6.8 AC-FT 80410

PEAK DISCHARGE (BASE, 6,000 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
11-2	1000	12.05	17,000	6-24	2000	13.10	29,900
5-30	0130	10.26	6,520	8-14	0930	10.51	7,960

07301300 NORTH FORK RED RIVER NEAR SHAMROCK, TEX.

LOCATION.--Lat 35°15'51", long 100°14'29", Wheeler County, on left bank at downstream side of bridge on U.S. Highway 83, 2.5 miles (4.0 km) north of Shamrock, 16 miles (26 km) upstream from Oklahoma-Texas State line, and 23 mil3s (37 km) downstream from McClellan Creek.

DRAINAGE AREA.--1,082 mi^2 (2,802 km^2), of which 379 mi^2 (982 km^2) is probably noncontributing.

PERIOD OF RECORD.--1951-63 (occasional low-flow measurements), February 1964 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2,165.55 ft (660.060 m) above mean sea level.

AVERAGE DISCHARGE.--11 years, 28.5 ft^3/s (0.807 m^3/s), 20,650 acre-ft/yr (25.5 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 20,400 ft^3/s (578 m^3/s) May 29, gage height, 7.47 ft (2.277 m); no flow at times.
Period of record: Maximum discharge, 20,400 ft^3/s (578 m^3/s) May 29, 1975, gage height, 7.47 ft (2.277 m), from rating curve extended above 3,800 ft^3/s (108 m^3/s) on basis of slope-area measurement of peak flow; no flow at times.
Maximum stage since at least 1915, 16.1 ft (4.91 m) in May 1957, from information by State Highway Department and local residents.

REMARKS.--Discharge records poor. Some regulation by Lake McClellan (capacity, 5,000 acre-ft or 6.16 hm^3) 41 miles (66 km) upstream. Water-quality records for the current year are published in the Texas State report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	25	.04	4.4	69	32	9.0	0	60	66	0	
2	0	44	.06	5.0	66	21	2.2	0	43	43	0	
3	0	874	.13	6.6	95	17	.73	0	35	43	0	
4	0	44	8.2	9.5	49	18	.09	3.0	31	35	0	
5	0	21	27	13	5.1	20	.29	2.1	43	28	0	
6	.21	17	21	17	1.5	19	1.1	.16	35	31	0	
7	.14	25	10	32	1.0	9.4	8.3	.01	22	66	0	
8	.06	24	5.1	30	2.0	4.0	244	0	12	31	0	
9	0	36	.91	18	1.0	9.5	46	0	5.7	28	0	
10	0	53	2.7	8.4	2.0	19	38	0	497	152	0	
11	0	23	89	2.8	10	32	136	0	7.7	39	0	
12	.17	9.2	59	2.4	20	39	45	5.7	6.7	12	0	
13	68	6.2	28	2.0	7.9	21	65	707	4.2	48	31	
14	174	1.7	21	2.8	7.9	19	80	314	.67	490	248	
15	41	1.8	11	7.7	7.0	17	23	20	.05	43	89	
16	13	2.1	6.0	27	7.0	23	6.5	6.5	0	25	28	
17	4.4	4.1	3.3	32	9.0	24	2.3	1.3	.03	1.5	3.6	
18	.94	7.4	11	27	20	35	.24	.66	.02	.42	.42	
19	.14	4.9	8.5	13	50	20	.05	5.9	0	.34	.01	
20	.11	.98	3.8	9.5	79	13	.03	3.3	0	.34	0	
21	.10	.36	3.3	7.5	53	4.2	.01	.07	42	.16	0	
22	.16	.37	4.4	2.4	12	.96	.07	.09	1000	.05	0	
23	.75	.54	5.8	2.4	12	.09	.06	52	64	13	0	
24	14	.15	2.8	3.3	30	.03	.03	12	4990	31	0	
25	19	.11	2.0	7.5	64	.03	.01	.31	976	142	0	
26	5.6	.05	2.0	6.6	64	.15	.02	0	346	108	0	
27	3.8	.05	2.0	3.8	46	19	.85	0	184	35	0	
28	6.6	.06	10	3.3	41	37	.02	.06	220	17	0	
29	12	.05	14	6.6	---	11	0	7060	152	6.7	0	
30	21	.03	6.6	15	---	6.6	0	1270	98	.82	0	
31	44	---	5.0	72	---	7.6	---	258	---	.06	0	---
TOTAL	429.36	1228.15	373.64	400.5	831.4	498.56	708.90	9722.16	8875.07	1536.39	400.03	0
MEAN	13.9	40.9	12.1	12.9	29.7	16.1	23.6	314	296	49.6	12.9	0
MAX	174	874	89	72	95	39	244	7060	4990	490	248	0
MIN	0	.03	.04	2.0	1.0	.03	0	0	0	.05	0	0
AC-FT	852	2440	741	794	1650	989	1410	19280	17600	3050	793	0

CAL YR 1974 TOTAL 6514.11 MEAN 17.8 MAX 943 MIN 0 AC-FT 12920
WTR YR 1975 TOTAL 25004.18 MEAN 68.5 MAX 7060 MIN 0 AC-FT 49600

PEAK DISCHARGE (BASE, 3,000 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
11-3	0030	4.47	3,470	6-22	0200	4.59	5,960
5-13	1300	4.40	3,210	6-24	0630	7.07	18,600
5-29	0900	7.47	20,400				

07301500 NORTH FORK RED RIVER NEAR CARTER, OKLA.

LOCATION.--Lat 35°10'05", long 99°30'25", in NW 1/4 SE 1/4 sec.15, T.8 N., R.22 W., Beckham County, near left bank on downstream side of pier of bridge on State Highway 34, 3.0 mi (4.8 km) south of Carter, 10.8 mi (17.4 km) downstream from Timber Creek, and at mile 110.5 (177.8 km).

DRAINAGE AREA.--2,337 mi^2 (6,053 km^2), of which 399 mi^2 (1,033 km^2) is probably noncontributing

PERIOD OF RECORD.--October 1944 to September 1962. Annual maximum and occasional low-flow measurements, water years 1963-64. August 1964 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,673.71 ft (510.147 m) above mean sea level.

AVERAGE DISCHARGE.--29 years (1944-62, 1964-75), 119 ft^3/s (3.370 m^3/s), 86,220 acre-ft/yr (106 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 10,600 ft^3/s (300 m^3/s) May 30, gage height, 10.51 ft (3.203 m); minimum daily, 2.5 ft^3/s (0.071 m^3/s) Sept. 30.
Period of record: Maximum discharge, 53,400 ft^3/s (1,512 m^3/s) May 26, 1959, gage height, 13.42 ft (4.090 m); no flow at times in most years.

REMARKS.--Records good. See pg. 438 for water-quality record.

REVISIONS.--WSP 1211: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.1	47	63	137	140	144	103	49	556	146	78	10
2	6.4	260	57	143	196	138	91	47	374	122	263	8.8
3	4.8	1070	56	154	230	128	82	114	237	97	150	7.8
4	3.6	488	59	162	250	122	78	141	162	95	60	6.7
5	2.8	246	62	180	270	125	75	146	129	80	36	6.0
6	2.9	231	62	146	198	118	75	193	136	67	33	5.1
7	4.6	203	65	138	140	106	109	100	118	59	25	4.8
8	6.1	239	68	128	166	93	385	65	97	96	20	4.5
9	6.8	245	67	116	140	98	305	52	85	135	16	4.2
10	6.0	282	67	118	206	124	250	45	629	134	13	4.2
11	4.8	282	82	109	174	122	233	42	669	297	11	3.6
12	3.9	249	94	115	198	126	293	130	266	146	9.7	4.5
13	6.1	221	125	97	202	129	268	342	167	96	9.3	4.5
14	39	196	116	97	170	129	241	820	52	78	1170	6.7
15	100	181	94	112	162	118	248	344	34	313	894	8.1
16	65	178	81	100	159	150	200	174	33	171	435	8.4
17	31	169	78	106	167	154	142	160	16	124	266	8.4
18	19	160	77	109	170	150	105	117	12	83	205	7.8
19	13	157	72	122	176	136	77	92	13	71	162	6.0
20	10	142	69	106	246	129	65	81	17	68	134	4.5
21	8.8	130	75	97	214	115	57	76	22	56	100	6.4
22	8.6	121	74	85	231	94	53	86	1600	33	75	6.7
23	15	115	72	80	139	85	56	111	1130	27	55	6.7
24	21	100	68	75	132	75	58	94	1620	135	42	5.1
25	37	90	67	75	206	70	53	108	3920	137	30	3.6
26	47	84	67	72	309	68	44	77	800	143	24	3.3
27	36	77	70	75	169	94	48	58	511	116	18	3.0
28	30	75	77	80	151	112	118	48	154	126	16	3.0
29	24	73	77	78	---	115	80	297	129	131	15	2.7
30	25	70	83	85	---	126	62	7040	150	95	13	2.5
31	36	---	120	122	---	115	---	1600	---	65	13	---
TOTAL	632.3	6181	2362	3419	5313	3608	4054	12849	13638	3542	4411.0	167.6
MEAN	20.4	206	76.2	110	190	116	135	414	455	114	142	5.59
MAX	100	1070	125	180	309	154	385	7040	3920	313	1170	10
MIN	2.8	47	56	72	132	68	44	42	12	27	9.3	2.5
AC-FT	1250	12260	4690	6780	10540	7160	8040	25490	27050	7030	8750	332

CAL YR 1974 TOTAL 21387.58 MEAN 58.6 MAX 1070 MIN 0 AC-FT 42420
WTR YR 1975 TOTAL 60176.90 MEAN 165 MAX 7040 MIN 2.5 AC-FT 119400

PEAK DISCHARGE (BASE, 3,200 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE
5-30	2115	10.51	10,600
6-22	1945	8.46	4,130
6-25	0730	9.72	7,410

07302500 LAKE ALTUS AT LUGERT, OKLA.

LOCATION.--Lat 34°53'15", long 99°17'47", in SW 1/4 SE 1/4 sec.22, T.5 N., R.20 W., Kiowa County, on upstream face of Altus Dam on North Fork Red River, 1.0 mi (1.6 km) west of Lugert, 2.6 mi (4.2 km) upstream from Elm Fork of North Fork, and at mile 73.5 (118.3 km).

DRAINAGE AREA.--2,515 mi^2 (6,514 km^2), of which 399 mi^2 (1,033 km^2) is probably noncontributing.

PERIOD OF RECORD.--December 1943 to September 1950 (monthly records only), October 1950 to current year.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Bureau of Reclamation). Prior to Nov. 19, 1948, nonrecording or float gage at same site and datum.

EXTREMES.--Current year: Maximum contents, 139,300 acre-ft (172 hm^3) July 25, elevation, 1,559.75 ft (475.412 m); minimum, 42,170 acre-ft (52.0 hm^3) Oct. 11, elevation, 1,538.60 ft (468.965 m).
Period of record: Maximum contents, 170,600 acre-ft (210 hm^3) May 19, 1951, elevation 1,562.10 ft (476.128 m); minimum after initial storage, 4,690 acre-ft (5.78 hm^3) Aug. 25, 1944, elevation, 1,520.2 ft (463.357 m).

REMARKS.--Reservoir is formed by concrete and coursed masonry dam. Storage began in December 1943. Capacity, 134,600 acre-ft (166 hm^3) at elevation 1,559.0 ft (475.18 m) crest of uncontrolled spillway and 72,500 acre-ft (89.4 hm^3) at elevation 1,547.0 ft (471.53 m) crest of controlled spillway. Dead storage, 1,660 acre-ft (2.05 hm^3) below elevation 1,517.5 ft (462.53 m) sill of headgate at irrigation canal. Figures given herein represent total contents. Reservoir is used for flood control, municipal water supply for city of Altus, and irrigation of about 48,000 acres (194 km^2). Revised capacity table used since Jan. 1, 1969.

COOPERATION.--Data on diversions furnished by Bureau of Reclamation.

Capacity table (elevation, in feet, and contents, in acre-feet)

1,538	40,360	1,550	85,560
1,542	53,240	1,555	111,000
1,546	68,510	1,560	140,900

CONTENTS, IN ACRE-FEET, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	42570	45190	57840	61860	67430	78700	86450	92410	112000	133100	134700	126600
2	42480	47650	57910	62380	68050	79000	86260	92610	112500	133200	134900	125800
3	42290	50240	57950	62500	68400	79270	86260	92710	113100	133300	135100	125300
4	42230	52210	57950	62570	69020	79400	86310	92850	113500	133300	135100	125100
5	42260	52960	58170	62910	69480	79700	86540	93000	114000	133200	134900	124600
6	42380	53590	58310	63030	69730	80060	86630	93400	114300	133100	134600	124000
7	42360	54040	58390	63100	70090	80230	87150	93590	114700	133200	134200	123500
8	42360	54350	58590	63060	70370	80360	87990	93640	114900	133000	133700	123000
9	42320	54920	58420	63250	70170	80850	88420	93690	115200	133200	133200	122500
10	42260	55230	58710	63400	70730	80850	88900	93740	116000	133400	132500	122100
11	42170	55520	59010	63520	71050	81210	89180	94040	117800	133900	131200	122000
12	42290	55690	59150	63520	71210	81430	89420	94090	118200	134100	130000	121600
13	42320	56080	59150	63600	71690	81650	89990	94380	118500	133900	131200	121700
14	42360	56510	59520	63710	71890	81790	90420	95580	118700	133700	131700	121600
15	42290	56660	59740	63860	72140	82280	90620	96630	118800	133700	134500	121600
16	42380	56370	59850	63960	72590	82690	91000	97040	118900	133800	134700	121600
17	42510	56510	59850	64090	72870	83270	91490	97190	118500	133600	134900	121600
18	42570	56580	60070	64740	73120	83500	91750	97800	118300	133400	134600	121600
19	42570	56900	60220	64890	73360	83590	91880	97640	118500	133500	134300	121400
20	42510	56980	60290	64820	73820	84050	91630	97700	118200	133300	134000	121400
21	42380	57050	60290	65150	74690	84280	91680	97800	118700	133100	133600	121500
22	42720	57190	60550	65190	75450	84320	91590	98360	119700	132700	133100	121500
23	42690	57410	60700	65260	75780	84550	91780	98560	122900	133400	132500	121300
24	43740	57410	60740	65420	76380	84690	91880	98720	123600	138900	131800	121000
25	44300	57260	60440	65530	76980	84780	91780	98610	129300	139200	131100	120900
26	44430	57590	60890	65530	77530	84550	91930	98920	131100	138500	130400	120700
27	44490	57440	61000	65750	77970	85470	92220	98920	131900	137500	129800	120700
28	44680	57840	60960	65830	78310	85660	92170	98870	132300	136300	129100	120600
29	44710	57730	61260	65940	---	85700	92460	100000	132700	135400	128400	120500
30	45060	57810	61520	66660	---	85750	92460	104400	132900	134500	127900	120500
31	45120	---	61740	67080	---	86070	---	110400	---	134500	127200	---
MAX	45120	57840	61740	67080	78310	86070	92460	110400	132900	139200	135100	126600
MIN	42170	45190	57840	61860	67430	78700	86260	92410	112000	132700	127200	120500
(†)	1,539.55	1,543.29	1,544.36	1,545.63	1,548.38	1,550.11	1,551.45	1,554.90	1,558.73	1,559.00	1,557.80	1,556.68
(‡)	+2,490	+12,690	+3,930	+5,340	+11,230	+7,760	+6,390	+17,940	+22,100	+1,600	-7,300	-6,700
++	0	0	0	556	0	0	642	0	613	3,130	12,900	4,270

CAL YR 1974.....++ 46,560 ‡ -4,200
WTR YR 1975.....++ 22,010 ‡+77,870

† Elevation, in feet, at end of month.
‡ Change in contents, in acre-ft.
++ Total diversions, in acre-ft.

07303000 NORTH FORK RED RIVER BELOW ALTUS DAM, NEAR LUGERT, OKLA.

LOCATION.--Lat 34°53'26", long 99°18'22", in SW 1/4 sec.22, T.15 N., R.20 W., Greer County, on right bank 3,500 ft (1,067 m) downstream from Altus Dam, 1.9 mi (3.1 km) upstream from Elm Fork of North Fork, 2.0 mi (3.2 km) west of Lugert, and at mile 72.8 (117.1 km).

DRAINAGE AREA.--2,515 mi^2 (6,514 km^2), of which 399 mi^2 (1,033 km^2) is probably noncontributing.

PERIOD OF RECORD.--March 1930 to December 1932 (published as "at Lugert Dam"), December 1943 to September 1950 (published as spill from Lake Altus), October 1950 to September 1962, August 1964 to current year. Monthly discharge only form some periods, published in WSP 1311.

GAGE.--Water-stage recorder. Datum of gage is 1,471.81 ft (448.608 m) above mean sea level. Mar. 19, 1930, to Dec. 21, 1932, nonrecording gage at former Lugert Dam, 0.7 mi (1.1 km) upstream at datum 1,504.31 ft (458.514 m) above mean sea level, unadjusted.

EXTREMES.--Current year: Maximum discharge, 880 ft^3/s (24.9 m^3/s) July 26, gage height, 7.78 ft (2.371 m); no flow most of the year.
Period of record: Maximum discharge, 16,100 ft^3/s (456 m^3/s) May 18, 1951, gage height, 12.70 ft (3.871 m); no flow at times in each year.
Flood of May 16, 1928, reached a stage of 14.5 ft (4.42 m), site and datum then in use, discharge, 14,300 ft^3/s (405 m^3/s).

REMARKS.--Records good. Some regulation at low flow by Lugert Lake prior to December 1943 capacity, 13,500 acre-ft (16.6 hm^3) and completely regulated thereafter by Lake Altus (see sta. 07302500). Diversions at Lake Altus bypass most of the streamflow. Seepage from Altus Dam not included except for period March 1951 to January 1953.

REVISIONS.--WSP 1311: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1										0	47	
2										0	16	
3										0	18	
4										0	24	
5										0	25	
6										0	18	
7										0	11	
8										0	4.2	
9										0	1.1	
10										0	.20	
11										0	.10	
12										0	0	
13										0	0	
14										0	1.0	
15										0	2.7	
16										0	9.3	
17										0	84	
18										0	150	
19										0	120	
20										0	24	
21										0	6.5	
22										0	2.2	
23										0	.50	
24										6.0	.10	
25										170	0	
26										761	0	
27										840	0	
28										810	0	
29					---					760	0	
30					---					605	0	
31		---			---		---		---	203	0	---
TOTAL	0	0	0	0	0	0	0	0	0	4155.0	564.90	0
MEAN	0	0	0	0	0	0	0	0	0	134	18.2	0
MAX	0	0	0	0	0	0	0	0	0	840	150	0
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	0	0	0	0	0	0	0	0	0	8240	1120	0

CAL YR 1974 TOTAL 0.00 MEAN .00 MAX .00 MIN 0 AC-FT 0
WTR YR 1975 TOTAL 4719.90 MEAN 12.9 MAX 840 MIN 0 AC-FT 9360

07303400 ELM FORK OF NORTH FORK RED RIVER NEAR CARL, OKLA.

LOCATION.--Lat 35°00'42", long 99°54'12", in SW 1/4 NW 1/4 sec.12, T.6 N., R.26 W., Harmon County, near left bank on downstream side of pier of bridge on State Highway 30, 4.0 mi (6.4 km) northeast of Carl, and at mile 54.0 (86.9 km).

DRAINAGE AREA.--416 mi^2 (1,077 km^2).

PERIOD OF RECORD.--October 1959 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,714.95 ft (552.717 m) above mean sea level (State Highway Department bench mark).

AVERAGE DISCHARGE.--16 years, 40.0 ft^3/s (1.133 m^3/s), 28,980 acre-ft/yr (35.7 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 8,240 ft^3/s (233 m^3/s) June 22, gage height, 8.22 ft (2.505 m); minimum daily, 2.3 ft^3/s (0.065 m^3/s) Oct. 4.
Period of record: Maximum discharge, 17,900 ft^3/s (507 m^3/s) Apr. 27, 1962, gage height, 11.45 ft (3.490 m), from rating curve extended above 1,000 ft^3/s (28.3 m^3/s) on basis of slope-area measurement of peak flow; no flow Sept. 4, 1964.

REMARKS.--Records good. See pg. 450 for water-quality record.

REVISIONS.--WSP 1731: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	34	37	32	31	34	25	25	20	28	11	13
2	8.7	108	38	34	35	34	23	25	17	28	9.0	14
3	5.3	1100	39	35	38	35	22	26	16	32	9.0	12
4	2.3	179	37	29	39	35	23	25	15	30	10	11
5	2.6	108	36	29	38	34	24	29	16	30	8.4	11
6	3.3	78	36	27	33	33	25	25	14	30	7.7	10
7	4.7	65	35	27	32	31	102	18	14	50	9.0	10
8	5.2	64	32	26	37	29	241	18	12	42	11	10
9	4.7	64	31	26	36	34	53	18	12	32	10	9.6
10	4.4	60	34	25	33	34	43	21	355	23	9.0	9.4
11	3.5	51	43	23	36	32	48	19	114	22	5.2	11
12	3.7	51	41	11	30	32	42	40	51	20	6.5	11
13	24	53	37	17	29	30	43	43	32	22	8.7	14
14	90	49	35	30	29	28	40	32	25	25	2570	15
15	83	49	31	26	30	32	35	26	21	23	435	16
16	55	51	31	25	39	45	33	22	19	20	167	16
17	28	50	30	23	40	40	32	20	20	19	90	14
18	21	47	31	25	38	35	32	19	16	19	53	13
19	18	44	31	25	35	31	33	20	15	18	44	12
20	17	40	31	23	35	28	34	29	13	18	34	12
21	16	41	30	23	35	27	34	23	20	14	29	15
22	21	40	29	23	43	25	36	29	3030	13	26	15
23	34	39	29	22	39	24	39	21	408	13	26	14
24	51	37	28	22	41	22	38	18	182	12	24	13
25	52	37	26	23	46	22	34	16	97	27	22	13
26	31	38	29	23	42	24	33	15	61	13	20	13
27	25	38	29	22	37	31	36	14	42	14	21	13
28	26	39	28	21	35	34	47	15	29	18	20	13
29	24	38	26	22	---	27	31	75	21	14	18	13
30	29	37	28	27	---	27	27	67	23	18	15	13
31	45	---	34	30	---	26	---	27	---	17	13	---
TOTAL	748.4	2729	1012	776	1011	955	1308	820	4730	704	3741.5	379.0
MEAN	24.1	91.0	32.6	25.0	36.1	30.8	43.6	26.5	158	22.7	121	12.6
MAX	90	1100	43	35	46	45	241	75	3030	50	2570	16
MIN	2.3	34	26	11	29	22	22	14	12	12	5.2	9.4
AC-FT	1480	5410	2010	1540	2010	1890	2590	1630	9380	1400	7420	752

CAL YR 1974 TOTAL 16364.11 MEAN 44.8 MAX 1100 MIN .52 AC-FT 32460
WTR YR 1975 TOTAL 18913.90 MEAN 51.8 MAX 3030 MIN 2.3 AC-FT 37520

PEAK DISCHARGE (BASE, 2,000 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE
11-3	0130	5.45	2,560
6-22	0615	8.22	8,240
8-14	1145	7.21	5,860

07303500 ELM FORK OF NORTH FORK RED RIVER, NEAR MANGUM, OKLA.

LOCATION.--Lat 34°55'36", long 99°30'00", on east line sec.10, T.5 N., R.22 W., Greer County, at bridge on U.S. Highway 283, 3.0 mi (4.8 km) north of Mangum, 5.0 mi (8.0 km) downstream from Haystack Creek, and at mile 17.8 (28.6 km).

DRAINAGE AREA.--838 mi^2 (2,170 km^2).

PERIOD OF RECORD.--April 1905 to March 1908 (published as Elm Fork of Red River), March 1930 to September 1931, October 1937 to September 1947, April 1965 to September 1967, August 1968 to current year. Monthly discharge for some periods, published in WSP 1311. Occasional low-flow measurements, water years 1954, 1958-60, 1962-64, April to September 1965.

GAGE.--Water-stage recorder. Datum of gage is 1,520.77 ft (463.531 m) above mean sea level (Bureau of Reclamation bench mark). Apr. 12, 1905, to Mar. 31, 1908, nonrecording gage at unknown datum. Mar. 16, 1930, to Sept. 30, 1947, and April 1965 to Sept. 30, 1967, at datum 10.00 ft (3.048 m) higher.

AVERAGE DISCHARGE.--22 years (1905-7, 1930-31, 1937-47, 1965-67, 1968-75), 101 ft^3/s (2.860 m^3/s), 73,170 acre-ft/yr (90.2 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 10,300 ft^3/s (292 m^3/s) Aug. 15, gage height, 23.14 ft (7.053 m); minimum daily, 19 ft^3/s (0.54 m^3/s) Aug. 12, 13.
Period of record: Maximum discharge, 30,600 ft^3/s (867 m^3/s) May 12, 1947, gage height, 23.52 ft (7.169 m), present datum; maximum gage height, 15.0 ft (4.57 m) May 27, 1905, datum then in use; no flow at times in 1939-40, 1945-46, 1964, 1970-71.
Flood in spring of 1921 reached a stage of 26.4 ft (8.05 m), present datum, from information by State Highway Department.

REMARKS.--Records good. See pg. 456 for water-quality record.

REVISIONS (WATER YEARS).--WSP 1087: 1940(M). WSP 1311: 1906-8, 1931(M), drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	66	124	66	57	80	80	53	40	55	59	37	42
2	64	2860	65	60	84	77	51	39	40	53	39	39
3	61	1420	62	61	109	73	48	38	34	49	39	37
4	55	579	57	59	108	72	47	37	30	48	34	37
5	52	180	56	56	92	72	45	107	27	51	30	35
6	51	157	55	53	80	71	47	70	26	46	29	34
7	50	141	52	52	71	66	120	43	25	45	26	33
8	44	144	50	52	72	59	520	38	23	77	24	32
9	43	141	51	49	64	58	193	35	23	132	23	30
10	43	170	51	46	67	70	94	35	50	545	21	30
11	43	136	63	46	69	74	75	35	267	572	20	30
12	41	115	70	54	70	70	74	38	97	131	19	38
13	44	105	67	35	62	67	75	76	43	75	19	38
14	122	101	61	43	60	60	75	67	35	60	4340	36
15	168	95	56	51	59	60	68	48	31	55	4500	36
16	82	92	49	48	89	81	62	39	28	49	386	34
17	56	92	51	47	82	103	57	36	28	44	161	33
18	48	78	51	45	86	116	53	33	25	41	118	32
19	46	84	50	45	94	92	48	37	23	43	104	29
20	43	81	42	45	119	72	46	33	23	40	87	28
21	41	81	42	43	144	62	44	34	112	38	76	29
22	42	77	44	42	117	58	43	57	4340	35	66	30
23	55	76	46	42	110	56	45	57	1120	33	61	28
24	131	74	46	42	115	52	45	49	253	1350	56	27
25	253	72	45	42	146	50	44	36	176	1440	53	26
26	126	70	44	42	114	49	43	31	121	288	51	25
27	74	69	46	42	95	68	51	29	105	123	50	25
28	71	69	41	42	87	69	68	29	87	56	49	25
29	63	67	46	42	---	64	55	97	75	46	47	24
30	98	66	49	108	---	57	45	192	68	46	45	24
31	172	---	55	92	---	55	---	131	---	39	43	---
TOTAL	2348	7616	1629	1583	2543	2153	2334	1666	7390	5709	10653	946
MEAN	75.7	254	52.5	51.1	90.8	68.8	77.8	53.7	246	184	344	31.5
MAX	253	2860	70	108	146	116	520	192	4340	1440	4500	42
MIN	41	66	41	35	59	49	43	29	23	33	19	24
AC-FT	4660	15110	3230	3140	5040	4230	4630	3300	14660	11320	21130	1880

CAL YR 1974 TOTAL 43889.16 MEAN 120 MAX 3970 MIN .60 AC-FT 87050
WTR YR 1975 TOTAL 46550.00 MEAN 128 MAX 4500 MIN 19 AC-FT 92330

PEAK DISCHARGE (BASE, 2,400 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE
11-2	1030	19.81	5,540
6-22	1845	21.69	7,990
7-24	2345	17.66	3,390
8-15	0200	23.14	10,300

07304500 ELK CREEK NEAR HOBART, OKLA.

LOCATION.--Lat 34°54'51", long 99°06'49", in NE 1/4 NE 1/4 sec.17, T.5 N., R.18 W., Kiowa County, near right bank on downstream side of pier of county road bridge, 7.0 mi (11.3 km) downstream from Little Elk Creek, 7.5 mi (12 km) south of Hobart, and at mile 10.9 (17.5 km).

DRAINAGE AREA.--549 mi^2 (1,422 km^2).

PERIOD OF RECORD.--September 1904 to March 1908, October 1949 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,429.4 ft (435.68 m) above mean sea level. See WSP 1920 for history of changes prior to Apr. 28, 1954.

AVERAGE DISCHARGE.--29 years (1904-7, 1949-75), 71.5 ft^3/s (2.025 m^3/s), 51,800 acre-ft/yr (63.9 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 8,400 ft^3/s (238 m^3/s) July 24, gage height, 29.50 ft (8.992 m); minimum daily, 9.4 ft^3/s (0.27 m^3/s) Oct. 5.
Period of record: Maximum discharge, 22,400 ft^3/s (634 m^3/s) Oct. 4, 1955, gage height, 30.75 ft (9.373 m), from floodmarks, from rating curve extended above 5,300 ft^3/s (150 m^3/s) on basis of field estimate of peak flow; no flow at times in most years.
Flood of June 9, 1907, reached a stage of 28.9 ft (8.81 m), datum then in use.

REMARKS.--Records good. See pg. 462 for water-quality record.

REVISIONS (WATER YEARS).--WSP 1211: Drainage area. WSP 1241: 1905.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	90	43	39	165	161	77	97	198	34	370	34
2	12	145	41	55	195	146	80	96	110	33	323	32
3	11	1830	39	146	345	138	85	95	97	30	272	30
4	9.9	873	39	74	402	133	65	191	90	28	227	29
5	9.4	291	39	51	213	115	60	132	83	26	198	30
6	9.6	202	40	48	131	107	62	127	76	25	173	30
7	9.7	207	40	37	91	104	64	121	66	24	152	29
8	10	311	42	36	109	106	194	116	60	24	134	27
9	12	158	43	37	113	85	285	112	52	57	115	25
10	14	187	43	43	72	88	155	109	108	185	98	24
11	16	138	44	58	84	117	148	106	661	246	83	23
12	13	117	49	48	74	107	142	107	215	152	67	29
13	13	94	52	41	59	111	141	192	128	58	55	47
14	16	84	54	40	60	95	135	318	85	41	601	41
15	18	75	55	32	62	80	130	225	59	29	441	35
16	23	61	56	35	71	314	124	123	50	26	180	34
17	25	58	55	37	64	344	117	88	45	23	137	33
18	20	58	55	35	84	185	116	68	41	20	137	32
19	18	57	52	35	91	146	114	110	37	22	94	29
20	16	58	47	46	94	139	112	54	33	28	77	28
21	16	56	47	35	647	123	110	44	52	20	88	30
22	17	52	47	41	371	110	108	45	166	18	71	27
23	18	51	44	36	249	99	105	83	171	17	69	28
24	35	50	46	35	382	91	103	88	76	6710	63	29
25	228	52	51	34	490	79	102	57	222	6540	53	25
26	78	47	44	33	332	71	101	44	82	4980	50	25
27	40	43	41	32	260	142	100	43	55	2900	46	25
28	116	42	39	32	190	370	99	43	45	1030	40	24
29	147	42	39	31	---	161	98	185	37	788	38	24
30	206	47	39	33	---	124	98	724	34	630	37	23
31	948	---	42	325	---	89	---	550	---	450	36	---
TOTAL	2140.6	5576	1407	1640	5500	4280	3430	4493	3236	25194	4533	881
MEAN	69.1	186	45.4	52.9	196	138	114	145	108	813	146	29.4
MAX	948	1830	56	325	647	370	285	724	661	6710	601	47
MIN	9.4	42	39	31	59	71	60	43	33	17	36	23
AC-FT	4250	11060	2790	3250	10910	8490	6800	8910	6420	49970	8990	1750

CAL YR 1974 TOTAL 23852.63 MEAN 65.3 MAX 1990 MIN .89 AC-FT 47310
WTR YR 1975 TOTAL 62310.60 MEAN 171 MAX 6710 MIN 9.4 AC-FT 123600

PEAK DISCHARGE (BASE, 2,200 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE
7-24	1715	29.50	8,400

07305000 NORTH FORK RED RIVER NEAR HEADRICK, OKLA.

LOCATION.--Lat 34°38'04", long 99°05'47", in NW 1/4 NE 1/4 sec.21, T.2 N., R.18 W., Tillman County, near left bank on downstream side of pier of bridge on U.S. Highway 62, 2.5 mi (4.0 km) east of Headrick, 12.9 mi (20.8 km) upstream from Otter Creek, and at mile 33.0 (53.1 km).

DRAINAGE AREA.--4,244 mi^2 (10,992 km^2), of which 399 mi^2 (1,033 km^2) is probably noncontributing.

PERIOD OF RECORD.--April 1905 to March 1908, October 1937 to current year. Monthly discharge only for some periods, published in WSP 1311. Prior to July 1905, published as "near Snyder".

GAGE.--Water-stage recorder. Datum of gage is 1,294.83 ft (394.664 m) above mean sea level (Bureau of Reclamation bench mark). Prior to July 18, 1905, nonrecording gage at site 0.2 mi (0.3 km) downstream at different datum. July 18, 1905, to Mar. 30, 1908, nonrecording gage at Navajo damsite 10.4 mi (16.7 km) upstream at different datum. Oct. 1, 1937, to Jan. 29, 1969, water-stage recorder at present site at datum 5.0 ft (1.52 m) higher.

AVERAGE DISCHARGE.--40 years (1905-7, 1937-75), 302 ft^3/s (8.553 m^3/s), 218,800 acre-ft/yr (270 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 15,600 (442 m^3/s) July 25, gage height, 14.32 ft (4.365 m); minimum daily, 70 ft^3/s (1.98 m^3/s) July 23.
Period of record: Maximum discharge, 30,700 ft^3/s (869 m^3/s) Oct. 5, 1955, gage height, 16.50 ft (5.029 m) present datum; no flow at times in most years.
A stage of 21.1 ft (6.43 m) present datum occurred sometime prior to 1927, from information by State Highway Department.

REMARKS.--Records good. Flow regulated since December 1943 by storage and diversion at Lake Altus, 39.5 mi (63.6 km) above station (see sta. 07302500). Diversions for irrigation of about 48,000 acres (194 km^2) above station; some return flow may re-enter at Stinking Creek, 16 mi (26 km) below station. See pg. 465 for water-quality record.

REVISIONS (WATER YEARS).--WSP 1211: Drainage area. WSP 1241: 1905-7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	161	1180	157	108	435	284	172	144	785	189	743	144
2	135	371	154	140	242	268	155	120	436	164	561	137
3	120	3040	144	157	284	248	159	113	293	150	473	132
4	107	5740	135	247	606	240	156	106	218	140	400	124
5	99	2020	132	185	612	228	133	264	172	125	360	131
6	91	794	132	152	380	220	126	192	146	115	325	171
7	88	529	132	135	300	216	136	221	127	109	283	124
8	85	511	128	121	259	216	160	187	113	109	237	116
9	82	516	128	113	239	213	529	145	104	108	201	111
10	81	408	127	112	238	210	706	138	150	206	169	106
11	77	441	139	108	202	210	380	114	254	435	146	106
12	77	369	135	116	188	206	267	113	734	875	131	110
13	73	302	143	113	186	206	258	177	497	483	123	115
14	73	255	153	103	178	220	228	282	303	229	388	156
15	75	240	150	104	162	206	220	458	213	147	4010	147
16	141	217	141	97	160	200	220	347	163	113	6150	130
17	181	198	135	97	160	435	205	220	147	100	1350	122
18	127	194	126	102	160	452	191	187	126	90	776	118
19	100	195	123	96	161	346	173	153	113	89	623	112
20	88	192	120	92	166	303	169	145	101	88	446	109
21	80	190	118	101	293	261	155	129	132	92	341	108
22	77	185	111	93	932	226	138	128	4000	79	323	110
23	77	180	108	91	595	207	126	137	3010	70	276	108
24	98	176	104	93	569	193	115	192	3720	1130	244	107
25	714	178	105	87	708	180	108	205	915	9690	225	99
26	829	177	114	84	712	167	115	166	744	11700	229	94
27	351	167	106	83	461	166	110	134	441	8810	192	90
28	205	164	101	83	324	267	96	128	328	6290	185	88
29	413	160	101	83	---	470	98	211	255	2330	170	84
30	259	160	101	87	---	278	150	377	229	1760	159	80
31	1450	---	104	103	---	214	---	1130	---	1300	150	---
TOTAL	6614	19449	3907	3488	9912	7756	5974	6743	18969	47315	20389	3489
MEAN	213	648	126	113	354	250	199	218	632	1526	658	116
MAX	1450	5740	157	247	932	470	706	1130	4000	11700	6150	171
MIN	73	160	101	83	160	166	96	106	101	70	123	80
AC-FT	13120	38580	7750	6920	19660	15380	11850	13370	37630	93850	40440	6920

CAL YR 1974 TOTAL 92001.5 MEAN 252 MAX 7490 MIN 3.6 AC-FT 182500
WTR YR 1975 TOTAL 154005.0 MEAN 422 MAX 11700 MIN 70 AC-FT 305500

07305500 WEST OTTER CREEK AT SNYDER LAKE, NEAR MOUNTAIN PARK, OKLA.

LOCATION.--Lat 34°43'55", long 98°29'12", in NE 1/4 SE 1/4 sec.16, T.3 N., R.17 W., Kiowa County, on left bank 700 ft (213.4 m) downstream from Snyder Dam on West Otter Creek, 0.7 mi (1.1 km) upstream from small tributary, 3.0 mi (4.8 km) northwest of Mountain Park, and at mile 26.0 (41.8 km).

DRAINAGE AREA.--132 mi^2 (342 km^2).

PERIOD OF RECORD.--April 1903 to March 1908, October 1951 to weptember 1971, July 1972 to current year. Published as Otter Creek near Mountain Park 1903-8 and as Otter Creek at Snyder Lake, near Mountain Park 1951-60. Monthly discharge only for some periods, published in WSP 1311.

GAGE.--Water-stage recorder. Datum of gage is 1,344.00 ft (409.651 m) above mean sea level. April 1903 to March 1908, nonrecording gage at site 1.8 mi (2.9 km) downstream at different datum. October 1951 to September 1971 at intake tower at Snyder Lake, 700 ft (213.4 m) upstream at datum 1,360.99 ft (414.830 m).

AVERAGE DISCHARGE.--27 years (1903-7, 1951-71, 1973-1975), 23.0 ft^3/s (0.651 m^3/s), 16,660 acre-ft/yr (20.5 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 797 ft^3/s (22.6 m^3/s) Oct. 31, gage height, 7.36 ft (2.243 m); no flow at times.
Period of record: Maximum discharge, 14,200 ft^3/s (40.2 m^3/s) June 6, 1953, gage height, 19.50 ft (5.944 m), from floodmarks, from rating curve extended above 1,600 ft^3/s (45.3 m^3/s) on basis of contracted-opening and flow-over-dam measurements of peak flow; no flow at times in most years.

REMARKS.--Records poor. The city of Snyder diverted about 130 acre-ft (160,000 m^3) annually prior to October 1958 and none thereafter. Flow regulated since June, 1975 by Tom Steed Reservoir.

REVISIONS (WATER YEARS).--WSP 1731: 1960(M). WSP 1920: 1959-60.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24	610	0	.80	1.8	136	0	.93	310	.40		
2	0	456	0	.35	10	72	0	.84	284	.17		
3	0	372	0	10	15	2.4	0	1.7	125	.10		
4	0	241	0	7.8	20	116	0	2.1	29	0		
5	0	165	0	6.4	25	187	0	2.7	10	0		
6	0	118	.16	5.4	20	239	0	2.2	3.9	0		
7	0	68	0	4.8	22	105	3.2	2.3	2.8	0		
8	0	21	0	4.1	18	88	61	2.3	2.2	0		
9	0	17	0	3.5	15	9.0	53	1.5	2.1	0		
10	0	14	0	3.0	13	7.5	16	1.3	1.3	0		
11	0	6.6	0	2.8	11	7.0	5.8	0	0	0		
12	0	2.7	5.0	2.4	9.6	7.6	1.4	0	3.1	0		
13	0	1.2	3.0	2.1	8.4	5.0	.83	.68	.04	0		
14	0	.50	1.8	1.9	0	2.0	15	1.4	.08	0		
15	5.0	.20	1.3	1.7	0	1.5	25	2.1	.98	0		
16	2.3	0	1.0	1.5	5.0	1.2	18	3.0	29	0		
17	1.0	0	.80	1.3	.60	1.0	14	2.8	134	0		
18	.85	0	.60	1.2	0	5.0	16	1.6	52	0		
19	.77	0	.60	1.0	0	.60	11	2.2	9.3	0		
20	.07	0	.50	.92	0	.60	7.5	2.6	3.6	0		
21	.12	0	.46	.82	0	.60	5.5	2.6	57	0		
22	.93	0	.42	.72	0	.60	4.4	3.5	47	0		
23	1.6	0	.38	.62	0	.60	4.4	7.4	0	0		
24	7.0	0	.32	.56	199	.60	4.9	44	.25	0		
25	6.7	0	.28	.48	195	.60	4.5	34	1.3	0		
26	4.9	0	.23	.40	115	.60	3.8	12	4.4	0		
27	3.4	0	.17	.34	184	.60	3.3	75	1.6	0		
28	8.0	0	.13	.28	216	.60	3.8	194	.90	0		
29	12	0	0	.24	---	.17	3.0	200	.50	0		
30	138	0	0	.18	---	.13	3.1	394	.37	0		
31	733	---	0	.10	---	.10	---	349	---	0		---
TOTAL	949.64	2093.20	17.15	67.71	1103.40	998.60	288.43	1399.75	1115.72	.67	0	0
MEAN	30.6	69.8	.55	2.18	39.4	32.2	9.61	45.2	37.2	.02	0	0
MAX	733	610	5.0	10	216	239	61	399	310	.40	0	0
MIN	0	0	0	.10	0	.10	0	0	0	0	0	0
AC-FT	1880	4150	34	134	2190	1980	572	2780	2210	1.3	0	0

CAL YR 1974 TOTAL 13789.94 MEAN 37.8 MAX 847 MIN 0 AC-FT 27350
WTR YR 1975 TOTAL 8034.27 MEAN 22.0 MAX 733 MIN 0 AC-FT 15940

07308500 RED RIVER NEAR BURKBURNETT, TEX.
(National stream-quality accounting network)

LOCATION.--Lat 34°06'30", long 98°32'00", Wichita County, on downstream side of bridge on U.S. Highways 277 and 281, 2 miles (3 km) northeast of Burkburnett, and at mile 933 (1,501 km).

DRAINAGE AREA.--20,570 mi² (53,280 km²), of which 5,936 mi² (15,374 km²) is probably noncontributing.

PERIOD OF RECORD.--July 1924 to August 1925 (monthly discharge only), December 1959 to current year.

GAGE.--Water-stage recorder. Datum of gage is 952.57 ft (290.343 m) above mean sea level. July 11, 1924, to Aug. 31, 1925, nonrecording gage at site 1,000 ft (305 m) downstream at same datum. Dec. 16, 1959, to Jan. 11, 1960, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--15 years (1960-75), 823 ft³/s (23.31 m³/s), 596,000 acre-ft/yr (735 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 61,400 ft³/s (1,740 m³/s) July 27, gage height, 12.64 ft (3.853 m); minimum, 210 ft³/s (5.95 m³/s) June 22, gage height, 6.07 ft (1.850 m).
Period of record: Maximum discharge, 62,800 ft³/s (1,780 m³/s) Oct. 19, 1965, gage height, 11.46 ft (3.493 m); maximum gage height, 12.64 ft (3.853 m) July 27, 1975; no flow at times.
Historic: Flood of June 3, 1957, reached a stage of 13.54 ft (4.127 m), from levels to floodmarks. According to local residents, higher stages occurred in 1891 and June 1941.

REMARKS.--Discharge records fair. Some regulation by Greenbelt Lake on Salt Fork, capacity, 59,110 acre-ft (72.9 hm³), Lake Altus on North Fork, capacity, 134,600 acre-ft (166 hm³), and Lake McClellan on McClellan Creek, capacity, 5,000 acre-ft (6.16 hm³). Many small diversions for irrigation upstream from station. Specific conductance and water-quality records for the current year are published in the Texas State report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1300	3540	364	360	516	1020	680	263	3320	1180	4360	635
2	1040	3730	357	475	568	952	515	261	2520	923	3720	605
3	849	2660	380	628	931	813	442	273	1960	795	3030	569
4	691	4420	408	608	1570	695	397	281	1460	769	2590	526
5	586	6090	398	644	1460	711	359	325	982	993	2010	496
6	522	3870	410	638	1440	674	368	304	717	2210	1780	473
7	522	2300	434	615	1200	617	396	281	569	1260	1610	441
8	498	1950	415	560	1070	577	731	408	622	1660	1490	411
9	474	1790	396	526	843	561	837	369	986	1000	1410	397
10	474	1560	408	469	743	577	1140	339	1650	1120	1310	358
11	450	1610	469	402	752	516	1300	324	1460	991	1160	357
12	395	1460	514	373	764	542	1630	285	1460	1010	1030	463
13	376	1560	516	362	721	566	1180	301	1710	1050	966	643
14	381	1290	548	327	671	525	929	320	1500	2330	965	1190
15	388	1030	533	299	671	505	791	363	1100	1520	722	1930
16	372	864	536	319	653	490	679	389	702	1060	8760	1680
17	1300	711	509	333	650	491	665	441	568	799	6650	1180
18	1190	685	468	338	633	718	633	598	456	669	5240	836
19	922	652	459	330	620	807	595	496	356	612	2670	711
20	728	640	443	331	725	1360	539	392	273	662	2160	592
21	547	616	423	303	786	1170	475	374	234	574	1690	524
22	427	615	410	296	1330	937	419	676	9980	777	1440	445
23	374	563	403	291	1610	821	390	7850	18800	658	1120	440
24	432	494	387	297	1730	680	355	3990	19900	638	948	404
25	483	437	362	310	1480	571	327	1190	13900	10900	857	354
26	2630	395	349	300	1370	502	310	651	13200	30600	810	331
27	3290	384	339	293	1300	516	356	525	4230	52700	749	301
28	2730	406	337	280	1170	487	400	438	2370	35600	719	296
29	2180	390	348	263	---	469	445	6640	1820	15300	733	284
30	1930	370	355	269	---	464	314	9290	1530	8980	711	279
31	3070	---	381	385	---	687	---	4880	---	5020	674	---
TOTAL	31551	47042	13059	12224	27977	21021	18597	43517	110335	184360	64084	18151
MEAN	1018	1568	421	394	999	678	620	1404	3678	5947	2067	605
MAX	3290	6090	548	644	1730	1360	1630	9290	19900	52700	8760	1930
MIN	372	370	337	263	516	464	310	261	234	574	674	279
AC-FT	62580	93310	25900	24250	55490	41700	36890	86320	218800	365700	127100	36000

CAL YR 1974 TOTAL 400883 MEAN 1098 MAX 21500 MIN 13 AC-FT 795200
WTR YR 1975 TOTAL 591918 MEAN 1622 MAX 52700 MIN 234 AC-FT 1174000

PEAK DISCHARGE (BASE, 9,000 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
5-23	0730	9.31	10,100	7-27	1400	12.64	61,400
5-30	0100	9.49	11,600	8-16	1400	8.95	10,900
6-22	1830	10.39	20,000				

07311000 EAST CACHE CREEK NEAR WALTERS, OKLA.

LOCATION.--Lat 34°21'44", long 98°16'56", on south line of SE 1/4 SE 1/4 sec.19, T.2 S., R.10 W., Cotton County at right bank on downstream side of bridge on State Highway 53, 1.8 mi (2.9 km) east of Walters, 12.2 mi (19.6 km) upstream from West Cache Creek, and at mile 19.7 (31.7 km).

DRAINAGE AREA.--675 mi^2 (1,748 km^2).

PERIOD OF RECORD.--May 1938 to December 1963; October 1969 to current year. Prior to October 1969, published as Cache Creek near Walters.

GAGE.--Water-stage recorder. Datum of gage is 938.2 ft (285.963 m) above mean sea level (State Highway Department bench mark). Prior to Jan. 8, 1939, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--31 years, (1939-63, 1969-75), 173 ft^3/s (4.899 m^3/s), 125, 300 acre-ft/yr (154 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 9,110 ft^3/s (258 m^3/s) May 29, gage height, 28.38 ft (8.650 m); minimum daily, 14 ft^3/s (0.40 m^3/s) Oct. 22.
Period of record: Maximum discharge, 28,200 ft^3/s (799 m^3/s) May 18, 1951, gage height, 29.72 ft (9.059 m); no flow at times in 1939-40.
Flood in 1906 reached a stage about the same as on May 18, 1951, and on May 17, 1947, gage height, 29.62 ft (9.028 m), from information by local residents.

REMARKS.--Records good. Flow partly regulated by Lake Lawtonka, capacity, 42,300 acre-ft (52.2 hm^3) prior to late 1953, and 63,000 acre-ft (77.7 hm^3) thereafter on Medicine Creek, by Lake Thomas capacity, 8,300 acre-ft (10.2 hm^3) on Little Medicine Creek, and since March 1961 by Lake Ellsworth, capacity, 94,500 acre-ft (117 hm^3) on East Cache Creek. Low flow sustained by sewage from cities of Lawton and Walters. See pg. 477 for water-quality record.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	38	2080	44	48	289	79	62	39	2950	200	834	29
2	33	335	82	151	273	515	44	36	1460	170	397	27
3	28	170	63	774	548	465	340	40	562	147	256	26
4	26	660	54	391	1250	110	195	72	321	129	274	26
5	25	230	52	123	1060	67	52	54	259	122	189	26
6	23	103	51	77	795	63	39	44	217	112	158	26
7	18	323	50	61	663	60	39	47	193	98	128	26
8	17	678	49	53	582	56	84	428	267	108	108	24
9	21	188	48	50	224	59	159	470	281	94	95	24
10	19	82	48	482	90	64	109	476	309	77	87	25
11	18	141	54	247	88	62	73	125	1010	86	79	25
12	18	114	100	53	82	84	61	50	529	197	72	34
13	17	79	92	40	73	81	63	39	443	138	62	163
14	16	66	66	49	68	66	79	100	391	108	63	568
15	15	58	57	50	65	80	92	458	203	88	65	307
16	15	56	51	38	65	63	71	1080	139	75	59	118
17	17	57	48	37	74	72	58	1390	127	64	54	70
18	19	50	48	35	93	69	49	1200	112	62	50	53
19	23	48	44	37	78	68	45	191	105	76	47	47
20	18	48	42	36	68	63	42	101	97	93	45	41
21	15	49	46	55	64	57	40	386	86	74	41	66
22	14	49	49	60	388	54	40	284	169	63	39	41
23	18	45	49	43	594	50	39	6270	1000	53	38	40
24	21	44	45	40	357	47	39	7490	2150	52	36	40
25	19	45	43	41	150	43	41	5250	2600	344	35	40
26	52	47	38	40	95	40	40	3610	1780	1670	45	40
27	40	52	37	39	74	44	40	2800	832	2400	39	41
28	248	54	42	37	67	54	52	3820	452	2170	37	40
29	952	47	45	37	---	69	71	8250	292	2070	33	40
30	234	45	41	38	---	104	46	7230	227	2090	32	39
31	1470	---	42	283	---	99	---	4620	---	1740	31	---
TOTAL	3507	6043	1620	3545	8317	2907	2204	56450	19563	14970	3528	2112
MEAN	113	201	52.3	114	297	93.8	73.5	1821	652	483	114	70.4
MAX	1470	2080	100	774	1250	515	340	8250	2950	2400	834	568
MIN	14	44	37	35	64	40	39	36	86	52	31	24
AC-FT	6960	11990	3210	7030	16500	5770	4370	112000	38800	29690	7000	4190

CAL YR 1974 TOTAL 38823.8 MEAN 106 MAX 2920 MIN 4.0 AC-FT 77010
WTR YR 1975 TOTAL 124766.0 MEAN 342 MAX 8250 MIN 14 AC-FT 247500

PEAK DISCHARGE (BASE, 2,400 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
11-1	0430	23.55	2,510	6-25	0745	24.60	2,700
5-24	0645	28.16	8,120	7-27	1215	23.10	2,480
5-29	1715	28.38	9,110				

07311200 BLUE BEAVER CREEK NEAR CACHE, OKLA.
(Hydrologic bench-mark station)

LOCATION.--Lat 34°37'24", long 98°33'48", in NE 1/4 NE 1/4 sec.28, T.2 N., R.13 W., Comanche County, on downstream side of right bank pier of bridge on U.S. Highway 62, 3,000 ft (914.4 m) upstream from St. Louis-San Francisco Railway Co. bridge, 4.0 mi (6.4 km) east of Cache, and at mile 12.0 (19.3 km).

DRAINAGE AREA.--24.6 mi^2 (63.7 km^2).

PERIOD OF RECORD.--July 1964 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,215.26 ft (370.411 m) above mean sea level.

AVERAGE DISCHARGE.--11 years, 9.10 ft^3/s (0.258 m^3/s), 6,590 acre-ft/yr (8.13 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 1,280 ft^3/s (36.2 m^3/s) May 29, gage height, 10.20 ft (3.109 m); minimum, 0.09 ft^3/s (0.003 m^3/s) Sept. 9.
Period of record: Maximum discharge, 3,050 ft^3/s (86.4 m^3/s) May 6, 1969, gage height, 12.17 ft (3.709 m) from floodmarks, from rating curve extended above 250 ft^3/s (7.08 m^3/s) on basis of conveyance studies; no flow at times each year except 1975.

REMARKS.--Records good. Minor regulation by Lake Rush, Lake Jed Johnson, and Lake Ketch, combined surface-area 132 acres (534,000 m^2). See pg. 480 for water-quality record.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.8	100	6.3	2.9	12	13	6.8	3.8	63	5.8	2.0	.22
2	1.5	60	5.9	16	21	12	6.2	3.8	45	5.0	2.0	.18
3	1.2	45	5.6	42	54	11	7.3	5.5	33	5.1	7.0	.16
4	1.2	35	5.5	35	116	11	6.6	5.0	25	4.6	6.0	.19
5	1.1	25	5.4	28	71	9.4	6.0	4.7	20	3.9	5.0	.16
6	1.1	20	5.2	23	47	8.7	5.6	4.3	17	3.4	4.0	.17
7	1.1	17	5.2	17	35	8.2	7.0	3.9	14	3.0	3.0	.14
8	1.1	13	4.9	14	32	8.0	19	3.6	12	2.8	2.7	.13
9	1.1	10	5.1	13	28	8.1	14	3.2	11	2.8	2.5	.11
10	.91	15	5.5	11	19	7.8	12	3.0	71	3.9	2.5	.19
11	1.0	30	6.1	10	18	7.7	10	2.7	45	8.7	2.3	.26
12	.91	22	5.6	9.0	16	7.5	11	2.8	24	21	2.3	.90
13	.91	18	5.4	10	14	7.7	14	2.4	17	12	2.3	1.9
14	1.0	16	5.0	6.6	13	7.6	17	2.7	13	7.5	3.1	2.0
15	1.0	13	4.8	5.6	12	7.0	14	3.6	9.9	5.6	2.5	1.1
16	.83	11	4.4	5.0	14	6.4	13	3.6	8.4	4.4	2.0	.71
17	.65	9.7	4.2	4.7	17	9.1	12	3.6	7.2	3.8	1.8	.59
18	.65	9.0	4.2	4.9	17	15	10	3.6	6.2	3.5	1.6	.42
19	.62	8.8	3.8	4.3	15	19	9.5	3.6	5.4	3.3	1.4	.33
20	.59	8.3	3.8	5.8	13	17	8.9	3.6	4.9	2.9	1.1	.33
21	.59	8.0	3.6	5.0	13	14	7.7	3.2	14	2.4	1.1	.42
22	.59	7.4	3.6	4.0	63	12	6.6	9.9	372	2.2	.98	.39
23	.59	6.6	3.5	3.9	45	11	6.3	477	101	2.0	.90	.26
24	.73	6.2	3.2	4.1	27	9.8	5.9	145	43	4.2	.76	.21
25	.78	8.6	3.2	4.0	21	9.0	5.3	71	32	180	.67	.22
26	.78	7.2	3.0	3.7	18	8.2	5.0	41	21	45	.71	.23
27	.78	6.4	3.0	3.5	16	8.9	5.0	26	15	25	.78	.21
28	1.3	5.9	2.9	3.2	13	8.9	5.0	424	11	6.0	.54	.16
29	1.5	5.6	2.9	3.2	---	12	4.4	597	8.9	5.0	.42	.15
30	2.1	5.7	2.9	3.3	---	10	4.0	369	7.0	3.0	.34	.14
31	150	---	3.0	6.9	---	7.8	---	126	---	2.0	.29	---
TOTAL	180.01	553.4	136.7	312.6	800	314.8	265.1	2362.1	1076.9	389.8	64.59	12.58
MEAN	5.81	18.4	4.41	10.1	28.6	10.2	8.84	76.2	35.9	12.6	2.08	.42
MAX	150	100	6.3	42	116	19	19	597	372	180	7.0	2.0
MIN	.59	5.6	2.9	2.9	12	7.0	4.0	2.4	4.9	2.0	.29	.11
AC-FT	357	1100	271	620	1590	624	526	4690	2140	773	128	25

CAL YR 1974 TOTAL 3816.80 MEAN 10.5 MAX 467 MIN 0 AC-FT 7570
WTR YR 1975 TOTAL 6468.58 MEAN 17.7 MAX 597 MIN .11 AC-FT 12830

PEAK DISCHARGE (BASE, 500 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
5-23	0600	9.37	794	5-29	1230	10.20	1,280
5-28	0700	9.60	915	6-22	1045	9.52	872

07311500 DEEP RED RUN NEAR RANDLETT, OKLA.

LOCATION.--Lat 34°13'15", long 98°27'10", in SW 1/4 SW 1/4 sec.10, T.4 S., R.12 W., Cotton County, near right bank on downstream side of pier of bridge on U.S. Highway 277, 2.8 mi (4.5 km) north of Randlett, and at mile 4.8 (7.7 km).

DRAINAGE AREA.--617 mi^2 (1,598 km^2).

PERIOD OF RECORD.--October 1949 to current year.

GAGE.--Water-stage recorder and sharp-crested weir. Datum of gage is 924.49 ft (281.785 m) above mean sea level (State Highway Department bench mark). Prior to Nov. 10, 1949, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--26 years, 117 ft^3/s (3.313 m^3/s), 84,770 acre-ft/yr (105 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 8,120 ft^3/s (230 m^3/s) June 23, gage height, 23.93 ft (7.294 m); minimum, 2.2 ft^3/s (0.062 m^3/s) Sept. 11.
Period of record: Maximum discharge, 48,700 ft^3/s (1,370 m^3/s) Sept. 22, 1969, gage height, 27.51 ft (8.385 m), from rating curve extended above 13,000 ft^3/s (368 m^3/s) on basis of contracted-opening measurement of peak flow; no flow at times in most years.
Flood in 1908 reached a stage somewhat exceeding 27 ft (8.2 m), from information by local residents.

REMARKS.--Records good.

REVISIONS (WATER YEARS).--WSP 1211: Drainage area. WSP 1631: 1956. WSP 1920: 1951.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	1770	9.0	20	380	29	13	10	3350	56	39	9.4
2	16	840	9.0	99	294	28	12	7.8	1140	46	31	7.0
3	11	145	9.0	440	540	23	12	7.0	124	38	28	5.9
4	8.2	554	9.0	226	1240	23	12	6.5	70	34	226	4.9
5	6.4	147	9.0	84	1400	18	12	10	49	30	63	4.3
6	5.5	46	9.0	42	847	20	12	15	39	35	38	4.0
7	5.4	29	9.0	26	217	21	13	12	31	26	26	3.8
8	6.2	32	9.0	17	93	21	33	8.2	127	22	20	3.6
9	6.4	23	9.0	12	64	24	36	6.1	394	20	17	3.6
10	5.6	16	10	10	44	27	30	167	1080	19	14	3.4
11	4.4	33	20	10	32	27	29	164	2830	135	12	3.3
12	3.7	34	18	9.0	28	78	30	37	2790	79	11	4.6
13	3.6	25	14	9.0	23	91	36	23	1840	69	9.2	5.6
14	4.6	15	12	8.0	20	30	18	12	478	43	8.8	337
15	3.5	12	11	8.0	21	20	10	28	89	24	8.4	1140
16	3.9	11	10	7.0	20	19	9.8	47	59	19	147	980
17	4.0	10	10	7.0	19	19	10	30	43	16	76	265
18	4.0	10	9.0	7.0	21	43	10	18	33	13	39	68
19	4.0	9.0	9.0	7.0	23	21	8.1	12	27	14	22	39
20	4.0	9.0	8.5	7.0	19	17	6.4	6.3	22	145	16	26
21	4.0	9.0	8.5	7.0	16	14	5.4	275	19	143	12	19
22	3.5	9.0	8.5	7.3	218	12	5.4	273	2190	61	9.0	15
23	3.5	8.5	8.5	7.5	1510	10	5.8	6140	6140	29	7.5	12
24	3.3	8.5	8.5	7.9	547	9.6	5.5	4910	6040	22	6.4	11
25	3.3	8.5	8.0	8.4	96	10	31	3930	5830	109	5.5	16
26	3.5	9.0	8.0	8.7	56	11	20	2180	2620	827	4.9	14
27	4.0	9.0	8.0	9.0	45	12	11	203	925	1250	57	9.6
28	119	9.0	8.0	9.1	35	18	98	410	179	1200	225	8.4
29	764	9.0	8.0	9.4	---	19	52	2260	102	229	42	7.6
30	184	9.0	8.0	12	---	17	21	3330	73	89	21	7.1
31	1370	---	8.0	165	---	16	---	3560	---	53	13	---
TOTAL	2594.5	3858.5	302.5	1306.3	7868	747.6	607.4	28117.9	38733	4895	1254.7	3038.1
MEAN	83.7	129	9.76	42.1	281	24.1	20.2	907	1291	158	40.5	101
MAX	1370	1770	20	440	1510	91	98	6140	6140	1250	226	1140
MIN	3.3	8.5	8.0	7.0	16	9.6	5.4	6.1	19	13	4.9	3.3
AC-FT	5150	7650	600	2590	15610	1480	1200	55770	76830	9710	2490	6030

CAL YR 1974 TOTAL 37089.97 MEAN 102 MAX 6340 MIN 0 AC-FT 73570
WTR YR 1975 TOTAL 93323.50 MEAN 256 MAX 6140 MIN 3.3 AC-FT 185100

PEAK DISCHARGE (BASE, 2,000 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-31	2300	19.61	2,250	6-11	1815	21.92	2,910
5-23	1100	23.86	7,460	6-23	1615	23.93	8,120
5-31	1915	22.48	3,870				

07313500 BEAVER CREEK NEAR WAURIKA, OKLA.

LOCATION.--Lat 34°13'00", long 98°02'57", on north line of NW 1/4 NW 1/4 sec.16, T.4 S., R.8 W., Jefferson County, on left bank on downstream side of bridge on State Highway 5, 4.5 mi (7.2 km) northwest of Waurika, 6.2 mi (10.0 km) upstream from Cow Creek, and at mile 25.8 (41.5 km).

DRAINAGE AREA.--563 mi^2 (1,458 km^2).

PERIOD OF RECORD.--June 1953 to current year.

GAGE.--Water-stage recorder. Datum of gage is 874.17 ft (266.447 m) above mean sea level (State Highway Department bench mark). Prior to Apr. 5, 1966, water-stage recorder at same site at datum 5.00 ft (1.524 m) higher.

AVERAGE DISCHARGE.--22 years, 110 ft^3/s (3.115 m^3/s), 79,700 acre-ft/yr (98.3 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 17,100 ft^3/s (484 m^3/s) May 24, gage height, 26.15 ft (7.971 m); minimum daily, 7.7 ft^3/s (0.22 m^3/s) Sept. 11.
Period of record: Maximum discharge, 32,200 ft^3/s (912 m^3/s) May 20, 1955, gage height, 27.42 ft (8.358 m), present datum; no flow at times in most years.
Flood of May 18, 1951, reached a stage of 27.7 ft (8.44 m), present datum, from floodmark, discharge 65,300 cfs (1,850 m^3/s) by contracted-opening measurement of peak flow. A similar stage was reached prior to 1889, from information by local resident.

REMARKS.--Records poor prior to May and good thereafter. Occassional minor regulation from construction work at Waurika Lake .8 mi (.24 m) upstream.

REVISIONS (WATER YEARS).--WSP 1731: 1954(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	30	2320	36	55	243	115	105	61	3670	34	298	18
2	30	2060	43	72	272	110	95	52	1220	35	232	18
3	34	400	43	417	302	104	77	55	428	60	132	18
4	16	315	43	494	668	88	73	429	300	87	67	18
5	16	543	43	248	1160	79	70	263	259	85	65	18
6	14	261	45	127	875	79	70	105	190	83	62	17
7	13	124	45	100	238	76	71	48	180	82	58	16
8	14	95	43	77	160	73	394	59	223	81	56	16
9	16	93	41	73	130	73	328	57	294	80	52	16
10	18	85	39	60	109	73	219	97	419	80	37	12
11	18	145	41	60	96	76	125	243	1040	76	12	7.7
12	18	155	71	52	103	800	125	181	953	73	12	22
13	16	112	77	43	91	516	110	81	205	71	12	24
14	14	90	65	39	88	157	98	100	133	66	19	33
15	14	74	57	47	85	140	108	248	135	65	17	1060
16	32	62	50	54	82	120	102	868	135	59	17	161
17	32	60	45	56	79	108	86	232	98	51	16	59
18	24	57	45	54	107	471	77	117	49	47	18	12
19	24	59	43	53	107	356	69	82	49	44	17	54
20	20	62	43	70	91	161	61	69	60	43	18	64
21	16	57	59	45	85	122	52	120	88	46	18	30
22	15	31	39	43	140	110	52	174	356	46	18	26
23	15	47	39	43	612	100	50	2090	641	48	18	30
24	16	58	39	45	955	89	51	12800	332	54	18	30
25	18	70	39	45	429	86	57	10700	428	168	18	32
26	24	41	39	48	173	58	50	3560	473	322	22	20
27	30	41	37	50	125	92	50	1120	460	606	22	19
28	122	39	39	49	121	161	105	886	337	1130	19	18
29	878	37	40	45	---	140	257	2360	149	154	19	17
30	970	31	65	43	---	130	76	7930	43	162	18	17
31	1400	---	47	43	---	118	---	6870	---	292	18	---
TOTAL	3917	7604	1420	2750	7726	4981	3263	52077	13347	4330	1425	1902.7
MEAN	126	253	45.8	88.7	276	161	109	1680	445	140	46.0	63.4
MAX	1400	2320	77	494	1160	800	394	12800	3670	1130	298	1060
MIN	13	31	36	39	79	58	50	48	43	34	12	7.7
AC-FT	7770	15080	2820	5450	15320	9880	6470	103300	26470	8590	2830	3770

CAL YR 1974 TOTAL 33205.68 MEAN 91.0 MAX 2390 MIN 0 AC-FT 65860
WTR YR 1975 TOTAL 104742.70 MEAN 287 MAX 12800 MIN 7.7 AC-FT 207800

PEAK DISCHARGE (BASE, 2,000 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
11-1	2400	22.57	2,530	7-28	1430	21.23	2,130
5-24	1845	26.15	17,100	9-15	0930	21.18	2,100
5-30	1245	24.99	8,870				

07315500 RED RIVER NEAR TERRAL, OKLA.

LOCATION.--Lat 33°52'43", long 97°56'03", Jefferson County, near left bank on downstream side of pier of bridge on U.S. Highway 81, 0.5 mile (0.8 km) downstream from Chicago, Rock Island, and Pacific Railroad Co. bridge, 1.2 miles (1.9 km) south of Terral, 3.6 miles (5.8 km) downstream from Little Wichita River, and at mile 872 (1,403 km).

DRAINAGE AREA.--28,723 mi^2 (74,393 km^2), of which 5,936 mi^2 (15,374 km^2) is probably noncontributing.

PERIOD OF RECORD.--January 1938 to current year. Monthly discharge only for some periods, published in WSP 1311.

GAGE.--Water-stage recorder. Datum of gage is 770.31 ft (234.790 m) above mean sea level. Prior to Jan. 12, 1939, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--37 years, 2,221 ft^3/s (62.90 m^3/s), 1,609,000 acre-ft/yr (1.98 km^3/yr).

EXTREMES.--Current year: Maximum discharge, 53,300 ft^3/s (1,510 m^3/s) May 25, gage height, 20.85 ft (6.355 m); minimum, 488 ft^3/s (13.8 m^3/s) Feb. 1.
Period of record: Maximum discharge, 197,000 ft^3/s (5,580 m^3/s) June 8, 1941, gage height, 28.12 ft (8.571 m); minimum, 43 ft^3/s (1.22 m^3/s) Mar. 15, 1939.
Historic: Maximum stage since at least 1891, that of June 8, 1941. Flood of May 19, 1935, reached a stage of 27.2 ft (8.29 m); floods in 1891 and May 1, 1908, are reported to have reached about the same stage.

REMARKS.--Discharge records good. Some regulation by nine major upstream reservoirs in Oklahoma and Texas with a total capacity of 1,402,000 acre-ft (1.73 km^2). Many small diversions for irrigation, oilfield, and municipal uses upstream from station. Water-quality records for the current year are published in the Texas State report.

REVISIONS.--WSP 1211: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3050	15800	759	594	640	2020	1060	1190	32500	2830	13500	1180
2	2540	14400	737	668	2130	1850	1090	857	20900	2220	9020	1070
3	2120	10100	698	861	2830	1640	990	1080	10500	2090	6380	1000
4	1690	6480	688	3250	5470	1930	779	620	5770	1870	5290	931
5	1470	11100	694	3460	9510	1780	896	935	3810	1900	4740	872
6	1300	10300	686	2130	8080	1330	917	820	2790	1860	3710	936
7	1280	5690	666	1490	6410	1190	696	651	2350	2050	2930	838
8	1440	3540	657	1240	4680	1120	4440	551	2200	2180	2550	785
9	1450	3250	653	1080	3530	1080	4540	762	2790	2000	2310	767
10	1420	4120	656	1010	2950	1050	2840	1290	3380	1880	2210	751
11	1390	3210	665	926	2140	1040	2180	2490	8260	1690	2070	718
12	1360	2530	673	1140	1770	1540	1900	3830	14000	1770	1830	1220
13	1320	2400	735	966	1630	2680	1910	2180	9710	1870	1670	1600
14	1370	2170	723	744	1480	2530	2000	1390	6880	1740	1580	2230
15	1430	1850	737	662	1390	1480	1690	1340	4180	1990	1570	4770
16	1500	1610	723	631	1300	1160	1400	2240	2620	2200	1980	6950
17	1390	1480	699	624	1280	1070	1220	3130	2130	1640	4660	4770
18	1320	1330	678	609	1220	1160	1030	2620	1620	1320	8310	2760
19	1780	1230	654	598	1220	3290	915	2380	1300	1150	6340	1920
20	1590	1140	633	568	1230	2530	853	1580	1130	1140	3530	1570
21	1440	1110	602	564	1210	1600	812	1120	1080	1550	2650	1340
22	1190	1070	583	560	1860	1810	745	1460	1070	1860	2280	1170
23	947	992	596	571	5790	1470	695	24700	20400	1480	2100	1040
24	856	956	578	597	7880	1150	663	42500	29800	1620	1810	949
25	835	915	568	574	5860	983	638	49000	30600	3290	1620	860
26	890	880	570	549	3470	868	651	36700	24100	22900	1570	831
27	1510	845	563	540	2540	833	663	24400	18900	34300	1900	788
28	3590	813	552	522	2360	968	850	14900	8660	40400	3180	748
29	4540	796	545	513	---	1690	1500	20900	4540	47400	2610	716
30	7490	780	543	496	---	2060	1670	37500	3610	27700	1810	661
31	9530	---	575	508	---	1240	---	43100	---	17100	1590	---
TOTAL	65028	112887	20089	29245	91860	48142	42233	328216	281780	236990	114100	46761
MEAN	2098	3763	648	943	3281	1553	1408	10590	9393	7645	3681	1559
MAX	9530	15800	759	3460	9510	3290	4540	49000	32500	47400	13500	6950
MIN	835	780	543	496	640	833	638	551	1070	1140	1390	661
AC-FT	129000	223900	39850	58010	182200	95490	83770	651000	558900	470100	226300	92790

CAL YR 1974 TOTAL 619895 MEAN 1698 MAX 32900 MIN 175 AC-FT 1230000
WTR YR 1975 TOTAL 1417351 MEAN 3883 MAX 49000 MIN 496 AC-FT 2811000

PEAK DISCHARGE (BASE, 21,000 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
5-25	0100	20.85	53,300	7-29	1300	20.46	49,800
5-31	0400	20.00	45,800	2-1	0400	8.77	488
6-25	0900	18.00	31,500				

07315700 MUD CREEK NEAR COURTNEY, OKLA.

LOCATION.--Lat 34°00'20", long 97°34'00", in NW 1/4 SE 1/4 sec.25, T.6 S., R.4 W., Jefferson County, on downstream side of bridge on State Highway 89, 4.0 mi (6.4 km) downstream from North Mud Creek, 6.0 mi (9.7 km) northwest of Courtney, and at mile 11.5 (18.5 km).

DRAINAGE AREA.--572 mi^2 (1,481 km^2).

PERIOD OF RECORD.--October 1960 to current year.

GAGE.--Water-stage recorder and sharp-crested weir. Datum of gage is 730.00 ft (222.504 m) above mean sea level (State Highway Department bench mark). Prior to Oct. 1, 1968, auxiliary water-stage recorder 2.0 mi (3.2 km) downstream from base gage.

AVERAGE DISCHARGE.--15 years, 122 ft^3/s (3.455 m^3/s), 88,390 acre-ft/yr (109 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 13,100 ft^3/s (371 m^3/s) May 24, gage height, 28.96 ft (8.827 m); minimum daily, 3.2 ft^3/s (0.091 m^3/s) Oct. 23.
Period of record: Maximum discharge, 33,400 ft^3/s (946 m^3/s) May 1, 1974, gage height, 31.37 ft (9.562 m); no flow at times in most years.
Flood in May 1957, reached a stage of 30.6 ft (9.33 m).

REMARKS.--Records fair.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	36	2500	7.0	29	70	64	154	129	2350	52	596	11
2	25	1800	6.4	63	166	54	106	70	1550	44	385	9.8
3	17	1000	6.4	310	636	45	76	52	245	38	75	8.0
4	13	600	6.7	468	994	37	59	44	124	34	55	7.1
5	8.0	350	6.1	296	1370	33	49	44	96	37	45	6.2
6	6.0	220	6.4	116	1400	31	45	45	78	34	37	5.6
7	15	150	6.4	72	755	29	53	39	66	30	31	5.1
8	10	100	5.8	52	227	25	780	35	195	27	27	4.8
9	8.0	150	5.6	39	139	21	2130	32	2980	25	24	13
10	7.0	300	6.7	48	105	19	2170	120	3490	24	21	6.3
11	6.0	200	16	65	75	19	1490	167	6130	24	19	4.6
12	5.0	100	47	103	62	422	218	72	5160	23	17	27
13	5.0	70	40	83	53	1150	134	47	3310	41	15	55
14	6.0	50	72	44	42	666	140	212	1600	36	14	248
15	20	40	55	25	34	182	173	230	232	22	13	411
16	108	37	37	21	33	116	149	449	126	17	44	324
17	38	33	23	21	41	165	99	298	100	15	92	128
18	20	30	19	20	57	847	79	80	83	14	42	58
19	12	28	16	18	51	2440	69	49	71	13	28	37
20	7.0	27	13	15	36	1540	59	38	60	12	20	23
21	4.5	24	12	14	26	726	51	33	53	15	15	17
22	3.5	24	12	12	506	163	47	26	181	13	13	14
23	3.2	21	11	11	1240	110	46	2900	464	12	12	12
24	3.5	17	11	12	1280	82	46	10700	1380	12	10	11
25	5.0	13	10	13	1410	63	47	6190	2700	204	8.9	10
26	7.0	10	9.9	14	498	51	47	3690	1420	807	8.8	10
27	10	9.9	11	14	127	67	45	2480	235	1430	8.9	8.5
28	18	7.6	10	21	83	938	119	822	93	2480	8.7	6.6
29	60	6.7	9.5	17	---	1360	413	397	71	1990	11	6.1
30	1000	7.0	9.2	13	---	957	390	1200	57	777	13	5.8
31	1500	---	14	26	---	322	---	1570	---	347	11	---
TOTAL	2986.7	7925.2	521.1	2075	11516	12744	9483	32260	34700	8649	1720.3	1493.5
MEAN	96.3	264	16.8	66.9	411	411	316	1041	1157	279	55.5	49.8
MAX	1500	2500	72	468	1410	2440	2170	10700	6130	2480	596	411
MIN	3.2	6.7	5.6	11	26	19	45	26	53	12	8.7	4.6
AC-FT	5920	15720	1030	4120	22850	25260	18810	63990	68830	17160	3410	2960

CAL YR 1974 TOTAL 69576.49 MEAN 191 MAX 19100 MIN .11 AC-FT 138000
WTR YR 1975 TOTAL 126075.80 MEAN 345 MAX 10700 MIN 3.2 AC-FT 250100

PEAK DISCHARGE (BASE, 1,300 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
11-1	unknown	25.1	3,280	3-29	0830	23.14	1,390	6-9	1345	25.96	4,420
2-6	0015	23.06	1,480	4-9	1130	24.39	2,450	6-11	1530	27.81	8,530
2-25	1045	23.55	1,460	5-24	1015	28.96	13,100	6-25	0215	25.04	3,210
3-19	0615	24.98	2,780	6-1	1315	24.52	2,580	7-28	1100	24.53	2,590

07316000 RED RIVER NEAR GAINESVILLE, TEX.

LOCATION.--Lat 33°43'40", long 97°09'35", in SW 1/4 sec.36, T.9 S., R.1 E., Love County, Okla., near center of span on downstream side of bridge on U.S. Highway 77, 0.2 mi (0.3 km) downstream from Gulf, Colorado and Santa Fe Failway Co. bridge, 5.0 mi (8.0 km) downstream from Fish Creek, 7.0 mi (11.0 km) north of Gainesville, and at mile 791.5 (1,273.5 km).

DRAINAGE AREA.--30,782 mi^2 (79,725 km^2) of which 5,936 mi^2 (15,374 km^2) is probably noncontributing.

PERIOD OF RECORD.--May 1936 to current year. Monthly discharge only for some periods, published in WSP 1311.

GAGE.--Water-stage recorder. Datum of gage is 627.91 ft (1,913.387 m) above mean sea level. Prior to Jan. 17, 1939, and Feb. 13, 1965 to Nov. 14, 1966, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--39 years, 2,785 ft^3/s (78.87 m^3/s), 2,018,000 acre-ft/yr (2.49 km^3/yr).

EXTREMES.--Current year: Maximum discharge, 57,700 ft^3/s (1,630 m^3/s) May 26, gage height, 21.23 ft (6.471 m); minimum, 728 ft^3/s (20.6 m^3/s) Dec. 31-Jan. 2, Jan. 29-31.
Period of record: Maximum discharge, 168,000 ft^3/s (4,758 m^3/s) June 9, 1941, gage height, 24.15 ft (7.361 m); maximum gage height, 26.53 ft (8.086 m) May 21, 1951; minimum discharge, 48 ft^3/s (1.36 m^3/s) Jan. 27, 1940.

REMARKS.--Records good. Flow slightly regulated by Lake Kemp, in Texas, since 1943 by Lake Altus (see sta. 07302500), since 1946 by Lake Kickapoo, and since 1967 by Lake Arrowhead and Moss Lake, also in Texas.

COOPERATION.--Gage-height record and 35 discharge measurements furnished by Corps of Engineers; records computed by Geological Survey.

REVISIONS.--WSP 1211: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5490	21900	970	729	1240	2440	3270	2080	49000	5350	20000	1770
2	4220	21700	947	768	1410	2270	2150	2170	42600	4120	17100	1430
3	3190	15400	928	989	1810	2110	1810	1760	23000	3350	12300	1380
4	2670	12200	906	1310	3690	2020	1710	1330	11900	2830	8290	1150
5	2270	11800	892	1440	6310	1980	1540	1110	7750	2470	7000	1070
6	2030	13000	878	3040	11100	2020	1390	1040	5830	2220	5700	1020
7	1830	12000	876	2820	9080	1910	1480	1150	4580	2130	5000	967
8	1700	7930	864	2030	6640	1570	3570	1210	4330	2020	4090	932
9	1620	5630	853	1590	5090	1470	6290	1060	4730	2110	3560	929
10	1620	5890	840	1440	4040	1390	8920	950	11800	2230	3180	911
11	1630	7130	841	1330	3310	1360	7420	1360	11700	2060	2910	894
12	1620	5810	869	1250	2740	1340	5350	3880	17500	1960	2650	861
13	1600	3870	862	1160	2230	2040	3330	3350	19800	1790	2440	883
14	1570	3230	862	1250	1960	3640	2590	3750	14100	1760	2240	1270
15	1660	2830	862	1190	1750	3700	2520	3100	9680	1820	2230	2250
16	1640	2540	862	1000	1680	3090	2460	2280	5660	1780	2280	3910
17	1750	2260	862	905	1590	2150	2200	1990	3800	1840	2400	6700
18	1720	2030	862	875	1500	3760	1890	2440	2930	2110	5810	6730
19	1560	1810	871	841	1460	6210	1690	2890	2360	1720	10100	4540
20	1460	1680	852	804	1420	7230	1540	2630	1940	1480	7130	3020
21	1620	1570	832	797	1370	6750	1430	2580	1640	1320	4970	2140
22	1600	1460	815	780	2110	4390	1350	2270	1480	1270	3490	1720
23	1490	1410	801	760	4050	2500	1310	8740	1510	1340	2820	1490
24	1310	1340	797	755	7720	2230	1280	38500	17100	1680	2370	1320
25	1160	1250	772	755	8740	1960	1220	54700	36100	1660	2020	1200
26	1070	1200	762	755	7330	1940	1170	56200	40600	2080	1850	1110
27	1060	1140	757	755	4710	2270	1130	46200	30700	17600	1770	1030
28	1120	1100	751	749	3030	5310	1100	27500	20100	34100	1610	961
29	3560	1060	746	739	---	6520	1130	17800	10800	41100	1820	912
30	7170	1020	735	728	---	6370	1420	27500	7440	45000	3020	859
31	22000	---	728	904	---	4770	---	42800	---	35600	2570	---
TOTAL	86010	173190	26055	35238	109110	98710	75660	366320	422460	229900	154720	55359
MEAN	2775	5773	840	1137	3897	3184	2522	11820	14080	7416	4991	1845
MAX	22000	21900	970	3040	11100	7230	8920	56200	49000	45000	20000	6730
MIN	1060	1020	728	728	1240	1340	1100	950	1480	1270	1610	859
AC-FT	170600	343500	51680	69890	216400	195800	150100	726600	837900	456000	306900	109800

CAL YR 1974 TOTAL 858834 MEAN 2353 MAX 57400 MIN 183 AC-FT 1703000
WTR YR 1975 TOTAL 1832732 MEAN 5021 MAX 56200 MIN 728 AC-FT 3635000

PEAK DISCHARGE (BASE, 24,000 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-31	0645	16.72	25,600	6-26	0045	18.59	41,800
5-26	0430	21.23	57,700	7-30	2145	20.18	47,600
6-1	1845	20.01	50,800				

07316500 WASHITA RIVER NEAR CHEYENNE, OKLA.

LOCATION.--Lat 35°37'35", long 99°40'05", in SE 1/4 sec.5, T.13 N., R.23 W., Roger Mills County, near left bank on downstream side of pier of bridge on U.S. Highway 283, 0.5 mi (0.8 km) downstream from Sergeant Major Creek, 1.0 mi (1.6 km) north of Cheyenne, 5.2 mi (8.4 km) upstream from Dead Indian Creek, and at mile 543.9 (875.1 km).

DRAINAGE AREA.--794 mi^2 (2,056 km^2).

PERIOD OF RECORD.--October 1937 to current year. Monthly discharge only for some periods, published in WSP 1311.

GAGE.--Water-stage recorder. Datum of gage is 1,905.98 ft (580.943 m) above mean sea level (levels by Corps of Engineers). May 1, 1938, to Nov. 16, 1946, and Oct. 1, 1947, to Jan. 11, 1948. nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--38 years, 30.3 ft^3/s (0.858 m^3/s), 21,950 acre-ft/yr (27.1 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 1,050 ft^3/s (29.7 m^3/s) Nov. 3, gage height, 5.12 ft (1.561 m); no flow at times.
Period of record: Maximum discharge, 69,800 ft^3/s (1,977 m^3/s) Apr. 29, 1954, gage height, 15.24 ft (4.645 m); from rating curve extended above 27,000 ft^3/s (765 m^3/s) on basis of contracted-opening measurement of peak flow; no flow at times in most years.
Flood of Apr. 3, 1934, reached a stage of 1.0 ft (0.30 m) lower than that in 1954 at site on upstream side of highway fill.

REMARKS.--Records fair. Some regulation by numerous flood-retarding structures.

REVISIONS.--WSP 1211: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	0	7.7	8.5	11	27	19	10	64	6.0	3.6	0
2	0	12	7.7	11	12	26	18	13	58	4.0	4.1	0
3	0	271	7.8	11	15	24	17	18	49	4.5	5.1	0
4	0	61	7.4	11	16	24	16	15	45	26	3.0	0
5	0	27	7.6	11	16	24	15	14	38	9.9	2.1	0
6	0	22	7.5	10	16	23	15	13	32	4.0	1.3	0
7	0	20	7.0	10	15	21	19	13	27	2.7	.75	0
8	0	18	6.4	9.6	14	20	21	11	24	2.0	.45	0
9	0	17	5.9	9.6	15	22	20	10	56	2.8	.25	0
10	0	16	7.0	8.8	15	24	19	10	44	3.5	.15	0
11	0	15	9.3	7.6	15	23	19	9.6	73	2.5	.07	0
12	0	14	9.4	7.8	15	25	18	5.3	67	2.0	.07	0
13	.70	13	8.3	7.8	14	23	20	105	56	1.7	4.0	0
14	.06	12	8.0	7.8	14	22	20	81	44	2.2	14	0
15	.03	11	7.5	7.5	13	21	19	55	34	2.9	19	0
16	0	11	7.1	8.6	12	22	18	48	28	2.3	22	0
17	0	11	7.3	8.1	13	22	16	41	21	2.0	14	0
18	0	11	7.7	8.1	13	22	15	35	17	1.5	9.2	0
19	0	11	7.0	8.0	19	22	14	32	13	1.2	6.7	0
20	0	9.4	6.9	7.3	21	21	13	27	9.5	.90	4.5	0
21	0	9.4	7.0	7.9	21	20	12	24	8.0	.70	3.4	1.5
22	0	9.4	7.1	6.7	22	18	12	46	19	.56	2.5	.28
23	0	9.0	6.7	7.0	20	17	14	34	21	.25	2.0	0
24	0	8.2	6.4	7.6	23	16	14	21	22	2.6	1.5	0
25	0	8.2	5.5	7.6	30	16	13	21	15	3.4	1.1	0
26	0	8.6	7.1	7.7	29	16	13	16	11	10	.82	0
27	0	7.8	7.2	7.5	29	24	15	12	8.5	9.3	.93	0
28	0	8.2	7.2	7.2	28	27	21	11	7.0	6.7	1.2	0
29	0	7.4	7.3	7.2	---	24	16	158	6.5	6.2	.85	0
30	0	7.1	8.2	9.2	---	22	13	76	5.0	5.4	.21	0
31	0	---	10	9.7	---	20	---	65	---	4.3	0	---
TOTAL	.81	665.7	230.2	264.4	496	678	494	1049.9	922.5	134.01	128.85	1.78
MEAN	.02	22.2	7.43	8.53	17.7	21.9	16.5	33.9	30.8	4.32	4.16	.05
MAX	.70	271	10	11	30	27	21	158	73	26	22	1.5
MIN	0	0	5.5	6.7	11	16	12	5.3	5.0	.25	0	0
AC-FT	1.6	1320	457	524	984	1340	980	2080	1830	266	256	3.5

CAL YR 1974 TOTAL 3654.07 MEAN 10.0 MAX 271 MIN 0 AC-FT 7250
WTR YR 1975 TOTAL 5066.15 MEAN 13.9 MAX 271 MIN 0 AC-FT 10050

PEAK DISCHARGE (BASE, 1,100 FT^3/S).--No peak above base.

07324200 WASHITA RIVER NEAR HAMMON, OKLA.

LOCATION.--Lat 35°39'23", long 99°18'21", on west line of sec.26, T.14 N., R.20 W., Custer County, on right bank near county road bridge, 2.2 mi (3.5 km) downstream from Quartermaster Creek, 4.7 mi (7.6 km) northeast of Hammon, and at mile 494.5 (795.7 km).

DRAINAGE AREA.--1,387 mi^2 (3,592 km^2).

PERIOD OF RECORD.--October 1969 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,643.22 ft (500.853 m) above mean sea level.

AVERAGE DISCHARGE.--6 years, 20.5 ft^3/s (0.581 m^3/s), 14,850 acre-ft/yr (18.3 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 1,820 ft^3/s (51.5 m^3/s) July 24, gage height, 17.45 ft (5.319 m); minimum daily, 0.02 ft^3/s (0.001 m^3/s) Oct. 11.
Period of record: Maximum discharge, 2,540 ft^3/s (71.9 m^3/s) April 18, 1970, gage height, 19.23 ft (5.861 m), from rating curve extended above 500 ft^3/s (14.2 m^3/s) on basis of slope-area measurement of peak flow; no flow at times in most years.

REMARKS.--Records poor prior to April and good thereafter. Some regulation by numerous flood-retarding structures. See pg. 481 for water-quality record.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.04	5.5	18	19	20	56	37	28	177	12	91	9.1
2	.12	10	20	21	23	55	34	81	139	10	86	7.6
3	.68	792	14	23	26	46	32	86	124	9.6	76	8.1
4	.58	467	18	26	30	52	31	66	106	86	66	9.1
5	.50	259	15	23	33	52	30	64	92	113	59	9.0
6	.45	134	15	24	32	47	27	61	79	62	49	7.9
7	.39	95	14	23	35	43	29	49	249	49	42	6.9
8	.26	71	14	23	35	38	40	43	108	44	38	5.8
9	.14	65	13	22	35	38	69	39	215	34	37	4.3
10	.07	62	11	20	32	44	43	35	252	32	32	3.7
11	.02	58	15	21	30	50	40	34	370	29	26	4.7
12	.09	46	20	21	30	49	42	32	249	23	26	9.7
13	.46	34	23	20	28	46	41	89	207	18	26	6.7
14	2.4	32	22	19	28	43	41	386	154	41	54	7.3
15	2.8	36	19	27	26	40	42	278	115	32	84	8.5
16	2.8	33	18	27	28	40	42	234	95	23	63	8.7
17	2.2	33	14	21	31	42	40	150	112	19	55	8.0
18	2.3	32	16	20	32	43	40	127	125	16	47	7.2
19	1.7	30	17	20	35	44	33	104	73	15	40	6.4
20	1.6	29	17	19	38	43	29	88	53	12	36	5.4
21	1.5	34	16	17	40	40	26	71	45	9.9	32	5.9
22	1.3	32	15	16	40	39	25	59	41	10	29	7.5
23	2.1	30	15	15	40	38	27	75	43	10	25	7.4
24	3.0	27	15	14	64	36	27	91	44	1330	24	6.0
25	3.9	26	14	14	55	34	26	77	40	730	19	5.3
26	4.2	25	14	14	65	28	25	62	35	467	14	5.2
27	4.0	22	15	14	64	31	27	58	26	313	13	5.2
28	4.6	20	15	14	55	43	34	51	21	225	14	5.3
29	5.1	18	16	14	---	45	38	278	19	168	14	5.6
30	5.1	14	16	14	---	42	32	338	15	128	12	6.5
31	5.5	---	20	16	---	39	---	288	---	105	11	---
TOTAL	59.90	2571.5	504	601	1030	1326	1049	3522	3423	4175.5	1240	204.0
MEAN	1.93	85.7	16.3	19.4	36.8	42.8	35.0	114	114	135	40.0	6.80
MAX	5.5	792	23	27	65	56	69	386	370	1330	91	9.7
MIN	.02	5.5	11	14	20	28	25	28	15	9.6	11	3.7
AC-FT	119	5100	1000	1190	2040	2630	2080	6990	6790	8280	2460	405

CAL YR 1974 TOTAL 8869.96 MEAN 24.3 MAX 792 MIN 0 AC-FT 17590
WTR YR 1975 TOTAL 19705.90 MEAN 54.0 MAX 1330 MIN .02 AC-FT 39090

07324300 FOSS RESERVOIR NEAR FOSS, OKLA.

LOCATION.--Lat 35°32'18", long 99°10'40", in S 1/2 sec.2, T.12 N., R.19 W., Custer County, near right end of dam on Washita River, 0.5 mi (0.8 km) upstream from Oak Creek, 3.5 mi (5.6 km) west of Stafford, 6.0 mi (9.7 km) north of Foss, and at mile 474.4 (763.3 km).

DRAINAGE AREA.--1,496 mi^2 (3,875 km^2).

PERIOD OF RECORD.--Feburary 1961 to current year.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Bureau of Reclamation). Prior to October 1961, nonrecording gage at same site and datum.

EXTREMES.--Current year: Maximum contents, 156,600 acre-ft (193 hm^3) Aug. 19, elevation, 1,638.70 ft (449.476 m); minimum, 109,700 acre-ft (135 hm^3) Oct. 22, elevation, 1,630.20 ft (496.885 m).
Period of record: Maximum contents, 156,600 acre-ft (193 hm^3) Aug. 19, 1975, elevation, 1,638.70 ft (499.476 m).

REMARKS.--Reservoir is formed by an earth dam. Storage began Feb. 13, 1961, Capacity, 436,500 acre-ft (538 hm^3) at elevation 1,668.6 ft (508.59 m) crest of drop inlet and 256,100 acre-ft (316 hm^3) at elevation 1,652.0 ft (503.530 m) conservation pool. Dead storage, 12,420 acre-ft (15.3 hm^3) below elevation 1,597.2 ft (486.83 m) sill of gated outlet. Figures given herein represent total contents. Reservoir is designed for flood control, municipal water supply, and irrigation release. Revised capacity table used after Sept. 30, 1964. See pg. 487 for water-quality record.

COOPERATION.--Elevations and data on diversions furnished by Foss Reservoir Master Conservancy District.

MONTHEND ELEVATION AND CONTENTS, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

Date	Elevation (feet)†	Contents (acre-feet)	Change in contents (acre-feet)	Diversions (acre-feet)
Sept. 30	1,630.40	110,700	--	--
Oct. 31	1,630.30	110,200	-500	155
Nov. 30	1,631.40	115,700	+5,500	0
Dec. 31	1,631.60	116,700	+1,000	0
CAL YR 1974	--	--	+13,600	--
Jan. 31	1,631.90	118,200	+1,500	72
Feb. 28	1,632.40	120,800	+2,600	159
Mar. 31	1,633.20	125,000	+4,200	103
Apr. 30	1,633.90	128,700	+3,700	92
May 31	1,635.50	137,700	+9,000	50
June 30	1,636.50	143,400	+5,700	63
July 31	1,638.50	155,400	+12,000	94
Aug. 31	1,638.60	156,000	+600	89
Sept. 30	1,638.20	153,500	-2,500	84
WTR YR 1975	--	--	+42,800	961

†Eelvation at 0800 on following day.

07324400 WASHITA RIVER NEAR FOSS, OKLA.

LOCATION.--Lat 35°32'20", long 99°10'10", in SW 1/4 SW 1/4 sec.1, T.12 N., R.19 W., Custer County, on left bank on downstream side of pile bent of county road bridge, 0.4 mi (0.6 km) downstream from Oak Creek, 0.9 mi (1.4 km) downstream from Foss Dam, 2.5 mi (4.0 km) west of Stafford, 6.0 mi (9.7 km) north of Foss, and at mile 473.5 (761.9 km).

DRAINAGE AREA.--1,511 mi^2 (4,017 km^2).

PERIOD OF RECORD.--March 1956 to April 1957, February to December 1958, July 1961 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,560 ft (475.5 m) from preliminary survey by Topographic Division.

AVERAGE DISCHARGE.--14 years (1961-75), 11.5 ft^3/s (0.326 m^3/s), 8,330 acre-ft/yr (10.3 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 1,470 ft^3/s (41.6 m^3/s) July 24, gage height, 19.14 ft (5.834 m); minimum dialy, 7.0 ft^3/s (0.20 m^3/s) Oct. 5, Jan. 15.
Period of record: Maximum discharge, 14,000 ft^3/s (397 m^3/s) Apr. 19, 1957, gage height, 20.40 ft (6.218 m), from rating curve extended above 3,600 ft^3/s (102 m^3/s) on basis of velocity-area study; no flow at times in 1956.
Flood in May 1959 reached a stage of 23.4 ft (7.13 m), from floodmark.

REMARKS.--Records fair. Except for 55 mi^2 (142 km^2) intervening area, flow completely regulated since 1961 by Foss Reservoir (see sta. 07324300). See pg. 488 for water-quality record.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	7.8	19	9.9	17	48	15	12	39	12	272	16
2	12	266	18	12	18	39	15	13	28	12	264	16
3	9.9	296	17	11	20	34	14	13	22	33	252	15
4	7.4	249	17	11	21	30	14	12	18	67	245	15
5	7.0	170	17	11	21	29	14	12	15	31	231	15
6	7.4	105	16	11	19	27	14	11	14	19	212	15
7	8.1	64	15	9.9	18	24	37	10	13	15	120	14
8	8.3	51	14	9.2	19	21	125	12	12	15	72	12
9	11	44	14	9.2	18	23	50	8.5	18	13	56	12
10	14	40	14	9.0	18	29	32	9.0	580	14	47	11
11	11	36	16	8.3	18	28	27	9.4	305	14	36	17
12	10	34	17	7.4	17	28	23	9.0	238	13	25	17
13	12	31	16	8.1	16	24	23	145	120	12	108	11
14	12	28	16	7.2	15	22	22	65	61	13	51	10
15	11	27	15	7.0	15	21	20	25	46	12	31	8.7
16	11	27	14	7.2	17	24	18	17	42	11	41	11
17	9.4	26	14	7.6	20	24	17	13	33	10	34	11
18	8.7	26	14	8.3	20	27	15	11	30	10	26	11
19	8.7	26	13	11	19	26	14	11	26	10	22	9.4
20	8.5	25	12	14	20	23	13	11	23	9.8	20	11
21	8.5	24	12	11	24	21	13	12	21	9.5	20	11
22	8.7	23	12	11	32	20	14	25	20	9.1	19	11
23	10	22	12	14	30	17	14	18	18	9.4	19	9.9
24	10	21	11	14	31	15	14	14	18	925	18	9.0
25	12	21	10	14	44	15	14	11	17	776	18	10
26	8.9	21	9.7	13	72	15	14	11	16	447	18	10
27	8.7	20	9.7	13	63	18	14	11	15	329	17	9.8
28	9.2	20	9.4	13	56	18	23	13	14	515	17	9.9
29	8.7	20	9.2	13	---	15	17	146	13	324	17	9.9
30	8.7	19	9.0	15	---	15	14	133	13	295	16	9.6
31	8.9	---	9.6	16	---	15	---	69	---	285	16	---
TOTAL	300.7	1789.8	421.6	336.3	718	735	673	891.9	1848	4269.8	2360	358.2
MEAN	9.70	59.7	13.6	10.8	25.6	23.7	22.4	28.8	61.6	138	76.1	11.9
MAX	14	296	19	16	72	48	125	146	580	925	272	17
MIN	7.0	7.8	9.0	7.0	15	15	13	8.5	12	9.1	16	8.7
AC-FT	596	3550	836	667	1420	1460	1330	1770	3670	8470	4680	710

CAL YR 1974 TOTAL 8374.48 MEAN 22.9 MAX 493 MIN .24 AC-FT 16610
WTR YR 1975 TOTAL 14702.30 MEAN 40.3 MAX 925 MIN 7.0 AC-FT 29160

07325000 WASHITA RIVER NEAR CLINTON, OKLA.

LOCATION.--Lat 35°31'52", long 98°57'57", in SW 1/4 NE 1/4 sec.11, T.12 N., R.17 W., Custer County, within channel on downstream side of pier of bridge on U.S. Highway 183, 0.5 mi (0.8 km) north of Clinton, 0.8 mi (1.3 km) upstream from Beaver Creek, 4.8 mi (7.7 km) downstream from Barnitz Creek, and at mile 447.4 (719.9 km).

DRAINAGE AREA.--1,977 mi^2 (5,120 km^2).

PERIOD OF RECORD.--October 1935 to current year. Monthly discharge only for some periods, published in WSP 1311.

GAGE.--Water-stage recorder. Datum of gage is 1,467.60 ft (447.324 m) above mean sea level. See WSP 1920 for history of changes prior to Mar. 19, 1941.

AVERAGE DISCHARGE.--25 years (1935-60), 146 ft^3/s (4.13 m^3/s) 105,700 acre-ft (130 hm^3/yr); 15 years (1960-75), 52.7 ft^3/s (1.492 m^3/s), 38,180 acre-ft/yr (47.1 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 2,580 ft^3/s (73.1 m^3/s) June 11, gage height, 19.58 ft (5.968 m); minimum daily, 36 ft^3/s (1.02 m^3/s) Oct. 22.
Period of record: Maximum discharge, 66,800 ft^3/s (1,890 m^3/s) May 16, 1951, gage height, 31.09 ft (9.476 m), from rating curve extended above 7,900 ft^3/s (224 m^3/s) by contracted-opening measurement of peak flow; no flow at times in 1952-56, 1964, 1966.
Flood of Apr. 3-4, 1934, reached a stage of 33.9 ft (10.33 m), from floodmarks.

REMARKS.--Records good. Flow regulated since February 1961 by Foss Reservoir (see sta. 07324300) and by numerous flood-retarding structures.

REVISIONS.--WSP 1211: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	57	62	75	61	79	192	90	79	360	90	507	59
2	57	873	73	66	83	173	83	83	267	90	539	58
3	52	2040	71	81	90	158	81	434	224	90	479	54
4	52	1210	69	75	102	143	80	228	199	170	431	52
5	59	666	71	69	105	140	80	169	175	140	382	52
6	49	459	72	85	91	140	77	146	144	110	354	51
7	45	330	67	63	83	131	102	121	217	100	313	49
8	44	287	65	62	93	108	462	101	293	90	226	47
9	44	245	63	59	73	107	289	90	374	120	186	45
10	44	225	64	66	80	132	177	87	1390	100	162	44
11	44	188	70	64	87	138	145	133	2000	95	148	43
12	43	163	76	53	76	133	126	102	821	90	138	73
13	57	147	77	55	71	123	120	163	488	120	131	69
14	99	128	76	57	71	111	128	1020	336	85	487	54
15	74	118	85	53	70	107	118	395	250	65	192	52
16	56	115	71	55	70	121	121	254	200	58	165	51
17	50	108	69	56	85	133	109	199	230	52	159	51
18	43	108	66	58	92	136	102	167	267	51	130	51
19	40	112	73	58	90	130	94	151	187	51	111	48
20	38	101	63	59	90	120	85	133	158	50	105	45
21	37	93	60	66	105	115	80	122	130	49	98	46
22	36	93	60	60	136	110	77	137	154	48	90	48
23	45	94	63	56	133	99	79	134	140	50	86	47
24	45	89	57	62	125	101	86	111	120	1130	82	44
25	60	79	55	61	171	85	77	92	110	1640	77	45
26	55	81	52	59	251	79	75	82	105	1630	73	45
27	48	82	53	59	234	176	85	80	100	900	71	43
28	66	79	54	59	207	161	123	76	100	1500	70	42
29	61	81	54	57	---	115	101	594	95	1650	68	41
30	58	78	54	61	---	98	83	1120	90	654	64	40
31	59	---	59	77	---	92	---	534	---	556	63	---
TOTAL	1617	8534	2037	1932	3043	3907	3535	7337	9724	11624	6187	1489
MEAN	52.2	284	65.7	62.3	109	126	118	237	324	375	200	49.6
MAX	99	2040	85	85	251	192	462	1120	2000	1650	539	73
MIN	36	62	52	53	70	79	75	76	90	48	63	40
AC-FT	3210	16930	4040	3830	6040	7750	7010	14550	19290	23060	12270	2950

CAL YR 1974 TOTAL 36159.0 MEAN 99.1 MAX 2040 MIN 3.8 AC-FT 71720
WTR YR 1975 TOTAL 60966.0 MEAN 167 MAX 2040 MIN 36 AC-FT 120900

07325500 WASHITA RIVER AT CARNEGIE, OKLA.

LOCATION.--Lat 35°07'02", long 98°33'49", in NW 1/4 NW 1/4 sec.3, T.7 N., R.13 W., Caddo County, on downstream side of right pier of bridge on State Highway 9, 1,300 ft (396.2 m) upstream from Running Creek, 2.7 mi (4.3 km) east of Carnegie, and at mile 353.9 (569.4 km). Records include flow of Running Creek.

DRAINAGE AREA.--3,129 mi^2 (8.104 km^2), includes that of Running Creek.

PERIOD OF RECORD.--October 1937 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,249.23 ft (380.765 m) above mean sea level. Prior to October 1942, water-stage recorder at site 8.0 mi (12.9 km) upstream at datum 24.57 ft (7.489 m) higher.

AVERAGE DISCHARGE.--38 years, 282 ft^3/s (7.986 m^3/s), 204,300 acre-ft/yr (252 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 5,340 ft^3/s (151 m^3/s) July 27, gage height, 21.34 ft (6.504 m); minimum daily, 107 ft^3/s (3.03 m^3/s) Oct. 23.

Period of record: Maximum discharge, 50,000 ft^3/s (1,420 m^3/s) May 18, 1949, gage height, 26.21 ft (7.989 m), from rating curve extended above 35,500 ft^3/s (1,010 m^3/s) on basis of contracted-opening measurement of peak flow; no flow at times in 1956 and 1964.

Flood of May 23, 1903, reached a stage of about 29 ft (8.8 m) at former site and datum, from information by local resident; flood of May 18, 1949, reached a stage of 20.9 ft (6.37 m), from flood-mark, at that site and datum.

REMARKS.--Records fair. Some diversion above station for irrigation. October 1942 to May 1949, occasional fluctuation caused by power plant at Carnegie, 7.5 mi (12.1 km) above station. Some regulation by Foss Reservoir since February 1961 (see sta. 07324300), and by numerous flood-retarding structures. See pg. 491 for water-quality record.

REVISIONS (WATER YEARS).--WSP 1087: 1938. WSP 1211: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	199	985	232	215	480	474	321	262	1490	516	1760	182
2	175	548	228	222	382	438	302	306	1040	438	1600	175
3	161	2400	225	222	334	409	287	628	736	391	1640	167
4	154	3170	225	229	463	388	275	627	604	356	1300	164
5	150	3030	225	264	650	372	272	583	527	321	1060	160
6	147	1580	228	236	541	360	276	436	495	366	880	157
7	150	1010	226	222	420	348	266	352	424	345	750	156
8	142	811	225	219	350	331	274	309	407	297	653	158
9	137	662	215	205	300	319	613	278	382	321	577	155
10	133	594	211	195	280	318	737	255	585	309	476	155
11	128	531	221	188	270	348	538	242	2580	312	412	150
12	120	479	233	186	270	354	468	239	2630	318	371	150
13	117	429	229	182	270	347	427	410	1990	288	328	162
14	121	395	236	169	260	327	382	945	1210	253	416	186
15	134	361	232	156	250	320	371	1220	890	315	463	218
16	178	329	226	169	250	322	354	1180	708	322	722	195
17	162	312	218	173	250	416	337	669	604	244	455	185
18	138	300	215	168	260	403	330	499	531	208	387	179
19	127	269	211	168	290	390	315	414	486	215	317	171
20	119	285	205	166	300	376	292	369	495	249	282	163
21	112	282	202	161	373	340	278	352	435	223	253	158
22	108	270	197	160	525	332	263	729	767	206	238	156
23	107	261	194	159	549	326	256	1990	1730	191	226	157
24	112	260	194	159	550	297	254	1210	844	866	222	158
25	132	257	191	159	629	284	249	906	1540	3540	208	155
26	147	250	191	159	619	279	253	749	2810	4180	258	152
27	146	243	191	159	589	272	242	643	1200	5200	218	149
28	146	242	191	159	519	422	242	592	833	4920	214	150
29	276	240	188	159	---	675	263	561	686	3780	205	148
30	258	235	188	166	---	419	295	1910	596	3410	199	145
31	579	---	186	191	---	352	---	2170	---	2760	192	---
TOTAL	5015	21040	6579	5745	11223	11358	10032	22055	30255	35660	17282	4916
MEAN	162	701	212	185	401	366	334	711	1009	1150	557	164
MAX	579	3170	236	264	650	675	737	2170	2810	5200	1760	218
MIN	107	235	186	156	250	272	242	239	382	191	192	145
AC-FT	9950	41730	13050	11400	22260	22530	19900	43750	60010	70730	34280	9750

CAL YR 1974 TOTAL 100106.0 MEAN 274 MAX 3740 MIN 8.5 AC-FT 198600
WTR YR 1975 TOTAL 101160.0 MEAN 496 MAX 5200 MIN 107 AC-FT 359300

PEAK DISCHARGE (BASE, 3,000 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE
11-5	0530	15.71	3,360
6-26	1330	14.95	3,140
7-27	1545	21.34	5,340

07325800 COBB CREEK NEAR EAKLY, OKLA.

LOCATION.--Lat 35°17'26", long 98°35'38", in NW 1/4 NE 1/4 sec.5, T.9 N., R.13 W., Caddo County, near right abutment of bridge on downstream side of State Highway 152, 0.5 mi (0.8 km) downstream from Fivemile Creek, 2.4 mi (3.9 km) southwest of Eakly, 2.5 mi (4.0 km) upstream from Fort Cobb Reservoir, and at mile 22.9 (36.8 km).

DRAINAGE AREA.--132 mi^2 (342 km^2).

PERIOD OF RECORD.--October 1968 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,369.70 ft (417.485 m) above mean sea level.

AVERAGE DISCHARGE.--7 years, 24.1 ft^3/s (0.683 m^3/s), 17,460 acre-ft/yr (21.5 hm^3/yr).

EXTREMES.--Current year: Maximum gage height, 20.43 ft (6.227 m) June 24 (discharge not determined); minimum daily discharge, 3.7 ft^3/s (0.10 m^3/s) July 9.
Period of record: Maximum gage height, 20.43 ft (6.227 m) June 24, 1975 (discharge not determined); no flow at times in most years.

REMARKS.--Records poor. Minor regulation by three small reservoirs having combined surface-area 262 acres (1.06 km^2) and capacity of 3,100 acre-ft (3.82 hm^3).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	49	16	31	73	26	24	17	51	6.2	35	9.0
2	9.8	930	18	54	54	25	23	38	33	5.3	500	15
3	10	200	18	61	61	22	22	80	27	4.9	250	25
4	9.4	400	18	38	60	23	19	32	24	4.9	70	20
5	8.8	199	27	33	41	22	19	30	21	4.9	30	15
6	8.8	110	35	31	38	22	19	26	20	4.7	20	13
7	9.6	82	30	28	33	21	20	22	39	11	15	12
8	9.8	66	25	25	33	20	27	20	30	8.3	12	11
9	9.7	42	18	23	27	23	24	18	26	3.7	9.0	10
10	9.7	39	25	23	26	31	22	17	180	244	7.0	10
11	9.0	32	40	22	25	30	21	17	269	30	6.0	9.7
12	8.7	30	35	20	24	31	20	26	115	25	5.0	25
13	9.3	28	30	22	21	27	27	101	64	20	4.0	20
14	16	26	28	22	21	22	24	447	46	18	26	25
15	16	25	26	21	21	22	22	291	36	16	20	18
16	14	23	24	19	26	40	21	124	24	15	17	13
17	13	22	22	20	30	30	20	67	21	15	15	11
18	13	21	20	19	33	35	27	45	18	15	14	10
19	12	27	19	20	34	29	24	36	16	14	13	10
20	11	23	19	22	39	30	22	32	14	14	12	9.0
21	11	21	19	18	54	26	21	30	14	13	12	20
22	11	20	19	17	47	23	21	49	324	13	12	15
23	12	27	19	17	46	21	20	99	162	13	12	13
24	15	23	19	18	39	20	20	53	821	800	12	12
25	23	22	18	18	35	18	20	43	750	300	12	11
26	21	21	18	17	31	17	19	39	106	150	28	10
27	19	20	19	17	28	34	19	37	38	170	18	10
28	41	19	19	17	26	44	19	37	21	350	14	10
29	32	18	19	16	---	36	19	253	14	200	12	9.0
30	32	18	20	25	---	30	17	496	8.4	100	11	9.0
31	127	---	41	120	---	27	---	102	---	50	10	---
TOTAL	561.6	2583	725	854	1026	827	642	2724	3332.4	2638.9	1233.0	409.7
MEAN	18.1	86.1	23.4	27.5	36.6	26.7	21.4	87.9	111	85.1	39.8	13.7
MAX	127	930	41	120	73	44	27	496	821	800	500	25
MIN	8.7	18	18	16	21	17	17	17	8.4	3.7	4.0	9.0
AC-FT	1110	5120	1440	1690	2040	1640	1270	5400	6610	5230	2450	813

CAL YR 1974 TOTAL 11904.10 MEAN 32.6 MAX 1470 MIN .40 AC-FT 23610
WTR YR 1975 TOTAL 17556.60 MEAN 48.1 MAX 930 MIN 3.7 AC-FT 34820

PEAK DISCHARGE (BASE, 500 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
11-2	1245	19.71	N.D.	6-24	2100	20.43	N.D.
5-13	2400	8.25	523	7-10	1145	10.08	801
5-30	0245	12.65	1,270	7-24		abt20.0	N.D.
6-22	0830	8.47	558				

07325850 LAKE CREEK NEAR EAKLY, OKLA.

LOCATION.--Lat 35°17'27", long 98°31'44", in NE 1/4 NW 1/4 sec.1, T.9 N., R.13 W., Caddo County, on downstream side of bridge on State Highway 152, 1.2 mi (1.9 km) upstream from Fort Cobb Reservoir, 2.0 mi (3.2 km) southeast of Eakly, and at mile 4.2 (6.8 km).

DRAINAGE AREA.--52.0 mi^2 (134.7 km^2).

PERIOD OF RECORD.--October 1969 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,365.47 ft (416.195 m) above mean sea level.

AVERAGE DISCHARGE.--6 years, 6.65 ft^3/s (0.188 m^3/s), 4,820 acre-ft/yr (5.94 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 2,030 ft^3/s (57.5 m^3/s) Nov. 2, gage height, 13.13 ft (4.002 m); no flow at times.
Period of record: Maximum discharge, 2,030 ft^3/s (57.5 m^3/s) Nov. 2, 1974, gage height, 13.13 ft (4.002 m); from rating curve extended above 200 ft^3/s (5.66 m^3/s); no flow at times each year.

REMARKS.--Records fair.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	5.9	3.4	9.7	23	6.0	4.9	.73	16	3.3	33	1.7
2	0	456	4.4	44	21	5.2	3.9	29	6.0	2.8	325	2.1
3	0	276	5.0	30	38	4.9	3.1	49	2.8	28	64	2.6
4	0	98	5.1	15	34	5.1	3.3	5.2	1.2	36	23	1.4
5	0	29	5.3	14	15	5.1	3.1	4.4	.73	8.1	12	.90
6	0	17	6.6	9.2	9.6	5.0	3.4	3.0	.46	3.2	8.1	.65
7	0	15	5.8	8.7	10	4.7	5.3	1.9	14	21	5.6	.60
8	0	12	4.3	7.7	12	4.4	7.9	.46	2.8	6.4	4.3	.55
9	0	17	4.4	7.4	6.6	9.7	6.9	.46	7.6	2.8	3.2	.55
10	0	15	7.2	7.1	8.8	14	4.6	.20	87	169	2.8	.60
11	0	8.0	22	5.4	9.4	12	4.0	32	48	30	2.8	.55
12	0	6.0	15	4.0	7.4	12	3.1	54	26	8.5	1.9	2.3
13	0	6.0	9.0	4.8	8.0	6.1	9.6	226	9.1	4.0	1.9	2.3
14	2.3	4.7	7.6	6.1	7.4	5.0	8.4	185	7.6	2.6	10	6.2
15	1.9	3.9	6.0	6.2	7.0	7.9	5.0	37	6.6	1.7	7.9	6.7
16	.35	3.9	5.7	5.9	8.4	23	3.9	13	5.2	1.1	7.2	5.1
17	.13	3.9	5.6	5.6	11	13	4.9	6.0	3.3	.68	6.6	4.7
18	.05	4.2	6.0	6.1	19	37	9.4	4.6	2.7	.68	6.0	4.0
19	0	4.5	5.2	6.3	17	12	3.7	4.6	1.6	.41	5.3	2.7
20	0	3.0	5.1	4.5	15	8.1	3.1	4.0	1.1	.41	4.6	1.9
21	0	2.8	4.9	5.1	14	6.6	2.6	2.2	1.1	.41	4.4	2.6
22	0	3.2	5.3	4.2	25	6.1	3.0	118	15	.68	3.9	3.3
23	.05	3.3	4.8	4.5	17	5.9	4.1	153	5.9	.68	3.8	2.1
24	1.2	2.1	4.6	5.5	18	5.6	3.4	16	123	434	3.4	1.4
25	8.1	2.0	4.0	5.1	17	5.0	2.3	8.0	134	133	3.0	1.1
26	2.8	2.3	5.2	4.7	9.5	4.0	2.1	6.0	27	58	4.3	1.7
27	1.5	2.1	6.0	4.8	6.6	24	2.8	4.0	16	49	3.6	1.7
28	7.8	2.4	5.6	4.5	6.3	9.4	2.6	17	8.5	126	3.6	1.5
29	6.5	2.1	5.9	4.8	---	6.9	1.5	172	5.9	78	2.9	1.9
30	6.5	2.6	6.7	27	---	6.3	.90	112	4.0	36	2.5	1.7
31	23	---	21	57	---	5.3	---	25	---	30	2.0	---
TOTAL	62.18	1013.9	212.7	334.9	401.0	285.3	126.80	1293.75	590.19	1276.45	572.6	67.10
MEAN	2.01	33.8	6.86	10.8	14.3	9.20	4.23	41.7	19.7	41.2	18.5	2.24
MAX	23	456	22	57	38	37	9.6	226	134	434	325	6.7
MIN	0	2.0	3.4	4.0	6.3	4.0	.90	.20	.46	.41	1.9	.55
AC-FT	123	2010	422	664	795	566	252	2570	1170	2530	1140	133

CAL YR 1974 TOTAL 2744.03 MEAN 7.52 MAX 456 MIN 0 AC-FT 5440
WTR YR 1975 TOTAL 6236.87 MEAN 17.1 MAX 456 MIN 0 AC-FT 12370

PEAK DISCHARGE (BASE, 250 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
11-2	1330	13.13	2,030	5-29	2300	9.74	368
11-3	1800	10.38	455	6-24	2200	10.34	444
5-11	2315	8.48	284	7-10	1030	9.14	396
5-13	1915	12.48	1,450	7-24	0915	12.58	1,530
5-22	2045	10.61	519	8-2	0915	11.28	748

07325860 WILLOW CREEK NEAR ALBERT, OKLA.

LOCATION.--Lat 35°14'00", long 98°27'57", in NE 1/4 NW 1/4 sec.28, T.9 N., R.12 W., Caddo County, at County road bridge 3.1 mi (5.0 km) west of Albert, 5.2 mi (8.4 km) above Fort Cobb Dam, and at mile 2.4 (3.9 km).

DRAINAGE AREA.--28.9 mi^2 (72.5 km^2).

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

GAGE.--Water-stage recorder. Datum of gage is 1,340.00 ft (408.432 m) above mean sea level.

EXTREMES.--Current year: Maximum discharge, 1,720 ft^3/s (48.7 m^3/s) July 24, gage height, 9.35 ft (2.850 m); minimum daily, 0.42 ft^3/s (0.012 m^3/s) May 10.
Period of record: Maximum discharge, 1,720 ft^3/s (48.7 m^3/s) July 24, 1975, gage height, 9.35 ft (2.850 m) from rating curve extended above 20 ft^3/s (0.57 m^3/s) on basis of channel conveyance study; no flow at times in most years.

REMARKS.--Records poor.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.1	3.9	2.1	3.3	4.1	2.2	1.8	3.2	1.5	.80	.63	1.3
2	1.1	116	2.1	10	4.1	2.2	1.7	14	.90	.60	46	1.1
3	1.1	59	2.1	6.0	8.1	2.1	1.7	10	.80	10	4.8	.92
4	1.1	11	2.2	4.2	6.5	2.1	1.7	3.6	.70	2.0	4.3	1.0
5	1.1	1.9	2.3	3.5	3.5	2.3	1.7	2.0	.60	1.0	3.5	1.2
6	1.1	1.9	2.4	3.0	2.8	2.4	1.7	.90	.60	.60	3.0	1.0
7	1.3	1.8	2.5	2.8	3.0	2.6	2.5	.60	10	5.0	2.8	.89
8	1.3	1.6	2.5	2.7	3.1	2.7	8.0	.45	2.0	1.0	3.7	.95
9	1.3	1.6	2.3	2.6	2.3	5.4	4.5	.45	10	.60	3.3	.91
10	1.3	1.7	3.3	2.5	2.6	5.8	3.0	.42	85	100	2.7	.93
11	1.2	1.8	6.0	2.5	2.9	5.5	2.3	.55	40	35	2.1	.99
12	1.1	1.7	4.3	2.4	2.0	4.6	2.0	1.7	15	10	2.0	3.0
13	1.1	2.0	3.3	2.3	2.0	3.8	9.0	42	7.0	5.0	2.0	1.5
14	1.4	2.0	3.1	2.3	2.0	3.8	7.0	109	4.0	3.0	2.8	2.3
15	1.1	2.0	2.8	2.3	2.2	4.3	3.5	11	3.0	2.0	2.1	1.7
16	.98	2.0	2.8	2.2	3.2	6.9	3.0	3.7	2.5	1.5	2.4	1.6
17	1.1	2.0	2.8	2.2	4.3	5.0	4.0	2.0	2.0	1.0	1.7	1.6
18	1.2	2.0	2.8	2.1	4.4	7.4	9.0	1.8	1.6	.80	1.5	1.4
19	1.3	2.0	2.7	2.1	3.7	5.0	3.5	3.5	1.4	2.8	1.5	1.1
20	1.3	2.0	2.7	2.1	3.4	4.4	3.0	2.2	1.2	1.3	1.4	1.1
21	1.3	2.2	2.7	2.0	3.2	3.8	2.5	1.8	1.0	.80	1.4	1.1
22	1.3	2.2	2.7	2.0	6.0	3.3	3.0	228	10	.63	1.2	1.2
23	1.4	2.2	2.6	2.0	4.7	2.9	4.5	134	5.0	.63	1.3	1.1
24	1.4	2.1	2.6	1.9	3.5	2.6	3.9	11	100	504	1.1	1.0
25	2.6	2.1	2.6	1.9	3.0	2.4	3.6	10	50	2.0	.98	.98
26	2.5	2.1	2.5	1.8	2.5	2.2	3.5	9.9	25	4.0	2.1	.98
27	2.4	2.1	2.5	1.8	2.2	10	3.7	10	10	2.0	1.3	.91
28	3.0	2.1	2.5	1.7	2.3	4.0	3.7	14	4.0	4.5	1.6	.91
29	2.7	2.1	2.5	1.7	---	2.5	3.3	168	2.0	.68	2.1	.91
30	4.0	2.1	3.3	6.8	---	2.2	3.4	12	1.0	.68	1.4	.91
31	7.4	---	4.0	8.3	---	2.0	---	3.4	---	.51	1.4	---
TOTAL	53.58	241.2	87.6	95.0	97.6	118.4	109.7	815.17	397.80	704.43	110.11	36.49
MEAN	1.73	8.04	2.83	3.06	3.49	3.82	3.66	26.3	13.3	22.7	3.55	1.22
MAX	7.4	116	6.0	10	6.1	10	9.0	228	100	504	46	3.0
MIN	.98	1.6	2.1	1.7	2.0	2.0	1.7	.42	.60	.51	.63	.89
AC-FT	106	478	174	188	194	235	218	1620	789	1400	218	72

CAL YR 1974 TOTAL 1034.41 MEAN 2.83 MAX 116 MIN 0 AC-FT 2050
WTR YR 1975 TOTAL 2867.08 MEAN 7.86 MAX 504 MIN .42 AC-FT 5690

PEAK DISCHARGE (BASE, 200 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
11-2	1345	7.09	609	5-29	1045	6.49	427
5-14	0945	6.25	364	7-24	1000	9.35	1,720
5-22	2215	8.53	1,230	8-2	0900	8.25	364

07325900 FORT COBB RESERVOIR NEAR FORT COBB, OKLA.

LOCATION.--Lat 35°09'30", long 98°27'40", in SE 1/4 sec.21, T.8 N., R.12 W., Caddo County, in control house at right center of dam on Cobb Creek, 4.0 mi (6.4 km) northwest of Fort Cobb, and at mile 7.5 (12.1 km).

DRAINAGE AREA.--304 mi^2 (787 km^2).

PEIOD OF RECORD.--March 1959 to current year.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Bureau of Reclamation). Prior to October 1961, nonrecording gage at same datum.

EXTREMES.--Current year: Maximum contents, 92,320 acre-ft (114 hm^3) Aug. 3, elevation, 1,344.87 ft (409.916 m); minimum, 76,940 acre-ft (94.9 hm^3) May 1, elevation, 1,341.24 ft (408.810 m).
Period of record: Maximum contents, 102,600 acre-ft (127 hm^3) Sept. 26, 1965, elevation, 1,347.10 ft (410.596 m); minimum since conservation pool was first filled, 54,650 acre-ft (67.4 hm^3) Oct. 19, 1972, elevation 1,335.06 ft (406.926 m).

REMARKS.--Reservoir is formed by an earth dam. Storage began Mar. 30, 1959. Conservation pool was first filled in June 1962. Capacity, 143,700 acre-ft (177 hm^3) at elevation 1,354.8 ft (412.94 m) crest of drop inlet, 80,010 acre-ft (98.7 hm^3) at elevation 1,342.0 ft (409.04 m) conservation pool, and 1,664 acre-ft (2.05 hm^3) at elevation 1,300.0 ft (396.24 m) crest of gated outlet. Figures given herein represent total contents. Reservoir is used for flood control, for municipal and industrial water supply, and for irrigation releases. Revised capacity table used since May 1, 1964.

COOPERATION.--Elevations and data on diversions furnished by Fort Cobb Reservoir Master Conservancy District.

MONTHEND ELEVATION AND CONTENTS, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

Date	Elevation (feet)†	Contents (acre-feet)	Change in contents (acre-feet)	Diversions (acre-feet)
Sept. 30	1,341.99	79,970	--	--
Oct. 31	1,342.13	80,540	+570	354
Nov. 30	1,342.04	80,170	-370	489
Dec. 31	1,342.20	80,830	+660	515
CAL YR 1974	--	--	+1,680	8,504
Jan. 31	1,342.53	82,200	+1,370	582
Feb. 28	1,342.37	81,530	-670	553
Mar. 31	1,342.26	81,080	-450	518
Apr. 30	1,341.24	76,940	-4,140	821
May 31	1,344.50	90,670	+13,730	776
June 30	1,342.77	83,200	-7,470	764
July 31	1,344.48	90,580	+7,380	916
Aug. 31	1,342.06	80,250	-10,330	772
Sept. 30	1,341.65	78,580	-1,670	872
WTR YR 1975	--	--	-1,390	7,932

†Elevation at 0800 on following day.

07326000 COBB CREEK NEAR FORT COBB, OKLA.

LOCATION.--Lat 35°08'37", long 98°26'33", in NE 1/4 NE 1/4 sec.27, T.8 N., R.12W., Caddo County, on left bank 10 ft (3.0 m) upstream from county road bridge, 0.3 mi (0.5 km) upstream from Punjo Creek, 1.2 mi (1.9 km) downstream from Fort Cobb Dam, 3.0 mi (4.8 km) north of Fort Cobb, and at mile 5.8 (9.3 km).

DRAINAGE AREA.--313 mi^2 (811 km^2). Area at site used prior to Oct. 1, 1969, 319 mi^2 (826 km^2).

PERIOD OF RECORD.--October 1939 to current year. Monthly discharge only for some periods, published in WSP 1311. Prior to October 1960, published as Pond Creek near Fort Cobb.

GAGE.--Water-stage recorder. Datum of gage is 1,259.49 ft (383.893 m) above mean sea level (Bureau of Reclamation bench mark). Oct. 1, 1939, to Aug. 29, 1940, nonrecording gage and Aug. 30, 1940, to Sept. 30, 1969, water-stage recorder at site 0.8 mi (1.3 km) downstream at datum 6.92 ft (2.109 m) lower.

AVERAGE DISCHARGE.--19 years (1939-58), 50.2 ft^3/s (1.42 m^3/s) 36,340 acre-ft/yr (44.8 hm^3/yr); 17 years (1958-75), 18.5 ft^3/s (0.524 m^3/s), 13,400 acre-ft/yr (16.5 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 1,000 ft^3/s (28.3 m^3/s) Aug. 7 (from outflow at dam); minimum daily, 1.5 ft^3/s (0.04 m^3/s) July 18-23.
Period of record: Maximum discharge, 35,000 ft^3/s (991 m^3/s) May 17, 1949 gage height, 18.72 ft (5.706 m), from floodmark in gage well at former site and datum, from rating curve extended above 4,300 ft^3/s (122 m^3/s) on basis of contracted-opening measurements at gage heights 16.62 (5.066 m), 17.58 (5.358 m), and 18.72 ft (5.706 m), at former site and datum; minimum daily, 0.2 ft^3/s (0.006 m^3/s) Sept. 20, 24-28, 1956.
Flood of June 15, 1973, reached a stage of 19.3 ft (5.88 m), site and datum used in 1939, from information by local resident.

REMARKS.--Records good prior to April and poor thereafter. Flow regulated since March 1959 by Fort Cobb Reservoir (see sta. 07325900).

REVISIONS (WATER YEARS).--WSP 1087: 1938. WSP 1211: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.8	3.0	2.9	2.8	339	4.4	164	2.3	2.9	600	1.8	3.1
2	2.6	3.2	2.9	3.6	339	4.4	164	2.2	57	600	380	2.8
3	2.4	3.3	2.9	4.0	339	4.4	164	2.0	307	600	600	2.3
4	2.3	3.2	2.8	3.6	339	4.4	164	2.0	418	320	600	2.0
5	2.5	3.1	2.8	3.1	339	4.4	164	1.9	418	4.0	675	2.1
6	2.5	3.0	2.8	3.0	339	4.4	164	1.9	418	3.5	800	2.6
7	2.4	3.0	2.8	2.8	339	4.6	178	1.8	418	3.0	880	1.8
8	2.4	3.0	2.6	2.8	339	4.6	219	1.8	418	4.5	800	1.8
9	2.4	3.3	2.6	2.7	339	4.7	219	1.6	418	4.5	600	1.9
10	2.4	3.4	2.7	2.7	339	4.7	219	1.7	418	3.5	600	1.8
11	2.4	36	3.1	2.6	208	4.7	219	1.8	418	5.0	412	2.1
12	2.4	73	2.8	2.6	3.4	4.7	219	1.9	200	2.5	130	3.1
13	2.4	71	2.8	2.6	3.4	4.7	219	4.0	5.0	2.0	8.0	3.2
14	2.6	71	2.6	2.5	3.4	5.1	98	3.6	3.5	1.8	5.3	3.5
15	2.6	322	2.6	2.5	3.3	5.2	3.6	2.3	3.0	1.7	3.9	3.2
16	2.5	780	2.6	2.5	3.4	5.1	3.5	2.1	178	1.7	3.8	3.0
17	2.4	777	2.6	2.5	3.4	5.1	3.4	2.0	421	1.6	3.6	2.9
18	2.4	771	2.6	2.4	3.4	5.1	3.3	2.0	421	1.5	3.6	2.9
19	2.3	769	2.5	2.4	3.4	5.1	3.2	2.2	421	1.5	3.7	2.7
20	2.3	761	2.5	2.4	3.7	5.1	3.1	1.9	300	1.5	3.7	2.7
21	2.4	428	2.5	2.4	4.4	5.1	3.0	96	200	1.5	3.7	2.9
22	2.6	5.1	2.5	2.4	4.4	5.1	2.9	245	8.0	1.5	3.7	2.9
23	2.6	4.0	2.5	2.4	4.4	5.1	2.9	113	3.5	1.5	3.7	2.9
24	2.9	3.6	2.5	2.4	4.4	75	2.9	4.1	70	5.0	3.7	2.8
25	3.2	3.3	2.5	2.4	4.4	164	4.4	3.6	170	2.5	3.5	2.9
26	3.0	3.1	2.5	2.4	4.4	164	3.0	3.1	3.0	4.5	3.7	3.0
27	3.0	3.0	2.5	2.4	4.4	164	2.8	3.0	225	2.5	3.7	3.2
28	3.1	3.0	2.5	2.4	4.4	164	2.6	3.1	600	30	3.6	3.7
29	2.9	2.9	2.5	81	---	164	2.4	5.8	600	2.5	3.5	3.5
30	3.4	2.9	2.7	352	---	164	2.3	4.9	600	2.0	3.4	3.5
31	3.4	---	2.8	344	---	164	---	3.1	---	1.8	3.3	---
TOTAL	81.5	4921.4	82.5	852.3	3664.0	1353.2	2623.3	527.7	8142.9	2219.1	6555.9	82.8
MEAN	2.63	164	2.66	27.5	131	43.0	87.4	17.0	271	71.6	211	2.76
MAX	3.4	780	3.1	352	339	164	219	245	600	600	880	3.7
MIN	2.3	2.9	2.5	2.4	3.3	4.4	2.3	1.6	2.9	1.5	1.8	1.8
AC-FT	162	9760	164	1690	7270	2640	5200	1050	16150	4400	13000	164

CAL YR 1974 TOTAL 9330.4 MEAN 25.6 MAX 780 MIN 1.4 AC-FT 18510
WTR YR 1975 TOTAL 31086.6 MEAN 85.2 MAX 880 MIN 1.5 AC-FT 61660

Note.--No gage height record Aug. 5-14.

07326500 WASHITA RIVER AT ANADARKO, OKLA.

LOCATION.--Lat 35°05'06", long 98°14'35", in NW 1/4 sec.15, T.7 N., R.10 W., Caddo County, at left bank 35 ft (10.7 m) upstream from bridge on U.S. Highway 281 at north edge of Anadarko, 8.1 mi (13.0 km) upstream from Sugar Creek, and about 305.2 (491.1 km).

DRAINAGE AREA.--3,656 mi^2 (9,460 km^2).

PERIOD OF RECORD.--October 1902 to September 1908; June 1924 to June 1925, published as "near Anadarko", October 1935 to February 1938; October 1963 to current year. Monthly discharge only for some periods, published in WSP 1311.

GAGE.--Water-stage recorder. Datum of gage is 1,150.00 ft (350.520 m) above mean sea level. Oct. 26, 1902, to June 30, 1908, nonrecording gage at former bridge 125 ft (38.1 m) downstream at datum estimated to be 2.8 ft (8.53 m) higher. May 25, 1924, to June 30, 1925, nonrecording gage at county road bridge 14 mi (22.5 km) downstream at different datum. Jan. 10, 1936, to Mar. 7, 1938, nonrecording gage on upstream side of bridge on U.S. Highway 281 at datum 1.88 ft (0.573 m) higher.

AVERAGE DISCHARGE.--20 years (1902-8, 1935-37, 1963-75), 396 ft^3/s (11.21 m^3/s), 286,900 acre-ft/yr (354 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 4,520 ft^3/s (128 m^3/s) July 30, gage height, 18.52 ft (5.645 m); minimum daily, 123 ft^3/s (3.48 m^3/s) Oct. 23.
Period of record: Maximum discharge, about 29,000 ft^3/s (821 m^3/s) May 25, 1903, gage height, 26.8 ft (8.169 m), site and datum then in use, affected by backwater; no flow Aug. 1, 1964.
Flood in May 1949, reached an elevation of 1,176.7 ft (358.66 m), from floodmark, at right bank on downstream side of bridge on U.S. Highway 281.

REMARKS.--Some regulation by low-water dams upstream and since March 1959, by Fort Cobb Reservoir (see sta. 07325900), since February 1961, by Foss Reservoir (see sta. 07324300), and by numerous flood-retarding structures.

COOPERATION.--Records furnished by Agricultural Research Service.

REVISIONS (WATER YEARS).--WSP 1311: 1903, 1907-8, drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	293	668	244	203	671	584	544	310	2210	947	2900	268
2	221	897	232	225	886	521	515	306	1430	895	1910	256
3	196	860	229	256	735	482	493	555	1120	838	2210	240
4	175	2400	225	280	782	445	477	729	1100	810	2240	229
5	165	2970	225	324	1010	414	461	677	1060	506	2040	217
6	162	2780	229	285	992	399	450	596	1020	356	1860	210
7	162	1550	232	264	717	385	450	477	962	385	1860	203
8	162	1140	229	248	480	375	488	389	902	365	1830	203
9	159	925	229	244	375	356	521	342	888	328	1550	199
10	146	755	225	232	342	347	932	302	1070	337	1290	199
11	143	658	229	221	315	333	950	280	1560	337	1110	196
12	137	602	229	210	310	347	796	264	2610	333	898	203
13	131	567	232	203	310	361	722	303	2440	324	609	203
14	131	515	240	196	302	356	683	1120	1850	289	499	214
15	131	488	240	185	285	347	495	1560	1230	264	521	232
16	140	770	232	185	280	342	394	1390	921	302	587	256
17	175	1040	225	192	280	342	380	1140	933	319	776	244
18	178	1020	225	192	285	445	356	659	1030	256	634	232
19	152	1000	221	189	293	440	342	515	1010	232	482	225
20	140	996	210	182	324	424	319	445	954	225	435	217
21	134	996	210	182	333	409	297	404	902	240	404	210
22	125	585	210	182	415	385	272	495	803	229	365	206
23	123	319	206	182	538	365	264	2480	1310	210	347	199
24	131	285	203	185	549	356	260	2240	1600	329	333	196
25	134	285	199	192	584	388	256	1180	923	1660	315	196
26	146	276	199	189	614	466	252	921	2180	3490	315	192
27	159	268	196	192	621	466	256	742	2330	3980	333	189
28	182	256	192	196	621	466	256	621	1370	4210	293	189
29	165	252	192	196	---	708	256	621	1240	4450	289	189
30	264	252	196	302	---	821	268	1240	1050	4470	285	189
31	297	---	199	573	---	614	---	2370	---	4050	276	---
TOTAL	5159	26375	6784	7087	14249	13489	13405	25673	40008	35966	29796	6401
MEAN	166	879	219	229	509	435	447	828	1334	1160	961	213
MAX	297	2970	244	573	1010	821	950	2480	2610	4470	2900	268
MIN	123	252	192	182	280	333	252	264	803	210	276	189
AC-FT	10230	52310	13460	14060	28260	26760	26590	50920	79360	71340	59100	12700

CAL YR 1974 TOTAL 108798 MEAN 298 MAX 2970 MIN 10 AC-FT 215800
WTR YR 1975 TOTAL 224392 MEAN 615 MAX 4470 MIN 123 AC-FT 445100

PEAK DISCHARGE (BASE, 3,000 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE
11-5	2400	15.06	3,100
5-23	1730	15.36	3,300
7-30	0400	18.52	4,520

07327000
SUGAR CREEK NEAR GRACEMONT, OK.
DISCONTINUED SEPTEMBER 1974

07327490 LITTLE WASHITA RIVER NEAR NINNEKAH, OKLA.

LOCATION.--Lat 34°56'41", long 97°57'08", in SE 1/4 SE 1/4 sec.32, T.6 N., R.7 W., Grady County, at left bank on downstream side of bridge on U.S. Highway 81, 1.0 mi (1.6 km) upstream from Rock Creek, 1.5 mi (2.4 km) west of Ninnekah, 5.5 mi (8.8 km) south of Chickasha, and at mile 8.4 (13.5 km).

DRAINAGE AREA.--208 mi^2 (539 km^2).

PERIOD OF RECORD.--October 1963 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,065.94 ft (324.899 m) above mean sea level.

AVERAGE DISCHARGE.--12 years, 27.6 ft^3/s (0.782 m^3/s), 20,000 acre-ft/yr (24.7 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 4,420 ft^3/s (125 m^3/s) July 29, gage height, 22.26 ft (6.785 m); maximum gage height, 22.61 ft (6.892 m) May 23; minimum daily discharge, 13 ft^3/s (0.37 m^3/s) Oct. 1-6, 18-22.
Period of record: Maximum discharge, 7,560 ft^3/s (214 m^3/s) May 10, 1964, gage height, 20.65 ft (6.294 m); maximum gage height, 22.61 ft (6.892 m) May 23, 1975, no flow at times in most years.

REMARKS.--Small diversions above station for irrigation.

COOPERATION.--Records furnished by Agricultural Research Service.

REVISIONS (WATER YEARS).--WSP 2120: 1964-65(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	66	24	38	60	25	42	32	92	33	144	24
2	13	53	24	157	57	29	42	86	86	33	158	19
3	13	92	24	105	79	33	39	180	67	29	142	24
4	13	71	24	51	95	31	36	52	56	27	80	25
5	13	38	25	39	66	30	36	41	53	28	60	32
6	13	38	27	32	64	31	39	38	48	28	57	28
7	16	37	28	30	55	35	53	35	99	36	49	28
8	16	36	27	30	56	36	138	30	64	35	43	28
9	14	39	25	29	52	39	41	30	76	36	42	28
10	14	49	28	27	44	52	37	27	102	46	43	28
11	14	43	46	27	41	53	42	28	74	51	38	29
12	14	39	45	24	41	53	38	29	46	37	36	82
13	14	38	38	21	38	52	53	33	39	31	36	63
14	15	36	34	30	42	46	51	399	35	32	39	92
15	18	34	33	28	46	46	33	145	38	31	52	69
16	16	33	32	25	62	52	35	52	43	30	46	60
17	15	34	28	25	59	47	33	38	59	29	39	53
18	13	34	26	28	57	52	31	35	48	28	35	46
19	13	32	28	31	52	46	31	36	42	33	33	46
20	13	29	28	28	44	41	31	79	41	37	30	46
21	13	30	28	29	37	37	30	31	38	28	29	46
22	13	27	28	29	157	38	29	319	304	27	27	43
23	14	28	28	28	71	36	36	1870	171	27	24	38
24	33	28	27	30	41	35	35	296	174	958	24	38
25	39	26	27	33	29	32	32	148	542	614	24	37
26	31	26	27	32	27	37	31	94	160	485	27	38
27	29	25	29	30	27	74	33	76	77	267	27	36
28	136	24	30	31	23	64	44	880	51	111	27	33
29	49	24	30	29	---	66	37	497	43	1220	27	35
30	88	24	31	30	---	53	33	325	37	669	25	35
31	311	---	40	83	---	44	---	128	---	257	27	---
TOTAL	1039	1133	921	1189	1522	1345	1221	6089	2805	5333	1490	1229
MEAN	33.5	37.8	29.7	38.4	54.4	43.4	40.7	196	93.5	172	48.1	41.0
MAX	311	92	46	157	157	74	138	1870	542	1220	158	92
MIN	13	24	24	21	23	25	29	27	35	27	24	19
AC-FT	2060	2250	1830	2360	3020	2670	2420	12080	5560	10580	2960	2440

CAL YR 1974 TOTAL 14180.2 MEAN 38.8 MAX 616 MIN 4.0 AC-FT 28130
WTR YR 1975 TOTAL 25316.0 MEAN 69.4 MAX 1870 MIN 13 AC-FT 50210

PEAK DISCHARGE (BASE, 1,500 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
5-23	0230	22.61	4,130	7-24	0900	17.55	2,250
5-28	1200	16.54	2,400	7-29	2000	22.26	4,420
6-25	0100	15.85	2,080				

07328070 WINTER CREEK NEAR ALEX, OKLA.

LOCATION.--Lat 34°59'35", long 97°45'40", in NE 1/4 sec.18, T.6 N., R.5 W., Grady County, at left bank 1,000 ft (304.8 m) downstream from county road bridge, 0.7 mi (1.1 km) downstream from East Winter Creek, 3.2 mi (5.2 km) upstream from mouth, and 5.5 mi (8.9 km) north of Alex.

DRAINAGE AREA.--33 mi^2 (86 km^2).

PERIOD OF RECORD.--October 1964 to current year.

GAGE.--Water-stage recorder and broad crest V-notch weir. Datum of gage is 1,048.20 ft (319.491 m) above mean sea level.

AVERAGE DISCHARGE.--11 years, 8.72 ft^3/s (0.247 m^3/s), 6,320 acre-ft/yr (7.79 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 4,020 ft^3/s (114 m^3/s) May 22, gage height, 7.75 ft (2.362 m); minimum daily, 2.1 ft^3/s (0.06 m^3/s) Sept. 2).
Period of record: Maximum discharge, 4,280 ft^3/s (121 m^3/s) May 24, 1973 gage height, 7.88 ft (2.402 m); no flow in most years.
Flood of May 10, 1964, reached a stage of 8.62 ft (2.627 m).

REMARKS.--Flow regulated by 16 flood-retarding structures, combined capacity, 1,050 acre-ft (1.29 hm^3). Minor diversions for irrigation above station.

COOPERATION.--Records furnished by Agricultural Research Service.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.2	54	6.8	7.6	14	10	7.6	23	38	12	9.0	2.4
2	3.1	36	6.8	20	14	10	7.3	38	35	12	18	2.1
3	2.9	43	6.8	12	17	10	7.1	37	29	12	15	2.8
4	2.8	28	6.8	11	19	10	7.1	23	26	12	12	2.8
5	2.6	20	6.8	10	16	9.7	7.1	17	24	11	11	2.9
6	2.6	17	7.3	10	15	9.7	7.1	14	23	11	9.4	3.1
7	3.6	14	7.3	13	14	9.7	9.3	12	29	10	7.6	2.5
8	3.6	13	7.1	13	13	9.7	11	10	36	10	6.5	2.4
9	3.4	13	6.3	13	12	9.7	9.0	8.7	36	10	6.1	2.4
10	3.2	14	8.2	14	12	9.7	8.7	7.9	133	14	5.8	2.4
11	3.1	12	13	16	12	10	7.3	7.9	50	11	5.4	3.2
12	3.1	11	11	16	11	10	7.1	7.9	41	9.7	4.9	5.1
13	3.2	10	10	16	11	9.4	8.4	16	32	6.7	3.6	4.5
14	3.9	9.0	9.4	16	10	8.7	7.9	42	25	7.6	4.5	5.6
15	3.9	8.4	8.7	14	7.3	7.6	7.9	24	20	6.8	5.1	4.9
16	3.8	7.9	8.2	12	9.7	8.2	7.3	18	18	5.8	4.9	4.9
17	3.6	7.6	7.9	11	9.0	7.6	7.1	14	23	5.6	5.8	5.1
18	3.4	7.6	8.2	11	9.0	10	6.8	11	18	5.6	5.6	4.7
19	3.2	7.6	10	10	10	9.4	6.5	11	17	6.5	4.7	4.1
20	3.2	7.6	14	8.7	13	9.4	6.5	20	15	6.8	4.5	3.9
21	3.1	7.6	15	6.5	13	11	6.3	13	14	6.3	4.1	4.1
22	3.1	7.6	16	6.3	16	15	6.3	530	22	6.1	3.8	4.3
23	2.9	7.6	15	6.5	12	14	6.8	488	82	5.8	2.9	3.8
24	5.1	7.6	15	7.3	11	7.6	6.8	235	39	13	2.8	3.6
25	9.0	7.1	15	7.3	11	7.6	6.8	152	28	14	2.6	3.6
26	8.2	7.1	12	7.3	11	11	6.5	104	22	18	3.4	3.8
27	6.5	7.1	7.1	7.3	11	12	7.1	84	19	14	4.9	3.6
28	19	7.1	7.1	7.3	11	10	7.6	92	17	14	3.8	3.6
29	10	7.1	7.1	8.2	---	9.0	6.5	79	15	12	2.9	3.8
30	130	7.1	6.8	12	---	8.2	35	54	14	12	2.9	3.6
31	95	---	8.4	17	---	7.9	---	42	---	10	2.5	---
TOTAL	357.3	413.7	295.1	347.3	344.0	301.8	247.8	2235.4	940	313.3	186.0	109.6
MEAN	11.5	13.8	9.52	11.2	12.3	9.74	8.26	72.1	31.3	10.1	6.00	3.65
MAX	130	54	16	20	19	15	33	530	133	18	18	5.6
MIN	2.6	7.1	6.3	6.3	7.3	7.6	6.3	7.9	14	5.6	2.5	2.1
AC-FT	709	821	585	689	682	599	492	4430	1860	621	369	217

CAL YR 1974 TOTAL 3449.10 MEAN 9.45 MAX 192 MIN .60 AC-FT 6840
WTR YR 1975 TOTAL 6091.30 MEAN 16.7 MAX 530 MIN 2.1 AC-FT 12080

PEAK DISCHARGE (BASE, 500 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE
5-22	2130	7.75	4,020

07328100 WASHITA RIVER AT ALEX, OKLA.

LOCATION.--Lat 34°55'35", long 97°46'30", in NW 1/4 sec.7, T.5 N., R.5 W., Grady County, near left bank on downstream side of county road bridge, 1.0 mile (1.6 km) north of Alex, 3.8 miles (6.1 km) downstream from Winter Creek, and at mile 226.5 (362.4 km).

DRAINAGE AREA.--4,787 mi^2 (12,398 km^2).

PERIOD OF RECORD.--October 1964 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,000.00 ft (304.800 m) above mean sea level.

AVERAGE DISCHARGE.--11 years, 379 ft^3/s (10.73 m^3/s), 274,600 acre-ft/yr (339 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 8,090 ft^3/s (229 m^3/s) May 23, gage height, 17.13 ft (5.221 m); minimum daily, 178 ft^3/s (5.04 m^3/s) Oct. 23.
Period of record: Maximum discharge, 9,350 ft^3/s (265 m^3/s) May 7, 1969; maximum gage height, 18.34 ft (5.590 m); June 2, 1973; no flow Aug. 13-18, 1970, Aug. 30 to Sept. 1, 1971.

REMARKS.--Some regulation by Fort Cobb Reservoir (sta. 07325900), by Foss Reservoir (sta. 07324300), and by numerous flood-retarding structures.

COOPERATION.--Records furnished by Agricultural Research Service.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	461	899	336	317	771	734	775	381	2440	1340	4720	392
2	413	740	334	494	786	724	687	575	2420	1210	4710	384
3	344	2230	329	869	1030	674	648	1060	1860	1140	4120	376
4	291	1630	325	604	1120	642	620	880	1460	1100	3050	364
5	256	2340	322	485	1110	620	610	878	1390	1050	2720	351
6	236	2780	325	462	1100	595	595	864	1290	870	2350	376
7	230	2920	322	465	1120	561	641	755	1350	652	2090	336
8	226	1980	320	421	978	528	1200	645	1310	1670	2010	319
9	222	1360	318	389	745	516	986	552	1170	776	1950	307
10	216	1130	326	364	613	531	795	476	2140	670	1730	303
11	205	955	400	354	564	552	911	451	1540	715	1530	307
12	196	825	398	329	522	615	1050	434	1640	593	1390	393
13	188	751	385	312	482	579	930	571	2390	537	1200	400
14	185	700	365	312	468	540	922	1280	2570	513	1020	445
15	187	648	358	310	445	522	875	1900	2050	485	908	410
16	187	610	358	298	456	513	782	1790	1460	448	864	397
17	185	663	348	287	470	513	641	1600	1270	413	817	397
18	181	1020	344	284	456	541	592	1390	1180	448	963	402
19	207	1050	334	284	456	713	555	968	1160	468	929	381
20	211	1020	332	284	451	720	531	850	1080	429	786	354
21	194	992	329	275	454	626	505	705	1030	394	694	349
22	183	996	322	271	704	585	470	1280	1370	371	639	341
23	178	830	315	271	919	549	456	7260	1600	371	579	331
24	192	530	311	268	796	511	437	4540	1800	2110	531	319
25	265	440	306	268	758	476	416	3430	2730	4320	502	307
26	256	403	304	268	737	456	400	2060	1860	4060	456	305
27	320	375	302	268	768	607	397	1540	2140	4320	445	305
28	433	363	300	262	765	782	426	2490	2530	4470	456	300
29	475	348	297	264	---	686	400	2570	1750	5170	451	291
30	633	341	295	271	---	683	459	2860	1490	6040	416	291
31	1780	---	306	388	---	683	---	2340	---	4880	400	---
TOTAL	9736	31869	10266	10998	20044	18777	19712	49355	51470	52031	45426	10533
MEAN	314	1062	331	355	716	606	657	1592	1716	1678	1465	351
MAX	1780	2920	400	869	1120	883	1200	7260	2730	6040	4720	445
MIN	178	341	295	262	445	456	397	381	1030	371	400	291
AC-FT	19310	63210	20360	21810	39760	37240	39100	97900	102100	103200	90100	20890

CAL YR 1974 TOTAL 164899 MEAN 452 MAX 3620 MIN 12 AC-FT 327100
WTR YR 1975 TOTAL 330217 MEAN 905 MAX 7260 MIN 178 AC-FT 655000

PEAK DISCHARGE (BASE, 3,800 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE
5-23	1400	17.13	8,090
7-30	0530	15.92	6,700

07328500 WASHITA RIVER NEAR PAULS VALLEY, OKLA.

LOCATION.--Lat 34°45'17", long 97°15'04", in SE 1/4 sec.1, T.3 N., R.1 W., Garvin County, on right bank 200 ft (61.0 m) upstream from bridge on U.S. Highway 77, 2 mi (3.2 km) northwest of Pauls Valley, 6 mi (9.7 km) downstream from Owl Creek, 7 mi (11.3 km) upstream from Washington Creek, and at mile 146.5 (235.7 km).

DRAINAGE AREA.--5,330 mi^2 (13,805 km^2).

PERIOD OF RECORD.--May to December 1899 (gage heights only), October 1937 to current year. Monthly discharge only for some periods, published in WSP 1311. Published as "at Pauls Valley, Indian Territroy" in 1899.

GAGE.--Water-stage recorder. Datum of gage is 854.61 ft (260.485 m) above mean sea level. During 1899, nonrecording gage at site 9 mi (14.5 km) downstream at different datum. Mar. 29, 1938, to Jan. 25, 1939, nonrecording gage and Jan. 26, 1939, to Oct. 6, 1948, water-stage recorder at site 0.7 mi (1.1 km) upstream at datum 1.53 ft (0.466 m) higher.

AVERAGE DISCHARGE.--38 years, 708 ft^3/s (20.05 m^3/s), 512,900 acre-ft/yr (632 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 14,100 ft^3/s (399 m^3/s) May 24, gage height, 17.57 ft (5.355 m); minimum daily, 213 ft^3/s (6.03 m^3/s) Oct. 23.
Period of record: Maximum discharge, 35,800 ft^3/s (1,010 m^3/s) May 18, 1957, gage height, 27.34 ft (8.333 m); maximum gage height, 29.88 ft (9.107 m) May 11, 1950; no flow at times in 1956, 1964, 1966-67, 1970-72.
Stream is reported to have receded to no flow in 1882 and in 1897 (from information by local resident).

REMARKS.--Records fair. Some diversion for irrigation above satation. Some regulation since March 1959, by Fort Cobb Reservoir (see sta. 07325900), since February 1961, by Foss Reservoir (see sta. 07324300), and by numerous flood-retarding structures.

REVISIONS (WATER YEARS).--WSP 897: 1938. WSP 1941: Drainage.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	503	2760	443	373	499	816	901	504	3690	1680	6560	600
2	450	1590	434	434	816	778	780	534	3580	1450	6120	600
3	404	2020	430	694	1110	760	677	7000	3270	1330	6080	590
4	364	3260	430	840	1480	685	621	2750	2430	1230	4950	590
5	321	2280	417	712	1400	681	583	1550	1960	1150	3810	590
6	279	2740	414	586	1270	647	571	1220	1780	1100	3280	600
7	269	3030	417	540	1200	641	573	1040	1630	982	2750	640
8	259	2910	407	529	1180	635	1380	839	2030	934	2400	700
9	254	2130	385	503	1060	623	1290	660	2860	1590	2250	640
10	249	1660	401	468	887	619	990	531	4280	1010	2120	550
11	249	1440	434	457	743	631	800	479	4130	1000	1890	520
12	244	1080	468	427	721	736	847	511	2750	990	1640	495
13	239	936	468	391	660	712	954	479	2510	878	1470	490
14	259	839	454	376	619	685	883	3040	3030	822	1250	490
15	242	775	434	373	606	629	866	2260	3100	786	1080	620
16	230	716	401	373	598	634	790	2220	2470	745	975	680
17	225	681	385	370	606	643	732	1970	2010	703	896	630
18	225	656	370	370	623	963	637	1740	1640	668	833	580
19	215	1180	370	370	582	822	605	1400	1410	648	920	521
20	215	1200	373	355	575	793	566	1050	1300	703	911	509
21	235	1190	370	340	579	788	546	901	1190	699	784	469
22	232	1140	370	338	2120	687	533	760	1170	657	702	442
23	213	1110	370	338	2080	658	522	10800	1670	618	663	430
24	220	936	370	329	1580	621	525	13800	2380	925	645	421
25	252	690	367	326	1400	577	520	11300	2350	5550	655	408
26	318	598	364	326	1010	558	507	6550	3090	8490	655	404
27	343	540	367	323	868	883	493	3840	2120	6720	655	395
28	1540	485	364	329	839	1140	519	3810	2570	9180	660	391
29	1050	471	361	332	---	1240	527	7500	2700	6750	700	388
30	1060	460	367	329	---	888	517	6120	1960	8450	630	381
31	5630	---	370	385	---	791	---	4860	---	8090	610	---
TOTAL	16788	41503	12375	13236	27711	22964	21255	102018	73060	76528	59544	15764
MEAN	542	1383	399	427	990	741	709	3291	2435	2469	1921	525
MAX	5630	3260	468	840	2120	1240	1380	13800	4280	9180	6560	700
MIN	213	460	361	323	499	558	493	479	1170	618	610	381
AC-FT	33300	82320	24550	26250	54960	45550	42160	202400	144900	151800	118100	31270

CAL YR 1974 TOTAL 218756 MEAN 599 MAX 5630 MIN 16 AC-FT 433900
WTR YR 1975 TOTAL 482746 MEAN 1323 MAX 13800 MIN 213 AC-FT 957500

PEAK DISCHARGE (BASE, 5,000 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-31	0800	12.74	6,750	6-10	0800	11.58	5,150
5-3	0830	15.14	10,000	7-28	1015	16.46	12,200
5-24	0645	17.57	14,100				

07329500 RUSH CREEK NEAR MAYSVILLE, OKLA.

LOCATION.--Lat 34°44'36", long 97°24'18", in SW 1/4 SW 1/4 sec.10, T.3 N., R.2 W., Garvin County, near right bank on downstream side of pier of bridge on State Highway 74, 2.8 miles (4.5 km) downstream from Panther Creek, 5.3 miles (8.5 km) south of Maysville, and at mile 14.2 (22.8 km).

DRAINAGE AREA.--206 mi^2 (534 km^2).

PERIOD OF RECORD.--December 1953 to current year.

GAGE.--Water-stage recorder. Datum of gage is 903.04 ft (275.247 m) above mean sea level (State Highway Department bench mark).

AVERAGE DISCHARGE.--21 years (1954-75), 53.1 ft^3/s (1.504 m^3/s), 38,470 acre-ft/yr (47.4 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 6,600 ft^3/s (187 m^3/s) May 23, gage height, 14.67 ft (4.471 m); minimum daily, 9.4 ft^3/s (0.27 m^3/s) Oct. 22.
Period of record: Maximum discharge, 38,500 ft^3/s (1,090 m^3/s) May 18, 1957, gage height, 23.62 ft (7.199 m), from rating curve extended above 5,300 ft^3/s (150 m^3/s) on basis of contracted-opening measurement of peak flow; no flow at times in most years.

REMARKS.--Records fair.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	45	454	26	34	67	50	38	50	222	50	231	15
2	37	179	26	99	77	49	35	65	180	46	186	14
3	34	218	26	87	112	49	31	605	161	53	119	14
4	31	346	26	60	156	48	30	131	143	59	94	14
5	30	142	26	50	91	48	30	80	130	53	73	14
6	29	104	25	43	70	47	30	68	121	51	58	15
7	31	87	25	41	61	46	82	64	138	47	45	13
8	30	79	25	40	58	46	338	59	280	54	38	13
9	28	76	25	36	55	45	125	56	284	52	36	14
10	25	95	25	46	52	45	99	54	919	96	32	14
11	23	86	44	37	49	45	85	76	498	105	28	13
12	21	72	43	37	45	85	70	62	270	76	26	30
13	20	67	38	35	45	53	80	141	188	55	24	25
14	24	60	35	33	45	42	70	313	157	49	24	22
15	29	56	33	33	45	42	58	133	137	46	24	20
16	25	56	31	32	52	46	50	101	125	42	26	20
17	20	51	29	31	53	44	42	79	110	38	27	19
18	16	48	27	31	50	110	38	67	100	35	26	19
19	13	46	27	31	47	60	35	63	90	33	25	18
20	11	42	27	30	47	44	33	61	85	34	23	18
21	10	39	26	30	58	39	32	61	80	34	22	18
22	9.4	36	25	29	603	36	32	137	75	34	21	18
23	10	34	26	29	120	35	31	3940	210	33	19	18
24	12	31	24	29	80	33	31	952	312	48	18	18
25	31	29	24	30	65	31	30	583	177	1100	17	18
26	45	28	25	30	60	32	30	336	130	1090	27	18
27	32	28	25	30	55	107	30	228	100	516	23	17
28	629	27	25	30	50	136	90	663	80	288	27	16
29	355	27	26	29	---	86	75	859	60	595	19	16
30	548	27	26	30	---	60	60	660	55	388	16	16
31	1300	---	33	62	---	45	---	322	---	249	16	---
TOTAL	5503.4	2670	874	1224	2568	1684	1840	11069	5617	5449	1390	517
MEAN	113	89.0	28.2	39.5	91.7	54.3	61.3	357	187	176	44.8	17.2
MAX	1300	454	44	99	603	136	338	3940	919	1100	231	30
MIN	9.4	27	24	29	45	31	30	50	55	33	16	13
AC-FT	6950	5300	1730	2430	5090	3340	3650	21960	11140	10810	2760	1030

CAL YR 1974 TOTAL 16565.1 MEAN 45.4 MAX 1300 MIN 2.5 AC-FT 32860
WTR YR 1975 TOTAL 38405.4 MEAN 105 MAX 3940 MIN 9.4 AC-FT 76180

PEAK DISCHARGE (BASE, 3,000 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE
10-30	2330	10.10	3,060
5-23	0700	14.67	6,600
7-26	1000	9.92	3,100

07329700 WILDHORSE CREEK NEAR HOOVER, OKLA.

LOCATION.--Lat 34°32'29", long 97°14'49", on west line of SW 1/4 sec.19, T.1 N., R.1 E., Garvin County, on downstream left bank at bridge on State Highway 19A, 1.5 mi (2.4 km) north of Hoover, 1.8 mi (2.9 km) downstream from Sandy Creek, and at mile 7.9 (12.7 km).

DRAINAGE AREA.--604 mi^2 (1,564 km^2).

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1944, 1951-69. October 1969 to current year.

GAGE.--Water-stage recorder. Datum of gage is 803.3 ft (244.85 m) above mean sea level.

AVERAGE DISCHARGE.--6 years, 226 ft^3/s (6.400 m^3/s), 163,700 acre-ft/yr (202 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 12,600 ft^3/s (357 m^3/s) June 10, gage height, 22.99 ft (7.007 m); minimum daily, 14 ft^3/s (0.40 m^3/s) Sept. 9, 11.
Period of record: Maximum discharge, 13,100 ft^3/s (371 m^3/s) Nov. 24, 1973, maximum gage height, 24.10 ft (7.346 m); no flow at times.

REMARKS.--Records good. Flow regulated by Duncan, Clear Creek, Humphries and Fuqua Lakes, combined surface-area, 3,340 acres (13.5 km^2), and capacity, 44,800 acre-ft (55.2 hm^3), and numerous flood-retarding structures.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	256	3310	99	106	319	340	426	221	1500	259	993	36
2	207	1780	94	378	416	312	371	145	1090	204	827	28
3	173	1320	76	627	928	293	356	5770	927	183	722	25
4	147	2450	69	383	1700	284	302	1990	786	276	636	21
5	125	1240	105	306	937	280	288	1030	699	181	551	19
6	109	882	152	256	632	267	263	701	625	144	482	19
7	98	691	134	207	492	224	283	506	635	154	412	18
8	101	566	120	176	411	198	2870	382	2050	599	362	15
9	90	486	115	171	353	178	1020	312	3680	311	318	14
10	80	717	118	261	324	188	610	582	8090	479	284	17
11	71	636	208	250	286	189	463	355	3550	510	230	14
12	66	468	192	155	237	2490	376	676	1930	310	183	162
13	63	404	142	145	199	1000	345	374	1340	232	154	166
14	140	354	124	136	181	540	366	1550	1090	177	129	445
15	105	325	111	123	162	428	313	1130	1380	137	110	410
16	90	284	103	115	213	433	278	628	838	110	119	371
17	72	248	95	108	252	383	243	477	762	95	114	283
18	64	221	99	111	184	2640	218	373	679	88	98	220
19	58	203	92	105	162	1160	181	299	611	80	76	173
20	56	180	96	132	142	692	160	240	549	75	60	134
21	53	161	83	109	130	501	130	184	498	72	47	119
22	48	142	83	91	2750	418	121	138	711	66	42	111
23	45	135	84	86	1820	373	121	7320	1410	60	35	106
24	44	120	79	90	929	329	120	5060	2820	84	30	95
25	171	140	85	98	661	301	118	2440	1140	1760	28	82
26	338	111	90	94	481	277	107	1630	620	3670	186	67
27	352	99	79	88	408	2730	95	1300	501	2770	119	54
28	2670	93	78	82	368	1600	1100	1380	395	1450	141	50
29	1720	90	78	85	---	1110	538	2150	344	1100	106	47
30	1490	113	78	80	---	653	394	3080	302	2440	63	45
31	8170	---	97	273	---	506	---	2290	---	1760	47	---
TOTAL	17272	17969	3258	5447	16077	21317	12376	44713	41552	19836	7704	3366
MEAN	557	599	105	176	574	688	413	1442	1385	640	249	112
MAX	8170	3310	208	627	2750	2730	2870	7320	8090	3670	993	445
MIN	44	90	69	80	130	178	95	138	302	60	28	14
AC-FT	34260	35640	6460	10800	31890	42280	24550	88690	82420	39340	15280	6680

CAL YR 1974 TOTAL 93328.5 MEAN 256 MAX 8620 MIN 3.9 AC-FT 185100
WTR YR 1975 TOTAL 210887.0 MEAN 578 MAX 8170 MIN 14 AC-FT 418300

PEAK DISCHARGE (BASE, 4,000 FT^3/S REVISED)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-28	1445	14.97	4,680	3-27	1430	17.30	6,440	6-8	2200	16.32	5,670
10-31	0330	21.40	10,200	4-8	0600	14.86	4,600	6-10	0730	22.99	12,600
2-22	1515	16.52	5,830	5-3	0715	20.82	9,540	6-23	2345	15.58	5,120
3-12	1000	14.38	4,270	5-23	0930	21.81	10,800	7-26	1515	16.88	6,100

07331000 WASHITA RIVER NEAR DURWOOD, OKLA.

LOCATION.--Lat 34°14'03", long 96°58'32", in NW 1/4 SW 1/4 sec.3, T.4 S., R.3 E., Carter County, near left bank on downstream side of pier of bridge on U.S. Highway 177, 1.3 miles (2.1 km) downstream from Caddo Creek, 4 miles (6.4 km) north of Durwood, and at mile 63.4 (102.0 km).

DRAINAGE AREA.--7,202 mi² (18,653 km²).

PERIOD OF RECORD.--August 1928 to current year. Monthly discharge only for some periods, published in WSP 1311.

GAGE.--Water-stage recorder. Datum of gage is 650.57 ft (198.294 m) above mean sea level (levels by Corps of Engineers). Prior to Feb. 16, 1939, nonrecording gage at same site and datum. Dec. 15, 1950, to Feb. 19, 1952, nonrecording gage at site 500 ft (152.4 m) upstream at same datum.

AVERAGE DISCHARGE.--47 years, 1,414 ft³/s (40.04 m³/s), 1,024,000 acre-ft/yr (1.26 km³/yr).

EXTREMES.--Current year: Maximum discharge, 39,000 ft³/s (1,100 m³/s) Nov. 1, gage height, 28.23 ft (8.605 m); minimum daily, 404 ft³/s (11.4 m³/s) Oct. 20-24.
Period of record: Maximum discharge, 98,000 ft³/s (2,780 m³/s) May 19, 1957; gage height, 42.30 ft (12.893 m), from floodmark; maximum gage height, 44.37 ft (13.524 m) Oct. 31, 1941; no flow Aug. 28, Sept. 14 to Oct. 1, Oct. 7-12, 1956.

REMARKS.--Records fair. Some diversions above station for irrigation. Some regulation since March 1959 by Fort Cobb Reservoir (see sta. 07325900), since February 1961 by Foss Reservoir (see sta. 07324300), and by numerous flood-retarding structures. See pg. 494 for water-quality record.

COOPERATION.--Results of 12 discharge measurements furnished by Corps of Engineers.

REVISIONS (WATER YEARS).--WSP 1211: Drainage area. WSP 1281: 1935 (m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2280	30700	990	1160	1550	2480	3090	1870	6600	2560	7670	880
2	1590	14100	960	1320	1810	2300	2910	1450	5090	2310	6290	756
3	1360	9600	933	3050	3450	2070	2050	10100	4610	2080	6020	728
4	1150	15700	906	2560	4670	1720	1750	12100	3810	2020	5540	709
5	932	11300	880	2150	6080	1560	1570	6130	3060	1950	4610	642
6	819	8830	880	1810	4070	1400	1490	5070	2620	1740	3920	625
7	723	8010	880	1640	3350	1330	1480	4200	2430	1640	3550	625
8	678	6390	880	1490	2840	1270	6670	3440	3640	1810	3150	604
9	634	4780	830	1400	2610	1150	6850	2590	10300	1730	2920	587
10	592	5930	855	1410	2290	1100	4460	2330	14300	2360	2800	567
11	551	5810	1460	1610	1990	1110	3160	2380	16200	1930	2600	579
12	512	3890	1320	1420	1800	3490	2500	1910	9240	1660	2340	629
13	475	3430	1600	1100	1660	5550	2370	1960	6530	1560	2140	732
14	457	3000	1710	996	1580	2970	2570	3790	5550	1220	2060	988
15	794	2100	1160	955	1440	2310	2360	5140	6140	1200	1860	1870
16	664	1600	1070	911	1390	2260	2140	3930	5850	1150	1860	1450
17	547	1290	1020	906	1510	2260	1970	3140	4360	1090	1700	1090
18	437	1320	880	886	1530	7840	1810	2880	3680	1010	1640	901
19	420	1360	830	886	1420	10100	1570	2560	3050	955	1540	814
20	404	1750	830	845	1340	5570	1430	2260	2620	923	1620	747
21	404	2020	830	830	1210	4050	1300	1910	2420	930	1650	700
22	404	1940	804	819	5560	2900	1240	1730	2280	928	1430	655
23	404	1860	804	790	11800	2310	1210	14200	2650	901	1320	608
24	404	1860	780	794	6140	2020	1200	24500	7440	928	1220	647
25	437	1640	770	794	4880	1690	1220	17100	6500	1590	1160	641
26	830	1290	761	790	3920	1500	1320	12400	4570	9340	1720	613
27	1530	1070	742	790	3370	2470	1170	10200	4250	12500	2080	593
28	3160	1020	742	928	3030	9320	2330	8250	3110	9550	1340	575
29	9170	990	742	933	---	6780	3040	10000	3610	9810	1170	557
30	5340	990	742	928	---	4230	2500	11600	3240	9270	1050	550
31	30100	---	845	999	---	3210	---	8860	---	9140	966	---
TOTAL	66202	155570	29436	37900	88290	100320	70730	199960	159750	97785	80936	22682
MEAN	2200	5186	950	1223	3153	3236	2358	6450	5325	3154	2611	756
MAX	30100	30700	1710	3050	11800	10100	6850	24500	16200	12500	7670	1870
MIN	404	990	742	790	1210	1100	1170	1450	2280	901	966	550
AC-FT	135300	308600	58390	75170	175100	199000	140300	396600	316900	194000	160500	44990

CAL YR 1974 TOTAL 658129 MEAN 1803 MAX 30700 MIN 68 AC-FT 1305000
WTR YR 1975 TOTAL 1111561 MEAN 3045 MAX 30700 MIN 404 AC-FT 2205000

PEAK DISCHARGE (BASE, 10,000 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-29	0330	16.41	11,900	3-19	0015	17.18	13,400	5-24	0715	25.14	25,700
11-1	0100	28.23	39,000	3-28	0815	15.78	10,900	6-11	0045	20.41	19,000
11-4	1500	19.51	17,900	4-8	1945	15.65	10,600	7-27	0700	17.05	13,500
2-23	0345	18.08	15,100	5-4	0030	20.62	20,300				

07331500 LAKE TEXOMA NEAR DENISON, TEX.

LOCATION.--Lat 33°49'05", long 96°34'20", in NE 1/4 sec.33, T.8 S., R.7 E., Bryan County, Okla., in control tower of Denison Dam on Red River, 1.2 miles (1.9 km) upstream from Shawnee Creek, 1.8 miles (2.9 km).
DRAINAGE AREA.--39,719 mi^2 (102,872 km^2), of which 5,936 mi^2 (15,374 km^2) is probably noncontributing.
PERIOD OF RECORD.--July 1942 to current year. Month-end contents only for some periods, published in WSP 1311.
GAGE.--Water-stage recorder. Datum of gage is at mean sea level. Prior to Mar. 30, 1944, nonrecording gage at same site and datum. Prior to Oct. 1, 1948, auxiliary nonrecording gage in Cumberland pool at same datum.
EXTREMES.--Current year: Maximum contents, 3,327,000 acre-ft (4.10 km^3) Nov. 4, elevation, 623.15 ft (189.936 m); minimum, 2,662,000 acre-ft (3.28 km^2) Sept. 29, 30, elevation, 616.18 ft (187.812 m).
Period of record: Maximum contents, 5,991,300 acre-ft (7.39 km^2) June 5, 1957, elevation, 643.18 ft (196.041 m). Minimum contents since power pool was first filled, 1,565,100 acre-ft (1.93 km^3) Sept. 16, 1964; minimum elevation, 599.96 ft (182.868 m) Mar. 1, 2, 1957.
REMARKS.--Lake is formed by a rolled-fill earth dam. Flow was diverted through conduits July 27, 1942; regulated storage began Oct. 31, 1943; power-pool was first filled Mar. 15, 1945. Capacity, based on 1962 survey, 5,392,900 acre-ft (6.65 km^2) at elevation 640.0 ft (195.07 m), crest of spillway, 2,733,300 acre-ft (3.37 km^3) at elevation 617.0 ft (188.06 m), maximum power pool, 1,049,200 acre-ft (1.29 km^2) at elevation 590.0 ft (179.83 m), minimum power pool, in Denison pool. Dead storage, 11,000 acre-ft (13.6 hm^3) at elevation 610.0 ft (185.93 m) in Cumberland pool. When contents are below 2,167,900 acre-ft (2.67 km^2), the lake is divided into two pools by protective levees around the Cumberland oilfield on the Washita River arm with bottom of outlet channel for the upper pool (known as Cumberland pool) at elevation 610 ft (185.9 m). At higher elevations the two pools are considered as being at a common level, contents being computed from gage in Denison pool. Figures given herein represent total contents of both pools. Lake is used principally for flood control and power development. Revised capacity table, based onsurvey in 1962, used since Oct. 1, 1963.
COOPERATION.--Records furnished by Corps of Engineers.
REVISIONS.--WSP 1211: Drainage area.

Capacity table (elevation, in feet, and contents, in acre-feet)

616	2,646,000	622	3,209,000
618	2,822,000	623	3,311,000
620	3,010,000	624	3,416,000

CONTENTS, IN ACRE-FEET, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2839000	3171000	2813000	2758000	2804000	2859000	2859000	2705000	3099000	2804000	2930000	2738000
2	2817000	3263000	2794000	2762000	2815000	2846000	2846000	2718000	3104000	2795000	2903000	2731000
3	2809000	3320000	2780000	2763000	2825000	2839000	2822000	2740000	3067000	2789000	2870000	2724000
4	2795000	3318000	2768000	2760000	2830000	2826000	2806000	2755000	3007000	2786000	2845000	2718000
5	2793000	3297000	2770000	2762000	2846000	2814000	2794000	2765000	2957000	2782000	2840000	2716000
6	2794000	3261000	2774000	2761000	2859000	2804000	2783000	2770000	2921000	2778000	2837000	2715000
7	2786000	3221000	2764000	2767000	2867000	2792000	2779000	2774000	2906000	2771000	2833000	2716000
8	2778000	3177000	2757000	2769000	2874000	2778000	2807000	2775000	2919000	2775000	2824000	2713000
9	2769000	3155000	2747000	2769000	2866000	2769000	2813000	2773000	2919000	2780000	2815000	2710000
10	2756000	3169000	2743000	2768000	2858000	2766000	2824000	2772000	2928000	2789000	2803000	2704000
11	2750000	3181000	2741000	2765000	2852000	2758000	2825000	2770000	2948000	2795000	2792000	2702000
12	2745000	3174000	2742000	2761000	2840000	2761000	2822000	2766000	2966000	2801000	2778000	2696000
13	2742000	3147000	2739000	2747000	2828000	2768000	2817000	2765000	2969000	2807000	2762000	2696000
14	2747000	3104000	2745000	2744000	2817000	2774000	2810000	2766000	2950000	2807000	2751000	2699000
15	2742000	3068000	2747000	2744000	2804000	2782000	2799000	2761000	2918000	2803000	2742000	2710000
16	2740000	3051000	2746000	2742000	2807000	2793000	2787000	2754000	2888000	2798000	2757000	2709000
17	2741000	3029000	2738000	2740000	2804000	2791000	2775000	2754000	2874000	2793000	2759000	2704000
18	2741000	3006000	2736000	2745000	2801000	2810000	2769000	2753000	2861000	2786000	2755000	2707000
19	2743000	3000000	2738000	2749000	2802000	2818000	2753000	2755000	2856000	2789000	2759000	2706000
20	2744000	2983000	2734000	2744000	2801000	2828000	2737000	2758000	2846000	2793000	2760000	2702000
21	2743000	2971000	2738000	2745000	2802000	2837000	2729000	2765000	2836000	2786000	2762000	2699000
22	2742000	2953000	2739000	2743000	2818000	2836000	2723000	2768000	2827000	2779000	2760000	2694000
23	2740000	2948000	2746000	2740000	2838000	2831000	2720000	2792000	2814000	2773000	2754000	2686000
24	2740000	2931000	2749000	2742000	2849000	2822000	2716000	2835000	2819000	2780000	2748000	2677000
25	2736000	2914000	2746000	2745000	2859000	2809000	2707000	2896000	2850000	2784000	2742000	2670000
26	2741000	2899000	2744000	2746000	2868000	2794000	2691000	2985000	2867000	2785000	2742000	2662000
27	2745000	2882000	2747000	2751000	2869000	2822000	2678000	3051000	2870000	2807000	2748000	2663000
28	2757000	2864000	2749000	2751000	2866000	2859000	2681000	3076000	2865000	2851000	2746000	2663000
29	2766000	2850000	2751000	2749000	---	2873000	2692000	3070000	2836000	2883000	2741000	2662000
30	2844000	2833000	2754000	2749000	---	2878000	2700000	3057000	2811000	2914000	2740000	2663000
31	3079000	---	2758000	2786000	---	2873000	---	3071000	---	2943000	2738000	---
MAX	3079000	3320000	2813000	2786000	2874000	2878000	2859000	3076000	3104000	2943000	2930000	2738000
MIN	2736000	2833000	2734000	2740000	2801000	2758000	2678000	2705000	2811000	2771000	2738000	2662000
(†)	620.70	618.12	617.28	617.59	618.48	618.56	616.62	620.62	617.88	619.30	617.05	616.20
(‡)	+216,000	-246,000	-75,000	+28,000	+80,000	+7,000	-173,000	+371,000	-260,000	+132,000	-205,000	-75,000

CAL YR 1974..... -32,000
WTR YR 1975..... -200,000

† Elevation in feet, at end of month.
‡ Change in contents, in acre-ft.

07331600 RED RIVER AT DENISON DAM, NEAR DENISON, TEX.

LOCATION.--Lat 33°49'08", long 96°33'47", Grayson County, on right bank 1,800 ft (548.6 m) downstream from Denison Dam powerhouse, 0.4 mile (0.6 km) upstream from Shawnee Creek (spillway flow return), 4.5 miles (7.2 km) north of Denison, and at mile 725.5 (1,167.3 km).

DRAINAGE AREA.--39,720 mi^2 (102,875 km^2), of which 5,936 mi^2 (15,374 km^2) is probably noncontributing. At site used prior to October 1961, drainage area 39,777 mi^2 (103,022 km^2), of which 5,936 mi^2 (15,374 km^2) was probably noncontributing.

PERIOD OF RECORD.--October 1923 to current year. Monthly discharge only for some periods, published in WSP 1311. Prior to October 1934, published as "near Denison, Tex.", and October 1934 to September 1961, published as "near Colbert, Okla.". Gage-height records collected at various sites in this vicinity 1892-93, 1906-28, 1931-49 are contained in reports of U.S. Weather Bureau.

GAGE.--Water-stage recorder. Datum of gage is 500.00 ft (152.400 m) above mean sea level. Oct. 9, 1923, to Sept. 24, 1934, nonrecording gage, and July 29, 1942, to Sept. 30, 1961, water-stage recorder at county road bridge 2.5 miles (4.0 km) downstream at datum 6.85 ft (2.088 m) higher prior to Oct. 1, 1931, at datum 7.07 ft (2.155 m) higher Oct. 1, 1931, to Sept. 24, 1934, and at datum 2.64 ft (0.805 m) lower July 29, 1942, to Sept. 30, 1961. Sept. 25, 1934, to July 28, 1942, water-stage recorder at railway bridge 1.9 miles (3.1 km) downstream at datum 7.36 ft (2.243 m) higher.

AVERAGE DISCHARGE.--52 years, 4,851 ft^3/s (137 m^3/s), 3,515,000 acre-ft/yr (4.33 km^3/yr).

EXTREMES.--Current year: Maximum discharge, 55,600 ft^3/s (1,570 m^3/s) June 3, gage height, 20.39 ft (6.215 m); minimum daily, 77 ft^3/s (2.18 m^3/s) Oct. 27.
Period of record: Maximum discharge, 201,000 ft^3/s (5,690 m^3/s) May 21, 1935, gage height, 31.8 ft (9.69 m) at site and datum then in use; maximum gage height, 32.0 ft (9.75 m) Apr. 25, 1942 (at site and datum used in 1943); minimum daily discharge, 12 ft^3/s (0.340 m^3/s) Jan. 10, 1944.
Flood of May 26, 1908, reached a stage of 45.5 ft (13.87 m) at site and datum used July 29, 1942, to Sept. 30, 1961, from records of U.S. Weather Bureau.

REMARKS.--Records good. Flow regulated since October 1943 by Lake Texoma (see sta. 07331500).

COOPERATION.--Gage-height record and 19 discharge measurements furnished by Corps of Engineers; records computed by Geological Survey.

REVISIONS (WATER YEARS).--WSP 807: 1935 (M). WSP 1211: Drainage area. WSP 1241: 1924-29, 1932-33, 1934 (M), 1935.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22200	5760	11100	731	4740	10400	16200	95	41000	13000	32000	2470
2	16100	10800	10600	4000	4660	10400	16000	530	48000	10600	31700	5210
3	10600	17900	7920	5260	5030	10400	16100	244	55100	10600	31300	4830
4	10600	32600	7130	5750	8300	10400	13300	3070	50300	6330	25800	5050
5	5580	37700	2960	3850	8460	10500	10600	5380	39400	6280	13300	4510
6	5170	42200	3080	4690	8980	10500	10800	5370	30000	5920	10900	329
7	6530	42100	5940	2880	10700	10400	10900	5330	16400	5950	11000	121
8	6640	38700	4650	2850	10700	10500	11400	5360	16400	1970	11000	2340
9	7000	32000	6070	4540	10700	10600	10800	5360	18900	178	10400	3620
10	7500	25000	6570	4440	10700	5130	10800	5370	17500	2100	10300	3580
11	5250	10900	4070	4520	10700	7490	10800	5390	11300	900	10400	2620
12	5160	15400	2570	5050	10800	4960	10800	5440	15800	111	10500	2370
13	4290	24700	3600	7740	10800	5480	10800	7380	26100	106	10100	2240
14	5170	27100	912	4470	10800	4950	10800	11100	32400	4000	9850	188
15	2900	22500	754	3210	10800	7020	10900	11500	31800	4610	9590	3650
16	2340	16800	2820	2660	4110	8450	10900	11700	27500	4620	4760	6950
17	2430	16700	4940	2660	3960	10800	10900	5960	19000	4630	4630	7310
18	2600	15100	4600	151	4770	10600	10900	6820	14100	5400	6550	6850
19	309	11000	1420	94	746	10500	10900	4980	11300	300	7560	6150
20	84	11000	2760	2240	3200	10500	11100	3810	11300	650	6990	4700
21	2150	11000	149	2650	3190	10500	8220	3630	11300	5400	6030	4660
22	2560	11100	585	2880	3840	10500	5270	4030	11300	4200	6550	4650
23	2800	11000	771	2480	4880	10500	5310	9400	11300	4500	6320	4660
24	2420	11000	1130	2470	7640	10400	5300	20700	11300	2500	4780	4650
25	5010	11000	765	154	10400	10500	7250	27000	17900	3300	5390	4660
26	408	11100	3050	91	10400	10700	10600	33200	29500	7360	3820	4450
27	77	11100	164	960	10400	10900	10700	37500	31400	7260	2680	196
28	736	11100	1150	1760	10400	11600	2740	41900	26600	12000	4550	983
29	2730	11100	1840	2470	---	10800	93	41900	27200	26300	4890	2460
30	5860	11000	1250	2770	---	10600	112	41500	22100	31700	4490	2350
31	6710	---	750	3240	---	12800	---	40900	---	32000	4010	---
TOTAL	159914	566460	106070	93711	214806	299780	291295	411849	733500	224775	322140	108807
MEAN	5159	18880	3422	3023	7672	9670	9710	13290	24450	7251	10390	3627
MAX	22200	42200	11100	7740	10800	12800	16200	41900	55100	32000	32000	7310
MIN	77	5760	149	91	746	4950	93	95	11300	106	2680	121
AC-FT	317200	1124000	210400	185900	426100	594600	577800	816900	1455000	445800	639000	215800

CAL YR 1974 TOTAL 1890723 MEAN 5180 MAX 42200 MIN 70 AC-FT 3750000
WTR YR 1975 TOTAL 3533107 MEAN 9680 MAX 55100 MIN 77 AC-FT 7008000

07332400 BLUE CREEK AT MILBURN, OKLA.
(Headwater of Blue River)

LOCATION.--Lat 34°15'04", long 96°33'05", in SW 1/4 SW 1/4 sec.35, T.3 S., R.7 E., Johnston County, on downstream side of left bank pier of bridge on State Highway 48A, 0.5 mi (0.8 km) north of Milburn, and at mile 84.9 (136.6 km).

DRAINAGE AREA.--203 mi^2 (526 km^2).

PERIOD OF RECORD.--Occasional low flow measurements made in water years 1956-61. October 1965 to current year.

GAGE.--Water-stage recorder. Datum of gage is 649.65 ft (198.013 m) above mean sea level (State Highway Department).

AVERAGE DISCHARGE.--10 years, 161 ft^3/s (4.560 m^3/s), 10.77 in/yr (274 mm/yr), 116,600 acre-ft/yr (144 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 12,500 ft^3/s (354 m^3/s) Oct. 31, gage height, 24.81 ft (7.562 m); minimum, 39 ft^3/s (1.10 m^3/s) Sept. 11, 12.
Period of record: Maximum discharge, 35,100 ft^3/s (994 m^3/s) Oct. 8, 1970, gage height, 27.87 ft (8.495 m); minimum, 20 ft^3/s (0.57 m^3/s) Mar. 15-19, Apr. 5-7, 1967.

REMARKS.--Records good.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	114	1730	149	193	207	250	333	188	197	99	80	43
2	108	337	147	208	200	234	306	180	186	96	76	43
3	105	248	145	337	298	221	282	1330	178	95	74	43
4	101	1700	142	189	281	221	274	445	173	123	71	42
5	99	384	141	161	503	218	266	264	170	97	68	42
6	95	250	151	150	263	212	262	232	165	93	67	44
7	91	211	149	146	197	207	305	207	168	93	65	41
8	90	198	138	144	187	194	1260	194	194	94	64	41
9	87	218	132	140	171	199	485	184	499	88	62	41
10	85	733	135	161	161	220	333	174	285	145	60	41
11	82	434	209	153	162	217	297	168	203	92	58	40
12	80	258	171	136	154	586	277	165	158	87	57	48
13	79	226	150	128	146	488	283	162	144	83	57	45
14	89	206	141	130	145	311	298	396	136	81	58	54
15	85	194	136	133	142	262	272	249	134	79	62	142
16	75	193	133	131	198	742	255	182	128	77	96	104
17	72	192	129	127	175	371	247	165	127	76	124	65
18	69	190	128	128	152	1680	246	158	130	75	64	58
19	66	189	126	128	141	662	228	159	125	74	58	55
20	64	183	124	124	138	354	218	156	119	74	55	51
21	63	178	122	124	138	323	215	154	117	71	53	49
22	60	176	122	122	1650	295	213	150	117	68	52	48
23	59	177	123	120	1450	276	218	1070	117	68	51	47
24	59	170	121	125	401	253	216	450	115	73	48	46
25	65	161	118	131	398	237	208	264	112	116	46	45
26	144	159	117	126	319	244	202	222	111	295	46	45
27	112	157	118	123	285	1630	197	212	108	254	47	45
28	156	154	118	119	266	1200	246	241	106	196	48	45
29	134	156	121	119	---	525	247	316	103	178	48	45
30	161	154	119	116	---	384	200	279	103	103	45	44
31	6870	---	175	204	---	348	---	219	---	86	44	---
TOTAL	9619	9916	4250	4576	9128	13564	8889	8935	4728	3329	1904	1542
MEAN	310	331	137	148	326	438	296	288	158	107	61.4	51.4
MAX	6870	1730	209	337	1650	1680	1260	1330	499	295	124	142
MIN	59	154	117	116	138	194	197	150	103	68	44	40
CFSM	1.53	1.63	.67	.73	1.61	2.16	1.46	1.42	.78	.53	.30	.25
IN.	1.76	1.82	.78	.84	1.67	2.49	1.63	1.64	.87	.61	.35	.28
AC-FT	19080	19670	8430	9080	18110	26900	17630	17720	9380	6600	3780	3060

CAL YR 1974 TOTAL 57372 MEAN 157 MAX 6870 MIN 40 CFSM .77 IN 10.51 AC-FT 113800
WTR YR 1975 TOTAL 80380 MEAN 220 MAX 6870 MIN 40 CFSM 1.08 IN 14.73 AC-FT 159400

PEAK DISCHARGE (BASE, 2,200 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-31	1045	24.81	12,500	3-18	1530	16.73	2,760
11-4	0545	18.53	3,580	3-27	1730	20.59	4,850
2-22	2000	18.63	3,640	5-23	1230	16.37	2,630

07332500 BLUE RIVER NEAR BLUE, OKLA.

LOCATION.--Lat 33°59'49", long 96°14'27", on line between secs. 27 and 34, T.6 S., R.10 E., Bryan County, near left bank on downstream side of pier of bridge on U.S. Highway 70, 1.0 mi (1.6 km) west of Blue, 7.0 mi (11.3 km) east of Durant, 7.7 mi (12.4 km) upstream from Caddo Creek, and at mile 38.8 (62.4 km).

DRAINAGE AREA.--476 mi^2 (1,233 km^2).

PERIOD OF RECORD.--June 1936 to current year. Monthly discharge only for some periods, published in WSP 1311, 1731.

GAGE.--Water-stage recorder. Datum of gage is 503.36 ft (153.424 m) above mean sea level. Prior to Mar. 13, 1945, nonrecording gage and Mar. 13, 1945, to Feb. 2, 1960, water-stage recorder at site 1.2 mi (1.9 km) downstream at datum 5.00 ft (1.524 m) lower.

AVERAGE DISCHARGE.--39 years, 307 ft^3/s (8.694 m^3/s), 8.76 in/yr (223 mm/yr), 222,400 acre-ft/yr (274 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 18,900 ft^3/s (535 m^3/s) Oct. 31, gage height, 31.78 ft (9.687 m); minimum, 42 ft^3/s (1.19 m^3/s) Sept. 5.
Period of record: Maximum discharge, 34,400 ft^3/s (974 m^3/s) Feb. 17, 1938, gage height, 31.81 ft (9.696 m), site and datum then in use; no flow (estimated) Aug. 3, 4, 1936, result of regulation at fish hatchery, and no flow Sept. 19, to Oct. 16, 1956.

REMARKS.--Records good. Some regulation at low flow by State Fish Hatchery, 16.0 miles (25.7 km) above station. Small diversion above station for municipal water supply of city of Durant.

COOPERATION.--Gage-height record and 29 discharge measurements furnished by Corps of Engineers; records computed by Geological Survey.

REVISIONS (WATER YEARS).--WSP 957: 1938. WSP 1241: 1936, drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	170	12100	222	481	3440	384	634	239	276	126	110	54
2	144	7660	212	460	1760	351	548	213	225	120	101	59
3	129	1490	201	1240	1950	319	479	3530	191	114	97	55
4	120	1410	195	670	1450	329	430	2330	177	132	93	53
5	114	2220	193	377	1730	328	408	848	171	136	90	52
6	110	908	303	293	1380	312	392	422	160	122	85	141
7	105	557	304	258	641	303	403	346	167	107	81	62
8	103	475	244	246	489	281	3040	299	484	113	74	55
9	104	464	202	234	425	269	2410	267	4090	117	77	52
10	102	3890	204	328	358	863	846	236	5390	116	75	58
11	100	3250	1220	354	333	497	560	222	1250	840	73	54
12	99	955	657	261	312	595	466	208	492	246	66	53
13	96	574	385	212	286	1150	428	207	322	138	65	57
14	188	465	296	193	271	1300	454	380	263	119	62	79
15	284	395	261	194	259	671	454	665	357	106	62	152
16	137	362	233	186	248	2350	397	392	260	100	124	574
17	111	367	217	181	373	1940	362	241	210	95	380	253
18	102	351	205	179	355	1470	345	198	193	92	524	116
19	99	334	197	179	267	2290	333	181	184	96	159	93
20	93	313	191	170	236	1430	302	181	172	91	100	82
21	88	287	183	159	221	659	282	183	160	90	85	76
22	87	274	179	155	238	539	272	177	153	91	78	70
23	86	275	182	157	1530	480	272	184	150	84	76	68
24	86	318	181	161	2310	429	282	1060	146	82	72	68
25	89	273	174	178	1230	377	277	641	141	124	62	66
26	102	246	175	162	769	373	251	321	135	338	61	64
27	152	236	179	173	535	1470	237	357	138	374	60	58
28	300	231	178	166	435	4550	236	363	141	349	60	51
29	458	226	176	158	---	4530	301	522	143	253	59	57
30	349	225	185	154	---	1620	307	935	141	219	59	54
31	11900	---	615	3030	---	787	---	424	---	139	56	---
TOTAL	16207	41131	8551	11369	23831	33266	16458	16772	16482	5269	3228	2786
MEAN	523	1371	276	367	851	1073	549	541	549	170	104	92.9
MAX	11900	12100	1220	3030	3440	4550	3090	3530	5390	840	524	574
MIN	86	225	174	154	221	281	236	177	135	82	56	51
CFSM	1.10	2.88	.58	.77	1.79	2.25	1.15	1.14	1.15	.36	.22	.20
IN.	1.27	3.21	.67	.89	1.86	2.60	1.29	1.31	1.29	.41	.25	.22
AC-FT	32150	81580	16960	22550	47270	65980	32640	33270	32690	10450	6400	5530

CAL YR 1974 TOTAL 138742 MEAN 380 MAX 12100 MIN 39 CFSM .80 IN 10.84 AC-FT 275200
WTR YR 1975 TOTAL 195350 MEAN 535 MAX 12100 MIN 51 CFSM 1.12 IN 15.27 AC-FT 387500

PEAK DISCHARGE (BASE, 4,000 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-31	1815	31.78	18,900	4-8	1645	20.35	4,280
11-10	2000	21.61	5,200	5-3	1615	21.41	5,050
1-31	2245	21.14	4,850	6-10	1245	23.51	6,900
3-28	2000	21.34	5,000				

07334000 MUDDY BOGGY CREEK NEAR FARRIS, OKLA.

LOCATION.--Lat 34°16'17", long 95°54'43", in NE 1/4 NW 1/4 sec.26, T.3 S., R.13 E., Atoka County, on downstream side of left bank pier of main span of bridge on State Highway 3, 1.3 miles (2.1 km) downstream from McGee Creek, 2.8 miles (4.5 km) northwest of Farris, and at mile 57.7 (92.8 km).

DRAINAGE AREA.--1,087 mi^2 (2,815 km^2).

PERIOD OF RECORD.--October 1937 to current year. Monthly discharge only for some periods, published in WSP 1311.

GAGE.--Water-stage recorder. Datum of gage is 444.58 ft (135.508 m) above mean sea level. Prior to Mar. 13, 1945, nonrecording gage, and Mar. 13, 1945, to Sept. 30, 1961, water-stage recorder at same site at datum 2.00 ft (0.610 m) higher.

AVERAGE DISCHARGE.--38 years, 924 ft^3/s (26.17 m^3/s), 669,400 acre-ft/yr (825 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 22,400 ft^3/s (634 m^3/s) Oct. 31, gage height, 39.93 ft (12.171 m); minimum, 9.1 ft^3/s (0.26 m^3/s) Sept. 4, 5.
Period of record: Maximum discharge, 61,900 ft^3/s (1,750 m^3/s) June 17, 1945, gage height, 44.94 ft (13.698 m), datum then in use, from rating curve extended above 37,000 ft^3/s (1,050 m^3/s); no flow at times in many years.

REMARKS.--Records good. Some regulation since June 1959 by Atoka Reservoir, capacity, 125,000 acre-ft (154 hm^2), on North Boggy Creek, drainage area, 176 mi^2 (456 km^2); pipeline diversions to Oklahoma City since November 1963, normal capacity, 60 mgd (227,100 m^3/d).

COOPERATION.--Gage-height records and 21 discharge measurements by Corps of Engineers; records computed by Geological Survey.

REVISIONS.--WSP 1211: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	471	16100	199	1740	8000	1200	2380	844	582	413	136	13
2	334	10900	173	2070	5500	932	1560	373	383	177	81	11
3	230	10400	142	2120	6230	748	1040	3140	260	102	54	10
4	160	10700	124	2380	5810	623	790	5390	178	67	40	9.3
5	118	8150	112	1600	6070	540	636	5540	136	94	32	9.3
6	89	6320	1340	875	5320	485	545	3450	118	127	28	16
7	74	2920	1220	642	3330	458	509	1070	1190	62	24	19
8	83	1340	847	506	1780	453	2510	767	1700	41	21	18
9	66	1020	594	427	1300	436	4240	606	5640	31	19	15
10	45	6840	414	813	951	1150	4160	709	4650	395	16	14
11	36	7280	2160	1250	739	1010	2110	729	3590	407	16	12
12	31	4730	2800	1140	640	1590	1000	749	4410	90	14	11
13	29	2230	1980	726	543	3920	725	376	2410	48	12	9.5
14	51	1210	1150	471	444	5460	656	2830	661	36	11	9.5
15	65	814	802	372	388	4120	617	4390	1100	32	10	1260
16	350	633	623	311	389	6110	594	4420	2030	31	15	2620
17	450	647	496	306	483	7710	483	2370	1280	29	326	885
18	197	529	404	253	1140	6480	406	698	851	27	626	479
19	108	445	351	228	718	5340	373	449	2460	24	915	293
20	72	396	285	293	462	4700	309	339	1590	22	873	165
21	51	332	251	193	359	3570	265	288	473	20	344	120
22	36	271	209	161	714	1580	224	257	299	60	422	79
23	29	249	184	167	4170	1080	202	231	221	56	120	54
24	25	490	168	149	7050	852	188	225	168	41	60	43
25	22	454	200	175	10000	676	179	479	130	33	40	37
26	20	307	193	184	9830	552	743	556	104	54	30	32
27	19	243	164	175	4550	3160	2320	325	84	488	25	29
28	98	205	153	176	1790	11900	1460	312	73	1660	22	26
29	157	176	151	168	---	11000	679	455	665	1230	19	23
30	133	229	167	157	---	9440	1510	1030	1030	594	16	21
31	15100	---	1330	5550	---	6990	---	776	---	244	14	---
TOTAL	18749	96560	19386	25778	88700	104265	33213	44173	38466	6735	4383	6342.6
MEAN	605	3219	625	832	3168	3363	1107	1425	1282	217	141	211
MAX	15100	16100	2800	5550	10000	11900	4240	5540	5640	1660	915	2620
MIN	19	176	112	149	359	436	179	225	73	20	10	9.3
AC-FT	37190	191500	38450	51130	175900	206800	65880	87620	76300	13360	8690	12580

CAL YR 1974 TOTAL 487108.0 MEAN 1335 MAX 28500 MIN 7.0 AC-FT 966200
WTR YR 1975 TOTAL 486750.6 MEAN 1334 MAX 16100 MIN 9.3 AC-FT 965500

PEAK DISCHARGE (BASE, 10,000 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-31	1515	39.93	22,400	2-25	2145	30.30	10,600
1-31	2200	29.60	10,000	3-28	0815	32.61	12,500

07334200 BYRD'S MILL SPRING NEAR FITTSTOWN, OKLA.

LOCATION.--Lat 34°35'45", long 96°39'55", in SW 1/4 SW 1/4 sec.34, T.2 N., R.6 E., Pontotoc County, upstream from weir outlet of spring, 0.5 mile (0.8 km) upstream from Big Spring Creek, 2.0 miles (3.2 km) west of Fittstown, and 12.0 miles (19.3 km) south of Ada.

PERIOD OF RECORD.--April 1959 to current year.

GAGE.--Water-stage recorder and V-notch sharp-crested weir. Altitude of gage is 1,022 ft (311.5 m) from ground-water survey map.

AVERAGE DISCHARGE.--16 years, 8.36 ft^3/s (0.237 m^3/s) 6,060 acre-ft/yr (7.47 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 23 ft^3/s (0.65 m^3/s) Mar. 31, gage height, 3.15 ft (0.960 m); minimum daily, 6.3 ft^3/s (0.18 m^3/s) Oct. 1-14.
Period of record: Maximum discharge, 30 ft^3/s (0.850 m^3/s) May 30, 1960, gage height, 3.22 ft (0.981 m); no flow at times in 1959, 1964-67.

REMARKS.--Records good. Records do not include diversion of about 6 to 10 ft^3/s (0.170 to 0.283 m^3/s) by city of Ada for municipal water supply, a part of which is discharged as effluent to Sandy Creek, tributary to Canadian River.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.3	10	15	12	9.9	16	23	18	16	13	10	7.9
2	6.3	10	15	12	9.9	16	23	18	15	13	10	7.9
3	6.3	11	15	12	9.9	16	23	18	15	13	10	7.9
4	6.3	12	15	12	9.9	16	23	18	15	13	10	7.9
5	6.7	12	14	11	9.9	16	23	18	15	13	10	7.9
6	6.7	12	14	11	9.9	17	23	18	15	13	10	7.9
7	6.7	12	14	12	9.9	17	23	18	15	13	9.9	7.9
8	6.7	13	14	12	9.9	17	23	18	15	12	9.9	7.9
9	7.1	13	14	12	9.9	17	23	18	15	12	9.9	7.9
10	7.1	13	14	12	9.9	17	23	18	15	12	9.9	7.5
11	7.5	14	14	11	11	17	23	18	15	12	9.9	7.5
12	7.5	14	13	11	11	17	23	18	15	12	9.9	7.5
13	7.5	15	13	11	11	17	23	18	15	12	9.9	7.5
14	7.9	15	13	11	11	17	23	17	15	12	9.9	7.5
15	7.9	15	13	11	11	17	23	17	15	12	9.9	7.5
16	7.9	15	13	11	11	18	23	17	15	12	9.9	7.5
17	7.5	15	13	11	12	18	23	17	15	12	9.9	7.5
18	7.5	15	13	11	12	18	23	17	15	12	9.4	7.1
19	7.5	15	12	11	12	19	23	17	15	12	9.4	7.1
20	7.5	15	12	11	13	19	23	16	15	11	9.4	7.1
21	7.5	15	12	11	13	19	23	16	15	11	8.9	7.1
22	7.5	15	12	11	13	20	23	16	14	11	8.9	7.1
23	7.5	15	12	11	14	20	23	16	14	11	8.9	7.1
24	7.5	15	12	11	15	20	22	16	14	11	8.9	7.1
25	7.5	15	12	10	18	20	22	16	14	11	8.9	7.1
26	7.1	15	12	10	16	21	21	16	14	11	8.9	6.7
27	7.1	15	12	10	15	21	21	16	13	10	8.4	6.7
28	7.1	15	12	10	15	21	20	16	13	10	8.4	6.7
29	7.1	15	12	10	---	22	19	15	13	10	8.4	6.7
30	7.1	15	12	9.9	---	22	18	16	13	10	8.4	6.7
31	9.9	---	12	10	---	22	---	16	---	10	8.4	---
TOTAL	225.3	416	405	341.9	333.0	570	672	527	438	362	292.5	221.4
MEAN	7.27	13.9	13.1	11.0	11.9	18.4	22.4	17.0	14.6	11.7	9.44	7.38
MAX	9.9	15	15	12	18	22	23	18	16	13	10	7.9
MIN	6.3	10	12	9.9	9.9	16	18	15	13	10	8.4	6.7
AC-FT	447	825	803	678	661	1130	1330	1050	869	718	580	439

CAL YR 1974 TOTAL 3573.2 MEAN 9.79 MAX 18 MIN 4.5 AC-FT 7090
WTR YR 1975 TOTAL 4804.1 MEAN 13.2 MAX 23 MIN 6.3 AC-FT 9530

07335000 CLEAR BOGGY CREEK NEAR CANEY, OKLA.

LOCATION.--Lat 34°15'09", long 96°12'19", in NW 1/4 SE 1/4 sec.36, T.3 S., R.10 E., Atoka County, on downstream side of left pier of bridge on old U.S. Highways 69 and 75, 0.5 mi (0.8 km) downstream from Caney Creek. 1.5 mi (2.4 km) north of Caney, and at mile 24.1 (38.8 km).

DRAINAGE AREA.--720 mi^2 (1,865 km^2).

PERIOD OF RECORD.--October 1942 to current year. Monthly discharge only for some periods, published in WSP 1311.

GAGE.--Water-stage recorder. Datum of gage is 485.05 ft (147.843 m) above mean sea level. Prior to Mar. 13, 1945, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--33 years, 503 ft^3/s (14.24 m^3/s), 9.49 in/yr (241 mm/yr), 364,400 acre-ft/yr (449 hm^3/s).

EXTREMES.--Current year: Maximum discharge, 14,200 ft^3/s (402 m^3/s) Oct. 31, gage height, 23.35 ft (7.117 m); minimum, 19 ft^3/s (0.54 m^3/s) Sept. 11.
Period of record: Maximum discharge, 52,800 ft^3/s (1,500 m^3/s) Dec. 11, 1946, Dec. 11, 1946, gage height, 26.77 ft (8.159 m); no flow at times in 1954, 1956, 1964.

REMARKS.--Records good. See pg. 511 for water-quality record.

COOPERATION.--Gage-height record and 33 discharge measurements furnished by Corps of Engineers; records computed by Geological Survey.

REVISIONS.--WSP 1211: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	452	10200	193	807	2610	1120	1740	401	368	87	154	33
2	298	7670	190	778	1520	932	1330	347	287	80	113	27
3	224	5990	182	1510	2410	796	1030	2160	241	75	91	25
4	187	4600	170	1340	2330	673	874	3350	214	70	77	30
5	158	4220	163	688	3090	582	757	2690	185	100	66	27
6	137	3750	226	501	2870	520	667	1150	165	95	55	29
7	118	1860	232	418	1490	479	624	868	271	89	49	22
8	108	1520	193	369	1040	429	2660	688	406	77	43	21
9	101	1390	164	328	810	445	3530	536	1500	69	39	20
10	95	4210	163	398	657	867	2290	443	2520	204	38	20
11	86	4050	812	423	570	574	1190	387	2560	314	34	19
12	81	2430	634	327	494	942	903	337	1130	84	32	20
13	74	1340	476	256	436	2740	751	302	642	65	30	25
14	78	991	351	227	394	2530	706	1040	440	57	28	32
15	89	775	290	213	357	1630	668	2340	471	52	28	577
16	84	676	255	203	342	3620	576	1090	1260	48	126	794
17	109	586	229	192	684	4500	511	623	439	44	342	361
18	89	502	212	184	584	3370	472	474	350	43	475	193
19	78	458	196	178	410	3500	431	390	484	41	179	129
20	71	416	187	168	330	3400	380	341	311	39	139	98
21	68	366	174	161	290	1770	342	312	262	37	100	77
22	63	338	166	154	611	1300	319	278	202	35	72	66
23	58	318	164	147	3360	1090	319	263	162	34	59	56
24	57	317	158	152	4410	874	314	1810	139	35	50	48
25	61	280	150	166	6100	704	298	1310	128	291	43	77
26	66	253	146	165	3870	625	636	776	125	117	39	83
27	79	234	147	162	1840	2170	539	516	115	607	34	57
28	180	217	146	153	1370	5950	476	415	108	742	32	37
29	259	207	149	148	---	7980	611	475	111	703	30	33
30	199	196	153	141	---	6300	539	573	101	406	31	30
31	9170	---	380	3380	---	2840	---	497	---	217	37	---
TOTAL	12977	60382	7451	14437	45479	65252	26483	27182	15697	4957	2665	3066
MEAN	419	2013	240	466	1624	2105	883	877	523	160	86.0	102
MAX	9170	10200	812	3380	6100	7980	3530	3350	2560	742	475	794
MIN	57	196	146	141	290	429	298	263	101	34	28	19
CFSM	.58	2.80	.33	.65	2.26	2.92	1.23	1.22	.73	.22	.12	.14
IN.	.67	3.12	.38	.75	2.35	3.37	1.37	1.40	.81	.26	.14	.16
AC-FT	25740	119800	14780	28640	90210	129400	52530	53920	31130	9830	5290	6080

CAL YR 1974 TOTAL 198654 MEAN 544 MAX 10200 MIN 15 CFSM .76 IN 10.26 AC-FT 394000
WTR YR 1975 TOTAL 286028 MEAN 784 MAX 10200 MIN 19 CFSM 1.09 IN 14.78 AC-FT 567300

PEAK DISCHARGE (BASE, 4,500 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-31	1930	23.35	14,200	2-25	1345	21.73	6,620
11-10	1630	20.99	5,410	3-17	1215	19.82	4,640
1-31	1330	20.99	5,360	3-29	0600	22.20	8,240

07335500 RED RIVER AT ARTHUR CITY, TEX.

LOCATION.--Lat 33°52'32", long 95°30'08", in NW 1/4 sec.11, T.8 S., R.17 E., Choctaw County, Okla., near right bank on downstream side of pier of bridge on U.S. Highway 271 at Arthur City, 10.6 miles (17.1 km) downstream from Muddy Boggy River, 26.0 miles (41.8 km) upstream from Kiamichi River, and at mile 633.1 (1,018.7 km).

DRAINAGE AREA.--44,531 mi^2 (115,335 km^2), of which 5,936 mi^2 (15,374 km^2) is probably noncontributing.

PERIOD OF RECORD.--January to September 1905 (gage heights and discharge measurements only), October 1905 to December 1911, July 1936 to current year. Monthly discharge only for some periods, published in WSP 1311. Gage-height records collected at same site since 1891 are contained in reports of the U.S. Weather Bureau.

GAGE.--Water-stage recorder. Datum of gage is 380.07 ft (115.845 m) above mean sea level. 1905-11, nonrecording gage at St. Louis-San Francisco Railway Co. bridge 200 ft (61.0 m) upstream at same datum. July 1, 1936, to Mar. 24, 1940, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--45 years, 8,330 ft^3/s (235.9 m^3/s), 6,035,000 acre-ft/yr (7.44 km^3/yr).

EXTREMES.--Current year: Maximum discharge, 103,000 ft^3/s (2,920 m^3/s) Nov. 1, gage height, 23.93 ft (7.294 m); minimum, 487 ft^3/s (13.8 m^3/s) Sept. 10, gage height, 4.19 ft (1.277 m).
Period of record: Maximum discharge, about 400,000 ft^3/s (11,300 m^3/s) May 28, 1908, gage height, 43.2 ft (13.17 m), from rating curve extended above 41,000 ft^3/s (1,160 m^3/s) on basis of records for later years; minimum, 130 ft^3/s (3.68 m^3/s) Dec. 11, 12, 1956, gage height, 4.49 ft (1.369 m).

REMARKS.--Records good. Flow regulated since October 1943 by Lake Texoma, 92.8 miles (149.3 km) above station (see sta. 07331500).

COOPERATION.--Gage-height record and 36 discharge measurements furnished by Corps of Engineers; records computed by Geological Survey.

REVISIONS (WATER YEARS).--WSP 1241: Drainage area. WSP 1311: 1906-11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29900	67000	15000	7770	27200	23500	26700	3900	40500	27300	33100	5140
2	25500	67200	14300	8370	41800	22500	29900	3760	40900	16500	32500	4900
3	20500	50200	13700	8390	36000	16800	30300	10500	44800	12900	32100	3830
4	12900	51100	12200	11700	28600	15200	27000	20300	52900	11800	32100	5120
5	11300	61800	10800	12900	27300	14400	22100	17400	49600	10100	30200	5550
6	9820	64100	14700	11700	28000	13900	15700	14800	40500	8010	20400	5490
7	7020	66700	14800	8950	26000	13400	14000	18600	37700	7770	13600	4930
8	6520	62600	13100	8290	24000	13200	17800	17700	25100	7480	12300	2470
9	7160	56200	11400	6560	22600	13100	32400	11700	34500	6570	12100	911
10	7260	61700	8890	6900	20300	15000	30600	8840	52500	4030	11800	1080
11	7410	71700	12100	8620	16800	16100	23500	8040	60700	2560	11300	3120
12	7600	45300	18400	9170	15100	12300	21100	7810	39300	3790	11200	3680
13	6280	33700	15800	8640	14500	13000	19200	7800	28000	3870	11200	3160
14	5590	35700	11500	8460	14100	14100	15600	11000	33000	2320	11100	2880
15	5350	39500	9360	9690	13800	16900	14500	17600	42400	1640	10700	2850
16	6160	36000	6300	7170	13600	17800	14100	21100	42600	2710	10600	2630
17	4830	24900	5080	5790	12200	24000	13800	20000	37800	5550	9900	7190
18	4170	21200	6070	5170	8420	26600	13500	17200	27500	5700	9590	10500
19	4010	20400	7630	5000	8420	24800	13200	10300	20400	5700	8880	9110
20	3900	17100	7180	3270	8480	25100	12900	8170	16300	5930	9290	8150
21	2610	15600	4810	2390	5140	24700	12700	6860	15500	3020	9780	7310
22	1680	15200	5030	3170	5870	23300	12400	5790	13900	1760	8880	6130
23	2050	15000	3570	4210	7990	22200	9050	5210	13100	4340	7940	5730
24	3390	19000	2710	4430	13100	20100	7540	5350	12700	5400	7840	5590
25	3640	19400	2790	4520	17400	16100	7320	12900	12500	5550	7410	5500
26	3380	16800	2960	4260	21100	14200	7200	24800	13200	4320	6190	5450
27	4760	15300	3440	3050	22100	15300	9570	33600	25100	4840	5670	5430
28	2850	14600	4550	2050	23300	21800	13500	39600	35500	8360	5000	5040
29	1730	14600	3570	2120	---	31100	12500	44900	29500	10200	4070	2360
30	2410	15400	2710	2540	---	30000	5690	46200	28400	19200	5060	1130
31	8890	---	4300	7860	---	28000	---	43800	---	30600	5610	---
TOTAL	230570	1115000	268750	203110	523220	600500	505370	525530	966400	251820	407610	142361
MEAN	7438	37170	8669	6552	18690	19370	16850	16950	32210	8123	13150	4745
MAX	29900	71700	18400	12900	41800	31100	32400	46200	60700	30600	33100	10500
MIN	1680	14600	2710	2050	5140	12300	5690	3760	12500	1640	4070	911
AC-FT	457300	2212000	533100	402900	1038000	1191000	1002000	1042000	1917000	499500	808500	282400

CAL YR 1974	TOTAL	3610976	MEAN	9893	MAX	71700	MIN	757	AC-FT	7162000
WTR YR 1975	TOTAL	5740241	MEAN	15730	MAX	71700	MIN	911	AC-FT	11390000

07335700 KIAMICHI RIVER NEAR BIG CEDAR, OKLA.
(Hydrologic bench mark station)

LOCATION.--Lat 34°38'18", long 94°36'45", in SW 1/4 SE 1/4 sec.18, T.2 N., R.26 E., LeFlore County, in Ouachita National Forest, on downstream side of right bank pier of bridge on State Highway 63, 0.2 mile (0.3 km) upstream from Rattlesnake Creek, 1.1 miles (1.8 km) upstream from Big Branch, 2.1 miles (3.4 km) east of Big Cedar, and at mile 157.6 (253.6 km).

DRAINAGE AREA.--40.1 mi^2 (103.9 km^2).

PERIOD OF RECORD.--October 1965 to current year.

GAGE.--Water-stage recorder. Datum of gage is 886.97 ft (270.348 m) above mean sea level (State Highway Department bench mark).

AVERAGE DISCHARGE.--10 years, 82.5 ft^3/s (2.336 m^3/s), 27.9 in/yr (709 mm/yr), 59,770 acre-ft/yr (73.7 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 6,840 ft^3/s (194 m^3/s) Aug. 15, gage height, 12.92 ft (3.938 m); no flow July 22-24.
Period of record: Maximum discharge, 21,500 ft^3/s (609 m^3/s) Dec. 10, 1971, gage height, 17.08 ft (5.206 m), from rating curve extended above 9,000 ft^3/s (255 m^3/s); no flow at times in most years.

REMARKS.--Records good. See pg. 505 for water-quality record.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	47	455	51	46	590	97	139	62	66	15	2.0	10
2	37	233	45	56	400	80	111	56	50	11	1.8	7.5
3	31	185	40	75	308	68	86	886	39	9.0	1.4	5.9
4	25	1510	36	71	233	61	70	281	30	7.4	1.4	5.3
5	20	345	34	67	234	54	59	165	24	6.2	1.1	4.3
6	18	201	807	60	191	49	51	127	20	5.3	.82	3.2
7	16	144	314	54	153	44	45	215	174	4.7	.82	2.3
8	16	116	191	51	128	38	76	224	116	4.0	.90	1.8
9	14	98	142	53	101	48	61	289	185	3.5	.55	1.5
10	12	1010	116	100	85	77	54	246	186	2.9	.45	1.5
11	11	402	146	83	75	76	49	156	149	2.4	.42	1.3
12	11	209	114	72	63	118	45	121	103	2.2	.36	1.8
13	9.7	148	99	66	54	138	43	86	72	1.6	.20	1.7
14	13	107	87	60	48	123	42	73	365	1.3	.04	1.5
15	20	83	77	54	44	112	36	60	422	1.1	172	27
16	17	70	64	47	44	302	32	45	260	.87	546	46
17	14	60	56	43	43	230	30	36	184	.69	70	29
18	13	51	50	40	38	258	29	28	128	.50	179	21
19	12	45	44	36	34	201	26	23	89	.37	116	16
20	11	38	38	32	32	153	22	21	66	.21	48	12
21	10	32	34	29	30	124	20	21	50	.12	32	9.1
22	9.4	29	30	26	170	100	18	17	39	0	23	7.5
23	8.9	39	28	24	214	93	18	13	41	0	17	6.2
24	8.8	195	26	25	170	77	17	12	60	0	12	5.1
25	8.9	143	23	25	155	64	384	12	42	.24	9.1	4.5
26	8.8	112	24	22	167	65	192	13	31	.59	73	3.8
27	8.4	88	24	20	139	905	130	16	24	2.1	48	3.4
28	21	71	22	19	118	1730	125	368	20	23	33	3.0
29	73	68	21	18	---	533	95	164	20	6.7	24	2.8
30	63	61	20	17	---	273	77	130	16	4.0	18	2.5
31	1420	---	37	595	---	184	---	88	---	2.1	13	---
TOTAL	2007.9	6348	2840	1986	4061	6475	2182	4054	3071	119.09	1445.36	248.5
MEAN	64.8	212	91.6	64.1	145	209	72.7	131	102	3.84	46.6	8.28
MAX	1420	1510	807	595	590	1730	384	886	422	23	546	46
MIN	8.4	29	20	17	30	38	17	12	16	0	.04	1.3
CFSM	1.62	5.29	2.28	1.60	3.62	5.21	1.81	3.27	2.54	.10	1.16	.21
IN.	1.86	5.89	2.63	1.84	3.77	6.01	2.02	3.76	2.85	.11	1.34	.23
AC-FT	3980	12590	5630	3940	8050	12840	4330	8040	6090	236	2870	493

CAL YR 1974 TOTAL 33399.05 MEAN 91.5 MAX 2400 MIN 0 CFSM 2.28 IN 30.98 AC-FT 66250
WTR YR 1975 TOTAL 34837.85 MEAN 95.4 MAX 1730 MIN 0 CFSM 2.38 IN 32.32 AC-FT 69100

PEAK DISCHARGE (BASE, 2,000 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-31	1115	10.38	3,160	3-28	0815	11.42	4,430
11-4	0345	11.26	4,230	5-3	0500	10.04	2,810
11-10	1200	10.00	2,770	8-15	2400	12.92	6,840
12-6	0600	9.19	2,050				

07336200 KIAMICHI RIVER NEAR ANTLERS, OKLA.

LOCATION.--Lat 34°14'55", long 95°36'18", in SW 1/4 sec.35, T.3 S., R.16 E., Pushmataha County, on right bank, 50 ft (15.240 m) downstream from bridge on U.S. Highway 271 and State Highway 2, 2.0 mi (3.2 km) northeast of Antlers, 7.7 mi (12.4 km) downstream from Tenmile Creek, 5.4 mi (8.7 km) upstream from Cedar Creek and at mile 59.6 (95.9 km).

DRAINAGE AREA.--1,138 mi^2 (2,947 km^2).

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

GAGE.--Water-stage recorder. Datum of gage is 419.82 ft (127.961 m) above mean sea level.

EXTREMES.--Current year: Maximum discharge, 33,100 ft^3/s (937 m^3/s) Nov. 1, gage height, 30.22 ft (9.211 m); minimum, 20 ft^3/s (0.57 m^3/s) Aug. 15, 16.
Period of record: Maximum discharge, 38,500 ft^3/s (1,090 m^3/s) Nov. 26, 1973, gage height, 32.62 ft (9.943 m); no flow Oct. 1-21, 1972.

REMARKS.--Records good. Small diversion above station for municipal water supply of city of Antlers.

COOPERATION.--Gage height record, 24 discharge measurements furnished by Corps of Engineers; records computed by Geological Survey.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	924	31500	977	2270	13700	2180	2890	1080	1350	1230	79	135
2	726	26400	857	1970	12500	1710	2120	852	884	662	64	156
3	582	10400	722	1970	9500	1370	1640	5060	639	454	57	128
4	475	9000	633	2070	7800	1170	1330	13700	485	332	65	90
5	398	14600	597	1560	6160	1060	1130	6070	385	274	64	66
6	342	7190	7460	1270	5490	962	979	2450	315	233	55	53
7	297	3170	13400	1090	3570	873	870	2380	584	190	47	50
8	262	2270	6010	974	2610	770	2390	3160	4260	161	41	41
9	239	1890	3190	879	2080	806	3800	2120	5080	143	36	35
10	231	11600	2340	1550	1660	2220	2280	2870	7440	125	34	30
11	221	18400	3260	2880	1400	2750	1510	2090	4780	198	30	25
12	201	11300	4410	1810	1220	4380	1140	1910	2270	133	26	23
13	178	3950	3040	1240	1040	6020	954	1080	1410	87	23	23
14	208	2730	2200	1000	907	3930	889	1740	2580	74	21	26
15	383	2060	1800	887	816	2930	862	2710	7280	67	21	422
16	201	1600	1510	812	887	5110	760	1430	7080	58	44	3140
17	172	1440	1270	729	1330	7050	654	870	2960	49	167	2080
18	168	1300	1100	657	1280	4320	577	619	2890	47	257	1060
19	167	1140	979	606	982	3860	523	483	1710	43	376	528
20	160	1010	872	564	810	2860	468	400	1060	38	276	317
21	142	877	783	514	711	2090	411	358	768	32	250	221
22	128	764	707	468	1590	1660	366	325	598	32	257	170
23	118	744	657	423	8590	1370	331	302	489	32	184	130
24	109	1540	613	398	6280	1150	312	285	450	31	135	104
25	104	2730	574	429	5260	966	570	258	477	29	104	87
26	103	1930	559	445	4870	868	4430	277	622	32	84	75
27	102	1310	620	439	4090	2500	2130	675	528	150	72	66
28	131	1050	751	405	2680	11800	1390	1150	448	261	263	59
29	520	895	743	375	---	13400	2440	3570	608	166	153	53
30	429	868	703	390	---	8880	1580	3410	1200	133	137	49
31	20300	---	1260	4070	---	4300	---	2600	---	102	143	---
TOTAL	28721	175658	64597	35144	110013	105315	41726	66284	61630	5598	3565	9442
MEAN	926	5855	2084	1134	3929	3397	1391	2138	2054	181	115	315
MAX	20300	31500	13400	4070	13700	13400	4430	13700	7440	1230	376	3140
MIN	102	744	559	375	711	770	312	258	315	29	21	23
CFSM	.81	5.15	1.83	1.00	3.45	2.99	1.22	1.88	1.80	.16	.10	.28
IN.	.94	5.74	2.11	1.15	3.60	3.44	1.36	2.17	2.01	.18	.12	.31
AC-FT	56970	348800	128100	69710	218200	208900	82760	131500	122200	11100	7070	18730

CAL YR 1974 TOTAL 918845 MEAN 2517 MAX 35600 MIN 12 CFSM 2.21 IN 30.04 AC-FT 1823000
WTR YR 1975 TOTAL 707693 MEAN 1939 MAX 31500 MIN 21 CFSM 1.70 IN 23.13 AC-FT 1404000

PEAK DISCHARGE (BASE, 18,000 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE
11-1	0215	30.22	33,100
11-11	0830	22.40	18,800

07336600 HUGO LAKE NEAR HUGO, OKLAHOMA

LOCATION.--Lat 34°00'42", long 95°22'49", in NW 1/4 NW 1/4 sec.25, T.6 S., R.18 E., Choctaw County, on upstream fact of Hugo Dam, 700 ft (213 m) to left of spillway, 7.0 mi (11.3 km) east of Hugo, and at mile 17.6 (28.3 km).

DRAINAGE AREA.--1,709 mi^2 (4,426 km^2).

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

GAGE.--Water-stage recorder. Datum of gage is at mean sea level.

EXTREMES.--Current year: Maximum contents, 533,100 acre-ft (657 hm^3) Nov. 13, elevation, 425.35 ft (129.647 m); minimum, 138,300 acre-ft (171 hm^3) Sept. 15, elevation, 402.99 ft (122.831 m).
Period of record: Maximum contents, 533,100 acre-ft (657 hm^3) Nov. 13, 1974, elevation, 425.35 ft (129.647 m); minimum since conservation pool was first filled, 138,300 acre-ft (171 hm^3) Sept. 15, 1975, elevation, 402.99 ft (122.831 m).

REMARKS.--Reservoir is formed by rolled earth dam. Regulated storage began Jan. 18, 1974; conservation pool was first filled Mar. 12, 1974. Total capacity, 1,561,500 acre-ft (1.93 km^3) at elevation 452.5 ft (137.92 m), top of dam, 966,700 acre-ft (1.19 km^3) at elevation 437.5 ft (133.35 m), top of flood control pool. Dead storage 21,080 acre-ft (26.0 hm^3) at elevation 387.5 ft (118.11 m), crest of gated spillway. Figures given herein represent total contents. Reservoir is used for flood control, water supply, recreation and conservation.

COOPERATION.--Records furnished by Corps of Engineers.

Capacity table (elevation, in feet, and contents in acre-feet)

402	126,100	416	354,800
406	177,900	421	472,300
411	257,400	426	605,400

CONTENTS, IN ACRE-FEET, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	160600	327800	169500	204200	233300	162600	251100	161100	175300	163300	149400	141300
2	158900	390900	160300	205800	269900	158300	238900	158000	172900	163300	149300	141200
3	158700	428000	158100	206100	295900	155300	223300	175100	170200	163300	149200	140900
4	158500	445700	157600	204000	314500	154500	207900	200200	166500	161800	148500	140700
5	159200	453400	160800	201100	328200	154900	193300	208900	162200	160000	148000	140400
6	160000	445000	190200	198200	323500	154700	178200	198700	158900	158300	147300	140300
7	160100	424700	217300	196900	308300	155000	167700	188700	162300	156900	146700	139800
8	160300	410600	229100	198100	291100	154700	167100	177800	176100	156900	146500	139600
9	160400	406600	223700	194700	269700	156500	167500	171400	186800	156500	145600	139300
10	160600	462200	208100	191400	244900	162000	164300	169100	208200	156200	145000	139300
11	160700	501500	194400	189600	230200	166500	160100	161600	222600	156200	144100	139800
12	160800	528700	181300	185600	209900	173700	158000	159700	226200	155800	143400	139300
13	160800	531800	174500	178200	190200	179800	155400	160000	220500	155300	143100	139200
14	162300	515700	178500	169900	177600	174500	155100	163100	214900	154900	142300	138400
15	163000	492500	166300	161100	173800	169800	157200	166100	224600	154300	142200	141500
16	162500	467800	182900	155500	171500	176800	158500	163300	237000	154200	142200	149400
17	161900	442100	166100	155300	170000	179400	159200	162000	214100	153600	142400	154200
18	161400	417300	158900	155800	169000	174500	161200	160100	198200	153100	143600	156800
19	161200	391600	191000	156200	167200	167100	159600	158400	182800	152800	143600	158400
20	161200	364200	193000	156100	162500	162000	159600	159100	170000	152400	143600	158400
21	161400	337400	194800	156400	160100	161900	159300	159100	167700	151700	143600	159200
22	161400	309700	196500	156400	164300	162300	158900	159100	164300	151200	143600	159100
23	161500	289000	198400	156400	161900	162300	158800	159100	159500	151100	143500	159500
24	161600	287300	199700	157700	160800	161500	158500	159100	158300	150800	143000	159500
25	161900	287600	199000	158500	186500	160400	158300	158700	156800	150400	142800	159300
26	161900	275800	199000	159100	180400	161100	165400	160300	156500	150300	142400	158700
27	161900	249400	199300	159500	172500	173200	169500	159100	157300	151900	141900	158400
28	164300	223300	199700	160300	166100	209100	169500	162000	159700	151700	141800	158000
29	165700	203400	200200	161000	---	240600	166000	169200	161100	150800	141500	157600
30	166700	186100	201200	161600	---	262700	165800	174900	162300	150700	141500	157300
31	243400	---	203400	168600	---	263200	---	176300	---	149900	141800	---
MAX	243400	531800	229100	206100	328200	263200	251100	208900	237000	163300	149400	159500
MIN	158500	186100	157600	155300	160100	154500	155100	158000	156500	149900	141500	138400
(†)	410.20	406.55	407.72	406.72	405.13	411.33	405.11	405.88	404.85	403.93	403.27	404.5
(‡)	+80,800	-57,300	+17,300	-14,800	-22,500	+97,100	-97,400	+10,500	-14,000	-12,400	-8,100	+15,500

WTR YR 1975.....‡ -5,300

† Elevation, in feet, at end of month.
‡ Change in contents, in acre-ft.

07336820 RED RIVER NEAR DE KALB, TEX.

LOCATION.--Lat 33°41'15", long 94°41'39", Bowie, Tex.-McCurtain, Okla. County line, near left bank at downstream side of bridge on U.S. Highway 259, 4.8 miles (7.7 km) upstream from North Mill Creek, 13 miles (21 km) north of De Kalb, and at mile 556.9 (896.1 km).

DRAINAGE AREA.--47,348 mi^2 (122,631 km^2), of which 5,936 mi^2 (15,374 km^2) is probably noncontributing.

PERIOD OF RECORD.--December 1967 to current year.

GAGE.--Water-stage recorder. Datum of gage is 302.92 ft (92.330 m) above mean sea level.

AVERAGE DISCHARGE.--7 years, 13,900 ft^3/s (393.6 m^3/s), 10,100,000 acre-ft/yr (12.5 km^3/yr).

EXTREMES.--Current year: Maximum discharge, 96,500 ft^3/s (2,730 m^3/s) Nov. 2, gage height, 26.12 ft (7.961 m), from graph based on gage readings; minimum, 1,180 ft^3/s (33.4 m^3/s) Sept. 11, gage height, 8.95 ft (2.728 m), from graph based on gage readings.
Period of record: Maximum discharge, 189,000 ft^3/s (5,350 m^3/s) Dec. 11, 1971, gage height, 31.55 ft (9.616 m), from graph based on gage readings; minimum, 431 ft^3/s (12.2 m^3/s) Sept. 4, 5, 1972.
Historic: Maximum stage since 1957, 32.2 ft (9.81 m) in June 1957. Greatest flood since 1936 occurred in February 1938, stage unknown.

REMARKS.--Discharge records good. Flow partly regulated by Lake Texoma (station 07331500) approximately 169 miles (272 km) upstream. Water-quality records for the current year are published in the Texas State report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	45400	60400	31200	5160	16000	34300	39600	14300	50300	24700	26200	5710
2	39700	93400	28600	9160	54600	32100	41200	9840	47100	24300	31800	5670
3	33900	70200	23200	11400	65700	31500	42700	12600	47300	19500	32300	5610
4	27900	54900	17400	11600	52300	28600	42600	20300	51200	14800	31500	4850
5	19700	59300	14900	15000	42100	20500	39400	26600	58700	12600	31200	4290
6	14800	74500	19800	17900	42400	16000	35000	29000	55300	11400	29300	5520
7	13400	80400	30200	16500	45500	17300	29000	29200	46400	9420	22000	5760
8	10400	79900	29400	12700	44700	16300	25900	30300	42000	8590	15600	5670
9	8490	70800	23900	10000	43000	15600	29400	31300	36200	8050	12400	4490
10	8170	66200	22100	9630	41000	16700	42900	24800	44200	7630	11600	2500
11	8560	79400	23900	11300	38300	16800	42300	19200	62900	5840	11500	1420
12	8630	79000	28900	13000	34600	21300	33300	16600	69500	4430	10900	1950
13	8800	54900	35500	13900	32400	20800	27900	12800	52400	3690	10700	3640
14	8460	46300	28600	14400	31400	24700	26000	11300	39500	4450	10600	3810
15	7440	50900	18000	15000	26200	26900	21600	16000	40900	3770	10500	3460
16	6490	56100	13600	15800	20200	28900	18700	24800	50100	2720	10200	3500
17	7100	52200	9870	13200	18500	31300	18000	29100	56900	1950	10200	3350
18	7120	42400	7320	8130	17200	37300	17600	25900	57000	3180	10300	3890
19	5490	36400	6690	6410	13400	36900	17100	23200	46100	5350	9720	6890
20	4710	37000	7760	5840	11800	37300	16600	17200	35300	5670	9360	9810
21	4350	33800	8080	5290	11700	33600	16200	10300	22800	5740	9190	9600
22	3930	30200	6610	3710	9600	31600	15900	7840	17800	5200	9510	9190
23	2570	31500	5390	3330	7920	29300	15600	6760	16300	2750	9330	8130
24	1800	42500	5420	4250	8640	28300	12600	5950	15000	2220	8780	6860
25	2360	42000	4760	4870	17300	25900	9080	5760	14000	4680	8450	6340
26	3540	34300	4230	4930	28800	21700	7920	6240	13000	5780	8340	6130
27	3730	30700	4210	4640	34100	18800	7500	22600	12700	5860	7630	6020
28	4030	34500	4600	4430	36000	22600	8670	34200	19000	4830	6590	5970
29	5330	34000	4990	2750	---	31400	15400	44100	30900	6100	5760	5910
30	3440	35100	5820	2500	---	38600	19400	52600	30300	6970	5350	4780
31	6000	---	4970	5080	---	37200	---	53200	---	14300	5440	---
TOTAL	335740	1595200	480120	281810	845360	834100	735070	675890	1181100	248470	432250	162720
MEAN	10830	53170	15490	9091	30190	26910	24500	21800	39370	8015	13940	5424
MAX	45400	93400	35500	17900	65700	38900	42900	53200	69500	24700	32300	9810
MIN	1800	30200	4210	2500	7920	15600	7500	5760	12700	1950	5350	1420
AC-FT	665900	3164000	952300	559000	1677000	1654000	1456000	1341000	2343000	492800	857400	322800

CAL YR 1974 TOTAL 5652560 MEAN 15490 MAX 93400 MIN 1130 AC-FT 11210000
WTR YR 1975 TOTAL 7807830 MEAN 21390 MAX 93400 MIN 1420 AC-FT 15490000

07337000 RED RIVER AT INDEX, ARK.

LOCATION.--Lat 33°33'07", long 94°02'28", in NW 1/4 SW 1/4 sec.7, T.14 S., R.28 W., Miller County, near right bank on downstream side of bridge on U.S. Highway 71 at Index, 2.2 mi (3.5 km) south of Ogden, 20.6 mi (33.1 km) upstream from Little River, and at mile 485.3 (780.8 km).

DRAINAGE AREA.--48,030 mi^2 (124,400 km^2), of which 5,936 mi^2 (15,370 km^2) is probably noncontributing.

PERIOD OF RECORD.--July 1936 to current year. Gage-height records collected at same site since 1917 are contained in reports of National Weather Service.

GAGE.--Water-stage recorder. Datum of gage is 246.87 ft (75.246 m) above mean sea level. Prior to Dec. 12, 1939, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--39 years, 12,140 ft^3/s (344 m^3/s), 8,795,000 acre-ft/yr (10,800 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 71,200 ft^3/s (2,020 m^3/s) Nov. 12, gage height, 19.64 ft (5.986 m); minimum daily, 2,510 ft^3/s (71.1 m^3/s) Sept. 13.
Period of record: Maximum discharge, 297,000 ft^3/s (8,410 m^3/s) Feb. 23, 1938, gage height, 34.25 ft (10.439 m); minimum, 378 ft^3/s (10.7 m^3/s) Nov. 28, 1956.

REMARKS.--Records good except for days of no gage-height record, which are fair. Some regulation by Lake Texoma (Texas), 241 mi (388 km) upstream since Oct. 31, 1943, capacity, 5,392,900 acre-ft (6,650 hm^3), by Pat Mayse Lake (Texas) since Sept. 28, 1967, capacity, 352,700 acre-ft (435 hm^3), and by Hugo Lake (Oklahoma) since Jan. 18, 1974, capacity, 966,700 acre-ft (1,190 hm^3).

REVISIONS.--WSP 1211: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	40800	18800	38500	7380	7970	26400	30300	16800	38600	30000	14500	4780
2	36000	53200	34500	6970	30100	26900	32300	15200	35300	25000	24500	4970
3	32100	63800	30800	9890	55900	25600	33200	18200	33800	25000	29200	5400
4	27700	49800	25700	12900	55500	24700	34400	24400	34500	19000	29300	5230
5	23700	43600	20900	13500	41800	21400	33600	26500	38000	14000	28400	4960
6	18600	51100	21500	14900	35000	18100	30700	26300	42000	11000	28000	4650
7	15300	60500	30800	16400	35600	16800	27400	26000	38600	10000	25900	4680
8	13600	63400	35000	15400	37100	16400	24700	25500	33900	8000	20500	5190
9	11200	64300	30300	13100	36400	15800	24200	25900	32200	6900	15800	5210
10	9300	60000	25100	11100	35100	15800	26500	26700	29700	6200	13100	5080
11	8530	63500	23600	10400	32900	17400	35400	22500	35100	5200	12200	4100
12	8660	69600	25000	11300	30500	20100	32500	17800	46800	4200	11800	2980
13	8730	64600	28500	12500	27900	22600	26900	15500	46900	3500	11400	2510
14	8840	46500	30500	13300	26600	23400	24700	13700	38700	2800	11000	3120
15	8910	41300	24400	13700	26000	24100	23500	12400	33000	3600	10900	3920
16	8050	45000	17400	14000	22800	23900	20300	14200	34300	3500	10800	4010
17	7310	49200	14200	14300	19600	24700	17900	21500	39700	2800	10700	3830
18	7270	45400	11500	13300	18300	26900	17100	24200	43500	2600	10700	3780
19	7540	38600	9020	10000	17300	30900	16600	22200	40100	2700	10800	3740
20	6620	35900	7900	7860	14800	31100	16100	19800	35900	4500	10100	5590
21	5740	35100	8420	6970	13200	28100	15500	16800	30800	4900	9580	8270
22	5310	32700	8930	6420	13000	25300	15200	13600	24600	5000	8960	8220
23	5080	31500	8200	5400	11900	24100	14800	10700	20400	4500	8980	7520
24	4470	40100	6890	4730	10200	23400	14400	9890	18500	3000	9140	6890
25	3770	52700	6730	4880	10300	23100	13100	8510	17100	2600	8580	6140
26	3490	46600	6020	5380	16600	20400	11200	7780	16000	4000	7950	5570
27	4050	37400	5590	5590	24800	19400	10200	8840	15000	5000	7690	5330
28	4880	35200	5550	5620	26000	20000	9820	19200	14000	5200	7290	5210
29	6420	36000	5720	5420	---	25300	10000	27800	31000	4500	6500	5140
30	7060	38900	6140	4860	---	30800	13200	35100	32000	7000	5930	5110
31	7630	---	7310	4440	---	32300	---	38400	---	10000	5300	---
TOTAL	366660	1414300	560620	301910	735170	727200	657720	611920	970000	246200	425500	151130
MEAN	11830	47140	18080	9739	26260	23460	21920	19740	32330	7942	13730	5036
MAX	40800	69600	38500	16400	55900	32300	35400	38400	46900	30000	29300	8270
MIN	3490	18800	5550	4440	7970	15800	9820	7780	14000	2600	5300	2510
AC-FT	727300	2805000	1112000	598800	1458000	1442000	1305000	1214000	1924000	488300	844000	299800

CAL YR 1974 TOTAL 5498640 MEAN 15060 MAX 69600 MIN 2040 AC-FT 10910000
WTR YR 1975 TOTAL 7168330 MEAN 19640 MAX 69600 MIN 2510 AC-FT 14220000

NOTE.--No gage-height record June 27 to July 31.

07337300 PINE CREEK LAKE NEAR WRIGHT CITY, OKLA.

LOCATION.--Lat 34°06'43", long 95°04'46", in NE 1/4 NW 1/4 sec.23, T.5 S., R.21 E., McCurtain County, at left of outlet works of dam on Little River, 4.7 mi (7.6 km) upstream from bridge on State Highway 98, 5.0 mi (8.0 km) northwest of Wright City, and at mile 145.3 (233.8 km).

DRAINAGE AREA.--635 mi^2 (1,645 km^2).

PERIOD OF RECORD.--June 1969 to current year. Prior to October 1970 published as Pine Creek Reservoir near Wright City.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level.

EXTREMES.--Current year: Maximum contents, 224,200 acre-ft (276 hm^3) Nov. 13, elevation, 462.64 ft (141.013 m); minimum, 49,990 acre-ft (61.6 hm^3) Sept. 13, 14, elevation, 436.97 ft (133.188 m).
Period of record: Maximum contents, 348,410 acre-ft (430 hm^3) Dec. 16, 1971, elevation, 472.57 ft (144.039 m); minimum since conservation pool was first filled, 28,220 acre-ft (34.8 hm^3) Oct. 21, 1972, elevation, 429.34 ft (130.863 m).

REMARKS.--Reservoir is formed by rolled earth dam; regulated storage began June 1, 1969; conservation pool was first filled Jan. 7, 1970. Total capacity, 1,136,000 acre-ft (1.40 km^3) at elevation 509.0 ft (153.14 m), top of dam, 465,800 acre-ft (574 hm^3) at elevation 480.0 ft (146.30 m), crest of spillway, 53,800 acre-ft (66.3 hm^3) at elevation 438.0 ft (133.50 m) top of conservation pool, 7,140 acre-ft (8.80 hm^3) dead storage at elevation 414.0 ft (126.19 m). Figures given herein represent total contents. Reservoir is designed for flood control, municipal and industrial water supply, and recreation.

COOPERATION.--Records furnished by Corps of Engineers.

Capacity table (elevation, in feet, and contents, in acre-feet)

436	46,650	451	122,300
441	65,970	457	169,400
446	90,920	463	228,100

CONTENTS, IN ACRE-FEET, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	156500	167100	87060	54660	103100	56470	96830	54890	62440	60440	52710	52080
2	144600	174800	76800	55380	118200	54540	86840	54620	57770	59540	52710	51970
3	132800	180900	66840	56510	127700	53600	77050	72120	55850	58610	52600	51860
4	121300	201000	59210	57490	133900	53750	69610	79810	54770	58210	52560	51720
5	109600	200900	56940	58330	136900	54130	65450	83010	54090	57690	52450	51500
6	98120	192700	62020	58050	133000	54390	61180	82170	54010	57140	52380	51320
7	88140	182800	92270	56740	125200	54510	56700	80110	56240	56200	52190	51100
8	75190	172700	97410	55270	116500	54390	54540	72550	59700	55500	52080	50920
9	64400	162500	100200	54540	106700	54580	54350	65930	70720	54730	51970	50810
10	57610	199600	97000	54660	96830	55850	55120	62350	76700	54200	51900	50640
11	55810	214800	93180	54810	86790	57650	55460	57060	75330	54200	51750	50490
12	55580	220200	86680	54700	78650	58690	55120	54200	69340	54090	51610	50310
13	55350	223200	78300	54580	66900	56740	54620	53900	63590	53980	51460	50140
14	55580	214900	69570	54390	60850	54850	54240	57930	70950	53790	51280	50030
15	55580	205800	60520	54200	60110	54960	53980	59780	80980	53680	51210	52630
16	55500	192500	54730	54170	59330	60110	54050	58530	84010	53600	51280	53340
17	55460	181100	54010	54200	58690	63120	53980	57730	78600	53560	52450	53560
18	55350	169700	53940	54430	57890	61560	53900	56510	71000	53380	52660	53750
19	55120	158300	54130	54620	56940	58850	53710	55040	61060	53340	53190	53900
20	54810	146300	54320	54620	55960	57100	53530	54280	55850	53270	53230	53830
21	54580	134800	54660	54730	55190	56430	53450	54660	54810	53190	53230	53830
22	54620	123500	55080	54770	55770	56080	53680	54890	53710	53080	53190	53750
23	54770	120700	55310	54770	56610	55770	54090	55000	53560	52930	53150	53680
24	54810	127700	55000	54930	60400	54930	54430	55040	53640	52860	53000	53560
25	54890	129400	54620	55190	60930	54390	55150	55080	53940	52780	52820	53490
26	54890	132900	54430	55230	61890	54510	55430	55190	54280	52710	52710	53380
27	54890	130600	54280	55350	60310	63030	56740	55560	54510	53000	52630	53300
28	54890	119600	54170	55420	57970	86790	57100	64230	54700	53000	52520	53190
29	56540	108000	54130	55460	---	97410	56350	70210	58570	52930	52450	53150
30	57850	97710	54050	55580	---	103200	55730	72170	60730	52860	52270	53080
31	142100	---	54280	76210	---	103900	---	67980	---	52820	52160	---
MAX	156500	223200	100200	76210	136900	103900	96830	83010	84010	60440	53230	53900
MIN	54580	97710	53940	54170	55190	53600	53450	53900	53560	52710	51210	50030
(†)	453.70	447.18	438.14	443.20	439.09	448.21	438.52	441.45	439.77	437.75	437.57	437.82
(‡)	-25,800	-44,390	-43,430	+21,930	-18,240	+45,930	-48,170	+12,250	-7,250	-7,910	-660	+920

CAL YR 1974.....‡ -9,010
WTR YR 1975.....‡ -114,820

† Elevation, in feet, at end of month.
‡ Change in contents, in acre-ft.

07337500 LITTLE RIVER NEAR WRIGHT CITY, OKLA.

LOCATION.--Lat 34°04'10", long 95°02'47", in NE 1/4 NW 1/4 sec.6, T.6 S., R.22 E., McCurtain County, on left bank on downstream side of bridge on State Highway 98, 1.8 mi (2.9 km) upstream from White Oak Creek, 2.0 mi (3.2 km) west of Wright City, 4.7 mi (7.6 km) downstream from Pine Creek Lake, and at mile 140.6 (226.2 km).

DRAINAGE AREA.--645 mi^2 (1,671 km^2).

PERIOD OF RECORD.--October 1929 to September 1931, October 1944 to current year. Monthly discharge only for some periods, published in WSP 1311.

GAGE.--Water-stage recorder. Datum of gage is 346.76 ft (105.692 m) above mean sea level. Oct. 12, 1929, to Sept. 30, 1931, nonrecording gage at railroad bridge 1.0 mi (1.6 km) downstream at datum 4.15 ft (1.265 m) higher. Dec. 6, 1944, to July 30, 1951, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--33 years, 957 ft^3/s (27.10 m^3/s), 693,300 acre-ft/yr (855 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 8,210 ft^3/s (233 m^3/s) Nov. 10, gage height, 24.81 ft (7.562 m); minimum daily, 9.2 ft^3/s (0.26 m^3/s) Oct. 22.

Period of record: Maximum discharge, 78,200 ft^3/s (2,210 m^3/s) May 6, 1961, gage height, 45.60 ft (13.899 m); maximum gage height, 45.77 ft (13.951 m) Sept. 16, 1950; no flow at times in 1930, 1954, 1956, 1964.

REMARKS.--Records good. Except for 10 mi^2 (25.9 km^2) intervening area, flow completely regulated since June 1969 by Pine Creek Lake. (See sta. 07337300).

COOPERATION.--Gage height record and 18 discharge measurements furnished by Corps of Engineers; records computed by Geological Survey.

REVISIONS.--WSP 1211: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6550	50	6370	451	75	2020	4850	634	4220	861	30	22
2	6490	50	6170	458	75	2000	5990	501	3730	937	30	22
3	6420	51	6010	467	75	1320	5970	150	1910	877	26	22
4	6340	1020	5260	454	765	541	5250	50	952	459	35	22
5	6260	4690	2590	453	2740	445	3110	147	796	437	35	17
6	6170	6810	1000	895	4640	445	2940	1700	214	435	30	17
7	6070	6860	50	1540	6340	444	2910	4110	193	435	26	13
8	5980	6770	49	1540	6420	440	3110	5860	174	435	26	13
9	5860	6680	437	1090	6330	457	1990	5390	987	435	26	13
10	4540	6730	3050	469	6230	486	634	4380	2610	333	40	17
11	1480	2000	4730	460	6130	457	663	4020	3220	43	30	13
12	198	70	5410	444	6020	1760	903	3020	4500	40	26	13
13	195	778	6100	442	5900	3480	921	894	4690	40	17	13
14	215	4590	6030	446	4700	5130	956	580	3310	35	9.6	17
15	221	6680	5910	446	1020	1560	734	1030	1950	35	9.6	35
16	202	6760	4820	329	981	1750	459	2140	770	26	9.6	86
17	204	6720	1380	236	979	2040	450	1290	3780	22	47	35
18	203	6660	718	215	967	3520	441	1250	5010	26	55	17
19	202	6590	433	210	958	3520	373	1240	5850	22	40	13
20	203	6530	389	209	954	2820	356	861	4480	22	30	13
21	144	6450	220	209	854	1670	276	161	1010	22	22	13
22	9.2	6380	226	209	352	1250	119	155	937	22	22	13
23	9.5	6290	278	209	62	1250	54	150	548	22	17	13
24	10	5740	443	218	642	1240	45	156	161	26	17	13
25	12	1590	444	223	1580	996	42	164	146	35	17	13
26	13	48	450	217	1580	540	35	175	76	30	17	13
27	15	1870	450	223	2470	323	30	191	75	35	17	13
28	29	6130	451	238	2970	150	170	850	79	59	17	13
29	51	6490	462	240	---	70	625	901	81	43	17	13
30	29	6610	457	242	---	70	631	2880	196	35	22	13
31	100	---	467	354	---	1240	---	4300	---	30	22	---
TOTAL	64424.7	134667	71254	13836	72609	41434	45037	49350	56655	6314	784.8	563
MEAN	2078	4490	2299	446	2600	1337	1501	1592	1889	204	25.3	18.8
MAX	6550	6860	6370	1540	6420	3520	5990	5860	5850	937	55	86
MIN	9.2	48	49	209	62	70	30	50	75	22	9.6	13
AC-FT	127800	267200	141300	27440	144000	82180	89330	97890	112400	12520	1560	1120

CAL YR 1974 TOTAL 612382.2 MEAN 1678 MAX 6940 MIN 3.1 AC-FT 1215000
WTR YR 1975 TOTAL 557148.5 MEAN 1526 MAX 6860 MIN 9.2 AC-FT 1105000

07337900 GLOVER CREEK NEAR GLOVER, OKLA.

LOCATION.--Lat 34°05'51", long 94°54'07", in NW 1/4 NE 1/4 sec.28, T.5 S., R.23 E., McCurtain County, near right bank on downstream side of pier of bridge on State Highways 3 and 7, 2.0 mi (3.2 km) north of Glover, 11.0 mi (17.7 km) northwest of Broken Bow, and at mile 9.2 (14.8 km).

DRAINAGE AREA.--315 mi^2 (816 km^2).

PERIOD OF RECORD.--October 1961 to current year.

GAGE.--Water-stage recorder. Datum of gage is 378.70 ft (115.428 m) above mean sea level.

AVERAGE DISCHARGE.--14 years, 483 ft^3/s (13.68 m^3/s), 20.82 in/yr (529 mm/yr), 349,900 acre-ft/yr (431 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 35,700 ft^3/s (1,010 m^3/s) Oct. 31, gage height, 20.44 ft (6.230 m); minimum, 2.7 ft^3/s (0.076 m^3/s) Sept. 9, 11-14.
Period of record: Maximum discharge, 98,600 ft^3/s (2,790 m^3/s) Dec. 10, 1971, gage height, 29.72 ft (9.059 m); no flow at times in 1966, 1968, 1970, 1972, 1973.
Flood in May 1961 reached a stage of 28.84 ft (8.790 m), from floodmark. Flood in 1908 was higher than in May 1961, from information by local residents.

REMARKS.--Records good.

COOPERATION.--Gage height record and 18 discharge measurements furnished by Corps of Engineers; records computed by Geological Survey.

REVISIONS (WATER YEARS).--WSP 2120: 1962(M), 1965(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	448	6760	906	241	6660	409	1080	191	914	276	19	6.3
2	338	2310	657	337	4450	338	784	181	565	184	18	5.1
3	259	1540	516	565	2590	278	569	5830	384	129	19	4.4
4	207	5600	433	620	1990	246	439	2430	278	93	19	3.9
5	171	3010	390	517	2010	227	362	1360	210	73	15	3.6
6	143	1680	6470	446	1770	207	305	916	166	61	14	4.2
7	122	1240	3000	386	1320	188	266	706	254	62	12	3.6
8	108	1030	1690	344	1070	171	675	667	670	51	11	3.1
9	98	793	1240	299	780	155	1210	492	2320	42	10	3.5
10	91	11200	991	274	597	373	826	1090	1680	35	11	5.0
11	83	5270	1180	269	488	571	605	503	1230	30	13	3.2
12	75	2160	1210	234	409	525	458	340	781	25	11	3.0
13	70	1400	1010	192	335	683	374	289	484	21	8.5	2.9
14	73	1050	801	170	282	880	391	1190	3300	18	8.1	3.2
15	194	711	645	158	252	735	378	1180	2690	16	7.3	39
16	219	528	517	152	231	1770	311	691	1630	14	7.0	116
17	160	448	422	143	227	1990	265	418	1120	13	10	51
18	127	382	361	140	215	1550	240	286	716	12	20	38
19	103	335	313	138	184	1350	222	211	457	11	35	51
20	88	298	271	130	161	1120	189	171	321	10	34	36
21	76	244	238	117	146	908	155	149	234	8.7	27	27
22	68	208	206	109	190	717	141	135	181	12	20	22
23	61	378	187	103	513	625	130	124	142	8.8	16	18
24	59	8230	174	102	773	917	123	104	113	7.6	13	15
25	57	2170	161	114	685	610	160	88	95	7.7	11	13
26	55	1390	145	137	665	485	411	78	93	16	9.9	12
27	67	1080	139	133	599	1530	365	84	90	28	9.0	11
28	99	738	147	123	489	6890	297	5760	74	41	7.3	10
29	262	929	142	122	---	3710	261	2710	832	30	7.5	9.2
30	432	1260	140	113	---	2000	229	2620	432	21	6.5	8.2
31	14800	---	157	3610	---	1400	---	1390	---	21	6.4	---
TOTAL	19213	64372	24861	10540	30081	35558	12221	32384	22656	1377.8	435.5	531.4
MEAN	620	2146	802	340	1074	1147	407	1045	755	44.4	14.0	17.7
MAX	14800	11200	6470	3610	6660	8890	1210	5830	3300	276	35	116
MIN	55	208	139	102	146	155	123	78	74	7.6	6.4	2.9
CFSM	1.97	6.81	2.55	1.08	3.41	3.64	1.29	3.32	2.40	.14	.04	.06
IN.	2.27	7.60	2.94	1.24	3.55	4.20	1.44	3.82	2.68	.16	.05	.06
AC-FT	38110	127700	49310	20910	59670	70530	24240	64230	44940	2730	864	1050

CAL YR 1974 TOTAL 321979.0 MEAN 882 MAX 21800 MIN 5.3 CFSM 2.80 IN 38.02 AC-FT 638600
WTR YR 1975 TOTAL 254230.7 MEAN 697 MAX 14800 MIN 2.9 CFSM 2.21 IN 30.02 AC-FT 504300

PEAK DISCHARGE (BASE, 8,000 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-31	1845	20.44	35,700	1-31	2000	12.31	11,100
11-4	1330	11.65	9,820	2-1	2115	11.69	9,890
11-10	1800	17.11	23,300	3-28	1330	12.76	12,400
11-24	0500	14.69	16,400	5-3	1230	13.11	12,800
12-6	1245	12.21	10,900	5-28	0930	13.07	12,700

07338500 LITTLE RIVER BELOW LUKFATA CREEK, NEAR IDABEL, OKLA.

LOCATION.--Lat 33°56'28", long 94°45'30", in SE 1/4 SE 1/4 sec.14, T.7 S., R.24 E., McCurtain County, on left bank at downstream side of bridge on U.S. Highway 70 just downstream from Lukfata Creek, 5.0 mi (8.0 km) northeast of Idabel, and at mile 103.4 (166.4 km).

DRAINAGE AREA.--1,226 mi^2 (3,175 hm^2).

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

GAGE.--Water-stage recorder. Datum of gage is 312.08 ft (95.122 m) above mean sea level. Oct. 1, 1946, to Oct. 26, 1950, and for stages below 9.0 ft (2.7 m) Oct. 26, 1950, to Oct. 10, 1951, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--29 years, 1,735 ft^3/s (49.14 m^3/s), 1,257,000 acre-ft/yr (1.55 km^3/yr).

EXTREMES.--Current year: Maximum discharge, 12,400 ft^3/s (351 m^3/s) Nov. 12, gage height, 27.80 ft (8.473 m); minimum daily, 22 ft^3/s (0.62 m^3/s) Sept. 11.
Period of record: Maximum discharge, 103,000 ft^3/s (2,920 m^3/s) Dec. 10, 1971, gage height, 39.39 ft (12.006 m); minimum, 0.4 ft^3/s (0.011 m^3/s) Sept. 15, 16, Sept. 21 to Oct. 1, 1956.
Flood in February 1938 reached a stage of 39.7 ft (12.10 m), from information by local residents, discharge, 86,000 ft^3/s (2,440 m^3/s).

REMARKS.--Records good. Flow regulated since June 1969 by Pine Creek Lake 41.9 miles (67.4 km) upstream. (See sta. 07337300).

COOPERATION.--Gage-height record and 23 discharge measurements furnished by Corps of Engineers; records computed by Geological Survey.

REVISIONS.--WSP 1211: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6970	9080	8430	1070	8150	3280	3620	1020	5490	916	83	44
2	7140	11300	7940	1070	11800	2560	5450	1110	4960	1290	79	44
3	7070	9210	7410	1440	11100	2380	6350	5690	3970	1200	75	43
4	6940	5100	6910	1580	8510	1700	6520	9280	2240	1000	70	43
5	6770	6600	5910	1400	5700	1050	5810	7210	1360	680	72	42
6	6570	7430	8240	1270	5510	911	4020	3270	993	618	76	51
7	6390	7870	10300	1700	6330	877	3380	3140	562	588	65	41
8	6260	7930	8550	2070	7170	832	3600	4660	834	582	55	34
9	6130	7770	4270	2030	7360	807	4330	6010	4040	581	61	32
10	5950	9190	2430	1500	7240	1190	3240	6180	5580	561	70	25
11	4460	11800	4570	1070	7060	1410	1920	5590	4960	452	56	22
12	1450	12000	5970	978	6640	1390	1650	4720	4540	202	56	24
13	447	9190	6520	663	6620	3080	1620	3230	4920	136	53	25
14	420	4900	6900	813	6410	4610	1730	1910	5660	109	52	27
15	529	5400	6920	793	5110	4090	1770	3520	7160	97	50	42
16	665	6680	6730	778	2070	3220	1300	3410	6350	89	46	207
17	580	7130	5520	636	1510	4380	1030	2870	4030	79	46	496
18	505	7240	2590	544	1480	4610	965	1980	4540	70	245	252
19	456	7190	1390	528	1420	5020	921	1730	5290	64	287	149
20	417	7070	1070	511	1360	4800	794	1670	5840	60	166	115
21	385	6910	913	485	1320	3790	720	1200	4590	58	127	106
22	338	6740	721	469	1230	2570	563	661	1760	56	104	89
23	210	6630	685	457	1410	2120	411	528	1290	56	85	74
24	160	10200	746	457	1550	2260	335	499	769	57	72	66
25	150	11900	871	505	2000	2170	331	526	442	64	63	60
26	148	10100	838	524	2450	1660	417	459	387	94	57	54
27	144	5250	818	513	2400	1360	587	457	295	141	58	50
28	178	3940	814	501	3160	4670	519	1390	265	172	54	48
29	565	6440	855	504	---	9120	754	6170	261	206	48	47
30	615	8410	888	498	---	8360	1140	6090	783	150	45	44
31	2020	---	1020	1870	---	4590	---	5840	---	102	43	---
TOTAL	81032	236600	127739	29227	134270	94867	65797	101960	94161	10530	2521	2396
MEAN	2614	7887	4121	943	4795	3060	2193	3289	3139	340	81.3	79.9
MAX	7140	12000	10300	2070	11800	9120	6520	9280	7160	1290	287	496
MIN	144	3940	685	457	1230	807	331	457	261	56	43	22
AC-FT	160700	469300	253400	57970	266300	188200	130500	202200	186800	20890	5000	4750

CAL YR 1974 TOTAL 1108791 MEAN 3038 MAX 14600 MIN 30 AC-FT 2199000
WTR YR 1975 TOTAL 981100 MEAN 2688 MAX 12000 MIN 22 AC-FT 1946000

07338900 BROKEN BOW LAKE NEAR BROKEN BOW, OKLA.

LOCATION.--Lat 34°08'35", long 94°41'00", in SW 1/4 sec.3, T.5 S., R.25 E., McCurtain County, at intake structure on upstream side of dam on Mountain Fork, 9.0 mi (14.5 km) northeast of Broken Bow, and at mile 20.3 (32.7 km).

DRAINAGE AREA.--754 mi² (1,953 km²).

PERIOD OF RECORD.--October 1968 to current year. Prior to October 1970 published as Broken Bow Reservoir near Broken Bow.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level.

EXTREMES.--Current year: Maximum contents, 1,027,000 acre-ft (1.27 km³) Mar. 31, elevation, 606.87 ft (184.974 m); minimum, 807,300 acre-ft (995 hm³) Sept. 30, elevation, 591.38 ft (180.253 m).
Period of record: Maximum contents, 1,178,000 acre-ft (1.45 km³), Dec. 17, 1971, elevation, 616.41 ft (187.882 m); minimum since conservation pool was first filled, 672,000 acre-ft (829 hm³) Oct. 21, 1972, elevation 580.48 ft (176.930 m).

REMARKS.--Reservoir is formed by a rolled earth and gravel structure. Regulated storage began Oct. 3, 1968; conservation pool was first filled Jan. 30, 1969. Total capacity, 1,368,000 acre-ft (1.69 km³) at elevation 627.5 ft (191.26 m), top of flood pool and spillway gates, 918,100 acre ft (1.13 km³) at elevation 599.5 ft (182.73 m), top of power pool, and 448,200 acre-ft (553 hm³) at elevation 559.0 ft (170.38 m), conservation pool. Figures given herein represent total contents. Reservoir is used for flood control, power development and water supply.

COOPERATION.--Records furnished by Corps of Engineers.

Capacity table (elevation, in feet, and contents, in acre-feet)

591	802,300	600	925,200
594	842,100	603	968,600
597	883,000	607	1,029,000

CONTENTS, IN ACRE-FEET, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	976400	951200	965800	922600	956900	923200	1015000	913100	920900	904800	856100	826000
2	967400	960100	958500	917100	975400	924500	1004000	914100	919200	901400	856000	822200
3	957600	966100	950200	917500	987100	918200	993200	951900	915700	897800	856500	818500
4	948300	984800	944800	920800	991800	915500	981400	964500	911400	897900	854600	816000
5	947700	989900	942200	922300	992700	915500	969300	963800	907300	897800	854800	814600
6	948300	984100	978000	921600	986900	913500	957300	959400	903200	894700	852900	814200
7	943200	975700	992000	920500	980700	914400	946400	955000	906200	893000	852100	814100
8	939100	966200	998300	920600	977600	914800	940200	951400	913500	892200	850800	813500
9	933600	957000	998100	916900	974200	916600	937800	952700	919500	890800	850600	813200
10	930600	997700	993000	911100	967400	914200	934500	950100	932600	890200	850400	811100
11	926600	1016000	985200	913000	959500	913300	930200	949000	937100	887900	849400	811500
12	923200	1019000	977600	912100	950100	912100	927900	943800	938900	887600	849100	809900
13	923000	1019000	967400	909700	939500	909900	925500	940500	938800	887200	847100	809500
14	919100	1009000	957900	907900	930600	912700	921000	935200	952200	885800	846800	809400
15	914200	999900	948200	906600	930500	917100	916600	929900	962400	885400	845600	810600
16	913700	989800	939200	904900	930900	925600	913400	923800	964000	883900	845400	811500
17	912400	979500	936300	904200	927500	929800	912700	923500	962900	880800	845700	811900
18	910700	968900	933600	904900	923000	930600	907800	924200	957300	877100	843200	812200
19	910600	959800	931000	906500	921800	931000	908300	919900	949300	876800	841500	812000
20	911000	951200	929900	906500	919200	928900	909300	917500	942400	876800	839200	811000
21	908700	947600	930500	906100	919600	929000	900700	916100	939400	872400	839000	811800
22	906300	942800	931800	907200	916600	932000	899900	914200	940200	868800	836400	811000
23	904500	955300	930600	906500	921900	935900	898800	910400	934500	867000	836200	810700
24	904400	993300	928900	906300	922200	935200	894600	911000	929000	864700	835500	810300
25	903200	999500	929000	907000	921600	933000	900900	911600	923500	863800	831400	810000
26	903200	1002000	923800	907900	922200	928500	907900	912100	918400	864600	831400	809000
27	903500	995100	922600	907600	922600	933200	912100	912400	912700	866200	831100	808500
28	904700	986000	923300	907000	921300	991600	910200	916900	912700	863200	830000	808300
29	906300	978200	923600	906600	---	1014000	911700	919200	912400	861200	828000	807600
30	905500	971800	921900	906300	---	1024000	913400	918100	908500	858700	826600	807700
31	939200	---	921600	925500	---	1022000	---	919600	---	857400	826000	---
MAX	976400	1019000	998300	925500	992700	1024000	1015000	964500	964000	904800	856500	826000
MIN	903200	942800	921600	904200	916600	909900	894600	910400	903200	857400	826000	807600
(†)	600.98	603.2	599.75	600.02	599.73	606.59	599.17	599.61	598.82	595.13	592.80	591.41
(‡)	-46,800	+32,600	-50,200	+3,900	-4,200	+100,700	-108,600	+6,200	-11,100	-51,100	-31,400	-18,300

CAL YR 1974.....‡ -3,600
WTR YR 1975.....‡ -178,300

† Elevation, in feet, at end of month.
‡ Change in contents, in acre-ft.

07339000 MOUNTAIN FORK NEAR EAGLETOWN, OKLA.

LOCATION.--Lat 34°02'30", long 94°37'15", in SE 1/4 SE 1/4 sec.7, T.6 S., R.26 E., McCurtain County, near center of span on downstream side of pier of bridge on U.S. Highway 70, 2.0 miles (3.2 km) west of Eagletown, 10.7 miles (17.2 km) downstream from Broken Bow Dam, and at mile 8.9 (14.3 km).

DRAINAGE AREA.--787 mi^2 (2,040 km^2).

PERIOD OF RECORD.--March 1924 to December 1925, October 1929 to current year. Published as Mountain Fork River near Broken Bow 1924-25 and as Mountain Fork River near Eagletown 1929-60. Monthly discharge only for some periods, published in WSP 1311.

GAGE.--Water-stage recorder. Datum of gage is 333.87 ft (101.763 m) above mean sea level. See WSP 1920 for history of changes prior to July 23, 1950.

AVERAGE DISCHARGE.--47 years, 1,310 ft^3/s (37.10 m^3/s), 949,100 acre-ft/yr (1.17 km^3/yr).

EXTREMES.--Current year: Maximum discharge, 8,490 ft^3/s (240 m^3/s) Nov. 29, gage height, 7.82 ft (2.384 m); minimum daily, 103 ft^3/s (2.92 m^3/s) May 27.
Period of record: Maximum discharge, 101,000 ft^3/s (2,850 m^3/s) May 20, 1960, gage height, 26.73 ft (8.147 m), from rating curve extended above 65,000 ft^3/s (1,840 m^3/s); no flow at times.
Flood of Aug. 18-19, 1915, reached a stage of 26.4 ft (8.05 m), from information by local residents, discharge, 92,500 ft^3/s (2,620 m^3/s).

REMARKS.--Records fair. Except for 33 mi^2 (85 km^2) intervening area, flow completely regulated since October 1968 by Broken Bow Lake. (See sta. 07338900).

COOPERATION.--Gage-height record and 12 discharge measurements furnished by Corps of Engineers; records computed by Geological Survey.

REVISIONS (WATER YEARS).--WSP 1211: Drainage area. WSP 1241: 1924-26, 1930 (M), 1936-37 (M), 1938, 1939 (M), 1942 (M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6790	6000	5800	630	2990	1070	6640	137	137	2180	712	273
2	5170	1500	6590	2120	1050	158	7190	543	675	2020	475	830
3	5910	250	6520	1980	1050	2800	7280	1200	1340	2180	162	1980
4	5700	1500	4250	572	1500	2890	7290	496	2290	1070	266	1740
5	2190	4500	3380	162	3500	896	7330	2230	2270	181	395	765
6	678	6500	5210	1270	4840	1410	7350	4520	2360	514	378	531
7	1570	7050	2020	1430	5650	1180	6800	4540	1260	1340	614	186
8	2980	7000	1060	1270	4130	221	5700	3600	146	796	497	171
9	2930	6960	2010	1710	3630	129	3250	3780	1190	729	416	207
10	2300	5240	4450	4070	3990	1490	3070	2880	1450	524	177	275
11	2070	2720	6940	1470	5530	1590	3670	3000	567	522	179	417
12	2450	3720	6970	261	6030	1280	2520	3860	1050	713	233	366
13	1160	2880	6950	1940	6310	2350	1690	2550	1180	163	366	425
14	1510	6690	6850	1480	5640	1630	3170	3700	1450	186	591	182
15	3010	6700	6770	1570	1640	292	3240	3680	976	269	311	186
16	1880	6850	6280	1570	568	301	2590	4020	2430	312	421	193
17	956	6880	2960	861	1160	439	1410	1350	3860	1010	178	174
18	1280	6890	2480	429	2880	2860	2890	156	5210	1570	611	168
19	824	6400	2300	135	1910	3680	1410	918	5760	1060	1320	171
20	183	5440	1610	205	1500	3680	170	1860	4730	173	1060	350
21	220	3030	919	252	733	3120	2960	1750	2820	992	777	179
22	1130	2900	167	155	1500	470	1620	1750	1280	2110	688	183
23	1430	1440	380	399	1500	159	1030	1920	1960	1440	627	210
24	679	1000	1430	392	2080	1280	1750	1350	3470	1050	185	188
25	260	2800	887	371	2920	2730	1490	149	3230	906	1100	221
26	800	2400	1500	129	2170	3560	711	111	3910	371	1180	248
27	159	6500	3000	284	1380	3080	137	103	3160	159	200	302
28	188	8000	700	345	1990	4510	1020	224	1730	910	186	177
29	500	8130	164	602	---	3020	1510	1370	1310	1630	390	189
30	1000	6180	384	705	---	1860	471	2460	2190	1550	930	225
31	3000	---	843	1740	---	2740	---	1150	---	1040	617	---
TOTAL	60907	144050	101774	30509	79771	56875	97359	61357	65391	29670	16242	11712
MEAN	1965	4802	3283	984	2849	1835	3245	1979	2180	957	524	390
MAX	6790	8130	6970	4070	6310	4510	7350	4540	5760	2180	1320	1980
MIN	159	250	164	129	568	129	137	103	137	159	162	168
AC-FT	120800	285700	201900	60510	158200	112800	193100	121700	129700	58850	32220	23230

CAL YR 1974 TOTAL 791882 MEAN 2170 MAX 8130 MIN 93 AC-FT 1571000
WTR YR 1975 TOTAL 755617 MEAN 2070 MAX 8130 MIN 103 AC-FT 1499000

As the number of streams on which stream flow information is likely to be desired far exceeds the number of stream-gaging stations feasible to operate at one time, the Geological Survey collects limited streamflow data at sites other than stream-gaging stations. When limited streamflow data are collected on a systematic basis over a period of years for use in hydrologic analyses, the site at which the data are collected is called a partial-record station. Data ollected at these partial-record station are usable in low-flow or floodflow analyses, depending on the type of data collected. In addition, discharge measurements are made at other sites not included in the partial-record program. These measurements are generally made in times of drought or flood to give better areal coverage to those events. Those measurements and others collected for some special reason are called measurements at miscellaneous sites.

Records collected at partial-record stations are presented in two tables. The first is a table of discharge measurements at low-flow partial-record stations, and the second is a table of annual maximum stage and discharge at crest-stage stations. Discharge measurements made at miscellaneous sites for both low flow and high flow are given in a third table.

Low-flow partial-record stations

Measurements of streamflow in the area covered by this report made at low-flow partial-record stations are given in the following table. Most of these measurements were made during periods of base flow when streamflow is primarily from ground-water storage. These measurements, when correlated with the simultaneous discharge of a nearby stream where continuous records are available, will give a picture of the low-flow potentiality of a stream. The column headed "Period of record" shows the water years in which measurements were made at the same, or practically the same, site.

Discharge measurement made at low-flow partial-record station during water year 1975

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Measurements	
					Date	Discharge (cfs)
		Arkansas River basin				
07148360	Greenwood Creek near Winchester	Lat 36°55'23", long 98°47'27", in SW 1/4 NW 1/4 sec.11, T.28 N., R.14 N., Woods County, at county road bridge 2.4 mi (3.9 km) south of Winchester and at mile 1.9 (3.1 km).	41.2	1972-75	03-24-75 07-16-75	2.8 2.7

Discharge measurements at miscellaneous sites during water year 1975

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previous (water years)	Measurements	
					Date	Discharge (cfs)
Soldier Creek	Deep Fork	Lat 35°40'01", long 97°18'48", in SW 1/4 SE 1/4 SW 1/4 sec.21, T.14 N., R.1 W., Oklahoma County, at bridge on U. S. Highway 66, .7 mi (1.1 km) east of Arcadia			08-11-75 09-09-75 09-25-75	2.9 1.7 2.1
Wildhorse Creek	Deep Fork	Lat 35°39'59", long 97°11'06", in NW 1/4 NW 1/4 NE 1/4 sec.27, T.14 N., R.1 E., Oklahoma County, at bridge on U. S. Highway 66, 0.4 mi (0.6 km) northeast of Luther	17.6		12-18-74 01-09-75 01-16-75 01-27-75 02-12-75 02-28-75 03-26-75 04-16-75 05-01-75 05-19-75 08-21-75 09-09-75 09-25-75	4.8 4.9 4.6 4.2 5.7 5.6 5.9 6.4 4.2 5.9 3.3 2.3 2.3
Hilliby Creek	Deep Fork	Lat 35°37'27", long 96°32'03", in NW 1/4 NE 1/4 NE 1/4 sec.11, T.13 N., R.7 E., Okfuskee County, at upstream side of county road bridge, 9 mi (14 km) northeast of Paden.	41.4		11-05-74 12-20-74 01-08-75 01-28-75 03-03-75 04-16-75 07-17-75	12 8.6 12 6.1 19 22 .91
Little Hominy Creek	Hominy Creek	Lat 36°29'04", long 96°23'36", in NW 1/4 NE 1/4 SE 1/4 sec.12, T.23 N., R.8 E., Osage County, at pipeline crossing in tank farm, 3.5 mi (5.6 km) northeast of Hominy			11-26-74 12-19-74 01-07-75	9.6 16 27
Polecat Creek	Arkansas River	Lat 35°58'00", long 96°24'16", in SE 1/4 SE 1/4 NE 1/4 sec.12, T.17 N., R.8 E., Creek County, at bridge on State Highway 48, 10 mi (16 km) north of Bristow	49.6		11-26-74 12-19-74 01-07-75 01-28-75 03-04-75 04-16-75 06-26-75 07-16-75 08-12-75 09-05-75	9.8 12 17 8.0 18 18 4.2 1.4 .25 .06

Crest-stage partial-record stations

The following table contains annual maximum discharges for crest-stage stations. A crest-stage gage is a device which will register the peak stage occurring between inspections of the gage. A stage-discharge relation for each gage is developed from discharge measurements made by indirect measurements of peak flow or by current meter. The date of the maximum discharge is not always certain, but is usually determined by comparison with nearby continuous-record stations, weather records, or local inquiry. Only the maximum discharge for each water year is given. Information on some lower floods may have been obtained, but is not published herein. The years given in the period of record represent water years for which the annual maximum has been determined.

Annual maximum discharge at crest-stage partial-record stations

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (cfs)
		Arkansas River Basin					
07150580	Sand Creek tributary near Kremlin, Okla. (discontinued)	Lat 36°33'00", long 97°48'38", in SE 1/4 SW 1/4 sec.14, T.24 N., R.6 W., Garfield County, at county road bridge, 1.2 mi (1.9 km) east of Kremlin.	7.21	1964-75	unknown	5.26	292
07150870	Salt Fork Arkansas River tributary near Eddy, Okla.	Lat 36°41'42", long 97°25'30", in SW 1/4 SW 1/4 sec.28, T.26 N., R.2 W., Kay County, at culvert on U.S. Highway 60, 3.0 mi (4.8 km) southeast of Eddy.	2.35	1964-75	5-13-75	14.99	663
07152360	Elm Creek near Foraker, Okla. (discontinued)	Lat 36°52'08", long 96°36'50", in SE 1/4 SW 1/4 sec.25, T.28 N., R.6 E., Osage County, at county road bridge, 2.8 mi (4.5 km) west of Foraker	18.2	1964-75	11-03-74	13.95	9,130
07152520	Black Bear Creek tributary near Garber, Okla. (discontinued)	Lat 36°23'25", long 97°37'20", in SE 1/4 SE 1/4 sec.9, T.22 N., R.4 W., Garfield County, at culvert on old U.S. Highway 64, 4.0 mi (6.4 km) southwest of Garber.	.97	1964-75	11-02-74	3.05	172
07154650	Tesesquite Creek near Kenton, Okla.	Lat 36°53'52", long 102°54'04", in NE 1/4 SE 1/4 sec.13, T.5 N., R.1 E., Cimarron County, at county road bridge, 3.9 mi (6.3 km) east of Kenton	25.4	1964-75	06-23-75	20.42	7,240
07155100	Cold Springs Creek near Wheeless, Okla.	Lat 36°46'20", long 102°48'16", in SE 1/4 NE 1/4 sec.35, T.4 N., R.2 E., Cimarron County, at county road multi-barrel culvert, 6.0 mi (9.7 km) northeast of Wheeless.	11.0	1964-75	08-09-75	10.50	17
07157550	West Fork Creek near Knowles, Okla.	Lat 36°52'30", long 100°07'20", in SE 1/4 SE 1/4 sec.22, T.5 N., R.27 E., Beaver County, at county road culvert, 4.2 mi (6.8 km) east of Knowles.	4.22	1964-75	06-21-75	11.0	12
07158020	Cimarron River tributary near Lone Wolf, Okla. (discontinued)	Lat 36°24'25", long 98°44'10", in SW 1/4 SE 1/4 sec.6, T.22 N., R.14 W., Major County, at multi-barrel culvert on State Highway 15, 5.4 mi (8.7 km) west of Lone Wolf.	4.07	1964-75	11-02-74	5.32	921
07158080	Sand Creek tributary near Waynoka, Okla. (discontinued)	Lat 36°35'40", long 98°44'00", in NW 1/4 NE 1/4 sec.6, T.24 N., R.14 W., Woods County, at multi-barrel culvert on U.S. Highway 281, 8.0 mi (12.9 km) east of Waynoka.	1.61	1964-75	11-02-74	4.00	172
07158180	Salt Creek tributary near Okeene, Okla. (discontinued)	Lat 36°03'00", long 98°19'00", in SW 1/4 NW 1/4 sec.7, T.18 N., R.10 W., Blaine County, at multi-barrel culvert on State Highway 8, 4.4 mi (7.1 km) south of Okeene.	8.23	1964-75	05-13-75	7.07	2,080
07158500	Preacher Creek near Dover, Okla.	Lat 36°02'37", long 98°00'48", in NW 1/4 NW 1/4 sec.13, T.18 N., R.8 W., Kingfisher County, at county road bridge, 7.1 mi (11.4 km) northwest of Dover.	14.5	1952-57† 1964-75	06-10-75	9.00	1,540
07158550	Turkey Creek tributary near Goltry, Okla.	Lat 36°28'40", long 98°08'05", in SE 1/4 SW 1/4 sec.11, T.23 N., R.9 W., Alfalfa County, at multi-barrel culvert on State Highway 45, 4.1 mi (6.6 km) south of Goltry.	5.08	1964-75	11-03-74	11.06	1,460
†07159200	Kingfisher Creek near Kingfisher, Okla.	Lat 35°50'03", long 98°03'57", in NW 1/4 SW 1/4 sec.28, T.16 N., R.8 W., Kingfisher County, at county road bridge, 7.6 mi (12.2 km) west of Kingfisher.	157	1967-70†† 1971-75	11-03-74	23.51	5,960

See footnotes at end of table, p. 193.

Annual maximum discharge at crest-stage partial-record stations

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (cfs)
		Arkansas River Basin--Continued					
07159450	Bluff Creek at Oklahoma City, Okla.	Lat 35°32'26", long 97°35'56", in SW 1/4 sec.2, T.12 N., R.4 W., Oklahoma County at 68 St. and Northwest Highway in Oklahoma City.	1.64	1973-75	11-02-74	12.38	1,250
07160550	West Beaver Creek near Orlando, Okla.	Lat 36°08'45", long 97°28'05", in NW 1/4 NE 1/4 sec.12, T.19 N., R.3 W., Logan County, at county road bridge, 5.0 mi (8.0 km) west of Orlando.	13.9	1964-75	11-03-74	6.89	1,430
07163020	Corral Creek near Yale, Okla. (discontinued)	Lat 36°07'50", long 96°49'50", in NE 1/4 NW 1/4 sec.13, T.19 N., R.4 E., Payne County, at multi-barrel culvert on Old State Highway 51, 7.7 mi (12.4 km) west of Yale.	2.89	1964-75	11-03-74	12.28	1,100
†07165550	Snake Creek near Bixby, Okla.	Lat 35°49'08", long 95°53'18", in NW 1/4 SW 1/4 sec.36, T.16 N., R.13 E., Okmulgee County, on right bank 5.5 mi (8.8 km) upstream from Duck Creek, 8.8 mi (14.2 km) south of Bixby, and at mile 11.0 (17.7 km).	50	1962-70†† 1971-75	11-04-74	18.60	4,070
07171120	Clear Creek tributary near Hollow, Okla. (discontinued)	Lat 36°52'50", long 95°16'00", in SW 1/4 NW 1/4 sec.27, T.28 N., R.19 E., Craig County, on downstream side of multi-barrel box culvert on State Highway 10, 1.2 mi (1.9 km) southeast of Hollow.	2.19	1966-75	11-04-74	7.15	570
07174720	Hogshooter Creek tributary near Bartlesville, Okla.	Lat 36°43'40", long 95°50'52", in SE 1/4 SE 1/4 sec.18, T.26 N., R.14 E., Washington County, at multi-barrel culvert on U.S. Highway 60, 4.9 mi (7.9 km) east of junction with U.S. Highway 75 southeast of Bartlesville.	.94	1965-75	10-30-74	9.34	525
07178640	Bull Creek near Inola, Okla. (discontinued)	Lat 36°08'55", long 95°27'05", in NE 1/4 NW 1/4 sec.12, T.19 N., R.17 E., Rogers County, at county road bridge, 3.2 mi (5.1 km) east of Inola.	10.7	1965-75	11-04-74	11.43	1,370
07188140	Flint Branch near Peoria, Okla.	Lat 36°52'25", long 94°41'35", in SW 1/4 SW 1/4 sec.26, T.28 N., R.24 E., Ottawa County, at upstream side of dam, 3.2 mi (5.1 km) southwest of Peoria.	4.90	1964-75	11-03-74	8.00a	1,120
†07188500	Lost Creek at Seneca, Mo. (discontinued)	Lat 36°50'28", long 94°36'30", in SW 1/4 SW 1/4 sec.36, T.27 N., R.34 W., Newton County, at Seneca Street bridge in Seneca, half a mile upstream from Little Lost Creek and 9.5 mi (15 km) upstream from mouth.	42	1949-59† 1960-75	11-04-74	6.55	3,000
†07189700	Horse Creek at Afton, Okla.	Lat 36°41'50", long 94°57'20", in NE 1/4 NW 1/4 sec.33, T.26 N., R.22 E., Ottawa County, on downstream side of bridge on U.S. Highway 60 at east edge of Afton.	21.9	1966-75	11-03-74	13.55	2,680
07190600	Big Cabin Creek near Pyramid Corners, Okla. (discontinued)	Lat 36°48'10", long 94°44'50", in SE 1/4 SE 1/4 sec.21, T.27 N., R.20 E., Craig County, on left bank 60 ft (18 m) upstream from county highway bridge, on graveled road 1.2 mi (1.9 km) west of Pyramid Corners, about 7 mi (11 km) upstream from West Fork, and 34.4 mi (55.4 km) above mouth.	71.1	1964-72‡ 1973-75	11-04-74	19.58	11,700
07194515	Mill Creek near Park Hill, Okla.	Lat 35°48'37", long 95°04'07", in NE 1/4 NW 1/4 sec.3, T.15 N., R.21 E., Cherokee County, at multi-barrel culvert on U.S. Highway 62, 6.3 mi (10.1 km) southwest of junction with State Highway 82 near Park Hill.	2.57	1965-75	11-03-74	6.68	414
07196380	Illinois River tributary near Tahlequah, Okla. (discontinued)	Lat 35°58'45", long 94°55'25", in SE 1/4 SE 1/4 sec.2, T.17 N., R.22 E., Cherokee County, at multi-barrel culvert on State Highway 10, 4.9 mi (7.9 km) northeast of Tahlequah.	3.59	1965-75	11-03-74	5.90	400
07228290	Rough Creek near Thomas, Okla.	Lat 35°48'08", long 98°47'15", in NW 1/4 SW 1/4 sec.3, T.15 N., R.15 W., Custer County, at county road bridge, 4.7 mi (7.6 km) northwest of Thomas	10.4	1964-75	06-10-75	10.49	1,400
07228450	Deer Creek tributary near Hydro, Okla. (discontinued)	Lat 35°32'10", long 98°28'50", in NW 1/4 NW 1/4 sec.9, T.12 N., R.12 W., Caddo County, at county road culvert, 5.5 mi (8.8 km) east of Hydro.	2.31	1964-75	11-02-74	8.22	274

See footnotes at end of table, p. 193.

Annual maximum discharge at crest-stage partial-record stations.

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (cfs)
		Arkansas River Basin--Continued					
07228960	Canadian River tributary near Newcastle, Okla. (discontinued)	Lat 35°17'27", long 97°37'20", in NW 1/4 NE 1/4 sec.4, T.9 N., R.4 W., McClain County, at multi-barrel culvert on State Highway 37, 1.3 mi (2.1 km) west of junction with U.S. Highway 62 north of Newcastle.	3.32	1965-75	06-17-75	20.06	961
07229420	Julian Creek tributary near Asher, Okla.	Lat 34°59'09", long 96°58'48", in SW 1/4 SW 1/4 sec.15, T.6 N., R.3 E., Pottawatomie County, at multi-barrel culvert on State Highway 39, 3.4 mi (5.5 km) west of Asher.	2.28	1964-75	03-26-75	12.78	286
07231320	Leader Creek tributary near Atwood, Okla.	Lat 34°57'10", long 96°20'21", in NW 1/4 NW 1/4 sec.34, T.6 N., R.9 E., Hughes County, at multi-barrel culvert on State Highway 12, 0.7 mi (1.1 km) southwest of Atwood.	.72	1964-75	05-22-75	9.45	215
07231950	Pine Creek near Higgins, Okla.	Lat 34°47'40", long 95°20'50", in NW 1/4 NE 1/4 sec.30, T.4 N., R.19 E., Latimer County, at bridge on State Highway 63, 5.4 mi (8.7 km) east of Higgins.	9.99	1964-75	10-31-74	12.05	3,620
07232550	South Fork tributary near Guymon, Okla.	Lat 36°40'06", long 101°29'54", in SW 1/4 NE 1/4 sec.1, T.2 N., R.14 E., Texas County, at multiple culvert on Chicago, Rock Island, and Pacific Railroad, 1.8 mi (2.9 km) southwest of junction of U.S. Highways 54 and 64 at Guymon.	.26	1964-75		<6.00	<4
07232650	Aqua Frio Creek near Felt, Okla. (discontinued)	Lat 36°33'23", long 102°47'10", in SW 1/4 NW 1/4 sec.18, T.1 N., R.3 E., Cimarron County, at county road culvert, 1.1 mi (1.8 km) south of junction with U.S. Highway 64 at Felt.	31.0	1964-75	08-14-75	10.80	123
07233850	Sharp Creek tributary near Turpin, Okla. (discontinued)	Lat 36°51'50", long 100°54'45", in SE 1/4 SE 1/4 sec.29, T.5 N., R.20 E., Beaver County, at culvert on U.S. Highway 64, 2.1 mi (3.4 km) west of Turpin.	1	1964-75	08-14-75	12.85	78
07234050	North Fork Clear Creek tributary near Balko, Okla.	Lat 36°37'01", long 100°39'50", in SW 1/4 SW 1/4 sec.23, T.2 N., R.22 E., Beaver County, at multi-barrel culvert on State Highway 3, 1.5 mi (2.4 km) southeast of Balko.	4.22*	1964-75		<10.00	<2
07234290	Clear Creek tributary near Catesby, Okla.	Lat 36°29'30", long 99°57'20", in SE 1/4 SW 1/4 sec.2, T.23 N., R.26 W., Ellis County, on downstream side of county road bridge, 0.1 mi (0.2 km) east of Catesby.	8.51*	1966-75	05-13-75	6.71	688
07237750	Cottonwood Creek near Vici, Okla.	Lat 36°08'45", long 99°12'00", in SE 1/4 SW 1/4 sec.2, T.19 N., R.19 E., Dewey County, at bridge on U.S. Highway 60, 5.4 mi (8.7 km) east of Vici.	11.8*	1964-75	05-13-75	9.90	2,050
+07237800	Bent Creek near Seiling, Okla.	Lat 36°11'26", long 99°00'36", in NW 1/4 SE 1/4 sec.21, T.20 N., R.17 W., Woodward County, at bridge on U.S. Highway 183 and 270, 6 mi (10 km) northwest of Seiling.	139	1967-70# 1971-75	11-03-74	18.95	6,200
07239050	North Canadian River tributary near Eagle City, Okla. (discontinued)	Lat 35°55'30", long 98°35'00", in SE 1/4 NE 1/4 sec.28, T.17 N., R.13 W., Blaine County, at culvert on State Highway 58, 0.5 mi (0.8 km) south of Eagle City.	.52	1964-75	11-02-74	3.86	207
07241880	Sand Creek near Cromwell, Okla.	Lat 35°20'56", long 96°29'40", in SE 1/4 SE 1/4 sec.7, T.10 N., R.8 E., Seminole County, at bridge on State Highway 99A, 2.2 mi (3.5 km) west of Cromwell.	9.48	1964-75	05-22-75	11.21	1,040
07242180	Stidham Creek near Dustin, Okla. (discontinued)	Lat 35°17'16", long 96°03'05", in NW 1/4 NW 1/4 sec.3, T.9 N., R.12 E., Hughes County, at multi-barrel culvert on State Highway 84, 1.1 mi (1.8 km) north of Dustin.	2.56	1964-75	05-14-75	7.98	280
07242200	Deep Fork Portland Ave. at Oklahoma City, Okla.	Lat 35°30'06", long 97°34'58", in NW 1/4 sec.24, T.12 N., R.4 W., Oklahoma County at N.W. 31 St. and Portland in Oklahoma City	2.98	1973-75	11-02-74	13.1	3,600

See footnotes at end of table, p. 193.

Annual maximum discharge at crest-stage partial-record stations

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (cfs)
		Arkansas River Basin--Continued					
07242220	Deep Fork Eastern Ave. at Okla. City, Okla.	Lat 35°32'05", long 97°28'35", on west line NW 1/4 sec.12, T.12 W., R.3 W., Oklahoma County, at bridge on Eastern Ave., 0.2 mi (.3 km) south of N.E. 63rd Street in Oklahoma City.	28.2	1975-	11-02-74	32.2	b
07243550	Adams Creek near Beggs, Okla.	Lat 35°44'55", long 96°02'15", in NE 1/4 SE 1/4 sec.28, T.15 N., R.12 E., Okmulgee County, at county road bridge, 2.0 mi (3.2 km) northeast of Beggs.	5.90	1965-75	11-03-74	10.84	1,590
07246610	Pecan Creek near Spiro, Okla. (discontinued)	Lat 35°14'40", long 94°44'35", in NE 1/4 NE 1/4 sec.22, T.9 N., R.24 E., LeFlore County, at multi-barrel culvert on U.S. Highway 59, 4.2 mi (6.8 km) west of Junction with U.S. Highway 271 west of Spiro.	.90	1965-75	03-28-75	7.92	130
07246630	Big Black Fox Creek near Long, Okla.	Lat 35°31'15", long 94°37'10", in NE 1/4 NE 1/4 sec.14, T.12 N., R.25 E., Sequoyah County, at county road bridge, 2.3 mi (3.7 km) northwest of Long.	5.32	1964-75	02-22-75	8.20	690
		Red River Basin					
07300150	Bear Creek near Vinson, Okla.	Lat 34°54'10", long 99°58'50", in NW 1/4 NE 1/4 sec.19, T.5 N., R.26 W., Harmon County, at bridge on State Highway 9, 6.9 mi (11.1 km) west of Vinson.	7.24	1964-75	06-22-75	8.38	376
07301480	Short Creek near Sayre, Okla.	Lat 35°18'20", long 99°39'15", in SW 1/4 SE 1/4 sec.20, T.10 N., R.23 W., Beckham County, at county road multi-barrel culvert, 0.9 mi (1.4 km) northwest of Sayre.	9.12	1964-75	05-28-75	12.54	208
07301495	Indian Creek near Carter, Okla. (discontinued)	Lat 35°17'30", long 99°30'35", in NW 1/4 NE 1/4 sec.3, T.9 N., R.22 W., Beckham County, at bridge on State Highway 152, 5.0 mi (8.0 km) north of Carter.	24.9	1965-75		<5.00	<200
07303450	Deer Creek near Plainview, Okla.	Lat 35°02'50", long 99°46'10", in NW 1/4 SE 1/4 sec.31, T.7 N., R.24 W., Greer County, at county road bridge, 3.8 mi (6.1 km) southwest of Plainview.	27.8	1964-75	06-22-75	9.69	1,380
07309480	Canyon Creek near Medicine Park, Okla. (discontinued)	Lat 34°49'55", long 98°32'10", in NW 1/4 SE 1/4 sec.11, T.4 N., R.13 W., Comanche County, at multi-barrel culvert on State Highway 58, 7.3 mi (11.7 km) northwest of Medicine Park.	3.35	1965-75	07-24-75	9.41	1,860
07312850	Nine Mile Beaver Creek near Elgin, Okla.	Lat 34°46'40", long 98°15'25", in SE 1/4 NW 1/4 sec.33, T.4 N., R.10 W., Comanche County, at multi-barrel culvert on State Highway 17, 2.0 mi (3.2 km) east of Elgin.	6.29	1964-75	07-24-75	9.63	1,920
07312950	Little Beaver Creek near Marlow, Okla. (discontinued)	Lat 34°40'55", long 98°00'30", in SW 1/4 SE 1/4 sec.35, T.3 N., R.8 W., Grady County, at county road bridge, 3.6 mi (5.8 km) northwest of Marlow.	35.4	1964-75	07-24-75	5.28	1,820
+07313600	Cow Creek at Waurika, Okla.	Lat 34°10'55", long 98°00'05", in SE 1/4 NE 1/4 sec.26, T.4 S., R.8 W., Jefferson County, at Chicago, Rock Island and Pacific Railway Co. bridge, near north edge of Waurika.	193	1967-70# 1971-75	05-24-75	23.38	7,420
07315680	Cottonwood Creek tributary near Loco, Okla.	Lat 34°18'40", long 97°34'00", in SE 1/4 NE 1/4 sec.12, T.3 S., R.4 W., Stephens County, at multi-barrel culvert on State Highway 53, 6.6 mi (10.6 km) southeast of Loco.	1.74	1964-75	05-23-75	8.48	560
07316130	Wilson Creek tributary near McMillan, Okla. (discontinued)	Lat 34°06'00", long 96°58'35", in NW 1/4 NE 1/4 sec.27, T.5 S., R.3 E., Carter County, at county road culvert, 2.5 mi (4.0 km) northwest of McMillan.	2.97	1965-75	05-23-75	8.18	1,380
07316140	Brier Creek near Powell, Okla.	Lat 33°59'54", long 96°49'35", in NW 1/4 NW 1/4 sec.31, T.6 S., R.5 E., Marshall County, at bridge on State Highway 32, 3.6 mi (5.8 km) northeast of Powell.	12.0	1965-75	10-30-74	14.97	5,570
07320870	Honey Creek near Davis, Okla.	Lat 34°26'50", long 97°07'40", in NW 1/4 NE 1/4 sec.30, T.1 S., R.2 E., Murray County, at bridge on State Highway	18.7	1964-75	10-30-74	10.97	1,640

See footnotes at end of table, p. 193.

Annual maximum discharge at crest-stage partial-record stations.

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (cfs)
		Red River Basin--Continued					
		77D, 4.0 mi (6.4 km) south of Davis.					
07331410	Buzzard Creek near Reagan, Okla. (discontinued)	Lat 34°19'50", long 96°39'28", in NE 1/4 NE 1/4 sec.3, T.3 S., R.6 E., Johnson County, at bridge on State Highway 99, 4.0 mi (6.4 km) southeast of Reagan.	4.30	1965-75	10-30-74	7.81	432
07333500	Chickasaw Creek near Stringtown, Okla. (discontinued)	Lat 34°27'41", long 96°01'36", in NE 1/4 NE 1/4 sec.22, T.1 S., R.12 E., Atoka County, on right upstream pier of county road bridge, 1.5 mi (2.4 km) east of Stringtown.	32.7	1956-68††, 1969-75	06-09-75	13.92	3,720
07333800	McGee Creek near Stringtown, Okla. (discontinued)	Lat 34°26'33", long 95°52'10", in NE 1/4 sec.30, T.1 S., R.14 E., Atoka County, on right bank 10.6 mi (17.0 km) east of Stringtown.	86.6	1956-68††, 1969-75	10-30-74	13.1	6,590
07335310	Rock Creek near Boswell, Okla.	Lat 33°57'57", long 95°52'02", in NE 1/4 NE 1/4 sec.7, T.7 S., R.14 E., Choctaw County, at culvert on State Highway 109, 4.2 mi (6.7 km) south of Boswell.	.94	1965-75	10-30-74	6.24	399
07335320	Bokchito Creek near Soper, Okla. (discontinued)	Lat 34°02'20", long 95°40'10", in NE 1/4 NW 1/4 sec.18, T.6 S., R.16 E., Choctaw County, at bridge on U.S. Highway 70, 1.9 mi (3.1 km) east of Soper.	16.6	1955-75	10-30-74	9.24	5,840
†07336000	Tenmile Creek near Miller, Okla.	Lat 34°17'55", long 95°44'40", in NW 1/4 sec.16, T.3 S., R.15 E., Pushmataha County, at county raod bridge, 1.2 mi (1.9 km) south of Miller.	68	1956-70††, 1971-75	10-30-74	17.0	3,000
07336520	Frazier Creek near Oleta, Okla.	Lat 34°11'50", long 95°21'00", in NW 1/4 NE 1/4 sec.19, T.4 S., R.19 E., Pushmataha County, at bridge on State Highway 3, 0.5 mi (0.8 km) west of Oleta.	19.4	1964-75	10-30-74	15.74	4,470
07336785	Bokchito Creek near Garvin, Okla. (discontinued)	Lat 33°53'44", long 94°54'23", in NE 1/4 NW 1/4 sec.4, T.8 S., R.23 E., McCurtain County, at multi-barrel culvert on State Highway 37, 4.5 mi (7.2 km) southeast of Garvin.	2.96	1965-75	12-06-74	6.0	680
07338520	Yanubbee Creek near Broken Bow, Okla.	Lat 34°03'35", long 94°44'22", in NW 1/4 SW 1/4 sec.6, T.6 S., R.25 E., McCurtain County, at bridge on U.S. Highway 259, 2.3 mi (3.7 km) north of Broken Bow.	9.10	1964-75	05-03-75	11.62	1,910
07338780	Mountain Fork tributary near Smithville, Okla.	Lat 34°29'48", long 94°40'06", in NW 1/4 SE 1/4 sec.3, T.1 S., R.25 E., McCurtain County, at multi-barrel culvert on U.S. Highway 259, 2.5 mi (4.0 km) northwest of Smithville.	.68*	1965-75	05-03-75	4.56	219

† Also a low-flow partial-record station.
†† Operated as a continuous-record station.
* Revised.
a Gage height at culvert 300 feet downstream from dam.
b Discharge not determined.

ENID, OKLAHOMA URBAN STUDY

A series of discharge measurements made at selected sites on the Boggy, Skeleton and North Boggy Creeks within the Enid area were made between May to September 1975 to assist in a preliminary survey of both water quality and quantity. See pg. 512 for water-quality record.

Station No.	Station name	Location	Drainage area (sq mi)	Measured previous (water years)	Measurements	
					Date	Discharge (cfs)
07160265	Skeleton Creek	Lat 36°23'28", long 97°48'10", on east line NE 1/4, sec.14, T.22 N., R.6 W., Garfield County, at 54th St. in Enid.			06-23-75	17
07160270	South Boggy Creek	Lat 36°21'40", long 97°53'55", in NE 1/4, NW 1/4, sec.25, T.22 N., R.7 W., Garfield County, upstream from Richards Ave. bride in Enid.			06-21-75	.69
07160275	Boggy Creek	Lat 36°22'27", long 97°53'28", on east line NE 1/4 sec.24, T.22 N., R.7 W., Garfield County, at Van Buren Ave. in Enid.			06-21-75	.60
07160280	Boggy Creek	Lat 36°22'34", long 97°52'20", in SW corner SW 1/4 SW 1/4 sec.17, T.22 N., R.6 W., Garfield County, at South Enid Blvd. in Enid.	20.8		05-13-75 06-21-75 07-23-75 08-18-75 09-18-75	519 1.6 1.4 .88 .34
07160288	North Boggy Creek	Lat 36°23'35", long 97°52'11", in SW 1/4, SW 1/4, sec.8, T.22 N., R.6 W., Garfield County, at Oklahoma Ave. in Enid.			05-10-75 05-13-75	56 136
07160290	North Boggy Creek	Lat 36°23'26", long 97°52'06", on north line, NW 1/4, sec.17, T.22 N., R.6 W., Garfield County, at corner of Seventh and Garriott Rd. in Enid.	8.98		06-22-75 07-22-75 08-15-75 08-20-75 09-18-75	2.4 1.5 22 1.0 .42
07160300	Boggy Creek	Lat 36°23'24", long 97°50'10", in NW 1/4, NW 1/4, sec.15, T.22 N., R.6 W., Garfield County, at 30th St. in Enid.	35.8		05-10-75 05-13-75 06-22-75 07-22-75 08-19-75 09-17-75	76.5 733 4.6 1.9 2.0 1.3
07160310	Boggy Creek Tributary	Lat 36°23'27", long 97°49'10", on north line NE 1/4, sec.15, T.22 N., R.6 W., Garfield County, at Garriott Rd. in Enid.			06-22-75 07-23-75 08-20-75 09-18-75	1.2 2.6 3.0 3.6
07160315	Boggy Creek	Lat 36°23'12", long 97°48'58", in SW 1/4, NW 1/4, sec.14, T.22 N., R.6 W., Garfield County, upstream from Enid sewage plant.			06-23-75 07-23-75 08-20-75 09-18-75	6.7 5.5 3.4 6.0
07160320	Boggy Creek	Lat 36°23'06", long 97°48'43", in SE 1/4, NW 1/4, sec.14, T.22 N., R.6 W., Garfield County, downstream from Enid sewage plant.			06-23-75 07-23-75 08-20-75 09-18-75	13 11 5.1 13

07327000
SUGAR CREEK NEAR GRACEMONT, OK.
DISCONTINUED SEPTEMBER 1974

PART 7. LOWER MISSISSIPPI RIVER BASIN

ARKANSAS RIVER BASIN

07148450 SALT FORK ARKANSAS RIVER NEAR INGERSOLL, OKLA.

LOCATION.--Lat 36°49'09", long 98°21'27", in NW 1/4 sec.14, T.27 N., R.11 W., Alfalfa County, at gaging station on State Highways 8 and 58, 2 mi (3.2 km) upstream from Medicine Lodge River, 2.5 mi (4.0 km) northeast of Ingersoll, 17 mi (27.4 km) upstream from Great Salt Plains Dam, and at mile 120.9 (194.5 km).

DRAINAGE AREA.--1,140 mi² (2,950 km²).

PERIOD OF RECORD.--Chemical analyses: October 1961 to September 1962, October 1973 to current year.
Water temperatures: October 1961 to September 1962, October 1973 to current year.

EXTREMES, Current year.--Specific conductance: Maximum daily, 2,650 micromhos/cm Oct. 11; minimum daily, 672 micromhos/cm Aug. 18.
Water temperatures: Maximum, 35.0°C July 9; minimum, freezing point on Nov. 30-Dec. 1.

Period of record.--Specific conductance: Maximum daily, 2,840 micromhos/cm July 18, 1974; minimum daily, 560 micromhos/cm Sept. 17-24, 1962.
Water temperatures: Maximum, 35.0°C July 9, 1975; minimum, freezing point on many days during winter months.

REMARKS.--Continuous monitor records for specific conductance are collected for this station. Records of maximum and minimum specific conductance values are available in district office at Oklahoma City, Okla.
*-Mean discharge

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
OCT.											
10...	1845	60	300	56	220	--	174	0	143	790	340
19...	1745	59	280	53	190	--	174	2	146	780	270
28...	1715	145	270	42	110	--	154	0	126	--	150
NOV.											
05...	1700	439	200	27	43	--	143	0	117	500	53
16...	1630	195	280	49	180	--	216	0	177	760	240
29...	1700	100	300	50	200	--	230	0	189	830	250
DEC.											
05...	1730	125	280	64	210	--	176	0	144	810	310
10...	1730	98	240	58	160	4.5	198	0	162	680	230
29...	1600	105	280	55	170	4.1	214	0	176	730	240
JAN.											
02...	1700	107	260	52	160	4.3	197	0	162	730	220
18...	1715	119	250	47	--	4.0	210	0	172	630	180
26...	1645	107	270	53	170	4.7	201	0	165	750	250
FEB.											
01...	1730	113	250	54	150	5.0	179	0	147	730	210
20...	1445	191	270	57	210	5.4	205	0	168	740	320
28...	1730	228	220	48	99	5.8	162	0	133	630	140
MAR.											
01...	1600	276	210	45	97	5.2	168	0	138	580	130
16...	1745	129	270	56	150	4.0	204	0	167	710	210
24...	1600	100	280	61	170	4.5	192	0	157	770	240
APR.											
06...	1915	96	280	62	180	4.4	188	0	154	810	260
08...	1800	123	230	51	140	4.8	150	0	123	700	190
30...	1830	77	280	63	180	4.7	163	0	134	800	260
MAY											
03...	1730	105	310	73	170	5.3	--	--	--	730	240
14...	1800	2750*	220	27	30	6.0	102	0	84	600	36
29...	1700	461	120	26	62	8.7	110	0	90	330	--
JUNE											
01...	1445	287	300	56	90	6.0	177	0	145	860	120
08...	1715	3670	92	11	30	5.9	122	0	100	180	41
17...	1745	218	300	64	190	6.3	159	0	130	--	300
JULY											
01...	2030	288	120	21	50	7.9	158	0	130	260	65
15...	1445	70	270	58	190	6.8	198	0	162	790	260
31...	2000	91	360	55	180	7.9	--	--	--	920	260
AUG.											
01...	2015	64	270	57	140	6.9	165	0	135	830	190
09...	0745	23	310	65	160	6.5	195	0	160	830	230
18...	1715	77	79	18	28	9.3	--	--	--	150	36
SEP.											
09...	1000	3.0	280	61	130	8.5	138	0	113	800	180
16...	1700	3.3	260	59	130	7.0	129	0	106	810	170
24...	0900	4.5	260	59	130	7.3	145	0	119	750	170

07148450 SALT FORK ARKANSAS RIVER NEAR INGERSOLL, OKLA.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	CARBON DIOXIDE (CO2) (MG/L)
OCT.											
10...	.13	1990	2.71	322	980	840	--	3.1	2630	8.3	1.4
19...	.18	1820	2.48	290	920	770	--	2.7	2370	8.4	1.1
28...	.35	1520	2.07	595	850	720	--	1.6	1940	7.9	3.1
NOV.											
05...	.70	976	1.33	1160	610	490	--	.8	1240	7.7	4.6
16...	.71	1760	2.39	927	900	720	--	2.6	2260	8.2	2.2
29...	.56	1880	2.56	508	960	770	--	2.8	2370	8.1	2.9
DEC.											
05...	--	1880	2.56	634	960	820	--	2.9	2460	8.7	.6
10...	--	1600	2.18	423	840	680	29	2.4	2080	8.6	.8
29...	--	1740	2.37	493	920	740	29	2.4	2230	8.7	.7
JAN.											
02...	--	1610	2.19	465	860	700	29	2.4	2090	8.7	.6
18...	--	1490	2.03	479	820	650	--	--	1940	8.5	1.1
26...	--	1730	2.35	500	890	730	29	2.5	2230	8.7	.6
FEB.											
01...	--	1650	2.24	503	850	700	28	2.2	2120	8.3	1.4
20...	--	1790	2.43	923	910	740	33	3.0	2390	8.0	3.3
28...	--	1310	1.78	806	750	610	22	1.6	1690	8.0	2.6
MAR.											
01...	--	1320	1.80	984	710	570	23	1.6	1690	7.6	6.8
16...	--	1720	2.34	599	900	740	26	2.2	2160	8.0	3.3
24...	--	1930	2.62	521	950	790	28	2.4	2370	8.1	2.4
APR.											
06...	--	1840	2.50	477	950	800	29	2.5	2330	8.2	1.9
08...	--	1440	1.96	478	780	660	28	2.2	1920	7.8	3.8
30...	--	1850	2.52	385	960	830	29	2.5	2310	8.3	1.5
MAY											
03...	--	1860	2.53	527	1100	--	25	2.3	2460	--	--
14...	--	1080	1.47	8020	660	580	9	.5	1300	7.5	5.2
29...	--	722	.98	899	410	320	24	1.3	1050	7.8	2.6
JUNE											
01...	--	1610	2.19	1250	980	830	17	1.3	1940	8.0	2.8
08...	--	463	.63	4590	280	180	19	.8	690	7.7	5.9
17...	--	1940	2.64	1140	1000	880	29	2.6	2460	7.5	8.0
JULY											
01...	--	663	.90	516	390	260	22	1.1	943	8.0	2.5
15...	--	1850	2.52	350	910	750	31	2.7	2370	8.1	2.5
31...	.69	2130	--	523	1100	--	26	2.3	2580	8.0	--
AUG.											
01...	.57	1820	2.48	314	910	770	25	2.0	2310	7.8	4.2
09...	.37	1920	2.61	119	1000	880	25	2.2	2470	8.1	2.5
18...	--	--	--	--	270	--	18	.7	672	7.5	--
SEP.											
09...	1.1	1680	2.28	15.6	950	840	23	1.8	2150	8.0	2.2
16...	.30	1620	2.20	14.4	890	790	24	1.9	2100	7.9	2.6
29...	.48	1660	2.26	20.2	890	770	24	1.9	2210	8.1	1.8

07148450 SALT FORK ARKANSAS RIVER NEAR INGERSOLL, OKLA.--Continued

DISSOLVED SULFATE (SO4), MG/L, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	840	710	760	700	720	730	710	700	690	280	740	730
2	840	570	740	700	720	720	740	650	570	390	780	730
3	820	580	760	700	720	720	750	800	630	510	790	740
4	820	530	780	710	720	740	760	790	660	620	790	740
5	830	500	780	710	720	740	770	770	700	680	820	740
6	830	550	710	720	720	740	770	740	640	700	820	740
7	810	590	700	720	710	730	760	750	530	700	820	730
8	820	630	740	720	730	720	670	760	150	720	820	730
9	840	650	740	710	740	710	750	760	330	720	810	730
10	840	700	710	710	750	710	760	750	560	720	790	730
11	850	700	680	720	750	740	740	650	630	760	800	740
12	780	710	730	740	710	740	740	550	700	770	780	740
13	770	720	740	740	700	710	740	630	730	770	760	730
14	820	730	720	730	700	710	730	520	730	760	760	730
15	840	740	710	740	710	720	750	490	800	780	750	720
16	770	750	730	730	700	730	720	560	800	790	750	720
17	760	760	710	720	690	730	680	630	810	800	760	710
18	750	760	730	670	700	730	700	700	740	800	150	720
19	780	780	760	700	700	730	720	720	720	790	580	720
20	790	760	760	710	690	730	740	740	800	800	710	720
21	800	760	750	770	680	740	720	760	650	780	710	730
22	800	760	750	720	680	740	750	770	750	800	750	730
23	800	770	750	730	680	760	750	770	750	790	740	730
24	790	770	760	730	680	770	770	780	750	770	730	730
25	760	760	760	740	700	790	760	740	780	780	740	740
26	750	760	770	750	680	770	760	620	320	780	740	730
27	720	760	770	740	710	730	760	710	190	810	730	730
28	670	760	760	740	720	710	760	750	550	790	740	740
29	670	780	730	740	---	750	760	500	640	770	740	740
30	680	780	730	710	---	660	770	640	640	730	730	740
31	700	---	720	710	---	680	---	660	---	830	730	---
MONTH	790	700	740	720	710	730	740	690	640	730	740	730

DISSOLVED SULFATE (SO4), TONS PER DAY, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	118	186	179	193	216	534	228	140	592	286	174	10.8
2	113	186	162	212	220	465	224	149	499	250	118	8.48
3	111	792	183	215	227	365	207	231	412	259	107	7.99
4	108	824	213	224	247	332	209	232	349	291	89.6	6.79
5	101	618	249	224	214	320	206	204	346	310	84.1	6.79
6	89.6	557	234	229	175	326	202	178	575	295	66.4	6.19
7	91.9	440	223	237	161	313	205	160	1850	263	66.4	6.11
8	97.4	403	222	239	177	268	219	156	1350	245	57.6	6.11
9	99.8	391	208	236	150	238	229	158	2010	233	52.5	6.11
10	97.5	391	190	230	202	226	226	170	1740	216	44.8	6.11
11	101	370	211	226	290	268	200	376	1820	220	41.0	4.60
12	96.9	341	254	160	297	284	182	756	1340	200	35.8	4.20
13	127	329	284	150	312	268	162	672	1040	168	30.8	3.74
14	142	304	276	170	274	257	193	3860	804	156	30.8	5.12
15	145	282	247	200	266	253	249	1590	706	147	30.4	6.03
16	137	261	231	213	208	252	288	1050	566	137	32.4	6.61
17	137	252	215	259	168	250	248	856	483	125	26.7	6.52
18	132	277	223	219	189	258	227	769	613	114	39.7	7.78
19	124	284	224	214	246	252	212	636	441	109	59.5	7.78
20	115	269	226	215	350	231	210	575	359	106	46.0	6.61
21	112	261	219	218	338	220	194	501	247	86.3	32.6	8.87
22	110	252	215	202	358	210	192	451	632	86.4	28.4	10.6
23	110	256	213	203	360	215	190	405	413	78.9	26.0	10.6
24	109	245	203	199	369	208	191	379	296	76.9	19.7	10.1
25	111	232	195	210	406	205	189	683	278	69.5	18.2	8.99
26	121	226	187	215	452	189	185	442	509	67.4	17.4	8.87
27	212	218	189	204	502	205	172	364	151	70.0	15.6	8.48
28	262	215	199	196	451	320	168	314	304	68.3	15.0	8.59
29	232	213	205	192	---	348	164	420	275	66.5	14.2	8.99
30	202	208	203	192	---	266	162	895	1050	88.7	13.2	9.59
31	198	---	200	203	---	235	---	747	---	204	11.6	---
MONTH	131	336	216	210	280	277	205	597	735	164	46.6	7.48

07148450 SALT FORK ARKANSAS RIVER NEAR INGERSOLL, OKLA.--Continued

DISSOLVED CHLORIDE (CL), MG/L, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	330	210	250	200	220	220	210	200	190	35	230	230
2	330	100	230	200	220	220	230	170	100	39	260	230
3	300	110	250	200	210	220	240	280	150	60	270	230
4	300	76	260	210	210	230	240	270	170	140	270	230
5	320	51	260	210	220	230	250	250	200	190	300	230
6	310	87	210	210	220	230	260	230	160	200	300	230
7	290	120	200	220	210	230	250	240	72	200	300	230
8	300	150	230	210	220	220	180	250	24	210	300	230
9	330	170	230	210	230	210	240	240	37	220	280	220
10	330	200	210	210	240	210	240	240	99	220	270	220
11	340	200	190	210	240	230	230	160	150	240	280	230
12	260	210	220	230	210	230	230	87	200	250	260	230
13	260	220	230	230	200	210	230	150	220	250	250	230
14	300	220	220	220	200	210	230	63	230	250	240	220
15	330	230	210	230	210	220	240	47	280	260	240	220
16	260	240	220	220	200	220	220	97	280	270	240	220
17	250	240	210	220	190	220	190	150	290	280	250	210
18	240	250	240	180	200	230	200	200	230	280	24	220
19	260	260	240	200	200	220	220	210	220	270	110	210
20	270	240	250	210	190	220	230	230	280	270	210	220
21	280	240	240	260	190	230	220	250	160	260	210	220
22	280	240	240	220	190	230	240	250	240	270	240	220
23	280	260	240	230	190	240	240	260	240	270	230	230
24	270	250	240	220	190	250	260	260	230	250	230	230
25	240	250	240	230	200	270	250	230	260	260	230	230
26	240	250	260	240	190	250	240	140	36	260	230	230
27	210	250	250	230	210	220	240	210	30	290	220	220
28	180	250	250	230	210	210	250	240	88	270	230	230
29	180	260	220	230	---	240	250	51	160	250	230	230
30	190	260	230	210	---	170	250	160	320	220	230	230
31	200	---	220	210	---	180	---	170	---	310	230	---
MONTH	270	200	230	220	210	220	230	190	180	230	240	230

DISSOLVED CHLORIDE (CL), TONS PER DAY, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	46.3	55.0	58.7	55.1	65.9	161	67.5	40.0	163	35.7	54.0	3.42
2	44.6	32.7	50.3	60.5	67.1	142	69.6	39.0	87.5	25.0	39.3	2.67
3	40.5	150	60.1	61.6	66.3	112	66.1	80.9	98.0	30.5	36.5	2.48
4	39.7	118	70.9	66.3	72.0	103	66.1	79.5	90.0	65.8	30.6	2.11
5	38.9	63.1	62.8	66.3	65.3	99.4	66.8	66.2	98.8	86.7	30.8	2.11
6	33.5	88.1	69.2	66.9	53.5	101	68.1	55.3	144	84.2	24.3	1.93
7	32.9	89.4	63.7	72.5	47.6	98.7	67.5	51.2	251	75.1	24.3	1.93
8	35.6	96.0	68.9	69.7	53.5	82.0	58.8	51.3	216	71.4	21.1	1.93
9	39.2	102	64.6	69.7	46.6	70.3	73.2	49.9	226	71.3	18.1	1.84
10	38.3	112	56.1	68.0	64.8	66.9	71.3	54.4	307	65.9	15.3	1.84
11	40.4	106	59.0	65.8	42.7	83.2	62.1	92.4	433	69.3	14.4	1.43
12	32.3	101	76.6	49.7	87.9	88.2	56.5	120	382	64.8	11.9	1.30
13	42.8	100	88.2	46.6	89.1	79.4	56.5	160	315	54.7	10.1	1.18
14	51.8	91.5	84.3	51.1	78.3	76.0	60.9	468	253	51.3	9.72	1.54
15	57.0	87.6	73.1	62.1	78.8	77.2	79.7	152	247	49.1	9.72	1.84
16	46.3	83.6	69.5	64.2	59.4	76.0	87.9	181	198	46.7	10.4	2.02
17	45.2	79.7	63.5	79.0	46.2	75.4	69.3	204	173	43.8	8.78	1.93
18	42.1	91.1	71.3	58.8	54.0	81.4	64.8	220	191	40.1	6.35	2.38
19	41.4	94.8	70.6	61.0	70.2	76.0	64.7	185	135	37.2	11.3	2.27
20	39.4	84.9	74.3	63.5	96.4	69.5	65.2	179	125	35.7	13.6	2.02
21	39.3	82.3	70.0	73.7	94.4	66.3	59.4	165	60.9	28.8	9.64	2.67
22	38.6	79.7	68.7	61.8	100	65.2	61.6	146	202	29.2	9.07	3.27
23	38.6	86.3	68.0	64.0	106	66.0	60.9	137	132	27.0	8.07	3.42
24	37.2	79.7	64.2	60.0	103	67.5	64.6	126	90.7	25.0	6.21	3.17
25	35.0	76.3	61.6	65.2	116	70.0	62.1	212	92.7	23.2	5.65	2.79
26	38.9	74.3	63.2	68.7	126	61.4	58.3	99.8	57.3	22.5	5.40	2.79
27	61.8	71.6	61.4	63.3	149	61.8	54.4	108	23.9	25.1	4.69	2.55
28	70.5	70.9	65.5	60.9	132	94.7	55.4	100	48.7	23.3	4.66	2.67
29	62.2	70.9	61.8	59.6	---	111	54.0	42.8	68.7	21.6	4.41	2.79
30	56.4	69.5	64.0	56.7	---	68.4	52.7	224	399	26.7	4.16	2.98
31	56.7	---	61.2	60.1	---	62.2	---	192	---	76.2	3.66	---
MONTH	44.0	86.3	67.3	63.0	81.5	84.4	64.2	132	177	46.2	15.0	2.30

07148450 SALT FORK ARKANSAS RIVER NEAR INGERSOLL, OKLA.--Continued

DISSOLVED SOLIDS (RESIDUE AT 180 DEG. C), MG/L, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2070	1600	1770	1550	1640	1660	1610	1560	1520	636	1700	1680
2	2050	1100	1720	1560	1630	1640	1710	1400	1100	749	1860	1680
3	1970	1140	1790	1560	1620	1650	1750	1930	1320	902	1900	1720
4	1990	978	1660	1590	1620	1690	1760	1870	1440	1260	1870	1700
5	2030	864	1860	1600	1630	1720	1810	1810	1570	1490	1980	1690
6	2010	1030	1610	1620	1640	1710	1820	1710	1370	1560	1980	1690
7	1950	1190	1580	1640	1600	1680	1790	1750	961	1580	1970	1680
8	1980	1300	1690	1620	1660	1640	1450	1790	370	1610	1970	1680
9	2070	1400	1690	1610	1720	1600	1750	1760	688	1640	1940	1660
10	2060	1540	1600	1600	1730	1600	1760	1750	1080	1630	1890	1670
11	2100	1580	1490	1620	1740	1700	1710	1380	1320	1760	1930	1700
12	1850	1600	1670	1700	1590	1690	1710	1030	1580	1800	1850	1700
13	1820	1630	1690	1690	1580	1600	1690	1300	1670	1810	1770	1670
14	1970	1670	1630	1660	1580	1610	1670	917	1680	1780	1760	1660
15	2070	1720	1610	1710	1590	1630	1750	843	1910	1850	1730	1650
16	1820	1750	1670	1660	1540	1670	1630	1080	1910	1890	1730	1630
17	1780	1760	1600	1650	1520	1660	1490	1320	1940	1910	1770	1610
18	1750	1770	1730	1450	1550	1680	1540	1580	1710	1910	354	1630
19	1840	1850	1760	1540	1540	1660	1640	1620	1630	1870	1140	1620
20	1900	1760	1770	1590	1530	1660	1710	1710	1920	1900	1610	1650
21	1920	1760	1750	1820	1490	1690	1640	1770	1370	1830	1610	1670
22	1920	1760	1730	1640	1490	1700	1740	1810	1730	1900	1750	1670
23	1930	1820	1730	1670	1500	1760	1740	1820	1750	1870	1710	1680
24	1890	1800	1760	1670	1500	1800	1820	1850	1720	1810	1670	1670
25	1760	1790	1760	1710	1580	1690	1790	1710	1850	1840	1690	1700
26	1730	1780	1820	1740	1490	1800	1760	1270	679	1840	1700	1680
27	1620	1780	1800	1760	1610	1670	1760	1610	516	1950	1670	1670
28	1450	1780	1770	1690	1620	1610	1790	1740	1040	1880	1700	1700
29	1470	1840	1670	1720	---	1730	1790	864	1350	1810	1700	1710
30	1510	1840	1670	1600	---	1440	1800	1350	2040	1670	1670	1700
31	1560	---	1650	1600	---	1460	---	1420	---	2010	1680	---
MONTH	1870	1570	1710	1640	1590	1670	1710	1530	1420	1680	1720	1670

DISSOLVED SOLIDS (TONS PER DAY), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	291	419	416	427	492	1210	517	312	1310	649	399	24.9
2	277	359	376	472	497	1060	517	321	962	479	281	19.5
3	266	1560	430	480	512	838	482	556	862	458	256	18.6
4	263	1520	507	502	555	757	485	550	762	592	212	15.6
5	247	1070	593	505	484	743	484	479	776	680	203	15.5
6	217	1040	530	516	399	755	477	411	1230	657	160	14.1
7	221	887	503	540	363	721	483	373	3350	593	160	14.1
8	235	832	506	538	403	611	474	367	3340	548	138	14.1
9	246	843	475	535	348	536	534	366	4200	531	126	13.9
10	239	861	428	518	467	510	523	397	3350	489	107	14.0
11	249	836	463	507	672	615	462	797	3810	508	99.0	10.6
12	230	769	582	367	665	648	420	1420	3020	467	64.9	9.64
13	300	744	648	342	704	605	415	1390	2390	396	71.7	8.57
14	340	694	625	385	619	582	442	6810	1850	365	71.3	11.7
15	358	655	561	462	597	572	581	2730	1690	350	70.1	13.8
16	324	610	528	484	457	577	651	2020	1350	327	74.7	15.0
17	322	584	484	593	369	569	543	1790	1160	299	62.1	14.8
18	307	645	514	474	418	594	499	1740	1420	273	93.7	17.6
19	295	674	518	470	541	574	483	1430	999	257	117	17.5
20	277	623	526	481	777	524	485	1330	861	251	104	15.1
21	270	604	510	516	740	502	443	1170	522	203	73.9	20.3
22	264	584	495	461	784	482	446	1060	1460	205	66.2	24.8
23	266	604	490	464	838	499	442	958	964	187	60.0	24.9
24	260	575	470	455	814	486	452	899	678	181	45.1	23.0
25	257	546	451	485	917	490	445	1580	659	164	41.5	20.7
26	260	529	442	498	990	442	428	905	1080	159	39.9	20.4
27	477	509	442	474	1140	469	399	826	411	168	35.6	19.4
28	568	505	464	447	1010	726	396	728	576	162	34.4	19.7
29	508	502	469	446	---	803	367	726	580	156	32.6	20.8
30	448	492	464	432	---	574	379	1890	2540	203	30.2	22.0
31	442	---	459	458	---	511	---	1610	---	494	26.8	---
MONTH	306	722	496	475	628	632	472	1220	1610	369	109	17.2

07148450 SALT FORK ARKANSAS RIVER NEAR INGERSOLL, OKLA.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2620	2080	2280	2030	2130	2150	2100	2040	1990	991	2200	2160
2	2600	1520	2220	2040	2120	2130	2210	1860	1520	1120	2380	2160
3	2510	1560	2300	2040	2110	2140	2250	2460	1770	1290	2420	2220
4	2530	1380	2380	2070	2110	2190	2270	2400	1900	1710	2390	2200
5	2570	1250	2380	2080	2120	2220	2320	2320	2050	1960	2520	2190
6	2550	1440	2100	2110	2130	2210	2330	2220	1820	2040	2520	2190
7	2480	1620	2060	2130	2090	2180	2300	2260	1360	2060	2510	2180
8	2520	1750	2190	2110	2150	2130	1920	2300	690	2100	2510	2180
9	2620	1860	2190	2100	2220	2080	2250	2270	1050	2130	2470	2150
10	2610	2020	2090	2090	2230	2090	2270	2250	1500	2120	2410	2160
11	2650	2060	1960	2110	2240	2200	2210	1840	1770	2270	2460	2200
12	2370	2090	2160	2200	2070	2190	2210	1440	2060	2320	2370	2200
13	2340	2120	2190	2190	2060	2080	2190	1750	2160	2320	2280	2170
14	2510	2160	2120	2150	2060	2100	2170	1310	2180	2290	2270	2150
15	2620	2220	2100	2210	2070	2120	2260	1230	2440	2370	2230	2140
16	2340	2260	2160	2150	2020	2160	2120	1490	2440	2410	2230	2120
17	2290	2270	2090	2140	2000	2150	1960	1770	2470	2440	2260	2100
18	2260	2260	2230	1920	2030	2180	2020	2060	2210	2440	672	2120
19	2360	2370	2270	2020	2020	2150	2130	2110	2120	2390	1560	2110
20	2420	2270	2280	2070	2010	2150	2210	2210	2450	2430	2100	2140
21	2450	2270	2250	2330	1960	2190	2130	2280	1850	2350	2100	2160
22	2450	2270	2230	2130	1960	2200	2240	2320	2230	2430	2250	2160
23	2460	2330	2230	2170	1970	2270	2240	2330	2250	2390	2210	2180
24	2410	2310	2270	2160	1970	2310	2330	2370	2220	2320	2170	2170
25	2270	2300	2270	2210	2060	2410	2300	2210	2370	2360	2190	2200
26	2230	2290	2340	2240	1960	2310	2270	1710	1040	2360	2200	2180
27	2110	2290	2310	2220	2100	2160	2270	2100	855	2480	2160	2160
28	1920	2290	2280	2190	2110	2100	2300	2240	1450	2400	2200	2200
29	1940	2360	2160	2220	---	2230	2300	1250	1800	2320	2200	2210
30	1980	2360	2170	2090	---	1900	2310	1800	2590	2160	2170	2200
31	2040	---	2140	2090	---	1950	---	1880	---	2550	2180	---
MONTH	2390	2060	2210	2130	2070	2160	2210	2000	1890	2170	2220	2170

TEMPERATURE (DEG. C) OF WATER , WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17.0	19.0	0.0	5.0	4.0	12.0	6.0	23.0	22.5	28.5	26.0	22.5
2	19.0	18.0	5.0	4.0	4.0	7.0	9.5	24.0	20.0	29.0	30.5	30.5
3	20.0	17.0	6.0	5.0	3.0	5.0	13.5	26.0	27.0	31.0	29.0	23.0
4	24.0	11.0	8.0	4.0	4.0	5.0	16.0	26.5	27.5	30.0	21.0	22.0
5	21.0	11.0	4.0	5.0	2.0	11.0	16.5	27.0	30.5	31.0	22.0	19.0
6	14.0	12.0	9.0	1.0	2.0	15.0	16.0	28.0	30.0	33.0	30.0	18.0
7	14.0	12.0	9.0	8.0	7.0	10.0	14.0	28.0	24.0	33.5	30.0	20.0
8	13.0	13.0	4.0	8.0	5.0	11.0	18.0	28.0	24.0	31.0	22.0	22.0
9	18.0	12.0	6.0	6.0	3.0	6.0	20.5	29.0	23.0	35.0	22.0	24.0
10	23.0	12.0	7.0	5.0	4.0	4.0	14.5	22.5	21.0	31.0	31.0	27.0
11	18.0	13.0	7.0	3.0	7.0	4.0	17.0	25.0	21.0	29.0	30.5	25.0
12	21.0	12.0	7.0	3.0	4.0	5.0	18.5	20.0	24.0	28.0	26.0	23.5
13	17.0	12.0	7.0	5.0	4.0	7.0	15.0	19.0	25.0	27.5	26.0	21.0
14	14.0	10.0	6.0	4.0	5.0	6.0	19.0	18.0	24.0	28.5	26.5	22.0
15	18.0	10.0	5.0	6.0	2.0	5.0	23.0	21.0	26.0	29.0	31.5	23.0
16	21.0	12.0	4.0	5.0	7.0	8.0	24.0	24.0	27.0	22.0	31.0	25.0
17	21.0	11.0	5.0	5.0	2.0	11.0	22.5	24.0	26.0	22.0	30.0	25.5
18	21.0	14.0	5.0	6.0	5.0	17.0	---	26.0	27.0	23.0	30.0	21.0
19	19.0	14.0	6.0	8.0	4.0	14.0	21.0	25.5	26.0	34.0	32.0	24.0
20	18.0	13.0	6.0	7.0	6.0	21.0	22.0	25.5	27.5	24.0	33.0	23.0
21	16.0	13.0	7.0	7.0	5.0	18.0	23.0	29.0	27.0	32.5	33.5	17.0
22	19.0	13.0	8.0	6.0	4.0	16.0	25.0	23.0	28.0	24.0	32.0	16.5
23	21.0	11.0	5.0	9.0	5.0	15.0	28.0	25.0	24.0	28.0	23.0	24.0
24	20.0	10.0	6.0	10.0	6.0	14.0	27.0	---	24.0	27.5	32.0	24.5
25	16.0	10.0	5.0	11.0	11.0	13.0	26.0	19.0	24.5	28.0	31.0	25.0
26	16.0	11.0	4.0	10.0	9.0	10.0	25.0	21.0	30.5	31.5	34.5	24.0
27	16.0	10.0	5.0	6.0	9.0	17.0	22.0	24.0	24.0	30.0	28.0	25.0
28	16.0	6.0	1.0	9.0	10.0	6.5	23.0	21.0	30.0	31.0	33.0	18.0
29	20.0	7.0	3.0	7.0	---	7.0	24.0	21.5	28.0	30.5	22.0	16.0
30	19.0	0.0	4.0	6.0	---	12.0	24.0	18.0	29.0	28.0	25.5	17.5
31	19.0	---	4.0	4.0	---	16.5	---	20.0	---	27.0	33.0	---
MONTH	18.5	11.5	5.5	6.0	5.0	11.0	20.0	23.5	26.5	29.0	29.0	22.0

07149000 MEDICINE LODGE NEAR KIOWA, KANS.

LOCATION.--Lat 37°02'17", long 98°28'04", in SE 1/4 SW 1/4 sec.36, T.34 S., R.11 W., Barber County, Kansas at gaging station at bridge on State Highway 14, 200 ft (61 m) downstream from the Atchison, Topeka and Santa Fe Railway Co. bridge, 1.5 mi (2.4 km) northeast of Kiowa, and at mile 22.2 (35.7 km).

DRAINAGE AREA.--903 mi^2 (2,340 km^2).

PERIOD OF RECORD.--Chemical analyses: October 1954 to September 1955, October 1973 to current year.
Water temperatures: October 1954 to September 1955, October 1973 to current year.

EXTREMES, Current year.--Specific conductance: Maximum daily, 1,510 micromhos/cm Aug. 13, 15; minimum daily, 538 micromhos/cm Sept. 1.
Water temperatures: Maximum, 33.0°C Aug. 6; minimum, 0.5°C on several days during November-January.

Period of record.--Specific conductance: Maximum daily, 1,570 micromhos/cm July 21, 1974; minimum daily, 359 micromhos/cm Aug. 17, 1974.
Water temperatures: Maximum, 33.0°C Aug. 10, 1974 and Aug. 6, 1975; minimum, freezing point on many days during December and January, 1975.

REMARKS.--Continuous monitor records for specific conductance are collected for this station. Records of maximum and minimum specific conductance values are available in district office at Oklahoma City, Okla.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	DIS-CHARGE (CFS)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	ALKA-LINITY AS CACO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)
OCT.											
04...	0930	58	120	23	71	--	200	0	164	--	--
15...	1100	114	110	--	50	--	219	0	180	220	62
25...	1245	106	94	17	51	--	196	0	161	170	60
NOV.											
05...	1045	322	120	20	--	5.3	166	0	136	--	50
12...	1000	138	120	26	58	4.4	254	0	208	240	72
29...	1130	121	130	41	--	4.6	325	0	267	--	99
DEC.											
01...	1130	116	140	27	66	4.0	271	0	222	270	87
11...	1330	140	120	23	54	3.3	238	0	195	220	65
18...	1410	118	130	29	59	3.7	258	0	212	240	70
JAN.											
15...	1130	80	140	29	67	3.8	259	0	212	290	85
16...	1015	110	110	24	49	3.1	234	0	192	220	--
31...	1245	116	120	27	58	3.5	237	0	194	260	71
FEB.											
02...	1700	112	85	28	58	4.2	106	0	87	240	73
17...	1630	70	130	29	61	4.5	255	0	209	270	78
26...	1400	210	150	40	76	4.8	262	0	215	350	100
MAR.											
02...	1100	191	140	34	63	3.8	247	0	203	290	--
26...	1145	214	140	42	86	4.3	247	0	203	340	110
29...	1150	221	160	38	62	4.0	247	0	203	350	--
APR.											
02...	1330	167	95	33	65	3.4	112	0	92	320	74
16...	1045	221	170	44	82	4.2	224	0	184	450	95
22...	1030	134	130	33	65	3.9	233	0	191	300	78
MAY											
13...	1155	475	47	10	15	6.3	116	0	95	71	16
16...	1030	202	170	45	74	5.5	233	0	191	450	84
26...	1000	116	150	33	66	4.8	219	0	180	350	80
JUNE											
13...	1000	166	170	38	68	5.5	250	0	205	380	91
22...	1015	566	140	30	40	7.6	155	0	127	360	44
25...	0900	1070	67	12	17	7.7	146	0	120	110	22
JULY											
01...	1030	212	120	22	47	7.7	208	0	171	220	59
14...	1230	74	140	34	89	5.7	222	0	182	340	110
27...	1045	32	150	41	110	5.8	200	0	164	400	140
AUG.											
14...	1030	12	150	39	120	--	186	0	153	400	160
19...	1045	36	96	26	77	7.6	138	0	113	280	91
31...	1015	111	150	33	97	7.3	183	0	150	420	120
SEP.											
01...	1045	86	53	14	38	7.1	158	0	130	97	42
12...	1100	13	140	37	110	5.9	226	0	185	--	--
27...	0930	22	110	28	86	4.7	207	0	170	260	110

07149000 MEDICINE LODGE RIVER NEAR KIOWA, KANS.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	CARBON DIOXIDE (CO2) (MG/L)
OCT.											
04...	.25	--	--	--	390	230	--	1.6	1010	8.3	1.6
15...	.61	637	.87	196	--	--	--	--	955	8.5	1.1
25...	.43	558	.76	160	300	140	--	1.3	850	8.3	1.6
NOV.											
05...	--	548	.75	476	380	240	--	--	790	8.2	1.7
12...	--	708	.96	264	410	260	23	1.3	1030	8.2	2.6
29...	--	848	1.15	277	490	230	--	--	1260	7.7	10
DEC.											
01...	--	769	1.05	241	460	240	24	1.3	1120	8.4	1.7
11...	--	643	.87	243	390	200	23	1.2	937	8.7	.8
18...	--	715	.97	228	440	230	22	1.2	1040	8.5	1.3
JAN.											
13...	--	823	1.12	178	470	260	24	1.3	1200	8.5	1.3
16...	--	608	.83	181	370	180	22	1.1	955	8.6	.9
31...	--	700	.95	219	410	220	23	1.2	1030	8.7	.8
FEB.											
02...	--	587	.80	178	330	240	28	1.4	917	8.3	.9
17...	--	746	1.01	141	440	230	23	1.3	1080	8.3	2.0
26...	--	907	1.23	514	540	320	23	1.4	1270	8.4	1.7
MAR.											
02...	--	815	1.11	420	490	290	22	1.2	1140	8.0	4.0
28...	--	919	1.25	531	520	320	26	1.6	1330	7.8	6.3
29...	--	933	1.27	557	560	350	19	1.1	1300	7.9	5.0
APR.											
02...	--	715	.97	322	570	280	27	1.5	1060	8.3	.9
16...	--	--	--	--	610	420	23	1.5	1390	7.9	4.5
22...	--	806	1.10	292	460	270	23	1.3	1140	8.0	3.7
MAY											
13...	--	244	.33	313	160	63	16	.5	378	7.8	2.9
16...	--	--	--	--	610	420	21	1.3	1360	8.0	3.7
26...	--	859	1.17	274	510	330	22	1.3	1190	8.0	3.5
JUNE											
13...	--	931	1.27	417	580	380	20	1.2	1260	8.2	2.5
22...	--	756	1.03	1160	470	350	15	.8	1020	7.8	3.9
25...	--	343	.47	991	220	97	14	.5	501	7.9	2.9
JULY											
01...	.39	627	.85	359	390	220	20	1.0	929	8.9	.4
14...	.37	895	1.22	179	490	310	28	1.8	1280	7.9	4.5
27...	.06	1020	1.39	88.1	540	380	30	2.1	1430	8.1	2.5
AUG.											
14...	--	1060	1.44	34.3	540	380	--	2.3	1520	7.8	4.7
19...	--	674	.92	65.5	350	230	32	1.8	1020	7.9	2.8
31...	--	972	1.32	291	510	360	29	1.9	1360	7.6	7.4
SEP.											
01...	--	348	.47	80.8	190	60	29	1.2	538	7.9	3.2
12...	--	--	--	--	500	320	32	2.1	1370	8.0	3.6
27...	--	744	1.01	44.2	390	220	32	1.9	1140	8.1	2.6

07149000 MEDICINE LODGE RIVER NEAR KIOWA, KANS.--Continued

DISSOLVED SULFATE (SO4), MG/L, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	240	230	220	250	240	320	320	280	210	190	450	110
2	220	230	250	250	220	300	260	250	240	280	380	150
3	230	200	210	260	220	300	320	260	290	310	350	210
4	220	250	280	250	240	290	300	260	280	340	370	250
5	230	180	210	220	250	290	300	260	290	340	390	300
6	230	210	240	260	260	320	370	260	350	300	410	350
7	220	230	230	260	270	340	300	270	320	300	430	350
8	220	240	250	250	280	300	290	270	330	420	450	330
9	220	240	240	260	340	280	390	280	360	360	470	420
10	220	240	240	250	300	290	320	260	230	370	---	390
11	220	240	220	240	240	300	300	230	250	350	490	450
12	220	250	230	300	240	350	300	300	350	380	510	450
13	210	250	270	350	250	280	280	170	380	380	530	420
14	210	250	310	350	260	340	310	300	---	390	450	410
15	220	250	250	240	250	310	360	410	---	390	530	420
16	240	250	240	240	230	320	460	440	350	490	440	330
17	230	250	220	230	250	310	340	380	190	410	420	300
18	230	240	220	250	240	290	320	370	300	440	410	200
19	230	250	240	250	250	290	310	360	150	440	250	280
20	210	250	240	240	240	310	310	360	150	430	390	280
21	210	250	250	250	250	320	290	350	210	440	400	280
22	230	250	270	250	---	300	310	350	240	440	390	290
23	220	250	240	250	300	310	280	350	140	450	420	300
24	220	250	250	240	---	290	290	330	200	440	450	320
25	190	250	220	250	350	330	300	300	120	440	410	330
26	200	250	240	240	380	290	290	340	170	440	440	320
27	220	250	260	240	360	---	280	350	140	480	480	310
28	230	250	230	240	330	250	300	320	310	450	450	300
29	230	380	280	240	---	400	280	330	140	400	450	300
30	230	200	250	230	---	380	280	360	170	450	440	290
31	220	---	270	230	---	360	---	300	---	470	440	---
MONTH	220	240	240	250	270	310	310	310	250	390	430	310

DISSOLVED SULFATE (SO4), TONS PER DAY, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	41.5	83.8	68.9	86.4	72.6	176	147	87.7	170	109	29.2	25.5
2	36.8	90.7	79.7	86.4	66.5	155	117	82.4	143	129	32.8	21.1
3	37.3	127	66.9	87.8	70.1	145	137	87.0	144	124	34.0	19.3
4	34.5	354	91.5	84.4	71.3	138	121	89.9	127	130	30.0	16.9
5	34.8	156	68.6	79.0	67.5	140	118	87.0	138	125	26.3	15.4
6	34.8	135	79.7	98.3	63.2	160	143	81.4	176	104	25.5	16.1
7	38.0	119	78.2	100	56.3	164	121	80.2	156	98.8	23.2	15.1
8	44.0	112	83.0	96.5	52.9	133	122	74.4	157	129	20.7	12.5
9	45.1	106	75.2	98.3	45.9	124	166	72.6	374	105	20.3	15.9
10	45.1	102	76.5	87.8	77.0	145	126	70.2	310	95.9	---	13.7
11	45.1	96.6	83.2	71.3	113	160	113	73.3	180	88.8	18.5	14.6
12	46.3	93.2	107	72.9	108	169	112	90.7	189	88.2	17.9	15.8
13	49.9	87.8	124	75.6	91.1	149	109	218	170	80.0	17.2	15.9
14	56.7	83.0	125	80.3	91.3	175	144	433	---	77.9	14.6	16.6
15	67.7	81.7	91.1	81.6	86.4	160	221	320	---	67.4	18.6	20.4
16	64.6	81.7	79.7	71.3	55.9	165	274	240	117	74.1	19.0	20.5
17	55.9	81.7	68.9	74.5	47.3	102	169	170	494	55.4	18.1	21.1
18	54.6	78.4	70.1	81.7	51.8	152	147	146	400	59.4	18.8	15.7
19	55.9	78.3	79.7	78.3	60.8	145	134	130	145	54.6	24.3	24.2
20	51.0	75.6	81.6	70.0	104	147	124	117	84.2	48.8	33.7	22.7
21	51.0	75.6	86.4	72.9	117	144	110	104	105	47.5	25.9	21.9
22	55.9	75.6	93.3	68.9	---	150	112	92.6	367	45.1	21.1	21.9
23	52.3	74.3	86.9	67.5	155	132	103	110	301	41.3	19.3	21.1
24	55.8	74.3	85.1	64.8	---	114	110	102	751	38.0	18.2	21.6
25	54.4	74.3	71.9	68.9	183	123	112	117	347	38.0	14.4	20.5
26	63.7	75.6	76.5	66.1	215	104	106	108	199	42.8	15.4	19.0
27	138	77.0	84.9	64.8	206	---	101	102	102	41.5	16.8	18.4
28	107	79.7	76.4	63.5	184	144	109	98.5	210	36.5	15.8	17.8
29	92.5	124	93.0	63.5	---	239	93.7	164	226	28.1	17.0	18.6
30	85.7	83.7	85.1	68.3	---	196	90.7	329	142	29.2	15.4	18.8
31	82.0	---	93.3	72.0	---	168	---	406	---	29.2	132	---
MONTH	57.4	101	84.1	76.9	96.8	153	130	147	229	73.0	25.1	18.6

07149000 MEDICINE LODGE RIVER NEAR KIOWA, KANS.--Continued

DISSOLVED CHLORIDE (CL), MG/L, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	69	65	64	72	71	84	84	78	61	56	100	29
2	64	65	72	74	63	81	74	73	69	78	92	43
3	66	59	62	75	65	80	83	74	79	82	88	60
4	63	73	78	73	70	79	81	74	77	86	91	73
5	67	51	61	65	73	79	81	74	79	86	93	81
6	67	62	69	75	75	84	91	74	87	80	96	87
7	65	68	68	74	76	86	80	76	84	81	99	87
8	64	68	73	74	77	81	79	76	85	98	100	85
9	64	68	69	74	86	77	94	77	89	89	110	98
10	64	71	69	73	81	79	84	75	67	91	---	93
11	64	69	64	70	71	80	81	68	72	88	110	100
12	62	72	68	81	70	88	80	80	88	92	110	100
13	60	72	76	88	73	77	76	50	92	92	110	98
14	61	73	82	87	74	87	82	80	---	93	100	97
15	64	73	74	70	73	82	89	97	---	94	110	98
16	69	73	71	70	66	84	100	100	88	110	100	85
17	66	73	63	68	73	82	86	92	53	97	98	80
18	68	71	63	72	70	79	84	91	80	100	96	57
19	66	72	71	73	72	79	82	90	43	100	73	77
20	62	72	71	69	70	82	82	90	44	99	93	78
21	62	72	73	72	72	83	79	87	61	100	95	78
22	66	72	76	73	---	81	82	87	70	100	93	79
23	65	72	71	73	80	82	77	87	40	100	98	80
24	64	72	73	71	---	79	79	85	57	100	100	83
25	56	72	65	72	87	84	81	81	32	100	97	85
26	59	72	70	70	92	79	79	86	49	100	100	84
27	63	73	74	70	89	---	78	87	38	110	110	82
28	68	73	68	71	85	73	80	83	82	100	100	81
29	66	92	77	71	---	95	77	85	40	95	100	80
30	66	58	74	66	---	92	77	90	49	100	100	79
31	63	---	76	66	---	89	---	81	---	110	100	---
MONTH	64	70	70	73	75	82	82	82	66	94	99	81

DISSOLVED CHLORIDE (CL), TONS PER DAY, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11.9	23.7	20.0	24.9	21.5	46.3	38.6	24.4	49.4	32.1	6.48	6.73
2	10.7	25.6	22.9	25.6	19.1	41.8	33.4	24.0	41.2	35.8	7.95	6.04
3	10.7	37.4	19.8	25.3	20.7	38.7	35.4	24.6	39.2	32.8	8.55	5.51
4	9.87	103	25.5	24.6	20.8	37.5	32.6	25.6	34.9	33.0	7.37	4.93
5	10.1	44.3	19.9	23.3	19.7	38.2	31.9	24.8	37.5	31.6	6.28	4.16
6	10.1	39.8	22.9	28.4	18.2	42.0	35.1	23.2	43.7	27.6	5.96	3.99
7	11.2	35.1	23.1	28.6	16.4	41.6	32.2	22.6	40.8	26.7	5.35	3.76
8	12.8	31.8	24.2	28.6	14.6	35.9	33.3	20.9	40.4	30.2	4.59	3.21
9	13.1	30.1	21.6	28.0	11.6	34.1	40.1	20.0	42.5	26.0	4.75	3.70
10	13.1	30.3	22.0	25.6	20.8	39.5	33.1	20.3	90.3	23.6	---	3.26
11	13.1	27.8	24.2	20.8	33.5	42.6	30.6	21.7	51.7	22.3	4.16	3.24
12	13.1	26.8	31.8	19.7	31.6	47.5	29.8	24.2	47.5	21.4	3.86	3.51
13	14.3	25.3	34.9	19.0	26.6	41.0	30.3	64.1	41.2	19.4	3.56	3.70
14	16.5	24.2	33.0	20.0	26.0	44.9	38.1	115	---	18.6	3.24	3.93
15	19.7	23.9	27.0	18.0	25.2	42.3	54.5	75.7	---	16.2	3.86	4.76
16	18.6	23.9	23.6	20.8	16.0	43.3	59.7	54.5	29.5	16.6	4.32	5.28
17	16.0	23.9	19.7	22.0	13.8	43.0	42.7	41.2	138	15.1	4.23	5.62
18	16.2	23.2	20.1	23.5	15.1	41.4	38.6	35.9	107	13.5	4.41	4.46
19	16.0	22.6	23.6	22.9	17.5	39.5	35.4	32.6	41.6	12.4	7.10	6.65
20	15.1	21.8	24.2	20.1	30.2	39.0	32.8	29.2	24.7	11.2	8.04	6.32
21	15.1	21.8	25.2	21.0	33.6	37.4	29.9	25.8	30.6	10.8	6.16	6.11
22	16.0	21.8	26.3	20.1	---	35.2	29.7	23.0	107	10.3	5.02	5.97
23	15.4	21.4	24.5	19.7	41.3	35.0	28.3	27.2	86.0	9.18	4.50	5.62
24	16.2	21.4	24.8	19.2	---	31.1	29.9	41.6	214	8.64	4.05	5.60
25	16.0	21.4	21.2	19.8	45.6	31.3	30.2	31.5	92.4	6.64	3.40	5.28
26	16.8	21.8	22.3	19.3	52.2	26.4	29.0	27.4	57.4	9.72	3.51	4.99
27	39.5	22.5	24.2	18.9	51.4	---	28.2	25.4	27.6	9.50	3.86	4.87
28	31.8	23.3	22.6	18.8	47.5	42.2	28.9	25.5	55.6	8.10	3.51	4.81
29	26.6	30.1	25.6	18.8	---	56.7	25.8	42.2	64.5	6.67	3.78	4.97
30	24.6	18.5	25.2	19.6	---	47.4	24.9	82.1	41.0	6.48	3.51	5.12
31	23.5	---	26.3	20.7	---	41.6	---	110	---	6.83	30.0	---
MONTH	16.6	29.0	24.3	22.1	26.6	40.2	34.1	38.3	63.1	18.0	5.84	4.87

07149000 MEDICINE LODGE RIVER NEAR KIOWA, KANS.--Continued

DISSOLVED SOLIDS (RESIDUE AT 180 DEG. C), MG/L, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	675	638	622	703	692	817	817	758	593	549	992	348
2	629	638	702	719	616	792	725	708	678	760	892	454
3	643	579	608	731	631	783	808	725	775	796	858	588
4	617	708	757	716	680	767	792	725	750	837	883	717
5	655	511	598	637	717	775	792	725	775	842	908	792
6	657	604	670	727	733	817	683	725	850	779	933	550
7	637	662	667	724	742	842	783	742	817	792	967	550
8	628	668	710	721	750	792	775	742	825	954	992	633
9	622	668	672	727	842	750	917	750	868	871	1030	950
10	628	692	675	717	792	767	817	733	653	883	---	908
11	628	675	630	685	692	783	792	667	700	858	1050	992
12	610	700	667	787	679	858	783	783	858	892	1080	992
13	591	700	739	861	714	752	758	501	892	900	1100	958
14	597	708	802	851	725	844	800	783	---	908	992	942
15	628	708	722	686	717	800	867	942	---	917	1100	958
16	675	708	694	682	648	817	1010	975	858	1050	975	833
17	642	708	619	667	717	800	842	892	529	942	958	783
18	660	692	616	704	685	767	817	883	782	983	933	558
19	646	700	693	717	707	775	800	875	452	975	708	750
20	607	700	692	675	685	797	800	875	457	967	908	758
21	604	700	715	700	700	808	767	850	594	975	925	758
22	647	700	741	708	---	792	800	850	679	983	908	767
23	632	700	695	708	783	802	750	850	427	992	958	783
24	627	700	717	692	---	771	775	825	559	983	992	808
25	550	700	632	700	850	823	787	792	573	975	942	825
26	577	702	682	685	900	767	773	842	497	975	975	817
27	617	708	722	683	867	---	761	850	416	1040	1040	800
28	666	708	662	692	833	717	785	808	796	1000	1000	792
29	641	692	751	692	---	925	750	833	427	925	992	783
30	641	566	718	649	---	892	750	875	500	1000	983	775
31	620	---	740	650	---	867	---	792	---	1030	975	---
MONTH	629	681	688	710	735	802	803	796	656	914	965	771

DISSOLVED SOLIDS (TONS PER DAY), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	117	233	195	243	209	450	375	237	480	314	64.3	80.8
2	105	251	224	248	186	408	327	233	405	349	77.1	63.7
3	104	367	194	247	201	378	345	243	385	318	83.4	54.0
4	96.6	1000	247	242	202	364	319	251	340	321	71.5	48.4
5	99.0	444	195	229	194	375	312	243	368	309	61.3	40.6
6	99.3	388	223	275	178	408	341	227	427	269	57.9	25.2
7	110	341	227	280	160	407	315	220	397	261	52.2	23.8
8	125	312	236	278	142	351	326	204	392	294	45.5	31.5
9	128	296	210	275	114	332	391	194	902	254	44.5	35.9
10	129	295	215	252	203	383	322	198	880	229	---	31.9
11	129	272	238	203	327	416	299	213	503	218	39.7	32.1
12	128	261	312	191	306	463	292	237	463	207	37.9	34.8
13	140	246	339	186	260	400	295	643	400	190	35.6	36.2
14	161	235	323	195	254	435	372	1130	---	181	32.1	38.2
15	193	231	263	176	248	413	531	735	---	158	38.6	46.6
16	182	231	230	203	157	421	603	532	287	159	42.1	51.7
17	156	231	194	216	136	419	418	400	1370	127	41.4	55.0
18	157	226	196	230	148	402	375	348	1040	133	42.8	43.7
19	157	219	230	225	172	387	346	317	437	121	68.8	64.8
20	148	212	235	197	296	379	320	283	257	110	76.5	61.4
21	147	212	247	204	327	364	290	252	298	105	59.9	59.4
22	157	212	256	195	---	344	289	225	1040	101	49.0	58.0
23	150	208	240	191	404	342	275	266	918	91.1	44.0	55.0
24	159	208	244	187	---	304	293	405	2100	84.9	40.2	54.5
25	157	208	206	193	445	307	293	308	1080	84.2	35.1	51.2
26	184	212	217	189	510	275	284	268	582	94.8	34.2	48.5
27	386	218	236	184	501	---	275	248	302	89.9	36.5	47.5
28	311	226	220	183	466	414	284	249	539	81.0	35.1	47.0
29	258	291	249	183	---	552	251	414	688	64.9	37.5	48.6
30	239	180	244	193	---	460	243	799	418	64.8	34.5	50.2
31	231	---	256	204	---	405	---	1070	---	64.0	292	---
MONTH	163	282	237	216	259	392	333	374	632	176	57.0	47.3

07149000 MEDICINE LODGE RIVER NEAR KIOWA, KANS.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1000	956	936	1030	1020	1170	1170	1100	902	849	1380	538
2	945	956	1030	1050	929	1140	1060	1040	1000	1100	1260	702
3	962	885	920	1070	947	1130	1160	1060	1120	1150	1220	896
4	930	1040	1100	1050	1010	1110	1140	1060	1090	1200	1250	1050
5	976	790	908	955	1050	1120	1140	1060	1120	1200	1280	1140
6	978	915	994	1060	1070	1170	1250	1060	1210	1130	1310	1210
7	955	964	990	1060	1080	1200	1130	1080	1170	1140	1350	1210
8	944	992	1040	1060	1090	1140	1120	1080	1180	1340	1380	1190
9	937	992	996	1060	1200	1090	1290	1090	1230	1240	1420	1330
10	944	1020	1000	1050	1140	1110	1170	1070	974	1250	---	1280
11	944	1000	946	1010	1020	1130	1140	990	1030	1220	1450	1380
12	922	1030	990	1130	1010	1220	1130	1130	1220	1260	1480	1360
13	899	1030	1080	1220	1050	1090	1100	775	1260	1270	1510	1340
14	906	1040	1150	1210	1060	1200	1150	1130	---	1280	1380	1320
15	944	1040	1060	1010	1050	1150	1230	1320	---	1290	1510	1340
16	1000	1040	1020	1010	968	1170	1400	1360	1220	1450	1360	1190
17	961	1040	933	990	1050	1150	1200	1260	818	1320	1340	1130
18	982	1020	929	1040	1010	1110	1170	1250	1130	1370	1310	860
19	965	1030	1020	1050	1040	1120	1150	1240	698	1360	1040	1090
20	918	1030	1020	1000	1010	1150	1150	1240	707	1350	1280	1100
21	915	1030	1050	1030	1030	1160	1110	1210	903	1360	1300	1100
22	966	1030	1080	1040	---	1140	1150	1210	1010	1370	1280	1110
23	949	1030	1020	1040	1130	1150	1090	1210	660	1380	1340	1130
24	942	1030	1050	1020	---	1120	1120	1180	861	1370	1380	1160
25	850	1030	948	1030	1210	1180	1140	1140	576	1360	1320	1180
26	883	1030	1010	1010	1270	1110	1120	1200	768	1360	1360	1170
27	930	1040	1060	1010	1230	---	1100	1210	643	1440	1440	1150
28	989	1040	984	1020	1190	1050	1130	1160	1150	1390	1390	1140
29	959	1260	1090	1020	---	1300	1090	1190	660	1300	1380	1130
30	959	869	1050	969	---	1260	1090	1240	772	1390	1370	1120
31	934	---	1080	970	---	1230	---	1140	---	1420	1360	---
MONTH	945	1010	1020	1040	1070	1150	1150	1140	967	1290	1350	1140

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15.0	17.5	0.5	---	4.0	14.5	7.0	15.0	21.5	27.5	28.5	26.0
2	---	13.0	1.0	---	4.5	7.5	6.5	15.5	18.0	25.0	27.5	23.5
3	18.5	11.5	2.0	---	6.0	5.0	11.5	19.0	21.5	25.5	23.5	22.0
4	18.0	10.5	4.5	---	6.5	5.0	12.5	22.0	22.5	28.0	28.5	25.5
5	14.0	9.5	6.0	---	2.0	4.0	---	19.0	24.5	25.0	23.5	24.5
6	13.0	9.0	8.0	2.0	1.0	15.5	13.0	22.5	26.0	27.0	33.0	19.0
7	11.5	10.5	8.0	3.0	3.0	9.5	12.0	15.5	25.5	27.5	27.5	25.5
8	15.0	10.0	0.5	4.5	0.5	8.5	16.0	20.5	25.0	28.0	27.0	21.5
9	15.0	10.0	4.0	9.0	0.5	2.5	10.5	18.5	23.5	26.0	24.5	19.0
10	---	11.5	1.5	4.0	4.0	2.5	13.0	20.0	19.5	27.0	---	25.0
11	17.5	9.5	5.5	1.0	3.0	2.5	10.5	23.0	16.5	25.0	24.5	24.5
12	---	7.5	6.0	0.5	2.0	3.5	9.5	20.0	20.5	21.5	23.5	16.5
13	14.0	8.5	5.5	1.5	6.0	6.0	12.0	16.5	22.0	21.0	25.0	17.0
14	12.0	6.5	5.0	1.5	4.5	5.0	12.0	15.0	---	25.5	24.5	15.0
15	10.5	5.5	3.0	1.5	2.0	6.5	15.5	20.0	---	24.0	23.0	15.5
16	---	6.0	4.5	1.0	---	9.5	19.0	20.5	29.5	27.0	23.0	18.0
17	13.0	8.5	---	4.0	1.0	10.0	18.5	19.5	20.0	25.5	25.5	19.0
18	13.5	9.5	4.0	6.0	2.0	11.5	16.5	20.0	24.5	25.5	25.0	20.5
19	12.0	12.5	4.0	6.0	2.0	10.5	11.5	23.5	24.0	23.0	25.0	16.5
20	14.0	8.5	5.0	6.0	3.5	16.0	17.0	26.0	24.0	29.0	31.0	14.0
21	12.5	8.0	6.5	6.0	6.5	12.5	17.0	28.5	23.5	29.5	30.0	15.0
22	13.0	10.0	4.5	3.0	---	11.5	16.5	24.5	24.0	27.5	26.0	14.0
23	17.0	10.0	3.5	3.5	2.0	13.0	20.0	21.5	23.0	26.0	23.5	11.0
24	18.0	6.0	3.5	3.0	5.5	12.5	22.5	23.0	24.0	23.5	---	14.0
25	17.5	10.0	2.5	3.5	10.0	9.5	20.0	22.0	24.0	24.0	25.0	14.0
26	15.5	7.5	2.5	5.5	7.0	9.0	21.0	19.5	25.0	25.0	22.5	15.0
27	15.0	4.5	---	2.5	6.5	---	21.0	26.0	26.0	27.5	27.0	13.0
28	15.5	5.5	---	7.5	8.5	6.0	18.0	20.0	25.0	28.0	30.5	17.5
29	17.5	1.0	---	5.5	---	5.5	19.0	20.5	26.0	27.0	---	15.5
30	20.0	0.5	---	5.0	---	6.0	16.0	17.5	27.0	28.0	---	16.0
31	16.5	---	---	3.0	---	9.0	---	18.5	---	27.0	25.5	---
MONTH	15.0	8.5	4.0	4.0	4.0	8.5	15.0	20.5	23.5	26.0	26.0	18.5

07150500 SALT FORK ARKANSAS RIVER NEAR JET, OKLA.

LOCATION.--Lat 36°45'11", long 98°07'44", in NW 1/4 NE 1/4 sec.11, T.26 N., R.9 W., Alfalfa County, at gaging station at bridge on county road, 0.6 mi (.97 km) downstream from Great Salt Plains Dam, 4 mi (6.4 km) upstream from Wagon Creek, 6 mi (9.6 km) northeast of Jet, and at mile 102.7 (165.2 km).

DRAINAGE AREA.--3,202 mi^2 (8,293 km^2), of which 8 mi^2 (20.7 km^2) is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: October 1953 to September 1959, water years 1960-61 (partial-record station), October 1961 to September 1963, July 1968 to current year.
Water temperatures: October 1954 to September 1955, October 1957 to September 1959, October 1961 to September 1963, July 1968 to current year.

EXTREMES, Current year.--Specific conductance: Maximum daily, 11,100 micromhos/cm Sept. 22-23; minimum daily, 1,420 micromhos/cm June 11.
Water temperatures: Maximum, 31.0°C July 21-22; minimum, 0.5°C Jan. 12, Feb. 9.

Period of record.--Specific conductance: Maximum daily, 42,200 micromhos/cm Mar. 9, 1955; minimum daily, 1,350 micromhos/cm July 3, 1957.
Water temperatures: Maximum, 35.5°C July 28, 1974; minimum, freezing point on many days during winter months.

REMARKS.--Continuous monitor records for specific conductance and temperature are collected for this station. Temperature records for Jan. 1-20 and Mar. 19-Apr. 8 were poor. Once-daily temperature values were used in their place. Records of maximum and minimum specific conductance values are available in district office at Oklahoma City, Okla.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
OCT.											
05...	1830	133	160	36	1100	--	150	0	123	400	--
15...	1915	211	--	--	1000	--	155	0	127	380	1600
25...	1800	285	150	35	1100	--	149	0	122	400	1700
NOV.											
05...	1820	2170	81	20	740	--	112	0	92	210	1100
15...	1700	691	140	33	430	--	219	0	180	320	660
26...	1530	328	140	33	910	--	201	0	165	320	--
DEC.											
05...	1730	241	140	41	960	6.6	183	0	150	350	1500
15...	1515	342	150	43	560	5.5	227	0	186	340	870
25...	1615	297	150	47	930	6.3	202	0	166	340	1500
JAN.											
05...	1630	532	150	43	--	7.4	223	0	183	390	1400
15...	1755	306	160	45	--	6.5	210	0	172	400	1600
25...	1800	325	160	38	820	6.3	237	0	194	390	--
FEB.											
05...	1725	749	130	38	1000	7.1	197	0	162	380	1500
15...	1800	471	140	40	1200	7.2	205	0	168	400	1800
25...	1205	590	150	47	920	5.3	215	--	176	380	1400
MAR.											
05...	1800	754	150	47	1200	5.2	222	0	182	390	1800
15...	1730	587	130	55	--	5.9	202	0	166	440	2000
25...	1900	241	150	58	1200	6.1	206	0	169	460	1800
APR.											
05...	1640	345	140	57	980	6.2	221	0	181	430	1500
15...	1900	392	190	53	1000	6.3	198	0	162	450	1600
25...	1900	257	150	58	990	6.3	192	0	157	460	1500
MAY											
05...	2100	374	140	55	970	5.4	191	0	157	470	--
15...	2045	3010	110	47	1100	5.9	151	0	124	380	--
25...	2100	1450	120	39	730	6.9	156	0	128	310	--
JUNE											
04...	2100	1430	100	33	450	8.0	179	0	147	--	700
14...	2230	2210	130	32	410	8.3	172	0	141	350	630
25...	2300	2160	110	34	460	9.1	170	0	139	310	700
JULY											
05...	1710	927	120	28	200	8.7	207	0	170	250	290
15...	1800	292	110	29	570	19	169	0	139	320	850
25...	1915	107	120	34	720	9.2	167	0	137	--	1100
AUG.											
05...	2040	85	150	39	890	9.5	178	0	146	420	--
15...	2025	37	150	43	--	11	185	0	152	420	1600
25...	2045	29	140	42	1200	9.6	182	0	149	440	1800
SEP.											
05...	1915	26	110	42	1400	10	171	0	140	380	2100
18...	1930	7.9	190	50	1900	11	191	0	157	460	3000
25...	2000	8.3	170	50	2000	11	196	0	161	470	3000

07150500 SALT FORK ARKANSAS RIVER NEAR JET, OKLA.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	CARBON DIOXIDE (CO2) (MG/L)
OCT.											
05...	.85	3520	4.79	1260	550	420	--	20	5780	7.5	7.6
15...	.65	3380	4.60	1930	--	--	--	--	5570	7.6	6.2
25...	.60	3520	4.79	2710	520	400	--	21	5800	7.6	6.0
NOV.											
05...	.53	2250	3.06	13200	280	190	--	19	3920	7.6	4.5
15...	.72	1730	2.35	3230	490	310	--	8.5	2780	8.2	2.2
26...	.61	2970	4.04	2630	490	330	--	18	4930	7.7	6.4
DEC.											
05...	--	3100	4.22	2020	520	370	80	18	5100	7.5	9.3
15...	--	2090	2.84	1930	550	370	69	10	3420	7.8	5.8
25...	--	3050	4.15	2450	570	400	78	17	5010	7.7	6.4
JAN.											
05...	--	3020	4.10	4340	550	370	--	--	5180	8.3	1.8
15...	--	3440	4.68	2840	580	410	--	--	5630	8.1	2.7
25...	--	2870	3.90	2520	560	360	76	15	4650	7.6	9.5
FEB.											
05...	--	3190	4.34	6450	480	320	82	20	5260	8.0	3.2
15...	--	3720	5.06	4730	510	350	83	23	6120	7.8	5.2
25...	--	3120	4.24	4970	570	390	78	17	5070	--	--
MAR.											
05...	--	3840	5.22	7820	570	390	82	22	6340	7.4	14
15...	--	4250	5.78	6740	550	390	--	--	6980	7.4	13
25...	--	3860	5.25	2510	610	440	81	21	6230	7.3	17
APR.											
05...	--	3440	4.68	3200	580	400	78	18	5910	7.8	5.6
15...	--	3530	4.80	3740	690	530	76	17	5750	7.7	6.3
25...	--	3510	4.77	2440	610	460	78	17	5620	7.8	4.9
MAY											
05...	--	3280	4.46	3310	580	420	78	18	5380	7.6	7.7
15...	--	3380	4.60	27500	470	340	83	22	5680	7.5	7.6
25...	--	2520	3.43	9870	460	330	77	15	4190	7.6	6.3
JUNE											
04...	--	1720	2.34	6640	390	240	71	10	2860	8.0	2.9
14...	--	1690	2.30	10100	460	320	66	8.4	2860	7.5	8.7
25...	--	1760	2.39	10300	410	280	70	9.8	2900	7.5	8.6
JULY											
05...	.60	1050	1.43	2630	420	250	51	4.3	1670	7.7	6.6
15...	--	1980	2.69	1560	390	260	75	13	3340	8.0	2.7
25...	--	2340	3.18	676	440	300	78	15	3910	8.0	2.7
AUG.											
05...	.28	2860	3.89	656	540	390	78	17	5030	7.9	3.6
15...	--	3310	4.50	331	550	400	--	--	5840	7.5	9.4
25...	.71	3770	5.13	295	520	370	83	23	6510	8.1	2.3
SEP.											
05...	.80	4430	6.02	311	450	310	87	29	7590	8.1	2.2
18...	--	5990	8.15	128	680	520	86	32	10300	8.2	1.9
25...	--	5800	7.89	130	630	470	87	35	10000	7.9	3.9

07150500 SALT FORK ARKANSAS RIVER NEAR JET, OKLA.--Continued

DISSOLVED SULFATE (SO4), MG/L, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	370	400	370	340	380	390	410	410	270	270	340	560
2	390	390	360	340	380	460	420	400	270	270	340	570
3	460	500	370	340	380	510	430	400	270	270	370	520
4	470	420	370	310	380	470	410	400	240	---	370	520
5	330	370	360	360	380	550	400	380	260	170	360	520
6	460	330	350	330	390	520	420	380	300	230	360	490
7	420	350	370	340	400	490	400	360	320	240	360	530
8	460	380	360	340	410	530	400	410	320	230	380	530
9	460	310	350	360	410	460	350	420	290	230	420	520
10	390	280	310	360	420	450	410	420	290	230	440	510
11	410	320	320	380	420	400	420	420	160	240	420	530
12	400	340	340	400	410	450	410	430	160	250	420	530
13	420	290	310	410	420	450	420	420	230	250	400	570
14	400	320	250	400	420	460	400	450	240	270	400	580
15	390	310	270	400	420	450	400	410	250	270	410	560
16	340	320	310	400	420	460	340	270	230	260	430	570
17	430	310	320	410	410	440	380	270	270	280	420	610
18	520	300	330	400	410	550	390	190	240	300	390	660
19	340	300	350	390	410	420	340	300	---	290	380	640
20	450	330	340	400	410	430	340	300	170	290	380	670
21	440	360	340	390	410	400	370	320	220	280	370	680
22	400	340	330	400	390	390	390	330	210	280	380	710
23	420	330	330	380	410	370	410	290	260	290	380	710
24	400	350	350	360	410	420	370	290	250	300	400	700
25	420	360	360	340	360	430	390	320	240	310	440	650
26	420	370	370	330	380	440	400	320	220	300	460	680
27	440	340	340	340	410	440	380	340	220	310	450	650
28	430	330	330	360	370	380	360	310	200	310	450	650
29	430	350	340	370	---	430	330	330	230	300	450	650
30	330	360	330	380	---	430	410	340	260	310	490	680
31	370	---	270	380	---	340	---	330	---	310	560	---
MONTH	410	350	340	370	400	450	390	350	240	270	410	600

DISSOLVED SULFATE (SO4), TONS PER DAY, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	118	458	265	277	744	746	412	249	1560	1050	128	24.2
2	77.9	441	236	340	701	955	491	393	1460	955	117	38.5
3	206	2080	233	371	702	1080	423	590	1280	853	112	42.1
4	261	2470	227	316	784	995	397	557	998	---	101	37.9
5	143	2220	231	392	775	1150	336	424	955	428	90.4	36.5
6	117	1830	246	316	742	1040	338	463	964	476	86.5	33.1
7	137	1740	271	333	691	866	267	345	1400	406	58.3	35.8
8	176	1660	248	329	606	902	490	350	1680	351	40.0	34.3
9	178	1210	256	346	697	751	408	291	2130	301	30.6	33.7
10	158	983	218	425	600	841	426	393	2510	334	29.7	33.0
11	179	994	312	331	592	733	448	508	1540	327	27.2	34.3
12	138	946	337	372	553	815	437	504	1450	284	43.1	31.5
13	206	717	301	366	570	779	416	926	1790	236	44.3	18.5
14	207	721	319	322	547	770	453	1960	1560	222	36.7	17.2
15	231	634	261	330	534	707	430	2930	1360	208	44.3	16.6
16	207	567	292	338	615	729	394	2350	1020	185	39.5	18.5
17	268	516	284	356	555	647	419	2260	1010	190	43.1	16.0
18	313	485	317	363	527	882	464	1360	927	173	62.1	13.4
19	198	454	306	326	517	663	335	1810	---	139	156	12.8
20	247	456	310	376	539	639	308	1480	918	113	173	13.4
21	258	463	286	289	587	578	320	1340	1090	107	159	14.0
22	220	414	282	362	569	499	323	1140	930	98.3	134	15.7
23	230	410	248	377	680	561	417	1000	1050	83.0	109	15.9
24	224	378	273	358	693	535	321	900	1030	92.3	108	17.0
25	282	357	293	310	597	336	275	1230	1270	84.5	60.6	14.6
26	324	363	294	279	635	213	280	1360	1340	82.6	34.8	16.2
27	359	308	288	303	738	466	312	1450	1300	83.7	40.1	15.4
28	363	247	249	310	677	429	295	1300	1050	74.5	71.7	17.2
29	424	269	281	315	---	492	226	1580	1040	92.3	59.5	17.0
30	337	320	252	440	---	518	283	1880	1080	132	35.7	18.4
31	444	---	232	764	---	404	---	1900	---	123	27.2	---
MONTH	233	837	273	356	635	704	371	1140	1300	276	74.3	23.4

07150500 SALT FORK ARKANSAS RIVER NEAR JET, OKLA.--Continued

DISSOLVED CHLORIDE (CL), MG/L, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1500	1600	1500	1300	1500	1600	1700	1600	850	840	1300	2300
2	1600	1600	1400	1300	1500	1900	1700	1600	890	840	1300	2300
3	1900	2100	1500	1300	1500	2100	1700	1600	860	850	1500	2100
4	1900	1700	1500	1100	1500	1900	1700	1600	670	---	1500	2100
5	1300	1500	1400	1400	1500	2300	1600	1500	780	290	1400	2100
6	1900	1300	1400	1300	1600	2200	1700	1500	1100	630	1500	2000
7	1700	1400	1500	1300	1600	2000	1600	1400	1200	660	1400	2200
8	1900	1500	1400	1300	1700	2200	1600	1600	1200	630	1500	2200
9	1900	1100	1400	1400	1700	1900	1400	1700	1000	610	1700	2200
10	1600	960	1200	1400	1700	1900	1600	1700	970	610	1800	2100
11	1700	1200	1200	1500	1700	1600	1700	1700	210	700	1700	2200
12	1600	1300	1300	1600	1700	1800	1700	1700	230	710	1700	2200
13	1700	1000	1200	1700	1700	1800	1700	1700	610	710	1600	2400
14	1600	1200	760	1600	1700	1900	1600	1800	670	880	1600	2400
15	1600	1100	890	1600	1700	1800	1600	1700	730	890	1600	2300
16	1300	1200	1100	1600	1700	1900	1300	890	620	770	1700	2400
17	1700	1100	1200	1700	1700	1800	1500	890	650	900	1700	2600
18	2100	1100	1200	1600	1600	2300	1600	370	680	1000	1600	2800
19	1300	1100	1400	1600	1600	1700	1300	1000	---	990	1500	2700
20	1800	1200	1300	1600	1600	1700	1300	1000	300	1000	1500	2800
21	1800	1400	1300	1500	1600	1600	1500	1200	570	950	1500	2900
22	1600	1300	1200	1600	1600	1600	1500	1200	480	930	1500	3000
23	1700	1300	1200	1500	1700	1500	1600	970	800	1000	1500	3000
24	1600	1400	1400	1400	1600	1700	1500	1000	740	1000	1600	2900
25	1700	1400	1400	1300	1500	1800	1600	1200	690	1100	1800	2700
26	1700	1500	1500	1300	1500	1800	1600	1200	570	1100	1900	2900
27	1800	1300	1300	1300	1700	1800	1500	1300	570	1100	1800	2700
28	1800	1300	1300	1400	1500	1500	1400	1100	450	1100	1800	2700
29	1700	1400	1300	1500	---	1700	1200	1300	600	1000	1800	2700
30	1200	1400	1300	1500	---	1800	1600	1300	780	1100	2000	2900
31	1500	---	890	1500	---	1300	---	1200	---	1100	2300	---
MONTH	1700	1300	1300	1500	1600	1800	1600	1300	710	870	1600	2500

DISSOLVED CHLORIDE (CL), TONS PER DAY, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	478	1830	1070	1060	2940	3270	1710	972	4910	3270	488	99.4
2	320	1810	919	1300	2770	3940	1990	1570	4810	2970	446	155
3	852	8730	944	1420	2770	4430	1670	2360	4090	2690	454	170
4	1060	10000	919	1120	3090	4020	1650	2230	2790	---	409	153
5	562	8990	900	1520	3060	4830	1340	1670	2860	730	352	147
6	482	7200	983	1250	3050	4400	1370	1830	3530	1300	360	135
7	555	6960	1100	1270	2760	3620	1070	1340	5250	1120	227	148
8	728	6560	964	1260	2510	3740	1960	1370	6320	963	158	143
9	734	4280	1020	1350	2890	3100	1630	1180	7340	797	124	143
10	648	3370	846	1650	2430	3550	1660	1590	8410	886	121	136
11	744	3730	1170	1310	2400	2930	1810	2060	2020	953	110	143
12	553	3620	1290	1490	2300	3260	1810	1990	2090	807	174	131
13	835	2470	1170	1520	2310	3120	1680	3750	4740	669	177	77.8
14	829	2700	969	1290	2210	3180	1810	7820	4360	725	147	71.3
15	946	2250	860	1320	2160	2830	1720	12200	3960	685	173	68.3
16	790	2130	1040	1350	2490	3010	1510	7760	2760	547	156	77.8
17	1060	1830	1070	1480	2300	2650	1650	7450	3170	610	174	68.1
18	1260	1780	1150	1450	2060	3690	1910	2660	2630	575	255	56.7
19	758	1670	1220	1340	2020	2690	1280	6050	---	473	616	53.9
20	987	1660	1190	1500	2100	2520	1180	4940	1620	389	684	55.9
21	1050	1800	1100	1110	2290	2310	1300	5020	2820	364	644	59.5
22	881	1580	1020	1450	2330	2050	1240	4150	2130	326	531	66.4
23	932	1610	901	1490	2820	2280	1630	3350	3220	286	429	67.2
24	894	1510	1090	1390	2700	2170	1300	3110	3040	308	432	70.5
25	1140	1390	1140	1190	2490	1400	1130	4600	3650	300	248	60.5
26	1310	1470	1190	1100	2510	870	1120	5090	3460	303	144	68.9
27	1470	1180	1100	1160	3060	1990	1230	5550	3370	297	160	64.2
28	1520	972	983	1210	2750	1690	1150	4600	2360	264	287	71.4
29	1680	1080	1070	1280	---	1950	823	6210	2720	308	238	70.7
30	1220	1240	993	1740	---	2170	1110	7200	3240	469	146	78.3
31	1800	---	764	3020	---	1540	---	6900	---	437	112	---
MONTH	938	3250	1040	1400	2560	2880	1480	4150	3710	827	296	97.0

07150500 SALT FORK ARKANSAS RIVER NEAR JET, OKLA.--Continued

DISSOLVED SOLIDS (RESIDUE AT 180 DEG. C), MG/L, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3060	3460	3050	2800	3170	3310	3550	3480	2030	2010	2800	5190
2	3340	3280	2980	2790	3180	4070	3660	3380	2080	2010	2750	5250
3	4090	4520	3130	2760	3230	4650	3760	3480	2040	2030	3100	4730
4	4190	3670	3120	2370	3180	4240	3580	3460	1790	---	3120	4700
5	2650	3120	2980	2970	3220	5070	3380	3250	1940	1200	2980	4710
6	4040	2690	2930	2670	3310	4800	3600	3160	2310	1740	3030	4430
7	3640	2860	3060	2780	3410	4420	3410	2970	2580	1780	3030	4860
8	4140	3190	2960	2750	3570	4860	3410	3500	2560	1740	3200	4830
9	4070	2400	2910	2960	3570	4060	2930	3610	2250	1700	3650	4780
10	3360	2180	2480	3020	3640	4030	3490	3640	2190	1710	3830	4670
11	3570	2540	2560	3160	3640	3440	3670	3640	1070	1830	3640	4860
12	3470	2710	2730	3470	3560	3950	3580	3770	1110	1840	3600	4880
13	3650	2240	2480	3560	3640	4020	3610	3620	1710	1840	3480	5260
14	3380	2510	1910	3390	3650	4050	3430	4010	1790	2070	3430	5390
15	3320	2440	2090	3410	3700	3950	3480	3530	1870	2090	3510	5230
16	2770	2540	2440	3470	3660	4110	2800	2090	1720	1930	3710	5330
17	3710	2390	2490	3540	3530	3850	3170	2090	2040	2100	3650	5770
18	4740	2310	2630	3460	3510	5070	3300	1330	1800	2290	3320	3800
19	2730	2370	2900	3310	3500	3660	2780	2300	---	2220	3250	6100
20	3970	2620	2730	3390	3500	3720	2770	2300	1210	2230	3150	6370
21	3890	2990	2710	3270	3500	3400	3100	2560	1640	2160	3120	6560
22	3430	2800	2630	3440	3360	3350	3270	2640	1510	2150	3150	6870
23	3690	2680	2610	3160	3530	3080	3510	2200	1970	2250	3250	6870
24	3380	2880	2870	2980	3490	3630	3130	2240	1890	2300	3460	6680
25	3600	2960	2980	2810	3030	3790	3350	2490	1810	2370	3840	6180
26	3690	3050	3050	2650	3250	3860	3430	2590	1650	2310	4140	6490
27	3850	2720	2720	2800	3580	3840	3170	2720	1650	2440	3950	6180
28	3790	2690	2660	3000	3140	3250	2960	2450	1450	2370	3960	6180
29	3720	2890	2720	3130	---	3760	2610	2650	1700	2290	3970	6240
30	2610	2960	2700	3220	---	3800	3490	2750	1940	2440	4410	6560
31	3130	---	2090	3180	---	2710	---	2600	---	2460	5140	---
MONTH	3570	2820	2720	3090	3440	3930	3310	2920	1840	2060	3500	5530

DISSOLVED SOLIDS (TONS PER DAY), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	975	3960	2180	2280	6210	6760	3570	2110	11700	7810	1050	224
2	667	3710	1960	2790	5860	8450	4280	3320	11200	7110	943	354
3	1830	18800	1970	3010	5970	9820	3700	5130	9690	6410	937	383
4	2330	21600	1910	2410	6560	8980	3470	4820	7440	---	851	343
5	1140	18700	1910	3230	6560	10600	2840	3620	7120	3020	748	331
6	1030	14900	2060	2560	6300	9590	2900	3850	7420	3600	728	299
7	1190	14200	2240	2720	5890	8000	2270	2850	11300	3010	491	328
8	1590	14000	2040	2660	5270	8270	4180	2990	13500	2660	337	313
9	1570	9330	2130	2850	6070	6630	3420	2500	16500	2220	266	310
10	1360	7650	1750	3560	5200	7530	3630	3410	19000	2480	259	303
11	1560	7890	2500	2760	5130	6310	3910	4400	10300	2490	236	315
12	1200	7540	2710	3220	4810	7160	3820	4420	10100	2090	369	290
13	1790	5540	2410	3180	4940	6960	3580	7990	13300	1730	385	170
14	1750	5650	2430	2730	4750	6760	3880	17400	11600	1700	315	160
15	1960	4990	2020	2820	4710	6210	3740	25300	10100	1610	379	155
16	1680	4500	2300	2930	5360	6510	3240	18200	7660	1370	341	173
17	2310	3980	2210	3080	4780	5670	3490	17500	7600	1420	374	151
18	2850	3740	2530	3140	4510	8130	3930	9550	6950	1320	529	77.0
19	1590	3590	2540	2770	4410	5780	2740	13900	---	1060	1330	122
20	2180	3620	2490	3190	4600	5520	2510	11400	6530	867	1440	127
21	2280	3840	2280	2420	5010	4910	2680	10700	8100	828	1340	135
22	1890	3410	2240	3110	4900	4290	2710	9120	6690	755	1110	152
23	2020	3330	1960	3130	5850	4670	3570	7600	7930	644	930	154
24	1890	3110	2240	2960	5900	4630	2710	6960	7760	708	934	162
25	2420	2930	2420	2560	5020	2960	2360	9550	9580	646	529	138
26	2850	2990	2420	2240	5430	1870	2400	11000	10000	636	313	154
27	3140	2470	2310	2490	6450	4240	2600	11600	9760	659	352	147
28	3200	2010	2010	2580	5750	3670	2420	10300	7600	570	631	164
29	3670	2220	2250	2860	---	4300	1790	12700	7710	705	525	163
30	2660	2630	2060	3730	---	4580	2410	15200	8070	1040	321	177
31	3750	---	1790	6400	---	5220	---	15000	---	976	250	---
JNTH	2010	6890	2200	2970	5440	6250	3160	9170	9730	2070	630	216

07150500 SALT FORK ARKANSAS RIVER NEAR JET, OKLA.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5090	5710	5070	4670	5260	5470	5850	5750	3330	3300	4680	8450
2	5530	5430	4960	4650	5270	6670	6030	5590	3440	3300	4590	8540
3	6700	7390	5200	4610	5350	7590	6180	5740	3360	3330	5150	7710
4	6870	6050	5170	4000	5280	6940	5910	5720	2860	---	5180	7670
5	4430	5180	4950	4940	5330	8250	5580	5390	3160	1670	4950	7680
6	6630	4500	4870	4460	5480	7830	5930	5240	3890	2750	5040	7250
7	5990	4770	5090	4640	5640	7230	5640	4940	4330	2830	5030	7930
8	6780	5290	4930	4590	5880	7930	5630	5770	4290	2750	5310	7880
9	6670	4040	4840	4930	5880	6660	4870	5950	3770	2690	6020	7790
10	5560	3630	4170	5020	5990	6610	5760	6000	3660	2690	6300	7630
11	5880	4260	4290	5240	6000	5680	6040	5990	1420	2930	6000	7920
12	5730	4530	4560	5730	5870	6490	5900	6200	1490	2960	5940	7960
13	6010	3760	4170	5870	6000	6590	5950	5960	2690	2960	5740	8560
14	5580	4210	3090	5600	6010	6650	5660	6580	2860	3420	5660	8760
15	5500	4100	3450	5630	6090	6490	5740	5830	3020	3450	5800	8510
16	4630	4260	4110	5730	6030	6740	4680	3450	2710	3130	6110	8660
17	6110	4020	4190	5840	5830	6330	5260	5460	3350	3490	6010	9350
18	7740	3890	4410	5720	5800	6260	5460	1940	2870	3850	5490	10120
19	4560	3990	4830	5470	5780	6030	4640	3880	---	3710	5380	9880
20	6520	4390	4570	5600	5770	6120	4630	3880	1700	3740	5220	10300
21	6390	4970	4530	5420	5770	5620	5150	4300	2560	3600	5180	10600
22	5660	4670	4400	5690	5550	5540	5410	4420	2300	3570	5220	11100
23	6070	4480	4370	5240	5830	5110	5800	3680	3210	3770	5390	11100
24	5580	4800	4780	4960	5760	5980	5200	3750	3050	3870	5710	10800
25	5940	4930	4950	4690	5040	6230	5540	4190	2900	4000	6310	10000
26	6070	5070	5070	4440	5390	6350	5670	4340	2570	3890	6780	10500
27	6330	4550	4550	4680	5910	6310	5260	4550	2580	4100	6480	10000
28	6240	4500	4450	4990	5210	5380	4920	4120	2180	4000	6510	10000
29	6130	4820	4540	5200	---	6190	4370	4440	2670	3860	6520	10100
30	4380	4930	4510	5340	---	6250	5760	4590	3160	4100	7220	10600
31	5190	---	3460	5280	---	4530	---	4360	---	4130	8370	---
MONTH	5890	4700	4530	5120	5680	6450	5480	4840	2940	3390	5780	9110

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19.5	16.0	3.5	4.0	4.0	7.0	8.0	20.0	22.0	28.0	28.5	26.5
2	17.0	16.0	3.0	3.5	4.5	6.5	6.5	19.5	21.5	27.5	28.0	25.5
3	17.0	14.5	3.5	3.0	4.5	6.5	6.0	20.5	23.0	28.0	28.5	26.5
4	17.0	12.5	4.5	2.5	5.0	5.5	10.0	22.0	24.0	29.0	29.0	27.0
5	18.0	11.0	4.5	3.0	3.0	6.5	10.5	22.0	26.0	30.0	28.5	25.0
6	18.0	10.0	5.5	3.0	2.0	7.5	12.0	23.0	25.0	30.5	29.5	25.0
7	16.0	11.5	5.5	4.0	2.0	8.5	13.0	23.0	25.0	30.5	28.5	23.5
8	16.0	11.0	4.5	4.0	1.5	7.0	14.0	23.5	25.0	30.0	28.0	23.0
9	16.0	12.0	4.5	6.0	0.5	6.5	15.0	23.0	25.5	30.0	28.5	24.0
10	16.0	11.0	3.5	4.5	1.5	5.5	14.0	22.0	24.5	30.5	28.0	24.0
11	18.0	11.0	3.5	2.5	2.0	4.5	12.5	23.0	23.5	30.0	26.5	23.0
12	18.5	10.5	5.0	0.5	2.5	5.0	13.0	23.0	23.0	28.5	26.0	19.5
13	17.5	9.5	5.0	1.5	3.0	3.0	12.5	21.5	24.5	27.0	26.5	19.5
14	15.5	9.0	4.0	2.5	3.5	3.0	12.5	20.5	26.0	26.5	25.0	17.5
15	15.0	8.5	4.5	2.5	3.0	4.5	14.0	20.0	27.0	26.5	27.5	17.5
16	15.5	8.0	3.5	2.5	1.0	6.0	16.5	21.0	27.0	27.0	29.0	19.5
17	15.5	8.5	3.5	4.0	1.5	6.5	18.0	22.5	26.0	26.5	28.5	19.5
18	16.5	9.0	4.0	4.5	1.5	8.0	18.0	23.0	26.5	26.5	29.0	19.5
19	17.0	10.5	4.0	3.5	1.5	12.0	16.0	23.5	26.0	27.5	26.0	18.0
20	16.0	11.0	3.5	4.5	3.0	14.0	16.0	23.0	26.5	29.0	28.0	17.5
21	16.0	9.5	4.5	4.0	3.0	14.5	16.5	23.0	27.0	31.0	28.0	17.0
22	16.0	10.5	4.5	3.5	1.5	14.5	17.0	23.0	27.5	31.0	28.5	16.5
23	17.0	11.5	4.0	4.0	1.5	13.5	21.0	22.5	27.5	29.5	28.0	16.5
24	17.5	10.0	3.0	4.5	2.0	12.5	23.5	22.5	28.0	28.5	27.0	16.0
25	17.0	9.0	2.5	6.0	3.5	11.5	23.5	23.0	28.0	27.5	27.0	16.5
26	16.5	8.5	3.0	2.5	4.5	11.0	23.5	23.0	28.0	27.0	26.0	17.0
27	16.5	8.0	2.5	6.5	4.5	11.0	23.0	22.5	28.0	28.0	25.5	17.5
28	16.5	7.5	2.5	6.0	6.5	9.5	21.0	22.0	28.5	28.0	25.5	18.0
29	16.5	5.5	3.0	6.0	---	7.0	20.5	23.5	28.5	27.5	26.0	18.5
30	17.5	5.0	3.0	5.5	---	8.0	20.5	22.0	28.0	28.5	27.0	18.0
31	17.0	---	3.5	5.0	---	9.0	---	21.5	---	28.5	27.5	---
MONTH	17.0	10.0	4.0	4.0	3.0	8.0	15.5	22.0	26.0	28.5	27.5	20.5

07151000 SALT FORK ARKANSAS RIVER AT TONKAWA, OKLA.

LOCATION.--Lat 36°40'13", long 97°18'33", in NW 1/4 SE 1/4 sec.4, T.25 N., R.1 W., Kay County, at gaging station at bridge on U.S. Highway 77 in Tonkawa, 4 mi (6.4 km) downstream from Thompson Creek, 7.8 mi (12.6 km) upstream from Chikaskia River, and at mile 33.8 (54.4 km).

DRAINAGE AREA.--4,528 mi² (11,730 km²), of which 8 mi² (20.7 km²) is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: September 1951 to September 1963, July 1968 to current year.
Water temperatures: November 1959 to September 1963, July 1968 to current year.

EXTREMES, Current year.--Specific conductance: Maximum daily, 5,380 micromhos/cm Apr. 5; minimum daily, 208 micromhos/cm Nov. 4.
Water temperatures: Maximum, 31.5°C Aug. 31; minimum, freezing point on January 12-14.

Period of record.--Specific conductance: Maximum daily, 14,800 micromhos/cm June 30, 1972, Dec. 30, 1973; minimum daily, 193 micromhos/cm Aug. 17, 1974.
Water temperatures: Maximum, 35.0°C July 14, 1969; minimum, freezing point on several days during winter months.

REMARKS.--Continuous monitor records for specific conductance and temperature are collected for this station. Temperature records for Oct. 1-May 31 were poor and once-daily values were used in their place. Records of maximum and minimum specific conductance values are available in district office at Oklahoma City, Okla.
*=Mean discharge.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
OCT.											
05...	1900	187*	130	36	920	--	213	0	175	290	1400
15...	1900	220	120	35	820	--	250	0	205	270	--
25...	1730	229	130	33	800	--	224	0	184	300	--
NOV.											
04...	1720	27700	14	3.1	24	--	55	0	45	12	29
15...	1715	1410	120	30	670	--	237	0	194	260	970
25...	1730	643	130	35	660	--	301	0	247	270	970
DEC.											
03...	1725	466	--	--	--	--	311	0	255	270	980
15...	1715	853	120	46	490	5.5	224	0	184	260	780
25...	1715	428	100	44	590	6.6	232	0	190	260	860
JAN.											
05...	1700	925	70	26	250	6.0	170	0	139	170	370
15...	1700	510	130	42	700	6.7	301	0	247	--	1100
25...	1700	497	120	45	610	6.4	272	0	223	320	880
FEB.											
04...	1730	4110	62	21	290	5.9	141	0	116	160	430
15...	1730	638	130	45	840	6.5	276	0	226	310	1300
28...	1845	5480	43	16	190	4.0	103	0	84	110	280
MAR.											
05...	1815	2080	69	29	410	4.6	178	0	146	200	590
16...	1830	1610	98	38	570	5.5	243	8	213	240	820
25...	1900	925	130	52	820	5.5	271	0	222	360	1200
APR.											
04...	1800	749	130	49	830	5.0	275	0	226	380	1200
15...	0615	700	120	49	790	4.9	241	0	198	360	1200
25...	0730	604	120	54	770	5.2	211	0	173	390	--
MAY											
05...	1900	1030	94	37	570	2.5	188	0	154	300	830
14...	1915	13100	27	10	110	4.7	79	0	65	62	160
26...	1700	7730	46	14	180	7.4	101	0	83	110	280
JUNE											
05...	1945	2140	93	32	420	7.7	204	0	167	240	640
12...	2045	8430	65	21	360	8.9	143	0	117	160	550
25...	2130	6950	47	15	160	11	116	0	95	120	230
JULY											
05...	2030	1460	99	30	500	9.3	210	0	172	260	740
15...	2015	558	95	32	430	7.6	227	8	200	230	620
25...	1800	349	84	32	500	6.4	252	0	207	220	--
AUG.											
05...	1930	229	100	36	590	7.2	265	0	217	260	830
16...	2000	190	83	32	580	5.6	374	18	337	190	--
25...	1900	192	110	34	670	7.8	245	0	201	290	980
SEP.											
05...	1900	120	90	34	--	5.9	320	0	262	190	920
15...	2000	109	98	35	--	4.8	228	0	187	200	1000
25...	1800	89	88	35	580	4.2	341	0	280	180	870

07151000 SALT FORK ARKANSAS RIVER AT TONKAWA, OKLA.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	CARBON DIOXIDE (CO2) (MG/L)
OCT.											
05...	.48	2960	4.03	1500	470	300	--	18	4970	7.6	8.6
15...	.38	2740	3.73	1630	440	240	--	17	4590	7.8	6.3
25...	.43	2700	3.67	1670	460	280	--	16	4510	7.9	4.5
NOV.											
04...	1.0	--	--	--	48	3	--	1.5	208	7.7	1.8
15...	.65	2170	2.95	8260	420	230	--	14	3690	8.1	3.0
25...	.60	2230	3.03	3870	470	220	--	13	3730	8.1	3.8
DEC.											
03...	--	--	--	--	--	--	--	--	3810	7.9	6.3
15...	--	1730	2.35	3980	490	310	68	9.6	3070	7.8	5.7
25...	--	2030	2.76	2350	430	240	75	12	3460	8.3	1.9
JAN.											
05...	--	1020	1.39	2550	280	140	65	6.5	1730	7.8	4.3
15...	--	2470	3.36	3400	500	250	75	14	4080	7.7	9.6
25...	--	2190	2.98	2940	490	260	73	12	3650	7.9	5.5
FEB.											
04...	--	1070	1.46	11900	240	130	72	8.1	1830	8.2	1.4
15...	--	2830	3.85	4880	510	280	78	16	4680	7.8	7.0
28...	--	739	1.01	10900	170	89	70	6.3	1280	7.9	2.1
MAR.											
05...	--	--	--	--	290	150	75	10	2430	8.2	1.8
16...	--	1940	2.64	8430	400	190	75	12	3280	8.6	1.0
25...	--	2800	3.81	6990	540	320	77	15	4620	7.9	5.5
APR.											
04...	--	2860	3.89	5780	530	300	77	16	4700	7.7	8.8
15...	--	2700	3.67	5100	500	300	77	15	4460	7.7	7.7
25...	--	2710	3.69	4420	520	350	76	15	4400	7.6	8.5
MAY											
05...	--	2000	2.72	5560	390	230	76	13	3380	7.5	9.5
14...	--	442	.60	15600	110	44	68	4.6	804	7.3	6.3
26...	--	724	.98	15100	170	90	68	6.0	1270	7.2	10
JUNE											
05...	--	1590	2.16	9190	360	200	71	9.6	2510	7.6	8.2
12...	--	1260	1.71	28700	250	130	75	9.9	1240	7.4	9.1
25...	--	658	.89	12300	180	84	64	5.2	1160	7.3	9.3
JULY											
05...	.68	1800	2.45	7100	370	200	74	11	3040	7.8	5.3
15...	.55	1580	2.15	2380	370	170	71	9.7	2680	8.5	1.2
25...	.48	1740	2.37	1640	340	130	76	12	2940	7.7	8.0
AUG.											
05...	--	1940	2.64	1200	400	180	76	13	3480	8.0	4.2
16...	--	1830	2.49	939	340	2	78	14	3260	8.3	3.3
25...	--	2240	3.05	1160	410	210	77	14	3970	7.5	12
SEP.											
05...	.54	2080	2.83	674	360	100	--	--	3730	8.2	3.2
15...	.46	2180	2.96	642	390	200	--	--	3980	8.1	2.9
25...	.38	1960	2.67	471	360	84	77	13	3550	8.0	5.5

07151000 SALT FORK ARKANSAS RIVER AT TONKAWA, OKLA.--Continued

DISSOLVED SULFATE (SO4), MG/L, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	300	56	190	130	56	72	300	200	160	91	180	210
2	310	56	220	160	100	91	220	160	170	110	170	220
3	320	15	200	130	100	89	210	---	160	140	170	210
4	320	11	---	91	96	120	260	---	170	150	180	190
5	380	50	---	91	88	170	400	180	130	160	180	190
6	370	79	190	90	83	310	380	200	140	140	180	200
7	380	120	190	88	100	350	290	250	57	100	200	210
8	340	180	200	100	120	280	330	290	32	120	200	270
9	300	180	200	170	130	270	360	290	70	130	200	240
10	350	150	190	170	150	160	180	230	65	130	200	200
11	350	150	120	170	140	170	160	340	63	140	190	240
12	370	150	120	200	---	120	250	360	110	140	190	250
13	370	210	100	190	---	140	300	90	110	140	190	250
14	360	210	150	190	190	150	360	42	91	140	190	250
15	350	190	160	250	360	170	330	79	120	140	---	230
16	370	190	160	290	320	190	360	96	120	160	170	230
17	360	170	150	260	290	150	240	---	130	160	170	210
18	---	170	170	290	360	350	260	400	130	160	170	200
19	360	---	240	290	320	180	200	190	130	150	110	190
20	350	190	170	290	290	170	230	110	140	150	110	190
21	350	190	200	290	180	260	180	150	140	83	200	190
22	350	170	200	280	200	240	270	200	100	160	150	190
23	360	200	200	280	220	220	200	71	98	160	200	180
24	340	200	180	270	180	230	250	93	94	160	240	200
25	350	200	180	190	230	370	300	85	71	150	220	180
26	340	200	180	200	92	210	190	66	58	140	140	180
27	330	200	160	200	91	210	250	79	81	150	170	180
28	290	210	160	210	68	350	230	110	83	160	190	180
29	290	190	240	190	---	360	270	140	81	160	190	180
30	280	190	170	95	---	360	270	110	91	160	190	190
31	110	---	170	46	---	360	---	130	---	160	190	---
MONTH	330	150	180	190	180	220	270	170	110	140	180	210

DISSOLVED SULFATE (SO4), TONS PER DAY, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	196	393	239	175	943	1250	727	228	1560	835	131	79.9
2	184	641	290	269	1200	1430	491	279	1400	858	120	76.0
3	174	599	242	318	748	1120	428	---	1200	767	119	68.0
4	164	775	---	246	829	1260	545	---	1120	693	126	59.5
5	192	3870	---	238	1100	1100	762	559	776	657	112	61.6
6	455	3690	217	367	791	1260	693	461	756	514	106	64.8
7	294	2280	227	466	559	1190	495	453	1300	324	114	66.9
8	201	2050	242	467	441	1090	571	487	1480	340	107	83.8
9	158	1570	244	661	442	962	713	410	3380	325	100	73.9
10	192	1190	225	555	429	562	583	284	2260	308	94.5	61.6
11	189	1070	173	438	301	900	421	378	2620	313	84.1	71.9
12	196	907	366	413	---	1150	523	477	3060	307	79.5	71.6
13	200	1080	400	292	---	1140	592	676	2080	281	77.0	72.2
14	193	936	531	295	371	968	711	1390	1830	249	74.9	72.9
15	193	744	400	357	620	991	643	2240	1550	220	---	68.9
16	244	672	363	384	518	867	730	1710	1080	229	91.8	66.4
17	231	542	259	340	454	535	458	---	1120	213	79.4	60.7
18	---	496	264	377	544	1270	511	4200	937	198	74.4	57.2
19	225	---	347	377	475	1010	372	1720	930	178	52.6	52.8
20	215	475	249	387	423	776	432	861	983	163	70.1	50.8
21	202	440	275	368	340	1050	295	992	1030	82.7	153	48.7
22	197	360	272	375	707	855	413	1120	742	144	117	47.7
23	202	394	259	335	754	665	299	1170	815	136	130	44.2
24	194	375	225	344	569	581	358	1890	855	138	141	47.5
25	212	359	209	253	764	913	475	968	1090	142	123	42.8
26	216	326	213	270	599	584	272	1110	1220	114	160	42.3
27	221	305	193	251	956	762	319	1730	1350	113	91.3	42.3
28	228	310	193	251	931	1460	279	1640	941	114	83.1	41.8
29	274	262	288	228	---	1840	343	1390	650	109	75.4	41.8
30	350	239	199	190	---	1200	353	1480	779	103	73.4	44.1
31	609	---	246	784	---	938	---	1940	---	105	77.5	---
MONTH	233	943	271	357	646	1020	494	1150	1360	299	101	59.5

07151000 SALT FORK ARKANSAS RIVER AT TONKAWA, OKLA.--Continued

DISSOLVED CHLORIDE (CL), MG/L, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1200	220	900	620	220	300	1200	970	750	400	840	1000
2	1200	220	1000	760	460	400	1000	740	800	490	830	1000
3	1200	47	990	620	450	390	1000	---	770	670	820	1000
4	1200	28	---	400	430	530	1100	---	800	700	860	940
5	1400	190	---	400	390	830	1500	880	610	740	870	960
6	1400	340	950	400	360	1200	1400	1000	670	640	880	990
7	1400	540	950	390	460	1200	1100	1100	230	460	960	1000
8	1200	890	980	460	530	1100	1200	1200	120	560	970	1100
9	1200	840	980	830	610	1100	1300	1100	290	600	970	1100
10	1300	730	960	830	710	760	890	1000	270	620	970	990
11	1300	730	550	830	680	790	760	1200	260	630	940	1100
12	1300	680	540	1000	---	570	1100	1300	520	630	930	1100
13	1300	1000	460	940	---	640	1200	400	480	640	900	1100
14	1300	1000	710	940	910	710	1300	160	400	660	900	1100
15	1300	950	760	1100	1300	830	1200	340	530	650	---	1100
16	1300	950	760	1100	1200	900	1300	430	540	760	810	1000
17	1300	830	720	1100	1100	700	1100	---	590	760	820	1000
18	---	820	800	1200	1300	1300	1100	1500	590	760	810	980
19	1300	---	1100	1200	1200	890	990	960	610	690	520	940
20	1300	910	830	1200	1100	790	1000	490	650	730	520	950
21	1300	910	980	1100	860	1100	880	700	650	360	960	940
22	1300	830	980	1100	980	1100	1100	980	470	760	690	910
23	1300	970	980	1100	1000	1000	1000	300	440	760	980	890
24	1200	960	880	1100	860	1000	1100	410	420	750	1100	1000
25	1300	960	870	940	1000	1300	1200	370	300	730	1000	890
26	1200	960	830	970	410	1000	950	280	230	650	640	870
27	1200	960	760	970	400	1000	1100	340	350	720	820	890
28	1200	1000	760	1000	290	1300	1100	520	360	750	940	890
29	1100	920	1100	950	---	1300	1100	660	350	760	940	890
30	1100	900	810	420	---	1300	1100	460	400	770	900	920
31	510	---	800	180	---	1300	---	600	---	770	930	---
MONTH	1200	730	850	840	740	920	1100	730	480	660	870	980

DISSOLVED CHLORIDE (CL), TONS PER DAY, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	784	1540	1130	834	3710	5200	2910	1110	7310	3670	610	381
2	713	2520	1320	1280	5510	6300	2230	1290	6590	3820	587	346
3	651	1880	1200	1510	3370	4920	2040	---	5780	3670	576	324
4	616	1970	---	1080	3720	5550	2300	---	5290	3230	604	294
5	707	14700	---	1050	4850	5380	2860	2730	3640	3040	540	311
6	1720	15900	1080	1630	3430	4890	2550	2300	3620	2350	518	321
7	1080	10200	1130	2060	2570	4080	1880	1990	5230	1490	547	319
8	710	10100	1190	2150	1950	4280	2080	2020	5540	1590	514	342
9	632	7350	1200	3230	2080	3920	2580	1560	14000	1500	487	339
10	713	5790	1140	2710	2030	2670	2880	1230	9400	1470	456	305
11	702	5200	792	2140	1460	4180	2000	1330	10800	1410	416	330
12	688	4110	1650	2070	---	5450	2300	1720	14500	1380	389	315
13	702	5160	1840	1440	---	5200	2370	3000	9080	1290	364	318
14	698	4450	2510	1460	1780	4580	2570	5310	8060	1180	355	321
15	716	3720	1900	1570	2240	4840	2340	9640	6850	1020	---	330
16	856	3360	1730	1460	1940	4200	2640	7640	4840	1090	437	289
17	835	2640	1240	1440	1720	2490	2100	---	5100	1010	383	289
18	---	2390	1240	1560	1970	4700	2160	15800	4250	942	354	280
19	811	---	1590	1560	1780	4970	1840	8710	4360	820	249	261
20	800	2270	1210	1600	1600	3600	1880	3840	4560	794	331	254
21	751	2110	1350	1400	1630	4430	1440	4630	4790	359	734	241
22	730	1760	1330	1470	3470	3920	1680	5500	3490	663	538	229
23	730	1910	1270	1320	3430	3020	1490	4920	3660	644	638	219
24	684	1800	1100	1400	2720	2530	1580	8350	3820	646	647	238
25	786	1720	1010	1250	3320	3210	1900	4220	4620	690	559	211
26	761	1570	982	1310	2670	2780	1360	4690	4820	530	729	204
27	804	1460	915	1220	4200	3730	1400	7460	5820	544	441	209
28	943	1470	915	1190	3970	5510	1350	7760	4080	537	411	207
29	1040	1270	1320	1140	---	6630	1400	6760	2810	517	373	207
30	1380	1130	947	841	---	4320	1440	6440	3420	497	347	214
31	2820	---	1160	3070	---	3390	---	8970	---	503	379	---
MONTH	885	4190	1290	1600	2610	4350	2050	5030	6000	1380	484	262

07151000 SALT FORK ARKANSAS RIVER AT TONKAWA, OKLA.--Continued

DISSOLVED SOLIDS (RESIDUE AT 180 DEG. C), MG/L, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2640	703	2180	1580	699	864	2630	2300	1870	1100	2080	2370
2	2660	703	2390	1900	1230	1100	2400	1860	1990	1290	2050	2400
3	2680	240	2340	1590	1200	1080	2380	---	1930	1690	2040	2370
4	2690	189	---	1100	1160	1380	2510	---	1990	1770	2120	2240
5	3030	632	---	1100	1070	2040	3270	2140	1560	1660	2120	2280
6	2980	966	2270	1090	1010	2670	3020	2350	1710	1630	2140	2340
7	3040	1410	2270	1070	1220	2770	2600	2480	717	1230	2290	2380
8	2740	2160	2330	1230	1400	2570	2740	2620	428	1460	2290	2540
9	2650	2080	2330	2050	1570	2550	2860	2590	859	1550	2300	2470
10	2820	1830	2280	2050	1790	1900	2160	2440	805	1590	2300	2340
11	2810	1830	1430	2050	1710	1960	1890	2760	781	1600	2250	2450
12	2920	1720	1410	2360	---	1470	2490	2900	1350	1610	2230	2480
13	2920	2380	1230	2240	---	1620	2640	1090	1260	1630	2180	2480
14	2880	2380	1790	2240	2210	1800	2830	545	1100	1670	2190	2490
15	2800	2270	1900	2500	2860	2050	2730	960	1400	1650	---	2440
16	2940	2270	1900	2610	2680	2180	2840	1160	1410	1890	2010	2420
17	2900	2060	1800	2510	2590	1770	2470	---	1510	1890	2020	2370
18	---	2040	1990	2610	2860	2820	2530	3230	1510	1890	2020	2320
19	2860	---	2450	2620	2680	2170	2330	2280	1570	1740	1350	2250
20	2790	2200	2050	2620	2600	1970	2430	1300	1660	1830	1350	2260
21	2800	2200	2320	2610	2110	2530	2140	1750	1660	1010	2290	2250
22	2780	2050	2330	2560	2310	2470	2550	2310	1250	1910	1750	2200
23	2870	2300	2310	2560	2420	2400	2360	876	1180	1900	2310	2170
24	2740	2290	2150	2560	2110	2420	2480	1130	1130	1880	2460	2340
25	2790	2290	2130	2240	2430	2940	2650	1030	872	1830	2420	2170
26	2760	2290	2060	2300	1110	2390	2260	823	723	1660	1630	2140
27	2730	2290	1910	2300	1100	2370	2490	960	984	1800	2040	2170
28	2620	2390	1900	2390	841	2800	2440	1360	1010	1870	2250	2160
29	2600	2210	2450	2260	---	2830	2550	1710	984	1910	2250	2170
30	2580	2190	2010	1150	---	2860	2550	1280	1100	1920	2180	2210
31	1340	---	1990	593	---	2890	---	1530	---	1920	2240	---
MONTH	2750	1810	2070	2020	1810	2180	2540	1780	1280	1680	2110	2320

DISSOLVED SOLIDS (TONS PER DAY), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1720	4940	2740	2120	11800	15300	6370	2630	18200	10100	1510	902
2	1580	8050	3150	3200	14700	17300	5350	3240	16400	10100	1450	829
3	1450	9590	2830	3890	8970	13600	4850	---	14500	9260	1430	768
4	1380	13300	---	2970	10000	14500	5260	---	13200	8170	1490	702
5	1530	49000	---	2880	13300	13200	6230	6640	9310	7630	1320	739
6	3660	45100	2590	4440	9630	10900	5500	5410	9230	5990	1260	758
7	2360	26800	2710	5660	6820	9420	4440	4490	16300	3990	1300	758
8	1620	24600	2820	5750	5140	9990	4740	4400	19800	4140	1220	789
9	1400	18200	2840	7970	5340	9090	5670	3660	41500	3880	1160	760
10	1550	14500	2700	6700	5120	6670	7000	3010	28000	3760	1090	720
11	1520	13000	2060	5280	3680	10400	4970	3070	32500	3560	996	734
12	1550	10400	4300	4870	---	14100	5210	3840	37500	3530	933	710
13	1580	12300	4920	3440	---	13200	5210	8180	23800	3270	883	716
14	1550	10600	6330	3480	4310	11600	5590	18100	22200	2980	863	726
15	1540	8890	4750	3570	4930	12000	5320	27200	18100	2600	---	731
16	1940	8030	4310	3450	4340	10200	5760	20600	12600	2700	1090	699
17	1860	6560	3110	3280	4060	6310	4710	---	13000	2520	944	665
18	---	5950	3090	3400	4320	10200	4970	33900	10900	2340	884	664
19	1780	---	3550	3400	3980	12100	4330	20700	11200	2070	845	626
20	1720	5490	3000	3490	3790	6990	4570	10200	11700	1990	860	604
21	1620	5100	3190	3310	3990	10200	3510	11600	12200	1010	1750	577
22	1560	4340	3160	3430	8170	8800	3900	13000	9280	1720	1370	552
23	1610	4530	2990	3060	8300	7260	3520	14400	9810	1610	1500	533
24	1560	4300	2690	3260	6670	6120	3560	23000	10300	1620	1450	556
25	1690	4110	2480	2990	8070	7260	4200	11700	13400	1730	1350	516
26	1750	3730	2440	3110	7220	6650	3240	13800	15100	1350	1860	503
27	1830	3490	2300	2890	11600	8830	3180	21100	16400	1360	1100	510
28	2060	3520	2290	2850	11500	11900	2960	20300	11500	1340	984	502
29	2460	3040	2940	2720	---	14400	3240	17000	7890	1300	893	504
30	3230	2760	2350	2300	---	9500	3330	17200	9410	1240	842	513
31	7420	---	2890	10100	---	7530	---	22900	---	1250	913	---
MONTH	2000	11520	3160	3980	7300	10570	4690	13050	16510	3550	1180	663

07151000 SALT FORK ARKANSAS RIVER AT TONKAWA, OKLA.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4320	1070	3550	2540	1060	1370	4300	3750	3020	1730	3370	3860
2	4350	1070	3900	3080	1960	1730	3910	3010	3230	2050	3330	3910
3	4390	293	3810	2560	1910	1700	3880	---	3120	2720	3310	3860
4	4400	208	---	1740	1830	2200	4100	---	3230	2860	3440	3650
5	4970	951	---	1730	1690	3320	5380	3480	2510	3010	3450	3720
6	4890	1510	3690	1720	1580	4360	4960	3830	2750	2620	3480	3810
7	4990	2260	3690	1680	1940	4530	4240	4040	1090	1960	3730	3880
8	4490	3510	3790	1960	2230	4200	4480	4280	609	2340	3740	4150
9	4330	3380	3790	3320	2530	4170	4690	4240	1330	2490	3750	4030
10	4610	2950	3710	3320	2890	3080	3520	3970	1240	2560	3740	3810
11	4600	2950	2280	3320	2760	3170	3060	4510	1200	2580	3670	4000
12	4780	2780	2250	3840	---	2360	4060	4760	2160	2590	3630	4050
13	4790	3880	1960	3650	---	2610	4320	1720	2010	2630	3550	4050
14	4720	3880	2890	3650	3590	2900	4640	804	1740	2690	3560	4070
15	4590	3690	3070	4080	4680	3320	4460	1500	2230	2650	---	3980
16	4820	3690	3070	4260	4380	3550	4650	1830	2250	3060	3260	3950
17	4750	3340	2910	4090	4240	2850	4040	---	2430	3060	3280	3860
18	---	3310	3230	4270	4690	4610	4140	5310	2430	3060	3270	3780
19	4690	---	4000	4280	4380	3520	3790	3710	2520	2810	2160	3660
20	4570	3580	3330	4280	4250	3190	3970	2070	2670	2960	2160	3680
21	4590	3580	3780	4260	3430	4130	3480	2830	2680	1580	3730	3660
22	4550	3320	3790	4190	3770	4030	4170	3770	1980	3090	2820	3570
23	4700	3740	3770	4190	3940	3920	3840	1360	1870	3080	3770	3520
24	4490	3730	3500	4180	3430	3950	4060	1780	1790	3040	4020	3820
25	4570	3730	3460	3650	3960	4810	4330	1620	1350	2950	3940	3530
26	4520	3730	3350	3740	1750	3890	3680	1270	1100	2680	2620	3470
27	4460	3730	3090	3750	1730	3870	4060	1500	1540	2910	3310	3520
28	4280	3890	3070	3890	1300	4590	3980	2170	1590	3030	3660	3510
29	4250	3600	4000	3680	---	4640	4160	2760	1540	3090	3670	3520
30	4220	3560	3260	1820	---	4680	4170	2030	1740	3110	3550	3600
31	2140	---	3220	885	---	4740	---	2460	---	3110	3640	---
MONTH	4490	2930	3350	3280	2920	3550	4150	2870	2030	2710	3420	3780

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18.0	12.5	2.5	3.0	3.5	7.0	9.0	20.5	21.0	27.5	28.5	30.5
2	20.5	11.0	3.5	3.0	3.5	6.0	7.5	17.0	22.5	26.0	29.0	29.5
3	19.0	10.5	3.5	2.0	4.0	5.5	9.0	---	23.0	28.5	27.5	29.0
4	20.0	11.0	---	2.5	5.5	5.0	13.0	---	24.5	29.0	28.0	29.0
5	16.5	11.0	---	3.0	---	5.5	14.0	22.0	25.5	28.5	28.5	27.5
6	14.0	10.0	3.0	3.0	---	6.0	13.5	---	28.0	29.5	29.0	26.0
7	15.0	10.0	3.5	4.0	---	6.5	12.0	23.0	23.0	30.5	28.0	26.0
8	15.0	11.0	3.5	5.0	---	8.0	15.0	24.5	23.0	30.0	28.5	25.0
9	18.0	10.5	4.0	4.0	---	5.0	16.0	23.0	23.5	30.0	28.0	25.5
10	17.5	11.0	4.5	2.5	---	4.5	11.5	---	22.0	30.5	28.0	25.5
11	18.0	11.0	5.0	0.5	---	3.5	---	---	18.5	28.0	28.0	24.5
12	17.0	10.5	5.0	0.0	---	3.5	15.0	23.5	21.5	26.5	27.0	19.0
13	18.5	10.0	4.5	0.0	---	3.0	12.5	16.0	23.0	25.5	27.5	18.0
14	15.0	9.0	4.5	0.0	2.0	4.0	12.5	16.0	22.5	26.0	27.0	17.0
15	14.0	9.0	4.0	3.5	2.5	7.0	18.0	17.5	25.0	25.5	---	17.0
16	11.0	9.5	3.0	3.5	2.0	8.0	20.0	20.0	26.0	26.5	30.0	20.0
17	12.5	9.5	4.0	3.5	1.5	11.0	20.0	---	25.0	27.0	29.0	21.5
18	---	10.0	4.0	3.0	2.5	12.0	19.0	23.0	25.5	27.0	29.5	21.0
19	16.5	---	4.0	2.0	3.5	13.0	18.0	24.0	26.0	27.5	29.5	19.5
20	16.0	12.0	5.0	5.0	2.0	15.5	19.5	23.0	26.5	29.0	29.5	18.0
21	16.5	12.5	5.5	5.5	6.0	15.0	19.0	24.5	27.0	29.5	29.0	17.5
22	15.0	13.5	6.0	4.0	5.0	15.0	18.5	24.0	27.0	30.0	30.5	17.5
23	16.0	14.0	5.5	6.0	4.5	15.0	22.5	22.0	26.5	28.0	29.0	18.5
24	16.0	11.0	4.5	7.5	4.5	13.0	---	24.0	26.5	26.5	28.5	18.0
25	16.5	9.5	4.5	8.0	6.0	11.5	25.0	26.0	26.0	26.5	27.5	18.0
26	14.0	9.0	5.0	7.5	---	12.0	23.0	22.0	26.5	27.5	25.5	18.5
27	14.5	9.0	4.5	7.0	4.5	13.0	21.0	24.0	27.5	29.5	27.0	19.0
28	16.5	8.0	5.0	7.0	5.0	14.5	---	21.5	27.5	29.5	27.5	19.0
29	17.0	2.5	5.0	6.0	---	15.0	22.0	21.5	28.0	28.5	28.5	20.0
30	11.5	2.0	5.0	4.0	---	14.0	21.0	19.0	27.5	28.5	29.5	20.0
31	12.0	---	5.0	3.5	---	13.5	---	20.0	---	29.0	31.5	---
MONTH	16.0	10.0	4.5	4.0	---	9.5	16.5	21.5	25.0	28.0	28.5	22.0

07152500 ARKANSAS RIVER AT RALSTON, OKLA.

LOCATION.--Lat 36°30'09", long 96°43'22", in NW 1/4 sec.1, T.23 N., R.5 E., Osage County, at gaging station at bridge on State Highway 18 at Ralston, 2 mi (3.2 km) downstream from Salt Creek, 2 mi (3.2 km) upstream from Grayhorse Creek, and at mile 594.0 (955.7 km).

DRAINAGE AREA.--54,465 mi² (141,064 km²), of which 7,615 mi² (19,723 km²) is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: January 1950 to September 1963, May 1965 to current year.
Water temperatures: January 1950 to September 1963, May 1965 to current year.

EXTREMES, Current year.--Specific conductance: Maximum daily, 2,910 micromhos/cm May 20; minimum daily, 217 micromhos/cm Nov. 5.
Water temperatures: Maximum, 29.5°C Aug. 22; minimum, freezing point on Jan. 15, 20, 22.

Period of record.--Specific conductance: Maximum daily, 7,510 micromhos/cm Sept. 14, 1955; minimum daily, 200 micromhos/cm Aug. 16, 1974.
Water temperatures (1950-1963, 1965-70, 1972-75): Maximum, 37.0°C July 28, 1956; minimum, freezing point on many days during winter months.

REMARKS.--Continuous monitor records for specific conductance and temperature are collected for this station. Temperature records for Oct. 1-Feb. 3, Apr. 24-May 5, June 18-July 14 were poor. Once-daily temperature values were used in their place. Records of maximum and minimum specific conductance values are available in district office in Oklahoma City, Okla.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TOTAL CALCIUM (CA) (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	TOTAL MAGNESIUM (MG) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	TOTAL SODIUM (NA) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	TOTAL POTASSIUM (K) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)
OCT.												
05...	0730	1420	--	85	--	23	--	310	--	--	185	0
09...	1300	1410	--	--	--	--	--	--	--	--	--	--
15...	0730	1620	--	90	--	22	--	320	--	--	220	0
22...	1000	1710	--	--	--	--	--	--	--	--	--	0
29...	0730	9650	--	52	--	11	--	120	--	--	151	0
NOV.												
05...	0730	110000	--	23	--	4.1	--	15	--	--	83	0
06...	0930	83500	--	--	--	--	--	--	--	--	87	0
15...	0730	8770	--	86	--	19	--	200	--	--	221	0
20...	0900	6470	--	--	--	--	--	--	--	--	279	0
25...	0730	5120	--	120	--	26	--	240	--	5.3	305	0
DEC.												
05...	0730	4230	--	110	--	28	--	260	--	4.5	319	0
10...	0900	4700	--	--	--	--	--	--	--	--	--	0
15...	0900	13800	--	75	--	19	--	110	--	3.8	192	0
JAN.												
05...	0900	7230	--	70	--	20	--	150	--	5.5	185	9
07...	0900	7890	--	--	--	--	--	--	--	--	--	0
15...	0730	4560	--	--	--	25	--	190	--	5.9	246	0
25...	0730	3050	--	110	--	30	--	250	--	5.9	296	0
29...	1330	2840	--	--	--	--	--	--	--	--	--	--
FEB.												
05...	0745	14300	--	56	--	16	--	120	--	4.9	146	0
11...	1330	5490	65	--	17	--	86	--	4.7	--	214	0
15...	0730	4540	--	98	--	25	--	230	--	5.9	272	0
25...	0745	10700	--	74	--	22	--	160	--	5.0	205	0
26...	1500	9820	--	--	--	--	--	--	--	--	--	--
MAR.												
05...	0745	17700	--	48	--	14	--	110	--	4.5	136	0
12...	0830	8500	--	--	--	--	--	--	--	--	--	0
15...	0745	9960	--	72	--	22	--	180	--	4.0	194	0
25...	0745	6120	--	94	--	27	--	230	--	4.1	229	13
25...	1000	6060	--	--	--	--	--	--	--	--	--	--
APR.												
05...	0730	6780	--	94	--	25	--	200	--	4.1	263	0
09...	1200	5640	--	--	--	--	--	--	--	--	--	--
15...	0730	7200	--	81	--	24	--	180	--	4.6	227	1
23...	1200	4310	--	--	--	--	--	--	--	--	--	--
25...	0730	4150	--	76	--	31	--	230	--	4.8	212	0
MAY												
05...	0730	6320	--	72	--	25	--	200	--	4.5	191	0
06...	1240	4980	79	--	27	--	180	--	4.8	--	192	0
15...	0730	47500	--	42	--	8.9	--	57	--	3.6	134	0
20...	1130	7660	79	--	22	--	300	--	5.2	--	198	0
25...	0800	29800	--	50	--	11	--	88	--	5.7	139	0

07152500 ARKANSAS RIVER AT RALSTON, OKLA.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	CALCIUM DISSOLVED (CA) (MG/L)	MAGNESIUM DISSOLVED (MG) (MG/L)	SODIUM DISSOLVED (NA) (MG/L)	SODIUM PERCENT	SODIUM ADSORPTION RATIO	POTASSIUM DISSOLVED (K) (MG/L)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)
JUNE											
03...	1515	9670	--	--	--	--	--	--	--	--	--
05...	0730	17900	--	64	--	15	--	140	--	5.8	186	0
15...	0800	20800	--	44	--	12	--	120	--	6.7	129	0
17...	1115	15600	--	--	--	--	--	--	--	--	--	--
25...	0730	20000	--	48	--	13	--	81	--	7.4	135	0
JULY											
02...	1300	12500	--	--	--	--	--	--	--	--	--	0
05...	0900	9600	--	60	--	12	--	120	--	9.2	157	0
15...	0730	4780	--	86	--	19	--	170	--	7.0	238	0
16...	1000	4260	--	--	--	--	--	--	--	--	--	0
25...	0730	2700	--	89	--	24	--	230	--	6.7	230	0
30...	1200	2410	75	--	25	--	210	--	6.2	--	234	0
AUG.											
05...	0900	1880	--	88	--	26	--	260	--	6.3	246	0
12...	1215	1460	88	--	4.9	--	260	--	5.9	--	253	0
15...	0815	1470	--	88	--	28	--	260	--	6.2	240	0
25...	0730	2510	--	69	--	20	--	220	--	5.9	193	0
28...	1100	4640	76	--	25	--	64	--	17	--	125	0
SEP.											
05...	0730	2290	--	64	--	17	--	170	--	6.4	184	0
11...	1100	1780	--	--	--	--	--	--	--	--	--	0
15...	0730	1940	--	110	--	20	--	180	--	6.3	231	0
23...	0830	1170	--	--	--	--	--	--	--	--	--	--
25...	0730	1060	--	64	--	21	--	220	--	6.0	183	0

07152500 ARKANSAS RIVER AT RALSTON, OKLA.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	DISSOLVED NITRITE PLUS NITRATE (N) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL NITROGEN (NO3) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)
OCT.												
05...	152	150	480	--	--	.61	--	--	--	--	--	.94
09...	--	--	--	--	.08	--	.03	1.3	1.3	1.4	6.1	.30
15...	180	150	480	--	--	.41	--	--	--	--	--	1.3
22...	--	--	--	--	1.3	--	.21	1.7	1.9	3.2	14	.61
29...	124	54	180	--	--	.95	--	--	--	--	--	1.0
NOV.												
05...	68	13	19	--	--	1.3	--	--	--	--	--	.35
06...	71	22	40	.3	.00	--	.11	2.6	2.7	2.7	12	.83
15...	181	--	290	--	--	1.3	--	--	--	--	--	.24
20...	229	110	330	.4	1.0	--	.09	.45	.54	1.5	6.8	.31
25...	250	140	370	--	--	--	--	--	--	--	--	.29
DEC.												
05...	262	140	400	--	--	--	--	--	.61	--	--	--
10...	--	--	--	--	1.2	--	.14	.63	.77	2.0	8.7	.32
15...	157	110	160	--	--	--	--	--	1.4	--	--	--
JAN.												
05...	167	100	240	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	1.0	--	.18	1.1	1.3	2.3	10	.37
15...	202	120	280	--	--	--	--	--	--	--	--	--
25...	243	140	380	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	1.3	--	--	--	.63	1.9	8.5	.25
FEB.												
05...	120	83	190	--	--	--	--	--	--	--	--	--
11...	176	68	150	.2	1.1	--	.11	1.1	1.2	2.3	10	.44
15...	223	140	360	--	--	--	--	--	--	--	--	--
25...	168	120	--	--	--	--	--	--	--	--	--	--
26...	--	--	--	--	1.3	--	.11	1.3	1.4	2.7	12	.28
MAR.												
05...	112	75	170	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	1.3	--	--	--	.66	2.0	8.7	.20
15...	159	120	250	--	--	--	--	--	--	--	--	--
25...	209	140	370	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	1.0	--	.17	.42	.59	1.6	7.0	.22
APR.												
05...	216	130	--	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	.64	--	.07	1.1	1.2	1.8	8.1	.20
15...	188	120	270	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	.01	--	.00	--	--	--	--	.25
25...	174	150	340	--	--	--	--	--	--	--	--	--
MAY												
05...	157	140	310	--	--	--	--	--	--	--	--	--
06...	157	130	290	.3	.04	--	.10	2.0	2.1	2.1	9.5	.33
15...	110	45	85	--	--	--	--	--	--	--	--	--
20...	162	140	450	.3	.00	--	.06	1.8	1.9	1.9	8.4	.19
25...	114	64	140	--	--	--	--	--	--	--	--	--
JUNE												
03...	--	--	--	--	4.2	--	.79	--	--	--	--	.19
05...	153	81	210	--	--	--	--	--	--	--	--	--
15...	106	76	170	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	1.7	--	.29	--	--	--	--	.25
25...	111	74	130	--	--	--	--	--	--	--	--	--
JULY												
02...	--	--	--	--	.98	--	.13	2.2	2.3	3.3	15	.73
05...	129	73	180	--	--	--	--	--	--	--	--	--
15...	195	110	260	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	.11	--	--	--	--	--	--	.36
25...	189	140	340	--	--	--	--	--	--	--	--	--
30...	192	140	370	.4	.01	--	.00	.86	.86	.87	3.9	.23
AUG.												
05...	202	140	410	--	--	--	--	--	--	--	--	--
12...	208	150	420	.4	.01	--	.00	1.0	1.0	1.0	4.5	.34
15...	197	150	410	--	--	--	--	--	--	--	--	--
25...	158	120	340	--	--	--	--	--	--	--	--	--
28...	103	48	100	.4	1.1	--	.04	4.7	4.7	5.8	26	1.2
SEP.												
05...	151	95	250	--	2.0	--	--	--	--	--	--	--
11...	--	--	--	--	.68	--	.04	1.8	1.8	2.5	11	.65
15...	189	--	--	--	1.3	--	--	--	--	--	--	--
23...	--	--	--	--	.01	--	.01	.06	.07	.08	.35	.33
25...	150	110	350	--	.78	--	--	--	--	--	--	--

07152500 ARKANSAS RIVER AT RALSTON, OKLA.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	TOTAL NON-FILT-RABLE RESIDUE (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	CARBON DIOXIDE (CO2) (MG/L)
OCT.											
05...	--	--	--	--	310	160	--	7.7	2040	8.0	3.0
09...	--	--	--	42	--	--	--	--	2100	--	--
15...	1210	1.65	5290	--	320	130	--	7.8	2080	7.4	14
22...	1050	1.43	4850	279	--	--	--	--	1750	8.4	--
29...	517	.70	13500	--	180	56	--	3.9	910	7.5	7.6
NOV.											
05...	139	.19	41300	--	74	6	--	.8	217	7.6	3.3
06...	--	--	--	1180	--	--	--	--	300	7.6	3.5
15...	858	1.17	20300	--	290	110	--	5.1	1470	8.1	2.8
20...	988	1.34	17300	70	--	--	--	--	1650	8.2	2.8
25...	1090	1.48	15100	--	410	160	56	5.2	1780	8.3	2.4
DEC.											
05...	1170	1.59	13400	--	390	130	59	5.7	1960	8.2	3.2
10...	1090	1.48	13800	34	--	--	--	--	1800	8.3	--
15...	598	.81	22300	--	270	110	47	2.9	974	7.8	4.9
JAN.											
05...	730	.99	14300	--	260	90	55	4.1	1240	8.4	1.3
07...	876	1.19	18700	29	--	--	--	--	1500	8.3	--
15...	873	--	10700	--	--	--	--	--	1460	7.7	7.9
25...	1110	1.51	9140	--	400	160	57	5.5	1850	8.0	4.7
29...	1070	1.40	8210	--	--	--	--	--	1700	--	--
FEB.											
05...	557	.76	21500	--	210	86	55	3.6	966	7.5	7.4
11...	--	--	--	93	--	--	--	--	981	8.5	1.1
15...	1080	1.47	13200	--	350	120	59	5.4	1800	7.8	6.9
25...	750	1.02	21700	--	280	110	55	4.2	1280	7.6	8.2
26...	711	.97	18900	402	--	--	--	--	1200	8.4	--
MAR.											
05...	522	.71	24900	--	180	66	57	3.6	920	8.2	1.4
12...	782	1.06	17900	121	--	--	--	--	1300	8.2	--
15...	762	1.04	20500	--	270	110	59	4.8	1320	7.9	3.9
25...	--	--	--	--	350	140	59	5.4	1750	8.6	1.0
25...	--	--	--	119	--	--	--	--	1600	8.5	--
APR.											
05...	940	1.28	17200	--	340	120	56	4.7	1580	7.9	5.3
09...	842	1.15	12800	120	--	--	--	--	1470	6.6	--
15...	834	1.13	16200	--	300	110	56	4.5	1420	8.4	1.5
23...	983	1.34	11400	140	--	--	--	--	1750	7.2	--
25...	1000	1.36	11200	--	320	140	61	5.6	1680	7.7	6.8
MAY											
05...	870	1.18	14800	--	280	130	60	5.2	1510	7.6	7.7
06...	855	1.16	11500	476	--	--	--	--	1480	8.0	3.1
15...	323	.44	41400	--	140	32	46	2.1	546	7.7	4.3
20...	--	--	--	212	--	--	--	--	1800	7.3	16
25...	445	.61	35800	--	170	56	52	2.9	788	7.6	5.6
JUNE											
03...	584	.79	15200	428	--	--	--	--	965	8.4	--
05...	635	.86	30700	--	220	69	57	4.1	1060	8.0	3.0
15...	535	.73	30000	--	160	53	61	4.1	933	7.9	2.6
17...	321	.44	13500	408	--	--	--	--	575	8.6	--
25...	451	.61	24400	--	170	63	49	2.7	750	7.7	4.3
JULY											
02...	455	.62	15400	824	--	--	--	--	758	6.0	--
05...	542	.74	14000	--	200	70	55	3.7	970	7.8	4.0
15...	784	1.07	10100	--	290	98	55	4.3	1370	7.7	7.6
16...	824	1.12	9480	84	--	--	--	--	1400	8.1	--
25...	980	1.33	7140	--	320	130	60	5.6	1690	8.1	2.9
30...	1030	1.40	6700	--	--	--	--	--	1800	8.0	3.7
AUG.											
05...	1090	1.48	5530	--	330	130	63	6.3	1910	7.4	16
12...	1150	1.56	4530	36	--	--	--	--	1980	8.2	2.6
15...	1100	1.50	4370	--	340	140	62	6.2	1890	7.5	12
25...	901	1.23	6110	--	250	96	65	6.0	1580	7.7	6.2
28...	361	.49	4520	1930	--	--	--	--	630	7.8	3.2
SEP.											
05...	721	.98	4460	--	230	79	61	4.9	1280	8.3	1.5
11...	789	1.07	3790	244	--	--	--	--	1320	8.2	--
15...	942	1.28	4930	--	360	170	52	4.1	1530	8.1	2.9
23...	880	1.20	2780	80	--	--	--	--	1580	8.8	--
25...	918	1.25	2630	--	250	96	65	6.1	1640	7.7	5.8

07152500 ARKANSAS RIVER AT RALSTON, OKLA.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TOTAL IRON (FE) (UG/L)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	CHEMICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	CHLOROPHYLL A (UG/L)	CHLOROPHYLL B (UG/L)
OCT.										
09...	1300	1410	550	19.0	10	9.0	101	24	220	38.0
22...	1000	1710	6600	14.0	70	--	--	45	170	130
NOV.										
06...	0930	83500	9100	10.0	500	9.0	83	65	46.0	86.0
20...	0900	6470	1800	9.5	9	10.2	94	15	--	--
DEC.										
10...	0900	4700	770	2.5	10	12.4	95	52	--	--
JAN.										
07...	0900	7890	6700	3.5	70	12.4	100	31	9.20	.000
29...	1330	2840	910	7.0	20	10.8	92	--	12.0	2.00
FEB.										
11...	1330	5490	7000	2.0	70	13.1	99	25	--	--
26...	1500	9820	13000	4.5	200	12.6	102	30	--	--
MAR.										
12...	0830	8500	4300	4.0	50	16.6	133	26	2.50	.000
25...	1000	6060	4100	10.0	38	11.1	104	--	12.0	2.50
APR.										
09...	1200	5640	3800	15.0	33	13.8	145	25	67.0	5.40
23...	1200	4310	2500	20.0	28	12.6	146	30	--	--
MAY										
06...	1240	4980	7900	21.0	650	7.4	88	38	15.0	.000
20...	1130	7660	4900	23.0	60	8.0	100	32	110	6.80
JUNE										
03...	1515	9670	12000	33.5	56	8.5	123	52	14.0	.300
17...	1115	15600	12000	21.5	170	6.7	81	58	--	--
JULY										
02...	1300	12500	14000	29.0	230	6.9	92	52	--	--
16...	1000	4260	1800	34.0	40	7.2	101	29	21.0	2.20
30...	1200	2410	1300	28.0	25	8.2	108	24	5.40	2.90
AUG.										
12...	1215	1460	610	31.0	16	8.6	119	250	--	--
28...	1100	4640	60000	25.0	600	6.2	82	91	16.0	.000
SEP.										
11...	1100	1780	9000	26.0	160	8.3	113	33	--	--
23...	0830	1170	2100	16.0	20	10.4	111	50	47.0	4.60

DATE	FECAL COLIFORM (COL. PER 100 ML)	STREPTOCOCCI (COLONIES PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)	OIL AND GREASE (MG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	TOTAL CHROMIUM (CR) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL ZINC (ZN) (UG/L)
OCT.										
09...	920	580	17	3	4	<10	0	<100	.0	0
22...	880	B67	12	6	10	<10	0	<100	.1	300
NOV.										
06...	7800	6300	2.3	2	36	<10	0	<100	.0	190
20...	620	B67	4.4	4	5	<10	0	<100	.1	50
DEC.										
10...	29	38	5.6	0	4	<10	<10	100	<.1	70
JAN.										
07...	B470	B1400	7.7	8	4	0	10	<100	.2	30
29...	--	1100	--	6	2	10	10	100	.0	40
FEB.										
11...	1600	550	8.2	5	2	10	0	<100	.1	40
26...	--	--	12	6	4	10	0	<100	.1	40
MAR.										
12...	B2100	--	6.9	6	5	20	30	100	.0	40
25...	B17	--	9.9	0	1	10	1	<100	.0	50
APR.										
09...	--	B68	8.7	2	4	<10	0	<100	.1	20
23...	B3340	110	18	1	3	<10	0	<100	.1	60
MAY										
06...	--	--	22	0	13	10	0	<100	.1	20
20...	1150	B34	13	1	4	<10	0	<100	.0	430
JUNE										
03...	B2500	310	18	1	10	<10	20	100	.2	340
17...	B13000	B3400	15	1	3	<10	30	<100	.0	260
JULY										
02...	1200	1100	12	--	10	<10	20	<100	.0	50
16...	290	190	10	1	7	<10	0	<100	.0	10
30...	M0	M0	5.1	1	1	<10	0	<100	.1	20
AUG.										
12...	M0	770	15	0	5	<10	20	<100	.1	--
28...	M0	B2000	26	E10	45	<10	80	200	15	480
SEP.										
11...	M0	M0	14	0	13	<10	10	<100	.7	40
23...	M0	B30	1.6	2	4	<10	10	<100	.5	10

07152500 ARKANSAS RIVER AT RALSTON, OKLA.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TOTAL IRON IN BOTTOM MATERIAL (UG/G)	TOTAL KJEL. NITROGEN IN BOTTOM MAT. (MG/KG)	TOTAL PHOSPHORUS IN BOTTOM MATERIAL (MG/KG)	LOSS ON IGNITION IN BOTTOM MATERIAL (MG/KG)	COD IN BOTTOM MATERIAL (MG/KG)
FEB. 26...	1500	9820	1600	210	100	13000	6000

DATE	OIL AND GREASE IN BOTTOM MATERIAL (MG/KG)	TOTAL ARSENIC IN BOTTOM MATERIAL (UG/G)	TOTAL CADMIUM IN BOTTOM MATERIAL (UG/G)	TOTAL CHROMIUM IN BOTTOM MATERIAL (UG/G)	TOTAL LEAD IN BOTTOM MATERIAL (UG/G)	TOTAL MERCURY IN BOTTOM MATERIAL (UG/G)	TOTAL ZINC IN BOTTOM MATERIAL (UG/G)
FEB. 26...	1000	1	1	3	60	.0	9

07152500 ARKANSAS RIVER AT RALSTON, OKLA.--Continued

DISSOLVED SULFATE (SO4), MG/L, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	150	57	140	120	52	79	89	140	73	89	140	140
2	150	82	140	140	41	70	100	140	82	77	140	140
3	150	40	140	110	53	64	130	110	110	75	140	130
4	150	24	150	110	78	57	140	130	120	74	140	120
5	150	15	150	100	79	74	140	130	72	80	140	110
6	150	22	150	110	69	91	140	130	43	87	140	91
7	150	49	140	120	62	140	140	140	60	98	140	71
8	150	---	140	110	70	140	140	140	71	100	150	84
9	150	86	140	110	90	150	140	150	40	100	140	83
10	150	110	140	100	110	140	140	150	50	91	150	96
11	150	120	130	94	130	140	130	150	58	100	150	100
12	150	---	120	100	130	140	120	140	62	110	150	110
13	150	120	120	100	140	140	100	130	46	110	150	130
14	150	110	120	110	140	120	110	44	68	110	150	130
15	150	120	80	120	140	110	120	46	72	120	140	130
16	140	140	76	130	110	120	140	47	60	120	140	130
17	110	140	84	140	140	140	140	63	72	120	140	140
18	140	140	95	140	100	140	140	130	97	130	140	130
19	140	140	110	140	140	130	140	160	60	130	140	130
20	140	140	110	140	140	120	140	180	25	130	130	130
21	140	140	120	140	150	140	140	160	39	140	140	140
22	140	140	130	140	120	130	140	140	61	140	140	140
23	140	140	130	140	110	130	140	120	89	140	120	140
24	140	140	140	140	100	140	140	77	71	140	120	140
25	140	140	140	140	110	140	140	66	61	140	110	140
26	140	140	140	140	100	140	140	61	49	140	110	140
27	140	140	140	140	110	140	140	44	51	140	120	140
28	140	140	140	150	97	69	140	41	60	140	65	140
29	75	140	140	150	---	81	140	52	75	140	74	140
30	92	140	140	140	---	100	140	65	84	140	100	140
31	23	---	140	89	---	97	---	110	---	140	120	---
MONTH	140	110	130	120	100	120	130	110	66	120	130	120

DISSOLVED SULFATE (SO4), TONS PER DAY, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	688	2540	1630	1940	4590	3820	2080	1430	3960	2840	798	578
2	664	4760	1570	2360	3010	3800	1890	2030	3120	2620	771	624
3	648	6050	1550	2030	2400	3610	2260	2000	2970	2350	752	639
4	607	5970	1690	2170	2840	3170	2220	2150	3270	2120	737	706
5	575	4330	1700	1920	3460	3320	2080	2180	4060	2020	714	659
6	571	4610	1730	1990	4360	2870	1940	1780	2960	1870	696	602
7	583	5620	1760	2420	3330	3350	1910	1600	3550	1900	692	521
8	624	---	1740	2280	2490	2960	2360	1440	3680	1750	729	551
9	571	3880	1740	2320	2050	3070	2310	1420	2980	1620	643	475
10	551	4310	1780	2330	1960	3180	2350	1350	4210	1430	664	454
11	531	4310	2670	2010	1970	2990	3180	1350	6560	1480	640	435
12	518	---	2640	1850	1700	3240	3120	1400	8240	1570	599	496
13	514	3500	2870	1610	1810	3970	1930	1400	5050	1500	583	498
14	547	2830	4670	1560	1790	3820	1850	2680	5180	1480	583	653
15	693	2790	2940	1440	1700	2890	1840	5760	3630	1520	597	656
16	903	2960	2150	1340	1330	2690	2030	4660	2190	1380	627	551
17	650	2740	1690	1360	1690	2780	1980	3930	2740	1300	654	544
18	699	2580	1780	1360	1280	3470	1960	4350	3900	1330	850	467
19	620	2430	1870	1370	1830	4110	1950	4000	7820	1230	820	474
20	590	2290	1730	1380	1730	4020	1920	3720	4390	1160	751	449
21	665	2230	1790	1340	2150	3760	1850	2840	3700	1180	647	476
22	650	2160	1870	1280	2480	2900	1750	2210	3030	1130	968	457
23	605	2080	1780	1240	3210	2550	1610	4860	3800	1070	982	442
24	567	1980	1810	1200	3130	2490	1590	6420	3640	1040	953	420
25	605	1920	1700	1140	3060	2260	1560	4810	4000	1030	725	401
26	658	1870	1640	1120	2640	2100	1530	4350	4040	1020	665	386
27	711	1800	1590	1110	3530	3620	1530	4800	3210	983	1080	370
28	1240	1750	1550	1160	3850	2270	1520	4100	2870	934	893	360
29	1640	1710	1530	1130	---	3150	1450	3410	2790	892	531	347
30	2930	1670	1510	1330	---	3590	1430	2490	2610	858	537	341
31	2190	---	2200	4280	---	3090	---	6150	---	824	554	---
MONTH	800	3130	1960	1720	2550	3190	1970	3130	3950	1470	730	501

07152500 ARKANSAS RIVER AT RALSTON, OKLA.--Continued

DISSOLVED CHLORIDE (CL), MG/L, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	470	130	390	280	110	180	210	350	170	210	350	330
2	400	190	390	340	86	160	250	360	190	180	330	330
3	410	83	380	250	120	140	300	260	250	170	390	310
4	420	44	400	260	180	130	330	310	270	170	380	300
5	470	22	410	240	180	170	320	300	170	180	380	250
6	470	40	400	270	160	210	360	310	89	200	380	210
7	420	110	390	290	140	350	360	340	130	230	380	160
8	410	---	390	250	160	380	320	380	160	240	410	190
9	490	200	390	260	210	430	370	470	84	240	380	190
10	570	270	390	240	260	380	330	420	110	210	420	220
11	550	290	310	220	300	330	310	410	130	240	450	240
12	470	---	300	240	320	360	280	380	140	250	470	270
13	450	290	290	240	340	370	240	320	98	270	430	300
14	460	270	280	270	360	280	250	94	150	270	400	310
15	490	290	190	290	390	260	290	98	160	290	390	300
16	380	330	170	310	270	290	340	100	130	290	370	300
17	250	340	190	350	330	350	350	140	160	300	380	330
18	360	330	220	340	240	350	370	310	230	310	360	300
19	350	350	250	340	370	310	350	670	130	310	350	310
20	360	350	260	340	380	290	330	1100	48	320	310	310
21	370	340	270	360	420	330	330	820	81	340	340	330
22	370	360	300	370	290	310	330	340	140	340	340	330
23	340	360	310	370	260	320	360	280	210	340	290	340
24	330	360	330	380	250	340	360	180	160	340	270	320
25	330	360	350	380	260	340	340	150	140	360	270	330
26	330	370	350	380	240	360	340	140	110	330	270	340
27	360	380	360	390	270	330	350	94	110	340	280	340
28	350	380	360	420	230	160	360	87	130	370	150	350
29	170	380	370	410	---	190	350	110	170	330	170	350
30	220	390	380	380	---	230	340	150	200	350	240	360
31	42	---	370	210	---	230	---	250	---	330	290	---
MONTH	380	270	330	310	250	290	320	310	150	280	340	300

DISSOLVED CHLORIDE (CL), TONS PER DAY, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2160	5790	4550	4540	9710	6700	4900	3570	9230	6690	1990	1360
2	1770	11000	4370	5730	6320	8680	4720	5210	7230	6120	1820	1470
3	1770	12500	4200	4620	5440	7900	5220	4720	6750	5320	2100	1520
4	1700	10900	4510	5130	6560	7230	5230	5130	7360	4870	2000	1770
5	1800	6360	4650	4600	7870	7620	4750	5020	9590	4540	1940	1500
6	1790	8380	4620	4890	10100	6630	4980	4240	6130	4300	1890	1390
7	1630	12600	4900	5860	7520	8370	4920	3880	7690	4460	1680	1180
8	1700	---	4840	5190	5700	8030	5390	3900	8290	4210	1990	1250
9	1870	9020	4850	5490	4780	8800	6110	4450	6260	3890	1740	1090
10	2090	10600	4970	5590	4630	8630	5530	3780	9270	3310	1860	1040
11	1950	10400	6380	4710	4540	7050	7570	3700	14700	3560	1920	1040
12	1620	---	6590	4450	4190	8320	7290	3800	18600	3560	1880	1220
13	1540	8460	6940	3860	4390	10500	4630	3440	10800	3690	1670	1150
14	1680	6940	10900	3830	4610	8920	4210	5740	11400	3630	1560	1560
15	2260	6750	6980	3470	4740	6840	4460	12300	8510	3660	1660	1510
16	2450	6990	4820	3200	3270	6500	4920	9910	4740	3330	1660	1270
17	1480	6660	3820	3410	3990	6960	4960	8730	6090	3240	1770	1280
18	1800	6090	4130	3300	3080	8680	5170	10400	9250	3160	2190	1080
19	1550	6070	4250	3330	4850	9790	4870	16800	17000	2940	2050	1130
20	1520	5730	4100	3360	4700	9710	4540	22700	8420	2860	1790	1070
21	1760	5410	4030	3440	6030	8870	4370	14600	7680	2870	2060	1120
22	1720	5560	4310	3380	6000	6920	4120	5370	6960	2750	2350	1080
23	1470	5340	4250	3280	7580	6270	4130	11300	8960	2590	2370	1070
24	1340	5090	4270	3250	7830	6040	4090	15000	8210	2530	2140	959
25	1430	4940	4260	3090	7230	5490	3780	10900	9190	2640	1780	944
26	1550	4940	4100	3050	6330	5390	3730	9980	9060	2410	1630	936
27	1830	4890	4080	3100	8680	8530	3830	10300	6920	2390	2530	898
28	3110	4740	3990	3250	9130	5270	3900	8690	6210	2470	2060	901
29	3710	4640	4040	3090	---	7390	3620	7220	6330	2100	1220	867
30	7010	4660	4100	3600	---	8260	3470	5750	6210	2150	1290	878
31	4000	---	5800	10100	---	7330	---	14000	---	1940	1340	---
MONTH	2100	7190	4920	4230	6060	7730	4780	8210	8770	3490	1880	1180

07152500 ARKANSAS RIVER AT RALSTON, OKLA.--Continued

DISSOLVED SOLIDS (RESIDUE AT 180 DEG. C), MG/L, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1190	406	1100	822	378	555	623	1000	516	620	991	938
2	1120	577	1110	967	303	496	721	1020	574	538	932	950
3	1130	295	1080	747	379	453	863	753	742	530	1100	892
4	1150	188	1120	764	544	409	950	897	799	523	1070	857
5	1180	126	1130	718	554	523	926	874	511	562	1080	735
6	1190	176	1120	782	490	632	1020	892	312	608	1080	631
7	1150	354	1090	851	444	1000	1010	961	428	677	1070	500
8	1140	---	1110	735	492	1080	926	1090	501	718	1140	585
9	1200	602	1100	753	625	1150	1050	1180	297	695	1090	579
10	1260	782	1100	718	765	1080	950	1150	359	637	1150	666
11	1250	828	903	654	870	944	880	1130	414	706	1170	712
12	1180	---	857	695	915	1020	816	1070	439	741	1190	776
13	1170	851	834	701	984	1050	706	915	335	782	1150	863
14	1180	776	811	776	1030	805	730	323	483	793	1130	892
15	1200	851	564	845	1090	770	845	334	510	840	1090	869
16	1090	950	536	903	787	828	984	340	428	845	1060	869
17	747	979	585	990	944	1000	990	449	510	857	1070	938
18	1020	955	660	979	695	990	1040	895	672	880	1020	869
19	990	1010	747	961	1050	885	990	1340	427	903	1000	897
20	1020	1000	770	984	1080	831	938	1680	198	917	892	903
21	1040	973	799	1020	1140	955	950	1460	288	967	961	944
22	1040	1010	863	1050	846	892	938	973	433	973	973	932
23	967	1020	903	1060	765	921	1020	801	620	967	851	984
24	950	1010	944	1080	724	961	1010	541	498	967	799	926
25	955	1030	990	1070	758	973	973	470	434	1020	782	950
26	955	1050	1000	1080	712	1010	967	432	355	932	787	961
27	1020	1070	1020	1100	793	944	1010	324	371	961	822	984
28	996	1080	1020	1150	672	485	1020	305	427	1060	462	1010
29	527	1080	1040	1130	---	568	996	372	530	950	524	1010
30	643	1090	1070	1090	---	694	979	458	591	990	695	1020
31	181	---	1050	620	---	672	---	734	---	938	828	---
MONTH	1030	790	936	897	744	825	927	812	467	810	966	855

DISSOLVED SOLIDS (TONS PER DAY), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5460	18100	12800	13300	33400	26800	14600	10200	28000	19800	5650	3870
2	4960	33500	12400	16300	22300	26900	13600	14800	21900	18300	5130	4230
3	4880	44600	11900	13800	17200	25600	15000	13700	20000	16600	5910	4380
4	4660	46700	12600	15100	19800	22700	15100	14800	21800	15000	5630	5040
5	4520	36400	12800	13800	24200	23400	13600	14600	28800	14200	5510	4410
6	4530	36900	12900	14200	31000	20000	14100	12200	21500	13100	5370	4170
7	4470	40600	13700	17200	23900	23900	13800	11000	25300	13100	5290	3670
8	4740	---	13800	15300	17500	22800	15600	11200	26000	12600	5540	3840
9	4570	27100	13700	15900	14200	23500	17400	11200	22100	11300	5000	3310
10	4630	30600	14000	16700	13600	24500	15900	10300	30200	10000	5090	3150
11	4420	29700	18600	14000	13200	20200	21500	10200	46800	10500	4990	3100
12	4080	---	18800	12900	12000	23600	21200	10700	58300	10600	4760	3500
13	4010	24800	20000	11300	12700	29800	13600	9830	36800	10700	4470	3310
14	4300	19900	31500	11000	13200	25600	12300	19700	36800	10700	4390	4480
15	5540	19800	20700	10100	13200	20200	13000	41900	27100	10600	4650	4390
16	7030	20100	15200	9310	9520	18600	14200	33700	15600	9700	4750	3680
17	4420	19200	11800	9650	11400	19900	14000	28000	19400	9260	5000	3650
18	5090	17600	12400	9520	8910	24500	14500	30000	27000	8980	6200	3120
19	4380	17500	12700	9420	13700	28000	13800	33500	55700	8560	5860	3270
20	4300	16400	12100	9720	13400	27800	12900	34700	34700	8200	5150	3120
21	4940	15500	11900	9750	16400	25700	12600	25900	27300	8170	5810	3210
22	4830	15600	12400	9580	17500	19900	11700	15400	21500	7880	6730	3040
23	4180	15100	12400	9390	22300	18100	11700	32400	26400	7360	6960	3110
24	3850	14300	12200	9240	22700	17100	11500	45100	25500	7210	6340	2780
25	4130	14100	12100	8700	21100	15700	10800	34300	28500	7490	5150	2720
26	4490	14000	11700	8660	18800	15100	10600	30800	29200	6820	4760	2650
27	5180	13800	11600	8730	25500	24400	11000	35300	23300	6750	7410	2600
28	8850	13500	11300	8910	26700	18000	11000	30500	20400	7070	6350	2600
29	11500	13200	11300	8510	---	22100	10300	24400	19700	6050	3760	2500
30	20500	13000	11600	10300	---	24900	9990	17600	18400	6070	3730	2490
31	17300	---	16500	29800	---	21400	---	41000	---	5520	3820	---
MONTH	5960	22910	14170	12260	18190	22540	13700	22870	28130	10260	5330	3450

07152500 ARKANSAS RIVER AT RALSTON, OKLA.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2050	702	1900	1420	652	958	1080	1730	892	1070	1710	1620
2	1940	997	1920	1670	523	857	1250	1770	991	930	1610	1640
3	1960	509	1870	1290	655	782	1490	1300	1280	915	1900	1540
4	1980	324	1930	1320	940	707	1640	1550	1380	904	1840	1480
5	2040	217	1960	1240	956	903	1600	1510	882	970	1860	1270
6	2050	304	1930	1350	846	1090	1770	1540	538	1050	1870	1090
7	1980	612	1890	1470	767	1730	1750	1660	740	1170	1840	864
8	1970	---	1920	1270	850	1870	1600	1880	865	1240	1960	1010
9	2080	1040	1900	1300	1080	1990	1810	2040	513	1200	1880	1000
10	2180	1350	1900	1240	1320	1860	1640	1980	620	1100	1980	1150
11	2160	1430	1560	1130	1500	1630	1520	1960	715	1220	2010	1230
12	2040	---	1480	1200	1580	1760	1410	1840	758	1280	2050	1340
13	2020	1470	1440	1210	1700	1810	1220	1560	578	1350	1990	1490
14	2030	1340	1400	1340	1780	1390	1260	557	634	1370	1950	1540
15	2080	1470	974	1460	1890	1330	1460	577	881	1450	1890	1500
16	1880	1640	925	1560	1360	1430	1700	588	739	1460	1830	1500
17	1290	1690	1010	1710	1630	1740	1710	775	881	1480	1840	1620
18	1770	1650	1140	1690	1200	1710	1800	1550	1160	1520	1760	1500
19	1710	1740	1290	1660	1820	1530	1710	2320	737	1560	1730	1550
20	1760	1730	1330	1700	1870	1440	1620	2910	342	1580	1540	1560
21	1800	1680	1380	1770	1970	1650	1640	2530	498	1670	1660	1630
22	1800	1750	1490	1810	1460	1540	1620	1660	748	1660	1680	1610
23	1670	1760	1560	1830	1320	1590	1760	1380	1070	1670	1470	1700
24	1640	1750	1630	1860	1250	1660	1750	935	860	1670	1380	1600
25	1650	1780	1710	1850	1310	1680	1680	811	750	1760	1350	1640
26	1650	1820	1730	1870	1230	1750	1670	746	613	1610	1360	1660
27	1760	1840	1760	1900	1370	1630	1740	559	640	1660	1420	1700
28	1720	1870	1760	1980	1160	838	1770	526	737	1830	798	1740
29	910	1860	1800	1960	---	981	1720	642	915	1640	905	1740
30	1110	1890	1850	1880	---	1200	1690	791	1020	1710	1200	1760
31	312	---	1810	1070	---	1160	---	1270	---	1620	1430	---
MONTH	1770	1360	1620	1550	1290	1430	1600	1400	806	1400	1670	1480

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14.5	15.0	1.0	3.5	3.0	6.0	10.0	16.0	20.0	27.0	25.0	29.0
2	14.0	15.5	0.5	3.0	3.5	6.5	7.5	16.5	21.0	26.0	27.0	28.5
3	14.0	15.5	1.0	1.0	4.0	4.5	7.0	15.5	22.5	26.0	26.0	28.0
4	16.5	11.5	2.5	1.0	4.5	3.5	8.5	18.0	23.5	26.5	25.0	28.5
5	17.0	10.0	5.0	3.0	3.0	4.5	11.0	20.0	23.5	27.5	25.5	26.0
6	18.0	8.5	8.0	1.0	1.0	6.5	12.5	21.5	24.0	27.5	25.5	25.0
7	13.0	9.0	6.0	3.0	0.5	7.0	11.5	21.0	23.5	27.5	25.0	24.0
8	12.5	---	2.0	4.0	1.5	6.5	11.5	22.0	23.5	27.0	25.0	24.0
9	17.5	10.0	0.5	7.0	1.5	5.0	13.0	22.0	22.0	27.5	26.0	24.5
10	19.0	10.5	2.0	5.0	1.5	3.0	13.0	21.5	22.5	26.5	26.0	27.0
11	17.0	9.0	3.0	1.0	3.5	2.5	11.5	22.5	20.5	25.0	26.0	24.0
12	19.0	---	2.0	1.5	3.5	3.0	12.5	22.0	20.5	21.5	29.0	16.5
13	17.0	9.5	4.0	1.5	4.5	2.0	12.0	19.0	21.0	24.0	25.5	16.5
14	16.0	7.0	5.5	1.0	3.5	1.5	12.0	15.5	22.0	22.0	26.0	14.0
15	10.0	6.0	4.0	0.0	3.5	3.0	14.0	16.0	21.5	28.0	26.0	15.5
16	11.0	8.0	2.0	1.0	2.0	4.0	16.5	17.5	22.5	27.0	24.0	20.5
17	18.0	7.5	1.5	2.0	1.0	5.5	18.0	19.0	22.5	27.0	26.0	19.5
18	14.0	8.5	3.0	2.0	1.0	8.0	18.5	21.0	23.0	27.5	24.0	22.5
19	13.0	10.5	1.5	4.5	1.5	9.5	16.0	22.0	23.0	28.0	25.0	18.0
20	12.5	9.0	2.5	0.0	3.0	11.5	16.5	22.0	23.0	27.5	26.5	16.0
21	13.0	9.5	3.0	3.5	5.0	13.5	17.0	23.0	24.0	27.5	27.0	15.0
22	12.5	10.5	6.0	0.0	2.0	13.5	17.0	24.5	24.5	27.0	29.5	15.5
23	14.5	14.5	5.5	1.5	1.0	14.5	17.0	21.0	24.0	27.0	29.0	17.5
24	16.5	7.5	3.0	6.0	1.0	11.5	20.0	21.5	23.5	24.5	26.5	15.0
25	16.5	6.5	0.5	6.0	2.5	11.0	20.0	21.5	23.5	24.0	27.0	14.0
26	15.0	7.0	1.5	5.0	3.0	8.5	22.0	20.5	24.0	26.0	23.5	14.0
27	19.0	6.0	2.0	5.0	4.5	8.5	21.0	20.0	25.0	26.5	25.5	15.0
28	16.5	5.5	2.5	5.0	5.0	8.0	17.0	20.5	25.5	25.0	24.0	17.5
29	16.0	2.0	5.5	4.5	---	6.0	18.0	19.5	26.0	27.0	25.5	16.0
30	18.5	2.0	3.5	5.5	---	6.5	18.0	17.0	26.5	26.5	27.0	18.0
31	16.0	---	4.0	4.0	---	7.5	---	18.0	---	24.5	29.0	---
MONTH	15.5	9.0	3.0	3.0	2.5	7.0	14.5	20.0	23.0	26.0	26.0	20.0

07157740 CIMARRON RIVER NEAR BUTTERMILK, KANS.

LOCATION.--Lat 37°01'36", long 99°28'45", in NW 1/4 sec.3, T.35 S., R.20 W., Comanche County, Kansas, at gaging station at county road bridge, 0.5 mi (0.8 km) upstream from Bluff Creek, 2 mi (3.2 km) north of Kansas-Oklahoma state line, 11.5 mi (18.5 km) southwest of Buttermilk, and at mile 304.8 (490.4 km).

DRAINAGE AREA.--11,120 mi^2 (28,800 km^2), of which 4,737 mi^2 (12,270 km^2) is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: October 1973 to current year.
Water temperatures: October 1973 to current year.

EXTREMES, Current year.--Specific conductance: Maximum daily, 4,800 micromhos/cm Feb. 8; minimum daily, 377 micromhos/cm Aug. 1.
Water temperatures: Maximum, 33.0°C Aug. 18; minimum, freezing point on Feb. 10.

Period of record.--Specific conductance: Maximum daily, 4,800 micromhos/cm Feb. 8, 1975; minimum daily, 377 micromhos/cm Aug. 1, 1975.
Water temperatures: Maximum, 33.0°C June 14, 1974 and Aug. 18, 1975; minimum, freezing point on many days during winter months.

REMARKS.--Continuous monitor records for specific conductance are collected for this station. Records of maximum and minimum specific conductance values are available in district office at Oklahoma City, Okla. Temperature records for Oct. 1-31, Nov. 4-Dec. 18, Jan. 23-29, May 13-June 5, and Aug. 1-20 were poor. Once-daily temperature values were used in their place. No flow July 19-30, Aug. 22-Sept. 30.
*=Mean discharge.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
OCT.											
04...	1840	22	110	49	560	--	211	0	173	320	820
23...	1055	45	100	43	540	--	215	0	176	260	790
31...	0945	99	95	37	470	--	233	0	191	230	700
NOV.											
03...	1720	244	93	41	400	--	207	0	170	240	--
14...	0934	85	110	45	540	--	243	0	199	270	820
29...	1337	97	130	50	570	--	270	0	221	310	880
DEC.											
06...	1622	150	99	44	440	6.7	242	0	198	210	670
14...	1055	138	110	49	490	7.0	260	0	213	270	760
26...	0907	144	130	59	550	7.2	264	0	217	350	870
JAN.											
02...	1725	185	100	44	460	6.5	255	0	209	230	740
13...	1207	74*	150	67	570	8.8	334	0	274	370	910
31...	0845	67	110	48	480	6.2	315	0	258	570	--
FEB.											
07...	1135	64*	130	62	550	9.1	270	0	221	340	860
11...	1705	163	92	40	420	7.6	229	0	188	210	660
26...	1015	117	100	45	460	7.8	238	0	195	250	730
MAR.											
11...	1730	172	100	47	460	6.1	229	0	188	230	710
17...	1330	124	100	47	470	6.4	240	0	197	230	710
29...	1800	102	120	57	540	7.3	262	0	215	310	810
APR.											
06...	1240	56	110	54	540	6.5	228	0	187	300	810
08...	1250	93	98	48	500	6.0	204	0	167	270	760
18...	1935	56	140	77	570	7.5	273	0	224	430	890
JUNE											
09...	2208	255	53	14	81	7.9	165	0	135	72	130
17...	1108	40	100	50	410	10	212	0	174	250	630
29...	1915	20*	120	64	540	9.8	205	0	168	410	830
JULY											
03...	1836	3.8*	140	70	520	8.9	148	0	121	480	780
05...	1115	2.5*	140	60	460	7.7	128	0	105	480	720
10...	2135	1.3*	180	64	430	7.5	179	0	147	560	660
AUG.											
01...	2108	153	42	11	32	9.3	130	0	107	53	54
10...	2109	4.5	110	52	340	12	200	0	164	330	510

07157740 CIMARRON RIVER NEAR BUTTERMILK, KANS.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	CARBON DIOXIDE (CO2) (MG/L)
OCT.											
04...	.13	2120	2.88	126	480	300	--	11	3440	8.2	2.1
23...	.07	1960	2.67	238	430	250	--	11	3220	8.2	2.2
31...	.14	1690	2.30	452	390	200	--	10	2820	8.0	3.7
NOV.											
03...	.95	1460	1.99	962	400	230	--	8.7	2420	7.9	4.2
14...	.39	1970	2.68	452	460	260	--	11	3250	8.3	1.9
29...	.48	2170	2.95	568	530	310	--	11	3520	8.2	2.7
DEC.											
06...	--	1670	2.27	676	430	230	69	9.3	2840	8.2	2.4
14...	--	1860	2.53	693	480	260	69	9.8	3100	8.1	3.3
26...	--	2170	2.95	844	570	350	68	10	3540	8.2	2.7
JAN.											
02...	--	1800	2.45	899	430	220	70	9.6	2980	8.3	2.0
13...	--	2380	3.24	476	650	380	65	9.7	3850	8.3	2.7
31...	--	--	--	--	470	210	69	9.6	3100	8.5	1.6
FEB.											
07...	--	2230	3.03	385	580	360	67	9.9	3650	8.0	4.3
11...	--	1590	2.16	700	390	210	69	9.2	2670	8.0	3.7
26...	--	1860	2.53	588	440	240	69	9.6	3060	8.1	3.0
MAR.											
11...	--	1800	2.45	836	440	260	69	9.5	2980	8.2	2.3
17...	--	1840	2.50	616	440	250	69	9.7	3020	8.0	3.8
29...	--	2160	2.94	595	530	320	68	10	3450	7.9	5.3
APR.											
06...	--	2040	2.77	308	500	310	70	11	3380	8.0	3.6
08...	--	1850	2.52	465	440	280	71	10	3090	8.0	3.3
18...	--	2390	3.25	361	670	440	65	9.6	3770	8.2	2.8
JUNE											
09...	--	465	.63	320	190	55	47	2.6	790	7.9	3.3
17...	--	1630	2.22	176	460	280	66	8.4	2680	7.7	6.8
29...	--	2160	2.94	117	560	400	67	9.9	3420	7.7	6.5
JULY											
03...	.19	2180	2.96	22.4	640	520	64	9.0	3460	8.1	1.9
05...	.13	2020	2.75	13.6	600	490	62	8.2	3270	8.0	2.0
10...	.17	--	--	--	710	570	56	7.0	3190	7.8	4.5
AUG.											
01...	1.1	290	.39	120	150	43	30	1.1	477	7.9	2.6
10...	.33	1550	2.11	18.8	490	320	59	6.7	2580	8.3	1.6

07157740 CIMARRON RIVER NEAR BUTTERMILK, KANS.--Continued

DISSOLVED SULFATE (SO4), MG/L, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	280	240	300	210	260	260	300	320	120	310	1.6	
2	290	250	290	240	250	270	250	260	110	310	3.0	
3	300	160	290	240	240	270	290	280	140	310	---	
4	320	200	280	260	250	210	280	350	180	300	4.8	
5	300	270	260	290	290	270	300	360	190	280	5.5	
6	260	280	220	260	300	270	290	320	140	290	43	
7	260	280	240	280	340	280	270	350	130	260	4.9	
8	240	280	260	210	510	270	240	350	69	260	33	
9	240	260	290	270	360	250	300	330	4.3	270	---	
10	290	280	290	410	43	260	270	290	82	270	180	
11	300	280	230	270	200	240	290	200	130	300	200	
12	290	280	230	350	200	260	290	81	180	300	210	
13	240	250	260	360	240	260	270	270	190	---	210	
14	260	280	260	340	240	240	300	200	160	---	210	
15	230	300	270	330	260	250	310	360	170	270	210	
16	260	300	290	280	250	240	300	330	160	---	180	
17	280	260	270	280	---	240	340	290	210	---	180	
18	290	270	270	270	---	260	360	310	230	---	190	
19	290	270	260	270	310	270	340	320	240	---	130	
20	280	270	270	260	210	260	330	290	280	---	140	
21	290	270	280	260	270	250	320	320	280	---	190	
22	290	270	250	260	260	260	320	320	250	---	---	
23	280	270	270	270	250	230	290	240	170	---	---	
24	280	270	350	260	270	260	320	210	230	---	---	
25	270	270	310	260	240	290	310	230	260	---	---	
26	270	---	320	260	270	240	300	160	270	---	---	
27	260	280	300	270	270	280	340	180	270	---	---	
28	250	270	230	260	270	270	330	180	300	---	---	
29	260	320	230	260	---	360	330	240	310	---	---	
30	260	320	220	250	---	320	330	190	300	---	---	
31	220	---	230	260	---	300	---	240	---	---	---	
MONTH	270	270	270	280	260	260	300	270	190	---	---	

DISSOLVED SULFATE (SO4), TONS PER DAY, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28.7	72.6	64.0	116	59.7	77.9	62.4	6.91	81.3	5.86	2.40	
2	23.5	77.0	65.8	128	63.5	77.3	47.9	19.7	55.8	4.35	6.37	
3	21.9	82.9	58.7	121	63.5	71.4	54.8	41.6	49.1	3.18	---	
4	19.9	114	62.7	128	74.3	64.1	55.9	37.8	49.1	2.43	3.58	
5	19.4	125	126	100	65.8	91.9	53.5	28.2	60.0	1.89	2.54	
6	16.1	101	98.6	88.5	48.6	91.1	44.6	19.0	44.2	1.64	13.4	
7	44.2	80.9	78.4	105	58.8	80.9	37.9	15.1	54.8	1.33	1.02	
8	43.4	77.1	75.8	74.3	93.6	70.7	56.4	9.45	32.6	.84	4.46	
9	49.9	69.5	79.9	91.9	58.3	64.1	75.3	6.42	5.84	1.09	---	
10	56.4	71.1	97.1	126	9.29	77.2	64.2	6.97	46.3	.95	2.19	
11	45.4	70.3	75.1	58.3	75.6	100	79.1	20.5	46.7	.89	1.30	
12	35.2	68.6	93.8	56.7	119	113	60.3	13.6	52.0	.65	.15	
13	43.4	57.4	99.7	71.9	89.4	92.7	48.1	50.3	43.6	---	.54	
14	66.0	63.5	94.8	87.2	65.4	79.1	72.1	54.0	28.1	---	.15	
15	54.6	64.8	94.0	69.5	68.1	68.9	124	115	22.5	.29	.74	
16	54.1	64.8	97.1	110	54.0	68.7	120	84.6	16.8	---	.49	
17	50.7	57.6	94.0	122	---	79.1	84.5	54.0	22.1	---	15.6	
18	49.3	62.0	87.5	71.4	---	85.6	61.2	37.7	24.2	---	8.72	
19	42.3	62.7	90.6	65.6	50.2	76.5	45.9	20.7	18.1	---	17.9	
20	38.6	58.3	89.7	59.0	51.0	69.5	40.1	11.0	12.1	---	1.17	
21	36.8	56.1	91.5	56.2	125	61.4	31.1	7.69	11.3	---	.67	
22	36.8	57.6	83.7	53.4	90.6	59.0	29.4	6.91	69.5	---	---	
23	34.0	59.8	92.6	56.1	78.3	57.8	25.8	4.67	52.3	---	---	
24	37.0	62.0	119	56.2	90.4	54.1	24.2	3.52	43.5	---	---	
25	40.8	62.0	114	57.6	103	55.6	20.1	5.09	33.0	---	---	
26	40.8	---	121	57.6	82.4	40.8	19.4	5.18	29.2	---	---	
27	50.5	66.5	111	55.4	72.2	64.3	19.3	3.26	26.2	---	---	
28	52.7	65.6	67.7	52.7	77.3	83.8	11.6	3.21	24.3	---	---	
29	54.1	82.1	102	51.9	---	102	9.80	26.6	16.7	---	---	
30	60.4	52.7	143	48.6	---	79.5	7.57	48.7	12.2	---	---	
31	57.6	---	133	56.2	---	65.6	---	275	---	---	---	
MONTH	42.1	71.2	93.6	79.1	72.6	75.0	49.5	33.6	36.1	---	---	

07157740 CIMARRON RIVER NEAR BUTTERMILK, KANS.--Continued

DISSOLVED CHLORIDE (CL), MG/L, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	770	710	810	670	750	750	810	840	500	830	50	
2	790	730	800	700	730	760	730	750	500	830	130	
3	810	570	800	710	720	760	800	760	550	840	---	
4	840	640	780	750	730	660	790	900	610	810	240	
5	820	760	750	790	800	760	820	920	630	780	280	
6	750	780	680	740	810	760	800	850	540	790	380	
7	750	780	720	780	880	780	770	910	530	750	250	
8	710	780	740	660	1200	760	720	900	420	750	360	
9	710	750	790	770	920	740	810	860	210	760	---	
10	790	780	790	1000	370	750	760	800	440	760	610	
11	820	780	690	760	640	720	790	640	530	810	640	
12	800	780	700	890	640	750	790	440	610	820	660	
13	710	730	750	910	710	750	760	770	630	---	660	
14	750	780	750	880	720	720	810	650	580	---	670	
15	700	810	770	860	740	720	840	910	590	760	660	
16	740	810	800	790	730	720	810	860	570	---	610	
17	780	750	760	790	---	720	890	790	660	---	610	
18	800	760	760	760	---	740	920	820	690	---	620	
19	800	760	750	770	840	760	880	850	710	---	520	
20	790	770	770	740	660	750	870	800	780	---	540	
21	800	770	780	750	760	730	850	850	790	---	620	
22	790	760	730	740	740	750	850	840	730	---	---	
23	790	760	760	760	720	700	790	720	580	---	---	
24	780	760	890	750	760	740	850	660	690	---	---	
25	760	760	840	740	720	800	820	690	750	---	---	
26	770	---	850	750	760	710	820	570	760	---	---	
27	750	770	820	760	760	780	880	620	760	---	---	
28	730	760	700	750	770	760	860	610	820	---	---	
29	750	850	690	740	---	910	860	710	840	---	---	
30	750	850	680	730	---	850	860	620	810	---	---	
31	680	---	690	740	---	820	---	710	---	---	---	
MONTH	770	760	760	770	750	750	820	760	630	---	---	

DISSOLVED CHLORIDE (CL), TONS PER DAY, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	79.0	215	173	371	172	225	168	18.1	339	15.7	75.1	
2	64.0	225	181	372	185	218	140	56.7	254	11.7	276	
3	59.0	295	162	357	191	201	151	116	193	8.62	---	
4	52.2	365	175	371	217	201	158	97.2	166	6.56	179	
5	53.1	351	362	273	181	259	146	72.0	199	5.27	129	
6	46.6	282	305	252	131	256	123	50.5	171	4.48	118	
7	128	225	235	293	152	225	108	39.3	223	3.85	52.0	
8	128	215	216	233	220	199	169	24.3	198	2.43	48.6	
9	148	200	218	262	149	190	203	16.7	285	3.08	---	
10	154	198	264	308	79.9	223	181	19.2	248	2.67	7.41	
11	124	196	225	164	242	301	215	65.7	190	2.41	4.15	
12	97.2	192	285	144	382	326	164	73.7	176	1.77	.48	
13	128	168	288	182	265	267	135	143	145	---	1.69	
14	190	177	273	226	196	237	195	175	102	---	.49	
15	166	175	268	181	194	198	336	290	78.1	.82	2.32	
16	154	175	268	309	158	206	324	221	60.0	---	1.65	
17	141	166	265	346	---	237	221	147	69.5	---	52.7	
18	136	174	246	201	---	244	156	99.6	72.7	---	26.5	
19	117	176	261	187	136	215	119	55.1	53.7	---	71.6	
20	109	166	256	168	160	200	106	30.2	33.7	---	4.52	
21	102	160	255	162	353	179	82.6	20.4	32.0	---	2.16	
22	100	162	244	152	258	170	78.0	18.1	203	---	---	
23	96.0	168	261	158	226	176	70.4	14.0	179	---	---	
24	103	174	303	162	254	154	64.3	11.0	130	---	---	
25	115	174	308	164	309	153	53.1	15.3	95.2	---	---	
26	116	---	321	166	232	121	53.1	16.5	82.1	---	---	
27	146	183	303	156	203	179	49.9	11.2	73.9	---	---	
28	154	185	206	152	220	236	30.2	10.9	66.4	---	---	
29	156	218	307	148	---	258	25.5	78.6	45.4	---	---	
30	174	140	442	142	---	211	19.7	159	32.8	---	---	
31	178	---	399	160	---	179	---	813	---	---	---	
MONTH	120	203	267	223	210	214	135	96.1	140	---	---	

07157740 CIMARRON RIVER NEAR BUTTERMILK, KANS.--Continued

DISSOLVED SOLIDS (RESIDUE AT 180 DEG. C), MG/L, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1960	1790	2060	1670	1890	1900	2070	2150	1230	2120	1	
2	2010	1840	2050	1780	1850	1920	1840	1910	1210	2120	210	
3	2060	1420	2050	1800	1810	1920	2040	1990	1340	2130	---	
4	2150	1610	1980	1910	1830	1650	2000	2320	1530	2080	502	
5	2090	1920	1900	2020	2050	1920	2080	2370	1570	1990	621	
6	1910	1990	1710	1870	2070	1920	2050	2170	1340	2010	878	
7	1900	1970	1810	1980	2260	1970	1940	2330	1300	1890	530	
8	1800	1970	1880	1640	3070	1920	1800	2300	996	1900	829	
9	1800	1910	2020	1960	2370	1860	2060	2200	433	1920	---	
10	2020	1980	2010	2580	877	1890	1920	2050	1060	1930	1530	
11	2080	1980	1750	1940	1590	1810	2010	1590	1300	2070	1600	
12	2030	1980	1760	2280	1590	1900	2010	1050	1520	2080	1640	
13	1780	1850	1900	2340	1790	1890	1940	1940	1570	---	1660	
14	1890	1980	1890	2240	1820	1820	2050	1620	1430	---	1670	
15	1770	2060	1940	2190	1870	1820	2130	2340	1460	1940	1660	
16	1870	2060	2030	2000	1840	1820	2050	2210	1420	---	1510	
17	1980	1910	1930	2000	---	1820	2280	2010	1660	---	1510	
18	2030	1930	1930	1940	---	1880	2350	2100	1730	---	1550	
19	2050	1930	1910	1940	2130	1920	2250	2180	1790	---	1280	
20	2000	1960	1960	1880	1650	1890	2210	2030	1980	---	1320	
21	2030	1960	1980	1890	1920	1830	2180	2170	2000	---	1550	
22	2020	1940	1850	1880	1870	1890	2180	2140	1830	---	---	
23	2000	1930	1930	1920	1830	1770	2020	1820	1450	---	---	
24	1990	1920	2280	1890	1940	1880	2160	1660	1730	---	---	
25	1930	1930	2140	1880	1800	2030	2100	1740	1890	---	---	
26	1940	---	2160	1900	1940	1790	2100	1410	1920	---	---	
27	1890	1960	2090	1920	1930	1980	2260	1530	1930	---	---	
28	1830	1940	1760	1910	1940	1940	2200	1520	2100	---	---	
29	1890	2180	1730	1870	---	2330	2190	1790	2130	---	---	
30	1910	2180	1720	1850	---	2170	2210	1540	2080	---	---	
31	1720	---	1730	1880	---	2100	---	1780	---	---	---	
MONTH	1950	1930	1930	1960	1900	1910	2090	1930	1560	---	---	

DISSOLVED SOLIDS (TONS PER DAY), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	201	541	439	924	434	569	430	46.4	834	40.1	1.50	
2	163	566	465	947	470	550	353	144	614	29.8	446	
3	150	736	415	904	479	506	386	296	470	21.9	---	
4	134	917	444	944	544	503	400	251	417	16.8	374	
5	135	886	918	698	465	653	371	186	496	13.4	287	
6	119	720	766	636	335	648	315	129	423	11.4	273	
7	323	569	591	743	391	569	272	101	548	9.70	110	
8	326	543	548	580	564	503	423	62.1	471	6.16	112	
9	374	511	556	667	384	477	517	42.8	588	7.78	---	
10	393	503	673	794	189	561	456	49.3	598	6.77	18.6	
11	314	497	572	419	601	757	548	163	467	6.15	10.4	
12	247	486	718	369	949	626	418	176	439	4.49	1.20	
13	322	425	728	468	667	674	346	361	360	---	4.26	
14	480	449	689	575	496	600	493	437	251	---	1.22	
15	421	445	676	461	490	501	851	746	193	2.10	5.83	
16	389	445	680	783	397	521	819	567	150	---	4.08	
17	358	423	672	875	---	600	566	374	175	---	130	
18	345	443	625	513	---	619	400	255	182	---	71.1	
19	299	448	665	471	345	544	304	141	135	---	176	
20	275	423	651	426	401	505	269	76.7	85.5	---	11.0	
21	258	407	647	408	892	450	212	52.1	81.0	---	5.44	
22	256	414	619	386	651	429	200	46.2	509	---	---	
23	243	427	662	399	573	444	180	35.4	446	---	---	
24	263	441	776	408	650	391	163	27.8	327	---	---	
25	292	443	786	416	773	589	136	38.5	240	---	---	
26	293	---	816	421	592	504	136	45.7	207	---	---	
27	367	466	773	394	516	454	128	27.7	188	---	---	
28	385	471	518	387	555	602	77.2	27.1	170	---	---	
29	393	559	771	374	---	661	65.0	198	115	---	---	
30	444	359	1120	360	---	539	50.7	395	84.2	---	---	
31	450	---	1000	406	---	459	---	2040	---	---	---	
MONTH	304	516	677	566	531	542	343	243	342	---	---	

07157740 CIMARRON RIVER NEAR BUTTERMILK, KANS.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3210	2960	3350	2790	3100	3120	3360	3480	2150	3430	377	
2	3280	3030	3330	2940	3050	3140	3030	3130	2120	3430	690	
3	3350	2430	3330	2970	2990	3150	3320	3250	2320	3450	---	
4	3480	2700	3240	3130	3020	2760	3260	3720	2580	3370	1110	
5	3390	3140	3120	3290	3330	3150	3380	3800	2650	3250	1280	
6	3130	3250	2840	3070	3360	3140	3330	3510	2310	3270	1650	
7	3120	3220	2990	3230	3640	3220	3180	3730	2260	3110	1150	
8	2980	3220	3090	2750	4800	3140	2980	3690	1820	3120	1580	
9	2970	3130	3290	3200	3790	3060	3350	3550	1010	3140	---	
10	3290	3230	3270	4100	1650	3100	3140	3330	1910	3160	2580	
11	3380	3230	2900	3180	2670	2990	3270	2670	2260	3360	2690	
12	3310	3230	2920	3670	2680	3120	3270	1900	2570	3380	2750	
13	2950	3040	3120	3750	2960	3100	3170	3180	2640	---	2770	
14	3110	3230	3100	3610	3000	3000	3340	2710	2450	---	2790	
15	2930	3350	3180	3540	3070	3010	3450	3750	2490	3170	2770	
16	3070	3340	3300	3260	3030	3000	3340	3560	2430	---	2560	
17	3240	3130	3160	3260	---	3000	3660	3270	2780	---	2560	
18	3310	3160	3160	3170	---	3090	3770	3410	2870	---	2610	
19	3330	3160	3130	3180	3450	3140	3620	3520	2960	---	2230	
20	3260	3200	3200	3090	2770	3110	3570	3310	3230	---	2280	
21	3300	3200	3240	3110	3140	3020	3520	3510	3260	---	2610	
22	3290	3170	3050	3090	3080	3100	3520	3470	3020	---	---	
23	3260	3160	3160	3140	3020	2930	3290	3000	2470	---	---	
24	3250	3140	3670	3110	3170	3080	3490	2780	2870	---	---	
25	3160	3160	3460	3090	2980	3300	3410	2890	3100	---	---	
26	3180	---	3490	3120	3170	2960	3400	2420	3150	---	---	
27	3100	3210	3390	3140	3160	3240	3640	2590	3160	---	---	
28	3020	3170	2910	3130	3180	3170	3550	2570	3400	---	---	
29	3110	3520	2880	3070	---	3740	3540	2960	3450	---	---	
30	3130	3520	2860	3040	---	3500	3560	2600	3370	---	---	
31	2860	---	2870	3090	---	3400	---	2950	---	---	---	
MONTH	3190	3160	3160	3200	3130	3130	3390	3170	2640	---	---	

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22.0	13.5	2.0	3.0	3.0	10.5	6.0	15.5	21.5	27.0	29.0	
2	22.5	11.5	3.0	3.5	4.0	8.5	4.5	17.0	16.5	26.0	28.5	
3	22.0	10.0	3.0	2.5	5.0	---	7.0	20.5	18.5	27.0	---	
4	23.5	9.0	8.0	2.5	4.5	---	10.0	20.0	20.5	26.5	23.5	
5	18.5	13.0	9.0	3.0	0.5	9.0	13.5	20.5	19.0	26.5	30.5	
6	15.0	12.0	7.0	3.0	0.5	11.0	15.0	20.0	26.5	27.5	26.5	
7	13.5	10.0	8.0	4.5	0.5	8.5	14.5	17.5	24.5	28.0	25.0	
8	---	10.5	3.0	6.0	0.5	7.0	13.5	19.5	25.0	27.0	21.5	
9	21.5	11.5	2.0	7.5	0.5	4.0	14.0	21.0	22.0	28.0	---	
10	23.0	8.0	2.0	3.0	0.0	3.0	13.5	19.5	18.5	26.5	27.0	
11	21.0	12.0	2.0	1.5	2.5	2.5	13.0	21.5	19.5	25.5	24.0	
12	15.5	4.0	1.5	1.5	4.5	3.5	14.0	19.5	23.5	23.5	24.5	
13	17.0	7.0	3.0	1.5	5.0	4.5	11.5	20.0	26.0	23.0	23.5	
14	12.5	4.0	4.0	1.5	3.0	5.5	14.5	25.5	25.5	24.0	26.5	
15	16.5	5.5	4.0	2.0	1.0	6.0	17.5	16.0	24.5	23.0	23.0	
16	12.0	5.5	0.5	1.5	---	7.5	19.5	19.0	26.0	---	25.0	
17	21.0	6.5	5.5	2.5	---	9.0	17.5	28.5	25.0	---	30.0	
18	15.0	7.0	6.0	4.5	---	14.0	13.0	24.0	26.0	---	33.0	
19	18.0	8.0	4.5	5.5	1.0	14.5	14.0	22.0	25.0	---	22.0	
20	20.0	6.0	2.5	4.0	3.0	16.5	16.0	17.0	26.0	---	24.0	
21	21.5	5.0	3.5	4.5	4.5	15.0	17.0	29.0	24.5	---	24.5	
22	18.0	7.0	4.5	1.5	1.5	13.0	16.5	20.0	25.5	---	---	
23	17.0	8.0	2.5	3.5	2.0	11.0	21.5	---	27.0	---	---	
24	16.5	2.0	2.0	5.0	4.5	8.5	19.5	---	26.5	---	---	
25	19.5	2.5	2.5	12.0	7.0	8.5	20.0	---	26.0	---	---	
26	13.5	---	1.5	10.5	7.0	---	21.0	---	26.5	---	---	
27	18.5	11.0	1.5	6.0	7.0	---	20.0	---	26.5	---	---	
28	15.0	5.0	2.5	6.0	9.0	5.5	17.0	---	26.0	---	---	
29	13.5	2.0	3.5	6.5	---	4.5	18.5	19.5	26.0	---	---	
30	19.0	2.0	2.0	5.0	---	7.0	17.5	22.5	26.5	---	---	
31	13.5	---	3.5	3.0	---	11.0	---	17.5	---	---	---	
MONTH	18.0	7.5	3.5	4.0	3.5	8.5	15.0	20.5	24.0	---	---	

07157940 BLUFF CREEK NEAR BUTTERMILK, KANS.

LOCATION.--Lat 37°01'55", long 99°28'45", in NW 1/4 sec.3, T.35 S., R.20 W., Comanche County, Kansas, at gaging station at county road bridge, 2.2 mi (3.5 km) north of Kansas-Oklahoma State line, 11.3 mi (18.2 km) southwest of Buttermilk, and at mile 0.3 (0.5 km).

DRAINAGE AREA.--657 mi² (1,702 km²), of which 76 mi² (197 km²) is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: August 1973 to current year.
Water temperatures: August 1973 to current year.

EXTREMES, Current year.--Specific conductance: Maximum daily, 2,150 micromhos/cm Sept. 21; minimum daily, 293 micromhos/cm June 7.
Water temperatures: Maximum, 30.0°C July 6; minimum, 0.5°C Dec. 24.

Period of record.--Specific conductance: Maximum daily, 2,290 micromhos/cm July 13, 1974; minimum daily, 273 micromhos/cm Oct. 11, 1973.
Water temperatures: Maximum, 34.0°C July 20, 1974; minimum, freezing point on Jan. 3, 5, 10, and 12, 1974.

REMARKS.--Continuous monitor records for specific conductance are collected for this station. Records of maximum and minimum specific conductance values are available in district office in Oklahoma City, Okla.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
OCT.											
03...	1824	12	120	30	63	--	191	0	157	280	--
14...	0930	31	93	20	39	--	257	0	211	130	32
22...	1838	16	84	24	46	--	170	0	139	190	40
NOV.											
04...	1010	53	92	21	35	5.8	261	0	214	150	29
16...	0815	25	120	26	41	4.1	289	0	237	200	37
27...	1530	26	100	24	37	4.0	268	0	220	160	33
DEC.											
07...	1635	24	52	24	40	4.1	114	0	94	170	33
09...	1120	22	88	24	39	4.0	192	0	157	180	32
17...	1700	28	110	25	43	3.8	252	0	207	180	40
JAN.											
04...	1505	40	76	24	39	3.7	175	0	144	170	31
16...	0935	43	71	21	34	3.5	201	0	165	130	26
29...	1740	34	110	24	40	3.9	271	0	222	180	35
FEB.											
06...	1530	27*	110	30	45	4.6	263	0	216	220	35
19...	0925	48	91	20	31	4.1	272	0	223	120	24
24...	1740	41	94	24	36	4.0	257	0	211	160	29
MAR.											
08...	1635	34	98	27	42	3.7	261	0	214	190	35
17...	1335	41	97	27	40	3.9	265	0	217	170	30
27...	1930	55	82	24	39	4.6	251	6	216	120	--
APR.											
02...	0610	35	110	29	42	3.7	278	0	228	190	34
12...	1645	35	94	25	40	3.7	253	0	208	180	32
25...	1930	43	82	22	34	3.8	250	0	205	130	25
MAY											
03...	1915	41	91	26	41	4.1	246	0	202	170	32
27...	0815	24	120	27	47	4.1	273	0	224	220	43
30...	1735	120	62	17	--	6.6	214	0	176	92	20
JUNE											
03...	0800	51	89	24	34	4.9	265	0	217	150	26
07...	0725	2620	38	6.4	6.4	7.4	116	0	95	31	5.9
15...	1610	70	120	33	47	6.1	297	0	244	250	37
JULY											
03...	1830	225	61	11	16	7.3	198	0	162	61	11
07...	0850	153	62	11	18	7.9	204	5	176	61	13
13...	1722	47	120	26	42	5.3	277	0	227	200	38
AUG.											
01...	2100	259	49	9.6	13	11	137	0	112	64	12
08...	0940	22	130	41	69	7.1	241	0	198	370	58
14...	1950	12	170	45	89	6.4	232	0	190	460	84

07157940 BLUFF CREEK NEAR BUTTERMILK, KANS.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	CARBON DIOXIDE (CO2) (MG/L)
OCT.											
03...	.25	735	1.00	23.8	420	270	--	1.3	1080	7.8	4.8
14...	.45	490	.67	41.0	310	100	--	1.0	736	8.1	3.3
22...	.23	--	--	--	310	170	--	1.1	866	8.0	2.7
NOV.											
04...	--	476	.65	68.1	320	100	19	.9	704	7.9	5.3
16...	--	597	.81	40.3	410	170	18	.9	867	8.2	2.9
27...	--	526	.72	36.9	350	130	19	.9	778	8.3	2.2
DEC.											
07...	--	412	.56	26.7	230	140	27	1.2	--	7.9	2.3
09...	--	492	.67	29.2	320	160	21	1.0	--	8.0	3.1
17...	--	595	.81	45.0	380	170	20	1.0	898	7.9	5.1
JAN.											
04...	--	476	.65	51.4	290	150	22	1.0	--	8.0	2.8
16...	--	413	.56	47.9	260	99	22	.9	709	8.1	2.6
29...	--	580	.79	53.2	370	150	19	.9	856	8.1	3.4
FEB.											
06...	--	648	.88	47.2	400	180	20	1.0	953	7.6	11
19...	--	464	.63	60.1	310	86	18	.8	691	7.8	6.9
24...	--	512	.70	56.7	330	120	19	.9	768	7.6	10
MAR.											
08...	--	572	.78	52.5	360	140	20	1.0	834	8.0	4.2
17...	--	549	.75	60.8	350	140	20	.9	803	8.0	4.2
27...	--	491	.67	72.9	300	88	22	1.0	728	8.5	1.3
APR.											
02...	--	589	.80	55.7	390	170	19	.9	866	8.4	1.8
12...	--	531	.72	50.2	340	130	20	.9	795	8.3	2.0
25...	--	459	.62	53.3	300	90	20	.9	695	8.3	2.0
MAY											
03...	--	533	.72	59.0	330	130	21	1.0	790	8.2	2.5
27...	--	651	.89	42.2	410	190	20	1.0	937	8.1	3.5
30...	--	372	.51	121	220	49	--	--	571	7.9	4.3
JUNE											
03...	--	506	.69	69.7	320	100	18	.8	744	8.4	1.7
07...	--	170	.23	1200	120	26	10	.3	274	8.2	1.2
15...	--	695	.95	131	440	190	19	1.0	984	7.9	6.0
JULY											
03...	--	287	.39	174	200	35	14	.5	455	8.4	1.3
07...	--	--	--	--	200	24	16	.6	487	8.5	1.1
13...	--	605	.82	76.8	410	180	18	.9	917	8.3	2.2
AUG.											
01...	.48	251	.34	176	160	50	14	.4	395	7.8	3.5
08...	.16	--	--	--	490	300	23	1.4	1220	8.1	3.1
14...	.06	--	--	--	610	420	24	1.6	1470	8.2	2.3

07157940 BLUFF CREEK NEAR BUTTERMILK, KANS.--Continued

DISSOLVED SULFATE (SO4), MG/L, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	250	140	160	160	190	140	200	130	100	74	53	270
2	190	160	160	160	180	160	190	150	110	75	98	300
3	460	130	160	140	180	150	180	160	140	73	190	360
4	290	130	---	150	170	150	170	160	170	73	230	460
5	270	140	150	160	230	160	170	---	180	75	270	520
6	270	150	170	160	230	170	190	---	140	75	310	530
7	190	150	140	170	200	180	170	160	47	79	320	540
8	190	160	200	150	---	180	160	160	70	96	330	570
9	190	150	180	160	---	170	160	110	90	150	360	590
10	190	150	170	170	170	170	170	200	120	180	380	600
11	220	160	160	170	120	170	170	190	170	180	420	380
12	220	160	160	140	140	170	170	98	200	200	420	410
13	160	160	170	110	150	180	140	110	230	210	430	590
14	140	210	170	130	150	160	150	96	240	210	440	590
15	170	190	190	130	160	170	160	140	230	210	430	570
16	190	180	190	130	170	170	170	170	170	200	410	560
17	200	190	220	130	---	170	170	180	160	210	390	590
18	220	180	250	150	---	180	170	210	150	220	410	600
19	220	180	200	150	120	180	150	210	210	220	450	680
20	210	210	190	---	140	160	150	210	210	230	410	710
21	240	210	190	160	160	160	160	220	190	230	410	720
22	200	190	180	160	160	160	170	210	85	230	440	680
23	180	150	190	160	160	160	170	190	65	240	460	---
24	160	180	220	170	150	160	170	200	48	250	470	---
25	160	160	200	170	120	170	89	210	75	250	460	---
26	170	160	220	150	130	150	130	210	78	270	470	---
27	170	150	170	170	140	160	130	220	77	280	510	---
28	170	160	150	180	130	140	130	210	51	290	520	---
29	180	79	140	190	---	150	130	120	66	330	450	---
30	170	76	150	190	---	190	130	91	70	290	280	---
31	170	---	150	190	---	170	---	92	---	200	260	---
MONTH	210	160	180	160	160	160	160	170	130	190	370	---

DISSOLVED SULFATE (SO4), TONS PER DAY, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.10	10.6	8.64	16.4	16.9	15.1	22.1	11.6	19.7	55.1	103	6.42
2	6.16	12.1	7.78	17.3	16.0	16.8	19.5	14.6	17.5	49.8	39.4	6.08
3	13.7	15.1	9.50	15.5	16.5	15.4	18.5	15.6	18.9	43.8	63.1	5.83
4	8.61	17.9	---	16.2	17.0	15.8	17.0	15.1	21.1	40.2	28.6	4.97
5	7.29	17.0	11.7	17.7	20.5	17.3	16.5	---	27.7	37.7	25.5	5.05
6	7.29	15.4	13.3	16.8	16.8	16.4	18.5	---	18.9	34.6	24.3	5.44
7	6.67	14.2	9.07	18.8	16.2	16.0	16.5	13.4	313	32.0	21.6	5.10
8	10.3	14.7	12.4	16.6	---	17.0	16.4	13.0	136	29.0	18.7	4.77
9	9.75	13.4	11.7	17.7	---	17.0	16.0	9.50	81.6	31.2	18.5	4.78
10	8.21	14.2	11.5	19.3	15.1	19.3	16.5	16.2	72.3	30.1	17.4	4.54
11	8.91	14.3	12.1	19.7	15.6	20.2	16.1	37.4	64.3	27.2	17.0	2.87
12	8.32	13.4	13.8	15.1	16.3	19.3	15.6	18.0	54.0	27.0	14.7	3.21
13	9.94	13.0	14.2	12.2	15.4	19.4	14.7	16.6	38.5	24.9	13.9	4.94
14	11.3	15.9	13.3	17.9	15.4	17.3	23.5	22.8	36.3	25.5	14.3	5.42
15	11.5	13.9	14.4	19.7	16.4	17.9	24.6	21.5	31.1	22.7	12.8	6.16
16	10.8	12.2	13.9	16.5	16.1	18.8	22.5	21.1	20.7	19.4	12.2	5.75
17	9.72	13.9	16.0	15.8	---	18.8	20.7	19.9	24.2	17.6	10.2	5.42
18	10.1	15.1	18.9	16.6	---	19.0	19.7	21.5	30.4	15.4	9.85	5.51
19	9.50	13.1	15.1	16.6	10.4	18.0	16.2	19.3	30.1	14.3	9.84	5.69
20	8.51	13.6	13.9	---	18.9	16.4	15.4	17.6	23.8	13.7	9.52	5.75
21	9.72	13.6	13.3	16.0	19.9	16.8	15.1	16.6	25.7	13.0	9.08	5.44
22	8.10	14.4	13.1	16.0	19.0	16.4	15.6	15.3	42.7	11.8	8.20	5.32
23	8.26	11.3	13.9	16.0	16.1	16.4	16.1	14.9	67.4	11.7	7.70	---
24	7.78	13.1	14.9	16.5	17.4	15.6	17.9	15.1	179	11.5	7.49	---
25	7.78	11.2	14.0	16.5	14.3	15.6	11.1	14.7	78.4	10.1	6.71	---
26	8.72	11.2	16.0	14.2	14.7	15.8	14.7	14.2	61.3	9.48	6.60	---
27	9.64	10.5	13.3	16.1	15.1	19.9	15.1	14.3	70.5	9.07	6.75	---
28	9.64	10.8	12.2	17.0	14.0	22.3	14.4	13.6	160	8.61	7.02	---
29	9.72	5.33	12.9	17.4	---	18.6	13.3	14.6	82.9	8.91	8.38	---
30	9.64	4.72	15.0	17.4	---	22.1	12.3	25.8	61.2	10.2	7.33	---
31	11.0	---	14.6	17.4	---	19.3	---	29.6	---	34.6	6.88	---
MONTH	9.18	13.0	13.1	16.8	16.3	17.8	17.1	17.7	63.6	23.6	18.3	---

07157940 BLUFF CREEK NEAR BUTTERMILK, KANS.--Continued

DISSOLVED CHLORIDE (CL), MG/L, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	47	28	32	32	36	30	38	28	23	11	2.5	49
2	36	32	32	32	35	33	37	30	24	12	21	54
3	80	28	32	28	35	31	35	32	29	11	37	64
4	52	27	---	31	34	31	33	33	33	11	43	80
5	49	28	31	32	42	32	34	---	36	12	49	89
6	49	31	33	32	43	34	37	---	30	11	56	92
7	37	31	29	33	38	35	34	31	.1	13	57	93
8	36	31	38	30	---	35	33	31	9.5	20	59	98
9	37	31	35	32	---	33	32	24	18	30	64	100
10	37	30	34	33	33	33	33	38	26	36	67	100
11	42	31	31	33	26	34	33	37	33	36	73	66
12	42	32	32	28	29	34	33	21	38	38	73	71
13	32	32	34	23	30	35	29	25	42	40	75	100
14	29	40	34	27	30	32	31	20	44	39	76	100
15	34	36	37	27	32	33	31	28	44	39	75	98
16	36	36	37	26	33	34	33	33	34	39	71	96
17	39	36	42	27	---	34	33	36	32	40	69	100
18	41	36	46	31	---	35	34	39	30	41	72	100
19	41	35	39	31	26	34	31	39	40	42	78	120
20	41	40	37	---	28	32	31	40	40	43	72	120
21	45	39	37	31	32	32	32	42	36	44	71	120
22	38	36	36	32	31	32	34	40	16	42	77	120
23	35	31	37	32	32	32	34	37	7.5	45	80	---
24	32	35	41	34	31	32	33	38	.8	46	81	---
25	32	33	39	33	25	33	17	40	12	47	80	---
26	33	32	42	31	28	30	27	40	13	50	81	---
27	33	30	34	33	29	32	27	42	12	51	87	---
28	33	32	30	35	27	28	27	40	2.0	52	90	---
29	36	13	29	37	---	31	27	26	7.7	58	77	---
30	34	12	30	37	---	36	27	18	9.5	53	51	---
31	33	---	31	36	---	34	---	18	---	39	48	---
MONTH	39	31	35	31	32	33	32	33	24	35	65	---

DISSOLVED CHLORIDE (CL), TONS PER DAY, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.52	2.12	1.73	3.28	3.21	3.24	4.21	2.49	4.53	8.20	4.84	1.16
2	1.17	2.42	1.56	3.46	3.12	3.47	3.80	2.92	3.82	7.97	8.45	1.09
3	2.38	3.25	1.90	3.10	3.21	3.18	3.59	3.11	3.92	6.59	12.3	1.04
4	1.54	3.72	---	3.35	3.40	3.26	3.30	3.12	4.10	6.06	5.34	.86
5	1.32	3.40	2.43	3.54	3.74	3.46	3.30	---	5.54	6.03	4.63	.87
6	1.32	3.18	2.58	3.37	3.13	3.67	3.60	---	4.05	5.08	4.38	.94
7	1.30	2.93	1.88	3.65	3.08	3.50	3.30	2.59	.67	5.27	3.85	.88
8	1.94	2.85	2.36	3.32	---	3.31	3.39	2.51	18.5	6.05	3.35	.82
9	1.90	2.76	2.27	3.54	---	3.30	3.20	2.07	16.3	6.24	3.28	.81
10	1.60	2.84	2.30	3.74	2.94	3.74	3.21	3.08	15.7	6.03	3.08	.76
11	1.70	2.76	2.34	3.83	3.37	4.04	3.12	7.29	12.5	5.44	2.96	.50
12	1.59	2.68	2.76	3.02	3.37	3.86	3.03	3.86	10.3	5.13	2.56	.56
13	1.99	2.59	2.85	2.55	3.08	3.78	3.05	3.78	7.03	4.75	2.43	.84
14	2.35	3.02	2.66	3.72	3.08	3.46	4.85	4.75	6.65	4.74	2.46	.92
15	2.30	2.62	2.80	4.08	3.28	3.47	4.77	4.31	5.94	4.21	2.23	1.06
16	2.04	2.43	2.70	3.30	3.12	3.76	4.37	4.10	4.13	3.79	2.11	.99
17	1.90	2.62	3.06	3.28	---	3.76	4.01	3.99	4.84	3.35	1.81	.92
18	1.88	3.01	3.48	3.43	---	3.69	3.95	4.00	6.08	2.88	1.73	.92
19	1.77	2.55	2.95	3.43	2.25	3.40	3.35	3.58	5.72	2.72	1.71	1.00
20	1.66	2.59	2.70	---	3.78	3.28	3.18	3.35	4.54	2.55	1.67	.97
21	1.82	2.53	2.60	3.10	3.97	3.37	3.02	3.18	4.86	2.49	1.57	.91
22	1.54	2.72	2.62	3.20	3.68	3.28	3.12	2.92	8.04	2.15	1.43	.94
23	1.61	2.34	2.70	3.20	3.63	3.28	3.21	2.90	7.78	2.19	1.34	---
24	1.56	2.55	2.77	3.30	3.60	3.11	3.47	2.87	2.98	2.11	1.29	---
25	1.56	2.32	2.74	3.21	2.97	3.03	2.11	2.61	12.5	1.90	1.17	---
26	1.69	2.25	3.06	2.93	3.18	2.75	3.06	2.70	10.2	1.76	1.14	---
27	1.87	2.11	2.66	3.12	3.13	3.97	3.13	2.72	11.0	1.65	1.15	---
28	1.67	2.16	2.43	3.31	2.92	4.46	2.99	2.59	6.26	1.54	1.22	---
29	1.94	.88	2.66	3.40	---	3.85	2.77	3.16	9.67	1.57	1.43	---
30	1.93	.75	3.00	3.40	---	4.18	2.55	5.10	8.31	1.86	1.34	---
31	2.14	---	3.01	3.30	---	3.86	---	5.78	---	6.74	1.27	---
MONTH	1.76	2.56	2.58	3.34	3.26	3.54	3.40	3.50	7.54	4.16	2.88	---

07157940 BLUFF CREEK NEAR BUTTERMILK, KANS.--Continued

DISSOLVED SOLIDS (RESIDUE AT 180 DEG. C), MG/L, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	685	490	525	526	576	502	589	484	431	304	210	715
2	573	527	527	528	562	534	586	512	447	309	407	770
3	1040	464	527	485	558	516	562	533	501	298	586	875
4	744	472	---	516	548	518	542	534	537	299	648	1040
5	708	490	518	528	640	528	550	---	568	310	715	1140
6	711	513	543	532	647	547	578	---	502	307	784	1160
7	578	516	499	543	590	562	553	521	184	327	798	1180
8	573	521	593	504	---	564	535	521	286	401	819	1230
9	586	516	558	532	---	543	529	441	372	506	868	1260
10	581	512	545	544	543	543	544	594	467	568	903	1280
11	632	520	520	542	467	550	541	585	541	567	966	896
12	631	527	529	490	495	550	543	408	595	597	966	945
13	523	526	548	434	502	560	496	449	640	614	994	1250
14	497	611	550	476	504	532	513	402	662	608	1000	1260
15	550	572	577	476	527	544	520	490	655	606	994	1230
16	573	567	581	469	536	547	536	539	552	601	945	1200
17	599	573	632	471	---	548	543	569	527	614	924	1250
18	624	569	682	515	---	556	545	606	503	627	959	1270
19	626	557	601	516	464	555	517	606	613	636	1020	1410
20	620	620	585	---	490	529	518	619	611	650	959	1470
21	667	608	584	522	523	528	529	631	573	654	945	1480
22	595	575	569	525	522	526	548	614	351	638	1010	1410
23	565	516	579	530	523	532	550	565	265	671	1040	---
24	531	562	627	546	518	530	540	594	192	675	1050	---
25	531	535	600	539	458	536	369	614	308	687	1040	---
26	541	551	631	514	482	510	469	617	323	722	1050	---
27	539	510	549	543	491	523	476	636	315	736	1120	---
28	539	531	504	560	476	485	479	614	205	743	1150	---
29	569	327	496	583	---	515	476	465	267	812	1010	---
30	549	314	508	581	---	570	475	380	286	757	736	---
31	538	---	514	572	---	546	---	381	---	601	701	---
MONTH	607	523	560	521	527	536	525	536	443	563	881	---

DISSOLVED SOLIDS (TONS PER DAY), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22.2	37.0	28.4	54.0	51.3	54.2	65.2	43.1	85.0	227	407	17.0
2	16.6	39.8	25.6	57.0	50.1	56.2	60.1	49.8	71.2	205	164	15.6
3	30.9	56.2	31.3	53.7	51.2	52.9	57.7	51.8	67.6	179	195	14.2
4	22.1	65.0	---	55.7	54.7	54.5	54.1	50.5	66.7	165	80.5	11.2
5	19.1	59.5	40.6	58.5	57.0	57.0	53.5	---	87.4	156	67.6	11.1
6	19.2	52.6	42.5	56.0	47.2	59.1	56.2	---	67.8	142	61.4	11.9
7	20.3	48.6	32.3	60.1	47.8	56.1	53.8	43.6	1230	132	53.9	11.2
8	30.9	47.6	36.6	55.6	---	53.3	54.9	42.2	557	121	46.4	10.3
9	30.1	46.0	36.2	58.9	---	54.2	52.8	38.1	337	105	44.5	10.2
10	25.1	48.4	36.8	61.7	48.4	61.6	52.9	48.1	281	95.1	41.4	9.68
11	25.6	46.3	39.3	62.9	60.5	65.3	51.1	115	204	85.7	39.1	6.77
12	23.9	44.1	45.7	52.9	57.5	62.4	49.8	74.9	161	80.6	33.9	7.40
13	32.5	42.6	45.9	48.0	51.5	60.5	52.2	67.9	107	72.9	32.2	10.5
14	40.3	46.2	43.1	65.5	51.7	57.5	60.3	95.5	100	73.9	32.4	11.6
15	37.1	41.7	43.6	72.0	54.1	57.3	80.0	75.4	88.4	65.4	29.5	13.3
16	32.5	38.3	42.4	59.5	50.7	60.6	70.9	66.9	67.1	56.4	28.1	12.3
17	29.1	41.8	46.1	57.2	---	60.7	66.0	63.0	79.7	51.4	24.2	11.5
18	28.6	47.6	51.6	57.0	---	56.5	63.3	62.2	102	44.0	23.0	11.7
19	27.0	40.6	45.4	57.1	40.1	55.4	55.8	55.6	87.7	41.2	22.3	11.8
20	25.1	40.2	42.6	---	66.2	54.3	53.1	51.8	69.3	38.6	22.3	11.9
21	27.0	39.4	41.0	52.1	65.0	55.6	50.0	47.7	77.4	37.1	20.9	11.2
22	24.1	43.5	41.5	52.4	62.0	54.0	50.3	44.8	176	32.7	18.8	11.0
23	25.9	39.2	42.2	52.9	59.3	54.6	52.0	45.8	275	32.6	17.4	---
24	25.8	41.0	42.3	53.1	60.1	51.5	56.9	44.9	715	31.0	16.7	---
25	25.8	37.6	42.1	52.4	54.4	49.2	45.8	43.1	322	27.8	15.2	---
26	27.8	37.3	46.0	48.6	54.7	46.8	53.2	41.6	254	25.3	14.7	---
27	30.6	35.8	43.0	51.3	53.0	65.0	55.5	41.2	288	23.8	14.8	---
28	30.6	35.6	40.8	52.9	51.4	77.3	53.0	39.8	642	22.1	15.5	---
29	30.7	22.1	45.5	53.5	---	64.0	48.8	56.5	335	21.9	18.8	---
30	31.1	19.5	50.8	53.3	---	66.2	44.9	108	250	26.6	19.3	---
31	34.9	---	50.0	52.5	---	61.9	---	122	---	104	18.5	---
MONTH	27.6	42.7	41.4	56.0	54.2	56.0	56.5	59.7	242	81.4	52.9	---

07157940 BLUFF CREEK NEAR BUTTERMILK, KANS.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/Cm AT 25 DEG. C), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1010	728	778	780	851	745	870	720	644	462	528	1050
2	847	781	782	783	831	792	866	760	667	470	610	1130
3	1520	720	781	722	826	765	831	790	744	454	666	1280
4	1090	703	---	766	812	769	803	792	796	455	955	1520
5	1040	729	768	783	943	783	814	---	840	471	1050	1660
6	1050	761	805	788	953	810	855	---	745	466	1150	1690
7	854	765	742	804	872	851	818	773	291	495	1170	1710
8	848	773	876	748	---	834	793	773	436	601	1200	1790
9	866	766	826	788	---	804	785	659	560	751	1270	1830
10	859	760	807	806	805	805	806	877	695	840	1320	1860
11	952	771	772	803	695	814	802	864	802	838	1410	1310
12	931	781	785	728	736	814	805	811	879	882	1410	1380
13	776	780	811	649	746	829	737	670	943	906	1450	1620
14	738	902	815	708	749	788	761	802	975	897	1460	1830
15	815	846	853	708	782	806	772	729	964	894	1450	1790
16	848	838	859	698	794	810	795	749	817	887	1380	1750
17	884	848	932	701	---	811	805	842	782	906	1350	1820
18	920	841	1000	764	---	823	807	894	747	925	1400	1850
19	923	824	888	765	691	821	767	894	904	938	1490	2040
20	915	914	864	---	729	784	769	913	902	958	1400	2130
21	982	897	863	775	776	783	784	930	847	963	1380	2150
22	879	850	841	779	774	780	812	906	530	940	1470	2040
23	836	768	856	786	776	789	814	864	406	987	1520	---
24	787	832	925	808	768	786	800	877	302	994	1530	---
25	787	793	886	798	683	795	555	906	468	1010	1520	---
26	802	787	930	763	717	757	699	910	490	1060	1550	---
27	798	757	813	805	730	776	712	937	478	1080	1630	---
28	798	787	748	828	709	721	713	906	321	1090	1670	---
29	841	495	737	861	---	764	709	693	409	1140	1480	---
30	813	477	754	859	---	843	707	571	457	1110	1080	---
31	797	---	763	846	---	808	---	572	---	887	1030	---
MONTH	896	776	829	773	781	795	779	794	661	832	1240	---

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21.0	12.0	7.0	---	2.5	---	6.0	17.5	20.5	28.5	27.5	
2	21.0	12.0	6.5	3.0	6.0	---	8.5	20.0	17.0	27.5	29.0	
3	---	10.5	6.0	3.5	6.5	---	12.0	23.5	19.0	29.0	---	
4	23.5	10.0	---	4.0	5.0	---	10.0	24.0	20.5	28.5	23.0	
5	18.5	12.5	10.0	1.0	1.0	12.0	10.0	---	20.0	25.0	28.5	
6	16.0	12.0	7.5	7.0	1.0	---	14.5	---	23.0	30.0	25.5	
7	14.5	10.0	6.5	5.5	---	---	14.5	22.0	15.0	26.0	26.0	
8	---	11.0	4.0	---	---	9.5	13.0	22.5	22.5	---	21.5	
9	21.0	12.0	3.0	9.5	---	3.0	17.5	25.5	21.5	---	---	
10	22.0	9.0	3.0	1.0	2.0	3.0	14.0	21.0	17.5	27.0	27.0	
11	20.0	11.5	3.0	1.5	8.5	3.0	15.0	21.0	18.5	28.5	26.0	
12	16.0	6.0	3.0	---	9.0	6.0	15.0	20.0	24.0	---	25.5	
13	16.5	7.5	4.0	---	9.5	8.0	16.0	19.5	20.5	25.0	26.0	
14	13.0	5.0	5.0	---	4.0	9.0	15.5	21.5	22.0	---	28.5	
15	16.0	6.0	5.0	1.0	3.0	8.5	19.0	17.0	25.5	26.0	24.5	
16	12.0	---	1.0	1.5	---	9.0	20.5	18.0	28.0	28.0	---	
17	20.0	7.0	6.0	1.0	---	10.0	17.5	26.0	22.0	---	---	
18	14.0	8.0	2.5	2.0	---	9.0	12.5	21.0	23.0	---	---	
19	17.0	9.0	1.5	4.0	1.5	12.0	17.0	23.0	22.0	---	---	
20	20.0	9.0	5.0	5.5	6.5	16.0	20.0	18.0	27.0	---	---	
21	20.0	7.0	7.5	6.0	5.0	16.5	17.0	25.5	26.0	---	---	
22	18.5	7.0	2.0	5.0	5.5	15.5	17.0	20.5	26.0	---	---	
23	17.0	9.0	2.5	4.5	5.5	12.0	23.0	24.0	28.0	---	---	
24	16.5	4.0	0.5	6.0	---	9.5	20.5	26.5	26.0	---	---	
25	19.0	3.5	2.5	10.5	---	10.5	22.0	24.0	25.5	---	---	
26	14.0	---	3.0	9.0	---	---	23.5	---	26.0	---	---	
27	17.5	10.0	3.0	8.0	---	6.0	23.0	18.5	26.5	---	---	
28	15.0	5.5	3.0	8.0	---	4.5	21.0	23.0	26.5	---	---	
29	14.0	3.0	2.0	8.5	---	7.5	22.0	20.0	27.5	---	---	
30	16.5	3.0	2.0	5.0	---	11.5	18.5	19.5	25.5	---	---	
31	13.5	---	2.5	5.0	---	14.0	---	17.0	---	---	---	
MONTH	17.5	8.5	4.0	5.0	---	---	16.5	21.5	23.0	---	---	

07157950 CIMARRON RIVER NEAR BUFFALO, OKLA.

LOCATION.--Lat 36°55'28", long 99°23'56", in NW 1/4 SW 1/4 sec.7, T.28 N., R.20 W., Harper County, at bridge on U.S. Highway 64, 7 mi (11.3 km) downstream from gaging station, 14 mi (22.5 km) east of Buffalo, and at mile 289.0 (465.0 km).

DRAINAGE AREA.--11,930 mi^2 (30,899 km^2), of which 4,813 mi^2 (12,466 km^2) is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: October 1959 to September 1963, July 1968 to current year.
Water temperatures: July 1968 to current year.

EXTREMES, Current year.--Specific conductance: Maximum daily, 43,600 micromhos/cm May 29; minimum daily, 1,020 micromhos/cm July 2.
Water temperatures: Maximum, 29.5°C June 5, 30, July 5; minimum, 1.0°C Jan. 11

Period of record.--Specific conductance (1969-75): Maximum daily, 72,800 micromhos/cm May 22, 1971; minimum daily, 1,020 micromhos/cm July 2, 1975.
Water temperatures: Maximum, 38.0°C Aug. 14, 1974; minimum, freezing poing on many days during winter months.

REMARKS.--Continuous monitor records for water temperature and specific conductance are collected for this station. Records of maximum and minimum specific conductance values are available in district office in Oklahoma City, Okla. Temperature records for Dec. 24-Jan. 6, Jan. 26-29, Mar. 3-12, 18-26, Apr. 26-May 5 and May 15-June 4 were poor. Once-daily temperature values were used in their place. No flow Sept. 9-13.
*=Mean discharge; M=Presence of material verified but not quantified.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)
OCT.											
06...	1730	50	--	170	63	2600	--	181	0	148	410
16...	1920	81	--	130	53	--	--	221	3	186	290
25...	1440	62	--	140	58	2400	--	199	0	163	380
30...	1030	72	13	120	40	--	7.3	229	0	188	340
NOV.											
05...	1800	194	--	130	54	1800	--	235	0	193	350
15...	1500	101	--	130	55	--	--	205	0	168	330
25...	1120	108	--	120	49	1200	7.2	199	0	163	300
DEC.											
05...	1710	208	--	130	56	2000	7.3	214	0	176	320
15...	1520	181	--	130	53	1600	7.0	250	0	205	310
25...	1525	89	--	120	54	1300	6.9	194	0	159	330
JAN.											
05...	1330	123	--	220	59	--	6.5	170	0	139	300
15...	1200	101	--	280	58	2000	.4	202	0	166	320
23...	1600	128	20	140	50	1200	6.6	267	0	219	320
25...	1750	156	--	120	50	1500	6.9	230	0	189	300
FEB.											
05...	1300	162	--	150	60	2500	9.8	267	0	219	380
05...	1301	162	18	170	62	2700	7.3	273	0	224	410
15...	1130	155	--	140	51	--	9.2	264	0	217	360
25...	1400	205	--	130	52	--	7.6	225	0	185	310
MAR.											
05...	1800	157	--	150	59	2500	7.2	240	0	197	380
06...	1130	158	15	130	54	--	8.5	245	0	201	330
15...	1500	153	--	130	54	1300	6.7	227	0	186	340
25...	1135	140	--	120	52	980	6.7	222	0	182	320
APR.											
02...	1300	173	15	150	62	1500	8.9	273	0	224	350
06...	1500	140	--	130	57	1400	7.5	219	0	180	350
14...	1100	131	--	210	94	6700	11	220	0	180	560
25...	1200	140	--	140	62	--	7.9	229	0	188	370
MAY											
05...	1230	68	--	140	77	--	7.3	217	0	178	430
14...	0930	392	13	230	96	5500	11	181	0	148	660
16...	1200	223	--	180	73	--	9.1	248	0	203	510
24...	1100	111	--	190	70	3100	8.3	207	0	170	530
JUNE											
05...	1200	199	--	170	59	4400	12	167	0	137	430
11...	1100	392	19	140	45	890	10	246	0	202	330
15...	1615	102*	--	120	43	750	9.7	256	0	210	300
25...	1600	305	--	68	16	440	10	166	0	153	100
JULY											
05...	1530	110	--	63	15	120	7.9	170	11	158	81
09...	0800	78	21	90	19	210	8.8	230	0	189	130
15...	1820	34	--	120	38	670	7.4	158	11	148	380
25...	1800	17	--	110	33	410	7.4	201	0	165	270
AUG.											
05...	1400	112	15	63	22	180	11	169	0	139	130
05...	1720	110	--	67	23	190	9.6	176	0	144	130
14...	1135	22	--	160	47	850	10	191	0	157	450
19...	1800	33	--	140	50	580	10	166	0	136	410
SEP.											
04...	1030	2.1	19	450	80	2900	9.5	203	0	167	1000

07157950 CIMARRON RIVER NEAR BUFFALO, OKLA.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	TOTAL NITRO-GEN (N) (MG/L)	TOTAL NITRO-GEN (NO3) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)
OCT.											
06...	4100	--	--	.18	--	--	--	--	7670	--	10.4
16...	2500	--	--	.13	--	--	--	--	4750	--	6.46
25...	3600	--	--	.10	--	--	--	--	6910	--	9.40
30...	--	.7	.04	--	.27	.31	1.4	.03	5070	5070	6.90
NOV.											
05...	2800	--	--	.36	--	--	--	--	5250	--	7.14
15...	2600	--	--	.28	--	--	--	--	5110	--	6.95
25...	1900	--	--	--	14	--	--	--	3700	--	5.03
DEC.											
05...	--	--	--	--	--	--	--	--	6030	--	8.20
15...	2500	--	--	--	--	--	--	--	4710	--	6.41
25...	2000	--	--	--	--	--	--	--	4060	--	5.52
JAN.											
05...	3000	--	--	--	--	--	--	--	5720	5720	7.78
15...	3400	--	--	--	--	--	--	--	6090	--	8.28
23...	1900	.7	.34	--	.60	.94	4.2	.07	--	3770	5.48
25...	2300	--	--	--	--	--	--	.08	4510	--	6.13
FEB.											
05...	3900	--	--	--	--	--	--	--	7380	--	10.0
05...	4400	.7	.56	--	.99	1.6	6.9	.10	8000	7900	10.9
15...	3000	--	--	--	--	--	--	--	5570	5570	7.58
25...	2700	--	--	--	--	--	--	--	5130	5130	6.98
MAR.											
05...	3800	--	--	--	--	--	--	--	7370	--	10.0
06...	2400	.9	.20	--	.38	.58	2.6	.04	4760	--	6.47
15...	2000	--	--	--	--	--	--	--	4170	--	5.67
25...	1500	--	--	--	--	--	--	--	3180	--	4.32
APR.											
02...	2500	.8	.13	--	.33	.46	2.0	.06	4730	4720	6.43
06...	2200	--	--	--	--	--	--	--	4330	--	5.89
14...	--	--	--	--	--	--	--	--	18900	18900	25.7
25...	2800	--	--	--	--	--	--	--	5500	--	7.48
MAY											
05...	2500	--	--	--	--	--	--	--	5010	--	6.81
14...	8900	.3	.11	--	1.4	1.5	6.7	.22	16200	15500	22.0
16...	2800	--	--	--	--	--	--	--	5740	--	7.81
24...	4800	--	--	--	--	--	--	--	8900	--	12.1
JUNE											
05...	7200	--	--	--	--	--	--	--	--	--	--
11...	1400	.6	.06	--	1.1	1.2	5.1	.19	2930	2960	3.98
15...	1100	--	--	--	--	--	--	--	2510	--	3.41
25...	690	--	--	--	--	--	--	--	1430	--	1.94
JULY											
05...	180	--	--	--	--	--	--	--	601	--	.82
09...	310	.5	.15	--	.63	.78	3.5	.16	960	903	1.31
15...	1000	--	--	--	--	--	--	--	2340	--	3.18
25...	610	--	--	--	--	--	--	--	1670	--	2.27
AUG.											
05...	290	.7	.44	--	3.6	4.0	18	.83	827	795	1.12
05...	280	--	--	--	--	--	--	--	838	--	1.14
14...	1200	--	.13	--	--	--	--	--	2960	--	4.03
19...	950	--	.23	--	--	--	--	--	2430	--	3.30
SEP.											
04...	4500	.3	.01	--	.34	.35	1.6	.04	9060	9060	12.3

07157950 CIMARRON RIVER NEAR BUFFALO, OKLA.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	CARBON DIOXIDE (CO2) (MG/L)	TUR-BID-ITY (JTU)
OCT.										
06...	1040	680	530	--	43	12100	8.2	--	1.8	--
16...	1040	540	360	--	--	7820	8.4	--	1.4	--
25...	1160	590	430	--	43	11000	8.2	--	2.0	--
30...	986	460	270	--	--	8500	8.3	19.0	1.8	10
NOV.										
05...	2750	550	360	--	34	8560	8.3	--	1.9	--
15...	1390	550	380	--	--	8210	8.1	--	2.6	--
25...	1080	500	340	84	23	6170	8.1	--	2.5	--
DEC.										
05...	3390	560	380	89	37	9820	8.2	--	2.2	--
15...	2300	540	340	86	30	7750	8.3	--	2.0	--
25...	976	520	360	84	25	6760	8.3	--	1.6	--
JAN.										
05...	1900	790	650	--	--	9310	8.3	--	1.4	--
15...	1660	940	770	82	28	9870	8.7	--	.6	--
23...	1390	560	340	82	22	7030	8.2	8.0	2.7	--
25...	1900	510	320	86	29	7440	8.9	--	.5	--
FEB.										
05...	3230	620	400	90	44	11800	8.1	.5	3.4	--
05...	3500	690	460	90	45	14000	7.8	--	6.9	--
15...	2330	560	340	--	--	9070	8.1	--	3.4	--
25...	2840	540	350	--	--	8440	8.4	--	1.4	--
MAR.										
05...	3120	620	420	90	44	11600	8.0	--	3.8	--
06...	2030	550	350	--	--	8300	7.9	9.0	4.9	30
15...	1720	550	360	84	24	6890	8.0	--	3.6	--
25...	1200	510	330	80	19	5320	7.9	--	4.5	--
APR.										
02...	2210	630	410	84	26	8200	8.1	1.0	3.5	15
06...	1640	560	380	84	26	7100	7.9	--	4.4	--
14...	6690	910	730	94	97	--	8.0	--	3.5	--
25...	2080	610	420	--	--	8940	8.0	--	3.7	--
MAY										
05...	920	670	490	--	--	8200	7.8	--	5.5	--
14...	17100	970	820	92	77	27000	7.1	15.0	23	64
16...	3460	750	550	--	--	9230	8.3	--	2.0	--
24...	2670	760	590	90	49	14000	8.1	--	2.6	--
JUNE										
05...	--	670	530	93	74	17600	7.4	--	11	--
11...	3100	540	330	78	17	5040	8.1	22.0	3.1	68
15...	691	480	270	77	15	4110	7.8	--	6.5	--
25...	1180	240	83	79	12	2510	7.8	--	4.7	--
JULY										
05...	178	210	53	54	3.6	1040	8.7	--	.6	--
09...	202	300	110	59	5.3	--	8.3	27.0	1.8	40
15...	215	460	310	76	14	4040	8.4	--	1.1	--
25...	76.7	410	250	68	8.8	2880	8.3	--	1.6	--
AUG.										
05...	250	250	110	60	5.0	1300	7.4	31.0	11	930
05...	249	260	120	60	5.1	1480	8.1	--	2.2	--
14...	176	590	440	75	15	4990	8.3	--	1.5	--
19...	217	560	420	69	11	4020	8.1	--	2.1	--
SEP.										
04...	51.4	1500	1300	81	33	13500	8.1	26.0	2.6	4

07157950 CIMARRON RIVER NEAR BUFFALO, OKLA.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	FECAL COLIFORM (COL. PER 100 ML)	STREPTOCOCCI (COLONIES PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)	SUSPENDED SEDIMENT (MG/L)	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM
OCT.									
30...	1030	72	9.0	107	MO	MO	--	--	--
JAN.									
23...	1600	128	11.3	99	6200	7000	--	96	83
FEB.									
05...	1300	162	14.0	98	MO	MO	--	--	--
MAR.									
06...	1130	158	10.7	103	MO	MO	--	74	95
APR.									
02...	1300	173	13.2	101	5600	4900	--	149	92
MAY									
14...	0930	392	9.2	96	MO	5400	17	316	98
JUNE									
11...	1100	392	8.1	101	1200	1900	--	167	99
JULY									
09...	0800	78	7.6	103	MO	MO	--	55	95
AUG.									
05...	1400	112	7.0	94	990	1720	24	5890	1
SEP.									
04...	1030	2.1	9.2	121	MO	MO	--	353	21

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TOTAL IRON (FE) (UG/L)	DISSOLVED IRON (FE) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	SUSPENDED MANGANESE (MN) (UG/L)	DISSOLVED MANGANESE (MN) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	SUSPENDED ARSENIC (AS) (UG/L)	DISSOLVED ARSENIC (AS) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	SUSPENDED CADMIUM (CD) (UG/L)
FEB.												
05...	1301	162	3300	110	120	110	10	4	2	2	40	38
MAY												
14...	0930	392	4300	40	260	190	70	6	3	3	30	27
AUG.												
05...	1400	112	45000	30	1300	1300	10	28	24	4	<10	<9

DATE	DISSOLVED CADMIUM (CD) (UG/L)	TOTAL CHROMIUM (CR) (UG/L)	SUSPENDED CHROMIUM (CR) (UG/L)	DISSOLVED CHROMIUM (CR) (UG/L)	TOTAL COBALT (CO) (UG/L)	SUSPENDED COBALT (CO) (UG/L)	DISSOLVED COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)	SUSPENDED COPPER (CU) (UG/L)	DISSOLVED COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)
FEB.											
05...	2	20	10	10	100	100	0	550	550	3	<100
MAY											
14...	3	20	10	10	350	350	0	40	32	8	100
AUG.											
05...	1	60	60	0	50	50	0	80	72	8	100

DATE	SUSPENDED LEAD (PB) (UG/L)	DISSOLVED LEAD (PB) (UG/L)	TOTAL MERCURY (HG) (UG/L)	SUSPENDED MERCURY (HG) (UG/L)	DISSOLVED MERCURY (HG) (UG/L)	TOTAL SELENIUM (SE) (UG/L)	SUSPENDED SELENIUM (SE) (UG/L)	DISSOLVED SELENIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	SUSPENDED ZINC (ZN) (UG/L)	DISSOLVED ZINC (ZN) (UG/L)
FEB.											
05...	<98	2	.1	.1	.0	2	0	2	40	0	40
MAY											
14...	96	4	.2	.2	.0	0	0	0	450	250	200
AUG.											
05...	98	2	--	--	.0	3	0	3	270	270	0

07157950 CIMARRON RIVER NEAR BUFFALO, OKLA.--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

PHYTOPLANKTON

Date	Time	Organism	Count (cells/ml)	Percent of total	Sampling method
Oct. 30	1030	CHLOROPHYTA			Sediment Sampler
		Chlorophyceae			
		Chlorococcales			
		Hydrodictyaceae			
		Pediastrum	480	3	
		Occystaceae			
		Ankistrodesmus		0	
		Kirchneriella		0	
		Scenedesmaceae			
		Scenedesmus	730	5	
		Zygnematales			
		Desmidiaceae			
		Closterium	1,100	8	
		CHRYSOPHYTA			
		Bacillariophyceae			
		Centrales			
		Coscinodiscaceae			
		Cyclotella	180	1	
		Pennales			
		Achnanthaceae			
		Achnanthes	120	1	
		Cymbellaceae			
		Cymbella	240	2	
		Fragilariaceae			
		Synedra	1,600	11	
		Naviculaceae			
		Caloneis		0	
		Gyrosigma		0	
		Navicula	540	4	
		Nitzschiaceae			
		Nitzschia	8,600	60	
		CYANOPHYTA			
		Myxophyceae			
		Oscillatoriales			
		Nostocaceae			
		Anabaena	420	3	
		TOTAL	14,000		
Jan. 23	1600	CHLOROPHYTA			Sediment Sampler
		Chlorophyceae			
		Volvocales			
		Chlamydomonadaceae			
		Chlamydomonas	110	2	
		CHRYSOPHYTA			
		Bacillariophyceae			
		Centrales			
		Coscinodiscaceae			
		Cyclotella	110	2	
		Pennales			
		Achnanthaceae			
		Achnanthes	550	8	
		Diatomaceae			
		Diatoma	660	10	
		Naviculaceae			
		Calonis	110	2	
		Navicula	2,900	42	
		Nitzschiaceae			
		Hantzschia	440	6	
		Nitzschia	2,000	29	
		TOTAL	6,800		
Feb. 5	1300	CHLOROPHYTA			Sediment Sampler
		Chlorophyceae			
		Chlorococcales			
		Hydrodictyaceae			
		Pediastrum	2,000	22	
		CHRYSOPHYTA			
		Bacillariophyceae			
		Pennales			
		Cymbellaceae			
		Amphora	130	1	
		Rhopalodia	130	1	
		Diatomaceae			
		Diatoma	660	7	
		Fragilariaceae			
		Synedra	530	6	
		Gomphonemataceae			
		Gomphonema	130	1	
		Naviculaceae			
		Amphiprora	260	3	
		Caloneis	400	4	

07157950 CIMARRON RIVER NEAR BUFFALO, OKLA.--Continued
QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA,
WATER YEAR OCTOBER 1974 to SEPTEMBER 1975

PHYTOPLANKTON

Date	Time	Organism	Count (cells/ml)	Percent of total	Sampling method
Feb. 5	1300	Gyrosigma	130	1	Sediment sampler
		Navicula	3,400	38	
		Nitzschiaceae			
		Nitzschia	790	9	
		Surirellaceae			
		Surirella	400	4	
		TOTAL	9,000		
Mar. 6	1130	CHLOROPHYTA			Sediment sampler
		Chlorophyceae			
		Chlorococcales			
		Scenedesmaceae			
		Scenedesmus	130	5	
		Volvocales			
		Chlamydomonadaceae			
		Chlamydomonas	130	5	
		CHRYSOPHYTA			
		Bacillariophyceae			
		Centrales			
		Coscinodiscaceae			
		Cyclotella	67	2	
		Pennales			
		Cymbellaceae			
		Amphora	67	2	
		Diatomaceae			
		Diatoma	130	5	
		Fragilariaceae			
		Fragilaria	330	12	
		Gomphonemataceae			
		Gomphonema	67	2	
		Naviculaceae			
		Caloneis	200	7	
		Diploneis	67	2	
		Navicula	1,000	37	
		Nitzschiaceae			
		Hantzschia	67	2	
		Nitzschia	400	15	
		TOTAL	2,700		
Apr. 02	1300	CHRYSOPHYTA			Sediment Sampler
		Bacillariophyceae			
		Pennales			
		Diatomaceae			
		Diatoma	70	2	
		Fragilariaceae			
		Synedra	580	16	
		Naviculaceae			
		Amphiprora	290	8	
		Navicula	1,500	43	
		Neidium	150	4	
		Nitzschiaceae			
		Hantzschia	70	2	
		Nitzschia	800	22	
		EUGLENOPHYTA			
		Euglenophyceae			
		Euglenales			
		Euglenaceae			
		Euglena	70	2	
		TOTAL	3,520		
May 14	0930	CHRYSOPHYTA			Sediment Sampler
		Bacillariophyceae			
		Pennales			
		Cymbellaceae			
		Amphora	240	3	
		Epithemia	240	3	
		Diatomaceae			
		Diatoma	240	3	
		Fragilariaceae			
		Synedra	1,200	13	
		Gomphonemataceae			
		Gomphonema	490	5	
		Naviculaceae			
		Amphiprora	490	5	
		Navicula	2,400	26	
		Tropidoneis	240	3	
		Nitzschiaceae			
		Hantzschia	730	8	
		Nitzschia	2,700	28	
		Surirellaceae			
		Surirella	240	3	

07157950 CIMARRON RIVER NEAR BUFFALO, OKLA.--Continued
QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA,
WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

PHYTOPLANKTON

Date	Time	Organism	Count (cells/ml)	Percent of total	Sampling method
May 14	0930	CYANOPHYTA			Sediment sampler
		Myxophyceae			
		Oscillatoriales			
		Oscillatoriaceae			
		Spirulina	240	3	
		TOTAL	9,500		
June 11	1100	CHLOROPHYTA			Sediment sampler
		Chlorophyceae			
		Chlorococcales			
		Characiaceae			
		Schroederia	230	1	
		Hydrodictyaceae			
		Pediastrum		0	
		Occystaceae			
		Ankistrodesmus	2,000	5	
		Chodatella	230	1	
		Kirchneriella	1,100	3	
		Tetraedron	230	1	
		Scenedesmaceae			
		Actinastrum	8,400	20	
		Scenedesmus	3,200	7	
		Tetrastrum	910	2	
		Tetrasporales			
		Palmellaceae			
		Sphaerocystis	1,800	4	
		CHRYSOPHYTA			
		Bacillariophyceae			
		Centrales			
		Coscinodiscaceae			
		Cyclotella	2,500	6	
		Melosira	7,300	17	
		Pennales			
		Achnanthaceae			
		Achnanthes	450	1	
		Gomphonemataceae			
		Gomphonema	2,700	6	
		Meridionaceae			
		Meridion	230	1	
		Naviculaceae			
		Navicula	1,400	3	
		Pinnularia	230	1	
		Nitzschiaceae			
		Denticula	910	2	
		Nitzschia	1,800	4	
		Xanthophyceae			
		Heterococcales			
		Chlorotheciaceae			
		Ophiocytium		0	
		CYANOPHYTA			
		Myxophyceae			
		Chroococcales			
		Chroococcaceae			
		Anacystis	7,300	17	
		Oscillatoriales			
		Nostocaceae		0	
		Anabaena			
		TOTAL	43,000		
July 9	0800	CHLOROPHYTA			Sediment Sampler
		Chlorophyceae			
		Chlorococcales			
		Characiaceae			
		Schroederia		0	
		Micractiniaceae			
		Micractinium		0	
		Occystaceae			
		Ankistrodesmus	2,500	4	
		Closteriopsis			
		Dictyosphaerium	4,500	6	
		Oocystis	1,100	2	
		Selenastrum	850	1	
		Tetraedron		0	
		Scenedesmaceae			
		Actinastrum	2,800	4	
		Crucigenia	3,400	5	
		Scenedesmus	2,300	3	
		Tetrastrum	1,100	2	
		Tetrasporales			
		Palmellaceae			
		Sphaerocystis	4,500	6	
		Volvocales			

07157950 CIMARRON RIVER NEAR BUFFALO, OKLA.--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

Date	Time	Organism	Count (cells/ml)	Percent of total	Sampling method
July 9	0800	Chlamydomonadaceae			Sediment sampler
		Chlamydomonas		0	
		Phacotaceae			
		Wislouchiella		0	
		CHRYSOPHYTA			
		Bacillariophyceae			
		Centrales			
		Coscinodiscaceae			
		Cyclotella	1,800	3	
		Melosira	570	1	
		Pennales			
		Achnanthaceae			
		Achnanthes		0	
		Cymbellaceae			
		Cymbella		0	
		Gomphonemataceae			
		Gomphonema		0	
		Naviculaceae			
		Caloneis		0	
		Diploneis	420	1	
		Navicula	1,400	2	
		Pinnularia		0	
		Nitzschiaceae			
		Nitzschia	7,500	11	
		Achnanthaceae			
		Rhoicosphenia		0	
		CYANOPHYTA			
		Myxophyceae			
		Chroococcales			
		Chroococcaceae			
		Agmenellum	19,000	28	
		Anacystis	9,300	13	
		Oscillatoriales			
		Oscillatoriaceae			
		Lyngbya	4,700	7	
		TOTAL	70,000		
Aug. 5	1400	CHRYSOPHYTA			Sediment Sampler
		Bacillariophyceae			
		Centrales			
		Coscinodiscaceae			
		Cyclotella	150	5	
		Pennales			
		Cymbellaceae			
		Cymbella		0	
		Diatomaceae			
		Diatoma	440	16	
		Meridionaceae			
		Meridion	880	32	
		Naviculaceae			
		Navicula	880	32	
		Nitzschiaceae			
		Nitzschia	440	16	
		CYANOPHYTA			
		Myxophyceae			
		Oscillatoriales			
		Oscillatoriaceae			
		Oscillatoria		0	
		TOTAL	2,800		

07157950 CIMARRON RIVER NEAR BUFFALO, OKLA.--Continued

DISSOLVED SULFATE (SO4), MG/L, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	360	330	360	330	330	330	340	320	320	89	190	---
2	340	320	350	330	340	330	340	310	310	69	130	---
3	350	430	340	360	380	---	320	410	310	75	140	---
4	320	430	350	350	430	420	310	370	340	69	120	430
5	380	350	360	360	370	390	330	340	430	70	100	---
6	390	340	330	370	380	330	330	340	310	---	120	---
7	430	---	370	350	410	320	370	320	330	100	130	---
8	410	350	320	330	410	310	500	320	160	87	150	---
9	370	360	320	330	390	320	310	330	200	100	180	---
10	350	410	330	420	370	430	310	350	280	140	210	---
11	330	360	470	370	350	350	310	380	320	160	240	---
12	340	340	370	340	300	380	310	350	300	160	290	---
13	500	360	350	---	300	330	340	360	290	170	150	---
14	410	330	350	380	320	320	470	430	300	170	300	---
15	320	340	340	360	350	320	340	380	280	190	270	---
16	340	350	330	350	360	330	310	360	280	200	300	---
17	340	---	330	310	440	340	310	340	300	200	300	---
18	340	340	340	320	440	380	360	350	220	200	210	440
19	340	380	320	350	440	390	330	350	180	210	270	430
20	350	330	320	310	340	320	330	360	230	220	200	410
21	340	340	320	340	370	330	320	370	350	230	300	360
22	420	350	330	310	350	450	330	350	320	250	320	370
23	420	350	320	320	360	340	410	470	220	250	330	370
24	410	310	330	370	390	310	380	420	270	240	430	380
25	380	320	320	340	350	300	360	---	170	260	490	370
26	430	320	350	330	330	330	350	390	160	290	---	380
27	420	320	420	330	330	440	370	340	310	300	---	380
28	390	320	380	310	350	350	400	380	140	300	---	390
29	370	340	360	340	---	310	340	540	130	310	---	390
30	340	340	310	320	---	320	340	420	110	300	---	400
31	390	---	410	370	---	320	---	380	---	250	---	---
MONTH	370	350	350	340	370	350	350	370	260	190	230	---

DISSOLVED SULFATE (SO4), TONS PER DAY, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	52.5	108	71.0	125	111	130	171	71.7	389	40.1	1270	---
2	45.0	125	66.2	151	118	121	164	89.6	243	27.0	246	---
3	45.4	241	69.8	169	147	---	138	94.1	187	26.3	503	---
4	38.9	324	93.6	163	175	164	138	73.9	171	22.4	80.4	2.21
5	44.1	193	154	159	160	166	140	62.4	271	21.0	32.1	---
6	53.7	149	178	156	84.1	140	124	59.7	192	---	31.4	---
7	54.6	---	140	174	114	105	131	52.7	2490	24.8	28.1	---
8	74.2	118	104	168	131	93.7	193	48.4	756	19.5	25.5	---
9	77.9	135	95.0	161	68.4	111	123	48.1	783	19.2	24.3	---
10	72.8	164	119	205	134	175	134	57.6	444	22.7	22.7	---
11	62.4	131	212	181	163	185	111	285	333	22.0	21.4	---
12	58.8	111	235	90.9	249	202	92.1	252	232	19.4	20.4	---
13	108	106	217	---	139	156	124	511	125	19.3	8.91	---
14	105	87.3	187	110	125	141	173	424	97.2	20.2	17.0	---
15	89.0	91.8	161	117	136	136	152	267	77.1	19.5	19.7	---
16	74.4	93.6	140	177	124	135	198	211	71.1	18.4	18.6	---
17	62.4	---	125	238	97.4	140	157	173	75.3	17.3	18.6	---
18	55.1	104	118	171	159	148	150	160	57.6	16.2	17.6	2.49
19	54.2	112	99.4	152	189	134	105	133	45.2	15.9	21.9	1.97
20	53.9	87.3	95.9	133	318	111	90.0	118	54.0	15.4	16.7	1.33
21	50.5	89.0	95.0	132	263	112	84.7	109	78.4	14.9	17.0	1.26
22	56.7	98.3	107	105	255	171	94.4	117	124	14.2	11.2	1.00
23	63.5	101	105	105	219	138	118	170	144	15.5	7.13	.41
24	63.1	89.6	98.0	146	202	127	103	126	1770	16.8	3.25	.04
25	62.6	95.0	76.9	143	195	111	90.4	---	159	15.4	2.12	.09
26	80.1	99.4	63.3	127	166	119	86.9	112	98.9	14.9	---	.45
27	90.7	99.4	83.9	116	146	249	93.9	95.5	188	13.8	---	.31
28	88.5	98.5	89.3	105	141	232	108	102	548	11.3	---	.18
29	75.9	108	111	112	---	183	85.4	359	139	15.9	---	.39
30	71.6	85.4	172	107	---	175	78.9	348	60.0	11.3	---	.71
31	97.9	---	178	123	---	164	---	702	---	33.1	---	---
MONTH	67.2	123	125	144	162	149	125	181	347	19.5	99.4	---

07157950 CIMARRON RIVER NEAR BUFFALO, OKLA.--Continued

DISSOLVED CHLORIDE (CL), MG/L, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3200	2200	3000	2200	2300	2300	2400	2000	1800	310	760	---
2	2500	1700	2900	2300	2400	2100	2400	1500	1500	230	480	---
3	2700	5500	2500	3100	3800	---	1800	4500	1700	250	520	---
4	2000	6000	2800	2800	5400	5000	1600	3300	2500	230	450	5900
5	3700	2700	3200	3000	3400	3800	2200	2600	5800	230	360	---
6	4000	2600	2200	3300	3500	2300	2100	2600	1700	---	430	---
7	5700	---	3500	2900	4400	1800	3300	2000	2100	380	510	---
8	4500	2900	1900	2200	4400	1600	11000	1900	610	310	590	---
9	3300	3000	1700	2100	3900	1800	1600	2100	790	370	730	---
10	2700	4500	2200	4700	3500	5500	1600	2900	1200	560	830	---
11	2200	3200	9000	3300	2700	2800	1600	3700	1900	630	960	---
12	2600	2400	3300	2400	1300	3600	1700	2900	1400	640	1200	---
13	12000	3100	2700	---	1400	2100	2600	3100	1200	660	570	---
14	4300	2100	2800	3800	1900	2000	8800	5500	1300	660	1400	---
15	1900	2600	2400	3200	2900	1900	2400	3600	1100	740	1100	---
16	2400	2800	2200	2700	3100	2300	1700	3000	1100	790	1300	---
17	2400	---	2300	1700	6300	2600	1700	2600	1500	820	1400	---
18	2600	2600	2600	1800	6600	3700	3000	2700	910	810	840	6500
19	2500	3500	2000	2900	6400	3900	2200	2700	710	850	1100	5600
20	2700	2100	2000	1600	2600	2000	2300	3000	940	910	800	4300
21	2600	2500	2000	2600	3500	2100	1900	3200	2900	930	1300	3100
22	4900	2800	2300	1600	2800	7100	2300	2900	1900	1000	1700	3200
23	4900	2900	1900	1900	3100	2500	4400	9100	880	1000	2100	3300
24	4300	1700	2100	3300	3900	1600	3800	4600	1100	990	6100	3500
25	3600	1800	2000	2500	2700	1500	3100	---	660	1100	11000	3500
26	5900	1800	2900	2300	2100	2200	2700	3800	620	1300	---	3600
27	4700	2000	4800	2000	2300	6300	3500	2600	1700	1300	---	3700
28	3800	2000	3600	1700	2700	2700	4200	3700	520	1400	---	3800
29	3300	2500	3200	2500	---	1600	2400	14000	490	1600	---	4000
30	2500	2400	1500	1800	---	1800	2400	4900	410	1400	---	4100
31	3800	---	4300	3400	---	1900	---	3500	---	1000	---	---
MONTH	3700	2800	2800	2600	3400	2800	3000	3700	1400	780	1500	---

DISSOLVED CHLORIDE (CL), TONS PER DAY, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	467	719	591	832	776	907	1210	448	2190	140	5090	---
2	331	666	548	1060	829	771	1160	433	1170	90.0	910	---
3	350	3090	513	1460	1470	---	778	1030	1030	87.8	1870	---
4	243	4520	748	1310	2200	1960	713	659	1260	74.5	301	30.3
5	430	1490	1370	1330	1470	1640	933	477	3650	68.9	116	---
6	551	1140	1190	1390	775	975	788	456	1050	---	113	---
7	723	---	1320	1440	1220	588	1170	329	15900	94.4	110	---
8	814	979	616	1120	1400	484	4250	287	2880	69.5	100	---
9	695	1130	505	1030	684	627	635	306	3090	70.9	98.6	---
10	561	1800	790	2300	1270	2240	691	478	1900	90.7	89.6	---
11	416	1170	4060	1610	1410	1480	575	2780	1980	86.8	85.5	---
12	449	784	2090	642	1080	1910	505	2090	1080	77.8	84.2	---
13	2590	912	1680	---	646	992	948	4400	518	74.8	33.9	---
14	1100	556	1500	1100	744	880	3230	5420	421	78.4	79.4	---
15	528	702	1130	1040	1130	805	1080	2530	303	75.9	80.2	---
16	525	748	933	1360	1070	938	1080	1760	279	72.5	80.7	---
17	441	---	869	1300	1390	1070	858	1320	377	70.8	86.9	---
18	421	793	899	962	2390	1440	1250	1230	238	65.6	70.3	36.9
19	398	1030	621	1260	2750	1340	701	1030	178	64.3	89.1	25.7
20	416	556	599	687	2430	697	627	980	221	63.9	67.0	13.9
21	386	655	594	1010	2490	714	503	942	650	60.3	73.7	10.9
22	661	786	745	540	2040	2700	658	971	734	56.7	59.7	8.64
23	741	838	626	626	1880	1010	1270	3290	575	62.1	45.4	3.65
24	662	491	624	1300	2020	657	1030	1380	7220	69.5	46.1	.38
25	593	535	481	1050	1500	555	778	---	617	65.3	47.5	.85
26	1100	559	525	882	1050	796	671	1090	383	66.7	---	4.28
27	1020	621	959	702	1020	3570	888	730	1030	59.7	---	3.00
28	862	616	846	574	1090	1790	1130	989	2040	52.9	---	1.74
29	677	796	985	823	---	946	603	9300	523	82.1	---	4.00
30	526	603	834	603	---	982	557	4060	224	52.9	---	7.31
31	954	---	1870	1130	---	975	---	6460	---	132	---	---
MONTH	666	1050	1020	1080	1440	1210	1040	1920	1790	75.9	393	---

07157950 CIMARRON RIVER NEAR BUFFALO, OKLA.--Continued

DISSOLVED SOLIDS (RESIDUE AT 180 DEG. C), MG/L, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6140	4500	5800	4520	4650	4730	4740	4190	3890	814	1740	---
2	4950	3790	5660	4610	4790	4290	4810	3410	3370	629	1170	---
3	5240	10300	5020	5830	7080	---	3850	8510	3750	685	1250	---
4	4250	11200	5480	5430	10100	9250	3520	6230	5000	635	1100	11100
5	7030	5280	6060	5740	6370	7160	4550	5060	10900	642	913	---
6	7460	5060	4570	6230	6670	4690	4380	5080	3680	---	1050	---
7	10600	---	6540	5550	8190	3890	6350	4210	4400	956	1230	---
8	8470	5580	4020	4470	8200	3540	20900	3960	1430	802	1390	---
9	6260	5770	3780	4310	7280	3870	3430	4330	1810	938	1680	---
10	5270	8390	4440	8760	6590	10200	3450	5510	2570	1320	1890	---
11	4570	6000	16800	6290	5350	5370	3480	7000	4100	1470	2170	---
12	5080	4840	6230	4880	2900	6720	3730	5600	3120	1510	2620	---
13	21800	5980	5320	---	3120	4320	5170	5980	2770	1540	1350	---
14	8140	4370	5500	7090	3970	4210	16500	10200	2900	1550	3080	---
15	4000	5060	4780	6090	5600	4000	4870	6850	2520	1700	2510	---
16	4820	5480	4450	5320	5950	4580	3700	5690	2540	1810	2880	---
17	4820	---	4630	3670	11800	5160	3620	5180	3250	1880	3040	---
18	5180	5050	5100	3890	12400	6920	5760	5310	2060	1860	1920	12200
19	4940	6660	4210	5550	11900	7400	4470	5280	1650	1930	2490	10400
20	5210	4310	4250	3470	5110	4150	4610	5710	2120	2050	1840	8140
21	5060	4920	4170	5140	6600	4410	4090	6170	5630	2110	2980	5980
22	9130	5510	4680	3490	5470	13300	4710	5660	3970	2270	3780	6170
23	9130	5540	4020	3990	5940	4940	8270	17100	2010	2290	4350	6290
24	8140	3730	4300	6350	7400	3550	7090	8640	2460	2230	11400	6660
25	6790	3810	4170	5020	5210	3280	5880	---	1550	2380	20200	6540
26	11100	3890	5560	4640	4270	4530	5240	7220	1460	2780	---	6790
27	8820	4160	8880	4260	4580	11700	6600	5100	3770	2890	---	6970
28	7220	4240	6790	3630	5300	5350	7830	6910	1240	3070	---	7220
29	6290	4900	6130	4930	---	3550	4740	26900	1190	3420	---	7460
30	4940	4780	3390	3870	---	3920	4870	9070	1020	3060	---	7710
31	7220	---	8140	6460	---	4040	---	6660	---	2320	---	---
MONTH	7030	5470	5580	5120	6530	5570	5840	7090	3070	1780	3200	---

DISSOLVED SOLIDS (TONS PER DAY), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	895	1470	1140	1710	1570	1860	2380	939	4730	367	11700	---
2	655	1480	1070	2120	1660	1580	2320	985	2640	246	2220	---
3	679	5780	1030	2740	2730	---	1660	1950	2270	240	4490	---
4	516	8440	1460	2540	4120	3620	1570	1240	2510	206	737	56.9
5	816	2910	2590	2540	2750	3090	1930	929	6860	192	293	---
6	1030	2210	2470	2620	1480	1990	1640	892	2280	---	275	---
7	1350	---	2470	2760	2280	1270	2250	693	33300	237	266	---
8	1530	1880	1300	2280	2610	1070	8070	602	6760	180	236	---
9	1320	2170	1120	2110	1260	1350	1360	631	7090	180	227	---
10	1100	3350	1590	4280	2380	4160	1490	907	4070	214	204	---
11	864	2190	7580	3070	2800	2840	1250	5250	4260	202	193	---
12	878	1580	3950	1300	2400	3570	1110	4040	2420	183	184	---
13	4710	1760	3300	---	1440	2040	1880	8490	1200	175	80.2	---
14	2090	1160	2940	2050	1550	1850	6060	10100	940	184	175	---
15	1110	1370	2260	1970	2180	1700	2180	4810	694	174	183	---
16	1050	1460	1890	2690	2060	1870	2360	3330	645	166	179	---
17	885	---	1750	2810	2610	2130	1830	2630	816	162	189	---
18	839	1540	1760	2080	4490	2690	2400	2420	540	151	161	69.2
19	787	1960	1310	2410	5110	2540	1420	2010	414	146	202	47.7
20	802	1140	1270	1490	4770	1450	1260	1870	498	144	154	26.4
21	751	1290	1240	2000	4690	1500	1080	1820	1260	137	169	21.0
22	1230	1550	1520	1180	3990	5060	1350	1890	1530	129	133	16.7
23	1380	1600	1320	1310	3610	2000	2390	6190	1310	142	94.0	6.96
24	1250	1080	1280	2500	3840	1460	1910	2590	16100	157	86.2	.72
25	1120	1130	1000	2110	2900	1210	1480	---	1450	141	87.3	1.59
26	2070	1210	1010	1780	2140	1640	1300	2070	903	143	---	8.07
27	1910	1290	1770	1500	2030	6630	1680	1430	2290	133	---	5.65
28	1640	1310	1590	1230	2130	3550	2110	1850	4850	116	---	3.31
29	1290	1560	1890	1620	---	2100	1190	17900	1270	175	---	7.45
30	1040	1200	1890	1300	---	2140	1130	7520	556	116	---	13.7
31	1810	---	3540	2150	---	2070	---	12300	---	307	---	---
MONTH	1270	2040	2010	2140	2770	2400	2070	3680	3880	182	917	---

07157950 CIMARRON RIVER NEAR BUFFALO, OKLA.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9950	7290	9400	7330	7540	7660	7690	6790	6310	1320	2820	---
2	8020	6140	9180	7470	7770	6950	7800	5520	5470	1020	1900	---
3	8500	16700	8130	9450	11480	---	6240	13800	6080	1110	2030	---
4	6890	18200	8890	8810	16320	15000	5700	10100	8100	1030	1790	18000
5	11400	8560	9820	9310	10320	11600	7370	8200	17600	1040	1480	---
6	12100	8210	7410	10100	10810	7610	7100	8230	5970	---	1710	---
7	17180	---	10600	9000	13280	6310	10300	6830	7140	1550	2000	---
8	13730	9050	6510	7240	13290	5740	33800	6450	2320	1300	2260	---
9	10150	9360	6120	6990	11800	6280	5560	7020	2930	1520	2730	---
10	8540	13600	7200	14200	10680	16600	5590	8940	4170	2140	3070	---
11	7410	9730	27300	10200	8680	8700	5640	11350	6640	2390	3510	---
12	8230	7850	10100	7910	4700	10900	6050	9080	5050	2440	4240	---
13	35300	9700	8630	---	5060	7000	8380	9700	4490	2500	2190	---
14	13200	7090	8920	11500	6440	6830	26700	16500	4700	2510	4990	---
15	6490	8210	7750	9870	9080	6490	7900	11100	4090	2760	4070	---
16	7820	8880	7220	8620	9650	7430	5990	9230	4110	2930	4670	---
17	7810	---	7500	5950	19200	8370	5870	8400	5270	3040	4930	---
18	8390	8190	8270	6310	20040	11220	9340	8600	3340	3020	3110	19800
19	8000	10800	6830	8990	19340	11990	7250	8560	2680	3130	4030	16900
20	8440	6990	6890	5620	8280	6720	7480	9250	3440	3330	2980	13200
21	8210	7970	6760	8330	10700	7150	6630	10000	9130	3420	4830	9700
22	14800	8930	7580	5650	8860	21600	7640	9180	6430	3680	6130	10000
23	14800	8980	6520	6460	9620	8000	13400	27700	3260	3720	7050	10200
24	13200	6050	6970	10300	12000	5750	11500	14000	3990	3610	18500	10800
25	11000	6170	6760	8140	8440	5320	9530	---	2510	3860	32700	10600
26	18000	6310	9010	7530	6930	7350	8500	11700	2370	4510	---	11000
27	14300	6750	14400	6900	7430	19000	10700	8270	6110	4690	---	11300
28	11700	6870	11000	5880	8590	8680	12700	11200	2010	4980	---	11700
29	10200	7940	9940	7990	---	5750	7690	43600	1930	5540	---	12100
30	8010	7750	5490	6270	---	6350	7890	14700	1650	4960	---	12500
31	11700	---	13200	10480	---	6550	---	10800	---	3760	---	---
MONTH	11400	8870	9040	8290	10580	9030	9460	11490	4980	2890	5190	---

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20.0	14.5	1.5	6.0	8.5	7.5	6.5	12.0	18.0	29.0	24.5	22.5
2	18.0	13.0	3.0	5.0	4.5	9.0	4.5	16.0	16.0	23.5	26.0	22.5
3	19.0	10.5	13.0	4.5	8.0	8.0	8.5	23.5	27.0	28.0	25.0	22.5
4	21.0	9.0	4.5	5.0	6.0	6.5	11.0	26.0	28.0	27.0	25.0	26.0
5	22.0	8.5	9.0	4.0	5.0	3.0	13.0	24.5	29.5	29.5	25.5	23.0
6	16.5	---	6.0	8.0	---	2.0	14.0	20.5	25.0	28.5	24.5	23.0
7	15.0	---	5.0	6.5	---	2.0	13.0	16.0	22.5	27.0	22.5	22.5
8	16.5	10.0	4.0	5.0	---	1.5	12.5	18.0	24.5	27.5	23.0	19.5
9	20.0	13.0	7.0	6.5	---	---	13.5	19.5	22.5	25.5	24.0	---
10	20.0	12.5	5.0	2.5	---	3.0	10.5	17.5	19.5	26.0	24.0	---
11	21.0	10.0	11.0	1.0	---	3.0	12.5	18.0	19.5	25.0	23.0	---
12	15.5	8.5	9.5	1.5	---	11.0	13.0	18.0	22.5	22.5	23.0	---
13	13.5	6.0	6.0	---	---	6.5	10.5	13.5	25.0	21.0	23.5	---
14	11.5	9.5	7.0	3.0	6.0	8.0	14.0	16.0	24.5	21.5	24.0	13.5
15	10.5	8.0	6.5	3.0	---	6.0	18.5	28.0	22.5	22.5	24.5	18.0
16	13.0	10.5	6.0	3.0	---	7.0	18.5	20.5	25.0	22.5	25.5	20.5
17	15.5	10.5	9.5	4.5	---	9.0	18.0	15.0	29.0	22.0	25.5	21.0
18	15.0	11.5	5.0	5.5	---	1.0	13.0	21.0	24.0	23.5	22.0	17.5
19	13.5	11.0	10.5	5.5	---	9.0	13.5	21.0	25.0	25.5	23.5	16.5
20	13.0	10.0	5.5	6.5	---	7.5	15.0	28.0	24.5	26.0	24.5	15.5
21	14.0	11.5	5.0	6.0	---	7.0	16.5	28.0	24.5	26.5	24.5	15.5
22	13.5	11.0	9.5	4.0	---	3.0	13.5	20.0	27.5	24.5	25.0	13.5
23	16.0	10.5	4.5	5.5	---	7.0	23.0	21.0	24.5	22.5	24.5	13.5
24	16.5	7.0	3.0	6.0	---	3.0	18.0	22.0	26.5	23.0	24.0	13.0
25	15.5	12.5	3.0	7.5	8.5	7.0	17.5	---	25.5	23.5	22.5	13.5
26	13.0	12.0	4.5	7.0	8.5	10.5	23.0	17.0	26.0	24.5	24.0	14.5
27	14.0	10.0	4.0	5.0	7.5	11.5	23.5	19.0	27.0	26.5	22.0	15.5
28	15.0	5.5	2.0	10.0	10.5	4.0	25.0	25.0	25.5	26.0	23.0	15.5
29	15.0	2.0	8.0	7.0	---	4.5	25.0	20.0	28.5	25.0	26.0	16.5
30	17.0	2.0	3.0	6.0	---	7.0	15.0	20.0	29.5	25.0	27.0	14.5
31	13.0	---	7.0	6.5	---	9.0	---	24.0	---	23.5	24.5	---
MONTH	16.0	9.5	6.0	5.0	---	6.0	15.0	20.5	24.5	25.0	24.0	18.0

07157960 BUFFALO CREEK NEAR LOVEDALE, OKLA.

LOCATION.--Lat 36°46'08", long 99°21'58", in NW 1/4 NW 1/4 sec.4, T.26 N., R.20 W., Harper County, at gaging station at bridge on State Highway 34, 1.2 mi (1.9 km) east of Lovedale, 1.3 mi (2.1 km) upstream from Sleeping Bear Creek, and at mile 7.6 (12.2 km).

DRAINAGE AREA.--408 mi^2 (1,057 km^2).

PERIOD OF RECORD.--Chemical analyses: October 1973 to current year.
Water temperatures: October 1973 to current year.

EXTREMES, Current year.--Specific conductance: Maximum daily, 4,770 micromhos/cm Aug. 4; minimum daily, 1,070 micromhos/cm June 8.
Water temperatures: Maximum, 34.0°C July 6; minimum, -1.0°C Feb. 16.

Period of record.--Specific conductance: Maximum daily, 6,990 micromhos/cm July 6, 1974; minimum daily, 349 micromhos/cm Sept. 2, 1974.
Water temperatures: Maximum, 34.0°C June 18, 1974, July 6, 1975; minimum, -1.0°C Feb. 16, 1975.

REMARKS.--Continuous monitor records for specific conductance are collected for this station. Records of maximum and minimum specific conductance values are available in district office in Oklahoma City, Okla. No flow Aug. 5-Sept. 30.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
OCT.											
04...	1100	4.4	460	120	140	--	194	0	159	1400	200
13...	0900	8.7	430	110	130	--	236	0	194	1300	180
25...	1900	6.8	430	120	140	--	194	0	159	1400	190
NOV.											
01...	1800	12	410	120	140	7.4	140	0	115	1400	180
09...	2230	15	290	110	110	8.8	239	0	196	1000	140
22...	1745	9.8	380	130	130	6.4	203	0	167	--	--
DEC.											
02...	1315	6.8	420	130	140	5.8	230	0	189	1300	170
10...	1700	10	190	130	140	5.6	167	0	137	1100	160
15...	1840	9.4	370	130	140	6.2	222	0	182	1300	180
JAN.											
08...	1345	9.4	340	130	130	6.0	201	0	165	1200	170
14...	1805	14	380	140	140	7.1	231	0	189	1300	180
27...	1640	11	--	130	140	5.6	206	--	169	1300	170
FEB.											
08...	0900	9.0	370	140	130	5.9	204	--	167	1300	170
09...	1200	8.0	350	150	140	6.3	251	--	206	1300	190
23...	1610	15	340	140	--	5.0	198	--	162	1200	160
MAR.											
10...	1635	16	310	130	140	5.5	--	--	--	--	--
15...	1600	14	350	150	140	5.6	243	0	199	1300	160
26...	1815	10	370	150	150	6.0	214	0	176	1400	190
APR.											
01...	2015	12	350	150	140	7.2	233	0	191	1300	180
21...	1855	15	360	150	150	6.6	187	0	153	1400	190
30...	1415	16	410	160	150	6.8	189	0	155	1500	200
MAY											
01...	1842	15	410	150	160	6.8	179	0	147	1500	210
14...	0745	270	150	52	45	10	113	0	93	520	57
23...	1400	7.6	330	110	110	8.2	233	0	191	1100	140
JUNE											
08...	1100	113	130	37	37	11	103	0	84	420	50
17...	1810	4.5	350	110	110	14	196	0	161	1200	160
26...	1015	2.9	420	120	140	9.8	202	0	166	1400	200
JULY											
01...	1330	2.6	260	82	97	10	196	0	161	880	120
13...	1915	1.1	450	110	190	9.0	155	0	127	--	--
25...	0815	.92	500	130	450	9.3	182	0	149	--	--
AUG.											
01...	0650	.68	550	140	380	9.2	155	0	127	--	--

07157960 BUFFALO CREEK NEAR LOVEDALE, OKLA.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	CARBON DIOXIDE (CO2) (MG/L)
OCT.											
04...	.16	2720	3.70	32.3	1600	1500	--	1.5	3000	8.3	1.6
13...	.11	2580	3.51	60.6	1500	1300	--	1.4	2820	8.0	3.8
25...	.10	2660	3.62	48.8	1600	1400	--	1.5	2920	8.0	3.1
NOV.											
01...	--	2580	3.51	83.6	1500	1400	17	1.6	2860	7.7	4.5
09...	--	1950	2.65	79.0	1200	980	17	1.4	2270	7.6	9.6
22...	--	2470	3.36	65.4	1500	1300	16	1.5	2740	7.7	6.5
DEC.											
02...	--	2680	3.64	49.2	1600	1400	16	1.5	2940	8.2	2.3
10...	--	2480	3.37	67.0	1000	870	23	1.9	2790	8.0	2.7
15...	--	2450	3.33	62.2	1500	1300	17	1.6	2720	8.1	2.8
JAN.											
08...	--	2340	3.18	59.4	1400	1200	17	1.5	2620	--	--
14...	--	2540	3.45	96.0	1500	1300	17	1.6	2780	8.1	2.9
27...	--	2440	3.32	72.5	--	--	--	--	2720	--	--
FEB.											
08...	--	2440	3.32	59.3	1500	1300	16	1.5	2740	--	--
09...	--	2620	3.56	56.6	1500	1300	17	1.6	2890	--	--
23...	--	2320	3.16	94.0	1400	1300	--	--	2620	--	--
MAR.											
10...	--	2360	3.21	102	1300	--	19	1.7	2690	8.2	--
15...	--	2430	3.30	91.9	1500	1300	17	1.6	2740	7.9	4.9
26...	--	2590	3.52	69.9	1500	1400	17	1.7	2880	8.0	3.4
APR.											
01...	--	2450	3.33	79.4	1500	1300	17	1.6	2750	8.1	3.0
21...	--	2600	3.54	105	1500	1400	18	1.7	2900	8.0	3.0
30...	--	2740	3.73	118	1700	1500	16	1.6	3020	8.0	3.0
MAY											
01...	--	2770	3.77	112	1600	1500	17	1.7	3120	7.8	4.5
14...	--	971	1.32	708	590	500	14	.8	1240	7.9	2.3
23...	--	2060	2.80	42.3	1300	1100	16	1.3	2330	8.0	3.7
JUNE											
08...	--	799	1.09	244	480	390	14	.7	1070	8.3	.8
17...	--	2240	3.05	27.2	1300	1200	15	1.3	2490	7.8	5.0
26...	--	2600	3.54	20.4	1500	1400	16	1.6	2860	7.6	8.1
JULY											
01...	.08	1850	2.52	13.0	990	830	17	1.3	2170	8.2	2.0
13...	--	2840	3.86	8.43	1600	1500	21	2.1	3200	8.1	2.0
25...	.31	3960	5.39	9.84	1800	1600	35	4.6	4700	7.9	3.7
AUG.											
01...	--	3830	5.21	7.03	2000	1800	30	3.7	4600	8.0	2.5

07157960 BUFFALO CREEK NEAR LOVEDALE, OKLA.--Continued

DISSOLVED SULFATE (SO4), MG/L, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1400	1400	1400	1400	1300	1300	1300	1500	1200	990	2700	
2	1400	1400	1500	1300	1300	1300	1300	1500	1300	1100	2800	
3	1400	1200	1400	1300	1400	1300	1400	1200	1200	1100	2800	
4	1500	1200	1400	1200	1300	1300	1400	900	1100	1200	2800	
5	1500	1200	1400	1200	1300	1300	1400	870	1200	1200	---	
6	1500	1100	1400	1200	1300	1300	1400	880	1100	1500	---	
7	1500	1100	1400	1200	1300	1400	1400	1100	490	1400	---	
8	1500	1100	1400	1200	1300	1400	1400	1200	440	1500	---	
9	1400	1000	1400	1300	1400	1400	1500	1300	530	1300	---	
10	1400	1100	1400	1200	1400	1300	1500	1200	830	1500	---	
11	1500	1100	1300	1200	1300	1300	1700	710	830	1500	---	
12	1400	1200	1400	1200	1300	1300	1400	780	890	1600	---	
13	1400	1200	1400	1300	1300	1400	1400	780	970	1700	---	
14	1400	1100	1300	1300	1300	1300	1400	530	990	1700	---	
15	1400	1200	1300	1300	1300	1300	1400	610	1100	1600	---	
16	1400	1200	1300	1300	1300	1300	1400	640	1100	1700	---	
17	1400	1300	1300	1300	1300	1300	1400	630	1100	1800	---	
18	1400	1300	1300	1300	1300	1300	1400	770	1200	2000	---	
19	1400	1300	1300	1300	1200	1400	1400	880	1200	2000	---	
20	1400	1300	1300	1300	1300	1400	1400	940	1300	2200	---	
21	1400	1300	1300	1300	1300	1400	1400	1000	1300	2300	---	
22	1400	1300	1300	1300	1200	1300	1400	1000	1200	1600	---	
23	1500	1300	1300	1300	1200	1400	1500	1100	1300	2400	---	
24	1500	1300	1400	1300	1200	1400	1400	1100	1400	1200	---	
25	1400	1400	1400	1300	1200	1400	1500	1100	1400	2800	---	
26	1400	1400	1400	1300	1200	1400	1500	1200	1400	1200	---	
27	1400	1400	1400	1300	1200	1300	1400	1200	1300	2400	---	
28	1400	1400	1400	1300	1300	1300	1500	1200	880	2000	---	
29	1400	1400	1400	1400	---	1400	1500	1100	680	1700	---	
30	1400	1400	1400	1300	---	1400	1500	1200	880	1200	---	
31	1500	---	1300	1300	---	1300	---	1100	---	2500	---	
MONTH	1400	1300	1400	1300	1300	1300	1400	1000	1100	1700	---	

DISSOLVED SULFATE (SO4), TONS PER DAY, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22.7	41.6	24.6	29.9	35.1	45.6	42.1	56.7	81.0	6.68	4.88	
2	20.8	60.5	26.3	34.0	34.7	45.6	38.6	56.7	73.7	6.53	4.69	
3	18.5	100	26.8	38.6	49.1	42.1	41.6	156	48.6	5.94	2.87	
4	17.8	156	30.6	35.6	52.7	45.6	41.6	75.3	32.7	6.16	.91	
5	16.6	123	34.0	32.4	52.7	49.1	41.6	47.0	38.9	5.51	---	
6	16.6	80.2	34.8	32.4	38.6	49.1	41.6	33.3	89.1	6.08	---	
7	22.3	62.4	32.5	32.1	35.1	45.4	45.4	26.7	308	5.29	---	
8	30.4	47.5	29.5	31.1	31.6	45.4	49.1	21.7	128	5.27	---	
9	35.5	40.5	28.4	33.7	30.2	49.1	52.7	19.0	58.7	5.97	---	
10	35.5	38.6	35.9	31.1	45.4	56.2	52.7	139	56.0	6.08	---	
11	33.6	35.6	42.1	25.9	56.2	59.7	55.1	40.3	40.3	5.67	---	
12	27.6	35.6	49.1	21.4	42.1	63.2	49.1	21.1	33.6	5.18	---	
13	32.5	35.6	45.4	29.5	42.1	60.5	56.7	497	26.2	5.05	---	
14	34.8	29.1	38.6	49.1	38.6	52.7	68.0	295	21.9	5.97	---	
15	37.8	30.1	35.1	56.2	38.6	49.1	75.6	125	18.7	4.75	---	
16	37.0	30.1	31.9	56.2	35.1	49.1	75.6	69.1	16.0	3.49	---	
17	34.4	32.6	31.2	59.7	28.1	49.1	68.0	42.5	14.0	2.48	---	
18	28.4	33.3	30.2	63.2	29.8	49.1	64.3	35.3	13.0	2.21	---	
19	24.9	34.7	29.8	56.2	35.6	52.9	60.5	30.9	11.0	1.84	---	
20	23.8	33.0	29.1	52.7	49.1	49.1	56.7	25.4	10.9	1.66	---	
21	22.7	33.0	28.4	49.1	52.7	49.1	56.7	21.1	12.6	1.37	---	
22	21.9	34.4	28.8	42.1	51.8	49.1	56.7	19.7	23.7	.52	---	
23	24.3	33.0	26.7	38.6	51.8	49.1	64.8	22.0	20.0	.52	---	
24	25.5	31.9	26.5	42.1	45.4	41.6	60.5	20.8	14.4	1.72	---	
25	25.7	32.9	24.2	42.1	51.8	37.8	64.8	20.2	11.7	5.97	---	
26	25.7	31.0	24.2	38.6	51.8	37.8	64.8	18.8	10.6	2.04	---	
27	28.4	29.5	25.7	38.6	48.6	49.1	60.5	18.1	77.2	3.37	---	
28	32.9	29.5	27.2	38.6	49.1	63.2	60.8	19.1	40.4	2.27	---	
29	34.4	27.2	28.0	37.8	---	60.5	60.8	38.6	8.45	2.07	---	
30	35.5	25.3	27.6	38.6	---	56.7	60.8	68.0	6.89	1.65	---	
31	44.6	---	27.4	38.6	---	45.6	---	71.3	---	3.11	---	
MONTH	28.2	46.3	31.0	40.2	43.0	49.9	56.3	69.4	44.9	3.94	---	

07157960 BUFFALO CREEK NEAR LOVEDALE, OKLA.--Continued

DISSOLVED CHLORIDE (CL), MG/L, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	190	180	180	180	180	170	170	200	150	130	380	
2	190	180	200	170	170	170	180	190	170	140	390	
3	190	160	190	170	180	170	180	160	150	150	390	
4	200	160	190	160	160	180	190	110	140	160	400	
5	200	150	190	160	170	170	190	110	160	160	---	
6	200	150	190	160	170	180	190	110	140	200	---	
7	210	140	180	160	170	180	190	140	49	190	---	
8	200	140	190	160	170	180	190	150	41	210	---	
9	190	130	180	170	190	180	200	170	55	180	---	
10	180	140	180	160	190	170	190	160	100	200	---	
11	200	140	170	160	180	170	230	83	100	200	---	
12	190	150	180	160	170	170	190	93	110	210	---	
13	180	150	180	170	180	190	180	93	120	230	---	
14	180	150	170	170	170	180	180	55	130	230	---	
15	190	160	170	170	170	170	180	67	140	220	---	
16	180	160	180	170	170	170	180	72	150	230	---	
17	190	170	170	170	180	170	180	71	140	250	---	
18	180	170	170	170	170	170	180	92	150	270	---	
19	190	170	180	170	160	180	180	110	160	280	---	
20	180	170	180	170	160	180	190	120	170	300	---	
21	190	170	170	160	160	180	190	130	170	320	---	
22	190	170	180	170	160	170	190	130	160	210	---	
23	200	180	180	170	160	180	200	140	160	340	---	
24	200	170	180	170	160	180	190	140	180	360	---	
25	190	180	180	170	150	190	200	150	180	390	---	
26	190	180	190	170	160	190	200	150	190	360	---	
27	190	180	190	170	160	170	190	160	170	340	---	
28	190	180	190	170	170	170	200	160	110	270	---	
29	190	190	190	180	---	180	200	150	78	220	---	
30	190	180	180	170	---	180	200	150	110	350	---	
31	200	---	180	180	---	180	---	150	---	350	---	
MONTH	190	160	180	170	170	180	190	130	130	250	---	

DISSOLVED CHLORIDE (CL), TONS PER DAY, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.08	5.35	3.16	3.84	4.86	5.97	5.51	7.56	10.1	.88	.69	
2	2.82	7.78	3.51	4.45	4.54	5.97	5.35	7.18	9.64	.83	.65	
3	2.51	13.4	3.64	5.05	6.32	5.51	5.35	20.7	6.08	.81	.40	
4	2.38	20.7	4.16	4.75	6.48	6.32	5.64	9.21	4.16	.82	.13	
5	2.21	15.4	4.62	4.32	6.89	6.43	5.64	5.94	5.18	.73	---	
6	2.21	10.9	4.72	4.32	5.05	6.80	5.64	4.16	11.3	.81	---	
7	3.12	7.94	4.18	4.28	4.59	5.83	6.16	3.40	30.8	.72	---	
8	4.05	6.05	4.00	4.15	4.13	5.83	6.67	2.71	12.0	.74	---	
9	4.82	5.27	3.65	4.41	4.10	6.32	7.02	2.48	6.09	.83	---	
10	4.57	4.91	4.62	4.15	6.16	7.34	6.67	18.6	6.75	.81	---	
11	4.48	4.54	5.51	3.46	7.78	7.80	7.45	4.71	4.86	.76	---	
12	3.74	4.46	6.32	2.85	5.51	8.26	6.67	2.51	4.16	.68	---	
13	4.18	4.46	5.83	3.86	5.83	8.21	7.29	59.3	3.24	.68	---	
14	4.47	3.97	5.05	6.43	5.05	7.29	8.75	30.6	2.88	.81	---	
15	5.13	4.02	4.59	7.34	5.05	6.43	9.72	13.7	2.38	.65	---	
16	4.76	4.02	4.42	7.34	4.59	6.43	9.72	7.78	2.19	.47	---	
17	4.67	4.27	4.09	7.80	3.89	6.43	8.75	4.79	1.78	.34	---	
18	3.65	4.36	3.95	8.26	3.90	6.43	8.26	4.22	1.62	.30	---	
19	3.39	4.54	4.13	7.34	4.75	6.80	7.78	3.86	1.47	.26	---	
20	3.06	4.31	4.03	6.89	6.05	6.32	7.70	3.24	1.42	.23	---	
21	3.08	4.31	3.72	6.05	6.48	6.32	7.70	2.74	1.65	.19	---	
22	2.98	4.50	3.99	5.51	6.91	6.43	7.70	2.56	3.15	.07	---	
23	3.24	4.57	3.69	5.05	6.91	6.32	8.64	2.80	2.46	.07	---	
24	3.40	4.18	3.40	5.51	6.05	5.35	8.21	2.65	1.85	.52	---	
25	3.49	4.23	3.11	5.51	6.48	5.13	8.64	2.75	1.51	.83	---	
26	3.49	3.99	3.28	5.05	6.91	5.13	8.64	2.35	1.44	.61	---	
27	3.85	3.79	3.49	5.05	6.48	6.43	8.21	2.42	10.1	.48	---	
28	4.46	3.79	3.69	5.05	6.43	8.26	8.10	2.55	5.05	.31	---	
29	4.67	3.69	3.80	4.86	---	7.78	8.10	5.27	.97	.27	---	
30	4.82	3.26	3.55	5.05	---	7.29	8.10	8.51	.86	.48	---	
31	5.94	---	3.79	5.35	---	6.32	---	9.72	---	.43	---	
MONTH	3.76	6.03	4.11	5.26	5.64	6.56	7.45	8.41	5.23	.56	---	

07157960 BUFFALO CREEK NEAR LOVEDALE, OKLA.--Continued

DISSOLVED SOLIDS (RESIDUE AT 180 DEG. C), MG/L, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2630	2570	2570	2510	2490	2420	2460	2720	2250	1870	4580	
2	2630	2510	2680	2430	2420	2440	2500	2670	2420	2050	4710	
3	2650	2330	2660	2430	2560	2460	2560	2340	2180	2140	4740	
4	2740	2340	2650	2340	2360	2480	2650	1700	2120	2260	4780	
5	2740	2200	2640	2330	2420	2460	2630	1640	2300	2340	---	
6	2710	2130	2580	2350	2440	2500	2650	1650	2110	2690	---	
7	2800	2110	2560	2350	2440	2530	2660	2050	900	2610	---	
8	2680	2060	2590	2280	2370	2520	2280	2230	804	2800	---	
9	2610	1980	2570	2370	2610	2520	2720	2420	987	2490	---	
10	2540	2000	2530	2330	2590	2370	2670	2310	1570	2680	---	
11	2690	2080	2460	2340	2490	2460	2990	1330	1570	2720	---	
12	2590	2180	2520	2350	2430	2460	2660	1460	1680	2880	---	
13	2510	2200	2520	2430	2490	2580	2540	1460	1840	3060	---	
14	2570	2140	2420	2450	2460	2490	2520	987	1870	3090	---	
15	2610	2260	2430	2460	2420	2430	2530	1130	1990	2950	---	
16	2570	2350	2480	2370	2460	2410	2510	1190	2170	3040	---	
17	2590	2380	2440	2450	2480	2380	2570	1180	2110	3270	---	
18	2560	2370	2440	2400	2460	2400	2540	1450	2240	3500	---	
19	2580	2370	2490	2420	2350	2510	2520	1660	2290	3570	---	
20	2570	2430	2500	2460	2360	2510	2580	1780	2380	3810	---	
21	2650	2440	2420	2360	2360	2560	2630	1880	2460	4030	---	
22	2650	2450	2490	2450	2310	2450	2650	1980	2270	2860	---	
23	2690	2490	2490	2420	2280	2520	2680	2010	2360	4170	---	
24	2680	2440	2510	2400	2340	2530	2660	2080	2520	4440	---	
25	2660	2560	2510	2400	2230	2590	2680	2140	2560	4730	---	
26	2640	2570	2580	2400	2310	2590	2710	2250	2280	4370	---	
27	2640	2510	2590	2420	2340	2440	2660	2330	2380	4180	---	
28	2640	2560	2580	2460	2380	2450	2720	2330	1650	3490	---	
29	2650	2640	2590	2510	---	2520	2720	2140	1270	2980	---	
30	2600	2520	2560	2460	---	2520	2770	2210	1650	4350	---	
31	2720	---	2490	2490	---	2490	---	2170	---	4340	---	
MONTH	2640	2340	2530	2410	2420	2480	2620	1900	1970	3220	---	

DISSOLVED SOLIDS (TONS PER DAY), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	42.6	76.3	45.1	53.5	67.2	84.9	79.7	103	152	12.6	8.29	
2	39.1	108	47.0	63.6	64.7	85.6	74.3	101	137	12.2	7.88	
3	35.1	195	51.0	72.2	89.9	79.7	76.0	303	88.3	11.6	4.86	
4	32.6	303	58.0	69.5	95.6	87.0	78.7	142	63.0	11.6	1.55	
5	30.3	226	64.2	62.9	98.0	93.0	78.1	88.6	74.5	10.7	---	
6	30.0	155	64.1	63.5	72.5	94.5	78.7	62.4	171	10.9	---	
7	41.6	120	59.4	62.8	65.9	82.0	86.2	49.8	566	9.87	---	
8	54.3	89.0	54.5	59.1	57.6	81.6	80.0	40.3	234	9.83	---	
9	66.2	80.2	52.0	61.4	56.4	88.5	95.5	35.3	109	11.4	---	
10	64.5	70.2	64.9	60.4	83.9	102	93.7	268	106	10.9	---	
11	60.3	67.4	79.7	50.5	108	113	96.9	75.4	76.3	10.3	---	
12	51.0	64.7	88.5	41.9	78.7	120	93.4	39.4	63.5	9.33	---	
13	58.3	65.3	81.6	55.1	80.7	111	103	930	49.7	9.09	---	
14	63.8	56.6	71.9	92.6	73.1	101	122	549	41.4	10.8	---	
15	70.5	56.7	65.6	106	71.9	91.9	137	232	33.9	8.76	---	
16	68.0	59.0	60.9	102	66.4	91.1	136	129	31.6	6.24	---	
17	63.6	59.8	58.6	112	53.6	90.0	125	79.7	26.8	4.50	---	
18	51.8	60.8	56.7	117	56.5	90.7	117	66.6	24.2	3.87	---	
19	46.0	63.4	57.1	105	69.8	94.9	109	58.3	21.0	3.28	---	
20	43.7	61.7	56.0	99.6	89.2	88.1	104	48.1	19.9	2.88	---	
21	42.9	61.9	52.9	89.2	95.6	89.9	107	39.6	23.9	2.39	---	
22	41.5	64.8	55.1	79.4	99.8	92.6	107	34.0	44.7	.93	---	
23	43.6	63.2	51.1	71.9	98.5	88.5	116	40.2	36.3	.90	---	
24	45.6	60.0	47.4	77.8	88.5	75.1	115	39.3	25.9	6.35	---	
25	48.8	60.1	43.4	77.8	96.3	69.9	116	39.3	21.4	10.1	---	
26	48.5	56.9	44.6	71.3	99.8	69.9	117	35.2	17.2	7.43	---	
27	53.5	52.9	47.6	71.9	94.8	92.2	115	35.2	141	5.87	---	
28	62.0	53.9	50.2	73.1	90.0	119	110	37.1	75.7	3.96	---	
29	65.1	51.3	51.7	67.8	---	109	110	75.1	15.8	3.62	---	
30	66.0	45.6	50.5	73.1	---	102	112	125	12.9	5.99	---	
31	80.8	---	52.4	74.0	---	87.4	---	141	---	5.39	---	
MONTH	52.0	87.0	57.5	75.4	80.8	92.5	103	131	83.5	7.53	---	

07157960 BUFFALO CREEK NEAR LOVEDALE, OKLA.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2900	2850	2850	2800	2780	2720	2760	2980	2570	2170	4600	
2	2900	2800	2950	2730	2730	2740	2790	2940	2720	2360	4710	
3	2920	2640	2930	2730	2840	2760	2840	2650	2500	2450	4740	
4	3000	2650	2920	2650	2670	2770	2920	2000	2430	2580	4770	
5	3000	2520	2910	2640	2720	2760	2900	1940	2620	2650	---	
6	2970	2440	2860	2660	2740	2790	2920	1950	2420	2960	---	
7	3050	2420	2840	2660	2740	2820	2930	2360	1170	2890	---	
8	2950	2370	2870	2600	2680	2810	2880	2550	1070	3050	---	
9	2890	2290	2850	2680	2890	2810	2980	2720	1260	2780	---	
10	2830	2310	2820	2640	2870	2680	2940	2630	1860	2950	---	
11	2960	2390	2760	2650	2780	2760	3220	1620	1860	2980	---	
12	2870	2500	2810	2660	2730	2760	2930	1750	1980	3120	---	
13	2800	2520	2810	2730	2780	2860	2830	1750	2140	3280	---	
14	2850	2450	2720	2750	2760	2780	2810	1260	2180	3300	---	
15	2890	2580	2730	2760	2720	2730	2820	1410	2300	3180	---	
16	2850	2660	2770	2680	2760	2710	2800	1470	2490	3260	---	
17	2870	2690	2740	2750	2770	2690	2850	1460	2420	3460	---	
18	2840	2680	2740	2700	2760	2700	2830	1740	2560	3660	---	
19	2860	2680	2780	2720	2660	2800	2810	1960	2610	3720	---	
20	2850	2730	2790	2760	2670	2800	2860	2080	2690	3930	---	
21	2920	2740	2720	2670	2670	2840	2900	2190	2760	4120	---	
22	2920	2750	2780	2750	2630	2750	2920	2290	2590	3100	---	
23	2960	2780	2760	2720	2600	2810	2950	2320	2670	4240	---	
24	2950	2740	2800	2700	2650	2820	2930	2390	2810	4480	---	
25	2930	2840	2800	2700	2550	2870	2950	2460	2840	4730	---	
26	2910	2850	2860	2700	2630	2870	2970	2570	2880	4420	---	
27	2910	2800	2870	2720	2650	2740	2930	2640	2690	4250	---	
28	2910	2840	2860	2760	2690	2750	2980	2640	1950	3650	---	
29	2920	2910	2870	2800	---	2810	2980	2460	1550	3210	---	
30	2880	2810	2840	2760	---	2810	3030	2530	1950	4400	---	
31	2980	---	2780	2780	---	2780	---	2490	---	4390	---	
MONTH	2910	2640	2820	2710	2720	2780	2910	2200	2280	3410	---	

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23.0	13.0	0.0	0.0	2.0	---	7.0	23.0	21.0	30.0	25.0	
2	20.0	11.5	1.5	3.0	---	8.0	---	20.0	25.0	24.0	---	
3	20.0	11.5	5.0	0.0	5.0	6.0	13.5	24.0	28.0	30.0	---	
4	17.0	12.0	1.5	4.0	4.0	0.0	11.5	24.0	26.0	31.0	24.0	
5	---	12.5	9.0	0.0	3.0	12.0	20.0	26.0	29.0	30.0	31.0	
6	---	12.0	6.0	4.0	1.0	16.0	16.0	27.0	31.0	34.0	---	
7	14.5	12.0	7.5	4.0	2.0	9.0	14.5	28.0	26.0	33.0	---	
8	12.5	---	5.0	6.0	0.0	5.0	9.5	28.0	25.0	31.0	---	
9	22.0	13.0	5.0	7.0	0.0	6.0	10.0	28.0	27.0	33.0	---	
10	20.0	13.0	7.0	3.0	0.0	6.0	13.0	19.0	20.0	31.0	---	
11	19.0	12.0	10.0	---	2.0	2.0	10.0	18.0	26.0	30.0	---	
12	17.5	11.0	8.0	---	1.5	---	10.0	23.0	27.0	24.0	---	
13	15.0	12.0	5.0	---	5.0	1.0	11.0	16.0	---	25.0	---	
14	13.0	11.0	5.0	2.0	3.0	1.5	19.0	16.0	23.0	24.0	---	
15	9.0	10.0	---	6.0	2.0	6.0	12.0	14.0	21.0	27.0	---	
16	17.0	7.0	---	4.0	-1.0	---	25.0	26.0	31.0	24.0	---	
17	12.5	8.0	---	2.0	0.0	12.0	16.0	24.0	32.0	26.0	---	
18	19.0	10.0	6.0	8.0	0.0	12.0	14.5	25.0	31.0	25.0	---	
19	12.0	13.0	7.0	6.5	5.0	18.0	21.0	27.0	26.0	25.0	---	
20	19.0	8.0	3.0	1.5	6.0	11.0	22.0	25.0	28.0	---	---	
21	19.0	7.0	6.0	6.0	2.0	17.0	23.0	27.0	25.0	16.0	---	
22	17.0	13.5	5.0	1.0	0.0	15.0	18.0	23.0	31.0	26.0	---	
23	15.0	9.0	5.0	1.0	7.0	15.0	24.0	24.0	29.0	27.0	---	
24	17.0	10.0	1.0	7.0	2.0	14.0	22.0	---	29.0	24.0	---	
25	18.0	4.0	2.0	5.0	9.0	11.0	20.0	27.0	27.0	25.0	---	
26	16.0	---	5.0	---	6.0	10.0	19.0	23.0	24.0	23.0	---	
27	18.0	10.0	8.0	7.0	11.0	15.0	22.0	20.0	31.0	30.0	---	
28	19.0	6.0	10.0	6.0	12.0	6.0	24.0	21.0	25.0	26.0	---	
29	20.0	1.0	2.0	4.0	---	8.0	23.0	21.0	29.0	26.0	---	
30	17.0	1.0	10.0	5.0	---	8.0	21.0	19.0	31.0	25.0	---	
31	18.0	---	5.0	---	---	13.0	---	16.0	---	26.0	---	
MONTH	17.0	10.0	5.5	4.0	3.5	9.5	17.0	22.5	27.0	27.0	---	

07157980 CIMARRON RIVER AT FREEDOM, OKLA.

LOCATION.--Lat 36°45'18", long 99°06'58", in SE 1/4 SE 1/4 sec.3, T.26 N., R.18 W., Woodward County, at gaging station at bridge on State Highway 50, 1 mi (1.60 km) south of Freedom, 1.1 mi (1.77 km) upstream from unnamed tributary, and at mile 272.4 (438.3 km).

DRAINAGE AREA.--12,706 mi² (32,909 km²), of which 4,813 mi² (12,466 km²) is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: October 1973 to current year.
Water temperatures: October 1973 to current year.

EXTREMES, Current year.--Specific conductance: Maximum daily, 93,400 micromhos/cm Aug. 15; minimum daily, 4,930 micromhos/cm June 10.
Water temperatures: Maximum, 36.0°C July 9; minimum, freezing point Feb. 6.

Period of record.--Specific conductance: Maximum daily, 93,400 micromhos/cm Aug. 15, 1975; minimum daily, 4,930 micromhos/cm June 10, 1975.
Water temperatures: Maximum, 37.0°C June 14, 1974; minimum, freezing point on many days during winter months.

REMARKS.--Continuous monitor records for specific conductance and water temperature are collected for this station. Temperature records for Nov. 24-Dec. 4, Feb. 4-10, Feb. 14-Mar. 12, Apr. 28-29, and Aug. 4-19 were poor. Once-daily temperature values were used in their place. Records of maximum and minimum specific conductance values are available in district office in Oklahoma City, Oklahoma. No flow Aug. 25-Sept. 30.
*=Mean discharge.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
OCT.											
13...	1800	134	400	150	16000	--	166	0	136	1100	25000
16...	1545	117	210	85	4700	--	202	0	166	560	7600
29...	1400	104	290	100	8700	--	201	0	165	790	13000
NOV.											
05...	1550	384	260	130	4900	11	195	0	160	760	8000
09...	1745	288	300	210	--	14	224	0	184	800	15000
25...	1545	117	210	120	4500	9.5	229	0	188	600	7300
DEC.											
07...	1430	198	190	76	4600	10	186	0	153	480	7000
11...	1310	264	320	140	14000	15	204	0	167	900	22000
18...	1000	180	230	91	5400	11	246	0	202	630	8100
JAN.											
13...	1350	117	760	120	8500	14	297	0	244	710	14000
18...	1740	288	180	69	3300	9.6	268	0	220	450	5000
30...	1410	216	190	82	4700	10	229	0	188	560	7400
FEB.											
03...	1330	304	310	130	--	15	207	0	170	840	18000
13...	1345	296	360	68	3000	8.5	245	0	201	--	4800
23...	1530	248	220	99	6500	10	251	0	206	730	10000
MAR.											
04...	1315	171	260	100	7300	11	227	0	186	710	11000
15...	1245	176	190	84	3600	8.9	154	0	126	600	5500
29...	1610	304	200	70	2700	8.4	243	0	199	520	4100
APR.											
07...	1350	171	240	87	5100	9.9	204	0	167	700	7900
11...	1515	216	180	66	3100	8.7	219	0	180	540	4700
13...	1705	376	270	110	--	12	187	0	153	790	14000
MAY											
02...	1825	190*	350	130	--	21	143	0	117	1000	24000
14...	1830	675	260	65	2800	11	140	0	115	750	4400
22...	1840	91	340	110	6200	16	182	0	149	970	10000
JUNE											
01...	1500	570	190	68	2900	11	212	0	174	560	4600
10...	2305	1630	210	25	820	8.4	112	0	92	520	1300
24...	1725	2700	160	46	2600	13	238	0	195	380	4200
JULY											
02...	1900	186	120	28	1800	12	202	0	166	--	2700
12...	1500	55	170	48	4100	15	201	0	165	420	6500
31...	1810	26	350	130	--	22	102	0	84	860	23000
AUG.											
04...	1840	368	84	31	1500	12	192	0	157	150	2300
10...	0930	49	180	80	5600	20	179	0	147	490	8700
15...	1540	10*	480	190	27000	36	147	0	121	1200	42000

07157980 CIMARRON RIVER AT FREEDOM, OKLA.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	CARBON DIOXIDE (CO2) (MG/L)
OCT.											
13...	.14	42700	58.1	15400	1600	1500	--	173	--	8.2	1.7
16...	.13	13300	18.1	4200	870	700	--	69	19800	8.5	1.0
29...	.09	23600	32.1	6630	1100	940	--	112	32500	8.3	1.6
NOV.											
05...	--	14200	19.3	14700	1200	1000	90	62	21100	8.0	3.1
09...	--	25400	34.5	19800	1600	1400	--	--	34500	8.2	2.3
25...	--	12800	17.4	4040	1000	830	90	61	18400	8.2	2.3
DEC.											
07...	--	--	--	--	790	630	93	71	20600	8.0	3.0
11...	--	38100	51.8	27200	1400	1200	96	164	56000	8.2	2.1
18...	--	--	--	--	950	750	92	76	24200	7.9	5.0
JAN.											
13...	--	23800	32.4	7520	2400	2100	88	76	37000	7.9	6.0
18...	--	--	--	--	730	510	91	53	16500	8.1	3.4
30...	--	--	--	--	810	620	93	72	21900	8.0	3.7
FEB.											
03...	--	31700	43.1	26000	1300	1100	--	--	42000	8.1	2.6
13...	--	8540	11.6	6830	1200	980	85	38	13200	8.0	3.9
23...	--	18100	24.6	12100	960	750	94	91	25700	8.0	4.0
MAR.											
04...	--	20800	28.3	9600	1100	870	94	98	28900	8.0	3.6
15...	--	10700	14.6	5090	820	690	90	55	16100	7.9	3.1
29...	--	--	--	--	790	590	88	42	12500	7.8	6.2
APR.											
07...	--	14500	19.7	6700	960	790	92	72	21300	7.9	4.1
11...	--	9110	12.4	5310	720	540	90	50	14100	8.0	3.5
13...	--	25600	34.8	26000	1100	970	--	--	34900	7.5	9.5
MAY											
02...	--	41400	56.3	21200	1400	1300	--	--	52900	7.1	18
14...	--	8500	11.6	15500	920	800	87	40	13200	7.8	3.6
22...	--	17700	24.1	4350	1300	1200	91	75	25100	7.7	5.8
JUNE											
01...	--	8430	11.5	13000	750	580	89	46	14000	7.3	17
10...	--	3040	4.13	13400	630	540	74	14	4930	7.2	11
24...	--	7520	10.2	54800	590	390	90	47	12700	7.2	24
JULY											
02...	.14	5860	7.97	2940	420	250	90	38	8670	7.9	4.1
12...	.15	11900	16.2	1770	620	460	93	72	17900	8.2	2.0
31...	.30	40700	55.4	2860	1400	1300	--	--	51200	7.2	10
AUG.											
04...	--	4110	5.59	4080	340	180	90	36	7530	7.9	3.9
10...	--	15200	20.7	2010	780	630	94	87	24300	8.0	2.9
15...	--	74300	101	2010	2000	1900	97	264	93400	7.5	7.4

07157980 CIMARRON RIVER AT FREEDOM, OKLA.--Continued

DISSOLVED SULFATE (SO4), MG/L, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	750	670	810	600	670	570	540	670	610	430	1400	
2	710	580	730	680	650	550	560	800	590	430	590	
3	760	750	620	610	890	530	540	790	490	430	520	
4	810	740	620	610	890	710	550	650	500	450	410	
5	870	600	670	610	780	690	550	650	550	440	440	
6	720	580	640	600	730	600	570	700	530	440	470	
7	920	590	570	620	790	510	600	630	540	460	470	
8	1000	600	580	560	670	510	770	570	410	430	580	
9	800	780	610	570	770	560	610	660	420	610	570	
10	670	780	580	590	760	680	510	760	380	580	640	
11	660	670	970	630	610	640	510	620	500	580	780	
12	690	600	750	690	490	630	530	650	500	560	890	
13	1000	600	640	750	490	570	790	490	490	600	830	
14	980	610	600	690	510	530	770	480	490	670	950	
15	660	590	580	570	680	530	740	530	480	710	1800	
16	600	610	580	570	620	640	550	560	490	---	1700	
17	600	620	590	510	760	640	530	550	510	740	1700	
18	620	630	600	500	830	560	560	540	540	680	1700	
19	610	640	550	530	740	550	570	580	480	---	1800	
20	650	590	560	550	710	540	590	620	510	---	1400	
21	690	600	580	500	660	550	620	640	660	---	1100	
22	720	620	610	540	---	640	620	660	520	---	1200	
23	730	630	580	550	660	660	630	740	470	---	---	
24	730	580	580	580	680	540	710	720	480	---	---	
25	810	560	600	580	640	510	680	740	420	---	---	
26	940	600	670	570	560	530	810	750	440	---	---	
27	890	---	730	590	550	650	810	710	490	---	---	
28	800	580	670	550	580	580	740	740	460	890	---	
29	760	600	680	610	---	480	720	740	420	---	---	
30	720	680	630	580	---	510	680	740	410	---	---	
31	850	---	600	710	---	530	---	620	---	1200	---	
MONTH	770	630	640	590	680	580	630	650	490	---	---	

DISSOLVED SULFATE (SO4), TONS PER DAY, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	93.2	248	188	369	336	295	262	163	758	316	5250	
2	78.6	310	158	386	309	261	259	410	637	251	1140	
3	73.9	425	167	385	533	233	232	486	402	204	948	
4	70.0	899	179	356	673	328	236	270	292	203	531	
5	70.5	648	271	316	316	391	242	223	428	183	214	
6	77.8	564	384	285	237	369	231	191	458	173	141	
7	127	421	314	301	271	281	264	158	5470	161	99.0	
8	194	321	199	290	235	224	399	155	2960	151	100	
9	173	556	171	314	270	246	326	139	1470	198	83.1	
10	157	539	179	354	316	397	264	657	1640	174	76.0	
11	162	309	471	378	306	429	289	770	1010	116	84.2	
12	188	243	502	255	286	463	275	400	540	87.7	86.5	
13	327	222	429	225	339	332	614	5580	381	84.2	71.7	
14	320	188	415	237	375	292	565	1370	286	83.2	38.5	
15	232	170	348	231	419	266	360	572	257	70.9	48.6	
16	201	171	319	271	286	342	285	387	246	---	91.8	
17	168	166	315	330	261	363	343	294	235	44.0	68.9	
18	152	168	301	367	300	318	266	262	249	29.4	55.1	
19	142	225	267	366	300	303	200	229	216	---	53.5	
20	146	166	281	294	460	271	186	196	218	---	37.8	
21	151	147	291	251	670	261	174	175	274	---	22.3	
22	148	157	296	257	---	311	169	171	229	---	17.8	
23	150	160	282	254	485	321	194	208	426	---	---	
24	150	143	276	262	441	249	199	389	3460	---	---	
25	407	150	243	268	470	224	185	499	687	---	---	
26	381	185	242	263	423	228	243	405	333	---	---	
27	274	---	270	272	380	823	284	335	339	---	---	
28	246	155	286	248	338	642	234	320	338	26.4	---	
29	234	160	307	275	---	363	192	408	318	---	---	
30	222	165	337	301	---	330	182	511	310	---	---	
31	298	---	389	391	---	292	---	469	---	87.5	---	
MONTH	188	289	293	302	372	337	272	541	829	---	---	

07157980 CIMARRON RIVER AT FREEDOM, OKLA.--Continued

DISSOLVED CHLORIDE (CL), MG/L, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13000	10000	15000	7700	10000	6700	5800	10000	8000	2900	32000	
2	12000	7100	12000	10000	9200	6200	6400	15000	7200	2900	7400	
3	13000	13000	8400	8000	18000	5500	6000	14000	4700	3100	5400	
4	15000	13000	8300	8000	18000	11000	6200	9500	4800	3400	2500	
5	18000	7600	10000	8000	14000	11000	6300	9300	6100	3300	3200	
6	12000	6900	9000	7700	12000	7700	6700	11000	5700	3200	4100	
7	19000	7200	6600	8400	14000	5100	7800	8700	6000	3700	4100	
8	23000	7800	7100	6500	10000	5100	13000	6700	2300	3000	6800	
9	15000	14000	7900	6700	14000	6300	7900	9800	2700	8000	6800	
10	10000	14000	7000	7100	13000	10000	5200	13000	1500	7100	9200	
11	9800	10000	21000	8700	7900	9200	5000	8400	4700	6900	14000	
12	11000	7700	13000	11000	4600	8700	5600	9300	4700	6300	18000	
13	23000	7700	8900	13000	4600	6600	14000	4600	4500	7500	16000	
14	21000	8100	7600	11000	5000	5700	14000	4300	4700	10000	20000	
15	9700	7300	7000	6600	11000	5700	12000	5500	4200	12000	42000	
16	7500	7800	7000	6600	8300	8900	6100	6400	4500	---	39000	
17	7700	8200	7300	5200	13000	9200	5500	6100	5100	12000	38000	
18	8500	8700	7800	4800	16000	6500	6500	5900	6000	10000	39000	
19	8100	9100	6200	5700	13000	6100	6800	7100	4400	---	41000	
20	9200	7200	6500	6100	12000	5900	7300	8400	5200	---	32000	
21	11000	7600	6900	4800	9600	6100	8400	8900	9700	---	24000	
22	12000	8400	7800	6000	---	9000	8200	9700	5500	---	27000	
23	12000	8800	6900	6200	9900	9800	8800	13000	4100	---	---	
24	12000	7100	6900	7100	10000	5800	12000	12000	4400	---	---	
25	15000	6500	7500	7100	9000	5100	11000	13000	2600	---	---	
26	20000	7800	10000	6800	6400	5500	15000	13000	3100	---	---	
27	18000	---	12000	7400	6200	9300	15000	11000	4500	---	---	
28	15000	7100	10000	6300	6900	7000	13000	12000	3800	18000	---	
29	13000	7500	10000	7900	---	4300	12000	13000	2500	---	---	
30	12000	10000	8700	7000	---	5000	10000	13000	2500	---	---	
31	17000	---	7600	11000	---	5700	---	8200	---	27000	---	
MONTH	13600	8700	9000	7600	10600	7100	8900	9700	4700	---	---	

DISSOLVED CHLORIDE (CL), TONS PER DAY, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1610	3700	3480	4740	5020	3470	2820	2430	9940	2130	120000	
2	1330	3800	2590	5670	4370	2950	2950	7690	7780	1690	14200	
3	1260	7370	2270	5050	10800	2420	2580	8620	3860	1470	9840	
4	1300	15800	2400	4670	13600	5080	2660	3950	2800	1530	3240	
5	1460	8210	4050	4150	5670	6240	2770	3190	4740	1370	1560	
6	1300	6710	5390	3660	3890	4740	2710	3000	4920	1260	1230	
7	2620	5130	3640	4080	4800	2810	3430	2180	60800	1300	863	
8	4470	4170	2430	3370	3510	2240	6740	1590	16600	1050	1180	
9	3240	9980	2220	3690	4910	2770	4220	2060	9480	2590	991	
10	2350	9680	2150	4260	5410	5830	2700	11200	6480	2130	1090	
11	2410	4620	10200	5210	3970	6160	2840	10400	9520	1380	1510	
12	3000	3120	8700	4070	2680	6390	2900	5730	5080	987	1750	
13	7510	2850	5960	3900	3180	3850	10900	52400	3500	1050	1380	
14	6860	2490	5250	3770	3670	3140	10300	12300	2740	1240	810	
15	3400	2110	4200	2670	6770	2860	5830	5940	2250	1200	1130	
16	2510	2190	3860	3140	3830	4760	3160	4420	2260	---	2110	
17	2160	2190	3900	3370	4460	5220	3560	3260	2350	713	1540	
18	2090	2330	3920	3530	5790	3690	3090	2870	2770	432	1260	
19	1880	3190	3010	3940	5260	3360	2390	2800	1980	---	1220	
20	2060	2020	3260	3260	7780	2960	2310	2650	2220	---	864	
21	2410	1870	3470	2410	9750	2900	2360	2430	4030	---	486	
22	2460	2130	3790	2850	---	4370	2240	2510	2420	---	401	
23	2460	2230	3350	2860	7270	4760	2710	3650	3720	---	---	
24	2460	1740	3280	3200	6480	2680	3370	6480	31700	---	---	
25	7530	1740	3040	3260	6610	2240	3000	6770	4250	---	---	
26	8100	2400	3620	3140	4840	2360	4500	7020	2340	---	---	
27	5540	---	4440	3420	4290	11800	5260	5200	3110	---	---	
28	4620	1900	4270	2840	4020	7750	4110	5180	2790	535	---	
29	4000	2000	4510	3560	---	3250	3210	7160	1890	---	---	
30	3690	2430	4650	3630	---	3240	2670	6990	1890	---	---	
31	5970	---	4920	6060	---	3140	---	6200	---	1970	---	
MONTH	3360	4140	4070	3790	5650	4180	3810	6850	7340	---	---	

07157980 CIMARRON RIVER AT FREEDOM, OKLA.--Continued

DISSOLVED SOLIDS (RESIDUE AT 180 DEG. C), MG/L, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22800	18200	26900	13900	18300	12400	10800	18300	14300	5460	57400	
2	20800	13000	21800	18600	16500	11400	11800	26000	13100	5450	13500	
3	23800	23200	14900	14300	31700	10200	11000	25500	8610	5710	9970	
4	27100	22700	14800	14300	31700	20400	11400	17000	8940	6410	4690	
5	30900	13800	18300	14300	25200	19200	11600	16600	11200	6100	5990	
6	21000	12700	16100	13900	21900	13900	12400	19600	10500	5920	7620	
7	33600	13200	12200	15000	25400	9500	14000	15600	11000	6950	7550	
8	40100	14000	13100	12000	17900	9430	24100	12300	4420	5630	12600	
9	26000	25200	14200	12300	24400	11600	14200	17500	5060	14300	12500	
10	18000	24800	12900	13100	23700	18600	9570	23700	2940	13000	16400	
11	17400	18100	36900	15500	14100	16400	9270	15000	8760	12700	25000	
12	19500	13900	23300	19000	8560	15600	10300	16600	8760	11600	31600	
13	41400	13900	16000	23200	8490	12200	25600	8560	8430	13600	28300	
14	37600	14400	13700	19200	9230	10600	24200	7960	8640	17800	35900	
15	17300	13300	12800	12200	18900	10400	22200	10200	7750	20700	76200	
16	13600	14100	12900	12100	14800	16000	11300	11800	8410	---	70300	
17	13900	14600	13400	9630	23700	16400	10200	11200	9410	22200	69800	
18	15200	15500	14000	8960	28100	12000	12000	10900	11000	18700	71600	
19	14400	16300	11500	10400	22700	11300	12500	13100	8160	---	75000	
20	16500	13300	12000	11300	20600	10800	13400	14900	9570	---	58600	
21	19100	13800	12800	8900	17200	11200	14900	15900	17300	---	43500	
22	21100	15000	14000	11000	---	16100	14700	17300	10100	---	49000	
23	21800	15700	12700	11400	17600	17400	15700	22600	7620	---	---	
24	21800	13000	12700	13000	18700	10600	20700	21300	8160	---	---	
25	27000	12000	13700	13000	16000	9430	18800	22500	4870	---	---	
26	35100	14000	17800	12500	11700	10200	26800	22800	5840	---	---	
27	32200	---	21500	13500	11500	16600	26700	20500	8290	---	---	
28	26200	13000	17900	11600	12700	12800	22500	22200	7020	31700	---	
29	23500	13600	18700	14200	---	8020	21200	22700	4760	---	---	
30	20900	18400	15500	12800	---	9180	18600	22600	4750	---	---	
31	29200	---	13700	20300	---	10600	---	14600	---	48200	---	
MONTH	24150	15750	16220	13720	18940	12920	16080	17330	8590	---	---	

DISSOLVED SOLIDS (TONS PER DAY), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2830	6730	6250	8560	9190	6430	5250	4450	17800	4010	215000	
2	2300	6950	4710	10500	7840	5420	5450	13300	14100	3180	26000	
3	2310	13200	4020	9030	19000	4490	4720	15700	7070	2710	18200	
4	2340	27600	4280	8340	24000	9420	4890	7070	5210	2890	6080	
5	2500	14900	7410	7410	10200	10900	5110	5690	8710	2540	2910	
6	2270	12300	9650	6610	7100	8560	5020	5340	9070	2330	2280	
7	4630	9410	6720	7290	8710	5230	6160	3920	111000	2440	1590	
8	7800	7480	4490	6220	6280	4150	12500	2920	31900	1980	2180	
9	5620	18000	3990	6770	8560	5110	7590	3690	17800	4630	1820	
10	4230	17100	3970	7850	9850	10800	4960	20500	12700	3900	1950	
11	4280	8360	17900	9290	7080	11000	5260	18600	17700	2540	2700	
12	5320	5630	15600	7030	4990	11500	5340	10200	9460	1820	3070	
13	13500	5140	10700	6950	5870	7120	19900	97500	6560	1910	2450	
14	12300	4430	9470	6580	6780	5840	17800	22800	5040	2210	1450	
15	6070	3840	7670	4940	11600	5220	10800	11000	4140	2070	2060	
16	4550	3960	7110	5750	6830	8550	5860	8160	4220	---	3800	
17	3900	3900	7160	6240	8130	9300	6610	5990	4340	1320	2830	
18	3730	4140	7030	6580	10200	6800	5700	5300	5080	808	2320	
19	3340	5720	5590	7190	9190	6220	4390	5160	3680	---	2230	
20	3700	3730	6030	6040	13300	5420	4230	4710	4080	---	1580	
21	4180	3390	6430	4470	17500	5320	4180	4340	7190	---	881	
22	4330	3810	6600	5230	---	7820	4010	4480	4450	---	728	
23	4470	3980	6170	5260	12900	6460	4830	6350	6910	---	---	
24	4470	3190	6040	5860	12100	4890	5810	11500	58800	---	---	
25	13600	3210	5550	6000	11800	4150	5130	15200	7970	---	---	
26	14200	4310	6440	5770	8850	4380	8030	12300	4420	---	---	
27	9910	---	7950	6230	7950	21000	9370	9690	5730	---	---	
28	8060	3470	7640	5230	7410	14200	7110	9590	5160	941	---	
29	7230	3640	6430	6400	---	6060	5670	12500	3600	---	---	
30	6430	4470	8290	6640	---	5950	4970	15600	3590	---	---	
31	10200	---	6880	11200	---	5840	---	11000	---	3510	---	
MONTH	5950	7450	7370	6890	10120	7600	6890	12400	13580	---	---	

07157980 CIMARRON RIVER AT FREEDOM, OKLA.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	31700	26410	36400	21200	26500	19000	16600	26500	21780	8680	71600	
2	29400	19890	30600	26800	24400	17500	18100	35400	20130	8670	20600	
3	32820	32200	22600	21900	42000	15700	17000	34800	13380	9050	15400	
4	36660	31600	22500	21900	42000	28900	17600	25000	13860	10100	7530	
5	41080	21100	26500	21800	34500	27600	17760	24500	17260	9640	9470	
6	29620	19500	24000	21300	30700	21200	19050	28000	16200	9370	11900	
7	44220	20200	18700	22670	34700	14700	21400	23400	16900	10900	11800	
8	51620	21400	20000	18370	26000	14600	33200	18900	7130	8940	19300	
9	35440	34500	21700	18900	33600	17900	21700	25550	8090	21800	19200	
10	26160	34000	19800	20100	32700	26900	14800	32700	4930	19900	24300	
11	25500	26300	48000	23300	21600	24300	14360	22700	13600	19500	34200	
12	27900	21300	32300	27300	13300	23400	15900	24500	13600	17900	41900	
13	53220	21300	23800	32200	13200	18700	34900	13300	13100	20800	38000	
14	48740	22000	21000	27500	14300	16300	33300	12400	13420	25900	46800	
15	25300	20400	19600	18700	27200	16100	31000	15800	12090	29300	93400	
16	20800	21500	19800	18600	22500	23800	17410	18120	13080	---	86600	
17	21200	22200	20500	14900	32700	24300	15700	17270	14570	31000	86000	
18	22900	23300	21400	13900	37800	16430	18380	16780	16900	27000	88100	
19	22000	24200	17630	16100	31600	17410	19100	20000	12700	---	92000	
20	24400	20300	18440	17410	29200	16690	20500	22600	14600	---	73000	
21	27400	21100	19570	13800	25200	17280	22600	23700	25400	---	55600	
22	29740	22700	21470	17000	---	24000	22300	25400	15600	---	62000	
23	30600	23500	19510	17600	25700	25500	23500	31500	11900	---	---	
24	30600	19900	19400	19900	27000	16400	29300	30000	12700	---	---	
25	36600	18400	20900	19900	23900	14600	27100	31300	7800	---	---	
26	45900	21400	25900	19100	18000	15700	36300	31700	9250	---	---	
27	42500	---	30200	20600	17700	24500	36200	29000	12900	---	---	
28	35600	19900	26000	17800	19400	19600	31400	31000	11000	42000	---	
29	32500	20800	27000	21700	---	12500	29800	31600	7640	---	---	
30	29500	26600	23300	19600	---	14220	26900	31500	7620	---	---	
31	39100	---	21010	28800	---	16300	---	22260	---	61000	---	
MONTH	33250	23380	23860	20670	26940	19480	23440	25070	13310	---	---	

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18.5	13.5	1.0	2.5	2.0	14.0	5.5	15.5	22.0	25.0	30.0	
2	16.0	13.5	5.0	2.5	2.5	12.0	3.0	16.0	21.5	30.0	30.0	
3	18.0	12.5	1.0	1.5	3.0	4.0	6.0	20.5	23.5	27.0	24.0	
4	19.0	10.0	3.0	1.5	5.0	5.0	9.0	20.0	22.5	28.0	31.0	
5	20.5	9.5	6.0	2.5	1.0	17.0	12.5	20.5	26.0	31.0	31.0	
6	15.0	9.5	7.5	3.0	0.0	16.0	13.5	20.5	26.0	35.0	27.0	
7	13.0	11.0	6.5	5.0	2.0	13.0	12.0	17.5	24.0	30.0	27.0	
8	15.0	11.5	4.5	6.0	1.0	10.0	11.5	19.5	24.0	32.0	30.0	
9	18.5	12.0	3.5	7.5	1.0	4.0	12.5	20.5	23.0	36.0	27.0	
10	19.0	12.0	3.5	3.0	2.0	4.0	11.5	18.5	19.0	31.0	23.0	
11	20.0	9.5	4.5	0.5	4.0	4.0	11.0	21.5	19.0	27.0	26.0	
12	18.0	6.5	5.0	0.5	5.0	2.0	12.0	19.5	23.0	30.0	25.0	
13	15.0	8.5	5.0	0.5	6.0	7.5	10.5	16.0	25.5	22.0	26.0	
14	12.0	6.0	4.5	0.5	3.0	11.0	13.0	19.5	25.0	28.0	30.0	
15	12.0	6.0	2.5	3.0	2.0	4.0	16.5	22.0	24.0	26.0	31.0	
16	15.0	8.5	2.0	3.0	2.0	6.0	18.5	20.0	24.5	---	31.0	
17	17.0	9.5	3.0	3.0	4.0	8.5	17.5	21.0	23.5	27.0	30.0	
18	17.0	11.0	3.5	5.0	3.0	12.5	14.0	22.0	24.5	27.0	29.0	
19	15.5	11.0	3.5	5.5	7.0	13.0	13.0	22.5	23.5	---	24.0	
20	14.5	8.5	3.5	4.5	9.0	15.0	14.5	22.0	24.0	---	30.0	
21	15.0	9.5	4.5	5.0	6.0	13.5	15.5	23.5	23.5	---	28.5	
22	14.5	10.5	6.0	2.0	---	13.0	15.5	21.5	24.0	---	30.0	
23	16.5	9.5	3.5	4.0	5.0	11.5	21.5	22.0	26.0	---	---	
24	17.5	7.0	2.0	6.0	5.0	7.0	22.0	22.5	25.5	---	---	
25	17.0	11.5	1.5	6.5	11.0	9.5	21.0	23.0	26.0	---	---	
26	15.0	13.0	1.5	5.5	10.0	6.0	16.5	21.0	25.0	---	---	
27	15.5	10.5	3.0	4.0	10.0	10.5	20.0	22.0	26.5	---	---	
28	16.5	8.5	3.5	4.0	9.0	3.5	24.0	21.5	26.0	29.0	---	
29	16.0	3.0	4.5	4.0	---	2.5	22.0	21.0	27.0	26.0	---	
30	17.0	1.0	3.0	3.5	---	5.5	21.0	17.5	25.5	24.5	---	
31	14.5	---	4.0	2.5	---	10.0	---	20.5	---	---	---	
MONTH	16.0	9.5	3.5	3.5	4.5	9.0	14.5	20.5	24.0	---	---	

07158000 CIMARRON RIVER NEAR WAYNOKA, OKLA.

LOCATION.--Lat 36°31'02", long 98°52'45", near center of sec.35, T.24 N., R.16 W., Woods County, at gaging station at bridge on U.S. Highway 281, 0.8 mi (1.39 km) downstream from Main Creek, 5 mi (8.0 km) south of Waynoka, and at mile 247.0 (397.4 km).

DRAINAGE AREA.--13,334 mi^2 (34,535 km^2), of which 4,830 mi^2 (12,510 km^2) is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: October 1952 to September 1963, July 1968 to current year.
Water temperatures: July 1968 to current year.

EXTREMES, Current year.--Specific conductance: Maximum daily, 66,800 micromhos/cm Nov. 19; minimum daily, 5,460 micromhos/cm Aug. 4.
Water temperatures: Maximum, 32.0°C Aug. 14; minimum, freezing point Feb. 5-7, 15-16.

Period of record.--Specific conductance: Maximum daily, 102,000 micromhos/cm Oct. 10, 1970; minimum daily, 1,260 micromhos/cm May 11, 1973.
Water temperatures: Maximum, 34.5°C July 22, 1969; minimum, freezing point on several days during winter months.

REMARKS.--Continuous monitor records for specific conductance and water temperature are collected for this station. Temperature records for Nov. 13-19, Feb. 2-Mar. 5, Mar. 26-29, and Apr. 23-June 1 were poor. Once-daily temperature values were used in their place. Records of maximum and minimum specific conductance values are available in district office in Oklahoma City, Okla. No flow Aug. 22-Sept. 30.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
OCT.											
05...	0755	35	380	110	6400	--	205	0	168	1000	10000
15...	0900	106	300	90	6200	--	182	0	149	750	10000
26...	1020	308	290	90	7300	--	165	0	135	750	11000
NOV.											
05...	0830	449	220	63	4900	--	148	0	121	570	7700
15...	1330	219	290	89	5400	--	203	0	167	820	8400
26...	1650	172	290	83	5000	--	229	--	188	810	7500
DEC.											
05...	0918	185	350	130	6000	13	224	0	184	850	9400
15...	0922	214	260	98	--	11	218	0	179	690	7900
24...	1010	224	270	100	5200	12	168	0	138	750	8300
JAN.											
05...	1050	320	240	95	6000	10	239	0	196	720	9200
15...	0925	214	300	110	6600	12	272	0	223	820	10000
25...	1430	243	280	85	4600	9.7	239	0	196	470	7200
FEB.											
05...	1130	348	340	120	9100	12	227	0	186	830	14000
15...	0924	274	220	76	3500	8.7	244	0	200	630	5200
25...	1000	348	290	94	6100	10	240	0	197	740	9700
MAR.											
05...	1525	290	300	94	5700	13	219	0	180	750	8700
15...	1300	341	260	93	4100	11	237	0	194	660	6100
25...	1545	236	260	89	4100	9.6	218	0	179	760	6100
APR.											
05...	0925	229	28	97	4100	9.0	228	0	187	830	6200
15...	1945	313	330	110	6900	11	208	0	171	980	11000
25...	1700	123	320	110	6900	12	194	0	159	1000	11000
MAY											
05...	0800	137	340	120	6100	12	182	0	149	1000	9400
15...	0830	1210	210	59	2800	9.0	151	0	124	590	4200
25...	1000	535	340	77	4300	12	148	0	121	880	6600
JUNE											
01...	1600	789	240	70	3500	10	195	0	160	680	5600
23...	1700	224	260	80	3600	12	188	0	154	790	5800
AUG.											
06...	0900	219	94	32	1400	13	188	--	154	--	2100
15...	1215	21	290	91	5400	18	163	0	134	740	8400

07158000 CIMARRON RIVER NEAR WAYNOKA, OKLA.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	CARBON DIOXIDE (CO2) (MG/L)
OCT.											
05...	.14	20900	28.4	1980	1400	1200	--	74	28600	8.2	2.1
15...	.10	18100	24.6	5180	1100	970	--	81	25600	8.0	2.9
26...	.10	21100	28.7	17500	1100	960	--	96	29200	7.8	4.2
NOV.											
05...	.47	13700	18.6	16600	810	690	--	75	20300	8.1	1.9
15...	.28	15400	20.9	9110	1100	920	--	71	22300	8.0	3.2
26...	.18	14100	19.2	6550	1100	880	--	67	20600	8.4	1.5
DEC.											
05...	--	16900	23.0	8440	1400	1200	90	70	23800	8.0	3.6
15...	--	14100	19.2	8150	1100	870	--	--	20800	7.9	4.4
24...	--	14500	19.7	8770	1100	950	91	69	21200	8.1	2.1
JAN.											
05...	--	--	--	--	990	790	93	83	27200	7.3	19
15...	--	18500	25.2	10700	1200	980	92	83	26200	7.8	6.9
25...	--	13100	17.8	8600	1100	900	90	62	19500	8.0	3.8
FEB.											
05...	--	25000	34.0	23500	1300	1200	94	108	--	8.2	2.3
15...	--	9840	13.4	7280	860	660	90	52	15000	8.2	2.5
25...	--	17400	23.7	16300	1100	910	92	80	24500	8.0	3.8
MAR.											
05...	--	16200	22.0	12700	1100	960	91	74	23200	7.7	7.0
15...	--	11400	15.5	10500	1000	840	90	56	17200	8.0	3.8
25...	--	11900	16.2	7580	1000	840	90	56	17600	7.9	4.4
APR.											
05...	--	12100	16.5	7480	470	280	95	82	17800	7.8	5.8
15...	--	19700	26.8	16600	1300	1100	92	84	27500	8.1	2.6
25...	--	19600	26.7	6510	1300	1100	92	85	27300	8.1	2.5
MAY											
05...	--	17700	24.1	6550	1300	1200	91	72	25000	8.2	1.8
15...	--	--	--	--	770	640	89	44	12600	8.1	1.9
25...	--	12700	17.3	18300	1200	1000	89	55	17600	7.0	24
JUNE											
01...	--	10100	13.7	21500	890	730	89	51	15300	7.5	9.9
23...	--	10600	14.4	6410	980	820	89	50	15900	7.5	9.5
AUG.											
06...	--	--	--	--	370	210	89	32	7090	--	--
15...	--	16200	22.0	919	1100	970	91	71	23300	7.7	5.2

07158000 CIMARRON RIVER NEAR WAYNOKA, OKLA.--Continued

DISSOLVED SULFATE (SO4), MG/L, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	970	520	920	720	1000	660	660	820	650	---	640	
2	960	480	1000	750	830	720	690	820	---	---	490	
3	960	540	760	740	790	700	720	860	---	---	450	
4	920	750	840	940	810	660	700	970	620	---	450	
5	920	720	820	830	1000	790	690	840	630	---	460	
6	980	750	780	780	980	790	710	840	---	---	460	
7	980	730	770	810	920	770	700	850	---	---	530	
8	1000	740	750	820	900	720	690	890	---	---	580	
9	990	620	760	770	940	660	670	720	---	---	620	
10	1100	800	740	720	860	690	910	750	---	---	660	
11	1100	800	680	750	670	900	810	950	---	---	710	
12	880	880	1000	920	870	940	660	720	---	---	770	
13	870	880	910	820	630	740	630	570	---	---	750	
14	850	790	880	850	600	720	640	580	---	---	800	
15	860	790	830	870	650	710	900	590	---	740	800	
16	910	780	620	830	750	670	890	640	---	---	840	
17	910	780	740	780	880	680	880	650	---	610	1100	
18	800	780	750	740	830	700	710	650	---	---	1000	
19	800	1700	770	620	900	730	670	650	650	620	960	
20	870	1600	780	690	900	710	740	700	650	640	930	
21	870	780	710	660	910	640	740	710	---	650	670	
22	870	950	730	700	820	680	740	720	---	660	---	
23	870	640	740	720	800	770	810	710	660	640	---	
24	880	800	810	710	750	820	800	810	---	630	---	
25	880	800	880	730	860	630	890	700	---	640	---	
26	930	760	730	780	740	640	860	630	---	---	---	
27	930	760	790	760	690	580	840	750	---	---	---	
28	1100	770	800	740	680	820	860	750	---	---	---	
29	1100	840	830	720	---	750	1000	580	---	780	---	
30	950	770	840	710	---	580	950	580	---	---	---	
31	950	---	800	690	---	630	---	720	---	---	---	
MONTH	930	810	800	760	820	720	770	730	---	---	---	

DISSOLVED SULFATE (SO4), TONS PER DAY, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	141	177	430	542	842	602	506	208	1380	---	55.3	
2	135	286	413	537	661	597	496	210	---	---	1020	
3	122	2300	339	555	636	544	478	330	---	---	530	
4	96.9	812	386	799	713	506	452	411	730	---	1090	
5	89.4	824	405	708	929	619	421	311	968	---	481	
6	103	923	383	644	820	629	424	263	---	---	258	
7	127	773	459	643	604	603	410	227	---	---	203	
8	189	675	448	629	668	544	468	202	---	---	172	
9	184	541	404	578	624	499	467	154	---	---	166	
10	247	704	382	502	495	594	580	255	---	---	143	
11	255	613	406	524	452	841	549	575	---	---	119	
12	209	570	645	546	651	904	447	381	---	---	95.6	
13	303	499	572	418	553	725	418	3970	---	---	26.3	
14	294	442	530	450	483	677	517	4450	---	---	25.9	
15	239	469	459	498	479	642	666	1620	---	186	36.7	
16	263	461	308	498	571	595	603	1090	---	---	61.2	
17	248	449	364	484	584	584	592	818	---	102	86.1	
18	171	446	375	575	511	571	470	691	---	---	45.9	
19	147	881	410	480	588	585	393	621	460	70.3	20.0	
20	146	786	428	499	637	537	374	542	491	62.2	4.02	
21	146	373	426	468	867	458	314	462	---	54.4	1.66	
22	153	439	428	471	837	487	270	422	---	44.6	---	
23	167	285	440	484	804	541	306	452	412	41.5	---	
24	188	365	483	479	701	553	292	560	---	68.0	---	
25	219	372	535	483	824	408	296	1080	---	69.1	---	
26	615	355	420	529	739	394	281	505	---	---	---	
27	392	376	459	495	700	476	283	405	---	---	---	
28	383	380	458	478	657	945	283	383	---	---	---	
29	380	422	477	482	---	723	313	1490	---	61.1	---	
30	308	410	474	500	---	537	262	2190	---	---	---	
31	321	---	516	553	---	521	---	1430	---	---	---	
MONTH	225	580	441	533	665	595	421	862	---	---	---	

07158000 CIMARRON RIVER NEAR WAYNOKA, OKLA.--Continued

DISSOLVED CHLORIDE (CL), MG/L, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12000	2400	11000	7000	13000	5700	5600	9000	5300	---	5000	
2	12000	1700	13000	7500	9200	6800	6300	9000	---	---	1800	
3	12000	2900	7800	7200	8400	6400	6800	9900	---	---	1000	
4	11000	7500	9500	12000	8900	5500	6400	12000	4600	---	970	
5	11000	6900	9000	9300	13000	8500	6200	9600	4900	---	1200	
6	13000	7600	8200	8100	13000	8400	6600	9500	2700	---	1200	
7	13000	7200	7900	8800	11000	8000	6400	9600	2800	---	2700	
8	13000	7200	7600	9000	11000	6800	6200	11000	2800	---	3900	
9	13000	4800	7800	8000	12000	5600	5700	6800	---	---	4700	
10	16000	8600	7200	6800	9900	6100	11000	7600	---	---	5600	
11	16000	8500	5900	7400	5800	11000	8800	12000	---	---	6700	
12	10000	10000	13000	11000	10000	12000	5600	6900	---	---	8000	
13	10000	10000	11000	9000	4800	7300	4800	3700	---	---	7600	
14	9800	8400	10000	9700	4300	6800	5100	3700	---	---	8600	
15	9800	8400	9300	10000	5300	6500	11000	4100	---	7400	8700	
16	11000	8200	4600	9200	7500	5700	11000	5100	---	---	9500	
17	11000	8300	7200	8200	10000	6100	10000	5300	---	4400	14000	
18	8600	8200	7600	7400	9300	6400	6600	5300	---	---	13000	
19	8600	28000	7900	4600	11000	7000	5700	5300	5200	4700	12000	
20	10000	27000	8200	6200	11000	6500	7200	6400	5400	5100	11000	
21	10000	8200	6700	6000	11000	5200	7200	6700	---	5300	5800	
22	10000	12000	7200	6500	9100	6000	7400	6900	---	5500	---	
23	10000	5100	7200	6800	8500	8000	8900	6500	5600	5200	---	
24	10000	8600	8700	6600	7600	9000	8700	8800	---	5000	---	
25	10000	8600	10000	7200	9800	4800	11000	6300	---	5100	---	
26	11000	7600	7000	8100	7300	5200	10000	5000	---	---	---	
27	11000	7800	8400	7700	6200	3900	9500	7500	---	---	---	
28	15000	8000	8700	7300	5900	9100	10000	7600	---	---	---	
29	15000	9400	9400	6900	---	7500	13000	3800	---	8300	---	
30	12000	7900	9600	6600	---	3700	12000	3800	---	---	---	
31	12000	---	8700	6200	---	5000	---	6900	---	---	---	
MONTH	11500	8800	8600	7800	9100	6800	8000	7100	---	---	---	

DISSOLVED CHLORIDE (CL), TONS PER DAY, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1750	816	5140	5270	11000	5200	4290	2280	11200	---	432	
2	1680	1010	5370	5370	7330	5640	4520	2310	---	---	3750	
3	1520	12400	3470	5400	6760	4980	4520	3800	---	---	1180	
4	1160	8120	4360	10200	7830	4220	4130	5090	5420	---	2340	
5	1070	7900	4450	7930	12100	6660	3780	3550	7530	---	1250	
6	1370	9360	4030	6690	10900	6690	3940	2980	5560	---	674	
7	1680	7620	4710	6990	7220	6260	3750	2570	28500	---	1040	
8	2460	6570	4530	6900	8170	5140	4200	2490	53600	---	1160	
9	2420	4190	4150	6000	7970	4230	3970	1450	---	---	1260	
10	3590	7570	3710	4740	5690	5250	7010	2590	---	---	1210	
11	3720	6520	3520	5170	3920	10300	5960	7260	---	---	1120	
12	2380	6480	8390	6530	7480	11500	3800	3650	---	---	994	
13	3480	5670	6920	4590	4210	7150	3190	25800	---	---	267	
14	3390	4690	6020	5130	3460	6390	4120	28400	---	---	279	
15	2730	4990	5150	5720	3910	5880	8140	11300	---	1860	399	
16	3180	4850	2290	5510	5710	5060	7450	8650	---	---	693	
17	3000	4770	3540	5090	6640	5240	6720	6670	---	737	1100	
18	1830	4690	3800	5750	5730	5220	4370	5640	---	---	597	
19	1580	14500	4200	3560	7190	5610	3340	5070	3680	533	249	
20	1670	13300	4490	4490	7780	4910	3640	4960	4080	496	47.5	
21	1670	3920	4020	4130	10500	3720	3050	4360	---	444	14.4	
22	1760	5540	4220	4370	9290	4290	2700	4040	---	371	---	
23	1920	2270	4280	4570	8540	5620	3360	4140	3490	337	---	
24	2130	3920	5190	4450	7100	6070	3170	6080	---	540	---	
25	2480	3990	6070	4760	9390	3110	3650	9700	---	551	---	
26	7280	3550	4030	5490	7290	3200	3270	4010	---	---	---	
27	4630	3850	4880	5010	6290	3210	3210	4050	---	---	---	
28	5220	3950	4980	4710	5530	10500	3290	3880	---	---	---	
29	5180	4720	5410	4620	---	7230	4070	9790	---	650	---	
30	3890	4200	5420	4650	---	3430	3300	14400	---	---	---	
31	4050	---	5610	4970	---	4130	---	13700	---	---	---	
MONTH	2770	5860	4720	5440	7320	5660	4260	6920	---	---	---	

07158000 CIMARRON RIVER NEAR WAYNOKA, OKLA.--Continued

DISSOLVED SOLIDS (RESIDUE AT 180 DEG. C), MG/L, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22700	5470	20700	12800	24100	10600	10400	16500	10000	---	9610	
2	22500	4370	24100	13700	17000	12400	11600	16500	---	---	4420	
3	22500	6250	14300	13200	15500	11800	12400	18300	---	---	3270	
4	20800	13700	17600	21600	16500	10400	11800	23000	8920	---	3180	
5	20700	12700	16700	17200	24700	15600	11400	17700	9470	---	3550	
6	23400	14000	15100	14900	23400	15500	12100	17600	---	---	3540	
7	23400	13100	14500	16200	20700	14700	11800	17800	---	---	5900	
8	24200	13200	14000	16500	20100	12500	11500	19600	---	---	7800	
9	23900	9190	14400	14800	21400	10500	10700	12500	---	---	9050	
10	28900	15800	13200	12400	18300	11300	20500	13900	---	---	10500	
11	29000	15700	10900	13600	10800	20000	16200	22100	---	---	12200	
12	19000	19100	24100	20700	18600	21400	10400	12600	---	---	14700	
13	18800	19100	20400	16500	9260	13400	9230	7450	---	---	14000	
14	18000	15500	19100	17900	8430	12500	9750	7520	---	---	15900	
15	18200	15500	17100	18700	9960	12000	19800	8150	---	13500	16000	
16	20500	15100	8990	17000	13800	10700	19600	9750	---	---	17500	
17	20400	15200	13200	15100	19200	11200	19300	10000	---	8570	26600	
18	15900	15000	13900	13600	17100	11800	12100	9960	---	---	23900	
19	15800	52500	14500	8990	20000	12900	10700	9960	9940	9050	22500	
20	18600	50100	15000	11400	20000	12000	13300	11800	10200	9750	21100	
21	18600	15100	12300	11100	20200	9870	13300	12200	---	10100	10900	
22	18700	22100	13100	11900	16900	11200	13500	12600	---	10300	---	
23	18700	9750	13200	12400	15700	14800	16400	12000	10400	9820	---	
24	19000	15800	16100	12100	14000	16500	16000	16200	---	9470	---	
25	19200	15900	19000	13100	18200	9260	19600	11600	---	9640	---	
26	21200	14000	12900	14900	13500	9820	18500	9540	---	---	---	
27	21200	14300	15500	14100	11400	7730	17600	13700	---	---	---	
28	28800	14800	16000	13500	10900	16800	18500	13900	---	---	---	
29	28700	17500	17300	12600	---	13800	23900	7660	---	15200	---	
30	22200	14600	17700	12100	---	7520	22000	7660	---	---	---	
31	22100	---	16000	11400	---	9470	---	12600	---	---	---	
MONTH	21470	16480	15840	14390	16770	12580	14800	13300	---	---	---	

DISSOLVED SOLIDS (TONS PER DAY), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3310	1860	9670	9640	20300	9670	7970	4190	21200	---	830	
2	3160	2610	9960	9800	13500	10300	8330	4230	---	---	9210	
3	2860	26700	6370	9910	12500	9180	8240	7020	---	---	3850	
4	2190	14800	8080	18400	14500	7970	7610	9750	10500	---	7680	
5	2010	14500	8250	14700	22900	12200	6960	6550	14500	---	3710	
6	2460	17200	7420	12300	19600	12300	7220	5510	---	---	1990	
7	3030	13900	8650	12900	13600	11500	6910	4760	---	---	2260	
8	4570	12000	8350	12700	14900	9450	7790	4450	---	---	2320	
9	4450	8010	7660	11100	14200	7940	7450	2670	---	---	2420	
10	6480	13900	6810	8640	10500	9730	13100	4730	---	---	2270	
11	6730	12000	6500	9510	7290	18700	11000	13400	---	---	2040	
12	4510	12400	15600	12300	13900	20600	7050	6670	---	---	1830	
13	6550	10800	12800	8420	8130	13100	6130	51900	---	---	491	
14	6220	8660	11500	9470	6780	11700	7870	57700	---	---	515	
15	5060	9210	9460	10700	7340	10900	14600	22400	---	3390	734	
16	5920	8930	4470	10200	10500	9500	13300	16500	---	---	1280	
17	5560	8740	6490	9380	12800	9620	13000	12600	---	1430	2080	
18	3390	8590	6940	10600	10500	9620	8000	10600	---	---	1100	
19	2900	27200	7710	6970	13100	10300	6270	9520	7030	1030	468	
20	3110	24600	8220	8250	14100	9070	6720	9140	7710	948	91.2	
21	3110	7220	7370	7640	19300	7060	5640	7940	---	845	27.1	
22	3280	10200	7680	8000	17200	8010	4920	7380	---	695	---	
23	3580	4340	7840	8340	15800	10400	6200	7650	6490	636	---	
24	4050	7210	9610	8170	13100	11100	5830	11200	---	1020	---	
25	4770	7380	11500	8670	17400	6000	6510	17900	---	1040	---	
26	14000	6540	7420	10100	13500	6050	6040	7650	---	---	---	
27	8930	7070	9000	9170	11600	6370	5940	7400	---	---	---	
28	10000	7310	9160	8710	10200	19400	6090	7090	---	---	---	
29	9920	8790	9950	8440	---	13300	7490	19700	---	1190	---	
30	7190	7770	9990	8530	---	6960	6060	29000	---	---	---	
31	7460	---	10300	9140	---	7820	---	25000	---	---	---	
MONTH	5190	11010	8730	10030	13540	10510	7870	13300	---	---	---	

07158000 CIMARRON RIVER NEAR WAYNOKA, OKLA.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	31000	8760	28600	19060	32700	16100	15900	23600	15300	---	14700	
2	30800	7170	32700	20190	24200	18600	17500	23600	---	---	7250	
3	30800	9880	20900	19640	22300	17800	18600	25700	---	---	5600	
4	28700	20200	24900	29690	23500	15800	17800	31400	13700	---	5460	
5	28600	19000	23800	24350	33400	22510	17330	25000	14490	---	5990	
6	31900	20500	21900	21680	31800	22300	18320	24900	---	---	5980	
7	31800	19500	21140	23140	28600	21400	17840	25100	---	---	9370	
8	32800	19600	20500	23580	27900	18700	17380	27300	---	---	12100	
9	32400	14100	21000	21470	29500	16000	16210	18700	---	---	13900	
10	38500	22700	19600	18680	25700	17100	28400	20400	---	---	16000	
11	38600	22600	16600	20100	16400	27800	23200	30300	---	---	18400	
12	26600	26700	32700	28600	26100	29500	15900	18900	---	---	21430	
13	26300	26700	28250	23600	14200	19800	14150	11600	---	---	20500	
14	25400	22400	26730	25200	13000	16800	14900	11700	---	---	22800	
15	25600	22300	24270	26200	15200	16100	27500	12600	---	20000	22910	
16	28400	21900	13800	24100	20290	16300	27300	14900	---	---	24800	
17	28200	22000	19600	21900	26850	17040	26900	15300	---	13200	35700	
18	22800	21800	20400	20020	24300	17800	18300	15200	---	---	32500	
19	22700	66800	21200	13800	27800	19180	16300	15200	15160	13900	30800	
20	26100	64000	21800	17250	27800	18100	19700	17800	15500	14900	29100	
21	26100	21900	18480	16900	28050	15080	19700	18400	---	15400	16500	
22	26200	30300	19500	17930	24000	16930	20000	18900	---	15700	---	
23	26200	14900	19600	18600	22600	21500	23400	18100	15900	15000	---	
24	26600	22700	23100	18300	20500	23600	22900	23200	---	14500	---	
25	26800	22800	26550	19500	25600	14200	27300	17600	---	14730	---	
26	29200	20600	19200	21600	19900	15000	26000	14600	---	---	---	
27	29200	20900	22300	20700	17300	12000	24900	20200	---	---	---	
28	38300	21500	23000	19900	16600	23900	25900	20400	---	---	---	
29	38200	24700	24500	18830	---	20300	32500	11900	---	22000	---	
30	30400	21300	25000	18300	---	11700	30200	11900	---	---	---	
31	30300	---	22900	17300	---	14500	---	16900	---	---	---	
MONTH	29530	23340	22730	20970	23790	18630	21410	19460	---	---	---	

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22.5	17.0	2.0	4.5	7.0	14.0	8.5	13.0	28.0	---	29.0	
2	17.0	16.0	3.5	4.5	5.0	5.0	7.0	17.0	---	---	29.5	
3	18.5	14.0	4.0	3.5	4.0	4.0	8.5	26.0	---	---	28.5	
4	19.5	12.0	6.0	3.5	6.0	9.0	10.5	14.0	---	---	29.5	
5	20.0	12.5	9.0	4.0	0.0	15.0	12.5	23.0	---	---	---	
6	15.0	13.0	9.5	4.5	0.0	14.0	14.5	21.0	---	---	24.5	
7	13.5	13.0	7.5	6.5	0.0	10.0	12.0	25.5	---	---	27.5	
8	16.0	13.0	3.5	8.0	1.0	9.5	15.0	15.0	---	---	29.0	
9	19.0	14.5	4.0	9.5	1.0	6.5	14.5	26.5	---	---	26.5	
10	19.5	16.0	4.5	5.5	3.5	5.0	15.5	17.0	---	---	28.5	
11	21.0	15.5	5.5	2.0	1.5	4.5	13.5	23.0	---	---	29.5	
12	18.5	12.0	6.5	1.5	3.0	4.5	14.5	20.0	---	---	29.0	
13	15.0	7.0	6.5	1.5	7.0	8.5	14.5	15.0	---	---	30.5	
14	13.5	10.0	6.0	2.5	4.5	7.5	13.5	16.5	---	---	32.0	
15	14.0	8.0	4.0	4.5	0.0	7.5	16.5	17.0	---	---	31.0	
16	16.5	7.0	3.5	5.0	0.0	9.0	21.0	21.0	---	28.5	31.5	
17	19.0	6.5	4.0	5.0	2.0	8.0	20.5	19.5	---	---	27.5	
18	19.0	7.0	5.0	6.5	4.0	15.0	17.5	18.5	---	---	29.0	
19	17.5	8.0	4.5	7.5	4.5	18.0	16.0	25.5	---	---	22.0	
20	17.0	11.5	5.0	6.5	5.0	18.0	18.0	18.5	---	29.0	30.0	
21	17.5	12.5	6.0	7.0	5.0	19.5	18.5	30.0	---	30.0	30.0	
22	16.5	13.5	7.0	6.0	---	15.5	19.0	18.0	---	28.0	---	
23	18.5	13.5	5.5	6.0	4.5	10.0	18.0	18.0	31.0	26.5	---	
24	19.5	10.5	3.0	7.0	9.5	14.5	23.0	20.5	---	26.5	---	
25	19.0	10.0	2.5	7.5	5.0	18.5	27.0	19.0	---	---	---	
26	17.5	10.5	3.0	6.5	9.0	10.0	23.0	17.5	---	---	---	
27	17.0	10.0	4.5	4.5	10.0	12.0	19.5	25.0	---	---	---	
28	18.5	7.0	5.5	3.0	7.0	4.0	26.5	20.0	---	---	---	
29	19.0	3.0	6.5	5.5	---	7.0	25.0	21.5	---	---	---	
30	19.0	1.5	5.0	2.5	---	12.0	12.0	17.5	---	---	---	
31	17.5	---	6.0	2.5	---	12.5	---	26.0	---	30.5	---	
MONTH	18.0	11.0	5.0	5.0	4.0	10.5	16.5	20.0	---	---	---	

07158400 SALT CREEK NEAR OKEENE, OKLA.

LOCATION.--Lat 36°06'11", long 98°11'36", in SW 1/4 sec.20, T.19 N., R.9 W., Kingfisher County, at gaging station at bridge on county road, 7.0 mi (11.3 km) east of Okeene, 2.2 mi (3.5 km) downstream from Spring Creek, and at mile 2.2 (3.5 km).

DRAINAGE AREA.--196 mi^2 (508 km^2).

PERIOD OF RECORD.--Chemical analyses: October 1973 to current year.
Water temperatures: October 1973 to current year.

EXTREMES, Current year.--Specific conductance: Maximum daily, 36,100 micromhos/cm Aug. 26; minimum daily, 373 micromhos/cm Nov. 3.
Water temperatures: Maximum, 34.0°C Aug. 31; minimum, 2.0°C Feb. 10, 24.

Period of record.--Specific conductance: Maximum daily, 36,100 micromhos/cm Aug. 26, 1975; minimum daily, 373 micromhos/cm Nov. 3, 1974.
Water temperatures: Maximum, 35.0°C July 14, 1974; minimum, freezing point on several days during January, 1974.

REMARKS.--Continuous monitor records for specific conductance are collected for this station. Records of maximum and minimum specific conductance values are available in district office at Oklahoma City, Okla.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
OCT.											
07...	1740	20	410	77	2300	--	270	0	221	1100	3500
16...	1750	15	410	100	--	--	224	0	184	1000	5300
29...	1750	138	150	35	670	--	148	0	121	400	--
NOV.											
03...	1030	6720	24	5.3	50	--	62	0	51	41	--
14...	1730	53	400	84	1400	--	338	0	277	1200	2000
29...	1000	26	390	93	2000	--	318	0	261	--	2800
DEC.											
11...	1740	81	370	90	2700	7.6	254	0	208	1000	4300
13...	1845	34	340	96	1800	7.0	223	0	183	1100	--
15...	1730	30	370	100	--	6.6	292	0	240	1200	3000
JAN.											
01...	1700	28	400	120	2900	7.8	306	0	251	1200	4400
23...	1230	20	350	100	--	5.8	301	0	247	1200	2800
31...	1610	248	--	--	230	4.6	107	0	88	310	--
FEB.											
08...	1555	53	390	99	--	5.7	286	0	235	1100	1600
18...	1530	41	370	93	1800	5.8	309	0	253	1100	2700
26...	1830	524	120	28	--	3.9	124	0	102	320	250
MAR.											
16...	1630	102	370	110	1700	7.2	143	0	117	1200	2500
18...	1715	1040	97	21	240	4.6	113	0	93	290	340
22...	2000	102	410	96	--	7.0	272	0	223	1200	1300
APR.											
09...	1730	61	370	20	--	7.4	302	0	248	1100	1700
14...	1810	64	420	120	2000	7.4	271	0	222	1300	3000
15...	1930	50	380	110	1600	7.3	263	0	216	1300	2400
MAY											
02...	1800	167	300	68	1600	7.9	198	0	162	950	2300
18...	1820	108	410	82	--	7.8	292	0	240	1300	1400
24...	1915	1500	61	13	92	4.5	103	0	84	140	130
JUNE											
02...	1830	18	360	84	990	7.8	311	0	255	1100	1400
10...	1730	8400	41	7.5	82	6.0	71	0	58	95	120
23...	2025	42	370	97	1700	8.4	302	0	248	1200	--
JULY											
01...	2010	34	280	82	1200	7.5	204	0	167	1100	1700
11...	1645	22	--	--	--	--	--	--	--	--	1500
25...	1900	13	450	120	4600	12	201	0	165	1200	7100
AUG.											
07...	2005	16	240	65	1400	5.6	254	0	208	870	1900
15...	1650	16	200	50	1100	5.1	207	0	170	720	1500
26...	1930	53	640	100	8100	16	154	0	126	1400	13000
SEP.											
01...	2000	12	230	52	1400	6.6	263	0	216	730	2100
11...	1720	10	220	54	1200	5.1	237	0	194	790	1700
20...	1900	9.7	--	--	2800	7.7	216	0	177	900	4500

07158400 SALT CREEK NEAR OKEENE, OKLA.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	CARBON DIOXIDE (CO2) (MG/L)
OCT.											
07...	.66	7570	10.3	409	1300	1100	--	27	11600	7.9	5.4
16...	.58	10900	14.8	441	1400	1300	--	--	15900	7.8	5.7
29...	1.2	2430	3.30	905	520	400	--	13	3860	8.4	.9
NOV.											
03...	1.1	226	.31	4100	82	31	--	2.4	373	7.5	3.1
14...	1.6	5360	7.29	767	1300	1000	--	17	7770	7.8	8.6
29...	1.6	6780	9.22	476	1400	1100	--	24	9920	7.8	8.1
DEC.											
11...	--	9130	12.4	2000	1300	1100	82	33	13500	8.4	1.6
13...	--	6320	8.60	580	1200	1100	76	22	9350	8.4	1.4
15...	--	7000	9.52	567	1300	1100	--	--	10200	8.2	2.9
JAN.											
01...	--	9700	13.2	733	1500	1200	81	33	14100	8.2	3.1
23...	--	6610	8.99	357	1300	1000	--	--	9720	8.1	3.8
31...	--	1130	1.54	757	--	--	--	--	1800	8.0	1.7
FEB.											
08...	--	4620	6.28	661	1400	1100	--	--	6490	8.0	4.6
18...	--	6120	8.32	677	1300	1100	75	22	9160	8.1	3.9
26...	--	1030	1.40	1460	420	310	--	--	1590	8.1	1.6
MAR.											
16...	--	6170	8.39	1700	1400	1300	73	20	8940	7.8	3.6
18...	--	--	--	--	330	240	61	5.8	1820	8.1	1.4
22...	--	4520	6.15	1250	1400	1200	--	--	6180	7.7	8.7
APR.											
09...	--	5090	6.92	838	1000	760	--	--	7310	8.0	4.8
14...	--	7410	10.1	1280	1500	1300	74	22	10600	7.9	5.5
15...	--	6170	8.39	833	1400	1200	71	19	8870	7.8	6.7
MAY											
02...	--	5460	7.43	2460	1000	870	77	22	8500	7.4	13
18...	--	4380	5.96	1280	1400	1100	--	--	5990	7.6	12
24...	--	509	.69	2060	210	120	49	2.8	861	7.8	2.6
JUNE											
02...	--	4270	5.81	208	1200	990	63	12	6140	7.9	6.3
10...	--	402	.55	9120	130	75	56	3.1	703	8.3	.6
23...	--	6210	8.45	704	1300	1100	74	20	8850	7.6	12
JULY											
01...	--	--	--	--	1000	870	71	16	6800	7.7	6.5
11...	1.4	--	--	--	--	--	--	--	6330	8.1	--
25...	--	14300	19.4	502	1600	1500	86	50	20100	7.6	8.1
AUG.											
07...	--	4760	6.47	206	870	660	78	21	7600	7.8	6.4
15...	--	3670	4.99	159	710	540	77	18	6060	8.0	3.3
26...	--	24100	32.8	3450	2000	1900	90	79	36100	7.4	9.8
SEP.											
01...	--	--	--	--	790	570	79	22	7870	7.9	5.3
11...	--	4220	5.74	114	770	580	77	19	6930	7.8	6.0
20...	--	9240	12.6	242	--	--	--	--	15000	7.4	14

07158400 SALT CREEK NEAR OKEENE, OKLA.--Continued

DISSOLVED SULFATE (SO4), MG/L, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1400	1000	1300	1800	380	610	950	1100	800	820	1200	1000
2	1300	120	1500	1200	630	690	1100	1500	870	940	1100	990
3	1300	56	1300	660	620	790	1100	1000	880	980	990	970
4	1200	160	1300	870	810	860	1100	1200	920	1100	1200	960
5	1400	600	1200	830	840	850	1100	1200	900	1200	1000	990
6	1400	720	1400	1100	850	870	1200	1200	980	860	980	910
7	1600	790	1400	1100	1100	940	1200	1200	1100	1000	1000	1000
8	1400	840	1400	1200	910	980	1200	1200	570	970	920	1000
9	1700	800	1300	1200	920	900	1000	1200	380	870	910	900
10	1700	880	1300	730	1000	610	950	850	110	870	940	930
11	1700	940	1700	1300	900	830	1200	780	330	860	910	930
12	1600	990	1400	1200	1100	940	460	1100	560	900	950	1000
13	1600	1000	1300	1200	1100	960	1100	480	670	1000	1000	960
14	1600	700	1300	1300	1100	920	1400	310	760	920	940	1400
15	1900	1100	1400	1400	1100	980	1100	570	800	1000	870	1900
16	2000	1100	1300	1400	940	1200	1200	690	860	870	900	1700
17	1600	1100	1300	1300	980	970	1200	770	770	870	950	1700
18	1700	1100	950	1300	1200	310	1200	840	690	860	1100	1600
19	1600	1200	1300	1200	---	600	1200	890	710	820	1100	1700
20	1600	1300	1300	1300	1200	760	1200	860	890	820	1000	1800
21	1600	1100	1300	1300	950	850	1200	940	950	820	970	1700
22	1400	1200	1300	1300	---	880	1000	340	960	840	950	1200
23	1400	1200	1400	1300	950	920	1300	230	1100	870	960	1100
24	1400	1200	1300	1300	910	930	1400	350	980	880	960	1400
25	1400	1200	1400	1400	500	970	1200	260	990	1100	950	1300
26	1500	1100	1400	1400	270	1000	1300	620	990	1500	4400	1100
27	1600	1200	1400	1300	390	650	1300	740	980	1400	1600	1100
28	620	1300	1500	1400	520	590	1200	820	960	1400	1400	1000
29	600	1300	1500	1400	---	840	1200	370	910	1200	1200	970
30	680	1300	1400	---	---	910	1200	430	900	1100	1000	1000
31	1100	---	1500	310	---	950	---	650	---	1000	860	---
MONTH	1400	950	1400	1200	850	840	1100	800	810	990	1100	1200

DISSOLVED SULFATE (SO4), TONS PER DAY, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	83.2	343	80.7	141	231	301	167	89.1	62.6	81.9	32.4	32.4
2	70.2	483	105	81.0	277	272	172	340	47.0	76.1	74.3	32.1
3	66.7	735	87.8	37.4	301	260	157	227	33.3	76.7	69.5	28.8
4	55.1	246	87.8	56.4	418	262	154	130	24.8	101	64.8	28.5
5	60.5	400	84.2	78.4	159	246	146	107	21.9	94.0	51.3	29.4
6	56.7	334	98.3	151	96.4	230	159	104	76.7	65.0	47.6	24.3
7	77.8	363	94.5	113	128	208	181	94.0	977	72.9	45.2	26.2
8	68.0	358	86.9	110	93.4	183	486	87.5	120	62.9	39.7	26.2
9	78.0	339	73.7	104	79.5	158	194	81.0	1360	54.0	36.9	23.6
10	73.4	347	87.8	59.1	97.2	384	139	509	1650	120	35.5	25.1
11	68.9	236	326	98.3	124	213	162	289	936	78.9	31.9	25.1
12	64.8	168	253	68.0	110	289	59.6	101	325	38.9	33.3	29.7
13	60.5	157	130	74.5	98.0	226	148	3370	282	37.8	35.1	31.1
14	73.4	100	112	87.8	95.0	194	249	3360	265	32.3	33.0	41.6
15	87.2	143	113	94.5	89.1	198	154	511	231	35.1	35.2	56.4
16	81.0	131	98.3	94.5	66.0	311	152	356	211	28.2	58.3	50.5
17	60.5	110	98.3	84.2	60.9	314	146	297	437	28.2	38.5	50.5
18	64.3	104	71.8	84.2	94.0	1260	146	254	194	25.5	41.6	43.2
19	56.2	110	98.3	77.8	---	330	130	204	127	24.4	38.6	45.9
20	56.2	116	98.3	80.7	175	263	123	153	130	21.3	35.1	47.1
21	56.2	98.0	94.8	77.2	367	255	117	117	125	20.6	34.0	44.5
22	49.1	107	94.8	73.7	---	247	97.2	495	119	21.1	33.3	31.4
23	49.1	104	98.3	70.2	146	238	133	1030	134	21.1	35.7	26.7
24	49.1	94.0	87.8	70.2	283	191	147	679	108	23.8	33.7	30.6
25	287	90.7	90.7	75.6	404	181	120	1050	107	44.6	30.8	27.4
26	202	83.2	86.9	79.4	526	181	130	187	98.9	48.6	475	22.0
27	143	87.5	86.9	70.2	378	999	130	95.9	92.6	41.6	86.4	25.8
28	1080	94.8	93.2	75.6	435	247	120	77.5	82.9	41.6	52.9	22.7
29	321	91.3	93.2	71.8	---	211	113	1280	73.7	32.4	38.9	22.0
30	297	80.7	86.9	---	---	201	110	601	129	29.7	56.7	22.7
31	823	---	121	237	---	192	---	94.8	---	27.0	60.4	---
MONTH	152	208	107	89.2	197	298	155	528	286	48.6	58.4	32.5

07158400 SALT CREEK NEAR OKEENE, OKLA.--Continued

DISSOLVED CHLORIDE (CL), MG/L, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2900	1900	2700	4300	310	690	1700	2200	1300	1300	2600	1800
2	2800	160	3300	2600	750	930	2000	3300	1500	1700	2100	1800
3	2700	130	2600	830	730	1200	2100	1900	1500	1800	1800	1800
4	2400	180	2600	1500	1300	1400	2100	2500	1600	2200	2400	1700
5	3200	660	2600	1300	1400	1400	2300	2300	1600	2300	2000	1800
6	3000	1000	2900	2100	1400	1500	2400	2300	1800	1400	1800	1600
7	3500	1200	3100	2200	2100	1700	2400	2300	2100	1900	1900	1900
8	3000	1400	3000	2400	1600	1800	2400	2400	580	1800	1600	2000
9	4200	1300	2800	2400	1600	1600	1900	2300	310	1500	1600	1600
10	3900	1500	2600	1000	1900	700	1700	1400	160	1500	1700	1700
11	4000	1700	4200	2700	1600	1300	2400	1200	280	1400	1600	1700
12	3800	1800	2900	2300	2000	1700	350	2000	560	1600	1700	2000
13	3800	2000	2600	2300	2200	1700	2200	360	880	2000	2000	1700
14	3800	950	2700	2700	2200	1600	2900	270	1100	1600	1700	3000
15	4700	2100	2900	2900	2200	1800	2300	560	1300	1900	1500	4900
16	5400	2200	2700	3200	1700	2400	2400	920	1400	1500	1600	4000
17	3600	2100	2800	2700	1800	1800	2400	1200	1200	1500	1700	4200
18	4000	2200	1700	2700	2500	270	2600	1400	920	1400	2100	3800
19	3700	2600	2900	2500	---	660	2500	1500	980	1300	2100	4100
20	3700	2600	2800	2800	2600	1100	2400	1400	1500	1300	1900	4500
21	3700	2200	2800	2600	1700	1400	2500	1700	1700	1300	1800	3900
22	3200	2300	2700	2800	---	1500	2000	290	1700	1400	1700	2500
23	3000	2600	3000	2700	1700	1600	2800	220	2200	1500	1700	2200
24	3100	2600	2800	2800	1600	1700	3000	290	1800	1500	1700	3200
25	3000	2500	3000	3000	380	1800	2600	240	1800	2000	1700	2600
26	3400	2300	2900	3000	240	1800	2700	710	1800	3500	15000	2100
27	3600	2500	3000	2900	310	820	2700	1100	1800	3100	3500	2100
28	730	2700	3300	2900	420	630	2500	1300	1700	3100	3200	1800
29	660	2800	3200	2900	---	1400	2400	300	1600	2600	2500	1800
30	910	2700	3200	---	---	1600	2400	330	1600	2100	1900	1800
31	2100	---	3300	260	---	1700	---	810	---	1900	1400	---
MONTH	3200	1800	2900	2400	1500	1400	2300	1300	1300	1800	2400	2500

DISSOLVED CHLORIDE (CL), TONS PER DAY, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	172	652	168	337	188	341	298	178	102	130	70.2	58.3
2	151	644	232	175	330	367	313	748	81.0	138	142	58.3
3	139	1710	175	47.1	355	345	301	431	56.7	141	126	53.5
4	110	277	175	97.2	670	427	295	270	43.2	202	130	50.5
5	138	440	183	123	265	404	304	205	38.9	160	103	53.5
6	121	464	204	289	159	347	318	199	141	106	87.5	42.8
7	170	551	209	226	244	376	363	180	1870	139	82.1	49.8
8	146	597	186	220	164	335	972	175	122	117	69.1	52.4
9	193	551	159	207	138	281	369	155	1110	93.2	64.8	41.9
10	168	591	175	81.0	185	440	248	839	2390	207	64.3	45.9
11	162	427	805	204	220	333	324	444	794	129	56.2	45.9
12	154	306	525	130	200	523	45.4	184	325	69.1	59.7	59.4
13	144	313	260	143	196	399	297	2530	371	75.6	70.2	55.1
14	174	136	233	182	190	337	517	2930	383	56.2	59.7	89.1
15	216	272	235	196	178	364	323	520	376	66.7	60.8	146
16	219	261	204	216	119	622	305	474	344	48.6	104	119
17	136	210	212	175	112	583	292	463	680	48.6	66.9	125
18	151	208	129	175	196	1100	316	423	258	41.6	79.4	103
19	130	239	219	162	---	364	270	344	175	38.6	73.7	111
20	130	232	212	174	379	380	246	249	219	33.7	66.7	118
21	130	196	204	154	656	420	243	211	220	32.6	63.2	102
22	112	205	197	159	---	421	194	422	211	35.2	59.7	65.5
23	105	225	211	146	262	415	287	986	267	36.5	54.7	53.5
24	109	204	189	151	497	349	316	562	199	40.5	59.7	70.0
25	616	189	194	162	307	335	260	966	194	81.0	55.1	54.8
26	459	174	180	170	290	326	270	215	180	113	1620	42.0
27	321	182	186	157	300	1260	270	143	170	92.1	189	49.3
28	1270	197	205	157	352	264	250	123	147	92.1	121	40.8
29	353	197	199	149	---	352	227	1040	130	70.2	81.0	40.8
30	398	168	199	---	---	354	220	462	229	56.7	108	40.8
31	1570	---	267	199	---	344	---	118	---	51.3	98.3	---
MONTH	276	367	230	172	275	439	308	554	394	89.1	134	67.9

07158400 SALT CREEK NEAR OKEENE, OKLA.--Continued

DISSOLVED SOLIDS (RESIDUE AT 180 DEG. C), MG/L, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6960	5130	6580	9070	1410	2470	4800	5680	4010	4100	6400	5080
2	6830	449	7700	6410	2630	3120	5360	7630	4380	4750	5540	5010
3	6600	235	6500	2850	2580	3910	5530	5080	4450	4980	5010	4940
4	6100	602	6500	4400	4080	4340	5450	6270	4650	5720	5990	4890
5	7430	2400	6370	4180	4250	4300	5840	5970	4540	5890	5260	5030
6	7140	3370	6960	5450	4300	4360	5980	5890	4940	4350	4980	4580
7	8090	3900	7250	5670	5560	4750	6110	5960	5470	5120	5140	5210
8	7230	4220	7120	6090	4620	4980	6060	6060	2260	4910	4650	5280
9	8970	4020	6740	6120	4640	4550	5190	5910	1420	4400	4580	4540
10	8640	4450	6510	3440	5240	2500	4810	4290	441	4410	4750	4730
11	8790	4740	9000	6630	4550	4160	6040	3820	1220	4330	4620	4720
12	8500	5020	7020	5940	5350	4760	1690	5350	2220	4550	4790	5310
13	8490	5340	6420	5910	5660	4860	5650	1750	2990	5290	5280	4850
14	8440	3180	6680	6580	5670	4650	7020	1160	3670	4640	4730	7080
15	9590	5450	6960	6960	5750	4990	5650	2260	4030	5110	4390	9870
16	10500	5650	6610	7460	4770	6000	6060	3090	4330	4380	4540	8760
17	8260	5540	6730	6530	4970	4920	6040	3780	3740	4360	4810	8940
18	8690	5710	4800	6560	6300	1160	6360	4250	3100	4310	5560	8450
19	8320	6380	6910	6190	---	2390	6310	4500	3260	4140	5550	8920
20	8580	6470	6860	6860	6350	3710	6080	4320	4490	4140	5110	9410
21	8320	5720	6820	6520	4820	4260	6250	4750	4820	4140	4940	8570
22	7470	5970	6650	6870	---	4430	5320	1270	4870	4220	4630	6250
23	7130	6370	7220	6650	4800	4630	6750	877	5640	4360	4870	5640
24	7290	6360	6770	6840	4580	4720	7080	1280	4990	4420	4860	7450
25	7190	6230	7120	7210	1680	4910	6390	976	5030	5380	4840	6480
26	7940	5860	6970	7210	1000	5080	6630	2530	5000	7950	23000	5600
27	8220	6330	7090	6920	1430	2810	6670	3530	4990	7390	8070	5460
28	2580	6550	7650	7050	1970	2350	6290	4130	4890	7330	7450	5070
29	2400	6720	7480	6960	---	4230	6120	1380	4620	6350	6250	4910
30	3080	6640	7470	---	---	4600	6110	1570	4550	5550	5170	5060
31	5440	---	7650	1140	---	4790	---	2800	---	5180	4330	---
MONTH	7390	4830	6940	6090	4200	4120	5860	3810	3970	5040	5820	6200

DISSOLVED SOLIDS (TONS PER DAY), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	413	1760	409	710	857	1220	842	460	314	410	173	165
2	369	1810	541	433	1160	1230	839	1730	237	385	374	162
3	339	3080	439	162	1250	1290	791	1150	168	390	352	147
4	280	925	439	285	2100	1320	765	677	126	525	323	145
5	321	1600	447	395	803	1240	773	532	110	461	270	149
6	289	1570	489	750	488	1150	791	509	387	329	242	122
7	393	1790	489	582	646	1050	924	467	4860	373	222	136
8	351	1800	442	559	474	928	2450	442	476	318	201	138
9	412	1700	382	529	401	799	1010	399	5100	273	185	119
10	373	1750	439	279	509	1570	701	2570	6600	607	180	128
11	356	1190	1730	501	627	1070	815	1410	3460	397	162	127
12	344	854	1270	337	534	1470	219	491	1290	197	168	158
13	321	836	641	367	504	1140	763	12300	1260	200	185	157
14	387	455	577	444	490	979	1250	12600	1280	163	166	210
15	440	706	564	470	466	1010	821	2030	1160	179	178	293
16	425	671	500	504	335	1560	769	1590	1060	142	294	260
17	312	553	509	423	309	1590	734	1460	2120	141	195	266
18	328	540	363	425	493	4730	773	1240	870	128	211	228
19	292	586	522	401	---	1320	681	1030	581	123	195	241
20	294	576	519	426	926	1280	624	770	655	107	179	246
21	292	510	497	367	1860	1280	607	590	625	104	173	224
22	262	532	485	390	---	1240	517	1850	605	106	170	164
23	250	550	507	354	739	1200	693	3930	685	106	171	137
24	256	498	457	369	1420	969	746	2480	552	119	171	163
25	1480	471	461	389	1520	915	638	3930	543	218	157	136
26	1070	443	433	409	1210	919	662	765	499	258	2480	112
27	752	461	440	374	1390	4320	666	457	472	219	436	128
28	4490	477	475	381	1650	983	628	390	422	218	282	115
29	1280	472	465	357	---	1060	578	4770	374	171	202	111
30	1350	412	464	---	---	1020	561	2200	651	150	293	115
31	4070	---	620	871	---	970	---	408	---	140	304	---
MONTH	728	956	549	442	891	1380	788	2120	1250	247	300	167

07158400 SALT CREEK NEAR OKEENE, OKLA.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10200	7300	9610	13600	2230	3890	6780	8170	5510	5660	9320	7210
2	10000	712	11390	9330	4060	4570	7660	11280	6100	6690	7960	7100
3	9630	373	9480	4290	4010	5410	7930	7220	6210	7060	7100	7000
4	8840	953	9480	6140	5620	6040	7800	9110	6530	8240	8670	6910
5	10970	3800	9270	5780	5890	5980	8430	8630	6360	8510	7510	7130
6	10490	4840	10200	7810	5980	6080	8650	8510	7000	6060	7060	6430
7	12020	5390	10680	8160	7980	6700	8850	8620	7830	7280	7320	7430
8	10640	5850	10460	8830	6490	7060	8770	8770	3580	6940	6530	7540
9	13440	5530	9860	8870	6520	6370	7400	8540	2250	6140	6420	6360
10	12920	6210	9490	4910	7470	3920	6790	5960	699	6150	6690	6660
11	13160	6660	13500	9680	6380	5760	8740	5320	1930	6020	6480	6640
12	12680	7120	10300	8590	7640	6710	2680	7650	3510	6370	6750	7580
13	12670	7630	9350	8530	8140	6660	8130	2780	4440	7550	7530	6850
14	12590	4640	9760	9610	8160	6540	10300	1840	5150	6510	6670	10400
15	14440	7810	10200	10210	8290	7070	8440	3580	5550	7270	6120	14900
16	15900	8120	9650	11020	6720	6680	8770	4540	6020	6100	6360	13110
17	12300	7950	9840	9530	7040	6970	8740	5270	5230	6080	6790	13390
18	13000	8220	6780	9570	9160	1830	9260	5890	4550	5990	8010	12600
19	12400	9290	10120	8990	---	3790	9170	6290	4720	5720	7960	13360
20	12500	9430	10040	10040	9230	5200	8810	6010	6280	5720	7260	14150
21	12390	8240	9990	9500	6810	5920	9070	6700	6800	5720	6990	12800
22	11030	8630	9710	10060	---	6180	7590	2020	6890	5850	6820	9070
23	10480	9270	10630	9710	6770	6500	9860	1390	8100	6080	6690	8110
24	10740	9250	9900	10010	6420	6640	10400	2040	7080	6160	6870	10990
25	10580	9040	10470	10600	2980	6940	9300	1550	7140	7700	6830	9440
26	11790	8450	10230	10600	1590	7210	9680	3950	7090	11800	36100	8040
27	12240	9200	10420	10150	2270	4250	9750	5010	7080	10900	12000	7820
28	4010	9560	11320	10350	3120	3730	9140	5710	6910	10800	11000	7200
29	3800	9830	11050	10210	---	5860	8870	2180	6490	9230	9080	6950
30	4530	9700	11030	---	---	6460	8860	2490	6570	7960	7360	7190
31	7790	---	11320	1800	---	6760	---	4240	---	7380	6020	---
MONTH	10970	6970	10180	8880	6040	5870	8490	5520	5650	7150	8400	9010

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23.5	18.5	7.0	7.5	8.0	12.0	13.5	25.0	23.0	30.0	29.0	30.5
2	22.0	16.0	5.5	4.0	5.0	10.0	11.0	16.0	24.5	27.0	29.0	31.5
3	22.0	15.0	9.0	3.5	5.5	5.0	11.0	25.0	25.0	28.0	32.0	31.0
4	23.0	8.0	9.0	5.0	8.0	10.0	16.5	23.5	25.0	29.5	31.0	30.0
5	22.0	13.0	7.0	5.5	5.0	14.0	10.0	---	28.0	29.5	33.0	28.0
6	16.0	13.0	10.5	7.5	3.0	6.0	18.0	26.5	---	27.0	31.0	29.0
7	15.0	13.0	10.5	10.0	6.0	10.5	15.0	25.0	25.0	31.5	29.5	21.0
8	19.0	13.0	6.5	7.0	3.0	---	14.0	26.0	26.5	30.0	32.5	27.0
9	21.0	13.0	8.0	12.0	4.0	6.0	20.5	27.0	24.0	31.0	32.0	28.0
10	23.0	14.5	8.0	6.5	2.0	5.0	14.0	21.0	19.0	30.5	29.0	29.0
11	23.0	14.0	7.0	4.0	7.0	6.0	17.0	---	23.0	30.0	30.0	26.0
12	21.0	13.0	9.0	3.0	10.5	7.0	19.5	23.0	24.0	28.0	30.0	19.5
13	19.0	12.0	9.0	5.0	11.0	7.0	12.0	16.0	25.5	---	26.5	20.0
14	13.0	10.0	10.0	7.0	6.0	10.0	19.5	17.0	25.0	27.0	30.0	20.5
15	19.0	10.5	8.0	9.0	4.0	8.5	22.0	21.0	26.0	28.0	28.0	17.0
16	20.5	13.0	7.0	8.0	3.5	10.0	23.0	23.5	---	30.0	30.0	---
17	23.0	---	9.0	8.0	4.0	---	23.5	23.0	25.0	26.5	30.0	27.0
18	21.0	14.0	7.0	7.5	5.0	12.0	18.0	26.5	25.5	27.5	30.5	23.0
19	21.0	---	6.0	10.0	---	16.5	---	25.0	26.0	31.0	30.0	23.0
20	20.0	14.0	8.0	9.0	6.0	19.0	18.5	24.0	28.0	31.5	31.0	22.5
21	20.0	14.0	---	---	6.0	18.0	22.0	27.0	27.5	29.0	31.5	21.0
22	16.5	14.5	10.0	8.0	---	18.0	19.0	19.5	26.0	31.5	31.0	21.0
23	22.0	14.0	---	6.0	4.0	17.5	25.0	22.0	27.0	29.0	30.5	23.0
24	19.5	12.0	4.5	11.0	2.0	15.0	---	18.0	27.0	26.5	29.5	20.0
25	---	11.0	6.0	13.0	5.0	13.5	21.5	---	27.5	28.0	29.5	22.5
26	17.0	12.5	5.0	10.5	5.0	12.0	23.5	21.5	29.0	28.0	27.0	22.0
27	19.5	10.5	8.0	10.0	7.0	13.5	22.0	24.0	28.0	30.0	25.0	23.5
28	---	---	---	6.0	10.0	8.5	25.0	20.0	27.0	32.0	28.0	24.0
29	19.0	5.0	10.0	8.0	---	6.5	24.0	20.0	28.0	28.5	31.0	24.5
30	18.0	4.5	6.0	---	---	12.0	24.0	18.0	25.5	---	30.0	22.0
31	17.5	---	7.0	4.5	---	11.0	---	18.0	---	28.0	34.0	---
MONTH	20.0	12.5	8.0	7.5	5.5	11.0	18.5	22.0	25.5	29.0	30.0	24.5

07159100 CIMARRON RIVER NEAR DOVER, OKLA.

LOCATION.--Lat 35°57'06", long 97°54'51", in SW 1/4 NE 1/4 sec.14, T.17 N., R.7 W., Kingfisher County, at gaging station at bridge on U.S. Highway 81, 1 mi (1.6 km) downstream from Turkey Creek, 2 mi (3.2 km) south of Dover, 2.5 mi (4.0 km) upstream from Kingfisher Creek, and at mile 160.6 (258.4 km).

DRAINAGE AREA.--15,713 mi² (40,697 km²), of which 4,926 mi² (12,758 km²) is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: October 1973 to current year.
Water temperatures: October 1973 to current year.

EXTREMES, Current year.--Specific conductance: Maximum daily, 20,900 micromhos/cm Oct. 20; minimum daily, 1,160 micromhos/cm Nov. 4.
Water temperatures: Maximum, 27.5°C July 9; minimum, 0.5°C Feb. 10.

Period of record.--Specific conductance: Maximum daily, 20,900 micromhos/cm Oct. 20, 1974; minimum daily, 1,160 micromhos/cm Nov. 4, 1974.
Water temperatures: Maximum, 33.0°C June 18, 1974; minimum, freezing point on many days during December, 1973 and January, 1974.

REMARKS.--Continuous monitor records for specific conductance are collected for this station. Records of maximum and minimum specific conductance values are available in district office in Oklahoma City, Okla.
*=Mean discharge.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
OCT.											
05...	0830	170	280	79	3600	--	233	0	191	720	5500
20...	1500	185*	320	91	5000	--	233	0	191	860	8000
29...	0900	2220*	120	40	1300	--	150	0	123	290	2000
NOV.											
05...	0800	9170*	61	12	180	4.8	92	0	75	130	270
14...	0830	733	250	67	--	8.6	310	0	254	670	3600
29...	1700	371	210	80	2500	7.1	153	0	126	750	3800
DEC.											
12...	0900	547	200	66	--	7.1	256	0	210	260	760
17...	0900	454	250	87	--	12	205	0	168	690	5200
26...	0930	348	250	83	2500	7.6	295	0	242	740	3900
JAN.											
21...	1000	330	270	89	3000	8.9	289	0	237	800	4800
28...	1010	252	--	85	2400	8.0	233	0	191	750	3800
31...	0900	6110	69	28	440	5.8	126	0	103	180	690
FEB.											
15...	0900	429	250	87	2700	9.2	334	0	274	750	4200
20...	1600	507	220	79	--	8.2	305	0	250	620	3200
26...	1400	6360	95	27	600	6.3	141	0	116	280	880
MAR.											
05...	0900	1650	200	61	--	6.4	240	0	197	580	1900
16...	1700	1220	240	81	2100	7.0	300	0	246	720	3100
19...	0900	5120	90	27	360	4.9	135	0	111	260	530
APR.											
11...	0900	925	220	75	--	6.9	255	0	209	690	1600
20...	0900	686	270	85	3100	8.0	262	0	215	850	4600
23...	0900	524	240	85	2100	7.3	254	0	208	760	3200
MAY											
03...	1250	1200*	--	57	1200	6.9	203	0	167	470	1900
08...	0800	485	240	67	3200	8.5	220	0	180	750	4800
24...	0800	6020	58	17	210	6.9	108	0	89	170	300
JUNE											
04...	0800	1540	240	63	2000	9.7	239	0	196	650	3100
11...	0800	25500	60	11	150	7.0	90	0	74	140	220
17...	0800	1460	200	56	1000	9.5	222	0	182	590	--
JULY											
15...	0800	326	190	61	2000	9.7	244	0	200	500	3000
24...	0800	242	--	--	1500	6.9	236	0	194	460	2200
31...	0800	459	100	40	910	7.7	199	0	163	320	1300
AUG.											
02...	0800	666	95	26	540	6.9	157	0	129	250	820
06...	0800	444	140	36	2400	11	181	0	148	350	3700
24...	0800	149	150	50	1500	8.1	236	0	194	--	2400
SEP.											
01...	0800	167	150	54	1600	7.2	230	0	189	450	2500
13...	0800	142	110	43	--	5.6	260	0	213	300	1500
25...	0900	76	120	51	1400	5.6	238	0	195	390	2100

07159100 CIMARRON RIVER NEAR DOVER, OKLA.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	CARBON DIOXIDE (CO2) (MG/L)
OCT.											
05...	.31	10500	14.3	4820	1000	810	--	49	15800	8.0	3.7
20...	.19	14800	20.1	7390	1200	1000	--	64	21300	8.1	3.0
29...	1.8	4070	5.54	24400	460	340	--	26	6730	7.6	6.0
NOV.											
05...	--	797	1.08	19700	200	130	65	5.5	1250	7.9	1.9
14...	--	6720	9.14	13300	900	650	--	--	10500	8.2	3.1
29...	--	7450	10.1	7460	650	730	86	37	11600	8.1	1.9
DEC.											
12...	--	1890	2.57	2790	770	560	--	--	--	8.1	3.3
17...	--	9600	13.1	11800	980	810	--	--	14500	8.4	1.3
26...	--	7810	10.6	7340	970	720	85	35	11900	8.3	2.4
JAN.											
21...	--	9170	12.5	8170	1000	800	86	40	13800	8.4	1.8
28...	--	7570	10.3	5150	--	--	--	--	11600	8.5	1.2
31...	--	1500	2.04	24700	290	180	76	11	2610	8.5	.6
FEB.											
15...	--	8320	11.3	9640	980	710	86	37	12600	8.3	2.7
20...	--	6120	8.32	8380	870	620	--	--	9530	8.5	1.5
26...	--	2040	2.77	35000	350	230	79	14	3350	8.1	1.8
MAR.											
05...	--	4340	5.90	19300	750	550	--	--	6820	8.0	3.8
16...	--	6660	9.06	21900	930	690	83	30	10200	8.0	4.8
19...	--	1450	1.97	20000	340	230	70	8.5	2370	8.1	1.7
APR.											
11...	--	4010	5.45	10000	860	650	--	--	6300	7.8	6.5
20...	--	9150	12.4	16900	1000	810	87	42	14400	7.7	8.4
23...	--	6550	8.91	9270	950	740	83	30	10300	7.6	10
MAY											
03...	--	3980	5.41	12900	--	--	--	--	6480	7.0	32
08...	--	9210	12.5	12100	880	690	89	47	14300	7.3	18
24...	--	844	1.15	13700	210	130	67	6.2	1440	7.4	6.9
JUNE											
04...	--	6180	8.40	25700	860	660	83	30	9610	7.3	19
11...	--	651	.89	44800	200	120	62	4.7	1130	8.3	.7
17...	--	3720	5.06	14700	730	550	75	16	5840	7.5	11
JULY											
15...	--	5980	8.13	5260	730	530	86	32	9790	7.8	6.2
24...	--	4510	6.13	2950	--	--	--	--	7640	8.1	3.0
31...	--	2950	4.01	3660	410	250	82	19	4920	8.2	2.0
AUG.											
02...	--	--	--	--	340	220	77	13	3290	7.6	6.3
06...	--	--	--	--	500	350	91	47	11900	7.5	9.2
24...	--	4560	6.20	1830	580	390	85	27	8120	8.0	3.8
SEP.											
01...	--	4800	6.53	2160	600	410	85	29	8690	7.5	12
13...	--	3040	4.13	1170	450	240	--	--	5620	8.0	4.2
25...	--	4230	5.75	868	510	310	86	27	7480	8.1	3.0

07159100 CIMARRON RIVER NEAR DOVER, OKLA.--Continued

DISSOLVED SULFATE (SO4), MG/L, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	840	530	700	660	410	400	660	710	430	450	290	590
2	850	490	700	630	310	400	650	670	540	540	230	490
3	960	250	690	540	410	360	590	480	550	530	470	530
4	880	140	690	550	490	400	590	510	670	420	380	550
5	870	140	690	560	510	510	610	510	560	430	620	550
6	940	300	670	540	510	540	620	570	460	460	730	560
7	890	430	700	630	650	550	620	660	380	450	540	570
8	870	450	710	640	740	550	610	810	340	450	500	530
9	830	400	730	660	710	490	510	810	280	500	450	540
10	840	460	720	710	720	490	560	660	230	510	500	540
11	870	470	700	730	650	450	470	610	140	510	530	540
12	880	560	600	760	700	480	580	480	200	520	560	420
13	1000	600	600	770	690	460	730	420	230	510	600	430
14	960	680	620	750	690	580	690	220	320	530	610	520
15	990	710	770	720	760	630	640	350	400	630	590	520
16	920	690	800	730	740	650	600	320	420	630	610	520
17	870	660	840	730	640	640	610	470	470	600	580	540
18	1100	670	790	740	590	260	660	500	440	610	570	520
19	1100	670	730	790	600	210	610	540	450	610	580	530
20	1100	680	740	800	610	310	630	560	490	600	600	540
21	1000	660	730	800	470	460	750	560	500	600	420	540
22	920	670	730	740	450	550	670	570	510	590	520	530
23	900	680	730	670	610	550	620	220	520	590	530	540
24	890	700	750	690	640	550	660	150	550	540	560	540
25	770	700	740	710	510	570	670	160	300	560	590	530
26	730	690	730	710	360	580	670	180	310	540	590	530
27	750	690	720	720	320	560	670	250	630	520	470	520
28	760	700	720	710	380	540	670	300	550	600	510	520
29	560	710	710	730	---	340	700	330	520	600	640	530
30	660	700	700	700	---	450	690	170	390	570	580	510
31	500	---	660	250	---	520	---	180	---	400	560	---
MONTH	870	560	710	680	570	480	650	450	430	540	530	530

DISSOLVED SULFATE (SO4), TONS PER DAY, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	490	2130	675	715	2590	4710	1740	832	4050	812	262	271
2	482	3630	663	922	1240	4500	1570	937	2920	1360	360	212
3	505	21900	645	1470	1050	3160	1320	1310	2330	1040	487	228
4	425	11600	639	1200	1570	2240	1250	1360	2660	674	319	208
5	402	3470	628	1090	1750	2230	1230	1060	2040	621	996	198
6	416	3730	613	1050	1390	2000	1190	974	1680	633	1080	218
7	413	3400	641	1040	1270	1950	1180	955	3330	717	875	215
8	413	2860	658	962	1220	1840	1300	1040	5280	561	481	193
9	394	2110	682	875	1010	1550	1720	916	9530	613	330	195
10	395	2190	751	788	842	2590	1720	884	15300	598	300	194
11	399	1680	850	777	853	2360	1150	1710	8090	690	278	197
12	399	1510	881	759	875	2100	1220	1190	4480	654	266	212
13	454	1350	891	728	801	2170	1490	2950	2610	559	258	161
14	480	1330	881	668	749	2270	1450	10700	2360	512	247	185
15	524	1270	1030	591	905	2180	1350	10500	2200	555	263	177
16	576	1140	1020	556	989	2160	1260	5420	1870	512	293	171
17	531	1050	1020	556	774	2110	1280	4440	1810	458	283	185
18	603	982	879	575	765	2700	1250	3830	1730	436	257	173
19	556	924	806	616	821	2710	1440	3150	1370	418	269	155
20	549	890	801	646	837	2140	1430	2870	1300	400	346	144
21	475	829	773	711	1050	2040	1190	2100	1180	381	217	141
22	402	819	751	625	1690	1980	1000	1200	1090	365	233	139
23	374	797	737	528	1930	1780	667	3280	1060	354	222	133
24	377	792	727	518	1760	1600	684	2150	1080	350	225	117
25	503	779	713	514	1800	1490	867	3950	1850	376	231	109
26	686	749	692	514	5040	1410	839	3110	1110	357	266	107
27	571	732	677	502	4860	2120	859	2710	2590	330	296	102
28	925	718	680	485	5230	2940	821	1780	1740	374	241	96.9
29	3360	707	656	469	---	1850	868	2640	1150	363	275	97.3
30	1950	677	650	677	---	1710	846	4520	766	357	232	84.0
31	2790	---	688	3390	---	1530	---	3270	---	534	234	---
MONTH	704	2560	754	824	1630	2260	1220	2820	3020	547	352	167

07159100 CIMARRON RIVER NEAR DOVER, OKLA.--Continued

DISSOLVED CHLORIDE (CL), MG/L, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5100	2200	3700	3400	1400	1300	3300	3800	1500	1600	870	2700
2	5100	1800	3700	3100	960	1300	3300	3400	2200	2300	610	1900
3	6200	680	3600	2200	1400	1100	2700	1800	2400	2100	1700	2200
4	5400	220	3600	2300	1800	1300	2700	2000	3500	1400	1200	2400
5	5300	260	3600	2400	2000	2000	2900	2000	2400	1500	3000	2300
6	5900	910	3500	2200	2000	2300	3000	2500	1700	1700	4000	2500
7	5400	1500	3700	3000	3300	2400	3000	3400	1200	1600	2200	2600
8	5300	1600	3900	3200	4100	2300	2900	4700	1100	1600	1900	2200
9	4900	1300	4000	3400	3800	1900	2000	4800	620	2000	1600	2300
10	5000	1700	3900	3800	3900	1900	2500	3400	620	2000	1900	2200
11	5300	1800	3800	4000	3300	1600	1700	2900	230	2000	2200	2300
12	5400	2400	2800	4300	3700	1800	2600	1800	490	2100	2500	1400
13	6600	2900	2800	4400	3600	1700	4000	1500	590	2000	2800	1500
14	6100	3500	3000	4200	3600	2600	3600	550	990	2200	2900	2000
15	6400	3800	4400	4000	4200	3100	3200	1100	1300	3100	2700	2100
16	5800	3700	4600	4000	4100	3300	2800	990	1400	3100	2900	2100
17	5300	3500	5000	4000	3200	3100	2900	1700	1700	2800	2800	2300
18	7200	3500	4600	4100	2700	740	3400	2000	1600	2900	2500	2100
19	7000	3500	4000	4500	2800	540	4700	2300	1600	2900	2600	2100
20	7500	3500	4100	4700	2900	930	5000	2400	1900	2800	2800	2300
21	6500	3400	4000	4700	1700	1700	4200	2400	1900	2800	1400	2300
22	5800	3400	4000	4100	1600	2300	3400	2600	2000	2700	2100	2200
23	5600	3600	4000	3400	2900	2400	3000	570	2100	2700	2200	2300
24	5500	3700	4200	3700	3200	2400	3300	300	2300	2200	2500	2300
25	4400	3800	4100	3800	2000	2600	3500	300	880	2400	2700	2200
26	4000	3600	4000	3800	1100	2600	3400	400	960	2300	2700	2100
27	4200	3700	4000	3900	980	2500	3500	680	3100	2100	1700	2100
28	4300	3800	3900	3900	1200	1000	3400	890	2300	2800	2000	2100
29	2400	3900	3800	4000	---	1000	3800	1000	2100	2800	3200	2100
30	3400	3700	3800	3700	---	1700	3700	360	1300	2600	2700	2000
31	1900	---	3400	680	---	2100	---	410	---	1300	2500	---
MONTH	5300	2700	3900	3600	2600	1900	3200	1900	1600	2300	2300	2200

DISSOLVED CHLORIDE (CL), TONS PER DAY, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2970	8850	3570	3680	8850	15300	8680	4450	14100	2890	785	1240
2	2890	13300	3510	4540	3840	14600	7950	4760	11900	5810	954	821
3	3260	59500	3360	6000	3600	9650	6040	4910	10200	4110	1760	944
4	2610	18200	3330	5010	5780	7440	5720	5350	13900	2250	1010	907
5	2450	6440	3260	4650	6860	8750	5850	4150	8750	2170	4820	826
6	2610	11300	3200	4260	5450	8510	5780	4270	6200	2340	5910	972
7	2510	11900	3390	4960	6420	6490	5720	4920	10500	2550	3560	983
8	2520	10200	3610	4810	6770	7700	6190	6020	17100	2000	1630	802
9	2330	6840	3740	4510	5420	6000	6750	5430	27900	2450	1180	832
10	2350	8080	3960	4220	4560	10100	7640	4550	41300	2340	1140	790
11	2430	6420	4620	4260	4330	6580	4170	8140	13300	2710	1150	838
12	2450	6450	4110	4300	4630	7870	5450	4450	11000	2640	1190	707
13	2990	6510	4160	4160	4180	8030	8150	10500	6690	2190	1200	563
14	3050	6850	4260	3740	4170	10200	7550	26700	7300	2130	1170	713
15	3390	6810	5900	3280	5000	10700	6770	33000	7160	2730	1200	714
16	3630	6110	5870	3050	5480	11000	5870	16800	6240	2520	1390	692
17	3230	5420	6060	3050	3870	10200	6080	16100	6560	2140	1270	789
18	3950	5130	5120	3190	3590	7670	6420	15300	6310	2070	1130	697
19	3550	4830	4420	3510	3830	6970	8360	13400	4680	1990	1210	612
20	3750	4580	4440	3790	3980	6430	6640	12300	5030	1870	1630	615
21	3090	4270	4230	4180	3790	7530	6690	9010	4470	1780	722	602
22	2540	4160	4110	3460	6000	6260	5080	5460	4290	1670	941	576
23	2330	4220	4040	2680	9160	7780	4200	8500	4290	1620	921	565
24	2330	4190	4070	2780	8810	7000	4420	4250	4510	1430	1010	447
25	2870	4230	3950	2750	7070	6820	4530	7410	5420	1610	1060	451
26	3760	3910	3790	2750	15400	6330	4260	6910	3450	1520	1220	425
27	3200	3930	3760	2720	14300	9450	4580	7380	12700	1330	1070	414
28	5240	3900	3690	2660	16500	8640	4170	5240	7270	1750	945	391
29	14400	3890	3510	2680	---	5450	4710	7940	4660	1640	1370	388
30	10100	3580	3530	3580	---	6470	4540	9150	2550	1630	1060	364
31	10600	---	3540	4220	---	6180	---	7450	---	1730	1050	---
MONTH	3850	8470	4070	3950	6480	8510	6030	9170	9660	2250	1510	690

07159100 CIMARRON RIVER NEAR DOVER, OKLA.--Continued

DISSOLVED SOLIDS (RESIDUE AT 180 DEG. C), MG/L, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9490	4700	7250	6720	3290	3280	6610	7470	3530	3690	2190	5510
2	9630	4110	7250	6260	2390	3240	6570	6810	4780	4850	1610	4150
3	11400	1750	7050	4750	3380	2780	5520	4010	5010	4600	3910	4720
4	10000	710	7050	4910	4110	3210	5580	4360	6850	3430	3070	4970
5	9900	796	7120	5060	4360	4310	5850	4340	5050	3530	5990	4910
6	11000	2290	6850	4730	4330	4840	6030	5260	3870	3880	7770	5150
7	10200	3550	7250	6130	6500	5000	6110	6690	2990	3710	4770	5330
8	9920	3780	7510	6380	7880	4930	5930	6960	2670	3760	4290	4660
9	9290	3200	7710	6660	7440	4190	4350	9040	2080	4300	3780	4610
10	9450	3860	7580	7380	7540	4190	5130	6720	1630	4320	4230	4780
11	9950	3970	7320	7710	6580	3750	3930	5950	727	4380	4720	4800
12	10100	5090	5800	8240	7220	4060	5460	4030	1330	4540	5170	3440
13	12100	5810	5780	8440	7050	3820	7690	3460	1560	4400	5690	3540
14	11300	6900	5960	8040	7060	5450	7060	1470	2450	4720	5910	4440
15	11600	7380	8440	7650	8140	6210	6340	2660	3250	6250	5520	4530
16	10800	7180	8770	7810	7960	6520	5670	2460	3430	6260	5450	4490
17	9860	6920	9430	7780	6540	6280	5850	3950	3940	5770	5460	4810
18	13100	6850	8710	7850	5550	1890	6680	4300	3620	5890	5220	4520
19	12800	6850	7710	8640	5710	1450	8960	4860	3750	5850	5380	4620
20	13600	6910	7980	8900	5690	2320	9350	5050	4150	5730	5710	4850
21	11900	6720	7710	8900	3950	3810	8060	5050	4230	5710	5440	4830
22	10700	6790	7780	7650	3720	4890	6790	5310	4340	5610	4490	4720
23	10400	6990	7780	6790	5860	5030	6110	1500	4550	5550	4680	4840
24	10200	7250	8040	7180	6370	5030	6010	868	4900	4790	5150	4870
25	8370	7320	7650	7450	4320	5340	6820	904	2210	5130	5550	4710
26	7780	7120	7710	7450	2800	5420	6770	1120	2390	4830	5600	4580
27	8080	7160	7650	7580	2440	5140	6880	1750	6260	4540	3910	4570
28	8180	7320	7580	7510	3020	2590	6800	2220	4930	5690	4360	4550
29	5090	7510	7450	7710	---	2590	7350	2520	4540	5740	5410	4600
30	6670	7250	7320	7250	---	3790	7180	1030	3170	5330	5500	4340
31	4250	---	6720	1750	---	4520	---	1150	---	3230	5190	---
MONTH	9910	5470	7490	7010	5400	4190	6470	4040	3610	4840	4860	4650

DISSOLVED SOLIDS (TONS PER DAY), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5530	18900	6490	7280	20800	36000	17400	8750	53300	6660	1970	2530
2	5460	30400	6870	9160	9550	36300	15800	9520	25800	12300	2520	1790
3	6000	153000	6590	13000	8700	24400	12400	10900	21200	8990	4050	2030
4	4830	58900	6530	10700	13200	18400	11600	11700	27200	5500	2590	1860
5	4570	19700	6480	9810	15000	16900	11400	9010	18400	5100	9620	1760
6	4870	28400	6270	9170	11800	17900	11600	8990	14100	5340	11500	2000
7	4740	28100	6640	10100	12700	17700	11600	9680	26200	5910	7730	2010
8	4710	24000	6960	9590	13000	16500	12700	11500	41500	4690	4120	1700
9	4410	16800	7200	8830	10600	13200	14700	10200	70800	5270	2780	1740
10	4440	18300	7700	8190	8820	22200	15600	9000	109000	5060	2540	1720
11	4570	14100	8890	8200	8630	19600	9630	16700	42000	5920	2470	1750
12	4580	13700	8520	8230	9030	17800	11500	9970	29800	5710	2460	1740
13	5490	13000	8580	7980	8190	16000	15700	24300	17700	4820	2440	1330
14	5640	13500	8490	7160	8180	21300	14800	71400	18100	4560	2390	1580
15	6240	13200	11300	6280	9690	21500	13400	80300	17900	5500	2460	1540
16	6770	11900	11200	5950	10600	21700	11900	41600	15300	5090	2860	1480
17	6030	10700	11400	5920	7670	20700	12300	37300	15200	4410	2670	1650
18	7180	10000	9690	6100	7190	14600	12600	33000	14300	4210	2350	1500
19	6500	9450	8510	6740	7820	16700	15900	28500	11400	4010	2500	1350
20	6790	9050	8640	7160	8080	18000	16200	25900	11000	3820	3310	1300
21	5650	8440	8160	7910	8810	16900	12800	19000	9950	3620	1770	1260
22	4680	8300	8000	6630	14000	17600	10100	11200	9320	3470	2010	1240
23	4320	8190	7860	5350	18500	16300	8550	22400	9300	3330	1960	1190
24	4320	8200	7790	5390	17500	14700	8850	12600	9620	3100	2070	1050
25	5470	8140	7570	5390	15300	14000	8820	22300	13600	3450	2170	966
26	7310	7730	7310	5390	39200	13200	8480	19400	8580	3200	2530	927
27	6150	7620	7190	5280	35500	19400	8620	14000	25700	2880	2460	901
28	9960	7510	7160	5130	41600	22400	8340	13200	15600	3550	2060	848
29	30500	7480	6880	5160	---	14100	9110	20100	10100	3500	2750	845
30	19800	7010	6800	7010	---	14400	8800	26200	6220	3340	2200	715
31	23800	---	7000	23700	---	13300	---	20900	---	4310	2170	---
MONTH	7460	19790	7910	8000	14270	19210	12070	21760	23270	4860	3210	1480

07159100 CIMARRON RIVER NEAR DOVER, OKLA.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14690	7440	11300	10500	5320	5300	10340	11630	5680	5920	3590	8670
2	14900	6550	11300	9810	3910	5240	10280	10630	7570	7670	2630	6620
3	17500	2870	11000	7520	5450	4550	8680	6410	7920	7290	6250	7480
4	15500	1160	11000	7760	6550	5190	8770	6940	10700	5530	4980	7850
5	15300	1300	11100	7990	6930	6850	9180	6910	7980	5680	9400	7770
6	16900	3740	10700	7490	6890	7660	9460	8290	6190	6200	12090	8130
7	15700	5710	11300	9610	10160	7900	9580	10450	4860	5950	7560	8400
8	15340	6060	11700	9990	12250	7790	9310	13920	4370	6020	6820	7380
9	14390	5180	12000	10410	11580	6670	6920	14000	3410	6840	6050	7610
10	14620	6180	11600	11500	11740	6670	8100	10500	2670	6880	6730	7570
11	15380	6350	11400	12000	10290	6010	6280	9330	1190	6960	7480	7600
12	15580	8030	9110	12800	11250	6480	8590	6430	2170	7210	8160	5550
13	18590	9120	9080	13100	11000	6110	11970	5570	2560	7000	8940	5700
14	17420	10770	9380	12500	11020	6580	11020	2400	4010	7470	9270	7060
15	18190	11500	13100	11900	12640	9730	9920	4390	5250	9790	8690	7190
16	16610	11200	13600	12150	12380	10200	8910	4030	5530	9810	9330	7130
17	15280	10800	14600	12100	9930	9840	9180	6320	6300	9070	8600	7620
18	20200	10700	13500	12200	8730	5100	10440	6840	5820	9250	8240	7180
19	19700	10700	12000	13400	8970	2370	13890	7720	6010	9190	8470	7330
20	20900	10780	12400	13800	9250	3800	14470	7980	6620	9010	8970	7670
21	18400	10500	12000	13800	6310	6100	12520	7970	6730	8980	5540	7650
22	16500	10600	12100	12200	5970	7740	10610	8370	6900	8820	7150	7480
23	16100	10900	12100	10600	9200	7940	9570	2450	7220	8730	7410	7660
24	15800	11300	12500	11200	9970	7950	10330	1450	7750	7580	8130	7700
25	13000	11400	12200	11600	6870	8420	10650	1480	3620	8090	8730	7460
26	12100	11100	12000	11600	4580	8550	10570	1840	3910	7640	8810	7260
27	12550	11200	11900	11800	4000	8110	10740	2860	9810	7200	8260	7250
28	12700	11400	11600	11700	4910	4230	10620	3640	7800	8940	6930	7220
29	8030	11700	11600	12000	---	4240	11450	4120	7210	9100	10030	7290
30	10430	11500	11400	11300	---	6070	11190	1680	5130	8400	8650	6900
31	6770	---	10500	2860	---	7180	---	1860	---	5220	8190	---
MONTH	15520	8580	11660	10940	8500	6660	10120	6400	5760	7660	7680	7380

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18.0	15.5	2.0	4.5	4.5	8.5	10.5	20.5	23.0	25.5	25.5	24.5
2	15.5	17.0	2.0	5.0	5.0	8.0	5.0	16.5	20.0	25.5	25.5	24.5
3	17.0	18.5	3.0	5.0	5.5	6.5	5.0	16.0	21.0	26.0	25.0	24.5
4	17.0	12.0	4.0	3.0	7.0	4.5	7.0	16.5	21.0	26.0	25.0	25.0
5	18.0	10.0	7.0	6.0	3.0	6.5	9.5	18.0	23.0	26.0	26.0	24.0
6	17.0	12.0	10.0	---	2.5	11.0	---	21.0	25.0	26.0	26.0	21.5
7	15.0	11.5	9.0	7.5	1.0	8.5	6.0	17.0	22.0	26.0	25.0	20.5
8	14.5	11.0	8.0	7.0	3.0	7.0	18.0	18.0	24.0	26.0	24.5	21.0
9	20.0	12.0	6.0	7.0	1.0	6.0	12.0	19.0	22.0	27.5	24.5	22.0
10	16.0	12.0	6.0	7.0	0.5	5.0	14.0	19.0	22.5	27.0	24.5	23.5
11	18.0	11.0	5.0	3.0	3.5	5.0	10.5	20.5	18.5	26.0	23.5	23.0
12	18.0	11.0	5.0	---	4.0	5.0	11.5	20.0	20.0	24.0	24.5	17.0
13	21.0	11.0	---	1.0	6.0	4.0	11.0	19.5	20.0	22.0	24.0	17.5
14	17.0	8.0	7.5	---	6.0	2.5	11.0	17.0	23.0	22.0	25.0	---
15	10.5	19.0	6.0	4.0	4.5	6.0	14.0	17.0	23.5	22.5	25.0	14.0
16	13.5	19.0	4.5	---	1.0	9.0	16.0	19.0	24.0	23.0	25.0	19.0
17	15.0	10.0	3.5	2.5	5.0	8.0	16.0	20.0	22.0	23.0	26.0	19.5
18	15.5	10.0	4.5	7.0	3.5	10.0	19.5	20.0	24.0	24.0	24.5	20.0
19	15.5	12.0	4.0	3.5	7.0	11.5	13.5	26.0	24.0	24.0	25.0	19.5
20	19.5	10.5	4.5	3.0	9.0	14.0	15.0	23.0	24.0	24.5	25.0	17.5
21	14.0	11.5	5.0	4.0	---	14.5	15.0	21.0	24.5	26.0	25.5	18.5
22	18.0	12.0	7.5	3.5	5.0	13.5	17.0	24.0	22.5	25.0	25.0	15.0
23	16.0	15.0	8.0	3.5	3.0	12.0	17.5	20.0	24.0	25.0	25.0	15.5
24	18.0	11.5	5.0	7.5	5.5	10.0	20.0	21.0	24.0	24.0	24.5	15.5
25	17.0	7.5	3.0	7.0	4.0	10.0	20.0	19.5	24.0	24.0	23.5	15.0
26	16.5	7.5	3.5	8.0	6.0	8.5	21.5	22.0	24.0	24.0	24.0	14.5
27	19.5	7.5	6.5	7.0	5.0	11.0	20.5	21.0	25.5	25.0	24.0	15.5
28	17.0	12.0	4.0	6.5	7.0	8.5	15.0	21.0	26.0	26.0	23.0	17.5
29	17.0	5.0	8.5	6.5	---	6.0	17.0	20.0	25.0	27.0	23.5	17.5
30	21.0	2.0	5.5	7.0	---	10.0	16.5	19.0	25.0	25.0	25.0	17.0
31	16.5	---	5.5	6.0	---	6.5	---	19.0	---	---	25.5	---
MONTH	17.0	11.5	5.5	5.5	4.5	8.5	14.0	19.5	23.0	25.0	25.0	19.5

07159750 COTTONWOOD CREEK AT SEWARD, OKLA.

LOCATION.--Lat 35°47'43", long 97°29'32", in SW 1/4 sec.2, T.15 N., R.3 W., Logan County, at county road bridge, 0.3 mi (0.48 km) west of Seward, 7.7 mi (12.4 km) southwest of Guthrie, and at mile 19.2 (30.9 km).
DRAINAGE AREA.--316 mi² (818 km²).

PERIOD OF RECORD.--Chemical analyses: February 1973 to current year.
Water temperatures: February 1973 to current year.

EXTREMES, Current year.--Specific conductance: Maximum daily, 1, 470 micromhos/cm Apr. 30; minimum daily, 132 micromhos/cm Nov. 4.
Water temperatures: Maximum, 26.0°C Aug. 21-22; minimum, 2.5°C on Feb. 9.

Period of record: Specific conductance: Maximum daily, 1,610 micromhos/cm Jan. 3, 1974; minimum daily, 132 micromhos/cm Nov. 4, 1974.
Water temperatures (1974-75): Maximum, 26.5°C July 22, 24-25; minimum, 1.0°C on several days during January, 1974.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	DIS-CHARGE (CFS)	INSTAN-TANEOUS DIS-CHARGE (CFS)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	ALKA-LINITY AS CACO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)
OCT.												
01-15	--	44	--	91	37	120	--	307	--	252	180	130
16-25	--	41	--	81	33	98	--	266	9	233	160	100
26-30	--	546	--	55	21	58	--	181	2	152	110	57
31...	--	3460	--	19	6.5	15	--	74	--	61	21	16
NOV.												
01-02	--	4710	--	41	14	--	--	141	--	116	61	36
03-05	--	6520	--	16	4.8	--	--	66	--	54	9.1	--
06-14	--	602	--	57	22	48	--	204	--	167	84	56
15-30	--	124	--	110	44	120	--	381	--	313	--	120
DEC.												
01-11	--	95	--	120	49	120	4.3	341	34	336	210	130
12-15	--	226	--	85	35	84	4.4	295	0	242	--	96
16-31	--	70	--	110	51	110	3.9	395	0	324	220	130
JAN.												
01-02	--	196	--	99	49	--	4.6	375	0	308	200	140
03-04	--	894	--	48	20	--	3.9	184	0	151	82	51
05-15	--	149	--	96	39	--	3.9	324	0	266	180	87
16-30	--	81	--	120	54	--	4.4	421	0	345	240	140
31...	--	1500	--	40	16	--	4.2	159	0	130	60	49
FEB.												
01...	--	1950	--	43	16	37	3.5	140	0	115	71	40
02-06	--	493	--	60	25	56	3.6	213	0	175	110	61
07-22	--	209	--	89	43	91	3.7	337	0	276	180	98
23-24	--	426	--	58	26	60	3.4	206	0	169	--	71
25-28	--	208	--	88	40	84	3.6	313	0	257	160	92
MAR.												
01-12	--	160	--	100	48	110	3.6	369	0	303	200	120
13-14	--	168	--	86	38	88	3.2	311	0	255	170	94
16-28	--	161	--	96	44	100	3.7	354	0	290	200	110
29-31	--	194	--	80	37	84	3.3	302	0	248	170	82
APR.												
01-08	--	138	--	98	49	100	3.7	244	62	303	200	110
09...	--	309	--	64	30	74	3.8	231	0	189	120	88
10-17	--	157	--	91	42	93	3.8	325	0	267	190	89
18-30	--	63	--	110	54	130	4.8	404	0	331	230	140
MAY												
01-02	--	131	--	110	54	130	5.0	402	0	330	240	150
03-04	--	404	--	48	21	52	4.4	178	0	146	89	63
05-13	--	135	--	89	40	94	4.6	317	0	260	200	97
14-15	--	1970	--	33	13	28	4.1	121	0	99	58	33
16-22	--	222	--	71	32	67	4.1	261	0	214	150	66
23-24	--	1720	--	41	16	34	4.8	140	0	115	76	36
25-31	--	303	--	67	29	62	4.5	246	0	202	130	61
JUNE												
01-06	--	89	--	83	39	94	4.9	336	0	276	170	99
07-11	--	527	--	42	18	41	5.2	170	0	139	75	41
12-17	--	117	--	76	36	84	5.1	315	0	258	160	84
18-19	--	500	--	39	17	41	4.4	164	0	135	78	38
20-23	--	204	--	57	26	64	4.9	239	0	196	120	56
24-25	--	577	--	40	15	39	5.3	152	0	125	64	43
26-30	--	149	--	--	31	63	5.1	257	0	211	120	62
JULY												
16...	0645	--	30	92	39	120	7.0	349	0	286	--	120
23...	0650	--	24	100	42	130	7.1	370	0	303	200	140
25...	0630	--	8000	18	5.8	13	4.7	73	0	60	22	--
AUG.												
04...	0650	--	154	84	34	80	5.0	318	0	261	150	78
14...	0635	--	59	110	44	110	6.1	382	0	313	210	120
18...	0635	--	488	37	11	25	4.0	128	0	105	57	25
SEP.												
09...	0655	--	34	100	43	120	7.5	338	10	294	210	130
15...	0705	--	74	73	27	81	5.4	250	0	205	150	78
22...	0655	--	35	88	35	110	6.7	298	17	273	200	87

07159750 COTTONWOOD CREEK AT SEWARD, OKLA.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)
OCT.												
01-15	3.5	--	2.7	778	1.06	92.4	380	130	--	2.7	1230	8.0
16-25	2.8	--	2.6	678	.92	75.1	340	110	--	2.3	1040	8.0
26-30	2.6	--	1.3	429	.58	632	220	72	--	1.7	694	8.5
31...	.98	--	.77	144	.20	1350	74	14	--	.8	216	7.8
NOV.												
01-02	1.0	--	.50	278	.38	3540	160	44	--	--	460	7.8
03-05	.60	--	.31	97	.13	1710	60	6	--	--	151	7.7
06-14	1.3	--	.43	395	.54	642	230	66	--	1.4	654	8.0
15-30	2.2	--	.88	795	1.08	266	460	140	--	2.4	1230	8.1
DEC.												
01-11	--	.55	1.1	881	1.20	226	500	170	34	2.3	1330	8.6
12-15	--	1.9	.77	642	.87	392	360	110	34	1.9	1010	8.4
16-31	2.6	.79	1.2	862	1.17	163	480	160	33	2.2	1330	8.1
JAN.												
01-02	--	--	--	835	1.14	442	450	140	--	--	1300	7.8
03-04	--	--	--	377	.51	910	200	51	--	--	613	8.1
05-15	--	--	--	688	.94	277	400	130	--	--	1070	8.3
16-30	--	--	--	928	1.26	203	520	180	--	--	1430	8.3
31...	--	--	--	315	.43	1280	170	35	--	--	521	7.9
FEB.												
01...	2.4	--	.43	311	.42	1640	170	58	31	1.2	493	7.7
02-06	1.8	--	.60	459	.62	611	250	78	32	1.5	734	7.9
07-22	2.6	--	.57	726	.99	410	400	120	33	2.0	1130	7.8
23-24	2.0	--	.59	467	.64	537	250	83	34	1.6	741	7.8
25-28	2.2	--	.47	669	.91	376	380	130	32	1.9	1050	7.7
MAR.												
01-12	--	--	--	813	1.11	351	450	140	35	2.3	1230	7.9
13-14	--	--	--	678	.92	308	370	120	34	2.0	1050	7.8
16-28	--	--	--	789	1.07	343	420	130	34	2.1	1200	8.0
29-31	--	--	--	647	.88	339	350	100	34	1.9	1000	8.0
APR.												
01-08	--	--	.88	804	1.09	300	450	140	33	2.1	1240	--
09...	--	--	.66	534	.73	446	280	94	36	1.9	876	--
10-17	--	--	.65	722	.98	306	400	130	33	2.0	1120	--
18-30	--	--	1.4	921	1.25	157	500	170	36	2.5	1410	--
MAY												
01-02	--	.52	1.7	926	1.26	328	500	170	36	2.5	1430	8.1
03-04	--	.73	.57	384	.52	419	210	60	35	1.6	646	8.1
05-13	--	.76	1.1	711	.97	259	390	130	34	2.1	1120	7.9
14-15	--	1.2	.36	249	.34	1320	140	37	30	1.0	414	8.0
16-22	--	.65	.52	545	.74	327	310	95	32	1.7	861	8.1
23-24	--	.28	.43	292	.40	1360	170	53	30	1.1	488	8.0
25-31	--	.62	.67	504	.69	412	290	85	32	1.6	806	7.9
JUNE												
01-06	--	.52	1.4	718	.98	173	370	92	35	2.1	1120	7.9
07-11	--	.34	.57	341	.46	485	180	40	32	1.3	554	7.3
12-17	--	.52	1.2	631	.86	199	340	80	35	2.0	1000	7.6
18-19	--	.34	.50	333	.45	450	170	33	34	1.4	542	7.4
20-23	--	.43	.82	495	.67	273	250	53	35	1.8	798	7.4
24-25	--	.38	.65	311	.42	485	160	37	34	1.3	515	7.2
26-30	--	.52	.66	511	.69	206	--	--	--	--	815	7.5
JULY												
16...	--	--	3.0	795	1.08	64.4	390	100	40	2.6	1250	7.8
23...	--	--	3.1	875	1.19	56.7	420	120	40	2.8	1360	8.2
25...	--	--	.72	131	.18	2830	69	9	27	.7	209	7.5
AUG.												
04...	--	--	.68	630	.86	262	350	89	33	1.9	989	7.9
14...	--	--	1.6	824	1.12	131	460	140	34	2.2	1270	8.1
18...	--	--	.96	234	.32	308	140	33	28	.9	381	7.4
SEP.												
09...	--	--	3.2	822	1.12	75.5	430	130	37	2.5	1310	8.5
15...	--	--	1.8	583	.79	116	290	88	37	2.1	917	8.3
22...	--	--	3.2	782	1.06	73.9	360	91	39	2.5	1220	8.5

07159750 COTTONWOOD CREEK AT SEWARD, OKLA.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED IRON (FE) (UG/L)	DISSOLVED MANGANESE (MN) (UG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	DISSOLVED OXYGEN (MG/L)
OCT. 17...	1530	51	--	--	840	--	15.0	5.2
NOV. 20...	1730	185	10	400	1300	--	12.0	7.8
DEC. 18...	1100	80	--	--	1300	--	4.0	10.6
JAN. 14...	1630	165	--	--	1090	--	3.5	10.6
FEB. 11...	1730	192	10	330	1240	--	4.5	10.8
MAR. 21...	1200	150	--	--	1050	7.6	--	6.7
APR. 16...	1330	128	--	--	1150	7.8	20.0	10.0
MAY 30...	1015	331	60	60	970	8.1	20.0	8.6
AUG. 25...	1500	125	30	120	1850	8.0	26.0	--
SEP. 23...	1300	39	--	--	1150	8.1	17.0	9.1

DATE	PERCENT SATURATION	CHEMICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	PHENOLS (UG/L)	DISSOLVED CADMIUM (CD) (UG/L)	DISSOLVED COPPER (CU) (UG/L)	DISSOLVED LEAD (PB) (UG/L)	DISSOLVED ZINC (ZN) (UG/L)
OCT. 17...	55	--	.2	--	--	--	--	--
NOV. 20...	77	--	7.0	0	4	7	4	40
DEC. 18...	87	--	3.0	--	--	--	--	--
JAN. 14...	84	--	--	--	--	--	--	--
FEB. 11...	91	16	2.6	--	4	3	0	10
MAR. 21...	74	--	--	--	--	--	--	--
APR. 16...	120	--	5.0	--	--	--	--	--
MAY 30...	101	--	7.4	--	0	2	2	10
AUG. 25...	--	35	11	--	8	22	6	270
SEP. 23...	100	--	--	--	--	--	--	--

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TOTAL ALDRIN (UG/L)	TOTAL CHLORDANE (UG/L)	TOTAL DDD (UG/L)	TOTAL DDE (UG/L)	TOTAL DDT (UG/L)	TOTAL DIAZINON (UG/L)	TOTAL DIELDRIN (UG/L)	TOTAL ENDRIN (UG/L)	TOTAL HEPTACHLOR (UG/L)	TOTAL HEPTACHLOR EPOXIDE (UG/L)
NOV. 20...	1730	185	.00	.0	.00	.00	.00	.01	.00	.00	.00	.00
FEB. 11...	1730	192	.00	.0	.00	.00	.00	.01	.00	.00	.00	.00
MAY 30...	1015	331	.00	.0	.00	.00	.00	.02	.00	.00	.00	.00
AUG. 25...	1500	125	.00	.0	.00	.00	.00	.04	.01	.00	.00	.00

DATE	TOTAL LINDANE (UG/L)	TOTAL MALATHION (UG/L)	TOTAL METHYL PARATHION (UG/L)	TOTAL METHYL TRITHION (UG/L)	TOTAL PARATHION (UG/L)	TOTAL PCB (UG/L)	TOTAL TOXAPHENE (UG/L)	TOTAL TRITHION (UG/L)	TOTAL 2,4-D (UG/L)	TOTAL 2,4,5-T (UG/L)	TOTAL SILVEX (UG/L)
NOV. 20...	.00	.00	.00	.00	.00	.0	0	.00	.00	.00	.00
FEB. 11...	.00	.00	.00	.00	.00	2.0	0	.00	.07	.00	.00
MAY 30...	.01	.00	.00	.00	.00	.0	0	.00	.18	.02	.06
AUG. 25...	.00	.00	.00	.00	.00	.0	0	.00	.00	.02	.00

07159750 COTTONWOOD CREEK AT SEWARD, OKLA.

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C) , WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1040	341	1330	1340	493	---	1150	1460	971	1060	659	1210
2	1120	570	1320	1250	782	---	1180	1400	984	1160	787	1190
3	1160	152	1290	549	848	1260	1210	520	1130	1220	875	---
4	1180	132	1320	667	666	---	1240	766	1200	1250	989	---
5	1220	166	---	816	536	---	1260	967	1220	---	1050	1210
6	1240	488	---	949	787	1260	1300	1000	1270	---	1090	1270
7	1250	514	1350	1060	938	1300	1330	1040	394	1200	963	1290
8	1190	572	---	1130	1030	1320	1240	1140	484	1250	994	1300
9	1230	564	---	1070	1120	---	876	1210	511	1280	1110	1310
10	1260	684	1360	---	1110	---	1010	1270	719	1270	1170	---
11	1310	753	1280	---	1190	1260	1010	1300	690	1260	1200	---
12	1340	706	1080	1080	1230	1300	1050	1080	831	1320	1240	1310
13	1330	764	876	1090	1210	1000	1060	980	957	1030	1260	967
14	1280	839	978	1120	1250	1110	1120	300	1060	1120	1270	944
15	1080	981	1080	1180	1220	---	1180	525	1110	1200	1250	917
16	756	1060	1160	1240	1110	1200	1200	710	1180	---	543	934
17	848	1120	1220	1390	1090	1240	1220	797	1190	---	382	989
18	950	1150	1250	1400	1120	1280	---	822	449	1310	381	1090
19	1030	1190	1280	---	1110	1220	---	891	643	1320	386	1160
20	1100	---	1290	---	1120	1040	1350	936	734	1340	434	1190
21	1150	---	1310	---	1130	1150	1370	986	800	1320	489	1200
22	1200	1220	---	1410	1190	1160	1400	1010	792	1340	630	1220
23	1230	1230	---	1450	672	1200	1440	564	896	1360	739	1240
24	1250	1260	1380	---	796	1220	1450	404	486	860	835	1270
25	1210	1290	---	---	924	1250	---	636	542	209	929	1280
26	958	1300	---	1460	1000	1280	---	726	668	326	979	1290
27	635	1330	1370	1450	1090	1270	---	804	766	457	1050	1230
28	796	1370	1380	1440	1140	1140	---	855	812	480	1000	1200
29	409	1350	1400	1430	---	925	1460	900	852	531	1030	1250
30	600	1370	1390	1410	---	986	1470	---	914	870	1150	1280
31	216	---	1370	521	---	1100	---	---	---	348	1160	---
MONTH	1050	875	---	---	997	---	1230	897	842	1030	904	1180

TEMPERATURE (DEG. C) OF WATER , WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
(ONCE-DAILY)

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

07161000 CIMARRON RIVER AT PERKINS, OKLA.

LOCATION.--Lat 35°57'32", long 97°01'49", in SW 1/4 SW 1/4 sec.7, T.17 N., R.3 E., Payne County, at gaging station at bridge on U.S. Highway 177, 1.0 mi (1.6 km) south of Perkins, 1.5 mi (2.4 km) upstream from Dugout Creek, 4.0 mi (6.4 km) downstream from Wildhorse Creek, and at mile 87.3 (140.5 km).

DRAINAGE AREA.--17,852 mi^2 (46,237 km^2) of which 4,926 mi^2 (12,758 km^2) is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: October 1952 to September 1963, June 1965 to current year.
Water temperatures: October 1952 to September 1963, June 1965 to current year.

EXTREMES, Current year.--Specific conductance: Maximum daily, 13,200 micromhos/cm Oct. 24; minimum daily, 681 micromhos/cm July 27.
Water temperatures: Maximum, 32.5°C Aug. 12; minimum, freezing point on several days during January and Feburary.

Period of record.--Specific conductance: Maximum daily, 32,400 micromhos/cm Mar. 18, 1957; minimum daily, 353 micromhos/cm Apr. 30, 1970.
Water temperatures: Maximum, 39.0°C June 18, 1974; minimum, -1.0°C Jan. 19-20, 1970.

REMARKS.--Continuous monitor records for specific conductance and water temperature are collected for this station. Temperature records for Oct. 1-Jan. 3, Jan. 11-15, Feb. 3-May 13, June 7-9, July 2-Aug. 3, and Aug. 12-Sept. 15 were poor. Once-daily temperature values were used in their place. Records of maximum and minimum specific conductance values are available in district office in Oklahoma City, Okla.
*=Mean discharge; M=Presence of material verified but not quantified.
B=Results based on colony count outside the acceptable range (Non-ideal colony count).

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)
OCT.											
05...	0730	495	--	180	46	1800	--	254	0	208	420
15...	0730	536	--	180	61	1900	--	255	0	209	420
27...	0730	4340	--	56	17	400	--	130	0	107	110
30...	1030	7670	12	58	16	410	7.1	128	0	105	120
31...	0730	20800*	--	39	8.8	--	--	109	0	89	46
NOV.											
05...	0730	75000	--	45	7.7	110	--	103	0	84	73
15...	0730	3170	--	160	43	850	--	305	0	250	320
20...	1200	2460	18	180	46	540	6.9	382	0	313	--
25...	0700	2040	--	200	70	1200	6.8	383	0	314	410
DEC.											
05...	0730	1700	--	190	70	--	6.3	400	0	328	430
15...	0730	2280	--	150	59	920	5.9	312	0	256	350
17...	1200	1860	12	170	58	1100	5.8	336	0	276	400
25...	0730	1370	--	190	70	--	6.2	371	0	304	470
JAN.											
05...	0730	4210	--	82	28	380	5.1	178	0	146	180
15...	0730	1420	--	160	58	1300	5.9	352	0	289	320
21...	1000	1330	13	200	66	1300	5.2	392	0	322	470
25...	0800	1240	--	190	35	1600	6.3	344	0	282	460
FEB.											
05...	0800	5630	--	86	31	300	4.7	207	0	170	180
14...	0730	1780	--	160	66	1200	6.1	355	0	291	420
20...	1030	2040	12	150	56	840	4.9	353	0	290	360
25...	0800	3970	--	120	40	730	4.8	220	0	180	280
MAR.											
03-04	--	4320*	--	130	41	600	5.1	204	0	167	330
12...	1030	4120	11	120	55	--	5.3	262	0	215	360
15-16	--	2470*	--	170	56	720	5.1	299	0	245	440
25...	0745	2390	--	180	55	930	6.3	335	0	275	470
26...	0745	2200	--	180	57	910	6.3	321	0	263	430
APR.											
05...	0730	1710*	--	180	64	1100	5.9	346	0	284	480
09...	1430	1870	9.8	170	61	860	6.0	347	0	285	400
15...	0700	1260	--	170	66	910	5.7	332	0	272	480
25...	0730	910	--	--	74	1200	6.6	242	0	198	510
MAY											
05...	0700	4220	--	76	28	320	5.8	184	0	151	180
06...	0900	2640	7.3	110	40	620	6.9	207	0	170	310
15...	0730	33200*	--	65	17	330	4.9	124	0	102	140

07161000 CIMARRON RIVER AT PERKINS, OKLA.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)
MAY											
25...	0730	11800*	--	41	11	82	5.7	114	0	94	72
JUNE											
03...	1200	3710	--	--	--	--	--	--	--	--	--
05...	0730	2700	--	150	39	860	8.5	244	0	200	380
15...	0730	5130	--	110	26	300	9.0	176	0	144	--
25...	0700	2600	--	130	45	570	7.4	242	0	198	330
JULY											
02...	1000	1560	--	130	40	800	8.6	281	0	230	--
05...	0700	1360	--	150	50	1100	8.6	226	0	185	--
15...	0700	713	--	140	50	1000	8.1	234	0	192	430
25...	0700	2150	--	88	38	620	5.9	235	0	193	240
AUG.											
05...	0700	1770	--	74	22	260	6.7	176	0	144	160
12...	1000	974	15	100	30	800	9.4	286	0	235	220
15...	0730	759	--	--	40	820	7.8	220	0	180	250
25...	0700	526	--	100	37	670	7.1	228	0	187	240
SEP.											
05...	0700	324	--	110	44	--	7.4	235	0	193	250
11...	0700	374*	9.9	110	50	--	6.9	261	0	214	320
15...	0700	374	--	110	42	720	6.2	298	8	258	240
25...	0700	225	--	110	45	810	6.3	281	0	230	270

07161000 CIMARRON RIVER AT PERKINS, OKLA.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	TOTAL NITRO-GEN (N) (MG/L)	TOTAL NITRO-GEN (NO3) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)
OCT.											
05...	2700	--	--	.58	--	--	--	.95	5440	--	7.40
15...	2900	--	--	.48	--	--	--	.29	5570	--	7.58
27...	590	--	--	2.6	--	--	--	1.3	1290	--	1.75
30...	620	.3	1.2	--	3.3	4.5	20	.27	1350	1310	1.84
31...	240	--	--	1.1	--	--	--	.28	--	--	--
NOV.											
05...	160	--	--	.79	--	--	--	.29	468	--	.64
15...	1300	--	--	1.1	--	--	--	.28	2850	--	3.88
20...	860	.2	.38	--	.92	1.3	5.8	.20	2000	1940	2.72
25...	1900	--	--	--	--	--	--	.23	3870	--	5.26
DEC.											
05...	1900	--	--	--	--	--	--	.21	4070	--	5.54
15...	1400	--	--	--	--	--	--	--	3020	--	4.11
17...	1700	.4	.92	--	.49	1.4	6.2	.20	3510	3610	4.77
25...	2000	--	--	--	--	--	--	.26	4500	--	6.12
JAN.											
05...	570	--	--	--	--	--	--	.49	1350	--	1.84
15...	2000	--	--	--	--	--	--	.23	4210	--	5.73
21...	--	.4	--	--	--	--	--	--	4340	--	5.90
25...	2400	--	--	--	--	--	--	.24	5080	--	6.91
FEB.											
05...	440	--	--	--	--	--	--	.47	1200	--	1.63
14...	1800	--	--	--	--	--	--	.18	3900	--	5.30
20...	1200	.3	1.1	--	.90	2.0	8.9	.21	2920	2800	3.97
25...	1100	--	--	--	--	--	--	.34	2400	--	3.26
MAR.											
03-04	910	--	--	--	--	--	--	.58	2190	--	2.98
12...	1200	.6	1.2	--	1.7	2.9	13	.42	2620	--	3.56
15-16	1100	--	--	--	--	--	--	.29	2740	--	3.73
25...	1400	--	--	--	--	--	--	.40	3410	--	4.64
26...	1400	--	--	--	--	--	--	.40	3270	--	4.45
APR.											
05...	--	--	--	--	.74	--	--	.22	3700	--	5.03
09...	1300	.1	.83	--	.95	1.8	7.9	.20	3030	2980	4.12
15...	1400	--	--	--	.27	--	--	.15	3290	--	4.47
25...	1900	--	--	--	--	--	--	.19	4120	--	5.60
MAY											
05...	--	--	--	--	--	--	--	--	1210	--	1.65
06...	930	.3	.68	--	1.8	2.5	11	.33	2200	2130	2.99
15...	490	--	--	--	8.6	--	--	1.4	1140	--	1.55
25...	120	--	--	--	3.8	--	--	1.1	414	--	.56
JUNE											
03...	--	--	--	--	--	--	--	--	--	--	--
05...	1300	--	--	--	--	--	--	.45	2940	--	4.00
15...	460	--	--	--	--	--	--	.56	1340	1340	1.82
25...	890	--	--	--	--	--	--	.35	2170	--	2.95
JULY											
02...	--	.6	.06	--	1.1	1.2	5.1	.29	--	--	--
05...	1600	--	--	--	--	--	--	.25	3540	3540	4.81
15...	1500	--	.53	--	--	--	--	.11	3270	--	4.45
25...	930	--	--	--	--	--	--	.83	2060	--	2.80
AUG.											
05...	--	--	--	--	--	--	--	.23	991	991	1.35
12...	1200	.5	.43	--	1.4	1.8	8.1	.37	2630	2520	3.58
15...	1300	--	--	--	--	--	--	.28	2560	2560	3.48
25...	990	--	--	--	--	--	--	--	2200	--	2.99
SEP.											
05...	1300	--	--	--	--	--	--	.27	2780	2780	3.78
11...	1400	.4	.01	--	1.3	1.3	5.8	.25	2960	2920	4.03
15...	1100	--	--	--	--	--	--	.44	2380	--	3.24
25...	1200	--	--	--	--	--	--	.32	2680	--	3.64

07161000 CIMARRON RIVER AT PERKINS, OKLA.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	CARBON DIOXIDE (CO2) (MG/L)	TUR-BID-ITY (JTU)
OCT.										
05...	7270	640	430	--	31	8740	8.2	--	2.6	--
15...	8060	700	490	--	31	8970	8.2	--	2.6	--
27...	15100	210	100	--	12	2310	7.6	15.0	5.2	--
30...	28000	210	110	80	12	2030	7.6	17.5	5.1	1000
31...	--	130	41	--	--	953	8.1	--	1.4	--
NOV.										
05...	94800	140	56	--	4.0	797	8.0	--	1.6	--
15...	24400	580	330	--	15	4620	8.3	--	2.4	--
20...	13300	640	330	64	9.3	--	8.2	11.0	3.9	50
25...	21300	790	470	77	19	6230	8.3	8.0	3.1	--
DEC.										
05...	18700	760	430	--	--	6530	8.2	--	4.0	--
15...	18600	620	360	76	16	4920	8.1	--	4.0	--
17...	17600	660	390	78	19	--	8.4	4.0	2.1	30
25...	16600	760	460	--	--	7180	8.3	--	3.0	--
JAN.										
05...	15300	320	170	72	9.2	2290	7.7	--	5.7	--
15...	16100	640	350	81	22	6810	7.9	--	7.1	--
21...	15600	770	450	78	20	--	8.2	5.0	4.0	7
25...	17000	620	340	85	28	8070	8.2	6.5	3.5	--
FEB.										
05...	18200	340	170	65	7.1	1990	7.8	4.5	5.3	--
14...	18700	670	380	79	20	6240	8.3	--	2.8	--
20...	16100	610	320	75	15	--	--	5.0	--	50
25...	25700	460	280	77	15	3990	7.4	3.5	14	--
MAR.										
03-04	25500	490	330	72	12	3640	8.0	--	3.3	--
12...	29100	530	310	--	--	4610	8.1	4.0	3.3	300
15-16	18300	660	410	70	12	4400	8.0	--	4.8	--
25...	22000	680	400	75	16	5240	8.3	--	2.7	--
26...	19400	680	420	74	15	5430	8.4	--	2.0	--
APR.										
05...	17100	710	430	77	18	5970	8.0	--	5.5	--
09...	15300	680	390	73	14	--	7.2	16.0	35	55
15...	11200	700	420	74	15	5270	8.2	--	3.4	--
25...	10100	--	--	--	--	6650	7.6	--	9.7	--
MAY										
05...	13800	310	150	69	8.0	2070	7.5	--	9.3	--
06...	15700	440	270	75	13	3800	7.8	21.0	5.2	240
15...	102000	230	130	75	9.4	2020	7.9	--	2.5	--
25...	13200	150	54	54	2.9	730	8.0	--	1.8	--
JUNE										
03...	--	--	--	--	--	3400	9.4	27.0	--	--
05...	21400	540	340	77	16	4740	7.8	--	6.2	--
15...	18600	380	240	62	6.7	2190	7.7	--	5.6	--
25...	15200	510	310	71	11	3540	7.9	--	4.9	--
JULY										
02...	--	490	260	78	16	4660	8.3	28.0	2.3	110
05...	13000	580	400	80	20	5750	8.4	--	1.4	--
15...	6300	560	360	79	18	5320	8.1	--	3.0	--
25...	12000	380	180	78	14	3540	8.4	--	1.5	--
AUG.										
05...	4740	280	130	67	6.8	1720	7.8	--	4.5	--
12...	6920	370	140	82	18	3800	8.4	27.0	1.8	72
15...	5250	--	--	--	--	4430	7.9	--	4.4	--
25...	3130	400	220	78	15	3720	8.1	--	2.9	--
SEP.										
05...	2430	460	260	--	--	4980	7.9	--	4.7	--
11...	2990	480	270	--	--	5500	8.3	24.0	2.1	7
15...	2400	450	190	77	15	4210	8.4	--	2.0	--
25...	1630	460	230	79	16	4620	7.9	--	5.7	--

07161000 CIMARRON RIVER AT PERKINS, OKLA.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	CARBON DIOXIDE (CO2) (MG/L)	FECAL COLIFORM (COL. PER 100 ML)	STREPTOCOCCI (COLONIES PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)	SUSPENDED SEDIMENT (MG/L)	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM
OCT.										
30...	1030	7670	8.1	89	5.1	36000	24000	9.0	2260	92
NOV.										
20...	1200	2460	11.8	112	3.9	2200	B110	7.6	359	66
DEC.										
17...	1200	1860	14.8	120	2.1	480	--	5.1	500	32
JAN.										
21...	1000	1330	11.8	99	4.0	360	140	--	163	57
FEB.										
20...	1030	2040	13.6	114	--	M0	M0	4.9	--	--
MAR.										
12...	1030	4120	15.2	123	3.3	B2040	M0	--	1110	58
APR.										
09...	1430	1870	12.6	135	35	M0	B13	--	438	41
MAY										
06...	0900	2640	--	--	5.2	M0	1400	14	62	99
JUNE										
03...	1200	3710	10.8	144	--	M0	233	--	--	--
JULY										
02...	1000	1560	7.6	101	2.3	1200	104	--	--	--
AUG.										
12...	1000	974	8.0	105	1.8	M0	M0	20	252	98
SEP.										
11...	0700	374	6.8	89	2.1	M0	580	--	75	--

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TOTAL IRON (FE) (UG/L)	DISSOLVED IRON (FE) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	SUSPENDED MANGANESE (MN) (UG/L)	DISSOLVED MANGANESE (MN) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	SUSPENDED ARSENIC (AS) (UG/L)	DISSOLVED ARSENIC (AS) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	SUSPENDED CADMIUM (CD) (UG/L)
FEB.												
20...	1030	2040	3800	10	160	90	70	4	2	2	10	6
MAY												
06...	0900	2640	--	40	--	--	10	11	8	3	--	--
AUG.												
12...	1000	974	6000	0	400	400	0	10	1	9	10	9

DATE	DISSOLVED CADMIUM (CD) (UG/L)	TOTAL CHROMIUM (CR) (UG/L)	SUSPENDED CHROMIUM (CR) (UG/L)	DISSOLVED CHROMIUM (CR) (UG/L)	TOTAL COBALT (CO) (UG/L)	SUSPENDED COBALT (CO) (UG/L)	DISSOLVED COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)	SUSPENDED COPPER (CU) (UG/L)	DISSOLVED COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)
FEB.											
20...	4	10	0	10	50	48	2	20	15	5	<100
MAY											
06...	8	--	--	0	--	--	1	--	--	10	--
AUG.											
12...	1	20	10	10	60	60	0	10	2	8	<100

DATE	SUSPENDED LEAD (PB) (UG/L)	DISSOLVED LEAD (PB) (UG/L)	TOTAL MERCURY (HG) (UG/L)	SUSPENDED MERCURY (HG) (UG/L)	DISSOLVED MERCURY (HG) (UG/L)	TOTAL SELENIUM (SE) (UG/L)	SUSPENDED SELENIUM (SE) (UG/L)	DISSOLVED SELENIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	SUSPENDED ZINC (ZN) (UG/L)	DISSOLVED ZINC (ZN) (UG/L)
FEB.											
20...	<98	2	.1	.0	.1	1	0	1	30	0	30
MAY											
06...	--	3	--	--	--	2	1	1	--	--	60
AUG.											
12...	<96	4	.1	.0	.1	2	0	2	90	50	40

07161000 CIMARRON RIVER AT PERKINS, OKLA.--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

PHYTOPLANKTON

Date	Time	Organism	Count (cells/ml)	Percent of total	Sampling method
Oct. 30		CHLOROPHYTA			Sediment sampler
		Chlorophyceae			
		Chlorococcales			
		Occystaceae			
		Closteriopsis	710	17	
		CHRYSOPHYTA			
		Bacillariophyceae			
		Centrales			
		Coscinodiscaceae			
		Cyclotella	1,400	33	
		Pennales			
		Naviculaceae			
		Navicula	2,100	50	
		TOTAL	4,300		
Nov. 20	1200	CHLOROPHYTA			Sediment sampler
		Chlorophyceae			
		Chlorococcales			
		Characiaceae			
		Schroederia	16	5	
		Volvocales			
		Chlamydomonadaceae			
		Chlamydomonas	31	10	
		Chrysophyta			
		Bacillariophyceae			
		Pennales			
		Fragilariaceae			
		Synedra	31	10	
		Naviculaceae			
		Navicula	16	5	
		Nitzschiaceae			
		Nitzschia	74	24	
		Cyanophyta			
		Myxophyceae			
		Oscillatoriales			
		Oscillatoriaceae			
		Oscillatoria	126	43	
		Spirulina	16	5	
		TOTAL	310		
Dec. 17	1200	CHLOROPHYTA			Sediment sampler
		Chlorophyceae			
		Chlorococcales			
		Occystaceae			
		Ankistrodesmus	88	4	
		Oocystis	180	8	
		Volvocales			
		Chlamydomonadaceae			
		Chlamydomonas	180	8	
		CHRYSOPHYTA			
		Bacillariophyceae			
		Centrales			
		Coscinodiscaceae			
		Cyclotella	1,300	56	
		Melosira	44	2	
		Pennales			
		Naviculaceae			
		Amphiprora	44	2	
		Navicula	66	3	
		Nitzschiaceae			
		Nitzschia	400	18	
		TOTAL	2,300		
Jan. 21	1000	CHLOROPHYTA			Sediment sampler
		Chlorophyceae			
		Chlorococcales			
		Occystaceae			
		Ankistrodesmus	30	2	
		Volvocales			
		Chlamydomonadaceae			
		Chlamydomonas	120	8	

07161000 CIMARRON RIVER AT PERKINS, OKLA.--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

PHYTOPLANKTON

Date	Time	Organism	Count (cells/ml)	Percent of total	Sampling method
		CHRYSOPHYTA			
		Bacillariophyceae			
		Centrales			
		Coscinodiscaceae			
		Cyclotella	600	40	
		Pennales			
		Naviculaceae			
		Amphiprora	60	4	
		Navicula	390	26	
		Tropidoneis	91	6	
		Nitzschiaceae			
		Nitzschia	180	12	
		Surirellaceae			
		Surirella	30	2	
		TOTAL	1,500		
Feb. 20	1030	CHRYSOPHYTA			Sediment sampler
		Bacillariophyceae			
		Centrales			
		Coscinodiscaceae			
		Cyclotella	1,800	68	
		Melosira	220	8	
		Pennales			
		Naviculaceae			
		Amphiprora	110	4	
		Navicula	430	16	
		Nitzschiaceae			
		Nitzschia	110	4	
		TOTAL	2,700		
Mar. 12	1030	CHRYSOPHYTA			Sediment sampler
		Bacillariophyceae			
		Centrales			
		Coscinodiscaceae			
		Cyclotella	740	37	
		Pennales			
		Diatomaceae			
		Diatoma	57	3	
		Eunotiaceae			
		Eunotia	110	6	
		Fragilariaceae			
		Synedra	170	9	
		Naviculaceae			
		Amphiprora	57	3	
		Navicula	340	17	
		Nitzschiaceae			
		Nitzschia	230	11	
		Surirellaceae			
		Surirella	57	3	
		CYANOPHYTA			
		Myxophyceae			
		Chroococcales			
		Chroococcaceae			
		Anacystis	170	9	
		EUGLENOPHYTA			
		Euglenophyceae			
		Euglenales			
		Euglenaceae			
		Euglena	57	3	
		TOTAL	2,000		
Apr. 9	1430	CHLOROPHYTA			Sediment sampler
		Chlorophyceae			
		Chlorococcales			
		Micractiniaceae			
		Micractinium	530	2	
		Occystaceae			
		Ankistrodesmus		0	
		Kirchneriella		0	
		Volvocales			
		Chlamydomonadaceae			
		Chlamydomonas	1,700	7	

07161000 CIMARRON RIVER AT PERKINS, OKLA.--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

PHYTOPLANKTON

Date	Time	Organism	Count (cells/ml)	Percent of total	Sampling method
Apr. 9	1430	CHRYSOPHYTA			
		Bacillariophyceae			
		Centrales			
		Coscinodiscaceae			
		Cyclotella	7,700	31	
		Pennales			
		Eunotiaceae			
		Eunotia		0	
		Fragilariaceae			
		Synedra	320	1	
		Naviculaceae			
		Amphiprora	320	1	
		Navicula		0	
		Nitzschiaceae			
		Nitzschia	210	1	
		Surirellaceae			
		Surirella	210	1	
		CYANOPHYTA			
		Myxophyceae			
		Chroococcales			
		Chroococcaceae			
		Anacystis	13,000	53	
		EUGLENOPHYTA			Sediment sampler
		Euglenophyceae			
		Euglenales			
		Euglenaceae			
		Euglena		0	
		TOTAL	24,000		
May 7		CHLOROPHYTA			Sediment sampler
		Chlorophyceae			
		Chlorococcales			
		Occystaceae			
		Ankistrodesmus	720	5	
		CHRYSOPHYTA			
		Bacillariophyceae			
		Centrales			
		Coscinodiscaceae			
		Cyclotella	720	5	
		Pennales			
		Naviculaceae			
		Amphiprora	2,200	16	
		Caloneis	720	5	
		Navicula	4,300	32	
		Nitzschiaceae			
		Nitzschia	720	5	
		Surirellaceae			
		Cymatopleura	720	5	
		Surirella	720	5	
		CYANOPHYTA			
		Myxophyceae			
		Chroococcales			
		Chroococcaceae			
		Anacystis	2,900	21	
		TOTAL	14,000		
July 2	1000	CHLOROPHYTA			Sediment sampler
		Chlorophyceae			
		Chlorococcales			
		Occystaceae			
		Ankistrodesmus	530	1	
		Kirchneriella	530	1	
		Scenedesmaceae			
		Actinastrum	1,100	2	
		Scendesmus	4,300	8	
		CHRYSOPHYTA			
		Bacillariophyceae			
		Centrales			
		Coscinodiscaceae			
		Cyclotella	12,00	23	
		Pennales			
		Cymbellaceae			
		Amphora		0	
		Nitzschiaceae			
		Nitzschia	4,300	8	

07161000 CIMARRON RIVER AT PERKINS, OKLA.--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

PHYTOPLANKTON

Date	Time	Organism	Count (cells/ml)	Percent of total	Sampling method
		CYANOPHYTA			
		Myxophyceae			
		Chroococcales			
		Chroococcaceae			
		Coccochloris	30,000	57	
		Oscillatoriales			
		Oscillatoriaceae			
		Oscillatoria		0	
		EUGLENOPHYTA			
		Euglenophyceae			
		Euglenales			
		Euglenaceae			
		Euglena		0	
		TOTAL	53,000		
Aug. 12	1000	CHLOROPHYTA			Sediment sampler
		Chlorophyceae			
		Chlorococcales			
		Characiaceae			
		Schroederia	380	1	
		Micractiniaceae			
		Micractinium	3,000	4	
		Occystaceae			
		Ankistrodesmus	380	1	
		Scenedesmaceae			
		Actinastrum		0	
		Scenedesmus	19,000	26	
		Tetrastrum		0	
Aug. 12	1000	Volvocales			Sediment sampler
		Chlamydomonadaceae			
		Chlamydomonas	380	1	
		CHRYSOPHYTA			
		Bacillariophyceae			
		Centrales			
		Coscinodiscaceae			
		Cyclotella	13,000	17	
		Melosira	1,500	2	
		Pennales			
		Naviculaceae			
		Navicula	6,400	9	
		Nitzschiaceae			
		Nitzschia	1,900	3	
		Surirellaceae			
		Surirella	380	1	
		CYANOPHYTA			
		Myxophyceae			
		Chroococcales			
		Chroococcaceae			
		Agmenellum	12,000	16	
		Anacystis	6,800	9	
		Oscillatoriales			
		Oscillatoriaceae			
		Lyngbya	8,700	12	
		Rivulariaceae			
		Raphidiopsis		0	
		TOTAL	74,000		
Sept. 11	0700	CHLOROPHYTA			Sediment sampler
		Chlorophyceae			
		Chlorococcales			
		Hydrodictyaceae			
		Pediastrum		0	
		Occystaceae			
		Ankistrodesmus	390	1	
		Dictyosphaerium	4,700	8	
		Kirchneriella		0	
		Oocystis	3,900	7	
		Scenedesmaceae			
		Actinastrum	1,600	3	
		Scenedesmus	6,500	11	

07161000 CIMARRON RIVER AT PERKINS, OKLA.--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA,
WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

PHYTOPLANKTON

Date	Time	Organsim	Count (cells/ml)	Percent of total	Sampling method
Sept. 11	0700	CHRYSOPHYTA			Sediment sampler
		Bacillariophyceae			
		Centrales			
		Coscinodiscaceae			
		Cyclotella	2,200	4	
		Pennales			
		Naviculaceae			
		Navicula	390	1	
		Nitzschiaceae			
		Nitzschia	980	2	
		Surirellaceae			
		Surirella	14,000	23	
		CYANOPHYTA			
		Myxophyceae			
		Chroococcales			
		Chroococcaceae			
		Anacystis	12,000	20	
		Oscillatoriales			
		Nostocaceae			
		Anabaena	2,900	5	
		Oscillatoriaceae			
		Lyngbya		0	
		Oscillatoria	10,000	17	
		PYRRHOPHYTA			
		Dinophyceae			
		Peridiniales			
		Glenodiniaceae			
		Glenodinium		0	
		TOTAL	60,000		

07161000 CIMARRON RIVER AT PERKINS, OKLA.--Continued

DISSOLVED SULFATE (SO4), MG/L, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	420	110	420	340	210	230	260	430	130	410	89	270
2	430	94	430	260	71	250	300	420	160	350	140	310
3	440	63	420	240	150	280	400	330	210	320	190	390
4	450	91	420	230	140	260	410	220	340	340	190	370
5	450	60	420	180	150	270	420	170	350	410	130	370
6	460	60	420	270	190	250	400	300	430	410	170	380
7	460	94	420	270	260	310	400	320	410	350	230	390
8	460	160	420	300	270	340	300	300	170	330	410	360
9	460	200	420	330	300	350	400	330	130	350	450	370
10	470	260	420	410	390	270	340	420	180	360	410	380
11	460	230	410	410	420	280	410	430	110	350	390	380
12	460	250	340	410	420	320	310	420	78	360	330	320
13	460	270	370	420	420	280	350	310	160	330	330	390
14	440	300	410	420	420	300	350	90	140	380	340	330
15	460	350	370	420	420	310	400	140	180	400	360	320
16	460	390	400	430	420	350	420	180	230	390	400	310
17	450	420	430	420	310	420	430	230	260	390	180	270
18	460	420	410	420	430	420	420	240	300	410	91	250
19	480	420	420	420	370	350	410	340	300	410	130	250
20	480	420	450	370	380	160	420	330	180	420	150	330
21	470	420	450	430	360	130	430	380	220	420	160	320
22	470	420	440	440	310	180	450	390	290	420	190	330
23	500	420	430	440	240	260	450	190	310	420	230	320
24	510	420	430	450	260	360	440	160	290	210	290	270
25	470	420	430	440	340	400	420	59	270	280	280	370
26	460	420	430	430	350	400	420	76	150	110	270	380
27	170	420	430	420	290	300	420	120	160	51	280	370
28	180	420	430	430	250	220	420	130	120	73	240	320
29	150	420	430	430	---	190	420	150	320	80	230	380
30	150	420	430	430	---	190	420	180	330	74	270	240
31	72	---	420	150	---	230	---	200	---	110	280	---
MONTH	410	300	420	370	310	290	390	260	230	310	250	330

DISSOLVED SULFATE (SO4), TONS PER DAY, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	826	4160	2030	2110	9750	3600	1960	1030	2860	1840	622	297
2	751	4920	2030	2050	1720	3400	1870	2200	2300	1450	711	312
3	691	8690	1960	2140	2060	3380	2220	3960	2120	1220	800	375
4	646	22900	1940	1780	1720	2920	2030	3390	2640	1420	1070	339
5	583	9230	1920	1990	2340	2480	1940	1720	2430	1460	579	320
6	551	2720	1920	2410	2670	1890	1670	2060	2800	1260	588	318
7	540	2360	1940	2110	2550	2180	1730	1760	3340	945	814	314
8	542	3150	1960	2200	2060	2220	1640	1430	2990	837	1450	286
9	554	3490	1950	1950	1980	2220	1990	1360	5720	904	1640	266
10	596	4250	1940	2210	2360	2810	1860	1750	14500	855	1250	288
11	574	3600	2610	2010	2220	3110	2260	1830	13400	819	1070	281
12	561	3270	2510	1790	2120	3560	1510	2560	4700	895	818	250
13	543	2890	2860	1850	2150	2490	1420	3160	4970	767	738	310
14	669	2780	2920	1720	2000	2380	1300	3550	2720	793	717	283
15	681	2930	2230	1610	1930	2190	1400	12500	2400	726	745	318
16	763	3010	2180	1740	1970	2190	1470	7920	2400	643	941	285
17	740	3080	2140	1680	1540	2560	1450	4780	2280	604	1220	228
18	714	2980	1880	1600	2250	2540	1370	3340	2380	604	428	209
19	704	2880	1840	1530	1930	5960	1320	3680	4030	568	435	195
20	634	2770	1910	1340	2090	3970	1250	3000	1560	573	417	244
21	571	2660	1830	1560	2130	1760	1200	3020	1470	556	373	227
22	548	2570	1730	1560	3060	1740	1220	2790	1800	541	390	227
23	562	2460	1650	1570	3370	2070	1170	4280	1850	523	408	211
24	548	2370	1610	1560	3380	2530	1120	10500	1710	709	450	167
25	704	2300	1590	1470	3720	2640	1030	2690	2110	2010	388	225
26	3080	2220	1560	1420	4770	2390	991	2130	1960	2750	379	218
27	1940	2150	1540	1360	5110	2450	980	2850	1950	744	429	212
28	1740	2110	1520	1360	4580	3030	992	2130	804	581	336	181
29	2240	2090	1520	1350	---	2450	959	1960	2040	730	373	205
30	4290	2060	1470	1560	---	2460	923	1940	1700	631	394	128
31	4040	---	1630	2840	---	2200	---	5170	---	745	349	---
MONTH	1070	3970	1950	1790	2840	2700	1470	3430	3330	959	688	258

07161000 CIMARRON RIVER AT PERKINS, OKLA.--Continued

DISSOLVED CHLORIDE (CL), MG/L, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1900	300	1900	1200	670	760	860	2000	380	1600	240	880
2	2200	260	2000	840	180	820	1000	1900	500	1300	420	1100
3	2400	150	1900	800	470	910	1500	1100	660	1100	610	1400
4	2500	250	1900	750	440	860	1700	700	1200	1200	620	1400
5	2700	140	1900	570	460	880	1700	520	1200	1600	390	1300
6	2900	140	1900	890	610	820	1500	1000	2000	1600	540	1400
7	3000	260	1800	870	860	1000	1500	1100	1500	1300	750	1400
8	3100	500	1800	1000	890	1200	1000	1000	510	1200	1500	1300
9	3000	650	1800	1100	1000	1300	1500	1200	370	1300	2800	1300
10	3200	840	1800	1600	1400	900	1200	1700	550	1300	1600	1400
11	3100	750	1600	1600	1800	910	1700	2000	330	1200	1400	1400
12	3100	810	1200	1600	1700	1100	1100	1900	200	1300	1200	1100
13	2900	880	1300	1800	1700	910	1200	1100	480	1100	1200	1400
14	2400	1000	1500	1900	1800	1000	1300	240	420	1400	1200	1200
15	2800	1200	1300	1900	1800	1100	1500	410	570	1500	1300	1100
16	3100	1400	1500	2000	1800	1300	1900	550	760	1400	1500	1100
17	2500	1700	2000	1900	1100	1800	2000	750	860	1400	560	870
18	3200	1800	1600	1900	2000	1900	1700	770	1000	1500	240	820
19	3800	1800	1700	1800	1300	1200	1700	1200	1000	1600	380	820
20	3700	1700	2600	1300	1400	490	1700	1100	570	1900	450	1100
21	3500	1700	2500	2000	1300	390	2000	1400	700	1800	480	1100
22	3500	1700	2200	2200	1000	570	2600	1400	950	1800	590	1100
23	4500	1700	2200	2400	780	850	2700	600	1100	1800	750	1100
24	4800	1700	2100	2600	860	1300	2300	500	980	660	990	880
25	3400	1800	2100	2400	1200	1500	1900	130	900	910	930	1400
26	3000	1800	2100	2000	1300	1500	1900	190	460	300	890	1400
27	550	1900	2200	1900	960	1000	1900	350	480	100	920	1300
28	580	1900	2200	2000	820	700	1900	400	360	180	790	1100
29	470	1900	2200	2000	---	620	1800	470	1100	210	760	1400
30	470	1900	2100	2100	---	610	1900	580	1100	180	890	770
31	180	---	1900	450	---	740	---	640	---	310	940	---
MONTH	2700	1200	1900	1600	1100	1000	1700	930	770	1200	900	1200

DISSOLVED CHLORIDE (CL), TONS PER DAY, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3730	11300	9180	7450	31100	11900	6480	4780	8350	7170	1680	969
2	3840	13600	9450	6620	4360	11200	6240	9950	7180	5370	2130	1110
3	3770	20700	8870	7150	6450	11000	8340	13200	6660	4190	2570	1350
4	3590	62900	8770	5810	5410	9660	8400	10800	9330	5020	3500	1280
5	3500	21500	8670	6310	7190	8080	7850	5250	8330	5700	1740	1120
6	3480	6350	8670	7950	8560	6200	6280	6860	13000	4920	1870	1170
7	3520	6510	8310	6810	8430	7020	6480	6060	12200	3510	2650	1130
8	3650	9850	8410	7340	6780	7840	5450	4750	8980	3040	5310	1030
9	3610	11300	8360	6500	6590	8250	7450	4960	16300	3360	10200	1000
10	4060	13700	8310	8640	8470	9380	6580	7070	44300	3090	4880	1060
11	3870	11700	10200	7860	9530	10100	9360	8530	40100	2810	3860	1040
12	3780	10600	8850	7000	8580	12200	5350	11600	12000	3230	2970	858
13	3420	9430	10000	7920	8720	8080	4660	11200	14900	2560	2680	1110
14	3650	9260	10700	7800	8550	7940	4840	9460	8150	2920	2530	1030
15	4140	10000	7830	7280	8260	7780	5260	36800	7590	2720	2690	1090
16	5140	10800	8180	8100	8460	8140	6670	24200	7920	2310	3530	1010
17	4110	12500	9940	7590	5460	11000	6750	15600	7550	2170	3780	735
18	4970	12800	7340	7230	10500	11500	5550	10700	7940	2210	1130	684
19	5570	12300	7440	6560	6770	20400	5460	13000	13400	2290	1270	640
20	4890	11200	11000	4700	7710	12100	5050	10000	4920	2590	1250	814
21	4250	10800	10200	7240	7690	5280	5560	11100	4690	2380	1120	781
22	4080	10400	8670	7780	9880	5510	7020	10000	5900	2320	1210	757
23	5050	9960	8430	8550	11000	6770	7030	13500	6560	2240	1330	725
24	5160	9590	7880	8990	11200	9130	5830	32900	5790	2230	1540	544
25	5090	9870	7770	8040	13100	9880	4640	5930	7050	6540	1290	850
26	20100	9530	7600	6590	17700	8950	4480	5340	6020	7510	1250	801
27	6270	9750	7900	6160	16900	8180	4430	8330	5860	1460	1410	744
28	5610	9540	7780	6320	15000	9640	4490	6540	2410	1430	1100	624
29	7030	9440	7780	6260	---	8000	4110	6140	7010	1920	1230	756
30	13500	9340	7200	7600	---	7910	4180	6260	5670	1540	1300	410
31	10100	---	7390	8530	---	7090	---	16600	---	2100	1170	---
MONTH	5370	12880	8620	7250	9940	9230	6020	11210	10540	3320	2460	907

07161000 CIMARRON RIVER AT PERKINS, OKLA.--Continued

DISSOLVED SOLIDS (RESIDUE AT 180 DEG. C), MG/L, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4150	863	4100	2790	1710	1920	2150	4180	1040	3440	728	2180
2	4560	765	4180	2080	583	2050	2440	4140	1330	2890	1130	2550
3	4890	517	4160	1990	1250	2240	3250	2680	1680	2600	1570	3210
4	5170	746	4090	1880	1180	2130	3600	1780	2770	2780	1580	3060
5	5410	491	4070	1470	1230	2180	3680	1380	2870	3580	1060	3020
6	5650	493	4070	2210	1570	2050	3280	2430	4230	3550	1400	3140
7	5730	771	3870	2160	2130	2500	3260	2610	3380	2890	1880	3150
8	5850	1320	3800	2450	2210	2770	2470	2480	1350	2700	3320	2940
9	5830	1670	3870	2660	2470	2880	3310	2730	1020	2870	5490	2990
10	6030	2100	3920	3460	3180	2230	2790	3740	1430	2960	3540	3090
11	5950	1890	3500	3430	3940	2250	3640	4210	925	2870	3160	3110
12	5880	2020	2750	3470	3690	2600	2550	4130	635	2910	2710	2630
13	5640	2180	2990	3850	3780	2250	2830	2560	1280	2690	2690	3150
14	5040	2470	3390	4040	3900	2450	2870	734	1150	3100	2780	2720
15	5550	2850	3030	4150	3900	2520	3300	1110	1470	3290	2900	2630
16	5890	3200	3280	4260	3940	2890	4090	1440	1900	3210	3240	2530
17	5130	3660	4320	4090	2550	3900	4250	1890	2140	3180	1450	2170
18	5970	3900	3430	4080	4190	4070	3700	1920	2420	3370	740	2040
19	6780	3890	3710	3990	3050	2820	3630	2760	2430	3550	1050	2050
20	6720	3720	5290	3020	3110	1500	3790	2670	1470	4130	1210	2680
21	6360	3680	5120	4290	2950	1080	4330	3070	1770	3980	1280	2610
22	6420	3760	4630	4660	2510	1470	5210	3190	2330	3790	1520	2670
23	7690	3700	4520	4930	1950	2120	5400	1540	2530	3840	1890	2600
24	8110	3730	4520	5200	2150	2900	4830	1310	2390	1680	2410	2180
25	6300	3890	4470	5010	2740	3270	4150	483	2240	2250	2290	3050
26	5750	3970	4480	4250	2880	3300	4010	623	1230	876	2210	3090
27	1420	4070	4530	4120	2350	2450	4060	974	1280	420	2280	3000
28	1500	4100	4540	4320	2050	1780	4010	1100	993	595	1970	2640
29	1260	4020	4520	4330	---	1580	3980	1260	2610	654	1900	3120
30	1250	4070	4380	4410	---	1570	4090	1500	2680	601	2200	1940
31	588	---	4150	1200	---	1860	---	1630	---	888	2320	---
MONTH	5110	2620	4050	3490	2610	2370	3630	2200	1900	2650	2130	2730

DISSOLVED SOLIDS (TONS PER DAY), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8160	32600	19800	17300	79400	30000	16200	10000	22900	15400	5090	2400
2	7970	40100	19800	16400	14100	27900	15200	21700	19100	11900	5740	2570
3	7680	71300	19400	17800	17100	27000	18100	32200	17000	9900	6610	3090
4	7430	188000	18900	14600	14500	23900	17800	27400	21500	11600	8920	2800
5	7010	75600	18600	16300	19200	20000	17000	13900	19900	12800	4720	2610
6	6770	22400	18600	19800	22000	15500	13700	16700	27500	10900	4840	2630
7	6730	19300	17900	16900	20900	17600	14100	14400	27600	7800	6650	2530
8	6890	26000	17700	18000	16800	18100	13500	11800	23800	6850	11700	2330
9	7020	29100	18000	15700	16300	18300	16400	11300	44900	7420	20000	2310
10	7650	34400	18100	18700	19200	23200	15300	15600	115000	7030	10800	2340
11	7420	29500	22300	16900	20900	25000	20000	18000	112000	6720	8700	2300
12	7180	26500	20300	15200	18600	26900	12400	25200	38200	7240	6720	2050
13	6650	23400	23100	16900	19400	20000	11500	26100	39700	6250	6010	2500
14	7660	22900	24200	16600	18500	19400	10700	28900	22300	6470	5860	2340
15	6210	23900	18200	15900	17900	17800	11600	99500	19600	5970	6000	2610
16	9760	24700	17900	17300	18500	18100	14400	63400	19800	5300	7620	2330
17	8440	26900	21500	16300	12700	23800	14300	39200	18800	4930	9790	1830
18	9270	27700	15700	15500	21900	24600	12100	26700	19200	4970	3480	1700
19	9940	26700	16200	14500	15900	48000	11700	29900	32700	5090	3520	1600
20	8870	24500	22400	10900	17100	32200	11300	24300	12700	5630	3370	1980
21	7730	23300	20900	15500	17400	14600	12000	24400	11900	5270	2980	1850
22	7490	23000	18300	16500	24800	14200	14100	22800	14500	4880	3120	1840
23	8640	21700	17300	17600	27400	16900	14100	34700	15100	4760	3350	1710
24	8720	21000	17000	18000	27900	20400	12200	86300	14100	5670	3740	1350
25	9440	21300	16500	16800	30000	21500	10100	22000	17500	16200	3170	1850
26	38500	21000	16200	14000	39300	19700	9460	17500	16100	21900	3100	1770
27	16200	20900	16300	13300	41400	20000	9470	23200	15600	6120	3500	1720
28	14500	20600	16100	13600	37600	24500	9470	18000	6650	4740	2760	1500
29	18800	20000	16000	13600	---	20400	9090	16500	16600	5970	3080	1680
30	35800	20000	15000	16000	---	20300	8990	16200	13800	5130	3210	1030
31	33000	---	16100	22700	---	17800	---	42200	---	6020	2890	---
MONTH	11470	33610	18530	16290	23810	22250	13210	28390	27200	7960	5840	2110

07161000 CIMARRON RIVER AT PERKINS, OKLA.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6650	1400	6570	4520	2770	3110	3480	6710	1690	5580	1180	3540
2	7330	1240	6710	3380	946	3320	3960	6640	2150	4690	1830	4130
3	7870	838	6680	3230	2030	3640	5270	4340	2720	4220	2540	5200
4	6340	1210	6560	3050	1910	3460	5840	2880	4490	4500	2570	4960
5	8740	797	6530	2380	1990	3540	5970	2230	4650	5800	1720	4890
6	9140	799	6530	3590	2540	3330	5320	3940	6790	5760	2270	5090
7	9270	1250	6200	3510	3450	4060	5290	4240	5480	4690	3050	5110
8	9460	2140	6120	3970	3590	4490	4010	4020	2190	4380	5390	4770
9	9430	2710	6200	4320	4000	4670	5360	4430	1660	4660	8860	4850
10	9760	3400	6270	5610	5160	3610	4520	6050	2320	4800	5740	5010
11	9620	3070	5670	5560	6310	3650	5900	6760	1500	4650	5130	5040
12	9510	3280	4460	5620	5990	4220	4140	6620	1030	4720	4390	4260
13	9120	3530	4850	6180	6090	3650	4590	4150	2080	4360	4370	5110
14	8120	4010	5490	6470	6240	3980	4660	1190	1860	5030	4500	4410
15	8970	4620	4920	6650	6250	4080	5350	1800	2380	5330	4710	4270
16	9530	5190	5320	6830	6310	4690	6550	2330	3080	5200	5250	4100
17	8280	5940	6930	6550	4140	6240	6820	3060	3470	5160	2350	3520
18	9660	6240	5570	6540	6720	6530	6000	3120	3920	5470	1200	3310
19	11000	6230	6010	6390	4940	4580	5890	4480	3940	5750	1700	3330
20	10900	6020	8540	4890	5050	2110	6100	4330	2380	6630	1960	4350
21	10300	5970	8260	6890	4780	1750	6960	4980	2870	6370	2080	4240
22	10400	6070	7440	7500	4070	2390	8400	5170	3780	6110	2470	4330
23	12500	6000	7270	7950	3170	3440	8720	2500	4100	6160	3070	4220
24	13200	6030	7260	8390	3480	4710	7780	2130	3880	2730	3900	3540
25	10200	6230	7180	8070	4450	5300	6650	784	3630	3650	3720	4950
26	9300	6360	7200	6820	4670	5350	6430	1010	1990	1420	3590	5010
27	2310	6520	7280	6600	3810	3980	6510	1580	2070	681	3690	4860
28	2440	6580	7300	6930	3320	2890	6420	1780	1610	965	3190	4280
29	2040	6440	7270	6960	---	2570	6370	2040	4240	1060	3080	5060
30	2030	6520	7030	7080	---	2540	6550	2440	4350	974	3570	3150
31	953	---	6650	1940	---	3010	---	2650	---	1440	3760	---
MONTH	8270	4220	6520	5620	4220	3840	5860	3560	3080	4290	3450	4430

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17.5	16.0	1.0	4.0	4.5	7.0	10.0	17.5	22.0	29.5	26.5	31.5
2	17.0	17.0	2.0	4.0	4.5	7.5	9.0	18.0	23.5	27.0	27.5	31.5
3	16.0	16.0	3.0	2.5	5.0	6.5	6.0	16.0	24.0	27.5	27.5	31.0
4	18.0	13.5	3.5	5.0	6.0	6.0	8.0	18.5	26.5	28.0	29.0	30.5
5	18.5	11.5	6.0	5.0	4.5	5.0	10.0	20.0	28.0	24.5	27.5	28.5
6	20.0	10.0	3.5	8.0	2.0	9.0	13.0	20.5	30.0	28.5	27.5	24.0
7	---	11.0	7.0	9.0	0.0	7.5	13.0	20.0	25.0	29.0	28.0	26.0
8	14.0	11.0	4.5	7.5	2.0	7.0	11.5	20.5	24.5	29.0	28.5	26.5
9	17.0	12.0	3.0	12.0	0.0	7.0	14.0	21.0	23.0	29.0	28.5	28.0
10	17.0	12.0	4.0	3.0	0.0	5.0	15.0	21.0	23.5	28.5	29.5	25.0
11	18.5	11.0	4.0	2.5	3.0	4.5	11.5	21.0	22.0	27.5	29.0	26.5
12	20.0	10.0	4.0	0.0	3.0	5.0	12.0	22.0	22.5	25.5	32.5	18.5
13	18.0	10.0	4.5	0.0	4.0	3.5	14.0	20.0	23.0	24.0	32.0	17.5
14	18.0	8.5	5.0	0.0	6.0	2.5	11.5	18.0	24.5	24.0	29.5	17.5
15	13.0	8.0	4.0	1.0	5.0	5.0	14.0	18.5	27.0	24.5	26.5	16.5
16	12.0	9.0	3.5	5.0	3.0	6.0	17.0	20.0	27.0	26.0	31.0	20.5
17	15.0	9.0	3.0	8.0	0.0	6.5	18.0	22.0	25.5	26.0	28.0	21.0
18	16.5	9.0	2.5	6.0	2.5	10.0	20.5	24.0	26.5	26.5	30.0	26.0
19	15.0	11.0	4.0	2.5	2.0	10.0	---	25.0	27.5	27.0	31.5	20.5
20	15.0	10.0	3.0	6.0	3.5	12.0	15.5	24.0	28.0	27.5	32.0	18.5
21	15.0	10.0	3.5	4.0	6.0	14.5	16.5	24.5	28.0	29.0	32.0	15.5
22	14.0	11.0	5.0	8.5	4.0	14.0	18.0	26.5	27.0	29.0	31.0	17.0
23	15.0	15.0	7.0	9.5	2.0	15.5	19.0	23.0	25.0	28.0	31.5	18.0
24	18.0	10.0	5.5	8.5	2.0	17.5	21.0	23.5	26.0	24.5	31.5	16.5
25	14.0	8.0	2.5	10.0	3.5	10.0	21.5	24.0	27.0	24.5	31.0	16.0
26	16.0	8.0	3.0	9.5	5.0	9.0	23.0	24.5	27.5	24.0	25.5	17.5
27	15.0	8.0	3.0	8.0	5.0	11.0	21.5	24.5	29.0	25.0	27.0	20.5
28	17.0	8.0	4.0	6.5	5.0	10.0	17.0	24.0	28.5	27.5	29.0	20.0
29	16.5	5.0	6.5	5.5	---	7.5	19.0	23.0	28.5	27.5	31.5	19.0
30	18.5	3.0	5.0	5.0	---	7.5	19.0	22.0	29.5	25.0	31.5	22.0
31	17.5	---	4.5	5.0	---	7.5	---	21.0	---	26.5	32.5	---
MONTH	16.5	10.5	4.0	5.5	3.5	8.5	15.0	21.5	26.0	27.0	29.5	22.5

07164400 ARKANSAS RIVER AT SAND SPRINGS BRIDGE, NEAR TULSA, OKLA.

LOCATION.--Lat 36°07'22", long 96°07'23", in NW 1/4 SW 1/4 sec.14, T.19 N., R.11 E., Tulsa County, at bridge on State Highway 97 in Sand Springs, 5.1 mi (8.2 km) downstream from Keystone Dam, and 10 mi (16.1 km) upstream from gaging station at Tulsa.

DRAINAGE AREA.--74,615 mi^2 (193,253 km^2) upstream from gaging station, of which 12,541 mi^2 (32,481 km^2) is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: October 1946 to current year.
Water temperatures: October 1946 to current year.

EXTREMES, Current year.--Specific conductance: Maximum daily, 2,560 micromhos/cm Feb. 3; minimum daily, 416 micromhos/cm Nov. 18.
Water temperatures: Maximum, 29.5°C July 20-21; minimum, 2.0°C Feb. 23.

Period of record.--Specific conductance: Maximum daily, 21,200 micromhos/cm Oct. 19, 1956; minimum daily, 269 micromhos/cm Nov. 21, 1964.
Water temperatures: Maximum, 36.0°C Aug. 7, 1947; minimum, freezing point on many days during winter months.

REMARKS.--Continuous monitor records for specific conductance and water temperature are collected for this station. Temperature records for Nov. 6-22, Nov. 29-Jan. 29, Mar. 15-Apr. 22, Apr. 25-28, and June 4-July 2 were poor. Once-daily temperature values were used in their place. Records of maximum and minimum specific conductance values are available in district office in Oklahoma City, Okla.
M=Presence of material verified but not quantified.
B=Results based on colony count outside the acceptable range (Non-ideal colony count).

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SIO2) (MG/L)	TOTAL CAL-CIUM (CA) (MG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	TOTAL MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	TOTAL SODIUM (NA) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	TOTAL PO-TAS-SIUM (K) (MG/L)
OCT.										
05...	1220	3330	--	--	59	--	12	--	250	--
09...	1000	307	--	--	--	--	--	--	--	--
15...	1140	4630	--	--	61	--	14	--	290	--
22...	1130	6970	--	--	--	--	--	--	--	--
NOV.										
05...	0940	75800	--	--	49	--	12	--	190	--
06...	1200	100000	--	--	--	--	--	--	--	--
15...	1145	26400	--	--	27	--	6.0	--	60	--
20...	1100	28800	--	--	--	--	--	--	--	--
25...	1435	27900	--	--	32	--	7.0	--	84	--
DEC.										
05...	1140	6550	--	--	64	--	18	--	240	--
10...	1100	6560	--	--	--	--	--	--	--	--
15...	1020	6480	--	--	85	--	26	--	360	--
25...	1045	6620	--	--	80	--	20	--	220	--
JAN.										
05...	0850	12700	--	--	91	--	24	--	330	--
07...	1045	12700	--	--	--	--	--	--	--	--
15...	1135	13200	--	--	81	--	22	--	220	--
25...	1600	7260	--	--	87	--	24	--	290	--
29...	1100	3300	--	--	--	--	--	--	--	--
FEB.										
05...	1135	21000	--	--	79	--	21	--	200	--
13...	1000	24900	--	--	65	--	20	--	180	--
15...	1100	14600	--	--	68	--	18	--	180	--
25...	1030	21000	--	--	73	--	21	--	230	--
25...	1400	21000	--	--	72	--	20	--	230	--
MAR.										
05...	0805	27100	--	--	80	--	22	--	230	--
11...	1600	25600	--	--	--	--	--	--	--	--
15...	1015	14200	--	--	77	--	23	--	270	--
25...	1140	20200	--	--	72	--	20	--	190	--
25...	1400	20200	--	--	--	--	--	--	--	--
APR.										
05...	0905	14300	--	--	80	--	26	--	250	--
09...	0900	8880	7.2	--	73	--	23	--	210	--
15...	1145	13000	--	--	83	--	26	--	240	--
23...	0900	11700	--	--	--	--	--	--	--	--
26...	0830	10200	--	--	79	--	23	--	200	--
MAY										
05...	1455	13600	--	--	94	--	32	--	350	--

07164400 ARKANSAS RIVER AT SAND SPRINGS BRIDGE, NEAR TULSA, OKLA.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SIO2) (MG/L)	TOTAL CAL-CIUM (CA) (MG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	TOTAL MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	TOTAL SODIUM (NA) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	TOTAL PO-TAS-SIUM (K) (MG/L)
MAY										
06...	1500	13600	--	--	--	--	--	--	--	--
15...	1140	14000	--	--	88	--	27	--	310	--
20...	1300	29500	3.7	66	67	22	33	200	210	3.4
25...	1530	29700	--	--	56	--	16	--	160	--
JUNE										
04...	1000	49400	--	--	--	--	--	--	--	--
04...	1135	49400	--	--	48	--	12	--	130	--
15...	0935	54500	--	--	48	--	13	--	120	--
17...	1400	45000	7.6	--	--	--	12	--	130	--
25...	1130	26600	--	--	42	--	10	--	91	--
JULY										
03...	0800	13400	--	--	--	--	--	--	--	--
05...	1120	16300	--	--	47	--	12	--	120	--
15...	0845	9140	--	--	65	--	15	--	160	--
16...	0800	11500	9.7	--	61	--	18	--	170	--
25...	1145	7650	--	--	66	--	16	--	190	--
29...	1600	7750	8.4	39	70	14	24	160	250	6.6
AUG.										
05...	1140	6430	--	--	65	--	19	--	230	--
12...	1500	5820	--	--	--	--	--	--	--	--
15...	1135	3940	--	--	70	--	17	--	180	--
25...	1135	371	--	--	79	--	19	--	210	--
26...	1600	457	6.3	70	73	20	18	190	210	6.1
SEP.										
05...	1135	6280	--	--	71	--	18	--	190	--
11...	1345	3790	--	--	--	--	--	--	--	--
15...	1145	2980	--	--	70	--	18	--	190	--
23...	1200	5830	4.5	--	69	--	20	--	210	--
25...	1135	3720	--	--	72	--	18	--	200	--

07164400 ARKANSAS RIVER AT SAND SPRINGS BRIDGE, NEAR TULSA, OKLA.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	ALKA-LINITY AS CACO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	AMMONIA NITRO-GEN (N) (MG/L)
OCT.										
05...	--	136	0	112	85	380	--	--	.70	--
09...	--	--	--	--	--	--	--	.55	--	.03
15...	--	135	0	111	98	450	--	--	.68	--
22...	--	--	0	--	--	--	--	.51	--	.11
NOV.										
05...	--	131	0	107	75	280	--	--	.73	--
06...	--	102	0	84	43	160	.3	.01	--	.11
15...	--	83	0	68	28	88	--	--	.78	--
20...	--	82	0	67	31	99	.2	.48	--	.11
25...	--	90	0	74	41	120	--	--	.70	--
DEC.										
05...	4.6	157	0	129	100	390	--	--	--	--
10...	--	--	0	--	--	--	--	.64	--	.03
15...	5.0	209	0	171	--	540	--	--	--	--
25...	4.7	210	0	172	110	340	--	--	--	--
JAN.										
05...	6.1	232	0	190	--	500	--	--	--	--
07...	--	--	0	--	--	--	--	.78	--	.07
15...	4.3	214	0	176	110	330	--	--	--	--
25...	4.1	236	0	194	120	450	--	--	--	--
29...	--	--	--	--	--	--	--	.92	--	.05
FEB.										
05...	5.2	227	0	186	110	310	--	--	--	--
13...	4.2	184	0	151	94	--	.2	.73	--	.12
15...	4.9	179	0	147	98	--	--	--	--	--
25...	5.2	188	0	154	110	360	--	--	--	--
25...	3.5	185	0	152	110	360	--	--	--	--
MAR.										
05...	3.8	209	0	171	120	340	--	--	--	--
11...	--	--	0	--	--	--	--	1.1	--	.17
15...	4.0	184	0	151	140	400	--	--	--	--
25...	3.7	188	2	158	110	290	--	--	--	--
25...	--	--	--	--	--	--	--	1.1	--	.05
APR.										
05...	4.2	206	0	169	150	370	--	--	--	--
09...	4.2	202	0	166	120	320	.1	.84	--	.07
15...	4.2	209	0	171	150	370	--	--	--	--
23...	--	--	0	--	--	--	--	.77	--	.06
26...	3.8	219	0	180	150	300	--	--	--	--
MAY										
05...	4.2	224	0	184	180	530	--	--	--	--
06...	--	--	0	--	--	--	--	.47	--	.18
15...	4.2	208	0	171	170	470	--	--	--	--
20...	4.5	--	--	--	110	300	.3	.36	--	.06
25...	4.1	146	0	120	93	250	--	--	--	--
JUNE										
04...	--	--	0	--	--	--	--	.50	--	.02
04...	5.0	129	0	106	81	190	--	--	--	--
15...	6.1	125	0	103	78	--	--	--	--	--
17...	6.6	115	0	94	69	190	.2	.60	--	.17
25...	5.8	117	0	96	60	140	--	--	--	--
JULY										
03...	--	--	--	--	--	--	--	.47	--	.04
05...	6.6	145	0	119	78	170	--	--	--	--
15...	6.6	158	0	130	97	250	--	--	--	--
16...	6.6	144	0	118	100	270	.3	.46	--	.07
25...	7.3	193	4	165	97	270	--	--	--	--
29...	7.3	189	0	155	140	370	.3	.32	--	.04
AUG.										
05...	7.0	176	0	144	100	350	--	.49	--	--
12...	--	--	--	--	--	--	--	.28	--	.01
15...	6.9	189	0	155	--	270	--	.28	--	--
25...	6.9	228	0	187	93	320	--	.28	--	--
26...	6.2	218	0	179	97	310	.4	.01	--	.00
SEP.										
05...	7.1	203	0	167	100	280	--	--	--	--
11...	--	--	--	--	--	--	--	.21	--	.03
15...	6.7	195	0	160	100	--	--	--	--	--
23...	6.6	--	--	--	100	340	.3	.41	--	.12
25...	--	201	0	165	110	300	--	--	--	--

07164400 ARKANSAS RIVER AT SAND SPRINGS BRIDGE, NEAR TULSA, OKLA.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TOTAL ORGANIC NITRO-GEN (N) (MG/L)	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	TOTAL NITRO-GEN (N) (MG/L)	TOTAL NITRO-GEN (NO3) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)
OCT.									
05...	--	--	--	--	.12	919	--	1.25	8260
09...	.42	.45	1.0	4.4	.13	863	863	1.17	715
15...	--	--	--	--	.12	1030	--	1.40	12900
22...	.67	.78	1.3	5.7	--	1330	--	1.81	25000
NOV.									
05...	--	--	--	--	.12	714	--	.97	146000
06...	.72	.83	.84	3.7	.26	442	--	.60	119000
15...	--	--	--	--	.42	269	--	.37	19200
20...	.70	.81	1.3	5.7	.26	--	--	--	--
25...	--	--	--	--	.24	341	--	.46	25700
DEC.									
05...	--	--	--	--	.17	928	--	1.26	16400
10...	.55	.58	1.2	5.4	.15	1190	--	1.62	21100
15...	--	--	--	--	.11	1300	--	1.77	22700
25...	--	--	--	--	.09	890	--	1.21	15900
JAN.									
05...	--	--	--	--	.12	1260	--	1.71	43200
07...	.64	.71	1.5	6.6	.18	1180	--	1.61	40500
15...	--	--	--	--	.10	896	--	1.22	31900
25...	--	--	--	--	.14	1120	--	1.52	22000
29...	.58	.63	1.6	6.9	.11	1230	--	1.67	11000
FEB.									
05...	--	--	--	--	.14	859	--	1.17	48700
13...	.55	.67	1.4	6.2	.14	--	--	--	--
15...	--	--	--	--	.11	746	--	1.01	29400
25...	--	--	--	--	.10	938	--	1.28	53200
25...	--	.76	--	--	.14	907	--	1.23	51400
MAR.									
05...	--	--	--	--	.11	916	--	1.25	67000
11...	.59	.76	1.9	8.2	.12	764	--	1.04	52800
15...	--	--	--	--	.13	1030	--	1.40	39500
25...	--	--	--	--	.15	--	--	--	--
25...	.38	.43	1.5	6.8	.11	820	--	1.12	44700
APR.									
05...	--	1.7	--	--	.08	1010	--	1.37	39000
09...	.51	.58	1.4	6.3	.10	906	857	1.23	21700
15...	--	3.0	--	--	.09	1030	--	1.40	36200
23...	.48	.54	1.3	5.8	.11	908	--	1.23	28700
26...	--	2.7	--	--	.07	873	--	1.19	24000
MAY									
05...	--	.36	--	--	.07	1340	--	1.82	49200
06...	.56	.74	1.2	5.4	.10	1370	--	1.86	50300
15...	--	--	--	--	.09	1210	--	1.65	45700
20...	.82	.88	1.2	5.5	.11	843	--	1.15	67100
25...	--	.50	--	--	.13	700	--	.95	56100
JUNE									
04...	.95	.97	1.5	6.5	.16	570	--	.78	76000
04...	--	.91	--	--	.25	544	--	.74	72600
15...	--	.82	--	--	.30	541	--	--	79600
17...	1.4	1.6	2.2	9.7	.12	532	502	.72	64600
25...	--	.47	--	--	.22	424	--	.58	30500
JULY									
03...	.53	.57	1.0	4.6	.17	690	--	.94	25000
05...	--	--	--	--	.17	--	--	--	--
15...	--	--	--	--	.16	690	--	.94	17000
16...	.74	.81	1.3	5.6	.19	745	707	1.01	23100
25...	--	--	--	--	.14	742	--	1.01	15300
29...	.21	.25	.57	2.5	.15	986	963	1.34	20600
AUG.									
05...	--	--	--	--	.09	906	--	1.23	15700
12...	.55	.56	.64	3.7	.14	814	--	1.11	12800
15...	--	--	--	--	.08	743	--	1.01	7900
25...	--	--	--	--	.06	859	--	1.17	860
26...	.52	.52	.53	2.3	.14	842	829	1.15	1040
SEP.									
05...	--	--	--	--	.06	812	--	1.10	13800
11...	1.1	1.1	1.3	5.8	.11	807	--	1.10	8260
15...	--	--	--	--	.05	765	--	1.04	6160
23...	.00	.10	.51	2.3	.00	882	--	1.20	13900
25...	--	--	--	--	.06	830	--	1.13	8340

07164400 ARKANSAS RIVER AT SAND SPRINGS BRIDGE, NEAR TULSA, OKLA.--Continued
WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TOTAL NON-FILTRABLE RESIDUE (MG/L)	HARDNESS (CA,MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	CARBON DIOXIDE (CO2) (MG/L)	TURBIDITY (JTU)
OCT.									
05...	--	200	85	--	7.8	1640	8.3	1.1	--
09...	16	--	--	--	--	1500	--	--	10
15...	--	210	64	--	8.7	1830	8.0	2.2	--
22...	18	--	--	--	--	2300	8.1	--	10
NOV.									
05...	--	170	64	--	6.3	1290	7.9	2.6	--
06...	228	--	--	--	--	800	9.4	.1	200
15...	--	92	24	--	2.7	482	7.7	2.6	--
20...	222	--	--	--	--	520	8.8	.2	200
25...	--	110	36	--	3.5	617	7.7	2.9	--
DEC.									
05...	--	230	110	69	6.8	1630	7.7	5.0	--
10...	21	--	--	--	--	2100	7.6	--	20
15...	--	320	150	71	8.8	2230	8.3	1.7	--
25...	--	280	110	62	5.7	1540	8.0	3.4	--
JAN.									
05...	--	330	140	68	8.0	2150	8.0	3.7	--
07...	208	--	--	--	--	2100	8.2	--	20
15...	--	290	120	62	5.6	1540	7.9	4.3	--
25...	--	320	120	66	7.1	1940	7.8	6.0	--
29...	22	--	--	--	--	2050	--	--	20
FEB.									
05...	--	280	98	60	5.2	1490	8.2	2.3	--
13...	11	250	99	61	5.0	1300	8.1	2.3	20
15...	--	240	97	61	5.0	1310	8.0	2.9	--
25...	--	270	110	65	6.1	1650	8.1	2.4	--
25...	--	260	110	65	6.2	--	8.5	.9	--
MAR.									
05...	--	290	120	63	5.9	1580	7.8	5.3	--
11...	18	--	--	--	--	1390	8.2	--	9
15...	--	290	140	67	6.9	1780	7.8	4.7	--
25...	--	260	100	61	5.1	1420	8.6	.8	--
25...	62	--	--	--	--	1450	8.7	--	26
APR.									
05...	--	310	140	64	6.2	1740	7.9	4.2	--
09...	8	280	110	62	5.5	1650	7.4	13	14
15...	--	310	140	62	5.9	1760	8.0	3.3	--
23...	16	--	--	--	--	1600	7.3	--	13
26...	--	290	110	59	5.1	1510	8.0	3.5	--
MAY									
05...	--	370	180	67	8.0	2400	8.4	1.4	--
06...	64	--	--	--	--	2440	8.1	--	8
15...	--	330	160	67	7.4	2070	8.2	2.1	--
20...	64	280	--	60	5.2	1490	7.1	--	38
25...	--	210	86	62	4.9	1240	8.1	1.9	--
JUNE									
04...	108	--	--	--	--	1000	6.8	--	76
04...	--	170	63	62	4.3	935	8.1	1.6	--
15...	--	170	67	59	4.0	962	7.8	3.2	--
17...	156	120	26	6	--	966	7.5	5.8	240
25...	--	150	50	56	3.3	750	7.7	3.7	--
JULY									
03...	40	--	--	--	--	1150	8.5	--	23
05...	--	170	48	60	4.0	954	7.8	3.7	--
15...	--	220	94	60	4.7	1250	7.7	5.0	--
16...	4	230	110	61	4.9	--	8.1	1.8	18
25...	--	230	66	63	5.4	1340	8.4	1.3	--
29...	8	270	120	66	6.6	--	7.9	3.8	6
AUG.									
05...	--	240	96	67	6.5	1590	8.1	2.2	--
12...	48	--	--	--	--	1430	8.0	--	7
15...	--	240	90	61	5.0	1310	8.1	2.4	--
25...	--	280	89	62	5.5	1500	8.0	3.6	--
26...	8	260	78	63	5.7	1500	8.2	2.2	5
SEP.									
05...	--	250	85	61	5.2	1430	8.1	2.6	--
11...	12	--	--	--	--	1410	8.3	--	5
15...	--	250	89	62	5.2	1380	8.1	2.5	--
23...	32	250	--	63	5.7	1600	8.5	--	10
25...	--	250	89	--	5.5	1480	7.9	4.0	--

07164400 ARKANSAS RIVER AT SAND SPRINGS BRIDGE, NEAR TULSA, OKLA.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	DIS-CHARGE (CFS)	DIS-SOLVED OXYGEN (MG/L)	PER-CENT SATUR-ATION	CHEM-ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	CHLORO-PHYLL A (UG/L)	CHLORO-PHYLL B (UG/L)
OCT.							
09...	1000	307	9.2	102	20	22.0	6.60
NOV.							
06...	1200	100000	11.0	110	27	74.0	180
20...	1100	28800	12.2	115	28	.000	.000
DEC.							
10...	1100	6560	10.8	93	16	--	--
JAN.							
07...	1045	12700	11.9	101	22	5.10	.000
29...	1100	3300	12.8	104	15	3.10	.000
FEB.							
13...	1000	24900	12.0	101	20	--	--
25...	1400	21000	--	--	--	9.00	.000
MAR.							
11...	1600	25600	13.0	108	24	1.00	.000
25...	1400	20200	15.0	143	20	--	--
APR.							
09...	0900	8880	11.6	110	12	9.40	.700
23...	0900	11700	8.8	90	17	--	--
MAY							
06...	1500	13600	8.2	95	21	.300	.000
20...	1300	29500	9.0	107	--	4.90	.000
JUNE							
04...	1000	49400	12.6	161	25	1.50	.000
17...	1400	45000	9.2	115	38	2.40	1.50
JULY							
03...	0800	13400	7.8	100	13	--	--
16...	0800	11500	8.4	106	15	.900	.000
29...	1600	7750	6.8	91	17	37.0	4.50
AUG.							
12...	1500	5820	8.2	112	17	--	--
26...	1600	457	9.8	126	100	19.0	1.40
SEP.							
11...	1345	3790	8.0	114	11	.000	.000
23...	1200	5830	7.8	93	15	.000	.000

DATE	FECAL COLI-FORM (COL. PER 100 ML)	STREP-TOCOCCI (COL-ONIES PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)	OIL AND GREASE (MG/L)	SUS-PENDED SEDI-MENT (MG/L)	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM
OCT.						
09...	16000	6600	5.1	0	--	--
NOV.						
06...	330	440	9.3	0	--	--
20...	100	80	7.7	9	--	--
DEC.						
10...	21	17	5.2	0	--	--
JAN.						
07...	85	88	4.2	7	--	--
29...	M0	82	6.6	5	12	77
FEB.						
13...	M0	M0	--	5	--	--
25...	M0	M0	--	--	351	55
MAR.						
11...	M0	M0	7.0	4	--	--
25...	M0	M0	--	1	--	--
APR.						
09...	M0	M0	4.5	2	62	82
23...	M0	816	21	1	--	--
MAY						
06...	112	M0	14	1	--	--
20...	M0	M0	5.7	1	55	97
JUNE						
04...	M0	8	11	0	--	--
17...	180	270	8.2	1	131	99
JULY						
03...	M0	28	4.1	6	--	--
16...	M0	M0	5.7	1	29	95
29...	380	M0	5.6	0	--	--
AUG.						
12...	M0	M0	--	0	15	50
26...	M0	814	8.5	0	169	4
SEP.						
11...	M0	30	5.3	0	--	--
23...	M0	M0	--	1	--	--

07164400 ARKANSAS RIVER AT SAND SPRINGS BRIDGE, NEAR TULSA, OKLA.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	DIS-CHARGE (CFS)	TOTAL IRON (FE) (UG/L)	DIS-SOLVED IRON (FE) (UG/L)	TOTAL MAN-GANESE (MN) (UG/L)	SUS-PENDED MAN-GANESE (MN) (UG/L)	DIS-SOLVED MAN-GANESE (MN) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	SUS-PENDED ARSENIC (AS) (UG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	TOTAL CAD-MIUM (CD) (UG/L)	SUS-PENDED CAD-MIUM (CD) (UG/L)
OCT.												
09...	1000	307	480	--	--	--	--	3	--	--	<10	--
22...	1130	6970	560	--	--	--	--	3	--	--	<10	--
NOV.												
06...	1200	100000	26000	--	--	--	--	9	--	--	10	--
20...	1100	28800	6900	--	--	--	--	8	--	--	<10	--
DEC.												
10...	1100	6560	580	--	--	--	--	3	--	--	<10	--
JAN.												
07...	1045	12700	590	--	--	--	--	2	--	--	0	--
29...	1100	3300	440	--	--	--	--	2	--	--	10	--
FEB.												
13...	1000	24900	510	10	70	70	--	1	0	1	10	9
MAR.												
11...	1600	25600	710	--	--	--	--	1	--	--	<10	--
25...	1400	20200	630	--	--	--	--	3	--	--	10	--
APR.												
09...	0900	8880	560	--	--	--	--	2	--	--	<10	--
23...	0900	11700	610	--	--	--	--	1	--	--	<10	--
MAY												
06...	1500	13600	670	--	--	--	--	1	--	--	10	--
20...	1300	29500	1700	190	150	100	50	2	1	1	<10	<8
JUNE												
04...	1000	49400	3300	--	--	--	--	2	--	--	<10	--
17...	1400	45000	4700	--	--	--	--	1	--	--	<10	--
JULY												
03...	0800	13400	1100	--	--	--	--	3	--	--	<10	--
16...	0800	11500	630	--	--	--	--	4	--	--	<10	--
29...	1600	7750	300	40	220	80	140	1	0	1	<10	<9
AUG.												
12...	1500	5820	440	--	--	--	--	6	--	--	10	--
26...	1600	457	490	40	210	130	80	4	0	4	<10	<9
SEP.												
11...	1345	3790	350	--	--	--	--	5	--	--	<10	--
23...	1200	5830	720	--	--	--	--	2	--	--	<10	--

DATE	DIS-SOLVED CAD-MIUM (CD) (UG/L)	TOTAL CHRO-MIUM (CR) (UG/L)	SUS-PENDED CHRO-MIUM (CR) (UG/L)	DIS-SOLVED CHRO-MIUM (CR) (UG/L)	TOTAL COBALT (CO) (UG/L)	SUS-PENDED COBALT (CO) (UG/L)	DIS-SOLVED COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)	SUS-PENDED COPPER (CU) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)
OCT.											
09...	--	0	--	--	--	--	--	--	--	--	<100
22...	--	0	--	--	--	--	--	--	--	--	<100
NOV.											
06...	--	0	--	--	--	--	--	--	--	--	<100
20...	--	0	--	--	--	--	--	--	--	--	<100
DEC.											
10...	--	<10	--	--	--	--	--	--	--	--	<100
JAN.											
07...	--	0	--	--	--	--	--	--	--	--	<100
29...	--	10	--	--	--	--	--	--	--	--	<100
FEB.											
13...	1	0	0	0	<50	<49	1	50	37	13	<100
MAR.											
11...	--	25	--	--	--	--	--	--	--	--	<100
25...	--	0	--	--	--	--	--	--	--	--	<100
APR.											
09...	--	0	--	--	--	--	--	--	--	--	<100
23...	--	10	--	--	--	--	--	--	--	--	<100
MAY											
06...	--	0	--	--	--	--	--	--	--	--	<100
20...	2	--	0	20	<50	<50	0	10	2	8	<100
JUNE											
04...	--	10	--	--	--	--	--	--	--	--	<100
17...	--	30	--	--	--	--	--	--	--	--	<100
JULY											
03...	--	0	--	--	--	--	--	--	--	--	<100
16...	--	0	--	--	--	--	--	--	--	--	<100
29...	1	10	10	0	<50	<50	0	<10	<8	2	<100
AUG.											
12...	--	10	--	--	--	--	--	--	--	--	<100
26...	1	10	0	10	50	50	0	<10	<3	7	<100
SEP.											
11...	--	0	--	--	--	--	--	--	--	--	<100
23...	--	10	--	--	--	--	--	--	--	--	<100

07164400 ARKANSAS RIVER AT SAND SPRINGS BRIDGE, NEAR TULSA, OKLA.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	SUS-PENDED LEAD (PB) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	TOTAL MERCURY (HG) (UG/L)	SUS-PENDED MERCURY (HG) (UG/L)	DIS-SOLVED MERCURY (HG) (UG/L)	TOTAL SELE-NIUM (SE) (UG/L)	SUS-PENDED SELE-NIUM (SE) (UG/L)	DIS-SOLVED SELE-NIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	SUS-PENDED ZINC (ZN) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)
OCT.											
09...	--	--	.0	--	--	--	--	--	30	--	--
22...	--	--	.1	--	--	--	--	--	80	--	--
NOV.											
06...	--	--	.0	--	--	--	--	--	130	--	--
20...	--	--	.0	--	--	--	--	--	40	--	--
DEC.											
10...	--	--	<.1	--	--	--	--	--	60	--	--
JAN.											
07...	--	--	.2	--	--	--	--	--	20	--	--
29...	--	--	--	--	--	--	--	--	40	--	--
FEB.											
13...	<99	1	.0	.0	.0	0	0	0	--	0	30
MAR.											
11...	--	--	.0	--	--	--	--	--	40	--	--
25...	--	--	.3	--	--	--	--	--	40	--	--
APR.											
09...	--	--	.0	--	--	--	--	--	30	--	--
23...	--	--	.0	--	--	--	--	--	50	--	--
MAY											
06...	--	--	.0	--	--	--	--	--	180	--	--
20...	<96	4	.1	.1	.0	1	1	0	170	100	70
JUNE											
04...	--	--	.0	--	--	--	--	--	230	--	--
17...	--	--	.0	--	--	--	--	--	270	--	--
JULY											
03...	--	--	.0	--	--	--	--	--	20	--	--
16...	--	--	.0	--	--	--	--	--	10	--	--
29...	<94	6	.1	.0	.1	1	0	1	30	10	20
AUG.											
12...	--	--	.2	--	--	--	--	--	10	--	--
26...	<96	4	--	--	8.2	0	0	0	--	0	20
SEP.											
11...	--	--	1.0	--	--	--	--	--	10	--	--
23...	--	--	.5	--	--	--	--	--	280	--	--

DATE	TIME	INSTAN-TANEOUS DIS-CHARGE (CFS)	TOTAL IRON IN BOTTOM MA-TERIAL (UG/G)	TOTAL KJEL. NITRO-GEN IN BOTTOM MAT. (MG/KG)	TOTAL PHOS-PHORUS IN BOT-TOM MA-TERIAL (MG/KG)	LOSS ON IGNI-TION IN BOTTOM MA-TERIAL (MG/KG)	COD IN BOTTOM MA-TERIAL (MG/KG)
FEB.							
13...	1000	24900	60000	100	2	4200	50

DATE	OIL AND GREASE IN BOT-TOM MA-TERIAL (MG/KG)	TOTAL ARSENIC IN BOTTOM MA-TERIAL (UG/G)	TOTAL CADMIUM IN BOTTOM MA-TERIAL (UG/G)	TOTAL CHRO-MIUM IN BOTTOM MA-TERIAL (UG/G)	TOTAL LEAD IN BOTTOM MA-TERIAL (UG/G)	TOTAL MERCURY IN BOTTOM MA-TERIAL (UG/G)	TOTAL ZINC IN BOTTOM MA-TERIAL (UG/G)
FEB.							
13...	6.0	2	1	1	<10	.0	8

07164400 ARKANSAS RIVER AT SAND SPRINGS BRIDGE, NEAR TULSA, OKLA.--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA,
WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

PHYTOPLANKTON

Date	Time	Organism	Count (cells/ml)	Percent of total	Sampling method
Jan. 29	1100	CHLOROPHYTA			Sediment sampler
		Chlorophyceae			
		Chlorococcales			
		Occystaceae			
		Ankistrodesmus	47	3	
		Kirchneriella	93	7	
		Scenedesmaceae			
		Crucigenia	93	7	
		Scenedesmus	93	7	
		CHRYSOPHYTA			
		Bacillariophyceae			
		Centrales			
		Coscinodiscaceae			
		Coscinodiscus	190	13	
		Cyclotella	540	38	
		Melosira	160	12	
		Pennales			
		Naviculaceae			
		Navicula	23	2	
		CYANOPHYTA			
		Myxophyceae			
		Chroococcales			
		Chroococcaceae			
		Anacystis	160	12	
		TOTAL	1,400		
Feb. 13	1000	CHLOROPHYTA			Sediment sampler
		Chlorophyceae			
		Chlorococcales			
		Occystaceae			
		Ankistrodesmus	31	1	
		Scenedesmaceae			
		Crucigenia	93	3	
		Scenedesmus	120	4	
		Volvocales			
		Chlamydomonadaceae			
		Chlamydomonas	150	6	
		CHRYSOPHYTA			
		Bacillariophyceae			
		Centrales			
		Coscinodiscaceae			
		Cyclotella	890	32	
		Melosira	370	13	
		Pennales			
		Fragilariaceae			
		Synedra	31	1	
		Naviculaceae			
		Gyrosigma	31	1	
		CYANOPHYTA			
		Myxophyceae			
		Chroococcales			
		Chroococcaceae			
		Anacystis	990	36	
		EUGLENOPHYTA			
		Euglenophyceae			
		Euglenales			
		Euglenaceae			
		Euglena	31	1	
		Trachelomonas	31	1	
		TOTAL	2,800		
Mar. 25	0000	CHLOROPHYTA			Sediment sampler
		Chlorophyceae			
		Chlorococcales			
		Micractiniaceae			
		Golenkinia	54	1	
		Occystaceae			
		Ankistrodesmus	110	3	
		Oocystis	210	5	
		Volvocales			
		Chlamydomonadaceae			
		Chlamydomonas	54	1	

07164400 ARKANSAS RIVER AT SAND SPRINGS BRIDGE, NEAR TULSA, OKLA.--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA,
WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

PHYTOPLANKTON

Date	Time	Organism	Count (cells/ml)	Percent of total	Sampling method
		CHRYSOPHYTA			
		Bacillariophyceae			
		Centrales			
		Coscinodiscaceae			
		Cyclotella	1,700	40	
		Pennales			
		Naviculaceae			
		Amphiprora	54	1	
Mar. 25	0000	Caloneis	54	1	Sediment sampler
		Nitzschiaceae			
		Nitzschia	210	5	
		Surirellaceae			
		Surirella	54	1	
		CYANOPHYTA			
		Myxophyceae			
		Chroococcales			
		Chroococcaceae			
		Anacystis	1,600	39	
		EUGLENOPHYTA			
		Euglenophyceae			
		Euglenales			
		Euglenaceae			
		Euglena	54	1	
		TOTAL	4,100		
Apr. 9	0900	CHLOROPHYTA			Sediment sampler
		Chlorophyceae			
		Volvocales			
		Chlamydomonadaceae			
		Chlamydomonas	23	6	
		CHRYSOPHYTA			
		Bacillariophyceae			
		Centrales			
		Coscinodiscaceae			
		Cyclotella	180	50	
		Pennales			
		Fragilariaceae			
		Asterionella	46	12	
		Naviculaceae			
		Navicula	23	6	
		Nitzschiaceae			
		Nitzschia	23	6	
		EUGLENOPHYTA			
		Euglenophyceae			
		Euglenales			
		Euglenaceae			
		Euglena			
		Trachelomonas	23	6	
		TOTAL	370		
May 20	1300	CHLOROPHYTA			Sediment sampler
		Chlorophyceae			
		Chlorococcales			
		Occystaceae			
		Selenastrum	210	2	
		Scenedesmaceae			
		Scenedesmus	830	7	
		CHRYSOPHYTA			
		Bacillariophyceae			
		Centrales			
		Coscinodiscaceae			
		Cyclotella	1,700	15	
		Melosira	1,200	11	
		Pennales			
		Achnanthaceae			
		Cocconeis	210	2	
		Naviculaceae			
		Navicula	410	4	

07164400 ARKANSAS RIVER AT SAND SPRINGS BRIDGE, NEAR TULSA, OKLA.--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA,
WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

PHYTOPLANKTON

Date	Time	Organism	Count (cells/ml)	Percent of total	Sampling method
		CYANOPHYTA			
		Myxophyceae			
		Chroococcales			
		Chroococcaceae			
		Anacystis	2,900	26	
		Gomphosphaeria	2,900	26	
		Oscillatoriales			
		Oscillatoriaceae			
		Lyngbya	830	7	
		TOTAL	11,000		
June 4	1500	CHLOROPHYTA			Sediment sampler
		Chlorophyceae			
		Chlorococcales			
		Occystaceae			
		Ankistrodesmus	22	3	
		Kirchneriella	22	3	
		Scenedesmaceae			
		Scenedesmus	280	42	
		CHRYSOPHYTA			
		Bacillariophyceae			
		Centrales			
		Coscinodiscaceae			
		Cyclotella	110	16	
		Melosire	130	19	
		Pennales			
		Naviculaceae			
		Navicula	43	6	
		Nitzschiaceae			
		Nitzschia	43	6	
		CYANOPHYTA			
		Myxophyceae			
		Oscillatoriales			
		Oscillatoriaceae			
		Phormidium		0	
		PYRRHOPHYTA			
		Dinophyceae			
		Peridiniales			
		Glenodiniaceae			
		Glenodinium	22	3	
		TOTAL	670		
July 16	0800	CHLOROPHYTA			Sediment sampler
		Chlorophyceae			
		Chlorococcales			
		Characiaceae			
		Schroederia		0	
		Hydrodictyaceae			
		Pediastrum		0	
		Micractiniaceae			
		Micractinium		0	
		Occystaceae			
		Ankistrodesmus	19	2	
		Kirchneriella	19	2	
		Oocystis	77	8	
		Scenedesmaceae			
		Scenedesmus	120	12	
		Volvocales			
		Chlamydomonadaceae			
		Chlamydomonas	19	2	
		CHRYSOPHYTA			
		Bacillariophyceae			
		Centrales			
		Coscinodiscaceae			
		Cyclotella	290	30	
		Melosira	370	38	
		Pennales			
		Naviculaceae			
		Navicula	39	4	
		Nitzschiaceae			
		Nitzschia	19	2	
		EUGLENOPHYTA			
		Euglenophyceae			
		Euglenales			
		Euglenaceae			
		Euglena		0	
		TOTAL	970		

07164400 ARKANSAS RIVER AT SAND SPRINGS BRIDGE, NEAR TULSA, OKLA.--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA,
WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

Date	Time	Organism	Count (cells/ml)	Percent of total	Sampling method
July 29	1600	CHLOROPHYTA			Sediment sampler
		Chlorophyceae			
		Chlorococcales			
		Characiaceae			
		Schroederia	18	3	
		Scenedesmaceae			
		Scenedesmus	71	12	
July 29	1600	CHRYSOPHYTA			Sediment sampler
		Bacillariophyceae			
		Centrales			
		Coscinodiscaceae			
		Cyclotella	230	39	
		Melosira	110	18	
		Pennales			
		Gomphonemataceae			
		Gomphonema	18	3	
		Naviculaceae			
		Navicula	71	12	
		CYANOPHYTA			
		Myxophyceae			
		Chroococcales			
		Chroococcaceae			
		Anacystis	71	12	
		TOTAL	590		
Aug. 12	1500	CHLOROPHYTA			Sediment sampler
		Chlorophyceae			
		Chlorococcales			
		Hydrodictyaceae			
		Pediastrum	2,600	1	
		Micractiniaceae			
		Golenkinia	2,300	1	
		Occystaceae			
		Ankistrodesmus		0	
		Dictyosphaerium		0	
		Kirchneriella	2,600	1	
		Oocystis	1,300	1	
		Scenedesmaceae			
		Actinastrum	4,000	2	
		Scenedesmus	4,000	2	
		CHRYSOPHYTA			
		Bacillariophyceae			
		Centrales			
		Coscinodiscaceae			
		Cyclotella	11,000	6	
		Pennales			
		Nitzschiaceae			
		Nitzschia		0	
		CYANOPHYTA			
		Myxophyceae			
		Chroococcales			
		Chroococcaceae			
		Agmenellum	4,000	2	
		Anacystis	75,000	40	
		Gomphosphaeria	1,300	1	
		Oscillatoriales			
		Oscillatoriaceae			
		Oscillatoria	77,000	41	
		EUGLENOPHYTA			
		Euglenophyceae			
		Euglenales			
		Euglenaceae			
		Euglena		0	
		TOTAL	190,000		
Aug. 26	1600	CHLOROPHYTA			Sediment sampler
		Chlorophyceae			
		Chlorococcales			
		Characiaceae			
		Schroederia	1,700	7	
		Occystaceae			
		Ankistrodesmus	330	1	
		Dictyosphaerium	1,300	6	
		Selenastrum	330	1	
		Scenedesmaceae			
		Scenedesmus	2,700	12	
		Volvocales			
		Chlamydomonadaceae			
		Chlamydomonas	170	1	
		Volvocaceae			
		Pandorina	2,700	12	

07164400 ARKANSAS RIVER AT SAND SPRINGS BRIDGE, NEAR TULSA, OKLA.--Continued

QUALITIATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA,
WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

PHYTOPLANKTON

Date	Time	Organism	Count (cells/ml)	Percent of total	Sampling method
Aug. 26	1600	CHRYSOPHYTA			
		Bacillariophyceae			
		Centrales			
		Coscinodiscaceae			
		Cyclotella	4,500	20	
		Melosira	830	4	
		Pennales			
		Naviculaceae			
		Navicula	170	1	
		Nitzschiaceae			Sediment sampler
		Nitzschia	170	1	
		CYANOPHYTA			
		Myxophyceae			
		Chroococcales			
		Chroococcaceae			
		Agmenellum	8,000	35	
		TOTAL	23,000		
Sep. 23	1200	CHLOROPHYTA			Sediment sampler
		Chlorophyceae			
		Chlorococcales			
		Characiaceae			
		Schroederia	48	2	
		Occystaceae			
		Ankistrodesmus	48	2	
		Scenedesmaceae			
		Scenedesmus	380	18	
		Tetrasporales			
		Palmellaceae			
		Sphaerocystis			
		CHRYSOPHYTA			
		Bacillariophyceae			
		Centrales			
		Coscinodiscaceae			
		Cyclotella	910	42	
		Melosira	95	4	
		Pennales			
		Naviculaceae			
		Navicula	140	7	
		Nitzschiaceae			
		Nitzschia	140	7	
		TOTAL	2,100		

07164400 ARKANSAS RIVER AT SAND SPRINGS BRIDGE, NEAR TULSA, OKLA.--Continued

DISSOLVED SULFATE (SO4), MG/L, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	130	140	69	160	120	91	110	120	75	76	120	97
2	120	130	67	150	160	97	99	110	75	85	120	97
3	130	100	81	150	180	94	110	120	65	80	120	100
4	130	97	91	150	150	98	120	150	62	54	120	100
5	120	85	110	160	100	110	120	160	67	62	110	100
6	110	80	120	150	100	120	130	170	67	66	110	100
7	110	35	130	150	94	110	120	180	63	66	110	98
8	110	32	120	140	100	99	110	170	62	84	110	97
9	110	30	140	140	89	95	120	170	64	75	99	100
10	110	30	150	130	93	86	110	180	67	68	100	100
11	110	32	130	120	90	91	100	160	67	76	97	99
12	110	25	160	100	92	88	110	160	71	94	97	97
13	110	32	160	110	80	88	110	140	88	87	95	98
14	75	30	170	110	88	120	120	130	76	84	91	99
15	130	28	160	110	90	120	120	140	64	88	91	96
16	150	27	150	110	88	130	120	130	70	93	92	97
17	140	23	150	110	87	140	120	130	62	92	93	98
18	160	23	120	110	85	120	110	120	56	85	87	95
19	150	48	120	120	85	130	97	110	55	86	97	97
20	170	25	140	120	85	140	100	100	51	86	130	97
21	180	33	130	130	90	140	100	100	50	87	120	97
22	170	37	140	130	85	130	110	100	49	99	110	97
23	160	36	130	130	83	120	110	95	50	100	120	110
24	150	35	120	140	100	97	110	94	50	96	100	110
25	150	38	110	140	97	100	100	82	48	93	110	100
26	140	47	130	140	83	100	110	85	48	110	100	110
27	180	43	130	150	88	76	110	88	48	100	130	110
28	160	46	130	160	91	94	110	91	55	98	100	100
29	180	48	140	180	---	100	120	88	59	110	100	100
30	170	50	140	160	---	100	110	84	62	130	100	110
31	140	---	140	110	---	120	---	79	---	120	100	---
MONTH	140	49	130	130	99	110	110	120	62	88	110	100

DISSOLVED SULFATE (SO4), TONS PER DAY, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2980	4910	2420	5400	2470	5530	5760	2360	9480	2460	2010	3200
2	2680	6260	1970	5180	3290	5920	5110	2120	9270	2750	1950	1700
3	2230	6750	1480	5140	4270	5740	5670	1960	8060	2890	1410	1790
4	2370	11800	1610	5100	6240	5980	5900	3600	8270	2380	1520	1770
5	1080	17400	1950	5490	5670	7630	4280	5880	7670	2730	1910	1700
6	114	21600	2250	5140	5590	9140	3430	6240	5590	2900	1920	751
7	642	9390	2340	5140	5710	8170	3050	5050	3640	2600	882	66.2
8	365	8100	2120	4800	6860	7160	2790	4870	5780	2060	1410	443
9	91.2	6240	2470	4840	6060	6620	2880	4120	7080	1810	1130	964
10	1350	4950	2660	4490	6500	5900	2680	4220	8410	1600	1250	626
11	1960	3790	2530	4150	6250	5950	2300	3150	9660	1640	1890	1010
12	983	2480	2870	3430	6230	5630	3680	3390	11100	1490	1520	1070
13	146	2400	2810	3860	5380	5870	3680	2900	14500	1770	1290	688
14	369	2240	2940	3950	5060	4310	4020	3510	12400	1410	749	748
15	1630	2000	2800	3920	3550	4240	3890	5290	9420	2170	968	772
16	2000	1930	2600	3920	3450	2900	4050	8950	9790	2890	435	1070
17	1850	1660	2880	3950	2770	2600	3180	10500	7530	3010	66.0	1240
18	2680	1700	2860	3950	2820	2270	2810	9780	4970	2000	265	551
19	1260	3710	3000	4310	4220	2780	2600	8880	4400	2810	846	1120
20	817	1940	3590	4310	5420	2390	2610	7960	4530	650	1300	148
21	1180	2530	2730	3030	4690	2720	2220	7830	5160	517	1880	62.9
22	3200	2860	3690	2650	2620	4390	2830	7720	5050	1560	1870	566
23	3460	2810	2510	3120	2160	4050	3470	7280	4720	1590	1950	1730
24	2200	2660	3760	3180	3940	3560	3330	7280	3960	1380	861	1810
25	2560	2860	1970	2740	5500	5100	2780	6580	3450	1490	110	1000
26	1160	3550	3500	2730	5380	5080	3030	6930	3800	1960	123	817
27	671	3220	4180	2980	5680	4020	3150	7250	4080	940	1550	585
28	2140	3370	4250	3160	5700	3400	3090	8010	4540	656	2010	74.3
29	6370	3530	4610	1600	---	3560	2850	8960	3600	2300	1950	162
30	6470	2840	4610	3270	---	3480	2380	9780	422	2920	1270	579
31	4950	---	4690	2810	---	4990	---	10200	---	2470	945	---
MONTH	2000	5050	2930	3930	4770	4870	3450	6210	6680	1990	1270	960

07164400 ARKANSAS RIVER AT SAND SPRINGS BRIDGE, NEAR TULSA, OKLA.--Continued

DISSOLVED CHLORIDE (CL), MG/L, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	410	460	210	500	380	280	360	370	220	230	370	300
2	390	410	200	490	540	290	300	350	220	250	370	300
3	410	310	240	470	610	280	340	380	200	240	360	310
4	400	300	280	470	470	300	360	500	190	160	370	310
5	370	260	350	510	320	350	390	530	200	190	350	310
6	340	240	390	480	310	370	400	560	200	200	340	310
7	330	110	410	470	290	360	390	610	190	200	350	300
8	330	100	370	440	320	300	350	540	190	250	330	300
9	330	96	440	440	270	290	360	540	190	220	300	310
10	330	96	470	400	280	260	340	580	200	200	320	310
11	340	99	420	370	270	270	320	530	200	230	300	300
12	350	82	500	320	280	260	330	530	210	290	290	300
13	330	100	530	350	240	270	350	460	260	260	290	300
14	220	95	550	350	270	360	380	430	230	250	280	300
15	410	89	520	340	270	390	390	440	190	260	270	290
16	470	86	500	330	260	420	370	400	210	280	280	290
17	440	76	470	350	260	450	360	400	190	280	280	300
18	510	75	380	350	250	360	350	360	170	250	260	290
19	480	150	360	390	250	430	290	330	170	260	290	300
20	560	80	440	380	250	430	310	310	160	260	410	300
21	600	100	430	400	270	460	320	310	150	260	360	290
22	560	120	440	420	250	410	330	310	150	300	350	290
23	510	110	400	430	250	360	340	290	150	320	390	330
24	480	110	390	460	310	290	330	280	150	290	320	330
25	490	120	350	440	300	310	320	240	150	280	340	320
26	450	140	410	440	250	310	330	250	150	330	320	340
27	590	130	410	470	270	230	350	270	150	320	410	330
28	520	140	420	520	280	290	360	270	170	300	310	320
29	580	150	440	570	---	320	360	260	180	350	320	310
30	560	150	450	510	---	320	350	250	190	400	320	350
31	440	---	460	350	---	370	---	240	---	390	310	---
MONTH	440	150	410	430	310	340	350	390	190	270	330	310

DISSOLVED CHLORIDE (CL), TONS PER DAY, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9400	16100	7570	16900	7830	17000	18900	7280	27800	7450	6180	9880
2	8700	19800	5890	16900	11100	17700	15500	6760	27200	8100	6010	5260
3	7030	20900	4390	16100	14500	17100	17500	6210	24800	8680	4240	5560
4	7300	30600	4940	16000	19500	16300	17700	12000	25300	7040	4680	5470
5	3330	53200	6190	17500	18100	24300	13900	19500	22900	6360	6080	5260
6	353	64800	7300	16500	17300	28200	10600	20600	16700	8800	5920	2330
7	1920	29500	7370	16100	17600	26700	9910	17100	11000	7880	2610	202
8	1100	25300	6520	15100	21900	21700	8890	15500	17700	6140	4240	1370
9	274	20000	7770	15200	18400	20200	8630	15100	21000	5320	3420	2990
10	4050	15800	8320	13800	19600	17800	8270	13600	25100	4700	4000	1940
11	6070	11700	8160	12800	18700	17600	7360	10400	28800	4970	5850	3070
12	3130	8150	8960	11000	19600	16600	11000	11200	32800	4600	4560	3320
13	438	7510	9320	12300	16100	18000	11700	9510	42900	5290	3930	2110
14	1110	7110	9640	12600	15500	12900	12700	11600	37500	4190	2310	2270
15	5130	6340	9100	12100	10600	13800	12600	16600	28000	6420	2870	2330
16	6260	6150	8670	11800	10200	9370	12500	27500	29400	8690	1320	3190
17	5810	5480	9040	12600	8280	6360	9550	32400	23100	9150	199	3800
18	8550	5530	9050	12600	8300	7180	8950	29400	15100	5870	793	1680
19	4040	11600	9000	14000	12400	9180	7780	26600	13600	8490	2530	3450
20	2690	6220	11300	13600	15900	7330	8090	24700	14200	1970	4110	458
21	3940	7670	9030	9330	14100	8940	7110	24300	15500	1540	5640	188
22	10500	9270	12200	8570	7690	13800	8490	23900	15500	4720	5930	1690
23	11000	8580	7730	10300	6500	12800	10700	22200	14200	5100	6350	5190
24	7040	8380	12200	10400	12200	10600	9980	21700	11900	4170	2760	5440
25	8350	9040	6260	8620	17000	15800	8900	19200	10800	4480	341	3210
26	3730	10600	11000	8590	16200	15700	9090	20400	11900	5890	395	2520
27	2200	9720	13200	9340	17400	12200	10000	22200	12800	3010	4880	1760
28	6960	10200	13700	10300	17500	10500	10100	23800	14000	2010	6240	238
29	20500	11000	14500	5080	---	11400	8560	26500	11000	7320	6260	501
30	21300	8500	14800	10400	---	11100	7590	29100	1290	8990	4070	1840
31	15600	---	15400	8930	---	15400	---	31100	---	8030	2930	---
MONTH	6380	15690	9300	12430	14620	15080	10750	19220	20130	6040	3930	2950

07164400 ARKANSAS RIVER AT SAND SPRINGS BRIDGE, NEAR TULSA, OKLA.--Continued

DISSOLVED SOLIDS (RESIDUE AT 180 DEG. C), MG/L, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1040	1140	580	1230	967	751	927	961	626	637	956	796
2	990	1040	569	1200	1300	791	808	910	626	700	950	796
3	1040	831	671	1170	1460	768	687	978	552	666	933	825
4	1010	796	751	1160	1160	802	933	1220	532	470	961	819
5	944	707	910	1250	848	904	990	1290	564	531	904	813
6	887	666	996	1180	819	956	1010	1370	564	559	887	813
7	876	327	1040	1170	774	922	990	1460	539	557	910	802
8	870	301	950	1100	836	808	910	1310	533	694	865	796
9	859	292	1090	1090	734	779	939	1310	546	626	808	819
10	870	291	1170	1020	762	711	887	1390	569	575	836	819
11	862	300	1060	950	740	745	853	1290	569	631	796	808
12	904	254	1230	836	757	722	876	1300	597	774	791	796
13	859	305	1290	910	666	728	904	1140	722	717	779	802
14	614	288	1340	899	728	933	978	1070	631	694	751	808
15	1040	274	1260	882	740	996	1000	1110	547	722	745	785
16	1160	265	1220	859	722	1060	956	1020	592	762	757	791
17	1090	239	1160	904	717	1120	933	1010	530	757	762	802
18	1250	237	973	904	700	973	916	933	488	700	717	779
19	1180	422	939	996	705	1080	791	870	481	711	791	796
20	1350	249	1100	978	700	1080	831	819	448	711	1040	796
21	1450	309	1070	1020	740	1130	853	819	441	717	933	791
22	1350	343	1100	1060	705	1050	859	813	435	808	904	791
23	1260	334	1010	1070	688	967	882	779	436	836	996	876
24	1190	328	996	1140	831	791	876	768	440	785	848	876
25	1210	351	904	1110	796	819	848	677	427	762	893	842
26	1130	413	1040	1110	688	819	859	700	424	859	842	887
27	1410	383	1040	1160	728	657	916	728	424	848	1050	859
28	1270	411	1060	1260	751	774	922	745	480	802	825	848
29	1390	427	1090	1360	---	836	939	722	506	910	853	831
30	1350	436	1110	1260	---	842	904	694	530	1010	842	910
31	1110	---	1140	910	---	950	---	660	---	1000	825	---
MONTH	1090	432	1030	1070	813	879	906	996	527	727	863	819

DISSOLVED SOLIDS (TONS PER DAY), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23800	40000	20400	41500	19900	45600	48600	18900	79100	20600	16000	26200
2	22100	50300	16700	41500	26700	48300	41700	17600	77400	22700	15400	14000
3	17800	56100	12300	40100	54700	46900	45700	16000	68400	24100	11000	14800
4	18400	97100	13300	39500	48200	48900	45800	29300	71000	20700	12100	14500
5	8490	145000	16100	42900	48100	62700	35300	47400	64600	23400	15700	13800
6	920	180000	18600	40500	45800	72800	26700	50300	47100	24600	15400	6100
7	5110	87800	18700	40100	47000	68500	25200	41000	31100	22000	7300	541
8	2890	76200	16700	37700	57300	58500	23100	37500	49600	17100	11100	3630
9	712	60700	19200	37700	49900	54300	22500	31700	60400	15100	9210	7890
10	10700	48000	20700	35300	53300	46800	21600	32600	71400	13500	10500	5130
11	15700	35600	20600	32800	51300	48700	19600	25400	82000	13600	15500	6270
12	8080	25200	22100	28700	51300	46200	29300	27500	93200	12300	12400	6810
13	1140	22900	22700	31900	44800	46800	30300	23600	119000	14600	10600	5650
14	3100	21500	23500	32300	41900	33500	32700	28900	103000	11600	6180	6110
15	13000	19500	22000	31400	29200	35200	32400	42000	80500	17800	7930	6320
16	15400	19000	21100	30600	28300	23600	32300	70200	82800	23700	3580	8690
17	14400	17200	22300	32500	22800	20800	24800	81800	64400	24700	541	10200
18	21000	17500	23200	32500	23200	18400	23400	76100	43300	18400	2190	4520
19	9940	32600	23500	35800	35000	23100	21200	70200	38400	23200	6900	9160
20	6490	19400	28200	35100	44600	18400	21700	65200	39800	5380	10400	1210
21	9510	23700	22500	23800	38600	22000	19000	64100	45500	4260	14600	513
22	25400	26500	30600	21600	21700	35400	22100	62800	44900	12700	15300	4610
23	27300	26100	19500	25700	17900	32600	27900	59700	41200	13300	16200	13800
24	17400	25000	31200	25900	32800	24000	26500	59500	34800	11300	7300	14500
25	20600	26400	16200	21800	45100	41600	23600	54300	30700	12200	895	8480
26	9370	31200	28000	21700	44600	41600	23700	57100	33500	15300	1040	6590
27	5250	28600	33400	23100	47000	33700	26200	60000	36100	7970	12300	4570
28	17000	30100	34600	24900	47000	28000	25900	65600	39700	5370	16000	630
29	49200	31400	35900	12300	---	29800	22300	73500	30900	19000	16700	1340
30	51400	24700	36600	25800	---	29300	19600	80800	36110	22700	10700	4790
31	39300	---	38200	23200	---	34500	---	85500	---	20800	7800	---
MONTH	15840	44840	23500	31300	34210	34820	28020	50200	56910	16510	10310	7840

07164400 ARKANSAS RIVER AT SAND SPRINGS BRIDGE, NEAR TULSA, OKLA.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1830	2000	1020	2170	1700	1320	1630	1690	1100	1120	1680	1400
2	1740	1820	1000	2110	2290	1390	1420	1600	1100	1230	1670	1400
3	1830	1460	1180	2050	2560	1350	1560	1720	970	1170	1640	1450
4	1770	1400	1320	2040	2040	1410	1640	2150	935	827	1690	1440
5	1660	1240	1600	2190	1490	1590	1740	2270	992	933	1590	1430
6	1560	1170	1750	2080	1440	1680	1770	2400	992	982	1560	1430
7	1540	575	1830	2060	1360	1620	1740	2560	947	980	1600	1410
8	1530	530	1670	1930	1470	1420	1600	2300	937	1220	1520	1400
9	1510	513	1920	1920	1290	1370	1650	2300	960	1100	1420	1440
10	1530	511	2060	1790	1340	1250	1560	2450	1000	1010	1470	1440
11	1550	528	1870	1670	1300	1310	1500	2260	1000	1110	1400	1420
12	1590	447	2170	1470	1330	1270	1540	2280	1050	1360	1590	1400
13	1510	537	2270	1600	1170	1280	1590	2000	1270	1260	1370	1410
14	1080	507	2350	1580	1280	1640	1720	1880	1110	1220	1320	1420
15	1830	482	2220	1550	1300	1750	1760	1950	962	1270	1310	1380
16	2040	465	2150	1510	1270	1870	1680	1800	1040	1340	1330	1390
17	1920	421	2040	1590	1260	1970	1640	1770	932	1330	1340	1410
18	2200	416	1710	1590	1230	1710	1610	1640	858	1230	1260	1370
19	2070	742	1650	1750	1240	1890	1390	1530	845	1250	1390	1400
20	2380	438	1930	1720	1230	1900	1460	1440	787	1250	1420	1400
21	2550	544	1880	1790	1300	1990	1500	1440	776	1260	1640	1390
22	2370	603	1930	1870	1240	1840	1510	1430	765	1420	1590	1390
23	2210	587	1770	1880	1210	1700	1550	1370	766	1470	1750	1540
24	2100	576	1750	2000	1460	1590	1540	1350	774	1380	1490	1540
25	2120	617	1590	1950	1400	1440	1490	1190	750	1340	1570	1480
26	1980	726	1820	1950	1210	1440	1510	1230	745	1510	1480	1560
27	2480	674	1820	2040	1280	1120	1610	1280	745	1490	1640	1510
28	2230	722	1860	2220	1320	1360	1620	1310	843	1410	1450	1490
29	2440	750	1920	2430	---	1470	1650	1270	890	1600	1500	1460
30	2380	767	1960	2210	---	1480	1590	1220	931	1780	1480	1600
31	1950	---	2000	1600	---	1670	---	1160	---	1760	1450	---
MONTH	1920	759	1810	1880	1430	1540	1590	1750	926	1280	1520	1440

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21.0	18.5	8.5	5.0	4.5	5.5	11.0	16.5	23.0	26.0	25.0	28.0
2	20.5	18.0	9.0	4.5	4.5	4.5	8.0	15.5	23.0	27.0	25.5	28.0
3	20.0	18.5	8.0	6.0	5.5	4.0	9.0	18.0	23.0	27.5	25.5	27.5
4	20.5	18.0	10.0	5.0	5.5	4.0	9.0	17.5	22.5	28.0	25.0	27.5
5	21.0	18.0	10.0	4.5	4.0	4.5	8.5	18.0	23.0	28.5	25.0	27.0
6	21.0	15.5	9.0	7.5	3.5	5.0	9.0	18.5	24.5	29.0	24.5	26.0
7	19.0	15.0	8.0	6.0	4.0	5.5	9.5	19.0	23.0	29.0	25.5	25.0
8	19.5	14.5	6.0	5.5	4.0	6.5	10.0	19.5	23.0	27.5	25.5	25.5
9	20.0	14.5	7.0	6.0	3.0	5.0	11.0	19.0	22.5	28.0	25.5	26.0
10	20.0	13.5	7.5	5.0	4.5	5.5	10.5	19.5	23.5	28.0	26.0	26.5
11	20.0	13.5	6.5	4.5	3.5	5.0	10.0	20.0	24.0	27.5	26.0	26.5
12	20.0	13.0	7.5	2.5	4.5	5.5	9.5	19.5	24.0	26.5	26.5	23.0
13	20.5	13.5	7.5	4.0	4.5	5.0	10.0	18.5	24.5	26.0	27.5	22.5
14	19.5	12.5	7.0	4.5	5.0	6.5	10.0	18.5	23.0	25.0	24.5	22.0
15	18.5	12.5	6.0	5.5	4.0	5.5	12.0	19.5	23.0	27.0	23.5	22.0
16	18.5	12.0	5.5	4.0	3.5	6.5	12.0	20.0	22.5	27.5	26.5	23.0
17	19.5	12.0	5.0	4.5	4.5	7.5	13.0	20.0	24.0	27.5	25.0	23.0
18	19.5	12.0	6.0	5.0	3.5	7.0	14.0	19.5	24.5	28.0	24.5	23.0
19	18.5	12.5	6.0	4.5	5.0	9.5	11.0	20.0	24.0	28.0	25.5	22.5
20	18.5	12.5	6.0	4.0	4.5	9.0	11.5	19.5	25.0	29.5	26.5	21.0
21	18.5	12.5	5.5	5.0	4.0	9.5	15.5	20.5	24.0	29.5	27.5	19.5
22	18.0	12.0	7.0	5.0	4.0	9.5	13.0	21.0	24.0	28.5	28.0	20.0
23	19.0	12.5	7.0	6.0	2.0	9.5	15.5	21.0	24.0	28.5	28.0	20.0
24	18.5	13.5	6.0	6.5	2.5	9.5	15.5	21.0	26.0	24.5	28.0	20.5
25	18.5	14.0	4.0	6.0	4.0	8.0	16.0	22.0	25.5	27.0	27.5	21.0
26	18.5	15.5	5.0	6.5	4.0	9.0	15.5	22.0	25.0	26.0	25.0	20.5
27	19.0	14.0	5.5	7.5	4.5	9.0	15.5	22.5	25.5	28.0	26.0	20.0
28	19.0	15.5	5.5	5.0	5.5	7.5	16.0	22.5	26.5	28.5	27.0	19.5
29	19.0	9.0	6.5	5.5	---	6.5	18.0	22.5	22.5	26.5	27.5	19.5
30	19.0	8.0	5.5	4.5	---	7.0	16.5	22.5	25.5	27.0	28.0	22.0
31	19.0	---	5.5	5.0	---	9.0	---	23.0	---	27.0	26.5	---
MONTH	19.5	14.0	6.5	5.0	4.0	7.0	12.0	20.0	24.0	27.5	26.0	23.5

07165570 ARKANSAS RIVER NEAR HASKELL, OKLA.

LOCATION.--Lat 35°49'23", long 95°38'39", in NE 1/4 sec.31, T.16 N., R.16 E., Muskogee County, at gaging station at bridge on State Highway 104, 2 mi (3.2 km) east of Haskell, 23.5 mi (37.8 km) upstream from Verdigris River, and at mile 483.7 (778.3 km).

DRAINAGE AREA.--75,473 mi^2 (195,475 km^2), of which 12,541 mi^2 (32,481 km^2) is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: March 1974 to current year.

REMARKS.--M=Presence of material verified but not quantified.
B=Results based on colony count outside the acceptable range (Non-ideal colony count).

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TOTAL CALCIUM (CA) (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	TOTAL MAGNESIUM (MG) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	TOTAL SODIUM (NA) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	TOTAL POTASSIUM (K) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)
OCT.												
08...	1200	457	--	--	--	--	--	--	--	--	--	--
23...	1030	2910	--	--	--	--	--	--	--	--	--	--
NOV.												
07...	0900	101000	--	--	--	--	--	--	--	--	101	0
21...	0900	28400	--	--	--	--	--	--	--	--	83	0
DEC.												
11...	0830	7980	--	--	--	--	--	--	--	--	--	--
JAN.												
08...	0900	13200	--	--	--	--	--	--	--	--	--	--
28...	1530	10600	--	--	--	--	--	--	--	--	--	--
FEB.												
12...	1800	24600	57	--	--	19	150	--	3.7	--	185	0
26...	1130	25700	--	--	--	--	--	--	--	--	--	--
MAR.												
11...	1430	26700	--	--	--	--	--	--	--	--	--	--
26...	1200	20100	--	73	--	22	--	210	--	4.2	191	0
APR.												
08...	1200	13600	--	--	--	--	--	--	--	--	--	--
22...	1430	9040	--	--	--	--	--	--	--	--	--	--
MAY												
07...	1045	14800	--	--	--	--	--	--	--	--	--	--
21...	1300	29600	59	--	21	--	200	--	4.0	--	176	0
JUNE												
04...	1300	49000	--	--	--	--	--	--	--	--	--	--
18...	1230	40400	--	--	--	--	--	--	--	--	--	--
JULY												
03...	1230	13000	--	--	--	--	--	--	--	--	--	--
15...	1300	5440	--	--	--	--	--	--	--	--	--	--
29...	1100	1250	65	--	17	--	170	--	6.4	--	211	0
AUG.												
13...	1400	4420	63	--	18	--	35	--	6.6	--	195	--
27...	1200	1230	67	--	27	--	170	--	5.8	--	227	--
SEP.												
11...	1700	1740	--	--	--	--	--	--	--	--	--	--
24...	0730	3450	--	--	--	--	--	--	--	--	--	--

07165570 ARKANSAS RIVER NEAR HASKELL, OKLA.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL NITROGEN (NO3) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)
OCT.											
08...	--	--	--	--	.82	.35	.65	1.0	1.8	8.1	.31
23...	--	--	--	--	.44	.28	.36	.64	1.1	4.8	.18
NOV.											
07...	83	88	150	.2	.46	.08	.90	.98	1.4	6.4	.45
21...	68	34	100	.2	.00	.08	.60	.68	.68	3.0	.25
DEC.											
11...	--	--	--	--	.66	.08	.63	.71	1.4	6.1	.23
JAN.											
08...	--	--	--	--	.40	.09	.62	.71	1.1	4.9	.18
28...	--	--	--	--	.99	.24	.58	.82	1.8	8.0	.18
FEB.											
12...	152	85	250	.2	.80	.09	.52	.61	1.4	6.2	.16
26...	--	--	--	--	.85	.11	.88	.99	1.8	8.1	.20
MAR.											
11...	--	--	--	--	.98	.21	.67	.88	1.9	8.2	.17
26...	157	120	320	.3	1.0	.01	.44	.45	1.5	6.4	.14
APR.											
08...	--	--	--	--	.88	.17	.60	.77	1.7	7.3	.18
22...	--	--	--	--	.85	.06	.67	.73	1.6	7.0	.17
MAY											
07...	--	--	--	--	.58	.26	.74	1.0	1.6	7.0	.16
21...	144	110	300	.3	.46	.10	.88	.98	1.4	6.4	.13
JUNE											
04...	--	--	--	--	.53	.08	1.0	1.1	1.6	7.2	.19
18...	--	--	--	--	.60	.13	1.2	1.3	1.9	8.4	.17
JULY											
03...	--	--	--	--	.53	.07	.55	.62	1.2	5.1	.18
15...	--	--	--	--	.35	.00	.62	.62	.97	4.3	.20
29...	173	99	300	.4	.02	.02	.82	.84	.86	3.8	.20
AUG.											
13...	160	100	270	.3	.02	.00	.43	.43	.45	2.0	.23
27...	--	95	250	.4	.05	.00	.57	.57	.62	2.7	.23
SEP.											
11...	--	--	--	--	.02	.00	.79	.79	.81	3.6	.18
24...	--	--	--	--	.47	.08	1.3	1.4	1.9	8.3	.19

DATE	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (TONS PER AC-FT)	DISSOLVED SOLIDS (TONS PER DAY)	TOTAL NONFILTRABLE RESIDUE (MG/L)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	CARBON DIOXIDE (CO2) (MG/L)
OCT.											
08...	837	1.14	1030	38	--	--	--	--	1250	--	--
23...	1410	1.92	11100	28	--	--	--	--	2500	7.9	--
NOV.											
07...	429	.58	117000	328	--	--	--	--	780	7.9	2.0
21...	327	.44	25100	256	--	--	--	--	540	8.6	.3
DEC.											
11...	1040	1.41	22400	39	--	--	--	--	1900	7.5	--
JAN.											
08...	1090	1.48	38800	42	--	--	--	--	1900	8.3	--
28...	1160	1.58	33200	19	--	--	--	--	1950	--	--
FEB.											
12...	715	.97	47500	31	--	--	--	--	1100	7.8	4.7
26...	734	1.00	50900	137	--	--	--	--	1600	8.0	--
MAR.											
11...	688	.94	49600	82	--	--	--	--	1300	8.2	--
26...	887	1.21	48100	62	270	120	62	5.5	1560	8.0	3.1
APR.											
08...	985	1.34	36200	64	--	--	--	--	1700	8.4	--
22...	852	1.16	20800	24	--	--	--	--	1500	7.4	--
MAY											
07...	1230	1.67	49200	92	--	--	--	--	2200	7.2	--
21...	840	1.14	67100	104	--	--	--	--	1100	7.1	22
JUNE											
04...	636	.87	84100	180	--	--	--	--	1100	7.4	--
18...	508	.69	55400	256	--	--	--	--	740	8.5	--
JULY											
03...	662	.90	23200	76	--	--	--	--	1150	7.9	--
15...	701	.95	10300	36	--	--	--	--	1100	7.9	--
29...	813	1.11	2740	16	--	--	--	--	1500	8.2	2.1
AUG.											
13...	779	1.06	9300	20	--	--	--	--	1200	8.7	.6
27...	779	1.06	2590	32	--	--	--	--	1400	8.8	.6
SEP.											
11...	792	1.08	3720	28	--	--	--	--	1380	--	--
24...	895	1.22	8340	28	--	--	--	--	1600	8.4	--

07165570 ARKANSAS RIVER NEAR HASKELL, OKLA.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TOTAL IRON (FE) (UG/L)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	CHEMICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	CHLOROPHYLL A (UG/L)	CHLOROPHYLL B (UG/L)
OCT.										
08...	1200	457	650	24.0	10	8.4	102	24	46.0	37.0
23...	1030	2910	770	16.0	20	--	--	29	14.0	12.0
NOV.										
07...	0900	101000	7500	12.0	200	9.8	93	28	81.0	86.0
21...	0900	28400	6600	10.5	40	10.4	97	23	4.40	.700
DEC.										
11...	0830	7980	1400	5.5	30	11.8	98	15	4.00	3.80
JAN.										
08...	0900	13200	750	6.0	20	11.8	99	26	8.70	5.70
28...	1530	10600	650	7.0	20	12.4	108	20	5.40	1.70
FEB.										
12...	1800	24600	800	6.0	20	11.8	98	16	--	--
26...	1130	25700	3800	4.5	50	12.1	98	26	--	--
MAR.										
11...	1430	26700	2400	--	30	--	--	25	3.10	.400
26...	1200	20100	2700	8.0	18	11.6	110	15	--	--
APR.										
08...	1200	13600	2800	11.0	24	13.4	128	19	28.0	2.50
22...	1430	9040	460	17.0	14	10.6	114	15	--	--
MAY										
07...	1045	14800	1600	20.0	24	9.1	106	23	2.50	.000
21...	1300	29600	2700	22.0	38	8.4	100	21	7.50	.000
JUNE										
04...	1300	49000	4200	25.0	56	8.3	102	30	1.60	.000
18...	1230	40400	7600	25.0	130	8.2	102	38	3.80	1.40
JULY										
03...	1230	13000	1300	29.5	28	6.8	96	17	--	--
15...	1300	5440	1100	31.0	21	7.8	107	18	17.0	2.80
29...	1100	1250	300	29.0	3	15.0	197	24	32.0	7.50
AUG.										
13...	1400	4420	630	31.0	6	10.2	139	24	7.00	.000
27...	1200	1230	350	26.0	9	10.0	130	50	14.0	2.60
SEP.										
11...	1700	1740	820	30.0	10	9.2	124	24	20.0	1.20
24...	0730	3450	920	16.0	15	8.7	93	19	.000	.000

DATE	FECAL COLIFORM (COL. PER 100 ML)	STREPTOCOCCI (COLONIES PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)	OIL AND GREASE (MG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	TOTAL CHROMIUM (CR) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL ZINC (ZN) (UG/L)
OCT.										
08...	210	190	6.7	5	6	<10	0	<100	.0	30
23...	81600	8280	5.7	1	4	<10	0	<100	.1	990
NOV.										
07...	930	760	13	1	12	10	0	<100	.0	100
21...	1300	--	7.8	1	8	<10	0	<100	.0	20
DEC.										
11...	--	--	5.9	1	4	<10	<10	<100	<.1	70
JAN.										
08...	--	460	4.2	6	6	20	0	<100	.1	10
28...	--	3900	4.6	7	2	<10	10	<100	.0	30
FEB.										
12...	4450	6150	6.5	5	2	10	0	<100	.0	30
26...	23000	1720	8.4	7	2	<10	0	<100	.1	30
MAR.										
11...	--	--	7.2	4	1	30	20	<100	.1	40
26...	5050	1800	--	0	1	<10	0	<100	.1	50
APR.										
08...	--	--	5.9	2	2	<10	0	<100	.1	30
22...	--	--	16	1	2	<10	0	<100	.0	100
MAY										
07...	183	MO	--	2	2	10	0	<100	.0	180
21...	--	344	5.9	2	2	<10	0	<100	.2	180
JUNE										
04...	--	--	15	0	2	<10	10	<100	.1	280
18...	410	MO	--	1	4	<10	20	<100	.6	340
JULY										
03...	6800	1900	3.3	5	3	<10	10	<100	.0	10
15...	3550	6500	5.6	2	4	<10	0	<100	.0	20
29...	4600	MO	6.6	0	3	<10	0	<100	.1	0
AUG.										
13...	--	--	7.1	1	4	10	10	<100	.1	20
27...	38000	8140	10	0	5	<10	10	<100	3.0	10
SEP.										
11...	MO	56	9.6	0	2	<10	100	<100	1.0	0
24...	MO	876	--	1	5	<10	30	<100	1.4	20

07165570 ARKANSAS RIVER NEAR HASKELL, OKLA.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TOTAL IRON IN BOTTOM MATERIAL (UG/G)	TOTAL KJEL. NITROGEN IN BOTTOM MAT. (MG/KG)	TOTAL PHOSPHORUS IN BOTTOM MATERIAL (MG/KG)	LOSS ON IGNITION IN BOTTOM MATERIAL (MG/KG)	COD IN BOTTOM MATERIAL (MG/KG)
FEB. 12...	1800	24600	160000	200	25	14900	3200

DATE	OIL AND GREASE IN BOTTOM MATERIAL (MG/KG)	TOTAL ARSENIC IN BOTTOM MATERIAL (UG/G)	TOTAL CADMIUM IN BOTTOM MATERIAL (UG/G)	TOTAL CHROMIUM IN BOTTOM MATERIAL (UG/G)	TOTAL LEAD IN BOTTOM MATERIAL (UG/G)	TOTAL MERCURY IN BOTTOM MATERIAL (UG/G)	TOTAL ZINC IN BOTTOM MATERIAL (UG/G)
FEB. 12...	1.0	2	1	2	<10	.0	16

07171400 VERDIGRIS RIVER NEAR OOLOGAH, OKLA.

LOCATION.--Lat 36°25'17", long 95°41'01", in NW 1/4 sec.2, T.22 N., R.15 E., Rogers County, at gaging station, 0.3 mi (0.48 km) downstream from Oologah Dam, 1.2 mi (1.9 km) upstream from Fourmile Creek, 2 mi (3.2 km) southeast of Oologah, and at mile 90.0 (144.8 km).

DRAINAGE AREA.--4,339 mi^2 (11,238 km^2).

PERIOD OF RECORD.--Chemical analyses: October 1964 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)
OCT.												
01...	--	964	43	5.9	13	--	135	0	111	26	16	--
22...	1115	4370	44	6.8	13	3.4	134	0	110	28	18	.01
DEC.												
17...	1150	6770	29	4.6	7.8	2.9	97	0	80	23	11	.01
JAN.												
08...	1110	7050	35	5.7	9.7	3.7	111	0	91	22	14	--

DATE	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (TONS PER AC-FT)	DISSOLVED SOLIDS (TONS PER DAY)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	CARBON DIOXIDE (CO2) (MG/L)
OCT.											
01...	193	.26	502	130	19	--	.5	321	7.8	19.5	3.4
22...	192	.26	2270	140	28	17	.5	320	8.5	--	.7
DEC.											
17...	145	.20	2650	91	12	15	.4	232	8.2	7.0	1.0
JAN.											
08...	166	.23	3160	110	20	15	.4	268	--	5.5	--

07175500 CANEY RIVER NEAR RAMONA, OKLA.

LOCATION.--Lat 36°30'31", long 95°50'36", in NE 1/4 NW 1/4 sec.5, T.23 N., R.14 E., Washington County, at gaging station at bridge on county road, 1 mi (1.6 km) upstream from Buck Creek, 2.2 mi (3.5 km) downstream from Double Creek, 4.5 mi (7.2 km) southeast of Ramona, and at mile 32.0 (51.5 km).

DRAINAGE AREA.--1,955 mi^2 (5,063 km^2).

PERIOD OF RECORD.--Chemical analyses: November 1951 to August 1953, October 1959 to August 1962, October 1964 to current year.
Water temperatures: October 1966 to current year.

EXTREMES, Current year.--Specific conductance: Maximum daily, 1,050 micromhos/cm Aug. 13; minimum daily, 119 micromhos/cm Nov. 4.
Water temperatures: Maximum, 28.0°C July 1, 4; minimum, 3.0°C Jan. 12-13, 16-17.

Period of record.--Specific conductance: Maximum daily, 1,880 micromhos/cm Feb. 5, 1967; minimum daily, 114 micromhos/cm Oct. 20, 1973.
Water temperatures: Maximum, 35.0°C Aug. 6, 1970, Aug. 26, 1971, July 21, 1974; minimum, freezing point on many days during winter period.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
OCT.											
05...	0830	144	--	4.5	23	--	120	0	98	14	39
14...	1400	2200	--	4.9	25	--	79	0	65	31	45
26...	0900	2940	35	5.0	30	--	90	0	74	24	53
NOV.											
05...	0845	20800	14	2.3	--	--	49	0	40	7.4	12
15...	1130	3240	37	5.0	--	--	--	--	--	13	28
25...	1300	4680	35	4.6	--	--	--	--	--	12	18
DEC.											
05...	1530	2180	48	6.7	--	2.7	140	0	115	18	26
15...	1230	3230	47	7.5	18	2.5	148	0	121	18	32
25...	1000	322	70	11	44	3.0	197	0	162	36	86
JAN.											
05...	1000	3110	--	6.6	22	2.6	120	0	98	24	37
15...	1140	1410	57	8.4	27	2.6	--	--	--	26	47
25...	0830	1250	--	9.2	29	2.5	188	0	154	29	51
FEB.											
05...	1300	5270	37	6.5	29	2.9	97	0	80	27	52
15...	1330	2760	50	7.8	20	2.6	162	0	133	25	35
24...	1330	4470	31	5.9	23	2.5	84	0	69	26	40
MAR.											
05...	1300	2720	57	9.0	24	1.9	180	0	148	31	38
15...	1300	3910	49	7.7	24	1.9	150	0	123	27	38
27...	1330	4080	26	6.3	16	1.9	78	0	64	18	27
APR.											
05...	0830	3500	53	8.6	20	1.7	171	0	140	27	31
15...	0800	1490	62	10	32	1.7	183	0	150	31	57
25...	0815	555	76	12	45	1.8	218	0	179	36	88
MAY											
05...	1930	1130	62	13	44	2.2	175	0	144	35	83
15...	0800	7690	24	2.8	13	2.6	76	0	62	14	21
25...	0800	3350	48	8.2	23	2.6	147	0	121	24	37
JUNE											
05...	0800	4080	42	6.6	19	2.6	134	0	110	20	31
15...	0800	1170	49	7.8	23	2.6	155	0	127	22	44
25...	0800	1190	58	9.0	19	2.5	192	0	157	21	33
JULY											
05...	0830	112	--	10	41	2.7	147	0	121	24	71
15...	0800	77	87	11	--	3.0	216	0	177	26	110
25...	0800	56	89	13	65	3.3	238	0	195	29	140
AUG.											
05...	0800	38	96	14	--	3.5	238	0	195	29	180
15...	0830	82	87	14	79	3.9	--	--	--	28	170
25...	0715	82	--	7.2	45	3.7	119	0	98	22	85
SEP.											
05...	0730	47	56	9.3	--	4.2	161	0	132	13	95
15...	0830	52	59	9.5	49	4.0	165	0	135	--	96
25...	1530	46	--	9.4	57	4.2	158	0	130	14	120

07175500 CANEY RIVER NEAR RAMONA, OKLA.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	CARBON DIOXIDE (CO2) (MG/L)
OCT.											
05...	.67	214	.29	83.2	--	--	--	--	357	7.7	3.8
14...	.57	222	.30	1320	--	--	--	--	351	7.2	8.0
26...	.54	230	.31	1830	110	36	--	1.3	377	7.3	7.2
NOV.											
05...	.31	--	--	--	44	4	--	--	131	7.2	4.9
15...	.36	183	.25	1600	110	--	--	--	302	7.7	--
25...	.44	163	.22	2060	110	--	--	--	265	7.7	--
DEC.											
05...	--	194	.26	1140	150	33	--	--	326	7.5	7.1
15...	--	219	.30	1910	150	27	21	.6	386	7.4	9.4
25...	--	372	.51	323	220	59	30	1.3	642	7.4	13
JAN.											
05...	--	223	.30	1870	--	--	--	--	370	7.5	6.1
15...	--	282	.38	1070	180	--	25	.9	478	7.6	--
25...	--	309	.42	1040	--	--	--	--	515	7.5	9.5
FEB.											
05...	--	228	.31	3240	120	40	34	1.2	384	7.7	3.1
15...	--	242	.33	1800	160	24	21	.7	406	7.8	4.1
24...	--	197	.27	2380	100	33	32	1.0	316	8.0	1.3
MAR.											
05...	--	280	.38	2060	180	32	22	.8	469	7.8	4.6
15...	--	248	.34	2620	150	31	25	.8	422	7.7	4.8
27...	--	--	--	--	91	27	27	.7	257	7.8	2.0
APR.											
05...	--	251	.34	2370	170	28	20	.7	426	7.8	4.3
15...	--	323	.44	1300	200	46	26	1.0	536	7.9	3.7
25...	--	400	.54	599	240	60	29	1.3	688	8.0	3.5
MAY											
05...	--	355	.48	1080	210	65	31	1.3	624	8.4	1.1
15...	--	149	.20	3090	71	9	27	.7	224	8.3	.6
25...	--	242	.33	2190	150	33	24	.8	405	8.0	2.4
JUNE											
05...	--	209	.28	2300	130	22	23	.7	347	7.6	5.4
15...	--	251	.34	793	150	27	24	.8	420	7.7	4.9
25...	--	263	.36	845	180	24	18	.6	430	8.3	1.5
JULY											
05...	--	282	.38	85.3	--	--	--	--	607	8.1	1.9
15...	--	415	.56	86.3	260	85	--	--	722	8.0	3.5
25...	--	520	.71	78.6	280	81	34	1.7	883	8.2	2.4
AUG.											
05...	--	570	.78	58.5	300	100	--	--	983	8.0	3.8
15...	--	552	.75	122	280	--	38	2.1	980	8.3	--
25...	--	308	.42	68.2	--	--	--	--	520	8.1	1.5
SEP.											
05...	--	349	.47	44.3	180	46	--	--	606	7.8	4.1
15...	--	361	.49	50.7	190	51	36	1.6	629	7.8	4.2
25...	.84	373	.51	46.3	--	--	--	--	--	7.6	6.4

07175500 CANEY RIVER NEAR RAMONA, OKLA.

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C) , WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	522	159	313	567	252	428	379	730	341	531	956	494
2	509	177	324	561	222	448	411	727	346	538	967	520
3	324	163	---	394	248	462	416	737	358	570	975	551
4	343	119	---	397	299	459	417	670	404	595	---	580
5	357	131	---	370	384	469	426	624	347	607	---	606
6	370	138	302	410	317	476	480	647	314	613	---	622
7	389	155	444	419	326	485	474	---	317	629	---	631
8	413	170	384	435	349	490	453	588	385	621	972	635
9	428	198	381	452	397	548	480	621	391	637	975	630
10	460	219	366	465	393	564	432	477	403	662	983	623
11	471	293	295	494	393	512	433	329	372	670	1010	618
12	475	379	272	460	409	432	451	436	427	680	1040	620
13	526	315	276	491	404	389	496	559	409	694	1050	632
14	351	290	322	471	408	367	521	301	391	706	1030	650
15	334	302	386	478	406	422	536	224	420	722	980	629
16	463	307	383	492	402	464	542	260	485	741	997	595
17	465	292	408	490	417	483	543	324	247	751	443	665
18	475	310	420	495	438	474	535	384	330	770	286	700
19	532	305	412	498	385	531	556	359	260	791	581	688
20	568	302	410	507	400	361	611	365	352	810	489	717
21	580	244	446	512	420	403	630	387	376	842	529	740
22	591	251	465	501	350	442	667	363	401	850	446	678
23	604	252	534	512	324	449	679	361	364	874	454	539
24	632	---	592	513	316	466	---	432	427	850	517	626
25	626	---	642	515	424	474	---	405	430	883	520	703
26	377	267	450	545	408	528	698	361	442	874	490	717
27	332	264	810	577	396	257	696	382	462	860	474	792
28	174	280	518	599	400	298	706	352	---	881	450	841
29	349	324	567	---	---	262	713	365	---	889	443	861
30	386	314	660	---	---	283	730	265	---	918	451	838
31	206	---	675	317	---	320	---	332	---	945	472	---
MONTH	433	247	445	481	367	434	540	446	378	742	703	658

TEMPERATURE (DEG. C) OF WATER , WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15.0	18.0	8.0	5.0	6.0	7.0	9.0	---	16.0	28.0	22.0	22.0
2	15.0	12.0	7.0	5.0	5.0	6.0	5.0	15.0	16.0	23.0	21.0	22.0
3	16.0	11.0	---	5.0	5.0	7.0	5.0	15.0	17.0	23.0	22.0	22.0
4	18.0	15.0	---	4.0	7.0	7.0	5.0	15.0	18.0	28.0	---	22.0
5	18.0	13.0	---	4.0	5.0	7.0	5.5	15.0	17.0	27.0	---	21.0
6	18.0	12.0	8.0	5.0	5.0	8.0	5.0	15.0	20.0	25.0	---	20.0
7	15.0	11.0	8.0	7.0	4.0	8.0	6.0	15.0	20.0	23.0	---	20.0
8	12.0	12.0	6.0	6.0	4.0	7.0	6.0	15.0	20.0	25.0	20.0	18.0
9	16.0	12.0	8.0	8.0	7.0	7.0	8.0	16.0	18.0	25.0	20.0	18.0
10	20.0	12.0	8.0	5.0	4.0	5.0	8.0	14.0	20.0	24.0	20.0	20.0
11	18.0	12.0	6.0	5.0	4.0	5.0	7.0	13.0	16.0	26.0	17.0	20.0
12	20.0	12.0	5.0	3.0	4.0	5.0	7.0	15.0	17.0	25.0	21.0	18.0
13	20.0	12.0	6.0	3.0	5.0	4.0	8.0	16.0	15.0	19.0	21.0	18.0
14	12.0	11.0	6.0	4.0	5.0	5.0	8.0	13.0	22.0	20.0	22.0	20.0
15	15.0	11.0	6.0	4.0	4.0	5.0	8.0	12.0	23.0	20.0	22.0	20.0
16	17.0	11.0	6.0	3.0	4.0	5.0	9.0	13.0	19.0	20.0	22.0	15.0
17	16.0	11.0	5.0	3.0	5.0	6.0	17.0	15.0	17.0	20.0	21.0	15.0
18	18.0	11.0	5.0	4.0	4.0	8.0	14.0	15.0	17.0	21.0	20.0	15.0
19	12.0	13.0	6.0	5.0	5.0	10.0	10.0	15.0	18.0	22.0	20.0	14.0
20	19.0	12.0	5.0	4.0	5.0	11.0	12.0	16.0	20.0	21.0	21.0	20.0
21	15.0	13.0	5.0	5.0	5.0	14.0	12.0	21.0	25.0	23.0	22.0	13.0
22	15.0	13.0	5.0	4.0	5.0	12.0	12.0	17.0	20.0	22.0	23.0	13.0
23	15.0	13.0	7.0	5.0	8.0	15.0	14.0	17.0	20.0	23.0	20.0	15.0
24	15.0	---	6.0	5.0	8.0	13.0	15.0	17.0	20.0	22.0	22.0	12.0
25	17.0	---	5.0	5.0	5.0	12.0	20.0	12.0	---	20.0	22.0	15.0
26	12.0	11.0	5.0	5.0	5.0	12.0	15.0	17.0	20.0	20.0	21.0	10.0
27	12.0	11.0	5.0	7.0	5.0	12.0	17.0	17.0	21.0	21.0	21.0	15.0
28	12.0	11.0	5.0	5.0	6.0	10.0	15.0	17.0	---	21.0	21.0	12.0
29	12.0	8.0	5.0	---	---	10.0	15.0	18.0	---	22.0	21.0	12.0
30	13.0	8.0	6.0	---	---	9.0	16.0	17.0	---	23.0	21.0	12.0
31	13.0	---	6.0	6.0	---	8.0	---	15.0	---	23.0	22.0	---
MONTH	15.5	12.0	6.0	5.0	5.0	8.5	10.5	15.5	19.0	22.5	21.0	17.0

07177500 BIRD CREEK NEAR SPERRY, OKLA.

LOCATION.--Lat 36°16'42", long 95°57'14", in NW 1/4 NW 1/4 sec.29, T.21 N., R.13 E., Tulsa County, at gaging station on county road bridge, 1.5 mi (2.4km) upstream from Delaware Creek, 2.4 mi (3.9 km) downstream from Hominy Creek, 2.5 mi (4.0 km) southeast of Sperry, and at mile 25.0 (40.2 km).

DRAINAGE AREA.--905 mi^2 (2,344 km^2).

PERIOD OF RECORD.--Chemical analyses: October 1951 to September 1953, December 1959 to August 1962, October 1964 to current year.
Water temperatures: October 1951 to September 1953, October 1964 to September 1968.

EXTREMES, Current year.--Specific conductance: Maximum daily, 1,220 micromhos/cm Aug. 20; minimum daily, 97 micromhos/cm Nov. 4.
Water temperatures: Maximum, 31.0°C July 9, 21; minimum, 1.0°C on Jan. 12, Feb. 9.

Period of record.--Specific conductance: Maximum daily, 1,600 micromhos/cm Mar. 24, 1972; minimum daily, 82 micromhos/cm Sept. 5-8, 1971.
Water temperatures: Maximum, 36.0°C June 24, 1971; minimum, freezing point on several days during winter months.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED PUTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
OCT.											
05...	1500	155	48	11	45	--	147	3	126	20	78
15...	1620	2410	20	5.8	20	--	64	0	53	15	33
26...	1650	6730	19	5.2	21	--	56	0	46	13	36
NOV.											
05...	1715	23500	12	2.2	6.9	--	48	0	39	6.2	9.2
15...	1701	552	50	10	41	--	152	0	125	24	71
25...	1647	222	73	17	73	2.9	217	0	178	38	140
DEC.											
05...	0920	171	71	19	--	2.8	196	0	161	40	150
15...	1120	804	30	5.9	22	3.3	94	0	77	17	39
24...	1800	280	59	13	--	3.0	175	0	144	34	94
JAN.											
05...	1040	1260	29	--	24	2.3	86	0	71	32	44
25...	1000	229	72	15	79	2.4	203	0	167	40	120
FEB.											
05...	1730	4370	32	7.8	32	2.2	89	0	73	23	60
15...	1055	354	56	13	45	2.0	165	0	135	34	83
23...	1100	7700	22	6.1	22	2.3	--	--	--	20	37
MAR.											
05...	1725	371	56	12	44	2.2	175	0	144	39	80
12...	1713	8250	14	2.9	14	2.1	43	0	35	14	26
25...	1620	327	60	13	44	2.1	-	--	--	35	80
APR.											
05...	0840	387	49	11	36	2.1	148	0	121	28	66
17...	1850	359	61	15	49	2.1	178	0	146	41	93
26...	1420	237	68	15	54	2.2	207	0	170	41	100
MAY											
05...	1700	575	34	9.1	32	2.2	101	0	83	23	--
14...	1708	9950	18	3.5	14	1.9	--	0	34	9.5	25
27...	1625	9860	18	3.5	9.4	2.0	65	0	53	7.9	14
JUNE											
06...	1640	4980	26	6.2	20	3.0	81	0	66	15	35
15...	1000	2220	28	6.8	27	2.9	82	0	67	17	54
28...	0930	163	53	11	41	2.7	159	0	130	26	83
JULY											
08...	1720	71	63	14	67	2.9	208	0	171	23	120
16...	1725	60	68	16	75	2.9	219	0	180	23	140
25...	1930	86	67	16	--	2.8	221	0	181	24	130
AUG.											
05...	1800	37	77	17	92	3.3	219	0	180	23	180
15...	1630	46	64	14	58	3.4	211	0	173	24	100
25...	1730	48	43	9.0	49	3.2	122	0	100	20	93
SEP.											
05...	1915	30	49	11	63	3.1	140	1	117	17	130
19...	1635	336	55	12	130	4.3	91	0	75	12	270
25...	1720	48	48	10	56	3.8	141	0	116	20	110

07177500 BIRD CREEK NEAR SPERRY, OKLA.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	CARBON DIOXIDE (CO2) (MG/L)
OCT.											
05...	.42	319	.43	134	170	40	--	1.5	552	8.5	.8
15...	.33	159	.22	1040	74	21	--	1.0	256	7.0	10
26...	.29	167	.23	3040	69	23	--	1.1	251	7.9	1.1
NOV.											
05...	.23	82	.11	5200	39	0	--	.5	116	7.6	1.9
15...	.27	309	.42	461	170	41	--	1.4	514	7.8	3.9
25...	--	484	.66	290	250	74	38	2.0	762	7.7	6.9
DEC.											
05...	--	492	.67	227	260	95	48	3.0	918	8.2	2.0
15...	--	191	.26	415	99	22	32	1.0	316	7.7	3.0
24...	--	362	.49	274	200	57	39	1.8	628	7.8	4.4
JAN.											
05...	--	199	.27	677	--	--	--	--	325	7.7	2.7
25...	--	427	.58	264	240	75	41	2.2	764	7.8	5.1
FEB.											
05...	--	236	.32	2790	110	39	38	1.3	382	7.6	3.6
15...	--	351	.48	335	190	58	33	1.4	586	7.5	8.3
23...	--	178	.24	3700	80	--	37	1.1	--	7.7	--
MAR.											
05...	--	336	.46	337	190	46	33	1.4	590	7.5	8.9
12...	--	108	.15	2410	47	12	38	.9	191	--	--
25...	--	357	.49	315	200	--	32	1.3	591	7.6	--
APR.											
05...	--	303	.41	317	170	46	32	1.2	501	7.6	5.9
17...	--	391	.53	379	210	68	33	1.5	665	7.7	5.7
26...	--	417	.57	267	230	62	33	1.5	712	7.9	4.2
MAY											
05...	--	228	.31	354	120	40	36	1.3	394	7.3	8.1
14...	--	103	.14	2770	59	26	33	.8	173	6.9	--
27...	--	107	.15	2850	59	6	25	.5	169	7.1	8.3
JUNE											
06...	--	166	.23	2230	90	24	32	.9	278	7.7	2.6
15...	--	213	.29	1280	98	31	37	1.2	346	8.1	1.0
28...	--	322	.44	142	180	47	33	1.3	556	8.4	1.0
JULY											
08...	--	437	.59	83.8	220	44	40	2.0	780	7.7	6.6
16...	--	484	.66	78.4	240	56	41	2.1	870	8.1	2.8
25...	--	450	.61	104	230	52	--	--	799	7.7	7.1
AUG.											
05...	--	--	--	--	260	83	43	2.5	960	7.8	5.6
15...	--	372	.51	46.2	220	44	36	1.7	690	8.0	3.4
25...	--	298	.41	38.6	140	44	42	1.8	539	7.6	4.9
SEP.											
05...	--	382	.52	30.9	170	51	44	2.1	684	8.4	.9
19...	--	567	.77	514	190	110	60	4.1	1080	8.1	1.2
25...	--	339	.46	43.9	160	45	42	1.9	--	8.2	1.4

07177500 BIRD CREEK NEAR SPERRY, OKLA.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C) , WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	130	901	651	---	527	331	814	347	680	---	701
2	449	158	897	---	---	530	380	1020	410	694	---	757
3	468	104	---	---	291	529	---	439	411	728	970	734
4	---	97	---	---	---	570	504	418	412	---	973	672
5	---	116	918	---	382	590	501	394	---	---	960	---
6	---	162	911	370	372	634	549	425	---	774	966	---
7	610	288	527	---	373	661	592	426	---	776	984	---
8	624	353	497	---	415	668	398	469	305	780	---	---
9	671	---	474	---	426	669	477	490	296	781	1000	---
10	675	---	---	---	---	543	475	523	297	792	944	675
11	693	400	294	---	514	455	---	568	303	787	953	688
12	---	378	---	503	570	184	477	592	255	789	937	739
13	---	423	245	538	568	268	516	---	303	829	939	741
14	325	458	294	541	569	367	568	173	357	831	---	---
15	256	514	314	609	586	370	569	---	346	---	690	---
16	325	534	388	637	581	429	---	---	---	870	692	683
17	351	557	390	638	418	408	665	---	---	---	689	692
18	---	602	432	636	515	409	647	351	---	902	634	850
19	---	---	---	648	552	355	669	400	---	903	1210	1080
20	442	---	---	689	555	406	663	490	---	878	1220	699
21	504	672	517	690	---	421	690	492	---	876	712	670
22	537	687	547	720	253	496	692	---	---	893	520	674
23	553	697	580	722	251	501	697	384	---	888	522	631
24	---	708	---	752	217	590	705	384	---	849	540	626
25	---	762	---	764	328	591	706	---	---	799	539	635
26	251	---	646	763	329	634	712	237	---	797	568	---
27	317	---	690	790	373	214	718	169	---	---	589	667
28	265	---	---	789	---	235	739	---	556	---	540	---
29	183	659	---	795	---	200	---	---	676	961	635	---
30	160	880	710	793	---	239	762	219	674	960	638	668
31	---	---	783	240	---	263	---	268	---	963	688	---
MONTH	---	---	---	---	429	451	592	---	---	833	787	---

TEMPERATURE (DEG. C) OF WATER , WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17.0	19.0	5.0	4.0	---	4.0	10.0	21.0	22.0	27.0	---	28.0
2	18.0	18.0	4.0	---	---	5.0	8.0	16.0	21.0	28.0	---	29.0
3	18.0	17.0	---	---	5.0	5.0	---	16.0	24.0	29.0	29.0	30.0
4	---	14.0	---	---	---	4.0	8.0	19.0	22.0	---	29.0	30.0
5	---	15.0	4.0	---	4.0	7.0	9.0	19.0	---	---	29.0	---
6	---	14.0	5.0	4.0	4.0	7.0	11.0	20.0	---	29.0	28.0	---
7	17.0	13.0	5.0	---	3.0	8.0	11.0	21.0	---	30.0	29.0	---
8	17.0	11.0	5.0	---	3.0	6.0	11.0	20.0	24.0	30.0	---	---
9	18.0	---	6.0	---	1.0	5.0	10.0	21.5	24.0	31.0	26.0	---
10	18.5	---	---	---	---	3.0	12.0	20.0	25.0	30.0	27.0	26.0
11	19.0	10.0	5.0	---	2.5	2.0	---	22.0	23.0	28.0	29.0	26.0
12	---	10.0	---	1.0	3.0	2.0	11.0	21.5	23.0	25.0	29.0	26.0
13	---	10.0	5.0	3.0	4.0	3.0	12.0	---	25.5	25.0	29.0	26.0
14	16.0	9.0	5.0	4.0	5.0	3.0	12.0	16.0	25.0	27.0	---	---
15	16.0	8.0	4.0	4.0	4.0	2.0	16.0	---	25.0	---	29.0	---
16	17.0	8.0	5.0	4.0	4.0	4.5	---	---	---	28.0	28.0	29.0
17	17.0	8.0	5.0	4.0	3.0	7.0	16.0	---	---	---	28.0	29.0
18	---	9.0	4.0	4.0	3.0	8.0	16.0	20.0	---	28.0	27.0	28.0
19	---	---	---	4.0	4.0	10.0	15.0	21.0	---	27.0	27.0	19.0
20	15.0	---	---	4.0	4.0	11.0	16.0	21.0	---	30.0	26.0	18.0
21	16.0	11.0	4.0	4.0	---	14.0	18.0	22.5	---	31.0	28.0	19.0
22	15.0	12.0	4.0	3.0	4.0	12.0	16.0	---	---	---	28.0	18.0
23	17.0	12.0	5.0	4.0	3.0	15.0	17.0	---	---	30.0	28.0	18.5
24	---	9.0	---	7.0	2.0	12.0	18.0	---	---	27.5	28.0	18.0
25	---	8.0	---	7.0	4.0	12.0	21.0	---	---	28.0	29.0	18.0
26	17.0	---	3.0	4.0	4.0	11.0	21.0	21.0	---	26.0	27.0	---
27	16.0	---	4.0	4.0	5.0	10.0	21.0	20.0	---	---	26.0	15.0
28	16.0	---	4.0	5.0	---	8.0	21.0	---	26.0	---	26.0	---
29	17.0	8.0	---	6.0	---	6.0	---	---	27.0	29.0	26.0	---
30	18.0	5.0	---	5.0	---	7.0	21.0	21.0	28.0	29.0	26.0	19.0
31	---	---	5.0	5.0	---	8.0	---	19.0	---	29.0	27.0	---
MONTH	---	---	---	---	3.5	7.0	15.0	---	---	---	28.0	---

07178050 BIRD CREEK NEAR CATOOSA, OKLA.

LOCATION.--Lat 36°13'51", long 95°49'55", Tulsa County, at bridge on U.S. Highway 75, approximately 5.5 mi (8.8 km) northwest of Catoosa.

DRAINAGE AREA.--1,080 mi^2 (2,797 km^2).

PERIOD OF RECORD.--Chemical analyses: October 1964 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	ALKA-LINITY AS CACO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)
OCT.											
22...	0825	41	8.5	39	4.4	123	0	101	31	65	--
DEC.											
05...	0945	79	18	--	4.0	223	0	183	50	140	--
JAN.											
07...	0825	37	9.2	32	3.8	106	0	87	30	--	--
29...	0850	72	16	67	4.1	195	0	160	54	--	--
FEB.											
21...	0845	--	7.5	27	4.4	--	--	--	23	42	--
MAR.											
18...	0835	50	9.4	32	3.0	142	0	116	50	--	--
APR.											
01...	0830	--	--	--	--	--	--	--	--	--	--
15...	0830	50	13	49	2.8	161	0	132	--	82	--
29...	0820	--	--	--	--	--	--	--	--	--	--
MAY											
28...	2215	19	3.3	10	2.3	56	0	46	9.6	16	--
JUNE											
11...	0850	25	5.4	19	2.8	93	0	76	15	31	.07
JULY											
08...	0850	61	13	65	4.6	190	0	156	28	110	1.4
23...	0900	62	14	73	5.4	190	0	156	35	120	3.6
AUG.											
19...	0930	51	12	65	4.6	137	0	112	30	--	2.2
SEP.											
29...	0830	49	9.9	51	4.9	--	--	--	33	83	4.6

DATE	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SURP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	CARBON DIOXIDE (CO2) (MG/L)
OCT.										
22...	--	302	.41	140	36	37	1.4	487	7.7	3.9
DEC.										
05...	--	547	.74	270	88	--	--	898	7.8	5.7
JAN.										
07...	.19	258	.35	130	43	34	1.2	419	--	--
29...	.59	468	.64	250	86	37	1.9	799	8.1	2.5
FEB.										
21...	.08	187	.25	--	--	--	--	311	8.2	--
MAR.										
18...	.67	--	--	160	47	29	1.1	479	8.1	1.8
APR.										
01...	--	--	--	--	--	--	--	361	--	--
15...	.60	--	--	180	46	37	1.6	611	8.1	2.0
29...	--	--	--	--	--	--	--	744	--	--
MAY										
28...	.48	110	.15	61	15	25	.6	168	8.2	.6
JUNE										
11...	.37	--	--	85	8	32	.9	268	7.7	3.0
JULY										
08...	1.2	433	.59	210	50	40	2.0	756	8.1	2.4
23...	2.0	463	.63	210	57	42	2.2	796	8.1	2.4
AUG.										
19...	.84	424	.58	180	64	44	2.1	746	8.4	.9
SEP.										
29...	1.7	348	.47	160	--	40	1.7	586	8.3	--

07178620 NEWT GRAHAM LOCK AND DAM (VERDIGRIS RIVER) NEAR INOLA, OKLA.

LOCATION (Corrected).--Lat 36°03'24", long 95°32'06", in NW 1/4 NE 1/4 sec.7, T.18 N., R.17 E., Wagoner County, at lock well at dam, 6.8 mi (10.9 km) southwest of Inola, and at 25.7 navigation channel miles (41.4 km).

DRAINAGE AREA.--8,030 mi^2 (20,797 km^2).

PERIOD OF RECORD.--Chemical analyses: December 1971 to current year.
Water temperatures: December 1971 to current year.

EXTREMES, Current year.--Specific conductance: Maximum, 739 micromhos/cm Sept. 1; minimum, 107 micromhos/cm Nov. 5.
Water temperatures: Maximum, 30.5°C Aug. 20, 22; minimum, 3.0°C Feb. 9-10, 19, 24-25.

Period of record.--Specific conductance: Maximum, 892 micromhos/cm Apr. 22, 1972; minimum, 107 micromhos/cm Nov. 5, 1974.
Water temperatures: Maximum, 31.5°C July 23, 1974; minimum, freezing point on Jan. 10-14, 1973.

REMARKS.--Continuous monitor records for specific conductance and water temperature are collected for this station. Temperature records for Oct. 11, Nov. 20-Dec. 29, Feb. 1-2, 6-11, June 11-18, and Aug. 2-6 were poor. Once-daily temperature values were used in their place. Records of maximum and minimum specific conductance and water temperature values are available in district office in Oklahoma City, Okla.
M=Presence of material verified but not quantified.
B=Results based on colony count outside the acceptable range (Non-ideal colony count).

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	ALKA-LINITY AS CACO3 (MG/L)
OCT.										
05...	0900	--	--	46	8.3	24	--	133	--	109
15...	0900	--	--	45	8.6	27	--	135	--	111
23...	0900	4990	6.3	41	6.2	15	3.1	132	--	108
30...	0900	--	--	21	3.8	14	--	63	--	52
NOV.										
05...	0900	--	--	15	2.3	6.1	--	50	--	41
15...	0900	--	--	42	6.3	15	--	126	--	103
20...	1300	28200	--	--	--	--	--	--	--	--
25...	0900	--	--	34	5.0	11	3.6	104	0	85
DEC.										
05...	0900	--	--	--	5.9	12	3.1	105	0	86
15...	0900	--	--	34	5.9	12	3.0	105	0	86
25...	0900	--	--	37	5.9	13	3.4	111	0	91
JAN.										
05...	0900	--	--	38	6.3	21	3.2	--	--	--
07...	1500	11200	8.3	37	6.4	15	5.3	113	0	93
15...	0900	--	--	45	7.7	19	3.6	136	0	112
25...	0900	--	--	44	7.0	15	2.9	135	0	111
FEB.										
05...	0900	--	--	30	5.4	16	2.7	88	0	72
12...	1200	15000	7.9	49	8.4	19	3.1	151	--	124
15...	0900	--	--	50	8.6	20	3.0	153	0	126
25...	0900	--	--	33	6.9	20	2.5	--	--	--
MAR.										
05...	0900	--	--	48	8.0	--	2.8	152	0	125
15...	0900	--	--	45	8.3	21	2.4	130	0	107
25...	0900	--	--	50	9.3	20	2.2	155	0	127
26...	1000	14900	7.7	73	22	210	4.2	191	0	157
APR.										
05...	0935	--	--	51	9.3	19	1.8	157	0	129
08...	1530	10600	6.1	53	10	--	2.7	163	0	134
15...	0810	--	--	51	9.6	--	1.8	155	0	127
25...	0820	--	--	51	9.9	--	2.2	157	0	129
MAY										
05...	0900	--	--	47	11	46	2.7	124	0	102
07...	0900	2870	5.3	52	12	45	3.1	138	0	113
15...	0900	--	--	--	8.3	23	3.0	111	0	91
25...	0900	--	--	46	7.9	21	2.8	141	0	116
JUNE										
04...	1500	8750	--	--	--	--	--	--	--	--

07178620 NEWT GRAHAM LOCK AND DAM (VERDIGRIS RIVER) NEAR INOLA, OKLA.--Continued
WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	ALKA-LINITY AS CACO3 (MG/L)
JUNE										
05...	0900	--	--	51	8.4	18	2.2	155	0	127
11...	1130	--	6.0	37	10	--	4.4	114	0	94
15...	0900	--	--	48	8.8	21	2.4	146	0	120
25...	0900	--	--	52	9.3	20	2.3	164	0	135
26...	1045	21800	--	--	--	--	--	--	--	--
JULY										
03...	0900	3300	6.5	48	8.9	21	2.3	144	0	118
05...	0900	--	--	48	7.8	20	2.7	153	0	126
16...	0905	--	--	48	8.3	18	2.7	147	0	121
25...	0900	--	--	41	7.5	--	2.7	143	0	117
AUG.										
06...	0900	--	--	42	8.7	18	2.8	140	0	115
13...	1200	176	4.5	48	11	19	2.9	145	0	119
15...	0900	--	--	45	8.7	24	3.0	150	0	123
25...	0900	--	--	60	12	41	--	165	0	135
SEP.										
05...	0900	--	--	59	11	53	3.7	168	0	138
12...	0900	559	5.9	55	11	--	3.7	146	0	120
15...	0900	--	--	51	10	59	3.9	141	0	116
25...	0900	--	--	49	9.4	46	4.0	145	0	119

07178620 NEWT GRAHAM LOCK AND DAM (VERDIGRIS RIVER) NEAR INOLA, OKLA.--Continued
WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	TOTAL NITRO-GEN (N) (MG/L)	TOTAL NITRO-GEN (NO3) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)
OCT.										
05...	33	37	--	--	.75	--	--	--	.19	238
15...	31	41	--	--	1.6	--	--	--	.60	247
23...	27	22	.2	.42	--	.61	1.0	4.6	.08	219
30...	15	22	--	--	.41	--	--	--	.20	138
NOV.										
05...	12	7.6	--	--	.47	--	--	--	.13	88
15...	29	20	--	--	.65	--	--	--	.18	193
20...	--	--	--	--	--	--	--	--	--	--
25...	22	16	--	--	--	--	--	--	.09	158
DEC.										
05...	23	19	--	--	--	--	--	--	.20	164
15...	22	21	--	--	--	--	--	--	.17	166
25...	25	--	--	--	--	--	--	--	.14	175
JAN.										
05...	26	34	--	--	--	--	--	--	.16	215
07...	26	26	.2	.28	--	.75	1.0	4.6	.16	201
15...	30	30	--	--	--	--	--	--	.14	222
25...	27	24	--	--	--	--	--	--	.13	216
FEB.										
05...	23	26	--	--	--	--	--	--	.20	176
12...	32	28	.2	.45	--	--	1.1	4.7	.12	238
15...	33	29	--	--	--	--	--	--	.15	233
25...	28	32	--	--	--	--	--	--	.18	205
MAR.										
05...	38	27	--	--	--	--	--	--	.11	229
15...	40	33	--	--	--	--	--	--	.14	230
25...	41	29	--	--	--	--	--	--	.11	--
26...	120	320	.3	1.0	--	.45	1.5	6.4	.14	887
APR.										
05...	45	28	--	--	--	.52	--	--	.13	245
08...	43	33	.4	.56	--	.59	1.2	5.1	.10	263
15...	54	29	--	--	--	.30	--	--	.06	252
25...	52	33	--	--	--	.21	--	--	.12	262
MAY										
05...	50	86	--	--	--	.73	--	--	.19	333
07...	48	89	.2	.27	--	.73	1.0	4.4	.13	371
15...	44	36	--	--	--	1.2	--	--	.28	221
25...	40	31	--	--	--	.87	--	--	.48	236
JUNE										
04...	--	--	--	--	--	--	--	--	--	--
05...	38	26	--	--	--	.57	--	--	.14	231
11...	45	87	.2	--	--	--	--	--	--	322
15...	39	33	--	--	--	.59	--	--	.22	241
25...	40	28	--	--	--	.43	--	--	.15	247
26...	--	--	--	--	--	--	--	--	--	--
JULY										
03...	33	--	.3	.46	--	.76	1.2	5.4	.11	226
05...	29	28	--	--	--	--	--	--	.15	--
16...	28	--	--	--	--	--	--	--	.09	214
25...	29	23	--	--	--	--	--	--	.06	209
AUG.										
06...	32	22	--	--	--	--	--	--	.01	203
13...	48	25	.3	.06	--	.52	.58	2.6	.06	242
15...	32	35	--	--	--	--	--	--	.04	227
25...	53	75	--	--	--	--	--	--	--	359
SEP.										
05...	43	98	--	--	--	--	--	--	.10	--
12...	34	100	.3	.51	--	.96	1.5	6.5	.12	391
15...	23	110	--	--	--	--	--	--	.17	--
25...	--	75	--	--	--	--	--	--	.20	320

07178620 NEWT GRAHAM LOCK AND DAM (VERDIGRIS RIVER) NEAR INOLA, OKLA.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (JTU)
OCT.									
05...	--	.32	--	150	40	401	--	--	--
15...	--	.34	--	150	37	426	--	--	--
23...	186	.30	2950	130	20	340	--	17.0	20
30...	--	.19	--	68	16	203	--	--	--
NOV.									
05...	--	.12	--	47	6	132	--	--	--
15...	--	.26	--	130	27	320	--	--	--
20...	--	--	--	--	--	300	--	11.5	--
25...	--	.21	--	110	20	258	7.4	--	--
DEC.									
05...	164	.22	--	--	--	270	7.7	--	--
15...	--	.23	--	110	23	276	7.8	--	--
25...	175	.24	--	120	26	283	7.4	--	--
JAN.									
05...	215	.29	--	120	--	342	7.0	--	--
07...	180	.27	6080	120	26	310	8.2	7.0	40
15...	--	.30	--	140	33	368	7.3	--	--
25...	--	.29	--	140	28	338	7.5	--	--
FEB.									
05...	--	.24	--	97	25	274	8.2	--	--
12...	222	.32	9640	160	33	395	7.8	4.0	40
15...	--	.32	--	160	35	396	8.1	--	--
25...	205	.28	--	110	--	307	8.2	--	--
MAR.									
05...	--	.31	--	150	28	388	7.6	--	--
15...	--	.31	--	150	40	378	7.8	--	--
25...	--	--	--	160	36	416	7.6	--	--
26...	851	1.21	35700	270	120	440	8.0	8.0	18
APR.									
05...	--	.33	--	170	37	416	8.0	--	--
08...	256	.36	7530	170	40	--	7.4	10.0	27
15...	252	.34	--	170	40	428	8.0	--	--
25...	262	.36	--	170	39	442	8.1	--	--
MAY									
05...	--	.45	--	160	61	562	7.3	--	--
07...	323	.50	2880	186	66	590	8.0	20.0	29
15...	221	.30	--	--	--	372	7.4	--	--
25...	--	.32	--	150	32	404	8.3	--	--
JUNE									
04...	--	--	--	--	--	410	--	25.0	--
05...	--	.31	--	160	35	393	8.2	--	--
11...	--	--	--	130	40	510	5.4	--	66
15...	--	.33	--	160	36	411	8.4	--	--
25...	--	.34	--	170	34	412	8.2	--	--
26...	--	--	--	--	--	390	8.1	26.0	--
JULY									
03...	--	--	2010	160	42	400	7.8	--	24
05...	--	--	--	150	26	396	8.0	--	--
16...	214	.29	--	150	33	366	7.6	--	--
25...	209	.28	--	130	16	361	7.7	--	--
AUG.									
06...	--	.28	--	140	26	356	7.9	--	--
13...	231	.33	115	170	46	404	7.0	31.0	14
15...	--	.31	--	150	25	407	7.8	--	--
25...	--	.49	--	200	64	612	7.9	--	--
SEP.									
05...	--	--	--	190	55	665	7.9	--	--
12...	339	.53	590	180	63	640	8.5	22.0	15
15...	--	--	--	170	53	658	8.1	--	--
25...	320	.44	--	160	42	565	8.2	--	--

07178620 NEWT GRAHAM LOCK AND DAM (VERDIGRIS RIVER) NEAR INOLA, OKLA.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	DIS-CHARGE (CFS)	DIS-SOLVED OXYGEN (MG/L)	PER-CENT SATUR-ATION	FECAL COLI-FORM (COL. PER 100 ML)	STREP-TOCOCCI (COL-ONIES PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)	SUS-PENDED SEDI-MENT (MG/L)	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM
OCT.									
23...	0900	4990	--	--	170	824	--	46	77
NOV.									
20...	1300	28200	11.8	110	MO	180	6.7	100	85
JAN.									
07...	1500	11200	12.9	112	1600	540	--	71	86
FEB.									
12...	1200	15000	8.9	70	4100	520	--	--	--
MAR.									
26...	1000	14900	13.6	120	2900	260	--	--	--
APR.									
08...	1530	10600	13.2	123	MO	MO	--	77	96
MAY									
07...	0900	2870	7.0	82	MO	MO	--	604	99
JUNE									
04...	1500	8750	8.0	101	MO	680	--	--	--
26...	1045	21800	7.9	100	--	--	--	--	--
JULY									
03...	0900	3300	6.9	90	MO	MO	--	--	--
AUG.									
13...	1200	176	7.5	101	--	--	9.2	20	86

DATE	TIME	DIS-CHARGE (CFS)	TOTAL IRON (FE) (UG/L)	DIS-SOLVED IRON (FE) (UG/L)	TOTAL MAN-GANESE (MN) (UG/L)	SUS-PENDED MAN-GANESE (MN) (UG/L)	DIS-SOLVED MAN-GANESE (MN) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	SUS-PENDED ARSENIC (AS) (UG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	TOTAL CAD-MIUM (CD) (UG/L)	SUS-PENDED CAD-MIUM (CD) (UG/L)
NOV.												
20...	1300	28200	3000	130	140	120	20	4	1	3	<10	<9
AUG.												
13...	1200	176	590	30	590	220	370	1	0	1	<10	<10

DATE	DIS-SOLVED CAD-MIUM (CD) (UG/L)	TOTAL CHRO-MIUM (CR) (UG/L)	SUS-PENDED CHRO-MIUM (CR) (UG/L)	DIS-SOLVED CHRO-MIUM (CR) (UG/L)	TOTAL COBALT (CO) (UG/L)	SUS-PENDED COBALT (CO) (UG/L)	DIS-SOLVED COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)	SUS-PENDED COPPER (CU) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)
NOV.											
20...	1	0	0	0	<50	<50	0	10	6	4	<100
AUG.											
13...	0	10	0	10	<50	<50	0	<10	<7	3	<100

DATE	SUS-PENDED LEAD (PB) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	TOTAL MERCURY (HG) (UG/L)	SUS-PENDED MERCURY (HG) (UG/L)	DIS-SOLVED MERCURY (HG) (UG/L)	TOTAL SELE-NIUM (SE) (UG/L)	SUS-PENDED SELE-NIUM (SE) (UG/L)	DIS-SOLVED SELE-NIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	SUS-PENDED ZINC (ZN) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)
NOV.											
20...	<89	11	.1	.1	.0	0	0	0	10	10	0
AUG.											
13...	<100	0	.3	.0	.3	0	0	0	60	0	60

07178620 NEWT GRAHAM LOCK AND DAM (VERDIGRIS RIVER) NEAR INOLA, OKLA.--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA,
WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

PHYTOPLANKTON

Date	Time	Organism	Count (cells/ml)	Percent of total	Sampling method
Oct. 23	0900	CHLOROPHYTA			Sediment sampler
		Chlorophyceae			
		Chlorococcales			
		Occystaceae			
		Ankistrodesmus	21	1	
		Scenedesmaceae			
		Scenedesmus	86	3	
		CHRYSOPHYTA			
		Bacillariophyceae			
		Centrales			
		Coscinodiscaceae			
		Cyclotella	430	15	
		Melosira	490	17	
		Pennales			
		Achnanthaceae			
		Cocconeis	21	1	
		Naviculaceae			
		Gyrosigma	21	1	
		Stauroneis	43	1	
		Nitzschiaceae			
		Nitzschia	21	1	
		CYANOPHYTA			
		Myxophyceae			
		Oscillatoriales			
		Oscillatoriaceae			
		Oscillatoria	1,700	59	
		EUGLENOPHYTA			
		Cryptophyceae			
		Cryptomonidales			
		Cryptomonodaceae			
		Cryptomonas	43	1	
		Euglenophyceae			
		Euglenales			
		Euglenaceae			
		Phacus	21	1	
		TOTAL	2,900		
Nov. 20	1300	CHLOROPHYTA			Sediment sampler
		Chlorophyceae			
		Chlorococcales			
		Occystaceae			
		Ankistrodesmus	12	1	
		Scenedesmaceae			
		Scenedesmus	50	5	
		CHRYSOPHYTA			
		Bacillariophyceae			
		Centrales			
		Coscinodiscaceae			
		Cyclotella	37	4	
		Melosira	12	1	
		Pennales			
		Diatomaceae			
		Diatoma	12	1	
		Naviculaceae			
		Navicula	25	3	
		CYANOPHYTA			
		Myxophyceae			
		Oscillatoriales			
		Oscillatoriaceae			
		Oscillatoria	810	84	
		TOTAL	960		
Feb. 12		CHLOROPHYTA			Sediment sampler
		Chlorophyceae			
		Chlorococcales			
		Occystaceae			
		Ankistrodesmus	13	2	
		Scenedesmaceae			
		Actinastrum	13	2	
		CHRYSOPHYTA			
		Bacillariophyceae			
		Centrales			
		Coscinodiscaceae			
		Cyclotella	200	34	
		Melosira	160	27	

07178620 NEWT GRAHAM LOCK AND DAM (VERDIGRIS RIVER) NEAR INOLA, OKLA.--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

PHYTOPLANKTON

Date	Time	Organism	Count (cells/ml)	Percent of total	Sampling method
Feb. 12		Pennales			Sediment sampler
		Cymbellaceae			
		Cymbella	13	2	
		Fragilariaceae			
		Synedra	26	5	
		Gomphonemataceae			
		Gomphonema	13	2	
		Nitzschiaceae			
		Nitzschia	13	2	
		CYANOPHYTA			
		Myxophyceae			
		Oscillatoriales			
		Oscillatoriaceae			
		Lyngbya	130	23	
		TOTAL	570		
Mar. 26		CHLOROPHYTA			Sediment sampler
		Chlorophyceae			
		Chlorococcales			
		Occystaceae			
		Oocystis	410	12	
		CHRYSOPHYTA			
		Bacillariophyceae			
		Centrales			
		Coscinodiscaceae			
		Cyclotella	2,600	76	
		Melosira	100	3	
		Pennales			
		Naviculaceae			
		Amphiprora	100	3	
		Navicula	100	3	
		Nitzschiaceae			
		Nitzschia	100	3	
		TOTAL	3,400		
Apr. 8	1530	CHRYSOPHYTA			Sediment sampler
		Bacillariophyceae			
		Centrales			
		Coscinodiscaceae			
		Cyclotella	4,800	63	
		Melosira	840	11	
		Pennales			
		Cymbellaceae			
		Cymbella		0	
		Fragilariaceae			
		Asterionella	660	9	
		Synedra	100	1	
		Gomphonemataceae			
		Gomphonema		0	
		CYANOPHYTA			
		Myxophyceae			
		Oscillatoriales			
		Oscillatoriaceae			
		Oscillatoria	1,100	14	
		TOTAL	7,500		
May 7	0900	CHLOROPHYTA			Sediment sampler
		Chlorophyceae			
		Chlorococcales			
		Occystaceae			
		Ankistrodesmus	470	2	
		Scenedesmaceae			
		Scenedesmus	3,100	16	
		CHRYSOPHYTA			
		Bacillariophyceae			
		Centrales			
		Coscinodiscaceae			
		Cyclotella	5,000	26	
		Melosira	5,900	30	
		Pennales			
		Naviculaceae			
		Navicula	240	1	
		Nitzschiaceae			
		Nitzschia	3,100	16	

07178620 NEWT GRAHAM LOCK AND DAM (VERDIGRIS RIVER) NEAR INOLA, OKLA.--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA,
WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

PHYTOPLANKTON

Date	Time	Organsim	Count (cells/ml)	Percent of total	Sampling method
May 7	0900	CYANOPHYTA			Sediment sampler
		Myxophyceae			
		Oscillatoriales			
		Nostocaceae			
		Anabaena	1,400	7	
		EUGLENOPHYTA			
		Cryptophyceae			
		Crypotomonidales			
		Cryptomonadaceae			
		Cryptomonas	240	1	
		TOTAL	19,000		
June 26	1045	CHLOROPHYTA			Sediment sampler
		Chlorophyceae			
		Chlorococcales			
		Occystaceae			
		Ankistrodesmus	39	4	
		Scenedesmaceae			
		Crucigenia	160	17	
		CHRYSOPHYTA			
		Bacillariophyceae			
		Centrales			
		Coscinodiscaceae			
		Cyclotella	390	43	
		Melosira	230	26	
		Pennales			
		Naviculaceae			
		Frustulia	39	4	
		Nitzschiaceae			
		Hantzschia	39	4	
		TOTAL	890		
July 3	1030	CHLOROPHYTA			Sediment sampler
		Chlorophyceae			
		Chlorococcales			
		Scenedesmaceae			
		Actinastrum		0	
		Zygnematales			
		Desmidiaceae			
		Euastrum	20	1	
		CHRYSOPHYTA			
		Bacillariophyceae			
		Centrales			
		Coscinodiscaceae			
		Cyclotella	40	2	
		Melosira	220	10	
		Pennales			
		Gomphonemataceae			
		Gomphonema	20	1	
		Nitzschiaceae			
		Nitzschia	20	1	
		CYANOPHYTA			
		Myxophyceae			
		Chroococcales			
		Chroococcaceae			
		Anacystis		0	
		Gomphosphaeria		0	
		Oscillatoriales			
		Nostocaceae			
		Anabaena		0	
		Oscillatoriaceae			
		Oscillatoria	1,800	85	
		EUGLENOPHYTA			
		Euglenophyceae			
		Euglenales			
		Euglenaceae			
		Trachelomonas		0	
		TOTAL	2,200		
Aug. 13	1200	CHLOROPHYTA			Sediment sampler
		Chlorophyceae			
		Chlorococcales			
		Characiaceae			
		Schroederia	94	2	
		Occystaceae			
		Ankistrodesmus	94	2	

07178620 NEWT GRAHAM LOCK AND DAM (VERDIGRIS RIVER) NEAR INOLA, OKLA.--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA,
WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

PHYTOPLANKTON

Date	Time	Organism	Count (cells/ml)	Percent of total	Sampling method
Aug. 13	1200	Tetrasporales			Sediment sampler
		Palmellaceae			
		Sphaerocystis	1,500	28	
		Zygnematales			
		Desmidiaceae			
		Euastrum	94	2	
		CHRYSOPHYTA			
		Bacillariophyceae			
		Centrales			
		Coscinodiscaceae			
		Cyclotella	94	2	
		Melosira	2,600	48	
		Pennales			
		Achnanthaceae			
		Cocconeis	94	2	
		Cymbellaceae			
		Cymbella		0	
		Nitzschiaceae			
		Nitzschia		0	
		CYANOPHYTA			
		Myxophyceae			
		Oscillatoriales			
		Oscillatoriaceae			
		Lyngbya	850	16	
		TOTAL	5,500		
Sep. 12	0900	CHLOROPHYTA			Sediment sampler
		Chlorophyceae			
		Chlorococcales			
		Coelastraceae			
		Coelastrum	230	8	
		Occystaceae			
		Ankistrodesmus	28	1	
		Oocystis	140	5	
		Scenedesmaceae			
		Crucigenia	170	6	
		Volvocales			
		Chlamydomonadaceae			
		Chlamydomonas	85	3	
		CHRYSOPHYTA			
		Bacillariophyceae			
		Centrales			
		Coscinodiscaceae			
		Cyclotella	170	6	
		Melosira	800	26	
		Pennales			
		Cymbellaceae			
		Cymbella		0	
		Fragilariaceae			
		Synedra	28	1	
		Naviculaceae			
		Navicula		0	
		CYANOPHYTA			
		Myxophyceae			
		Chroococcales			
		Chroococcaceae			
		Anacystis	1,300	44	
		Oscillatoriales			
		Nostocaceae			
		Anabaena		0	
		EUGLENOPHYTA			
		Euglenophyceae			
		Euglenales			
		Euglenaceae			
		Trachelomonas	28	1	
		TOTAL	3,000		

07178620 NEWT GRAHAM LOCK AND DAM (VERDIGRIS RIVER) NEAR INOLA, OKLA.--Continued

DISSOLVED SULFATE (SO4), MG/L, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29	15	21	24	21	36	36	58	27	38	34	100
2	31	13	20	32	22	36	39	58	33	38	33	90
3	36	12	21	35	18	39	41	58	35	37	33	95
4	40	9.8	23	31	21	38	42	55	36	37	35	89
5	45	8.4	22	29	23	38	43	64	39	40	34	89
6	50	9.1	22	27	30	38	44	62	33	41	32	87
7	48	11	27	26	31	38	44	69	27	41	33	88
8	42	13	33	29	32	40	49	76	26	40	33	86
9	36	14	31	29	34	42	46	75	30	37	34	85
10	30	16	27	28	35	40	46	61	35	34	35	86
11	34	20	24	28	40	43	47	59	40	32	35	87
12	33	25	25	29	38	40	46	56	35	33	35	86
13	32	29	28	29	40	26	45	62	36	32	36	91
14	32	29	21	28	39	32	45	36	38	33	37	90
15	38	28	24	32	40	36	45	31	42	34	42	87
16	31	27	23	40	40	37	47	19	37	34	43	83
17	27	26	24	37	42	41	51	17	42	35	45	83
18	29	25	25	35	44	43	48	23	36	35	58	82
19	30	24	25	32	45	42	49	24	31	38	70	80
20	30	42	25	32	45	46	49	26	37	37	76	75
21	30	25	26	32	42	43	48	45	39	32	84	72
22	30	23	26	32	39	43	48	36	41	32	79	74
23	30	21	25	32	32	40	47	38	42	32	81	71
24	30	21	24	29	27	42	47	40	43	32	75	71
25	30	21	24	29	27	43	48	31	42	32	79	61
26	35	20	24	30	30	43	48	38	41	33	81	69
27	33	18	25	32	33	42	50	34	38	31	82	66
28	28	18	28	32	38	29	51	29	40	32	80	65
29	17	19	27	33	---	23	57	22	39	31	82	64
30	19	20	25	31	---	22	58	26	40	32	91	64
31	16	---	24	32	---	28	---	24	---	32	99	---
MONTH	32	20	25	31	34	38	47	44	37	35	56	81

DISSOLVED CHLORIDE (CL), MG/L, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26	13	18	21	19	31	30	62	24	32	29	180
2	28	10	18	28	19	31	32	62	29	32	29	150
3	30	8.8	19	30	16	32	33	62	30	31	29	160
4	33	5.5	20	28	18	32	34	53	31	31	30	150
5	36	3.7	20	26	20	32	35	77	32	33	29	140
6	39	4.6	19	24	27	32	35	73	29	33	29	140
7	37	6.9	25	23	28	32	35	92	24	33	29	140
8	34	9.4	29	26	29	33	38	110	24	33	29	140
9	31	11	26	26	29	34	36	110	27	31	30	130
10	27	13	24	25	30	33	36	70	30	30	30	140
11	30	18	22	25	33	35	37	65	33	29	30	140
12	29	23	22	26	32	33	36	55	30	29	30	140
13	29	26	25	26	33	23	36	72	31	29	31	150
14	28	26	19	25	32	29	35	31	32	29	31	150
15	32	25	21	28	33	31	36	28	34	30	34	140
16	28	24	21	33	33	31	37	17	31	30	34	130
17	24	24	22	31	34	33	44	15	34	30	36	130
18	26	23	23	30	35	34	38	21	30	30	63	130
19	27	22	22	28	36	34	38	22	28	32	95	120
20	27	34	22	29	36	36	38	23	31	31	110	110
21	27	22	23	29	34	34	37	36	32	29	130	100
22	27	21	23	29	32	34	37	31	34	29	120	100
23	27	19	22	29	29	33	37	32	34	28	120	98
24	27	19	21	26	24	34	37	33	35	29	110	98
25	27	19	22	27	25	34	37	28	34	29	120	70
26	30	18	22	27	27	34	37	32	33	29	120	91
27	29	16	22	28	29	34	41	30	32	28	130	84
28	26	16	25	29	32	26	43	26	33	28	120	81
29	14	17	24	29	---	21	59	20	32	28	130	79
30	17	18	23	28	---	20	63	23	33	29	150	77
31	14	---	22	29	---	25	---	21	---	29	170	---
MONTH	28	17	22	27	29	31	38	46	31	30	71	120

07178620 NEWT GRAHAM LOCK AND DAM (VERDIGRIS RIVER) NEAR INOLA, OKLA.--Continued

DISSOLVED SOLIDS (RESIDUE AT 180 DEG. C), MG/L, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	196	116	151	168	152	224	222	295	185	231	216	438
2	207	101	149	210	156	225	233	295	213	231	213	398
3	222	94	152	220	136	234	240	295	220	227	213	415
4	235	74	163	208	151	230	244	285	225	228	221	397
5	253	63	161	195	162	230	247	314	234	237	216	395
6	269	69	157	186	202	229	250	309	213	240	211	389
7	261	82	188	179	208	231	251	333	186	239	215	394
8	242	97	213	196	212	237	265	353	182	237	215	386
9	224	107	208	199	216	244	256	350	205	227	217	383
10	204	120	183	190	221	237	258	306	221	219	219	365
11	218	149	171	192	238	248	259	299	237	212	220	389
12	215	176	174	196	230	238	257	288	221	213	219	385
13	212	194	192	197	235	179	253	308	225	210	223	401
14	210	197	155	191	234	212	252	224	232	215	226	399
15	229	191	168	209	236	224	254	208	244	217	242	390
16	208	185	166	236	237	228	258	144	228	218	245	377
17	184	183	170	226	244	240	274	129	242	219	253	378
18	197	176	175	219	251	246	264	164	222	220	296	375
19	203	171	174	209	254	243	267	171	206	229	336	366
20	202	245	174	212	254	256	266	178	226	228	355	350
21	202	174	181	211	243	245	262	253	234	212	380	341
22	202	165	179	211	234	246	261	225	241	211	365	346
23	203	155	174	210	210	236	261	231	244	210	372	339
24	203	155	169	197	187	245	260	237	247	212	352	339
25	203	154	170	199	187	246	263	209	244	212	365	306
26	220	147	171	202	201	246	263	229	239	213	371	331
27	215	138	173	209	215	242	270	219	231	208	374	323
28	193	139	189	210	230	194	273	196	235	209	368	318
29	126	143	187	215	---	165	292	159	233	209	375	316
30	142	148	177	206	---	158	296	180	236	210	402	314
31	125	---	171	212	---	189	---	168	---	210	427	---
MONTH	207	144	174	204	212	227	259	244	225	220	288	369

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	330	196	254	284	256	378	375	498	312	389	365	739
2	349	171	251	354	263	380	393	498	360	390	359	672
3	375	158	256	371	229	394	404	498	371	383	360	701
4	397	125	275	350	255	388	411	481	379	384	372	670
5	426	107	271	329	274	388	417	529	394	399	364	667
6	453	116	265	314	341	387	421	521	360	404	356	656
7	441	139	317	302	350	389	424	561	314	403	363	665
8	408	164	360	331	357	400	447	546	307	399	363	651
9	378	181	350	335	364	412	432	591	345	383	366	646
10	344	203	309	320	372	399	435	516	373	369	370	650
11	368	252	289	324	401	418	437	504	399	357	371	657
12	363	297	293	331	388	402	433	485	372	360	370	650
13	358	328	324	333	397	302	426	519	380	355	376	677
14	354	332	262	322	395	357	425	377	391	363	382	674
15	387	322	283	353	398	377	429	350	411	366	409	658
16	350	312	280	398	400	385	436	243	385	367	414	636
17	310	308	286	382	411	404	462	218	408	370	426	637
18	332	297	296	370	424	415	446	276	375	371	500	632
19	343	288	294	353	429	410	451	288	348	386	566	618
20	341	413	294	358	428	432	449	300	381	385	599	591
21	341	293	305	356	410	414	442	426	394	358	641	576
22	341	278	302	356	395	415	441	380	406	356	616	584
23	342	261	294	355	355	398	440	369	412	354	627	572
24	342	262	285	333	315	413	439	400	416	358	593	572
25	343	260	286	336	316	415	444	352	412	358	615	516
26	371	248	288	340	339	415	444	387	403	360	626	558
27	362	232	292	353	363	409	456	369	390	350	631	544
28	326	234	318	355	388	327	460	331	397	353	621	537
29	213	242	315	363	---	279	493	288	393	352	632	533
30	240	250	299	348	---	267	500	304	398	355	678	529
31	210	---	289	358	---	318	---	284	---	355	721	---
MONTH	350	242	293	344	358	383	437	411	380	371	486	622

07178620 NEWT GRAHAM LOCK AND DAM (VERDIGRIS RIVER) NEAR INOLA, OKLA.--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19.5	18.0	8.5	5.0	7.0	5.0	8.5	20.0	23.0	28.0	30.0	30.0
2	19.0	17.5	8.0	4.5	7.0	5.0	8.5	20.0	23.5	28.5	28.0	29.5
3	19.0	17.0	8.0	4.5	5.0	4.5	8.0	19.5	23.5	28.5	29.0	29.0
4	19.0	16.0	8.0	4.5	5.0	4.5	8.5	20.0	23.5	29.0	29.0	29.0
5	19.0	14.5	8.0	4.0	5.5	4.5	9.0	20.0	24.5	29.5	29.0	29.0
6	19.0	13.5	8.0	4.0	6.0	5.0	9.5	20.5	24.0	30.0	29.0	29.0
7	18.5	12.5	7.5	4.5	4.5	5.5	9.5	21.0	14.0	30.0	29.5	27.5
8	18.5	12.0	7.0	4.0	4.0	5.5	10.0	21.5	16.0	29.5	29.5	26.5
9	18.5	12.0	7.0	4.5	3.0	5.5	12.0	22.5	24.5	29.0	29.5	26.0
10	18.5	12.0	7.0	5.5	3.0	5.0	12.0	22.5	14.0	28.5	29.5	24.5
11	18.5	12.0	7.0	5.0	5.0	4.5	12.0	23.0	24.0	28.0	29.5	24.5
12	19.0	12.5	6.0	4.0	3.5	4.5	12.5	23.0	23.0	28.0	29.5	24.0
13	19.0	13.5	6.0	4.5	3.5	5.0	12.5	22.5	23.5	28.0	29.5	24.0
14	19.0	14.0	6.5	6.0	4.0	3.5	12.0	21.5	24.0	28.0	29.5	23.5
15	18.0	13.5	6.0	4.5	4.0	4.0	12.5	19.0	24.0	28.0	29.5	23.5
16	17.5	13.0	6.0	3.5	3.5	4.5	13.5	19.0	24.0	27.5	29.5	22.5
17	17.0	12.5	6.0	3.5	3.5	5.0	14.0	20.0	23.5	28.0	29.5	22.5
18	17.5	12.5	6.0	4.0	3.5	6.0	15.5	20.5	23.5	28.0	30.0	22.5
19	17.5	12.5	6.0	4.0	3.0	7.0	15.5	22.0	22.0	29.0	30.0	21.5
20	18.0	12.0	6.0	4.0	3.5	8.0	15.5	22.0	24.5	29.0	30.5	22.0
21	17.5	12.0	6.0	4.0	4.0	9.0	15.5	22.5	26.0	29.0	30.0	21.0
22	17.0	12.0	6.0	4.0	4.0	8.0	16.0	23.0	26.5	28.5	30.5	21.0
23	17.5	14.0	6.5	4.0	3.5	7.5	16.5	23.5	26.5	28.5	30.0	20.5
24	17.5	14.0	7.0	4.5	3.0	8.0	17.5	23.5	25.0	29.0	29.5	20.5
25	17.5	11.5	6.0	4.5	3.0	8.0	17.5	23.5	26.0	29.0	29.5	20.5
26	17.5	11.5	6.0	4.5	3.5	8.5	18.5	23.5	27.0	29.0	29.5	20.5
27	17.5	11.5	6.0	5.0	4.0	9.5	19.5	23.5	27.5	28.5	29.5	20.5
28	17.5	11.5	6.0	5.0	4.5	10.5	20.0	22.5	27.5	28.5	29.5	20.0
29	17.5	11.5	6.0	5.0	---	9.5	20.5	22.5	27.0	29.0	30.0	19.5
30	18.0	9.0	5.0	5.5	---	8.5	20.5	23.0	28.0	29.0	30.0	19.5
31	---	---	5.0	6.0	---	8.0	---	22.5	---	30.0	30.0	---
MONTH	18.0	13.0	6.5	4.5	4.0	6.5	14.0	21.5	24.0	28.5	29.5	24.0

07192060 PRYOR CREEK BELOW SULFUR CREEK, NEAR PRYOR, OKLA.

LOCATION.--Lat 36°13'29", long 95°15'20", in NW 1/4 NE 1/4 sec.10, T.20 N., R.19 E., Mayes County, at abandoned bridge, approximately 2 mi (3.2 km) downstream from Sulfur Creek and 5.4 mi (8.7 km) southeast of Pryor.

PERIOD OF RECORD.--Chemical analyses: July 1966 to current year (discontinued).
Water temperatures: July 1966 to September 1967.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	DIS_SOLVED NITRATE (NO3) (MG/L)	DIS-SOLVED NITRITE (N) (MG/L)	DIS_SOLVED NITRITE (NO2) (MG/L)	DIS-SOLVED AMMONIA NITRO-GEN (N) (MG/L)	DIS_SOLVED AMMONIA (NH4) (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)
OCT.											
04...	0900	26	2.2	9.6	.14	.46	1.2	1.5	401	6.7	20.0
13...	1400	36	2.6	11	.13	.43	3.1	4.0	432	7.3	19.0
19...	1400	12	.85	3.8	.03	.10	.87	1.1	265	7.0	16.0
25...	0830	11	.74	3.3	.05	.16	.49	.63	388	6.8	17.0
NOV.											
01...	0830	2.8	.21	.93	.00	.00	.78	1.0	128	6.5	18.0
08...	0845	5.0	.27	1.2	.01	.03	1.4	1.8	154	6.8	18.0
15...	1100	6.3	.41	1.8	.03	.10	.66	.85	195	6.5	12.0
22...	1000	17	.69	3.1	.12	.39	.63	.81	288	6.5	11.5
30...	0900	30	1.9	8.4	.00	.00	1.3	1.7	387	6.7	7.0
DEC.											
06...	0830	30	1.3	5.7	.12	.39	.79	1.0	379	6.9	11.0
13...	0830	6.0	.59	2.6	.00	.00	.58	.75	152	--	6.0
20...	0900	30	.99	4.4	.01	.03	.89	1.1	327	6.6	6.0
27...	0900	66	1.3	5.6	.03	.10	.86	1.1	4930	6.5	6.0

07193500 NEOSHO RIVER BELOW FORT GIBSON LAKE, NEAR FORT GIBSON, OKLA.

LOCATION.--Lat 35°51'15", long 95°13'45", in SE 1/4 NW 1/4 sec.19, T.16 N., R.20 E., Cherokee County, at gaging station, 1.1 mi (1.8 km) downstream from Fort Gibson Dam, 4.5 mi (7.2 km) north of Fort Gibson, and at mile 6.6 (10.6 km).

DRAINAGE AREA.--12,495 mi^2 (32,262 km^2).

PERIOD OF RECORD.--Chemical analyses: October 1951 to current year.
Water temperatures: October 1951 to September 1963, October 1973 to current year.

EXTREMES, Current year.--Specific conductance: Maximum daily, 496 micromhos/cm Sept. 7; minimum daily, 188 micromhos/cm Oct. 18.
Water temperatures: Maximum, 29.0°C Sept. 3-4; minimum, 3.5°C Feb. 23-25.

Period of record.--Specific conductance (1974-1975): Maximum daily, 496 micromhos/cm Sept. 7, 1975; minimum daily, 188 micromhos/cm Oct. 18, 1974.
Water temperatures: Maximum, 31.5°C July 31, Aug. 1, 1955; minimum, freezing point Jan. 23-25, 1962.

REMARKS.--M=Presence of material verified but not quantified.
B=Results based on colony count outside the acceptable range (Non-ideal colony count).

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	ALKA-LINITY AS CACO3 (MG/L)
OCT.										
16...	1100	18300	--	26	1.9	3.8	1.7	86	0	71
30...	1100	3610	2.6	31	--	6.8	2.7	102	0	84
NOV.										
21...	1000	47200	6.3	31	--	6.6	3.7	96	0	79
DEC.										
19...	0930	16600	8.8	26	3.6	5.5	2.8	78	0	64
JAN.										
28...	1330	5590	9.2	30	4.5	6.5	2.5	91	0	75
FEB.										
26...	1000	22100	7.8	39	6.2	10	2.4	110	0	90
MAR.										
11...	1300	34400	6.7	42	5.5	8.4	3.4	107	0	88
APR.										
22...	1200	11800	5.8	39	5.5	8.5	2.6	--	--	--
MAY										
13...	--	2150	3.4	33	4.9	9.7	2.9	100	0	82
21...	1030	3400	5.6	37	4.9	9.0	3.2	105	0	86
JUNE										
18...	1030	18200	--	--	--	--	--	--	--	--
AUG.										
27...	1500	4180	4.0	37	6.5	--	2.5	115	0	94
SEP.										
24...	1000	11400	3.2	--	5.0	12	2.7	101	0	83

DATE	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	TOTAL NITRO-GEN (N) (MG/L)	TOTAL NITRO-GEN (NO3) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)
OCT.										
16...	7.7	4.9	--	--	--	--	--	.02	102	--
30...	26	7.3	.1	.31	.33	.64	2.8	.05	167	--
NOV.										
21...	24	--	.1	.10	.36	.46	2.0	.11	146	--
DEC.										
19...	23	6.5	.1	.54	.40	.94	4.2	.13	133	115
JAN.										
28...	28	6.1	.1	2.7	.40	3.1	14	.08	138	132
FEB.										
26...	38	9.4	.1	.93	.37	1.3	5.8	.10	175	167
MAR.										
11...	39	9.1	.4	1.0	.50	1.5	6.6	.07	173	167
APR.										
22...	36	7.8	.1	.97	.37	1.3	5.9	.07	169	--
MAY										
13...	33	10	.1	.68	2.6	3.3	15	.15	168	146
21...	33	9.0	.1	.73	1.1	1.8	8.1	.05	172	154
JUNE										
18...	--	--	--	--	--	--	--	--	--	--
AUG.										
27...	32	9.3	.2	.31	.47	.78	3.5	.05	165	--
SEP.										
24...	25	13	.1	.37	.01	.38	1.7	.10	158	--

07193500 NEOSHO RIVER BELOW FORT GIBSON LAKE, NEAR FORT GIBSON, OKLA.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (JTU)
OCT.										
16...	.14	5040	73	2	10	.2	159	8.0	20.0	--
30...	.23	1630	--	--	--	--	246	7.8	24.0	10
NOV.										
21...	.20	18600	--	--	--	--	--	7.7	12.0	10
DEC.										
19...	.18	5960	80	16	13	.3	230	7.5	6.0	30
JAN.										
28...	.19	2080	93	19	13	.3	227	7.9	5.0	30
FEB.										
26...	.24	10400	120	33	15	.4	280	8.0	4.5	20
MAR.										
11...	.24	16100	130	40	12	.3	289	8.1	7.0	20
APR.										
22...	.23	5380	120	--	13	.3	280	7.4	14.0	14
MAY										
13...	.23	975	100	18	17	.4	247	--	--	140
21...	.23	1580	110	26	14	.4	--	7.0	21.0	24
JUNE										
18...	--	--	--	--	--	--	235	6.4	24.5	--
AUG.										
27...	.22	1860	120	25	--	--	280	7.7	28.0	9
SEP.										
24...	.21	4860	--	--	--	--	240	8.1	21.0	20

DATE	TIME	DIS-CHARGE (CFS)	DIS-SOLVED OXYGEN (MG/L)	PER-CENT SATUR-ATION	FECAL COLI-FORM (COL. PER 100 ML)	STREP-TOCOCCI (COL-ONIES PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)	SUS-PENDED SEDI-MENT (MG/L)	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM
OCT.									
30...	1100	3610	8.2	100	62	74	--	26	94
NOV.									
21...	1000	47200	13.0	125	810	814	4.8	114	97
DEC.									
19...	0930	16600	11.6	97	49	62	--	--	--
JAN.									
28...	1330	5590	12.3	102	--	84	--	--	--
FEB.									
26...	1000	22100	12.6	102	49	32	7.4	319	53
MAR.									
11...	1300	34400	15.6	134	--	--	--	11	94
APR.									
22...	1200	11800	9.6	97	M0	810	--	15	90
MAY									
21...	1030	3400	8.1	95	--	547	3.5	30	97
JUNE									
18...	1030	18200	6.8	85	--	58	--	496	97
AUG.									
27...	1500	4180	7.4	96	52	62	5.9	26	29
SEP.									
24...	1000	11400	6.2	72	100	856	--	--	--

07193500 NEOSHO RIVER BELOW FORT GIBSON LAKE, NEAR FORT GIBSON, OKLA.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS-SOLVED CADMIUM (CD) (UG/L)	TOTAL CHROMIUM (CR) (UG/L)	SUS-PENDED CHROMIUM (CR) (UG/L)	DIS-SOLVED CHROMIUM (CR) (UG/L)	TOTAL COBALT (CO) (UG/L)	SUS-PENDED COBALT (CO) (UG/L)	DIS-SOLVED COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)	SUS-PENDED COPPER (CU) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)
MAY											
21...	2	--	--	10	--	--	0	--	--	7	--
AUG.											
27...	1	20	10	10	<50	<50	0	10	1	9	<100

DATE	SUS-PENDED LEAD (PB) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	TOTAL MERCURY (HG) (UG/L)	SUS-PENDED MERCURY (HG) (UG/L)	DIS-SOLVED MERCURY (HG) (UG/L)	TOTAL SELENIUM (SE) (UG/L)	SUS-PENDED SELENIUM (SE) (UG/L)	DIS-SOLVED SELENIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	SUS-PENDED ZINC (ZN) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)
MAY											
21...	--	2	.1	.0	.1	0	0	0	870	700	170
AUG.											
27...	<99	1	--	.0	12	0	0	0	40	30	10

DATE	TIME	DIS-CHARGE (CFS)	TOTAL IRON (FE) (UG/L)	DIS-SOLVED IRON (FE) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	SUS-PENDED MANGANESE (MN) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	SUS-PENDED ARSENIC (AS) (UG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	SUS-PENDED CADMIUM (CD) (UG/L)
MAY												
21...	1030	3400	--	30	150	90	60	1	0	1	--	--
AUG.												
27...	1500	4180	580	10	170	110	60	2	0	2	<10	<9

07193500 NEOSHO RIVER BELOW FORT GIBSON LAKE, NEAR FORT GIBSON, OKLA.--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA,
WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

PHYTOPLANKTON

Date	Time	Organism	Count (cells/ml)	Percent of total	Sampling method
Oct. 30	1100	CHLOROPHYTA			Sediment sampler
		Chlorophyceae			
		Chlorococcales			
		Scenedesmaceae			
		Scenedesmus	370	14	
		CHRYSOPHYTA			
		Bacillariophyceae			
		Centrales			
		Coscinodiscaceae			
		Cyclotella	370	14	
		Melosira	1,600	60	
		Pennales			
		Cymbellaceae			
		Cymbella	61	2	
		Naviculaceae			
		Navicula	180	7	
		Nitzschiaceae			
		Nitzschia	61	2	
		TOTAL	2,600		
Dec. 23	1100	CHRYSOPHYTA			Sediment sampler
		Bacillariophyceae			
		Centrales			
		Coscinodiscaceae			
		Coscinodiscus	95	29	
		Cyclotella	36	11	
		Melosira	200	61	
		TOTAL	330		
Jan. 28	1330	CHLOROPHYTA			Sediment sampler
		Chlorophyceae			
		Chlorococcales			
		Occystaceae			
		Kirchneriella	21	6	
		CHRYSOPHYTA			
		Bacillariophyceae			
		Centrales			
		Coscinodiscaceae			
		Cyclotella	360	94	
		TOTAL	390		
Feb. 26	1000	CHLOROPHYTA			Sediment sampler
		Chlorophyceae			
		Chlorococcales			
		Occystaceae			
		Selenastrum	58	11	
		CHRYSOPHYTA			
		Bacillariophyceae			
		Centrales			
		Coscinodiscaceae			
		Cyclotella	470	84	
		Melosira	29	5	
		TOTAL	550		
Mar. 11	1300	CHLOROPHYTA			Sediment sampler
		Chlorophyceae			
		Chlorococcales			
		Coelastraceae			
		Coelastrum	95	12	
		Occystaceae			
		Ankistrodesmus	12	1	
		CHRYSOPHYTA			
		Bacillariophyceae			
		Centrales			
		Coscinodiscaceae			
		Cyclotella	620	76	
		Pennales			
		Nitzschiaceae			
		Nitzschia	71	9	
		EUGLENOPHYTA			
		Euglenophyceae			
		Euglenales			
		Euglenaceae	12	1	
		Phacus			
		TOTAL	810		

07193500 NEOSHO RIVER BELOW FORT GIBSON LAKE, NEAR FORT GIBSON, OKLA.--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

PHYTOPLANKTON

Date	Time	Organism	Count (cells/ml)	Percent of total	Sampling method
Apr. 22	1200	CHLOROPHYTA			Sediment sampler
		Chlorophyceae			
		Chlorococcales			
		Occystaceae			
		Ankistrodesmus	40	2	
		CHRYSOPHYTA			
		Bacillariophyceae			
		Centrales			
		Coscinodiscaceae			
		Cyclotella	1,300	63	
		Melosira	440	22	
		Pennales			
		Fragilariaceae			
		Fragilaria	160	8	
		Naviculaceae			
		Navicula	120	6	
		TOTAL	2,000		
May 21	1030	CHLOROPHYTA			Sediment sampler
		Chlorophyceae			
		Chlorococcales			
		Characiaceae			
		Schroederia	11	3	
		Scenedesmaceae			
		Scenedesmus	66	19	
		Tetrastrum	44	13	
		CHRYSOPHYTA			
		Bacillariophyceae			
		Centrales			
		Coscinodiscaceae			
		Cyclotella	110	32	
		Melosira	66	19	
		Pennales			
		Fragilariaceae			
		Synedra	11	3	
		Nitzschiaceae			
		Nitzschia	33	10	
		TOTAL	340		
June 18	1030	CHRYSOPHYTA			Sediment sampler
		Bacillariophyceae			
		Centrales			
		Coscinodiscaceae			
		Cyclotella	300	19	
		Melosira	440	29	
		Pennales			
		Naviculaceae			
		Navicula	37	2	
		CYANOPHYTA			
		Myxophyceae			
		Oscillatoriales			
		Oscillatoriaceae			
		Oscillatoria	740	48	
		EUGLENOPHYTA			
		Euglenophyceae			
		Euglenales			
		Euglenaceae			
		Phacus	37	2	
		TOTAL	1,600		
July 15	1530	CHLOROPHYTA			Sediment sampler
		Chlorophyceae			
		Chlorococcales			
		Hydrodictyaceae			
		Pediastrum	1,100	6	
		Volvocales			
		Phacotaceae			
		Phacotus	140	1	
		CHRYSOPHYTA			
		Bacillariophyceae			
		Centrales			
		Coscinodiscaceae			
		Cyclotella	410	2	
		Melosira	960	5	
		Pennales			
		Fragilariaceae			

07193500 NEOSHO RIVER BELOW FORT GIBSON LAKE, NEAR FORT GIBSON, OKLA.--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA,
WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

PHYTOPLANKTON

Date	Time	Organism	Count (cells/ml)	Percent of total	Sampling method
July 15	1530	Synedra	550	3	Sediment sampler
		CYANOPHYTA			
		Myxophyceae			
		Chroococcales			
		Chroococcaceae			
		Agmenellum	6,800	38	
		Oscillatoriales			
		Oscillatoriaceae			
		Lyngbya	410	2	
		Phormidium	7,700	42	
		TOTAL	18,000		
Aug. 27	1500	CHLOROPHYTA			Sediment sampler
		Chlorophyceae			
		Chlorococcales			
		Occystaceae			
		Dictyosphaerium	1,500	14	
		Tetraedron	91	1	
		Scenedesmaceae			
		Scenedesmus	1,100	11	
		Volvocales			
		Chlamydomonadaceae			
		Chlamydomonas	180	2	
		Zygnematales			
		Desmidiaceae			
		Euastrum	91	1	
		CHRYSOPHYTA			
		Bacillariophyceae			
		Centrales			
		Coscinodiscaceae			
		Cyclotella	460	4	
		Melosira	820	8	
		Pennales			
		Achnanthaceae			
		Achnanthes	91	1	
		Nitzschiaceae			
		Nitzschia	91	1	
		CYANOPHYTA			
		Myxophyceae			
		Chroococcales			
		Chroococcaceae			
		Agmenellum	1,500	14	
		Anacystis	370	4	
		Oscillatoriales			
		Oscillatoriaceae			
		Oscillatoria	3,800	37	
		Rivulariaceae			
		Raphidiopsis	270	3	
		EUGLENOPHYTA			
		Euglenophyceae			
		Euglenales			
		Euglenaceae			
		Euglena		0	
		TOTAL	10,000		

07193500 NEOSHO RIVER BELOW FORT GIBSON LAKE, NEAR FORT GIBSON, OKLA.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	239	240	206	208	236	280	264	262	264	295	295	286
2	241	241	199	208	237	280	253	263	256	290	286	298
3	240	242	199	207	237	283	260	261	256	293	290	282
4	239	236	199	208	237	283	254	264	255	290	288	287
5	239	235	198	207	237	282	255	262	255	294	290	273
6	239	280	202	214	239	282	259	262	254	290	293	285
7	237	287	199	214	240	280	259	262	254	298	293	496
8	235	203	197	216	239	282	259	263	256	291	294	312
9	236	201	196	216	240	282	261	261	254	293	297	290
10	237	201	195	215	238	280	262	256	258	294	292	290
11	231	210	196	216	239	282	261	261	253	289	292	285
12	230	210	195	216	236	280	264	264	256	290	292	---
13	228	225	195	211	237	282	266	263	255	291	288	---
14	229	223	195	212	238	280	260	272	257	293	286	---
15	235	224	197	212	267	282	260	265	258	296	290	---
16	235	224	199	223	269	282	266	260	258	294	287	---
17	236	238	199	224	271	273	267	258	258	292	284	---
18	188	240	196	225	268	272	268	258	260	291	283	277
19	245	238	196	224	270	274	269	258	264	293	283	276
20	247	238	198	233	270	273	267	258	260	293	285	280
21	246	231	195	232	269	273	267	260	269	302	284	282
22	244	231	195	233	270	272	268	261	269	293	282	247
23	246	231	196	233	267	272	267	259	270	295	281	243
24	248	219	196	225	280	274	267	260	282	293	279	238
25	254	217	197	225	278	274	268	316	282	288	278	270
26	246	216	197	230	279	273	270	262	284	290	280	262
27	249	209	197	232	281	272	269	260	288	391	281	251
28	246	210	198	231	278	273	268	260	283	294	281	240
29	247	211	197	227	---	273	268	256	290	293	281	235
30	247	205	200	228	---	273	265	260	297	297	282	240
31	242	---	204	226	---	273	---	260	---	295	283	---
MONTH	239	227	198	220	255	277	264	263	265	296	287	280

TEMPERATURE (DEG. C) OF WATER , WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18.0	17.5	9.5	6.5	6.0	5.0	8.0	19.0	---	24.5	27.5	27.5
2	18.0	17.5	9.0	6.5	6.0	5.5	8.0	17.5	---	24.5	28.0	28.0
3	17.5	17.0	8.5	6.5	6.0	4.5	7.0	19.0	---	25.0	28.0	29.0
4	17.5	18.0	8.0	7.0	6.0	4.5	8.0	19.0	---	25.0	27.5	29.0
5	18.0	17.5	8.0	7.0	6.0	5.0	8.0	19.0	23.0	25.5	27.5	27.5
6	18.5	17.5	8.0	7.0	5.5	5.0	8.5	19.0	23.0	26.0	28.0	28.0
7	18.0	17.5	8.0	6.5	5.5	5.5	9.0	19.5	23.0	26.0	27.5	28.0
8	17.5	17.0	8.0	6.5	5.0	5.5	8.5	20.0	22.0	26.0	28.0	27.0
9	19.0	17.0	7.0	6.0	5.0	5.5	9.0	20.0	22.5	26.0	26.0	27.0
10	19.5	17.0	7.0	6.0	5.0	5.5	9.0	20.5	22.5	25.5	26.5	28.0
11	19.0	16.0	7.5	5.5	5.0	5.5	8.5	19.5	23.0	26.0	28.0	28.0
12	19.5	15.0	7.5	5.0	5.5	5.0	8.0	22.0	23.5	26.0	28.0	27.0
13	20.0	14.0	8.0	5.0	5.0	5.0	8.5	20.0	23.0	26.5	28.5	27.0
14	18.0	15.0	7.5	5.0	5.0	4.5	8.5	20.0	23.5	26.0	26.0	27.0
15	17.0	13.0	7.0	5.0	4.5	4.5	8.5	22.0	23.0	26.0	26.5	26.5
16	17.0	13.0	7.0	4.5	4.5	5.0	12.5	23.0	23.0	26.0	27.5	26.0
17	17.5	13.0	7.0	4.5	4.5	5.0	15.0	22.5	22.5	26.0	28.0	25.0
18	17.0	13.0	7.0	5.0	4.5	5.0	13.5	23.0	23.0	26.0	27.5	25.5
19	17.0	12.5	7.0	5.0	4.5	5.5	14.0	23.5	23.0	26.0	26.0	25.5
20	17.0	12.5	7.0	4.5	4.0	5.5	15.0	22.0	23.0	26.0	27.0	25.0
21	17.0	12.5	7.5	4.0	4.0	6.0	15.0	21.5	23.0	26.0	27.0	24.5
22	17.5	12.5	8.0	4.0	4.0	6.5	14.5	23.0	23.5	26.0	28.0	23.0
23	18.0	13.0	8.0	4.0	5.5	7.0	15.0	22.0	24.0	26.0	28.0	23.0
24	18.0	12.0	7.5	4.5	5.5	7.0	15.5	23.0	24.0	26.5	27.0	23.0
25	18.5	12.0	7.0	5.0	5.5	7.5	16.0	---	24.0	26.0	27.0	22.5
26	19.0	11.5	7.0	6.0	4.0	7.0	16.5	---	24.0	26.5	27.0	22.5
27	19.5	11.5	7.0	6.5	4.5	7.0	17.5	---	25.0	27.0	26.0	---
28	19.5	11.0	7.0	7.0	5.0	7.5	16.0	---	25.0	27.0	27.0	---
29	19.0	11.0	7.0	6.5	---	7.5	18.5	---	25.0	27.0	26.0	---
30	19.0	10.0	7.0	6.0	---	7.0	16.0	---	24.5	27.0	27.0	---
31	18.0	---	7.0	6.0	---	8.5	---	---	---	27.0	28.0	---
MONTH	18.0	14.0	7.5	5.5	5.0	6.0	12.0	---	23.5	26.0	27.5	26.0

07198000 ILLINOIS RIVER NEAR GORE, OKLA.

LOCATION.--Lat 35°34'23", long 95°04'07", in NE 1/4 SW 1/4 sec.27, T.13 N., R.21 E., Sequoyah County at Tenkiller Ferry Dam, 4.3 mi (6.9 km) upstream from gaging station, 6 mi (9.6 km) northeast of Gore, and at mile 12.8 (20.6 km).

DRAINAGE AREA.--1,610 mi^2 (4,170 km^2).

PERIOD OF RECORD.--Chemical analyses: October 1953 to current year.
Water temperatures: October 1953 to September 1963.

REMARKS.--No appreciable inflow between sampling point and gaging station except during periods of heavy local runoff.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED NITRITE PLUS NITRATE (N) (MG/L)
OCT.												
01...	--	3220	26	1.6	3.3	--	82	0	67	5.9	4.2	.69
NOV.												
01...	0900	3230	--	--	--	--	--	--	--	--	--	--
03...	0900	531	--	--	--	--	--	--	--	--	--	--
15...	0800	6470	25	1.5	2.5	2.4	78	0	64	8.8	3.9	--
DEC.												
03...	1145	6120	--	--	--	--	--	--	--	--	--	--
16...	0830	3400	25	1.6	3.1	2.7	81	0	66	5.8	4.5	--
JAN.												
15...	0815	3640	24	1.6	--	2.4	69	--	57	5.5	3.6	--
FEB.												
03...	0800	1860	26	1.5	2.9	2.3	66	--	54	10	--	--
14...	1510	3770	--	--	--	--	--	--	--	--	--	--
18...	1700	3820	26	1.8	2.9	1.9	83	0	68	5.8	3.9	--
18...	1730	3820	27	1.7	--	1.9	83	0	68	5.8	4.1	--
28...	0815	11400	27	1.5	2.9	2.3	81	0	66	7.8	4.4	--
MAR.												
14...	1100	1790	28	1.2	2.9	2.1	84	0	69	7.9	3.9	--
APR.												
01...	--	11700	--	--	--	--	--	--	--	--	--	--
15...	0900	3210	26	1.9	2.7	1.6	77	0	63	7.9	--	--
MAY												
01...	1130	3270	--	--	--	--	--	--	--	--	--	--
15...	1345	3270	27	2.5	--	1.5	77	0	63	7.5	4.2	--
JUNE												
16...	0810	3500	25	1.3	3.6	1.8	81	0	66	7.8	--	--
30...	1500	1540	--	--	--	--	--	--	--	--	--	--
JULY												
15...	0800	41	29	1.6	5.4	2.0	84	0	69	7.4	7.8	.56
AUG.												
01...	0800	42	--	--	--	--	--	--	--	--	--	--
15...	0800	11	28	1.6	6.9	1.9	90	0	74	--	--	.06
SEP.												
05...	0830	3150	--	--	--	--	--	--	--	--	--	--
15...	0900	25	29	1.6	5.2	2.0	--	--	--	6.8	7.7	.07

07198000 ILLINOIS RIVER NEAR GORE, OKLA.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	CARBON DIOXIDE (CO2) (MG/L)
OCT.											
01...	98	.13	852	72	5	--	.2	161	7.8	21.5	2.1
NOV.											
01...	--	--	--	--	--	--	--	163	--	19.5	--
03...	--	--	--	--	--	--	--	155	--	9.5	--
15...	100	.14	1750	69	5	7	.1	156	--	8.0	--
DEC.											
03...	--	--	--	--	--	--	--	148	--	14.0	--
16...	95	.13	872	69	3	9	.2	159	8.0	11.5	1.3
JAN.											
15...	88	.12	865	67	10	--	--	135	--	16.0	--
FEB.											
03...	98	--	492	71	17	8	.2	158	--	8.0	--
14...	--	--	--	--	--	--	--	158	--	7.5	--
18...	98	.13	1010	72	4	8	.1	159	8.0	25.0	1.3
18...	99	.13	1020	74	6	--	--	160	7.8	25.0	2.1
28...	101	.14	3110	74	7	8	.1	161	--	6.5	--
MAR.											
14...	96	.13	464	75	6	8	.1	165	7.8	6.5	2.1
APR.											
01...	--	--	--	--	--	--	--	159	--	8.0	--
15...	101	.14	875	73	10	7	.1	156	7.5	9.5	3.9
MAY											
01...	--	--	--	--	--	--	--	156	--	10.0	--
15...	--	--	--	78	15	--	--	153	7.6	7.5	3.1
JUNE											
16...	103	.14	973	68	1	10	.2	152	7.6	12.0	3.3
30...	--	--	--	--	--	--	--	153	--	14.0	--
JULY											
15...	116	.16	12.8	79	10	13	.3	173	8.1	13.0	1.1
AUG.											
01...	--	--	--	--	--	--	--	183	--	15.0	--
15...	126	.17	3.98	77	3	16	.3	194	8.1	14.0	1.1
SEP.											
05...	--	--	--	--	--	--	--	187	--	--	--
15...	118	--	7.96	79	--	12	.3	184	7.4	14.0	--

07228500 CANADIAN RIVER AT BRIDGEPORT, OKLA.

LOCATION.--Lat 35°34'00", long 98°22'45", in SE 1/4 SW 1/4 sec.28, T.13 N., R.11 W., Blaine County, at gaging station at Chicago, Rock Island and Pacific Railroad Co. bridge, 1.0 mi (1.6 km) north of Bridgeport, 2.8 mi (4.5 km) upstream from Lumpmouth Creek, and at mile 267.1 (429.8 km).

DRAINAGE AREA.--25,229 mi^2 (65,343 km^2), of which 4,801 mi^2 (12,435 km^2) is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: October 1969 to current year.
Water temperatures: October 1969 to current year.

EXTREMES, Current year.--Specific conductance: Maximum daily, 2,830 micromhos/cm June 11; minimum daily, 498 micromhos/cm July 30.
Water temperatures: Maximum, 35.0°C July 1; minimum, freezing point on several days during December to February.

Period of record.--Specific conductance: Maximum daily, 2,830 micromhos/cm June 11, 1975; minimum daily, 223 micromhos/cm Aug. 16, 1973.
Water temperatures: Maximum, 40.0°C July 9, 22, 1973; minimum, freezing point on many days during winter months.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	DIS-CHARGE (CFS)	INSTAN-TANEOUS DIS-CHARGE (CFS)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	ALKA-LINITY AS CACO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)
OCT.												
01-10	--	47	--	200	48	92	--	284	--	233	520	95
11-15	--	79	--	220	51	110	--	274	--	225	610	98
16-25	--	65	--	210	52	110	--	261	0	214	--	120
26-31	--	219	--	170	45	130	--	246	--	202	470	130
NOV.												
01-03	--	7010	--	120	30	--	--	174	0	143	310	73
04...	--	19400	--	68	15	--	--	105	0	86	160	32
05-08	--	447	--	100	24	--	--	160	0	131	260	63
09-10	--	279	--	170	50	--	--	249	0	204	480	170
11-30	--	148	--	220	68	210	--	296	0	243	670	240
DEC.												
01-10	--	122	--	230	75	140	6.0	295	0	242	--	180
11-12	--	211	--	200	60	120	7.4	246	0	202	550	150
13-31	--	187	--	210	71	170	6.2	297	0	244	600	220
JAN.												
01-10	--	296	--	190	61	180	6.5	284	0	233	--	230
11-22	--	211	--	200	69	200	6.7	293	0	240	--	260
23-30	--	178	--	190	63	200	6.4	270	0	221	--	270
31...	--	586	--	83	25	68	5.0	169	0	139	200	81
FEB.												
01-02	--	392	--	94	29	78	4.8	179	0	147	250	89
07-21	--	343	--	190	67	190	6.5	300	0	246	560	230
26-28	--	759	--	150	26	--	5.8	183	0	150	400	180
MAR.												
01-12	--	509	--	180	61	190	6.5	262	0	215	--	250
13-27	--	633	--	190	68	180	6.5	271	0	222	580	230
28-29	--	632	--	150	50	120	5.8	213	0	175	450	150
APR.												
01-08	--	424	--	210	70	170	6.5	272	0	223	610	220
09-11	--	422	--	160	48	99	5.9	200	0	164	460	130
12-30	--	229	--	210	70	160	6.7	243	0	199	650	210
MAY												
01-04	--	309	--	230	76	140	6.9	221	0	181	730	170
05-07	--	173	--	--	65	110	6.8	198	0	162	650	140
08-11	--	118	--	220	74	120	6.7	210	0	172	720	140
12-14	--	5250	--	200	69	110	5.6	215	0	176	640	130
15-16	--	2040	--	99	27	54	6.0	122	0	100	290	64
17-22	--	307	--	160	56	--	8.1	220	0	180	510	210
24-26	--	253	--	120	46	110	8.0	198	0	162	380	140
27-31	--	2420	--	180	63	140	7.7	234	0	192	560	190

07228500 CANADIAN RIVER NEAR BRIDGEPORT, OKLA.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	DIS-CHARGE (CFS)	INSTAN-TANEOUS DIS-CHARGE (CFS)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	ALKA-LINITY AS CACO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)
JUNE												
01-04	--	541	--	150	51	130	7.4	225	0	185	--	160
05-08	--	737	--	190	65	140	7.6	217	0	178	570	180
09...	1030	--	466	140	49	130	8.2	176	0	144	430	170
10-11	--	10400	--	31	7.4	11	6.8	93	0	76	43	11
12...	0930	--	1600	72	20	32	7.2	137	0	112	170	36
13-15	--	423	--	170	53	81	8.4	207	0	170	520	94
16-17	--	759	--	120	36	56	7.5	161	0	132	330	65
18-22	--	426	--	170	56	100	8.0	180	0	148	530	120
23-30	--	116	--	190	60	90	7.4	229	0	188	570	110
JULY												
02...	0830	--	49	250	72	78	7.0	253	0	208	790	75
13...	1045	--	50	180	53	61	6.1	159	0	130	560	55
30...	1045	--	177	70	10	13	4.7	77	18	93	140	14
AUG.												
05...	1045	--	124	210	57	110	7.2	196	0	161	620	130
15...	1030	--	95	200	52	59	4.9	193	0	158	620	51
27...	1030	--	99	110	23	33	6.6	137	0	112	280	23
SEP.												
12...	0930	--	62	160	34	35	4.3	221	0	181	380	19
20...	1135	--	46	190	44	44	3.4	219	8	193	--	25
29...	1005	--	36	190	41	--	2.8	208	8	184	500	21

07228500 CANADIAN RIVER NEAR BRIDGEPORT, OKLA.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	CARBON DIOXIDE (CO2) (MG/L)
OCT.											
01-10	.26	1150	1.56	146	700	460	--	1.5	1510	8.3	2.3
11-15	.12	1230	1.67	262	760	530	--	1.7	1590	8.3	2.2
16-25	2.2	1260	1.71	221	740	520	--	1.8	1660	8.1	3.3
26-31	.14	1070	1.46	633	610	410	--	2.3	1480	8.3	2.0
NOV.											
01-03	.55	709	.96	13400	420	260	--	--	1000	7.6	7.0
04...	.62	378	.51	19800	230	150	--	--	567	7.8	2.7
05-08	.30	611	.83	737	350	220	--	--	896	7.8	4.1
09-10	.08	1130	1.54	851	630	430	--	--	1580	7.7	7.9
11-30	.43	1550	2.11	619	830	590	--	3.2	2060	8.2	3.0
DEC.											
01-10	--	1540	2.09	507	880	640	26	2.1	2030	8.1	3.7
11-12	--	1320	1.80	752	750	550	26	1.9	1770	8.4	1.6
13-31	--	1510	2.05	762	820	570	31	2.6	2050	8.2	3.0
JAN.											
01-10	--	1540	1.93	1230	730	490	35	2.9	1970	8.2	2.9
11-22	--	1540	2.09	877	780	540	35	3.1	2140	8.2	3.0
23-30	--	1470	2.00	706	730	510	37	3.2	2070	8.2	2.7
31...	--	586	.80	927	310	170	32	1.7	890	8.2	1.7
FEB.											
01-02	--	678	.92	718	350	210	32	1.8	1000	8.4	1.1
07-21	--	1470	2.00	1360	750	500	35	3.0	2040	8.1	3.8
26-28	--	1140	1.55	2340	480	330	--	--	1590	8.5	.9
MAR.											
01-12	--	1450	1.97	1990	700	490	37	3.1	2040	7.9	5.3
13-27	--	1520	2.07	2600	750	530	34	2.9	2080	8.0	4.3
28-29	--	1130	1.54	1930	580	410	31	2.2	1580	7.9	4.3
APR.											
01-08	--	1560	2.12	1790	810	590	31	2.4	2080	7.7	8.7
09-11	--	1110	1.51	1270	600	430	26	1.8	1500	7.7	6.4
12-30	--	1560	2.12	965	810	610	30	2.4	2060	7.9	4.9
MAY											
01-04	--	1580	2.15	1320	890	710	25	2.0	2040	8.4	1.4
05-07	--	1380	1.88	645	--	--	22	1.7	1780	8.2	2.0
08-11	--	1510	2.05	481	850	680	23	1.8	1940	8.3	1.7
12-14	--	1380	1.88	19600	780	610	23	1.7	1780	8.3	1.7
15-16	--	643	.87	3540	360	260	24	1.2	987	8.2	1.2
17-22	--	1270	1.73	1050	630	450	--	--	1780	8.5	1.1
24-26	--	956	1.30	653	490	330	32	2.2	1380	8.4	1.3
27-31	--	1360	1.85	8890	710	520	30	2.3	1850	8.6	.9
JUNE											
01-04	--	1120	1.52	1640	580	400	32	2.3	1570	7.2	23
05-08	--	1370	1.86	2730	740	560	29	2.2	1840	7.8	5.5
09...	--	1050	1.43	1320	550	410	33	2.4	1520	7.3	14
10-11	--	170	.23	4770	110	32	17	.5	281	6.9	19
12...	--	437	.59	1890	260	150	20	.9	662	7.0	22
13-15	--	1120	1.52	1280	640	470	21	1.4	1480	7.6	8.3
16-17	--	741	1.01	1520	450	320	21	1.2	1050	7.2	16
18-22	--	1190	1.62	1370	660	510	25	1.7	1610	7.5	9.1
23-30	--	1300	1.77	407	720	530	21	1.5	1670	7.9	4.6
JULY											
02...	--	1540	2.09	204	920	710	15	1.1	1840	7.2	26
13...	--	1130	1.54	153	670	540	16	1.0	1410	8.2	1.6
30...	--	339	.46	162	220	120	11	.4	498	8.9	.2
AUG.											
05...	--	1330	1.81	445	760	600	24	1.7	1790	7.4	12
15...	--	1190	1.62	305	710	560	15	1.0	1530	8.2	1.9
27...	--	555	.75	148	370	260	16	.7	804	7.7	4.4
SEP.											
12...	--	931	1.27	156	540	360	12	.7	1120	8.1	2.8
20...	--	1080	1.47	134	660	460	13	.7	1370	8.5	1.2
29...	--	966	1.31	93.9	640	460	--	--	1260	8.5	1.1

07228500 CANADIAN RIVER NEAR BRIDGEPORT, OKLA.--Continued
WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TOTAL IRON (FE) (UG/L)	DISSOLVED IRON (FE) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	DISSOLVED MANGANESE (MN) (UG/L)	DISSOLVED NITRATE (N) (MG/L)	DISSOLVED NITRATE (NO3) (MG/L)	DISSOLVED NITRITE (N) (MG/L)	DISSOLVED NITRITE (NO2) (MG/L)	DISSOLVED NITRITE PLUS NITRATE (N) (MG/L)	DISSOLVED AMMONIA NITROGEN (N) (MG/L)
OCT.												
01...	1230	59	--	80	--	30	--	--	.01	.03	.54	--
31...	1300	156	--	40	--	60	.21	.93	.01	.03	.22	--
NOV.												
26...	1100	140	690	20	80	1300	.41	1.8	.01	.03	.41	--
DEC.												
30...	1330	72	--	30	--	50	.56	2.5	.02	.07	.59	--
JAN.												
28...	0700	163	750	20	58	30	.46	2.0	.00	.03	.47	.06
FEB.												
28...	1100	624	14000	90	410	50	.37	1.6	.01	.03	.38	.16
MAR.												
25...	0900	398	1300	40	60	30	.34	1.5	.03	.10	.37	.01
APR.												
23...	1300	184	1400	10	100	0	.14	.62	.02	.07	.60	.14
MAY												
20...	0930	244	6800	20	520	40	.03	.13	.02	.00	.05	.34
JUNE												
20...	1700	244	9000	10	660	20	.26	1.2	.00	.03	.27	.31
JULY												
16...	0930	36	380	60	70	20	.38	1.7	.05	.16	.43	.00
AUG.												
12...	1000	114	200	20	60	10	.09	.40	.02	.07	.11	.09
SEP.												
09...	1100	108	40	30	40	0	.39	1.7	.02	.07	.41	.03

DATE	DISSOLVED AMMONIA (NH4) (MG/L)	DISSOLVED ORGANIC NITROGEN (N) (MG/L)	DISSOLVED KJEL. NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	CHEMICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)
OCT.											
01...	--	--	--	--	1400	8.0	19.0	8.9	--	--	1.6
31...	--	--	--	--	660	7.6	25.0	8.1	101	14	5.0
NOV.											
26...	--	--	--	--	2200	8.8	7.0	11.1	99	22	20
DEC.											
30...	--	--	--	.40	2000	--	8.0	11.0	102	9	1.6
JAN.											
28...	.08	.35	.41	.06	2100	8.9	4.0	--	--	26	1.7
FEB.											
28...	.21	.50	.66	.39	2100	8.5	5.0	13.0	109	35	1.6
MAR.											
25...	E.10	--	--	--	2600	8.3	7.0	15.4	134	16	3.0
APR.											
23...	.18	.43	.57	.06	1800	8.3	--	--	--	32	2.9
MAY											
20...	.43	1.5	1.8	.27	2050	8.4	19.0	8.9	106	49	2.9
JUNE											
20...	.40	1.3	1.6	.39	1500	7.8	29.0	7.8	107	33	7.0
JULY											
16...	.00	.04	.04	.20	1400	8.4	24.0	7.5	95	26	--
AUG.											
12...	.12	.66	.75	--	1700	7.9	25.0	8.8	114	14	6.0
SEP.											
09...	.04	.49	.52	.25	2400	8.5	28.0	14.6	192	14	6.2

07228500 CANADIAN RIVER NEAR BRIDGEPORT, OKLA.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	PHENOLS (UG/L)	TOTAL CADMIUM (CD) (UG/L)	DISSOLVED CADMIUM (CD) (UG/L)	TOTAL CHROMIUM (CR) (UG/L)	DISSOLVED CHROMIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	DISSOLVED COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	DISSOLVED LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)	DISSOLVED ZINC (ZN) (UG/L)
OCT.											
01...	1	--	0	--	0	--	1	--	2	--	0
31...	3	--	0	--	0	--	6	--	2	--	120
NOV.											
26...	2	<10	1	0	<10	10	3	100	3	20	10
DEC.											
30...	0	--	1	--	0	--	6	--	20	--	120
JAN.											
28...	8	20	0	0	0	--	5	100	0	40	30
FEB.											
28...	4	<10	0	20	10	30	2	<100	4	60	40
MAR.											
25...	5	10	1	0	0	<10	0	<100	1	30	20
APR.											
23...	7	<10	0	0	0	<10	4	<100	0	50	10
MAY											
20...	7	<10	1	10	10	20	8	100	4	--	--
JUNE											
20...	3	<10	2	0	0	40	7	<100	1	430	90
JULY											
16...	3	10	1	20	10	<10	2	<100	0	--	--
AUG.											
12...	8	<10	0	10	20	<10	4	<100	3	10	10
SEP.											
09...	2	<10	1	0	0	10	4	<100	10	7	10

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TOTAL ALDRIN (UG/L)	TOTAL CHLORDANE (UG/L)	TOTAL DDD (UG/L)	TOTAL DDE (UG/L)	TOTAL DDT (UG/L)	TOTAL DIAZINON (UG/L)	TOTAL DIELDRIN (UG/L)	TOTAL ENDRIN (UG/L)	TOTAL HEPTACHLOR (UG/L)	TOTAL HEPTACHLOR EPOXIDE (UG/L)
OCT.												
01...	1230	59	.00	.0	.00	.00	.00	.00	.00	.00	.00	.00
31...	1300	156	.00	.0	.00	.00	.00	.00	.00	.00	.00	.00
NOV.												
26...	1100	140	.00	.0	.00	.00	.00	.00	.00	.00	.00	.00
JAN.												
28...	0700	163	.00	.0	.00	.00	.00	.00	.00	.00	.00	.00
FEB.												
28...	1100	624	.00	.0	.00	.00	.00	.00	.00	.00	.00	.00
MAR.												
25...	0900	398	.00	.0	.00	.00	.00	.00	.00	.00	.00	.00
APR.												
23...	1300	184	.00	.0	.00	.00	.00	.00	.00	.00	.00	.00
JUNE												
20...	1700	244	.00	.0	.00	.00	.00	.01	.00	.00	.00	.00
SEP.												
09...	1100	108	.00	.0	.00	.00	.00	.01	.00	.00	.00	.00

DATE	TOTAL LINDANE (UG/L)	TOTAL MALATHION (UG/L)	TOTAL METHYL PARATHION (UG/L)	TOTAL METHYL TRITHION (UG/L)	TOTAL PARATHION (UG/L)	TOTAL PCB (UG/L)	TOTAL TOXAPHENE (UG/L)	TOTAL TRITHION (UG/L)	TOTAL 2,4-D (UG/L)	TOTAL 2,4,5-T (UG/L)	TOTAL SILVEX (UG/L)
OCT.											
01...	.00	.00	.00	.00	.00	.0	0	.00	.00	.00	.00
31...	.00	.00	.00	.00	.00	.0	0	.00	.02	.00	.00
NOV.											
26...	.00	.00	.00	.00	.00	.0	0	.00	.00	.00	.00
JAN.											
28...	.00	.00	.00	.00	.00	.0	0	.00	.00	.00	.00
FEB.											
28...	.00	.00	.00	.00	.00	.0	0	.00	.00	.00	.00
MAR.											
25...	.00	.00	.00	--	.00	.0	0	--	.01	.00	.00
APR.											
23...	.00	.00	.00	--	.01	.0	0	--	.00	.00	.00
JUNE											
20...	.00	.00	.00	.00	.00	.0	0	.00	.00	.00	.00
SEP.											
09...	.00	.00	.00	.00	.00	.0	0	.00	.00	.00	.00

07228500 CANADIAN RIVER NEAR BRIDGEPORT, OKLA.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C) , WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1600	1080	2100	1920	866	1930	2070	2030	1520	1720	---	1140
2	1600	---	2090	1840	1180	1960	2060	2040	1580	1840	---	1300
3	---	917	2060	1850	1630	2060	2120	2000	1530	1690	1310	1320
4	1560	567	2020	1750	1750	2050	---	2020	1660	---	---	1300
5	1510	838	2030	1940	1900	2090	2140	1840	1810	---	1790	---
6	1510	717	1990	2030	1900	2130	2120	1730	1900	1390	1720	1290
7	1480	892	2020	2030	---	2140	2080	1790	1900	1650	1650	1190
8	1480	1140	2020	2090	2050	2240	1920	1850	1740	1270	1660	1140
9	1460	1550	2080	2130	2060	2230	1610	1900	1520	1090	1630	1200
10	1490	1620	2040	2130	2080	1750	1250	1990	---	755	1600	1290
11	1590	1930	---	2090	2080	2150	1580	1910	2830	889	---	1300
12	1590	1920	1770	2150	2110	1980	---	1710	662	1330	1530	1120
13	1590	1960	1970	2150	2180	2070	1940	1710	1230	1410	1440	1200
14	1600	2100	1890	2140	2120	2160	1900	1920	1440	1470	1550	1250
15	1650	2140	1920	2150	2110	2130	1960	810	1710	1510	1530	1260
16	1690	2110	2120	2140	2120	2070	1910	1050	1280	1500	1650	1280
17	1730	2090	2110	2130	1900	2070	2120	1660	862	1500	1580	1260
18	1710	2160	2150	2130	1890	1990	2080	1560	1570	1450	1590	1220
19	1760	2090	2150	2150	1880	1960	2160	1790	1640	1400	1580	1250
20	1690	2090	2120	2190	---	1870	2180	1790	1570	1320	---	1370
21	1630	2110	2140	2180	1950	1950	---	1900	1650	1430	1420	1300
22	1640	2130	---	2140	---	2120	2130	1890	1630	1360	1490	1350
23	1640	2100	2130	---	---	2140	---	---	---	1460	1420	1220
24	1620	2090	2120	2130	---	2190	2140	1220	---	---	1400	1270
25	1620	2110	---	2100	---	2200	2140	1210	1570	---	1390	1230
26	1440	2100	2110	2120	1720	2180	---	1600	1560	1340	1590	1300
27	1420	2090	2110	1930	1540	2180	---	1840	1780	829	804	1210
28	1380	---	2070	2090	1640	1470	---	1840	1660	524	847	1330
29	1510	2070	2060	2100	---	1680	---	1860	1760	758	909	1260
30	1700	2100	2050	2110	---	1790	2020	---	1750	498	911	1270
31	1410	---	1990	890	---	2010	---	1850	---	1150	1240	---
MONTH	1580	1740	2050	2030	1850	2030	---	1730	1600	1280	1420	1260

TEMPERATURE (DEG. C) OF WATER , WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15.0	13.0	3.0	3.0	3.0	5.0	5.0	14.5	19.5	35.0	---	28.0
2	14.0	---	2.0	1.0	4.0	4.0	5.0	16.5	19.5	25.0	---	25.0
3	---	10.0	3.0	1.0	4.0	3.0	5.0	15.5	20.5	32.0	30.0	26.0
4	15.0	11.0	4.0	2.0	3.0	3.0	---	17.5	22.5	---	---	24.0
5	15.0	10.0	5.0	2.0	2.0	4.5	6.5	18.5	24.5	---	29.0	---
6	16.0	10.0	8.0	2.0	0.0	5.0	8.0	20.5	25.5	34.0	26.0	26.0
7	15.0	9.0	7.0	3.0	---	4.0	9.0	20.5	23.5	25.0	26.0	26.0
8	13.0	9.5	3.0	5.0	1.0	4.0	10.5	22.5	24.5	24.0	25.0	27.0
9	14.0	10.0	0.0	5.0	1.0	3.0	10.0	24.5	23.5	20.0	24.0	29.0
10	17.0	9.5	4.0	0.0	3.0	4.0	9.5	22.5	---	26.0	26.0	26.0
11	17.0	10.0	---	0.0	3.0	5.0	9.0	19.5	21.0	27.0	---	25.0
12	19.0	10.0	5.0	0.0	4.0	3.0	---	18.5	19.5	26.0	30.0	24.0
13	17.0	9.0	3.0	0.0	5.0	1.0	9.5	17.5	20.0	28.0	31.0	23.0
14	14.0	9.0	5.0	1.0	4.0	1.5	10.0	14.5	23.5	24.0	30.0	24.0
15	10.5	10.0	3.0	1.0	3.0	3.0	11.0	16.5	28.5	25.0	28.0	24.0
16	10.0	9.5	3.0	1.0	3.0	4.0	12.0	18.5	25.5	26.0	29.0	20.0
17	12.0	9.0	3.5	1.5	---	4.0	15.0	20.5	26.5	24.0	28.0	21.0
18	14.0	9.0	3.0	1.0	4.0	5.0	14.0	21.5	23.5	23.0	25.0	23.0
19	13.0	11.0	2.0	0.0	2.0	5.0	11.0	21.5	27.5	25.0	28.0	25.0
20	14.0	10.0	3.0	1.0	---	6.0	13.0	20.5	27.5	25.5	---	20.0
21	12.0	9.0	3.0	2.0	3.0	8.0	---	20.5	28.5	27.0	30.0	21.0
22	10.0	9.0	---	2.0	---	9.0	16.0	24.5	25.5	26.0	30.0	16.0
23	12.0	10.0	2.0	---	---	8.0	---	---	---	25.0	26.0	17.0
24	12.0	9.0	2.0	4.0	---	9.0	18.0	20.5	---	---	25.0	14.0
25	17.0	5.0	---	5.0	---	6.0	20.0	21.5	29.5	---	25.0	16.0
26	16.0	5.0	1.5	5.0	3.0	7.0	---	19.5	28.5	25.0	24.0	17.0
27	16.0	5.0	3.0	0.0	4.0	7.0	---	19.5	27.5	22.0	25.0	19.0
28	15.0	---	4.0	5.0	5.0	5.0	---	24.5	29.5	21.0	23.0	19.0
29	16.0	2.0	4.0	5.0	---	2.0	---	25.5	32.0	21.0	25.0	20.0
30	17.0	2.0	2.0	6.0	---	6.0	15.0	---	33.0	21.0	29.0	18.0
31	13.0	---	3.0	4.0	---	5.5	---	25.5	---	25.0	28.0	---
MONTH	14.5	8.5	3.5	2.5	---	4.5	---	20.0	25.0	25.5	27.0	22.0

07229200 CANADIAN RIVER AT PURCELL, OKLA.

LOCATION.--Lat 35°00'50", long 97°20'50", in NW 1/4 sec.7, T.6 N., R.1 W., McClain County, at bridge on U.S. Highway 77, 0.5 mi (0.8 km) east of Purcell, 1 mi (1.6 km) upstream from Walnut Creek, and at mile 184.9 (297.5 km).

DRAINAGE AREA.--25,939 mi² (67,182 km²), of which 4,801 mi² (12,434 km²) is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: May 1974 to current year.
Water temperatures: May 1974 to current year.

EXTREMES, Current year.--Specific conductance: Maximum daily, 1,990 micromhos/cm Jan. 13; minimum daily, 291 micromhos/cm May 23.
Water temperatures: Maximum, 27.5°C July 9; minimum, freezing point on many days during winter months.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	DIS-CHARGE (CFS)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	ALKA-LINITY AS CACO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)
OCT.											
23-25	--	83	150	46	--	--	229	0	188	430	110
26-30	--	412	81	23	54	--	175	0	144	190	49
31...	--	3320	45	9.9	19	--	134	0	110	55	20
NOV.											
01-02	--	1190	69	17	44	--	167	0	137	130	41
03-04	--	15400	45	10	--	--	125	0	103	65	19
05-07	--	3710	79	19	--	--	157	0	129	170	43
08-11	--	766	120	35	99	--	248	0	203	290	110
12-30	--	326	170	50	150	--	307	0	252	440	170
DEC.											
01-10	--	314	180	--	140	6.1	335	0	275	450	150
11-13	--	507	140	49	110	4.9	306	0	251	380	120
14-17	--	628	160	57	130	5.9	323	0	265	460	150
18-31	--	365	180	61	160	6.4	324	0	266	480	180
JAN.											
01-02	--	687	120	48	160	6.5	286	0	235	290	210
06-10	--	239	160	54	140	6.2	315	0	258	--	170
11-30	--	352	180	61	160	6.8	324	0	266	460	210
31...	--	894	120	48	130	4.9	276	0	226	--	160
FEB.											
01-06	--	1090	110	36	97	5.3	244	0	200	270	100
07-21	--	620	170	50	160	6.1	342	0	281	410	180
22-28	--	1700	140	47	140	5.8	290	0	238	370	160
MAR.											
01-09	--	870	160	56	160	6.3	310	0	254	420	200
10-14	--	2290	150	56	140	6.0	--	--	--	430	160
15-26	--	1020	--	52	140	5.3	305	0	250	410	170
27-31	--	1600	110	43	110	5.0	247	0	203	310	120
APR.											
01-02	--	410	150	52	120	6.0	303	0	249	390	130
03-07	--	293	170	61	150	6.2	313	0	257	--	170
08-09	--	1240	95	40	87	5.4	233	0	191	260	93
10-20	--	266	140	56	120	6.2	262	0	215	440	140
14...	1430	195	140	56	120	5.7	307	0	252	--	130
21-30	--	205	140	61	150	6.5	241	0	198	480	180
MAY											
01-02	--	329	130	58	120	6.1	228	0	187	430	140
03-04	--	2600	83	30	60	5.2	180	0	148	230	64
05-13	--	832	130	52	100	6.4	216	0	177	430	100
14-16	--	8960	72	22	40	5.3	151	0	124	--	41
17-22	--	996	130	45	130	7.0	229	0	188	340	170
23-25	--	8500	49	15	32	5.2	145	0	119	93	30
26-31	--	3020	96	33	73	6.5	225	0	185	240	83
JUNE											
01-08	--	1730	110	38	98	7.3	222	0	182	300	110
09-12	--	4570	85	26	55	6.8	183	0	150	210	59
13-17	--	3120	110	36	--	7.5	203	0	167	310	74
18-19	--	3750	60	19	37	7.9	159	0	130	140	36
20-24	--	1620	120	38	71	7.8	200	0	164	320	79
25-27	--	2070	61	18	37	7.2	167	0	137	120	34
28-30	--	1000	100	32	63	8.3	235	0	193	250	56
JULY											
07...	0730	365	140	55	95	6.9	194	0	159	490	80
17...	0745	125	92	37	76	7.1	245	0	201	260	59
30...	0815	2700	40	8.5	17	4.4	134	0	114	48	14
AUG.											
03...	0900	1800	59	15	24	4.6	153	0	126	100	20
10...	0900	110	82	36	86	6.8	129	0	106	320	79
28...	0800	500	130	53	95	6.4	203	--	167	--	74
SEP.											
06...	0900	90	58	20	--	6.0	166	0	136	130	37
19...	0800	125	96	36	--	6.4	210	0	172	290	56
27...	0800	52	110	46	93	6.1	252	0	207	370	67

07229200 CANADIAN RIVER AT PURCELL, OKLA.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	CARBON DIOXIDE (CO2) (MG/L)
OCT.											
23-25	1.4	1040	1.41	233	560	370	--	--	1450	7.6	9.2
26-30	1.0	533	.72	593	300	160	--	1.4	814	7.7	5.6
31...	1.7	251	.34	2250	150	40	--	.7	376	8.0	2.1
NOV.											
01-02	1.2	410	.56	1320	240	100	--	1.2	638	7.6	6.7
03-04	1.3	254	.32	9730	150	47	--	--	391	7.8	3.2
05-07	.85	454	.62	4550	280	150	--	--	707	7.6	6.3
08-11	1.0	817	1.11	1690	440	240	--	2.0	1200	8.0	4.0
12-30	1.4	1220	1.66	1070	630	380	--	2.6	1710	8.0	4.9
DEC.											
01-10	--	1250	--	1060	--	--	--	--	1720	8.1	4.6
11-13	--	1010	1.37	1380	550	300	30	2.0	1430	8.0	4.9
14-17	--	1150	1.56	1950	630	370	31	2.2	1620	8.2	3.3
18-31	--	1290	1.75	1270	700	440	33	2.6	1790	8.2	3.3
JAN.											
01-02	--	1010	1.37	1870	500	260	41	3.1	1580	8.3	2.3
06-10	--	1150	1.56	742	620	360	33	2.4	1640	8.8	.8
11-30	--	1320	1.80	1260	700	440	33	2.6	1860	8.4	2.1
31...	--	974	--	2350	500	270	36	2.5	1440	8.3	2.2
FEB.											
01-06	1.8	770	1.05	2270	420	220	33	2.1	1140	8.2	2.5
07-21	1.5	1230	1.67	2060	630	350	35	2.8	1730	8.3	2.7
22-28	1.2	1040	1.41	4770	540	310	36	2.6	1500	8.2	2.9
MAR.											
01-09	--	1270	1.73	2980	630	380	35	2.8	1810	7.9	6.2
10-14	--	1170	1.59	7230	610	--	33	2.5	1610	8.4	--
15-26	--	1160	1.58	3200	--	--	--	--	1640	8.1	3.9
27-31	--	886	1.21	3830	450	250	34	2.3	1290	8.0	4.0
APR.											
01-02	--	1090	1.48	1210	590	340	30	2.2	1530	7.8	7.7
03-07	--	1280	--	1010	680	420	32	2.5	1760	7.9	6.3
08-09	--	751	1.02	2510	400	210	32	1.9	1130	7.7	7.4
10-20	--	1120	1.52	804	580	370	31	2.2	1550	7.8	6.6
14...	--	1060	--	558	580	330	31	2.2	1550	8.4	2.0
21-30	--	1240	1.69	686	600	400	35	2.7	1740	7.7	7.7
MAY											
01-02	--	1050	1.43	933	560	380	31	2.2	1500	7.9	4.6
03-04	--	601	.82	4220	330	180	28	1.4	907	7.9	3.6
05-13	--	1000	1.36	2250	540	360	28	1.9	1400	7.9	4.4
14-16	--	464	--	11200	270	150	24	1.1	705	7.8	3.8
17-22	--	1030	1.40	2770	510	320	35	2.5	--	7.9	4.6
23-25	--	311	.42	7140	180	65	27	1.0	514	7.9	2.9
26-31	--	691	.94	5630	380	190	29	1.6	1040	7.7	7.2
JUNE											
01-08	--	858	1.14	3910	430	250	33	2.1	1230	7.7	7.1
09-12	--	569	.77	7020	320	170	27	1.3	855	7.6	7.4
13-17	--	766	1.04	6450	420	260	--	--	1100	7.7	6.5
18-19	--	419	.57	4240	230	98	25	1.1	639	7.6	6.4
20-24	--	765	1.04	3350	460	290	25	1.4	1110	7.6	8.0
25-27	--	347	.54	2220	230	89	25	1.1	618	7.3	13
28-30	--	669	.91	1810	380	190	26	1.4	981	7.4	15
JULY											
07...	--	1050	1.43	1040	580	420	26	1.7	--	7.9	3.9
17...	--	--	--	--	380	180	30	1.7	1060	8.1	3.1
30...	--	209	.28	1520	130	21	21	.6	346	8.5	.7
AUG.											
03...	--	309	.42	1500	210	84	20	.7	520	8.1	1.9
10...	--	733	1.00	218	350	250	35	2.0	1100	7.8	3.3
28...	--	1010	--	1360	540	380	27	1.8	1420	--	--
SEP.											
06...	--	416	.57	101	230	91	--	--	641	7.3	13
19...	--	717	.98	242	390	220	--	--	1050	7.5	11
27...	--	877	1.19	123	460	260	30	1.9	1250	7.8	6.4

07229200 CANADIAN RIVER AT PURCELL, OKLA.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	DIS-CHARGE (CFS)	TOTAL IRON (FE) (UG/L)	DIS-SOLVED IRON (FE) (UG/L)	TOTAL MAN-GANESE (MN) (UG/L)	DIS-SOLVED MAN-GANESE (MN) (UG/L)	DIS-SOLVED NITRATE (N) (MG/L)	DIS-SOLVED NITRATE (NO3) (MG/L)	DIS-SOLVED NITRITE (N) (MG/L)	DIS-SOLVED NITRITE (NO2) (MG/L)	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS-SOLVED AMMONIA NITRO-GEN (N) (MG/L)
OCT.												
30...	1500	366	--	50	--	20	.34	1.5	.07	.26	.41	--
NOV.												
26...	1250	296	1600	10	70	0	.06	.27	.01	.03	.07	--
JAN.												
07...	1330	340	40	40	40	--	.27	1.2	.02	.07	.30	.30
FEB.												
13...	1300	371	5900	50	180	40	.51	2.3	.02	.07	.53	.67
MAR.												
14...	1330	2500	5500	50	160	40	.00	.00	.00	.00	.00	.33
APR.												
14...	1430	195	--	--	--	--	--	--	--	--	--	--
MAY												
08...	1330	521	5300	60	410	50	.10	.44	.06	.20	.16	.55
JUNE												
06...	1330	490	7100	40	470	0	.19	.84	.04	.13	.23	.02
JULY												
07...	1500	365	1000	10	140	10	.13	.58	.01	.03	.14	.01
AUG.												
29...	1400	220	13000	0	730	10	1.4	6.2	.40	1.3	1.8	.02
SEP.												
30...	1100	44	60	0	50	50	1.1	4.7	.63	2.1	1.7	.19

DATE	DIS-SOLVED AMMONIA (NH4) (MG/L)	DIS-SOLVED ORGANIC NITRO-GEN (N) (MG/L)	DIS-SOLVED KJEL. NITRO-GEN (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	DIS-SOLVED OXYGEN (MG/L)	PER-CENT SATUR-ATION	CHEM-ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	BIO-CHEM-ICAL OXYGEN DEMAND 5 DAY (MG/L)
OCT.											
30...	--	--	--	--	900	8.1	21.0	8.2	95	--	1.4
NOV.											
26...	--	--	--	--	2100	8.5	9.0	--	--	35	26
JAN.											
07...	.39	.51	.81	.60	1350	7.9	9.0	11.0	104	31	3.6
FEB.											
13...	.86	.63	1.3	.46	1400	7.3	10.0	11.6	110	22	2.2
MAR.											
14...	.43	.25	.58	.27	1700	--	7.0	12.8	112	45	3.0
APR.											
14...	--	--	--	.47	1550	8.4	18.0	9.9	111	--	6.4
MAY											
08...	.71	.25	.80	.01	1450	8.6	27.0	9.3	124	23	--
JUNE											
06...	.03	.60	.62	--	1010	8.9	33.0	8.7	126	--	7.2
JULY											
07...	.01	.46	.47	.01	1180	9.2	32.0	10.6	91	--	11
AUG.											
29...	.03	.69	.72	.89	900	8.4	30.0	7.8	111	82	--
SEP.											
30...	.24	1.1	1.3	1.6	1125	8.6	21.0	11.2	130	18	--

07229200 CANADIAN RIVER AT PURCELL, OKLA.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	PHENOLS (UG/L)	TOTAL CADMIUM (CD) (UG/L)	DISSOLVED CADMIUM (CD) (UG/L)	TOTAL CHROMIUM (CR) (UG/L)	DISSOLVED CHROMIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	DISSOLVED COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	DISSOLVED LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)	DISSOLVED ZINC (ZN) (UG/L)
OCT.											
30...	1	--	0	--	0	--	2	--	2	--	90
NOV.											
26...	0	<10	2	0	<10	<10	2	<100	0	20	30
JAN.											
07...	1	10	1	10	--	20	5	<100	3	6	--
FEB.											
13...	7	10	1	0	0	70	10	<100	5	40	30
MAR.											
14...	5	<10	0	40	0	20	8	<100	1	30	20
APR.											
14...	3	--	--	--	--	--	--	--	--	--	--
MAY											
08...	5	10	1	0	0	20	10	<100	4	170	0
JUNE											
06...	0	<10	1	20	0	10	10	<100	2	30	0
JULY											
07...	8	20	0	10	0	10	3	<100	4	10	10
AUG.											
29...	5	<10	0	10	10	20	4	<100	6	40	10
SEP.											
30...	2	10	1	10	10	20	8	100	7	10	20

DATE	TIME	DISCHARGE (CFS)	TOTAL ALDRIN (UG/L)	TOTAL CHLORDANE (UG/L)	TOTAL DDD (UG/L)	TOTAL DDE (UG/L)	TOTAL DDT (UG/L)	TOTAL DIAZINON (UG/L)	TOTAL DIELDRIN (UG/L)	TOTAL ENDRIN (UG/L)	TOTAL HEPTACHLOR (UG/L)	TOTAL HEPTACHLOR EPOXIDE (UG/L)
OCT.												
30...	1500	366	.00	.0	.00	.00	.00	.00	.00	.00	.00	.00
NOV.												
26...	1250	298	.00	.0	.00	.00	.00	.04	.00	.00	.00	.00
JAN.												
07...	1330	340	.00	.0	.00	.00	.00	.01	.00	.00	.00	.00
FEB.												
13...	1300	371	.00	.0	.00	.00	.00	.01	.00	.00	.00	.00
MAR.												
14...	1330	2500	.00	.0	.00	.00	.00	.01	.00	.00	.00	.00
APR.												
14...	1430	195	--	--	--	--	--	.01	--	--	--	--
MAY												
08...	1330	521	.00	.0	.00	.00	.00	.00	.00	.00	.00	.00
JUNE												
06...	1330	490	.00	.0	.00	.00	.00	.00	.00	.00	.00	.00
JULY												
07...	1500	365	.00	.0	.00	.00	.00	.03	.00	.00	.00	.00
AUG.												
29...	1400	220	.00	.0	.00	.00	.00	.02	.00	.00	.00	.00
SEP.												
30...	1100	44	.00	.0	.00	.00	.00	.02	.00	.00	.00	.01

DATE	TOTAL LINDANE (UG/L)	TOTAL MALATHION (UG/L)	TOTAL METHYL PARATHION (UG/L)	TOTAL METHYL TRITHION (UG/L)	TOTAL PARATHION (UG/L)	TOTAL PCB (UG/L)	TOTAL TOXAPHENE (UG/L)	TOTAL TRITHION (UG/L)	TOTAL 2,4-D (UG/L)	TOTAL 2,4,5-T (UG/L)	TOTAL SILVEX (UG/L)
OCT.											
30...	.00	.00	.00	.00	.00	.0	0	.00	.00	.00	.00
NOV.											
26...	.00	.00	.00	.00	.00	.0	0	.00	.02	.00	.00
JAN.											
07...	.00	.00	.00	.00	.00	.0	0	.00	.01	.00	.00
FEB.											
13...	.00	.00	.00	.00	.00	.0	0	.00	--	--	--
MAR.											
14...	.00	.00	.00	--	.00	.0	0	--	.01	.00	.00
APR.											
14...	--	.00	.01	--	.02	--	--	--	.00	.00	.00
MAY											
08...	.00	.00	.00	--	.00	.0	0	--	.41	.00	.00
JUNE											
06...	.00	.00	.00	--	.00	.0	0	--	.02	.00	.00
JULY											
07...	.01	.00	.00	--	.00	.0	0	--	.00	.00	.00
AUG.											
29...	.01	.00	.00	--	.00	.0	0	--	.00	.01	.00
SEP.											
30...	.02	.00	.00	.00	.00	.0	0	.00	.00	.00	.00

07229200 CANADIAN RIVER AT PURCELL, OKLA.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	568	1600	1580	1080	1690	1430	1330	817	1220	643	929
2	---	695	1780	1520	964	1760	1600	1660	1100	1280	815	889
3	---	326	1720	1140	1140	1810	1730	1040	1280	1300	520	959
4	---	448	1720	1050	1120	1830	1780	743	1320	1310	564	1060
5	---	581	1710	1250	---	1830	1820	1300	1340	1360	662	1050
6	---	675	1670	1410	1360	1850	1800	1190	1080	1350	867	641
7	---	859	1660	1560	1580	1860	1750	1270	1400	1410	989	924
8	---	1050	1670	1620	1640	1860	1080	1370	1310	864	1070	986
9	---	1210	1740	1690	1760	1920	1170	1410	788	906	1110	1030
10	---	1210	1720	1650	1760	1720	1610	1490	746	1140	1100	1050
11	---	1300	1420	1740	1660	1670	1200	1570	597	637	1120	1080
12	---	1400	1410	1860	1770	1620	1370	1400	819	821	1170	1050
13	---	1520	1460	1990	1780	1510	1490	1530	875	1120	1240	758
14	---	1640	1570	1940	1840	1690	1510	470	989	1010	1240	932
15	---	1700	1630	1770	1910	1820	1520	759	1120	898	1110	908
16	---	1750	1610	1800	1840	1820	1610	952	1240	947	920	1060
17	---	1760	1670	1750	1720	1850	1620	1350	1190	1060	949	1040
18	---	1770	1750	1770	1670	1670	1640	1550	544	1160	969	1030
19	---	1760	1800	1790	1660	1560	1690	1510	716	1220	1050	1050
20	---	1750	1820	1800	1660	1160	1690	1430	1160	1210	1140	1130
21	---	1740	1820	1840	1700	1400	1800	1520	1230	1250	1240	1180
22	---	1740	1830	1840	1430	1610	1810	1560	1220	1250	1320	1180
23	1560	1720	1820	1860	1290	1720	1820	291	970	1290	1270	1200
24	1520	1720	1810	1880	1380	1780	1830	488	918	841	1260	1190
25	1320	1750	1820	1850	1580	1840	1830	695	589	529	1300	1220
26	973	1770	1810	1830	1660	1850	1820	989	508	690	1320	1230
27	839	1770	1810	1810	1630	1470	1810	1140	712	580	1260	1250
28	704	1760	1780	1820	1530	1370	1710	1200	828	446	1400	1230
29	675	1780	1750	1810	---	1250	1730	1090	997	383	951	1190
30	805	1780	1750	1810	---	1040	1410	814	1120	346	808	1170
31	376	---	1650	1440	---	1320	---	794	---	531	857	---
MONTH	---	1380	1710	1690	1560	1650	1620	1160	984	979	1040	1050

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	14.5	0.0	2.0	4.0	9.0	8.5	14.5	19.5	26.5	26.0	24.5
2	---	17.0	0.0	4.0	4.5	8.0	6.0	18.0	20.0	25.5	27.0	24.5
3	---	18.0	1.0	2.0	5.0	5.0	3.5	16.0	21.0	25.5	25.0	24.0
4	---	12.0	2.5	1.0	7.0	3.5	7.0	18.0	20.0	24.0	25.0	25.0
5	---	10.5	6.5	2.5	3.0	4.0	8.5	19.0	23.0	25.0	25.0	24.0
6	---	10.0	9.0	2.5	0.0	9.0	12.0	20.5	25.0	26.0	25.5	22.0
7	---	11.0	6.0	4.0	0.0	8.0	11.5	18.5	23.0	26.5	26.0	20.0
8	---	10.5	6.5	6.0	1.0	4.5	11.0	19.0	23.5	25.0	25.0	20.0
9	---	11.5	0.0	5.5	0.0	6.5	12.0	22.0	21.5	27.5	25.5	22.0
10	---	12.0	3.0	6.0	0.0	4.0	13.0	20.0	22.0	25.5	25.0	24.0
11	---	9.5	3.0	0.0	4.5	4.0	13.0	20.0	18.0	24.0	25.0	22.0
12	---	8.5	1.5	0.0	3.0	5.0	10.0	21.0	19.0	24.0	25.0	16.0
13	---	9.0	3.0	0.0	4.5	1.5	12.0	19.0	21.0	22.0	24.5	16.0
14	---	6.5	6.0	0.0	7.0	1.0	10.5	17.0	22.0	22.5	25.0	15.5
15	---	5.5	2.5	0.0	4.0	5.0	13.5	16.0	23.5	23.0	26.0	15.5
16	---	7.0	1.5	1.5	1.0	5.5	14.5	24.0	24.0	23.0	25.0	18.0
17	---	9.0	1.0	1.5	0.0	6.0	16.5	26.0	22.0	24.0	26.0	20.0
18	---	9.0	3.0	3.5	2.0	10.0	21.0	20.0	23.0	24.0	25.5	19.5
19	---	13.0	3.0	4.5	1.0	10.0	11.0	21.0	23.5	24.0	23.5	20.0
20	---	9.0	2.5	5.0	2.5	12.0	14.0	20.0	24.0	25.0	25.5	25.0
21	---	8.5	3.0	0.5	6.5	13.0	13.0	20.5	24.0	26.0	25.0	18.0
22	---	10.0	4.5	0.5	4.0	12.0	16.0	23.5	23.0	26.0	25.0	13.0
23	20.0	15.5	9.0	2.0	1.0	15.0	18.0	19.0	24.5	26.0	25.0	14.0
24	17.0	6.0	6.0	6.5	0.0	10.0	19.0	21.0	22.0	23.5	24.5	14.0
25	16.0	5.0	0.0	5.5	3.0	8.0	20.0	21.0	23.5	22.5	23.0	13.5
26	16.0	5.5	2.0	6.0	5.0	6.0	21.0	23.0	23.5	23.0	23.5	13.0
27	15.5	5.5	2.0	6.0	4.5	12.0	20.5	22.0	24.5	24.0	23.0	14.5
28	16.5	5.5	3.5	6.0	7.0	7.0	15.0	21.5	25.0	24.5	24.0	16.0
29	17.0	3.0	7.5	5.5	---	3.0	17.5	20.0	24.5	25.0	23.5	17.0
30	20.0	0.0	4.5	7.0	---	2.0	17.0	18.5	26.0	23.5	24.0	18.0
31	16.0	---	4.5	6.0	---	6.0	---	16.0	---	25.5	25.0	---
MONTH	---	9.5	3.5	3.5	3.0	7.0	13.5	20.0	22.5	24.5	25.0	19.0

07229900 LAKE THUNDERBIRD NEAR NORMAN, OKLA.

LOCATION.--Lat 35°13'15", long 97°13'05", in NW 1/4 SE 1/4 sec.29, T.9 N., R.1 E., Cleveland County, upstream face of dam at outlet gate, 0.2 mi (0.3 km) upstream from gaging station, 13.0 mi (20.9 km) east of Norman, and at mile 96.4 (155.1 km).

DRAINAGE AREA.--256 mi^2 (633 km^2).

PERIOD OF RECORD.--Chemical analyses: October 1966 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	RESERVOIR STORAGE (AC-FT)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED NITRITE PLUS NITRATE (N) (MG/L)
JAN.												
08...	1505	121400	33	22	17	5.7	202	0	166	12	28	--
MAR.												
06...	1450	122100	35	22	17	5.5	207	0	170	9.5	27	--
APR.												
07...	1100	124000	--	--	--	--	--	--	--	--	--	--
29...	1100	120500	40	22	18	5.0	219	0	180	10	28	--
JUNE												
24...	1240	120100	32	19	16	4.6	204	0	167	8.3	23	.09
JULY												
21...	1415	123100	30	20	17	4.8	199	0	163	7.6	25	.01
AUG.												
22...	1030	118500	32	19	16	4.7	205	0	168	8.4	23	.10
SEP.												
18...	0950	115500	35	20	17	4.8	204	2	171	9.3	27	.01

DATE	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (TONS PER AC-FT)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	CARBON DIOXIDE (CO2) (MG/L)
JAN.											
08...	233	.32	170	7	17	.6	402	--	8.5	2	--
MAR.											
06...	--	--	180	8	17	.6	423	8.1	--	6	2.6
APR.											
07...	--	--	--	--	--	--	420	--	--	--	--
29...	--	--	190	11	17	.6	433	7.6	19.0	33	8.8
JUNE											
24...	218	.30	160	0	18	.6	393	8.4	27.0	10	1.3
JULY											
21...	213	.29	160	0	18	.6	382	8.3	--	3	1.6
AUG.											
22...	218	.30	160	0	18	.6	391	8.4	28.0	6	1.3
SEP.											
18...	225	.31	170	0	17	.6	400	8.4	23.0	7	1.3

07231000 LITTLE RIVER NEAR SASAKWA, OKLA.

LOCATION.--Lat 34°59'02", long 96°33'01", in NE 1/4 sec.22, T.6 N., R.7 E., Seminole County, at gaging station at bridge on county road, 2.8 mi (4.5 km) northwest of Sasakwa, 8.7 mi (14.0 km) downstream from Salt Creek, and at mile 84.1 (38.8 km).

DRAINAGE AREA.--865 mi^2 (2,240 km^2).

PERIOD OF RECORD.--Chemical analyses: September 1951 to current year.
Water temperatures: October 1955 to current year.

EXTREMES, Current year.--Specific conductance: Maximum daily, 3,220 micromhos/cm Oct. 12; minimum daily, 278 micromhos/cm Nov. 2.
Water temperatures: Maximum, 36.0°C July 22; minimum, 1.0°C Dec. 22.

Period of record.--Specific conductance (1955-64, 66-75): Maximum daily, 138,000 micromhos/cm Oct. 31, 1956; minimum daily, 134 micromhos/cm Sept. 22, 1972.
Water temperatures (1955-64, 1966-74): Maximum, 38.0°C July 20, 27, 28, 30, 1961; minimum, freezing point on several days during winter months.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
OCT.											
05...	1629	15	80	34	240	--	240	0	197	22	460
15...	1605	43	89	39	400	--	162	0	133	18	770
25...	1715	23	73	30	280	--	156	0	128	20	530
31...	1645	4830	22	7.4	36	--	93	0	76	7.0	52
NOV.											
05...	1654	1900	26	9.9	34	--	107	0	88	9.4	59
15...	1620	174	70	26	140	--	--	--	--	17	260
24...	1642	82	96	45	--	4.7	292	0	240	31	530
DEC.											
05...	1615	168	59	31	120	4.4	258	0	212	18	230
15...	1452	105	77	38	180	4.2	280	0	230	26	360
25...	1210	60	100	51	300	4.7	309	0	253	31	600
JAN.											
06...	1612	180	72	34	--	3.8	237	0	194	27	330
15...	1415	198	68	36	--	3.8	267	0	219	24	240
25...	1721	85	120	51	330	5.8	300	0	246	28	--
FEB.											
05...	1330	874	53	22	93	4.9	176	0	144	20	190
15...	1634	373	63	34	120	6.2	253	0	208	19	240
25...	1710	1210	52	22	95	3.7	160	0	131	19	190
MAR.											
05...	1840	482	63	33	110	4.1	251	0	206	18	210
15...	1530	305	84	41	170	3.7	272	0	223	26	360
26...	1652	468	33	10	54	2.4	--	--	--	9.2	100
APR.											
08...	1925	1860	42	19	59	3.1	--	--	--	13	110
15...	1700	479	63	32	110	4.1	256	0	210	20	200
24...	1700	121	99	45	240	4.4	312	0	256	29	490
MAY											
05...	1915	383	69	34	--	3.7	234	0	192	22	240
14...	1650	4700	31	11	43	2.8	--	--	--	7.5	80
25...	1735	3310	27	14	--	3.3	115	0	94	8.0	53
JUNE											
05...	1820	496	55	28	91	4.2	238	0	195	19	180
17...	1525	4370	28	8.5	26	2.5	101	0	83	9.5	--
25...	0700	936	43	--	63	4.2	203	0	167	16	120
JULY											
05...	1738	96	83	50	240	5.0	--	--	--	--	--
15...	1810	38	95	50	280	5.0	295	0	242	23	580
28...	1855	1120	31	12	55	3.1	115	0	94	7.8	98
AUG.											
05...	1900	259	41	22	49	4.3	211	0	173	11	82
15...	1635	12	62	35	150	4.8	256	0	210	5.1	290
25...	1845	19	78	45	250	5.2	282	0	231	5.6	490
SEP.											
01...	1955	32	62	38	170	4.6	259	13	234	28	300
25...	1315	22	92	49	300	4.7	282	0	231	28	610

07231000 LITTLE RIVER NEAR SASAKWA, OKLA.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	CARBON DIOXIDE (CO2) (MG/L)
OCT.											
05...	.24	990	1.35	40.1	340	140	--	5.7	1790	8.1	3.1
15...	.47	1530	2.08	178	380	250	--	8.9	2690	7.9	3.3
25...	.55	1080	1.47	67.1	310	180	--	7.0	1940	8.2	1.6
31...	.55	190	.26	2480	85	9	--	1.7	309	7.4	5.9
NOV.											
05...	.62	213	.29	1090	110	18	--	1.4	374	7.5	5.4
15...	.30	645	.88	303	280	--	--	3.6	1140	7.9	--
24...	--	1080	--	239	430	190	--	--	1940	8.1	3.7
DEC.											
05...	--	595	.81	270	280	63	48	3.2	1090	8.2	2.6
15...	--	848	1.15	240	350	120	53	4.2	1550	8.4	1.8
25...	--	1250	1.70	202	460	210	58	6.1	2210	7.9	6.2
JAN.											
06...	--	764	--	371	320	130	--	--	1420	8.3	1.9
15...	--	658	--	352	320	99	--	--	1180	8.0	4.3
25...	--	--	--	--	510	260	58	6.4	2410	7.8	7.6
FEB.											
05...	--	513	.70	1210	220	79	47	2.7	917	7.6	7.1
15...	--	639	.87	644	300	90	46	3.0	1160	7.7	8.1
25...	--	501	.68	1640	220	89	48	2.8	890	7.7	5.1
MAR.											
05...	--	600	.82	781	290	87	45	2.8	1080	7.9	5.1
15...	--	880	1.20	725	380	160	49	3.8	1570	7.8	6.9
26...	--	--	--	--	120	--	48	2.1	513	8.5	--
APR.											
08...	--	372	.51	1870	180	--	41	1.9	635	7.4	--
15...	--	603	.82	780	290	79	45	2.8	1070	8.2	2.6
24...	--	1150	1.56	376	430	180	54	5.0	2020	8.1	4.0
MAY											
05...	--	644	--	666	310	120	--	--	1160	8.2	2.4
14...	--	256	.35	3250	120	--	43	1.7	444	7.9	--
25...	--	209	--	1870	130	31	--	--	369	7.8	2.9
JUNE											
05...	--	545	.74	730	250	57	43	2.5	937	8.3	1.9
17...	--	196	.27	2310	110	22	36	1.2	328	8.3	.8
25...	--	406	.55	1030	--	--	--	--	718	7.8	5.1
JULY											
05...	--	--	--	--	410	--	55	5.1	--	--	--
15...	--	1240	1.69	127	440	200	58	5.8	2200	7.9	5.9
28...	--	289	.39	874	130	33	48	2.1	515	7.3	9.2
AUG.											
05...	--	335	.46	234	190	20	35	1.5	602	7.9	4.3
15...	--	729	.99	25.0	300	89	52	3.8	1360	8.4	1.6
25...	--	1070	1.46	54.9	380	150	58	5.6	1940	8.2	2.8
SEP.											
01...	--	756	1.03	65.3	310	77	54	4.2	--	8.4	1.8
25...	--	1290	1.75	7.66	430	200	60	6.3	2420	8.1	3.6

07231000 LITTLE RIVER NEAR SASAKWA, OKLA.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C) , WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1260	342	1250	1030	1780	1410	906	1280	960	1330	647	1430
2	1260	278	1150	1030	1740	1130	1090	1560	952	1520	589	---
3	1740	297	1100	1310	1380	1140	1120	813	937	1690	564	---
4	1730	333	1080	1240	1140	1170	1120	1050	934	1820	598	---
5	1790	374	1090	1240	917	1080	1100	1160	937	1860	602	---
6	1780	368	1080	1420	1040	1160	1100	1410	934	1970	607	---
7	1880	459	1150	1510	1140	1460	1160	1490	1460	1910	728	---
8	3170	631	1190	1840	1200	1460	635	1310	868	1710	775	---
9	3140	719	1260	1840	1200	1610	808	1440	856	1590	877	---
10	2690	834	1390	1740	1120	2710	957	997	759	1690	975	---
11	2690	850	2120	1440	1270	1820	1100	1200	557	2070	1090	---
12	3220	918	2120	1140	1090	989	1140	1370	583	1860	1180	---
13	2910	920	1620	1010	1080	1140	1100	1460	---	1970	1260	---
14	2740	1110	1460	1190	1160	1550	1230	444	520	1960	1270	---
15	2690	1140	1550	1180	1160	1570	1070	694	561	2200	1360	---
16	2390	1250	1690	1100	1380	1450	1110	505	576	2380	1530	---
17	2370	1400	1850	1160	---	1550	1380	629	528	2470	1530	---
18	2200	1480	1850	1170	1790	635	---	973	420	2620	1190	---
19	2200	1560	2020	1280	1670	791	1710	783	430	2660	2330	---
20	2440	1680	1970	1400	1670	786	1840	1020	484	2770	2040	---
21	2850	1680	2020	1910	549	781	1970	1040	741	2820	2040	---
22	3020	1670	2180	1920	526	1070	2030	1240	738	2820	2070	---
23	2690	1790	2200	2000	678	1080	2170	366	359	2780	1780	---
24	2840	1940	2300	2080	611	1080	2020	495	767	2730	1920	---
25	1940	1870	2210	2410	890	1080	1510	369	718	1850	1940	2420
26	1940	1880	2210	2500	892	513	1510	364	873	1430	1870	2320
27	1170	2060	2430	2170	1260	539	1930	526	832	662	1990	2420
28	1170	2060	2430	2300	1260	562	776	746	927	515	2260	2660
29	690	1420	2270	2310	---	497	1390	866	952	460	2410	2680
30	405	1250	2280	2410	---	534	1400	710	1110	548	2330	2690
31	309	---	1030	1860	---	718	---	815	---	623	1520	---
MONTH	2110	1150	1730	1620	1170	1130	1520	940	747	1850	1420	---

TEMPERATURE (DEG. C) OF WATER , WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23.0	18.0	5.0	8.0	8.0	13.0	15.0	22.5	22.0	30.5	29.5	32.0
2	23.5	19.0	4.5	7.5	7.0	10.5	12.0	19.5	24.0	30.5	30.0	---
3	23.5	20.0	5.5	6.0	7.0	9.0	11.5	21.5	26.0	30.0	30.0	---
4	23.5	17.0	6.0	5.5	9.0	8.0	12.5	23.0	27.0	32.0	30.0	---
5	23.5	14.5	7.5	6.0	7.0	9.5	13.0	23.0	28.0	32.5	30.0	---
6	21.0	14.0	9.0	7.5	4.5	10.5	14.0	25.0	29.0	33.0	30.5	---
7	18.0	15.0	10.0	8.0	4.0	11.5	13.0	25.5	27.0	31.0	31.5	---
8	21.0	13.5	8.0	9.5	4.0	12.0	13.5	26.5	26.0	32.0	32.0	---
9	22.0	13.0	6.0	10.0	3.5	8.0	17.0	28.0	23.0	32.5	32.0	---
10	23.0	13.0	5.0	8.5	5.0	7.5	16.5	20.0	25.0	31.0	31.5	---
11	23.0	13.0	6.0	6.5	7.0	7.0	15.5	25.0	24.0	30.0	32.0	---
12	23.0	13.0	6.5	3.0	7.5	7.0	16.0	24.5	25.0	30.5	31.5	---
13	23.0	13.0	6.5	3.0	8.0	6.0	14.5	25.0	---	30.0	30.5	---
14	19.0	11.0	8.0	3.5	8.0	6.5	16.5	19.0	26.0	29.5	28.5	---
15	18.0	9.5	8.0	4.0	8.0	7.0	18.5	22.0	27.0	30.5	32.0	---
16	18.5	10.0	6.0	6.5	6.0	9.0	20.0	23.0	28.5	31.0	31.0	---
17	20.5	10.5	6.0	7.0	---	11.0	21.5	24.0	25.0	30.5	28.0	---
18	20.0	11.5	7.5	7.5	7.0	12.0	---	25.0	26.0	31.0	32.0	---
19	20.0	15.0	6.5	8.0	7.5	14.5	21.0	26.0	27.0	33.0	32.0	---
20	20.5	14.5	---	7.0	8.0	17.0	21.0	23.0	28.0	32.5	32.5	---
21	19.5	15.0	6.5	8.5	8.5	15.0	22.5	25.5	29.0	35.0	30.0	---
22	19.0	14.5	1.0	6.0	6.5	17.5	20.0	24.0	29.5	36.0	34.0	---
23	20.0	15.5	11.0	7.5	5.0	18.5	22.0	22.0	24.5	34.0	34.0	---
24	19.0	13.0	9.0	8.5	5.5	17.0	25.5	24.0	28.0	28.5	34.0	---
25	18.0	11.5	8.0	9.5	7.0	15.5	23.0	24.5	28.5	28.0	32.0	17.5
26	17.5	11.0	6.0	9.5	8.0	15.5	24.5	25.0	26.0	26.0	27.5	15.5
27	19.0	10.5	6.5	10.5	9.5	15.0	25.0	26.0	29.5	28.0	29.5	15.5
28	19.5	10.0	7.0	10.5	11.0	11.0	20.0	25.0	26.0	27.5	30.0	17.5
29	19.5	7.0	8.5	10.5	---	9.0	23.0	23.5	29.5	28.5	30.0	17.5
30	20.0	5.0	8.5	10.0	---	8.5	22.0	21.0	31.0	29.5	32.0	23.0
31	18.5	---	9.0	8.0	---	11.5	---	21.5	---	29.5	32.0	---
MONTH	20.5	13.0	7.0	7.5	7.0	11.5	18.5	23.5	26.5	31.0	31.0	---

07231500 CANADIAN RIVER AT CALVIN, OKLA.

LOCATION.--Lat 34°58'32", long 96°14'24", in NE 1/4 SW 1/4 sec.22, T.6 N., R.10 E., Hughes County, at gaging station at bridge on U.S. Highway 75, 0.5 mi (0.8 km) northeast of Calvin, 2.5 mi (4.0 km) upstream from Shawnee Creek, 8.5 mi (13.7 km) downstream from Little River, and at mile 93.9 (151.1 km).

DRAINAGE AREA.--27,952 mi^2 (72,396 km^2), of which 4,801 mi^2 (12,435 km^2) is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: July 1965 to current year.
Water temperatures: July 1965 to current year.

EXTREMES, Current year.--Specific conductance: Maximum daily, 1,670 micromhos/cm Jan. 29-30; minimum daily, 277 micromhos/cm Oct. 31.
Water temperatures: Maximum, 34.0°C July 7; minimum, -1.0°C Feb. 9.

Period of record.--Specific conductance: Maximum daily, 11,400 micromhos/cm Nov. 17, 1966; minimum daily, 205 micromhos/cm Nov. 1, 1972.
Water temperatures: Maximum, 34.0°C July 7, 1975; minimum, freezing point on many days during the winter months.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)
OCT.											
05...	0700	182	--	71	23	93	--	188	0	154	140
15...	0700	229	--	85	30	130	--	253	0	208	120
25...	0700	172	--	92	31	140	--	208	0	171	--
NOV.											
06...	1500	13200	7.1	71	13	34	4.2	128	0	105	98
15...	0700	1050	--	97	27	86	--	267	0	219	150
25...	0700	436	--	100	37	130	--	265	0	217	200
DEC.											
04...	0700	317	--	110	42	120	--	325	0	267	170
14...	0700	637	--	110	38	130	--	303	0	249	170
18...	1500	705	--	130	44	120	4.6	327	0	268	240
25...	0700	340	--	140	50	150	--	334	0	274	280
JAN.											
05...	0700	2130	--	--	30	86	--	235	0	193	160
15...	0700	748	--	110	39	120	--	320	0	262	180
21...	1130	619	10	120	42	140	4.8	331	0	271	200
25...	0700	555	--	110	49	150	--	295	0	242	210
FEB.											
05...	0700	5990	--	59	19	60	--	185	0	152	87
15...	0700	1370	--	110	41	--	--	316	0	259	190
25...	0700	5650	--	--	19	66	--	168	0	138	87
MAR.											
05...	0700	1110	--	100	37	120	--	290	0	238	170
13...	0700	5360	--	51	16	49	--	171	0	140	57
25...	0700	1490	--	94	33	110	--	273	0	224	130
APR.											
05...	0700	1500	--	91	35	110	--	281	0	230	120
15...	0700	1900	--	90	36	100	--	274	0	225	120
25...	0700	13400	--	--	8.4	23	--	134	0	110	26
MAY											
05...	0700	4060	--	64	24	61	--	177	0	145	110
15...	0700	13200	--	45	13	31	--	148	0	121	41
20...	1000	1490	9.0	90	31	87	6.6	216	0	177	180
26...	0700	4780	--	41	14	34	--	151	0	124	41
JUNE											
05...	0700	1810	--	91	33	91	--	239	0	196	150
15...	0700	3380	--	52	19	55	--	159	0	130	84
23...	0700	3250	--	70	28	--	--	210	0	172	120
JULY											
04...	0700	522	--	69	31	100	5.7	224	0	184	110
15...	0700	546	--	59	26	77	5.2	217	0	178	90
26...	0700	13900	--	56	16	29	4.8	176	0	144	90
SEP.											
23...	0900	156	5.8	64	34	120	4.6	248	0	203	110

07231500 CANADIAN RIVER AT CALVIN, OKLA.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	TOTAL NITRO-GEN (N) (MG/L)	TOTAL NITRO-GEN (NO3) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)
OCT.											
05...	190	--	--	.54	--	--	--	.28	720	--	.98
15...	190	--	--	.40	--	--	--	.33	720	--	.98
25...	210	--	--	.61	--	--	--	.28	789	--	1.07
NOV.											
06...	39	.4	.02	--	4.7	4.7	21	1.2	336	330	.46
15...	120	--	--	.67	--	--	--	.25	654	--	.89
25...	180	--	--	.61	--	--	--	.23	849	--	1.15
DEC.											
04...	190	--	--	--	--	--	--	--	--	--	--
14...	190	--	--	--	--	--	--	--	840	--	1.14
18...	180	.4	.44	.44	.92	1.4	6.0	.22	942	893	1.28
25...	220	--	--	--	--	--	--	--	1060	--	1.44
JAN.											
05...	130	--	--	--	--	--	--	--	644	--	.88
15...	190	--	--	--	--	--	--	--	839	--	1.14
21...	200	.4	.70	.57	.97	1.7	7.4	.15	874	883	1.19
25...	240	--	--	--	--	--	--	--	978	--	1.33
FEB.											
05...	87	--	--	--	--	--	--	--	438	--	.60
15...	180	--	--	--	--	--	--	--	830	--	1.13
25...	94	--	--	--	--	--	--	--	450	--	.61
MAR.											
05...	180	--	--	--	--	--	--	--	788	--	1.07
13...	76	--	--	--	--	--	--	--	358	--	.49
25...	170	--	--	--	--	--	--	--	--	--	--
APR.											
05...	170	--	--	--	--	--	--	--	704	--	.96
15...	170	--	--	--	--	--	--	--	692	--	.94
25...	37	--	--	--	--	--	--	--	226	--	.31
MAY											
05...	--	--	--	--	--	--	--	--	471	--	.64
15...	45	--	--	--	--	--	--	--	269	--	.37
20...	120	.4	.27	.11	.88	1.2	5.1	.14	669	633	.91
26...	52	--	--	--	--	--	--	--	282	--	.38
JUNE											
05...	140	--	--	--	--	--	--	--	667	--	.91
15...	74	--	--	--	--	--	--	--	380	--	.52
23...	120	--	--	--	--	--	--	--	551	--	.75
JULY											
04...	170	--	--	--	--	--	--	--	620	--	.84
15...	110	--	--	--	--	--	--	--	519	--	.71
26...	30	--	--	--	--	--	--	--	--	--	--
SEP.											
23...	180	.3	.00	.00	.96	.96	4.3	.27	671	641	.91

07231500 CANADIAN RIVER AT CALVIN, OKLA.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	CARBON DIOXIDE (CO2) (MG/L)	TUR-BID-ITY (JTU)
OCT.										
05...	354	270	120	--	2.5	1000	8.0	17.5	3.0	--
15...	445	340	130	--	3.1	1200	--	--	--	--
25...	366	360	190	--	3.2	1290	7.6	18.5	8.4	--
NOV.										
06...	12000	230	130	24	1.0	540	7.6	18.0	5.1	900
15...	1850	350	130	--	2.0	1040	8.2	7.0	2.7	--
25...	999	400	180	--	2.8	1330	8.3	8.5	2.1	--
DEC.										
04...	--	450	180	--	2.5	1340	8.3	--	2.6	--
14...	1450	430	180	--	2.7	1340	8.2	--	3.1	--
18...	1850	510	240	34	2.3	1400	7.8	8.0	8.3	50
25...	973	560	280	--	2.8	1650	8.1	--	4.2	--
JAN.										
05...	3700	--	--	--	--	1020	7.8	--	6.0	--
15...	1690	440	170	--	2.5	1340	7.9	--	6.4	--
21...	1460	470	200	39	2.8	1500	8.6	--	1.3	60
25...	1470	480	230	--	3.0	1580	8.1	--	3.8	--
FEB.										
05...	7080	230	74	--	1.7	707	8.2	--	1.9	--
15...	3070	440	180	--	--	1300	8.3	--	2.5	--
25...	6870	--	--	--	--	707	7.8	--	4.3	--
MAR.										
05...	2360	400	160	--	2.6	1270	7.9	--	5.8	--
13...	5180	190	53	--	1.5	579	7.7	--	5.5	--
25...	--	370	150	--	2.5	1160	7.7	--	8.7	--
APR.										
05...	2850	370	140	--	2.5	1160	7.9	--	5.7	--
15...	3550	370	150	--	2.3	1150	8.0	--	4.4	--
25...	8180	--	--	--	--	345	7.5	--	6.8	--
MAY										
05...	5160	260	110	--	1.7	762	7.5	--	9.0	--
15...	9590	170	45	--	1.0	424	7.5	--	7.5	--
20...	2690	350	180	34	2.0	--	7.9	23.0	4.4	70
26...	3640	160	36	--	1.2	467	7.6	--	6.1	--
JUNE										
05...	3260	360	170	--	2.1	1060	8.3	--	1.9	--
15...	3470	210	78	--	1.7	637	8.3	--	1.3	--
23...	4840	290	120	--	--	900	7.9	--	4.2	--
JULY										
04...	874	300	120	41	2.5	1060	7.5	--	11	--
15...	765	250	76	39	2.1	893	7.6	--	8.7	--
26...	--	210	61	23	.9	500	7.4	--	11	--
SEP.										
23...	283	300	96	46	3.0	1150	8.2	--	2.5	100

07231500 CANADIAN RIVER AT CALVIN, OKLA.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED NITRATE (N) (MG/L)	DISSOLVED NITRATE (NO3) (MG/L)	DISSOLVED NITRITE (N) (MG/L)	DISSOLVED NITRITE (NO2) (MG/L)	DISSOLVED NITRITE PLUS NITRATE (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)
OCT.										
03...	1000	263	--	--	--	--	--	--	1000	8.6
08...	1000	166	--	--	--	--	--	--	--	--
15...	1400	229	--	--	--	--	.02	.29	1300	7.8
NOV.										
06...	1500	13200	--	--	--	--	--	1.2	540	7.6
19...	1100	825	--	--	--	--	--	--	1450	--
DEC.										
04...	1500	317	.22	.97	.01	.03	.23	.19	1370	--
18...	1500	705	--	--	--	--	.44	.22	1400	7.8
JAN.										
04...	0700	3160	.35	1.6	.01	.03	.36	.12	1100	9.0
08...	1400	883	.35	1.6	.03	.10	.38	.17	1600	7.6
21...	1130	619	.55	2.4	.02	.07	.57	.15	1500	8.6
FEB.										
04...	0700	3640	.35	1.6	.01	.03	.36	.12	1100	9.0
20...	1200	1050	.45	2.0	.01	.03	.46	.18	1520	8.4
MAR.										
04...	1100	1260	.30	1.3	.01	.03	.31	.24	1400	8.2
18...	1100	17500	--	--	--	--	--	--	1000	6.5
APR.										
01...	1400	2950	3.4	15	.01	.03	3.4	--	800	7.4
15...	1200	1920	.27	1.2	.02	.07	.29	1.1	1100	8.4
MAY										
06...	1145	2590	.33	1.5	.02	.07	.35	.31	850	8.3
20...	1000	1490	.10	.44	.01	.03	.11	.14	--	7.9
JUNE										
04...	0730	2070	.23	1.0	.03	.10	.26	.34	1000	8.1
18...	1430	11200	--	--	--	--	--	--	480	--
JULY										
01...	1430	1140	.19	.84	.31	1.0	.50	.06	885	7.1
SEP.										
03...	0900	208	--	--	--	--	--	--	1150	8.2

DATE	TEMPERATURE (DEG C)	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	CHEMICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (COL. PER 100 ML)	STREPTOCOCCI (COLONIES PER 100 ML)	PHENOLS (UG/L)	SUSPENDED SEDIMENT (MG/L)	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM
OCT.										
03...	16.5	9.9	105	--	6.6	69	81	--	222	65
08...	--	9.4	104	--	--	82	57	--	--	--
15...	21.0	8.4	99	--	--	M0	M0	--	--	--
NOV.										
06...	18.0	9.8	105	--	3.7	--	--	--	--	--
19...	10.0	10.6	98	--	3.6	190	280	--	--	--
DEC.										
04...	8.5	11.2	98	18	1.7	--	--	--	--	--
18...	8.0	11.4	100	--	1.8	240	290	--	--	--
JAN.										
04...	--	--	--	40	--	--	--	--	--	--
08...	8.0	10.6	95	17	.7	--	--	--	--	--
21...	--	--	--	9	--	--	--	--	--	--
FEB.										
04...	4.0	13.8	110	40	2.6	--	--	--	--	--
20...	6.0	16.0	136	27	8.4	--	--	0	--	--
MAR.										
04...	5.0	11.9	97	29	1.2	--	--	--	--	--
18...	10.0	9.5	90	--	2.6	--	--	--	--	--
APR.										
01...	14.0	8.0	82	41	--	--	420	--	--	--
15...	19.0	7.3	83	24	--	--	--	--	--	--
MAY										
06...	23.0	7.7	95	41	2.8	--	--	--	--	--
20...	23.0	8.7	106	30	--	--	--	--	--	--
JUNE										
04...	22.5	8.3	100	35	2.0	370	480	--	--	--
18...	27.0	7.3	96	--	4.4	--	--	--	3750	72
JULY										
01...	28.5	7.9	104	21	8.8	60	120	--	--	--
SEP.										
03...	15.0	9.4	98	--	--	810	1280	--	--	--

07231500 CANADIAN RIVER AT CALVIN, OKLA.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TOTAL IRON (FE) (UG/L)	DISSOLVED IRON (FE) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	SUSPENDED MANGANESE (MN) (UG/L)	DISSOLVED MANGANESE (MN) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	SUSPENDED ARSENIC (AS) (UG/L)	DISSOLVED ARSENIC (AS) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	SUSPENDED CADMIUM (CD) (UG/L)
OCT.												
03...	1000	263	--	150	--	--	100	6	2	4	--	--
15...	1400	229	--	10	100	100	0	4	3	1	--	--
NOV.												
06...	1500	13200	45000	20	1900	1900	0	30	29	1	20	20
FEB.												
20...	1200	1050	--	20	--	--	40	--	--	--	--	--
MAY												
20...	1000	1490	5400	70	260	250	10	4	2	2	<10	<9

DATE	DISSOLVED CADMIUM (CD) (UG/L)	TOTAL CHROMIUM (CR) (UG/L)	SUSPENDED CHROMIUM (CR) (UG/L)	DISSOLVED CHROMIUM (CR) (UG/L)	TOTAL COBALT (CO) (UG/L)	SUSPENDED COBALT (CO) (UG/L)	DISSOLVED COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)	SUSPENDED COPPER (CU) (UG/L)	DISSOLVED COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)
OCT.											
03...	--	--	--	0	--	--	--	--	--	--	--
15...	1	--	--	0	--	--	0	--	--	3	--
NOV.											
06...	0	40	40	0	<50	<49	1	60	52	8	<100
FEB.											
20...	0	--	--	0	--	--	--	--	--	30	--
MAY											
20...	1	10	0	10	<50	<50	0	10	6	4	100

DATE	SUSPENDED LEAD (PB) (UG/L)	DISSOLVED LEAD (PB) (UG/L)	TOTAL MERCURY (HG) (UG/L)	SUSPENDED MERCURY (HG) (UG/L)	DISSOLVED MERCURY (HG) (UG/L)	TOTAL SELENIUM (SE) (UG/L)	SUSPENDED SELENIUM (SE) (UG/L)	DISSOLVED SELENIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	SUSPENDED ZINC (ZN) (UG/L)	DISSOLVED ZINC (ZN) (UG/L)
OCT.											
03...	--	--	--	--	.0	0	0	0	--	--	40
15...	--	0	--	--	.0	2	2	0	--	--	0
NOV.											
06...	<99	1	.1	.1	.0	2	2	0	320	270	50
FEB.											
20...	--	3	--	--	.2	--	--	--	--	--	20
MAY											
20...	98	2	--	--	.1	1	1	0	110	70	40

07231500 CANADIAN RIVER AT CALVIN, OKLA.--Continued
QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA,
WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

PHYTOPLANKTON

Date	Time	Organism	Count (cells/ml)	Percent of total	Sampling method
Oct. 3	1000	CHLOROPHYTA			Sediment sampler
		Chlorophyceae			
		Chlorococcales			
		Botryococcaceae			
		Botryococcus	26,000	9	
		Occystaceae			
		Kirchneriella		0	
		Oocystis	3,200	1	
		Scenedesmaceae			
		Scenedesmus	3,200	1	
		Tetrasporales			
		Palmellaceae			
		Sphaerocystis	32,000	12	
		CHRYSOPHYTA			
		Bacillariophyceae			
		Centrales			
		Coscinodiscaceae			
		Cyclotella	80,000	29	
		Pennales			
		Fragilariaceae			
		Synedra	2,400	1	
		Naviculaceae			
		Navicula		0	
		CYANOPHYTA			
		Myxophyceae			
		Chroococcales			
		Chroococcaceae			
		Anacystis	7,300	3	
		Oscillatoriales			
		Oscillatoriaceae			
		Lyngbya	120,000	44	
		TOTAL	270,000		
Oct. 16	1000	CHLOROPHYTA			Sediment sampler
		Chlorophyceae			
		Chlorococcales			
		Occystaceae			
		Ankistrodesmus		0	
		Oocystis	1,200	2	
		Scenedesmaceae			
		Scenedesmus	9,500	16	
		CHRYSOPHYTA			
		Bacillariophyceae			
		Centrales			
		Coscinodiscaceae			
		Cyclotella	33,000	54	
		Pennales			
		Achnanthaceae			
		Cocconeis		0	
		Fragilariaceae			
		Synedra		0	
		Naviculaceae			
		Navicula		0	
		Nitzschiaceae			
		Nitzschia	8,900	15	
		CYANOPHYTA			
		Myxophyceae			
		Chroococcales			
		Chroococcaceae			
		Anacystis	5,300	9	
		Oscillatoriales			
		Oscillatoriaceae			
		Oscillatoria	2,100	3	
		TOTAL	61,000		
Nov. 6	1500	CHRYSOPHYTA			Sediment sampler
		Bacillariophyceae			
		Centrales			
		Coscinodiscaceae			
		Cyclotella	57	25	
		Pennales			
		Fragilariaceae			
		Synedra	57	25	
		Naviculaceae			
		Navicula	57	25	
		Surirellaceae			
		Surirella	57	25	
		TOTAL	230		

07231500 CANADIAN RIVER AT CALVIN, OKLA.--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

Date	Time	Organism	Count (cells/ml)	Percent of total	Sampling method
Jan. 21	1100	CHLOROPHYTA			Sediment sampler
		Chlorophyceae			
		Chlorococcales			
		Occystaceae			
		Ankistrodesmus	33	3	
		Scenedesmaceae			
		Actinastrum	43	4	
		Scenedesmus	54	5	
		Tetrasporales			
		Palmellaceae			
		Sphaerocystis	87	8	
		Volvocales			
		Chlamydomonadaceae			
		Chlamydomonas	170	15	
		CHRYSOPHYTA			
		Bacillariophyceae			
		Centrales			
		Coscinodiscaceae			
		Cyclotella	65	6	
		Pannales			
		Gomphonemataceae			
		Gomphonema	11	1	
		Naviculaceae			
		Navicula	110	10	
		Nitzschiaceae			
		Nitzschia	220	19	
		Surirellaceae			
		Cymatopleura	11	1	
		CYANOPHYTA			
		Myxophyceae			
		Chroococcales			
		Chroococcaceae			
		Anacystis	54	5	
		Oscillatoriales			
		Nostocaceae			
		Anabaena	280	25	
		TOTAL	1,100		
Feb. 20	1200	CHLOROPHYTA			Sediment sampler
		Chlorophyceae			
		Chlorococcales			
		Occystaceae			
		Ankistrodesmus	48	3	
		Scenedesmaceae			
		Scenedesmus	48	3	
		Volvocales			
		Chlamydomonadaceae			
		Chlamydomonas	580	33	
		CHRYSOPHYTA			
		Bacillariophyceae			
		Centrales			
		Coscinodiscaceae			
		Cyclotella	240	14	
		Melosira	48	3	
		Pennales			
		Fragilariaceae			
		Synedra	48	3	
		Gomphonemataceae			
		Gomphonema	97	6	
		Naviculaceae			
		Navicula	140	8	
		Nitzschiaceae			
		Nitzschia	390	22	
		Surirellaceae			
		Surirella	97	6	
		TOTAL	1,700		
May 20		CHLOROPHYTA			Sediment sampler
		Chlorophyceae			
		Chlorococcales			
		Occystaceae			
		Ankistrodesmus	670	9	
		Scenedesmaceae			
		Scenedesmus	5,300	75	
		CHRYSOPHYTA			
		Bacillariophyceae			
		Pennales			
		Gomphonemataceae			
		Gomphonema	130	2	

07231500 CANADIAN RIVER AT CALVIN, OKLA.--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

PHYTOPLANKTON

Date	Time	Organism	Count (cells/ml)	Percent of total	Sampling method
May 20		Naviculaceae			Sediment sampler
		Navicula	530	8	
		EUGLENOPHYTA			
		Euglenophyceae			
		Euglenales			
		Euglenaceae			
		Euglena	270	4	
		Trachelomonas	130	2	
		TOTAL	7,100		
June 18	1500	CHLOROPHYTA			Sediment sampler
		Chlorophyceae			
		Chlorococcales			
		Scenedesmaceae			
		Scenedesmus	220	47	
		CHRYSOPHYTA			
		Bacillariophyceae			
		Centrales			
		Coscinodiscaceae			
		Melosira	56	12	
		Pennales			
		Achnanthaceae			
		Achnanthes	28	6	
		Diatomaceae			
		Diatoma	28	6	
		Naviculaceae			
		Navicula	110	24	
		Nitzschiaceae			
		Nitzschia	28	6	
		TOTAL	470		
Aug. 5	1030	CHLOROPHYTA			Sediment sampler
		Chlorophyceae			
		Chlorococcales			
		Coelastraceae			
		Coelastrum	230	21	
		Occystaceae			
		Ankistrodesmus	57	5	
		Dictyosphaerium	57	5	
		Selenastrum	14	1	
		Westella	170	15	
		Scenedesmaceae			
		Crucigenia	110	10	
		Scenedesmus		0	
		Zygnematales			
		Desmidiaceae			
		Desmidium		0	
		CHRYSOPHYTA			
		Bacillariophyceae			
		Pennales			
		Naviculaceae			
		Navicula	29	3	
		Nitzschiaceae			
		Nitzschia	14	1	
		Chrysophyceae			
		Chrysomonadales			
		Ochromonadaceae			
		Dinobryon	370	33	
		Xanthophyceae			
		Heterococcales			
		Chlorotheciaceae			
		Ophiocytium	43	4	
		EUGLENOPHYTA			
		Euglenophyceae			
		Euglenales			
		Euglenaceae			
		Trachelomonas		0	
		PYRRHOPHYTA			
		Dinophyceae			
		Peridiniales			
		Glenodiniaceae			
		Glenodinium	14	1	
		TOTAL	1,100		

07231500 CANADIAN RIVER AT CALVIN, OKLA.--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

PHYTOPLANKTON

Date	Time	Organism	Count (cells/ml)	Percent of total	Sampling method
Sep. 23	0900	CHRYSOPHYTA			Sediment sampler
		Bacillariophyceae			
		Centrales			
		Coscinodiscaceae			
		Cyclotella	2,300	89	
		Pennales			
		Nitzschiaceae			
		Nitzschia	290	11	
		Surirellaceae			
		Surirella		0	
		TOTAL	2,600		

07231500 CANADIAN RIVER AT CALVIN, OKLA.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C) , WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1010	305	1410	1300	1510	1230	954	1010	755	885	572	1330
2	1010	428	1360	1190	1160	1240	1050	1090	815	976	577	1450
3	1000	---	1360	990	888	1290	1080	492	865	1060	616	1280
4	1000	---	1340	938	706	1240	1120	476	986	1060	572	1160
5	1000	---	1340	1020	707	1270	1160	762	1060	1060	567	1150
6	1100	---	1320	1020	831	1290	1190	758	1070	1080	640	1020
7	1100	---	1310	1090	956	1290	917	965	830	1070	637	934
8	1130	---	1310	1180	1040	1340	1180	1050	1050	1170	686	1020
9	1180	---	1320	1270	1170	1440	566	1050	836	1330	868	937
10	1160	739	1330	1290	1220	1340	813	992	618	1300	902	1050
11	1160	742	1250	1360	1220	1440	1020	955	605	1360	901	1280
12	1150	800	1290	1370	1250	731	1020	950	732	870	948	1040
13	1120	926	1350	1340	1240	579	1140	---	719	838	997	1310
14	1120	978	1340	1330	1240	777	1080	342	406	855	1020	960
15	1200	1040	---	1340	1300	910	1150	424	637	893	1020	1020
16	1200	1210	1330	1340	1300	884	1130	672	691	1100	802	960
17	1200	1210	1390	1380	---	685	1120	710	634	1260	1060	885
18	1350	---	1380	1490	---	662	446	781	394	1300	798	914
19	1200	1270	1460	1490	---	515	---	986	525	1300	843	1020
20	1340	1290	1450	1480	---	745	---	1140	530	1250	992	1050
21	1380	1360	1560	1480	---	894	---	1250	638	1260	992	1160
22	1380	1350	1560	1490	356	868	---	1060	739	1290	992	1120
23	1380	1340	1570	1490	501	---	1450	1070	900	1240	1170	1160
24	1340	1330	1580	1500	671	---	1490	360	850	1450	1050	1160
25	1290	1330	1600	1580	707	1160	345	490	830	1590	1050	1160
26	---	1370	1640	1600	796	1110	552	467	771	500	1030	1120
27	---	1380	1630	1600	1220	1110	---	504	690	555	1130	1200
28	934	1450	1620	1590	1220	506	592	454	688	565	1180	1200
29	838	1580	1610	1670	---	505	589	760	763	442	1040	1210
30	472	1590	1600	1670	---	866	643	458	819	425	802	1190
31	277	---	1500	1410	---	925	---	701	---	394	779	---
MONTH	1100	---	1440	1360	1010	995	952	774	748	1020	878	1120

TEMPERATURE (DEG. C) OF WATER , WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17.0	19.0	2.0	6.0	7.0	10.0	4.5	17.0	20.0	29.0	---	24.5
2	18.0	18.0	3.0	6.0	6.0	9.5	3.0	16.5	21.0	28.0	26.0	26.0
3	17.0	---	3.5	4.0	7.5	6.5	6.5	17.5	24.0	28.0	26.5	24.5
4	17.5	---	4.5	3.0	6.0	5.5	9.0	18.5	24.0	29.0	25.0	27.0
5	17.5	---	5.5	4.0	6.0	5.5	11.0	21.5	25.5	32.0	26.0	25.0
6	17.0	---	8.0	4.0	1.0	9.0	12.0	22.5	27.0	33.0	26.5	24.0
7	15.5	---	6.5	5.5	0.0	9.5	12.0	21.0	24.5	34.0	27.0	23.0
8	14.5	---	4.0	7.0	2.5	7.0	11.0	22.5	24.5	26.5	25.5	21.0
9	15.0	---	1.5	6.5	-1.0	6.0	12.5	24.5	22.5	28.5	26.5	23.0
10	16.0	14.0	4.0	8.5	2.0	6.0	12.0	22.0	23.0	28.5	26.0	24.0
11	17.0	12.0	3.5	4.0	5.0	5.5	12.5	22.5	22.5	26.5	26.0	23.5
12	18.0	9.5	4.0	3.0	4.5	5.5	12.5	23.0	22.0	25.5	26.5	20.0
13	19.0	10.0	4.0	0.0	6.0	5.5	12.5	---	24.0	24.0	26.0	19.0
14	20.0	9.0	5.0	0.0	8.0	5.5	13.0	18.0	21.0	24.0	26.0	17.0
15	11.0	7.0	6.0	0.5	6.5	5.5	13.5	19.0	24.5	25.5	26.5	17.0
16	14.0	8.5	5.0	2.0	8.0	6.0	15.5	18.5	26.5	26.0	24.0	17.5
17	15.0	9.5	5.0	4.0	---	7.0	17.0	20.0	24.5	26.0	25.0	19.5
18	15.5	---	4.5	6.0	---	9.0	17.5	21.5	25.0	26.0	24.5	20.5
19	14.0	11.5	4.0	5.0	---	10.0	---	23.5	25.5	26.0	26.0	22.5
20	19.0	10.0	3.5	5.0	---	12.0	---	24.5	26.0	26.5	26.0	19.0
21	14.5	10.0	4.5	4.5	---	11.0	---	22.0	26.5	27.5	26.0	20.0
22	15.5	10.0	6.5	4.0	9.0	11.0	---	24.0	26.5	26.0	27.0	16.0
23	15.0	9.0	7.0	3.0	2.5	---	18.5	24.0	27.0	26.0	26.5	14.5
24	17.5	9.5	7.5	5.5	2.5	---	19.0	22.5	25.0	25.0	25.0	15.0
25	18.5	8.5	4.0	6.0	4.0	11.0	18.0	23.0	29.0	26.5	24.5	15.0
26	---	8.0	4.0	6.0	5.0	12.0	21.5	24.0	26.0	25.5	24.0	11.0
27	---	7.0	4.5	7.0	6.5	11.5	---	24.5	26.0	---	24.0	14.0
28	17.0	5.0	4.0	8.5	8.0	12.0	20.0	23.0	26.0	---	24.5	19.0
29	18.0	3.5	5.0	9.5	---	8.5	20.5	23.0	25.0	---	25.0	18.0
30	19.5	0.0	6.0	8.5	---	5.0	21.0	21.0	27.0	---	25.0	19.5
31	17.0	---	7.0	8.0	---	5.0	---	19.5	---	---	26.5	---
MONTH	16.5	---	5.0	5.0	5.0	8.0	14.0	21.5	25.0	27.5	25.5	20.0

07232500 BEAVER RIVER NEAR GUYMON, OKLA.
(Headwater of the North Canadian River)

LOCATION.--Lat 36°43'24", long 101°29'30", in NW 1/4 SW 1/4 sec.18, T.3 N., R.15 E., Texas County, at gaging station at bridge on U.S. Highway at Dry Sand Draw, 1.2 mi (1.9 km) upstream from Goff Creek, 2.5 mi (4.0 km) north of Guymon, and at mile 650.7 (1,047.0 km).

DRAINAGE AREA.--2,139 mi^2 (5,540 km^2) includes that of Dry Sand Draw, of which 964 mi^2 (2,497 km^2) is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: Water years 1952-59 (partial-record station), November 1959 to September 1963, October 1967 to current year.
Water temperatures: November 1959 to September 1963.

REMARKS.--No flow July 3-4, 7-10, 15-30, Aug. 5-Sept. 30.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)
OCT.											
31...	0930	5.2	25	48	25	25	5.0	264	0	217	41
DEC.											
04...	1130	10	25	49	25	26	4.8	280	0	230	44
JAN.											
24...	1400	3.7	20	50	24	--	4.0	278	--	--	47
FEB.											
10...	1400	3.0	24	47	26	23	4.2	249	0	204	50
MAR.											
07...	0800	3.4	--	--	--	--	--	--	--	--	--
APR.											
22...	1500	6.5	20	37	27	31	5.4	248	0	203	47
MAY											
14...	1400	5.2	15	34	26	28	5.7	220	0	180	50
JUNE											
11...	1500	7.3	--	--	--	--	--	--	--	--	--

DATE	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL NITROGEN (NO3) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DISSOLVED SOLIDS (TONS PER AC-FT)
OCT.										
31...	13	1.5	.65	.22	.87	3.9	.12	304	314	.41
DEC.										
04...	11	2.4	1.0	.32	1.3	5.8	.02	318	325	.43
JAN.										
24...	15	1.7	.59	.26	.85	3.8	.06	326	--	--
FEB.										
10...	17	1.5	.65	.22	.87	3.9	.01	306	316	.42
MAR.										
07...	--	--	--	--	--	--	--	--	--	--
APR.										
22...	15	1.9	.09	.30	.39	1.7	.05	303	306	.41
MAY										
14...	15	1.8	.02	.26	.28	1.2	.04	284	284	.39
JUNE										
11...	--	--	--	--	--	--	--	--	--	--

07232500 BEAVER RIVER NEAR GUYMON, OKLA.--Continued
(Headwater of the North Canadian River)

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	FECAL COLIFORM (COL. PER 100 ML)	STREPTOCOCCI (COLONIES PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)	SUSPENDED SEDIMENT (MG/L)	SUS. SED. SIEVE DIAM, % FINER THAN .062 MM
OCT.									
31...	0930	5.2	10.2	91	120	300	--	--	--
DEC.									
04...	1130	10	13.6	110	220	120	--	--	--
JAN.									
24...	1400	3.7	11.8	103	58	85	--	--	--
FEB.									
10...	1400	3.0	10.3	110	--	--	1.8	--	--
MAR.									
07...	0800	3.4	10.5	88	93	160	--	--	--
APR.									
22...	1500	6.5	9.5	99	120	140	--	34	95
MAY									
14...	1400	5.2	10.2	123	99	130	7.7	36	81
JUNE									
11...	1500	7.3	7.9	100	110	250	--	--	--

DATE	DISSOLVED SOLIDS (TONS PER DAY)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	CARBON DIOXIDE (CO2) (MG/L)	TURBIDITY (JTU)
OCT.										
31...	4.27	220	6	19	.7	500	8.2	8.0	2.7	20
DEC.										
04...	8.59	230	0	20	.8	540	8.1	1.0	3.6	20
JAN.										
24...	--	220	--	--	--	546	8.3	7.0	2.2	20
FEB.										
10...	2.48	220	16	18	.7	508	8.2	11.0	2.5	20
MAR.										
07...	--	--	--	--	--	520	7.6	3.0	--	--
APR.										
22...	5.32	200	0	24	.9	500	8.3	12.0	2.0	21
MAY										
14...	3.99	190	11	23	.9	--	8.3	26.0	1.8	16
JUNE										
11...	--	--	--	--	--	620	8.0	24.0	--	--

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TOTAL IRON (FE) (UG/L)	DISSOLVED IRON (FE) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	SUSPENDED MANGANESE (MN) (UG/L)	DISSOLVED MANGANESE (MN) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	SUSPENDED ARSENIC (AS) (UG/L)	DISSOLVED ARSENIC (AS) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	SUSPENDED CADMIUM (CD) (UG/L)
FEB.												
10...	1400	3.0	1000	90	70	50	20	3	1	2	<10	<8
MAY												
14...	1400	5.2	800	20	50	50	5	5	0	6	<10	<10

DATE	DISSOLVED CADMIUM (CD) (UG/L)	TOTAL CHROMIUM (CR) (UG/L)	SUSPENDED CHROMIUM (CR) (UG/L)	DISSOLVED CHROMIUM (CR) (UG/L)	TOTAL COBALT (CO) (UG/L)	SUSPENDED COBALT (CO) (UG/L)	DISSOLVED COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)	SUSPENDED COPPER (CU) (UG/L)	DISSOLVED COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)
FEB.											
10...	2	10	10	0	<50	<50	0	90	70	20	<100
MAY											
14...	0	20	20	0	<50	<50	0	20	19	1	<100

DATE	SUSPENDED LEAD (PB) (UG/L)	DISSOLVED LEAD (PB) (UG/L)	TOTAL MERCURY (HG) (UG/L)	SUSPENDED MERCURY (HG) (UG/L)	DISSOLVED MERCURY (HG) (UG/L)	TOTAL SELENIUM (SE) (UG/L)	SUSPENDED SELENIUM (SE) (UG/L)	DISSOLVED SELENIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	SUSPENDED ZINC (ZN) (UG/L)	DISSOLVED ZINC (ZN) (UG/L)
FEB.											
10...	<94	6	--	--	.0	0	0	0	30	10	20
MAY											
14...	<98	2	.0	.0	.0	1	0	1	10	8	2

07232500 BEAVER RIVER NEAR GUYMON, OKLA.--Continued
(Headwater of the North Canadian River)

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA,
WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

PHYTOPLANKTON

Date	Time	Organism	Count (cells/ml)	Percent of total	Sampling method
Oct. 31	0930	CHRYSOPHYTA			Sediment sampler
		Bacillariophyceae			
		Pennales			
		Achnanthaceae			
		Achnanthes	280	10	
		Cocconeis	69	2	
		Cymbellaceae			
		Cymbella	69	2	
		Gomphonemataceae			
		Gomphonema	420	15	
		Naviculaceae			
		Gyrosigma	69	2	
		Navicula	550	20	
		Nitzschiaceae			
		Nitzschia	1,200	42	
		Surirellaceae			
		Cymatopleura	69	2	
		Surirella	69	2	
		TOTAL	2,800		
Dec. 4	1130	CHRYSOPHYTA			Sediment sampler
		Bacillariophyceae			
		Pennales			
		Achnanthaceae			
		Achnanthes	120	3	
		Fragilariaceae			
		Synedra	120	3	
		Gomphonemataceae			
		Gomphonema	250	6	
		Naviculaceae			
		Navicula	270	6	
		Pinnularia	150	3	
		Nitzschiaceae			
		Nitzschia	170	4	
		Surirellaceae			
		Surirella	25	1	
		CYANOPHYTA			
		Myxophyceae			
		Chroococcales			
		Chroococcaceae			
		Agmenellum	3,400	75	
		TOTAL	4,500		
Jan. 24	1400	CHRYSOPHYTA			Sediment sampler
		Bacillariophyceae			
		Centrales			
		Coscinodiscaceae			
		Cyclotella	36	3	
		Pennales			
		Achnanthaceae			
		Achnanthes	180	13	
		Cymbellaceae			
		Cymbella	71	5	
		Fragilariaceae			
		Fragilaria	110	8	
		Gomphonemataceae			
		Gomphonema	36	3	
		Naviculaceae			
		Navicula	360	26	
		Pinnularia	36	3	
		Nitzschiaceae			
		Nitzschia	280	21	
		Achnanthaceae			
		Rhoicosphenia	36	3	
		CYANOPHYTA			
		Myxophyceae			
		Oscillatoriales			
		Nostocaceae			
		Anabaena	210	16	
		TOTAL	1,400		

07232500 BEAVER RIVER NEAR GUYMON, OKLA.--Continued
(Headwater of the North Canadian River)

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1974

PHYTOPLANKTON

Date	Time	Organism	Count (cells/ml)	Percent of total	Sampling method
Feb. 10		CHRYSOPHYTA			Sediment sampler
		Bacillariophyceae			
		Pennales			
		Achnanthaceae			
		Achnanthes	30	1	
		Cymbellaceae			
		Amphora	30	1	
		Cymbella	270	6	
		Rhopalodia	61	1	
		Diatomaceae			
		Diatoma	300	7	
		Eunotiaceae			
		Eunotia	30	1	
		Fragilariaceae			
		Synedra	300	7	
		Gomphonemataceae			
		Gomphonema	210	5	
		Naviculaceae			
		Caloneis	91	2	
		Gyrosigma	61	1	
		Navicula	550	13	
		Nitzschiaceae			
		Nitzschia	150	4	
		Surirellaceae			
		Surirella	30	1	
		CYANOPHYTA			
		Myxophyceae			
		Oscillatoriales			
		Nostocaceae			
		Anabaena	360	8	
		Oscillatoriaceae			
		Lyngbya	1,800	42	
		TOTAL	4,300		
Apr. 22	1500	CHLOROPHYTA			Sediment sampler
		Chlorophyceae			
		Chlorococcales			
		Scenedesmaceae			
		Scenedesmus	180	5	
		Zygnematales			
		Zygnemataceae			
		Mougeotia	90	3	
		CHRYSOPHYTA			
		Bacillariophyceae			
		Centrales			
		Coscinodiscaceae			
		Cyclotella	45	1	
		Pennales			
		Achnanthaceae			
		Achnanthes	45	1	
		Cymbellaceae			
		Cymbella	1,100	33	
		Diatomaceae			
		Diatoma	90	3	
		Fragilariaceae			
		Synedra	180	5	
		Naviculaceae			
		Gyrosigma	45	1	
		Navicula	950	28	
		Nitzschiaceae			
		Denticula	500	14	
		Nitzschia	90	3	
		Surirellaceae			
		Surirella	90	3	
		TOTAL	3,400		

07232500 BEAVER RIVER NEAR GUYMON, OKLA.--Continued
(Headwater of the North Canadian River)

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA,
WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

PHYTOPLANKTON

Date	Time	Organism	Count (cells/ml)	Percent of total	Sampling method
May 14	1400	CHLOROPHYTA			Sediment sampler
		Chlorophyceae			
		Chlorococcales			
		Scenedesmaceae			
		Scenedesmus	330	6	
		CHRYSOPHYTA			
		Bacillariophyceae			
		Centrales			
		Coscinodiscaceae			
		Cyclotella	170	3	
		Pennales			
		Achnanthaceae			
		Achnanthes	330	6	
		Cymbellaceae			
		Cymbella	2,200	41	
		Diatomaceae			
		Diatoma	83	2	
		Fragilariaceae			
		Synedra	580	11	
		Gomphonemataceae			
		Gomphonema	83	2	
		Naviculaceae			
		Navicula	1,200	22	
		Nitzschiaceae			
		Nitzschia	250	5	
		Surirellaceae			
		Surirella	83	2	
		TOTAL	5,200		

07232500 BEAVER RIVER NEAR GUYMON, OKLA.--Continued
(Headwater of the North Canadian River)

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	492	515	546	544	---	---	---	494	502	---	484	
2	445	491	489	518	---	520	---	498	528	---	478	
3	461	542	475	---	---	536	525	502	530	---	---	
4	450	538	472	---	---	---	528	501	520	---	---	
5	491	540	521	---	---	529	488	530	---	---	---	
6	497	512	528	---	---	546	492	516	---	---	---	
7	476	510	509	---	---	543	536	496	---	---	---	
8	---	510	506	---	---	540	550	488	---	---	---	
9	492	504	541	---	---	536	---	482	---	---	---	
10	487	514	540	---	---	506	---	488	---	---	---	
11	480	512	474	---	---	479	543	469	---	619	---	
12	504	530	512	---	---	542	541	472	---	---	---	
13	495	528	503	---	532	436	587	483	---	---	---	
14	525	511	598	---	530	522	552	486	---	---	---	
15	526	518	602	---	523	---	541	510	---	---	---	
16	492	510	496	---	---	527	---	498	---	---	---	
17	502	508	---	---	551	528	530	482	---	---	---	
18	501	503	543	---	499	514	530	433	---	---	---	
19	483	516	541	---	539	---	527	511	---	---	---	
20	---	506	524	---	540	549	520	---	---	---	---	
21	---	509	525	---	---	526	502	---	---	---	---	
22	---	516	546	---	539	537	---	---	499	---	---	
23	---	515	532	---	521	528	516	---	492	---	---	
24	---	509	580	---	536	519	512	---	501	---	---	
25	---	514	580	527	537	515	503	---	504	---	---	
26	---	513	---	533	530	---	---	---	501	---	---	
27	---	532	525	542	529	538	565	---	513	---	---	
28	---	531	470	534	532	509	528	---	490	---	---	
29	514	580	485	542	---	525	---	---	---	---	---	
30	512	579	495	---	---	---	505	298	---	---	---	
31	510	---	496	---	---	525	---	458	---	---	---	
MONTH	---	521	523	---	---	523	---	---	---	---	---	

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
(ONCE-DAILY)

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

ARKANSAS RIVER BASIN

07234000 BEAVER RIVER AT BEAVER, OKLA.

(Headwater of the North Canadian River)

LOCATION.--Lat 36°49'20", long 100°31'05", in SW 1/ 4sec.7, T.4 N., R.24 E., Beaver County, at gaging station at bridge on U.S. Highway 270 at Beaver, 1.5 mi (2.4 km) downstream from Home Creek, 5 mi (8.0 km) upstream from Clear Creek, and at mile 576.0 (926.8 km).

DRAINAGE AREA.--7,955 mi^2 (20,603 km^2), of which 4,270 mi^2 (11,059 km^2) is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: Water years 1958-59 (partial-record station), November 1961 to September 1963, October 1967 to current year.
Water temperatures: October 1967 to current year.

EXTREMES, Current year.--Specific conductance: Maximum daily, 5,130 micromhos/cm Apr. 30; minimum daily, 404 micromhos/cm Aug. 2.
Water temperatures: Maximum, 34.0°C Aug. 29; minimum 0.5°C on Feb. 8.

Period of record.--Specific conductance: Maximum daily, 5,730 micromhos/cm Nov. 30, 1973; minimum daily, 286 micromhos/cm July 31, 1971.
Water temperatures: Maximum, 36.0°C July 12, 14, 1970, July 27, 1972, June 27, 1973; minimum, freezing point on many days during winter months.

REMARKS.--No flow Oct. 1-Feb. 6, Mar. 7-8, Mar. 21-Apr. 6, Apr. 28-29, May 6-12, 19-29, 31, June 10, 16-20, July 3-9, 11-25, Aug. 31-Sept. 30.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
FEB.											
17...	1740	.08	230	110	720	13	290	0	238	700	1100
25...	1710	.49	160	85	490	10	209	0	171	460	820
MAR.											
05...	1705	.13	210	95	620	8.9	262	0	215	580	1000
17...	1710	.23	230	100	600	10	315	0	258	600	1000
APR.											
15...	1755	.43	210	120	680	10	309	0	253	770	1100
22...	1230	.18	210	110	650	9.7	303	0	249	630	1100
25...	1835	.13	200	120	--	11	247	0	203	700	1200
MAY											
05...	1810	.23	210	130	730	11	224	0	184	710	1200
15...	1805	134	73	32	240	13	181	0	148	220	350
JUNE											
05...	1845	5.9	64	26	150	18	177	0	145	140	240
25...	1720	87	40	14	53	13	173	0	142	49	69
JULY											
02...	1650	.28	100	49	300	14	213	0	175	280	480
AUG.											
02...	1430	902	44	7.3	28	7.7	161	0	132	21	41
17...	1515	31	47	13	85	9.6	159	0	130	63	130
25...	1800	.60	110	37	280	16	255	0	209	230	440

DATE	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (TONS PER AC-FT)	DISSOLVED SOLIDS (TONS PER DAY)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	CARBON DIOXIDE (CO2) (MG/L)
FEB.										
17...	3260	4.43	.70	1000	790	60	9.8	4890	8.2	2.9
25...	2340	3.18	3.10	750	580	58	7.8	3650	8.0	3.3
MAR.										
05...	2890	3.93	1.01	920	700	59	8.9	4360	--	--
17...	2880	3.92	1.79	990	730	57	8.3	4330	7.3	25
APR.										
15...	3150	4.28	3.66	1000	770	59	9.3	4690	8.0	4.9
22...	3090	4.20	1.50	980	730	59	9.0	--	8.4	--
25...	3280	4.46	1.15	990	790	--	--	4870	8.1	3.1
MAY										
05...	3300	4.49	2.05	1100	880	60	9.8	4970	8.2	2.3
15...	1080	1.47	391	310	170	61	5.9	1790	8.0	2.9
JUNE										
05...	762	1.04	12.1	270	120	53	4.0	1290	7.5	9.0
25...	348	.47	81.7	160	16	40	1.8	569	7.9	3.5
JULY										
02...	1410	1.92	1.07	450	280	58	6.1	2300	7.6	8.6
AUG.										
02...	219	.30	533	140	8	29	1.0	404	7.4	10
17...	449	.61	37.6	170	40	50	2.8	782	7.5	8.0
25...	1270	1.73	2.06	430	220	58	5.9	2090	7.4	16

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	FECAL COLIFORM (COL. PER 100 ML)	STREPTOCOCCI (COLONIES PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)	SUSPENDED SEDIMENT (MG/L)	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM
APR.									
22...	1230	--	9.3	102	580	970	--	36	100

07234000 BEAVER RIVER AT BEAVER, OKLA.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1					---	4350	---	5060	1190	2270	876	
2					---	4350	---	4600	686	2300	404	
3					---	4340	---	4820	690	---	730	
4					---	4250	---	4810	975	---	458	
5					---	4330	---	4970	1290	---	464	
6					---	4480	---	---	1530	---	608	
7					4970	---	4310	---	1790	---	1090	
8					4740	---	4610	---	2100	---	1090	
9					4670	4520	4620	---	2370	---	1320	
10					3220	4480	4700	---	---	3810	1540	
11					2850	4250	4650	---	3040	---	2060	
12					3640	4310	4650	---	738	---	2070	
13					3810	4470	4010	2440	1100	---	2340	
14					4090	4300	4600	4340	2090	---	2340	
15					---	4240	4690	1790	2090	---	1170	
16					---	4240	4890	902	---	---	1640	
17					4890	4330	4800	1190	---	---	782	
18					4850	4380	4830	1150	---	---	---	
19					4580	4460	4630	---	---	---	---	
20					3840	4520	4750	---	---	---	---	
21					3580	---	4820	---	1770	---	---	
22					3720	---	4800	---	1200	---	---	
23					4480	---	4820	---	1510	---	---	
24					4380	---	4900	---	1500	---	---	
25					3650	---	4870	---	569	---	2090	
26					3910	---	4830	---	550	434	3450	
27					4070	---	4790	---	622	540	3520	
28					4160	---	---	---	890	570	4510	
29					---	---	---	---	1280	653	4540	
30					---	---	5130	1440	1560	870	4490	
31					---	4750	---	---	---	1000	---	
MONTH					---	---	---	---	1380	---	---	

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1					---	9.5	---	---	24.5	30.0	29.5	
2					---	10.5	---	22.5	28.0	33.0	25.0	
3					---	3.0	---	22.0	29.0	---	29.0	
4					---	13.5	---	24.5	27.5	---	31.0	
5					---	15.5	---	24.5	30.5	---	30.5	
6					---	15.0	---	---	31.0	---	28.0	
7					3.0	---	15.5	---	30.0	---	30.0	
8					0.5	---	15.0	---	26.0	---	29.0	
9					1.0	5.0	19.0	---	24.0	---	33.0	
10					4.5	5.5	13.5	---	---	33.0	33.5	
11					4.5	4.0	10.0	---	28.0	---	30.0	
12					9.5	6.5	10.0	---	29.0	---	31.0	
13					7.0	7.5	10.5	20.5	31.5	---	26.0	
14					3.0	10.5	19.0	26.5	26.0	---	32.0	
15					---	9.0	20.5	26.5	30.0	---	30.5	
16					---	10.5	22.5	24.0	---	---	32.5	
17					1.0	14.5	16.0	23.0	---	---	30.5	
18					1.0	17.0	11.0	27.5	---	---	---	
19					2.5	19.0	15.5	---	---	---	---	
20					3.5	21.0	19.0	---	---	---	---	
21					4.5	---	---	---	28.5	---	---	
22					2.5	---	---	---	29.5	---	---	
23					4.0	---	---	---	27.0	---	---	
24					6.0	---	---	---	30.0	---	---	
25					9.0	---	---	---	30.5	---	32.0	
26					9.5	---	---	---	29.0	28.0	33.0	
27					10.0	---	---	---	29.5	28.5	30.0	
28					13.0	---	---	---	30.0	28.5	30.0	
29					---	---	---	---	32.0	31.5	34.0	
30					---	---	---	24.5	33.0	32.0	32.5	
31					---	16.5	---	---	---	29.0	---	
MONTH					---	---	---	---	29.0	---	---	

07237500 NORTH CANADIAN RIVER AT WOODWARD, OKLA.

LOCATION.--Lat 36°26'18", long 99°16'40", in SE 1/4 SE 1/4 sec.25, T.23 N., R.20 W., Woodward County, at bridge on State Highway 15, 200 ft (61.0 m) downstream from the Atchison, Topeka and Santa Fe Railway Co. bridge, 6.0 mi (9.7 km) east of Woodward, 7.2 mi (11.6 km) upstream from Indian Creek, 27.5 mi (44.2 km) downstream from Wolf Creek, and at mile 460.2 (740.5 km).

DRAINAGE AREA.--11,589 mi^2 (30,016 km^2), of which 4,812 mi^2 (12,463 km^2) is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: Current year.

EXTREMES, Current year.--Specific conductance: Maximum daily, 3,740 micromhos/cm Sept. 23; minimum daily, 721 micromhos/cm Aug. 10.

REMARKS.--M=Presence of material verified but not quantified; B=Results based on colony count outside the acceptable range (non-ideal colony count).

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)
OCT.											
03...	1030	9.6	26	180	56	260	5.8	353	0	290	450
DEC.											
03...	1130	67	18	75	29	150	6.7	227	0	186	--
JAN.											
23...	1300	64	20	92	31	150	5.4	250	0	205	170
FEB.											
04...	1400	56	20	--	40	150	5.2	257	0	211	210
MAR.											
06...	0930	86	17	94	37	150	6.9	252	--	207	200
APR.											
02...	1030	48	22	160	48	220	6.8	297	0	244	380
MAY											
13...	1230	359	8.0	75	21	100	6.6	111	0	91	190
JUNE											
11...	0800	126	18	92	28	150	6.0	232	0	190	170
JULY											
08...	1500	12	20	210	63	360	7.0	234	0	192	580
AUG.											
06...	1100	4.6	24	220	59	320	8.0	257	0	211	570
SEP.											
02...	1400	2.3	25	170	41	270	9.7	213	0	175	480

DATE	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	DISSOLVED NITRITE PLUS NITRATE (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL NITROGEN (NO3) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DISSOLVED SOLIDS (TONS PER AC-FT)
OCT.											
03...	380	.7	.06	--	.54	.60	2.7	.05	1570	1530	2.14
DEC.											
03...	200	.8	.09	--	.83	.92	4.1	.08	793	--	1.08
JAN.											
23...	220	.7	.10	--	.51	.61	2.7	.03	877	812	1.19
FEB.											
04...	220	.7	.06	--	.48	.54	2.4	.02	922	--	1.25
MAR.											
06...	220	.8	.09	--	.33	.42	1.9	.04	865	850	1.18
APR.											
02...	340	.8	.19	--	.92	1.1	4.9	.46	1330	1320	1.81
MAY											
13...	140	.3	.30	--	2.0	2.3	10	.47	626	596	.85
JUNE											
11...	210	.8	.22	--	.79	1.0	4.5	.20	805	789	1.09
JULY											
08...	570	.8	.25	--	.83	1.1	4.8	.47	1950	1930	2.65
AUG.											
06...	510	.7	.22	--	2.5	2.7	12	2.1	1920	1840	2.61
SEP.											
02...	370	.6	.76	--	2.3	3.1	14	1.1	1510	1470	2.05

07237500 NORTH CANADIAN RIVER AT WOODWARD, OKLA.--Continued

DATE	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	CARBON DIOXIDE (CO2) (MG/L)	TUR-BID-ITY (JTU)
OCT.										
03...	40.7	680	390	45	4.3	--	7.9	16.0	7.1	1
DEC.										
03...	143	310	120	51	3.7	1300	8.1	.0	2.9	40
JAN.										
23...	152	360	160	47	3.5	1420	8.2	--	2.5	2
FEB.										
04...	139	--	230	--	--	1400	8.1	3.0	3.3	4
MAR.										
06...	201	390	180	45	3.3	1420	--	--	--	6
APR.										
02...	172	600	350	44	3.9	2000	8.3	1.5	2.4	4
MAY										
13...	607	270	180	44	2.6	1050	7.5	15.0	5.6	150
JUNE										
11...	274	350	150	48	3.5	1340	7.8	21.0	5.9	40
JULY										
08...	63.2	780	590	50	5.6	3010	8.1	29.0	3.0	1
AUG.										
06...	23.8	790	580	46	4.9	2800	8.1	26.0	3.3	2
SEP.										
02...	9.38	590	420	49	4.8	2400	7.7	33.0	6.8	3

DATE	TIME	INSTAN-TANEOUS DIS-CHARGE (CFS)	DIS-SOLVED OXYGEN (MG/L)	PER-CENT SATUR-ATION	FECAL COLI-FORM (COL. PER 100 ML)	STREP-TOCOCCI (COL-ONIES PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)	SUS-PENDED SEDI-MENT (MG/L)	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM
OCT.									
03...	1030	9.6	10.9	107	79	67	--	--	--
DEC.									
03...	1130	67	13.2	110	78	176	--	--	--
JAN.									
23...	1300	64	12.4	102	1020	210	--	--	--
FEB.									
04...	1400	56	12.9	101	680	120	--	--	--
MAR.									
06...	1000	86	10.0	99	430	203	--	13	99
APR.									
02...	1030	48	12.5	99	M0	6600	--	39	97
MAY									
13...	1230	359	6.6	73	M0	B44300	8.7	37	95
JUNE									
11...	0800	126	8.6	105	B4040	1700	--	57	86
JULY									
08...	1500	12	7.8	104	5900	2800	--	12	48
AUG.									
06...	1100	4.6	20.0	--	123	67000	11	106	89
SEP.									
02...	1400	2.3	19.2	274	--	--	--	--	--

07237500 NORTH CANADIAN RIVER AT WOODWARD, OKLA.--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

PHYTOPLANKTON

Date	Time	Organism	Count (cells/ml)	Percent of total	Sampling method
Dec. 3	1130	CHLOROPHYTA			Sediment sampler
		Chlorophyceae			
		Chlorococcales			
		Characiaceae			
		Schroederia	81	1	
		Occystaceae			
		Ankistrodesmus	240	2	
		Scenedesmaceae			
		Crucigenia	1,500	15	
		Zygnematales			
		Desmidiaceae			
		Staurastrum	81	1	
		CHRYSOPHYTA			
		Bacillariophyceae			
		Centrales			
		Coscinodiscaceae			
		Cyclotella	81	1	
		Pennales			
		Cymbellaceae			
		Amphora	81	1	
		Cymbella	81	1	
		Rhopalodia	320	3	
		Fragilariaceae			
		Synedra	322	3	
		Gomphonemataceae			
		Gomphonema	160	2	
		Naviculaceae			
		Caloneis	81	1	
		Gyrosigma	81	1	
		Navicula	1,200	12	
		Tropidoneis	81	1	
		Nitzschiaceae			
		Nitzschia	730	7	
		CYANOPHYTA			
		Myxophyceae			
		Chroococcales			
		Chroococcaceae			
		Agmenellum	1,300	13	
		Oscillatoriales			
		Nostocaceae			
		Anabaena	3,600	35	
		TOTAL	10,000		
Jan. 23	1300	CHLOROPHYTA			Sediment sampler
		Chlorophyceae			
		Volvocales			
		Chlamydomonadaceae			
		Chlamydomonas	110	3	
		CHRYSOPHYTA			
		Bacillariophyceae			
		Centrales			
		Coscinodiscaceae			
		Cyclotella	1,400	32	
		Pennales			
		Achnanthaceae			
		Achnanthes	56	1	
		Naviculaceae			
		Amphiprora	56	1	
		Navicula	170	4	
		Nitzschiaceae			
		Nitzschia	280	6	
		CYANOPHYTA			
		Myxophyceae			
		Chroococcales			
		Chroococcaceae			
		Agemnellum	1,800	41	
		Anacystis	560	13	
		TOTAL	4,400		

07237500 NORTH CANADIAN RIVER AT WOODWARD, OKLA.--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

PHYTOPLANKTON

Date	Time	Organism	Count (cells/ml)	Percent of total	Sampling method
Feb. 4	1400	CHLOROPHYTA			Sediment sampler
		Chlorophyceae			
		Chlorococcales			
		Scenedesmaceae			
		Crucigenia	430	27	
		Tetrasporales			
		Coccomyxaceae			
		Elakatothrix	65	4	
		CHRYSOPHYTA			
		Bacillariophyceae			
		Centrales			
		Coscinodiscaceae			
		Cyclotella	22	1	
		Pennales			
		Cymbellaceae			
		Amphora	87	5	
		Fragilariaceae			
		Synedra	87	5	
		Gomphonemataceae			
		Gomphonema	22	1	
		Naviculaceae			
		Amphiprora	65	4	
		Caloneis	170	11	
		Navicula	260	16	
		Nitzschiaceae			
		Nitzschia	65	4	
		Surirellaceae			
		Surirella	43	3	
		CYANOPHYTA			
		Myxophyceae			
		Chroococcales			
		Chroococcaceae			
		Anacystis	260	16	
		TOTAL	1,600		
Mar. 6	0930	CHLOROPHYTA			Sediment sampler
		Chlorophyceae			
		Chlorococcales			
		Occystaceae			
		Closteriopsis	60	3	
		Scenedesmaceae			
		Scenedesmus	240	12	
		Volvocales			
		Chlamydomonadaceae			
		Chlamydomonas	300	15	
		CHRYSOPHYTA			
		Bacillariophyceae			
		Pennales			
		Cymbellaceae			
		Rhopalodia	60	3	
		Diatomaceae			
		Daitoma	60	3	
		Gomphonemataceae			
		Gomphonema	120	6	
		Naviculaceae			
		Caloneis	660	32	
		Navicula	300	15	
		Nitzschiaceae			
		Hantzschia	60	3	
		Nitzschia	180	9	
		TOTAL	2,000		
Apr. 2	1030	CHLOROPHYTA			Sediment sampler
		Chlorophyceae			
		Chlorococcales			
		Scenedesmaceae			
		Scenedesmus	91	4	
		CHRYSOPHYTA			
		Bacillariophyceae			
		Centrales			
		Coscinodiscaceae			
		Cyclotella	270	12	
		Pennales			
		Achnanthaceae			
		Achnanthes	91	4	
		Gomphonemataceae			
		Gomphonema	46	2	
		Naviculaceae			
		Caloneis	46	2	
		Navicula	370	16	
		Nitzschiaceae			
		Hantzschia	46	2	

07237500 NORTH CANADIAN RIVER AT WOODWARD, OKLA.--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

PHYTOPLANKTON

Date	Time	Organism	Count (cells/ml)	Percent of total	Sampling method
Apr. 2	1030	Nitzschia	1,300	57	Sediment sampler
		Surirellaceae			
		Surirella	46	2	
		TOTAL	2,300		
May 13	1230	CHLOROPHYTA			Sediment sampler
		Chlorophyceae			
		Chlorococcales			
		Occystaceae			
		Tetraedron	720	3	
		CHRYSOPHYTA			
		Bacillariophyceae			
		Centrales			
		Coscinodiscaceae			
		Cyclotella	720	3	
		Pennales			
		Diatomaceae			
		Diatoma	1,400	7	
		Fragilariaceae			
		Fragilaria	720	3	
		Synedra	720	3	
		Naviculaceae			
		Navicula	2,900	14	
		Pinnularia	1,400	7	
		Nitzschiaceae			
		Hantzschia	720	3	
		Nitzschia	5,000	24	
		Surirellaceae			
		Cymatopleura	720	3	
		CYANOPHYTA			
		Myxophyceae			
		Oscillatoriales			
		Rivulariaceae			
		Raphidiopsis	5,800	28	
		TOTAL	21,000		
Aug. 6	1100	CHLOROPHYTA			Sediment sampler
		Chlorophyceae			
		Chlorococcales			
		Occystaceae			
		Ankistrodesmus		0	
		Tetraedron		0	
		Scenedesmaceae			
		Crucigenia		0	
		Scenedesmus	25,000	48	
		Volvocales			
		Volvocaceae			
		Pandorina		0	
		CHRYSOPHYTA			
		Bacillariophyceae			
		Pennales			
		Cymbellaceae			
		Amphora		0	
		Fragilariaceae			
		Synedra		0	
		Naviculaceae			
		Navicula		0	
		Nitzschiaceae			
		Nitzschia	330	1	
		CYANOPHYTA			
		Myxophyceae			
		Chroococcales			
		Chroococcaceae			
		Agmenellum	23,000	44	
		Anacystis	3,700	7	
		Oscillatoriales			
		Oscillatoriaceae			
		Oscillatoria		0	
		EUGLENOPHYTA			
		Euglenophyceae			
		Euglenales			
		Euglenaceae			
		Euglena		0	
		Phacus		0	
		Trachelomonas		0	
		TOTAL	52,000		

07237500 NORTH CANADIAN RIVER AT WOODWARD, OKLA.--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

PHYTOPLANKTON

Date	Time	Organism	Count (cells/ml)	Percent of total	Sampling method
Sep. 2	1400	CHLOROPHYTA			Sediment sampler
		Chlorophyceae			
		Chlorococcales			
		Occystaceae			
		Ankistrodesmus	460	1	
		Selenastrum	3,000	6	
		Scenedesmaceae			
		Scenedesmus	2,500	5	
		Volvocales			
		Chlamydomonadaceae			
		Chlamydomonas	1,400	3	
		Volvocaceae			
		Pandorina	920	2	
		CHRYSOPHYTA			
		Bacillariophyceae			
		Centrales			
		Coscinodiscaceae			
		Cyclotella		0	
		Pennales			
		Cymbellaceae			
		Epithemia		0	
		Naviculaceae			
		Navicula		0	
		Nitzschiaceae			
		Nitzschia	2,100	4	
		CYANOPHYTA			
		Myxophyceae			
		Chroococcales			
		Chroococcaceae			
		Agmenellum	25,000	52	
		Anacystis	12,000	25	
		TOTAL	48,000		

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TOTAL IRON (FE) (UG/L)	DISSOLVED IRON (FE) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	SUSPENDED MANGANESE (MN) (UG/L)	DISSOLVED MANGANESE (MN) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	SUSPENDED ARSENIC (AS) (UG/L)	DISSOLVED ARSENIC (AS) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	SUSPENDED CADMIUM (CD) (UG/L)
MAY												
13...	1230	359	8200	140	280	190	90	10	7	3	<10	<10
AUG.												
06...	1100	4.6	110	40	530	60	470	5	1	4	<10	<9

DATE	DISSOLVED CADMIUM (CD) (UG/L)	TOTAL CHROMIUM (CR) (UG/L)	SUSPENDED CHROMIUM (CR) (UG/L)	DISSOLVED CHROMIUM (CR) (UG/L)	TOTAL COBALT (CO) (UG/L)	SUSPENDED COBALT (CO) (UG/L)	DISSOLVED COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)	SUSPENDED COPPER (CU) (UG/L)	DISSOLVED COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)
MAY											
13...	0	30	30	0	50	50	0	30	27	3	<100
AUG.											
06...	1	10	10	0	<50	<50	0	20	19	1	<100

DATE	SUSPENDED LEAD (PB) (UG/L)	DISSOLVED LEAD (PB) (UG/L)	TOTAL MERCURY (HG) (UG/L)	SUSPENDED MERCURY (HG) (UG/L)	DISSOLVED MERCURY (HG) (UG/L)	TOTAL SELENIUM (SE) (UG/L)	SUSPENDED SELENIUM (SE) (UG/L)	DISSOLVED SELENIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	SUSPENDED ZINC (ZN) (UG/L)	DISSOLVED ZINC (ZN) (UG/L)
MAY											
13...	<97	3	.0	.0	.0	0	0	0	440	410	30
AUG.											
06...	<96	4	.1	.0	.1	0	0	0	50	50	0

07237500 NORTH CANADIAN RIVER AT WOODWARD, OKLA.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2440	2160	1360	1700	1650	1720	2020	1860	1860	2970	2950	2390
2	2530	2180	1340	---	1650	1760	2020	---	1970	---	2870	2320
3	2510	2070	1340	1620	1620	---	2020	1840	2020	2980	3020	2270
4	2370	2030	1340	1680	1650	1760	2080	1890	2040	2820	3150	2320
5	2380	---	1360	1670	---	1780	2140	1990	2000	2440	2940	3080
6	2380	---	1350	1670	1610	1500	2120	1830	2040	2730	2950	3630
7	2360	---	1330	1660	1750	1510	2040	1880	1780	2960	2980	3610
8	2530	---	1620	1660	1750	---	1940	1960	1770	2770	2940	3610
9	2520	---	1830	1690	1760	---	1610	1910	1460	3030	866	3620
10	2510	---	1820	---	1670	1500	1560	1700	1250	2820	721	3690
11	1970	---	1780	1710	1320	---	1590	1810	1720	2710	790	3710
12	1990	---	1740	1960	1460	---	1580	1870	1320	2760	989	3400
13	1980	---	1700	2110	1470	1380	1460	1110	1160	2890	1290	2560
14	1980	---	1710	1900	1480	1380	1530	1060	1300	2740	1120	2570
15	2670	---	1720	1760	---	1260	1540	902	1360	2790	1230	2640
16	2670	---	1760	1530	---	1460	1540	1230	1330	2880	1780	3540
17	2670	---	1790	1620	---	1730	1570	1330	1490	2930	1950	3600
18	2690	---	1820	---	---	1830	1570	1330	2030	2890	2160	3620
19	2670	---	1760	1600	---	1880	1600	1320	2200	3000	2250	3690
20	2670	---	1740	1680	1430	1890	1580	1290	2300	2950	2310	3690
21	2690	---	1760	1690	1620	1940	1590	1280	2410	3030	2790	3590
22	2530	---	1640	1700	---	1990	1580	1250	2520	2950	2800	3720
23	2520	---	1500	1510	---	2040	1610	1270	2590	2940	3330	3740
24	2530	2360	1490	1520	1490	2050	1580	1160	2710	2680	3450	3730
25	2530	2420	1550	1480	1580	2090	1550	1280	2690	2700	3520	3690
26	2530	2450	1530	1480	1630	2110	1580	1300	2670	2660	3210	2720
27	2530	2380	1520	1490	1660	1120	1560	1390	2750	2770	2460	2610
28	2530	2200	1550	1480	1700	1930	1540	1690	2800	2860	2520	2510
29	2520	1370	1700	1500	---	1880	1630	1540	2880	2230	2510	2530
30	2540	1400	1690	1470	---	1940	1790	1790	2940	2970	2420	2500
31	2530	---	---	1480	---	2060	---	1980	---	2820	2380	---
MONTH	2470	---	1600	1640	---	1750	1700	1540	2040	2820	2340	3160

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17.0	13.0	2.0	5.0	4.0	15.0	8.5	20.0	14.0	21.0	16.0	20.5
2	22.0	13.0	3.0	---	6.0	12.0	11.5	---	15.0	---	21.0	20.0
3	15.0	12.0	4.0	2.0	6.0	---	3.5	26.5	17.0	12.0	24.0	20.5
4	15.0	12.0	7.0	4.0	4.0	11.0	6.0	25.5	16.5	22.0	23.5	11.0
5	16.0	---	5.0	3.0	---	16.0	20.5	27.0	19.5	12.5	24.0	11.0
6	17.0	---	7.0	7.0	2.0	13.0	15.0	26.0	13.0	15.0	23.0	19.0
7	12.0	---	5.5	8.0	2.0	---	15.0	25.0	18.5	24.0	15.0	17.0
8	15.0	---	4.0	7.5	1.0	---	19.0	15.0	19.0	15.0	10.0	15.0
9	15.0	---	5.0	5.0	1.0	---	19.0	21.5	15.5	23.5	19.5	19.0
10	17.0	---	5.0	---	6.0	---	12.0	25.0	7.5	15.0	19.0	18.0
11	15.0	---	7.0	2.0	9.0	---	17.0	27.0	13.5	11.0	20.0	10.0
12	12.0	---	2.0	0.0	11.0	---	17.0	24.0	10.0	7.5	19.5	3.0
13	12.0	---	2.0	2.0	5.0	---	11.0	17.0	15.5	8.0	19.0	9.0
14	12.0	---	3.0	5.0	4.0	---	18.5	19.5	17.0	9.0	11.5	6.0
15	16.0	---	5.0	8.0	---	---	22.0	19.5	17.0	20.5	12.0	15.0
16	15.0	---	5.0	2.0	---	---	24.0	18.5	19.0	21.0	23.0	16.5
17	16.0	---	7.0	2.0	---	---	16.5	14.0	17.5	14.0	23.5	17.0
18	15.0	---	5.0	---	---	17.0	15.5	15.5	18.5	10.0	23.0	8.0
19	15.0	---	3.0	3.0	---	19.0	20.0	13.0	10.5	23.0	21.5	5.0
20	14.0	---	4.0	8.0	1.0	12.0	21.0	14.0	10.0	14.5	22.0	15.0
21	13.0	---	8.0	7.0	4.0	13.0	22.0	15.5	17.0	24.0	12.0	10.0
22	16.0	---	3.0	6.0	---	19.0	18.0	10.5	19.0	22.0	12.0	16.5
23	15.0	---	5.0	9.0	---	17.0	26.5	10.5	20.5	13.5	20.5	13.0
24	16.0	10.0	1.0	10.0	9.0	15.0	23.5	11.0	19.5	10.5	20.5	10.5
25	15.0	10.0	2.0	10.0	11.0	14.0	21.5	16.0	19.0	10.5	22.0	12.0
26	15.0	12.0	2.0	10.0	10.0	12.0	24.5	12.0	18.0	10.0	17.5	10.0
27	15.0	11.0	2.0	8.0	7.0	12.0	23.0	12.5	18.5	20.0	14.5	13.5
28	14.0	6.0	6.0	9.0	5.0	19.0	23.0	13.0	21.0	13.0	10.5	13.5
29	14.0	1.0	7.0	6.0	---	9.0	23.5	9.0	22.0	13.0	14.0	5.0
30	14.0	1.0	4.0	4.0	---	13.5	23.5	6.5	23.0	22.0	23.0	5.5
31	15.0	---	---	3.0	---	13.5	---	13.5	---	13.0	21.0	---
MONTH	15.0	---	4.5	5.5	---	---	18.0	17.5	16.5	15.5	18.5	13.0
YEAR	MAX	27.0	MIN	0.0	MEAN	13.0						

07238000 NORTH CANADIAN RIVER NEAR SEILING, OKLA.

LOCATION.--Lat 36°11'06", long 98°55'15", in NW 1/4 sec.28, T.20 N., R.16 W., Major County, at gaging station at bridge on U.S. Highway 60, 2.0 mi (3.2 km) upstream from Seiling Creek, 2.2 mi (3.5 km) north of Seiling, 2.8 mi (4.5 km) downstream from Deep Creek, and at mile 422.6 (680.0 km).

DRAINAGE AREA.--12,261 mi^2 (31,756 km^2), of which 4,847 mi^2 (12,554 km^2) is probably noncontributing.

PERIOD OF RECORD.--Water years 1951 and 1953-58 (partial-record station), October 1967 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TOTAL CALCIUM (CA) (MG/L)	TOTAL MAGNESIUM (MG) (MG/L)	TOTAL SODIUM (NA) (MG/L)	TOTAL POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)
OCT.									
16...	0900	22	--	--	--	--	--	--	--
NOV.									
12...	0930	77	--	--	--	--	383	--	314
26...	0900	62	--	--	--	--	369	0	303
DEC.									
18...	0830	104	--	--	--	--	--	--	--
JAN.									
15...	1200	104	--	--	--	--	--	--	--
28...	--	107	--	--	--	--	--	--	--
FEB.									
05...	--	128	--	--	--	--	--	--	--
25...	--	177	--	--	--	--	--	--	--
MAR.									
12...	1400	175	--	--	--	--	--	--	--
25...	1100	75	--	--	--	--	--	--	--
APR.									
08...	1300	114	--	--	--	--	--	--	--
23...	1000	116	--	--	--	--	--	--	--
MAY									
07...	1100	77	170	61	170	4.3	271	0	222
20...	1230	302	120	43	140	5.7	260	0	213
JUNE									
02...	1515	215	140	50	130	3.9	308	0	253
21...	1100	130	--	--	--	--	--	--	--
JULY									
02...	1100	96	--	--	--	--	--	--	--
16...	1145	28	--	--	--	--	--	--	--
30...	1130	33	--	--	--	--	--	--	--
AUG.									
06...	1500	24	--	--	--	--	--	--	--
26...	1330	11	--	--	--	--	--	--	--
SEP.									
09...	1500	6.6	--	--	--	--	--	--	--
24...	1630	16	--	--	--	--	--	--	--

07238000 NORTH CANADIAN RIVER NEAR SEILING, OKLA.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	AMMONIA NITRO-GEN (N) (MG/L)	TOTAL ORGANIC NITRO-GEN (N) (MG/L)	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	TOTAL NITRO-GEN (N) (MG/L)	TOTAL NITRO-GEN (NO3) (MG/L)
OCT.									
16...	--	--	--	.50	.42	.41	.83	1.3	5.9
NOV.									
12...	650	210	.5	1.2	.19	.51	.70	1.9	8.4
26...	630	230	.7	.00	.08	.53	.61	.61	2.7
DEC.									
18...	--	--	--	1.1	.31	.39	.70	1.8	8.0
JAN.									
15...	--	--	--	.79	.26	.65	.91	1.7	7.5
28...	--	--	--	.47	.01	.29	.30	.77	3.4
FEB.									
05...	--	--	--	.65	.28	.61	.89	1.5	6.8
25...	--	--	--	.57	.19	.63	.82	1.4	6.2
MAR.									
12...	--	--	--	.00	.07	.38	.45	.45	2.0
25...	--	--	--	.34	.05	.46	.51	.85	3.8
APR.									
08...	--	--	--	.07	.16	2.8	3.0	3.1	14
23...	--	--	--	.19	.07	.65	.72	.91	4.0
MAY									
07...	460	250	.6	.10	.03	.85	.88	.98	4.3
20...	250	210	.8	.06	.17	1.4	1.6	1.7	7.3
JUNE									
02...	380	210	.6	.01	.02	2.8	2.8	2.8	12
21...	--	--	--	.02	.47	1.2	1.7	1.7	7.6
JULY									
02...	--	--	--	.17	.13	.68	.81	.98	4.3
16...	--	--	--	.22	--	--	--	--	--
30...	--	--	--	.10	.22	.62	.84	.94	4.2
AUG.									
06...	--	--	--	.02	.03	.78	.81	.83	3.7
26...	--	--	--	.02	.04	.68	.72	.74	3.3
SEP.									
09...	--	--	--	.01	.07	.87	.94	.95	4.2
24...	--	--	--	.57	.13	.64	.77	1.3	5.9

DATE	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	TOTAL NON-FILT-RABLE RESIDUE (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	CARBON DIOXIDE (CO2) (MG/L)
OCT.								
16...	.50	1940	2.64	115	11	--	8.2	--
NOV.								
12...	.33	1720	2.34	358	24	2300	8.2	3.9
26...	.28	1780	2.42	298	8	2400	8.0	5.9
DEC.								
18...	.26	1450	1.97	407	12	2000	8.0	--
JAN.								
15...	.31	1430	1.94	402	22	2200	8.1	--
28...	.21	1010	1.37	292	16	1810	--	--
FEB.								
05...	.61	1050	1.43	354	77	1400	8.4	--
25...	.27	1380	1.88	660	55	1900	8.5	--
MAR.								
12...	.17	--	--	--	33	1680	8.5	--
25...	.16	1510	2.05	306	15	--	8.1	--
APR.								
08...	.53	1440	1.96	443	72	2100	8.2	--
23...	.21	1230	1.67	385	--	1600	8.4	--
MAY								
07...	.24	1400	1.90	291	100	1800	8.1	3.4
20...	.27	974	1.32	794	160	--	8.1	3.3
JUNE								
02...	.24	1190	1.62	691	96	1770	8.2	3.1
21...	.17	1490	2.03	523	84	2120	8.3	--
JULY								
02...	.10	1730	2.35	448	20	--	8.3	--
16...	.10	1610	2.19	122	28	2000	8.7	--
30...	.10	1660	2.26	148	--	--	8.2	--
AUG.								
06...	.11	1510	2.05	97.8	16	2000	7.6	--
26...	.12	1710	2.33	50.8	8	--	8.6	--
SEP.								
09...	.08	1720	2.34	30.7	--	--	8.3	--
24...	.07	1920	2.61	82.9	4	--	8.6	--

07238000 NORTH CANADIAN RIVER NEAR SEILING, OKLA.--Continued
WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TOTAL IRON (FE) (UG/L)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	CHEMICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	CHLOROPHYLL A (UG/L)	CHLOROPHYLL B (UG/L)
OCT.										
16...	0900	22	330	10.0	3	7.7	75	24	--	--
NOV.										
12...	0930	77	710	7.0	9	10.1	89	34	3.20	13.0
26...	0900	62	350	5.5	3	10.6	92	23	--	--
DEC.										
18...	0830	104	560	2.5	6	13.4	103	22	.000	.000
JAN.										
15...	1200	104	580	--	5	--	--	13	--	--
28...	--	107	440	--	4	--	--	18	--	--
FEB.										
05...	--	128	1100	1.0	30	13.7	107	26	--	--
25...	--	177	1300	--	20	--	--	22	4.00	.000
MAR.										
12...	1400	175	760	3.0	13	13.3	109	31	--	--
25...	1100	75	380	8.0	3	12.9	116	17	9.40	2.00
APR.										
08...	1300	114	6300	16.0	24	8.5	92	22	13.0	2.10
23...	1000	116	1100	--	4	--	--	19	4.40	.100
MAY										
07...	1100	77	1300	14.0	18	9.9	106	23	--	--
20...	1230	302	3800	22.5	50	8.2	104	31	42.0	3.90
JUNE										
02...	1515	215	2000	24.0	29	11.8	153	33	--	--
21...	1100	130	650	25.0	9	8.9	117	33	56.0	14.0
JULY										
02...	1100	96	200	25.0	4	6.2	80	20	--	--
16...	1145	28	260	26.0	12	7.8	103	--	--	--
30...	1130	33	490	28.0	4	8.2	109	23	--	--
AUG.										
06...	1500	24	170	30.5	4	7.5	106	33	--	--
26...	1330	11	140	31.0	2	12.2	165	120	13.0	2.10
SEP.										
09...	1500	6.6	160	32.0	1	12.4	165	14	4.60	.600
24...	1630	16	110	22.5	1	--	--	13	.000	.000

DATE	FECAL COLIFORM (COL. PER 100 ML)	STREPTOCOCCI (COLONIES PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)	OIL AND GREASE (MG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	TOTAL CHROMIUM (CR) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL ZINC (ZN) (UG/L)
OCT.										
16...	180	100	--	8	3	<10	0	<100	.3	100
NOV.										
12...	220	--	8.2	0	4	<10	0	100	.1	130
26...	64	54	6.1	1	4	<10	0	100	<.1	30
DEC.										
18...	815	827	5.6	3	3	<10	0	100	.2	20
JAN.										
15...	--	--	8.2	6	11	20	0	100	.0	30
28...	--	--	8.5	4	4	20	25	<100	.1	40
FEB.										
05...	--	--	13	3	2	<10	0	<100	.6	30
25...	--	--	9.5	3	2	10	0	<100	.0	40
MAR.										
12...	6600	1570	6.2	2	3	<10	20	<100	.3	30
25...	105	37	34	E1	1	10	0	<100	.0	40
APR.										
08...	--	--	7.9	2	3	<10	0	<100	.1	30
23...	--	--	5.0	2	5	<10	0	<100	.1	40
MAY										
07...	--	--	8.6	0	3	<10	0	<100	.4	60
20...	130	131	12	1	6	<10	0	100	.0	20
JUNE										
02...	190	95	11	1	6	<10	20	<100	.1	50
21...	--	334	8.3	2	3	<10	0	<100	.1	190
JULY										
02...	--	--	5.0	1	3	<10	0	<100	.1	0
16...	M0	8610	--	0	4	<10	0	<100	.1	0
30...	M0	--	5.3	0	4	<10	10	<100	.1	50
AUG.										
06...	450	340	4.3	--	3	<10	0	<100	.0	20
26...	99	188	10	1	4	<10	0	<100	.3	30
SEP.										
09...	375	--	8.4	0	6	<10	0	<100	.6	7
24...	387	287	--	1	5	<10	10	<100	.1	10

07238000 NORTH CANADIAN RIVER NEAR SEILING, OKLA.--Continued
WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TOTAL IRON IN BOTTOM MATERIAL (UG/G)	TOTAL KJEL. NITROGEN IN BOTTOM MAT. (MG/KG)	TOTAL PHOSPHORUS IN BOTTOM MATERIAL (MG/KG)	LOSS ON IGNITION IN BOTTOM MATERIAL (MG/KG)	COD IN BOTTOM MATERIAL (MG/KG)
MAR. 12...	1400	175	630	60	45	1900	97

DATE	OIL AND GREASE IN BOTTOM MATERIAL (MG/KG)	TOTAL ARSENIC IN BOTTOM MATERIAL (UG/G)	TOTAL CADMIUM IN BOTTOM MATERIAL (UG/G)	TOTAL CHROMIUM IN BOTTOM MATERIAL (UG/G)	TOTAL LEAD IN BOTTOM MATERIAL (UG/G)	TOTAL MERCURY IN BOTTOM MATERIAL (UG/G)	TOTAL ZINC IN BOTTOM MATERIAL (UG/G)
MAR. 12...	<1.0	1	1	1	10	.1	5

07238500 CANTON LAKE NEAR CANTON, OKLA.

LOCATION.--Lat 36°05'03", long 98°36'05", in SE 1/4 NE 1/4 sec.32, T.19 N., R.13 W., Blaine County, near right end of Canton Dam on North Canadian River, 2.0 mi (3.2 km) northwest of Canton, and at mile 394.3 (634.4 km).

DRAINAGE AREA.--12,483 mi² (32,331 km²), of which 4,883 mi² (12,647 km²) is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: October 1951 to September 1954, December 1955 to September 1963, October 1967 to current year.
Water temperatures: October 1951 to September 1954.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	RESERVOIR STORAGE (AC-FT)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED NITRITE PLUS NITRATE (N) (MG/L)
OCT.												
21...	1530	67720	90	42	160	10	177	0	145	250	230	--
NOV.												
18...	1400	71080	82	33	130	8.1	175	0	144	230	170	--
DEC.												
03...	1600	66470	--	--	--	--	--	--	--	--	--	--
16...	1320	67440	96	38	130	7.9	195	0	160	260	180	--
JAN.												
20...	1445	67490	110	45	130	9.4	220	0	180	280	180	--
FEB.												
03...	1130	67890	--	45	140	7.1	221	0	181	300	190	--
21...	1100	67440	--	--	--	--	--	--	--	--	--	--
MAR.												
05...	1130	65180	120	47	140	7.1	231	0	189	310	190	--
17...	0920	68350	--	--	--	--	--	--	--	--	--	--
APR.												
01...	1000	72680	--	--	--	--	--	--	--	--	--	--
14...	0950	75510	130	45	140	6.7	250	0	205	330	190	--
MAY												
01...	1300	79470	130	52	150	6.8	240	0	197	360	200	--
JUNE												
30...	1000	116300	100	42	130	7.0	209	0	171	270	180	.10
AUG.												
04...	1430	112800	100	42	140	7.4	196	0	161	300	180	.09
22...	1100	109300	100	44	140	7.6	183	0	150	--	190	.01
SEP.												
03...	1345	106800	--	--	--	--	--	--	--	--	--	--
22...	1545	103000	91	43	150	7.5	161	0	132	310	190	.49

DATE	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (TONS PER AC-FT)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	CARBON DIOXIDE (CO2) (MG/L)
OCT.											
21...	921	1.25	400	250	46	3.5	1450	7.9	16.0	13	3.6
NOV.											
18...	796	1.08	340	200	45	3.1	1260	7.8	11.0	1	4.4
DEC.											
03...	--	--	--	--	--	--	1320	--	--	--	--
16...	--	--	400	240	41	2.8	1340	8.0	4.0	1	3.1
JAN.											
20...	946	1.29	460	280	37	2.6	1440	--	4.0	5	--
FEB.											
03...	951	--	--	--	--	--	1450	--	7.0	4	--
21...	--	--	--	--	--	--	1450	--	5.0	--	--
MAR.											
05...	987	1.34	490	300	38	2.7	1490	--	7.0	3	--
17...	--	--	--	--	--	--	1490	--	5.0	--	--
APR.											
01...	--	--	--	--	--	--	1520	--	7.5	--	--
14...	1030	1.40	510	300	37	2.7	1560	8.0	10.0	12	4.0
MAY											
01...	1060	1.44	540	340	37	2.8	1570	7.8	18.0	30	6.1
JUNE											
30...	901	1.23	420	250	40	2.8	1420	8.1	26.0	20	2.7
AUG.											
04...	920	1.25	420	260	41	3.0	1450	8.1	29.0	60	2.5
22...	935	1.27	430	280	41	2.9	1460	7.7	27.0	20	5.8
SEP.											
03...	--	--	--	--	--	--	1460	--	27.0	--	--
22...	942	1.28	400	270	44	3.2	1480	8.8	22.0	25	.4

07239450 NORTH CANADIAN RIVER NEAR FORT RENO, OKLA.

LOCATION.--Lat 35°36'59", long 98°03'57", in E 1/2 sec.9, T.13 N., R.8 W., Canadian County, at bridge on county road, 4 mi (6.4 km) northwest of Fort Reno, 3 mi (4.8 km) east and 1 mi (1.6 km) north of Calumet.

DRAINAGE AREA.--Not determined.

PERIOD OF RECORD.--Chemical analyses: February 1974 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TOTAL CALCIUM (CA) (MG/L)	TOTAL MAGNESIUM (MG) (MG/L)	TOTAL SODIUM (NA) (MG/L)	TOTAL POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)
OCT.									
16...	1030	110	--	--	--	--	--	--	--
NOV.									
12...	1130	754	--	--	--	--	176	0	144
26...	1100	314	--	--	--	--	218	0	179
DEC.									
18...	1030	139	--	--	--	--	--	--	--
JAN.									
15...	--	141	--	--	--	--	--	--	--
28...	1330	144	--	--	--	--	--	--	--
FEB.									
11...	1200	225	--	--	--	--	--	--	--
25...	--	582	--	--	--	--	--	--	--
MAR.									
12...	1100	648	--	--	--	--	--	--	--
25...	1300	144	--	--	--	--	--	--	--
APR.									
08...	1530	495	--	--	--	--	--	--	--
23...	--	181	--	--	--	--	--	--	--
MAY									
07...	--	71	110	49	150	6.5	305	0	250
20...	1430	211	95	40	120	5.5	333	0	273
JUNE									
02...	1715	286	88	36	100	7.5	294	0	241
21...	1320	238	--	--	--	--	--	--	--
JULY									
02...	1330	96	--	--	--	--	--	--	--
30...	1400	380	--	--	--	--	--	--	--
AUG.									
12...	1200	76	--	--	--	--	--	--	--
26...	1120	46	--	--	--	--	--	--	--
SEP.									
09...	1800	38	--	--	--	--	--	--	--
25...	1100	36	--	--	--	--	--	--	--

07239450 NORTH CANADIAN RIVER NEAR FORT RENO, OKLA.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	AMMONIA NITRO-GEN (N) (MG/L)	TOTAL ORGANIC NITRO-GEN (N) (MG/L)	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	TOTAL NITRO-GEN (N) (MG/L)	TOTAL NITRO-GEN (NO3) (MG/L)
OCT.									
16...	--	--	--	.09	.34	.76	1.1	1.2	5.3
NOV.									
12...	210	190	.6	.11	.13	.73	.86	.97	4.3
26...	220	170	.9	.00	.11	.50	.61	.61	2.7
DEC.									
18...	--	--	--	.18	.24	.50	.74	.92	4.1
JAN.									
15...	--	--	--	.16	.18	1.1	1.3	1.5	6.5
28...	--	--	--	.34	.09	.80	.89	1.2	5.4
FEB.									
11...	--	--	--	.15	.22	.88	1.1	1.3	5.5
25...	--	--	--	.22	.34	1.4	1.7	1.9	8.5
MAR.									
12...	--	--	--	.64	.01	.60	.61	1.3	5.5
25...	--	--	--	.11	.09	.59	.68	.79	3.5
APR.									
08...	--	--	--	.10	.07	.61	.68	.78	3.5
23...	--	--	--	.02	.07	.58	.65	.67	3.0
MAY									
07...	270	190	.6	.02	.02	.86	.88	.90	4.0
20...	230	160	.6	.00	.02	1.5	1.5	1.5	6.6
JUNE									
02...	150	110	.4	.00	--	--	--	--	--
21...	--	--	--	.01	.00	1.3	1.3	1.3	5.8
JULY									
02...	--	--	--	.01	.00	1.2	1.2	1.2	5.4
30...	--	--	--	.04	.00	.89	.89	.93	4.1
AUG.									
12...	--	--	--	.00	.00	.72	.72	.72	3.2
26...	--	--	--	.05	.03	.49	.52	.57	2.5
SEP.									
09...	--	--	--	.02	.00	1.1	1.1	1.1	5.0
25...	--	--	--	.15	.06	1.2	1.3	1.5	6.4

DATE	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	TOTAL NON-FILT-RABLE RESIDUE (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	CARBON DIOXIDE (CO2) (MG/L)
OCT.								
16...	.16	1450	1.97	431	18	--	8.4	--
NOV.								
12...	.20	802	1.09	1630	147	1250	8.7	.6
26...	.16	860	1.17	729	62	1300	8.5	1.1
DEC.								
18...	.17	1040	1.42	390	8	1600	8.3	--
JAN.								
15...	.17	1050	1.43	400	26	1600	7.9	--
28...	.10	988	1.34	384	22	1550	8.9	--
FEB.								
11...	1.3	1320	1.80	802	39	--	8.5	--
25...	.29	807	1.10	1270	268	--	8.6	--
MAR.								
12...	.35	--	--	--	40	1450	8.3	--
25...	.14	1200	1.63	467	37	2200	8.3	--
APR.								
08...	.15	1250	1.70	1670	20	1800	9.5	--
23...	.14	1210	1.65	591	16	1750	8.1	--
MAY								
07...	.21	979	1.33	188	168	1520	8.1	3.9
20...	.26	898	1.22	512	112	--	8.2	3.4
JUNE								
02...	.79	714	.97	551	135	1100	8.3	2.4
21...	.41	712	.97	458	68	--	8.5	--
JULY								
02...	.26	1150	1.56	298	36	--	8.4	--
30...	.21	1150	1.56	1180	12	1800	8.1	--
AUG.								
12...	.00	1160	1.58	238	28	1900	8.0	--
26...	.27	1180	1.60	147	12	--	7.8	--
SEP.								
09...	.20	1110	1.51	114	0	--	8.7	--
25...	.18	1070	1.46	104	228	1600	7.6	--

07239450 NORTH CANADIAN RIVER NEAR FORT RENO, OKLA.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TOTAL IRON (FE) (UG/L)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	CHEMICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	CHLOROPHYLL A (UG/L)	CHLOROPHYLL B (UG/L)
OCT.										
16...	1030	110	430	13.0	5	7.4	78	25	--	--
NOV.										
12...	1130	754	3200	9.5	50	10.4	97	22	--	--
26...	1100	314	1600	6.5	30	11.2	95	23	--	--
DEC.										
18...	1030	139	520	3.0	6	13.6	131	22	3.20	.500
JAN.										
15...	--	141	620	--	10	--	--	12	--	--
28...	1330	144	440	6.0	10	--	--	24	--	--
FEB.										
11...	1200	225	1200	2.0	20	12.1	95	21	--	--
25...	--	582	8400	--	100	--	--	39	--	--
MAR.										
12...	1100	648	3100	4.0	22	12.4	102	--	--	--
25...	1300	144	780	11.0	11	14.0	133	22	--	--
APR.										
08...	1530	495	660	18.0	9	9.4	106	27	8.20	.000
23...	--	181	100	--	5	--	--	39	--	--
MAY										
07...	--	71	2900	19.0	68	9.6	114	36	--	--
20...	1430	211	2100	23.0	30	10.2	129	39	55.0	2.70
JUNE										
02...	1715	286	4400	27.0	40	9.5	127	22	--	--
21...	1320	238	2700	27.5	25	9.6	130	50	43.0	9.40
JULY										
02...	1330	96	510	28.5	7	8.6	116	31	--	--
16...	1500	55	--	30.0	--	7.0	97	--	40.0	8.30
30...	1400	380	580	29.0	8	7.9	107	49	--	--
AUG.										
12...	1200	76	320	29.0	13	8.1	111	150	20.0	3.50
26...	1120	46	260	25.0	2	9.1	117	120	4.00	1.20
SEP.										
09...	1800	38	190	28.0	3	11.2	147	56	--	--
25...	1100	36	100	15.0	1	10.6	110	18	36.0	6.30

DATE	FECAL COLIFORM (COL. PER 100 ML)	STREPTOCOCCI (COLONIES PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)	OIL AND GREASE (MG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	TOTAL CHROMIUM (CR) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL ZINC (ZN) (UG/L)
OCT.										
16...	350	280	8.8	1	5	<10	0	<100	.0	30
NOV.										
12...	520	--	9.2	2	4	<10	0	<100	.2	70
26...	280	78	7.5	1	4	10	0	100	<.1	30
DEC.										
18...	810	810	5.6	2	4	<10	0	100	<.1	20
JAN.										
15...	--	--	7.8	6	4	0	10	100	.0	30
28...	--	--	7.4	3	3	10	10	<100	.2	30
FEB.										
11...	690	8800	7.8	4	1	<10	0	<100	.0	20
25...	533	810	14	0	8	10	0	<100	.0	50
MAR.										
12...	340	160	9.1	2	2	<10	0	<100	.1	40
25...	M0	89	6.7	0	5	10	1	<100	.0	40
APR.										
08...	--	--	9.2	1	4	<10	0	100	.0	20
23...	--	--	.0	2	3	<10	0	<100	.0	40
MAY										
07...	--	--	19	0	9	<10	0	<100	.2	30
20...	160	121	13	1	6	<10	10	<100	.4	8
JUNE										
02...	450	1000	19	0	5	0	10	10	.3	50
21...	--	1510	12	2	11	<10	0	<100	.1	270
JULY										
02...	--	--	9.3	2	4	<10	0	<100	.2	0
16...	--	--	--	--	--	--	--	--	--	--
30...	M0	--	--	0	4	<10	20	<100	.1	30
AUG.										
12...	5500	7800	6.4	0	9	<10	10	<100	.1	10
26...	162	453	13	0	7	<10	0	<100	.6	20
SEP.										
09...	225	--	8.7	0	8	<10	10	<100	.8	10
25...	387	100	--	0	4	<10	68	<100	.0	10

07239450 NORTH CANADIAN RIVER NEAR FORT RENO, OKLA.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TOTAL IRON IN BOTTOM MATERIAL (UG/G)	TOTAL KJEL. NITROGEN IN BOTTOM MAT. (MG/KG)	TOTAL PHOSPHORUS IN BOTTOM MATERIAL (MG/KG)	LOSS ON IGNITION IN BOTTOM MATERIAL (MG/KG)	COD IN BOTTOM MATERIAL (MG/KG)
MAR. 12...	1100	648	1300	150	77	6410	2400

DATE	OIL AND GREASE IN BOTTOM MATERIAL (MG/KG)	TOTAL ARSENIC IN BOTTOM MATERIAL (UG/G)	TOTAL CADMIUM IN BOTTOM MATERIAL (UG/G)	TOTAL CHROMIUM IN BOTTOM MATERIAL (UG/G)	TOTAL LEAD IN BOTTOM MATERIAL (UG/G)	TOTAL MERCURY IN BOTTOM MATERIAL (UG/G)	TOTAL ZINC IN BOTTOM MATERIAL (UG/G)
MAR. 12...	<1.0	0	1	2	10	.0	8

07239500 NORTH CANADIAN RIVER NEAR EL RENO, OKLA.

LOCATION.--Lat 35°33'44", long 97°57'32", on east line of sec.32, T.13 N., R.7 W., Canadian County, at gaging station at bridge on U.S. Highway 81, 2.0 mi (3.2 km) north of courthouse in El Reno, 2.2 mi (3.5 km) downstream from Target Creek, and at mile 307.4 (494.6 km).

DRAINAGE AREA.--13,042 mi² (33,779 km²), of which 4,899 mi² (12,688 km²) is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: May 1974 to current year.
Water temperatures: May 1974 to current year.

EXTREMES, Current year.--Specific conductance: Maximum daily, 1,860 micromhos/cm Apr. 23; minimum daily, 239 micromhos/cm Nov. 3.
Water temperatures: Maximum, 36.0°C Aug. 21; minimum, 4.0°C Feb. 9.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	DIS-CHARGE (CFS)	INSTAN-TANEOUS DIS-CHARGE (CFS)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	ALKA-LINITY AS CACO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)
OCT.												
01-16	--	554	--	84	39	160	--	185	0	152	240	220
17-27	--	76	--	100	38	180	--	245	0	201	250	240
28-30	--	111	--	81	31	130	--	211	0	173	190	170
31...	1600	--	540	44	18	57	--	121	--	99	99	69
NOV.												
01...	1635	--	226	68	26	110	--	181	0	148	170	--
02-05	--	2580	--	31	8.1	28	--	96	0	79	49	31
06-07	--	764	--	71	23	99	--	162	0	133	160	130
08-23	--	779	--	84	33	130	--	179	0	147	220	180
24-30	--	277	--	100	39	150	--	237	0	194	250	190
DEC.												
01-11	--	124	--	--	49	170	9.6	284	0	233	300	240
12-15	--	298	--	110	40	140	7.6	223	0	183	280	190
16-31	--	144	--	--	--	110	4.4	163	0	134	--	--
JAN.												
01-02	--	220	--	110	45	140	7.0	262	0	215	300	180
03-04	--	530	--	75	33	99	7.9	175	0	144	220	130
05-08	--	253	--	99	41	120	7.7	241	0	198	250	170
09-30	--	147	--	120	51	160	7.2	292	0	240	310	210
31...	1630	--	832	61	25	72	6.3	152	0	125	150	--
FEB.												
01-05	--	411	--	75	30	--	6.4	190	0	156	180	110
06-21	--	265	--	120	46	150	6.2	286	0	235	260	180
22-28	--	536	--	--	35	110	5.8	210	0	172	200	130
MAR.												
01-06	--	492	--	110	40	130	6.7	256	0	210	270	160
07-17	--	230	--	130	47	160	6.7	324	0	266	310	190
18-20	--	588	--	69	26	80	7.1	201	0	165	160	--
21-28	--	221	--	110	47	160	7.3	323	0	265	290	180
29-31	--	232	--	85	35	110	6.7	261	0	214	210	120
APR.												
01-07	--	116	--	130	54	180	6.9	396	0	325	340	210
08...	1635	--	230	79	33	110	7.2	219	0	180	230	120
09-12	--	128	--	120	49	160	6.5	351	0	288	290	--
13-30	--	81	--	--	53	190	6.7	363	0	298	350	220
MAY												
05...	1703	--	99	82	37	120	7.2	260	0	213	210	130
14...	1825	--	1870	42	10	23	5.7	125	0	103	62	21
25...	1320	--	647	49	20	60	9.3	169	0	139	120	61
JUNE												
01-02	--	378	--	61	23	68	9.5	209	0	171	120	69
03-06	--	208	--	98	47	140	9.1	333	0	273	250	170
07-10	--	447	--	63	26	84	11	209	0	171	160	95
11-14	--	648	--	46	16	50	11	168	0	138	92	51
15-16	--	197	--	88	36	120	10	311	0	255	200	130
17-20	--	934	--	42	14	44	14	146	0	120	160	110
21-26	--	335	--	45	15	42	14	229	0	188	160	110
27-30	--	142	--	100	46	160	9.5	330	0	271	280	190
JULY												
01...	0945	--	112	110	51	180	8.6	325	0	267	300	200
17...	2100	--	50	120	56	190	9.3	343	0	281	330	230
28...	1645	--	3820	35	7.9	22	6.8	106	0	87	--	24
AUG.												
02...	1500	--	1830	38	8.7	21	5.7	111	0	91	63	20
13...	2010	--	55	120	57	--	7.3	329	0	270	370	210
30...	0730	--	46	110	50	--	7.0	274	0	225	350	200
SEP.												
09...	1845	--	29	--	53	170	6.9	283	0	232	360	220
11...	2030	--	37	100	49	--	6.6	274	0	225	330	210
24...	1700	--	35	--	51	160	6.4	288	0	236	340	200

07239500 NORTH CANADIAN RIVER NEAR EL RENO, OKLA.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	CARBON DIOXIDE (CO2) (MG/L)
OCT.											
01-16	.28	897	1.22	1340	370	220	--	3.6	1450	8.2	1.9
17-27	.18	980	1.33	201	410	210	--	3.9	1560	8.2	2.5
28-30	.42	768	1.04	230	330	160	--	3.1	1240	7.9	4.3
31...	1.1	389	.53	567	180	85	--	1.8	640	--	--
NOV.											
01...	.70	661	.90	403	280	130	--	2.9	1060	7.9	3.6
02-05	.86	214	.29	1490	110	31	--	1.2	363	7.8	2.4
06-07	.56	605	.82	1250	270	140	--	2.6	984	7.9	3.3
08-23	.39	796	1.08	1670	350	200	--	3.0	1260	8.1	2.3
24-30	.35	898	1.22	672	410	220	--	3.2	1400	8.1	3.0
DEC.											
01-11	--	1030	--	345	--	--	--	--	1590	8.4	1.8
12-15	--	903	1.23	727	440	260	40	2.9	1370	8.5	1.1
16-31	--	--	--	--	--	--	--	--	2200	7.8	4.1
JAN.											
01-02	--	972	1.32	577	460	250	39	2.8	1470	9.0	.4
03-04	--	686	.93	982	320	180	39	2.4	1060	8.1	2.2
05-08	--	--	--	--	420	220	38	2.6	1310	8.8	.6
09-30	--	1050	1.43	417	510	270	40	3.1	--	8.8	.7
31...	--	508	.69	1140	260	130	37	2.0	783	8.0	2.4
FEB.											
01-05	--	647	--	718	310	160	--	--	1000	8.2	1.9
06-21	--	1000	1.36	715	490	250	40	3.0	1520	8.2	2.9
22-28	--	730	--	1060	--	--	--	--	1130	8.2	2.1
MAR.											
01-06	--	923	1.26	1230	440	230	39	2.7	1400	7.8	6.5
07-17	--	1060	1.44	658	520	250	40	3.1	1590	7.9	6.5
18-20	--	564	.77	895	280	110	38	2.1	888	7.5	10
21-28	--	1030	1.40	615	470	200	42	3.2	1570	8.0	5.2
29-31	--	749	1.02	469	360	140	40	2.5	1160	7.8	6.6
APR.											
01-07	--	1210	1.65	379	550	220	41	3.4	1800	7.1	50
08...	--	739	1.01	459	330	150	41	2.6	1140	7.1	28
09-12	--	1040	1.41	359	500	210	41	3.1	1580	7.0	56
13-30	--	1200	--	262	--	--	--	--	1810	7.3	29
MAY											
05...	--	749	1.02	200	360	140	42	2.8	1180	7.6	10
14...	--	244	.33	1230	150	44	25	.8	392	7.7	4.0
25...	--	441	.60	770	200	66	38	1.8	699	7.6	6.8
JUNE											
01-02	--	479	.65	489	250	76	36	1.9	775	8.4	1.3
03-06	--	924	1.26	519	440	170	40	2.9	1420	8.3	2.7
07-10	--	590	.80	712	260	93	40	2.2	939	8.0	3.3
11-14	--	373	.51	653	180	43	36	1.6	604	8.2	1.7
15-16	--	795	1.08	423	370	110	41	2.7	1240	8.3	2.5
17-20	--	626	.85	1580	160	43	35	1.5	574	7.9	2.9
21-26	--	621	.84	562	170	0	32	1.4	997	8.0	3.7
27-30	--	1010	1.37	387	440	170	44	3.3	1520	8.2	3.3
JULY											
01...	.51	1080	1.47	327	480	220	44	3.6	1680	8.3	2.6
17...	.43	1180	1.60	159	530	250	43	3.6	1790	8.0	5.5
28...	1.2	239	--	--	120	33	27	.9	--	7.4	6.8
AUG.											
02...	1.3	231	.31	1140	130	40	25	.8	364	8.0	1.8
13...	--	1180	1.60	175	530	260	--	--	1830	8.2	3.3
30...	.41	1050	--	130	480	260	--	--	1640	8.3	2.2
SEP.											
09...	.33	1120	--	87.7	--	--	--	--	1760	7.8	6.4
11...	--	1060	1.44	106	450	230	--	--	1590	8.0	4.4
24...	--	1080	--	102	--	--	--	--	1680	8.1	3.7

07239500 NORTH CANADIAN RIVER NEAR EL RENO, OKLA.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TOTAL IRON (FE) (UG/L)	DISSOLVED IRON (FE) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	DISSOLVED MANGANESE (MN) (UG/L)	DISSOLVED NITRATE (N) (MG/L)	DISSOLVED NITRATE (NO3) (MG/L)	DISSOLVED NITRITE (N) (MG/L)	DISSOLVED NITRITE (NO2) (MG/L)	DISSOLVED NITRITE PLUS NITRATE (N) (MG/L)	DISSOLVED AMMONIA NITROGEN (N) (MG/L)
OCT.												
01...	1100	808	--	20	--	0	.00	.00	.00	.03	.00	--
31...	1030	664	--	80	--	20	.29	1.3	.06	.02	.36	--
NOV.												
26...	1300	312	1800	20	50	10	.16	.71	.00	.00	.16	--
DEC.												
30...	1515	142	--	10	--	1800	.09	.40	.00	.00	.09	--
JAN.												
28...	1500	171	440	10	40	0	.06	.27	.01	.03	.07	.01
FEB.												
25...	0900	537	6300	350	200	110	.31	1.4	.08	.26	.39	.18
MAR.												
25...	1400	146	740	50	80	30	.10	.44	.01	.03	.11	.01
APR.												
23...	1500	73	540	10	80	0	.05	.22	.00	.00	.05	.02
MAY												
20...	1530	214	2700	30	390	5	.04	.18	.00	.00	.04	.17
JUNE												
21...	1445	242	2900	780	260	0	.04	.18	.01	.03	.05	.29
JULY												
16...	1530	55	740	50	140	10	.00	.00	.08	.26	.08	.31
AUG.												
12...	1300	60	430	10	120	20	.01	.04	.00	.03	.02	.02
SEP.												
09...	1900	29	80	10	70	10	.02	.09	.00	.00	.02	.24

DATE	DISSOLVED AMMONIA (NH4) (MG/L)	DISSOLVED ORGANIC NITROGEN (N) (MG/L)	DISSOLVED KJEL. NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	CHEMICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)
OCT.											
01...	--	--	--	--	1200	7.8	18.0	8.5	96	--	2.7
31...	--	--	--	.43	--	--	22.0	8.2	101	25	3.9
NOV.											
26...	--	--	--	--	1600	8.1	7.0	10.9	97	28	15
DEC.											
30...	--	--	--	.19	1550	8.1	9.0	11.3	103	19	1.6
JAN.											
28...	.01	.55	.56	.11	1400	8.6	--	--	--	15	1.7
FEB.											
25...	.23	1.0	1.2	.33	2100	8.7	--	--	--	32	--
MAR.											
25...	.01	.31	.32	.16	1850	8.3	12.0	13.8	135	16	2.8
APR.											
23...	.03	.51	.53	.07	1800	8.3	--	--	--	27	--
MAY											
20...	.22	1.1	1.3	.26	1300	8.1	24.0	9.6	123	37	8.0
JUNE											
21...	.37	1.2	1.5	.37	850	8.6	28.0	9.2	124	42	6.4
JULY											
16...	.40	.31	.62	.23	1600	8.4	31.0	7.4	104	35	--
AUG.											
12...	.03	.87	.89	--	2000	7.9	28.0	8.6	113	30	5.7
SEP.											
09...	.31	1.2	1.4	.18	1500	8.8	27.0	11.4	150	21	5.8

07239500 NORTH CANADIAN RIVER NEAR EL RENO, OKLA.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	PHENOLS (UG/L)	TOTAL CADMIUM (CD) (UG/L)	DISSOLVED CADMIUM (CD) (UG/L)	TOTAL CHROMIUM (CR) (UG/L)	DISSOLVED CHROMIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	DISSOLVED COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	DISSOLVED LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)	DISSOLVED ZINC (ZN) (UG/L)
OCT.											
01...	2	--	<1	--	0	--	6	--	2	--	20
31...	3	--	0	--	0	--	6	--	1	--	70
NOV.											
26...	2	10	0	0	<10	<10	2	<100	1	70	20
DEC.											
30...	0	--	0	--	0	--	28	--	3	--	30
JAN.											
28...	6	<10	2	0	0	630	7	100	9	30	30
FEB.											
25...	5	<10	0	10	10	20	10	100	10	100	60
MAR.											
25...	1	<10	0	0	0	<10	2	<100	0	30	20
APR.											
23...	5	<10	0	0	0	<10	3	<100	0	40	0
MAY											
20...	4	<10	2	0	10	10	1	<100	1	20	30
JUNE											
21...	11	<10	1	0	0	10	9	<100	2	180	70
JULY											
16...	7	<10	3	0	0	<10	14	<100	8	10	10
AUG.											
12...	36	10	0	10	10	<10	4	<100	1	20	20
SEP.											
09...	--	0	1	12	2	0	9	<100	4	20	30

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TOTAL ALDRIN (UG/L)	TOTAL CHLORDANE (UG/L)	TOTAL DDD (UG/L)	TOTAL DDE (UG/L)	TOTAL DDT (UG/L)	TOTAL DIAZINON (UG/L)	TOTAL DIELDRIN (UG/L)	TOTAL ENDRIN (UG/L)	TOTAL HEPTACHLOR (UG/L)	TOTAL HEPTACHLOR EPOXIDE (UG/L)
OCT.												
01...	1100	808	.00	.0	.00	.00	.00	.00	.00	.00	.00	.00
31...	1030	664	--	--	--	--	--	--	--	--	--	--
NOV.												
26...	1300	312	--	--	--	--	--	--	--	--	--	--
JAN.												
28...	1500	171	.00	.0	.00	.00	.00	<.01	.00	.00	.00	.00
FEB.												
25...	0900	537	.00	.0	.00	.00	.00	.00	.00	.00	.00	.00
MAR.												
25...	1400	146	.00	.0	.00	.00	.00	.00	.00	.00	.00	.00
APR.												
23...	1500	73	.00	.0	.00	.00	.00	.00	.00	.00	.00	.00
MAY												
20...	1530	214	.00	.0	.00	.00	.00	.01	.00	.00	.00	.00
SEP.												
09...	1900	29	.00	.0	.00	.00	.00	.01	.00	.00	.00	.00

DATE	TOTAL LINDANE (UG/L)	TOTAL MALATHION (UG/L)	TOTAL METHYL PARATHION (UG/L)	TOTAL METHYL TRITHION (UG/L)	TOTAL PARATHION (UG/L)	TOTAL PCB (UG/L)	TOTAL TOXAPHENE (UG/L)	TOTAL TRITHION (UG/L)	TOTAL 2,4-D (UG/L)	TOTAL 2,4,5-T (UG/L)	TOTAL SILVEX (UG/L)
OCT.											
01...	.00	.00	.00	.00	.00	.0	0	.00	.00	.00	.00
31...	--	--	--	--	--	--	--	--	.00	.00	.00
NOV.											
26...	--	--	--	--	--	--	--	--	.01	.00	.00
JAN.											
28...	.00	.00	.00	.00	.00	.0	0	.00	.00	.00	.00
FEB.											
25...	.00	.00	.00	--	.00	.0	0	--	.03	.00	.00
MAR.											
25...	.00	.00	.00	--	.00	.0	0	--	.00	.00	.00
APR.											
23...	.00	.00	.00	--	.05	.0	0	--	.04	.00	.00
MAY											
20...	.00	.00	.00	--	.00	.0	0	--	.05	.01	.00
SEP.											
09...	.00	.00	.00	.00	.00	.0	0	.00	.01	.00	.02

07239500 NORTH CANADIAN RIVER NEAR EL RENO, OKLA.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	1060	1580	1510	826	1270	1630	1800	615	1680	1100	1640
2	---	515	1610	1440	918	1350	1750	1570	934	1730	364	1700
3	1430	239	1620	1010	1050	1420	1800	1690	1210	1700	598	---
4	---	319	1560	1120	1040	1440	1820	1000	1390	1720	687	---
5	---	348	---	1210	1170	1460	1850	---	1500	1730	1310	---
6	---	785	---	1240	1330	1520	---	---	1520	---	1000	---
7	---	1190	---	1360	1400	1600	---	1430	898	---	1490	---
8	1430	1280	1630	1440	1460	1700	1140	1610	901	---	1560	---
9	---	1290	1660	1520	1470	1710	1660	1680	873	---	1690	1760
10	---	1260	1670	1550	1540	1660	1650	1660	1020	---	1750	1730
11	---	1240	1640	1580	1600	1600	1410	1640	448	1640	1780	1650
12	1470	1260	1380	1590	1580	1540	1530	1700	476	1430	1810	1590
13	1490	1280	---	1610	1610	1490	1700	1350	575	1340	1830	---
14	1310	1240	---	1620	1620	---	1750	392	---	1670	1770	---
15	1430	1250	1390	1610	1610	---	1770	436	---	1740	1390	---
16	1470	---	1460	1570	---	1580	1760	516	1330	1780	1650	---
17	1530	---	1540	1590	---	1650	1750	726	598	1790	1620	---
18	1550	---	1600	1610	1520	1030	1770	937	364	1770	1630	---
19	1580	---	1640	---	1510	765	1820	1160	578	1700	1690	---
20	1610	1270	1630	---	1540	871	---	1260	679	1750	1520	1660
21	---	1250	---	---	1350	1310	---	1400	997	---	1660	1640
22	---	1260	---	1620	1150	1540	---	1380	1300	1760	1730	1650
23	---	1280	1570	1610	987	1630	1860	453	779	1750	1790	1660
24	1570	1330	1540	1570	1180	1750	1850	476	974	486	1780	1680
25	1430	1350	1560	1530	1190	1790	1840	699	861	589	1800	1690
26	1500	1370	1530	---	1120	---	1840	974	1020	748	1800	1700
27	1490	1380	1520	---	1090	---	1820	1040	1290	895	1760	---
28	1210	1400	1530	---	1190	1440	1810	1140	1530	318	1750	---
29	1380	1430	---	---	---	1080	1790	1280	1640	393	1750	---
30	1140	1530	---	1470	---	1060	1780	588	1660	867	1640	---
31	633	---	1460	783	---	1300	---	466	---	1000	1440	---
MONTH	---	1130	---	---	1310	1430	1730	1120	999	1360	1520	---

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	21.0	6.0	7.0	7.5	14.0	19.0	---	25.0	29.0	31.0	33.0
2	---	19.5	8.0	8.0	7.5	13.5	15.5	20.5	28.0	33.0	27.0	33.0
3	23.0	17.0	10.0	7.0	8.5	10.0	16.5	27.0	30.0	30.5	31.0	---
4	---	16.0	10.5	6.5	10.0	10.5	8.5	26.0	32.0	29.0	33.0	---
5	---	16.0	---	7.5	7.0	14.0	14.0	---	33.0	35.0	33.0	---
6	---	15.0	---	8.0	5.0	16.0	---	---	28.0	---	32.0	---
7	---	15.0	---	10.0	7.0	12.0	---	30.0	29.0	---	33.0	---
8	20.0	16.0	8.5	11.0	5.5	13.5	20.0	31.0	28.0	---	26.5	---
9	---	15.0	8.5	11.5	4.0	10.0	23.0	---	29.0	---	35.0	28.0
10	---	18.0	8.0	9.5	7.5	9.0	17.5	28.0	25.0	---	33.0	28.5
11	---	15.0	9.0	8.0	10.0	8.5	13.0	28.0	23.0	30.5	34.0	20.0
12	24.0	15.0	8.0	4.5	11.0	9.0	21.0	27.5	25.0	---	33.0	24.5
13	20.0	15.0	---	4.5	13.0	9.5	15.5	22.0	24.0	19.0	---	---
14	18.0	13.0	---	7.0	10.0	---	22.0	18.5	---	32.5	30.0	---
15	18.5	13.5	8.5	8.5	8.0	---	25.0	21.5	---	33.5	25.0	---
16	21.5	---	8.0	9.0	---	11.0	26.0	24.0	31.5	30.5	33.0	---
17	23.0	---	9.0	9.5	---	15.5	27.0	26.5	26.0	30.5	31.0	---
18	19.0	---	9.0	11.0	9.5	15.0	26.0	25.0	18.5	27.0	33.5	---
19	22.0	---	9.5	---	10.0	18.0	25.0	29.0	30.0	30.0	33.5	---
20	22.0	15.0	9.5	---	11.0	20.0	---	27.5	27.0	34.0	32.0	23.5
21	---	15.0	---	---	10.0	19.5	---	30.0	31.0	---	36.0	20.5
22	---	15.5	---	10.0	6.5	21.0	---	28.0	31.5	36.0	26.0	21.0
23	---	16.5	10.5	11.0	5.0	18.0	27.5	23.5	19.0	32.5	33.0	21.5
24	20.0	13.0	6.5	12.5	10.0	19.0	30.0	27.5	18.0	25.0	30.0	21.0
25	21.5	13.5	5.0	13.5	9.5	16.5	31.0	27.0	30.0	25.0	31.0	21.0
26	21.0	12.0	6.0	---	10.0	---	24.0	27.0	32.5	28.0	26.5	14.0
27	22.0	12.0	6.5	---	11.0	---	23.0	26.5	---	32.0	28.0	---
28	22.5	11.0	9.5	---	13.0	12.0	27.0	24.5	34.5	27.0	29.5	---
29	22.5	7.5	---	---	---	8.0	29.0	23.5	34.0	27.0	32.0	---
30	20.0	7.0	---	10.0	---	9.5	26.0	21.5	32.0	---	32.5	---
31	21.0	---	9.5	8.0	---	17.0	---	24.0	---	---	33.0	---
MONTH	---	14.5	---	---	8.5	13.5	22.0	25.5	28.0	---	31.0	---

07241550 NORTH CANADIAN RIVER NEAR HARRAH, OKLA.

LOCATION.--Lat 35°30'01", long 97°11'37", in SW 1/4 NW 1/4 sec.22, T.12 N., R.1 E., Oklahoma County, at gaging station at bridge on county road, 2.2 mi (3.5 km) northwest of Harrah, 3.8 mi (6.1 km) downstream from Choctaw Creek, and at mile 230.0 (370.1 km).

DRAINAGE AREA.--13,501 mi^2 (34,968 km^2), of which 4,899 mi^2 (12,688 km^2) is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: October 1968 to current year.
Water temperatures: October 1968 to current year.

EXTREMES, Current year.--Specific conductance: Maximum daily, 2,260 micromhos/cm Sept. 3; minimum daily, 334 micromhos/cm Nov. 3.
Water temperatures: Maximum, 30.0°C July 4; minimum, freezing point on several days during January.

Period of record.--Specific conductance: Maximum daily, 3,400 micromhos/cm Oct. 2, 1968, Oct. 31, 1969; minimum daily, 262 micromhos/cm June 9, 1974.
Water temperatures: Maximum, 35.0°C July 11, Aug. 9, 1969; minimum, freezing point on several days during winter months.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	DIS-CHARGE (CFS)	INSTAN-TANEOUS DIS-CHARGE (CFS)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PU-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	ALKA-LINITY AS CACO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)
OCT.												
01-18	--	573	--	89	34	180	--	202	0	166	210	250
19-25	--	324	--	92	35	220	--	240	0	197	180	270
26-28	--	617	--	65	22	110	--	176	0	144	130	150
29-31	--	1640	--	47	14	66	--	153	0	126	57	91
NOV.												
01-02	--	1400	--	48	11	47	--	149	0	122	48	69
03...	0900	--	3870	28	6.0	26	--	101	0	83	16	40
03-04	--	4980	--	35	5.7	26	--	106	0	87	23	43
04...	1100	--	5920	--	6.9	31	--	108	0	89	31	43
05-07	--	5090	--	43	9.4	39	--	127	0	104	57	--
08-11	--	1520	--	65	20	81	--	168	0	138	110	120
12-30	--	733	--	91	34	130	--	224	0	184	190	190
DEC.												
01-11	--	334	--	110	36	170	8.5	318	0	261	190	240
12-14	--	482	--	92	34	130	7.4	262	0	215	180	180
15-30	--	286	--	110	42	160	7.9	315	0	258	220	230
JAN.												
01-02	--	382	--	120	42	170	--	297	0	244	220	250
03-07	--	860	--	110	45	180	--	317	0	260	220	260
08-11	--	435	--	120	45	180	--	320	0	262	210	260
12-30	--	297	--	91	34	140	--	263	0	216	180	190
31...	--	988	--	87	34	130	--	244	0	200	190	--
FEB.												
01-07	--	912	--	64	23	80	--	173	0	142	130	100
08-09	--	538	--	87	34	130	--	240	0	197	190	170
10-22	--	322	--	110	42	160	--	298	0	244	240	210
23-28	--	745	--	79	30	110	--	196	0	161	180	130
MAR.												
01-18	--	471	--	100	40	140	--	272	0	223	220	180
19-23	--	553	--	81	29	120	--	236	0	194	150	160
24-26	--	298	--	100	42	170	--	323	0	265	210	210
27-31	--	538	--	80	27	110	--	242	0	198	150	140
APR.												
01-04	--	289	--	94	36	150	--	297	0	244	180	200
05-07	--	240	--	120	45	190	--	369	0	303	210	270
08-11	--	692	--	78	--	120	--	242	0	198	150	170
12-20	--	334	--	100	43	180	--	327	0	268	190	260
21-30	--	256	--	110	47	220	--	342	0	281	200	320
MAY												
01-02	--	270	--	110	44	230	8.8	356	0	292	210	320

07241500 NORTH CANADIAN RIVER NEAR HARRAH, OKLA.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	DIS-CHARGE (CFS)	INSTAN-TANEOUS DIS-CHARGE (CFS)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	ALKA-LINITY AS CACO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)
MAY												
03-07	--	653	--	66	23	110	6.3	207	0	170	--	150
08-13	--	307	--	87	34	160	7.8	270	0	221	170	230
14-17	--	899	--	58	19	80	6.0	186	0	153	78	110
18-22	--	492	--	79	29	120	7.5	252	0	207	120	170
23-27	--	2710	--	45	13	42	6.2	148	0	121	66	50
28-30	--	1350	--	68	25	93	7.2	230	0	189	110	130
31...	--	1450	--	43	14	38	5.3	156	0	128	56	48
JUNE												
01-03	--	909	--	55	19	68	--	194	0	159	92	83
04-06	--	428	--	78	28	120	--	278	0	228	120	150
07-10	--	1140	--	53	16	58	--	174	0	143	74	76
11-17	--	657	--	67	23	97	--	231	0	189	96	130
18-21	--	1600	--	--	12	44	--	156	0	128	58	55
22-24	--	863	--	55	16	74	--	185	0	152	74	98
25-30	--	598	--	68	22	96	--	228	0	187	96	130
JULY												
07...	0730	236	--	120	40	260	11	382	0	313	100	430
16...	0730	--	223	99	36	190	11	325	0	267	140	270
31...	0730	--	4400	43	7.9	25	6.3	133	0	109	31	--
AUG.												
10...	0730	--	489	92	32	160	9.6	326	0	267	160	210
15...	0930	--	480	--	--	--	--	--	--	--	--	--
21...	0730	--	312	100	30	150	10	297	0	244	160	210
26...	0730	--	421	120	39	270	12	333	0	273	130	440
28...	1700	--	296	--	--	--	--	--	--	--	--	--
SEP.												
03...	0730	--	405	120	43	280	12	311	0	255	180	460
16...	0730	--	116	73	--	120	8.6	228	0	187	110	170
29...	1400	--	74	--	--	--	--	--	--	--	--	--
30...	0730	--	88	110	38	220	10	327	0	268	170	330

07241500 NORTH CANADIAN RIVER NEAR HARRAH, OKLA.--Continued
WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	CARBON DIOXIDE (CO2) (MG/L)
OCT.											
01-18	2.5	937	1.27	1450	360	200	--	4.1	1520	7.9	4.1
19-25	4.4	968	1.32	847	370	170	--	5.0	1590	7.6	9.6
26-28	2.2	616	.84	1030	250	110	--	3.0	1030	7.8	4.5
29-31	1.1	382	.52	1690	180	50	--	2.2	661	7.7	4.9
NOV.											
01-02	1.8	321	.44	1210	170	43	--	1.6	546	7.7	4.8
03...	.48	--	--	--	95	12	--	1.2	325	7.8	2.6
03-04	1.0	194	.26	2610	110	24	--	1.1	349	7.9	2.1
04...	.46	203	--	3250	--	--	--	--	399	7.7	3.4
05-07	1.0	282	.38	3880	150	42	--	1.4	482	7.8	3.2
08-11	1.2	508	.69	2090	240	110	--	2.3	851	7.8	4.3
12-30	1.3	796	1.08	1580	370	190	--	3.0	1290	7.9	4.5
DEC.											
01-11	--	953	1.30	859	420	160	46	3.6	1540	7.9	6.4
12-14	--	780	1.06	1020	370	150	43	2.9	1260	8.0	4.2
15-30	--	967	1.32	747	450	190	43	3.3	1550	7.9	6.3
JAN.											
01-02	--	1030	1.40	1060	470	230	--	3.4	1620	8.0	4.8
03-07	--	1070	1.46	2490	460	200	--	3.7	1680	8.1	4.0
08-11	--	1050	1.43	1230	490	220	--	3.6	1650	8.2	3.2
12-30	--	842	1.15	675	370	150	--	3.2	1340	8.5	1.3
31...	--	768	1.04	2050	360	160	--	3.0	1260	8.3	2.0
FEB.											
01-07	2.3	529	.72	1300	250	110	--	2.2	857	7.0	28
08-09	3.4	785	1.07	1140	360	160	--	3.0	1260	7.6	9.6
10-22	4.1	985	1.34	856	450	200	--	3.3	--	7.8	7.6
23-28	2.6	679	.92	1370	320	160	--	2.7	--	7.7	6.3
MAR.											
01-18	--	--	--	--	410	190	--	3.0	1390	7.7	8.7
19-23	--	722	.98	1080	320	130	--	2.9	1170	7.7	7.5
24-26	--	950	1.29	764	420	160	--	3.6	1510	7.7	10
27-31	--	669	.91	972	310	110	--	2.7	1100	7.6	9.7
APR.											
01-04	--	873	1.19	681	380	140	--	3.3	1400	--	--
05-07	--	1110	1.51	719	490	180	--	3.8	1770	--	--
08-11	--	723	.98	1350	--	--	--	--	1190	--	--
12-20	--	1020	1.39	920	430	160	--	3.8	1640	--	--
21-30	--	1160	1.58	802	470	190	--	4.4	1880	--	--
MAY											
01-02	--	1160	1.58	846	460	160	52	4.7	1880	7.7	11
03-07	--	594	.81	1050	260	90	47	3.0	1020	7.7	6.6
08-13	--	867	1.18	719	360	140	49	3.7	1450	7.6	11
14-17	--	472	.64	1150	220	71	43	2.3	802	7.8	4.7
18-22	--	711	.97	944	320	110	44	2.9	1180	7.7	8.0
23-27	--	323	.44	2360	170	45	34	1.4	--	7.9	3.0
28-30	--	582	.79	2120	270	84	42	2.5	949	7.8	5.8
31...	--	316	.43	1240	170	37	33	1.3	504	7.8	4.0
JUNE											
01-03	--	449	.61	1100	220	56	--	2.0	750	8.0	3.1
04-06	--	691	.94	799	310	82	--	3.0	1130	7.8	7.1
07-10	--	398	.54	1230	200	56	--	1.8	674	7.7	5.6
11-17	--	580	.79	1030	260	73	--	2.6	972	7.5	12
18-21	--	316	--	1370	--	--	--	--	546	7.7	5.0
22-24	--	452	.61	1050	200	51	--	2.3	758	7.4	12
25-30	--	571	.78	922	260	73	--	2.6	962	7.5	12
JULY											
07...	--	1240	1.69	790	460	150	54	5.3	2090	8.3	3.1
16...	--	965	1.31	581	400	130	50	4.2	1620	7.7	10
31...	--	226	.31	2690	140	31	27	.9	382	8.3	1.1
AUG.											
10...	--	874	1.19	1150	360	94	48	3.7	1420	8.0	5.2
15...	1.3	1010	1.37	1310	--	--	--	--	1750	7.8	--
21...	--	832	1.13	701	370	130	46	3.4	1370	7.4	19
26...	--	1280	1.74	1460	460	190	55	5.5	2100	8.0	5.3
28...	2.1	1040	1.41	831	--	--	--	--	1700	8.3	--
SEP.											
03...	--	1340	1.82	1470	480	220	55	5.6	2260	7.9	6.3
16...	--	659	.90	206	--	--	--	--	1150	7.7	7.3
29...	3.1	1050	1.43	210	--	--	--	--	1650	8.3	--
30...	--	1080	1.47	257	430	160	52	4.6	1830	7.9	6.6

07241550 NORTH CANADIAN RIVER NEAR HARRAH, OKLA.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TOTAL IRON (FE) (UG/L)	DISSOLVED IRON (FE) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	DISSOLVED MANGANESE (MN) (UG/L)	DISSOLVED NITRATE (N) (MG/L)	DISSOLVED NITRATE (NO3) (MG/L)	DISSOLVED NITRITE (N) (MG/L)	DISSOLVED NITRITE (NO2) (MG/L)	DISSOLVED NITRITE PLUS NITRATE (N) (MG/L)	DISSOLVED AMMONIA NITROGEN (N) (MG/L)
OCT.												
16...	1330	503	--	--	--	--	.93	4.1	.08	.26	1.0	--
NOV.												
20...	0800	908	7900	40	340	0	.70	3.1	.04	.13	.74	--
DEC.												
18...	0730	328	--	--	--	--	--	--	--	--	1.4	--
JAN.												
16...	0930	343	--	20	--	110	1.3	5.6	.04	.13	1.3	3.0
FEB.												
11...	0900	385	3400	--	150	--	.71	3.1	.04	.13	.75	--
MAR.												
20...	1200	1050	44000	3300	1600	2800	3.1	14	.03	.10	3.1	.13
APR.												
18...	1500	319	3900	10	310	30	2.6	11	.02	.07	2.6	--
MAY												
13...	1100	275	560	--	520	--	1.9	8.5	.19	.62	2.1	.67
JUNE												
26...	1200	866	13000	70	630	20	.86	3.8	.14	.46	1.0	.36
JULY												
29...	0730	2080	15000	150	580	0	.46	2.0	.06	.20	.52	.09
AUG.												
15...	0930	480	--	--	--	--	1.1	4.8	.21	.69	1.3	--
28...	1700	296	900	20	70	20	1.8	7.8	.34	1.1	2.1	.00
SEP.												
13...	1700	168	1200	210	430	350	.01	.04	.01	.03	.02	.07
29...	1400	74	510	40	70	30	2.6	12	.48	1.6	3.1	.46

DATE	DISSOLVED AMMONIA (NH4) (MG/L)	DISSOLVED ORGANIC NITROGEN (N) (MG/L)	DISSOLVED KJEL. NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	CHEMICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)
OCT.											
16...	--	--	--	1.3	1150	7.4	16.0	4.8	52	26	1.1
NOV.											
20...	--	--	--	--	--	7.8	10.0	--	--	--	--
DEC.											
18...	--	--	--	1.9	1600	7.5	5.0	10.2	86	33	15
JAN.											
16...	3.9	.40	3.4	--	1500	7.8	3.0	--	12	--	--
FEB.											
11...	--	--	1.7	.80	1340	7.3	4.0	12.9	107	27	1.5
MAR.											
20...	.17	.64	.77	1.4	1050	7.5	12.0	7.6	74	100	7.4
APR.											
18...	--	--	--	2.1	1680	--	22.0	9.1	114	51	--
MAY											
13...	.86	.93	1.6	1.9	1400	7.3	21.0	8.7	105	--	14
JUNE											
26...	.46	.94	1.3	1.0	820	6.8	25.0	7.7	101	40	--
JULY											
29...	.12	.91	1.0	1.1	430	4.2	26.0	4.2	55	71	--
AUG.											
15...	--	--	--	2.7	1750	7.8	26.0	7.0	100	50	--
28...	.00	1.0	1.0	3.2	1700	8.3	27.0	7.8	106	15	--
SEP.											
13...	.09	.46	.53	.03	1180	8.3	18.0	6.0	67	16	--
29...	.59	1.0	1.5	3.8	1650	8.3	28.0	7.7	104	51	20

07241500 NORTH CANADIAN RIVER NEAR HARRAH, OKLA.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	PHENOLS (UG/L)	TOTAL CADMIUM (CD) (UG/L)	DISSOLVED CADMIUM (CD) (UG/L)	TOTAL CHROMIUM (CR) (UG/L)	DISSOLVED CHROMIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	DISSOLVED COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	DISSOLVED LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)	DISSOLVED ZINC (ZN) (UG/L)
OCT.											
16...	3	--	--	--	--	--	--	--	--	--	--
NOV.											
20...	1	10	5	0	<10	10	4	<100	3	50	50
DEC.											
18...	9	--	--	--	--	--	--	--	--	--	--
JAN.											
16...	3	--	6	--	0	--	4	--	4	--	20
FEB.											
11...	5	10	--	0	--	90	--	<100	--	50	--
MAR.											
20...	11	20	7	70	0	50	450	100	200	200	830
APR.											
18...	12	10	1	10	0	<10	4	100	3	60	20
MAY											
13...	10	<10	--	0	--	10	--	100	--	60	--
JUNE											
26...	3	<10	2	20	0	30	16	<100	5	60	0
JULY											
29...	6	<10	1	20	0	20	11	100	14	70	20
AUG.											
15...	--	--	--	--	--	--	--	--	--	--	--
28...	7	<10	1	20	10	30	4	<100	7	50	10
SEP.											
13...	5	<10	0	40	10	10	0	<100	6	690	430
29...	17	10	0	10	10	0	5	100	1	10	10

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TOTAL ALDRIN (UG/L)	TOTAL CHLORDANE (UG/L)	TOTAL DDD (UG/L)	TOTAL DDE (UG/L)	TOTAL DDT (UG/L)	TOTAL DIAZINON (UG/L)	TOTAL DIELDRIN (UG/L)	TOTAL ENDRIN (UG/L)	TOTAL HEPTACHLOR (UG/L)	TOTAL HEPTACHLOR EPOXIDE (UG/L)
OCT.												
16...	1330	503	.00	.0	.00	.00	.00	.00	<.01	.00	.00	.00
NOV.												
20...	0800	908	.00	.0	.00	.00	.00	.02	.00	.00	.00	.00
DEC.												
18...	0730	328	.00	<.1	.00	.00	.00	.07	.01	.00	.00	.00
JAN.												
16...	0930	343	.00	.0	.00	.00	.00	.10	.00	.00	.00	.00
FEB.												
11...	0900	385	.00	.0	.00	.00	.00	.04	.00	.00	.00	.00
MAR.												
20...	1200	1050	.00	.0	.00	.00	.00	.02	.01	.00	.00	.00
APR.												
18...	1500	319	.00	.0	.00	.00	.00	.06	.01	.00	.00	.00
MAY												
13...	1100	275	.00	.0	.00	.00	.00	.00	.01	.00	.00	.00
AUG.												
28...	1700	296	.00	.0	.00	.00	.00	.07	.00	.00	.00	.00
SEP.												
29...	1400	74	.00	.0	.00	.00	.00	.08	.01	.00	.00	.00

DATE	TOTAL LINDANE (UG/L)	TOTAL MALATHION (UG/L)	TOTAL METHYL PARATHION (UG/L)	TOTAL METHYL TRITHION (UG/L)	TOTAL PARATHION (UG/L)	TOTAL PCB (UG/L)	TOTAL TOXAPHENE (UG/L)	TOTAL TRITHION (UG/L)	TOTAL 2,4-D (UG/L)	TOTAL 2,4,5-T (UG/L)	TOTAL SILVEX (UG/L)
OCT.											
16...	.00	.00	.00	.00	.00	.0	0	.00	.00	.00	.00
NOV.											
20...	.00	.00	.00	.00	.00	.0	0	.00	.10	.00	.00
DEC.											
18...	.00	.00	.00	.00	.00	.0	0	.00	.14	.00	.00
JAN.											
16...	.00	.00	.00	.00	.00	.0	0	.00	.00	.00	.00
FEB.											
11...	.00	.00	.00	.00	.00	3.0	0	.00	.00	.00	.00
MAR.											
20...	.00	.00	.00	--	.00	.0	0	--	.01	.00	.00
APR.											
18...	.00	.00	.00	--	.00	.0	0	--	.08	.00	.00
MAY											
13...	.00	.00	.00	.00	.00	.0	0	.00	.15	.00	.07
AUG.											
28...	.00	.00	.00	--	.00	.0	0	--	.00	.00	.00
SEP.											
29...	.00	.00	.00	.00	.00	.0	0	.00	.00	.00	.00

07241500 NORTH CANADIAN RIVER NEAR HARRAH, OKLA.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1540	376	1450	1600	859	1110	1230	1890	820	1460	487	1960
2	1840	714	1460	1450	864	1180	1360	1890	652	1550	686	2160
3	2100	334	1520	858	798	1280	1490	1260	768	1580	860	2260
4	1460	356	1600	946	805	1300	1590	647	972	1690	650	1580
5	1450	579	1600	924	839	1440	1770	783	1150	1660	637	1670
6	1450	423	1650	988	842	1470	1800	1220	1300	1940	805	1710
7	1440	441	1640	1140	974	1490	1760	1050	709	2090	952	2080
8	1420	499	1520	1240	1240	1520	1360	1450	578	1700	1150	1710
9	1440	778	1540	1320	1260	1600	714	1510	548	1550	1320	1770
10	1440	1030	1510	1310	---	1580	1280	1640	805	1600	1420	1800
11	1450	1050	1450	1450	1400	1230	1280	1300	948	1680	1500	1820
12	1460	1100	839	1520	1470	1520	1550	1480	968	1370	1570	1660
13	1460	1150	1160	1610	1480	1150	1690	1400	984	1570	1570	1180
14	1450	1200	1310	1630	1580	1370	1660	1080	1450	1710	1640	1210
15	1490	1240	1460	1640	1570	1470	1430	487	961	1680	1600	1640
16	1510	1250	1390	1650	1550	1510	1630	675	828	1620	674	1150
17	1450	1270	1400	1630	1620	1550	1780	1070	715	1660	658	1520
18	1460	1270	1480	1660	1430	1470	1780	1410	412	1730	1280	1610
19	1530	1280	1550	1670	1460	1280	1620	1150	630	1780	1510	1680
20	1610	1240	1530	1660	1490	1010	1690	968	527	1760	961	1690
21	1590	1300	1610	1580	1550	1070	1810	1040	608	1800	1370	1780
22	1550	1300	1620	1680	1410	1350	1830	1150	760	1800	1560	1780
23	1620	1280	1630	1760	1010	1130	1860	468	812	1750	1600	1810
24	1640	1300	1620	1690	943	1400	1890	384	740	1320	1650	---
25	1570	1300	1600	1690	918	1550	1890	497	902	409	1850	1750
26	1020	1390	1600	1740	1130	1630	1940	644	762	477	2100	1780
27	1100	1420	1620	1700	1230	1060	1910	626	876	485	1540	1810
28	937	1420	1620	1700	1190	1110	1890	1030	1410	418	1640	1800
29	468	1440	1650	1620	---	1280	1900	1030	885	500	1390	1800
30	971	1440	1730	1640	---	1100	1870	832	1220	394	1690	1830
31	510	---	1650	1260	---	1030	---	504	---	382	1670	---
MONTH	1400	1040	1520	1480	1220	1330	1640	1050	857	1390	1290	1720

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17.5	16.5	4.0	6.0	5.0	9.0	10.5	18.0	20.0	27.0	26.0	27.0
2	17.5	17.0	4.0	6.5	5.0	9.0	12.0	19.0	19.5	26.0	27.0	25.5
3	18.5	17.5	4.5	4.5	5.0	8.0	7.5	17.0	21.5	26.0	26.5	26.0
4	18.0	15.0	6.0	4.0	5.0	7.0	9.5	18.0	22.0	30.0	25.5	26.0
5	18.5	13.0	8.0	4.0	0.5	7.0	12.0	20.0	24.0	26.0	25.0	25.0
6	18.0	11.0	10.0	5.0	0.0	9.5	13.5	21.0	25.5	26.5	26.0	23.0
7	17.0	12.5	9.0	5.0	4.5	11.5	13.0	20.0	22.0	26.5	27.0	27.5
8	16.5	12.0	6.5	7.0	4.0	8.0	12.5	21.0	23.0	28.0	26.0	22.0
9	17.0	12.5	4.0	7.0	4.0	8.5	13.5	22.0	23.0	28.0	26.0	23.0
10	17.5	13.0	5.0	8.0	3.0	7.0	15.0	22.0	23.5	27.0	26.0	24.5
11	18.5	12.5	6.0	5.0	4.5	6.0	12.0	20.0	20.5	26.0	26.0	24.0
12	19.0	12.0	5.0	5.0	5.0	6.5	12.0	22.0	21.0	24.0	26.0	20.0
13	19.5	11.5	6.0	5.0	7.0	5.0	14.0	21.0	22.0	22.5	26.5	19.0
14	18.5	10.5	7.0	5.0	8.0	4.0	13.0	18.5	23.0	23.0	26.0	17.0
15	14.5	9.5	5.5	5.0	6.0	7.0	14.5	17.0	24.0	24.5	26.0	17.0
16	13.0	10.0	5.0	5.0	5.0	7.0	16.5	19.0	25.0	24.5	25.0	22.5
17	15.0	10.5	7.0	5.0	3.0	7.0	18.0	20.0	22.5	25.0	26.0	20.0
18	17.0	10.0	7.0	6.5	4.0	10.0	21.0	21.5	23.5	25.0	25.0	21.0
19	16.0	11.5	5.0	7.0	4.5	10.0	16.5	22.5	25.0	26.0	27.5	22.0
20	15.0	11.0	5.0	5.0	4.5	13.0	16.5	22.5	25.0	26.0	27.0	20.0
21	15.5	12.5	6.0	5.0	8.0	14.5	17.0	25.5	26.0	---	27.0	20.0
22	15.5	12.5	7.5	5.0	6.5	13.5	18.0	24.0	25.0	28.0	26.0	20.0
23	15.5	14.5	9.0	5.0	4.0	16.0	19.0	21.0	25.0	28.0	27.0	16.0
24	18.0	11.5	8.5	7.5	---	18.5	20.5	21.5	23.0	25.0	26.0	---
25	18.0	10.0	5.0	9.0	5.0	11.5	21.5	22.0	25.0	23.0	25.0	21.5
26	17.0	13.5	5.0	9.0	6.5	11.0	22.5	23.0	25.0	24.0	26.0	16.5
27	18.0	8.5	5.0	9.0	7.0	11.0	21.5	23.0	25.5	25.0	24.0	15.5
28	17.0	9.5	5.5	7.0	7.5	13.0	17.0	22.0	26.0	26.0	24.5	18.5
29	17.0	13.5	9.0	8.0	---	---	19.0	21.5	26.0	26.0	25.0	17.5
30	19.0	4.0	7.0	8.0	---	6.0	21.5	20.0	27.0	24.5	25.0	19.0
31	18.5	---	7.0	8.0	---	8.0	---	18.0	---	26.0	25.0	---
MONTH	17.0	12.0	6.5	6.0	5.0	9.5	15.5	21.0	23.5	26.0	26.0	21.5

07242000 NORTH CANADIAN RIVER NEAR WETUMKA, OKLA.

LOCATION.--Lat 35°15'53", long 96°12'25", in center of SW 1/4 sec.12, T.9 N., R.10 E., Hughes County, at gaging station at bridge on U.S. Highway 75, 2.3 mi (3.7 km) upstream from Wewoka Creek, 2.5 mi (4.0 km) northeast of Wetumka, and at mile 84.4 (135.8 km).

DRAINAGE AREA.--14,290 mi^2 (37,011 km^2), of which 4,899 mi^2 (12,668 km^2) is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: Water year 1952 (partial-record station), October 1953 to current year.
Water temperatures: October 1953 to current year.

EXTREMES, Current year.--Specific conductance: Maximum daily, 1,810 micromhos/cm July 12; minimum daily, 226 micromhos/cm Nov. 1.
Water temperatures: Maximum, 28.5°C on several days during July; minimum, 0.5°C on Jan. 13-14.

Period of record.--Specific conductance: Maximum daily, 37,100 micromhos/cm Dec. 31, 1954; minimum daily, 156 micromhos/cm Nov. 1, 1972.
Water temperatures: Maximum, 39.0°C July 5, 1971; minimum, freezing point on many days during winter months.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
OCT.											
05...	0700	262	78	28	140	--	247	0	203	91	210
15...	0700	684	80	34	160	--	--	--	--	190	220
31...	0700	7920	31	3.5	24	--	105	0	86	15	27
NOV.											
05...	0700	6710	30	3.6	33	--	125	0	103	14	24
15...	0700	1940	71	23	94	--	199	0	163	120	130
25...	0700	1210	95	31	--	7.6	246	0	202	150	190
DEC.											
05...	0700	675	110	34	140	6.4	342	0	281	120	230
15...	0700	1000	84	26	100	5.6	266	0	218	110	160
25...	0700	618	110	32	--	6.8	351	0	288	120	220
JAN.											
05...	0700	1070	63	21	--	4.7	193	0	158	75	140
15...	0700	624	98	33	130	7.4	297	0	244	--	180
25...	0700	516	120	38	170	7.0	341	0	280	150	--
FEB.											
05...	0700	2300	54	16	65	4.2	146	0	120	88	92
15...	0700	716	--	34	130	6.5	264	0	217	160	180
25...	0745	2570	40	11	41	3.4	121	0	99	42	62
MAR.											
04...	0745	1030	88	30	110	6.2	219	8	193	160	160
15...	0745	1170	71	25	--	4.9	222	0	182	95	140
29...	0745	7180	36	8.1	27	3.1	128	0	105	25	39
APR.											
05...	0715	889	78	28	100	5.5	262	11	233	86	160
15...	0715	838	79	28	110	5.5	261	0	214	110	160
25...	0700	832	69	24	110	5.0	234	0	192	79	170
MAY											
05...	0700	1290	--	13	67	3.8	137	0	112	34	110
15...	0700	4950	45	8.6	41	5.5	123	0	101	--	66
25...	0700	5160	30	6.1	17	4.0	108	0	89	15	24
JUNE											
05...	0700	1570	53	18	65	6.7	190	0	156	70	87
15...	0700	4020	56	19	85	7.0	187	0	153	54	140
25...	0700	1850	47	16	60	8.3	171	0	140	50	90
JULY											
05...	0700	777	96	28	120	8.7	311	11	273	85	190
15...	0700	618	100	32	150	7.1	356	0	292	110	240
25...	0700	329	85	34	170	7.7	301	0	247	110	280
AUG.											
05...	0700	1520	49	11	52	7.5	157	0	129	56	--
15...	0700	564	90	27	120	8.2	304	5	258	110	170
25...	0700	426	79	22	97	7.7	250	4	212	99	130
SEP.											
05...	0715	282	95	33	150	8.1	317	0	260	91	250
15...	0715	338	80	32	150	7.3	287	0	235	98	230
25...	0715	219	79	36	180	9.0	264	0	217	140	270

07242000 NORTH CANADIAN RIVER NEAR WETUMKA, OKLA.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	CARBON DIOXIDE (CO2) (MG/L)
OCT.											
05...	1.7	--	--	--	310	110	--	3.5	1250	7.9	5.0
15...	1.5	844	1.15	1560	340	--	--	3.8	1370	7.8	--
31...	.74	165	.22	3530	92	6	--	1.1	247	7.6	4.2
NOV.											
05...	.66	167	.23	3030	90	0	--	1.5	260	7.8	3.2
15...	.87	557	.76	2920	270	110	--	2.5	922	8.0	3.2
25...	--	782	1.06	2560	360	160	--	--	1270	8.2	2.5
DEC.											
05...	--	852	1.16	1550	410	130	42	3.0	1420	8.1	4.3
15...	--	651	.89	1760	320	99	40	2.4	--	8.1	3.4
25...	--	874	1.19	1460	410	120	--	--	1440	7.5	18
JAN.											
05...	--	533	.72	1540	240	85	--	--	911	7.2	19
15...	--	--	--	--	380	140	42	2.9	1280	7.6	12
25...	--	--	--	--	460	180	44	3.5	1530	7.5	17
FEB.											
05...	--	427	.58	2650	200	81	41	2.0	685	7.9	2.9
15...	--	763	1.04	1480	--	--	--	--	1220	7.8	6.7
25...	--	287	.39	1990	150	46	37	1.5	464	7.9	2.4
MAR.											
04...	--	708	.96	1970	340	150	41	2.6	1150	8.4	1.5
15...	--	--	--	--	280	98	--	--	986	7.7	7.1
29...	--	--	--	--	120	18	32	1.1	359	7.4	6.2
APR.											
05...	--	637	.87	1530	310	77	41	2.5	1060	8.6	1.1
15...	--	657	.89	1490	310	98	43	2.7	1100	8.0	4.2
25...	--	595	.81	1340	270	79	46	2.9	1030	8.1	3.0
MAY											
05...	--	388	--	1350	--	--	--	--	663	7.7	4.4
15...	--	274	.37	3660	140	42	38	1.5	458	7.8	3.1
25...	--	170	.23	2370	100	11	26	.7	287	8.1	1.4
JUNE											
05...	--	442	.60	1870	210	5	40	2.0	734	7.9	3.8
15...	--	515	.70	5590	220	65	45	2.5	868	7.7	6.0
25...	--	397	.54	1980	180	43	40	1.9	653	7.6	6.9
JULY											
05...	--	734	1.00	1540	360	82	42	2.8	--	8.4	2.1
15...	--	869	1.18	1450	380	89	46	3.3	1460	8.2	3.6
25...	--	863	1.17	767	350	110	51	3.9	1500	8.1	3.8
AUG.											
05...	--	305	.41	1250	170	39	39	1.7	534	8.3	1.3
15...	--	719	.98	1100	340	78	43	2.9	1200	8.4	2.0
25...	--	634	.86	729	290	76	42	2.5	1020	8.5	1.3
SEP.											
05...	.97	826	1.12	629	370	110	46	3.4	--	8.2	3.2
15...	--	795	1.08	726	330	96	49	3.6	1360	8.1	3.6
25...	--	876	1.19	518	350	130	52	4.2	1480	7.4	17

07242000 NORTH CANADIAN RIVER NEAR WETUMKA, OKLA.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C) , WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	692	226	1350	1390	1160	901	681	865	750	832	471	812
2	798	261	1380	1390	958	1080	906	596	657	876	424	1180
3	988	337	1380	918	958	1130	909	594	517	899	402	1530
4	1200	226	1380	1160	772	1150	968	507	753	1000	436	1390
5	1250	260	1420	911	685	1100	1060	663	734	1240	534	1520
6	1360	282	1420	805	627	1130	1200	850	761	1460	661	1330
7	1360	285	1480	808	627	1210	1200	667	692	1470	827	1450
8	1770	428	1500	808	694	1270	1180	640	618	1490	682	1640
9	1470	520	1490	846	744	1310	771	777	692	1520	680	1650
10	1430	451	1460	967	796	1310	764	834	672	1620	735	1450
11	1430	477	1290	1200	884	1240	940	1060	432	1460	807	1460
12	1470	517	1350	1200	976	1170	1100	1110	577	1810	1040	1340
13	1430	719	1350	1230	1160	1110	825	800	612	1530	1080	1410
14	1430	919	1070	1260	1230	986	1000	589	752	1480	1150	1360
15	1370	922	1120	1280	1220	986	1100	458	868	1460	1200	1360
16	1420	1080	---	1350	1250	857	1240	372	431	1410	1180	1280
17	1370	1090	1120	1340	1240	864	1360	402	482	1370	1290	1480
18	1430	1140	1200	1400	1180	630	1400	627	533	1380	1280	1540
19	1440	1170	1370	1510	1370	705	1420	557	365	1450	1310	1150
20	1460	1190	1330	1510	1330	632	1410	603	411	1490	1520	1380
21	1460	1200	1330	1520	1350	699	1410	704	452	1460	814	1260
22	1400	1220	1410	1520	554	945	1420	923	478	1500	809	1260
23	1400	1220	1410	1540	519	948	1480	1220	562	1490	1010	1430
24	1420	1270	1440	1550	465	929	1520	472	590	1520	1050	1420
25	1420	1270	1440	1530	464	943	1030	287	653	1500	1020	1460
26	1420	1280	1490	1530	893	1120	1430	297	658	1430	1120	1430
27	1250	1270	1520	1520	844	1280	1420	335	805	905	1330	1420
28	1380	1280	1500	1590	856	590	814	423	752	474	1370	1450
29	546	1270	1520	1560	---	359	1080	519	798	447	1410	1480
30	367	1370	1300	1460	---	384	1240	586	830	440	1400	1490
31	247	---	1300	1460	---	533	---	659	---	420	1420	---
MONTH	1250	858	1370	1290	922	951	1150	645	630	1250	985	1390

TEMPERATURE (DEG. C) OF WATER , WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17.0	17.0	4.0	6.5	7.5	9.5	10.0	18.0	21.0	28.0	26.5	26.5
2	18.0	17.5	4.0	6.5	7.5	9.5	12.0	18.5	20.0	27.0	25.5	26.5
3	17.0	17.5	3.5	5.0	7.5	5.0	6.5	17.0	21.0	28.0	27.0	26.0
4	17.0	16.5	3.5	5.0	6.0	7.0	9.5	18.0	22.0	27.5	27.0	27.0
5	17.0	14.5	5.5	5.0	6.5	7.0	11.5	20.0	24.0	27.5	27.0	26.5
6	17.0	13.0	6.5	5.0	6.5	9.5	12.5	20.5	25.5	27.5	27.5	24.5
7	16.0	17.0	6.5	5.0	4.0	10.0	13.5	20.5	24.5	28.0	27.5	25.0
8	16.0	12.0	4.0	6.0	5.0	8.0	12.0	21.5	24.0	27.5	27.0	23.0
9	17.0	12.0	4.0	6.5	3.5	6.5	13.0	22.5	22.5	28.5	27.5	24.0
10	17.0	12.0	4.5	6.5	3.0	7.0	15.0	22.0	24.0	28.5	27.5	25.0
11	18.0	12.0	5.0	5.5	5.0	7.0	13.0	22.5	21.5	25.0	27.0	25.0
12	19.5	11.0	4.5	3.5	5.0	6.5	---	22.5	22.0	25.0	27.5	22.0
13	18.5	11.0	5.0	0.5	5.0	5.0	14.5	22.0	23.0	25.0	27.5	20.0
14	19.5	10.0	7.0	0.5	7.5	4.0	13.0	19.0	24.0	25.0	27.5	19.0
15	16.5	9.5	5.0	3.5	5.0	5.0	14.0	19.0	24.0	24.5	27.5	17.5
16	14.0	9.5	5.0	4.0	5.0	5.5	16.5	19.0	24.0	25.0	27.0	18.0
17	15.0	9.5	5.0	5.0	3.0	6.5	17.5	19.0	23.5	26.0	25.0	18.5
18	15.5	---	5.0	5.5	5.0	9.0	---	20.0	22.5	26.5	25.0	20.0
19	16.0	12.0	4.0	5.5	4.0	10.0	16.5	20.5	24.0	26.5	26.0	20.0
20	15.0	11.0	5.0	4.0	4.5	12.5	17.0	23.5	25.0	27.0	26.0	18.0
21	14.5	11.0	5.0	4.0	7.5	14.0	17.0	22.0	25.5	28.5	28.0	15.0
22	14.5	11.5	6.5	3.5	6.0	16.0	18.5	24.0	26.0	28.5	27.5	17.0
23	15.0	10.0	6.0	4.0	5.5	17.0	19.5	23.5	25.5	28.5	27.5	17.0
24	16.5	9.5	9.0	5.0	3.5	14.5	19.0	22.0	25.0	26.5	27.5	17.0
25	17.5	9.0	8.5	6.0	4.0	12.5	20.0	22.5	25.0	26.5	25.0	17.5
26	14.0	9.5	5.0	6.5	5.0	11.5	22.0	23.5	25.0	25.0	25.0	17.0
27	16.0	9.0	5.0	8.0	5.5	14.5	22.5	23.0	25.0	25.0	25.0	17.0
28	17.0	9.0	5.5	10.0	7.0	13.0	19.0	23.0	25.0	25.0	25.0	17.5
29	17.0	8.0	6.5	9.5	---	9.0	20.0	23.0	25.5	25.0	26.0	17.0
30	17.5	5.0	17.5	8.0	---	6.5	21.5	22.0	26.0	25.5	26.0	17.5
31	17.0	---	17.5	8.5	---	8.5	---	20.0	---	26.0	26.0	---
MONTH	16.5	11.5	6.0	5.5	5.5	9.5	15.5	21.0	24.0	26.5	26.5	20.5

07242350 DEEP FORK NEAR ARCADIA, OKLA.

LOCATION.--Lat 35°39'10", long 97°20'58", on south line of SW 1/4 sec.30, T.14 N., R.1 W., Oklahoma County, at gaging station on county road bridge, 1.6 mi (2.6 km) upstream from Coffee Creek, 1.6 mi (2.6 km) southwest of Arcadia, and at mile 212.8 (342.4 km).

DRAINAGE AREA.--108 mi^2 (280 km^2).

PERIOD OF RECORD.--Chemical analyses: October 1969 to current year.
Water temperatures: October 1969 to current year.

EXTREMES, Current year.--Specific conductance: Maximum daily, 1,750 micromhos/cm Aug. 27; minimum daily, 230 micromhos/cm July 24.
Water temperatures: Maximum, 29.0°C July 21, 23, Aug. 21; minimum, freezing point on Jan. 12, Feb. 9.

Period of record.--Specific conductance: Maximum daily, 1,970 micromhos/cm Oct. 15, 1971; minimum daily, 198 micromhos/cm June 8, 1974.
Water temperatures: Maximum, 29.0°C June 17-18, 1970, July 18-19, 1974, July 21, 23, Aug. 21, 1975; minimum, freezing point on several days during winter months.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	DIS-CHARGE (CFS)	INSTAN-TANEOUS DIS-CHARGE (CFS)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	ALKA-LINITY AS CACO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)
OCT.												
01-13	--	29	--	69	28	170	--	--	--	--	120	230
14-15	--	38	--	49	21	110	--	165	0	135	86	140
16-24	--	23	--	67	28	170	--	214	0	176	120	230
25-30	--	34	--	48	16	77	--	167	0	137	64	100
31...	1000	--	327	--	--	20	9.6	126	0	103	26	23
NOV.												
01-02	--	4210	--	65	--	72	--	262	0	215	79	94
03-04	--	2400	--	48	16	52	--	193	0	158	43	38
05-13	--	85	--	79	34	88	--	333	0	273	90	110
14-30	--	50	--	86	47	130	--	357	0	293	--	170
DEC.												
01-05	--	44	--	77	44	110	8.0	326	0	267	110	--
06-10	--	44	--	83	40	140	8.7	320	0	262	110	210
11-12	--	126	--	52	25	--	5.4	220	0	180	58	86
13-31	--	44	--	79	43	130	8.0	309	0	253	110	200
JAN.												
01-04	--	88	--	56	29	72	6.2	245	0	201	--	94
05-14	--	43	--	81	44	130	8.3	328	0	269	140	170
15-30	--	100	--	--	--	150	8.9	316	0	259	140	200
31...	--	532	--	35	15	31	4.1	147	0	121	43	41
FEB.												
01-04	--	258	--	52	24	62	5.3	207	0	170	--	78
05-16	--	84	--	89	48	130	6.6	347	0	285	140	180
17-18	--	72	--	62	35	100	5.5	--	--	--	81	140
19-22	--	142	--	81	--	130	7.4	316	0	259	120	180
23...	--	166	--	49	24	62	4.1	--	--	--	58	79
24-28	--	80	--	81	--	130	6.8	327	0	268	130	170
MAR.												
01-09	--	69	--	90	50	150	7.8	342	0	281	160	210
10-13	--	238	--	55	30	--	5.7	234	0	192	87	96
14-26	--	66	--	83	52	140	7.3	335	0	275	150	--
27-31	--	84	--	62	36	93	6.3	270	0	221	110	120
APR.												
01-07	--	56	--	88	50	150	8.1	334	0	274	160	200
08-09	--	258	--	50	24	59	5.0	214	0	176	67	74
10-13	--	59	--	82	46	120	7.5	333	0	273	150	160
14...	0900	--	63	65	37	87	5.5	283	0	232	100	110
15-30	--	42	--	80	47	140	8.6	--	--	--	150	180
MAY												
01...	--	33	--	77	40	130	8.3	310	0	254	150	160

07242350 DEEP FORK NEAR ARCADIA, OKLA.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	DIS-CHARGE (CFS)	INSTAN-TANEOUS DIS-CHARGE (CFS)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	ALKA-LINITY AS CACO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)
MAY												
02-03	--	545	--	45	19	38	6.1	190	0	156	53	50
04-13	--	114	--	72	43	120	7.6	286	0	235	130	170
14-15	--	530	--	48	21	--	4.6	194	0	159	60	58
16-22	--	88	--	78	44	130	7.0	323	0	265	140	--
24-28	--	131	--	72	39	97	5.9	310	0	254	120	120
29-31	--	150	--	56	29	69	4.9	251	0	206	85	86
JUNE												
01-06	--	109	--	--	--	130	7.4	329	0	270	130	180
07...	0800	--	1210	38	12	21	4.0	149	0	122	30	29
08-09	--	182	--	49	22	55	5.7	207	0	170	60	69
10-16	--	74	--	70	38	100	7.3	288	0	236	110	140
17-18	--	354	--	41	16	39	4.9	174	0	143	46	49
19-22	--	89	--	67	35	120	8.0	287	0	235	110	150
23-24	--	157	--	49	23	59	5.5	--	--	--	60	77
25-30	--	45	--	75	39	120	8.6	287	0	235	120	170
JULY												
08...	0900	--	30	71	37	160	9.6	286	0	235	120	210
17...	1100	--	29	54	34	150	11	242	0	198	120	200
24...	0900	--	2110	25	7.6	--	4.6	106	0	87	12	13
AUG.												
08...	1030	--	58	69	33	120	8.8	270	0	221	110	170
15...	1030	--	2490	--	8.9	13	3.9	125	0	103	18	17
27...	1100	--	30	77	35	210	11	256	0	210	110	330
SEP.												
02...	0930	--	34	65	31	140	10	262	0	215	120	190
12...	1100	--	129	37	14	46	5.4	146	0	120	52	62
30...	0930	--	31	67	35	200	13	190	0	156	110	--

07242350 DEEP FORK NEAR ARCADIA, OKLA.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	CARBON DIOXIDE (CO2) (MG/L)
OCT.											
01-13	5.1	841	--	65.9	290	--	--	4.4	1440	7.1	--
14-15	3.3	581	.79	59.6	210	75	--	3.3	--	6.9	33
16-24	5.7	845	1.15	52.5	280	100	--	4.4	1440	7.0	34
25-30	4.0	457	.62	42.0	190	53	--	2.4	786	6.4	106
31...	1.3	--	--	--	--	--	1	--	330	7.5	6.4
NOV.											
01-02	3.4	525	.71	5970	--	--	--	--	869	7.5	13
03-04	1.8	311	.42	2020	190	52	--	1.0	523	7.7	6.2
05-13	3.2	635	.86	146	340	67	--	2.1	1060	7.5	17
14-30	4.5	784	1.07	106	410	120	--	2.8	1320	7.6	14
DEC.											
01-05	--	723	.98	85.9	370	110	38	2.5	1190	8.0	5.2
06-10	--	832	1.13	98.8	370	110	44	3.2	1370	8.1	4.1
11-12	--	429	--	146	230	52	--	--	734	8.1	2.8
13-31	--	766	1.04	91.0	370	120	42	2.9	1290	8.1	3.9
JAN.											
01-04	--	--	--	--	260	58	37	1.9	843	7.4	16
05-14	--	784	1.07	91.0	380	110	42	2.9	1320	7.8	8.3
15-30	--	824	1.12	222	--	--	--	--	1420	7.5	16
31...	--	258	.35	371	150	29	30	1.1	439	7.7	4.7
FEB.											
01-04	--	422	.57	294	230	59	36	1.8	709	8.2	2.1
05-16	--	844	1.15	191	420	140	40	2.8	1380	8.3	2.8
17-18	--	607	.83	118	300	--	42	2.5	1030	8.2	--
19-22	--	796	1.08	305	--	--	--	--	1330	8.2	3.2
23...	--	427	.58	191	220	--	37	1.8	719	8.2	--
24-28	--	795	1.08	172	--	--	--	--	1340	8.2	3.3
MAR.											
01-09	--	900	1.22	168	430	150	43	3.1	1500	7.6	14
10-13	--	507	--	326	260	69	--	--	863	7.5	12
14-26	--	830	1.13	148	420	150	41	3.0	1370	7.3	27
27-31	--	599	.81	136	300	82	39	2.3	1010	7.4	17
APR.											
01-07	--	897	1.22	136	430	150	43	3.2	1460	7.4	21
08-09	--	421	.57	293	220	48	36	1.7	707	7.4	14
10-13	--	811	1.10	129	390	120	39	2.6	1310	7.4	21
14...	--	603	.82	103	310	83	37	2.1	994	7.2	29
15-30	--	855	1.16	97.0	390	--	43	3.1	1320	7.3	--
MAY											
01...	--	814	1.11	72.5	360	100	44	3.0	1340	7.3	25
02-03	--	328	.45	483	190	35	29	1.2	552	7.7	6.1
04-13	--	757	1.03	233	360	120	42	2.8	1250	7.7	9.1
14-15	--	363	--	519	210	47	--	--	614	7.9	3.9
16-22	--	792	1.08	188	380	110	42	2.9	1300	7.6	13
24-28	--	654	.89	231	340	86	38	2.3	1080	7.7	9.9
29-31	--	484	.66	196	260	53	36	1.9	827	7.7	8.0
JUNE											
01-06	--	805	1.09	237	--	--	--	--	1310	8.0	5.3
07...	--	217	.30	709	140	22	23	.8	383	7.5	7.5
08-09	--	399	.54	196	210	43	35	1.6	--	7.4	13
10-16	--	671	.91	134	330	95	39	2.4	1110	7.9	5.8
17-18	--	299	.41	286	170	26	33	1.3	523	8.0	2.8
19-22	--	707	.96	170	310	76	45	3.0	1160	7.5	15
23-24	--	399	.54	169	220	--	36	1.7	699	7.3	--
25-30	--	743	1.01	90.3	350	110	42	2.8	1230	7.4	16
JULY											
08...	--	816	1.11	66.1	330	95	50	3.8	1400	8.1	3.6
17...	--	782	1.06	61.2	270	76	53	3.9	1330	7.3	19
24...	--	136	--	775	94	7	--	--	230	7.2	11
AUG.											
08...	--	705	.96	110	310	87	45	3.0	--	7.9	5.4
15...	--	--	--	--	--	--	--	--	286	7.5	6.3
27...	--	988	1.34	80.0	340	130	57	5.0	1750	6.9	52
SEP.											
02...	--	744	1.01	68.3	290	75	50	3.6	1280	7.1	33
12...	--	306	.42	107	150	30	39	1.6	530	8.0	2.3
30...	--	867	1.18	72.6	310	160	57	4.9	1570	6.7	61

07242350 DEEP FORK NEAR ARCADIA, OKLA.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TOTAL IRON (FE) (UG/L)	DISSOLVED IRON (FE) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	DISSOLVED MANGANESE (MN) (UG/L)	DISSOLVED NITRATE (N) (MG/L)	DISSOLVED NITRATE (NO3) (MG/L)	DISSOLVED NITRITE (N) (MG/L)	DISSOLVED NITRITE (NO2) (MG/L)	DISSOLVED NITRITE PLUS NITRATE (N) (MG/L)	DISSOLVED AMMONIA NITROGEN (N) (MG/L)
OCT.												
17...	1130	25	--	--	--	--	.38	1.7	.61	2.0	1.0	--
NOV.												
20...	1400	49	1100	70	970	900	1.2	5.3	.00	.00	1.2	--
DEC.												
17...	1300	41	--	--	--	--	--	--	--	--	.74	--
JAN.												
14...	1230	43	9600	40	1600	2200	.51	2.3	.18	.59	.69	6.1
FEB.												
11...	1330	48	90	30	660	140	.64	2.8	.13	.43	.77	--
MAR.												
20...	1430	56	1300	20	510	60	1.1	4.9	.09	.30	1.2	5.5
APR.												
18...	1400	72	1600	10	470	410	.64	2.8	.30	.99	.94	4.2
MAY												
22...	1730	65	760	50	760	710	.53	2.3	.87	2.9	1.4	8.0
JUNE												
26...	1400	46	1700	50	500	390	.42	1.9	.51	1.7	.93	.00
JULY												
29...	1400	63	1800	20	580	440	.12	.53	.18	.59	.30	3.3
AUG.												
28...	1200	67	4700	2900	--	550	.38	1.7	.50	1.6	.88	4.7
SEP.												
23...	1130	36	580	30	500	430	.27	1.2	.83	2.7	1.1	18

DATE	DISSOLVED AMMONIA (NH4) (MG/L)	DISSOLVED ORGANIC NITROGEN (N) (MG/L)	DISSOLVED KJEL. NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	CHEMICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)
OCT.											
17...	--	--	--	5.2	1170	7.5	17.0	8.4	92	41	10
NOV.											
20...	--	--	--	--	1600	8.1	13.0	8.7	88	--	18
DEC.											
17...	--	--	--	3.9	1650	7.8	7.2	10.8	95	29	17
JAN.											
14...	7.9	5.9	12	3.9	1400	6.6	6.0	12.7	105	20	--
FEB.											
11...	--	--	4.0	4.3	1550	8.2	7.0	11.4	102	31	8.2
MAR.											
20...	7.1	--	--	--	1075	7.8	16.0	9.4	103	--	5.4
APR.											
18...	5.4	.40	4.6	2.3	1080	8.2	17.0	9.2	101	35	7.2
MAY											
22...	10	1.1	9.1	4.6	1100	8.3	23.0	8.4	105	44	8.4
JUNE											
26...	.00	9.3	9.3	--	820	6.8	27.0	15.7	212	29	--
JULY											
29...	4.3	.10	3.4	2.1	750	--	25.0	--	--	43	--
AUG.											
28...	6.1	1.3	6.0	1.7	--	8.1	27.0	7.0	97	130	--
SEP.											
23...	23	.00	17	4.5	1100	810	16.5	10.8	117	44	6.6

07242350 DEEP FORK NEAR ARCADIA, OKLA.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	PHENOLS (UG/L)	TOTAL CADMIUM (CD) (UG/L)	DISSOLVED CADMIUM (CD) (UG/L)	TOTAL CHROMIUM (CR) (UG/L)	DISSOLVED CHROMIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	DISSOLVED COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	DISSOLVED LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)	DISSOLVED ZINC (ZN) (UG/L)
OCT.											
17...	5	--	--	--	--	--	--	--	--	--	--
NOV.											
20...	7	<10	11	0	<10	<10	4	100	3	50	50
DEC.											
17...	8	--	--	--	--	--	--	--	--	--	--
JAN.											
14...	7	10	1	20	0	140	2	<100	4	590	30
FEB.											
11...	2	10	0	0	0	70	3	<100	0	40	10
MAR.											
20...	2	10	0	1	10	<10	3	<100	0	40	90
APR.											
18...	5	<10	0	10	0	<10	9	<100	3	50	10
MAY											
22...	7	<10	0	0	20	<10	2	100	0	10	10
JUNE											
26...	6	<10	1	10	0	30	3	<100	5	20	0
JULY											
29...	11	<10	1	0	0	10	4	<100	8	20	0
AUG.											
28...	7	<10	7	--	20	70	42	100	6	--	120
SEP.											
23...	--	0	1	10	10	20	3	100	8	10	10

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TOTAL ALDRIN (UG/L)	TOTAL CHLORDANE (UG/L)	TOTAL DDD (UG/L)	TOTAL DDE (UG/L)	TOTAL DDT (UG/L)	TOTAL DIAZINON (UG/L)	TOTAL DIELDRIN (UG/L)	TOTAL ENDRIN (UG/L)	TOTAL HEPTACHLOR (UG/L)	TOTAL HEPTACHLOR EPOXIDE (UG/L)
OCT.												
17...	1130	25	.00	<.1	.00	.00	.00	.20	.02	.00	.00	.00
NOV.												
20...	1400	49	.00	.0	.00	.00	.00	.14	.01	.00	.00	.00
DEC.												
17...	1300	41	.03	.1	.00	.00	.00	.24	.00	.00	.00	.00
JAN.												
14...	1230	43	.02	.0	.00	.00	.00	.16	.02	.00	.00	.00
FEB.												
11...	1330	48	.00	.0	.00	.00	.00	.19	.01	.00	.00	<.01
APR.												
18...	1400	72	.00	.1	.00	.00	.00	.24	.01	.00	.00	.00
MAY												
22...	1730	65	.00	.0	.00	.00	.00	.32	.00	.00	.00	.00
JUNE												
26...	1400	46	.00	.0	.00	.00	.00	.42	.01	.00	.00	.00
SEP.												
23...	1130	36	.00	.0	.00	.00	.00	.13	.01	.00	.00	.00

DATE	TOTAL LINDANE (UG/L)	TOTAL MALATHION (UG/L)	TOTAL METHYL PARATHION (UG/L)	TOTAL METHYL TRITHION (UG/L)	TOTAL PARATHION (UG/L)	TOTAL PCB (UG/L)	TOTAL TOXAPHENE (UG/L)	TOTAL TRITHION (UG/L)	TOTAL 2,4-D (UG/L)	TOTAL 2,4,5-T (UG/L)	TOTAL SILVEX (UG/L)
OCT.											
17...	.00	.00	.00	.00	.00	.0	0	.00	.00	.00	.00
NOV.											
20...	.02	.00	.00	.00	.00	.0	0	.00	.00	.00	.00
DEC.											
17...	.02	.00	.00	.00	.00	.0	0	.00	.02	.00	.00
JAN.											
14...	.02	.00	.00	.00	.00	.0	0	.00	.00	.00	.00
FEB.											
11...	.00	.00	.00	.00	.00	.0	0	.00	.00	.00	.00
APR.											
18...	.01	.04	.00	--	.00	.0	0	--	.40	.03	.03
MAY											
22...	.01	.00	.00	--	.00	.0	0	--	.07	.03	.04
JUNE											
26...	.02	.00	.00	--	.00	.0	0	--	.02	.05	.01
SEP.											
23...	.00	.00	.00	.00	.00	.0	0	.00	.00	.01	.00

07242350 DEEP FORK NEAR ARCADIA, OKLA.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1460	724	1240	919	778	1440	1350	1340	1260	1350	1120	1240
2	1420	1010	1200	1010	831	1580	1400	634	1260	1360	1110	1280
3	1470	423	1140	550	659	1540	1430	462	1350	1350	1130	1220
4	1440	611	1240	898	551	1480	1540	911	1350	1370	1160	1440
5	1450	923	1220	1240	961	1490	1460	1290	1340	1320	1180	1190
6	1450	1080	1600	1200	1130	1500	1520	1290	1380	1230	1230	1330
7	1480	1180	1360	1340	1310	1450	1500	1280	383	1330	1200	1420
8	1360	1150	1400	1360	1330	1500	508	1430	802	1400	1220	1300
9	1430	1220	1390	1400	1450	1510	918	1430	493	1360	1250	1290
10	1440	871	1220	1340	1390	677	1230	1450	845	1350	1250	1350
11	1480	853	630	1340	1450	992	1340	1140	1020	1300	1330	1240
12	1460	1080	849	1360	1470	617	1350	971	1210	1340	1230	530
13	1450	1180	1140	1400	1500	1060	1390	1340	1260	1320	1310	828
14	1060	1290	1200	1400	1440	1260	994	421	1350	1290	1310	1070
15	986	1280	1210	1510	1500	1370	1260	809	1290	1330	286	789
16	1330	1320	1330	1420	1470	1500	1320	1060	1380	1310	631	1100
17	1430	1330	1330	1340	931	1370	1440	1270	370	1330	934	1230
18	1450	1330	1350	1420	1120	1160	1340	1380	686	1300	636	1280
19	1430	1330	1090	1300	1260	1030	1240	1420	1020	1350	1040	1350
20	1420	1370	1320	1390	1370	1260	1500	1290	1210	1310	1070	1280
21	1440	1360	1330	1430	1420	1370	1370	1380	1260	1330	1220	1310
22	1480	1340	1320	1440	1290	1430	1610	1400	1220	1330	1240	1300
23	1520	1320	1330	1430	719	1510	1390	294	820	1350	1200	1280
24	1580	1320	1360	1470	1110	1440	1510	707	606	230	1200	1200
25	802	1250	1380	1370	1290	1420	1540	1030	1030	403	1250	1560
26	671	1240	1300	1510	1310	1580	1440	1180	1170	618	1260	1540
27	1110	1460	1370	1450	1490	926	1480	1310	1200	523	1750	954
28	439	1340	1340	1440	1500	931	1410	1300	1360	718	1280	1390
29	635	1290	1330	1350	---	912	1300	789	1320	785	1140	1300
30	1080	1370	1360	1480	---	1200	1300	552	1290	594	1250	1570
31	330	---	1380	439	---	1270	---	1040	---	917	1240	---
MONTH	1260	1160	1270	1290	1220	1280	1350	1080	1080	1140	1150	1240

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17.0	24.0	3.0	6.0	7.0	10.0	11.0	16.0	---	27.0	27.0	28.0
2	18.0	17.0	11.0	6.0	6.0	8.0	7.0	16.0	25.0	27.0	26.0	27.0
3	17.0	17.0	7.0	4.0	7.0	7.0	7.0	16.0	23.0	28.0	26.0	28.0
4	18.0	14.0	8.0	5.0	9.0	7.0	11.0	17.0	23.0	25.0	27.0	27.0
5	18.0	13.0	10.0	6.0	6.0	8.0	11.0	19.0	25.0	26.0	26.0	27.0
6	19.0	13.0	12.0	8.0	3.0	11.0	13.0	21.0	27.0	26.0	27.0	24.0
7	15.0	17.0	10.0	8.0	5.0	9.0	12.0	---	22.0	28.0	23.0	21.0
8	17.0	12.0	5.0	9.0	6.0	8.0	14.0	---	26.0	27.0	27.0	24.0
9	19.0	14.0	7.0	10.0	0.0	7.0	13.0	21.0	22.0	27.0	26.0	25.0
10	17.0	14.0	12.0	8.0	4.0	7.0	14.0	19.0	23.0	26.0	26.0	25.0
11	21.0	13.0	5.0	5.0	7.0	6.0	10.0	19.0	24.0	25.0	27.0	26.0
12	17.0	11.0	6.0	0.0	7.0	6.0	12.0	20.0	---	27.0	28.0	20.0
13	18.0	11.0	8.0	3.0	8.0	5.0	13.0	20.0	25.0	21.5	28.0	18.0
14	16.0	11.0	8.0	5.0	9.0	6.0	12.0	17.0	22.0	24.0	26.0	18.0
15	17.0	9.0	5.0	6.0	7.0	8.0	14.0	18.0	23.0	25.0	24.0	18.0
16	14.0	11.0	8.0	7.0	3.0	8.0	16.0	18.0	24.0	27.0	25.0	20.0
17	15.0	11.0	6.0	8.0	4.0	9.0	18.0	17.0	22.0	26.0	26.0	21.0
18	17.0	10.0	8.0	7.0	4.0	12.0	20.0	19.0	24.0	26.0	27.0	22.0
19	15.0	14.0	7.0	7.0	6.0	10.0	13.0	23.0	25.0	25.0	26.0	22.0
20	14.0	12.0	7.0	6.0	7.0	14.0	13.0	21.0	27.0	25.0	28.0	18.0
21	14.0	14.0	8.0	8.0	9.0	16.0	17.0	21.0	25.0	29.0	29.0	18.0
22	12.0	14.0	8.0	6.0	5.0	13.0	13.0	24.0	23.0	27.0	27.0	28.0
23	17.0	16.0	10.0	6.0	2.0	15.0	20.0	21.0	23.0	29.0	27.0	17.0
24	18.0	9.0	7.0	10.0	5.0	12.0	20.0	21.0	23.0	24.0	26.0	18.0
25	18.0	10.0	4.0	9.0	7.0	10.0	20.0	20.0	25.0	24.0	26.0	17.0
26	16.0	10.0	7.0	6.0	7.0	12.0	21.0	20.0	25.0	24.0	28.0	16.0
27	15.0	11.0	7.0	9.0	8.0	13.0	20.0	22.0	28.0	25.0	26.0	17.0
28	15.0	10.0	7.0	9.0	9.0	9.0	17.0	21.0	25.0	26.0	26.0	19.0
29	18.0	6.0	9.0	8.0	---	6.0	18.0	20.0	25.0	26.0	25.0	27.0
30	21.0	4.0	9.0	9.0	---	4.0	---	19.0	28.0	25.0	26.0	20.0
31	18.0	---	9.0	7.0	---	9.0	---	17.0	---	26.0	26.0	---
MONTH	17.0	12.5	7.5	7.0	6.0	9.0	14.5	19.5	24.5	26.0	26.5	22.0

07243500 DEEP FORK NEAR BEGGS, OKLA.

LOCATION.--Lat 35°40'15", long 96°04'08", on line between secs. 19 and 20, T.14 N., R.12 E., Okmulgee County, at gaging station at bridge on county road, 3.0 mi (4.8 km) downstream from Adams Creek, 4.0 mi (6.4 km) south of Beggs, 8.0 mi (12.9 km) from Flat Rock (Checkerboard) Creek, and at mile 85.0 (136.8 km).

DRAINAGE AREA.--2,018 mi^2 (5,227 km^2).

PERIOD OF RECORD.--Chemical analyses: November 1951 to current year.
Water temperatures: November 1951 to current year.

EXTREMES, Current year.--Specific conductance: Maximum daily, 1,520 micromhos/cm Oct. 25; minimum daily, 142 micromhos/cm Nov. 6.
Water temperatures: Maximum, 34.0°C July 9, 22; minimum 1.0°C Dec. 3.

Period of record.--Specific conductance: Maximum daily, 10,500 micromhos/cm Jan. 12, 1955; minimum daily, 83 micromhos/cm June 10, 1974.
Water temperatures: Maximum, 38.5°C Aug. 8, 1970; minimum (1951-69, 1971-75), freezing point on many days during winter months.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
OCT.											
05...	1700	263	46	20	76	--	192	0	157	28	130
15...	1700	129	73	31	150	--	283	0	232	43	240
25...	1700	123	79	36	170	--	305	0	250	45	290
31...	1600	4180	10	3.3	15	--	38	0	31	6.4	26
NOV.											
03...	1600	9830	12	4.6	14	--	51	0	42	7.4	23
14...	1600	6470	23	8.5	--	--	103	0	84	12	36
25...	1600	827	56	26	82	--	251	0	206	29	--
DEC.											
04...	1600	491	73	38	100	3.3	309	7	265	38	170
15...	1600	1200	48	25	67	3.4	206	0	169	30	120
25...	1600	481	69	36	110	3.1	294	8	254	40	190
JAN.											
05...	1600	1450	31	16	50	2.8	125	0	103	22	99
15...	1600	630	--	34	91	3.7	258	8	225	40	160
25...	1600	412	72	40	100	3.4	318	0	261	45	--
FEB.											
04...	1600	2630	31	13	39	3.6	--	--	--	21	76
15...	1600	1100	50	30	63	4.0	238	0	195	34	120
23...	1600	3500	18	8.0	29	3.3	--	--	--	16	50
MAR.											
05...	1630	1120	53	29	--	3.2	218	2	182	34	120
15...	1630	1650	40	23	54	3.0	174	0	143	29	96
25...	1600	2160	43	24	48	3.3	186	0	153	27	83
APR.											
05...	1630	3740	33	18	38	3.0	156	0	128	21	66
15...	1630	2340	39	22	48	3.1	173	0	142	24	84
25...	1630	595	69	40	96	3.7	300	0	246	46	180
MAY											
05...	1700	5740	17	7.7	19	2.9	--	--	--	11	34
15...	1700	3520	20	8.9	23	3.0	75	0	62	--	42
25...	1700	4040	31	13	30	3.2	--	--	--	14	53
JUNE											
05...	1700	2990	38	20	36	3.6	186	0	153	19	61
15...	1700	3120	20	9.4	19	3.4	94	0	77	13	33
25...	1700	2500	32	15	33	3.6	152	0	125	17	58
JULY											
05...	1700	560	54	25	83	3.9	236	0	194	21	140
15...	1700	300	62	36	97	4.2	296	0	243	33	170
26...	1730	632	30	17	78	3.5	121	0	99	19	140
05...	1730	1790	--	16	35	4.4	165	0	135	15	54
15...	1730	227	59	31	78	4.7	285	0	234	34	120
25...	1730	358	39	19	46	4.6	189	0	155	13	--
SEP.											
05...	1730	136	56	30	93	5.2	265	0	217	30	150
15...	1730	129	57	35	130	5.3	274	0	225	42	210
25...	1730	90	62	38	110	5.2	313	--	257	52	180

07243500 DEEP FORK NEAR BEGGS, OKLA.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	CARBON DIOXIDE (CO2) (MG/L)
OCT.											
05...	.76	432	.59	307	200	40	--	2.4	772	7.8	4.9
15...	.59	743	1.01	259	310	78	--	3.7	1310	8.1	3.6
25...	.68	857	1.17	285	350	95	--	4.0	1520	7.8	7.7
31...	.36	101	.14	1140	39	8	--	1.1	162	7.4	2.4
NOV.											
03...	.32	110	.15	2920	49	7	--	.9	171	7.3	4.1
14...	.37	175	.24	3060	92	8	--	--	301	7.6	4.1
25...	.79	--	--	--	250	41	--	2.3	822	8.3	2.0
DEC.											
04...	--	616	.84	817	340	74	39	2.4	1060	8.6	1.3
15...	--	423	.58	1370	220	54	39	2.0	753	8.1	2.6
25...	--	625	.85	812	320	66	42	2.7	1130	8.9	.6
JAN.											
05...	--	298	.41	1170	140	41	43	1.8	541	8.6	.5
15...	--	581	.79	988	--	--	--	--	997	8.9	.6
25...	--	641	.87	713	340	84	38	2.3	1140	8.5	1.6
FEB.											
04...	--	265	.36	1880	130	--	39	1.5	441	7.8	--
15...	--	455	.62	1350	250	53	35	1.7	791	7.8	6.0
23...	--	182	.25	1720	78	--	43	1.4	283	7.8	--
MAR.											
05...	--	457	.62	1380	250	70	--	--	782	8.4	1.4
15...	--	373	.51	1660	190	52	37	1.7	636	7.8	4.4
25...	--	--	--	--	210	54	33	1.5	614	7.8	4.7
APR.											
05...	--	285	.39	2880	160	29	34	1.3	500	7.5	7.9
15...	--	338	.46	2140	190	46	35	1.5	593	7.5	8.8
25...	--	612	.83	983	340	91	38	2.3	1060	8.6	1.2
MAY											
05...	--	153	.21	2370	74	--	35	1.0	244	7.8	--
15...	--	172	.23	1640	87	25	36	1.1	291	7.8	1.9
25...	--	219	--	2390	130	--	33	1.1	386	8.3	--
JUNE											
05...	--	294	.40	2370	180	25	30	1.2	514	8.0	3.0
15...	--	166	.23	1400	89	12	31	.9	283	8.1	1.2
25...	--	254	.35	1710	140	17	33	1.2	447	8.0	2.4
JULY											
05...	--	473	.64	715	240	44	43	2.3	850	8.2	2.4
15...	--	574	.78	465	300	60	41	2.4	1040	8.5	1.5
26...	--	403	.55	688	150	46	53	2.8	724	8.0	1.9
05...	--	268	.36	1300	--	--	--	--	470	7.8	4.2
15...	--	501	.68	307	280	41	38	2.0	897	8.0	4.6
25...	--	322	.44	311	180	21	36	1.5	569	8.1	2.4
SEP.											
05...	--	528	.72	194	260	46	43	2.5	949	8.3	2.1
15...	--	629	.86	219	290	62	49	3.3	--	7.6	11
25...	1.3	--	--	--	310	55	43	2.7	1130	--	--

07243500 DEEP FORK NEAR BEGGS, OKLA.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	654	145	1010	1100	625	493	326	829	309	637	309	636
2	644	157	1020	924	586	543	361	640	352	674	336	719
3	695	171	1020	---	502	617	397	218	411	660	371	792
4	732	148	1060	537	441	713	436	209	474	777	407	880
5	772	154	---	541	383	782	500	244	514	850	457	949
6	806	142	1050	658	383	842	574	262	543	833	509	1000
7	894	148	1120	690	420	884	673	289	594	931	554	1080
8	951	164	1180	700	446	911	461	305	600	978	618	1100
9	1070	158	952	709	469	951	389	326	712	1060	659	1100
10	1090	179	1000	740	491	828	392	366	360	989	700	885
11	1200	217	765	824	524	624	457	434	368	1020	756	1130
12	1260	233	555	882	---	635	478	501	432	1030	788	1060
13	1310	267	---	918	634	625	524	597	420	1040	815	1070
14	1340	301	---	952	730	644	559	378	282	1010	855	1100
15	1310	---	753	997	791	636	593	291	283	1040	897	1160
16	1400	371	784	1030	845	639	656	307	286	1000	915	1120
17	1430	403	795	1040	728	617	733	342	261	1020	976	1080
18	1280	432	821	995	638	512	798	332	249	1130	997	1000
19	1480	471	866	1010	704	330	851	316	236	1170	953	1180
20	1480	529	910	1040	815	414	894	309	262	1100	979	1170
21	1440	589	933	1040	871	505	942	335	292	1130	529	1160
22	1490	664	984	1060	719	511	995	374	330	1140	483	1210
23	1490	737	1060	1100	283	562	1020	426	357	1150	479	1120
24	1510	---	---	1120	291	583	1070	474	440	1130	506	1070
25	1520	822	1130	1140	350	614	1060	386	447	1230	569	1120
26	1430	856	1140	1150	382	684	1080	362	527	724	458	1180
27	1110	908	1210	1140	411	770	1110	312	528	725	342	1180
28	926	932	1180	1140	452	272	1120	263	551	292	385	1170
29	316	976	1230	1160	---	227	1020	243	559	328	572	1160
30	298	992	1260	1180	---	247	970	257	593	300	704	1210
31	162	---	1300	1240	---	284	---	282	---	288	576	---
MONTH	1080	438	1000	959	552	597	715	362	419	883	628	1060

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22.0	19.0	6.0	8.0	8.0	10.0	14.0	22.0	22.0	30.0	27.0	31.0
2	19.0	18.0	8.0	6.0	7.0	9.0	11.0	18.0	23.0	31.0	28.0	31.0
3	22.0	18.0	1.0	---	8.0	9.0	11.0	20.0	25.0	31.0	29.0	33.0
4	22.0	15.0	8.0	7.0	6.0	8.0	13.0	22.0	26.0	32.0	30.0	33.0
5	23.0	17.0	---	6.0	8.0	11.0	14.0	22.0	27.0	32.0	30.0	30.0
6	21.0	15.0	9.0	7.0	5.0	12.0	14.0	23.0	28.0	33.0	29.0	28.0
7	18.0	19.0	9.0	8.0	5.0	11.0	13.0	25.0	27.0	33.0	31.0	27.0
8	20.0	19.0	7.0	9.0	5.0	9.0	16.0	25.0	27.0	32.0	32.0	27.0
9	19.0	14.0	7.0	10.0	4.0	8.0	17.0	26.0	27.0	34.0	33.0	28.0
10	21.0	15.0	9.0	7.0	6.0	7.0	16.0	24.0	24.0	33.0	32.0	27.0
11	22.0	14.0	7.0	7.0	6.0	7.0	16.0	24.0	24.0	29.0	31.0	29.0
12	23.0	14.0	7.0	5.0	---	7.0	15.0	23.0	24.0	30.0	32.0	26.0
13	22.0	15.0	---	6.0	9.0	4.0	15.0	23.0	24.0	28.0	32.0	23.0
14	18.0	12.0	---	6.0	9.0	7.0	17.0	23.0	27.0	28.0	29.0	21.0
15	18.0	---	7.0	8.0	6.0	9.0	18.0	21.0	26.0	29.0	29.0	20.0
16	19.0	14.0	6.0	6.0	6.0	11.0	18.0	23.0	26.0	29.0	30.0	22.0
17	21.0	11.0	8.0	5.0	8.0	11.0	21.0	24.0	26.0	31.0	28.0	23.0
18	20.0	13.0	6.0	7.0	8.0	12.0	22.0	24.0	26.0	30.0	31.0	24.0
19	20.0	14.0	7.0	7.0	8.0	13.0	20.0	24.0	28.0	31.0	30.0	22.0
20	21.0	13.0	7.0	7.0	7.0	17.0	20.0	23.0	29.0	32.0	32.0	23.0
21	15.0	15.0	7.0	8.0	9.0	15.0	22.0	26.0	29.0	32.0	31.0	21.0
22	19.0	16.0	9.0	7.0	7.0	18.0	20.0	26.0	28.0	34.0	31.0	23.0
23	18.0	16.0	12.0	8.0	5.0	19.0	22.0	24.0	27.0	32.0	32.0	22.0
24	19.0	---	---	7.0	5.0	17.0	23.0	24.0	27.0	28.0	32.0	20.0
25	17.0	13.0	7.0	9.0	8.0	17.0	24.0	26.0	28.0	26.0	32.0	21.0
26	17.0	14.0	7.0	10.0	8.0	13.0	25.0	25.0	28.0	26.0	26.0	21.0
27	19.0	12.0	7.0	9.0	9.0	17.0	25.0	26.0	31.0	28.0	26.0	24.0
28	19.0	12.0	9.0	9.0	10.0	13.0	24.0	24.0	27.0	28.0	28.0	21.0
29	20.0	8.0	8.0	11.0	---	10.0	26.0	23.0	29.0	28.0	30.0	23.0
30	20.0	7.0	7.0	9.0	---	11.0	22.0	22.0	31.0	29.0	29.0	23.0
31	19.0	---	7.0	8.0	---	12.0	---	23.0	---	30.0	33.0	---
MONTH	20.0	14.5	7.5	7.5	7.0	11.5	18.5	23.5	26.5	30.5	30.0	25.0

07245000 CANADIAN RIVER NEAR WHITEFIELD, OKLA.
(Irrigation Network Station)

LOCATION.--Lat 35°15'45", long 95°14'19", in SE 1/4 SE 1/4 sec.12, T.9 N., R.19 E., Haskell County, at gaging station at bridge on State Highway 2, 0.8 mi (1.3 km) north of Whitefield, 5.5 mi (8.8 km) upstream from Taleka (Snake) Creek, 8.2 mi (13.2 km) downstream from Eufaula Dam, and at mile 18.8 (30.2 km).

DRAINAGE AREA.--47,576 mi² (123,222 km²), of which 9,700 mi² (25,123 km²) is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: September 1944 to February 1945, September 1946 to September 1964, October 1966 to current year.
Water temperatures: September 1944 to February 1945, September 1946 to September 1964, October 1966 to Sept. 1974.

EXTREMES, Current year.--Specific conductance: Maximum, 512 micromhos/cm Sept. 8; minimum, 129 micromhos/cm Oct. 31.

Period of record.--Specific conductance: Maximum daily, 22,900 micromhos/cm Nov. 11, 1956; minimum, 66 micromhos/cm Nov. 26, 1973.
Water temperatures (1944-45, 46-64, 66-74): Maximum, 31.0°C Sept. 4, 1944, Aug. 11, 19, 1973; minimum, freezing point on many days during winter months.

REMARKS.--Continuous monitor records for specific conductance and water temperature are collected for this station. Records of maximum and minimum specific conductance are available in district office in Oklahoma City, Okla.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	ALKA-LINITY AS CACO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)
OCT.											
05...	0830	1350	--	26	9.7	32	--	98	0	80	21
15...	0730	2260	--	24	7.6	25	--	--	--	--	18
22...	1100	2910	--	31	8.6	32	3.6	99	0	81	23
31...	0730	8460	--	14	2.7	9.3	--	46	0	38	8.3
NOV.											
05...	0730	2320	--	22	6.8	25	--	82	0	67	19
12...	1030	19100	--	25	--	32	2.4	94	0	77	23
15...	0730	33300	--	26	8.3	33	--	92	0	75	22
25...	0845	35400	--	32	9.6	33	3.9	--	--	--	28
DEC.											
05...	0730	6170	--	26	8.5	--	3.5	92	0	75	23
14...	0800	8140	--	24	8.0	25	3.4	89	0	73	23
25...	0730	10200	--	--	8.4	27	3.3	85	0	70	23
JAN.											
05...	0800	8290	--	52	13	46	3.7	143	0	117	41
12...	0800	7460	--	24	7.9	25	3.8	85	0	70	23
16...	1100	14400	2.3	24	7.8	25	3.8	80	0	66	24
31...	0800	8170	--	18	5.4	18	3.3	62	0	51	20
FEB.											
05...	0800	7060	--	26	8.4	--	3.4	81	0	66	28
15...	0730	8050	--	25	7.9	26	3.1	84	0	69	28
19...	1200	8890	--	25	7.9	27	3.3	83	0	68	27
26...	0800	31100	--	26	8.3	28	3.0	85	0	70	30
MAR.											
05...	0800	29000	--	29	10	33	3.7	103	0	84	38
15...	0830	14400	--	29	9.8	34	3.6	93	0	76	41
18...	1400	21000	6.2	39	12	37	3.3	101	0	83	46
29...	0800	1790	--	21	--	18	2.1	78	0	64	20
APR.											
05...	0900	16300	--	36	11	37	3.1	102	0	84	52
15...	0830	--	--	30	11	40	2.8	103	0	84	--
15...	1330	9880	5.8	29	12	39	1.9	101	0	83	42
25...	0730	9220	--	34	12	37	2.8	100	0	82	57
MAY											
05...	0715	14000	--	32	12	35	2.8	99	0	81	41
15...	0800	19100	--	33	11	34	2.8	99	0	81	39
24...	0730	19100	--	36	12	37	2.8	102	0	84	--
29...	1030	21400	5.7	30	12	37	2.7	96	0	79	39
JUNE											
05...	0800	17900	--	29	12	38	2.8	97	0	80	37

07245000 CANADIAN RIVER NEAR WHITEFIELD, OKLA.--Continued
WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	ALKA-LINITY AS CACO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)
JUNE											
10...	1030	11200	6.1	39	11	--	4.8	115	0	94	39
15...	0900	13800	--	--	11	33	2.7	86	0	71	34
25...	0830	24000	--	--	11	36	3.0	101	0	83	--
JULY											
05...	0730	4560	--	--	11	36	3.0	121	0	99	33
08...	1330	6220	6.8	36	13	36	3.2	127	0	104	37
15...	0800	4330	--	33	11	35	3.0	119	0	98	32
25...	0900	2690	--	31	12	33	3.3	113	0	93	31
AUG.											
05...	0800	5670	--	37	11	36	3.5	118	0	97	34
07...	1125	6720	6.9	36	12	37	3.6	119	0	98	40
15...	0900	2930	--	35	11	35	3.5	118	0	97	33
25...	0730	7410	--	35	11	--	--	122	0	100	35
SEP.											
05...	0800	7280	--	34	11	36	3.4	119	0	98	32
07...	0930	148	8.2	45	14	35	3.4	166	0	136	32
15...	0830	382	--	47	12	32	3.0	184	0	151	24
24...	0800	906	--	33	12	36	3.6	120	0	98	31

07245000 CANADIAN RIVER NEAR WHITEFIELD, OKLA.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	TOTAL NITRO-GEN (N) (MG/L)	TOTAL NITRO-GEN (NO3) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)
OCT.										
05...	50	--	--	.40	--	--	--	.04	213	--
15...	39	--	--	.38	--	--	--	.08	170	--
22...	54	--	--	.23	--	--	--	.02	239	--
31...	12	--	--	.58	--	--	--	.28	--	--
NOV.										
05...	38	--	--	.28	--	--	--	.07	170	--
12...	51	--	--	.27	--	--	--	.09	227	--
15...	52	--	--	.35	--	--	--	.06	206	--
25...	56	--	--	--	--	--	--	.04	--	--
DEC.										
05...	47	--	--	--	--	--	--	.09	200	--
14...	43	--	--	--	--	--	--	.06	189	--
25...	44	--	--	--	--	--	--	.07	182	--
JAN.										
05...	86	--	--	--	--	--	--	.35	350	--
12...	37	--	--	--	--	--	--	.09	183	--
16...	40	.2	.29	.29	.45	.74	3.3	.12	176	167
31...	24	--	--	--	--	--	--	.15	137	--
FEB.										
05...	42	--	--	--	--	--	--	.07	200	--
15...	39	--	--	--	--	--	--	.06	197	--
19...	42	--	--	.35	--	--	--	.09	196	--
26...	43	--	--	--	--	--	--	.07	206	--
MAR.										
05...	51	--	--	--	--	--	--	.08	227	--
15...	52	--	--	--	--	--	--	.08	235	--
18...	71	.4	.30	.30	.31	.61	2.7	.11	270	265
29...	23	--	--	--	.49	--	--	.05	145	--
APR.										
05...	56	--	--	--	.54	--	--	.09	252	--
15...	57	--	--	--	.34	--	--	.09	251	--
15...	60	.2	.35	--	.42	.77	3.4	.07	247	240
25...	55	--	--	--	.57	--	--	.09	246	--
MAY										
05...	56	--	--	--	--	--	--	.05	243	--
15...	55	--	--	--	--	--	--	.05	243	--
24...	60	--	--	--	3.1	--	--	.05	247	--
29...	61	.2	.37	--	.82	1.2	5.3	.06	249	235
JUNE										
05...	63	--	--	--	.25	--	--	.05	267	--
10...	63	.2	.43	--	1.6	2.0	9.0	.09	271	--
15...	55	--	--	--	.36	--	--	.03	233	--
25...	60	--	--	--	.39	--	--	.04	259	--
JULY										
05...	58	--	--	--	--	--	--	--	249	--
08...	56	.3	.30	--	3.6	3.9	17	.07	255	251
15...	58	--	--	--	--	--	--	--	246	--
25...	53	--	--	--	--	--	--	--	--	--
AUG.										
05...	56	--	--	--	--	--	--	--	248	--
07...	56	.2	.28	--	.13	.41	1.8	.03	256	250
15...	54	--	--	--	--	--	--	--	--	--
25...	54	--	--	--	--	--	--	--	267	--
SEP.										
05...	56	--	.17	--	--	--	--	--	257	--
07...	53	.2	.08	--	.32	.40	1.8	.06	275	273
15...	43	--	.15	--	--	--	--	--	268	--
24...	55	--	.15	--	--	--	--	--	240	--

07245000 CANADIAN RIVER NEAR WHITEFIELD, OKLA.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (JTU)
OCT.										
05...	.29	776	100	24	--	1.4	374	8.0	--	--
15...	.23	1040	91	--	--	1.1	296	7.7	--	--
22...	.33	1880	110	32	37	1.5	--	8.1	24.0	--
31...	--	--	46	8	--	.6	129	7.5	--	--
NOV.										
05...	.23	1070	83	16	--	1.2	292	8.3	--	--
12...	.31	11700	--	--	--	--	369	8.0	10.5	--
15...	.28	18500	99	24	--	1.4	368	8.0	--	--
25...	--	--	120	--	37	1.5	388	7.8	--	--
DEC.										
05...	--	3330	100	24	--	--	350	7.4	--	--
14...	.26	4150	93	20	36	1.1	326	7.6	--	--
25...	.25	5010	--	--	--	--	--	7.9	--	--
JAN.										
05...	.48	7830	180	66	35	1.5	--	7.7	--	--
12...	.25	3690	92	23	36	1.1	302	7.5	--	--
16...	.24	6840	92	26	36	1.1	--	7.6	6.0	40
31...	.19	3020	67	16	35	1.0	220	7.6	--	--
FEB.										
05...	--	3810	100	33	--	--	322	8.4	--	--
15...	.27	4280	95	26	36	1.2	317	8.3	--	--
19...	.27	4710	95	27	37	1.2	310	7.8	5.0	--
26...	.28	17300	99	29	37	1.2	330	8.3	--	--
MAR.										
05...	.31	17800	110	29	38	1.3	389	8.2	--	--
15...	.32	9140	110	36	39	1.4	406	7.5	--	--
18...	.37	15300	150	64	35	1.3	--	7.2	6.0	25
29...	.20	701	--	--	--	--	245	7.5	--	--
APR.										
05...	.34	11100	140	52	37	1.4	436	7.5	--	--
15...	.34	6740	120	36	41	1.6	440	7.9	--	--
15...	.34	6590	120	39	41	1.5	--	8.1	12.0	21
25...	.33	6120	130	52	37	1.4	422	7.7	--	--
MAY										
05...	.33	9190	130	48	36	1.3	423	7.6	--	--
15...	.33	12500	130	47	36	1.3	419	8.2	--	--
24...	.34	12700	140	56	36	1.4	431	8.3	--	--
29...	.34	14400	120	46	39	1.4	440	7.6	20.0	25
JUNE										
05...	.36	12900	120	42	40	1.5	439	8.1	--	--
10...	--	8200	140	48	--	--	400	5.6	--	31
15...	--	8680	--	--	--	--	393	8.1	--	--
25...	.35	16800	--	--	--	--	437	7.9	--	--
JULY										
05...	--	3070	--	--	--	--	444	7.7	--	--
08...	.35	4280	140	39	35	1.3	450	7.3	27.0	18
15...	.33	2880	130	30	37	1.5	444	7.9	--	--
25...	--	--	130	34	35	1.3	423	7.7	--	--
AUG.										
05...	.34	3800	140	41	36	1.3	447	7.9	--	--
07...	.35	4650	140	42	36	1.4	450	7.7	28.0	14
15...	--	--	130	36	36	1.3	438	7.9	--	--
25...	.36	5340	130	33	--	--	454	7.9	--	--
SEP.										
05...	.35	5050	130	33	37	1.4	451	8.0	--	--
07...	.37	110	170	34	30	1.2	492	7.2	23.0	2
15...	.36	276	170	16	29	1.1	468	8.3	--	--
24...	.33	587	130	33	36	1.4	441	8.1	--	--

07245000 CANADIAN RIVER NEAR WHITEFIELD, OKLA.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	DIS-CHARGE (CFS)	DIS-SOLVED OXYGEN (MG/L)	PER-CENT SATUR-ATION	FECAL COLI-FORM (COL. PER 100 ML)	STREP-TOCOCCI (COL-ONIES PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)	SUS-PENDED SEDI-MENT (MG/L)	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM
OCT.									
22...	1100	2910	8.5	102	100	140	--	21	96
NOV.									
12...	1030	19100	11.3	107	--	--	--	55	98
JAN.									
16...	1100	14400	12.5	103	240	310	--	76	30
FEB.									
19...	1200	8890	12.0	99	130	280	--	306	520
MAR.									
18...	1400	21000	15.2	165	20	810	--	180	180
APR.									
15...	1330	9880	9.1	88	--	--	--	21	84
MAY									
29...	1030	21400	8.7	101	400	85	--	22	94
JUNE									
10...	1030	11200	--	--	--	--	--	49	80
JULY									
08...	1330	6220	6.8	87	136	128	--	28	39
AUG.									
07...	1125	6720	8.3	106	--	--	9.3	31	6
SEP.									
07...	0930	148	8.3	98	--	--	--	--	--

DATE	TIME	DIS-CHARGE (CFS)	TOTAL IRON (FE) (UG/L)	DIS-SOLVED IRON (FE) (UG/L)	TOTAL MAN-GANESE (MN) (UG/L)	SUS-PENDED MAN-GANESE (MN) (UG/L)	DIS-SOLVED MAN-GANESE (MN) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	SUS-PENDED ARSENIC (AS) (UG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	TOTAL CAD-MIUM (CD) (UG/L)	SUS-PENDED CAD-MIUM (CD) (UG/L)
MAY												
29...	1030	21400	800	60	10	0	10	2	1	1	<10	<9
AUG.												
07...	1125	6720	640	40	120	100	20	0	0	0	<10	<9

DATE	DIS-SOLVED CAD-MIUM (CD) (UG/L)	TOTAL CHRO-MIUM (CR) (UG/L)	SUS-PENDED CHRO-MIUM (CR) (UG/L)	DIS-SOLVED CHRO-MIUM (CR) (UG/L)	TOTAL COBALT (CO) (UG/L)	SUS-PENDED COBALT (CO) (UG/L)	DIS-SOLVED COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)	SUS-PENDED COPPER (CU) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)
MAY											
29...	1	0	0	0	<50	<50	0	20	15	5	<100
AUG.											
07...	1	0	0	0	<50	<50	0	10	0	11	100

DATE	SUS-PENDED LEAD (PB) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	TOTAL MERCURY (HG) (UG/L)	SUS-PENDED MERCURY (HG) (UG/L)	DIS-SOLVED MERCURY (HG) (UG/L)	TOTAL SELE-NIUM (SE) (UG/L)	SUS-PENDED SELE-NIUM (SE) (UG/L)	DIS-SOLVED SELE-NIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	SUS-PENDED ZINC (ZN) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)
MAY											
29...	<97	3	.1	.1	.0	1	1	0	50	30	20
AUG.											
07...	99	1	.1	.0	.1	0	0	0	40	40	0

07245000 CANADIAN RIVER NEAR WHITEFIELD, OKLA.--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

PHYTOPLANKTON

Date	Time	Organism	Count (cells/ml)	Percent of total	Sampling method
Oct. 22	1100	CHLOROPHYTA			Sediment sampler
		Chlorophyceae			
		Chlorococcales			
		Occystaceae			
		Ankistrodesmus	11	2	
		Scenedesmaceae			
		Scenedesmus	68	10	
		Zygnematales			
		Desmidiaceae			
		Euastrum	11	2	
		CHRYSOPHYTA			
		Bacillariophyceae			
		Centrales			
		Coscinodiscaceae			
		Cyclotella	270	38	
		Pennales			
		Achnanthaceae			
		Achnanthes	11	2	
		Cocconeis	11	2	
		Naviculaceae			
		Navicula	68	10	
		Neidium	11	2	
		Pinnularia	57	8	
		Nitzschiaceae			
		Nitzschia	57	8	
		CYANOPHYTA			
		Myxophyceae			
		Oscillatoriales			
		Nostocaceae			
		Anabaena	140	19	
		TOTAL	720		
Nov. 12	1030	CHLOROPHYTA			Sediment sampler
		Chlorophyceae			
		Chlorococcales			
		Micractiniaceae			
		Golenkinia	39	5	
		Occystaceae			
		Ankistrodesmus	58	8	
		Volvocales			
		Chlamydomonadaceae			
		Chlamydomonas	19	3	
		CHRYSOPHYTA			
		Bacillariophyceae			
		Centrales			
		Coscinodiscaceae			
		Cyclotella	97	14	
		Melosira	120	16	
		Pennales			
		Achnanthaceae			
		Cocconeis	19	3	
		Naviculaceae			
		Navicula	160	22	
		CYANOPHYTA			
		Myxophyceae			
		Chroococcales			
		Chroococcaceae			
		Anacystis	210	30	
		TOTAL	720		
Dec. 12		CHRYSOPHYTA			Sediment sampler
		Bacillariophyceae			
		Centrales			
		Coscinodiscaceae			
		Cyclotella	16	3	
		Melosira	110	24	
		Pennales			
		Fragilariaceae			
		Synedra	16	3	
		Surirellaceae			
		Surirella	16	3	
		CYANOPHYTA			
		Myxophyceae			
		Chroococcales			
		Chroococcaceae			
		Gomphosphaeria	310	66	
		TOTAL	470		

07245000 CANADIAN RIVER NEAR WHITEFIELD, OKLA.--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

PHYTOPLANKTON

Date	Time	Organism	Count (cells/ml)	Percent of total	Sampling method
Jan. 16	1100	CHLOROPHYTA			Sediment sampler
		Chlorophyceae			
		Zygnematales			
		Desmidiaceae			
		Closterium	33	6	
		CHRYSOPHYTA			
		Bacillariophyceae			
		Centrales			
		Coscinodiscaceae			
		Cyclotella	66	11	
		Melosira	460	78	
		Pennales			
		Nitzschiaceae			
		Nitzschia	33	6	
		TOTAL	600		
Feb. 19	1200	CHLOROPHYTA			Sediment sampler
		Chlorophyceae			
		Chlorococcales			
		Occystaceae			
		Oocystis	30	18	
		CHRYSOPHYTA			
		Bacillariophyceae			
		Centrales			
		Coscinodiscaceae			
		Cyclotella	30	18	
		Melosira	90	55	
		Pennales			
		Naviculaceae			
		Navicula	15	9	
		TOTAL	170		
Mar. 18	1400	CHRYSOPHYTA			Sediment sampler
		Bacillariophyceae			
		Centrales			
		Coscinodiscaceae			
		Cyclotella	22	7	
		Melosira	240	81	
		Pennales			
		Achnanthaceae			
		Achnanthes	11	4	
		Gomphonemataceae			
		Gomphonema	11	4	
		Nitzschiaceae			
		Nitzschia	11	4	
		TOTAL	290		
Apr. 15	1330	CHRYSOPHYTA			Sediment sampler
		Bacillariophyceae			
		Centrales			
		Coscinodiscaceae			
		Cyclotella	120	64	
		Melosira	39	21	
		Pennales			
		Naviculaceae			
		Navicula	13	7	
		Nitzschiaceae			
		Nitzschia	13	7	
		TOTAL	180		
May 29	1030	CHLOROPHYTA			Sediment sampler
		Chlorophyceae			
		Chlorococcales			
		Occystaceae			
		Dictyosphaerium	130	20	
		CHRYSOPHYTA			
		Bacillariophyceae			
		Centrales			
		Coscinodiscaceae			
		Cyclotella	65	10	
		Pennales			
		Gomphonemataceae			
		Gomphonema	33	5	
		Naviculaceae			
		Navicula	330	50	
		Nitzschiaceae			
		NItzschia	98	15	
		TOTAL	650		

07245000 CANADIAN RIVER NEAR WHITEFIELD, OKLA.--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

PHYTOPLANKTON

Date	Time	Organism	Count (cells/ml)	Percent of total	Sampling method
July 8	1530	CHLOROPHYTA			Sediment sampler
		Chlorophyceae			
		Chlorococcales			
		Scenedesmaceae			
		Scenedesmus		0	
		CHRYSOPHYTA			
		Bacillariophyceae			
		Centrales			
		Biddulphiaceae			
		Biddulphia	190	8	
		Coscinodiscaceae			
		Melosira	260	11	
		Pennales			
		Achnanthaceae			
		Achnanthes		0	
		Gomphonemataceae			
		Gomphonema	260	11	
		Naviculaceae			
		Navicula	580	24	
		Nitzschiaceae			
		Nitzschia		0	
		Achnanthaceae			
		Rhoicosphenia	190	8	
		CYANOPHYTA			
		Myxophyceae			
		Chroococcales			
		Chroococcaceae			
		Anacystis	510	22	
		Oscillatoriales			
		Oscillatoriaceae			
		Lyngbya	390	16	
		TOTAL	2,400		
Aug. 7	1125	CHLOROPHYTA			Sediment sampler
		Chlorophyceae			
		Chlorococcales			
		Occystaceae			
		Tetraedron		0	
		Scenedesmaceae			
		Scenedesmus		0	
		Volvocales			
		Chlamydomonadaceae			
		Chlamydomonas		0	
		CHRYSOPHYTA			
		Bacillariophyceae			
		Centrales			
		Biddulphiaceae			
		Biddulphia		0	
		Coscinodiscaceae			
		Melosira	160	4	
		Pennales			
		Naviculaceae			
		Navicula		0	
		Nitzschiaceae			
		Nitzschia	55	1	
		CYANOPHYTA			
		Myxophyceae			
		Chroococcales			
		Chroococcaceae			
		Agmenellum	590	15	
		Anacystis	,2000	52	
		Oscillatoriales			
		Nostocaceae			
		Anabaena	200	5	
		Oscillatoriaceae			
		Lyngbya	260	7	
		Oscillatoria	530	14	
		TOTAL	3,800		

07245000 CANADIAN RIVER NEAR WHITEFIELD, OKLA.--Continued

DISSOLVED SULFATE (SO4), MG/L, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	32	18	31	17	15	34	38	40	42	48	42	43
2	32	17	31	19	13	35	39	40	42	49	43	44
3	32	15	31	18	15	35	40	36	43	47	44	43
4	32	21	30	21	22	35	41	40	42	48	43	43
5	31	23	18	17	31	33	40	39	42	49	43	43
6	40	22	17	19	24	35	40	38	38	48	44	44
7	31	23	19	19	19	35	37	39	40	46	43	50
8	31	24	19	19	22	35	40	38	43	46	44	53
9	31	8.7	20	20	18	33	37	38	41	48	44	44
10	35	16	19	21	19	36	43	38	44	49	44	44
11	31	23	19	19	20	36	43	38	41	44	44	50
12	42	29	21	19	20	11	41	38	42	43	44	41
13	41	30	21	19	19	36	41	39	41	48	43	48
14	19	30	20	19	21	36	41	40	41	45	43	51
15	19	30	23	20	24	36	39	38	34	42	41	46
16	26	33	22	21	26	35	42	39	41	43	42	15
17	29	30	23	19	24	39	42	39	36	42	46	40
18	31	30	23	21	24	41	41	41	37	41	46	45
19	30	31	23	24	25	38	40	39	34	43	42	47
20	37	32	25	23	24	39	42	40	40	40	41	44
21	41	20	23	23	25	38	38	40	43	47	43	45
22	31	32	24	22	16	38	42	39	43	42	43	47
23	31	33	23	19	22	40	42	42	38	42	43	44
24	31	32	19	19	27	40	41	40	40	18	44	42
25	31	33	20	18	26	38	39	47	41	40	44	43
26	35	32	21	20	22	38	40	41	41	37	44	44
27	40	31	21	21	29	35	41	40	41	41	43	43
28	23	31	21	17	25	36	40	41	41	41	44	46
29	23	30	24	21	---	37	40	41	41	41	44	48
30	30	32	23	20	---	27	40	40	39	41	43	42
31	8.2	---	17	18	---	31	---	35	---	42	50	---
MONTH	31	26	22	20	22	35	40	39	40	43	44	44

DISSOLVED SULFATE (SO4), TONS PER DAY, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	243	382	619	542	111	2340	2870	1200	2720	905	883	539
2	396	555	840	470	35.8	2410	2930	1140	2470	732	816	852
3	419	192	706	341	245	2560	2980	1070	2100	711	550	974
4	478	265	611	464	389	2790	2580	1250	2030	614	753	966
5	113	144	300	361	591	2580	1760	1470	2030	603	658	845
6	17.6	127	246	458	474	2600	1730	1470	1640	625	826	166
7	393	160	317	406	416	2140	1070	1520	1060	724	780	20.0
8	544	59.9	299	404	444	1340	1360	1490	1080	775	795	893
9	136	12.8	329	418	372	1370	918	1490	1090	827	550	549
10	465	49.7	363	462	359	1460	1830	1480	1330	823	437	79.4
11	159	404	342	398	453	1230	1810	1480	1630	413	857	427
12	52.2	1500	448	383	407	246	1730	1480	1740	87.0	748	151
13	84.2	2320	472	405	403	991	1730	1510	1610	30.3	763	14.1
14	359	2410	440	416	446	1400	1220	1650	1550	267	816	12.7
15	116	2700	484	778	522	1400	1040	1960	1270	491	324	47.4
16	105	3210	522	816	569	1420	1120	1460	1460	428	107	30.7
17	64.1	2880	615	723	492	1530	1120	1450	1240	473	22.1	15.1
18	71.6	2870	463	374	566	2320	1240	1850	1020	871	527	9.48
19	45.5	3020	646	393	600	3360	1040	2170	2030	255	657	26.1
20	20.6	3170	617	350	706	3400	1090	2060	2810	44.5	700	17.3
21	78.3	1970	584	255	411	2950	667	2060	3010	648	720	8.99
22	244	3120	654	326	436	2140	1040	2000	3010	709	819	28.6
23	238	3190	617	268	366	2220	1040	2150	2620	663	446	145
24	174	3080	509	260	1160	1870	1030	2060	2740	168	194	103
25	130	3150	551	262	1690	1450	971	2450	2660	291	880	76.7
26	54.4	3030	548	274	1850	959	1300	2150	2160	73.6	820	87.0
27	21.8	2730	496	342	2350	1170	1570	2120	1850	71.6	265	15.0
28	14.4	2230	423	317	1890	1240	1540	2160	1510	634	652	6.55
29	15.1	2140	544	437	---	179	1540	2370	1480	828	562	264
30	175	1880	515	447	---	32.4	1520	2580	1250	829	107	382
31	187	---	375	397	---	747	---	2280	---	917	482	---
MONTH	181	1770	493	412	670	1740	1510	1770	1870	533	589	245

07245000 CANADIAN RIVER NEAR WHITEFIELD, OKLA.--Continued

DISSOLVED CHLORIDE (CL), MG/L, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	52	36	51	31	26	54	54	62	63	71	64	65
2	52	33	51	37	21	56	60	62	64	71	65	66
3	52	27	51	36	26	56	61	57	64	70	65	65
4	52	41	50	41	42	56	63	61	63	71	65	65
5	51	42	54	33	52	54	62	60	63	71	65	65
6	62	42	33	38	43	56	62	60	60	70	66	66
7	52	43	38	37	37	56	58	60	62	68	65	72
8	52	43	38	38	41	56	62	59	64	68	66	76
9	51	13	39	39	35	56	56	59	63	71	66	66
10	56	29	38	40	38	57	64	60	66	71	66	66
11	52	43	38	38	39	57	65	60	63	66	66	72
12	63	49	41	38	39	17	63	59	64	65	65	62
13	63	50	40	38	38	57	62	60	63	71	65	70
14	37	50	39	39	40	57	63	62	63	68	65	73
15	37	50	42	40	44	57	60	60	55	64	63	68
16	46	54	42	40	46	57	63	60	63	64	63	28
17	50	50	42	38	44	60	64	60	57	64	66	61
18	51	50	43	41	44	63	63	62	58	62	68	67
19	51	52	43	43	44	59	61	61	54	65	64	69
20	54	52	43	42	43	60	64	62	62	61	63	65
21	63	40	43	42	45	57	60	62	65	69	65	67
22	51	52	43	41	29	54	64	61	65	63	65	69
23	51	53	43	38	41	61	64	63	60	64	65	66
24	51	52	38	39	46	62	63	62	62	55	66	63
25	52	54	39	36	46	59	60	69	62	61	66	65
26	56	52	40	39	41	54	62	63	63	59	68	65
27	62	52	41	41	49	56	62	62	62	62	65	64
28	43	51	40	33	45	57	61	63	63	63	66	68
29	43	50	44	40	---	58	62	62	63	63	65	71
30	51	52	42	40	---	47	62	62	61	62	65	64
31	12	---	33	37	---	52	---	56	---	64	72	---
MONTH	51	45	41	38	40	56	62	61	62	65	65	66

DISSOLVED CHLORIDE (CL), TONS PER DAY, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	395	765	1020	624	206	3720	4460	1860	4080	1540	1350	512
2	643	1080	1050	915	57.8	3860	4500	1770	3770	1060	932	1250
3	681	346	1160	681	424	4100	4550	1690	3130	1060	783	1470
4	776	517	1020	906	743	4460	3960	1910	3040	909	1140	1490
5	186	263	566	739	991	4230	2730	2270	3040	874	995	1280
6	27.3	243	478	915	849	4160	2680	2320	2590	911	1240	249
7	660	298	633	740	810	3420	1680	2330	1650	1070	1180	28.8
8	913	107	598	808	828	2150	2110	2310	1800	1140	1190	1280
9	224	19.1	642	816	725	2190	1440	2310	1680	1220	825	524
10	744	90.0	725	880	717	2310	2730	2330	2000	1190	656	119
11	267	756	684	795	882	1950	2740	2330	2500	820	1280	614
12	78.2	2530	676	765	795	380	2650	2290	2640	131	1110	226
13	129	3860	900	810	806	1570	2610	2320	2470	44.9	1150	20.6
14	699	4020	857	854	850	2220	1870	2560	2380	404	1230	16.1
15	226	4500	885	1560	956	2220	1600	3090	2050	748	498	70.1
16	186	5250	997	1560	1010	2250	1690	2250	2250	638	160	57.4
17	111	4790	1120	1450	903	2350	1710	2240	1970	721	32.7	23.1
18	118	4780	966	730	1040	3570	1910	2800	1600	1520	778	14.1
19	77.4	5070	1210	704	1060	5210	1590	3390	3220	585	1000	36.4
20	33.1	5150	1150	638	1270	5230	1670	3200	4350	67.9	1080	25.6
21	120	3940	1090	465	740	4590	1050	3200	4550	952	1090	13.4
22	401	5070	1170	608	741	3330	1580	3130	4550	1060	1240	41.9
23	391	5120	1150	536	663	3590	1580	3230	4130	1010	674	217
24	286	5000	1020	534	1970	2900	1580	3200	4250	326	290	154
25	218	5160	1070	524	2990	2230	1490	3600	4020	445	1320	116
26	87.1	4930	1040	534	3440	1490	2010	3300	3320	117	1230	128
27	33.8	4580	968	669	3470	1670	2380	3280	2800	109	400	19.4
28	26.9	3680	866	615	3400	1970	2360	3320	2310	975	948	9.36
29	28.2	3560	998	833	---	280	2390	3580	2280	1270	830	591
30	297	3060	941	894	---	56.3	2360	4000	1960	1250	182	582
31	274	---	727	816	---	1250	---	3610	---	1400	665	---
MONTH	501	2950	917	805	1210	2740	2320	2740	2870	794	866	366

07245000 CANADIAN RIVER NEAR WHITEFIELD, OKLA.--Continued

DISSOLVED SOLIDS (RESIDUE AT 180 DEG. C), MG/L, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	223	174	220	161	150	229	244	252	257	279	259	261
2	224	166	220	177	129	235	247	251	259	280	260	264
3	223	148	220	174	144	234	250	238	260	275	263	262
4	223	189	216	189	192	234	254	249	257	278	262	262
5	221	193	168	167	222	229	253	247	256	279	260	262
6	251	192	166	182	196	234	251	246	245	277	264	263
7	222	195	181	178	176	236	240	247	251	271	261	263
8	222	197	181	180	190	235	253	244	260	271	264	295
9	221	93	183	184	171	235	241	244	256	278	264	263
10	234	154	180	187	180	237	260	245	263	279	264	265
11	222	194	181	182	184	237	261	246	256	263	265	263
12	257	214	188	182	183	111	255	244	258	260	263	254
13	255	217	187	181	181	237	254	246	256	278	261	276
14	177	217	184	182	187	238	256	251	256	269	261	286
15	179	217	193	186	199	238	248	246	230	258	255	271
16	206	228	192	186	204	238	256	247	255	260	257	151
17	215	216	193	181	199	247	258	247	237	258	270	249
18	220	217	194	188	199	255	256	254	240	254	271	266
19	219	222	194	196	200	243	249	249	230	261	257	274
20	242	223	195	194	197	248	257	253	251	250	256	263
21	255	186	195	194	201	243	245	252	260	275	261	268
22	220	224	196	190	155	244	256	249	261	257	260	275
23	220	226	194	182	191	250	258	257	246	258	262	264
24	221	224	181	182	206	252	254	251	251	172	264	257
25	222	228	183	175	205	244	247	273	253	250	264	261
26	234	223	187	185	191	243	253	256	255	242	263	263
27	251	222	188	188	213	233	254	251	254	253	262	260
28	195	220	188	185	202	236	250	254	256	255	265	271
29	195	218	198	186	---	240	251	254	254	254	263	278
30	219	223	193	186	---	207	253	251	249	253	262	258
31	89	---	185	176	---	222	---	235	---	258	283	---
MONTH	219	202	190	182	187	234	252	249	252	261	263	264

DISSOLVED SOLIDS (TONS PER DAY), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1690	3700	4390	3240	1110	15800	18400	7550	16700	5260	5450	2060
2	2770	5420	4540	4380	355	16200	18500	7180	15200	4180	3730	4990
3	2920	1900	5010	3290	2350	17100	18600	7070	12700	4160	3170	5940
4	3330	2380	4400	4170	3400	16600	16000	7800	12400	3560	4590	6010
5	806	1210	2800	3740	4230	17900	11100	9340	12400	3440	3980	5150
6	110	1110	2410	4380	3870	17400	10800	9500	10600	3600	4950	994
7	2820	1350	3020	3900	3900	14400	6930	9600	6670	4270	4740	113
8	3900	491	2850	3830	3840	9010	8610	9550	6510	4550	4770	4970
9	973	136	3010	3850	3530	9200	5980	9550	6820	4790	3300	2090
10	3110	478	3440	4110	3400	9600	11100	9530	7950	4690	2620	478
11	1140	3410	3260	3810	4160	8130	11000	9560	10200	2470	5160	2410
12	319	11000	4020	3670	3720	2480	10700	9490	10700	526	4470	933
13	524	16800	4210	3860	3840	6530	10700	9500	10000	176	4630	81.2
14	3350	17500	4040	3990	3970	9250	7600	10400	9680	1600	4950	71.0
15	1090	19500	4080	7230	4330	9250	6620	12700	8570	3020	2020	280
16	834	22200	4560	7230	4460	9380	6650	9270	9090	2590	652	309
17	475	20700	5160	6890	4080	9670	6900	9200	8190	2900	130	94.1
18	508	20700	3910	3550	4700	14500	7740	11500	6610	5400	3100	56.0
19	332	21600	5450	3210	4800	21500	6490	13800	13700	1540	4020	152
20	136	22100	5230	2950	5800	21600	6690	13000	17600	278	4370	104
21	487	18300	4950	2150	3310	16900	4300	13000	18200	3790	4370	53.5
22	1730	21800	5340	2820	4230	13600	6360	12800	18300	4340	4950	167
23	1690	21800	5210	2570	5180	13900	6360	13200	16900	4080	2720	870
24	1240	21500	4650	2490	8640	11800	6360	12900	17200	1600	1160	629
25	929	21800	5040	2550	13300	9240	6150	14200	16400	1820	5280	466
26	364	21100	4880	2530	16000	6130	8200	13400	13400	482	4900	520
27	137	19500	4440	3070	17300	7800	9740	13300	11500	443	1610	78.6
28	122	15900	3740	3070	15500	8160	9650	13400	9400	3950	3810	37.3
29	128	15500	4490	3870	---	1160	9690	14700	9190	5130	3360	1530
30	1280	13100	4330	4160	---	248	9830	16200	8000	5120	654	2350
31	2030	---	3640	3880	---	5350	---	15200	---	5640	2610	---
MONTH	1350	12800	4220	3810	5550	11420	9460	11210	11690	3210	3560	1470

07245000 CANADIAN RIVER NEAR WHITEFIELD, OKLA.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/Cm AT 25 DEG. C), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	378	267	373	264	243	390	417	432	441	462	445	449
2	380	272	372	293	204	401	423	431	445	484	447	455
3	378	240	375	287	232	398	428	407	446	475	452	451
4	378	315	365	315	320	398	436	427	441	481	451	450
5	374	323	277	274	377	389	433	422	440	483	447	451
6	431	321	275	302	328	398	430	420	419	479	455	453
7	377	326	300	294	294	402	410	423	431	468	448	489
8	376	330	300	299	318	401	433	417	446	467	454	512
9	374	137	304	306	282	400	412	417	439	460	454	453
10	349	251	298	311	299	404	446	419	453	483	454	456
11	376	325	301	302	306	405	449	420	439	453	456	489
12	441	302	314	302	305	171	437	418	443	447	452	435
13	438	367	311	300	300	405	435	421	439	480	448	477
14	243	367	306	303	312	406	439	430	439	464	448	495
15	296	368	323	309	353	406	424	420	392	443	438	468
16	346	367	320	310	343	406	440	422	437	446	441	244
17	364	365	322	301	333	423	444	422	404	443	465	427
18	373	367	325	314	334	438	434	435	410	435	468	458
19	370	377	325	329	335	416	427	426	391	448	442	473
20	414	379	327	324	330	424	442	433	431	429	439	452
21	438	309	327	324	338	415	414	432	447	474	448	462
22	373	380	326	318	252	417	443	426	448	441	447	474
23	373	384	325	302	319	428	443	441	420	443	450	454
24	374	380	301	303	347	432	436	430	430	283	455	441
25	377	387	304	290	345	417	423	471	434	428	454	448
26	399	378	312	307	319	415	433	439	437	414	453	452
27	430	376	314	314	360	397	435	431	435	434	450	446
28	326	373	313	270	340	403	428	436	439	437	456	467
29	326	369	332	310	---	409	430	435	436	436	452	480
30	370	376	325	309	---	348	433	431	426	434	450	444
31	129	---	270	292	---	376	---	400	---	443	489	---
MONTH	370	339	316	303	312	398	432	427	433	450	452	454

07246400 ROBERT S. KERR LOCK AND DAM (ARKANSAS RIVER) NEAR SALLISAW, OKLA.

LOCATION.--Lat 35°21'57", long 94°46'43", in SE 1/4 SW 1/4 sec.8, T.10 N., R.24 E., Sequoyah County, from lock wall at dam, 0.4 mi (0.6 km) upstream from gage on bridge on U.S. Highway 59, 3.5 mi (5.6 km) downstream from Sans Bois Creek, 7.5 mi (12.1 km) south of Sallisaw, and at mile 395.4 (636.2 km).

DRAINAGE AREA.--147,750 mi² (382,672 km²), of which 22,241 mi² (57,604 km²) is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: December 1969 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	ALKA-LINITY AS CACO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)
OCT.												
22...	1500	42	7.9	86	--	115	0	94	44	130	--	393
NOV.												
12...	1300	--	4.4	27	--	82	0	67	25	38	--	180
JAN.												
15...	1100	41	8.8	67	3.3	120	0	98	44	99	--	345
FEB.												
18...	1100	44	9.9	66	3.0	131	0	131	48	99	--	361
MAR.												
19...	0830	41	9.5	50	3.5	117	0	96	49	74	--	298
APR.												
16...	1000	36	10	45	1.5	120	0	98	44	65	--	278
MAY												
29...	0620	45	14	95	3.2	134	0	110	61	140	--	453
JULY												
08...	1515	44	10	45	3.5	132	0	108	44	64	--	293
AUG.												
06...	1635	46	12	73	4.4	135	0	111	59	110	--	393
SEP.												
07...	0800	42	11	61	3.8	136	0	112	47	89	.08	328

DATE	DIS-SOLVED SOLIDS (TONS PER AC-FT)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	DIS-SOLVED OXYGEN (MG/L)	PER-CENT SATUR-ATION	CHEM-ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	CARBON DIOXIDE (CO2) (MG/L)
OCT.												
22...	.53	140	43	--	3.2	--	8.1	--	--	--	--	1.5
NOV.												
12...	--	--	--	--	--	304	7.8	--	--	--	--	2.1
JAN.												
15...	.47	140	40	51	2.5	--	8.2	6.0	12.1	102	15	1.2
FEB.												
18...	.49	150	43	48	2.3	600	8.5	7.5	11.0	96	--	.7
MAR.												
19...	.41	140	46	43	1.8	500	7.5	6.0	12.4	104	8	5.9
APR.												
16...	.38	130	33	42	1.7	520	8.4	12.0	12.5	121	2E	.8
MAY												
29...	.62	170	60	54	3.2	--	8.1	23.0	8.4	102	21	1.7
JULY												
08...	.40	150	43	39	1.6	--	7.8	29.0	--	--	21	3.3
AUG.												
06...	.53	160	54	48	2.5	650	7.6	30.0	7.8	92	26	5.4
SEP.												
07...	.45	150	39	46	2.2	--	7.3	25.0	6.9	105	--	11

07301500 NORTH FORK RED RIVER NEAR CARTER, OKLA.

LOCATION.--Lat 35°10'05", long 99°30'25", in NW 1/4 SE 1/4 sec.15, T.8 N., R.22 W., Beckham County, at gaging station at bridge on State Highway 34, 3.0 mi (4.8 km) south of Carter, 10.8 mi (17.4 km) downstream from Timber Creek, and at mile 110.5 (177.8 km).

DRAINAGE AREA.--2,337 mi² (6,053 km²), of which 399 mi² (1,033 km²) is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: Water years 1951 and 1958-60 (partial-record station), November 1961 to September 1962, July 1968 to current year.
Water temperatures: July 1968 to current year.

EXTREMES, Current year.--Specific conductance: Maximum, 3,790 micromhos/cm Oct. 21; minimum, 746 micromhos/cm Oct. 1.
Water temperatures: Maximum, 34.0°C Aug. 22, 24; minimum, 1.0°C on Feb. 4-5, 9-10, 13.

Period of record.--Specific conductance: Maximum, 4,440 micromhos/cm Dec. 11, 1972; minimum, 420 micromhos/cm Sept. 6, 1973.
Water temperatures: Maximum, 34.0°C July 1, 1972, Aug. 22, 24, 1975; minimum, -0.5°C Feb. 2-3, 1972.

REMARKS.--Continuous monitor records for specific conductance and water temperature are collected for this station. Records of maximum and minimum specific conductance values are available in district office in Oklahoma City, Okla. Temperature record for Oct. 1-2, 6-7, 13-15, 24, 27, Nov. 10, Nov. 18-Jan. 13, Jan.26-Mar. 10, Mar. 26-June 3, Aug. 5-27 was poor. Once-daily values were used in their place.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
OCT.											
01...	1630	7.8	79	19	46	--	118	0	97	--	56
15...	1615	119	290	82	360	--	161	0	132	660	560
25...	1520	39	290	92	--	--	190	0	156	890	530
NOV.											
15...	1520	181	270	93	350	4.6	247	0	203	880	500
25...	1620	88	250	97	320	4.2	240	0	197	860	440
DEC.											
05...	1520	62	260	94	330	4.1	236	0	194	860	460
14...	1500	115	260	91	330	4.3	250	0	205	860	460
25...	1030	74	270	86	320	4.0	235	0	193	850	440
JAN.											
05...	1600	173	260	83	330	4.5	257	0	211	770	490
16...	1630	100*	270	89	350	4.6	259	0	212	860	--
25...	1645	75*	240	86	340	4.2	223	0	183	840	450
FEB.											
05...	1635	270*	230	80	330	4.5	191	0	157	750	490
15...	1410	162	270	85	330	4.9	320	0	262	810	490
27...	1630	166	210	79	260	4.4	247	0	203	690	360
MAR.											
05...	1630	122	200	74	240	4.6	287	0	235	580	350
15...	1710	118*	210	82	260	4.0	224	0	184	640	380
25...	1630	70*	180	92	300	4.4	138	0	113	800	410
APR.											
06...	1630	75	--	--	290	4.3	206	0	169	750	380
14...	1945	243	210	--	260	5.5	229	0	188	590	390
25...	1720	53	200	97	330	4.9	206	0	169	730	470
MAY											
05...	1525	144	150	63	150	5.8	235	0	193	--	180
17...	1520	149	130	50	160	6.8	170	0	139	420	220
26...	1945	70	160	69	240	6.5	147	0	121	600	--
JUNE											
05...	2115	206	190	59	240	6.8	220	0	180	530	360
15...	1550	261	210	75	280	7.5	181	0	148	710	410
25...	1940	1560	140	27	100	6.3	156	0	128	310	150
JULY											
03...	2010	91	210	68	270	6.6	162	0	133	670	390
15...	1830	261	180	45	180	6.3	154	0	126	520	270
25...	1815	107	100	41	130	5.7	171	0	140	310	160
AUG.											
05...	2035	65	200	69	220	7.6	181	0	148	670	300
25...	1525	30	96	18	59	7.3	121	0	99	220	79
SEP.											
05...	0812	6.0	280	110	350	7.1	142	0	116	1100	480
15...	1540	8.1	270	93	300	5.9	171	0	140	920	440
25...	1715	3.6	330	99	290	5.7	181	0	148	1100	420

07301500 NORTH FORK RED RIVER NEAR CARTER, OKLA.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	CARBON DIOXIDE (CO2) (MG/L)
OCT.											
01...	.88	486	.66	10.2	280	180	--	1.2	746	7.8	3.0
15...	.24	2450	3.30	781	1100	970	--	4.8	3310	8.0	2.6
25...	.28	2480	--	261	1100	940	--	--	3330	7.9	3.8
NOV.											
15...	--	2290	3.11	1120	1100	850	42	4.7	3110	7.9	5.0
25...	--	--	--	--	1000	830	40	4.4	3020	8.0	3.8
DEC.											
05...	--	2240	3.05	375	1000	840	41	4.5	3020	8.1	3.0
14...	--	2240	3.05	696	1000	820	41	4.5	3000	8.0	4.0
25...	--	2220	3.02	444	1000	840	40	4.3	3030	7.6	9.4
JAN.											
05...	--	2150	2.92	1000	990	780	42	4.6	2990	7.6	10
16...	--	2290	3.11	618	1000	830	42	4.7	3090	7.6	10
25...	--	2210	3.01	448	950	770	44	4.8	2980	7.8	5.7
FEB.											
05...	--	2140	2.91	1560	900	750	44	4.8	3000	7.9	3.8
15...	--	2310	3.14	1010	1000	760	41	4.5	3130	7.7	10
27...	--	1860	2.53	834	850	650	40	3.9	2710	7.9	5.0
MAR.											
05...	--	1780	2.42	586	800	570	39	3.7	2510	7.6	12
15...	--	1920	2.61	612	860	680	40	3.9	2650	7.8	5.7
25...	--	1970	2.68	372	830	720	44	4.5	2800	8.0	2.2
APR.											
06...	--	1920	--	389	--	--	--	--	2740	7.8	5.2
14...	--	1620	2.48	1190	--	--	--	--	2600	8.1	2.9
25...	--	2100	2.86	301	900	730	44	4.8	2950	7.6	8.3
MAY											
05...	--	1260	1.71	490	630	440	34	2.6	1740	7.8	6.0
17...	--	1110	1.51	447	530	390	39	3.0	1640	7.7	5.4
26...	--	1600	2.18	302	680	560	43	4.0	2290	7.5	7.4
JUNE											
05...	--	1630	2.22	907	720	540	42	3.9	2320	8.3	1.8
15...	--	1900	2.58	1340	830	680	42	4.2	2620	8.3	1.5
25...	--	906	1.23	3820	460	330	32	2.0	1290	7.8	4.0
JULY											
03...	--	1850	2.52	455	800	670	42	4.1	2610	7.7	5.2
15...	--	1360	1.85	958	630	500	38	3.1	1960	7.6	6.2
25...	--	892	1.21	258	420	280	40	2.8	1390	8.3	1.4
AUG.											
05...	--	1620	2.20	284	780	640	38	3.4	2330	8.2	1.8
25...	--	572	.78	46.3	310	210	28	1.5	897	7.0	19
SEP.											
05...	--	2530	3.44	41.0	1200	1000	40	4.5	3480	8.0	2.3
15...	--	2320	3.16	50.7	1100	920	38	4.0	3170	7.9	3.4
25...	--	2470	3.36	24.0	1200	1100	34	3.6	--	7.8	4.6

07301500 NORTH FORK RED RIVER NEAR CARTER, OKLA.--Continued

DISSOLVED SULFATE (SO4), MG/L, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	180	450	---	760	760	700	600	680	410	610	520	920
2	880	320	---	760	760	---	610	710	470	740	310	1000
3	890	390	800	760	770	---	720	460	540	720	280	1000
4	850	510	790	800	770	670	740	350	620	660	420	1000
5	800	490	800	790	800	650	740	420	590	710	610	1000
6	850	590	800	790	780	690	720	340	630	750	670	1000
7	880	720	790	790	780	---	610	480	650	780	700	1000
8	790	670	810	770	790	700	280	580	670	710	750	1000
9	800	570	810	790	840	670	650	610	720	520	790	950
10	880	850	820	800	760	630	620	620	400	600	830	1000
11	1000	850	730	820	720	690	---	610	290	310	830	900
12	900	840	---	780	---	730	760	---	420	530	810	850
13	910	820	810	660	730	760	---	---	550	560	820	830
14	900	850	800	780	780	720	680	---	570	580	410	810
15	880	830	---	770	840	570	730	---	730	570	210	850
16	760	830	800	870	730	580	710	---	730	410	320	810
17	1100	850	800	730	750	530	690	390	790	430	600	790
18	960	780	---	870	760	730	700	430	850	450	700	820
19	1200	800	790	810	680	740	720	480	850	510	800	880
20	1200	800	790	790	860	760	730	490	880	620	840	910
21	1300	800	790	790	---	790	740	490	900	690	840	820
22	1200	840	790	800	---	760	760	540	330	760	870	840
23	810	810	---	860	---	730	750	---	300	800	890	850
24	840	840	810	790	---	710	760	440	340	620	900	790
25	890	800	810	860	---	760	780	620	300	310	940	850
26	810	790	810	790	---	630	790	590	280	460	930	890
27	760	790	780	740	710	700	720	590	300	450	860	870
28	1100	790	790	720	730	650	620	600	330	440	890	900
29	1000	---	770	800	---	690	560	520	430	400	870	900
30	990	---	770	---	---	780	730	370	520	520	850	890
31	820	---	760	800	---	750	---	370	---	530	890	---
MONTH	910	720	790	780	---	700	690	510	550	570	710	900

DISSOLVED SULFATE (SO4), TONS PER DAY, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.94	57.1	---	281	287	272	167	90.0	615	240	110	24.8
2	15.2	225	---	293	406	---	150	90.1	475	244	220	23.8
3	11.5	1130	121	316	478	---	159	142	346	189	113	21.1
4	8.26	672	126	350	520	221	156	133	271	169	68.0	18.1
5	6.05	325	134	384	563	219	150	166	205	153	59.3	16.2
6	6.66	368	134	311	417	220	146	177	231	136	59.7	13.8
7	10.9	395	139	294	295	---	180	130	207	124	47.3	13.0
8	13.0	432	149	266	354	176	291	102	175	184	40.5	12.2
9	14.7	377	147	247	318	177	535	85.6	165	190	34.1	10.8
10	14.3	632	148	255	423	211	416	75.3	679	217	29.1	11.3
11	13.0	647	162	241	338	227	---	64.2	524	249	24.7	8.75
12	9.48	565	---	242	---	248	601	---	302	209	21.2	10.3
13	15.0	489	273	173	398	265	---	---	248	145	20.6	10.1
14	94.8	450	251	204	358	251	442	---	80.0	122	1300	14.7
15	238	406	---	233	367	182	469	---	67.0	482	507	18.6
16	133	399	175	235	313	235	383	---	65.0	189	376	18.4
17	92.1	388	168	209	338	220	265	168	34.1	144	463	17.9
18	49.2	337	---	256	349	296	198	136	27.5	101	387	17.3
19	42.1	339	154	267	323	272	150	119	29.8	97.8	350	14.3
20	32.4	307	147	226	571	265	128	107	40.4	114	304	11.1
21	30.9	281	156	207	---	245	114	101	53.5	104	227	14.2
22	27.9	274	158	184	---	193	109	125	1430	67.7	176	15.2
23	32.8	252	---	186	---	168	113	---	915	58.3	132	15.4
24	47.6	227	149	160	---	144	119	112	1490	226	102	10.9
25	86.9	194	147	134	---	144	112	181	3160	115	76.1	8.26
26	103	179	147	154	---	116	93.9	123	605	178	60.3	7.93
27	73.9	164	147	150	324	178	93.3	92.4	252	141	41.8	7.05
28	89.1	160	164	156	298	197	198	77.8	137	150	38.4	7.29
29	64.8	---	160	168	---	214	121	417	150	141	35.2	6.56
30	66.8	---	173	---	---	265	122	7030	211	133	29.8	6.01
31	79.7	---	246	264	---	233	---	1600	---	93.0	31.2	---
MONTH	49.3	381	165	235	---	216	222	466	440	165	177	13.5

07301500 NORTH FORK RED RIVER NEAR CARTER, OKLA.--Continued

DISSOLVED CHLORIDE (CL), MG/L, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	52	240	---	410	420	380	320	370	220	330	280	500
2	480	160	---	410	420	---	330	390	250	410	150	520
3	490	200	440	410	420	---	400	250	290	400	130	520
4	470	280	440	440	420	370	410	180	340	360	220	530
5	440	260	440	440	440	350	410	220	320	390	330	520
6	470	320	440	430	430	370	390	170	340	410	370	530
7	490	400	430	440	430	---	330	250	350	430	380	530
8	430	370	440	420	430	380	130	310	370	390	410	520
9	440	310	440	430	460	360	360	330	400	280	430	510
10	480	460	450	440	420	340	340	340	210	330	460	520
11	530	470	400	450	390	380	---	330	140	150	460	490
12	500	460	---	430	---	400	420	---	220	290	440	470
13	500	450	450	360	400	420	---	---	290	300	450	460
14	490	470	440	430	430	400	370	---	310	310	210	440
15	490	460	---	420	460	310	400	---	400	310	74	470
16	410	460	440	480	400	310	390	---	400	220	160	450
17	550	470	440	400	410	290	370	210	430	230	320	440
18	510	430	---	480	420	400	380	230	470	240	380	450
19	560	440	430	440	370	410	390	250	470	280	440	480
20	560	440	430	430	470	420	400	260	490	340	460	500
21	570	440	430	440	---	440	400	260	490	380	460	450
22	560	460	430	440	---	420	410	290	170	420	480	460
23	440	440	---	480	---	400	410	---	150	440	490	470
24	460	460	440	430	---	390	410	230	170	340	500	430
25	490	440	440	360	---	420	430	340	150	150	510	470
26	440	440	440	430	---	340	430	320	130	240	500	490
27	410	430	430	410	390	380	390	320	150	240	480	480
28	550	440	430	390	400	350	340	330	170	230	490	500
29	520	---	420	440	---	370	300	280	230	210	480	490
30	520	---	420	---	---	430	400	200	280	280	470	490
31	450	---	420	440	---	410	---	190	---	290	490	---
MONTH	480	400	430	430	---	380	370	270	290	310	380	490

DISSOLVED CHLORIDE (CL), TONS PER DAY, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.14	30.5	---	152	159	146	89.0	49.0	330	130	59.0	13.5
2	8.29	112	---	158	225	---	81.1	49.5	252	135	107	12.4
3	6.35	578	66.5	170	261	---	88.6	77.0	186	105	52.7	11.0
4	4.57	369	70.1	192	263	122	86.3	66.5	149	92.3	35.6	9.59
5	3.33	173	73.7	214	321	118	83.0	86.7	111	84.2	32.1	8.42
6	3.66	200	73.7	170	230	118	79.0	88.6	125	74.2	33.0	7.30
7	6.09	219	75.5	164	163	---	97.1	67.5	112	68.5	25.7	6.87
8	7.08	239	80.8	145	193	95.4	135	54.4	96.9	101	22.1	6.32
9	8.08	205	79.6	135	174	95.3	296	46.3	91.8	102	18.6	5.78
10	7.78	350	81.4	140	234	114	229	41.3	357	119	16.1	5.90
11	6.87	358	88.6	132	183	125	---	37.4	253	120	13.7	4.76
12	5.27	309	---	134	---	136	332	---	158	114	11.5	5.71
13	8.24	269	152	94.3	218	146	---	---	131	77.8	11.3	5.59
14	51.6	249	138	113	197	139	241	---	43.5	65.3	663	7.96
15	132	225	---	127	201	98.8	268	---	36.7	262	179	10.3
16	72.0	221	96.2	130	172	126	211	---	35.6	102	168	10.2
17	46.0	214	92.7	114	185	121	142	90.7	18.6	77.0	247	9.98
18	26.2	186	---	141	193	162	108	72.7	15.2	53.6	210	9.46
19	19.7	187	83.6	145	176	151	81.1	62.1	16.5	53.7	192	7.78
20	15.1	169	80.1	123	312	146	70.2	56.9	22.5	62.4	166	6.08
21	13.5	154	84.8	115	---	137	61.6	53.4	29.1	57.5	124	7.78
22	13.0	150	85.9	101	---	107	58.7	67.3	734	57.4	97.2	8.32
23	17.8	137	---	104	---	91.8	62.0	---	458	32.1	72.8	8.50
24	26.1	124	80.8	87.1	---	79.0	64.2	56.4	744	124	56.7	5.92
25	49.0	107	79.6	72.9	---	79.4	61.5	99.1	1590	55.5	41.3	4.57
26	55.8	99.8	79.6	83.6	---	62.4	51.1	66.5	281	92.7	32.4	4.37
27	39.9	89.4	81.3	83.0	178	96.4	50.5	50.1	126	75.2	23.3	3.89
28	44.6	89.1	89.4	84.2	163	106	108	42.8	70.7	78.2	21.2	4.05
29	33.7	---	87.3	92.7	---	115	64.8	225	80.1	74.3	19.4	3.57
30	35.1	---	94.1	---	---	146	67.0	3800	113	71.8	16.5	3.31
31	43.7	---	136	145	---	127	---	821	---	50.9	17.2	---
MONTH	26.2	208	89.3	129	---	118	120	249	226	88.7	90.5	7.30

07301500 NORTH FORK RED RIVER NEAR CARTER, OKLA.--Continued

DISSOLVED SOLIDS (RESIDUE AT 180 DEG. C), MG/L, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	453	1270	---	2050	2060	1890	1630	1860	1160	1650	1420	2510
2	2410	898	---	2050	2070	---	1650	1930	1300	2010	883	2610
3	2440	1100	2190	2050	2090	---	1960	1290	1480	1960	780	2590
4	2330	1410	2160	2170	2090	1830	2010	1010	1690	1800	1180	2620
5	2180	1350	2190	2160	2170	1770	2010	1180	1600	1930	1650	2600
6	2330	1600	2190	2150	2130	1870	1950	964	1720	2030	1830	2620
7	2420	1960	2150	2160	2110	---	1650	1320	1760	2120	1890	2630
8	2140	1830	2210	2100	2150	1900	787	1580	1830	1940	2040	2590
9	2170	1570	2210	2140	2300	1810	1780	1660	1960	1430	2140	2530
10	2410	2280	2250	2170	2070	1730	1700	1690	1130	1650	2260	2590
11	2630	2310	1990	2230	1950	1870	---	1660	824	883	2260	2460
12	2470	2290	---	2120	---	1980	2060	---	1190	1470	2200	2320
13	2500	2250	2220	1790	1980	2070	---	---	1500	1540	2250	2260
14	2460	2310	2170	2120	2120	1960	1840	---	1560	1590	1150	2210
15	2430	2280	---	2090	2290	1550	1970	---	1980	1560	544	2330
16	2050	2270	2170	2370	1980	1590	1930	---	1980	1160	920	2220
17	2730	2310	2170	1980	2030	1470	1870	1110	2140	1200	1630	2160
18	2550	2130	---	2390	2070	1980	1900	1210	2320	1270	1890	2250
19	2810	2190	2140	2200	1860	2010	1940	1320	2340	1410	2180	2400
20	2780	2190	2140	2140	2350	2060	1990	1360	2430	1690	2290	2500
21	2870	2190	2140	2160	---	2160	2000	1350	2460	1880	2300	2230
22	2820	2290	2140	2190	---	2070	2050	1480	956	2060	2380	2290
23	2210	2210	---	2360	---	1990	2030	---	861	2180	2440	2320
24	2290	2290	2210	2140	---	1930	2050	1230	964	1690	2480	2140
25	2450	2190	2200	1790	---	2070	2130	1690	853	890	2520	2340
26	2210	2160	2200	2150	---	1730	2140	1600	787	1280	2510	2440
27	2050	2140	2130	2010	1930	1900	1940	1610	861	1250	2360	2370
28	2730	2160	2140	1950	1980	1760	1690	1640	942	1230	2450	2470
29	2600	---	2100	2190	---	1870	1530	1440	1200	1130	2370	2460
30	2580	---	2100	---	---	2120	1990	1070	1420	1440	2330	2440
31	2240	---	2060	2190	---	2040	---	1060	---	1470	2440	---
MONTH	2380	1980	2160	2130	---	1890	1860	1410	1510	1570	1930	2420

DISSOLVED SOLIDS (TONS PER DAY), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.91	161	---	758	779	735	453	246	1740	650	299	67.8
2	41.6	630	---	792	1110	---	405	245	1310	662	627	62.0
3	31.6	3180	331	852	1300	---	434	397	947	513	316	54.5
4	22.6	1860	344	949	1410	603	423	385	739	462	191	47.4
5	16.5	897	367	1050	1580	597	407	465	557	417	160	42.1
6	18.2	998	367	848	1140	596	395	502	632	367	163	36.1
7	30.1	1070	377	805	798	---	486	356	561	338	128	34.1
8	35.2	1180	406	726	964	477	818	277	479	503	110	31.5
9	39.8	1040	400	670	869	479	1470	233	450	521	92.4	28.7
10	39.0	1740	407	691	1150	579	1150	205	1920	597	79.3	29.4
11	34.1	1760	441	656	916	616	---	188	1490	708	67.1	23.9
12	26.0	1540	---	658	---	674	1630	---	855	579	57.6	28.2
13	41.2	1340	749	469	1080	721	---	---	676	399	56.5	27.5
14	259	1220	680	555	973	683	1200	---	219	335	3630	40.0
15	656	1110	---	632	1000	494	1320	---	182	1320	1310	51.0
16	360	1090	475	640	850	644	1040	---	176	536	1080	50.4
17	229	1050	457	567	915	611	717	480	92.4	402	1260	49.0
18	131	920	---	703	950	802	539	382	75.2	285	1050	47.4
19	98.6	928	416	725	884	738	403	328	82.1	270	954	38.9
20	75.1	840	399	612	1560	717	349	297	112	310	829	30.4
21	68.2	769	422	566	---	671	308	277	146	284	621	36.5
22	65.5	748	428	503	---	525	293	344	4130	184	482	41.4
23	89.5	686	---	510	---	457	307	---	2630	159	362	42.0
24	130	618	406	433	---	391	321	312	4220	616	261	29.5
25	245	532	398	362	---	391	305	493	9030	329	204	22.7
26	280	490	398	418	---	318	254	333	1700	494	163	21.7
27	199	445	403	407	881	482	251	252	723	391	115	19.2
28	221	437	445	421	807	532	538	213	392	418	106	20.0
29	168	---	437	461	---	581	330	1150	418	400	96.0	17.9
30	174	---	471	---	---	721	333	20300	575	369	81.8	16.5
31	218	---	667	721	---	633	---	4580	---	258	85.6	---
MONTH	131	1050	444	639	---	588	603	1330	1240	454	486	36.3

07301500 NORTH FORK RED RIVER NEAR CARTER, OKLA.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	746	1850	---	2860	2870	2660	2330	2620	1700	2360	2060	3380
2	3270	1350	---	2860	2880	---	2360	2710	1900	2820	1330	3500
3	3300	1620	3020	2860	2910	---	2750	1880	2140	2750	1190	3480
4	3180	2050	2990	3000	2910	2580	2820	1500	2400	2550	1740	3510
5	3010	1970	3020	2990	3000	2510	2820	1740	2290	2710	2360	3490
6	3180	2290	3020	2980	2950	2630	2740	1440	2440	2840	2580	3510
7	3280	2750	2980	2990	2930	---	2360	1920	2500	2940	2660	3520
8	2970	2580	3040	2920	2980	2670	1200	2260	2580	2720	2850	3470
9	3000	2250	3040	2970	3150	2560	2520	2370	2750	2070	2970	3410
10	3270	3120	3090	3000	2880	2450	2420	2400	1660	2350	3100	3470
11	3520	3160	2790	3070	2740	2640	---	2370	1250	1330	3100	3330
12	3340	3140	---	2940	---	2780	2870	---	1750	2120	3030	3170
13	3370	3090	3050	2530	2780	2890	---	---	2160	2210	3090	3100
14	3330	3160	3000	2940	2940	2750	2600	---	2240	2280	1690	3040
15	3290	3120	---	2910	3130	2230	2760	---	2780	2240	870	3180
16	2860	3110	3000	3230	2780	2280	2710	---	2770	1700	1380	3050
17	3640	3160	3000	2770	2840	2120	2630	1640	2960	1760	2330	2990
18	3430	2950	---	3250	2880	2770	2680	1770	3170	1850	2660	3090
19	3730	3020	2970	3030	2620	2810	2730	1920	3190	2050	3010	3260
20	3690	3020	2970	2970	3200	2870	2790	1980	3290	2410	3130	3370
21	3790	3020	2970	2990	---	2990	2800	1960	3330	2650	3150	3070
22	3740	3140	2970	3020	---	2880	2860	2140	1430	2870	3240	3140
23	3040	3040	---	3220	---	2790	2840	---	1300	3010	3300	3170
24	3130	3130	3040	2970	---	2710	2860	1800	1440	2400	3350	2970
25	3320	3020	3030	2530	---	2880	2950	2410	1290	1340	3400	3190
26	3040	2990	3030	2980	---	2450	2970	2290	1200	1870	3390	3300
27	2860	2970	2950	2810	2710	2680	2730	2300	1300	1830	3220	3230
28	3640	2990	2960	2740	2780	2500	2410	2340	1410	1800	3320	3340
29	3490	---	2920	3020	---	2630	2200	2080	1760	1670	3230	3330
30	3460	---	2920	---	---	2940	2790	1580	2060	2080	3180	3310
31	3080	---	2870	3020	---	2850	---	1570	---	2120	3310	---
MONTH	3230	2750	2990	2950	---	2660	2630	2040	2150	2250	2680	3280

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24.0	15.5	---	8.0	10.0	8.0	18.0	25.0	24.0	17.5	26.5	28.0
2	25.0	17.5	---	3.0	9.0	---	10.5	28.0	24.0	22.0	27.0	27.5
3	21.0	15.5	13.0	7.0	6.0	---	17.0	26.0	26.0	27.0	28.0	27.5
4	20.0	11.5	11.0	7.0	1.0	15.0	19.0	20.0	23.0	25.5	28.0	27.5
5	20.5	11.0	10.0	8.0	1.0	18.0	15.0	28.0	27.0	31.0	27.0	25.5
6	25.0	11.5	10.0	9.0	6.0	20.0	14.0	28.0	28.0	33.0	28.0	25.5
7	25.0	11.5	9.0	10.0	10.0	---	13.5	27.0	25.0	27.0	21.5	24.5
8	18.5	13.5	8.0	12.0	---	10.0	17.0	29.0	26.0	27.5	---	24.5
9	20.0	16.5	10.0	13.0	1.0	9.0	15.0	30.0	22.5	28.5	---	25.0
10	20.5	18.0	10.0	9.0	1.0	7.0	19.0	28.0	18.0	24.5	---	26.0
11	20.5	12.0	8.0	8.0	3.0	4.5	---	29.0	18.0	24.0	---	24.0
12	21.5	11.0	---	---	---	4.5	13.5	---	20.5	24.5	---	15.5
13	20.0	11.0	10.0	5.0	1.0	5.0	---	---	21.5	24.0	28.0	15.0
14	20.0	9.5	9.0	2.0	4.0	7.0	18.0	---	23.5	23.5	24.5	15.0
15	20.0	9.0	---	4.0	3.0	5.5	22.0	---	20.5	23.5	27.0	19.0
16	14.5	9.0	10.0	4.5	4.0	8.0	24.0	---	22.5	23.5	30.5	22.0
17	17.0	9.5	10.0	5.0	5.0	9.5	26.0	27.0	20.5	23.0	30.0	24.5
18	18.5	12.0	---	6.5	6.0	12.0	23.0	28.0	21.0	23.5	---	23.5
19	17.0	11.0	10.0	7.5	7.0	13.5	23.0	29.0	20.0	23.0	32.5	20.5
20	16.5	12.0	10.0	6.0	8.0	15.5	22.0	27.0	21.0	24.0	33.0	20.0
21	15.0	6.0	9.0	6.0	---	14.5	23.0	31.0	18.0	25.5	24.0	18.0
22	15.5	13.0	8.0	4.5	---	14.0	20.0	29.0	15.5	25.0	34.0	18.0
23	17.5	13.0	---	4.5	---	13.0	23.0	---	17.0	24.5	33.5	18.5
24	17.0	12.0	6.0	9.0	---	11.5	27.0	26.0	17.5	20.5	34.0	17.0
25	18.0	12.0	5.0	8.5	---	13.5	27.0	25.0	17.5	20.5	32.0	17.0
26	17.5	13.0	4.0	11.0	---	20.0	27.0	---	19.0	19.5	32.0	17.5
27	18.0	13.0	11.0	7.5	7.0	14.0	23.0	---	20.0	22.5	26.0	19.5
28	17.5	15.0	11.0	10.0	---	19.0	24.0	---	20.5	23.5	26.0	20.5
29	17.5	---	10.0	6.5	---	14.0	25.0	18.0	21.0	23.0	27.0	20.5
30	17.5	---	9.0	---	---	13.0	24.0	18.0	28.0	29.0	28.5	19.5
31	16.5	---	6.0	9.0	---	20.0	---	21.0	---	28.0	28.5	---
MONTH	19.0	12.5	9.0	7.5	---	12.0	20.5	---	21.5	24.5	28.5	21.5

07303395 ELM FORK OF NORTH FORK RED RIVER AT SALTON CROSSING NEAR CARL, OKLA.

LOCATION.--Lat 35°01'15", long 99°56'58", in NE 1/4 SW 1/4 sec.3, T.6 N., R.26 W., Harmon County, 0.1 mi (0.2 km) upstream from fiord at saltworks, 2.6 mi (4.2 km) upstream from Carl gage, and at mile 56.6 (91.9 km).

DRAINAGE AREA.--411 mi² (1,023 km²).

PERIOD OF RECORD.--Chemical analyses: April 1973 to current year.
Water temperatures: April 1973 to current year.

EXTREMES, Current year.--Specific conductance: Maximum, 21,700 micromhos/cm Oct. 14; minimum, 2,340 micromhos/cm June 10.
Water temperatures: Maximum, 33.0°C June 5, July 8; minimum, freezing point on several days during December and January.

Period of record.--Specific conductance: Maximum, 80,700 micromhos/cm Aug. 2, 1974; minimum, 1,330 micromhos/cm May 21, 1974.
Water temperatures: Maximum, 34.5°C June 7, 1973; minimum, freezing point on several days during winter months.

REMARKS.--Continuous monitor records for specific conductance and water temperature are collected for this station. Records of maximum and minimum specific conductance values are available in district office in Oklahoma City, Okla. Temperature record for Oct. 9-16, Jan. 1-13, Mar. 30-Aug. 23 was poor. Once daily values were used in their place.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	DIS-CHARGE (CFS)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	ALKA-LINITY AS CACO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)
OCT.											
09...	1615	1.4	630	110	1000	--	89	--	73	1700	1600
14...	0915	89	900	150	4500	--	138	--	113	1700	7900
31...	1000	44	530	79	480	--	150	--	123	1400	730
NOV.											
04...	1035	179	490	63	260	7.5	152	0	125	1200	470
21...	0950	40	630	99	570	7.1	165	0	135	1600	930
28...	1530	38	620	110	660	7.0	160	0	131	1600	1100
DEC.											
17...	1615	29	580	110	680	6.8	153	0	126	1600	1100
30...	1245	27	560	100	640	6.7	124	0	102	1700	1500
31...	1630	33	570	100	540	5.9	143	0	117	1600	880
JAN.											
01...	1015	31	570	110	540	5.6	173	0	142	1700	870
04...	1715	28	550	110	570	6.2	184	0	151	1600	890
FEB.											
14...	1200	28	570	70	400	5.6	93	0	76	1100	640
20...	1545	34	560	100	640	6.1	125	0	101	1600	1100
26...	1200	41	540	110	490	5.9	109	0	89	1700	780
MAR.											
06...	1500	32	570	100	620	6.8	153	0	126	1500	980
20...	1515	23	570	110	720	6.8	139	0	114	1600	1100
28...	1745	33	550	100	530	6.4	140	0	115	1500	830
APR.											
03...	1745	21	570	110	700	6.5	152	0	106	1600	1200
08...	1200	241	430	61	100	7.1	121	0	99	1200	160
26...	1730	32	570	110	620	7.8	132	0	108	1700	1300
MAY											
07...	1200	17	640	120	910	9.2	137	0	112	1800	1600
27...	1515	15	650	110	1200	10	151	0	107	1700	2000
29...	1715	74	550	83	180	8.3	127	0	104	1500	270
JUNE											
04...	1600	14	590	110	1000	10	117	0	96	1700	1700
10...	1600	355	460	34	89	9.4	135	0	111	1200	130
30...	1600	22	650	110	1100	12	129	0	106	1800	--
JULY											
08...	1815	41	570	98	570	8.8	126	0	103	1700	850
23...	1330	12	740	140	2100	15	95	0	78	1900	3400
29...	1645	13	660	110	1500	12	96	0	79	1800	2300
AUG.											
13...	1530	7.5	760	160	3400	50	93	0	76	2100	5400
15...	1700	435	390	32	120	7.5	92	0	75	940	220
29...	1715	17	660	110	1100	12	99	0	81	1900	1800
SEP.											
04...	1245	9.8	660	120	1400	12	102	0	84	1900	2200
10...	1100	5.2	700	120	1900	12	102	0	84	1900	2900
22...	1630	14	620	110	1100	8.9	108	0	89	1900	1800

07303395 ELM FORK OF NORTH FORK RED RIVER AT SALTON CROSSING NEAR CARL, OKLA.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	CARBON DIOXIDE (CO2) (MG/L)
OCT.											
05...	.64	5410	7.36	20.4	2000	2000	--	9.7	7100	8.3	.7
14...	.43	16200	22.0	3890	2900	2800	--	37	21700	7.6	5.5
31...	1.3	3550	4.83	422	1600	1500	--	5.1	4440	8.0	2.4
NOV.											
04...	--	2860	3.89	1380	1500	1400	28	2.9	3400	8.0	2.4
21...	--	4100	5.58	443	2000	1800	38	5.6	5200	7.7	5.3
28...	--	4290	5.83	440	2000	1900	42	6.4	5410	7.7	5.1
DEC.											
17...	--	4290	5.83	336	1900	1800	44	6.8	5490	7.4	9.7
30...	--	4880	6.64	356	1800	1700	53	9.6	6540	7.8	3.1
31...	--	3980	5.41	355	1800	1700	39	5.5	4960	7.5	7.2
JAN.											
01...	--	3990	5.43	334	1900	1700	38	5.4	4960	7.9	3.5
04...	--	3950	5.37	299	1800	1700	40	5.8	5010	8.0	2.9
FEB.											
14...	--	2600	3.54	197	1200	1100	42	5.0	3490	8.0	1.5
20...	--	4180	5.68	384	1800	1700	43	6.5	5470	8.0	2.0
26...	--	3780	5.14	418	1800	1700	37	5.0	4660	8.0	1.7
MAR.											
06...	--	4340	5.90	375	1800	1700	42	6.3	5420	7.5	7.7
26...	--	4620	6.28	287	1900	1800	45	7.2	5870	7.6	5.6
28...	--	4080	5.55	364	1800	1700	39	5.5	5010	7.6	5.6
APR.											
03...	--	4530	6.16	257	1900	1800	45	7.0	5810	7.0	21
08...	--	2240	3.05	1460	1300	1200	14	1.2	2470	7.6	4.9
26...	--	4800	6.53	415	1900	1800	49	8.2	6270	7.9	2.7
MAY											
07...	--	5260	7.15	241	2100	2000	49	8.7	6580	7.6	5.5
27...	--	6010	8.17	211	2000	1900	56	12	7630	7.5	6.6
29...	--	2760	3.75	551	1600	1500	20	2.0	3030	7.3	10
JUNE											
04...	--	5420	7.37	205	1900	1800	53	9.9	7120	7.2	12
10...	--	2120	2.88	2030	1300	1200	13	1.1	--	7.4	8.6
30...	--	5670	--	337	2100	2000	53	11	9700	7.7	4.1
JULY											
08...	--	3980	5.41	441	1800	1700	40	5.8	5030	7.6	5.1
23...	--	8980	12.2	291	2400	2300	65	19	12900	8.0	1.5
29...	--	6370	8.66	224	2100	2000	61	14	8840	7.7	3.1
AUG.											
13...	--	12600	17.1	255	2600	2500	74	29	18800	7.9	1.9
15...	--	2050	2.79	2410	1100	1000	19	1.6	2460	7.9	1.9
29...	--	5710	7.77	262	2100	2000	53	10	8030	7.5	5.0
SEP.											
04...	--	6500	8.84	172	2200	2100	58	13	9350	7.8	2.6
10...	--	7770	10.6	172	2200	2200	65	17	11400	7.6	4.1
22...	--	5770	7.85	218	2000	1900	54	11	8080	7.9	2.2

07303395 ELM FORK OF NORTH FORK RED RIVER AT SALTON CROSSING NEAR CARL, OKLA.--Continued

DISSOLVED SULFATE (SO4), MG/L, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1700	1500	1600	1500	1500	1500	1600	1600	1600	1800	1900	1900
2	1700	1200	1500	---	1500	1500	1600	1700	1700	1800	1900	1900
3	1800	880	1500	1500	1500	1500	1600	1700	1700	1900	1900	1900
4	1800	1200	1600	1500	1500	1500	1600	---	1700	---	1900	1900
5	1700	1400	1400	1500	1500	1500	1600	1600	1800	1900	1900	1900
6	1800	1500	1600	1600	1700	1600	1600	1600	1700	1900	1900	1900
7	1800	1500	1500	1600	1700	1500	1600	1700	1800	---	1900	---
8	1700	1400	1500	1600	1500	1600	900	1700	1900	1500	1900	1900
9	1800	1500	1600	1600	1900	1500	1400	1700	1900	1800	1900	---
10	---	1500	1500	1500	1800	1500	1500	1700	860	---	1900	1900
11	1900	1500	1500	1900	1500	1600	1400	1700	1200	1900	1900	1900
12	1700	1500	1500	1900	1600	1500	1500	1500	1600	1900	1900	1900
13	1900	1500	1500	1500	1400	1600	1500	1500	1700	1900	1900	---
14	2000	1500	1600	1600	1300	1600	1500	1600	1700	1900	---	---
15	1600	1500	1600	1500	---	1600	1600	1700	1800	1900	900	1900
16	1600	1500	1600	1600	---	1500	1600	1700	1800	1900	1300	1900
17	1600	1600	1600	1600	---	1500	1600	1700	1800	1900	1400	1900
18	1600	1500	1600	1600	---	1500	1600	1800	1800	1900	1500	1900
19	1700	1500	1500	1600	1600	1600	1600	1700	1800	1900	1500	1900
20	1600	1500	1600	1600	1500	1600	1600	1600	1900	1900	1600	1900
21	1600	1500	---	1500	---	1600	1600	1600	1900	1900	1600	---
22	1700	1500	1600	1600	---	1600	1600	---	---	1900	1700	1800
23	1600	1500	1600	1600	---	1600	1600	1800	1100	1900	1700	1900
24	1600	1500	---	1600	---	1600	1600	1700	1100	---	1700	1900
25	1600	1500	---	1600	---	1600	1600	1800	---	1600	1800	1900
26	1500	1500	---	1600	1500	1600	1600	1800	1500	1900	1800	1900
27	1500	1500	1600	1600	1500	1500	---	1800	---	1800	1800	1900
28	1800	1500	1600	1600	1500	1500	1500	1700	1700	1700	1800	1900
29	1600	1600	1600	1600	---	---	1600	1100	1800	1800	1800	1900
30	1500	1500	1700	1900	---	1600	1600	1300	1900	1900	1900	1900
31	1400	---	1500	1500	---	1600	---	1500	---	1900	---	---
MONTH	1700	1500	1600	1600	---	1600	1500	1600	1700	1800	1700	1900

DISSOLVED SULFATE (SO4), TONS PER DAY, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	40.4	134	156	126	121	134	104	104	82.1	131	50.3	61.6
2	34.4	350	150	---	138	134	95.0	110	73.4	131	40.0	66.7
3	19.9	2610	154	138	150	138	90.7	115	68.9	159	40.0	56.4
4	5.35	580	156	113	154	138	95.0	---	64.3	---	45.1	50.3
5	6.43	408	132	113	150	134	99.4	121	72.9	149	36.9	50.3
6	10.2	312	151	112	147	138	104	104	59.7	149	33.3	45.1
7	17.0	259	138	112	142	121	441	78.0	63.2	---	40.0	---
8	18.4	238	126	108	146	121	586	78.0	56.4	166	50.3	45.1
9	17.0	255	130	108	180	134	197	78.0	56.4	151	45.1	---
10	---	239	134	97.2	156	134	170	91.8	824	---	40.0	42.1
11	11.8	202	170	113	142	134	178	82.6	369	108	20.5	50.3
12	11.5	202	162	50.3	125	126	166	158	216	97.5	27.2	50.3
13	118	211	146	64.8	106	125	170	170	142	108	38.5	---
14	481	194	147	125	98.3	117	158	134	110	123	---	---
15	354	194	130	101	---	134	147	115	97.2	113	1060	77.0
16	233	202	130	104	---	178	138	96.4	87.5	97.5	586	77.0
17	117	212	125	95.0	---	158	134	87.2	92.3	92.3	336	66.7
18	86.4	186	130	104	---	138	134	87.5	72.9	92.3	211	61.6
19	87.2	174	121	104	147	130	138	87.2	68.0	87.2	174	56.4
20	69.1	156	130	95.0	138	117	143	121	61.6	87.2	143	56.4
21	64.8	162	---	89.1	---	112	138	95.0	97.5	66.7	121	---
22	91.8	158	121	95.0	---	104	151	---	---	61.6	115	66.0
23	143	154	121	90.7	---	99.4	164	97.2	1210	61.6	115	66.7
24	216	146	---	90.7	---	90.7	160	78.0	541	---	106	61.6
25	220	146	---	95.0	---	90.7	143	72.9	---	112	102	61.6
26	121	150	---	95.0	166	99.4	138	68.0	243	61.6	92.3	61.6
27	97.2	150	121	90.7	146	121	---	63.2	---	63.2	97.2	61.6
28	121	154	117	86.4	138	134	186	64.3	129	78.0	92.3	61.6
29	99.4	160	108	90.7	---	---	130	220	97.2	63.2	82.6	61.6
30	117	146	124	133	---	112	112	232	113	87.2	71.8	61.6
31	166	---	134	117	---	108	---	105	---	82.1	---	---
MONTH	107	295	136	102	---	125	166	107	191	103	138	59.2

07303395 ELM FORK OF NORTH FORK RED RIVER AT SALTON CROSSING NEAR CARL, OKLA.--Continued

DISSOLVED CHLORIDE (CL), MG/L, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1400	940	1000	890	920	960	1200	1300	1200	2000	3100	2300
2	1500	440	980	---	610	980	1200	1400	1400	2000	2900	2300
3	1700	160	970	890	760	990	1200	1300	1400	2100	3100	2300
4	1700	460	1100	910	780	990	1200	---	1600	---	3500	2400
5	1600	680	700	1000	770	1000	1200	1300	1700	2000	3900	2600
6	1900	770	1200	1000	1400	1000	1200	1300	1500	2200	4200	2700
7	1700	750	990	1000	1400	1000	1200	1400	1700	---	4600	---
8	1600	740	1000	1100	970	1000	180	1500	2000	910	5400	2800
9	1800	810	1200	1100	2400	900	630	1600	2100	1800	5600	---
10	---	800	870	990	1800	920	810	1500	140	---	5800	3100
11	4100	770	990	3300	940	1000	600	1500	460	2100	6300	3100
12	1600	800	990	2100	1100	980	780	880	1100	2100	6500	2900
13	3900	840	980	860	660	1000	760	760	1500	2300	6700	---
14	8300	870	1000	1200	510	1100	770	1200	1600	2100	---	---
15	1000	910	1100	870	---	1100	1200	1400	1700	2100	180	2200
16	1100	1000	1100	1100	---	1000	1100	1400	1800	2600	510	2200
17	1200	1000	1100	1200	---	950	1100	1500	1700	2700	720	2100
18	1300	1000	1100	1300	---	1000	1100	1700	1800	2800	850	2100
19	1400	920	980	1200	1000	1100	1300	1500	1900	2800	920	2500
20	1200	960	1100	1000	990	1100	1300	1100	2200	2800	1000	2400
21	1200	970	---	940	---	1100	1200	1100	2300	2900	1200	---
22	1400	1000	1100	1100	---	1100	1200	---	---	3100	1500	1900
23	1300	1000	1100	1100	---	1200	1200	1700	320	3300	1400	2300
24	1200	1000	---	1100	---	1100	1200	1600	380	---	1600	2300
25	1000	1000	---	1100	---	1200	1300	1700	---	1300	1700	2500
26	1000	1000	---	1100	810	1200	1300	1800	1000	2000	1800	2500
27	990	990	1000	1100	920	1000	---	1800	---	2000	1900	2400
28	1700	1000	1100	1100	950	910	790	1500	1400	1600	1800	2200
29	1000	1000	1100	1100	---	---	1100	340	1700	1900	1900	2600
30	1000	1000	1400	2700	---	1100	1300	540	2500	2500	2100	2300
31	740	---	890	880	---	1100	---	910	---	2700	---	---
MONTH	1800	850	1000	1200	---	1000	1100	1300	1500	2200	2900	2400

DISSOLVED CHLORIDE (CL), TONS PER DAY, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33.3	83.8	97.2	74.5	74.5	85.5	77.8	84.2	61.6	146	82.0	74.5
2	30.4	128	97.9	---	74.4	87.3	71.3	90.7	60.5	146	61.1	80.7
3	18.8	475	99.5	81.7	75.9	90.9	68.0	87.8	56.7	176	65.3	68.3
4	5.05	222	107	68.8	80.0	90.9	71.3	---	60.5	---	83.2	63.5
5	6.05	198	66.2	75.6	76.9	89.1	74.5	98.3	68.9	157	75.8	68.8
6	10.8	160	113	70.2	121	86.4	77.8	84.2	52.7	172	73.7	64.2
7	16.1	130	90.9	70.2	117	81.0	330	64.3	59.7	---	96.9	---
8	17.3	126	85.7	74.3	94.3	75.6	117	68.9	59.4	101	143	66.5
9	17.0	138	97.2	74.3	227	80.2	88.5	73.4	62.4	151	133	---
10	---	127	77.5	64.2	156	82.0	91.9	81.0	134	---	122	68.6
11	25.5	104	112	196	88.8	83.7	76.1	72.9	142	119	68.0	82.0
12	10.8	108	107	55.6	86.1	82.0	86.3	92.7	148	108	93.0	76.7
13	242	118	95.3	37.2	49.9	78.3	86.2	86.2	126	130	136	---
14	1990	113	91.8	94.0	38.6	80.2	81.1	100	104	136	---	---
15	221	118	89.1	58.7	---	92.1	110	94.5	91.8	125	211	89.1
16	160	135	89.1	71.3	---	119	95.0	79.4	87.5	133	230	89.1
17	87.5	132	86.1	71.3	---	100	92.1	77.0	87.2	131	173	73.7
18	70.2	124	89.1	84.2	---	91.8	92.1	82.6	72.9	136	119	68.0
19	71.8	107	79.4	77.8	91.8	89.1	112	77.0	71.8	129	107	74.3
20	51.8	101	89.1	59.4	90.9	80.2	116	83.2	71.3	129	89.1	71.3
21	48.6	105	---	55.8	---	77.2	104	65.3	118	102	90.7	---
22	75.6	105	83.2	65.3	---	71.3	113	---	---	100	101	71.8
23	116	103	83.2	62.4	---	74.5	123	91.8	353	107	94.5	80.7
24	162	97.2	---	62.4	---	62.4	120	73.4	187	---	99.4	74.5
25	138	97.2	---	65.3	---	68.0	116	68.9	---	91.3	96.4	81.0
26	81.0	99.9	---	65.3	89.7	74.5	112	68.0	162	64.8	92.3	81.0
27	64.2	98.9	75.6	62.4	89.4	81.0	---	63.2	---	70.2	103	77.8
28	115	103	80.2	59.4	87.2	81.1	98.1	56.7	106	73.4	92.3	71.3
29	62.1	99.9	74.3	62.4	---	---	89.1	67.9	91.8	66.7	87.2	84.2
30	78.3	97.2	102	190	---	77.2	91.3	96.2	148	115	79.4	74.5
31	87.9	---	79.3	68.9	---	74.3	---	63.9	---	117	---	---
MONTH	137	132	90.2	76.0	---	82.9	103	79.1	105	120	107	75.0

07303395 ELM FORK OF NORTH FORK RED RIVER AT SALTON CROSSING NEAR CARL, OKLA.--Continued

DISSOLVED SOLIDS (RESIDUE AT 180 DEG. C), MG/L, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4970	3850	4070	3740	3800	3910	4470	4740	4470	6070	7740	6540
2	5070	2570	3970	---	3520	3960	4550	4830	4880	6090	7470	6610
3	5550	1840	3930	3730	3390	3990	4370	4770	4910	6290	7740	6610
4	5600	2620	4240	3780	3430	3990	4480	---	5350	---	8530	6710
5	5380	3200	3230	4050	3430	4010	4390	4680	5520	6190	9220	7030
6	5890	3410	4400	4090	4930	4100	4480	4710	5180	6470	9760	7160
7	5610	3370	3990	4130	4800	4030	4510	4940	5520	---	10300	---
8	5370	3340	4060	4300	3930	4100	1890	5200	6140	3790	11400	7370
9	5700	3510	4360	4190	6740	3760	3050	5370	6300	5780	11700	---
10	---	3490	3690	3990	5730	3810	3520	5060	1790	---	12000	7790
11	9530	3410	3980	8150	3870	4110	2990	5200	2620	6280	12700	7740
12	5240	3490	3980	6310	4160	3960	3440	3700	4220	6280	13000	7470
13	9300	3610	3960	3650	3140	4100	3380	3360	5100	6530	13300	---
14	15600	3670	4070	4570	2760	4220	3420	4370	5380	6270	---	---
15	4080	3780	4190	3690	---	4270	4480	4960	5580	6220	1880	6390
16	4190	4060	4200	4280	---	4020	4200	4960	5750	7040	2740	6460
17	4360	4070	4340	4470	---	3880	4260	5170	5620	7210	3290	6340
18	4690	4000	4210	4590	---	4020	4280	5550	5750	7370	3640	6320
19	4810	3810	3950	4570	4120	4250	4670	5040	5970	7370	3810	6880
20	4460	3920	4160	4100	3990	4280	4620	4310	6430	7320	4070	6720
21	4400	3930	---	3870	---	4220	4480	4310	6510	7420	4380	---
22	4800	4000	4280	4300	---	4350	4540	---	---	7790	5000	6040
23	4630	4050	4280	4280	---	4380	4450	5530	2260	8080	4920	6550
24	4510	4010	---	4280	---	4290	4510	5380	2410	---	5230	6550
25	4090	4010	---	4230	---	4360	4710	5490	---	4690	5580	6910
26	4040	4010	---	4160	3510	4420	4710	5720	4040	6190	5760	6920
27	3990	3990	4130	4150	3810	4010	---	5720	---	6080	5950	6710
28	5580	4010	4190	4180	3870	3780	3470	5170	4950	5400	5750	6440
29	4100	4090	4190	4170	---	---	4310	2300	5520	5900	6020	6960
30	4060	4060	4910	7260	---	4270	4600	2830	6890	6890	6320	6640
31	3350	---	3740	3710	---	4330	---	3780	---	7210	---	---
MONTH	5430	3640	4100	4430	---	4110	4110	4730	5000	6450	7210	6790

DISSOLVED SOLIDS (TONS PER DAY), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	118	343	396	313	308	348	290	307	229	443	205	212
2	103	749	397	---	323	353	270	313	211	444	157	252
3	61.4	5460	403	342	339	366	248	322	199	526	163	196
4	16.6	1270	412	286	352	366	286	---	202	---	203	178
5	20.3	933	305	306	343	357	273	354	224	485	179	186
6	33.4	709	416	287	426	354	290	305	182	507	171	170
7	53.0	582	366	290	402	326	1240	227	194	---	217	---
8	58.0	568	340	290	382	310	1230	239	182	420	302	175
9	53.9	597	353	283	637	335	428	246	187	484	278	---
10	---	556	329	259	495	339	399	273	1720	---	253	172
11	59.2	460	451	484	366	344	379	253	806	355	137	205
12	35.4	471	430	167	326	331	381	390	570	322	186	198
13	578	507	385	158	237	321	383	383	427	370	269	---
14	3750	476	374	358	209	308	360	366	349	406	---	---
15	903	490	339	249	---	357	411	335	301	369	2210	259
16	611	548	340	277	---	478	363	281	279	361	1240	262
17	318	538	340	266	---	409	357	265	288	350	791	223
18	253	497	341	297	---	369	358	270	233	358	511	205
19	247	442	320	296	378	344	403	259	226	338	442	204
20	193	413	337	244	366	312	412	326	208	336	363	200
21	178	424	---	230	---	296	387	256	334	260	331	---
22	259	421	324	255	---	282	429	---	---	252	337	228
23	413	416	324	243	---	272	457	299	2490	262	332	230
24	609	390	---	243	---	243	451	247	1180	---	325	212
25	563	390	---	251	---	248	420	222	---	329	316	224
26	327	401	---	247	389	274	407	216	654	201	295	224
27	259	349	312	235	370	325	---	201	---	213	321	217
28	377	411	305	226	355	337	431	195	374	248	295	209
29	255	409	283	236	---	---	349	460	298	207	276	226
30	318	395	358	510	---	300	323	504	409	316	239	215
31	398	---	333	290	---	292	---	265	---	311	---	---
MONTH	381	689	356	281	---	330	427	296	480	351	391	210

07303395 ELM FORK OF NORTH FORK RED RIVER AT SALTON CROSSING NEAR CARL, OKLA.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6610	5110	5400	4960	5040	5190	5940	6310	5940	6130	11300	9020
2	6750	3390	5270	---	4670	5260	6050	6430	6490	8170	10800	9150
3	7390	2410	5220	4950	4490	5300	5810	6350	6540	8560	11300	9150
4	7460	3460	5630	5010	4550	5300	5960	---	7130	---	12500	9350
5	7170	4230	4270	5380	4540	5330	5830	6220	7360	8370	13400	9950
6	7850	4520	5850	5430	6560	5440	5960	6260	6900	8890	14100	10200
7	7470	4460	5300	5490	6390	5350	5990	6580	7360	---	14800	---
8	7150	4420	5390	5720	5210	5450	2470	6920	8270	5030	16200	10600
9	7590	4650	5800	5570	9410	4990	4030	7150	8570	7700	16600	---
10	---	4630	4890	5300	7640	5050	4670	6730	2340	---	17000	11400
11	13800	4510	5280	12000	5130	5460	3950	6920	3450	8500	18000	11300
12	6980	4620	5280	8590	5520	5260	4560	4900	5610	8540	18400	10800
13	13500	4780	5250	4840	4160	5450	4480	4480	6790	9000	18600	---
14	21700	4870	5410	6070	3640	5610	4530	5810	7160	8520	---	---
15	5420	5020	5570	4890	---	5670	5950	6600	7430	8420	2460	8750
16	5560	5390	5580	5680	---	5340	5580	6600	7660	9970	3620	8870
17	5800	5400	5770	5940	---	5150	5660	6880	7490	10300	4560	8640
18	6240	5310	5590	6110	---	5340	5690	7390	7660	10600	4820	8660
19	6400	5060	5240	6070	5470	5640	6210	6710	7960	10600	5060	9670
20	5930	5200	5520	5450	5300	5690	6140	5730	8810	10500	5400	9360
21	5850	5220	---	5130	---	5600	5960	5730	8970	10700	5820	---
22	6380	5310	5690	5720	---	5780	6030	---	---	11400	6660	8080
23	6160	5380	5680	5690	---	5820	5920	7370	2970	11900	6550	9040
24	6000	5320	---	5690	---	5700	6000	7170	3170	---	6970	9050
25	5430	5320	---	5620	---	5820	6260	7320	---	6240	7430	9720
26	5370	5330	---	5520	4650	5870	6270	7620	5360	8360	7680	9750
27	5290	5300	5480	5510	5060	5330	---	7630	---	8160	7930	9340
28	7430	5330	5560	5550	5140	5010	4600	6880	6590	7190	7670	8830
29	5440	5430	5570	5540	---	---	5730	3030	7360	7860	8030	9830
30	5390	5390	6540	10400	---	5670	6120	3730	9700	9690	8600	9220
31	4430	---	4960	4920	---	5750	---	5020	---	10300	---	---
MONTH	7330	4830	5440	5960	---	5450	5460	6290	6710	8950	10080	9510

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19.5	19.0	8.0	0.5	6.0	11.5	14.5	16.5	22.0	30.5	26.0	28.0
2	19.5	21.0	8.5	---	6.0	11.0	9.5	26.5	24.0	31.5	27.0	27.0
3	18.0	19.0	9.0	1.0	6.0	5.5	16.0	27.0	21.5	27.5	27.0	26.5
4	18.0	16.0	12.5	5.0	6.5	8.5	11.5	---	26.0	---	32.0	25.5
5	16.0	16.0	13.0	0.5	3.0	11.0	22.0	19.0	33.0	27.0	31.0	25.0
6	15.0	16.0	12.5	0.5	1.5	12.0	15.5	20.0	29.5	31.5	30.5	25.5
7	13.0	16.0	---	---	4.0	11.0	15.5	18.5	26.0	---	28.0	26.5
8	12.5	16.0	---	1.0	2.5	9.0	12.5	28.0	29.0	33.0	29.0	24.5
9	15.5	16.0	---	0.0	1.0	7.5	12.0	20.0	27.5	30.5	30.5	16.5
10	---	17.5	---	5.0	5.5	7.0	14.0	22.5	17.0	---	25.5	16.5
11	20.0	15.5	---	---	6.0	6.5	14.0	30.0	21.0	28.5	28.0	16.0
12	---	14.5	---	0.0	8.0	6.5	13.0	17.5	27.0	29.5	---	21.0
13	16.0	14.0	---	0.0	11.5	7.0	11.5	17.0	29.5	28.0	28.0	22.0
14	10.0	13.5	---	2.0	12.5	7.5	16.5	24.0	---	28.0	---	24.5
15	11.0	12.5	---	4.0	---	7.0	19.0	24.5	30.0	29.5	28.0	24.0
16	11.0	14.0	---	4.0	5.5	9.0	26.0	28.5	---	25.5	30.0	21.5
17	20.5	14.5	---	4.0	3.5	10.0	22.0	19.5	---	27.5	29.0	20.5
18	21.0	16.0	---	5.5	5.5	13.5	19.5	27.5	27.0	28.0	28.5	19.5
19	19.5	16.0	---	5.5	5.0	11.5	16.5	24.5	27.5	29.0	28.5	18.5
20	19.0	14.5	---	4.5	6.5	13.5	18.5	27.0	27.5	28.0	27.5	15.0
21	18.0	15.0	---	4.5	7.0	14.0	16.0	26.5	---	32.0	31.0	---
22	18.0	16.5	---	4.0	3.0	11.5	18.0	---	---	30.0	30.0	21.5
23	20.0	17.0	---	5.5	5.0	15.0	26.0	26.5	24.0	26.5	28.5	23.0
24	20.5	12.5	---	8.0	6.5	9.5	23.5	29.0	27.5	---	24.5	18.5
25	21.0	12.0	---	7.5	8.5	11.0	23.5	25.0	---	24.0	26.5	18.5
26	20.5	13.0	---	7.5	8.5	11.0	22.5	21.5	30.5	---	27.5	18.5
27	19.5	12.5	---	7.5	9.0	12.0	---	21.5	---	32.0	29.0	20.5
28	20.5	12.0	---	6.5	11.0	8.0	16.5	25.0	30.5	32.0	29.0	21.0
29	20.0	8.5	---	6.0	---	---	21.0	20.5	28.0	31.5	27.5	20.0
30	20.5	7.5	---	6.0	---	14.5	26.5	20.0	31.0	32.0	27.5	20.0
31	19.5	---	---	5.5	---	18.0	---	21.0	---	28.5	27.5	---
MONTH	17.5	15.0	---	4.0	6.0	10.5	17.5	23.5	---	29.5	28.5	21.5

07303400 ELM FORK OF NORTH FORK RED RIVER NEAR CARL, OKLA.

LOCATION.--Lat 36°00'42", long 99°54'12", in SW 1/4 NW 1/4 sec.12, T.6 N., R.26 W., Harmon County, at gaging station at bridge on State Highway 30, 4.0 mi (6.4 km) northeast of Carl, and at mile 54.0 (86.9 km).

DRAINAGE AREA.--416 mi^2 (1,077 km^2).

PERIOD OF RECORD.--Chemical analyses: Water years 1960-61 (partial-record station), November 1961 to September 1962, July 1968 to current year.
Water temperatures: July 1968 to current year.

EXTREMES, Current year.--Specific conductance: Maximum, 59,400 micromhos/cm Aug. 13; minimum, 3,760 micromhos/cm Apr. 9.
Water temperatures: Maximum, 33.0°C on July 28; minimum, freezing point on several days during December and January.

Period of record.--Specific conductance: Maximum, 224,000 micromhos/cm Sept. 15, 1971; minimum, 2,190 micromhos/cm June 2, 1973.
Water temperatures: Maximum, 39.0°C June 22, 1969, Aug. 17, 1970; minimum, freezing point on several days during winter months.

REMARKS.--Continuous monitor records for specific conductance and water temperature are collected for this station. Records of maximum and minimum specific conductance values are available in district office in Oklahoma City, Okla. Temperature records for Oct. 1-Feb. 26, May 23-June 4, July 17-Aug. 4, Aug. 20-Sept. 23, Sept. 29 were poor. Once daily values were used in their places.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
OCT.											
05...	1135	3.6	670	170	5400	--	139	0	114	1600	8500
15...	0930	85	530	93	2200	--	145	0	119	1300	3600
NOV.											
05...	0930	111	570	89	1600	11	167	0	137	1500	2600
15...	1045	51	630	120	2400	12	137	0	112	1700	4000
28...	1645	39	650	150	2900	15	153	0	126	1800	4800
DEC.											
05...	1130	37	630	150	3000	15	150	0	123	1700	4900
15...	1000	32	620	160	3900	17	138	0	113	1700	6100
27...	1730	30	690	150	3200	14	166	0	136	1700	5300
JAN.											
04...	1730	28	--	140	3100	13	172	0	141	1500	5200
15...	1130	26	640	160	3500	13	154	0	126	1600	5800
25...	1130	25	640	170	3800	15	144	0	118	1700	6100
FEB.											
09...	1200	46	770	270	9900	31	198	0	162	2000	16000
11...	1200	37	600	150	2700	12	175	0	144	1600	4400
26...	1130	45	600	150	2500	11	170	0	139	1700	4000
MAR.											
05...	1645	35	590	150	2900	14	154	0	126	1700	4600
15...	1145	30	600	150	3000	14	166	0	136	1700	4700
27...	1845	30	600	150	2600	13	114	0	94	1700	4300
APR.											
05...	1630	26	660	160	3400	16	132	0	108	1700	5400
15...	1145	37	620	150	3000	15	157	0	129	1600	4800
24...	1145	39	660	160	3600	16	139	0	114	1700	5800
MAY											
05...	1845	30	700	200	5100	23	115	0	94	1900	8200
15...	1930	23	670	170	4400	19	130	0	107	1800	7200
25...	1200	18	730	200	6300	24	138	0	113	1900	10000
JUNE											
05...	1730	14	640	150	5600	25	101	0	83	1800	9000
15...	1600	20	1000	260	8200	38	137	0	112	2200	14000
26...	1730	52	570	93	2100	15	133	0	109	1500	3300
JULY											
05...	1843	12	680	160	4800	21	110	0	90	1900	7400
15...	1445	9.3	640	170	--	22	108	0	89	1800	8200
25...	1500	23	660	120	3100	17	106	0	87	1600	5100
AUG.											
05...	1815	2.0	850	260	11000	41	81	0	66	1900	18000
13...	1515	.76	950	410	17000	66	71	0	58	2200	28000
25...	1600	23	700	140	--	21	100	0	82	1800	7200
SEP.											
05...	1700	11	780	200	6500	35	88	0	72	1900	11000
15...	1730	17	730	190	5500	24	104	0	85	1700	9300
25...	1145	14	740	210	6400	26	102	0	84	1900	10000

07303400 ELM FORK OF NORTH FORK RED RIVER NEAR CARL, OKLA.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	CARBON DIOXIDE (CO2) (MG/L)
OCT.											
05...	1.2	17100	23.3	166	2400	2300	--	48	23300	8.0	2.2
15...	1.0	8190	11.1	1880	1700	1600	--	23	11900	8.1	1.8
NOV.											
05...	--	6500	8.84	1950	1800	1700	66	16	9240	8.0	2.7
15...	--	9110	12.4	1250	2100	2000	72	23	12900	7.8	3.5
28...	--	10400	14.1	1040	2200	2100	74	27	14600	7.8	3.9
DEC.											
05...	--	10500	14.3	1050	2200	2100	75	28	14600	7.9	3.0
15...	--	12600	17.1	1090	2200	2100	79	36	17500	7.8	3.5
27...	--	11000	15.0	891	2300	2200	75	29	15700	7.6	6.7
JAN.											
04...	--	10800	--	816	--	--	--	--	15500	7.3	14
15...	--	11800	16.0	828	2300	2100	77	32	16700	7.5	7.8
25...	--	12700	17.3	857	2300	2200	78	35	17700	7.8	3.7
FEB.											
09...	--	28200	38.4	3500	3000	2900	88	78	--	7.7	6.3
11...	--	9590	13.0	958	2100	2000	73	26	13700	8.0	2.8
26...	--	9270	12.6	1130	2100	2000	72	24	13200	7.9	3.4
MAR.											
05...	--	10400	14.1	983	2100	2000	75	28	14600	7.5	7.8
15...	--	10600	14.4	859	2100	2000	75	28	14900	7.7	5.3
27...	--	9930	13.5	804	2100	2000	73	25	--	7.8	2.9
APR.											
05...	--	11900	16.2	835	2300	2200	76	31	16700	7.4	8.4
15...	--	10500	14.3	1050	2200	2000	75	28	14600	7.4	10
24...	--	12500	17.0	1320	2300	2200	77	33	17600	7.7	4.4
MAY											
05...	--	16900	23.0	1370	2600	2500	81	44	23300	7.4	7.3
15...	--	14700	20.0	913	2400	2300	80	39	20500	7.6	5.2
25...	--	19400	26.4	943	2600	2500	84	53	26400	7.3	11
JUNE											
05...	--	17800	24.2	673	2200	2100	84	52	24800	7.3	8.1
15...	--	26700	36.3	1440	3600	3500	83	60	34200	7.2	14
26...	--	7660	10.4	1080	1800	1700	71	22	11700	7.7	4.2
JULY											
05...	--	14700	20.0	476	2400	2300	81	43	20600	7.5	5.6
15...	--	15900	--	399	2300	2200	--	--	23900	7.5	5.5
25...	.80	11200	15.2	696	2100	2100	76	29	15900	7.7	3.4
AUG.											
05...	.44	31100	42.3	168	3200	3100	88	85	--	7.6	3.3
13...	.84	51700	70.3	106	4100	4000	90	116	59400	7.3	5.7
25...	.40	14900	--	925	2300	2200	--	--	20200	8.1	1.3
SEP.											
05...	.39	18200	24.8	541	2800	2700	83	54	--	7.8	2.2
15...	.90	18300	24.9	840	2600	2500	82	47	--	7.5	5.3
25...	.80	20200	27.5	764	2700	2600	84	53	--	7.8	2.6

07303400 ELM FORK OF NORTH FORK RED RIVER NEAR CARL, OKLA.--Continued

DISSOLVED SULFATE (SO4), MG/L, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1900	1700	1700	1600	1800	1600	1700	1800	1800	1800	2100	1900
2	1900	1600	1700	1600	1900	1700	1800	1800	1800	1800	2000	2000
3	1900	---	1600	1600	1900	1700	1700	1800	---	1800	2100	1900
4	1900	1500	1600	1700	2000	1700	1700	1800	2000	---	2100	2000
5	1900	1500	1700	1700	2000	1700	1700	1800	1900	1800	2200	2100
6	1900	1600	1700	1700	2100	1700	1700	1700	1900	1800	2200	2100
7	1900	1600	1700	1700	2100	1700	1900	1800	1900	---	2300	---
8	1900	1600	1700	1700	2200	1700	1400	1900	2000	1600	2400	2100
9	1900	1600	1700	1700	2200	1600	1600	1800	2000	1800	2400	---
10	1900	1600	1700	1600	1800	1600	1600	1800	1500	---	2500	---
11	1900	1600	1700	1800	1600	1700	1700	1800	1500	1800	2600	2200
12	1800	1600	1700	2100	1700	1600	1600	1800	1800	1900	2600	2200
13	1800	1600	1700	1800	1700	1700	1700	1600	1900	1900	2700	---
14	1700	1600	1700	1700	1700	1700	1700	1700	2000	1900	---	---
15	1600	1600	1700	1700	1700	1700	1700	1800	2100	1800	1400	1900
16	1700	1600	1700	1700	1700	1600	1700	1900	2400	2000	1500	2100
17	1600	1700	1700	1700	1700	1600	1700	1900	2200	2000	1500	1900
18	1600	1600	1700	1700	1700	1700	1700	1900	2200	2000	1600	2000
19	1800	1600	1700	1700	1700	1700	1700	1900	2300	2100	1600	2000
20	1800	1600	1700	1700	1700	1700	1700	1700	2300	2100	1600	2000
21	1800	1700	1700	1700	1700	1700	1700	1800	2300	2100	1700	---
22	1800	1700	1700	1700	1600	1700	1700	1800	---	2100	1700	1900
23	1800	1600	1700	1700	1600	1800	1700	1900	---	2100	1700	1900
24	1800	1700	1700	1700	1600	1700	1700	1900	---	---	1800	2000
25	1800	1700	1700	1700	1600	1700	1700	1900	---	1700	1800	2000
26	1800	1700	1700	1700	1600	1700	1700	1900	1600	---	1800	2100
27	1800	1700	1700	1700	1600	1700	1700	1900	---	1900	1800	2100
28	1800	1700	1700	1700	1700	1600	1600	---	1700	1800	1800	2100
29	1800	1600	1700	1700	---	1700	1700	1500	1700	2000	1800	2100
30	1800	1600	1700	1800	---	1700	1800	1600	1700	2000	1800	2100
31	1800	---	1600	1800	---	1700	---	1600	---	2100	---	---
MONTH	1800	1600	1700	1700	1800	1700	1700	1800	1900	1900	2000	2000

DISSOLVED SULFATE (SO4), TONS PER DAY, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	51.3	156	170	138	151	147	115	121	97.2	136	62.4	66.7
2	44.6	467	174	147	180	156	112	121	82.6	136	48.6	75.6
3	27.2	---	168	151	195	161	101	126	---	156	51.0	61.6
4	11.8	725	160	133	211	161	106	121	81.0	---	56.7	59.4
5	13.3	437	165	133	205	156	110	141	82.1	146	49.9	62.4
6	16.9	337	165	124	187	151	115	115	71.8	146	45.7	56.7
7	24.1	281	161	124	181	142	523	87.5	71.8	---	55.9	---
8	26.7	276	147	119	220	133	911	92.3	64.8	181	71.3	56.7
9	24.1	276	142	119	214	147	229	87.5	64.8	156	64.8	---
10	22.8	259	156	108	160	147	186	102	1440	---	60.8	---
11	18.0	220	197	112	156	147	220	92.3	462	107	36.5	65.3
12	18.0	220	188	62.4	138	138	181	194	248	103	45.6	65.3
13	117	229	170	82.6	133	138	197	186	164	113	63.4	---
14	413	212	161	138	133	129	184	147	135	128	---	---
15	359	212	142	119	138	147	161	126	119	112	1640	82.1
16	252	220	142	115	179	194	151	113	123	108	676	90.7
17	136	229	138	106	184	173	147	103	119	103	364	71.8
18	102	203	142	115	174	161	147	97.5	95.0	103	229	70.2
19	87.3	190	142	115	161	142	151	103	93.2	102	190	64.8
20	82.6	173	142	106	161	129	156	133	80.7	102	147	64.8
21	77.8	188	138	106	161	124	156	112	124	79.4	135	---
22	102	184	133	106	186	115	165	141	---	73.7	119	77.0
23	165	168	135	101	168	117	179	108	---	73.7	119	71.8
24	248	170	129	101	177	101	174	92.3	---	---	117	70.2
25	253	170	119	106	199	101	156	82.1	---	124	107	70.2
26	151	174	135	106	181	110	151	77.0	264	---	97.2	73.7
27	121	174	133	101	160	142	165	71.8	---	71.8	102	73.7
28	126	179	129	96.4	161	147	203	---	133	87.5	97.2	73.7
29	117	164	119	101	---	124	142	304	96.4	75.6	87.5	73.7
30	141	160	129	131	---	124	131	289	106	97.2	72.9	73.7
31	219	---	147	146	---	119	---	117	---	96.4	---	---
MONTH	115	243	149	115	173	139	194	127	184	112	173	69.7

07303400 ELM FORK OF NORTH FORK RED RIVER NEAR CARL, OKLA.--Continued

DISSOLVED CHLORIDE (CL), MG/L, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10000	5200	4500	4300	8200	3000	5800	7000	6500	6500	13000	10000
2	9400	3000	4900	4300	9000	4600	6800	7000	7300	6700	12000	11000
3	9500	---	4200	4100	9900	5700	5500	6700	---	7200	14000	10000
4	9000	1400	4300	5300	11000	4500	5900	6800	11000	---	15000	12000
5	8500	2300	4700	6100	12000	5500	5600	7000	9300	7400	18000	13000
6	10000	2900	5700	5400	13000	4900	6000	6300	10000	7900	18000	13000
7	9100	2800	6100	5000	14000	5500	9300	7900	10000	---	22000	---
8	9300	3000	6000	5700	16000	5600	25	8500	12000	3200	24000	14000
9	9800	3200	6400	5900	17000	4100	2900	7800	11000	6700	23000	---
10	9000	3200	5400	4200	8300	4100	4300	8200	1600	---	29000	---
11	9000	3300	5100	8100	4300	5400	4500	8000	1300	8300	30000	18000
12	8200	3500	4900	12000	4600	3900	4200	7100	7100	8700	31000	17000
13	6600	3900	4700	7700	5100	5100	4600	4300	9700	9700	33000	---
14	5100	3700	5500	5900	5200	5000	4600	6400	11000	9300	---	---
15	3700	3900	6200	5800	5200	4700	4800	6800	14000	8200	470	10000
16	5900	3900	5700	5500	5800	3900	5200	9300	23000	10000	1700	13000
17	6500	4600	5300	5700	6000	4400	5700	8800	16000	11000	2100	10000
18	6900	4400	5700	6000	5600	5700	6200	9400	17000	12000	3100	11000
19	7400	4100	6300	6100	5400	4900	5700	9300	21000	13000	3200	11000
20	7300	4300	5800	5700	5400	5300	6100	5700	20000	13000	3900	12000
21	7200	4700	5700	5500	5200	5600	6200	7400	22000	13000	4700	---
22	7900	4700	5700	6100	4400	5900	6400	7300	---	14000	5400	9700
23	7600	4200	5700	6000	3900	7000	6000	8500	---	16000	6100	9800
24	6600	4600	5700	6100	4100	5700	6000	8700	---	---	7000	11000
25	7100	5300	5500	6100	4000	5300	6300	9900	---	5300	7200	12000
26	7100	5300	5400	5000	4100	5200	6400	9400	3400	---	8200	13000
27	7200	4700	5300	5300	4300	4700	5900	9000	---	9300	7400	13000
28	7100	4700	5700	5600	5400	4300	3900	---	4700	8200	7100	13000
29	7100	4300	5900	5700	---	5000	6100	1100	5500	11000	7400	13000
30	7700	4100	6100	6600	---	5400	6600	2900	6000	12000	7900	13000
31	8200	---	4200	7300	---	5600	---	4400	---	13000	---	---
MONTH	7800	3900	5400	5900	7400	5000	5500	7200	10900	9600	12600	12200

DISSOLVED CHLORIDE (CL), TONS PER DAY, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	270	477	450	372	686	275	391	472	351	491	386	351
2	221	875	503	395	850	422	422	472	335	507	292	416
3	136	---	442	387	1020	539	327	470	---	622	340	324
4	55.9	677	430	415	1160	425	366	459	445	---	405	356
5	59.7	671	457	478	1230	505	363	548	402	599	408	386
6	89.1	611	554	394	1160	437	405	425	378	640	374	351
7	115	491	576	364	1210	460	2560	384	378	---	535	---
8	131	518	518	400	1600	438	16.3	413	389	363	715	378
9	124	553	536	414	1650	376	415	379	356	579	621	---
10	107	518	496	283	740	376	499	465	1530	---	705	---
11	85.1	454	592	503	418	467	583	410	400	493	421	535
12	81.9	482	542	356	373	337	476	767	978	470	544	505
13	428	558	470	353	399	413	534	449	838	576	775	---
14	1240	490	520	478	407	378	497	553	742	628	---	---
15	829	516	519	407	421	406	454	477	794	509	552	432
16	876	537	477	371	611	474	463	552	1180	540	767	562
17	491	621	429	354	648	475	492	475	864	564	510	378
18	391	558	477	405	575	539	536	482	734	616	444	386
19	360	487	527	412	510	410	506	502	850	632	380	356
20	335	464	485	354	510	401	560	446	702	632	358	389
21	311	520	462	342	491	406	569	460	1190	491	368	---
22	448	508	446	379	511	348	622	572	---	491	379	393
23	698	442	446	356	411	454	632	482	---	562	428	370
24	909	460	451	362	454	339	616	423	---	---	454	386
25	997	529	386	379	497	315	578	428	---	386	428	421
26	594	544	423	310	465	337	570	381	560	---	443	456
27	486	482	415	315	430	393	573	340	---	352	420	456
28	498	495	431	318	510	395	495	---	368	399	383	456
29	460	441	414	339	---	364	511	223	312	416	360	456
30	603	410	461	481	---	394	481	525	373	583	320	456
31	996	---	386	591	---	393	---	321	---	597	---	---
MONTH	433	531	474	389	712	411	550	460	644	528	466	415

07303400 ELM FORK OF NORTH FORK RED RIVER NEAR CARL, OKLA.--Continued

DISSOLVED SOLIDS (RESIDUE AT 180 DEG. C), MG/L, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19900	11100	9970	9670	16200	7320	12200	14100	13400	13300	25500	19800
2	18300	7400	10600	9510	17700	10000	13800	14200	14600	13700	24100	21700
3	18400	---	9440	9290	19300	12000	11700	13700	---	14500	25800	19900
4	17700	4640	9670	11300	20900	9970	12400	13900	20900	---	27800	23600
5	16800	6220	10300	12700	22700	11600	11900	14300	18200	14800	30700	24600
6	20200	7170	11900	11500	24500	10600	12500	13000	20200	15700	30800	25500
7	17700	7020	12600	10700	26700	11600	18100	15700	20200	---	35400	---
8	18000	7320	12500	11900	28500	11800	2080	16800	22700	7780	37600	26700
9	19100	7630	13100	12200	29600	9290	7170	15600	21800	13700	37000	---
10	17600	7780	11500	9360	16400	9210	9670	16200	5020	---	44100	---
11	17600	7850	11000	16000	9590	11500	9970	15900	4420	16500	44800	30600
12	16200	8160	10600	24400	10100	8910	9360	14300	14300	17100	46800	30200
13	13400	8990	10200	15300	10900	10900	10100	9590	18900	18900	48900	---
14	10900	6530	11600	12200	11200	10800	10100	13100	21500	18200	---	---
15	8530	8630	12900	12200	11100	10300	10400	13800	26200	16200	2890	20200
16	12300	8990	11900	11600	12100	8990	11200	18200	36600	20500	5170	25400
17	13300	10000	11300	11900	12500	9820	12000	17200	28600	22400	5780	20000
18	14000	9820	12000	12500	11800	11900	12800	18300	30300	23800	7480	20900
19	14800	9290	13000	12700	11500	10600	12000	18000	34300	25000	7700	21600
20	14600	9510	12100	12000	11500	11300	12600	12000	32900	24800	8910	22700
21	14600	10300	12000	11700	11200	11800	12800	15000	35200	24500	10300	---
22	15800	10300	12000	12600	9740	12300	13100	14700	---	26600	11500	18900
23	15300	9360	11900	12500	8990	14200	12500	16800	---	28100	12600	19000
24	13500	10000	11900	12700	9210	11900	12500	17100	---	---	14200	22400
25	14400	11300	11600	12600	9140	11300	13100	19300	---	11300	14500	23900
26	14400	11300	11500	10700	9210	11100	13100	18300	8080	---	16300	24700
27	14600	10200	11300	11300	9590	10300	12300	17700	---	18100	14900	24800
28	14400	10300	12000	11900	11400	9590	8990	---	10200	16200	14300	24800
29	14400	9590	12400	11900	---	10700	12600	4040	11700	20900	14900	24800
30	15300	9290	12600	13400	---	11400	13400	7170	12500	23200	15800	25500
31	16200	---	9440	14600	---	11900	---	9820	---	24800	---	---
MONTH	15560	8900	11510	12410	14760	10800	11550	14600	20110	18870	21940	23430

DISSOLVED SOLIDS (TONS PER DAY), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	537	1020	996	835	1360	672	823	952	724	1010	757	695
2	430	2160	1090	873	1670	918	857	958	670	1040	586	820
3	263	---	994	878	1980	1130	695	962	---	1250	627	645
4	110	2240	966	885	2200	942	770	938	846	---	751	701
5	118	1810	1000	994	2330	1060	771	1120	786	1200	696	731
6	180	1510	1160	838	2180	944	844	877	764	1270	640	688
7	225	1230	1190	780	2310	971	4480	763	764	---	860	---
8	253	1260	1080	835	2850	924	1350	816	735	882	1120	721
9	242	1320	1100	856	2880	853	1030	758	706	1160	999	---
10	209	1260	1060	632	1460	845	1120	919	4810	---	1070	---
11	166	1080	1280	994	932	994	1290	816	1360	980	626	909
12	162	1120	1170	725	818	770	1060	1540	1970	923	818	897
13	868	1290	1020	702	653	883	1170	1110	1630	1120	1150	---
14	2650	1130	1100	988	877	816	1090	1130	1450	1230	---	---
15	1910	1170	1080	856	899	890	983	969	1490	1010	3390	873
16	1830	1240	996	783	1270	1090	998	1080	1880	1110	2330	1100
17	1010	1350	915	739	1350	1060	1040	929	1540	1150	1400	756
18	794	1250	1000	844	1210	1120	1110	939	1310	1220	1070	754
19	719	1100	1090	857	1090	887	1070	972	1390	1220	915	700
20	670	1030	1010	745	1090	854	1160	940	1150	1210	818	735
21	631	1140	972	727	1060	860	1180	951	1900	926	806	---
22	896	1110	940	782	1130	830	1270	1150	---	934	807	765
23	1400	986	932	742	947	920	1320	953	---	986	885	718
24	1860	999	900	754	1020	707	1280	831	---	---	920	786
25	2020	1130	814	782	1140	671	1200	834	---	824	861	839
26	1210	1160	900	664	1040	719	1170	741	1330	---	880	867
27	985	1050	885	671	958	862	1200	669	---	884	845	870
28	1010	1080	907	675	1080	860	1140	---	799	787	772	870
29	933	984	870	707	---	780	1050	828	663	790	724	870
30	1200	928	953	977	---	831	977	1300	776	1130	840	895
31	1970	---	867	1180	---	835	---	716	---	1140	---	---
MONTH	886	1250	1010	816	1430	888	1200	946	1310	1050	992	799

07303400 ELM FORK OF NORTH FORK RED RIVER NEAR CARL, OKLA.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	27100	15700	14200	13800	22400	10700	17100	19700	18700	18600	33300	26900
2	25200	10800	15100	13600	24400	14300	19300	19800	20400	19100	31700	29100
3	25400	---	13500	13300	26400	16900	16500	19100	---	20200	33700	27100
4	24400	7150	13800	16000	28200	14200	17400	19400	28200	---	35900	31200
5	23200	9240	14600	17800	30200	16300	16700	19900	25100	20600	39100	32300
6	27400	10500	16800	16200	32200	15000	17600	18200	27400	21800	39200	33300
7	24500	10300	17700	15200	34700	16300	25000	21800	27400	---	44400	---
8	24900	10700	17600	16800	36700	16600	3760	23300	30200	11300	46800	34600
9	26200	11100	18400	17200	37900	13300	10500	21700	29200	19200	46200	---
10	24300	11300	16200	13400	22700	13200	13800	22500	7650	---	54100	---
11	24300	11400	15600	22200	13700	16200	14200	22100	6850	22800	54600	39000
12	22500	11800	15100	32100	14400	12800	13400	20000	20000	23600	56900	38600
13	18800	12900	14500	21300	15500	15400	14400	13700	26000	26000	59400	---
14	15500	12300	16300	17200	15800	15300	14400	18400	28800	25100	---	---
15	12300	12700	18100	17100	15700	14700	14800	19300	34100	22400	4830	27400
16	17300	12900	16800	16400	17000	12900	15800	25100	45700	27700	7850	33200
17	18600	14300	16000	16800	17600	14000	16900	23800	36800	29800	8650	27200
18	19600	14000	16900	17600	16600	16800	17900	25300	38700	31400	10900	28200
19	20600	13300	18200	17800	16200	15100	16900	24900	43100	32800	11200	29000
20	20400	13600	17000	16900	16200	16000	17700	16900	41600	32500	12800	30200
21	20300	14600	16900	16500	15800	16600	18000	20800	44100	32200	14600	---
22	21900	14700	16900	17700	13900	17300	18400	20500	---	34500	16200	25900
23	21200	13400	16800	17600	12900	19800	17600	23300	---	36200	17700	26100
24	18900	14300	16800	17800	13200	16800	17500	23700	---	---	19800	29900
25	20100	15900	16400	17700	13100	16000	18300	26400	---	15900	20200	31500
26	20100	16000	16200	15200	13200	15700	18400	25300	11700	---	22600	32400
27	20300	14500	16000	16000	13700	14600	17300	24400	---	25000	20700	32500
28	20100	14600	16900	16700	16100	13700	12900	---	14500	22500	20000	32500
29	20100	13700	17400	16800	---	15200	17700	6410	16500	28200	20700	32500
30	21300	13300	17700	18800	---	16100	18800	10500	17500	30800	21900	33300
31	22500	---	13500	20400	---	16700	---	14000	---	32500	---	---
MONTH	21590	12790	16250	17420	20230	15310	16300	20340	26680	25490	28480	31000

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16.0	---	---	0.0	---	8.5	13.0	18.5	21.0	26.0	25.5	30.0
2	10.5	---	5.5	---	---	7.0	8.0	20.5	23.5	24.5	27.5	29.5
3	---	---	5.0	0.5	---	3.5	10.0	23.0	---	26.5	27.0	28.0
4	15.0	10.0	6.0	5.0	---	6.5	12.0	21.5	---	24.5	32.5	28.5
5	16.0	5.5	5.5	0.0	---	9.0	15.0	23.0	27.0	24.5	31.5	27.0
6	15.0	10.0	5.5	0.5	---	15.0	15.0	21.5	28.5	25.5	27.5	28.0
7	10.5	10.0	---	---	---	5.5	15.0	19.5	24.5	26.0	27.5	---
8	15.5	---	5.0	5.0	---	8.5	12.0	21.5	26.5	26.5	28.0	26.5
9	10.5	---	0.0	0.0	0.5	7.5	13.5	21.5	23.5	26.5	27.5	---
10	15.0	---	0.5	5.0	3.0	6.5	12.5	21.5	19.5	25.0	27.5	28.0
11	20.0	10.5	---	---	5.5	6.0	11.0	25.0	20.0	25.5	26.0	24.5
12	22.0	5.0	---	0.0	11.0	6.0	11.0	22.0	21.0	25.5	27.5	14.0
13	---	10.0	5.0	0.5	17.0	7.0	10.5	20.5	22.0	24.0	29.0	---
14	---	---	---	0.5	5.0	7.5	16.0	20.0	22.5	24.5	---	---
15	6.0	5.5	0.0	0.5	---	6.5	18.5	20.5	22.0	23.0	27.0	24.5
16	10.0	5.5	5.0	0.5	---	10.5	20.0	23.0	23.5	21.5	30.0	18.5
17	11.0	10.0	5.5	---	---	10.5	21.5	22.5	24.0	27.5	28.5	19.5
18	---	10.0	10.0	---	---	14.0	18.0	23.5	24.5	28.0	28.5	24.0
19	20.0	5.5	5.5	0.0	---	15.5	16.5	22.5	24.5	29.0	31.5	21.5
20	---	5.0	0.5	0.0	15.0	17.0	17.5	23.0	24.0	28.5	27.0	20.0
21	20.0	5.0	---	5.5	5.0	15.5	18.0	24.0	23.0	31.0	31.0	---
22	15.0	5.5	10.5	0.5	---	15.5	18.5	20.5	18.0	31.0	31.0	21.0
23	---	10.0	10.0	5.0	---	13.0	23.0	26.5	19.5	26.5	27.0	23.0
24	20.5	10.0	---	5.5	---	12.0	23.5	29.5	22.5	---	27.0	19.0
25	20.0	---	---	5.5	---	11.0	22.5	25.0	23.5	23.0	29.0	18.0
26	---	0.5	---	10.5	5.0	10.5	21.5	21.5	24.5	---	27.5	19.0
27	20.0	10.0	5.0	---	6.0	14.0	21.0	21.5	25.0	31.0	24.0	20.0
28	---	5.5	10.0	10.0	7.5	8.0	18.5	26.0	25.0	33.0	30.0	20.5
29	10.5	---	6.0	5.0	---	4.5	20.5	21.0	24.5	31.0	30.0	24.0
30	---	---	0.5	---	---	9.0	20.0	20.5	25.0	31.0	32.0	19.5
31	---	---	5.5	5.0	---	12.5	---	20.0	---	29.0	---	---
MONTH	---	---	---	---	---	10.0	16.5	22.5	23.5	27.0	28.5	23.0

07303500 ELM FORK OF NORTH FORK RED RIVER NEAR MANGUM, OKLA.

LOCATION.--Lat 34°55'36", long 99°30'00", on east line sec.10, T.5 N., R.22 W., Greer County, at gaging station at bridge on U.S. Highway 283, 3.0 mi (4.8 km) north of Mangum, 5.0 mi (8.0 km) downstream from Haystack Creek, and at mile 17.8 (28.6 km).

DRAINAGE AREA.--838 mi^2 (2,170 km^2).

PERIOD OF RECORD.--Chemical analyses: Water year 1960 (partial-record station), November 1961 to August 1963, July 1968 to current year.
Water temperatures: July 1968 to current year.

EXTREMES, Current year.--Specific conductance: Maximum, 29,800 micromhos/cm Sept. 12; minimum, 1,580 micromhos/cm May 1.
Water temperatures: Maximum, 35.5°C July 25; minimum, freezing point on Jan. 1-3, 9.

Period of record.--Specific conductance: Maximum, 62,000 micromhos/cm Mar. 19, 1971; minimum, 1,040 micromhos/cm Apr. 15, 1973.
Water temperatures: Maximum, 37.0°C Aug. 11, 1969; minimum, -2.0°C Jan. 7, 9-13, 1973.

REMARKS.--Continuous monitor records for specific conductance and water temperature are collected for this station. Records of maximum and minimum specific conductance values are available in district office in Oklahoma City, Okla. Temperature record for Oct. 1-Apr. 5, June 10-11, 22-25, July 5-29, Aug. 5-Sept. 30 were poor. Once daily values were used in their place.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
OCT.											
05...	1235	48	680	140	4000	--	144	0	118	1500	6500
15...	1720	140	430	55	1200	--	104	0	85	1000	1900
25...	1710	262	310	56	--	--	101	0	83	760	1400
NOV.											
05...	1524	166	440	54	760	--	139	0	114	1100	1200
15...	1706	95	--	120	--	--	177	0	145	1500	3000
25...	1705	71	620	130	2500	13	179	0	147	--	4100
DEC.											
05...	1754	56	600	150	2600	13	121	0	99	1700	4100
15...	1310	56	--	--	2600	12	132	0	108	1600	3800
25...	1610	44	550	160	2900	2.3	177	0	145	1600	4600
JAN.											
05...	1404	55	550	150	--	13	164	0	135	1600	3900
15...	1719	46	590	150	3400	15	126	0	103	1700	--
25...	1548	42	590	160	2900	15	158	0	130	1600	--
FEB.											
05...	1704	88	500	130	1800	11	191	0	157	1400	2800
15...	1456	59	580	160	--	13	173	0	142	1700	4200
25...	1700	152	400	100	970	10	172	0	141	1200	1500
MAR.											
05...	1700	73	570	120	2100	14	173	0	142	1600	3300
15...	1519	60	550	160	2300	13	123	0	101	1700	3800
25...	1615	51	590	170	2800	15	158	0	130	1800	4500
APR.											
05...	1640	45	590	170	2800	16	160	0	131	1600	4600
14...	1710	76	530	130	1900	13	183	0	150	1500	3000
25...	1710	42	610	170	2900	17	149	0	122	1900	4600
MAY											
05...	1717	133	340	92	980	11	138	0	113	1000	1600
15...	1715	45	560	120	2300	14	151	0	124	1600	3800
25...	1330	35	590	140	3100	20	159	0	130	1600	5000
JUNE											
05...	1850	26	610	150	3700	21	125	0	103	1700	6000
15...	1655	26	600	120	3200	14	130	0	107	1600	5100
23...	1715	609	300	24	260	9.4	83	0	68	780	410
JULY											
05...	1615	50	640	140	3200	16	138	0	113	1700	5200
12...	1350	110	300	44	720	12	108	0	89	840	1100
24...	1715	3160	62	9.3	79	5.9	104	0	85	120	120
AUG.											
05...	1707	30	520	140	3400	19	143	0	117	--	5300
15...	1320	2280	220	15	140	8.6	85	0	70	510	220
25...	1708	51	460	120	2500	16	110	0	90	1400	4000
SEP.											
05...	1707	34	610	150	3000	20	151	0	124	1600	5000
15...	1745	35	610	160	3800	20	151	0	124	1600	6000
25...	1307	26	650	160	4200	20	140	0	115	1500	6900

07303500 ELM FORK OF NORTH FORK RED RIVER NEAR MANGUM, OKLA.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	CARBON DIOXIDE (CO2) (MG/L)
OCT.											
05...	.33	14000	19.0	1810	2300	2200	--	37	19400	8.0	2.3
15...	.85	4880	6.64	1850	1300	1200	--	14	7140	7.7	3.3
25...	.63	3670	4.99	2600	1000	920	--	--	--	7.6	4.1
NOV.											
05...	.89	3740	5.09	1680	1300	1200	--	9.1	5330	7.8	3.5
15...	1.5	7750	--	1990	--	--	--	--	10800	7.8	4.5
25...	--	9150	12.4	1750	2100	1900	72	24	12800	7.8	4.5
DEC.											
05...	--	9330	12.7	1410	2100	2000	73	25	13200	7.7	3.9
15...	--	8870	12.1	1340	--	--	--	--	12600	7.8	3.3
25...	--	10500	14.3	1250	2000	1900	76	28	14800	7.4	11
JAN.											
05...	--	9030	--	1340	2000	1900	--	--	12700	7.6	6.6
15...	--	11900	16.2	1480	2100	2000	78	32	16900	7.6	5.1
25...	--	10700	14.6	1210	2100	2000	75	27	15000	7.5	8.0
FEB.											
05...	--	6850	9.32	1630	1800	1600	69	19	9810	8.0	3.1
15...	--	9270	--	1480	2100	2000	--	--	13000	8.1	2.2
25...	--	4480	6.09	1840	1400	1300	60	11	6320	8.1	2.2
MAR.											
05...	--	8110	11.0	1600	1900	1800	70	21	11300	7.4	11
15...	--	8800	12.0	1430	2000	1900	71	22	12400	7.6	4.9
25...	--	10400	14.1	1430	2200	2000	74	26	14500	8.0	2.5
APR.											
05...	--	10700	14.6	1300	2200	2000	74	26	14800	7.5	8.1
14...	--	7630	10.4	1570	1900	1700	69	19	10700	7.8	4.6
25...	--	10700	14.6	1210	2200	2100	74	27	14900	7.7	4.8
MAY											
05...	--	4220	5.74	1520	1200	1100	63	12	6280	7.8	3.5
15...	--	8660	11.8	1050	1900	1800	72	23	12400	7.5	7.6
25...	--	10800	14.7	1020	2100	1900	76	30	--	7.7	5.1
JUNE											
05...	--	12600	17.1	885	2100	2000	79	35	--	7.3	10
15...	--	10900	14.8	765	2000	1900	78	31	--	7.6	5.2
23...	--	1910	2.60	3140	850	780	40	3.9	2610	8.1	1.1
JULY											
05...	--	11000	15.0	1490	2200	2100	76	30	15900	7.7	4.4
12...	--	3190	4.34	947	930	840	62	10	4760	7.9	2.2
24...	--	490	.67	4180	190	110	46	2.5	805	7.7	3.3
AUG.											
05...	--	11600	15.8	940	1900	1800	80	34	16400	7.9	2.9
15...	--	1390	1.89	8560	610	540	33	2.5	1790	8.1	1.1
25...	--	9010	12.3	1240	1600	1600	77	27	12800	7.8	2.8
SEP.											
05...	--	11600	15.8	1070	2100	2000	75	28	17400	7.5	7.6
15...	--	--	--	--	2200	2100	79	35	19400	7.5	7.6
25...	--	13800	18.8	969	2300	2200	80	38	--	7.6	5.6

07303500 ELM FORK OF NORTH FORK RED RIVER NEAR MANGUM, OKLA.--Continued

DISSOLVED SULFATE (SO4), MG/L, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1700	1300	1700	1700	1600	1400	1700	1700	1200	1700	1700	1700
2	1700	520	1700	1700	1500	1500	1700	1700	1600	1500	1700	1700
3	1400	680	1700	1600	1300	1500	1700	1700	1700	1700	1700	1700
4	1400	690	1700	1700	1300	1400	1700	1700	1700	1700	1700	1700
5	1700	880	1700	1700	1400	1500	1700	1200	1700	1700	1700	1700
6	1700	1100	1700	1700	1500	1500	1700	1500	1700	1700	1700	1700
7	1700	1200	1700	1700	1600	1600	1700	1700	1700	1700	1700	1700
8	1700	1200	1700	1700	1600	1600	1100	1700	1700	1700	1700	1700
9	1700	1200	1700	1700	1600	1500	1100	1700	1700	1200	1700	1700
10	1700	1200	1700	1700	1500	1600	990	1700	1700	1500	1700	1700
11	1700	1200	1700	1700	1700	1700	1400	1700	1200	500	1700	1700
12	1700	1300	1700	1700	1600	1600	1500	1700	1100	820	---	1700
13	1700	1400	1700	1700	1600	1600	1500	1700	1300	1400	1700	1700
14	1700	1400	1600	1700	1700	1700	1500	1400	1700	1700	730	1700
15	1100	1500	1700	1700	1700	1600	1600	1600	1700	1700	490	1700
16	1500	1500	1700	1700	1500	1500	1600	1700	1500	1700	660	1700
17	1700	1500	1700	1700	1500	1400	1700	1700	1700	1700	920	1700
18	1700	1500	1700	1700	1500	1300	1700	1700	1500	1700	1100	1700
19	1700	1600	1700	1700	1400	1300	1700	1700	1700	1700	1200	1700
20	1700	1600	1700	1700	1200	1500	1700	1700	1700	1700	1300	1700
21	1700	1600	1700	1700	1000	1500	1700	1700	1700	1700	1400	1700
22	1700	1600	1700	1700	1200	1700	1700	1200	800	1700	1500	1700
23	920	1700	1700	1100	1200	1300	1700	1700	590	1700	1600	---
24	1000	1700	1700	1700	1200	1500	1700	1500	730	390	1600	1700
25	1000	1700	1700	1700	1000	1700	1700	1700	930	450	1700	1700
26	1200	1700	1700	1700	1100	1700	1700	1700	1100	970	1700	1700
27	1400	1700	1700	1700	1200	1700	1700	1700	1200	700	1700	1700
28	1500	1700	1700	1700	1300	1600	1500	1700	1400	1200	1700	1700
29	1700	1700	1700	1700	---	1700	1700	1200	1500	1600	1700	1700
30	1300	---	1700	1500	---	1600	1700	1400	1500	1700	1700	1700
31	880	---	1700	1400	---	1700	---	810	---	1700	1700	---
MONTH	1500	1400	1700	1700	1400	1500	1600	1600	1400	1400	1500	1700

DISSOLVED SULFATE (SO4), TONS PER DAY, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	303	435	303	262	346	302	243	184	178	271	170	193
2	294	4020	298	275	340	312	234	179	173	215	179	179
3	231	2610	285	264	383	296	220	174	156	225	179	170
4	208	1080	262	271	379	272	216	170	138	220	156	170
5	239	428	257	257	348	292	207	347	124	234	138	161
6	234	466	252	243	324	288	216	283	119	211	133	156
7	229	457	239	239	307	285	551	197	115	207	119	151
8	202	467	229	239	311	255	1540	174	106	353	110	147
9	197	457	234	225	276	235	573	161	106	428	106	138
10	197	551	234	211	271	302	251	161	229	2210	96.4	138
11	197	441	289	211	317	340	283	161	865	772	91.8	138
12	188	404	321	248	302	302	300	174	288	290	---	174
13	202	397	306	161	268	289	304	349	151	283	87.2	174
14	560	382	264	197	275	275	304	253	161	275	8550	165
15	499	385	257	234	271	259	294	207	142	252	5950	165
16	332	373	225	220	360	328	268	179	113	225	688	156
17	257	373	234	216	332	389	262	165	129	202	400	151
18	220	316	234	207	348	407	243	151	101	188	350	147
19	211	363	229	207	355	323	220	170	106	197	337	133
20	197	350	193	207	386	292	211	151	106	184	305	129
21	188	350	193	197	389	251	202	156	514	174	287	133
22	193	333	202	193	379	266	197	185	9370	161	267	138
23	137	349	211	125	356	197	207	262	1780	151	264	---
24	354	340	211	193	366	211	207	198	499	1420	242	124
25	683	330	207	193	394	229	202	165	442	1750	243	119
26	408	321	202	193	339	225	197	142	359	754	234	115
27	280	317	211	193	308	312	234	133	340	232	229	115
28	288	317	188	193	305	298	275	133	329	181	225	115
29	289	308	211	193	---	294	252	314	304	199	216	110
30	344	---	225	437	---	246	207	726	275	211	207	110
31	409	---	252	348	---	252	---	286	---	179	197	---
MONTH	283	611	241	227	333	285	304	216	594	415	692	145

07303500 ELM FORK OF NORTH FORK RED RIVER NEAR MANGUM, OKLA.--Continued

DISSOLVED CHLORIDE (CL), MG/L, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5100	2500	4300	4400	3600	3000	4300	4600	2200	3900	4900	5600
2	5600	270	4300	3800	3300	3100	4400	5000	3700	3200	5100	5300
3	2800	540	4400	3500	2500	3200	4400	5100	4500	4500	4800	5600
4	2800	590	4300	3900	2400	2800	3900	5300	5100	4900	5200	5700
5	6600	1200	4100	4000	2800	3200	4000	2100	5100	5200	5300	5700
6	6800	1900	4100	4000	3400	3200	4600	3200	4800	5100	5400	5900
7	6800	2200	4200	4000	3600	3600	5500	5000	5700	5200	5900	6000
8	7400	2200	4300	4100	3700	3700	2000	5000	5300	5600	5800	6100
9	7200	2200	4600	4400	3500	3400	1900	5000	5800	2300	6500	6200
10	7100	2200	4300	4300	3300	3700	1600	5400	4000	3400	5800	6300
11	7100	2200	4200	4400	3900	4000	2700	5700	2200	240	5900	6400
12	7000	2500	3900	4600	3500	3600	3200	5700	1800	1000	---	6400
13	7000	2800	4500	5000	3400	3700	3200	4100	2700	2800	5800	5900
14	4300	3000	3700	4600	3900	3800	3200	3000	3900	4000	710	5600
15	2000	3200	3900	5400	3900	3700	3600	3700	4700	4800	240	6500
16	3200	3200	4400	4600	3400	3400	3700	4600	3200	5100	510	7000
17	4700	3300	4600	4300	3100	2900	3900	5200	5300	5500	1400	7200
18	5200	3400	4600	4400	3400	2400	3900	5300	3400	5800	2000	7300
19	5500	3500	4800	4500	2800	2400	4500	5400	6100	5500	2300	7200
20	5900	3600	4400	4700	2200	3300	4600	5200	6800	5300	2700	7100
21	6100	3700	4500	4700	1800	3200	4700	6000	6800	5800	3000	6900
22	5600	3700	4900	4900	2400	4000	4800	2100	960	6100	3200	6900
23	1400	3800	4700	2000	2300	2500	4600	4300	390	6200	3500	---
24	1700	3900	4600	4900	2200	3400	4800	3200	710	56	3700	7200
25	1800	3900	4700	4900	1800	4600	4800	4500	1400	160	3900	7200
26	2100	4100	4700	5000	2100	4200	4800	5300	2000	1600	4100	7300
27	3000	4100	4800	5000	2300	3900	4800	5600	2300	620	4000	7100
28	3400	4100	4600	4800	2600	3600	3100	5700	2800	2300	4400	7000
29	4300	4100	4600	5000	---	3900	4900	2300	3400	3700	4500	7200
30	2600	---	4400	3200	---	3600	4000	3000	3400	4700	4800	7300
31	1200	---	4200	2700	---	4000	---	980	---	5100	5000	---
MONTH	4600	2800	4400	4300	3000	3500	3900	4400	3700	3900	4000	6500

DISSOLVED CHLORIDE (CL), TONS PER DAY, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	909	837	766	677	778	648	615	497	327	621	490	635
2	968	2080	755	616	748	644	606	526	400	458	537	558
3	461	2070	737	576	736	631	570	523	413	595	505	559
4	416	922	662	621	700	544	495	529	413	635	477	569
5	927	583	620	605	696	622	486	607	372	716	429	539
6	936	805	609	572	734	613	584	605	337	633	423	542
7	918	838	590	562	690	642	1780	580	385	632	414	535
8	879	855	580	576	719	589	2810	513	329	1160	376	527
9	836	838	633	582	605	532	990	472	360	820	404	502
10	824	1010	592	534	597	699	406	510	540	5000	329	510
11	824	808	714	546	727	799	547	539	1590	371	319	518
12	775	776	737	671	661	680	639	585	471	354	---	657
13	832	794	814	472	569	669	648	841	313	567	298	605
14	1420	818	609	534	632	616	648	543	369	648	8320	544
15	907	821	590	744	621	599	661	480	393	713	2920	632
16	708	795	582	596	817	744	619	484	242	675	532	643
17	711	820	633	546	686	806	600	505	401	653	609	642
18	674	716	633	535	789	752	558	472	229	642	637	631
19	683	794	648	547	711	596	583	539	379	639	646	564
20	685	787	499	571	707	642	571	463	422	572	634	537
21	675	809	510	546	700	536	558	551	2060	595	616	540
22	635	769	582	556	758	626	557	323	11200	576	570	559
23	208	780	584	227	683	378	559	662	1180	552	576	---
24	601	779	571	556	671	477	583	423	485	204	559	525
25	1230	758	571	556	710	621	570	437	665	622	558	505
26	714	775	558	567	646	556	557	444	653	1240	565	493
27	599	764	596	567	590	716	661	438	652	206	540	479
28	652	764	509	544	611	671	569	446	658	348	582	472
29	731	742	571	567	---	674	728	602	688	460	571	467
30	688	---	582	933	---	554	486	1560	624	584	583	473
31	557	---	624	671	---	594	---	347	---	537	580	---
MONTH	761	886	621	580	689	628	708	550	918	743	853	550

07303500 ELM FORK OF NORTH FORK RED RIVER NEAR MANGUM, OKLA.--Continued

DISSOLVED SOLIDS (RESIDUE AT 180 DEG. C), MG/L, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11200	6320	9570	9870	8300	7110	9640	10200	5620	8970	10800	12200
2	12100	1350	9640	8750	7780	7330	9940	10900	8450	7480	11200	11700
3	6740	2360	9940	8150	6160	7630	9940	11200	10100	10000	10700	12100
4	6890	2440	9640	8900	6130	6890	8820	11500	11200	10800	11400	12200
5	14000	3590	9270	9120	6790	7630	9050	5380	11100	11300	11700	12400
6	14400	4790	9270	9120	7850	7630	10300	7560	10600	11100	11800	12700
7	14500	5460	9420	9120	8300	8380	11900	11000	12400	11400	12600	12800
8	15500	5430	9570	9340	8520	8520	5010	10900	11500	12200	12500	13100
9	15200	5590	10200	9790	8150	7930	4850	10900	12500	5870	13900	13200
10	15000	5590	9720	9720	7710	8520	4280	11700	9120	7930	12500	13400
11	14900	5570	9490	9940	8820	9120	6650	12200	5610	1220	12600	13700
12	14900	6150	8820	10200	8150	8300	7480	12300	4710	3230	---	13700
13	14800	6870	10100	10900	8000	8600	7480	9270	6540	6830	12500	12700
14	9640	7180	8520	10200	8820	8750	7480	7180	8900	9120	2660	12100
15	4970	7630	8820	11700	8970	8600	8300	8600	10400	10500	1220	13900
16	7630	7480	9870	10200	7930	7930	8600	10200	7630	11200	2220	14800
17	10400	7780	10300	9570	7410	6960	8970	11400	11600	11900	3890	15200
18	11400	7850	10200	9870	7850	5960	8900	11700	7850	12500	5050	15400
19	12000	8150	10500	10000	6860	6050	10100	11800	13100	11900	5840	15200
20	12800	8300	9940	10400	5630	7710	10200	11400	14400	11600	6610	15000
21	13100	8450	10100	10500	4600	7630	10400	12900	14300	12500	7180	14600
22	12100	8520	10800	10800	5900	9050	10500	5340	3120	13100	7630	14600
23	3840	8670	10400	4950	5770	6280	10200	9640	1780	13300	8150	---
24	4380	8900	10300	10800	5540	7850	10600	7480	2670	546	8600	15100
25	4550	8970	10500	10800	4640	10200	10600	10100	3910	937	8970	15200
26	5320	9200	10400	10900	5200	9420	10500	11600	5000	4200	9270	15300
27	7260	9270	10500	11000	5780	8900	10600	12100	5800	2500	9050	15000
28	7930	9270	10300	10700	6410	8380	7410	12200	6780	5770	9790	14800
29	9720	9340	10200	11100	---	8970	10800	5740	7930	8600	10100	15100
30	6440	---	9870	7630	---	8380	9050	7110	7930	10500	10500	15300
31	3600	---	9490	6650	---	9120	---	3160	---	11100	11100	---
MONTH	10230	6770	9860	9700	7070	8060	8950	9830	8420	8710	9070	13880

DISSOLVED SOLIDS (TONS PER DAY), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2000	2120	1710	1520	1790	1540	1380	1100	835	1430	1080	1380
2	2090	10400	1690	1420	1760	1520	1370	1150	913	1070	1180	1230
3	1110	9050	1660	1340	1610	1500	1290	1150	927	1320	1130	1210
4	1020	3810	1480	1420	1790	1340	1120	1150	907	1400	1050	1220
5	1970	1740	1400	1380	1690	1480	1100	1550	809	1560	948	1170
6	1980	2030	1380	1310	1700	1460	1310	1430	744	1380	924	1170
7	1960	2080	1320	1280	1590	1490	3860	1280	837	1390	885	1140
8	1840	2110	1290	1310	1660	1360	7030	1120	714	2540	810	1130
9	1760	2130	1400	1300	1410	1240	2530	1030	776	2090	863	1070
10	1740	2570	1340	1210	1390	1610	1090	1110	1230	11700	709	1090
11	1730	2050	1610	1230	1640	1820	1350	1150	4040	1880	680	1110
12	1650	1910	1670	1490	1540	1570	1490	1260	1230	1140	---	1410
13	1760	1950	1830	1030	1340	1560	1510	1900	759	1380	641	1300
14	3180	1960	1400	1180	1430	1420	1510	1300	841	1460	31200	1180
15	2250	1960	1330	1610	1430	1390	1520	1110	870	1560	14800	1350
16	1690	1860	1310	1320	1910	1730	1440	1070	577	1480	2310	1360
17	1570	1930	1420	1210	1640	1940	1380	1110	877	1410	1690	1350
18	1480	1650	1400	1200	1620	1870	1270	1040	530	1380	1610	1330
19	1490	1850	1420	1220	1740	1500	1310	1180	814	1380	1640	1190
20	1490	1820	1130	1260	1810	1500	1270	1020	894	1250	1550	1130
21	1450	1850	1150	1220	1790	1280	1240	1180	4320	1280	1470	1140
22	1370	1770	1280	1220	1660	1420	1220	822	36600	1240	1360	1180
23	570	1780	1290	561	1710	950	1240	1480	5380	1190	1340	---
24	1550	1780	1280	1220	1690	1100	1290	990	1620	1990	1300	1100
25	3110	1740	1280	1220	1830	1380	1260	982	1860	3640	1280	1070
26	1810	1740	1240	1240	1600	1250	1220	971	1630	3270	1280	1030
27	1450	1730	1300	1250	1480	1630	1460	947	1640	830	1220	1010
28	1520	1730	1140	1210	1510	1560	1360	955	1590	872	1300	999
29	1650	1690	1270	1260	---	1550	1600	1500	1610	1070	1280	978
30	1700	---	1310	2220	---	1290	1100	3690	1460	1300	1280	991
31	1670	---	1410	1650	---	1350	---	1120	---	1170	1290	---
MONTH	1730	2510	1390	1310	1660	1470	1640	1250	2600	1870	2670	1170

07303500 ELM FORK OF NORTH FORK RED RIVER NEAR MANGUM, OKLA.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15800	9240	13600	14000	11900	10300	13700	14500	8280	12800	15200	17100
2	17000	1990	13700	12500	11200	10600	14100	15400	12100	10800	15800	16400
3	9800	3470	14100	11700	9020	11000	14100	15800	14300	14200	15100	17000
4	10000	3600	13700	12700	8980	10000	12600	16200	15800	15200	16100	17200
5	19500	5290	13200	13000	9870	11000	12900	7920	15700	15900	16400	17400
6	20100	7050	13200	13000	11300	11000	14600	10900	15000	15700	16600	17800
7	20200	8050	13400	13000	11900	12000	16700	15500	17400	16100	17700	18000
8	21600	8000	13600	13300	12200	12200	7380	15400	16200	17100	17500	18300
9	21100	8240	14500	13900	11700	11400	7140	15400	17600	8640	19400	18500
10	20900	8230	13800	13800	11100	12200	6310	16500	13000	11400	17500	18800
11	20800	8210	13500	14100	12600	13000	9680	17200	8270	1800	17700	19200
12	20700	9010	12600	14500	11700	11900	10600	17300	6940	4760	---	19200
13	20600	9960	14300	15400	11500	12300	10800	13200	9530	9920	17600	17600
14	13700	10400	12200	14500	12600	12500	10800	10400	12700	13000	3920	17000
15	7320	11000	12600	16500	12800	12300	11900	12300	14700	14900	1790	19400
16	11000	10800	14000	14400	11400	11400	12300	14500	11000	15800	3270	20600
17	14700	11200	14600	13600	10700	10100	12800	16000	16300	16800	5730	21100
18	16000	11300	14500	14000	11300	8750	12700	16400	11300	17500	7440	21400
19	16900	11700	14900	14200	9960	8880	14300	16600	18400	16700	8600	21200
20	17900	11900	14100	14700	8290	11100	14400	16000	20100	16300	9630	20900
21	18300	12100	14300	14800	6770	11000	14700	18100	20000	17600	10400	20400
22	17000	12200	15200	15300	8670	12900	14900	7860	4590	18400	11000	20400
23	5660	12400	14700	7290	8500	9190	14500	13700	2620	18600	11700	---
24	6450	12700	14600	15300	8160	11300	15000	10800	3930	805	12300	21000
25	6700	12800	14800	15200	6840	14400	15000	14300	5760	1380	12600	21200
26	7830	13100	14700	15400	7660	13400	14900	16300	7360	6190	13200	21300
27	10500	13200	14900	15500	8510	12700	15000	17000	8540	3680	12900	20900
28	11400	13200	14600	15100	9360	12000	10700	17200	9860	8500	13900	20600
29	13800	13300	14400	15600	---	12800	15300	8460	11400	12300	14300	21000
30	9400	---	14000	11000	---	12000	12900	10300	11400	14800	14900	21300
31	5310	---	13500	9680	---	13000	---	4660	---	15700	15600	---
MONTH	14450	9780	13990	13770	10230	11570	12760	13940	12000	12360	12870	19390

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24.0	19.0	6.5	7.5	---	17.5	20.0	20.0	23.0	27.0	23.0	27.5
2	25.0	12.0	6.0	8.0	7.0	15.0	15.5	21.0	24.0	25.0	24.5	31.5
3	24.5	17.0	9.5	---	7.0	7.5	17.0	25.0	22.0	24.0	24.0	31.5
4	24.0	14.5	9.0	5.5	7.5	15.5	18.5	21.0	26.0	23.5	23.5	30.0
5	21.0	15.5	12.0	8.0	6.0	18.0	22.0	22.0	27.0	32.5	33.0	30.0
6	18.0	14.5	9.5	9.5	3.5	20.0	15.0	22.5	27.5	31.5	34.0	24.5
7	17.0	13.0	---	11.0	7.0	15.5	13.5	19.5	21.5	---	32.0	29.5
8	24.5	12.5	8.0	11.0	4.0	10.0	15.0	20.5	25.5	27.5	32.5	29.0
9	21.5	12.5	7.0	11.5	1.0	8.0	17.0	22.0	22.5	31.5	32.5	29.5
10	25.0	15.5	6.5	7.5	10.0	8.0	12.5	22.0	21.5	27.5	30.0	30.0
11	20.0	15.0	9.0	7.5	12.5	7.5	11.0	22.0	23.5	27.0	31.5	29.0
12	25.5	14.0	6.0	3.0	13.0	8.0	10.0	21.5	20.5	28.0	---	17.0
13	19.0	13.0	9.0	7.0	14.5	12.5	11.0	21.0	22.0	27.5	30.0	17.0
14	13.5	12.0	8.0	6.0	13.5	13.5	17.0	18.5	24.5	26.5	23.0	16.0
15	17.0	10.0	7.0	9.5	5.0	7.5	18.0	22.5	23.0	31.0	24.5	23.0
16	---	13.0	8.0	8.0	6.5	12.0	19.0	25.5	25.5	30.5	26.5	24.5
17	23.5	11.5	9.0	7.0	6.5	13.5	21.5	22.5	24.5	30.0	30.5	29.5
18	24.5	13.5	9.0	10.5	5.5	17.0	22.0	23.5	25.5	30.0	31.0	28.0
19	22.0	15.5	8.0	9.0	8.5	20.5	17.5	22.0	26.0	27.0	31.0	24.5
20	22.0	14.0	9.0	9.0	11.0	13.5	18.0	24.5	26.0	31.0	30.5	23.5
21	18.0	16.0	10.0	7.5	9.0	19.0	16.5	22.5	21.0	32.5	32.0	19.0
22	17.5	13.5	11.5	9.0	---	20.5	21.0	21.5	29.5	33.0	32.0	20.0
23	20.0	16.0	10.5	11.0	4.0	---	22.5	21.0	24.5	30.5	32.5	---
24	17.0	12.0	5.0	13.5	11.5	17.5	23.5	22.0	28.0	21.5	31.0	20.0
25	20.0	12.0	5.0	14.0	12.5	17.5	21.5	24.5	29.0	23.0	30.5	18.0
26	18.0	12.5	4.0	12.0	12.5	12.0	20.0	24.5	24.5	23.0	31.0	17.5
27	18.0	11.5	8.0	12.5	13.5	15.0	21.0	22.0	24.0	30.0	25.0	22.0
28	20.0	11.0	9.0	7.0	16.5	8.0	19.0	22.5	24.5	32.0	30.0	22.5
29	21.5	6.5	10.0	8.0	---	6.0	21.0	24.0	28.0	34.0	31.0	25.0
30	16.0	---	5.0	6.0	---	14.5	22.0	20.0	34.5	28.5	27.0	25.0
31	18.0	---	8.0	6.5	---	18.0	---	22.0	---	24.5	32.5	---
MONTH	20.5	13.5	8.0	9.0	9.0	13.5	18.0	22.0	25.0	28.5	29.5	24.5

07304500 ELK CREEK NEAR HOBART, OKLA.

LOCATION.--Lat 34°54'51", long 99°06'49", in NE 1/4 NE 1/4, sec.17, T.5 N., R.18 W., Kiowa County, at county road bridge, 11 mi (17.7 km) downstream from Little Elk Creek, 11.7 mi (18.8 km) south of Hobart, and 1.2 mi (1.9 km) west of Hobart.

DRAINAGE AREA.--549 mi^2 (1,422 km^2).

PERIOD OF RECORD.--Chemical analyses: October 1949 to September 1951, water years 1957-58 (partial-record station), October 1958 to September 1963, November 1969 to current year.
Water temperatures: October 1949 to September 1951, October 1958 to September 1961, November 1969 to current year.
Sediment records: December 1958 to September 1961.

EXTREMES.--Current year.--Specific conductance: Maximum daily, 2,140 micromhos/cm Aug. 27; minimum daily, 206 micromhos/cm Oct. 31.
Water temperatures: Maximum, 26.0°C July 1, 5, 10; minimum, freezing point on Jan. 11-12.

Period of record.--Specific conductance: Maximum daily, 3,100 micromhos/cm Nov. 27, 1958; minimum, 153 micromhos/cm Sept. 5, 1971.
Water temperatures: Maximum, 35.0°C July 8, 1951; minimum, freezing point on many days during winter months.

REMARKS.--M=Presence of material verified but not quantified; B=Results based on colony count outside the acceptable range (non-ideal colony count).

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	DIS-CHARGE (CFS)	INSTAN-TANEOUS DIS-CHARGE (CFS)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	ALKA-LINITY AS CACO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)
OCT.												
01-07	--	11	--	94	42	68	--	275	0	226	230	60
08-24	--	18	--	--	70	99	--	386	0	317	310	81
25-30	--	136	--	49	19	31	--	139	0	114	98	34
31...	0830	--	1500	23	6.3	9.6	--	--	--	--	22	10
NOV.												
01-04	--	734	--	39	10	18	5.7	120	0	98	49	25
05-09	--	234	--	55	24	32	5.5	164	0	135	120	32
10-16	--	108	--	99	50	65	5.5	306	0	251	250	67
17-30	--	51	--	130	76	85	4.5	436	0	358	320	79
DEC.												
01-04	--	40	--	110	71	82	4.1	362	14	337	310	77
05-16	--	46	--	--	84	95	4.0	418	0	343	370	91
17-31	--	46	--	140	86	100	4.0	383	26	357	410	92
JAN.												
01-12	--	56	--	140	81	--	5.0	396	0	325	400	99
13-15	--	39	--	110	63	74	4.8	369	0	303	280	62
16-31	--	53	--	140	81	100	4.3	436	0	358	380	86
FEB.												
01-05	--	264	--	82	42	70	6.1	--	--	--	220	89
06-20	--	84	--	140	87	110	5.2	385	0	316	440	110
21-28	--	365	--	82	45	61	5.1	--	--	--	200	74
MAR.												
01-16	--	125	--	110	72	85	4.3	394	0	323	320	72
17-18	--	264	--	94	49	65	5.5	263	0	216	270	65
19-27	--	111	--	130	74	85	4.6	409	0	335	340	72
28-31	--	186	--	100	56	71	5.3	308	0	253	270	66
APR.												
01-08	--	86	--	130	83	94	4.2	435	0	357	410	83
09-13	--	174	--	83	49	59	6.1	294	0	241	230	44
14-30	--	110	--	--	76	95	4.8	429	0	352	370	79
MAY												
01-04	--	120	--	110	64	86	5.5	386	0	317	310	67
05-07	--	127	--	73	47	58	5.6	310	0	254	200	42
08-12	--	110	--	--	76	85	5.6	406	0	333	310	64
13-20	--	147	--	67	42	59	6.3	312	0	256	140	48
21-29	--	70	--	94	60	77	6.0	352	0	289	240	70
30-31	--	637	--	58	29	43	7.2	173	0	142	150	--
JUNE												
01-04	--	124	--	61	35	44	6.0	254	0	208	130	35
05-10	--	74	--	78	46	58	5.7	315	0	258	180	49
11-14	--	272	--	61	26	34	7.0	208	0	171	130	24
15-21	--	45	--	73	49	53	5.9	298	0	244	180	45
22...	--	73	--	41	12	23	6.3	--	--	--	51	38
23-26	--	138	--	61	30	39	7.9	171	0	140	160	39
27-30	--	43	--	96	51	68	7.0	306	0	251	250	64
JULY												
16...	0825	--	26	120	59	87	7.0	--	--	--	320	84
22...	0745	--	18	140	78	110	6.7	338	0	277	490	97
25...	0820	--	8670	28	6.8	--	5.6	82	0	67	33	14
AUG.												
15...	0815	--	450	62	22	40	6.4	145	0	119	140	--
21...	0738	--	93	120	62	100	5.8	337	0	276	330	110
27...	0820	46	--	140	84	--	6.2	358	0	294	530	240
SEP.												
07...	0830	--	28	150	91	150	4.2	392	0	322	540	140
15...	0825	--	35	130	77	120	5.2	354	14	314	410	110
30...	0812	--	24	160	78	130	5.9	447	0	367	470	120

07304500 ELK CREEK NEAR HOBART, OKLA.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	CARBON DIOXIDE (CO2) (MG/L)
OCT.											
01-07	1.6	687	.93	20.4	410	180	--	1.5	1020	8.2	2.8
08-24	1.2	943	1.28	45.8	--	--	--	--	1340	8.2	3.9
25-30	.90	337	.46	124	200	87	--	1.0	543	7.8	3.5
31...	.66	135	.18	547	83	--	--	.5	206	7.9	--
NOV.											
01-04	--	237	.32	470	140	40	21	.7	364	8.0	1.9
05-09	--	377	.51	238	240	100	22	.9	580	8.3	1.3
10-16	--	746	1.01	218	450	200	24	1.3	--	8.2	3.1
17-30	--	977	1.33	135	640	280	22	1.5	1380	8.3	3.5
DEC.											
01-04	--	924	1.26	99.8	570	230	24	1.5	1320	8.5	2.1
05-16	--	1080	--	134	--	--	--	--	1490	8.4	2.7
17-31	--	1120	1.52	139	700	350	24	1.6	1520	8.5	2.2
JAN.											
01-12	--	1140	--	172	680	360	--	--	1560	8.2	4.0
13-15	--	819	1.11	86.2	530	230	23	1.4	1180	8.2	3.7
16-31	--	1100	1.50	157	680	330	24	1.7	1520	8.3	3.5
FEB.											
01-05	--	667	.91	475	380	--	28	1.6	1010	7.8	--
06-20	--	1150	1.56	261	710	390	25	1.8	1590	7.9	7.8
21-28	--	642	.87	633	390	--	25	1.3	973	7.9	--
MAR.											
01-16	--	958	1.30	323	570	250	24	1.5	1350	7.8	10
17-18	--	733	1.00	522	440	220	24	1.4	1080	7.7	8.4
19-27	--	987	1.34	296	630	290	23	1.5	1390	8.0	6.5
28-31	--	803	1.09	403	480	230	24	1.4	1170	7.9	6.2
APR.											
01-08	--	1100	1.50	255	670	310	23	1.6	1500	8.1	5.5
09-13	--	680	.92	319	410	170	24	1.3	997	7.8	7.5
14-30	--	1040	--	309	--	--	--	--	1440	8.2	4.3
MAY											
01-04	--	895	1.22	290	540	220	26	1.6	1270	7.9	7.8
05-07	--	612	.83	210	380	120	25	1.3	930	8.2	3.1
08-12	--	888	--	264	--	--	--	--	1280	8.1	5.2
13-20	--	542	.74	215	340	84	27	1.4	665	8.1	4.0
21-29	--	763	1.04	144	480	190	26	1.5	1130	8.2	3.6
30-31	--	476	.65	819	260	120	26	1.2	728	8.0	2.8
JUNE											
01-04	--	469	.64	157	300	88	24	1.1	742	7.7	8.1
05-10	--	613	.83	122	390	130	24	1.3	938	7.8	8.0
11-14	--	427	.58	314	260	89	22	.9	664	7.9	4.2
15-21	--	599	.81	72.8	380	140	23	1.2	916	8.1	3.8
22...	--	241	.33	47.5	150	--	24	.8	399	7.4	--
23-26	--	447	.61	167	280	140	23	1.0	694	7.4	11
27-30	--	739	1.01	85.8	450	200	24	1.4	1100	7.8	7.8
JULY											
16...	1.5	911	1.24	64.0	540	--	26	1.6	1300	8.0	--
22...	--	--	--	--	670	390	26	1.8	--	8.0	5.4
25...	--	160	--	3750	98	31	--	--	234	8.0	1.6
AUG.											
15...	1.5	414	.56	503	250	130	26	1.1	668	8.0	2.6
21...	--	977	1.33	245	560	260	26	1.8	--	8.0	5.4
27...	--	1500	--	186	700	400	--	--	2140	7.8	9.1
SEP.											
07...	1.8	1420	1.93	107	750	430	30	2.4	1960	8.3	3.1
15...	2.3	1170	1.59	111	640	330	29	2.1	1640	8.5	1.9
30...	2.1	1360	1.85	88.1	720	350	28	2.1	1860	8.1	5.7

07304500 ELK CREEK NEAR HOBART, OKLA.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	868	317	1220	1570	894	1150	1460	1260	658	1350	681	1890
2	900	502	1350	1530	1090	1200	1540	1180	697	1420	740	1910
3	941	276	1350	1770	1190	1200	1330	1370	765	1470	793	1900
4	1030	354	1390	1330	818	1180	1370	1390	818	1460	899	1880
5	1080	499	1470	1640	1000	1270	1530	644	863	1520	974	1890
6	1160	611	1460	1600	1260	1350	1540	871	907	1490	1000	1900
7	1220	679	1500	1440	1380	1390	1560	981	950	1510	1050	1960
8	1290	432	1500	1610	1490	1370	1580	1160	997	1500	1080	1930
9	1350	704	1540	1610	1630	1400	1050	1280	1030	886	1130	1860
10	1380	901	1560	1610	1450	1460	859	1330	904	1100	1190	1900
11	1410	959	1430	1660	1740	1460	974	1370	704	428	1260	1940
12	1230	1040	1450	1460	1620	1460	1040	1340	584	833	1360	1930
13	1360	1110	1470	1200	1500	1520	1150	927	628	734	1490	1940
14	1340	1130	1460	1140	1630	1380	1290	927	711	1020	674	1920
15	1340	1220	1550	1230	1620	1460	1440	699	764	1050	668	1640
16	1380	1230	1590	1400	1460	1500	1380	797	820	1300	1000	1660
17	1410	1310	1700	1490	1510	967	1390	841	856	1370	1190	1810
18	1390	1350	1620	1410	1610	1170	1380	909	901	1450	1440	1840
19	1380	1360	1540	1580	1660	1290	1400	958	956	1470	1480	1850
20	1330	1420	1530	1570	1720	1370	1430	837	1030	1500	1500	1860
21	1330	1470	1480	1600	928	1360	1410	1140	1060	1520	1430	1880
22	1360	1430	1560	1450	822	1360	1420	1170	399	1630	1560	1880
23	1320	1390	1520	1570	976	1360	1460	1100	617	1450	1770	1920
24	1320	1390	1560	1330	971	1410	1520	1120	717	271	1740	1910
25	627	1430	1540	1530	971	1420	1550	1050	847	234	1790	1860
26	504	1180	1220	1570	899	1420	1520	1120	595	306	1800	1820
27	686	1360	1380	1590	1040	1400	1450	1200	921	266	2140	1790
28	---	1420	1510	1590	1110	943	1470	1170	1110	484	1810	1830
29	402	1420	1550	1580	---	1050	1480	1090	1200	511	1820	1870
30	449	1440	1540	1590	---	1230	1460	956	1240	516	1850	1860
31	206	---	1630	1620	---	1350	---	570	---	668	1840	---
MONTH	1100	1040	1490	1510	1300	1320	1380	1060	842	1080	1330	1870

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16.0	14.0	1.5	3.0	5.0	8.0	9.5	17.0	19.0	26.0	25.0	25.0
2	16.5	16.0	1.5	3.0	5.0	8.5	8.5	17.5	19.0	24.5	24.0	24.0
3	17.0	16.5	2.0	2.0	5.0	8.0	7.0	17.5	21.0	25.0	24.0	24.0
4	17.0	14.0	2.5	3.0	5.0	6.0	9.0	18.0	20.5	25.0	24.0	24.0
5	17.0	12.0	4.0	3.5	5.0	7.0	12.0	17.5	22.0	26.0	24.0	24.0
6	18.5	11.5	6.0	3.0	2.0	8.5	12.5	20.0	23.5	25.0	24.0	23.0
7	15.0	12.0	5.0	3.5	1.0	9.5	13.5	18.5	23.0	25.0	24.0	21.0
8	15.0	11.0	5.0	4.5	3.0	8.0	13.0	18.0	24.0	24.0	24.0	21.0
9	16.5	11.0	2.5	4.0	0.5	7.0	15.0	19.0	23.0	24.0	24.0	22.0
10	17.0	12.0	4.0	5.0	1.0	7.0	14.0	20.0	20.5	26.0	24.0	24.0
11	17.0	11.0	4.0	3.5	2.0	6.5	12.0	19.5	19.0	24.0	24.0	24.0
12	19.5	10.0	4.0	0.0	4.0	5.5	12.5	20.5	19.0	24.0	24.0	20.0
13	18.5	10.0	4.5	0.0	5.0	4.0	12.0	19.5	20.5	23.0	24.0	16.0
14	18.5	9.0	4.0	0.5	7.0	4.5	11.5	18.5	21.5	23.0	22.0	15.5
15	14.0	8.0	4.0	1.0	5.0	6.0	13.0	17.0	22.0	23.0	24.0	15.0
16	13.0	8.0	5.0	1.5	3.0	5.5	15.0	17.5	23.0	23.5	24.5	16.0
17	14.0	9.0	5.0	2.5	2.0	7.0	17.0	18.0	24.0	24.0	24.5	18.5
18	15.0	9.5	4.0	2.5	2.0	8.0	20.0	19.0	24.0	24.0	25.0	20.0
19	14.5	10.0	3.0	3.0	2.0	9.5	15.5	20.0	24.0	24.5	25.0	20.0
20	14.5	9.0	3.5	2.5	3.0	15.0	15.5	20.5	24.0	23.0	25.0	17.0
21	14.5	9.0	5.0	3.5	6.0	13.0	15.5	21.0	24.0	25.0	25.0	17.5
22	15.0	9.0	4.0	2.0	3.0	15.0	17.0	23.0	18.5	24.5	25.5	15.0
23	15.0	10.0	4.0	3.0	2.0	13.5	18.0	20.5	21.0	25.0	25.0	15.0
24	16.0	9.5	4.0	4.0	2.0	13.0	19.0	20.5	23.0	23.0	25.0	16.0
25	15.5	8.0	2.0	4.5	3.0	10.0	20.0	20.5	23.0	22.0	25.0	15.0
26	15.0	7.0	3.0	5.0	4.5	10.0	21.0	22.0	23.0	23.0	25.0	14.5
27	16.0	7.0	2.5	6.0	5.0	12.0	20.5	21.0	24.5	25.0	24.0	15.0
28	---	6.5	3.0	5.0	5.5	9.5	16.5	20.0	24.0	24.0	25.0	16.0
29	16.0	5.0	4.0	6.0	---	7.0	17.5	19.0	25.0	25.0	25.5	17.0
30	17.5	2.0	4.0	6.0	---	5.0	17.0	19.0	25.0	24.0	24.0	17.0
31	15.0	---	3.0	5.0	---	6.0	---	18.0	---	24.5	25.0	---
MONTH	16.0	10.0	3.5	3.5	3.5	8.5	14.5	19.5	22.5	24.0	24.5	19.0

07305000 NORTH FORK RED RIVER NEAR HEADRICK, OKLA.

LOCATION.--Lat 34°38'04", long 99°05'47", in NW 1/4 NE 1/4 sec.21, T.2 N., R.18 W., Tillman County, at gaging station at bridge on U.S. Highway 62, 2.5 mi (4.0 km) east of Headrick, 12.9 mi (20.8 km) upstream from Otter Creek, and at mile 33.0 (53.1 km).

DRAINAGE AREA.--4,224 mi^2 (10,992 km^2), of which 399 mi^2 (1,033 km^2) is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: Water years 1957-59 (partial-record station), October 1959 to September 1963, July 1968 to current year.
Water temperatures: November 1959 to September 1963, July 1968 to current year.

EXTREMES, Current year.--Specific conductance: Maximum, 11,900 micromhos/cm Oct. 16; minimum, 706 micromhos/cm Nov. 4.
Water temperatures: Maximum, 34.0°C June 5; minimum, freezing point on several days during December and January.

Period of record.--Specific conductance: Maximum, 23,300 micromhos/cm June 8, 1971; minimum, 493 micromhos/cm Sept. 24, 1970, Sept. 8, 1973.
Water temperatures: Maximum, 38.0°C July 19, 1969; minimum, freezing point on many days during winter months.

REMARKS.--Continuous monitor records for specific conductance and water temperature are collected for this station. Records of maximum and minimum specific conductance values are available in district office in Oklahoma City, Okla. Temperature record for Oct. 1-Feb. 24, May 10-June 4, July 15-22, 25-26, Aug. 5-Sept. 30 was poor. Once daily values were used in their place.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)
OCT.											
05...	1040	98	--	340	67	1500	--	167	0	137	780
08...	1100	86	9.3	400	82	1800	12	169	0	139	900
15...	0900	70	--	410	100	2200	--	193	0	158	970
26...	0850	604	--	87	23	290	--	108	0	89	180
NOV.											
04...	0940	6490	--	57	9.7	83	--	113	0	93	110
13...	1200	304	10	290	70	740	5.3	216	0	177	730
15...	0930	240	--	330	71	900	--	241	0	198	900
25...	0845	178	--	370	97	--	10	195	0	160	980
DEC.											
05...	0830	98	--	380	100	1400	7.6	285	0	234	1100
10...	1200	132	9.0	380	110	1500	11	262	0	215	980
15...	0900	150	--	360	110	1300	9.8	265	0	217	1100
25...	0920	103	--	340	120	1600	10	144	0	118	1100
JAN.											
05...	0850	185	--	240	77	830	7.8	203	0	167	720
15...	1005	103	--	330	110	1500	8.9	212	0	174	1000
25...	0830	88	--	330	--	1500	8.5	166	0	136	970
29...	1200	86	1.6	350	--	1600	9.4	235	0	193	1100
FEB.											
05...	1000	663	--	120	43	330	6.0	135	0	111	330
15...	0945	164	--	--	110	1200	8.6	245	0	201	950
25...	1100	691	--	120	42	290	6.0	138	0	113	330
25...	1330	618	6.3	110	39	250	5.6	128	0	105	310
MAR.											
05...	1100	221	--	260	100	710	7.4	287	0	235	720
15...	1000	207	--	300	110	900	7.9	269	0	221	840
25...	0830	182	--	270	100	960	8.3	268	0	220	840
25...	1200	182	6.3	290	100	1000	8.0	277	0	227	850
APR.											
05...	0900	132	--	290	100	1100	8.6	273	0	224	850
15...	0910	218	--	290	92	850	9.0	278	0	228	840
24...	1500	115	5.3	290	100	1200	11	225	0	185	850
25...	0826	106	--	310	110	1200	9.9	242	0	198	1000
MAY											
05...	0815	336	--	210	87	710	7.6	309	0	253	640
15...	0800	484	--	110	48	390	7.3	233	0	191	280
25...	0720	210	--	230	100	830	9.7	272	0	223	640
28...	1200	126	8.1	270	76	990	13	258	--	212	790
JUNE											
05...	0800	178	--	190	55	560	9.0	238	0	195	500
15...	0800	225	--	210	50	390	9.4	183	0	150	580
24...	1400	2340	6.9	270	27	290	9.9	98	0	80	690
25...	1200	869	--	240	26	250	9.1	98	0	80	610
JULY											
05...	0800	126	--	320	74	1200	11	153	0	126	670
13...	0810	574	--	130	19	120	8.1	103	0	84	300
23...	1030	72	8.8	230	77	1100	12	172	0	141	680
25...	0700	7840	--	40	8.2	54	5.5	107	0	88	44

07305000 NORTH FORK RED RIVER NEAR HEADRICK, OKLA.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)
AUG.											
05...	1025	369	--	160	53	530	7.9	244	0	200	440
15...	0745	2790	--	79	19	180	7.2	151	0	124	170
25...	0745	210	--	270	74	890	10	181	0	148	740
30...	1300	164	11	260	96	1000	9.4	191	0	157	820
SEP.											
05...	0815	134	--	140	78	1200	11	196	0	161	790
15...	0830	148	--	--	--	--	--	171	0	140	740
17...	1400	123	9.5	270	180	--	9.3	238	--	195	780
25...	0900	24	--	240	90	1500	11	242	0	198	820

DATE	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	DISSOLVED NITRITE PLUS NITRATE (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL NITROGEN (NO3) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DISSOLVED SOLIDS (TONS PER AC-FT)
OCT.											
05...	2400	--	--	.29	--	--	--	--	5490	--	7.47
08...	3000	.3	.00	--	.58	.58	2.6	.07	6390	6290	8.69
15...	3600	--	--	.13	--	--	--	--	7530	--	10.2
28...	460	--	--	.97	--	--	--	--	1160	--	1.58
NOV.											
04...	100	--	--	1.1	--	--	--	--	447	--	.61
13...	1200	.1	.92	--	.66	1.6	7.0	.19	3350	3150	4.56
15...	1400	--	--	1.1	--	--	--	--	3960	--	5.39
25...	2100	--	--	--	.96	--	--	--	5190	--	7.06
DEC.											
05...	2200	--	--	--	--	--	--	--	5630	--	7.66
10...	2400	.4	1.2	--	.54	1.7	7.7	.08	5560	5520	7.56
15...	--	--	--	--	--	--	--	--	5410	--	7.36
25...	2600	--	--	--	--	--	--	--	5860	--	7.97
JAN.											
05...	1400	--	--	--	--	--	--	--	3430	--	4.66
15...	2400	--	--	--	--	--	--	--	5700	--	7.75
25...	2300	--	--	--	--	--	--	--	5660	--	7.70
29...	2600	.3	.60	--	.73	1.3	5.9	.02	5930	--	8.06
FEB.											
05...	550	--	--	--	--	--	--	--	1510	--	2.05
15...	1800	--	--	--	--	--	--	--	4720	--	--
25...	450	--	--	--	--	--	--	--	1390	--	1.89
25...	420	.2	.95	--	2.6	3.6	16	.48	1250	1200	1.70
MAR.											
05...	1100	--	--	--	--	--	--	--	3220	--	4.38
15...	1400	--	--	--	--	--	--	--	3930	--	5.34
25...	1500	--	--	--	--	--	--	--	4020	--	5.47
25...	1600	.6	1.1	--	.75	1.9	8.2	.10	4130	3990	5.62
APR.											
05...	1700	--	--	--	--	--	--	--	4360	--	5.93
15...	1300	--	--	--	--	--	--	--	3720	--	5.06
24...	1800	.4	.56	--	.95	1.5	6.7	.09	4820	4370	6.56
25...	1900	--	--	--	--	--	--	--	4940	--	6.72
MAY											
05...	1100	--	--	--	--	--	--	--	3150	--	4.28
15...	610	--	--	--	--	--	--	--	1620	--	2.20
25...	1400	--	--	--	--	--	--	--	3460	--	4.71
28...	1500	.4	.69	--	2.8	3.5	15	.16	4020	3780	5.47
JUNE											
05...	880	--	--	--	1.2	--	--	--	2410	--	3.28
15...	620	--	--	--	.47	--	--	--	2050	--	2.79
24...	440	.3	.44	--	2.6	3.0	13	.26	--	1780	2.60
25...	390	--	--	--	3.0	--	--	--	--	--	--
JULY											
05...	1900	--	.36	--	--	--	--	--	4650	--	6.32
13...	180	--	1.3	--	--	--	--	--	892	--	1.21
23...	1700	.4	.14	--	1.3	1.4	6.4	.09	3980	3890	5.41
25...	--	--	1.5	--	--	--	--	--	316	--	.43
AUG.											
05...	790	--	.78	--	--	--	--	--	2140	--	2.91
15...	260	--	--	1.4	--	--	--	--	834	--	1.13
25...	1400	--	--	.56	--	--	--	--	3800	--	5.17
30...	1600	.4	.01	--	.99	1.0	4.4	.08	4110	3890	5.59
SEP.											
05...	1700	--	.74	--	--	--	--	--	4400	--	5.98
15...	1700	--	1.0	--	--	--	--	--	4170	--	5.67
17...	1900	.3	.60	--	.83	1.4	6.3	.04	4580	--	6.23
25...	2300	--	.46	--	--	--	--	--	5350	--	7.28

07305000 NORTH FORK RED RIVER NEAR HEADRICK, OKLA.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	CARBON DIOXIDE (CO2) (MG/L)	TUR-BID-ITY (JTU)
OCT.										
05...	1450	1100	960	--	19	8460	8.2	--	1.7	--
08...	1480	1300	1200	74	21	--	7.7	17.0	5.4	20
15...	1420	1400	1300	--	25	11300	8.1	--	2.5	--
26...	1890	310	220	--	7.1	2000	7.6	--	4.3	--
NOV.										
04...	7830	180	90	--	2.7	706	7.8	--	2.9	--
13...	2750	1000	84	61	10	5340	8.2	12.0	2.2	40
15...	2570	1100	920	--	12	5840	8.2	--	2.4	--
25...	2490	1300	1200	--	--	7580	7.9	--	3.9	--
DEC.										
05...	1490	1400	1100	69	17	8310	8.2	--	2.9	--
10...	1980	1400	1200	70	17	--	8.5	4.5	1.3	3
15...	2190	1400	1100	67	15	7980	7.9	--	5.3	--
25...	1630	1300	1200	72	19	8740	8.3	--	1.2	--
JAN.										
05...	1710	920	750	66	12	5350	8.5	--	1.0	--
15...	1590	1300	1100	72	18	8510	8.6	--	.9	--
25...	1350	--	--	--	--	8440	8.8	--	.4	--
29...	1380	--	--	--	--	7000	8.3	--	1.9	4
FEB.										
05...	2700	480	370	60	6.6	2370	7.9	--	2.7	--
15...	2090	--	--	--	--	7000	7.8	--	6.2	--
25...	2590	470	360	57	5.8	2170	7.9	--	2.8	--
25...	2090	440	330	55	5.2	2200	7.6	5.0	5.1	700
MAR.										
05...	1920	1100	830	59	9.5	4790	8.1	--	3.6	--
15...	2200	1200	980	62	11	5770	8.0	--	4.3	--
25...	1980	1100	870	66	13	5930	8.2	--	2.7	--
25...	2030	1100	910	66	13	3500	7.5	--	14	45
APR.										
05...	1550	1100	910	68	14	6510	7.8	--	6.9	--
15...	2190	1100	880	62	11	5750	8.1	--	3.5	--
24...	1500	1100	950	69	16	800	8.2	27.0	2.3	20
25...	1410	1200	1000	66	15	7270	7.8	--	6.1	--
MAY										
05...	2860	880	630	63	10	4780	7.8	--	7.8	--
15...	2120	470	280	64	7.8	2700	7.8	--	5.9	--
25...	1960	990	760	64	12	5300	8.1	--	3.5	--
28...	1370	990	780	68	14	6370	8.4	21.0	1.6	56
JUNE										
05...	1160	700	510	63	9.2	3790	8.4	--	1.5	--
15...	1250	730	580	53	6.3	3080	8.2	--	1.8	--
24...	11200	790	710	44	4.5	2740	8.4	23.0	.6	560
25...	--	710	630	43	4.1	2380	7.7	--	3.1	--
JULY										
05...	1580	1100	980	70	16	6950	7.5	--	7.7	--
13...	1380	400	320	39	2.6	1340	7.2	--	10	--
23...	774	890	750	73	16	6250	--	25.0	--	29
25...	6690	130	46	46	2.0	5130	7.3	--	8.6	--
AUG.										
05...	2130	620	420	65	9.3	3400	8.2	--	2.5	--
15...	6280	280	150	58	4.7	1390	7.4	--	9.6	--
25...	2160	980	830	66	12	5720	7.2	--	18	--
30...	1820	1000	890	67	13	7500	7.8	30.0	4.8	9
SEP.										
05...	1590	670	510	79	20	--	8.2	--	2.0	--
15...	1670	--	--	--	--	6920	7.9	--	3.4	--
17...	1520	1400	1200	--	--	--	--	26.0	--	15
25...	347	970	770	77	21	--	7.8	--	6.1	--

07305000 NORTH FORK RED RIVER NEAR HEADRICK, OKLA.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	FECAL COLIFORM (COL. PER 100 ML)	STREPTOCOCCI (COLONIES PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)	SUSPENDED SEDIMENT (MG/L)	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM
OCT.									
08...	1100	86	9.4	104	82	57	5.0	42	98
NOV.									
13...	1200	304	9.5	96	--	--	6.0	259	89
DEC.									
10...	1200	132	13.5	113	811	20	3.8	--	--
FEB.									
25...	1330	618	12.5	106	--	--	24	1440	93
MAR.									
25...	1200	182	--	--	--	--	--	83	98
APR.									
24...	1500	115	13.0	173	290	280	--	92	91
MAY									
28...	1200	126	8.8	107	--	--	6.8	217	94
JUNE									
24...	1400	2340	7.4	92	--	--	--	1190	99
JULY									
23...	1030	72	8.2	106	850	453	--	--	--
AUG.									
30...	1300	164	9.0	125	694	838	10	435	1
SEP.									
17...	1400	123	9.9	130	--	220	--	--	--

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TOTAL IRON (FE) (UG/L)	DISSOLVED IRON (FE) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	SUSPENDED MANGANESE (MN) (UG/L)	DISSOLVED MANGANESE (MN) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	SUSPENDED ARSENIC (AS) (UG/L)	DISSOLVED ARSENIC (AS) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	SUSPENDED CADMIUM (CD) (UG/L)
NOV.												
13...	1200	304	4500	20	150	130	20	--	0	10	<10	<9
FEB.												
25...	1330	618	36000	130	760	720	40	24	22	2	<10	<10
MAY												
28...	1200	126	3300	80	180	120	60	7	3	4	10	2
AUG.												
30...	1300	164	810	100	60	--	30	4	0	4	<10	<10

DATE	DISSOLVED CADMIUM (CD) (UG/L)	TOTAL CHROMIUM (CR) (UG/L)	SUSPENDED CHROMIUM (CR) (UG/L)	DISSOLVED CHROMIUM (CR) (UG/L)	TOTAL COBALT (CO) (UG/L)	SUSPENDED COBALT (CO) (UG/L)	DISSOLVED COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)	SUSPENDED COPPER (CU) (UG/L)	DISSOLVED COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)
NOV.											
13...	1	0	0	0	0	0	0	20	12	8	100
FEB.											
25...	0	50	50	0	50	50	0	50	30	20	<100
MAY											
28...	8	10	10	0	<50	<50	0	50	0	50	<100
AUG.											
30...	0	20	--	20	100	--	0	30	--	4	100

DATE	SUSPENDED LEAD (PB) (UG/L)	DISSOLVED LEAD (PB) (UG/L)	TOTAL MERCURY (HG) (UG/L)	SUSPENDED MERCURY (HG) (UG/L)	DISSOLVED MERCURY (HG) (UG/L)	TOTAL SELENIUM (SE) (UG/L)	SUSPENDED SELENIUM (SE) (UG/L)	DISSOLVED SELENIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	SUSPENDED ZINC (ZN) (UG/L)	DISSOLVED ZINC (ZN) (UG/L)
NOV.											
13...	97	3	.0	.0	.0	2	0	2	80	30	50
FEB.											
25...	<98	2	.0	.0	.0	3	2	1	140	100	40
MAY											
28...	<86	14	.9	.7	.2	2	1	1	770	310	460
AUG.											
30...	--	1	--	--	.6	3	--	2	100	--	0

07305000 NORTH FORK RED RIVER NEAR HEADRICK, OKLA.--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

PHYTOPLANKTON

Date	Time	Organism	Count (cells/ml)	Percent of total	Sampling method
Oct. 8	1100	CHLOROPHYTA			Sediment sampler
		Chlorophyceae			
		Chlorococcales			
		Scenedesmaceae			
		Scenedesmus	350	3	
		Volvocales			
		Chlamydomonadaceae			
		Chlamydomonas	4,100	35	
		CHRYSOPHYTA			
		Bacillariophyceae			
		Centrales			
		Coxcinodiscaceae			
		Cyclotella	1,600	14	
		Melosira	170	1	
		Pennales			
		Fragilariaceae			
		Synedra	2,300	20	
		Naviculaceae			
		Navicula	86	1	
		Surirellaceae			
		Surirella	950	8	
		CYANOPHYTA			
		Myxophyceae			
		Chroococcales			
		Chroococcaceae			
		Anacystis	2,200	19	
		TOTAL	12,000		
Nov. 13	1200	CHLOROPHYTA			Sediment sampler
		Chlorophyceae			
		Chlorococcales			
		Scenedesmaceae			
		Scenedesmus	82	3	
		Scenedesmus	33	1	
		CHRYSOPHYTA			
		Bacillariophyceae			
		Centrales			
		Coscinodiscaceae			
		Cyclotella	300	12	
		Pennales			
		Fragilariaceae			
		Synedra	99	4	
		Naviculaceae			
		Navicula	33	1	
		NItzschiaceae			
		Nitzschia	66	3	
		CYANOPHYTA			
		Myxophyceae			
		Oscillatoriales			
		Oscillatoriaceae			
		Oscillatoria	1,800	75	
		TOTAL	2,400		
Dec. 10		CHLOROPHYTA			Sediment sampler
		Chlorophyceae			
		Chlorococcales			
		Scenedesmaceae			
		Actinastrum	4,400	81	
		Scenedesmus	94	2	
		CHRYSOPHYTA			
		Bacillariophyceae			
		Pennales			
		Fragilariaceae			
		Synedra	94	2	
		Naviculaceae			
		Navicula	520	9	
		Nitzschiaceae			
		NItzschia	94	2	
		CYANOPHYTA			
		Myxophyceae			
		Chroococcales			
		Chroococcaceae			
		Anacystis	190	3	

07305000 NORTH FORK RED RIVER NEAR HEADRICK, OKLA.--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

PHYTOPLANKTON

Date	Time	Organism	Count (cells/ml)	Percent of total	Sampling method
Dec. 10		PYRRHOPHYTA			Sediment sampler
		Dinophyceae			
		Peridiniales			
		Glenodiniaceae			
		Glenodinium	47	1	
		TOTAL	5,400		
Jan. 29	1200	CHLOROPHYTA			Sediment sampler
		Chlorophyceae			
		Chlorococcales			
		Occystaceae			
		Selenastrum	70	1	
		Treubaria	280	6	
		Scenedesmaceae			
		Scenedesmus	280	6	
		Volvocales			
		Chlamydomonadaceae			
		Chlamydomonas	140	3	
		CHRYSOPHYTA			
		Bacillariophyceae			
		Centrales			
		Coscinodiscaceae			
		Cyclotella	140	3	
		Pennales			
		Cymbellaceae			
		Cymbella	70	1	
		Naviculaceae			
		Amphiprora	140	3	
		Navicula	3,500	71	
		Nitzschiaceae			
		Nitzschia	140	3	
		Surirellaceae			
		Surirella	140	3	
		TOTAL	4,900		
Feb. 25		CHRYSOPHYTA			Sediment sampler
		Bacillariophyceae			
		Pennales			
		Naviculaceae			
		Navicula	2,00	89	
		Surirellaceae			
		Cymatopleura	240	11	
		TOTAL	2,200		
Mar. 25	1200	CHLOROPHYTA			Sediment sampler
		Chlorophyceae			
		Chlorococcales			
		Occystaceae			
		Ankistrodesmus	200	2	
		Volvocales			
		Chlamydomonadaceae			
		Chlamydomonas	3,500	42	
		CHRYSOPHYTA			
		Bacillariophyceae			
		Centrales			
		Coscinodiscaceae			
		Cyclotella	3,400	41	
		Pennales			
		Fragilariaceae			
		Synedra	98	1	
		Naviculaceae			
		Amphiprora	200	2	
		Navicula	690	8	
		Nitzschiaceae			
		Nitzschia	200	2	
		TOTAL	8,400		
Apr. 24	1500	CHLOROPHYTA			Sediment sampler
		Chlorophyceae			
		Chlorococcales			
		Occystaceae			
		Ankistrodesmus	220	1	
		Oocystis	890	4	
		Scenedesmaceae			
		Scenedesmus	2,700	12	
		CHRYSOPHYTA			
		Bacillariophyceae			
		Centrales			
		Coscinodiscaceae			
		Cyclotella	7,100	33	
		Melosira	1,300	6	

07305000 NORTH FORK RED RIVER NEAR HEADRICK, OKLA.--Continued

QUALITATIVE AND ASSOCIATED QUANTATATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

PHYTOPLANKTON

Date	Time	Organism	Count (cells/ml)	Percent of total	Sampling method
Apr. 24	1500	Pennales			Sediment sampler
		Naviculaceae			
		Amphiprora	220	1	
		Gyrosigma	220	1	
		Navicula	1,300	6	
		Nitzschiaceae			
		Nitzschia	7,300	34	
		Surirellaceae			
		Surirella	440	2	
		TOTAL	22,000		
May 28		CHLOROPHYTA			Sediment sampler
		Chlorophyceae			
		Chlorococcales			
		Scenedesmaceae			
		Scenedesmus	3,700	36	
		CHRYSOPHYTA			
		Bacillariophyceae			
		Centrales			
		Coscinodiscaceae			
		Cyclotella	270	3	
		Melosira	530	5	
		Pennales			
		Gomphonemataceae			
		Gomphonema	5,000	49	
		Naviculaceae			
		Navicula	530	5	
		Nitzschiaceae			
		Nitzschia	270	3	
		TOTAL	10,000		
May 28	1200	CHLOROPHYTA			Sediment sampler
		Chlorophyceae			
		Chlorococcales			
		Occystaceae			
		Ankistrodesmus	760	1	
		Scenedesmaceae			
		Scenedesmus	760	1	
		CHRYSOPHYTA			
		Bacillariophyceae			
		Centrales			
		Coscinodiscaceae			
		Cyclotella	34,000	43	
		Melosira	2,300	3	
		Pennales			
		Gomphonemataceae			
		Gomphonema	29,000	37	
		Naviculaceae			
		Navicula	1,500	2	
		Nitzschiaceae			
		Nitzschia	3,400	4	
		CYANOPHYTA			
		Myxophyceae			
		Chroococcales			
		Chroococcaceae			
		Anacystis	7,200	9	
		TOTAL	79,000		
June 24	1400	CHRYSOPHYTA			Sediment sampler
		Bacillariophyceae			
		Pennales			
		Naviculaceae			
		Navicula	300	86	
		Nitzschiaceae			
		Nitzschia			
		TOTAL	360		
Sep. 17	1400	CHLOROPHYTA			Sediment sampler
		Chlorophyceae			
		Chlorococcales			
		Coelastraceae			
		Coelastrum			
		Micractiniaceae			
		Micractinium			
		Occystaceae			
		Ankistrodesmus	390	1	
		Dictyosphaerium	2,000	8	
		Kirchneriella	260	1	
		Oocystis	2,000	8	

07305000 NORTH FORK RED RIVER NEAR HEADRICK, OKLA.--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

PHYTOPLANKTON

Date	Time	Organism	Count (cells/ml)	Percent of total	Sampling method
Sep. 17	1400	Scenedesmaceae		8	
		Actinastrum	520	2	
		Scenedesmus	1,000	4	
		CHRYSOPHYTA			
		Bacillariophyceae			
		Centrales			
		Coscinodiscaceae			
		Cyclotella	14,000	52	
		Pennales			
		Fragilariaceae			
		Synedra			
		Naviculaceae			
		Gyrosigma			
		Navicula			
		Nitzschiaceae			
		Nitzschia	650	2	
		CYANOPHYTA			
		Myxophyceae			
		Oscillatoriales			
		Nostocaceae			
		Anabaena			
		Oscillatoriaceae			
		Oscillatoria	5,800	22	
		TOTAL	27,000		

07305000 NORTH FORK RED RIVER NEAR HEADRICK, OKLA.--Continued

DISSOLVED SULFATE (SO4), MG/L, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	770	170	1000	1100	550	470	810	710	230	770	280	890
2	860	400	1000	990	280	510	800	900	370	790	280	920
3	930	520	1000	970	490	550	820	860	310	960	340	940
4	1000	90	1100	780	410	600	770	900	390	830	390	970
5	1100	430	1100	680	300	580	720	600	580	850	430	910
6	1100	280	1100	820	380	770	900	540	580	950	460	690
7	1200	320	1100	810	610	700	1000	710	640	980	440	920
8	1200	440	1100	930	610	720	960	710	600	1000	460	940
9	1300	360	1100	940	730	730	290	570	740	1000	480	960
10	1300	540	1000	---	700	760	720	690	520	960	500	970
11	1400	510	960	1000	740	770	390	920	480	1000	530	990
12	1400	620	1000	950	760	700	450	930	210	530	560	910
13	1400	920	1000	950	800	1000	620	520	720	180	580	920
14	1400	690	1000	950	840	770	690	880	430	250	560	830
15	1400	740	1000	1100	890	730	720	340	420	390	180	880
16	1500	760	1100	990	740	780	710	470	480	630	310	950
17	1500	830	1000	1000	790	600	600	470	550	730	220	920
18	930	860	980	1100	790	410	760	540	670	850	310	980
19	930	860	1000	1100	830	550	730	590	720	---	400	1000
20	1100	900	1100	1100	720	650	790	660	710	920	450	1000
21	1200	900	1000	1100	740	540	800	740	790	1100	540	1100
22	1300	900	1100	950	270	620	870	800	260	1100	610	1100
23	1400	940	1100	1100	320	670	910	730	260	630	650	1100
24	1300	960	1100	1000	340	720	900	870	360	750	700	1100
25	1200	970	1100	1100	280	760	920	680	320	650	730	1100
26	260	940	1100	1100	270	770	940	---	340	690	700	1100
27	570	960	1000	1100	360	820	920	950	460	810	750	1100
28	440	1000	1100	1100	380	800	880	750	570	1000	730	1100
29	340	1000	1100	1100	---	320	950	650	650	190	790	1100
30	360	1000	1100	1100	---	460	1000	750	690	200	800	1100
31	530	---	1100	1000	---	710	---	290	---	230	810	---
MONTH	1100	690	1100	1000	570	660	780	690	500	730	520	980

DISSOLVED SULFATE (SO4), TONS PER DAY, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	335	542	424	321	646	360	376	276	487	393	562	346
2	313	401	416	374	183	369	335	292	436	350	424	340
3	301	4270	389	411	376	368	352	262	245	389	434	335
4	289	1390	401	520	671	389	324	258	230	314	421	325
5	294	2350	392	340	496	357	259	428	269	287	418	322
6	270	600	392	337	390	457	306	280	229	295	404	319
7	285	457	392	295	494	408	367	424	219	288	336	308
8	275	607	380	304	427	420	415	358	183	294	294	294
9	288	502	380	287	471	420	414	223	208	292	260	288
10	284	595	343	---	450	431	1370	257	211	534	228	278
11	291	607	360	292	404	437	400	283	329	1170	209	283
12	291	618	364	303	386	389	349	284	416	1250	198	270
13	276	750	386	290	402	556	432	249	966	235	193	286
14	276	475	413	264	404	457	425	670	352	155	587	350
15	283	480	405	309	389	406	428	420	242	155	1950	349
16	571	445	419	259	320	421	422	440	211	192	5150	333
17	733	444	364	262	341	705	332	279	218	197	802	303
18	319	450	333	303	341	500	392	243	228	207	650	312
19	251	453	332	285	361	514	341	244	220	---	673	302
20	261	467	356	273	323	532	360	258	194	219	542	294
21	259	462	319	300	585	381	335	258	282	273	497	321
22	270	450	330	259	679	378	324	276	2810	235	532	327
23	291	457	321	270	514	374	310	270	2110	119	484	321
24	344	456	309	251	522	375	279	451	3620	2290	461	318
25	2310	466	312	258	535	369	268	376	791	17000	443	294
26	582	449	339	249	519	347	292	---	683	21800	433	279
27	540	433	286	247	448	368	273	344	548	19300	389	267
28	244	443	300	247	332	577	228	259	505	17000	365	261
29	379	432	300	247	---	406	251	370	448	1200	363	249
30	252	432	300	258	---	345	405	763	427	950	343	238
31	2070	---	309	278	---	410	---	865	---	807	326	---
MONTH	452	713	357	296	443	427	379	356	611	2940	625	304

07305000 NORTH FORK RED RIVER NEAR HEADRICK, OKLA.--Continued

DISSOLVED CHLORIDE (CL), MG/L, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1500	190	2200	2600	1000	830	1600	1300	310	1500	420	1700
2	1700	670	2000	2000	420	910	1500	1800	610	1500	430	1800
3	1800	950	2200	1900	870	1000	1600	1700	500	1900	550	1800
4	2000	92	2300	1500	710	1100	1500	1700	660	1600	660	1900
5	2400	750	2300	1300	470	1100	1400	1100	1100	1600	750	1800
6	2600	430	2300	1600	630	1500	1700	990	1100	1800	810	1300
7	2700	520	2400	1500	1100	1300	2200	1300	1200	2000	770	1800
8	3000	760	2400	1800	1100	1400	1900	1300	1100	2200	800	1800
9	3200	590	2300	1800	1400	1400	450	1000	1400	2100	850	1900
10	3400	970	2200	---	1300	1400	1400	1300	930	1900	900	1900
11	3600	920	1900	2100	1400	1500	660	1800	860	2100	960	2000
12	3800	1100	2200	1900	1400	1300	790	1800	280	960	1000	1800
13	3600	1800	2200	1900	1500	2000	1100	930	1400	210	1100	1800
14	3800	1300	2200	1900	1600	1500	1300	1700	760	360	1000	1600
15	3900	1400	2100	2400	1700	1400	1400	560	720	670	210	1700
16	4200	1500	2300	2000	1400	1500	1300	830	860	1200	490	1900
17	4000	1600	2100	2200	1500	1100	1100	840	1000	1400	300	1800
18	1800	1700	2000	2600	1500	700	1400	970	1300	1600	490	2000
19	1800	1700	2200	2600	1600	1000	1400	1100	1400	---	680	2100
20	2300	1700	2400	2300	1400	1200	1500	1200	1400	1800	800	2200
21	2900	1700	2100	2300	1400	980	1500	1400	1500	2300	980	2300
22	3500	1700	2500	1900	410	1200	1700	1500	390	2300	1100	2300
23	3600	1800	2600	2300	510	1300	1800	1400	390	1200	1200	2400
24	3400	1900	2300	2100	550	1400	1700	1700	600	1400	1300	2500
25	2800	1900	2500	2400	420	1500	1800	1300	510	1200	1400	2400
26	370	1800	2400	2500	410	1500	1800	---	560	1300	1300	2400
27	1000	1900	2100	2600	600	1600	1800	1900	810	1600	1400	2500
28	780	2100	2400	2600	650	1500	1700	1400	1000	2100	1400	2500
29	550	2200	2400	2600	---	520	1900	1200	1200	240	1500	2400
30	600	2200	2500	2700	---	820	2200	1400	1300	260	1500	2400
31	950	---	2500	2100	---	1300	---	440	---	330	1600	---
MONTH	2500	1300	2300	2100	1000	1300	1500	1300	910	1400	920	2000

DISSOLVED CHLORIDE (CL), TONS PER DAY, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	652	605	933	758	1170	636	743	505	657	765	843	661
2	620	671	832	756	274	658	628	583	718	664	651	666
3	583	7800	855	805	667	670	687	519	396	769	702	642
4	578	1430	838	1000	1160	713	632	487	388	605	713	636
5	642	4090	820	649	777	677	503	784	511	540	729	637
6	639	922	820	657	646	891	578	513	434	559	711	600
7	642	743	855	547	891	758	808	776	411	589	588	603
8	688	1050	829	588	769	816	821	656	336	647	512	564
9	708	822	795	549	903	805	643	391	393	612	461	569
10	744	1070	754	---	835	794	2670	484	377	1060	411	544
11	748	1100	713	612	764	850	677	554	590	2470	378	572
12	790	1100	802	605	711	723	612	549	555	2270	354	535
13	710	1470	849	580	753	1110	766	444	1880	274	565	559
14	749	895	909	528	769	891	800	1290	622	223	1050	674
15	790	907	850	674	744	779	832	692	414	266	2270	675
16	1600	879	876	524	605	810	772	778	378	366	8140	667
17	1950	855	765	576	648	1290	609	499	397	378	1090	593
18	617	890	680	716	648	854	722	437	442	389	1030	637
19	486	895	731	674	696	934	654	454	427	---	1140	635
20	546	881	778	571	627	982	684	470	382	428	963	647
21	626	872	669	627	1110	691	628	488	535	571	902	671
22	728	849	749	477	1030	732	633	518	4210	491	959	683
23	748	875	758	565	819	727	612	518	3170	227	894	700
24	900	903	646	527	845	730	528	881	6030	4270	856	722
25	5400	913	709	564	803	729	525	720	1260	31400	850	642
26	828	860	739	567	788	676	559	---	1120	41100	804	609
27	948	857	601	583	747	717	535	687	964	38100	726	607
28	432	930	654	583	569	1080	441	484	886	35700	699	594
29	613	950	654	583	---	660	503	684	826	1510	668	544
30	420	950	682	634	---	615	891	1430	804	1240	644	518
31	3720	---	702	584	---	751	---	1340	---	1160	648	---
MONTH	995	1270	769	622	777	798	723	654	1020	5650	1020	620

073050000 NORTH FORK RED RIVER NEAR HEADRICK, OKLA.--Continued

DISSOLVED SOLIDS (RESIDUE AT 180 DEG. C), MG/L, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3960	829	5410	5820	2790	2350	4190	3620	1100	3950	1360	4600
2	4450	1960	5160	5110	1350	2560	4120	4660	1800	4050	1370	4750
3	4830	2650	5440	5000	2450	2770	4200	4420	1540	4980	1640	4870
4	5170	440	5510	4030	2040	3060	3950	4640	1920	4280	1920	5020
5	5600	2160	5500	3490	1480	2940	3690	3050	2960	4400	2150	4710
6	5920	1370	5540	4230	1860	3950	4640	2750	2970	4890	2310	3510
7	6030	1580	5670	4150	3120	3580	5360	3620	3280	5080	2210	4750
8	6380	2190	5580	4790	3130	3710	4950	3620	3070	5430	2290	4870
9	6630	1760	5540	4880	3750	3730	1430	2900	3780	5210	2410	4970
10	6920	2710	5400	---	3580	3890	3710	3560	2610	4940	2520	5040
11	7120	2590	4960	5220	3790	3940	1920	4780	2440	5200	2690	5120
12	7390	3130	5330	4920	3900	3590	2260	4830	1020	2670	2830	4690
13	7120	4760	5420	4930	4110	5190	3130	2610	3710	879	2950	4750
14	7390	3520	5420	4920	4320	3980	3550	4570	2170	1220	2820	4280
15	7530	3820	5270	5630	4610	3770	3690	1690	2070	1950	866	4550
16	7940	3920	5540	5140	3780	4000	3610	2350	2420	3200	1500	4910
17	7670	4300	5320	5370	4040	3060	3060	2370	2770	3760	1080	4750
18	4830	4440	5070	5820	4060	2030	3900	2710	3410	4410	1520	5100
19	4830	4450	5320	5880	4270	2800	3750	2970	3670	---	1990	5210
20	5550	4640	5590	5560	3710	3290	4080	3390	3660	4750	2270	5440
21	6320	4660	5270	5490	3810	2740	4110	3810	4040	5510	2730	5530
22	6990	4630	5750	4920	1320	3170	4500	4140	1280	5550	3120	5510
23	7190	4850	5830	5530	1550	3410	4710	3770	1280	3220	3290	5590
24	6920	4950	5510	5300	1650	3710	4650	4490	1780	3850	3590	5730
25	6180	5000	5790	5590	1350	3920	4770	3450	1560	3340	3740	5680
26	1250	4870	5640	5780	1340	3930	4860	---	1680	3540	3600	5620
27	2870	4950	5230	5880	1790	4240	4740	4920	2310	4180	3840	5720
28	2220	5230	5610	5870	1890	4130	4540	3880	2880	5270	3730	5810
29	1640	5330	5690	5920	---	1580	4930	3340	3320	928	4050	5660
30	1790	5400	5790	5970	---	2330	5430	3830	3550	991	4120	5670
31	2660	---	5720	5300	---	3650	---	1400	---	1130	4170	---
MONTH	5460	3570	5480	5210	2890	3390	4010	3540	2540	3760	2600	5080

DISSOLVED SOLIDS (TONS PER DAY), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1720	2640	2290	1700	3280	1800	1950	1410	2330	2020	2730	1790
2	1620	1960	2150	1930	882	1850	1720	1510	2120	1790	2080	1760
3	1560	21800	2120	2120	1880	1850	1800	1350	1220	2020	2090	1740
4	1490	6820	2010	2690	3340	1980	1660	1330	1130	1620	2070	1680
5	1500	11800	1960	1740	2450	1810	1330	2170	1370	1490	2090	1670
6	1450	2940	1970	1740	1910	2350	1580	1430	1170	1520	2030	1620
7	1430	2260	2020	1510	2530	2090	1970	2160	1120	1500	1690	1590
8	1460	3020	1930	1560	2190	2160	2140	1830	937	1600	1470	1530
9	1470	2450	1910	1490	2420	2150	2040	1140	1060	1520	1310	1490
10	1510	2990	1850	---	2300	2210	7070	1330	1060	2750	1150	1440
11	1480	3080	1860	1520	2070	2230	1970	1470	1670	6110	1060	1470
12	1540	3120	1940	1570	1980	2000	1750	1470	2020	6310	1000	1390
13	1400	3880	2090	1500	2060	2890	2180	1250	4980	1150	980	1470
14	1460	2420	2240	1370	2080	2360	2190	3480	1780	754	2950	1800
15	1520	2480	2130	1580	2020	2100	2190	2090	1190	774	9380	1810
16	3020	2300	2110	1350	1630	2160	2140	2200	1070	976	24900	1720
17	3750	2300	1940	1410	1750	3590	1690	1410	1100	1020	3940	1560
18	1660	2330	1720	1600	1750	2480	2010	1220	1160	1070	3180	1620
19	1300	2340	1770	1520	1860	2620	1750	1230	1120	---	3350	1580
20	1320	2410	1810	1380	1660	2690	1860	1330	998	1130	2730	1600
21	1370	2390	1680	1500	3010	1930	1720	1330	1440	1370	2510	1610
22	1450	2310	1720	1240	3320	1930	1680	1430	13800	1180	2720	1640
23	1490	2360	1700	1360	2490	1910	1600	1390	10400	609	2450	1630
24	1830	2350	1550	1330	2530	1930	1440	2330	17900	11700	2370	1660
25	11900	2400	1640	1310	2580	1910	1390	1910	3850	87400	2270	1520
26	2800	2330	1740	1310	2580	1770	1510	---	3370	112000	2230	1430
27	2720	2230	1500	1320	2230	1900	1410	1780	2750	99400	1990	1390
28	1230	2320	1530	1320	1650	2980	1180	1340	2550	89500	1860	1380
29	1830	2300	1550	1330	---	2010	1300	1900	2290	5840	1860	1280
30	1250	2330	1580	1400	---	1750	2200	3900	2190	4710	1770	1220
31	10400	---	1610	1470	---	2110	---	4270	---	3970	1690	---
MONTH	2320	3620	1860	1540	2230	2180	1950	1810	3040	15160	3090	1570

07305000 NORTH FORK RED RIVER NEAR HEADRICK, OKLA.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6040	1330	8180	8790	4320	3680	6390	5540	1770	6030	2180	6980
2	6760	3100	7810	7740	2160	3980	6280	7080	2870	6170	2200	7210
3	7320	4110	8220	7580	3820	4300	6400	6720	2470	7540	2630	7390
4	7820	706	8330	6150	3220	4720	6030	7040	3040	6510	3040	7600
5	8460	3400	8310	5350	2370	4540	5650	4710	4570	6690	3380	7150
6	8930	2200	8370	6440	2960	6030	7050	4260	4580	7420	3620	5380
7	9090	2530	8560	6320	4810	5480	8110	5550	5050	7690	3470	7210
8	9600	3440	8430	7270	4820	5680	7500	5550	4740	8210	3580	7390
9	9970	2800	8370	7400	5740	5700	2290	4480	5780	7880	3760	7530
10	10400	4210	8170	---	5490	5940	5670	5450	4050	7490	3930	7640
11	10700	4030	7520	7900	5800	6010	3040	7250	3800	7870	4170	7750
12	11100	4830	8060	7460	5950	5500	3540	7330	1640	4150	4380	7120
13	10700	7220	8200	7470	6270	7860	4830	4060	5680	1410	4560	7210
14	11100	5400	8190	7460	6580	6070	5440	6940	3410	1960	4360	6510
15	11300	5840	7980	8510	7000	5760	5640	2700	3260	3090	1390	6920
16	11900	5980	8370	7780	5780	6110	5530	3680	3780	4930	2410	7450
17	11500	6540	8040	8120	6160	4720	4720	3700	4290	5750	1730	7210
18	7330	6750	7680	8790	6190	3200	5950	4210	5240	6700	2440	7720
19	7330	6770	8050	8870	6500	4340	5740	4590	5620	---	3140	7880
20	8380	7050	8440	8400	5670	5060	6220	5210	5600	7210	3560	8220
21	9520	7070	7980	8290	5820	4250	6270	5830	6160	8320	4240	8350
22	10500	7030	8680	7460	2120	4880	6840	6310	2060	8380	4810	8320
23	10800	7360	8800	8350	2490	5240	7150	5760	2050	4950	5060	8450
24	10400	7500	8330	8020	2640	5680	7060	6820	2840	5890	5500	8650
25	9320	7580	8740	8440	2170	5990	7230	5300	2510	5130	5720	8580
26	2000	7380	8520	8730	2150	6000	7370	---	2690	5420	5510	8490
27	4440	7500	7920	8870	2850	6450	7190	7460	3620	6370	5870	8640
28	3480	7920	8480	8860	3000	6300	6900	5920	4460	7980	5710	8770
29	2630	8060	8590	8930	---	2540	7470	5130	5100	1490	6170	8540
30	2850	8160	8740	9010	---	3640	8210	5850	5440	1590	6280	8560
31	4130	---	8640	8010	---	5590	---	2250	---	1820	6360	---
MONTH	8250	5460	8280	7890	4460	5200	6120	5420	3940	5730	4040	7690

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16.5	14.5	6.0	4.0	4.0	13.5	16.0	22.0	19.0	31.5	26.0	25.0
2	17.0	11.0	1.5	4.0	5.0	9.0	11.5	22.5	20.0	31.0	26.0	25.0
3	17.0	17.0	3.0	3.5	2.0	10.0	12.0	25.0	21.0	30.0	26.0	32.0
4	18.0	15.0	6.0	3.5	5.0	10.5	14.0	24.5	20.0	29.5	26.0	25.0
5	20.0	12.0	7.0	4.0	4.0	15.5	16.0	24.0	34.0	31.0	26.0	23.5
6	19.0	12.0	10.0	3.5	0.0	15.5	16.5	25.0	31.0	31.0	26.5	23.0
7	14.0	12.0	7.0	6.5	2.0	13.5	17.0	24.5	29.0	31.0	24.0	21.0
8	15.0	12.0	3.0	6.5	0.0	11.0	18.0	24.5	29.0	31.5	25.0	20.0
9	17.0	11.5	0.0	6.0	0.0	10.0	17.5	22.5	27.0	31.5	23.5	30.0
10	18.0	17.0	5.0	5.0	0.5	9.0	16.5	19.0	25.5	30.5	25.0	24.0
11	16.0	12.0	4.0	3.0	5.0	8.0	14.0	20.5	24.5	28.5	26.0	23.0
12	20.0	10.0	4.0	0.0	5.5	8.0	16.0	21.5	25.5	29.5	25.0	15.0
13	18.0	10.0	8.0	2.0	5.5	7.5	14.0	20.0	27.0	29.0	24.0	15.0
14	17.0	9.0	5.0	0.5	8.0	9.5	17.5	18.0	28.5	28.0	30.0	15.0
15	10.0	8.0	5.0	3.0	9.0	8.5	20.5	18.0	28.5	23.0	25.0	15.0
16	12.0	7.0	3.0	4.0	5.0	11.5	21.5	17.0	29.0	24.0	24.5	20.0
17	17.0	10.0	4.5	4.0	0.0	12.0	23.0	19.0	25.0	---	25.5	24.0
18	16.5	10.0	4.0	4.5	5.0	13.5	23.5	20.0	27.5	23.0	25.0	20.0
19	15.0	10.5	3.5	4.5	6.0	16.0	19.0	20.5	27.0	24.0	26.0	19.0
20	15.5	10.0	5.0	3.0	3.5	18.0	20.0	19.0	27.5	24.0	25.5	22.0
21	14.0	10.0	5.5	5.0	8.0	17.0	20.5	20.5	27.5	25.5	25.0	17.0
22	14.0	12.0	5.0	4.0	5.0	17.5	21.0	23.0	24.0	25.0	30.0	18.0
23	15.0	12.0	6.0	3.0	4.5	17.5	23.5	19.0	26.0	25.5	25.0	16.0
24	17.0	8.0	4.5	10.0	7.0	15.5	25.0	20.5	26.0	21.0	25.0	20.0
25	17.0	10.0	1.0	5.0	10.0	14.5	24.0	20.0	29.0	25.0	25.0	14.0
26	16.5	8.0	1.0	10.0	10.0	13.0	26.5	21.5	30.0	24.0	23.0	15.0
27	17.0	10.0	3.0	9.0	12.0	16.5	23.5	23.0	31.0	23.0	25.0	15.5
28	17.0	8.0	5.0	5.0	14.0	10.0	21.0	20.0	31.0	24.5	23.0	16.0
29	15.0	3.0	7.0	6.0	---	7.5	23.0	17.5	31.0	24.5	24.0	16.0
30	19.5	0.0	5.0	7.0	---	9.5	22.0	17.0	31.5	24.5	24.0	18.0
31	16.0	---	6.0	5.0	---	13.0	---	18.0	---	26.0	25.0	---
MONTH	16.5	10.5	4.5	4.5	5.0	12.5	19.0	21.0	27.0	27.0	25.5	20.0

07311000 EAST CACHE CREEK NEAR WALTERS, OKLA.

LOCATION.--Lat 34°21'44", long 98°16'56", on south line of SE 1/4 SE 1/4 sec.19, T.2 S., R.10 W., Cotton County, at gaging station at bridge on State Highway 53, 1.8 mi (2.9 km) east of Walters, 12.2 mi (19.6 km) upstream from West Cache Creek, and at mile 19.7 (31.7 km).

DRAINAGE AREA.--675 mi^2 (1,748 km^2).

PERIOD OF RECORD.--Chemical analyses: October 1951 to September 1953, October 1960 to September 1961, October 1962 to September 1963, October 1969 to current year.
Water temperatures: October 1951 to September 1953, October 1969 to current year.

EXTREMES, Current year.--Specific conductance: Maximum daily, 970 micromhos/cm Sept. 12; minimum daily, 153 micromhos/cm May 22.
Water temperatures: Maximum, 28.0°C Sept. 4; minimum, 2.0°C Jan. 12.

Period of record.--Specific conductance: Maximum daily, 3,860 micromhos/cm Jan. 10, 1971; minimum daily, 101 micromhos/cm Nov. 1, 1972.
Water temperatures: Maximum, 38.5°C July 29, 1970; minimum, freezing point on Jan. 8, 20-24, 1970.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
OCT.											
05...	1820	26	48	8.5	57	--	175	0	144	--	44
15...	1845	15	52	11	--	9.2	211	0	173	48	66
29...	1752	986	25	4.1	--	4.3	116	0	95	11	9.3
NOV.											
05...	1745	170	38	6.3	33	--	151	0	124	23	27
15...	1717	57	58	11	--	--	224	0	184	50	54
25...	1640	44	67	14	68	6.8	247	0	203	--	72
DEC.											
03...	1715	59	--	14	72	5.0	234	0	192	--	81
15...	1740	56	67	14	72	6.1	236	0	194	--	79
25...	1040	43	69	14	78	8.9	249	0	204	66	85
JAN.											
05...	1540	106	43	11	48	6.0	165	0	135	72	35
15...	1750	43	61	13	55	8.1	215	0	176	63	58
25...	1710	42	--	14	62	7.0	239	0	196	73	68
FEB.											
04...	1800	1390	28	4.7	25	3.9	118	0	97	20	19
15...	1640	64	69	14	65	5.6	245	0	201	--	70
25...	1855	130	54	11	44	4.5	181	0	148	66	40
MAR.											
05...	1815	64	64	14	46	5.6	163	28	180	71	52
15...	1750	76	65	14	70	5.6	248	1	205	63	70
25...	1705	43	74	15	86	7.0	281	0	230	73	86
APR.											
05...	1910	44	--	15	50	5.8	225	0	185	71	53
15...	1720	88	57	12	56	5.6	207	0	170	65	50
25...	1710	42	71	14	73	6.6	264	0	217	73	69
MAY											
08...	1725	508	--	14	27	6.1	184	0	151	61	30
15...	1735	535	47	6.7	30	4.7	169	0	139	39	27
29...	1715	9050	17	2.9	9.1	5.3	73	0	60	8.7	8.5
JULY											
08...	1715	127	84	15	59	5.0	309	0	253	62	64
25...	1900	715	41	5.5	21	4.0	149	0	122	21	22
AUG.											
01...	1715	664	51	11	19	4.8	173	0	142	43	21
26...	2015	40	86	16	76	7.7	333	0	273	58	80
SEP.											
12...	1725	34	74	16	98	6.0	269	7	232	65	130
14...	1300	598	28	4.2	26	4.9	104	0	85	--	21

07311000 EAST CACHE CREEK NEAR WALTERS, OKLA.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	CARBON DIOXIDE (CO2) (MG/L)
OCT.											
05...	3.3	331	.45	23.2	150	6	--	2.0	524	7.7	5.6
15...	--	--	--	--	180	2	--	--	669	7.9	4.3
29...	--	150	--	399	79	0	--	--	207	7.6	4.7
NOV.											
05...	.82	220	.30	101	120	0	--	1.3	363	7.7	4.8
15...	2.3	388	--	59.7	190	6	--	--	634	7.7	7.2
25...	--	444	.60	52.7	230	22	38	1.9	744	7.2	25
DEC.											
03...	--	458	.62	73.0	--	--	--	--	765	7.6	9.4
15...	--	451	.61	68.2	230	31	40	2.1	754	7.7	7.5
25...	--	484	.66	56.2	230	26	41	2.2	801	7.1	32
JAN.											
05...	--	330	.45	94.4	150	17	39	1.7	516	7.2	17
15...	--	408	.55	47.4	210	30	36	1.7	676	7.1	27
25...	--	448	--	50.8	--	--	--	--	745	7.4	15
FEB.											
04...	--	188	.26	706	89	0	37	1.2	288	8.0	1.9
15...	--	439	.60	75.9	230	29	37	1.9	737	7.4	16
25...	--	--	--	--	180	32	34	1.4	546	8.1	2.3
MAR.											
05...	--	--	--	--	220	37	31	1.4	--	9.4	.1
15...	--	458	.62	94.0	220	15	40	2.1	749	8.6	1.0
25...	--	523	.71	60.7	250	16	42	2.4	839	8.0	4.5
APR.											
05...	--	399	--	47.4	--	--	--	--	654	7.7	7.2
15...	--	380	.52	90.3	190	22	38	1.8	629	7.7	6.6
25...	--	472	.64	53.5	240	18	40	2.1	780	7.8	6.7
MAY											
08...	--	327	--	449	--	--	--	--	528	7.6	7.4
15...	2.1	--	--	--	150	6	30	1.1	442	8.2	1.7
29...	.48	98	.13	2400	54	0	24	.5	162	8.0	1.2
JULY											
08...	3.3	475	.65	163	270	18	32	1.6	792	8.3	2.5
25...	1.1	204	.28	394	130	3	26	.8	334	8.2	1.5
AUG.											
01...	.73	--	--	--	170	31	19	.6	424	8.1	2.2
26...	3.1	530	.72	57.2	280	8	36	2.0	894	8.2	3.4
SEP.											
12...	--	564	.77	51.8	250	18	45	2.7	970	8.5	1.4
14...	--	182	.25	294	87	2	38	1.2	310	7.8	2.6

07311000 EAST CACHE CREEK NEAR WALTERS, OKLA.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	504	335	759	417	512	---	754	---	487	---	424	876
2	520	337	738	936	407	508	659	---	487	---	448	---
3	468	411	765	304	340	506	533	763	544	756	462	---
4	437	344	---	---	288	573	549	802	580	759	450	903
5	524	363	---	516	373	631	654	691	629	754	466	899
6	596	406	768	560	484	706	652	677	672	747	523	881
7	605	482	---	576	493	728	694	682	692	783	531	871
8	673	467	---	578	496	772	708	528	---	792	---	875
9	659	494	812	615	520	774	611	539	---	674	519	874
10	633	800	835	482	587	783	610	287	---	697	679	877
11	635	528	808	---	639	788	624	474	---	700	702	881
12	641	542	812	537	652	789	724	589	---	---	737	970
13	676	596	759	586	705	742	786	739	---	---	688	409
14	644	594	642	652	732	741	838	---	---	573	710	310
15	669	634	754	676	737	749	629	442	630	678	830	423
16	672	725	762	660	779	745	759	548	---	694	828	422
17	549	726	712	720	831	700	746	444	751	---	848	475
18	547	712	745	706	763	790	804	478	809	---	844	558
19	554	693	781	710	749	843	792	550	731	---	863	684
20	586	725	795	748	769	759	834	610	851	---	828	768
21	680	742	785	708	757	---	850	415	860	---	---	776
22	679	734	801	764	---	806	853	153	550	---	---	855
23	707	752	---	759	452	830	840	195	---	---	897	861
24	708	746	---	759	504	739	766	---	---	---	892	884
25	686	744	801	745	546	839	780	356	---	334	811	868
26	714	758	---	734	569	851	824	452	---	340	894	870
27	715	780	---	758	633	854	834	445	---	386	852	849
28	335	760	840	766	679	787	758	239	---	411	---	848
29	207	771	822	820	---	782	767	162	---	426	---	865
30	286	779	889	802	---	710	614	224	---	384	---	878
31	225	---	893	347	---	664	---	349	---	426	---	---
MONTH	572	616	---	653	592	741	728	475	---	---	---	770

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
(ONCE-DAILY)

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

07311200 BLUE BEAVER CREEK NEAR CACHE, OKLA.
(Hydrologic bench-mark station)

LOCATION.--Lat 34°37'24", long 98°33'48", in NE 1/4 NE 1/4 sec.28, T.2 N., R.13 W., Comanche County, at gaging station at bridge on U.S. Highway 62, 3,000 ft (914.4 m) upstream from St. Louis-San Francisco Railway Co. bridge, 4.0 mi (6.4 km) east of Cache, and at mile 12.0 (19.3 km).

DRAINAGE AREA.--24.6 mi^2 (63.7 km^2).

PERIOD OF RECORD.--Water year 1965-67 (partial-record station), October 1967 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)
FEB.												
13...	1630	1.4	12	14	2.8	9.6	1.4	--	--	13	5.5	.3
AUG.												
13...	0800	2.5	18	21	4.5	--	1.9	87	71	9.3	7.8	.4

DATE	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (TONS PER AC-FT)	DISSOLVED SOLIDS (TONS PER DAY)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)
FEB.												
13...	.03	.02	84	.11	.32	47	--	30	.6	155	7.3	14.0
AUG.												
13...	.01	.02	122	.17	.82	71	0	--	--	182	--	23.5

07324200 WASHITA RIVER NEAR HAMMON, OKLA.

LOCATION.--Lat 35°39'23", long 99°18'21", on west line of sec.26, T.14 N., R.20 W., Custer County, at gaging station at bridge on county road, 2.2 mi (3.5 km) downstream from Quartermaster Creek, 4.7 mi (7.6 km) northeast of Hammon, and at mile 494.5 (795.7 km).

DRAINAGE AREA.--1,387 mi² (3,592 km²).

PERIOD OF RECORD.--Chemical analyses: October 1969 to current year.
Water temperatures: October 1969 to current year.

EXTREMES, Current year.--Specific conductance: Maximum, 2,580 micromhos/cm Oct. 29; minimum, 450 micromhos/cm July 24.
Water temperatures: Maximum, 29.5°C Sept. 8; minimum, 0.5°C on several days during winter months.

Period of record.--Specific conductance: Maximum daily, 2,580 micromhos/cm Oct. 29, 1974; minimum daily, 450 micromhos/cm July 24, 1975.
Water temperatures: Maximum, 33.5°C June 18, 1974; minimum, freezing point on several days during winter months.

REMARKS.--Continuous monitor records for specific conductance and water temperature are collected for this station. Records are poor.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
OCT.											
05...	1655	.50	140	58	15	--	160	0	131	430	9.7
15...	0810	3.8	--	140	35	--	224	0	184	910	28
25...	1830	4.2	320	160	--	--	249	0	204	1400	26
NOV.											
03...	1830	769	83	23	18	--	122	0	100	230	6.5
15...	2130	33	220	100	67	--	237	--	194	840	31
24...	1620	25	230	100	75	--	230	0	189	870	36
DEC.											
05...	1600	14	240	130	94	5.4	--	--	--	980	48
15...	0820	19	250	130	100	6.8	277	0	227	990	67
25...	1300	14	240	120	130	5.3	279	--	--	--	66
JAN.											
05...	1730	22	220	120	91	5.2	235	--	--	910	48
16...	1700	25	250	120	89	5.1	--	--	--	1000	44
25...	1430	14	240	110	110	5.2	294	--	--	950	51
FEB.											
05...	1300	33	240	120	100	5.4	322	0	264	950	49
16...	1430	30	240	110	110	4.6	346	0	284	--	57
25...	1055	53	150	96	90	4.7	229	0	188	700	45
MAR.											
05...	1650	48	190	89	93	4.7	306	0	251	710	50
15...	1100	42	210	110	100	4.3	318	0	261	770	53
24...	1210	36	210	120	98	5.2	160	0	137	860	59
APR.											
06...	1845	27	220	120	110	4.7	310	0	254	930	56
15...	1700	46	190	110	94	4.9	301	0	247	780	47
25...	1905	25	200	120	100	4.9	275	0	226	870	50
MAY											
06...	1920	57	220	110	73	5.6	243	0	199	920	38
15...	1735	308	120	55	37	7.7	164	0	135	430	19
29...	1650	479	--	50	27	9.1	157	0	129	430	17
JUNE											
05...	1700	104	160	74	65	7.0	299	0	245	550	41
15...	1845	100	140	62	55	6.2	257	0	211	470	33
25...	1655	39	200	88	65	6.0	262	0	215	720	33
JULY											
03...	2030	88	200	94	84	5.8	248	0	203	770	42
16...	2035	24	190	89	57	5.5	194	0	159	750	30
24...	2040	1310	72	22	12	7.9	105	0	86	190	7.0
AUG.											
05...	2045	54	180	78	57	6.2	213	0	175	600	19
15...	2120	62	210	110	46	9.5	172	0	141	840	20
25...	1015	20	220	95	44	6.3	213	0	175	790	26
SEP.											
06...	1355	8.1	230	100	34	7.0	202	0	166	870	19
11...	0930	3.4	250	110	39	6.6	213	0	175	960	22
13...	1035	6.5	210	94	36	10	184	0	151	800	22

07324200 WASHITA RIVER NEAR HAMMON, OKLA.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	CARBON DIOXIDE (CO2) (MG/L)
OCT.											
05...	.44	839	1.14	1.13	590	460	--	.2	1080	7.5	8.1
15...	.44	--	--	--	--	--	--	--	1930	7.7	7.2
25...	.26	2290	--	26.0	1500	1300	--	--	2370	8.0	4.0
NOV.											
03...	1.2	456	.62	947	300	200	--	.5	612	7.8	3.1
15...	.37	1550	2.11	138	960	770	--	.9	1780	8.4	1.5
24...	.31	--	--	--	990	800	--	1.0	1820	8.0	3.7
DEC.											
05...	--	1770	2.41	66.9	1100	--	15	1.2	--	8.3	--
15...	--	1860	2.53	95.4	1200	930	16	1.3	2050	8.3	2.2
25...	--	1800	2.45	68.0	1100	--	20	1.7	2060	8.5	1.4
JAN.											
05...	--	1670	2.27	99.2	1000	--	16	1.2	1970	8.8	.6
16...	--	1810	2.46	122	1100	--	15	1.2	2040	8.6	--
25...	--	1760	--	66.5	1100	--	18	1.5	2050	8.6	1.2
FEB.											
05...	--	1790	2.43	159	1100	830	17	1.3	2040	8.1	4.1
16...	--	1730	2.35	140	1100	770	18	1.5	1980	7.8	8.8
25...	--	--	--	--	770	580	20	1.4	1620	7.9	4.6
MAR.											
05...	--	1500	2.04	194	840	590	19	1.4	1810	7.9	--
15...	--	--	--	--	980	720	18	1.4	1900	8.0	5.1
24...	--	--	--	--	920	780	17	1.4	1900	8.0	2.6
APR.											
06...	--	1690	2.30	123	1000	790	19	1.5	1980	7.9	6.2
15...	--	1540	2.09	191	930	680	18	1.3	1820	8.0	4.8
25...	--	1640	2.23	111	990	770	18	1.4	1940	8.0	4.4
MAY											
06...	--	1620	2.20	249	1000	800	14	1.0	1870	8.1	3.1
15...	--	831	1.13	691	530	390	13	.7	1080	8.0	2.6
29...	--	823	--	1060	--	--	--	--	1060	8.0	2.5
JUNE											
05...	--	1140	1.55	320	700	460	17	1.1	1440	8.2	3.0
15...	--	965	1.31	261	610	390	16	1.0	1260	8.1	3.3
25...	--	1380	1.88	145	860	650	14	1.0	1640	8.2	2.6
JULY											
03...	--	1490	2.03	354	890	680	17	1.2	1780	8.1	3.2
16...	--	1350	1.84	87.5	840	680	13	.9	1640	8.2	2.0
24...	--	396	.54	1400	270	180	9	.3	568	8.2	1.1
AUG.											
05...	.39	1160	1.58	169	770	600	9	.6	1470	8.3	1.7
15...	.48	1500	2.04	251	980	840	9	.6	1780	7.9	3.5
25...	.34	1440	1.96	77.8	940	770	9	.6	1690	8.3	1.7
SEP.											
06...	--	1450	1.97	31.7	990	820	7	.5	1690	7.8	5.1
11...	--	1610	2.19	14.8	1100	900	7	.5	1840	7.9	4.3
13...	--	1380	1.88	24.2	910	760	8	.5	1630	7.4	12

07324200 WASHITA RIVER NEAR HAMMON, OKLA.--Continued

DISSOLVED SULFATE (SO4), MG/L, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	850	1700	970	960	1000	800	850	830	460	740	550	770
2	830	1100	980	960	1000	880	890	480	490	750	580	780
3	550	220	970	940	990	780	910	840	510	800	560	780
4	540	310	860	940	960	820	790	900	520	610	550	740
5	420	290	1100	930	980	830	980	910	570	420	610	750
6	400	360	1000	940	1000	850	940	870	610	470	640	730
7	460	430	1100	930	980	840	980	810	490	490	660	770
8	480	480	1100	930	960	910	950	800	540	640	720	760
9	570	530	1000	930	940	890	910	850	430	660	760	810
10	670	550	1000	940	1000	910	810	870	480	720	800	830
11	680	580	910	960	940	910	890	890	400	730	640	830
12	750	360	1000	990	970	930	890	920	430	770	770	780
13	990	680	1100	1100	950	930	830	630	410	740	780	720
14	810	720	1000	1000	960	900	850	470	460	480	590	720
15	910	800	980	880	950	890	830	440	480	720	710	710
16	760	880	960	940	840	880	860	480	530	770	700	730
17	850	870	950	980	870	890	890	480	380	740	710	740
18	870	780	940	1000	980	910	830	560	530	730	720	770
19	930	810	950	980	970	880	850	610	580	760	770	780
20	940	810	960	990	960	---	840	620	610	720	740	790
21	930	760	950	960	980	850	870	690	680	820	730	810
22	---	780	1300	1000	850	830	890	720	670	760	740	820
23	890	820	950	1000	790	900	880	530	660	610	750	830
24	---	830	960	990	810	890	950	700	700	150	760	850
25	1400	830	980	980	720	900	930	930	700	300	740	860
26	1500	830	980	980	780	930	920	660	700	360	740	870
27	1500	860	950	1000	830	910	910	750	660	370	790	900
28	1600	890	960	1000	770	960	880	750	670	430	840	930
29	1700	910	970	1000	---	950	800	460	710	460	810	930
30	1600	950	960	1000	---	910	800	470	760	470	760	940
31	1500	---	960	1000	---	850	---	370	---	510	760	---
MONTH	930	720	990	970	920	880	880	690	560	600	710	800

DISSOLVED SULFATE (SO4), TONS PER DAY, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.09	25.2	47.1	49.2	54.0	121	84.9	62.7	220	24.0	135	18.9
2	.27	29.7	52.9	54.4	62.1	131	81.7	105	184	20.3	135	16.0
3	1.01	470	36.7	58.4	69.5	96.9	78.6	195	171	20.7	115	17.1
4	.85	391	41.8	66.0	77.8	115	66.1	160	149	142	98.0	18.2
5	.57	203	44.6	57.8	87.3	117	79.4	157	142	128	97.2	18.2
6	.49	130	40.5	60.9	86.4	108	68.5	143	130	78.7	84.7	15.6
7	.48	110	41.6	57.8	92.6	97.5	76.7	107	329	64.8	74.8	14.3
8	.34	92.0	41.6	57.8	90.7	93.4	103	92.9	157	76.0	73.9	11.9
9	.22	93.0	35.1	55.2	88.8	91.3	170	89.5	250	60.6	75.9	9.40
10	.13	92.1	29.7	50.8	86.4	108	94.0	82.2	327	62.2	69.1	8.29
11	.04	90.8	36.9	54.4	76.1	123	96.1	81.7	400	57.2	44.9	10.5
12	.18	44.7	54.0	56.1	78.6	123	101	79.5	289	47.8	54.1	20.4
13	1.23	62.4	68.3	59.4	71.8	116	91.9	151	229	36.0	54.8	13.0
14	5.25	62.2	59.4	51.3	72.6	104	94.1	490	191	53.1	86.0	14.2
15	6.88	77.8	50.3	64.2	66.7	96.1	94.1	330	149	62.2	161	16.3
16	5.75	78.4	46.7	68.5	63.5	95.0	97.5	303	136	47.8	119	17.1
17	5.05	77.5	35.9	55.6	72.8	101	96.1	194	115	38.0	105	16.0
18	5.40	67.4	40.6	54.0	84.7	106	89.6	199	179	31.5	91.4	15.0
19	4.27	65.6	43.6	52.9	91.7	105	75.7	171	114	30.6	83.2	13.5
20	4.06	63.4	44.1	50.8	98.5	---	65.8	147	87.3	23.3	71.9	11.5
21	3.77	69.8	41.0	44.1	106	91.8	61.1	132	82.6	21.9	63.1	12.9
22	---	67.4	52.7	43.2	91.8	87.4	60.1	115	74.2	20.5	57.9	16.6
23	5.05	66.4	38.5	40.5	85.3	92.3	64.2	107	76.6	16.5	50.6	16.6
24	---	60.5	38.9	37.4	140	86.5	69.3	172	83.2	539	49.2	13.8
25	14.7	58.3	37.0	37.0	107	82.6	65.3	193	75.6	591	38.0	12.3
26	17.0	56.0	37.0	37.0	137	70.3	62.1	110	66.2	454	28.0	12.2
27	16.2	51.1	36.5	37.8	143	76.2	66.3	117	46.3	313	27.7	12.6
28	19.9	48.1	38.9	37.8	114	111	80.8	103	38.0	261	31.8	13.3
29	23.4	44.2	41.9	37.8	---	115	82.1	345	36.4	209	30.6	14.1
30	22.0	35.9	41.5	37.8	---	103	69.1	429	30.8	162	24.6	16.5
31	22.3	---	51.8	43.2	---	89.5	---	288	---	145	22.6	---
MONTH	6.44	96.1	43.5	50.6	89.2	102	82.8	176	152	124	72.7	14.5

07324200 WASHITA RIVER NEAR HAMMON, OKLA.--Continued

DISSOLVED CHLORIDE (CL), MG/L, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	42	80	52	51	56	38	42	40	15	33	18	35
2	41	59	52	51	56	44	45	16	16	34	20	36
3	18	7.0	52	49	53	36	47	41	17	38	18	36
4	18	9.9	43	49	51	40	37	46	17	22	18	33
5	14	9.2	58	48	52	41	53	47	19	14	22	34
6	13	11	57	49	55	42	49	44	22	15	24	32
7	15	14	58	49	52	41	52	38	16	16	27	35
8	15	15	59	48	51	47	50	38	17	24	31	35
9	19	17	57	48	49	45	47	42	14	26	34	38
10	27	18	55	49	55	46	39	43	16	31	37	41
11	28	20	47	51	49	47	45	45	13	32	25	40
12	34	12	54	53	52	49	45	48	14	35	35	36
13	53	28	61	59	50	48	41	24	13	33	36	31
14	39	31	58	56	51	46	42	15	15	16	21	31
15	46	37	53	44	50	45	41	14	15	31	30	30
16	35	44	51	49	41	44	43	15	17	35	29	32
17	42	43	50	53	44	45	45	16	12	33	30	33
18	44	36	49	56	52	46	41	20	17	32	31	35
19	49	38	50	52	52	44	42	22	20	35	35	36
20	49	38	51	53	51	---	41	23	22	31	33	37
21	48	35	50	51	52	42	43	29	28	40	32	38
22	---	36	66	54	42	41	45	31	27	34	33	40
23	45	40	50	54	37	46	44	17	27	22	34	41
24	---	40	51	53	39	45	50	30	30	4.7	34	42
25	70	41	53	53	31	46	49	48	30	9.7	33	43
26	74	41	52	53	36	48	48	27	29	11	33	44
27	74	43	50	54	41	46	47	34	27	12	37	46
28	77	45	51	55	35	51	44	34	27	14	41	49
29	81	47	52	56	---	50	38	15	30	15	39	48
30	76	50	51	55	---	46	37	15	35	15	35	49
31	74	---	51	55	---	42	---	12	---	17	35	---
MONTH	44	33	53	52	48	45	44	30	21	25	30	38

DISSOLVED CHLORIDE (CL), TONS PER DAY, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	1.19	2.53	2.62	3.02	5.75	4.20	3.02	7.17	1.07	4.42	.86
2	.01	1.59	2.81	2.89	3.48	6.53	4.13	3.50	6.00	.92	4.64	.74
3	.03	15.0	1.97	3.04	3.72	4.47	4.06	9.52	5.69	.99	3.69	.79
4	.03	12.5	2.09	3.44	4.13	5.62	3.10	8.20	4.87	5.11	3.21	.81
5	.02	6.43	2.35	2.98	4.63	5.76	4.29	8.12	4.72	4.27	3.50	.83
6	.02	3.98	2.31	3.18	4.75	5.33	3.57	7.25	4.69	2.51	3.18	.68
7	.02	3.59	2.19	3.04	4.91	4.76	4.07	5.03	10.8	2.12	3.06	.65
8	.01	2.88	2.23	2.98	4.82	4.82	5.40	4.41	4.96	2.85	3.18	.55
9	.01	2.98	2.00	2.85	4.63	4.62	8.76	4.42	8.13	2.39	3.40	.44
10	.01	3.01	1.63	2.65	4.75	5.46	4.53	4.06	10.9	2.68	3.20	.41
11	0	3.13	1.90	2.89	3.97	6.35	4.86	4.13	13.0	2.51	1.76	.51
12	.01	1.49	2.92	3.01	4.21	6.48	5.10	4.15	9.41	2.17	2.46	.94
13	.07	2.57	3.79	3.19	3.78	5.96	4.54	5.77	7.27	1.60	2.53	.56
14	.25	2.68	3.45	2.87	3.86	5.34	4.65	15.6	6.24	1.77	3.06	.61
15	.35	3.60	2.72	3.21	3.51	4.86	4.65	10.5	4.66	2.68	6.80	.69
16	.26	3.92	2.48	3.57	3.10	4.75	4.88	9.48	4.36	2.17	4.93	.75
17	.25	3.83	1.89	3.01	3.66	5.10	4.86	6.48	3.63	1.69	4.46	.71
18	.27	3.11	2.12	3.02	4.49	5.34	4.43	6.66	5.74	1.38	3.93	.68
19	.23	3.08	2.30	2.81	4.91	5.23	3.74	6.18	3.94	1.42	3.78	.62
20	.21	2.98	2.34	2.72	5.23	---	3.21	5.46	3.15	1.00	3.21	.54
21	.19	3.21	2.16	2.34	5.62	4.54	3.02	5.56	3.40	1.07	2.76	.61
22	---	3.11	2.67	2.33	4.54	4.32	3.04	4.94	2.99	.92	2.58	.81
23	.26	3.24	2.03	2.19	4.00	4.72	3.21	3.44	3.13	.59	2.30	.82
24	---	2.92	2.07	2.00	6.74	4.37	3.65	7.37	3.56	16.9	2.20	.68
25	.74	2.88	2.00	2.00	4.60	4.22	3.44	4.98	3.24	19.1	1.69	.62
26	.84	2.77	1.97	2.00	6.32	3.63	3.24	4.52	2.74	13.9	1.25	.62
27	.80	2.55	2.03	2.04	7.08	3.65	3.43	5.32	1.90	10.1	1.30	.65
28	.96	2.43	2.07	2.08	5.20	5.92	4.04	4.68	1.53	8.51	1.55	.70
29	1.12	2.28	2.25	2.12	---	6.08	3.90	11.3	1.54	6.80	1.47	.73
30	1.07	1.89	2.20	2.08	---	5.22	3.20	13.7	1.42	5.18	1.13	.86
31	1.10	---	2.75	2.58	---	4.42	---	9.33	---	4.82	1.04	---
MONTH	.31	3.69	2.32	2.69	4.56	5.12	4.17	6.84	5.15	4.23	2.95	.68

07324200 WASHITA RIVER NEAR HAMMON, OKLA.--Continued

DISSOLVED SOLIDS (RESIDUE AT 180 DEG. C), MG/L, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1580	2490	1820	1810	1910	1490	1580	1540	922	1380	1080	1430
2	1560	1980	1830	1810	1910	1640	1670	955	972	1390	1120	1440
3	1090	437	1820	1760	1860	1440	1710	1570	1020	1490	1100	1450
4	1070	614	1610	1760	1790	1530	1470	1680	1040	1160	1090	1380
5	829	566	1970	1730	1830	1560	1840	1710	1110	838	1160	1390
6	796	705	1950	1760	1880	1580	1760	1630	1160	938	1200	1350
7	913	846	1970	1740	1830	1570	1830	1500	964	980	1230	1430
8	947	947	2000	1730	1810	1710	1780	1490	1060	1200	1330	1420
9	1110	1050	1950	1730	1760	1660	1710	1580	846	1220	1400	1500
10	1240	1090	1880	1760	1900	1690	1520	1620	955	1330	1480	1560
11	1270	1120	1710	1790	1760	1710	1660	1660	796	1350	1210	1540
12	1390	721	1870	1860	1820	1740	1670	1720	846	1430	1430	1440
13	1860	1270	2030	1980	1770	1730	1560	1190	821	1370	1450	1330
14	1520	1330	1960	1920	1810	1680	1590	938	913	955	1140	1340
15	1690	1480	1840	1640	1770	1660	1560	880	947	1340	1320	1320
16	1420	1640	1810	1760	1570	1640	1610	947	1050	1430	1290	1350
17	1580	1620	1780	1840	1630	1660	1670	955	754	1380	1320	1380
18	1630	1440	1760	1920	1830	1690	1560	1120	1060	1350	1330	1430
19	1740	1500	1770	1830	1820	1640	1590	1160	1120	1420	1430	1440
20	1760	1500	1810	1860	1810	---	1570	1170	1160	1330	1380	1470
21	1730	1420	1770	1810	1830	1590	1620	1280	1250	1530	1350	1500
22	---	1450	2160	1870	1580	1560	1660	1330	1240	1400	1370	1530
23	1660	1530	1780	1870	1470	1680	1640	1050	1230	1160	1390	1560
24	---	1540	1810	1860	1520	1660	1780	1300	1300	302	1400	1590
25	2250	1560	1840	1840	1340	1680	1740	1730	1300	597	1370	1610
26	2340	1560	1830	1840	1450	1730	1720	1230	1290	706	1370	1630
27	2340	1610	1770	1870	1560	1690	1710	1390	1230	740	1470	1680
28	2410	1660	1810	1900	1430	1810	1640	1390	1240	855	1570	1740
29	2510	1710	1820	1920	---	1770	1490	905	1320	913	1520	1730
30	2420	1770	1790	1900	---	1690	1480	938	1420	938	1420	1760
31	2350	---	1810	1880	---	1590	---	729	---	1010	1420	---
MONTH	1620	1340	1850	1820	1720	1650	1650	1300	1080	1140	1330	1490

DISSOLVED SOLIDS (TONS PER DAY), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.17	37.0	88.5	92.9	103	225	158	116	441	44.7	265	35.1
2	.51	53.5	98.8	103	119	244	153	209	365	37.5	260	29.5
3	2.00	934	68.8	109	131	179	148	365	341	38.6	226	31.7
4	1.68	774	78.2	124	145	215	123	299	298	269	194	33.9
5	1.12	396	79.8	107	163	219	149	295	276	256	185	33.8
6	.97	255	79.0	114	162	201	128	268	247	157	159	28.8
7	.96	217	74.5	108	173	182	143	198	648	130	139	26.6
8	.66	182	75.6	107	171	175	192	173	309	143	136	22.2
9	.42	184	68.4	103	166	170	319	166	491	112	140	17.4
10	.23	182	55.8	95.0	164	201	176	153	650	115	128	15.6
11	.07	175	69.3	101	143	231	179	152	795	106	84.9	19.5
12	.34	89.5	101	105	147	230	189	149	569	88.8	100	37.7
13	2.31	117	126	107	134	215	173	286	459	86.6	102	24.1
14	9.85	115	116	98.5	137	195	176	978	380	106	166	26.4
15	12.8	144	94.4	120	124	179	177	661	294	116	299	30.3
16	10.7	146	88.0	128	119	177	183	598	269	88.8	219	31.7
17	9.39	144	67.3	104	136	188	180	387	228	70.8	196	29.8
18	10.1	124	76.0	104	158	196	168	384	358	58.3	169	27.8
19	7.99	121	81.2	98.8	172	195	142	326	221	57.5	154	24.9
20	7.60	117	83.1	95.4	186	---	123	278	166	43.1	134	21.4
21	7.01	130	76.5	83.1	198	172	114	245	152	40.9	117	23.9
22	---	125	67.5	80.8	171	164	112	212	137	37.8	107	31.0
23	9.41	124	72.1	75.7	159	172	120	213	143	31.5	93.8	31.2
24	---	112	73.3	70.3	263	161	130	319	154	1080	90.7	25.8
25	23.7	110	69.6	69.6	199	154	122	360	140	1180	70.3	23.0
26	26.5	105	69.2	69.6	254	131	116	206	122	890	51.8	22.9
27	25.3	95.6	71.7	70.7	270	141	125	218	86.3	625	51.6	23.6
28	29.9	89.6	73.5	71.8	212	210	151	191	70.3	519	59.3	24.9
29	34.6	83.1	78.6	72.6	---	215	153	679	67.7	414	57.5	26.2
30	33.3	66.9	77.3	71.8	---	192	128	856	57.5	324	46.0	30.9
31	34.9	---	97.7	81.2	---	167	---	567	---	286	42.2	---
MONTH	10.5	185	81.2	94.9	167	190	155	339	298	243	137	27.1

07324200 WASHITA RIVER NEAR HAMMON, OKLA.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1840	2560	2030	2020	2100	1770	1840	1810	1190	1680	1380	1720
2	1820	2160	2040	2020	2100	1890	1910	1230	1250	1690	1430	1730
3	1390	612	2030	1980	2060	1730	1940	1830	1310	1770	1400	1740
4	1370	823	1860	1980	2010	1800	1750	1920	1330	1470	1390	1680
5	1080	766	2150	1960	2040	1820	2050	1940	1420	1090	1470	1690
6	1040	932	2130	1980	2080	1840	1980	1880	1470	1210	1520	1660
7	1180	1100	2150	1970	2040	1830	2040	1780	1240	1260	1560	1720
8	1220	1220	2170	1960	2020	1940	2000	1770	1360	1520	1640	1710
9	1410	1340	2130	1960	1980	1900	1940	1840	1100	1550	1700	1780
10	1570	1390	2080	1980	2090	1930	1790	1870	1230	1640	1760	1820
11	1590	1430	1940	2010	1980	1940	1900	1900	1040	1660	1530	1810
12	1690	950	2070	2060	2030	1970	1910	1950	1100	1720	1720	1730
13	2060	1590	2200	2160	1990	1960	1820	1510	1070	1670	1740	1640
14	1790	1640	2140	2110	2020	1920	1850	1210	1180	1230	1450	1650
15	1930	1760	2050	1890	1990	1900	1820	1140	1220	1650	1630	1630
16	1710	1890	2020	1980	1830	1890	1860	1220	1340	1720	1610	1660
17	1840	1870	2000	2050	1880	1900	1910	1230	990	1680	1630	1680
18	1880	1730	1980	2110	2040	1930	1820	1430	1350	1660	1640	1720
19	1970	1780	1990	2040	2030	1890	1850	1480	1430	1710	1720	1730
20	1980	1780	2020	2060	2020	---	1830	1490	1480	1640	1680	1750
21	1960	1710	1990	2020	2040	1850	1870	1600	1580	1800	1660	1780
22	---	1740	2300	2070	1840	1820	1900	1640	1570	1700	1670	1800
23	1900	1800	2000	2070	1750	1920	1890	1340	1560	1480	1690	1820
24	---	1810	2020	2060	1790	1900	2000	1620	1620	450	1700	1850
25	2370	1820	2050	2050	1650	1920	1970	1960	1620	803	1670	1860
26	2440	1820	2040	2050	1740	1960	1950	1560	1610	933	1670	1880
27	2440	1860	1990	2070	1820	1930	1940	1690	1560	973	1750	1920
28	2500	1900	2020	2090	1720	2020	1890	1690	1570	1110	1630	1970
29	2580	1940	2030	2110	---	1990	1770	1170	1630	1180	1790	1960
30	2510	1990	2010	2090	---	1930	1760	1210	1710	1210	1710	1980
31	2450	---	2020	2080	---	1850	---	960	---	1300	1710	---
MONTH	1850	1590	2050	2030	1950	1890	1890	1580	1370	1420	1630	1770

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22.0	18.0	0.5	3.0	4.5	10.0	10.5	19.0	21.0	28.0	26.5	26.5
2	14.0	18.0	0.5	3.5	5.0	10.0	7.5	15.5	22.5	27.5	26.0	26.0
3	15.5	14.0	0.5	2.0	5.5	7.5	8.0	17.5	23.5	27.5	27.0	26.0
4	16.5	11.5	2.5	2.0	6.0	7.0	10.5	19.5	24.0	26.0	26.0	25.5
5	22.5	12.0	6.0	2.5	3.0	10.0	14.0	20.5	25.5	26.5	26.0	25.5
6	15.0	12.0	7.5	2.5	0.5	7.5	15.5	21.5	27.0	28.0	26.5	23.5
7	15.0	12.0	6.0	4.0	1.0	10.0	15.5	19.0	23.5	28.0	26.0	22.0
8	21.0	12.0	3.0	5.0	0.5	9.0	14.5	20.0	25.5	26.5	26.0	29.5
9	22.5	12.0	1.5	7.0	0.5	6.0	15.5	21.0	24.0	28.0	26.0	24.5
10	14.5	12.5	2.0	5.0	1.5	4.0	14.5	21.0	22.5	28.0	26.0	28.0
11	21.5	11.0	2.0	2.0	3.5	4.0	14.0	22.0	20.5	27.0	25.5	24.0
12	22.5	9.5	1.0	0.5	5.5	4.0	14.0	21.5	22.0	25.5	25.5	16.0
13	16.0	9.5	1.5	0.5	6.5	5.5	13.0	19.5	24.5	24.0	25.5	13.0
14	13.5	8.0	3.0	0.5	6.0	7.5	13.5	18.0	25.5	24.5	25.0	15.0
15	8.0	7.5	2.0	1.0	4.5	5.0	17.0	19.5	25.5	23.5	26.0	19.0
16	17.5	8.5	2.0	1.5	2.0	8.5	20.0	21.0	26.0	25.5	26.5	21.0
17	22.5	9.5	2.0	2.0	1.0	7.0	21.0	21.0	25.0	24.5	27.0	24.0
18	13.0	11.0	3.0	3.0	2.0	13.5	20.5	23.0	25.5	25.5	28.0	21.0
19	19.5	11.0	3.0	4.0	2.0	15.0	17.5	23.0	25.5	26.0	28.0	19.5
20	18.0	9.5	3.0	3.0	3.5	---	16.0	23.0	25.5	27.0	27.5	19.0
21	13.0	9.5	3.0	4.5	4.5	15.0	18.5	23.5	26.0	27.5	27.5	15.5
22	---	11.0	4.5	3.0	2.5	15.0	18.5	23.5	24.0	26.5	28.0	15.5
23	21.0	11.5	4.5	3.5	1.0	13.5	21.5	22.5	25.5	25.5	27.5	16.5
24	---	8.0	3.0	6.5	1.5	11.0	22.5	23.0	26.0	23.0	28.0	15.0
25	19.0	7.0	1.0	6.0	4.5	12.5	22.5	23.5	26.5	24.5	27.5	12.5
26	18.0	7.0	1.5	6.0	4.5	10.5	22.0	22.5	27.5	24.5	26.5	15.0
27	17.0	6.5	2.5	6.0	6.5	12.5	21.0	21.5	28.0	25.5	25.0	18.5
28	20.5	6.5	3.0	6.0	8.5	9.5	19.5	22.0	26.0	26.5	25.5	18.5
29	20.0	3.0	4.5	5.5	---	6.0	20.0	19.0	26.5	27.5	26.5	18.5
30	16.0	0.5	3.0	6.0	---	6.5	19.5	19.0	26.5	27.5	26.5	19.0
31	18.0	---	4.5	5.0	---	9.5	---	19.5	---	27.5	27.0	---
MONTH	17.5	10.0	3.0	3.5	3.5	9.0	16.5	21.0	25.0	26.0	26.5	20.5

07324400 WASHITA RIVER NEAR FOSS, OKLA.

LOCATION.--Lat 35°32'20", long 99°10'10", in SW 1/4 SW 1/4 sec.1, T.12 N., R.19 W., Custer County, at gaging station at bridge on county road, 0.4 mi (0.6 km) downstream from Oak Creek, 0.9 mi (1.4 km) downstream from Foss Dam, 2.5 mi (4.0 km) west of Stafford, 6.0 mi (9.7 km) north of Foss, and at mile 473.5 (761.9 km).

DRAINAGE AREA.--1,511 mi^2 (4,017 km^2).

PERIOD OF RECORD.--Chemical analyses: October 1946 to September 1948, water years 1950-51 and 1956 (partial-record station), October 1969 to current year.
Water temperatures: October 1946 to September 1948, October 1969 to current year.

EXTREMES, Current year.--Specific conductance: Maximum daily, 1,750 micromhos/cm Sept. 26; minimum daily, 239 micromhos/cm July 26.
Water temperatures: Maximum, 26.0°C July 1, Aug. 16, Sept. 2-3; minimum, 0.0°C Jan. 13, Feb. 6.

Period of record.--Specific conductance (1969-75): Maximum daily, 2,840 micromhos/cm Aug. 13, 1974; minimum daily, 164 micromhos/cm Mar. 30, 1973.
Water temperatures: Maximum, 35.0°C Aug. 10-11, 1948; minimum, -0.5°C Jan. 9-11, 1974.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
OCT.											
05...	0900	13	--	--	39	--	415	0	340	190	13
15...	0900	11	150	80	68	--	289	0	237	580	31
25...	0900	13	130	84	68	--	289	0	237	530	27
NOV.											
05...	0900	152	36	19	16	--	177	0	145	46	5.0
15...	0900	28	66	40	30	--	328	0	269	100	8.5
25...	0800	20	72	44	35	--	355	0	291	120	11
DEC.											
05...	0900	16	77	49	40	3.8	383	0	314	130	14
15...	0900	15	79	53	41	3.5	393	0	322	150	15
25...	0900	12	94	65	42	3.2	386	0	317	--	14
JAN.											
04...	0900	11	90	59	40	3.3	390	0	320	--	13
15...	0900	8.1	96	68	44	3.1	379	0	311	260	14
25...	0900	14	170	110	73	9.2	317	0	260	660	35
FEB.											
05...	0900	20	110	69	50	6.3	353	0	290	330	21
14...	0900	15	120	76	54	6.2	384	0	315	380	23
25...	0900	44	88	62	46	6.2	355	0	291	260	22
MAR.											
05...	1000	30	91	56	45	5.2	412	0	338	190	19
15...	0900	20	85	59	43	3.8	430	0	353	160	16
25...	0900	16	90	64	45	3.0	358	0	294	--	15
APR.											
05...	1200	14	82	71	46	2.8	397	0	326	--	16
15...	1000	20	--	--	46	4.5	417	0	342	190	18
27...	1630	14	100	72	46	4.8	410	0	336	260	16
MAY											
05...	0900	14	110	67	48	4.0	428	0	351	280	18
15...	1300	24	75	60	47	4.9	413	0	339	--	18
26...	1000	11	100	68	47	4.4	429	0	352	240	18
JUNE											
05...	0800	16	88	65	49	5.9	398	0	326	240	21
15...	1430	10	48	34	28	5.5	271	0	222	88	14
25...	1400	17	87	59	41	5.1	368	0	302	220	17
JULY											
10...	1100	14	82	52	40	4.5	--	--	--	220	16
22...	0900	9.4	120	70	53	6.4	268	0	220	--	22
26...	1600	396	27	9.8	8.3	3.7	121	0	99	21	4.5
AUG.											
01...	0830	273	27	11	10	4.2	139	0	114	16	6.2
18...	0830	26	72	40	--	4.2	318	--	261	150	12
28...	0900	17	--	--	43	4.4	304	0	249	270	16
SEP.											
05...	1200	15	99	60	40	3.4	375	0	308	260	15
15...	1430	8.7	99	69	45	3.4	350	0	287	320	15
25...	0900	11	120	87	62	6.4	254	0	208	540	24

07324400 WASHITA RIVER NEAR FOSS, OKLA.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	CARBON DIOXIDE (CO2) (MG/L)
OCT.											
05...	.42	665	.90	23.3	--	--	--	--	971	8.1	5.3
15...	.35	1250	1.70	37.1	700	470	--	1.1	1560	8.1	3.7
25...	.41	1090	1.48	38.3	670	430	--	1.1	1390	7.8	7.3
NOV.											
05...	.51	238	.32	97.7	170	23	--	.5	383	8.1	2.2
15...	.77	444	.60	33.6	330	61	--	.7	698	8.1	4.2
25...	.82	500	.68	27.0	360	70	--	.8	765	8.1	4.5
DEC.											
05...	--	533	.72	23.0	390	80	18	.9	802	7.9	7.7
15...	--	572	.78	23.2	420	93	18	.9	867	7.8	10
25...	--	700	.95	22.7	500	190	15	.8	1040	7.9	7.8
JAN.											
04...	--	660	.90	19.6	470	150	16	.8	950	8.0	6.2
15...	--	744	1.01	16.3	520	210	15	.8	1090	7.8	9.6
25...	--	1400	1.90	52.9	880	620	15	1.1	1700	7.9	6.4
FEB.											
05...	--	815	1.11	44.0	560	270	16	.9	1120	8.2	3.0
14...	--	904	1.23	36.6	610	300	16	1.0	1210	8.2	3.9
25...	--	714	.97	84.8	480	180	17	.9	1010	8.2	3.6
MAR.											
05...	--	662	.90	53.6	460	120	17	.9	976	7.8	10
15...	--	627	.85	33.9	460	100	17	.9	939	8.0	6.9
25...	--	683	.93	29.5	490	190	17	.9	1010	7.9	7.2
APR.											
05...	--	652	.89	24.6	500	170	17	.9	987	7.9	8.0
15...	--	647	.88	34.9	--	--	--	--	970	7.9	8.4
27...	--	750	1.02	28.3	550	210	15	.9	--	7.9	8.3
MAY											
05...	--	783	1.06	29.6	550	200	16	.9	1110	8.2	4.3
15...	--	576	.78	37.3	430	96	19	1.0	892	8.2	4.2
26...	--	730	.99	21.7	530	180	16	.9	1050	8.2	4.3
JUNE											
05...	--	710	.97	30.7	490	160	18	1.0	1010	8.3	3.2
15...	--	371	.50	10.0	260	58	19	.8	602	8.1	3.4
25...	--	653	.89	30.0	460	160	16	.8	955	8.3	3.0
JULY											
10...	.59	598	.81	22.6	420	--	17	.9	--	8.3	--
22...	.84	928	1.26	23.6	590	370	16	1.0	1230	8.1	3.4
26...	--	157	.21	168	110	9	14	.3	239	7.9	2.4
AUG.											
01...	--	--	--	--	110	0	16	.4	256	7.7	4.4
18...	--	505	--	35.5	340	84	--	--	777	--	--
28...	--	680	.92	31.2	--	--	--	--	1030	7.9	6.1
SEP.											
05...	--	693	.94	28.1	490	190	15	.8	1030	7.9	7.6
15...	--	790	1.07	18.6	530	240	15	.9	1200	7.8	8.9
25...	.94	1050	1.43	31.2	660	450	17	1.1	--	7.9	5.1

07324400 WASHITA RIVER NEAR FOSS, OKLA.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1420	---	804	1050	1420	809	---	1030	767	1040	256	1010
2	1420	329	816	1060	1210	812	985	1460	792	1010	277	1040
3	1410	332	811	979	1210	852	987	1050	952	1000	277	1050
4	988	383	825	950	1130	852	1020	1330	---	557	292	1040
5	971	383	802	950	1120	976	987	1110	1010	---	309	1030
6	974	382	834	950	1190	894	1050	1050	1060	---	598	---
7	971	442	845	1010	1300	894	1050	1060	970	881	599	---
8	971	521	845	1020	1300	997	736	1240	948	---	652	1080
9	1390	---	845	1030	1300	1000	761	1120	984	892	674	1200
10	1620	603	865	1020	1310	997	834	---	326	960	746	1230
11	1620	604	865	---	1320	1110	1030	1180	454	---	808	1210
12	1610	736	850	1060	1320	1110	1210	1140	463	1030	896	772
13	1210	714	861	1060	1240	1100	1080	527	524	971	880	---
14	1200	654	859	1110	1210	1020	1200	861	---	931	953	---
15	1560	698	867	1090	---	939	970	892	602	945	805	1200
16	1400	682	867	1060	1400	936	1290	965	625	968	593	1610
17	1400	685	900	1170	1400	936	1190	1030	701	948	667	---
18	1340	682	908	1170	1350	872	1070	1060	704	1100	764	1690
19	1360	735	909	---	1370	---	---	1060	754	---	883	1590
20	1370	719	991	1460	1210	941	1210	1170	---	---	910	---
21	1360	725	994	1480	1180	1100	1060	1100	853	963	992	---
22	1360	729	991	1180	1180	1000	---	696	---	1230	994	1450
23	1210	764	971	1720	987	1000	1100	1020	857	1230	---	1450
24	1340	766	1040	1690	984	1010	1100	1030	968	277	---	1420
25	1390	765	1040	1700	1010	1020	1240	1030	955	---	946	1490
26	1310	763	1070	1720	800	1060	1240	1050	958	239	997	1750
27	1300	753	1070	1660	854	1000	1080	1110	945	---	992	---
28	1300	---	1050	1650	872	997	782	377	---	308	1030	---
29	1370	768	1070	1690	---	---	964	1350	---	241	994	1360
30	1350	800	1070	1620	---	---	---	633	912	247	---	1330
31	1350	---	1060	1580	---	---	---	719	---	242	---	---
MONTH	1320	635	922	1270	1190	972	1050	1020	795	---	733	---

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15.0	---	1.5	5.0	5.0	6.0	---	18.0	18.0	24.0	22.5	22.0
2	15.0	15.0	3.0	5.0	6.0	8.0	4.0	15.0	17.5	21.0	23.0	20.0
3	15.0	15.0	3.5	5.0	7.0	6.0	4.0	15.0	19.0	21.0	22.0	20.0
4	17.0	14.0	5.0	5.0	7.0	5.0	7.0	20.0	22.0	20.0	25.0	20.0
5	14.0	11.0	14.5	4.0	3.5	8.0	12.0	16.0	16.5	---	23.0	22.0
6	14.0	11.0	10.0	4.0	0.0	10.0	---	23.0	18.5	---	23.0	---
7	15.0	12.0	4.0	5.0	0.5	8.0	12.0	18.0	24.0	22.5	24.0	---
8	17.0	12.0	2.0	7.0	0.5	6.0	12.0	14.0	24.0	---	23.0	18.0
9	18.5	---	2.0	12.0	1.0	6.0	11.0	22.0	19.0	22.0	20.0	19.0
10	18.5	11.0	8.0	12.0	1.0	6.0	12.5	---	19.0	21.0	21.0	21.0
11	20.5	10.0	6.0	---	4.0	6.0	15.0	18.0	20.0	---	23.0	23.0
12	25.0	9.5	4.5	0.5	4.0	6.5	14.5	17.0	19.5	24.0	23.5	15.5
13	15.0	10.0	5.0	0.0	10.0	4.0	---	12.0	20.0	22.0	23.0	---
14	14.5	8.0	6.0	3.0	4.0	5.0	---	17.0	---	18.0	21.5	---
15	11.0	8.0	6.0	9.0	---	6.0	10.0	18.5	21.0	23.0	22.0	15.0
16	13.5	10.0	6.0	11.5	4.0	6.0	21.0	15.5	20.0	22.0	26.0	24.0
17	16.0	11.0	4.5	5.0	4.0	11.0	19.5	21.0	23.0	18.0	23.0	---
18	17.0	11.0	4.5	5.0	4.0	9.5	20.0	23.0	21.0	22.0	22.0	23.0
19	14.0	11.0	4.5	---	4.0	---	---	18.0	21.0	---	25.0	21.0
20	16.0	9.0	5.0	5.0	2.0	12.0	13.0	18.0	---	---	22.0	---
21	13.5	12.0	5.5	4.0	5.5	14.0	13.0	20.0	21.0	22.0	22.5	---
22	16.5	11.0	6.5	4.0	4.0	9.0	---	20.5	---	22.0	23.0	14.5
23	15.0	10.0	6.5	4.0	2.0	9.0	17.0	18.0	21.0	23.5	---	14.0
24	17.0	8.0	5.0	4.0	2.0	9.0	19.0	18.5	21.0	20.0	---	16.0
25	16.0	8.0	5.0	5.0	4.0	9.0	17.0	19.0	22.5	---	22.0	16.0
26	16.0	8.0	5.0	5.0	4.0	11.0	19.0	18.0	21.0	21.0	24.0	18.0
27	15.5	8.5	5.5	4.5	6.0	10.0	20.0	18.0	22.5	---	21.0	---
28	15.5	---	5.0	4.5	5.0	10.0	13.0	21.0	---	20.0	21.0	---
29	15.0	4.0	5.5	5.5	---	---	15.5	16.5	---	21.0	22.0	15.5
30	15.0	2.0	6.0	6.0	---	---	---	18.0	21.0	23.0	---	17.0
31	15.0	---	7.0	5.5	---	---	---	19.0	---	22.0	---	---
MONTH	16.0	10.0	5.5	5.5	4.0	8.0	---	18.0	20.5	---	22.5	---

07325500 WASHITA RIVER AT CARNEGIE, OKLA.

LOCATION.--Lat 35°07'02", long 98°33'49", in NW 1/4 NW 1/4 sec.3, T.7 N., R.13 W., Caddo County, at gaging station at bridge on State Highway 9, 1,300 ft (362.2 m) upstream from Running Creek, 2.7 mi (4.3 km) east of Carnegie, and at mile 353.9 (569.4 km).

DRAINAGE AREA.--3,129 mi^2 (8,104 km^2) includes that of Running Creek.

PERIOD OF RECORD.--Chemical analyses: Water years 1948-53 (partial-record station), October 1953 to current year.
Water temperatures: October 1953 to current year.
Sediment records: May 1947 to September 1950.

EXTREMES, Current year.--Specific conductance: Maximum daily, 2,390 micromhos/cm Aug. 30; minimum daily, 412 micromhos/cm July 26.
Water temperatures: Maximum, 29.0°C Aug. 23, 31; minimum, freezing point on Feb. 6.

Period of record.--Specific conductance: Maximum daily, 3,530 micromhos/cm Aug. 26, 1954; minimum daily, 197 micromhos/cm Sept. 25, 1971.
Water temperatures: Maximum, 35.0°C Sept. 2, 1971, July 3, 1974; minimum, freezing point on many days during winter months.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	DIS-CHARGE (CFS)	INSTAN-TANEOUS DIS-CHARGE (CFS)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	ALKA-LINITY AS CACO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)
OCT.												
01-09	--	157	--	220	78	61	--	265	0	217	--	46
10-29	--	138	--	280	85	76	--	303	0	249	--	66
30-31	--	418	--	190	63	61	--	205	0	168	--	49
NOV.												
01-02	--	766	--	--	33	40	--	154	0	126	310	29
03-06	--	2540	--	81	16	--	--	120	0	98	170	12
07-10	--	769	--	120	40	--	--	175	0	144	340	24
11-17	--	405	--	200	61	63	--	260	0	213	570	40
18-30	--	263	--	270	89	81	--	338	0	277	810	63
DEC.												
01-10	--	224	--	290	100	86	5.0	--	--	--	890	80
11-20	--	223	--	270	110	93	4.8	226	0	185	1000	78
JAN.												
01-10	--	223	--	290	110	100	4.6	322	0	264	1000	88
11-20	--	172	--	330	120	100	4.0	328	0	269	--	88
21-31	--	163	--	330	120	99	4.2	317	0	260	1100	86
FEB.												
01-09	--	436	--	240	78	84	5.4	249	0	204	770	77
10-21	--	277	--	230	88	140	6.4	302	0	248	840	85
22-28	--	568	--	200	82	77	4.7	246	0	202	640	76
MAR.												
01-06	--	407	--	220	89	71	4.7	307	0	252	700	58
07-28	--	340	--	270	110	85	4.2	305	0	250	930	73
29-31	--	482	--	210	84	57	5.3	273	0	224	690	43
APR.												
01-09	--	321	--	280	120	81	4.4	311	0	255	930	70
10-14	--	510	--	190	73	53	5.4	272	0	223	580	37
15-30	--	287	--	280	120	85	4.7	310	0	254	970	69
MAY												
01-05	--	481	--	270	100	68	6.2	275	0	226	900	55
06-07	--	394	--	230	89	53	6.6	214	0	176	720	40
08-13	--	289	--	270	100	77	5.0	297	0	244	940	60
14-17	--	1010	--	130	44	37	6.2	158	0	130	400	29
18-22	--	473	--	220	75	50	5.6	228	0	187	730	37
23-24	--	1600	--	100	35	31	6.0	157	0	129	300	26
25-31	--	1080	--	130	46	38	5.2	170	0	139	410	36
JUNE												
01-02	--	1260	--	--	41	28	7.2	158	0	130	400	23
03-10	--	520	--	220	82	49	6.0	227	0	186	730	35
11-13	--	2400	--	88	27	20	7.4	141	0	116	220	18
14-21	--	670	--	160	58	39	6.4	215	0	176	480	30
22-25	--	1120	--	--	41	30	7.2	169	0	139	410	24
26...	0700	--	2950	--	11	8.7	7.1	116	0	95	130	8.9
27...	0700	--	1270	160	33	25	8.0	146	0	120	--	26
28-30	--	705	--	190	51	51	6.6	202	0	166	580	51
JULY												
03...	1100	--	371	230	73	75	6.2	231	0	189	710	73
23...	0900	--	170	300	93	110	5.3	282	0	231	950	110
26...	0700	--	3860	50	9.6	18	6.6	107	0	88	96	14
AUG.												
03...	0700	--	1660	84	23	30	5.8	151	0	124	200	28
13...	1000	--	340	250	78	89	5.6	316	0	259	710	100
30...	1130	--	202	270	94	110	5.2	284	0	233	930	110
SEP.												
03...	1100	--	169	290	98	120	4.9	206	0	169	990	130
17...	1630	--	184	300	99	120	6.1	288	0	236	970	120
30...	1700	--	145	340	110	120	4.4	281	0	230	1100	130

07325500 WASHITA RIVER AT CARNEGIE, OKLA.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	CARBON DIOXIDE (CO2) (MG/L)
OCT.											
01-09	.95	1320	--	560	870	650	--	.9	1610	8.2	2.7
10-29	.92	--	--	--	1100	850	--	1.0	1900	8.2	3.1
30-31	.71	1140	--	1290	730	560	--	1.0	1440	7.9	4.1
NOV.											
01-02	1.1	--	--	--	--	310	--	--	911	7.8	3.9
03-06	.71	377	.51	2590	270	170	--	--	560	7.8	3.0
07-10	.86	717	.98	1490	460	320	--	--	960	7.9	3.5
11-17	1.1	1140	1.55	1250	750	540	--	1.0	1420	8.2	2.6
18-30	1.3	1620	2.20	1150	1000	720	--	1.1	1890	8.2	3.4
DEC.											
01-10	--	1810	2.46	1100	1100	--	14	1.1	1955	7.9	--
11-20	--	1930	2.62	1160	1100	940	15	1.2	2140	7.8	5.7
JAN.											
01-10	--	--	--	--	1200	910	16	1.3	2257	8.1	4.1
11-20	--	2060	2.80	957	1300	1100	14	1.2	2470	8.7	1.0
21-31	--	2080	2.83	915	1300	1100	14	1.2	2310	8.7	1.0
FEB.											
01-09	1.6	1550	2.11	1830	920	720	16	1.2	1760	8.2	2.5
10-21	2.1	1660	2.26	1240	940	690	24	2.0	--	8.3	2.4
22-28	1.6	1320	1.80	2020	840	640	17	1.2	--	8.2	2.5
MAR.											
01-06	--	1480	2.01	1630	920	660	14	1.0	1760	7.9	6.2
07-28	--	1800	2.45	1650	1100	880	14	1.1	2060	7.9	6.1
29-31	--	1360	1.85	1770	870	650	12	.8	1640	7.8	6.9
APR.											
01-09	--	1850	2.52	1600	1200	940	13	1.0	2110	8.4	2.0
10-14	--	1220	1.66	1680	780	550	13	.8	1510	8.2	2.7
15-30	--	1900	2.58	1470	1200	940	13	1.1	2150	8.3	2.5
MAY											
01-05	--	1710	2.33	2220	1100	860	12	.9	1970	7.9	5.5
06-07	--	1380	1.88	1470	860	680	12	.8	1640	8.0	3.4
08-13	--	1780	2.42	1390	1100	840	13	1.0	2020	8.1	3.8
14-17	--	781	1.06	2130	510	380	14	.7	1060	7.9	3.2
18-22	--	1350	1.84	1720	860	670	11	.7	1600	8.0	3.6
23-24	--	624	.85	2700	390	270	14	.7	880	7.9	3.2
25-31	--	796	1.08	2320	510	370	14	.7	1070	7.9	3.4
JUNE											
01-02	--	735	--	2500	--	--	--	--	988	7.5	8.0
03-10	--	1350	1.81	1870	890	700	11	.7	1570	7.7	7.2
11-13	--	489	.67	3170	330	220	11	.5	702	7.6	5.7
14-21	--	946	1.29	1710	640	460	12	.7	1220	7.8	5.5
22-25	--	810	1.10	2450	--	--	--	--	--	7.5	8.6
26...	--	316	.43	2520	--	--	--	--	466	7.2	12
27...	--	757	--	--	540	420	10	.5	--	6.9	29
28-30	--	1120	1.52	2130	680	520	14	.8	1390	7.5	10
JULY											
03...	--	1400	1.90	1400	880	690	1790	1.1	--	8.2	2.3
23...	--	1710	2.33	785	1100	900	17	1.4	2180	8.1	3.6
26...	--	300	.41	3130	160	72	18	.6	424	--	--
AUG.											
03...	--	469	.64	2100	300	180	17	.7	716	8.0	2.4
13...	--	1510	2.05	1390	950	690	17	1.3	1910	7.9	6.4
30...	--	1950	2.65	1060	1100	830	18	1.5	2390	7.9	5.7
SEP.											
03...	--	1990	2.71	908	1100	960	19	1.6	2420	7.7	6.6
17...	--	1920	2.61	954	1200	920	18	1.5	2330	7.9	5.8
30...	--	2170	2.95	850	1300	1100	17	1.4	2550	7.6	11

07325500 WASHITA RIVER AT CARNEGIE, OKLA.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1380	784	1980	2340	1790	1670	1940	2000	884	1620	753	2380
2	1390	1010	2030	2290	1890	1670	1970	2080	1090	1750	834	2380
3	1530	557	2030	2200	1890	1740	2090	2010	1470	1790	716	2420
4	1600	507	2070	2200	1620	1820	2110	1710	1480	---	947	2400
5	1700	494	2080	2120	1440	1840	2150	1910	---	1850	974	2400
6	1720	670	2070	2130	1650	1900	2160	1500	1550	2040	---	2400
7	1650	805	2130	2130	1790	2030	2240	1770	1580	2030	1190	2420
8	1670	922	2130	2140	1870	1930	2180	1860	1600	1700	1280	2430
9	1670	1000	2130	2220	1890	2010	2310	1940	1670	1810	1350	2430
10	1790	1130	2120	2190	2020	2050	1240	2030	1660	1700	1440	2430
11	1780	1240	2100	2180	2030	2090	1460	2020	642	1990	1620	2420
12	1820	1320	2170	2300	2030	2180	1560	2100	694	1960	1810	2480
13	1890	1380	2170	2300	2100	2080	1590	2180	750	2050	1910	2480
14	1910	1430	2170	2260	2160	2130	1670	1120	959	2140	1800	2490
15	1960	1470	2140	2250	2130	2130	1940	1060	1040	2150	1970	2470
16	1920	1550	2170	2330	2180	2130	2000	811	1170	1900	1500	2400
17	1930	1600	2180	2270	2180	2190	2040	1170	1240	1440	1320	2330
18	1640	1730	2230	2340	2160	2050	2060	1430	1300	2030	1690	2420
19	1800	1730	2200	2360	2140	1940	2080	1610	1340	2120	2000	2490
20	1790	1780	2200	2330	2070	1970	2120	1670	1440	2120	2050	2500
21	1880	1860	2240	2320	2060	2000	2180	1620	1460	1950	2060	---
22	2020	1930	2240	2330	1700	2000	2160	1730	1170	2170	2240	2510
23	2020	1940	2230	2330	1910	2050	2130	765	954	2180	2240	2530
24	2120	1860	2230	2340	1760	2130	2200	936	815	2030	2240	2530
25	2070	1970	2260	2340	1590	2130	2220	1030	1210	702	2270	2510
26	1980	1970	2270	2320	1600	2190	2270	1060	466	412	2210	2490
27	2030	1960	2310	2350	1460	2130	2250	1170	1000	460	2310	2500
28	1980	1950	2310	2330	1460	2120	2210	1220	---	532	2280	2530
29	1980	1980	2300	2310	---	1430	2290	1040	1370	622	2330	2550
30	1270	1980	2320	2270	---	---	2310	1270	1420	525	2390	2550
31	1590	---	2320	2270	---	1300	---	835	---	573	2340	---
MONTH	1790	1420	2180	2270	1880	1970	2040	1510	1190	1610	1740	2460

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17.0	17.0	6.0	10.0	17.0	7.0	13.0	19.5	18.0	26.0	26.0	26.0
2	17.0	20.0	8.0	8.0	15.0	8.0	11.0	26.5	18.0	27.0	25.0	28.0
3	17.0	14.5	12.0	7.0	18.5	12.0	15.0	18.0	---	---	24.5	26.0
4	18.0	15.0	10.0	9.0	16.0	9.0	10.5	18.0	23.0	---	24.0	28.0
5	17.0	14.0	14.0	---	7.0	13.0	17.0	19.0	---	26.0	24.5	28.0
6	22.0	14.0	14.0	7.0	0.0	7.0	15.0	19.5	---	26.0	---	26.0
7	22.0	19.0	11.0	6.0	9.5	---	15.5	19.0	24.0	26.0	26.0	26.0
8	17.0	19.0	5.0	8.0	9.5	---	15.0	19.0	23.0	28.0	24.5	24.0
9	22.0	17.0	5.0	7.0	4.0	---	15.0	24.0	24.0	28.0	25.0	24.0
10	18.0	15.0	5.0	7.0	16.0	11.0	15.0	24.0	23.0	25.0	26.0	25.0
11	21.0	19.0	7.0	7.0	15.0	8.5	17.5	22.0	23.0	26.0	24.0	26.0
12	22.0	13.0	9.0	5.0	15.0	5.0	15.5	24.0	19.0	25.0	24.5	20.0
13	21.0	15.0	7.0	8.0	7.0	7.0	14.0	20.0	20.0	26.0	25.5	19.0
14	20.0	12.0	8.0	8.0	7.0	8.0	15.0	21.0	21.0	25.5	24.5	17.0
15	16.0	13.5	7.0	7.0	8.0	8.0	16.0	19.0	24.0	25.0	24.0	18.0
16	15.0	14.0	8.0	7.5	8.0	10.0	19.5	17.0	26.0	25.5	26.0	18.5
17	21.0	15.0	20.0	8.0	---	11.0	21.0	17.0	25.0	25.0	25.0	23.0
18	17.0	15.0	17.0	6.0	7.0	15.0	22.0	19.0	26.0	27.0	25.0	24.0
19	15.0	16.0	9.0	7.0	6.0	15.0	20.0	22.0	24.0	24.5	26.0	21.0
20	18.0	13.0	10.0	6.0	7.0	15.5	21.0	21.0	25.0	25.0	27.0	20.0
21	15.0	13.0	7.0	8.0	7.0	16.0	16.0	22.0	26.0	25.0	27.0	---
22	16.0	13.0	6.0	5.0	7.0	15.5	19.0	23.0	24.0	25.0	26.0	18.0
23	15.0	12.5	7.0	7.0	5.5	16.5	21.0	20.0	24.0	26.0	29.0	15.0
24	16.0	12.0	7.0	8.0	5.0	17.0	---	21.0	25.0	24.0	28.0	17.0
25	19.5	12.5	5.0	8.0	5.0	17.0	---	21.0	23.0	23.0	28.0	17.0
26	16.0	10.0	5.0	8.5	6.0	14.5	23.0	21.0	22.0	22.0	25.0	17.5
27	19.0	12.0	7.0	10.0	12.0	15.0	23.0	23.0	24.0	---	25.0	19.0
28	20.0	12.0	7.0	---	12.0	9.5	25.0	21.0	---	25.0	25.0	18.0
29	19.0	---	5.0	15.0	---	9.0	---	20.0	28.5	25.0	27.0	19.0
30	20.0	---	5.0	8.5	---	---	19.0	19.0	26.0	24.0	26.0	22.0
31	16.0	---	7.0	9.0	---	18.0	---	19.0	---	26.0	29.0	---
MONTH	18.5	14.5	8.5	8.0	9.5	12.0	17.5	20.5	23.5	25.5	26.0	21.5

07331000 WASHITA RIVER NEAR DURWOOD, OKLA.

LOCATION.--Lat 34°14'03", long 96°58'32", in NW 1/4 SW 1/4 sec.3, T.4 S., R.3 E., Carter County, at gaging station at bridge on U.S. Highway 177, 1.3 mi (2.1 km) downstream from Caddo Creek, 4 mi (6.4 km) north of Durwood, and at mile 63.4 (102.0 km).

DRAINAGE AREA.--7,202 mi² (18,653 km²).

PERIOD OF RECORD.--Chemical analyses: May 1944 to current year.
Water temperatures: April 1947 to current year.

EXTREMES, Current year.--Specific conductance: Maximum daily, 1,580 micromhos/cm Sept. 24; minimum daily, 248 micromhos/cm Oct. 30.
Water temperatures: Maximum, 34.0°C Aug. 11, Sept. 3; minimum, 4.0°C on Jan. 12.

Period of record.--Specific conductance (1944-49, 1950-1975): Maximum daily, 2,120 micromhos/cm Nov. 15, 1963; minimum daily, 94.9 micromhos/cm Nov. 2, 1951.
Water temperatures (1947-75): Maximum, 37.0°C July 8, 1964; minimum, freezing point on many days during winter months.

REMARKS.--M=Presence of material verified but not quantified; B=Results based on colony count outside the acceptable range (non-ideal colony count).

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)
OCT.											
12...	1100	512	--	100	40	64	--	260	0	213	220
16...	1200	664	9.9	110	42	70	5.2	259	0	212	220
24...	1715	404	--	--	53	89	--	284	0	233	340
30...	1800	3850	--	35	6.9	17	--	130	0	107	18
NOV.											
01...	1730	24800	--	44	10	13	3.8	149	0	122	31
12...	1200	3740	9.6	67	21	28	3.4	205	0	168	79
23...	1000	1860	--	100	36	51	4.8	269	0	221	200
30...	1100	990	--	120	46	59	4.4	345	0	283	220
DEC.											
03...	1300	933	13	150	55	68	4.1	380	0	312	310
JAN.											
07...	1200	1640	8.6	110	38	47	4.2	270	0	221	210
FEB.											
19...	0900	1420	9.6	--	52	70	3.2	339	0	278	320
APR.											
15...	1200	2350	7.8	130	51	--	--	310	0	254	270
MAY											
27...	1200	9500	6.8	50	21	21	6.4	177	0	145	70
JUNE											
23...	1200	2750	8.0	53	16	23	5.3	156	0	128	76
JULY											
22...	1035	928	10	130	68	82	7.0	236	0	194	400
AUG.											
13...	1200	2110	9.4	100	38	47	5.2	231	0	189	250
SEP.											
17...	1100	1150	9.5	110	43	64	5.9	250	0	205	250

07331000 WASHITA RIVER NEAR DURWOOD, OKLA.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	TOTAL NITRO-GEN (N) (MG/L)	TOTAL NITRO-GEN (NO3) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)
OCT.											
12...	65	--	.27	.27	--	--	--	--	667	--	.91
16...	110	.3	.01	--	1.1	1.1	4.9	.21	718	695	.98
24...	91	--	.32	.32	--	--	--	--	926	--	--
30...	17	--	.43	.43	--	--	--	--	--	--	--
NOV.											
01...	18	--	--	--	1.2	--	--	--	214	--	.29
12...	35	.2	.25	--	1.5	1.8	7.7	.47	368	344	.50
23...	62	--	--	--	1.8	--	--	--	635	--	.86
30...	85	--	--	--	.64	--	--	--	743	--	1.01
DEC.											
03...	92	.3	.52	--	.79	1.3	5.8	.21	941	880	1.28
JAN.											
07...	61	.3	.31	--	1.3	1.6	7.1	.38	640	612	.87
FEB.											
19...	98	.3	.57	--	.77	1.3	5.9	.15	886	--	--
APR.											
15...	82	.4	.54	--	.41	.95	4.2	.13	827	--	1.12
MAY											
27...	30	.3	.68	--	4.1	4.8	21	.39	301	297	.41
JUNE											
23...	33	.3	.69	--	1.4	2.1	9.3	.46	334	294	.45
JULY											
22...	110	.4	.02	--	2.4	2.4	11	.14	1000	924	1.36
AUG.											
13...	44	.4	.52	--	1.6	2.1	9.4	.45	621	608	.84
SEP.											
17...	90	.3	.30	--	1.4	1.7	7.5	.22	747	694	1.02

DATE	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	CARBON DIOXIDE (CO2) (MG/L)	TUR-BID-ITY (JTU)
OCT.										
12...	922	410	200	--	1.4	994	8.1	23.0	3.3	--
16...	1290	450	240	25	1.4	--	8.2	16.0	2.6	2
24...	1010	--	--	--	--	1300	8.0	20.0	4.5	--
30...	--	120	9	--	.7	248	7.9	20.0	2.6	--
NOV.										
01...	14300	150	29	15	.5	332	7.8	21.0	3.8	--
12...	3720	250	86	19	.8	599	8.0	12.5	3.3	300
23...	3190	400	180	22	1.1	906	8.1	19.0	3.4	--
30...	1990	490	210	21	1.2	1100	8.2	7.0	3.5	--
DEC.										
03...	2370	600	290	20	1.2	1400	8.1	5.0	4.8	50
JAN.										
07...	2830	430	210	19	1.0	965	8.9	--	.5	100
FEB.										
19...	3400	--	--	--	--	1100	7.4	5.5	22	70
APR.										
15...	5250	540	280	--	--	1350	8.2	14.0	3.1	330
MAY										
27...	7720	210	66	17	.6	480	7.5	24.0	9.0	570
JUNE										
23...	2480	200	70	20	.7	480	8.8	24.0	.4	520
JULY										
22...	2510	600	410	23	1.5	1100	--	29.5	--	54
AUG.										
13...	3540	410	220	20	1.0	--	8.0	29.5	3.7	360
SEP.										
17...	2320	450	250	23	1.3	1075	8.7	22.0	.8	120

07331000 WASHITA RIVER NEAR DURWOOD, OKLA.--Continued
WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	FECAL COLIFORM (COL. PER 100 ML)	STREPTOCOCCI (COLONIES PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)	SUSPENDED SEDIMENT (MG/L)	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM
OCT.									
16...	1200	664	9.8	104	--	--	--	--	--
NOV.									
12...	1200	3740	9.6	94	1400	350	11	1420	74
DEC.									
03...	1300	933	--	--	890	850	5.5	163	94
FEB.									
19...	0900	1420	12.8	107	--	--	5.9	--	--
APR.									
15...	1200	2350	--	--	--	--	--	940	98
MAY									
27...	1200	9500	8.9	111	--	8136	16	1120	100
JUNE									
25...	1130	6440	6.4	80	--	40	--	903	100
JULY									
22...	1035	928	8.3	112	--	126	--	135	11
SEP.									
17...	1100	1150	8.4	101	--	2000	--	--	--

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TOTAL IRON (FE) (UG/L)	DISSOLVED IRON (FE) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	SUSPENDED MANGANESE (MN) (UG/L)	DISSOLVED MANGANESE (MN) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	SUSPENDED ARSENIC (AS) (UG/L)	DISSOLVED ARSENIC (AS) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	SUSPENDED CADMIUM (CD) (UG/L)
FEB.												
19...	0900	1420	3700	20	130	100	30	4	1	3	10	10
MAY												
27...	1200	9500	26000	2800	1100	290	810	17	9	8	10	6
AUG.												
13...	1200	2110	18000	160	1100	1100	0	26	22	4	10	9

DATE	DISSOLVED CADMIUM (CD) (UG/L)	TOTAL CHROMIUM (CR) (UG/L)	SUSPENDED CHROMIUM (CR) (UG/L)	DISSOLVED CHROMIUM (CR) (UG/L)	TOTAL COBALT (CO) (UG/L)	SUSPENDED COBALT (CO) (UG/L)	DISSOLVED COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)	SUSPENDED COPPER (CU) (UG/L)	DISSOLVED COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)
FEB.											
19...	0	0	0	0	<50	<49	1	20	18	2	100
MAY											
27...	4	40	40	0	<50	<47	3	50	10	40	<100
AUG.											
13...	1	0	0	0	100	100	0	40	35	5	<100

DATE	SUSPENDED LEAD (PB) (UG/L)	DISSOLVED LEAD (PB) (UG/L)	TOTAL MERCURY (HG) (UG/L)	SUSPENDED MERCURY (HG) (UG/L)	DISSOLVED MERCURY (HG) (UG/L)	TOTAL SELENIUM (SE) (UG/L)	SUSPENDED SELENIUM (SE) (UG/L)	DISSOLVED SELENIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	SUSPENDED ZINC (ZN) (UG/L)	DISSOLVED ZINC (ZN) (UG/L)
FEB.											
19...	98	2	.2	.1	.1	0	0	0	90	60	30
MAY											
27...	<83	17	.2	.1	.1	1	1	0	440	70	370
AUG.											
13...	<92	8	.1	.0	.1	--	--	0	70	70	0

07331000 WASHITA RIVER NEAR DURWOOD, OKLA.--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

PHYTOPLANKTON

Date	Time	Organism	Count (cells/ml)	Percent of total	Sampling method
Oct. 16		CHLOROPHYTA			Sediment sampler
		Chlorophyceae			
		Chlorococcales			
		Occystaceae			
		Ankistrodesmus	170	1	
		Quadrigula	340	2	
		Scenedesmaceae			
		Scenedesmus	430	2	
		CHRYSOPHYTA			
		Bacillariophyceae			
		Centrales			
		Coscinodiscaceae			
		Cyclotella	3,800	20	
		Pennales			
		Cymbellaceae			
		Amphora		0	
		Fragilariaceae			
		Synedra	1,500	8	
		Naviculaceae			
		Navicula		0	
		Nitzschiaceae			
		Nitzschia	770	4	
		CYANOPHYTA			
		Myxophyceae			
		Chroococcales			
		Chroococcaceae			
		Anacystis	1,200	6	
		Oscillatoriales			
		Oscillatoriaceae			
		Oscillatoria	11,000	56	
		EUGLENOPHYTA			
		Euglenophyceae			
		Euglenales			
		Euglenaceae			
		Trachelomonas		0	
		TOTAL	19,000		
Nov. 13	1200	CHLOROPHYTA			Sediment sampler
		Chlorophyceae			
		Chlorococcales			
		Occystaceae			
		Ankistrodesmus	63	3	
		CHRYSOPHYTA			
		Bacillariophyceae			
		Centrales			
		Coscinodiscaceae			
		Cyclotella	380	15	
		Melosira	1,500	62	
		Pennales			
		Fragilariaceae			
		Synedra	250	10	
		Naviculaceae			
		Navicula	63	3	
		Nitzschiaceae			
		Nitzschia	130	5	
		Surirellaceae			
		Surirella	63	3	
		TOTAL	2,500		
Dec. 3	1300	CHLOROPHYTA			Sediment sampler
		Chlorophyceae			
		Chlorococcales			
		Occystaceae			
		Ankistrodesmus	47	4	
		Kirchneriella	47	4	
		Scenedesmaceae			
		Scenedesmus	95	8	
		CHRYSOPHYTA			
		Bacillariophyceae			
		Centrales			
		Coscinodiscaceae			
		Cyclotella	470	42	
		Pennales			
		Naviculaceae			
		Navicula	140	12	
		Nitzschiaceae			
		Nitzschia	330	29	
		TOTAL	1,100		

07331000 WASHITA RIVER NEAR DURWOOD, OKLA.--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA,
WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

PHYTOPLANKTON

Date	Time	Organism	Count (cells/ml)	Percent of total	Sampling method
Jan. 7	1200	CHLOROPHYTA			Sediment sampler
		Chlorophyceae			
		Chlorococcales			
		Occystaceae			
		Ankistrodesmus	130	4	
		CHRYSOPHYTA			
		Bacillariophyceae			
		Pennales			
		Fragilariaceae			
		Synedra	270	7	
		Gomphonemataceae			
		Gomphonema	530	15	
		Naviculaceae			
		Navicula	1,500	41	
		Nitzschiaceae			
		Nitzschia	930	26	
		Surirellaceae			
		Surirella	270	7	
		TOTAL	3,600		
Feb. 19	0900	CHLOROPHYTA			Sediment sampler
		Chlorophyceae			
		Chlorococcales			
		Occystaceae			
		Ankistrodesmus	53	4	
		Scenedesmaceae			
		Scenedesmus	210	15	
		Volvocales			
		Chlamydomonadaceae			
		Chlamydomonas	53	4	
		CHRYSOPHYTA			
		Bacillariophyceae			
		Centrales			
		Coscinodiscaceae			
		Cyclotella	530	38	
		Pennales			
		Fragilariaceae			
		Synedra	110	8	
		Gomphonemataceae			
		Gomphonema	110	8	
		Naviculaceae			
		Navicula	110	8	
		Nitzschiaceae			
		NItzschia	53	4	
		Surirellaceae			
		Surirella	53	4	
		CYANOPHYTA			
		Myxophyceae			
		Chroococcales			
		Chroococcaceae			
		Anacystis	110	8	
		TOTAL	1,400		
Mar. 18		CHRYSOPHYTA			Sediment sampler
		Bacillariophyceae			
		Centrales			
		Coscinodiscaceae			
		Cyclotella	430	20	
		Pennales			
		Achnanthaceae			
		Achnanthes	320	15	
		Fragilariaceae			
		Synedra	110	5	
		Naviculaceae			
		Navicula	860	40	
		Nitzschiaceae			
		Hantzschia	110	5	
		Nitzschia	320	15	
		TOTAL	2,200		

07331000 WASHITA RIVER NEAR DURWOOD, OKLA.--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA,
WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

PHYTOPLANKTON

Date	Time	Organism	Count (cells/ml)	Percent of total	Sampling method
Apr. 15		CHLOROPHYTA			Sediment sampler
		Chlorophyceae			
		Chlorococcales			
		Scenedesmaceae			
		Scenedesmus	80	28	
		CHRYSOPHYTA			
		Bacillariophyceae			
		Centrales			
		Coscinodiscaceae			
		Cyclotella	70	24	
		Melosira	30	10	
		Pennales			
		Naviculaceae			
		Navicula	20	7	
		Nitzschiaceae			
		Nitzschia	40	14	
		CYANOPHYTA			
		Myxophyceae			
		Oscillatoriales			
		Oscillatoriaceae			
		Oscillatoria	50	17	
		TOTAL	290		
May 27	1200	CHRYSOPHYTA			Sediment sampler
		Bacillariophyceae			
		Centrales			
		Coscinodiscaceae			
		Melosira	1,100	91	
		Pennales			
		Fragilariaceae			
		Synedra	110	9	
		TOTAL	1,200		
June 23	1200	CHRYSOPHYTA			Sediment sampler
		Bacillariophyceae			
		Centrales			
		Coscinodiscaceae			
		Melosira	200	27	
		Pennales			
		Naviculaceae			
		Navicula	67	9	
		Nitzschiaceae			
		Nitzschia	400	55	
		Surirellaceae			
		Cymatopleura		0	
		CYANOPHYTA			
		Myxophyceae			
		Oscillatoriales			
		Oscillatoriaceae			
		Oscillatoria		0	
		EUGLENOPHYTA			
		Euglenophyceae			
		Euglenales			
		Euglenaceae			
		Phacus	67	9	
		TOTAL	730		
July 22	1035	CHLOROPHYTA			Sediment sampler
		Chlorophyceae			
		Chlorococcales			
		Occystaceae			
		Ankistrodesmus	945	2	
		Dictyosphaerium	5,000	8	
		Oocystis	1,300	2	
		Scenedesmaceae			
		Actinastrum	1,300	2	
		Scenedesmus	1,300	2	
		Tetrastrum	3,800	6	
		Volvocales			
		Chlamydomonadaceae			
		Chlamydomonas	940	2	
		Volvocaceae			
		Pandorina	5,-00	8	
		CHRYSOPHYTA			
		Bacillariophyceae			
		Centrales			
		Coscinodiscaceae			
		Cyclotella	20,000	34	

07331000 WASHITA RIVER NEAR DURWOOD, OKLA.--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

PHYTOPLANKTON

Date	Time	Organism	Count (cells/ml)	Percent of total	Sampling method
July 22	1035	Melosira	8,100	14	Sediment sampler
		Pennales			
		Naviculaceae			
		Pinnularia	310	1	
		Nitzschiaceae			
		Nitzschia	1,900	3	
		CYANOPHYTA			
		Myxophyceae			
		Oscillatoriales			
		Oscillatoriaceae			
		Oscillatoria	9,400	16	
		TOTAL	60,000		
Aug. 13	1200	CHLOROPHYTA			Sediment sampler
		Chlorophyceae			
		Chlorococcales			
		Hydrodictyaceae			
		Pediastrum	280	6	
		CHRYSOPHYTA			
		Bacillariophyceae			
		Centrales			
		Coscinodiscaceae			
		Melosira	71	2	
		Pennales			
		Fragilariaceae			
		Synedra	35	1	
		CYANOPHYTA			
		Myxophyceae			
		Oscillatoriales			
		Nostocaceae			
		Anabaena	990	22	
		Oscillatoriaceae			
		Oscillatoria	1,400	31	
		Rivulariaceae			
		Raphidiopsis	1,800	39	
		TOTAL	4,600		
Sep. 17	1100	CHLOROPHYTA			Sediment sampler
		Chlorophyceae			
		Chlorococcales			
		Characiaceae			
		Schroederia		0	
		Occystaceae			
		Ankistrodesmus	530	1	
		Dictyosphaerium		0	
		Scenedesmaceae			
		Actinastrum		0	
		Scenedesmus	4,300	6	
		Ulotrichales			
		Ulotrichaceae			
		Ulothrix		0	
		CHRYSOPHYTA			
		Bacillariophyceae			
		Centrales			
		Coscinodiscaceae			
		Cyclotella	10,000	13	
		Melosira	3,700	5	
		Pennales			
		Cymbellaceae			
		Cymbella	530	1	
		Naviculaceae			
		Gyrosigma		0	
		Nitzschiaceae			
		NItzschia	1,100	1	
		CYANOPHYTA			
		Myxophyceae			
		Oscillatoriales			
		Nostocaceae			
		Aphanizomenon	19,000	25	
		Oscillatoriaceae			
		Oscillatoria	36,000	48	
		EUGLENOPHYTA			
		Euglenophyceae			
		Euglenales			
		Euglenaceae			
		Euglena		0	
		Trachelomonas	530	1	
		TOTAL	76,000		

07331000 WASHITA RIVER NEAR DURWOOD, OKLA.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C) , WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	624	532	1320	1260	1330	1030	819	840	614	717	558	1400
2	656	574	1340	1090	1050	1020	906	1020	642	867	601	1440
3	664	418	1300	1030	977	1060	1090	756	782	1000	639	1460
4	660	439	1380	820	573	1160	1220	490	863	995	610	1430
5	696	446	1400	950	778	1180	1060	517	789	1050	690	1470
6	708	469	1430	908	690	1190	1030	596	775	1070	722	1560
7	836	502	1440	943	885	1220	1070	775	859	1080	759	1550
8	872	551	1440	932	834	1210	798	769	901	1070	778	1560
9	869	527	1420	1090	954	1260	586	958	510	1070	834	1540
10	899	449	1470	1150	1000	1300	706	1060	401	1040	858	1590
11	961	592	1230	1170	997	1310	821	765	575	762	870	1590
12	994	593	1190	1190	984	1290	859	1010	488	750	877	1380
13	1040	615	1230	1250	1010	525	992	1030	562	1040	903	1430
14	1040	671	1250	1290	1050	768	1130	902	702	1130	933	1270
15	1140	789	1230	1340	1140	965	1260	587	869	1200	984	787
16	992	866	1230	1350	1230	958	1100	686	626	1170	938	956
17	992	922	1280	1400	1260	986	1050	849	684	1220	978	1100
18	1110	976	1400	1400	1220	840	1080	1030	718	1270	1080	1200
19	1150	979	1430	1420	1280	472	1120	848	820	1300	1180	1240
20	1180	1100	1450	1440	1300	568	1130	1030	873	1350	1320	1290
21	1200	1050	1450	1400	1370	727	1150	973	917	1390	1360	1380
22	1220	918	1460	1430	810	966	1160	1100	968	1300	1450	1420
23	1240	906	1460	1440	---	1020	1200	355	936	1360	1560	1460
24	1300	931	1490	1440	525	1080	1310	360	673	1380	1390	1580
25	1270	946	1510	1450	716	1180	1300	480	587	1400	1230	1560
26	1130	992	1500	1150	713	1240	1320	608	690	530	1260	1550
27	1100	1000	1500	1460	812	1140	1240	488	926	444	708	1530
28	783	1050	1520	1420	888	465	1200	484	853	578	1140	1520
29	374	1040	1500	1280	---	542	654	521	886	470	1250	1540
30	248	1100	1500	1260	---	705	786	507	899	443	1310	1570
31	260	---	1360	1260	---	794	---	489	---	424	1340	---
MONTH	914	752	1390	1240	969	967	1040	739	740	996	1000	1410

TEMPERATURE (DEG. C) OF WATER , WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21.0	21.0	5.0	11.0	10.0	13.0	18.0	20.0	24.5	32.0	30.0	32.0
2	22.0	21.0	6.0	14.0	8.0	10.0	14.0	21.0	23.0	31.0	30.0	32.5
3	19.0	21.0	7.0	8.0	12.0	13.0	12.0	19.5	25.0	28.0	31.0	34.0
4	22.0	15.0	11.0	9.0	10.0	13.0	15.0	22.0	26.0	27.0	30.0	33.0
5	24.0	17.0	12.0	12.0	11.0	16.0	15.0	21.0	26.0	32.0	31.0	28.0
6	22.0	16.0	10.0	8.0	8.0	11.0	15.0	22.0	26.5	30.0	31.0	29.0
7	19.0	16.0	10.0	11.0	7.0	14.0	13.0	25.0	28.0	30.0	32.0	29.5
8	19.0	16.0	7.0	11.0	6.0	15.0	13.5	24.0	25.0	31.0	32.0	29.5
9	19.0	15.0	6.0	14.0	6.0	10.0	17.0	26.0	24.0	32.5	30.5	27.0
10	22.0	16.0	7.0	11.0	7.0	11.0	15.0	26.0	23.0	30.0	30.0	27.0
11	24.0	16.0	10.0	10.0	13.0	13.0	14.0	24.0	22.0	32.0	34.0	29.0
12	23.0	15.0	7.0	4.0	12.0	11.0	15.0	26.0	23.0	31.5	31.5	24.5
13	25.0	15.0	13.0	5.0	15.0	7.0	17.0	26.0	25.0	31.0	29.0	20.5
14	21.0	13.0	10.0	5.0	12.0	10.0	16.0	23.0	27.0	30.0	27.0	18.0
15	19.0	12.0	12.0	9.0	14.0	12.0	20.0	21.0	27.0	29.0	31.5	17.5
16	22.0	13.0	9.0	6.0	9.0	12.0	20.0	21.5	26.0	30.0	28.0	20.0
17	23.0	13.0	6.0	6.0	9.0	13.0	22.0	23.0	26.0	31.0	28.0	24.0
18	26.0	15.0	7.0	11.0	10.0	14.0	23.0	25.0	27.0	30.0	27.5	21.0
19	23.0	20.0	15.0	15.0	11.0	15.0	21.0	26.0	27.0	32.0	30.5	24.0
20	---	---	10.0	7.0	12.0	16.0	21.0	24.0	26.0	32.0	32.0	23.0
21	21.0	12.0	6.0	11.0	15.0	17.0	22.0	24.0	26.0	33.0	32.0	20.0
22	21.0	17.0	---	9.0	12.0	20.0	21.0	25.0	28.0	32.0	32.0	24.0
23	22.0	14.0	15.0	9.0	10.0	20.0	21.0	22.0	27.0	33.0	30.0	23.0
24	20.0	17.0	10.0	10.0	15.0	16.0	24.0	23.0	26.0	30.0	32.0	20.0
25	20.0	15.0	7.0	13.0	8.0	15.0	27.0	24.0	28.0	30.0	32.0	22.0
26	21.0	14.0	10.0	---	11.0	16.0	26.5	25.0	29.0	25.0	26.0	22.5
27	21.0	12.0	9.0	11.0	12.0	15.0	25.5	25.0	26.0	29.0	28.0	18.5
28	20.0	17.0	11.0	14.0	15.0	15.0	24.0	23.0	28.0	29.0	29.0	24.0
29	20.0	8.0	10.0	13.0	---	10.0	26.5	22.0	30.0	30.0	29.0	25.0
30	20.0	7.0	15.0	14.0	---	11.0	22.0	23.0	30.0	31.0	27.0	27.0
31	20.0	---	10.0	10.0	---	16.0	---	22.0	---	27.0	32.0	---
MONTH	21.5	15.0	10.0	10.0	11.0	15.5	19.0	23.5	26.0	30.5	30.0	25.0

07332800 CANEY BOGGY CREEK NEAR ASHLAND, OKLA.

LOCATION.--Lat 34°45'11", long 96°08'52", in SW 1/4 SE 1/4 SE 1/4 sec.4, T.3 N., R.11 E., Coal County, at bridge on county road, approximately 2 mi (3.2 km) west of State Highway 31, 2.0 mi (3.2 km) northeast of Parker and 5.0 mi (8.0 km) west of Ashland.

DRAINAGE AREA.--49 mi^2 (126.9 km^2).

PERIOD OF RECORD.--Chemical analyses: February 1972 to current year.
Water temperatures: February 1972 to 1974.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	ALKA-LINITY AS CACO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	DIS-SOLVED NITRATE (NO3) (MG/L)
OCT.												
03...	1300	--	--	--	--	--	--	--	--	--	.07	.31
05...	1300	18	6.2	9.6	--	92	0	75	13	6.6	--	--
14...	1500	6.1	2.6	4.9	--	27	0	22	9.4	4.4	--	--
16...	1500	--	--	--	--	--	--	--	--	--	.34	1.5
31...	1330	4.0	1.1	3.0	--	16	0	13	3.7	1.9	--	--
NOV.												
05...	1330	8.5	2.9	6.3	--	33	0	27	9.8	5.0	--	--
15...	1300	--	--	--	--	52	0	43	14	7.3	--	--
19...	1300	--	--	--	--	--	--	--	--	--	.06	.27
25...	1300	18	7.5	16	--	87	0	71	22	11	--	--
DEC.												
05...	1330	21	8.5	15	--	101	0	83	24	13	--	--
15...	1300	9.3	3.8	8.3	--	37	0	30	16	7.6	--	--
18...	1300	--	--	--	--	--	--	--	--	--	.01	.04
24...	1200	16	6.7	13	--	73	0	60	22	11	--	--
JAN.												
05...	1300	--	--	--	--	30	0	25	15	5.9	--	--
08...	1200	--	--	--	--	--	--	--	--	--	--	--
15...	1300	24	9.6	11	--	58	0	48	22	9.7	--	--
21...	1430	--	--	--	--	--	--	--	--	--	.20	.89
FEB.												
04...	1030	--	--	--	--	--	--	--	--	--	.08	.35
05...	1300	5.0	2.7	6.3	--	24	0	20	9.5	5.3	--	--
15...	1300	15	7.1	14	--	64	0	53	23	11	--	--
20...	1400	--	--	--	--	--	--	--	--	--	.13	.58
25...	1300	7.9	2.9	5.8	--	25	0	21	12	4.7	--	--
MAR.												
04...	1230	--	--	--	--	--	--	--	--	--	.05	.22
06...	1300	16	7.1	12	--	69	0	57	26	9.3	--	--
16...	1330	5.9	2.5	6.1	--	22	0	18	14	4.2	--	--
18...	1300	--	--	--	--	--	--	--	--	--	--	--
25...	1300	16	7.7	13	--	75	0	62	23	9.7	--	--
APR.												
01...	1500	--	--	--	--	--	--	--	--	--	.11	.49
07...	1330	18	7.4	13	--	78	0	64	28	9.3	--	--
15...	1245	--	--	--	--	--	--	--	--	--	1.3	5.7
15...	1300	14	6.7	12	--	68	0	56	26	8.4	--	--
25...	1330	5.1	2.5	4.0	--	18	0	15	7.8	3.2	--	--
MAY												
05...	1300	15	5.6	8.9	2.2	61	0	50	17	6.1	--	--
06...	1330	--	--	--	--	--	--	--	--	--	.04	.18
14...	1230	4.3	1.7	2.7	2.4	16	0	13	6.1	2.6	--	--
20...	1300	--	--	--	--	--	--	--	--	--	.01	.04
26...	1300	11	3.1	5.0	2.3	30	0	25	9.2	3.6	--	--
JUNE												
04...	0830	--	--	--	--	--	--	--	--	--	.04	.18
05...	1300	21	8.2	14	--	98	0	80	22	10	--	--
15...	1330	6.2	2.2	5.3	--	27	0	22	6.7	4.3	--	--
25...	1330	23	9.7	14	--	105	0	86	26	10	--	--
JULY												
01...	1830	--	--	--	--	--	--	--	--	--	.05	.22
05...	1330	27	11	17	--	134	0	110	24	12	--	--
15...	1135	--	--	--	--	--	--	--	--	--	.66	2.9
25...	1300	40	16	24	--	215	0	176	20	15	--	--

07332800 CANEY BOGGY CREEK NEAR ASHLAND, OKLA.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS-SOLVED NITRITE (N) (MG/L)	DIS-SOLVED NITRITE (NO2) (MG/L)	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS-SOLVED AMMONIA ORGANIC NITRO-GEN (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	VOLA-TILE FILT-RABLE RESIDUE (MG/L)	SUS-PENDED SOLIDS (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)
OCT.											
03...	.01	.03	.08	--	.22	117	.16	39	64	--	--
05...	--	--	.29	--	.08	125	.17	--	--	79	4
14...	--	--	.35	--	.18	63	.09	--	--	26	4
16...	.00	.00	.34	--	.09	--	--	--	88	--	--
31...	--	--	.25	--	.15	45	.06	--	--	15	2
NOV.											
05...	--	--	.19	--	.06	76	.10	--	--	33	6
15...	--	--	.22	--	.03	94	--	--	--	--	1
19...	.00	.00	1.1	--	.04	129	.18	50	42	--	--
25...	--	--	--	--	--	135	.18	--	--	76	4
DEC.											
05...	--	--	--	--	--	150	.20	--	--	87	5
15...	--	--	--	--	--	86	.12	--	--	39	9
18...	.01	.03	.02	--	.06	111	.15	33	45	--	--
24...	--	--	--	--	--	127	.17	--	--	68	8
JAN.											
05...	--	--	--	--	--	75	--	--	--	--	--
08...	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	114	.16	--	--	99	52
21...	.01	.03	.21	.42	.03	114	.16	34	44	--	--
FEB.											
04...	.01	.03	.09	.57	.05	116	.16	29	105	--	--
05...	--	--	--	--	--	68	.09	--	--	24	4
15...	--	--	--	--	--	124	.17	--	--	67	14
20...	.00	.00	.13	1.2	.05	100	.14	40	58	--	--
25...	--	--	--	--	--	63	.09	--	--	32	11
MAR.											
04...	.00	.00	.05	.25	.04	115	.16	33	36	--	--
06...	--	--	--	--	--	123	.17	--	--	69	13
16...	--	--	--	--	--	65	.09	--	--	25	7
18...	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	72	10
APR.											
01...	.00	.00	.11	.27	.05	--	--	162	68	--	--
07...	--	--	--	--	--	128	.17	--	--	75	11
15...	.01	.03	1.3	.22	.04	105	.14	22	20	--	--
15...	--	--	--	--	--	118	.16	--	--	63	7
25...	--	--	--	--	--	66	.09	--	--	23	8
MAY											
05...	--	--	--	--	--	105	.14	--	--	61	10
06...	.00	.00	.04	.50	.06	97	.13	30	84	--	--
14...	--	--	--	--	--	68	.09	--	--	18	5
20...	.00	.00	.01	.52	.03	144	.20	37	12	--	--
26...	--	--	--	--	--	80	.11	--	--	40	16
JUNE											
04...	.01	.03	.05	--	.06	126	.17	39	104	--	--
05...	--	--	--	--	--	151	.21	--	--	86	6
15...	--	--	--	--	--	--	--	--	--	25	2
25...	--	--	--	--	--	161	.22	--	--	97	11
JULY											
01...	.01	.03	.06	2.1	.04	122	.17	52	20	--	--
05...	--	--	--	--	--	180	.24	--	--	110	3
15...	.11	.36	.77	.79	.02	125	.17	36	60	--	--
25...	--	--	--	--	--	249	.34	--	--	170	0

07332800 CANEY BOGGY CREEK NEAR ASHLAND, OKLA.--Continued
WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	PERCENT SODIUM	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	CARBON DIOXIDE (CO2) (MG/L)	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	CHEMICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	DISSOLVED BORON (B) (UG/L)
OCT.											
03...	--	--	140	7.5	17.0	--	7.9	84	20	2.6	--
05...	--	.5	198	7.9	--	1.9	--	--	--	--	80
14...	--	.4	82	6.8	--	6.8	--	--	--	--	90
16...	--	--	135	7.6	23.0	--	8.2	100	29	1.4	--
31...	--	.3	40	6.9	--	3.2	--	--	--	--	120
NOV.											
05...	--	.5	92	7.8	--	.8	--	--	--	--	100
15...	--	--	136	7.9	--	1.0	--	--	--	--	70
19...	--	--	200	7.2	10.0	--	10.9	101	9	1.7	--
25...	--	.8	210	8.0	--	1.4	--	--	--	--	--
DEC.											
05...	--	.7	243	7.7	--	3.2	--	--	--	--	--
15...	--	.6	119	8.0	--	.6	--	--	--	--	--
18...	--	--	111	8.1	7.0	--	12.4	106	22	1.6	--
24...	--	.7	196	7.8	--	1.9	--	--	--	--	--
JAN.											
05...	--	--	93	7.2	--	3.0	--	--	--	--	--
08...	--	--	130	7.8	8.5	--	10.8	98	--	1.7	--
15...	--	.5	166	7.8	--	1.5	--	--	--	--	--
21...	--	--	240	8.3	--	--	--	--	17	1.3	--
FEB.											
04...	--	--	--	7.9	3.0	--	--	--	30	2.0	--
05...	--	.6	76	7.8	--	.6	--	--	--	--	--
15...	--	.7	188	7.8	--	1.6	--	--	--	--	--
20...	--	--	135	7.8	6.0	--	12.6	108	29	8.0	--
25...	--	.4	78	7.9	--	.5	--	--	--	--	--
MAR.											
04...	--	--	220	7.3	5.0	--	10.6	86	27	.4	--
06...	--	.6	189	7.6	--	2.8	--	--	--	--	--
16...	--	.5	80	7.8	--	.6	--	--	--	--	--
18...	--	--	70	6.3	9.0	--	9.4	86	--	.8	--
25...	--	.7	199	7.2	--	7.6	--	--	--	--	--
APR.											
01...	--	--	160	7.7	14.0	--	9.0	90	25	--	--
07...	--	.7	209	7.8	--	2.0	--	--	--	--	--
15...	--	--	164	7.6	18.0	--	6.6	74	13	.6	--
15...	--	.7	186	7.6	--	2.7	--	--	--	--	--
25...	--	.4	68	7.3	--	1.4	--	--	--	--	--
MAY											
05...	23	.5	153	8.0	--	1.0	--	--	--	--	--
06...	--	--	120	8.1	22.0	--	7.0	84	23	1.2	--
14...	22	.3	53	8.0	--	.3	--	--	--	--	--
20...	--	--	195	7.8	22.0	--	8.5	102	24	2.4	--
26...	20	.3	84	7.7	--	1.0	--	--	--	--	--
JUNE											
04...	--	--	190	7.6	23.5	--	8.1	100	22	2.0	--
05...	--	.7	237	8.1	--	1.2	--	--	--	--	--
15...	--	.5	74	7.6	--	1.1	--	--	--	--	--
25...	--	.6	251	7.3	--	8.4	--	--	--	--	--
JULY											
01...	--	--	165	8.5	30.0	--	11.1	150	28	6.2	--
05...	--	.7	332	8.3	--	1.1	--	--	--	--	--
15...	--	--	200	7.8	25.0	--	9.2	115	28	--	--
25...	--	.8	417	8.5	--	1.1	--	--	--	--	--

07335700 KIAMICHI RIVER NEAR BIG CEDAR, OKLA.
(Hydrologic bench-mark station)

LOCATION.--Lat 34°38'18", long 94°36'45", in SW 1/4 SE 1/4 sec.18, T.2 N., R.26 E., LeFlore County, in Ouachita National Forest, at gaging station at bridge on State Highway 63, 0.2 mi (0.3 km) upstream from Rattlesnake Creek, 1.1 mi (1.8 km) upstream from Big Branch, 2.1 mi (3.4 km) east of Big Cedar, and at mile 157.6 (253.6 km).

DRAINAGE AREA.--40.1 mi^2 (103.9 km^2).

PERIOD OF RECORD.--Chemical analyses: December 1965 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TOTAL IRON (FE) (UG/L)	DISSOLVED IRON (FE) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	DISSOLVED MANGANESE (MN) (UG/L)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)
OCT.											
23...	1000	9.0	--	130	--	--	9.2	2.2	1.0	2.2	.9
NOV.											
13...	1300	147	300	40	--	0	8.2	4.2	.5	2.0	.7
DEC.											
12...	1300	114	--	70	--	--	8.1	1.8	.5	2.4	.7
JAN.											
15...	1400	54	320	--	10	--	2.5	1.8	.5	2.6	.7
FEB.											
18...	1400	37	400	--	10	--	6.6	3.2	.3	1.5	.4
MAR.											
19...	1030	206	--	--	--	--	6.9	2.0	.6	1.8	1.2
APR.											
16...	1130	32	--	--	--	--	6.9	1.3	.7	2.2	.8
MAY											
29...	0800	155	--	--	--	--	--	2.5	.1	1.9	.7
JUNE											
11...	1030	152	--	--	--	--	7.7	1.2	.8	3.9	1.1
JULY											
09...	1030	3.6	--	--	--	--	8.1	3.4	1.7	1.9	.8
AUG.											
06...	1315	.82	--	--	--	--	7.1	--	--	--	--
SEP.											
06...	1330	3.3	--	--	--	--	8.2	1.3	1.0	3.5	1.1

DATE	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	DISSOLVED NITRATE (NO3) (MG/L)	DISSOLVED NITRITE (N) (MG/L)	DISSOLVED NITRITE (NO2) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)
OCT.											
23...	10	0	8	2.1	2.3	.0	--	--	--	--	--
NOV.											
13...	7	0	6	3.1	2.5	.0	--	--	--	--	.02
DEC.											
12...	7	0	6	3.2	2.5	.3	.04	.18	.02	.07	--
JAN.											
15...	6	0	5	2.9	2.3	.1	--	--	--	--	.04
FEB.											
16...	6	0	5	2.4	4.8	.0	--	--	--	--	.02
MAR.											
19...	6	0	5	3.2	1.9	.2	--	--	--	--	.01
APR.											
16...	7	0	6	2.6	2.0	.0	--	--	--	--	.00
MAY											
29...	9	0	7	3.6	2.2	--	--	--	--	--	--
JUNE											
11...	10	0	8	2.9	3.2	.1	--	--	--	--	.02
JULY											
09...	16	0	13	3.1	3.4	.1	--	--	--	--	.05
AUG.											
06...	20	0	16	3.3	5.2	.1	--	--	--	--	.03
SEP.											
06...	12	0	10	3.4	2.7	.1	--	--	--	--	.02

07335700 KIAMICHI RIVER NEAR BIG CEDAR, OKLA.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)
OCT.											
23...	.01	.00	30	25	.04	.73	10	1	31	.3	28
NOV.											
13...	.02	.01	27	25	.04	10.7	13	7	24	.2	18
DEC.											
12...	.06	.04	30	23	.04	9.23	7	1	41	.4	22
JAN.											
15...	--	.03	21	16	.03	5.06	7	2	43	.4	28
FEB.											
18...	.04	.02	31	22	.04	5.10	9	4	25	.2	28
MAR.											
19...	--	.01	29	21	.04	16.1	7	3	30	.3	17
APR.											
16...	--	.00	18	20	.02	1.56	6	0	40	.4	28
MAY											
29...	--	.02	21	--	.03	8.79	7	0	35	.3	24
JUNE											
11...	--	.02	29	26	.04	11.9	6	0	52	.7	19
JULY											
09...	--	.03	25	30	.03	.24	16	2	20	.2	26
AUG.											
06...	--	.01	24	--	.03	.05	--	--	--	--	29
SEP.											
06...	--	.03	23	27	.03	.20	7	0	46	.6	27

DATE	PH (UNITS)	TEMPER-ATURE (DEG C)	DIS-SOLVED OXYGEN (MG/L)	PER-CENT SATUR-ATION	CHEM-ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	IMME-DIATE COLI-FORM (COL. PER 100 ML)	FECAL COLI-FORM (COL. PER 100 ML)	STREP-TOCOCCI (COL-ONIES PER 100 ML)	DIS-SOLVED BORON (B) (UG/L)	TOTAL CAD-MIUM (CD) (UG/L)
OCT.											
23...	6.9	16.0	10.0	105	--	2.0	92	32	16	60	--
NOV.											
13...	7.1	8.0	11.6	102	--	.9	310	68	80	20	--
DEC.											
12...	6.9	6.0	11.5	98	7	1.4	56	36	51	90	--
JAN.											
15...	6.9	7.0	11.2	97	--	1.2	24	82	610	--	<10
FEB.											
18...	6.9	7.0	11.6	102	--	1.2	57	26	43	--	10
MAR.											
19...	7.4	15.0	9.8	103	--	.4	390	90	150	--	--
APR.											
16...	6.9	15.0	9.0	95	--	1.4	--	--	--	--	--
MAY											
29...	--	18.0	8.7	101	--	--	96	28	60	--	--
JUNE											
11...	--	18.0	10.1	113	--	--	--	590	84	--	--
JULY											
09...	6.8	27.0	6.4	84	--	4.1	--	90	1020	--	--
AUG.											
06...	6.1	28.0	7.6	103	--	25	--	35	162	--	--
SEP.											
06...	6.4	27.0	7.5	97	--	7.6	--	--	--	--	--

07335700 KIAMICHI RIVER NEAR BIG CEDAR, OKLA.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS-SOLVED CADMIUM (CD) (UG/L)	TOTAL CHROMIUM (CR) (UG/L)	DIS-SOLVED CHROMIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)	SUS-PENDED SEDIMENT (MG/L)	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM
OCT.											
23...	--	--	--	--	--	--	--	--	--	6	62
NOV.											
13...	0	--	0	--	0	--	0	--	0	6	41
DEC.											
12...	--	--	--	--	--	--	--	--	--	--	--
JAN.											
15...	--	0	--	<10	--	<100	--	10	--	73	29
FEB.											
16...	--	20	--	<10	--	<100	--	30	--	--	--
MAR.											
19...	--	--	--	--	--	--	--	--	--	2	87
APR.											
16...	--	--	--	--	--	--	--	--	--	5	69
MAY											
29...	--	--	--	--	--	--	--	--	--	22	30
JUNE											
11...	--	--	--	--	--	--	--	--	--	5	76
JULY											
09...	--	--	--	--	--	--	--	--	--	45	27
AUG.											
06...	--	--	--	--	--	--	--	--	--	--	--
SEP.											
06...	--	--	--	--	--	--	--	--	--	--	--

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TOTAL ALDRIN (UG/L)	TOTAL CHLORDANE (UG/L)	TOTAL DDD (UG/L)	TOTAL DDE (UG/L)	TOTAL DDT (UG/L)	TOTAL DIAZINON (UG/L)	TOTAL DIELDRIN (UG/L)	TOTAL ENDRIN (UG/L)	TOTAL HEPTACHLOR (UG/L)	TOTAL HEPTACHLOR EPOXIDE (UG/L)
NOV.												
13...	1300	147	.00	.0	.00	.00	.00	.00	.00	.00	.00	.00

DATE	TOTAL LINDANE (UG/L)	TOTAL MALATHION (UG/L)	TOTAL METHYL PARATHION (UG/L)	TOTAL METHYL TRITHION (UG/L)	TOTAL PARATHION (UG/L)	TOTAL PCB (UG/L)	TOTAL TOXAPHENE (UG/L)	TOTAL TRITHION (UG/L)	TOTAL 2,4-D (UG/L)	TOTAL 2,4,5-T (UG/L)	TOTAL SILVEX (UG/L)
NOV.											
13...	.00	.00	.00	.00	.00	.0	0	.00	.00	.00	.00

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DIS-SOLVED GROSS ALPHA AS U-NAT. (UG/L)	SUS-PENDED GROSS ALPHA AS U-NAT. (UG/L)	DIS-SOLVED GROSS BETA AS CS-137 (PC/L)	SUS-PENDED GROSS BETA AS CS-137 (PC/L)	DIS-SOLVED GROSS BETA AS SR90 /Y90 (PC/L)	SUS-PENDED GROSS BETA AS SR90 /Y90 (PC/L)	DIS-SOLVED RA-226 (RADON METHOD) (PC/L)	DIS-SOLVED URANIUM (U) (UG/L)
NOV.										
13...	1300	147	<.4	<.4	.9	<.4	.7	<.4	.02	.01

07336730 RED RIVER NEAR VALLIANT, OKLA.

LOCATION.--Lat 33°55'20", long 95°04'56", McCurtain County, 5.8 mi (9.2 km) south of Valliant, 0.1 mi (0.2 km) upstream from Garland Creek, approximately 8.8 mi (14.2 km) upstream from Highway 37 bridge.

DRAINAGE AREA.--46,730 mi² (121,030 km²).

PERIOD OF RECORD.--Chemical analyses: July 1970 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	DIS-SOLVED NITRATE (NO3) (MG/L)	DIS-SOLVED NITRITE (N) (MG/L)	DIS-SOLVED NITRITE (NO2) (MG/L)	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)
DEC.										
04...	1100	--	180	.17	.75	.00	.00	.17	.08	1000
JAN.										
08...	0800	5.4	87	.08	.35	.01	.03	.09	.09	568
FEB.										
21...	1045	6.0	120	.16	.71	.00	.00	.16	.08	650
MAR.										
05...	1000	5.0	160	.08	.35	.00	.00	.08	.07	900
19...	--	--	--	--	--	--	--	--	--	580
APR.										
16...	1100	5.1	180	.46	2.0	.01	.03	.47	.09	1100
MAY										
07...	1030	5.6	14	.18	.80	.01	.03	.19	.10	180
JUNE										
04...	1000	4.7	130	.00	.00	.00	.00	.00	.09	1400
JULY										
02...	1100	--	--	--	--	--	--	--	--	875
16...	1030	5.0	87	.09	.40	.02	.07	.11	.23	750
AUG.										
20...	1030	7.0	120	.00	.00	.00	.00	.00	.19	1200
SEP.										
24...	1400	3.6	200	.00	.00	.00	.00	.00	.06	1120

DATE	PH (UNITS)	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	TUR-BID-ITY (JTU)	DIS-SOLVED OXYGEN (MG/L)	PER-CENT SATUR-ATION	CHEM-ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	BIO-CHEM-ICAL OXYGEN DEMAND 5 DAY (MG/L)	PHENOLS (UG/L)
DEC.									
04...	--	6.0	20	30	11.4	99	14	--	31
JAN.									
08...	--	--	50	--	--	--	16	--	--
FEB.									
21...	8.3	6.0	30	--	11.6	102	17	1.4	8
MAR.									
05...	8.3	7.0	40	--	12.3	--	21	.8	--
19...	6.7	9.0	--	--	11.9	101	--	--	--
APR.									
16...	--	--	10	--	--	--	13	--	4
MAY									
07...	8.1	20.0	80	--	8.4	96	16	1.9	6
JUNE									
04...	8.3	--	49	--	--	--	24	--	1
JULY									
02...	--	26.0	--	--	8.1	101	--	--	--
16...	7.9	27.0	15	--	8.2	105	39	--	2
AUG.									
20...	6.5	27.0	35	--	7.6	96	99	--	7
SEP.									
24...	7.9	17.0	5	--	8.7	94	25	1.9	11

07336760 RED RIVER NEAR MILLERTON, OKLA.

LOCATION.--Lat 35°51'42", long 95°01'51", McCurtain County, at State Highway 37 bridge, 8.2 mi (13.2 km) southwest of Millerton, approximately 8.8 mi (14.2 km) downstream from Garland Creek.

DRAINAGE AREA.--46,930 mi² (121,549 km²).

PERIOD OF RECORD.--Chemical analyses: July 1970 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	DIS-SOLVED NITRATE (NO3) (MG/L)	DIS-SOLVED NITRITE (N) (MG/L)	DIS-SOLVED NITRITE (NO2) (MG/L)	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)
OCT.										
04...	0900	--	230	.05	.18	.00	.00	.03	.12	1280
16...	0800	--	--	--	--	--	--	--	--	1230
NOV.										
06...	0800	--	90	.15	.66	.01	.03	.16	.16	540
20...	0800	--	--	--	--	--	--	--	--	600
DEC.										
04...	0815	--	120	.16	.71	.01	.03	.17	.09	750
18...	0800	--	75	.27	1.2	.03	.10	.30	.08	470
JAN.										
08...	0800	5.4	87	.08	.35	.01	.03	.09	.09	568
22...	0800	6.9	110	.34	1.5	.02	.07	.36	.09	650
FEB.										
05...	0900	5.3	26	.29	1.3	.01	.03	.30	.25	320
21...	0900	6.3	120	.09	.40	.02	.07	.11	.08	580
MAR.										
05...	1100	--	160	.09	.40	.01	.03	.10	.09	900
19...	0900	--	--	--	--	--	--	--	--	530
APR.										
03...	1000	4.9	79	.09	.00	.39	1.3	.37	.16	400
16...	0930	5.9	91	.12	.53	.36	1.2	.48	.09	560
MAY										
07...	0830	5.6	17	.13	.58	.00	.00	.13	.14	200
21...	0900	5.3	150	.36	1.7	.07	.23	.45	.09	900
JUNE										
04...	1000	5.1	240	.13	.55	.01	.03	.14	.13	1400
18...	0900	--	--	--	--	--	--	--	--	850
JULY										
02...	1200	2.0	170	.06	.27	.05	.16	.11	.12	675
16...	0830	4.8	80	.19	.84	.25	.82	.44	.05	725
AUG.										
06...	1015	4.9	200	.10	.44	.03	.10	.13	.10	1000
20...	0700	7.8	120	.08	.35	.02	.07	.10	.34	1100
SEP.										
10...	0900	11	140	.03	.13	.01	.03	.04	.12	825
24...	1300	3.7	200	.01	.04	.00	.00	.01	.06	1130

07336760 RED RIVER NEAR MILLERTON, OKLA.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	CHEMICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	PHENOLS (UG/L)
OCT.									
04...	--	19.5	10	50	9.3	103	16	2.2	1
16...	--	23.0	--	--	8.5	102	--	--	--
NOV.									
06...	--	16.0	70	60	9.9	103	<2	1.4	0
20...	--	9.0	--	--	11.6	106	--	1.6	--
DEC.									
04...	--	8.0	40	30	11.8	103	30	1.5	1
18...	--	7.0	40	20	11.9	101	31	1.3	2
JAN.									
08...	--	7.0	50	--	11.9	103	16	.8	6
22...	8.8	--	40	--	--	--	14	--	--
FEB.									
05...	8.4	4.0	100	--	--	--	34	2.6	--
21...	8.5	5.0	30	--	13.6	111	13	--	0
MAR.									
05...	8.2	8.0	40	--	13.2	115	20	1.0	6
19...	7.7	8.0	--	--	10.1	90	--	.6	--
APR.									
03...	7.5	11.0	60	--	8.0	75	24	--	7
16...	7.3	8.0	30	--	12.0	103	21	.6	4
MAY									
07...	8.2	21.0	90	--	9.1	107	<1	1.4	4
21...	7.6	--	<20	--	--	--	20	--	7
JUNE									
04...	8.3	24.0	4	--	8.4	104	<3	2.0	2
18...	--	26.0	--	--	8.3	105	--	<.3	--
JULY									
02...	9.2	27.0	20	--	9.1	115	28	4.5	4
16...	8.2	27.0	15	--	6.8	87	<6	--	5
AUG.									
06...	7.6	26.0	15	--	6.9	90	29	1.4	6
20...	6.5	27.0	35	--	14.2	180	100	--	4
SEP.									
10...	8.2	26.0	5	--	7.7	100	<3	<.5	4
24...	7.9	18.0	4	--	9.0	100	29	1.0	7

ANALYSIS OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

ARKANSAS RIVER BASIN

07164200 KEYSTONE LAKE NEAR SAND SPRINGS, OKLA.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)
DEC. 31...	260	733	1.00	240	79	58	4.5	1280

DATE	TIME	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	ALKA-LINITY AS CACO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)
DEC. 31...	1115	66	18	160	5.8	201	0	165	85

RED RIVER BASIN

07335000 CLEAR BOGGY CREEK NEAR CANEY, OKLA.--Continued

DATE	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	CARBON DIOXIDE (CO2) (MG/L)
OCT. 21...	--	354	.48	65.0	210	37	30	1.3	689	8.4	1.4
31...	--	--	--	--	--	--	--	--	--	--	--
NOV. 01...	--	92	.13	2510	52	1	14	.3	133	7.7	2.0
04...	--	--	--	--	--	--	--	--	--	--	--

DATE	TIME	INSTAN-TANEOUS DIS-CHARGE (CFS)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	ALKA-LINITY AS CACO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)
OCT. 21...	1120	66	55	18	43	3.9	213	0	175	26	74
31...	1330	12100	--	--	--	--	--	--	--	--	--
NOV. 01...	1200	10100	16	2.9	4.3	4.8	62	0	51	7.2	6.4
04...	1400	4520	--	--	--	--	--	--	--	--	--

A series of chemical analyses at selected sites on the Boggy, and North Boggy Creeks within the Enid area were made between June to September 1975 to assist in a preliminary survey of both water quality and quantity.

07160280 BOGGY CREEK AT ENID, AVE., ENID, OKLA.

LOCATION.--Lat 36°22'34", long 97°52'20", in SW corner SW 1/4 SW 1/4 sec.17, T.22 N., R.6 W., Garfield County, at South Enid Blvd. in Enid.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TOTAL IRON (FE) (UG/L)	DIS-SOLVED IRON (FE) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)
JULY											
23...	--	--	--	--	--	77	23	150	7.6	337	--
AUG.											
19...	1045	--	--	--	--	44	12	59	7.5	185	0
SEP.											
18...	1200	70	30	30	10	67	19	110	7.4	316	--

DATE	ALKALINITY AS CACO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	DIS-SOLVED NITRATE (NO3) (MG/L)	DIS-SOLVED NITRITE (N) (MG/L)	DIS-SOLVED NITRITE (NO2) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS-SOLVED AMMONIA NITROGEN (N) (MG/L)	DIS-SOLVED AMMONIA (NH4) (MG/L)
JULY											
23...	276	85	170	.05	.22	.02	.07	--	.07	.00	.00
AUG.											
19...	152	37	66	.55	2.4	.04	.13	--	.59	.03	.04
SEP.											
18...	259	58	120	.49	2.2	.04	.13	--	.53	--	--

DATE	DIS-SOLVED ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	DIS-SOLVED KJEL. NITROGEN (N) (MG/L)	DIS-SOLVED AMMONIA ORGANIC NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	SUSPENDED SOLIDS (MG/L)	VOLATILE FILTRABLE RESIDUE (MG/L)	HARDNESS (CA,MG) (MG/L)
JULY										
23...	.47	2.8	.47	--	1.0	669	.91	--	--	290
AUG.										
19...	--	.75	--	.46	.69	326	.44	168	71	160
SEP.										
18...	--	.43	--	.27	.65	569	.77	8	106	250

DATE	NONCARBONATE HARDNESS (MG/L)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	DIS-SOLVED OXYGEN (MG/L)	PERCENT SATURATION	CHEMICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	FECAL COLIFORM (COL. PER 100 ML)
JULY										
23...	11	52	3.9	1150	--	26.0	9.4	127	48	--
AUG.										
19...	8	43	2.0	600	8.2	33.5	5.7	81	18	--
SEP.										
18...	0	48	3.1	984	8.4	20.0	20.0	--	36	760

DATE	STREPTOCOCCI (COLONIES PER 100 ML)	CARBON DIOXIDE (CO2) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	PHENOLS (UG/L)	OIL AND GREASE (MG/L)	TOTAL CADMIUM (CD) (UG/L)	DIS-SOLVED CADMIUM (CD) (UG/L)	TOTAL CHROMIUM (CR) (UG/L)	DIS-SOLVED CHROMIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)
JULY										
23...	--	--	17	--	--	--	--	--	--	--
AUG.										
19...	--	1.9	7.0	--	--	--	--	--	--	--
SEP.										
18...	530	2.0	4.9	2	--	<10	0	--	20	<10

DATE	DIS-SOLVED COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)
SEP.					
18...	2	<100	2	20	0

07160280 BOGGY CREEK AT ENID AVE., ENID, OKLA.--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

PHYTOPLANKTON

Date	Time	Organism	Count (cells/ml)	Percent of total	Sampling method
July 23		CHLOROPHYTA			Sediment sampler
		Chlorophyceae			
		Chlorococcales			
		Micractiniaceae			
		Micractinium			
		Occystaceae	680	2	
		Ankistrodesmus			
		Scenedesmaceae	2,700	7	
		Scenedesmus			
		Volvocales			
		Volvocaceae			
		Pandorina			
		CHRYSOPHYTA			
		Bacillariophyceae			
		Centrales			
		Coscinodiscaceae			
		Cyclotella	34,000	88	
		Melosira	1,300	4	
		Pennales			
		Naviculaceae			
		Gyrosigma			
		Navicula			
		Nitzschiaceae			
		Nitzschia			
		CYANOPHYTA			
		Myxophyceae			
		Chroococcales			
		Chroococcaceae			
		Agmenellum			
		Gomphosphaeria			
		EUGLENOPHYTA			
		Euglenophyceae			
		Euglenales			
		Euglenaceae			
		Euglena			
		TOTAL	39,000		
Aug. 19	1045	CHLOROPHYTA			Sediment sampler
		Chlorophyceae			
		Chlorococcales			
		Occystaceae			
		Ankistrodesmus	150	1	
		Dictyosphaerium	1,800	13	
		Tetraedron	150	1	
		Scenedesmaceae			
		Scenedesmus	310	2	
		Volvocales			
		Chlamydomonadaceae			
		Chlamydomonas	3,400	24	
		CHRYSOPHYTA			
		Bacillariophyceae			
		Centrales			
		Coscinodiscaceae			
		Cyclotella	2,100	15	
		Pennales			
		Nitzschiaceae			
		Nitzschia	620	4	
		CYANOPHYTA			
		Myxophyceae			
		Chroococcales			
		Chroococcaceae			
		Agmenellum	4,900	35	
		Anacystis	310	2	
		EUGLENOPHYTA			
		Euglenophyceae			
		Euglenales			
		Euglenaceae			
		Trachelomonas	150	1	
		TOTAL	14,000		

07160290 NORTH BOGGY CREEK AT GARRIOTT RD., ENID, OKLA.

LOCATION.--Lat 36°23'26", long 97°52'06", on north line, NW 1/4, sec.17, T.22 N., R.6 W., Garfield County, at corner of Seventh and Garriott Rd. in Enid.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TOTAL IRON (FE) (UG/L)	DIS-SOLVED IRON (FE) (UG/L)	TOTAL MAN-GANESE (MN) (UG/L)	DIS-SOLVED MAN-GANESE (MN) (UG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)
JULY 22...	--	--	--	--	--	130	33	170	4.1	364	--
AUG. 19...	1345	--	--	--	--	150	41	250	5.3	376	0
SEP. 18...	0800	80	20	170	140	170	42	260	5.4	412	0

DATE	ALKA-LINITY AS CACO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	DIS-SOLVED NITRATE (NO3) (MG/L)	DIS-SOLVED NITRITE (N) (MG/L)	DIS-SOLVED NITRITE (NO2) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS-SOLVED AMMONIA NITRO-GEN (N) (MG/L)	DIS-SOLVED AMMONIA (NH4) (MG/L)
JULY 22...	299	170	230	5.9	26	.31	1.0	--	6.2	.22	.28
AUG. 19...	308	150	400	7.4	33	.40	1.3	--	7.8	.13	.17
SEP. 18...	338	150	500	4.5	20	.38	1.2	--	4.9	--	--

DATE	DIS-SOLVED ORGANIC NITRO-GEN (N) (MG/L)	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	DIS-SOLVED KJEL. NITRO-GEN (N) (MG/L)	DIS-SOLVED AMMONIA ORGANIC NITRO-GEN (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	SUS-PENDED SOLIDS (MG/L)	VOLA-TILE FILT-RABLE RESIDUE (MG/L)	HARD-NESS (CA,MG) (MG/L)
JULY 22...	.74	.96	.96	--	.53	1000	1.36	--	--	460
AUG. 19...	--	1.5	--	1.1	.95	1280	1.74	8	231	540
SEP. 18...	--	1.0	--	1.0	1.3	1510	2.05	12	262	600

DATE	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	DIS-SOLVED OXYGEN (MG/L)	PER-CENT SATUR-ATION	CHEM-ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	FECAL COLI-FORM (COL. PER 100 ML)
JULY 22...	160	44	3.4	1550	--	--	--	--	24	--
AUG. 19...	240	50	4.7	2200	8.2	26.0	10.0	130	33	--
SEP. 18...	260	50	5.0	2400	7.8	21.0	10.8	130	28	9200

DATE	STREP-TOCOCCI (COL-ONIES PER 100 ML)	CARBON DIOXIDE (CO2) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	PHENOLS (UG/L)	OIL AND GREASE (MG/L)	TOTAL CAD-MIUM (CD) (UG/L)	DIS-SOLVED CAD-MIUM (CD) (UG/L)	TOTAL CHRO-MIUM (CR) (UG/L)	DIS-SOLVED CHRO-MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)
JULY 22...	--	--	10	--	--	--	--	--	--	--
AUG. 19...	--	3.8	13	--	--	--	--	--	--	--
SEP. 18...	920	10	6.4	5	--	<10	0	60	10	<10

DATE	DIS-SOLVED COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)
SEP. 18...	4	<100	2	50	20

07169290 NORTH BOGGY CREEK AT GARRIOTT RD., ENID, OKLA.--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

PHYTOPLANKTON

Date	Time	Organism	Count (cells/ml)	Percent of total	Sampling method
July 22		CHLOROPHYTA			Sediment sampler
		Chlorophyceae			
		Chlorococcales			
		Hydrodictyaceae			
		Hydrodictyon			
		Occystaceae			
		Kirchneriella	200	1	
		Tetraedron	200	1	
		Scenedesmaceae			
		Scenedesmus	1,200	4	
		Zygnematales			
		Desmidiaceae			
		Cosmarium			
		CHRYSOPHYTA			
		Bacillariophyceae			
		Centrales			
		Coscinodiscaceae			
		Cyclotella	27,000	88	
		Pennales			
		Gomphonemataceae			
		Gomphonema	600	2	
		Naviculaceae			
		Navicula	600	2	
		Nitzschiaceae			
		Nitzschia	800	3	
		CYANOPHYTA			
		Myxophyceae			
		Oscillatoriales			
		Oscillatoriaceae			
		Lyngbya			
		TOTAL	30,000		
Aug. 19	1345	CHLOROPHYTA			Sediment sampler
		Chlorophyceae			
		Chlorococcales			
		Characiaceae			
		Characium	470	5	
		Occystaceae			
		Ankistrodesmus	95	1	
		Tetrasporales			
		Coccomyxaceae			
		Elakatothrix	190	2	
		Palmellaceae			
		Sphaerocystis	1,100	13	
		Volvocales			
		Chlamydomonadaceae			
		Chlamydomonas	95	1	
		CHRYSOPHYTA			
		Bacillariophyceae			
		Centrales			
		Coscinodiscaceae			
		Cyclotella	3,300	38	
		Pennales			
		Fragilariaceae			
		Synedra	95	1	
		Naviculaceae			
		Navicula	470	5	
		Nitzschiaceae			
		Nitzschia	380	4	
		CYANOPHYTA			
		Myxophyceae			
		Chroococcales			
		Chroococcaceae			
		Anacystis	1,500	18	
		Oscillatoriales			
		Oscillatoriaceae			
		Lyngbya	850	10	
		TOTAL	8,600		

07160300 BOGGY CREEK AT 30TH ST., ENID, OKLA.

LOCATION.--Lat 36°23'24", long 97°50'10", in NW 1/4, NW 1/4, sec.15, T.22 N., R.6 W., Garfield County, at 30th St. in Enid.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TOTAL IRON (FE) (UG/L)	DIS-SOLVED IRON (FE) (UG/L)	TOTAL MAN-GANESE (MN) (UG/L)	DIS-SOLVED MAN-GANESE (MN) (UG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)
JUNE											
24...	2045	--	--	--	--	34	6.0	25	8.8	113	0
JULY											
07...	1100	--	--	--	--	65	28	140	9.2	260	0
22...	--	--	--	--	--	57	32	160	7.4	212	--
27...	1100	--	--	--	--	98	32	170	7.0	327	6
28...	1200	--	--	--	--	54	14	83	6.5	193	0
AUG.											
01...	0900	--	--	--	--	71	33	180	6.5	256	0
09...	1800	--	--	--	--	65	28	160	5.6	254	0
15...	0903	--	--	--	--	31	4.9	25	7.2	109	0
16...	1900	--	--	--	--	38	9.1	37	7.1	145	0
19...	1315	80	10	30	30	63	23	110	7.6	175	15
SEP.											
01...	1200	--	--	--	--	87	26	110	4.7	347	0
10...	0900	--	--	--	--	77	34	160	5.2	284	0
17...	1200	110	30	60	50	100	28	140	6.2	372	0
22...	0800	--	--	--	--	110	35	170	5.3	386	0

DATE	ALKA-LINITY AS CACO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	DIS-SOLVED NITRATE (NO3) (MG/L)	DIS-SOLVED NITRITE (N) (MG/L)	DIS-SOLVED NITRITE (NO2) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS-SOLVED AMMONIA NITRO-GEN (N) (MG/L)	DIS-SOLVED AMMONIA (NH4) (MG/L)
JUNE											
24...	93	21	32	--	--	--	--	--	1.4	--	--
JULY											
07...	213	140	180	--	--	--	--	3.1	--	--	--
22...	174	140	190	1.5	6.4	.25	.82	--	1.7	.03	.04
27...	278	130	230	--	--	--	--	2.6	--	--	--
28...	158	70	100	--	--	--	--	1.9	--	--	--
AUG.											
01...	210	130	240	--	--	--	--	3.0	--	--	--
09...	208	140	210	--	--	--	--	2.2	--	--	--
15...	89	28	35	--	--	--	--	--	.39	--	--
16...	119	30	44	--	--	--	--	1.9	--	--	--
19...	169	97	140	1.6	7.1	.10	.33	--	1.7	--	--
SEP.											
01...	285	88	140	--	--	--	--	3.1	--	--	--
10...	233	160	220	--	--	--	--	2.6	--	--	--
17...	305	120	180	2.7	12	.15	.49	--	2.8	--	--
22...	317	130	250	--	--	--	--	5.3	--	--	--

DATE	DIS-SOLVED ORGANIC NITRO-GEN (N) (MG/L)	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	DIS-SOLVED KJEL. NITRO-GEN (N) (MG/L)	DIS-SOLVED AMMONIA ORGANIC NITRO-GEN (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	SUS-PENDED SOLIDS (MG/L)	VOLA-TILE FILT-RABLE RESIDUE (MG/L)	HARD-NESS (CA,MG) (MG/L)
JUNE										
24...	--	--	--	--	2.3	174	.24	--	--	110
JULY										
07...	--	--	--	--	.22	715	.97	--	--	280
22...	--	2.3	--	--	.25	716	.97	--	--	270
27...	--	--	--	--	.15	905	1.23	--	--	380
28...	--	--	--	--	.23	459	.62	--	--	190
AUG.										
01...	--	--	--	--	.02	847	1.15	--	--	310
09...	--	--	--	--	.03	762	1.04	--	--	280
15...	--	--	--	--	.43	193	.26	--	--	98
16...	--	--	--	--	.57	272	.37	--	--	130
19...	--	1.4	--	.56	.04	543	.74	12	85	250
SEP.										
01...	--	--	--	--	.16	640	.87	--	--	320
10...	--	--	--	--	.17	818	1.11	--	--	330
17...	--	.81	--	.83	.45	1250	1.70	20	661	370
22...	--	--	--	--	.45	961	1.31	--	--	420

07160300 BOGGY CREEK AT 30TH ST., ENID, OKLA.--Continued

DATE	NON-CARBONATE HARDNESS (MG/L)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	CHEMICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	FECAL COLIFORM (COL. PER 100 ML)
JUNE										
24...	17	31	1.0	337	7.9	--	--	--	--	--
JULY										
07...	64	51	3.7	1220	8.2	--	--	--	--	--
22...	100	55	4.2	1350	--	34.5	20.0	--	29	--
27...	98	49	3.8	1510	8.5	--	--	--	--	--
28...	34	47	2.6	779	8.2	--	--	--	--	--
AUG.										
01...	100	55	4.4	1450	8.1	--	--	--	--	--
09...	69	55	4.2	1340	8.2	--	--	--	--	--
15...	8	34	1.1	337	7.3	--	--	--	--	--
16...	13	36	1.4	464	8.2	--	--	--	--	--
19...	83	48	3.0	940	8.9	33.0	16.4	234	34	1792
SEP.										
01...	40	42	2.7	1120	7.9	--	--	--	--	--
10...	99	51	3.8	1410	8.0	--	--	--	--	--
17...	60	45	3.2	1350	7.3	21.0	18.6	230	11	56000
22...	100	47	3.6	1640	7.7	--	--	--	--	--

DATE	STREPTOCOCCI (COLONIES PER 100 ML)	CARBON DIOXIDE (CO2) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	PHENOLS (UG/L)	OIL AND GREASE (MG/L)	TOTAL CADMIUM (CD) (UG/L)	DISSOLVED CADMIUM (CD) (UG/L)	TOTAL CHROMIUM (CR) (UG/L)	DISSOLVED CHROMIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)
JUNE										
24...	--	2.3	--	--	--	--	--	--	--	--
JULY										
07...	--	2.6	--	--	--	--	--	--	--	--
22...	--	--	12	--	--	--	--	--	--	--
27...	--	1.7	--	--	--	--	--	--	--	--
28...	--	1.9	--	--	--	--	--	--	--	--
AUG.										
01...	--	3.3	--	--	--	--	--	--	--	--
09...	--	2.6	--	--	--	--	--	--	--	--
15...	--	8.7	--	--	--	--	--	--	--	--
16...	--	1.5	--	--	--	--	--	--	--	--
19...	--	.4	9.3	--	--	10	0	0	0	<10
SEP.										
01...	--	7.0	--	--	--	--	--	--	--	--
10...	--	4.5	--	--	--	--	--	--	--	--
17...	960000	30	6.7	13	2	<10	1	10	0	<10
22...	--	12	--	--	--	--	--	--	--	--

DATE	DISSOLVED COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	DISSOLVED LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)	DISSOLVED ZINC (ZN) (UG/L)
AUG.					
19...	4	<100	7	10	10
SEP.					
17...	10	<100	2	10	10

07160300 BOGGY CREEK AT 30TH ST., ENID, OKLA.--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA,
WATER YEAR OCTOBER 1974 TO SEPTEMBER 1974

PHYTOPLANKTON

Date	Time	Organism	Count (cells/ml)	Percent of total	Sampling method
July 22		CHLOROPHYTA			Sediment sampler
		Chlorophyceae			
		Chlorococcales			
		Micractiniaceae			
		Micractinium			
		Occystaceae			
		Ankistrodesmus	890	3	
		Kirchneriella	290	1	
		Scenedesmaceae			
		Scenedesmus	3,200	11	
		CHRYSOPHYTA			
		Bacillariophyceae			
		Centrales			
		Coscinodiscaceae	19,000	67	
		Cyclotella			
		Pennales			
		Naviculaceae			
		Navicula	890	3	
		Nitzschiaceae			
		Nitzschia	590	2	
		CYANOPHYTA			
		Myxophyceae			
		Chroococcales			
		Chroococcaceae			
		Agmenellum	3,500	13	
		Anacystis			
		EUGLENOPHYTA			
		Euglenophyceae			
		Euglenales			
		Euglenaceae			
		Euglena			
		TOTAL	28,000		
Aug. 13	1315	CHLOROPHYTA			Sediment sampler
		Chlorophyceae			
		Chlorococcales			
		Occystaceae			
		Ankistrodesmus	110	1	
		Volvocales			
		Chlamydomonadaceae			
		Chlamydomonas	470	4	
		CHRYSOPHYTA			
		Bacillariophyceae			
		Centrales			
		Coscinodiscaceae			
		Cyclotella	8,000	61	
		Pennales			
		Naviculaceae			
		Navicula	950	7	
		Nitzschiaceae			
		Nitzschia	3,400	26	
		CYANOPHYTA			
		Myxophyceae			
		Oscillatoriales			
		Oscillatoriaceae			
		Oscillatoria			
		EUGLENOPHYTA			
		Euglenophyceae			
		Euglenales			
		Euglenaceae			
		Euglena	110	1	
		TOTAL	13,000		

07160310 BOGGY CREEK TRIB. AT GARRIOTT RD., ENID, OKLA.

LOCATION.--Lat 36°23'27", long 97°49'10", on north line NE 1/4, sec.15, T.22 N., R.6 W., Garfield County, at Garriott Rd. in Enid.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TOTAL IRON (FE) (UG/L)	DIS-SOLVED IRON (FE) (UG/L)	TOTAL MAN-GANESE (MN) (UG/L)	DIS-SOLVED MAN-GANESE (MN) (UG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	HICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)
JULY											
23...	--	--	--	--	--	130	42	350	25	100	--
AUG.											
20...	1237	--	--	--	--	110	46	390	29	109	0
SEP.											
18...	1500	610	60	100	70	92	40	--	25	221	0

DATE	ALKA-LINITY AS CACO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	DIS-SOLVED NITRATE (NO3) (MG/L)	DIS-SOLVED NITRITE (N) (MG/L)	DIS-SOLVED NITRITE (NO2) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS-SOLVED AMMONIA NITRO-GEN (N) (MG/L)	DIS-SOLVED AMMONIA (NH4) (MG/L)
JULY											
23...	82	470	480	8.0	36	.98	3.2	--	9.0	15	19
AUG.											
20...	89	500	480	3.3	15	3.4	11	--	6.7	4.6	5.9
SEP.											
18...	181	518	480	.00	.00	.55	1.8	--	.55	--	--

DATE	DIS-SOLVED ORGANIC NITRO-GEN (N) (MG/L)	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	DIS-SOLVED KJEL. NITRO-GEN (N) (MG/L)	DIS-SOLVED AMMONIA ORGANIC NITRO-GEN (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	SUS-PENDED SOLIDS (MG/L)	VOLA-TILE FILT-RABLE RESIDUE (MG/L)	HARD-NESS (CA,MG) (MG/L)
JULY										
23...	1.0	16	16	--	4.9	1740	2.37	--	--	500
AUG.										
20...	--	24	--	13	1.7	1800	2.45	44	202	460
SEP.										
18...	--	41	--	36	2.5	--	--	28	122	390

DATE	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	DIS-SOLVED OXYGEN (MG/L)	PER-CENT SATUR-ATION	CHEM-ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	FECAL COLI-FORM (COL. PER 100 ML)
JULY										
23...	420	59	6.8	2690	--	29.0	7.6	102	170	--
AUG.										
20...	370	63	7.9	2780	8.0	30.0	5.0	65	230	--
SEP.										
18...	210	--	--	2780	7.5	22.0	3.2	38	170	--

DATE	STREP-TOCOCCI (COL-ONIES PER 100 ML)	CARBON DIOXIDE (CO2) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	PHENOLS (UG/L)	OIL AND GREASE (MG/L)	TOTAL CAD-MIUM (CD) (UG/L)	DIS-SOLVED CAD-MIUM (CD) (UG/L)	TOTAL CHRO-MIUM (CR) (UG/L)	DIS-SOLVED CHRO-MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)
JULY										
23...	1350	--	59	--	--	--	--	--	--	--
AUG.										
20...	--	1.7	77	--	--	--	--	--	--	--
SEP.										
18...	180000	11	48	56	--	<10	0	10	10	<10

DATE	DIS-SOLVED COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)
SEP.					
18...	0	<100	0	20	0

07160310 BOGGY CREEK TRIB. AT GARRIOTT RD., ENID, OKLA.--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

Date	Time	Organism	Count (cells/ml)	Percent of total	Sampling method
July 23		CHLOROPHYTA			Sediment sampler
		Chlorophyceae			
		Chlorococcales			
		Micractiniaceae			
		Micractinium	1,600	6	
		Occystaceae			
		Ankistrodesmus	1,100	4	
		Oocystis	11,000	42	
		Ulotrichales			
		Chaetophoraceae			
		Stigeoclonium			
		Volvocales			
		Volvocaceae			
		Pandorina	5,200	19	
		CHRYSOPHYTA			
		Bacillariophyceae			
		Pennales			
		Nitzschiaceae			
		Nitzschia	230	1	
		CYANOPHYTA			
		Myxophyceae			
		Chroococcales			
		Chroococcaceae			
		Anacystis			
		Oscillatoriales			
		Oscillatoriaceae			
		Oscillatoria	7,000	26	
		EUGLENOPHYTA			
		Euglenophyceae			
		Euglenales			
		Euglenaceae			
		Euglena	230	1	
		TOTAL	26,000		
Aug. 20	1237	CHLOROPHYTA			Sediment sampler
		Chlorophyceae			
		Chlorococcales			
		Occystaceae			
		Ankistrodesmus	12,000	31	
		Oocystis	11,000	30	
		Volvocales			
		Chlamydomonadaceae	1,100	3	
		Chlamydomonas			
		CHRYSOPHYTA			
		Bacillariophyceae			
		Centrales			
		Coscinodiscaceae			
		Cyclotella	360	1	
		Pennales			
		Cymbellaceae			
		Epithemia			
		Nitzschiaceae			
		Nitzschia	360	1	
		CYANOPHYTA			
		Myxophyceae			
		Chroococcales			
		Chroococcaceae			
		Anacystis	2,900	7	
		Oscillatoriales			
		Oscillatoriaceae			
		Oscillatoria	8,000	20	
		Spirulina	360	1	
		EUGLENOPHYTA			
		Euglenophyceae			
		Euglenales			
		Euglenaceae			
		Euglena	2,500	6	
		TOTAL	39,000		

07160315 BOGGY CREEK AT SEWAGE TR. PLANT, ENID, OKLA.

LOCATION.--Lat 36°23'12", long 97°48'58", in SW 1/4, NW 1/4, sec.14, T.22 N., R.6 W., Garfield County, upstream from Enid sewage plant.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TOTAL IRON (FE) (UG/L)	DIS-SOLVED IRON (FE) (UG/L)	TOTAL MAN-GANESE (MN) (UG/L)	DIS-SOLVED MAN-GANESE (MN) (UG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)
JULY 23...	--	--	--	--	--	120	40	260	19	266	--
AUG. 20...	1415	--	--	--	--	97	34	260	19	146	--
SEP. 18...	1700	230	100	100	70	110	37	260	8.3	275	0

DATE	ALKA-LINITY AS CACO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	DIS-SOLVED NITRATE (NO3) (MG/L)	DIS-SOLVED NITRITE (N) (MG/L)	DIS-SOLVED NITRITE (NO2) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS-SOLVED AMMONIA NITRO-GEN (N) (MG/L)	DIS-SOLVED AMMONIA (NH4) (MG/L)
JULY 23...	218	310	340	4.6	20	.30	.99	--	4.9	--	--
AUG. 20...	120	340	340	2.9	13	2.7	8.9	--	5.6	4.2	5.4
SEP. 18...	226	280	360	1.2	5.1	.85	2.8	--	2.0	--	--

DATE	DIS-SOLVED ORGANIC NITRO-GEN (N) (MG/L)	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	DIS-SOLVED KJEL. NITRO-GEN (N) (MG/L)	DIS-SOLVED AMMONIA ORGANIC NITRO-GEN (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	SUS-PENDED SOLIDS (MG/L)	VOLA-TILE FILT-RABLE RESIDUE (MG/L)	HARD-NESS (CA,MG) (MG/L)
JULY 23...	--	--	--	--	--	1280	1.74	--	--	460
AUG. 20...	--	15	--	13	1.7	1270	1.73	16	214	380
SEP. 18...	--	22	--	19	1.6	1320	1.80	12	161	430

DATE	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	DIS-SOLVED OXYGEN (MG/L)	PER-CENT SATUR-ATION	CHEM-ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	FECAL COLI-FORM (COL. PER 100 ML)
JULY 23...	250	54	5.3	2050	--	28.0	9.4	127	200	--
AUG. 20...	260	58	5.8	2000	--	31.0	4.9	64	130	--
SEP. 18...	200	56	5.5	2100	7.9	22.0	20.0	--	98	26000

DATE	STREP-TOCOCCI (COL-ONIES PER 100 ML)	CARBON DIOXIDE (CO2) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	PHENOLS (UG/L)	OIL AND GREASE (MG/L)	TOTAL CAD-MIUM (CD) (UG/L)	DIS-SOLVED CAD-MIUM (CD) (UG/L)	TOTAL CHRO-MIUM (CR) (UG/L)	DIS-SOLVED CHRO-MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)
JULY 23...	--	--	49	--	--	--	--	--	--	--
AUG. 20...	--	--	41	--	--	--	--	--	--	--
SEP. 18...	62000	5.5	27	28	--	<10	0	10	10	<10

DATE	DIS-SOLVED COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)
SEP. 18...	1	<100	0	20	0

07160315 BOGGY CREEK AT SEWAGE TR. PLANT, ENID, OKLA.--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

PHYTOPLANKTON

Date	Time	Organism	Count (cells/ml)	Percent of total	Sampling method
July 23		CHLOROPHYTA			Sediment sampler
		Chlorophyceae			
		Chlorococcales			
		Hydrodictyaceae			
		Pediastrum			
		Micractiniaceae			
		Micractinium	4,400	10	
		Occystaceae			
		Ankistrodesmus	1,600	4	
		Oocystis	3,500	8	
		Tetraedron	230	1	
		Scenedesmaceae			
		Crucigenia	7,500	17	
		Scenedesmus	940	2	
		Volvocales			
		Volvocaceae			
		Pandorina	3,700	9	
		CHRYSOPHYTA			
		Bacillariophyceae			
		Centrales			
		Coscinodiscaceae			
		Cyclotella	3,700	9	
		Pennales			
		Naviculaceae			
		Navicula	940	2	
		CYANOPHYTA			
		Myxophyceae			
		Chroococcales			
		Chroococcaceae			
		Agmenellum	7,500	17	
		Oscillatoriales			
		Oscillatoriaceae			
		Oscillatoria	9,400	21	
		EUGLENOPHYTA			
		Euglenophyceae			
		Euglenales			
		Euglenaceae			
		Trachelomonas	230	1	
		TOTAL	44,000		
Aug. 20	1415	CHLOROPHYTA			Sediment sampler
		Chlorophyceae			
		Chlorococcales			
		Occystaceae			
		Ankistrodesmus	5,500	41	
		Oocystis	1,500	11	
		CHRYSOPHYTA			
		Bacillariophyceae			
		Centrales			
		Coscinodiscaceae			
		Cyclotella	750	6	
		Pennales			
		Naviculaceae			
		Navicula	100	1	
		Nitzschiaceae			
		Nitzschia	650	5	
		CYANOPHYTA			
		Myxophyceae			
		Chroococcales			
		Chroococcaceae			
		Anacystis	1,300	10	
		Oscillatoriales			
		Oscillatoriaceae			
		Oscillatoria	2,400	19	
		EUGLENOPHYTA			
		Euglenophyceae			
		Euglenales			
		Euglenaceae			
		Euglena	970	7	
		TOTAL	13,000		

07160320 BOGGY CREEK BLW SEWAGE TR. PLANT, ENID, OKLA.

LOCATION.--Lat 36°23'06", long 97°48'43", in SE 1/4, NW 1/4, sec.14, T.22 N., R.6 W., Garfield County, downstream from Enid sewage plant.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TOTAL IRON (FE) (UG/L)	DIS-SOLVED IRON (FE) (UG/L)	TOTAL MAN-GANESE (MN) (UG/L)	DIS-SOLVED MAN-GANESE (MN) (UG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)
JULY											
23...	--	--	--	--	--	98	27	190	14	267	--
AUG.											
20...	1730	--	--	--	--	86	30	200	16	183	--
SEP.											
18...	1815	110	--	90	--	89	29	190	15	212	0

DATE	ALKA-LINITY AS CACO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	DIS-SOLVED NITRATE (NO3) (MG/L)	DIS-SOLVED NITRITE (N) (MG/L)	DIS-SOLVED NITRITE (NO2) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS-SOLVED AMMONIA NITRO-GEN (N) (MG/L)	DIS-SOLVED AMMONIA (NH4) (MG/L)
JULY											
23...	219	180	230	6.6	29	1.8	5.9	--	8.4	.01	.01
AUG.											
20...	150	220	250	4.9	22	2.3	7.6	--	7.2	.59	.76
SEP.											
18...	174	180	240	2.0	8.9	1.3	4.3	--	3.3	--	--

DATE	DIS-SOLVED ORGANIC NITRO-GEN (N) (MG/L)	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	DIS-SOLVED KJEL. NITRO-GEN (N) (MG/L)	DIS-SOLVED AMMONIA ORGANIC NITRO-GEN (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	SUS-PENDED SOLIDS (MG/L)	VOLA-TILE FILT-RABLE RESIDUE (MG/L)	HARD-NESS (CA,MG) (MG/L)
JULY										
23...	1.1	1.4	1.1	--	6.3	981	1.33	--	--	360
AUG.										
20...	--	16	--	15	4.7	1010	1.37	28	161	340
SEP.										
18...	--	16	--	14	5.5	1010	1.37	16	191	340

DATE	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	DIS-SOLVED OXYGEN (MG/L)	PER-CENT SATUR-ATION	CHEM-ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	FECAL COLI-FORM (COL. PER 100 ML)
JULY										
23...	140	53	4.4	1550	--	27.0	8.4	114	52	--
AUG.										
20...	190	55	4.7	1300	--	29.0	3.6	47	83	--
SEP.										
18...	170	53	4.5	1700	7.7	22.0	20.0	--	55	8200

DATE	STREP-TOCOCCI (COL-ONIES PER 100 ML)	CARBON DIOXIDE (CO2) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	PHENOLS (UG/L)	OIL AND GREASE (MG/L)	TOTAL CAD-MIUM (CD) (UG/L)	DIS-SOLVED CAD-MIUM (CD) (UG/L)	TOTAL CHRO-MIUM (CR) (UG/L)	DIS-SOLVED CHRO-MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)
JULY										
23...	--	--	22	--	--	--	--	--	--	--
AUG.										
20...	1062	--	9.3	--	--	--	--	--	--	--
SEP.										
18...	11000	6.8	26	13	3	<10	--	10	--	<10

DATE	DIS-SOLVED COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)
SEP.					
18...	--	<100	--	20	--

07160320 BOGGY CREEK BLW SEWAGE TR. PLANT, ENID, OKLA.--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

PHYTOPLANKTON

Date	Time	Organism	Count (cells/ml)	Percent of total	Sampling method
July 23		CHLOROPHYTA			Sediment sampler
		Chlorophyceae			
		Chlorococcales			
		Hydrodictyaceae			
		Pediastrum			
		Micractiniaceae			
		Micractinium	690	2	
		Occystaceae			
		Ankistrodesmus	690	2	
		Kirchneriella	170		
		Oocystis	1,500	4	
		Tetraedron			
		Scenedesmaceae			
		Scenedesmus	690	2	
		Volvocales			
		Volvocaceae			
		Pandorina			
		Zygnematales			
		Desmidiaceae			
		Cosmarium			
		Staurastrum			
		CHRYSOPHYTA			
		Bacillariophyceae			
		CEntrales			
		Coscinodiscaceae	2,500	7	
		Cyclotella			
		Melosira			
		Pennales			
		Gomphonemataceae			
		Gomphonema			
		Naviculaceae	510	1	
		Navicula			
		Nitzschiaceae	510	1	
		Nitzschia			
		CYANOPHYTA			
		Myxophyceae			
		Chroococcales			
		Chroococcaceae	24,000	67	
		Anacystis			
		Oscillatoriales			
		Oscillatoriaceae			
		Oscillatoria	4,500	12	
		EUGLENOPHYTA			
		Euglenophyceae			
		Euglenales			
		Euglenaceae			
		Euglena	170		
		TOTAL	36,000		
Aug. 20	1730	CHLOROPHYTA			Sediment sampler
		Chlorophyceae			
		Chlorococcales			
		Micractiniaceae			
		Micractinium	1,400	12	
		Occystaceae			
		Ankistrodesmus	2,400	20	
		Oocystis	2,000	16	
		CHRYSOPHYTA			
		Bacillariophyceae			
		Centrales			
		Coscinodiscaceae			
		Cyclotella	620	5	
		Melosira	150	1	
		Pennales			
		Naviculaceae			
		Navicula	78	1	
		Nitzschiaceae			
		Nitzschia	230	2	
		CYANOPHYTA			
		Myxophyceae			
		Oscillatoriales			
		Oscillatoriaceae			
		Oscillatoria	4,600	37	
		Phormidium	78	1	
		EUGLENOPHYTA			
		Euglenophyceae			
		Euglenales			
		Euglenaceae			
		Euglena	620	5	
		TOTAL	12,000		

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