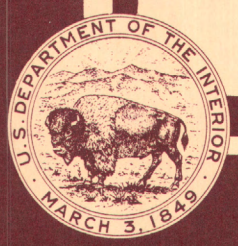
1973

Water Resources Data for Oklahoma

Part 2. Water Quality Records



UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Prepared in cooperation with the State of Oklahoma and with other agencies

CALENDAR FOR WATER YEAR 1973

1972

OCTOBER

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

NOVEMBER

S	M	T	W	T	F	S
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DECEMBER

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31						

1973

JANUARY

S	M	T	W	T	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
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FEBRUARY

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25	26	27	28			

MARCH

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APRIL

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29	30					

MAY

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27	28	29	30	31		

JUNE

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JULY

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22	23	24	25	26	27	28
29	30	31				

AUGUST

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19	20	21	22	23	24	25
26	27	28	29	30	31	

SEPTEMBER

S	M	T	W	T	F	S
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9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30						

1973

Water Resources Data for Oklahoma

Part 2. Water Quality Records

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Prepared in cooperation with the State of Oklahoma and with other agencies

Prepared in cooperation with

Oklahoma Water Resources Board
Oklahoma State Department of Health,
Environmental Health Service
Bureau of Reclamation, U.S. Department
of the Interior

Water resources records, 1973, for Oklahoma are in the following reports of the U.S. Geological Survey:

1. Water Resources Data for Oklahoma
   Part 1. Surface Water Records

2. Water Resources Data for Oklahoma
   Part 2. Water Quality Records

Copies of this report may be obtained from
District Chief, Water Resources Division
U.S. Geological Survey
Rm. 621, 201 Northwest 3rd Street
Oklahoma City, Oklahoma 73102

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IV WATER-QUALITY STATIONS, IN DOWNSTREAM ORDER, FOR WHICH RECORDS ARE PUBLISHED

(Letters after station name designate type of data: (c) chemical, (t) water temperature, (s) sediment)

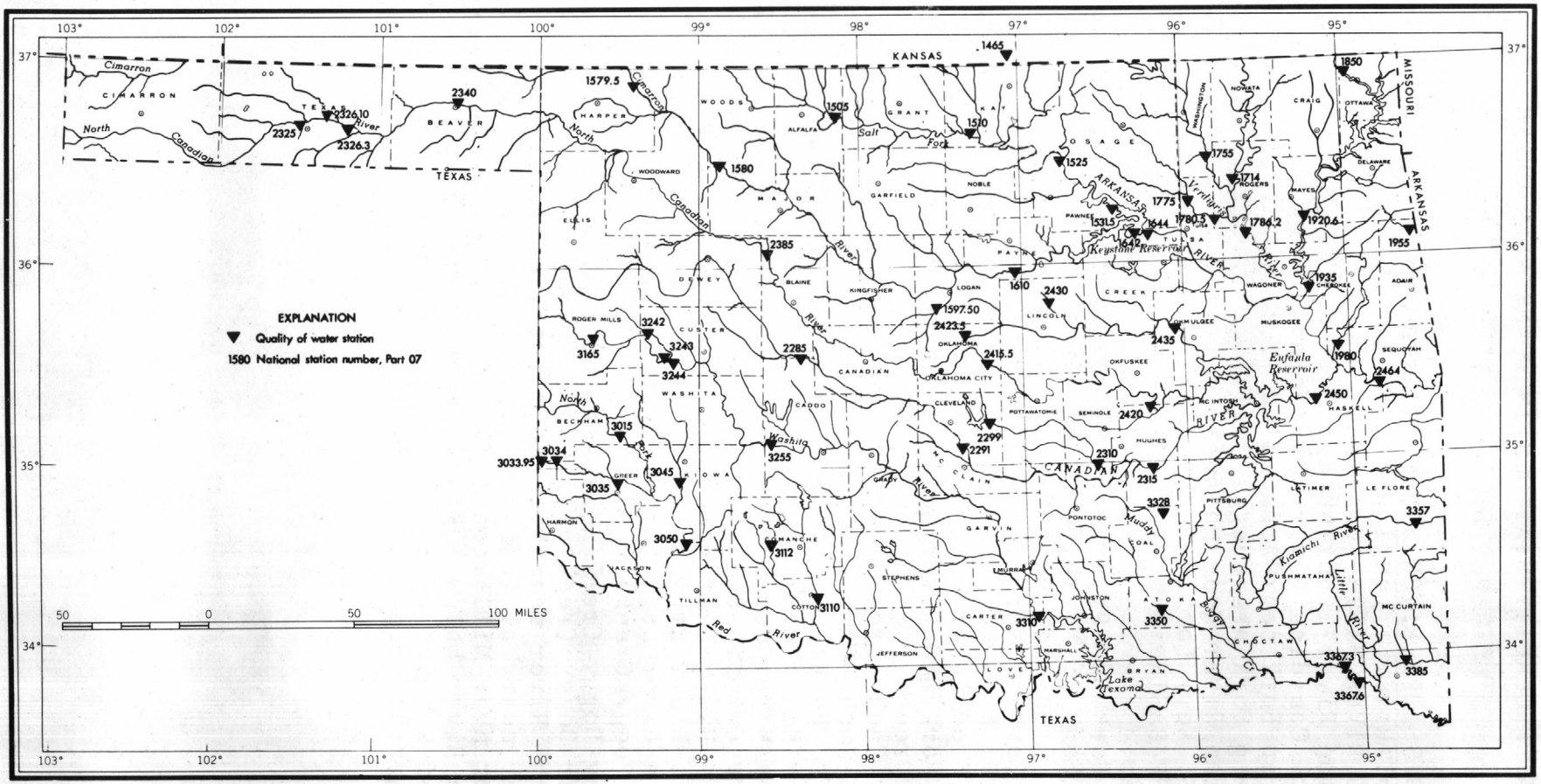

Figure 1. Map showing locations of water-quality stations in Oklahoma.

WATER RESOURCES DATA FOR OKLAHOMA, 1973

Part 2. Water Quality Records

by J. K. Kurklin

INTRODUCTION

Water-resources data for the 1973 water year for Oklahoma include records of data for the chemical and physical characteristics of surface water. Data on the quality of surface water (chemical, temperature, and sediment) were collected from designated sampling sites at regular intervals such as once daily, weekly, monthly or less frequently, and at some sites data were recorded on punched paper tape at 60-minute intervals. Records are given for 58 sampling stations of which 55 are continuous record stations and 3 are partial-record stations. A few pertinent stations (not included above) in bordering States are also included. The records were collected by the Water Resources Division of the U.S. Geological Survey under the direction of J. H. Irwin, district chief. Oklahoma district personnel who contributed to the collection, laboratory analysis and collation of data included T. E. Waldrep, D. M. Ferree, M. J. Webster, G. L. Keller, R. L. Factory, E. O. Stockton, G. L. Lake, W. P. Wells, and R. Karr. These data represent that portion of the National Water Data System collected by the U.S. Geological Survey and cooperating State and Federal agencies in Oklahoma.

The Geological Survey has published records of chemical quality, water temperatures, and sediment since 1941 in an annual series of water-supply papers entitled, "Quality of Surface Waters of the United States". Beginning with the 1964 water year, water-quality records have been released by the Geological Survey in annual reports on a State-boundary basis. These reports are for limited distribution and are designed primarily for rapid release of data shortly after the end of the water year. These records will be published later in Geological Survey water-supply papers.

COOPERATION

This report was prepared by the U.S. Geological Survey under cooperative agreement with the following organizations:

Oklahoma Water Resources Board, Don Arch King, Chairman, succeeded by Lloyd E. Church; Forrest Nelson, executive director.

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

Agencies furnishing assistance in the form of funds were:

Corps of Engineers, U.S. Army.
Bureau of Reclamation, U.S. Department of the Interior.
Environmental Protection Agency.

DEFINITION OF TERMS

Terms related to water-quality and hydrologic data, as used in this report are defined as below. See also table for converting English units to International System of units (SI) on page 19.

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

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 amount of oxygen required by aerobic bacteria while stabilizing decomposable organic matter. Thus, the determination of BOD provides an indication of the quantity of organic material in the water at the sampling point. Because complete stabilization may require a period too long for practical purposes, the 5-day BOD test has been accepted as standard. The BOD data presented in this report are based on the standard 5-day BOD test.

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, 1.9835 acre-feet, or about 646,000 gallons, and represents a runoff of 0.0372 inches from 1 square mile.

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.

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 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.

Continuous-record station is a particular site where chemical quality, water temperature and/or sediment data are collected once daily, twice daily, more than twice daily, weekly, or monthly on a regularly scheduled basis.

Cubic foot per second (cfs, CFS) 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.

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 particular instant of time.

Dissolved oxygen (DO) in surface water 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 specified 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.

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 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) expresses the concentration of chemical constituents 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) expresses the concentration of chemical constituents in solution. Milligrams per litre is 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 mulitplying the factors in table 1, page 5. 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, page 5.

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 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) (Guy, 1969).

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
Calcium (Ca^{+2})	.04990	Manganese (Mn^{+2})*	.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	556-570	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 1.000 g/ml and a specific gravity of sediment of 2.65.

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

Classification	Size (mm)	Method of analysis
Clay.....	0.00024 - 0.004	Sedimentation.
Silt.....	.004 - .062	Sedimentation.
Sand.....	.062 - 2.0	Sedimentation or sieve.
Gravel.....	2.0 - 64.0	Sieve.

The particle size distributions given in this report are not necessarily representative of all particles in transport in the stream. Most of the organic material is removed and the sample is subjected to mechanical and chemical dispersion before analysis in distilled water. Chemical dispersion is not used for native-water analysis (Guy, 1969).

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 O, O-dimethyl O-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-trichlorophenoxy-) propionic acid.

Plankton is the floating (or weakly swimming) animal or plant life in a body of water consisting chiefly of minute plants (as diatoms and blue-green algae) and of minute animals (as protozoan, entomostracans, and various larvae).

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 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 total quantity of sediment, as measured by dry weight or volume, that is discharged during a given time (Colby and Hembree, 1955). It is the sum of the suspended-sediment discharge and the bedload discharge.

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. This ratio is used to evaluate the suitability of water used for irrigating farmland.

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 centimeter 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). 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.

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 indicate the location of the thermograph or a digital mechanism that automatically records water temperature on paper tape.

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

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.

Turbidity of water is the reduction of transparency due to the presence of suspended particulate matter. Such material may consist of clay or silt, finely divided organic matter, plankton, or other microscopic organisms which cause light to be transmitted in straight lines through the matter.

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-weight 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.

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.

Irrigation network stations are water-quality stations located at or near certain streamflow gaging stations west of the main stem of the Mississippi River. Data collected at these stations are used to evaluate the chemical quality of surface waters used for irrigation and the changes resulting from the drainage of irrigated lands. Prior to water year 1966, the data for these stations were published in the annual water-supply paper series, "Quality of Surface Water for Irrigation, Western States".

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 (Goerlitz and Brown, 1972 p. 24). 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.

Radiochemical program is a network of regularly sampled water-quality stations where additional samples are collected twice a year (at high and low flow) to be analyzed for radioisotopes. The streams that are sampled represent major drainage basins in the conterminous United States.

Radioisotopes are isotope forms of an element that exhibit radioactivity. Isotopes are varieties of a chemical element that differ in atomic weight, but are very nearly alike in chemical properties. The difference arises because the atoms of the isotopic forms of an element differ in the number of neutrons in the nucleus. For example: Ordinary chlorine is a mixture of isotopes having atomic weights 35 and 37, with the natural mixture having atomic weight about 35.453. Many of the elements similarly exist as mixtures of isotopes, and a great many new isotopes have been produced in the operation of nuclear devices such as the cyclotron (Rose, 1966). There are 275 isotopes of the 81 stable elements in addition to over 800 radioactive isotopes.

Radioisotopes that are determined in this program are those of uranium in micrograms per litre, radium as radium-226 in picocuries per litre, gross beta radiation as strontium/yttrium-90 in picocuries per litre, and gross alpha radiation as micrograms of uranium equivalent per litre.

A picocurie (PC/1, pCi/1) is one millionth of the amount of radioactivity represented by a microcurie, which is the quantity of radiation represented by one millionth of a gram of radium-226. A picocurie of radium results in 2.22 disintegration per minute.

DOWNSTREAM ORDER AND STATION NUMBERS

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 list of 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 water-quality station, gaging station, and partial-record station has been assigned a station number. These are in the same downstream order used in this report. In assigning station numbers, no distinction is made between partial-record and continuous-record 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 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 07152500, which appears just to the left of the station's name includes the 2-digit part number "07" plus the 6-digit downstream order number "152500". 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 could be arranged in downstream order by assembling pages from the various State reports by station number to include all records in the basin.

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. Discharge records for streams in Oklahoma have been released in the report, "Water Resources Data for Oklahoma, 1973, Part 1. Surface Water Records".

The data in this report include a description of the sampling station and tabulations of the samples analyzed. The description of the sampling station gives the location, drainage area, periods of record for the various water-quality data, extremes of the pertinent data, and general remarks, in a format similar to that used for streamflow gaging stations.

Water-quality information is presented for chemical quality, biological, microbiological, water temperature, and fluvial sediment. Chemical quality includes concentrations of individual dissolved constituents and certain properties or 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 furnishes information from which daily minimums and maximums 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 concentrations 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 to use the metric system; data for chemical constituents and concentrations of suspended sediment are now reported in milligrams per litre (mg/l) and water temperatures are given in degrees Celsius (centigrade, °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 with a density greater than 1.000 g/ml, values in parts per million should be multiplied by the density to convert to milligrams per litre. Temperature reported in degrees Celsius may be converted to degrees Fahrenheit by using the table on page 14.

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 "Definitions of Terms", p. 5 and table for converting English units to SI units, p. 19).

Table 3.--Degrees Celsius (°C)* to degrees Fahrenheit (°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	41.5	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.

Solutes

The methods of collecting and analyzing water samples for determining the kinds and concentrations of solutes are described by Brown, Skougstad, and Fishman (1970). 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 the mixing of the stream. Some must be sampled at several verticals across the channel to determine accurately the solute load.

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 noncontinuous-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, Oklahoma 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. For daily stations, the water temperatures are taken at about the same time each day when the sample is collected. Large streams have a small diurnal temperature change; shallow streams may have a daily range of several degrees and may follow closely the changes in air temperature. Some streams may be affected by waste-heat discharges.

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

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 those days when the published sediment discharge value differs from the value computed as the product of discharge times mean concentration times 0.0027, the reader can assume that the sediment discharge for that day was computed by the

sub-divided day method. For periods when no samples were collected, daily loads of suspended sediment were estimated on the basis of water discharge, sediment concentrations observed immediately before and after the periods, and suspended-sediment loads for other periods of similar discharge.

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

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

WATER-SUPPLY PAPERS

The annual series of water-supply papers that give information on quality of surface waters in the Lower Mississippi basin, Part 7, Oklahoma are shown in table 4.

Table 4.--Water-supply paper numbers, water years 1941-72

Year	WSP	Year	WSP	Year	WSP
1941	942	1951	1199	1961	1884
1942	950	1952	1252	1962	1944
1943	970	1953	1292	1963	1950
1944	1022	1954	1352	1964	1957
1945	1030	1955	1402	1965	1964
1946	1050	1956	1452	1966	1994
1947	1102	1957	1522	1967	2014
1948	1133	1958	1573	1968	2096
1949	1163	1959	1644	1969	A2146
1950	1188	1960	1744	1970	A2156
				1971	A2166

A In press.

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

Porterfield, George, 1972, Computations of fluvial-sediment discharge: U.S. Geol. Survey Techniques of Water-Resources Inv., book 5, chap. C3, 66 p.

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

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.

____ 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.

Table 4.--Factors for converting English units to International System units (SI)

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	millimetres (mm)
	.0254	metres (m)
feet (ft)	.3048	metres (m)
yards (yd)	.9144	metres (m)
rods	5.0292	metres (m)
miles (mi)	1.609	kilometres (km)
	Area	
acres	4047	square metres (m^2)
	.4047	*hectares (ha)
	.4047	square hectometres (hm^2)
	.004047	square kilometres (km^2)
square miles (mi^2)	2.590	square kilometres (km^2)
	Volume	
gallons (gal)	3.785	**litres (l)
	3.785	cubic decimetres (dm^3)
	3.785×10^{-3}	cubic metres (m^3)
million gallons (10^6 gal)	3785	cubic metres (m^3)
	3.785×10^{-3}	cubic hectometres (hm^3)
cubic feet (ft^3)	28.32	cubic decimetres (dm^3)
	.02832	cubic metres (m^3)
cfs-days [(ft^3/s) · d]	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)
	28.32	cubic decimetres per second (dm^3/s)
	.02832	cubic metres per second (m^3/s)
gallons per minute (gpm)	.06309	litres per second (l/s)
	.06309	cubic decimetres per second (dm^3/s)
	6.309×10^{-5}	cubic metres per second (m^3/s)
million gallons per day (mgd)	43.81	cubic decimetres per second (dm^3/s)
	.04381	cubic metres per second (m^3/s)
	Mass	
tons (short)	.9072	tonnes (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 330, p. 13, 1972 edition.

PART 7. LOWER MISSISSIPPI RIVER BASIN

ARKANSAS RIVER BASIN

07146500 ARKANSAS RIVER AT ARKANSAS CITY, KANS.
(Irrigation network station)

LOCATION.--Lat 37°03'23", long 97°03'32", in NE1/4NE1/4NE1/4 sec.35, T.34 S., R.3 E., Cowley County, at bridge on Chestnut Street, 0.4 mi (0.6 km) upstream from St. Louis - San Francisco Railway Company bridge, 0.5 mi (0.8 km) upstream from gage on U.S. Highway 166 bridge, 0.5 mi (0.8 km) west of Arkansas City, 5.9 mi (9.5 km) upstream from Walnut River, and at mile 701.9 (1,129.9 km).

DRAINAGE AREA.--43,713 sq mi (113,216.7 km²), of which 7,607 sq mi (19,702.1 km²), is probably noncontributing.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	DISSOLVED NITRATE (NO3) (MG/L)	DISSOLVED NITRITE (N) (MG/L)
OCT.											
05...	382	--	--	310	166	36	250	420	.41	1.8	--
15...	346	--	--	280	186	0	200	400	2.1	9.1	--
23...	454	--	--	300	190	0	180	430	1.8	8.0	--
NOV.											
05...	460	--	--	<70	220	0	160	390	2.0	8.9	--
15...	1010	--	--	110	132	0	93	160	1.7	7.6	--
25...	782	--	--	270	202	0	160	390	3.2	14	--
DEC.											
05...	581	--	--	420	264	0	220	610	3.6	16	--
15...	755	--	--	410	276	0	210	600	4.3	19	--
25...	773	--	--	300	212	0	170	440	.36	1.6	--
JAN.											
04...	1570	--	--	160	148	0	120	240	1.5	6.6	--
17...	900	--	--	240	154	0	140	350	2.0	8.9	--
25...	1850	--	--	160	158	0	130	220	2.7	12	--
FEB.											
05...	9050	--	--	47	90	0	40	68	1.3	5.8	--
15...	2000	--	--	240	226	0	230	330	2.1	9.1	--
25...	1070	--	--	300	256	0	280	400	2.5	11	--
MAR.											
05...	8300	--	--	140	164	0	160	180	1.1	5.0	--
15...	20500	--	--	33	106	0	34	46	1.2	5.1	--
25...	14800	--	--	83	126	0	100	110	1.2	5.4	--
APR.											
05...	28400	--	--	37	98	0	35	52	.79	3.5	--
14...	6020	--	--	150	204	0	190	190	1.4	6.1	--
25...	5480	--	--	150	188	0	210	190	1.1	5.0	--
MAY											
05...	5820	--	--	140	194	0	170	170	.95	4.2	--
15...	3160	--	--	170	202	0	210	220	.88	3.9	--
25...	2250	--	--	210	206	0	220	280	1.0	4.6	--
JUNE											
05...	1700	100	20	270	180	6	270	370	.70	3.1	.00
15...	1410	98	20	280	173	0	250	390	1.4	6.2	.00
25...	1080	99	30	300	180	0	300	410	.46	2.0	.00
JULY											
05...	860	100	31	290	222	0	250	440	.02	.10	.72
15...	890	100	30	330	236	0	220	490	1.2	5.4	.09
25...	1240	67	15	150	169	0	120	210	.57	2.5	.04
AUG.											
05...	1500	63	13	140	164	0	91	195	2.1	9.3	.00
15...	910	81	21	220	198	0	170	320	1.3	5.7	.01
25...	572	94	26	330	221	0	200	460	1.2	5.3	.00
SEP.											
05...	452	110	28	350	238	0	200	530	.04	.18	.40
15...	980	81	19	290	176	0	140	440	2.1	9.2	.03
29...	35600	25	3.9	22	88	0	15	32	1.3	5.7	.03

PART 7. LOWER MISSISSIPPI RIVER BASIN

ARKANSAS RIVER BASIN

07146500 ARKANSAS RIVER AT ARKANSAS CITY, KANS.
(Irrigation network station)

PERIOD OF RECORD.--Chemical analyses: October 1951 to current year.
Water temperatures: October 1951 to current year.
Sediment record: September 1961 to current year.

REMARKS.--Continuous monitor records for water temperature and specific conductance are collected for this station.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS- SOLVED NITRITE (NO2) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	PHOS- PHATE (PO4) (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)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)
OCT.											
05...	--	--	1.8	1240	1.69	1280	380	180	6.9	2120	9.0
15...	--	--	4.1	1110	1.51	1040	320	170	6.8	1900	7.3
23...	--	--	3.2	1090	1.48	1340	310	150	7.4	1940	7.3
NOV.											
05...	--	--	2.8	1110	1.51	1380	310	130	6.7	1860	8.3
15...	--	--	2.8	535	.73	1460	190	82	3.5	911	7.7
25...	--	--	2.9	1090	1.48	2300	310	140	6.7	1850	7.8
DEC.											
05...	--	--	2.7	1640	2.23	2570	440	220	8.7	2690	7.9
15...	--	--	3.5	1640	2.23	3340	440	210	8.5	2690	7.4
25...	--	--	2.7	1220	1.66	2550	340	170	7.1	2030	7.5
JAN.											
04...	--	--	1.1	738	1.00	3130	250	130	4.4	1220	8.3
17...	--	--	2.0	986	1.34	2400	260	130	6.5	1620	8.3
25...	--	--	1.6	740	1.01	3700	240	110	4.5	1230	7.7
FEB.											
05...	--	--	.76	298	.41	7280	110	36	2.0	468	7.1
15...	--	--	1.7	1160	1.58	6260	370	190	5.4	1820	7.8
25...	--	--	2.2	1380	1.88	3990	450	240	6.2	2130	8.0
MAR.											
05...	--	--	.62	733	1.00	16400	270	140	3.7	1170	8.2
15...	--	--	.86	248	.34	13700	110	23	1.4	410	7.2
25...	--	--	.85	475	.65	19000	180	77	2.7	778	8.2
APR.											
05...	--	--	.75	253	.34	19400	110	30	1.5	412	7.1
14...	--	--	.67	800	1.09	13000	300	130	3.8	1260	7.5
25...	--	--	.76	840	1.14	12400	310	160	3.7	1260	7.1
MAY											
05...	--	--	.72	732	1.00	11500	280	120	3.6	1170	8.2
15...	--	--	.89	888	1.21	7580	330	160	4.1	1420	7.9
25...	--	--	.44	1000	1.36	6080	340	170	5.0	1610	7.8
JUNE											
05...	.0	.81	--	1220	1.66	5600	330	170	6.4	1810	8.6
15...	.0	.95	--	1290	1.75	4910	330	190	6.7	1840	7.4
25...	.0	.76	--	1370	1.86	4000	370	220	6.8	1810	7.2
JULY											
05...	2.4	--	--	1330	1.81	3090	380	200	6.5	2130	7.6
15...	.3	--	--	1390	1.89	3340	370	180	7.4	2220	7.8
25...	.1	--	--	656	.89	2200	230	90	4.3	1160	7.7
AUG.											
05...	.0	--	--	704	.96	2850	210	76	4.2	1070	7.7
15...	.0	.70	--	904	1.23	2220	290	130	5.6	1580	7.6
25...	.0	.84	--	1240	1.69	1920	340	160	7.8	2120	7.8
SEP.											
05...	1.3	.87	--	1380	1.88	1680	390	190	7.7	2310	7.9
15...	.1	.76	--	1160	1.58	3070	280	140	7.5	2000	7.8
29...	.1	.36	--	173	.24	16600	79	6	1.1	287	7.7

07146500 ARKANSAS RIVER AT ARKANSAS CITY, KANS.--Continued
(Irrigation network station)

CHEMICAL ANALYSES OF ADDITIONAL SAMPLES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SODIUM (NA) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	DISSOLVED NITRATE (NO3) (MG/L)
OCT.								
17...	376	300	174	20	210	420	.09	.40
NOV.								
08...	553	240	210	0	170	340	1.4	6.3
DEC.								
20...	800	370	242	0	200	570	1.4	6.3
JAN.								
17...	900	240	186	0	140	350	1.3	5.6
FEB.								
22...	1160	290	260	0	280	400	1.9	8.2
MAR.								
14...	18400	36	80	0	38	51	.66	2.9
APR.								
25...	5480	150	186	0	210	190	.34	1.5
MAY								
18...	2490	240	242	0	290	310	.23	1.0
JUNE								
06...	3880	150	150	0	160	200	.63	2.8
JULY								
31...	2860	--	--	--	--	--	--	--
AUG.								
28...	468	--	--	--	--	--	--	--
SEP.								
19...	1010	--	--	--	--	--	--	--

DATE	DISSOLVED NITRITE (N) (MG/L)	DISSOLVED NITRITE (NO2) (MG/L)	DISSOLVED ORGANIC NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	PHOSPHATE (PO4) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (TONS PER AC-FT)	DISSOLVED SOLIDS (TONS PER DAY)
OCT.								
17...	.01	.0	2.5	1.5	4.7	1180	1.60	1200
NOV.								
08...	.03	.1	.09	.78	2.4	988	1.34	1480
DEC.								
20...	.03	.1	3.6	.87	2.7	1500	2.04	3240
JAN.								
17...	.09	.3	4.5	.36	1.1	992	1.35	2410
FEB.								
22...	.00	.0	1.5	.59	1.8	1290	1.75	4040
MAR.								
14...	.00	.0	.19	.01	.02	243	.33	12100
APR.								
25...	.00	.0	.80	.33	1.0	756	1.03	11200
MAY								
18...	.00	.0	.46	.65	2.0	1170	1.59	7870
JUNE								
06...	.03	.1	.24	.06	.20	712	.97	7460
JULY								
31...	--	--	--	--	--	--	--	--
AUG.								
28...	--	--	--	--	--	--	--	--
SEP.								
19...	--	--	--	--	--	--	--	--

07146500 ARKANSAS RIVER AT ARKANSAS CITY, KANS.--Continued
(Irrigation network station)

CHEMICAL ANALYSES OF ADDITIONAL SAMPLES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	HARDNESS (CA,MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	CHEMICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	CHEMICAL OXYGEN DEMAND (HIGH LEVEL) (MG/L)	BIOCHEMICAL OXYGEN DEMAND (MG/L)
OCT.								
17...	340	160	7.1	1980	8.9	30	--	--
NOV.								
08...	300	128	6.0	1700	7.7	37	--	8.2
DEC.								
20...	400	200	8.1	2480	7.8	17	--	6.2
JAN.								
17...	270	120	6.4	1640	7.5	52	--	7.2
FEB.								
22...	440	230	6.0	2100	7.4	21	--	4.2
MAR.								
14...	100	34	1.6	383	7.2	81	--	4.5
APR.								
25...	300	150	3.8	1270	7.7	32	--	3.3
MAY								
18...	410	210	5.2	1830	8.1	27	--	2.5
JUNE								
06...	24	117	13	1170	7.6	97	--	6.2
JULY								
31...	--	--	--	--	--	17	--	5.5
AUG.								
28...	--	--	--	--	--	--	44	8.2
SEP.								
19...	--	--	--	--	--	31	--	4.4

FIELD ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION
OCT.					
17...	1700	8.5	15.0	9.8	104
NOV.					
08...	1600	9.1	8.5	11.7	106
DEC.					
20...	2650	8.0	.0	15.8	117
JAN.					
17...	1750	7.8	6.0	10.8	95
FEB.					
22...	2200	8.2	3.5	11.1	89
MAR.					
14...	385	8.2	10.5	8.6	84
APR.					
05...	400	8.1	9.0	9.6	89
25...	1350	8.1	16.0	8.2	90
MAY					
18...	1800	8.2	17.5	8.8	100
JUNE					
06...	1200	--	24.5	7.4	91
JULY					
31...	530	--	26.0	6.7	87
AUG.					
28...	2100	--	29.0	11.6	157
SEP.					
19...	1450	--	19.0	8.4	98

07146500 ARKANSAS RIVER AT ARKANSAS CITY, KANS.--Continued
(Irrigation network station)

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), MEAN VALUES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(CONTINUOUS HOURLY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2050	1760	2140	1770	1230	2140	450	1310	1920	2120	655	2250
2	2060	1890	2160	1350	702	2150	395	771	1860	2080	851	2110
3	1980	1610	1960	1580	423	2100	372	834	1860	2110	952	2180
4	1990	1790	2330	1180	453	1770	372	961	1930	2120	953	2240
5	2120	1890	2570	1850	488	1090	411	1180	1910	2140	981	2180
6	2120	1930	3030	1840	532	446	481	1250	1180	2220	1170	2130
7	2160	1940	3090	2140	634	439	521	1240	863	2180	1290	2240
8	2160	1720	2910	2390	819	509	590	1260	1290	2160	1340	2000
9	1960	1820	2810	2320	1030	401	765	1270	1650	2180	1120	1090
10	1950	1980	2810	2000	1310	374	880	1380	1730	2200	1600	780
11	2010	2020	3130	2180	1520	285	979	1400	1790	2240	1460	1260
12	2070	1790	2760	2180	1600	316	1080	1470	1900	1430	1450	1380
13	2170	1700	2810	2090	1730	407	1180	1440	1780	1960	1540	1440
14	2160	1210	2900	2060	1830	385	1260	1380	2040	2010	1590	1090
15	1880	1070	2900	2190	1850	381	1290	1430	1920	2020	1590	2020
16	1880	1580	2820	2210	1960	388	1320	1640	2090	1160	1600	1360
17	1930	1710	2720	1700	1870	529	1180	1770	2500	1820	1660	1470
18	2130	1690	2590	1510	2030	699	828	1840	2010	2040	1640	1460
19	2110	1620	2500	1670	2180	856	983	1880	1960	1940	1540	1330
20	2150	1940	2370	1020	2110	971	856	1910	1960	2080	1570	1370
21	1930	1900	1800	824	2110	1020	964	2000	2030	2200	1670	1370
22	1920	1860	1610	846	2080	970	1070	1890	2020	2040	1800	1690
23	1990	1840	1730	1000	2170	963	1080	1540	2030	1530	1930	1650
24	1760	1890	1820	1110	2170	1030	1230	1930	1970	1020	2030	527
25	1960	1780	1970	1240	2160	792	1260	1610	2030	1080	2060	643
26	2070	1870	2060	1320	2310	540	1330	1710	2060	1340	2100	393
27	2030	1800	1850	1410	2140	374	1290	1750	2150	1460	2180	611
28	2030	1920	1890	1340	2190	414	1450	1800	2080	837	2200	318
29	2150	2400	1710	1390	---	397	1350	1920	2230	646	2200	209
30	2150	2250	1270	1450	---	430	1570	1900	2050	679	2180	290
31	2020	---	1550	1580	---	436	---	1880	---	651	2210	---
MONTH	2030	1810	2340	1640	1560	774	960	1530	1890	1730	1580	1370

TEMPERATURE (°C) OF WATER, MEAN VALUES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(CONTINUOUS HOURLY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	2.0	6.5	9.5	10.0	14.0	27.5	---	27.0	24.0
2	---	---	---	1.0	5.0	10.5	10.5	17.0	---	---	27.0	25.0
3	---	---	---	1.5	4.0	9.5	10.5	16.5	---	---	27.5	25.0
4	---	---	---	0.0	4.5	10.0	10.0	18.0	---	---	27.0	25.0
5	---	---	---	0.0	4.5	9.0	10.0	---	---	---	26.0	23.0
6	---	---	---	0.0	4.5	8.0	11.0	---	---	---	25.5	22.0
7	---	---	---	0.0	3.5	8.5	11.5	---	---	---	26.5	22.5
8	---	---	---	0.0	1.0	8.5	9.5	---	---	---	26.5	23.5
9	---	---	---	0.0	0.5	8.5	7.0	---	---	---	28.0	24.5
10	---	---	---	0.0	1.5	9.0	6.5	---	---	---	29.5	25.5
11	---	---	---	0.0	2.5	10.0	---	---	---	---	29.0	25.0
12	---	---	---	0.0	4.0	11.0	---	---	---	---	29.0	25.0
13	---	8.0	---	0.0	5.5	12.5	---	---	---	---	28.5	24.0
14	---	5.0	---	0.5	3.5	12.0	---	---	---	---	29.0	23.0
15	---	4.0	---	0.5	2.5	11.5	---	---	---	---	28.0	22.0
16	---	4.0	---	0.5	2.0	10.5	---	---	---	---	28.0	21.5
17	17.0	4.0	---	1.0	1.5	10.0	---	---	---	---	28.5	18.5
18	10.5	2.5	---	---	2.0	10.5	---	---	---	---	28.0	17.5
19	5.5	2.5	---	---	2.5	11.0	---	---	---	---	28.0	18.5
20	10.0	4.0	0.5	---	4.0	9.5	---	40.5	41.0	---	29.5	21.0
21	9.5	4.0	1.0	---	6.0	9.0	---	40.5	39.0	---	29.5	23.0
22	12.0	4.0	1.5	---	6.0	10.0	---	36.0	41.0	---	27.5	23.5
23	---	4.0	2.0	---	7.5	10.5	---	28.5	41.0	---	26.5	23.5
24	---	4.0	1.0	---	9.0	11.0	---	26.0	41.0	---	27.5	21.5
25	---	4.5	1.5	---	9.0	9.5	20.0	28.0	41.0	---	26.5	21.0
26	---	4.5	2.0	---	8.5	9.0	19.0	29.0	41.0	---	26.5	20.5
27	---	5.5	3.0	---	8.5	9.5	20.0	29.0	41.0	---	26.5	19.5
28	---	5.0	3.0	---	9.0	10.5	22.5	28.5	41.0	---	26.0	18.5
29	---	---	9.0	---	---	11.0	17.0	28.5	41.0	---	25.5	17.5
30	---	---	7.0	---	---	10.5	7.5	28.5	41.0	---	25.5	17.5
31	---	---	3.0	6.0	---	10.0	---	28.5	---	27.5	25.0	---
MONTH	---	---	---	---	4.5	10.0	---	---	---	---	27.5	22.0

07146500 ARKANSAS RIVER AT ARKANSAS CITY, KANS.--Continued
(Irrigation network station)

DISSOLVED SULFATE (SO_4), IN MILLIGRAMS PER LITRE, MEAN VALUES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	190	160	200	160	110	200	41	120	180	190	60	240
2	190	170	200	120	64	200	36	71	170	190	78	190
3	180	150	180	150	39	190	34	76	170	190	87	200
4	180	160	360	110	41	160	34	88	180	190	87	220
5	190	170	740	170	45	100	38	110	180	200	90	200
6	190	180	1500	170	49	41	44	110	110	200	110	200
7	200	180	1600	200	58	40	48	110	79	200	120	220
8	200	160	1300	460	75	47	54	120	120	200	120	180
9	180	170	1100	350	94	37	70	120	150	200	100	100
10	180	180	1100	180	120	34	81	130	160	200	150	71
11	180	190	1600	200	140	26	90	130	160	220	130	120
12	190	160	1000	200	150	29	99	130	170	130	130	130
13	200	160	1100	190	160	37	110	130	160	180	140	130
14	200	110	1300	190	170	35	120	130	190	180	150	100
15	170	98	1300	200	170	35	120	130	180	190	150	190
16	170	150	1100	200	180	35	120	150	190	110	150	120
17	180	160	970	160	170	48	110	160	630	170	150	130
18	200	160	770	140	190	64	76	170	180	190	150	130
19	190	150	630	150	200	78	90	170	180	180	140	120
20	200	180	420	93	190	89	78	180	180	190	140	130
21	180	170	170	75	190	93	88	180	190	200	150	130
22	180	170	150	77	190	89	98	170	190	190	170	160
23	180	170	160	91	200	88	99	140	190	140	180	150
24	160	170	170	100	200	94	110	180	180	93	190	48
25	180	160	180	110	200	72	120	150	190	99	190	59
26	190	170	190	120	330	49	120	160	190	120	190	36
27	190	170	170	130	200	34	120	160	200	130	200	56
28	190	180	170	120	200	38	130	170	190	77	200	29
29	200	470	160	130	---	36	120	180	200	59	200	19
30	200	240	120	130	---	39	140	170	190	62	200	27
31	190	---	140	150	---	40	---	170	---	60	200	---
MONTH	190	180	650	160	150	71	88	140	190	160	150	130

DISSOLVED SULFATE (TONS/DAY), MEAN VALUES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	227	189	367	421	1240	560	4030	1990	764	501	372	287
2	222	253	360	433	2460	595	4480	2210	740	497	408	236
3	207	220	312	581	1560	602	2820	1710	712	488	433	239
4	205	218	607	455	1140	634	2880	1420	691	470	391	259
5	212	218	1180	521	1070	2640	2780	1700	887	447	359	239
6	207	213	1710	344	961	1810	2510	1730	1050	432	387	242
7	207	213	1970	317	814	1290	2430	1660	688	405	382	287
8	202	225	1760	689	680	1420	2490	1620	685	391	361	283
9	186	208	1880	466	585	1970	2400	1520	766	387	276	285
10	185	228	1880	247	654	2410	2050	1560	744	384	360	220
11	187	251	2770	280	691	2700	1850	1580	721	567	350	296
12	183	223	1760	291	676	3150	1840	1520	718	300	340	297
13	189	322	2010	279	697	2600	1890	1330	651	349	344	363
14	188	338	2370	295	701	1750	1910	1250	726	369	363	315
15	163	249	2520	325	676	1850	1870	1100	673	584	353	504
16	192	279	2230	382	668	1450	2080	1130	712	292	343	319
17	180	286	1920	378	605	1360	3090	1130	2240	370	358	345
18	192	298	1520	530	627	1280	1800	1110	621	380	360	371
19	183	281	1290	1330	657	1300	1940	1080	571	367	335	332
20	184	353	960	728	662	1470	2110	1040	562	350	309	332
21	182	350	429	550	615	1610	2130	1030	572	349	301	308
22	219	348	344	750	586	1520	1940	929	554	395	306	388
23	240	346	358	684	595	1470	1890	749	552	453	307	974
24	192	349	364	642	584	1370	1740	1150	526	353	303	832
25	194	341	376	560	566	2250	1680	891	536	331	287	1170
26	200	383	425	561	935	3240	1510	849	529	387	263	1030
27	192	360	449	599	555	2380	1520	817	536	559	252	3270
28	189	358	460	645	584	1920	1610	818	510	546	254	2430
29	202	910	422	594	---	1780	1350	868	546	485	254	1890
30	197	450	442	544	---	1810	1680	826	494	553	243	3030
31	189	---	448	566	---	2670	---	780	---	476	255	---
MONTH	197	309	1160	516	816	1770	2210	1260	709	426	329	712

07146500 ARKANSAS RIVER AT ARKANSAS CITY, KANS.--Continued
(Irrigation network station)

DISSOLVED CHLORIDE (CL), IN MILLIGRAMS PER LITRE, MEAN VALUES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	420	350	440	360	240	440	62	250	390	430	110	470
2	420	380	440	260	120	440	50	130	380	420	150	430
3	400	320	400	310	56	430	45	150	380	430	170	450
4	400	360	490	220	63	360	45	180	390	430	170	460
5	430	380	560	370	71	200	54	220	390	440	180	450
6	430	390	690	370	80	61	69	240	220	460	220	430
7	440	390	710	440	100	60	78	240	150	450	250	460
8	440	340	660	510	140	75	93	240	250	440	260	410
9	400	370	630	490	190	51	130	240	330	450	210	200
10	400	400	630	410	250	45	160	270	350	450	320	140
11	410	410	720	450	300	26	180	270	360	460	290	240
12	420	360	610	450	320	33	200	290	380	280	280	270
13	440	340	630	430	350	53	220	280	360	400	300	280
14	440	230	660	420	370	48	240	270	420	410	320	200
15	380	200	660	450	370	47	250	280	390	410	320	410
16	380	310	630	450	400	49	260	330	430	220	320	260
17	390	340	600	340	380	80	220	360	540	370	330	290
18	430	340	560	300	410	120	150	370	410	420	330	290
19	430	320	540	330	450	150	180	380	400	390	300	260
20	440	390	500	190	430	180	150	390	400	420	310	270
21	390	380	360	150	430	190	180	410	410	450	330	270
22	390	380	320	150	420	180	200	380	410	420	360	340
23	400	370	350	180	440	180	200	300	410	300	390	330
24	350	380	370	210	440	190	240	390	400	190	410	79
25	400	360	400	240	440	140	240	320	410	200	420	110
26	420	380	420	260	480	82	260	340	420	260	430	50
27	410	360	370	280	440	45	250	350	440	290	450	98
28	410	390	380	260	450	54	280	360	420	150	450	33
29	440	510	340	270	---	51	260	390	460	110	450	15
30	440	470	240	280	---	58	310	380	420	110	450	27
31	410	---	310	310	---	59	---	380	---	110	450	---
MONTH	410	360	500	330	310	130	180	300	380	350	310	270

DISSOLVED CHLORIDE (TONS/DAY), MEAN VALUES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	504	414	818	922	2600	1250	6110	4210	1690	1120	669	567
2	493	558	803	919	4530	1330	6210	4180	1630	1110	792	525
3	458	478	690	1260	2270	1340	3730	3300	1570	1090	862	534
4	454	478	820	944	1730	1390	3810	2840	1530	1050	779	544
5	473	482	890	1150	1690	5410	3970	3530	1960	996	719	534
6	461	471	813	758	1590	2720	3940	3620	2180	969	803	540
7	462	470	902	707	1450	1920	3980	3470	1340	905	805	603
8	451	491	908	765	1310	2300	4310	3410	1440	872	764	627
9	413	457	1060	655	1180	2760	4530	3180	1670	864	568	584
10	409	505	1060	548	1380	3200	4000	3320	1620	858	781	417
11	414	558	1240	626	1490	2660	3710	3370	1580	1190	750	620
12	407	489	1040	650	1460	3560	3760	3270	1580	641	727	630
13	421	703	1130	621	1520	3690	3930	2850	1430	773	741	776
14	419	704	1240	656	1540	2380	4010	2650	1610	818	786	645
15	360	509	1310	725	1490	2500	3940	2350	1490	1300	765	1120
16	423	604	1250	856	1480	1980	4390	2450	1590	605	742	677
17	398	624	1190	824	1330	2240	6410	2480	1920	814	778	739
18	427	649	1110	1140	1390	2340	3470	2440	1380	844	782	796
19	409	610	1110	2890	1470	2520	3890	2370	1260	812	722	702
20	410	780	1130	1470	1470	2930	4110	2300	1240	779	669	704
21	402	773	942	1060	1370	3250	4250	2290	1270	781	656	654
22	484	767	746	1450	1300	3030	3960	2050	1230	878	672	846
23	533	762	783	1380	1330	2930	3860	1620	1220	977	678	2120
24	421	769	800	1320	1300	2780	3640	2540	1160	713	672	1370
25	429	748	833	1170	1260	4290	3530	1930	1190	676	638	2080
26	445	844	945	1180	1370	5400	3200	1850	1180	820	587	1420
27	425	790	988	1280	1240	3170	3210	1790	1200	1200	563	5740
28	420	791	1020	1370	1310	2760	3440	1800	1140	1060	569	2770
29	452	982	920	1260	---	2480	2850	1920	1230	868	569	1490
30	440	888	929	1160	---	2660	3620	1820	1100	1010	544	3070
31	419	---	967	1220	---	3960	---	1720	---	854	572	---
MONTH	437	638	980	1060	1600	2810	4060	2670	1450	910	701	1150

07146500 ARKANSAS RIVER AT ARKANSAS CITY, KANS.--Continued
(Irrigation network station)

DISSOLVED SOLIDS, IN MILLIGRAMS PER LITRE, MEAN VALUES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1230	1030	1290	1040	722	1290	264	769	1140	1280	385	1370
2	1240	1120	1310	793	412	1300	232	453	1100	1250	500	1270
3	1180	945	1170	928	248	1270	218	490	1100	1270	559	1320
4	1190	1050	1420	693	266	1040	218	564	1150	1280	560	1360
5	1280	1120	1590	1090	287	640	241	693	1130	1290	576	1320
6	1280	1150	1910	1090	312	262	282	734	693	1350	687	1290
7	1310	1160	1950	1290	372	258	306	728	507	1320	757	1360
8	1310	1010	1830	1470	481	299	346	740	757	1310	787	1200
9	1170	1070	1760	1420	605	235	449	746	969	1320	658	640
10	1160	1180	1760	1200	769	220	517	810	1020	1340	939	458
11	1200	1210	1980	1320	892	167	575	822	1050	1360	857	740
12	1250	1050	1720	1320	939	186	634	863	1130	840	851	810
13	1310	998	1760	1260	1020	239	693	845	1050	1170	904	845
14	1310	710	1820	1240	1080	226	740	810	1220	1200	934	640
15	1110	628	1820	1330	1090	224	757	840	1140	1210	934	1210
16	1110	928	1760	1340	1170	228	775	963	1260	681	939	798
17	1150	1000	1690	998	1110	311	693	1040	1540	1070	975	863
18	1290	992	1600	887	1220	410	486	1090	1200	1220	963	857
19	1270	951	1540	980	1320	503	577	1110	1170	1160	904	781
20	1300	1160	1450	599	1270	570	503	1130	1170	1250	922	804
21	1150	1130	1060	484	1270	599	566	1200	1220	1340	980	804
22	1140	1100	945	497	1250	570	628	1120	1210	1220	1060	992
23	1190	1090	1020	587	1310	565	634	904	1220	898	1150	969
24	1030	1120	1070	652	1310	605	722	1140	1180	599	1220	309
25	1170	1050	1180	728	1310	465	740	945	1220	634	1240	378
26	1250	1110	1240	775	1410	317	781	1000	1240	787	1270	231
27	1220	1060	1090	828	1290	220	757	1030	1300	857	1320	359
28	1220	1140	1120	787	1330	243	851	1060	1250	491	1340	187
29	1300	1470	1000	816	---	233	793	1140	1360	379	1340	123
30	1300	1370	746	851	---	252	922	1130	1230	399	1320	170
31	1210	---	910	928	---	256	---	1110	---	382	1340	---
MONTH	1220	1070	1440	975	931	458	563	904	1130	1040	940	815

DISSOLVED SOLIDS (TONS/DAY), MEAN VALUES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1490	1210	2420	2700	7970	3700	25890	12790	4960	3310	2390	1670
2	1460	1640	2380	2780	15800	3930	28740	14180	4780	3270	2620	1550
3	1350	1410	2030	3730	9990	3960	18100	10970	4600	3220	2780	1580
4	1340	1400	2390	2920	7320	4070	18460	9140	4500	3100	2510	1600
5	1400	1420	2530	3360	6840	16970	17850	10910	5760	2950	2300	1580
6	1360	1390	2240	2220	6160	11590	16090	11080	6730	2870	2490	1600
7	1370	1380	2480	2100	5230	8280	15610	10650	4420	2680	2450	1780
8	1340	1440	2520	2220	4360	9120	15990	10430	4400	2580	2320	1850
9	1220	1340	2960	1910	3760	12650	15400	9720	4920	2560	1770	1830
10	1200	1490	2960	1620	4190	15470	13130	10020	4770	2540	2310	1410
11	1220	1650	3390	1850	4430	17300	11870	10160	4630	3510	2250	1900
12	1200	1430	2930	1930	4340	20240	11800	9790	4660	1930	2180	1900
13	1250	2070	3160	1840	4470	16710	12140	8560	4180	2280	2210	2330
14	1240	2170	3430	1940	4520	11230	12280	8010	4760	2410	2330	2020
15	1060	1600	3650	2150	4370	11900	12020	7050	4380	3820	2270	3300
16	1240	1790	3480	2540	4360	9290	13330	7230	4690	1880	2200	2050
17	1170	1840	3340	2430	3910	8720	19830	7270	5500	2390	2290	2210
18	1260	1910	3160	3400	4110	8190	11560	7150	4060	2490	2310	2380
19	1210	1810	3170	8520	4350	8320	12450	6980	3720	2390	2150	2130
20	1210	2300	3290	4670	4360	9400	13560	6770	3660	2300	1990	2130
21	1180	2270	2760	3530	4060	10320	13660	6750	3750	2320	1930	1980
22	1420	2250	2210	4810	3850	9730	12450	6020	3630	2590	1970	2490
23	1570	2230	2300	4390	3940	9420	12120	4810	3620	2910	2000	6250
24	1230	2260	2340	4120	3870	8820	11170	7480	3430	2260	1990	5340
25	1260	2190	2450	3600	3740	14440	10810	5720	3520	2120	1890	7480
26	1310	2480	2790	3600	4000	20800	9720	5450	3480	2490	1740	6600
27	1260	2310	2900	3840	3670	15300	9770	5240	3550	3590	1670	21020
28	1240	2330	2980	4140	3870	12340	10320	5260	3360	3500	1690	15630
29	1340	2840	2710	3810	---	11450	8650	5640	3630	3110	1690	12130
30	1300	2620	2840	3490	---	11590	10750	5360	3240	3550	1610	19450
31	1240	---	2870	3630	---	17140	---	5050	---	3050	1700	---
MONTH	1290	1880	2810	3220	5210	11370	14180	8120	4310	2770	2130	4570

07150500 SALT FORK ARKANSAS RIVER NEAR JET, OKLA.

LOCATION.--Lat 36°45'11", long 98°07'44", in NE1/4NE1/4 sec.11, T.26 N., R.9 W., Alfalfa County, at gaging station at bridge on county road, 0.6 mi (1.0 km) downstream from Great Salt Plains Dam, 4.0 mi (6.9 km) upstream from Wagon Creek, 6.0 mi (9.6 km) northeast of Jet, and at mile 102.7 (165.2 km).

DRAINAGE AREA.--3,202 sq mi (8,293.2 km^2), of which 8.0 sq mi (20.7 km^2) is probably noncontributing.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	DISSOLVED NITRATE (NO3) (MG/L)	DISSOLVED NITRITE (N) (MG/L)
OCT.											
05...	19	--	--	2700	118	0	520	4200	.38	1.7	--
15...	5.8	--	--	3400	126	0	560	5300	--	--	--
25...	14	--	--	3100	122	0	520	4800	--	--	--
NOV.											
05...	39	--	--	2800	120	0	500	4400	.18	.80	--
15...	75	--	--	2800	124	0	520	4500	.23	1.0	--
25...	225	--	--	2600	138	0	480	4000	.18	.80	--
DEC.											
05...	71	--	--	2700	144	0	490	4200	.23	1.0	--
15...	75	--	--	2900	150	0	520	4600	.32	1.4	--
25...	90	--	--	4500	156	0	650	7000	--	--	--
JAN.											
05...	298	--	--	2300	150	0	380	3600	.23	1.0	--
15...	196	--	--	2500	152	0	420	4000	.18	.80	--
25...	443	--	--	2200	152	0	410	3400	.34	1.5	--
FEB.											
05...	870	--	--	1900	156	0	360	3000	.23	1.0	--
15...	392	--	--	1600	170	0	380	2500	.43	1.9	--
25...	294	--	--	1300	200	0	430	2000	.45	2.0	--
MAR.											
05...	490	--	--	1400	192	0	400	2200	.25	1.1	--
15...	4600	--	--	630	112	0	230	980	.66	2.9	--
25...	2620	--	--	580	158	0	340	880	.97	4.3	--
APR.											
05...	8660	--	--	210	108	0	290	330	.52	2.3	--
15...	2650	--	--	240	212	0	600	350	.61	2.7	--
25...	2890	--	--	440	140	0	490	680	.41	1.8	--
MAY											
05...	3500	130	39	240	67	0	450	370	.02	.09	.00
15...	805	150	51	400	153	0	570	580	.00	.00	.02
25...	443	190	59	440	127	0	640	650	.00	.00	.01
JUNE											
05...	292	190	65	650	138	0	690	950	.00	.00	.00
15...	230	210	65	670	155	0	740	1000	.09	.40	.00
25...	61	220	71	930	140	0	740	1500	.03	.13	.00
JULY											
05...	3.5	240	79	1600	141	0	800	2600	.10	.40	.11
15...	3.5	260	80	1800	167	0	820	2800	.24	1.1	.47
25...	323	240	75	1100	118	0	820	1800	.77	3.4	.02
AUG.											
05...	325	210	61	1300	118	0	730	1900	.63	2.8	.00
15...	1.7	270	72	2900	122	0	860	4300	.10	.40	.70
25...	.55	270	83	3300	128	0	900	5000	.97	4.3	.00
SEP.											
05...	2.0	280	84	2900	151	0	940	4200	1.2	5.3	.01
15...	2.3	270	84	3200	123	0	920	4700	1.0	4.4	.00
30...	2600	91	22	530	83	0	240	770	.47	2.1	.00

07150500 SALT FORK ARKANSAS RIVER NEAR JET, OKLA.

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.

REMARKS.--Continuous monitor records for water temperature and specific conductance are collected for this station.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS- SOLVED NITRITE (NO2) (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)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)
OCT.										
05...	--	--	7840	10.7	402	640	540	46	12300	6.7
15...	--	--	9520	12.9	149	710	610	56	15000	6.6
25...	--	--	8780	11.9	332	690	590	51	13800	7.4
NOV.										
05...	--	--	8080	11.0	851	630	530	49	12900	6.8
15...	--	--	8180	11.1	1660	670	570	47	13000	6.7
25...	--	--	7400	10.1	4500	610	500	46	11800	7.1
DEC.										
05...	--	--	8080	11.0	1550	630	510	47	12600	7.0
15...	--	--	8700	11.8	1760	670	550	49	13600	7.1
25...	--	--	13000	17.7	3160	810	680	69	18600	7.6
JAN.										
05...	--	--	6900	9.38	5550	600	480	41	11100	7.7
15...	--	--	7440	10.1	3940	620	500	44	12000	7.8
25...	--	--	6200	8.43	7420	570	450	40	10400	7.8
FEB.										
05...	--	--	5820	7.92	13700	580	450	34	9180	7.6
15...	--	--	4980	6.77	5270	620	480	28	7960	7.6
25...	--	--	4250	5.78	3370	610	450	23	6640	7.7
MAR.										
05...	--	--	4590	6.24	6070	590	430	25	7300	7.2
15...	--	--	2140	2.91	26600	350	260	15	3590	7.0
25...	--	--	2190	2.98	15500	470	340	12	3500	6.9
APR.										
05...	--	--	1090	1.48	25500	420	330	4.5	1690	7.3
15...	--	--	1760	2.39	12600	750	580	3.8	2340	7.1
25...	--	--	2020	2.75	15800	600	490	7.8	3090	6.8
MAY										
05...	.0	--	1320	1.80	12500	490	430	4.7	2080	8.2
15...	.0	--	1900	2.58	4130	580	460	7.2	2970	8.3
25...	.0	--	2150	2.92	2570	720	610	7.2	3260	7.8
JUNE										
05...	.0	--	2670	3.63	2110	740	630	10	4540	8.2
15...	.0	--	2850	3.88	1770	790	670	10	4680	7.8
25...	.0	--	3820	5.20	629	840	730	14	5580	8.0
JULY										
05...	.3	--	5780	7.86	54.6	920	810	23	7500	7.1
15...	1.5	--	6350	8.64	60.0	980	840	25	8050	7.5
25...	.0	--	4630	6.30	4040	910	810	16	6120	7.4
AUG.										
05...	.0	.13	4430	6.02	3890	780	680	20	7150	7.7
15...	2.3	.13	8640	11.8	39.7	970	870	41	13700	7.1
25...	.0	--	9370	12.7	13.9	1000	910	45	14300	7.4
SEP.										
05...	.0	--	8660	11.8	46.8	1000	920	39	11300	7.5
15...	.0	--	9490	12.9	58.9	1000	920	44	15800	7.1
30...	.0	--	1930	2.62	13500	320	250	13	3070	7.4

07150500 SALT FORK ARKANSAS RIVER NEAR JET, OKLA.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), MEAN VALUES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(CONTINUOUS HOURLY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12700	12600	10400	12000	9660	6970	1850	2550	3540	6910	7070	10700
2	12200	11900	11600	11900	9660	7070	1420	2360	3550	6910	7170	12000
3	12000	13100	12200	11300	5820	6990	1720	2160	3540	6990	7250	12800
4	12700	14100	12700	10900	6230	7350	1970	1740	4080	7280	7310	13300
5	12700	13000	12900	11000	7990	7420	1740	2000	4110	8510	6660	13000
6	12500	13200	13300	11400	8850	7510	1520	2290	4320	9310	6740	12800
7	12800	13000	13500	11700	8690	7220	1670	2840	4290	10300	7250	13100
8	13300	13100	13500	11800	8730	6950	1770	2800	3700	10400	7480	12600
9	13900	12600	13600	11900	8590	6810	2240	2710	3820	8030	7530	13600
10	13400	12600	13800	11900	7960	6530	2230	2620	3930	6350	7470	13600
11	13400	13000	13900	11900	8110	4540	2080	2810	4120	5980	7520	13800
12	13200	13100	13700	11800	7830	2130	2040	2910	4370	7230	7550	13200
13	13800	13100	13700	11900	7690	2490	2220	2860	4420	7230	7950	12000
14	14400	13200	13800	12000	7910	2870	2260	2940	4450	7530	13000	13900
15	15100	12600	13800	12000	7970	3540	2190	2950	4390	9230	13000	13900
16	15300	13100	13800	12200	7730	3330	2490	2660	4550	6260	12800	16300
17	15500	13100	13800	11300	7670	3030	2520	2860	5060	6640	12900	13400
18	15700	13000	13900	9350	7100	3180	2480	2870	5210	6780	12600	14600
19	15500	13000	13800	10200	6810	3450	2260	2800	5010	6030	13000	14100
20	15400	12800	13800	9860	7000	3440	3190	3070	5030	6770	13600	14000
21	13600	12800	13800	9720	6750	3700	2880	3050	5050	7120	13100	15100
22	13800	12700	14300	10800	6950	3520	2950	2940	5110	6860	13100	15900
23	13500	11400	16500	9560	6000	3710	3100	3190	5110	6810	14200	15900
24	14000	11700	18500	7960	6080	3360	2940	3050	5130	6780	12900	14600
25	13700	11800	19800	10400	6710	3410	3090	3140	5650	6730	14000	14600
26	14000	11800	19600	10400	6890	3250	3160	3290	5630	6650	13600	11600
27	13700	11500	18600	10500	6960	2720	2930	3390	6210	6410	13900	10700
28	14300	11800	17700	10600	6950	2400	2180	3850	6490	6290	13800	4060
29	15000	12000	11400	10500	---	2600	1720	3990	6690	6530	14500	2440
30	14000	11100	11500	10300	---	1980	1890	3900	7250	5970	9610	2960
31	13300	---	8860	9510	---	1950	---	3480	---	6710	10700	---
MONTH	13820	12590	14070	10920	7550	4370	2290	2910	4790	7210	10620	12490

TEMPERATURE (°C) OF WATER, MEAN VALUES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(CONTINUOUS HOURLY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19.0	10.5	5.0	---	4.5	9.0	11.5	21.0	23.5	29.5	26.5	24.5
2	18.5	9.5	5.5	---	4.5	9.5	11.5	19.5	23.5	28.5	26.0	25.5
3	19.5	9.5	4.5	---	5.0	9.5	11.5	19.5	24.0	29.0	27.0	26.5
4	19.5	10.5	3.5	---	6.0	9.5	11.0	19.5	25.0	28.5	25.5	24.5
5	20.5	11.5	2.0	---	7.0	9.5	11.5	19.0	24.5	28.0	25.5	21.5
6	18.5	12.5	0.5	---	7.0	10.0	12.0	19.5	25.0	29.0	24.5	19.5
7	18.0	13.0	1.0	---	---	11.0	12.5	19.5	26.0	29.0	25.5	22.0
8	18.5	12.5	1.0	---	---	10.5	10.5	20.0	28.0	28.5	26.0	24.0
9	19.0	12.0	0.5	---	2.5	10.5	8.0	21.0	28.0	29.0	26.0	25.0
10	20.5	12.0	1.0	---	3.5	10.5	8.0	21.5	28.5	28.5	26.5	25.5
11	22.0	11.0	1.0	---	3.5	10.5	9.0	22.0	27.0	28.5	27.5	25.0
12	21.0	11.0	---	---	4.5	11.5	10.5	22.5	27.0	27.0	28.0	24.5
13	20.0	10.0	---	---	5.5	12.5	11.0	22.5	26.5	26.5	29.0	23.5
14	19.5	8.0	---	---	5.0	12.5	13.0	22.0	27.0	24.5	27.0	21.5
15	15.0	7.0	---	---	4.5	12.0	15.5	23.0	28.5	24.0	27.5	23.5
16	16.5	6.5	---	---	4.0	12.0	15.5	22.5	28.5	25.5	27.5	20.0
17	18.0	6.0	---	---	4.5	12.0	15.5	22.0	28.5	27.0	28.0	---
18	13.0	5.0	---	---	4.5	12.0	16.5	25.0	27.5	28.0	27.0	---
19	9.5	4.5	---	---	3.5	---	17.0	25.0	26.5	28.0	28.0	---
20	9.5	4.0	---	---	4.5	---	17.0	25.0	26.0	27.5	29.0	---
21	11.0	4.0	---	---	5.0	---	19.5	25.0	26.0	27.5	28.0	---
22	13.5	4.0	---	---	5.5	11.5	20.0	25.5	27.0	26.0	26.5	---
23	12.5	4.5	---	---	6.5	12.0	20.0	25.0	26.0	26.5	25.5	---
24	12.0	4.5	---	---	7.0	12.5	18.5	25.5	26.5	27.5	27.0	---
25	13.0	4.5	---	---	7.5	11.0	18.0	25.0	26.0	27.0	25.5	---
26	12.5	4.5	---	---	7.5	10.0	17.0	24.5	26.5	28.5	25.0	---
27	12.5	5.0	---	---	8.0	11.0	16.0	21.0	27.5	29.5	25.5	---
28	13.0	5.0	---	---	8.5	11.5	16.5	18.5	28.0	28.0	25.5	---
29	13.5	5.0	---	---	---	11.5	17.5	19.5	27.0	28.0	26.0	---
30	13.5	5.0	---	---	---	11.5	20.5	21.0	28.5	28.0	26.5	---
31	11.0	---	---	4.5	---	11.5	---	22.5	---	27.5	26.0	---
MONTH	16.0	8.0	---	---	5.5	11.0	14.5	22.0	26.5	27.5	26.5	---

07150500 SALT FORK ARKANSAS RIVER NEAR JET, OKLA.--Continued

DISSOLVED SULFATE (SO_4), IN MILLIGRAMS PER LITRE, MEAN VALUES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	510	500	430	480	400	400	370	500	640	830	830	860
2	490	480	470	480	400	400	290	460	640	830	830	880
3	480	520	490	460	400	400	350	430	640	830	830	880
4	510	560	510	450	400	400	390	350	680	830	830	890
5	510	520	520	450	400	400	350	400	680	850	830	880
6	500	530	530	460	400	400	310	450	690	850	830	880
7	510	520	540	470	400	400	340	550	690	860	830	890
8	530	520	540	480	400	400	350	550	650	860	840	880
9	550	500	540	480	400	400	440	530	660	840	840	890
10	530	500	550	480	400	400	440	510	670	810	840	890
11	530	520	550	480	400	370	410	550	680	790	840	890
12	530	520	540	480	400	300	400	570	690	830	840	890
13	550	520	540	480	400	310	440	560	700	830	840	880
14	570	530	550	480	400	320	450	570	700	840	880	890
15	590	500	550	480	400	340	430	570	690	850	880	890
16	600	520	550	490	400	330	490	520	700	810	880	910
17	610	520	550	460	400	330	490	560	740	830	880	890
18	610	520	550	400	400	330	490	560	740	830	880	900
19	610	520	550	420	400	340	450	550	730	790	880	890
20	600	510	550	410	400	340	620	600	730	830	890	890
21	540	510	550	400	400	340	560	590	730	830	890	900
22	550	510	560	440	400	340	570	570	740	830	890	910
23	540	460	640	400	400	340	600	620	740	830	890	910
24	550	470	710	400	400	330	570	590	740	830	880	900
25	540	480	730	430	400	340	600	610	770	830	890	900
26	550	480	720	430	400	330	610	630	770	830	890	870
27	540	470	710	430	400	320	570	630	800	820	890	860
28	560	480	680	440	400	310	430	660	820	810	890	670
29	590	480	460	430	---	310	350	670	830	820	900	480
30	550	450	470	420	---	300	380	660	830	790	850	580
31	530	---	400	400	---	300	---	640	---	830	860	---
MONTH	550	500	560	450	400	350	450	550	720	830	860	860

DISSOLVED SULFATE (TONS/DAY), MEAN VALUES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	44	225	155	299	665	297	9890	5390	550	36	741	3.3
2	40	170	152	298	737	321	8210	5500	630	29	740	4.3
3	30	75	118	400	840	298	9600	5410	624	22	738	4.5
4	26	74	137	376	981	536	10150	3960	585	15	734	5.3
5	26	74	99	361	940	512	8270	3800	576	12	727	5.3
6	24	87	149	406	885	664	6490	3740	533	7.8	725	6.7
7	14	81	136	392	807	738	6330	3880	514	7.7	729	6.2
8	13	70	110	347	774	934	6070	3190	451	7.4	729	6.7
9	12	94	227	318	732	1510	6840	2670	433	98	729	6.0
10	29	74	149	289	643	1980	5830	2230	428	40	726	6.0
11	19	29	92	279	593	1720	4990	1940	386	117	722	6.0
12	10	34	133	259	599	2780	4430	1850	344	7.2	725	8.6
13	9.4	259	116	251	602	4320	4140	1580	325	45	370	6.1
14	12	148	111	251	554	4430	3650	1440	352	9.0	4.3	6.3
15	11	102	106	256	510	4210	3090	1310	431	8.5	4.1	5.5
16	10	135	91	252	455	3750	3100	1070	422	185	3.6	7.9
17	10	113	103	307	470	3030	2860	1070	284	394	3.1	7.2
18	13	169	85	345	454	2540	2680	983	321	379	2.6	6.8
19	11	279	114	360	433	2210	2610	904	253	362	2.9	7.0
20	8.3	272	130	370	438	1860	3000	916	267	378	2.9	7.5
21	7.1	273	131	473	387	1640	2630	890	230	384	2.6	5.6
22	25	277	129	645	413	1440	2740	796	185	419	1.9	6.9
23	23	231	163	567	392	1200	3080	837	263	388	1.8	5.9
24	18	217	194	534	370	1230	3350	795	176	385	3.1	9.7
25	21	290	227	543	352	2370	4670	727	127	723	2.2	6.8
26	19	246	256	535	352	4550	6000	784	108	884	2.2	20
27	21	181	301	557	323	5120	7100	1150	46	994	2.6	294
28	23	192	341	636	278	4700	5540	628	47	880	2.6	1510
29	15	184	311	571	---	4210	4290	575	27	830	2.7	2420
30	55	210	456	528	---	3900	4270	576	27	768	2.5	4040
31	59	---	293	510	---	5500	---	574	---	763	33	---
MONTH	21	162	171	404	571	2400	5200	1970	331	309	297	281

07150500 SALT FORK ARKANSAS RIVER NEAR JET, OKLA.--Continued

DISSOLVED CHLORIDE (CL), IN MILLIGRAMS PER LITRE, MEAN VALUES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4000	4000	3100	3700	2800	1900	310	530	840	1900	2000	3200
2	3800	3700	3600	3700	2800	2000	180	470	850	1900	2000	3700
3	3700	4200	3800	3500	1600	1900	270	410	840	1900	2000	4000
4	4000	4600	4000	3300	1700	2000	350	280	1000	2000	2000	4200
5	4000	4100	4100	3300	2200	2100	280	360	1000	2400	1800	4100
6	3900	4200	4200	3500	2500	2100	210	450	1100	2700	1800	4000
7	4000	4100	4300	3600	2500	2000	260	620	1100	3100	2000	4200
8	4200	4200	4300	3700	2500	1900	290	610	890	3100	2100	4000
9	4500	4000	4400	3700	2400	1900	440	580	930	2300	2100	4400
10	4300	4000	4400	3700	2200	1800	430	560	970	1700	2100	4400
11	4300	4100	4500	3700	2300	1200	390	620	1000	1600	2100	4400
12	4200	4200	4400	3700	2200	400	370	650	1100	2000	2100	4200
13	4400	4200	4400	3700	2100	510	430	630	1100	2000	2200	3700
14	4700	4200	4400	3700	2200	630	440	660	1100	2100	4100	4500
15	4900	4000	4400	3700	2200	840	420	660	1100	2600	4100	4500
16	5000	4200	4400	3800	2200	780	510	570	1200	1700	4000	5400
17	5100	4200	4400	3500	2100	680	520	630	1300	1800	4100	4300
18	5200	4100	4500	2700	2000	730	510	630	1400	1900	4000	4700
19	5100	4100	4400	3000	1900	820	440	610	1300	1600	4100	4600
20	5100	4000	4400	2900	1900	810	730	700	1300	1900	4400	4500
21	4400	4000	4400	2800	1900	890	640	690	1300	2000	4200	4900
22	4400	4000	4600	3300	1900	840	660	660	1300	1900	4200	5300
23	4300	3500	5500	2800	1600	900	710	730	1300	1900	4600	5300
24	4500	3600	6300	2200	1600	790	660	690	1300	1900	4100	4700
25	4400	3700	6800	3100	1800	800	700	720	1500	1800	4500	4700
26	4500	3700	6700	3100	1900	750	720	770	1500	1800	4400	3600
27	4400	3500	6300	3100	1900	590	650	800	1700	1700	4500	3200
28	4600	3700	6000	3200	1900	490	420	940	1800	1700	4400	1000
29	4900	3700	3500	3100	---	550	270	990	1800	1800	4700	500
30	4500	3400	3500	3100	---	360	330	960	2000	1600	2800	660
31	4200	---	2500	2800	---	350	---	830	---	1800	3200	---
MONTH	4400	4000	4500	3300	2100	1100	450	650	1200	2000	3200	4000

DISSOLVED CHLORIDE (TONS/DAY), MEAN VALUES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	346	1770	1120	2310	4660	1420	8400	5760	722	82	1740	12
2	309	1310	1160	2290	5160	1560	5070	5610	830	67	1760	18
3	232	595	915	3010	3270	1430	7590	5210	820	51	1780	21
4	205	602	1080	2790	4140	2730	9110	3170	878	36	1780	25
5	205	590	783	2690	5260	2640	6620	3450	869	34	1600	24
6	191	692	1180	3070	5550	3470	4430	3740	840	25	1620	31
7	109	646	1100	2990	4960	3680	4850	4380	807	27	1760	29
8	102	562	886	2660	4780	4470	4940	3580	618	27	1810	30
9	99	739	1840	2440	4440	7060	6760	2950	611	261	1830	29
10	231	578	1210	2220	3580	8800	5740	2410	621	84	1800	29
11	150	234	749	2140	3370	5440	4680	2170	584	239	1810	30
12	83	270	1080	1980	3280	3720	4090	2110	548	17	1820	41
13	77	2070	938	1930	3220	7170	4060	1790	523	108	980	26
14	102	1180	898	1930	3070	8760	3630	1650	570	23	20	31
15	92	803	862	1970	2840	10480	3010	1510	689	26	19	28
16	87	1080	743	1950	2450	8760	3260	1170	695	389	16	47
17	88	899	838	2310	2510	6370	3040	1210	510	863	14	35
18	109	1350	689	2320	2220	5640	2820	1120	591	848	12	36
19	90	2210	922	2590	2020	5350	2590	1010	451	741	13	36
20	70	2150	1050	2620	2110	4500	3570	1070	478	847	14	38
21	58	2160	1070	3320	1790	4270	2990	1040	412	908	12	31
22	204	2180	1060	4760	1970	3570	3150	913	335	951	8.9	40
23	187	1750	1390	3930	1580	3120	3620	995	476	873	9.4	34
24	146	1660	1710	2970	1520	2890	3840	928	319	863	14	51
25	166	2220	2130	3940	1620	5680	5480	859	248	1610	11	36
26	158	1880	2370	3880	1670	10340	7100	956	210	1940	11	81
27	166	1370	2680	4060	1550	9500	8140	1440	95	2120	13	1100
28	188	1470	2980	4660	1330	7430	5370	894	100	1860	13	2250
29	122	1420	2350	4160	---	7380	3390	845	59	1790	14	2520
30	451	1570	3450	3810	---	4670	3700	829	65	1560	8.3	4650
31	469	---	1840	3510	---	6430	---	741	---	1690	122	---
MONTH	171	1270	1390	2940	3070	5440	4830	2110	519	676	723	379

07150500 SALT FORK ARKANSAS RIVER NEAR JET, OKLA.--Continued

DISSOLVED SOLIDS, IN MILLIGRAMS PER LITRE, MEAN VALUES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7870	7810	6440	7440	5990	4320	1150	1580	2190	4280	4380	6630
2	7560	7370	7190	7370	5990	4380	880	1460	2200	4280	4440	7440
3	7440	8120	7560	7000	3610	4330	1070	1340	2190	4330	4490	7930
4	7870	8740	7870	6750	3860	4550	1220	1080	2530	4510	4530	8240
5	7870	8060	7990	6820	4950	4600	1080	1240	2550	5270	4130	8060
6	7750	8180	8240	7060	5480	4650	942	1420	2680	5770	4180	7930
7	7930	8060	8370	7250	5380	4470	1030	1760	2660	6380	4490	8120
8	8240	8120	8370	7310	5410	4310	1100	1740	2290	6440	4640	7810
9	8610	7810	8430	7370	5320	4220	1390	1680	2370	4980	4670	8430
10	8300	7810	8550	7370	4930	4050	1380	1620	2440	3930	4630	8430
11	8300	8060	8610	7370	5030	2810	1290	1740	2550	3710	4660	8550
12	8180	8120	8490	7310	4850	1320	1260	1800	2710	4480	4680	8180
13	8550	8120	8490	7370	4770	1540	1380	1770	2740	4480	4930	7440
14	8920	8180	8550	7440	4900	1780	1400	1820	2760	4670	8060	8610
15	9370	7810	8550	7440	4940	2190	1360	1830	2720	5720	8060	8610
16	9510	8120	8550	7560	4790	2060	1540	1650	2820	3880	7930	10220
17	9650	8120	8550	7000	4750	1880	1560	1770	3140	4110	7990	8300
18	9790	8060	8610	5790	4400	1970	1540	1780	3230	4200	7810	9050
19	9650	8060	8550	6320	4220	2140	1400	1740	3100	3740	8060	8740
20	9580	7930	8550	6110	4340	2130	1980	1900	3120	4200	8430	8680
21	8430	7930	8550	6020	4180	2290	1780	1890	3130	4410	8120	9370
22	8550	7870	8860	6690	4310	2180	1830	1820	3170	4250	8120	9930
23	8370	7060	10360	5920	3720	2300	1920	1980	3170	4220	8800	9930
24	8680	7250	11780	4930	3770	2080	1820	1890	3180	4200	7990	9050
25	8490	7310	12700	6440	4160	2110	1910	1950	3500	4170	8680	9050
26	8680	7310	12560	6440	4270	2010	1960	2040	3490	4120	8430	7190
27	8490	7130	11850	6510	4310	1690	1820	2100	3850	3970	8610	6630
28	8860	7310	11210	6570	4310	1490	1350	2390	4020	3900	8550	2520
29	9300	7440	7060	6510	---	1610	1070	2470	4150	4050	8990	1510
30	8680	6880	7130	6380	---	1230	1170	2420	4490	3700	5950	1830
31	8240	---	5490	5890	---	1210	---	2160	---	4160	6630	---
MONTH	8570	7800	8780	6770	4680	2710	1420	1800	2970	4470	6580	7750

DISSOLVED SOLIDS (TONS/DAY), MEAN VALUES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	680	3480	2330	4600	9910	3210	30700	17070	1880	185	3900	25
2	612	2610	2330	4580	10970	3510	24950	17330	2160	150	3950	36
3	462	1160	1820	6110	7580	3230	29640	16990	2130	116	3980	41
4	404	1160	2120	5710	9460	6100	31640	12230	2190	80	3990	49
5	404	1150	1530	5480	11630	5880	25560	11850	2170	75	3620	48
6	376	1350	2310	6200	12130	7730	19840	11760	2070	53	3650	60
7	214	1260	2120	6010	10860	8250	19500	12350	1990	57	3930	57
8	198	1100	1720	5330	10470	10060	18780	10170	1580	56	4040	59
9	191	1450	3550	4880	9740	15950	21510	8480	1550	578	4070	57
10	448	1140	2330	4440	7920	19990	18320	7060	1560	191	4020	57
11	291	457	1440	4280	7450	13220	15630	6160	1450	550	4030	58
12	161	526	2090	3970	7270	12220	13860	5890	1350	39	4050	80
13	148	4030	1810	3860	7170	21500	13000	5020	1280	242	2170	52
14	195	2300	1730	3850	6790	24590	11490	4590	1390	50	39	60
15	174	1580	1660	3940	6290	27240	9710	4190	1690	57	37	53
16	164	2100	1430	3880	5440	23230	9790	3400	1690	890	32	88
17	167	1750	1620	4690	5580	17490	9060	3400	1210	1960	28	67
18	206	2630	1330	4990	4990	15220	8460	3130	1390	1920	23	68
19	169	4330	1780	5410	4570	14030	8210	2880	1070	1710	26	68
20	132	4220	2030	5530	4750	11800	9610	2930	1140	1910	27	73
21	111	4240	2050	7040	4040	10960	8380	2840	980	2040	24	58
22	393	4290	2030	9780	4440	9310	8740	2540	795	2150	17	75
23	361	3530	2630	8400	3640	8010	9850	2680	1130	1970	18	64
24	281	3330	3210	6580	3490	7650	10670	2540	755	1950	28	98
25	321	4440	3980	8180	3660	14950	14940	2330	577	3640	21	68
26	305	3770	4440	8060	3760	27680	19190	2550	490	4390	21	163
27	321	2770	5020	8400	3480	27300	22650	3800	218	4840	26	2260
28	359	2940	5600	9610	2990	22730	17400	2270	228	4240	25	5620
29	231	2830	4750	8610	---	21660	13240	2120	134	4080	27	7630
30	867	3190	6970	7940	---	16170	13280	2090	146	3600	18	12880
31	912	---	4020	7510	---	22510	---	1940	---	3830	251	---
MONTH	331	2500	2700	6060	6800	14620	16250	6280	1280	1530	1620	1000

07151000 SALT FORK ARKANSAS RIVER AT TONKAWA, OKLA.

LOCATION.--Lat 36°40'13", long 97°18'33",in NW1/4SE1/4 sec.4, T.25 N., R.1 W., Kay County, at gaging station at bridge on U.S. Highway 77 in Tonkawa, 4.0 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 sq mi (11,727.5 km^2), of which 8.0 sq mi (20.7 km^2) is probably noncontributing.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	DISSOLVED NITRATE (NO3) (MG/L)	DISSOLVED NITRITE (N) (MG/L)
OCT.											
05...	71	--	--	2100	188	0	410	3200	.16	.70	--
15...	72	--	--	1900	212	0	380	2900	.25	1.1	--
25...	57	--	--	1300	234	0	270	2000	.32	1.4	--
NOV.											
05...	150	--	--	1200	124	0	260	1800	.36	1.6	--
15...	428	--	--	200	86	0	52	280	.61	2.7	--
25...	282	--	--	1600	124	0	300	2500	.23	1.0	--
DEC.											
05...	100	--	--	2000	204	0	430	3100	.18	.80	--
15...	150	--	--	2500	186	0	450	3800	.23	1.0	--
25...	177	--	--	1500	180	0	310	2200	.47	2.1	--
JAN.											
03...	384	--	--	1000	128	0	200	1600	.52	2.3	--
17...	3560	--	--	460	86	0	91	700	1.4	6.0	--
25...	1200	--	--	800	96	0	160	1300	.86	3.8	--
FEB.											
05...	1140	--	--	1400	164	0	340	2100	.27	1.2	--
15...	552	--	--	1500	174	6	380	2300	.45	2.0	--
25...	308	--	--	1200	220	0	360	1800	.45	2.0	--
MAR.											
05...	451	--	--	940	182	0	290	1400	.54	2.4	--
15...	6840	--	--	270	122	0	150	380	.86	3.8	--
25...	2560	--	--	390	146	0	190	580	.97	4.3	--
APR.											
05...	9010	--	--	260	116	0	220	380	.50	2.2	--
15...	4450	--	--	230	160	0	340	330	.56	2.5	--
25...	13500	--	--	110	82	0	140	160	.59	2.6	--
MAY											
05...	4930	130	36	150	143	0	360	220	.03	.13	.00
15...	1210	140	47	440	204	0	460	630	.04	.18	.00
25...	554	150	51	480	183	0	490	730	.13	.58	.00
JUNE											
05...	380	130	46	420	188	0	420	620	.38	1.7	.00
15...	105	140	53	690	208	0	470	1000	.03	.13	.00
25...	58	110	55	880	109	0	470	1300	.16	.71	.00
JULY											
05...	121	120	42	1000	280	0	300	1500	.08	.40	.31
15...	28	120	43	920	245	0	350	1400	.11	.50	.07
26...	505	60	16	200	123	0	150	300	1.1	4.8	.02
AUG.											
05...	126	200	62	1300	146	0	650	1900	.12	.53	.43
15...	57	180	59	1200	189	0	550	1700	.03	.10	--
25...	89	110	42	1100	279	0	300	1600	.00	.00	--
SEP.											
05...	89	63	24	430	144	0	130	680	1.1	4.8	--
15...	57	110	38	860	288	0	230	1300	.41	1.8	--
27...	7370	13	4.0	31	57	0	14	36	1.2	5.2	--

CHEMICAL ANALYSES OF ADDITIONAL SAMPLES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	INSTANTANEOUS DISCHARGE (CFS)	CHEMICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	CHEMICAL OXYGEN DEMAND (HIGH LEVEL) (MG/L)	BIOCHEMICAL OXYGEN DEMAND (MG/L)
OCT.				
17...	84	23	--	8.5
NOV.				
08...	96	29	--	2.7
DEC.				
20...	345	39	--	8.4
JAN.				
17...	2660	83	--	5.8
FEB.				
22...	429	72	--	3.3
MAR.				
15...	9760	34	--	2.2
APR.				
25...	13800	65	--	4.8
MAY				
18...	923	63	--	2.8
JUNE				
06...	344	40	--	5.4
JULY				
31...	615	53	--	4.0
AUG.				
28...	79	--	44	5.8
SEP.				
19...	58	39	--	3.8

07151000 SALT FORK ARKANSAS RIVER AT TONKAWA, OKLA.

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.

REMARKS.--Continuous monitor records for water temperature and specific conductance are collected for this station.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS-SOLVED NITRITE (NO2) (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)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)
OCT.										
05...	--	--	6000	8.16	1150	560	410	39	9780	7.6
15...	--	--	5590	7.60	1090	540	370	36	9170	7.5
25...	--	--	3910	5.32	602	420	230	28	6650	7.7
NOV.										
05...	--	--	3530	4.80	1430	320	220	29	5910	7.6
15...	--	--	646	.88	747	96	25	8.9	1180	6.8
25...	--	--	4830	6.57	3680	420	320	34	7910	6.6
DEC.										
05...	--	--	5930	8.06	1600	600	430	36	9720	7.8
15...	--	--	7140	9.71	2890	620	470	44	11500	7.5
25...	--	--	4300	5.85	2060	440	290	31	7200	8.2
JAN.										
03...	--	--	320	.44	332	340	240	24	5400	8.1
17...	--	--	1480	2.01	14200	160	89	16	2580	7.7
25...	--	--	2370	3.22	7680	260	180	22	4260	7.3
FEB.										
05...	--	--	4190	5.70	12900	500	370	27	6920	8.1
15...	--	--	4450	6.05	6630	540	390	28	7340	8.5
25...	--	--	3790	5.15	3150	570	390	22	6220	8.0
MAR.										
05...	--	--	3120	4.24	3800	460	310	19	5060	7.8
15...	--	--	1000	1.36	18500	230	130	7.7	1720	7.8
25...	--	--	1450	1.97	10000	310	190	9.6	2430	7.7
APR.										
05...	--	--	1130	1.54	27500	300	210	6.5	1840	8.0
15...	--	--	1280	1.74	15400	480	350	4.6	1930	8.3
25...	--	--	577	.78	21000	200	130	3.4	966	7.5
MAY										
05...	.0	--	1060	1.44	14100	470	360	3.0	1580	8.1
15...	.0	--	2290	3.11	7480	540	380	8.2	3008	7.9
25...	.0	--	2220	3.02	3320	580	430	8.6	3193	8.2
JUNE										
05...	.0	--	1860	2.53	1910	510	360	8.1	2890	7.5
15...	.0	--	2710	3.69	768	570	400	13	4440	7.9
25...	.0	--	3100	4.22	485	500	410	17	5050	8.2
JULY										
05...	1.0	.16	3360	4.57	1100	470	240	20	4980	8.6
15...	.2	--	3290	4.47	249	480	280	18	5140	7.9
26...	.0	--	1250	1.70	1700	220	110	5.9	4010	7.8
AUG.										
05...	1.4	--	4240	5.77	1440	750	640	21	7120	7.8
15...	.02	.0	3850	5.24	593	690	540	20	6450	7.6
25...	.09	.3	3210	4.37	771	450	220	23	5540	7.9
SEP.										
05...	.01	.0	1440	1.96	346	260	140	12	2630	7.5
15...	.06	.2	2730	3.71	420	430	200	18	4390	8.1
27...	.03	.1	151	.21	3010	49	2	1.9	241	7.3

FIELD ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	TEMPER-ATURE (DEG C)	DIS-SOLVED OXYGEN (MG/L)	PER-CENT SATUR-ATION
OCT.				
17...	8500	18.0	9.7	109
NOV.				
08...	7950	11.5	10.6	103
DEC.				
20...	7200	.0	12.3	90
JAN.				
17...	3700	2.0	11.0	85
FEB.				
22...	6250	7.0	11.9	104
MAR.				
15...	3200	12.5	8.8	90
APR.				
05...	1750	11.5	9.1	89
25...	910	15.5	7.0	75
MAY				
18...	3100	21.5	7.1	86
JUNE				
06...	3000	24.0	7.2	90
JULY				
31...	2500	26.0	7.2	92
AUG.				
28...	5400	28.0	8.1	108
SEP.				
19...	4500	19.0	9.5	110

07151000 SALT FORK ARKANSAS RIVER AT TONKAWA, OKLA.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), MEAN VALUES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(CONTINUOUS HOURLY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9610	4290	9250	6340	6370	5120	734	1920	3700	5090	4870	5520
2	9610	3250	9630	3930	6520	3660	1110	1860	3720	5100	4850	5410
3	9510	5320	9880	6650	5910	3690	1260	1570	3400	5130	6420	3040
4	9410	5500	10000	---	6810	4040	1420	1630	3570	5150	6570	2730
5	9640	5700	9870	---	7010	4830	1850	1640	3970	5140	6730	2200
6	9980	5820	9830	---	6790	5930	1810	1600	3510	5140	6560	3850
7	9840	8110	11100	---	6690	4860	1460	2520	3880	5150	6720	4360
8	9670	8070	10800	---	8210	2500	1490	2540	4050	4960	6720	3280
9	9430	7270	11400	---	8520	819	1480	2750	4100	5130	6240	2790
10	9220	7320	11500	---	8100	647	1730	2690	4110	4830	2510	3380
11	9060	7480	11900	---	8090	735	1920	2930	4020	5390	3130	4340
12	9060	7420	11300	---	8050	1320	1970	2940	4020	5380	4940	4550
13	8980	6170	11800	---	7550	1740	2060	2920	4040	5040	---	4420
14	8630	3100	11600	---	7200	3230	2050	2920	4050	5390	4990	4490
15	8710	1170	11400	---	7480	2140	1900	2980	4180	5030	6080	4500
16	8580	4840	11200	---	7200	2720	1990	2910	4220	5010	6280	4870
17	9220	5330	12000	2480	7190	3080	2780	2480	4300	5020	6480	4860
18	9200	6840	11900	2510	7240	3190	2340	2560	4300	5910	5380	4100
19	6550	6450	8760	3020	6950	2960	2290	5580	4700	5910	5090	4070
20	6430	7970	6350	2710	7240	2880	2200	3300	4690	5920	4600	4490
21	6900	7860	5360	2960	7070	3090	1940	3600	4960	5330	5130	4460
22	6070	6920	7620	1530	6710	3290	1330	4880	4880	5320	5080	4350
23	6430	7600	7850	1810	6670	3170	1120	3320	4830	5330	5240	1750
24	6850	7970	6200	3010	6200	2670	1850	2700	4950	6560	5030	4360
25	6700	7790	6840	4130	5620	2520	1000	3150	4960	2600	5320	1750
26	6770	9280	7180	5020	6340	1290	933	3030	4870	1380	5270	341
27	6880	8890	10900	4640	3500	1700	1660	3220	5200	1390	5450	233
28	6960	9220	10600	5790	4900	2480	2250	3480	4290	4240	5400	292
29	7290	8970	13300	6250	---	2540	1640	3230	4510	4510	5250	954
30	4800	9520	14800	7020	---	1380	1730	3780	4200	4510	5230	1490
31	6170	---	14400	7150	---	1570	---	3740	---	4040	5180	---
MONTH	8130	6710	10210	---	6860	2770	1710	2920	4270	4840	5420	3370

TEMPERATURE (°C) OF WATER, MEAN VALUES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(CONTINUOUS HOURLY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18.5	11.0	6.5	4.5	7.0	11.0	12.0	21.0	---	---	---	---
2	19.5	10.5	7.0	4.0	6.0	11.5	12.5	21.0	---	---	---	---
3	20.0	11.5	5.0	4.0	6.0	11.0	12.0	20.0	---	---	---	---
4	21.0	12.0	1.5	1.5	7.5	11.0	11.5	20.0	---	---	---	---
5	21.0	13.0	1.0	1.0	8.0	11.0	12.0	20.5	---	---	---	---
6	18.0	14.0	1.0	1.5	7.0	11.0	13.0	20.0	28.0	---	---	---
7	18.0	13.0	1.0	1.0	5.5	12.0	13.5	21.5	---	---	---	---
8	19.0	12.5	0.5	0.0	2.5	12.0	11.5	22.0	---	---	---	---
9	20.5	12.5	0.5	0.0	2.0	10.5	9.0	23.0	---	30.0	---	---
10	22.0	11.5	1.0	0.0	3.5	11.0	8.5	25.0	---	27.5	---	---
11	23.5	10.5	1.0	0.0	4.5	11.0	9.0	25.0	---	---	---	---
12	23.0	10.0	1.0	0.0	6.0	12.0	11.5	24.0	---	---	---	---
13	22.5	9.5	1.5	0.0	8.0	13.0	13.5	24.0	---	---	---	---
14	21.5	6.5	1.5	1.0	6.5	13.5	14.0	25.5	---	---	---	---
15	15.5	5.5	1.5	2.0	4.5	13.5	15.0	24.0	---	---	---	---
16	19.0	6.0	1.5	5.5	4.0	13.0	15.5	24.5	---	---	---	---
17	21.5	5.5	1.0	8.5	3.5	12.5	16.5	22.5	---	---	---	---
18	14.5	4.5	2.0	6.5	3.5	13.0	17.5	1.0	---	---	---	---
19	10.0	4.0	2.0	7.5	3.5	13.0	18.5	23.5	---	---	---	---
20	10.5	5.0	2.0	8.0	5.0	11.5	18.5	24.5	---	---	---	---
21	12.0	5.0	1.5	7.5	7.5	11.5	19.5	25.0	---	---	---	---
22	14.0	5.5	2.0	5.5	7.5	13.0	20.0	25.5	---	---	---	---
23	12.0	5.5	3.5	4.5	8.5	13.5	20.5	24.5	---	---	---	---
24	12.0	6.0	3.5	4.5	10.0	13.5	26.0	24.5	---	---	---	---
25	12.0	6.0	3.5	5.0	10.5	11.5	17.5	26.0	---	---	---	---
26	13.0	5.5	3.5	6.5	9.0	10.5	17.0	24.5	---	---	---	---
27	14.0	7.0	4.5	6.5	9.0	11.0	16.0	---	30.0	---	---	---
28	14.0	6.0	5.0	3.0	9.5	12.0	17.0	---	27.5	---	---	---
29	14.5	6.0	9.0	2.0	---	13.0	19.0	---	26.0	---	---	---
30	15.0	6.0	8.5	---	---	12.5	20.0	---	25.0	---	---	---
31	10.5	---	5.0	---	---	12.0	---	---	---	---	---	---
MONTH	17.0	8.0	3.0	3.5	6.5	12.0	15.5	22.5	---	---	---	---

07151000 SALT FORK ARKANSAS RIVER AT TONKAWA, OKLA.--Continued

DISSOLVED SULFATE (SO_4), IN MILLIGRAMS PER LITRE, MEAN VALUES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	400	190	380	270	270	220	110	260	420	420	420	420
2	400	150	400	170	280	160	160	250	420	420	420	420
3	390	230	410	280	250	170	170	210	420	420	510	400
4	390	240	410	---	290	180	190	220	420	420	530	360
5	400	240	410	---	290	210	250	220	420	420	550	290
6	410	250	410	---	290	250	240	220	420	420	530	420
7	410	340	460	---	280	210	200	330	420	420	550	420
8	400	340	440	---	340	120	200	340	420	420	550	420
9	390	310	470	---	350	52	200	360	420	420	480	370
10	380	310	470	---	340	45	230	360	420	420	330	420
11	380	310	490	---	340	49	260	390	420	420	410	420
12	380	310	460	---	340	72	260	390	420	420	420	420
13	370	260	480	---	320	88	280	390	420	420	---	420
14	360	140	470	---	300	150	270	390	420	420	420	420
15	360	66	470	---	310	100	260	390	420	420	460	420
16	360	210	460	---	300	130	270	380	420	420	490	420
17	380	230	490	120	300	140	370	330	420	420	520	420
18	380	290	490	120	300	150	310	340	420	430	420	420
19	280	270	360	140	290	140	310	420	420	430	420	420
20	270	330	270	130	300	130	290	420	420	430	420	420
21	290	330	230	140	300	140	260	420	420	420	420	420
22	260	290	320	80	280	150	180	420	420	420	420	420
23	270	320	330	91	280	140	160	420	420	420	420	240
24	290	330	260	140	260	130	250	360	420	530	420	420
25	280	330	290	180	240	120	140	410	420	340	420	240
26	290	380	300	220	270	71	130	400	420	190	420	58
27	290	370	450	200	160	87	230	420	420	190	420	44
28	290	380	440	250	210	120	300	420	420	420	420	51
29	310	370	540	270	---	120	220	420	420	420	420	140
30	210	390	---	300	---	74	230	420	420	420	420	200
31	260	---	---	300	---	82	---	420	---	420	420	---
MONTH	340	280	410	---	290	130	230	360	420	410	450	350

DISSOLVED SULFATE (TONS/DAY), MEAN VALUES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	77	80	158	189	509	191	4640	4500	498	163	763	83
2	76	108	167	110	624	138	7200	4720	540	153	526	84
3	75	192	154	291	821	147	6330	3750	530	142	551	80
4	74	177	141	---	859	304	5110	3360	594	138	546	305
5	77	123	110	---	819	255	6190	3110	719	137	568	163
6	79	89	83	---	841	457	5730	2690	541	136	522	88
7	80	98	103	---	769	483	4380	3760	497	129	540	96
8	80	87	114	---	858	952	4320	3290	462	124	547	187
9	79	74	123	---	783	1820	4900	3030	447	127	511	111
10	78	71	121	---	715	2180	5220	2510	431	117	793	92
11	78	68	118	---	672	2910	5410	2330	420	115	924	85
12	78	70	125	---	598	3720	4360	1950	407	132	585	77
13	80	109	115	---	518	3310	3960	1700	383	120	---	74
14	79	164	102	---	493	3180	3520	1510	363	144	421	70
15	79	76	113	---	500	1920	3070	1370	359	127	376	70
16	80	163	124	---	456	2000	3510	1180	347	144	245	74
17	86	125	145	411	432	1830	4150	932	363	154	216	69
18	86	127	185	351	408	1600	3000	844	362	130	145	65
19	63	113	164	336	382	1270	2960	980	310	182	132	66
20	62	155	229	272	386	1060	5110	913	295	224	124	65
21	68	232	187	310	358	952	4350	840	265	219	118	67
22	58	261	219	887	327	852	3650	788	264	234	113	66
23	59	290	209	970	295	720	3670	784	253	242	109	35
24	54	284	162	920	270	575	2980	614	234	347	103	129
25	46	247	153	702	241	821	4380	699	229	436	101	260
26	45	250	132	492	259	1500	5010	651	228	276	95	329
27	46	243	175	365	146	2480	5840	616	196	1040	93	873
28	43	244	161	500	191	2700	5060	671	189	1460	90	995
29	45	188	210	620	---	2440	3170	869	184	1040	87	2510
30	35	179	---	676	---	1360	3380	545	169	686	86	2860
31	65	---	---	601	---	2470	---	507	---	697	90	---
MONTH	68	156	148	---	519	1500	4490	1810	369	307	337	338

07151000 SALT FORK ARKANSAS RIVER AT TONKAWA, OKLA.--Continued

DISSOLVED CHLORIDE (CL), IN MILLIGRAMS PER LITRE, MEAN VALUES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3000	1100	2900	1900	1900	1400	150	450	900	1400	1300	1600
2	3000	780	3100	980	1900	880	250	430	910	1400	1300	1500
3	3000	1500	3100	2000	1700	900	280	360	820	1400	1900	730
4	3000	1600	3200	---	2000	1000	320	380	860	1400	1900	650
5	3100	1600	3100	---	2100	1300	430	380	1000	1400	2000	520
6	3200	1700	3100	---	2000	1700	420	370	850	1400	1900	950
7	3100	2500	3600	---	2000	1300	330	600	960	1400	2000	1100
8	3100	2500	3500	---	2500	590	340	600	1000	1400	2000	790
9	3000	2200	3700	---	2600	170	340	660	1000	1400	1800	670
10	2900	2200	3700	---	2500	130	400	640	1000	1300	600	810
11	2800	2300	---	---	2500	150	450	700	1000	1500	750	1100
12	2800	2200	3700	---	2500	300	460	700	1000	1500	1300	1200
13	2800	1800	---	---	2300	400	480	700	1000	1400	---	1200
14	2700	740	---	---	2200	780	480	700	1000	1500	1400	1200
15	2700	260	3700	---	2300	500	440	710	1100	1400	1800	1200
16	2700	1300	3600	---	2200	650	470	700	1100	1400	1800	1300
17	2900	1500	---	590	2200	740	660	590	1100	1400	1900	1300
18	2900	2000	---	600	2200	770	550	610	1100	1700	1500	1000
19	1900	1900	2700	720	2100	710	540	1600	1300	1700	1400	1000
20	1900	2400	1900	650	2200	690	520	790	1300	1700	1200	1200
21	2100	2400	1500	710	2100	740	450	870	1400	1500	1400	1200
22	1800	2100	2300	350	2000	790	300	1300	1300	1500	1400	1100
23	1900	2300	2400	420	2000	760	250	800	1300	1500	1500	410
24	2000	2400	1800	720	1800	640	430	640	1400	1900	1400	1100
25	2000	2400	2000	1100	1600	600	220	760	1400	620	1500	410
26	2000	2900	2200	1400	1900	290	200	730	1300	310	1500	53
27	2100	2800	3500	1200	840	390	380	770	1400	320	1500	26
28	2100	2900	3400	1700	1300	590	530	840	1100	1100	1500	41
29	2200	2800	---	1800	---	600	380	780	1200	1200	1500	210
30	1300	3000	---	2100	---	310	400	930	1100	1200	1500	340
31	1800	---	---	2200	---	360	---	910	---	1000	1400	---
MONTH	2500	2000	---	---	2000	680	400	710	1100	1300	1500	870

DISSOLVED CHLORIDE (TONS/DAY), MEAN VALUES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	592	475	1200	1310	3530	1230	6540	7820	1060	545	2400	307
2	584	573	1290	620	4360	747	11390	8170	1160	513	1650	303
3	577	1250	1190	2040	5560	799	10270	6330	1030	478	2050	145
4	570	1170	1090	---	6080	1740	8480	5700	1220	469	2000	549
5	594	820	847	---	5840	1590	10700	5280	1710	464	2050	288
6	609	599	641	---	5940	3090	9880	4550	1090	460	1910	201
7	616	729	813	---	5410	3030	7310	6730	1140	438	1950	261
8	613	644	892	---	6370	4780	7240	5890	1130	399	1980	351
9	603	533	977	---	5860	6010	8200	5470	1110	429	1940	201
10	596	514	957	---	5300	6230	8940	4530	1070	364	1420	178
11	591	490	---	---	4970	9050	9410	4230	1010	412	1680	229
12	591	510	987	---	4420	15440	7610	3550	983	472	1880	222
13	608	746	---	---	3770	15120	6950	3090	932	396	---	204
14	595	860	---	---	3540	16830	6160	2730	886	518	1370	198
15	594	301	898	---	3630	9280	5320	2480	918	418	1460	199
16	598	1020	978	---	3280	10230	6130	2140	898	471	926	232
17	658	817	---	2060	3100	9620	7500	1670	964	506	798	217
18	657	902	---	1770	2940	8450	5330	1510	961	514	521	161
19	438	789	1230	1760	2720	6630	5250	3690	930	721	439	162
20	434	1140	1590	1390	2780	5480	9020	1720	883	888	360	182
21	484	1700	1220	1610	2560	5000	7570	1740	856	776	398	187
22	394	1850	1600	3890	2310	4520	5980	2490	835	827	378	178
23	408	2110	1530	4480	2080	3800	5820	1490	788	857	378	60
24	386	2100	1120	4800	1850	2930	5150	1110	752	1270	339	350
25	322	1810	1080	4070	1600	4130	6770	1280	739	782	357	445
26	321	1910	945	3130	1790	6160	7600	1180	718	456	333	305
27	327	1840	1380	2240	785	11240	9950	1130	674	1730	340	522
28	309	1860	1260	3360	1200	13550	8950	1340	502	3810	323	795
29	321	1430	---	4270	---	12320	5400	1600	521	2960	304	3820
30	217	1370	---	4820	---	5730	5790	1200	434	1950	298	4800
31	446	---	---	4310	---	10900	---	1100	---	1700	306	---
MONTH	505	1100	---	---	3700	6960	7550	3320	930	870	1080	542

07151000 SALT FORK ARKANSAS RIVER AT TONKAWA, OKLA.--Continued

DISSOLVED SOLIDS, IN MILLIGRAMS PER LITRE, MEAN VALUES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5800	2520	5560	3720	3740	3010	431	1130	2170	2990	2860	3240
2	5800	1910	5810	2310	3830	2150	652	1090	2190	3000	2850	3180
3	5730	3130	5970	3910	3470	2170	738	922	2000	3010	3770	1790
4	5670	3230	6050	---	4000	2370	834	957	2100	3030	3860	1600
5	5820	3350	5970	---	4120	2840	1090	963	2330	3020	3950	1290
6	6040	3420	5940	---	3990	3480	1060	937	2060	3020	3850	2260
7	5950	4820	6770	---	3930	2850	858	1480	2280	3030	3950	2560
8	5840	4800	6570	---	4890	1470	875	1490	2380	2910	3950	1930
9	5680	4280	6960	---	5090	481	869	1620	2410	3010	3670	1640
10	5540	4310	7030	---	4820	380	1020	1580	2410	2840	1470	1990
11	5440	4410	7290	---	4810	432	1130	1720	2360	3170	1840	2550
12	5440	4380	6900	---	4780	775	1160	1730	2360	3160	2900	2670
13	5390	3620	7220	---	4460	1020	1210	1720	2370	2960	---	2600
14	5160	1820	7090	---	4230	1900	1200	1720	2380	3170	2930	2640
15	5210	687	6960	---	4410	1260	1120	1750	2460	2950	3570	2640
16	5130	2840	6830	---	4230	1600	1170	1710	2480	2940	3690	2860
17	5540	3130	7350	1460	4230	1810	1630	1460	2530	2950	3810	2850
18	5530	4020	7290	1470	4260	1870	1370	1500	2530	3470	3160	2410
19	3850	3790	5250	1770	4080	1740	1350	3280	2760	3470	2990	2390
20	3780	4730	3730	1590	4260	1690	1290	1940	2750	3480	2700	2640
21	4050	4660	3150	1740	4150	1820	1140	2110	2910	3130	3010	2620
22	3570	4060	4510	899	3940	1930	781	2870	2870	3130	2980	2560
23	3780	4490	4650	1060	3920	1860	658	1950	2840	3130	3080	1030
24	4020	4730	3640	1770	3640	1570	1090	1590	2910	3850	2950	2560
25	3940	4620	4020	2430	3300	1480	587	1850	2910	1530	3130	1030
26	3980	5580	4220	2950	3720	758	548	1780	2860	811	3100	200
27	4040	5330	6640	2730	2060	999	975	1890	3050	817	3200	137
28	4090	5540	6440	3400	2880	1460	1320	2040	2520	2490	3170	172
29	4290	5380	---	3670	---	1490	963	1900	2650	2650	3080	560
30	2820	5740	---	4120	---	811	1020	2220	2470	2650	3070	875
31	3620	---	---	4200	---	922	---	2200	---	2370	3040	---
MONTH	4860	3980	5920	---	4040	1630	1000	1710	2510	2840	3190	1980

DISSOLVED SOLIDS (TONS/DAY), MEAN VALUES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1130	1080	2300	2620	7070	2610	18630	19700	2580	1160	5200	639
2	1110	1400	2450	1460	8690	1820	30280	20620	2810	1090	3570	635
3	1100	2620	2260	4050	11340	1940	26890	16210	2520	1020	4100	357
4	1090	2430	2070	---	11990	4050	21910	14550	2970	996	3980	1360
5	1130	1690	1610	---	11450	3450	27020	13470	3990	986	4060	719
6	1160	1230	1220	---	11740	6310	25000	11640	2660	978	3810	476
7	1170	1410	1530	---	10720	6550	18850	16670	2700	931	3860	588
8	1170	1240	1690	---	12290	11860	18620	14580	2610	857	3910	858
9	1150	1040	1840	---	11270	16760	21100	13480	2560	911	3910	496
10	1140	1000	1800	---	10220	18270	22690	11180	2480	789	3520	434
11	1130	954	1770	---	9600	25760	23690	10410	2360	863	4130	516
12	1130	992	1860	---	8540	40200	19120	8720	2290	990	4040	491
13	1160	1510	1720	---	7320	38360	17410	7600	2170	847	---	456
14	1140	2110	1530	---	6910	41190	15440	6720	2060	1090	2940	442
15	1140	794	1690	---	7060	23220	13410	6100	2100	893	2950	442
16	1150	2220	1840	---	6400	25240	15400	5260	2050	1010	1860	502
17	1260	1720	2180	5110	6060	23590	18470	4130	2180	1080	1590	470
18	1250	1780	2770	4380	5730	20690	13250	3750	2180	1050	1090	371
19	873	1580	2370	4310	5350	16290	13080	7650	2040	1470	936	374
20	867	2210	3180	3440	5420	13470	22510	4210	1930	1810	795	406
21	952	3300	2570	3960	5010	12250	19050	4230	1840	1630	846	417
22	799	3640	3100	9970	4570	11060	15570	5380	1800	1740	806	400
23	816	4100	2970	11340	4120	9300	15450	3640	1710	1800	798	153
24	760	4050	2250	11790	3740	7240	13000	2730	1620	2530	726	788
25	638	3510	2140	9370	3320	10230	18240	3130	1590	1930	751	1130
26	634	3650	1850	6700	3590	16080	20720	2910	1550	1180	702	1150
27	644	3530	2600	4930	1920	28580	25350	2770	1430	4480	709	2720
28	607	3550	2380	6900	2600	33590	22300	3270	1140	8670	677	3330
29	626	2730	---	8600	---	30500	13760	3920	1160	6570	641	10380
30	472	2620	---	9450	---	14840	14690	2880	993	4330	630	12340
31	900	---	---	8410	---	27890	---	2650	---	3940	649	---
MONTH	977	2190	2130	---	7290	17520	19360	8200	2130	1920	2270	1460

07152500 ARKANSAS RIVER AT RALSTON, OKLA.

LOCATION.--Lat 36°30'09", long 96°43'22", in NW1/4 sec.1, T.23 N., R.5 E., Osage County, at gaging station at bridge on State Highway 18 at Ralston, 2.0 mi (3.2 km) downstream from Salt Creek, 2.0 mi (3.2 km) upstream from Grayhorse Creek, and at mile 594.0 (955.7 km).

DRAINAGE AREA.--54,465 sq mi (141,064.4 km^2), of which 7,615 sq mi (19,722.8 km^2) is probably noncontributing.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	DISSOLVED NITRATE (NO3) (MG/L)	DISSOLVED NITRITE (N) (MG/L)
OCT.											
05...	880	--	--	390	176	0	180	580	.54	2.4	--
15...	652	--	--	360	192	0	190	550	1.1	4.7	--
25...	810	--	--	320	194	0	170	490	.81	3.6	--
NOV.											
05...	1620	--	--	210	170	0	99	310	.95	4.2	--
15...	4920	--	--	61	144	0	38	92	1.3	5.6	--
25...	3080	--	--	200	202	0	88	310	1.2	5.4	--
DEC.											
05...	2100	--	--	300	216	0	120	460	1.5	6.5	--
15...	1500	--	--	430	266	0	160	660	1.8	8.0	--
25...	4510	--	--	160	208	0	92	240	2.0	8.7	--
JAN.											
05...	12300	--	--	68	150	0	46	98	1.1	5.0	--
15...	2900	--	--	130	212	0	57	230	.75	3.3	--
25...	12400	--	--	61	142	0	55	90	1.7	7.6	--
FEB.											
05...	21600	--	--	29	130	0	30	39	1.5	6.6	--
15...	4200	--	--	290	216	0	140	440	1.2	5.5	--
25...	2630	--	--	320	260	0	200	470	1.4	6.1	--
MAR.											
05...	7020	--	--	64	168	0	46	95	.68	3.0	--
15...	44000	--	--	33	112	0	29	48	1.0	4.5	--
25...	25800	--	--	62	156	0	54	90	.81	3.6	--
APR.											
05...	48300	--	--	38	122	0	41	53	.88	3.9	--
15...	19700	--	--	140	200	0	170	190	.97	4.3	--
25...	23000	--	--	90	150	0	120	120	1.1	4.9	--
MAY											
05...	19700	--	--	90	156	0	140	120	.75	3.3	--
15...	7920	--	--	200	228	0	82	280	.68	3.0	--
25...	5210	--	--	240	212	0	270	340	.47	2.1	--
JUNE											
05...	3600	110	33	270	196	0	260	380	.60	2.7	.00
15...	3240	94	19	250	176	0	220	360	.52	2.3	.00
25...	2120	99	32	300	182	0	240	460	.79	3.5	.00
JULY											
05...	1110	100	32	320	222	0	220	470	.48	2.1	.01
15...	1500	100	29	330	215	0	210	480	.80	3.5	.00
25...	1960	97	29	350	191	0	220	500	.77	3.4	.73
AUG.											
05...	2990	80	19	230	155	0	160	330	1.7	7.5	.01
15...	1650	91	23	340	185	0	190	470	.76	3.4	.01
25...	1240	93	25	310	216	0	180	450	.01	.00	.36
SEP.											
05...	1030	97	27	310	208	0	180	490	.78	3.5	.01
15...	1250	80	21	240	192	0	130	370	1.2	5.3	.01
30...	78400	28	4.8	20	102	0	18	24	1.1	4.7	.04

07152500 ARKANSAS RIVER AT RALSTON, OKLA.

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.

REMARKS.--Continuous monitor records for water temperature and specific conductance are collected for this station.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS-SOLVED NITRITE (NO2) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	PHOS-PHATE (PO4) (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)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)
OCT.											
05...	--	--	1.1	1380	1.88	3280	300	160	9.8	2400	8.3
15...	--	--	1.6	1360	1.85	2390	330	170	8.6	2340	7.1
25...	--	--	2.4	1200	1.63	2620	310	150	7.9	2080	8.1
NOV.											
05...	--	--	1.2	814	1.11	3560	220	81	6.2	1400	7.9
15...	--	--	1.4	350	.48	4650	160	42	2.1	581	8.3
25...	--	--	.91	844	1.15	7020	260	94	5.4	1440	8.0
DEC.											
05...	--	--	.94	1140	1.55	6460	300	120	7.5	2000	7.9
15...	--	--	1.1	1610	2.19	6520	400	180	9.4	2710	7.8
25...	--	--	1.1	738	1.00	8990	280	110	4.2	1260	7.3
JAN.											
05...	--	--	.49	380	.52	12600	160	37	2.3	635	6.7
15...	--	--	.12	658	.89	5150	280	110	3.4	1140	7.1
25...	--	--	.58	368	.50	12300	170	54	2.0	616	6.7
FEB.											
05...	--	--	.64	226	.31	13200	130	23	1.1	401	7.2
15...	--	--	.58	1100	1.50	12500	340	160	6.8	1940	7.4
25...	--	--	.81	1320	1.80	9370	410	200	6.9	2210	7.3
MAR.											
05...	--	--	.22	413	.56	7830	190	52	2.0	667	7.4
15...	--	--	.60	245	.33	29100	120	28	1.3	410	7.4
25...	--	--	.46	400	.54	27900	180	52	2.0	635	7.7
APR.											
05...	--	--	.61	281	.38	36600	140	40	1.4	466	7.5
15...	--	--	.44	771	1.05	41000	320	160	3.4	1240	8.0
25...	--	--	.54	521	.71	32400	220	97	2.6	865	8.3
MAY											
05...	--	--	.40	602	.82	32000	250	120	2.5	931	7.8
15...	--	--	.64	1060	1.44	22700	260	73	5.4	1640	8.0
25...	--	--	.69	1190	1.62	16700	420	250	5.1	1850	7.9
JUNE											
05...	.0	.40	--	1290	1.75	12500	410	250	5.8	1870	7.6
15...	.0	.50	--	1150	1.56	10100	310	170	6.2	1740	7.4
25...	.0	.44	--	1310	1.78	7500	380	230	6.7	2080	7.5
JULY											
05...	.0	--	--	1400	1.90	4200	380	200	7.1	2250	8.1
15...	.0	--	--	1410	1.92	5710	370	190	7.5	2130	7.7
25...	2.4	--	--	1530	2.08	8100	360	210	8.0	2210	7.5
AUG.											
05...	.0	.42	--	908	1.23	7330	280	150	6.0	1600	7.7
15...	.0	.43	--	1230	1.67	5480	320	170	8.2	2100	7.7
25...	1.2	.44	--	1200	1.63	4020	340	160	7.4	2040	7.8
SEP.											
05...	.0	.42	--	1260	1.71	3500	350	180	7.2	2160	7.8
15...	.0	.53	--	992	1.35	3350	290	130	6.2	1726	7.9
30...	.1	.40	--	198	.27	41900	90	6	.9	280	7.8

07152500 ARKANSAS RIVER AT RALSTON, OKLA.--Continued

CHEMICAL ANALYSES OF ADDITIONAL SAMPLES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	INSTANTANEOUS DISCHARGE (CFS)	CHEMICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	CHEMICAL OXYGEN DEMAND (HIGH LEVEL) (MG/L)	BIOCHEMICAL OXYGEN DEMAND (MG/L)
OCT.				
16...	1190	30	--	16
NOV.				
07...	770	35	--	7.2
DEC.				
19...	4200	15	--	4.6
JAN.				
18...	8220	36	--	3.2
FEB.				
21...	4010	6	--	2.1
MAR.				
13...	116000	74	--	3.2
APR.				
04...	51400	--	--	--
24...	23300	42	--	1.2
MAY				
17...	6700	31	--	4.6
JUNE				
06...	4240	38	--	6.4
JULY				
31...	4480	--	--	5.0
AUG.				
28...	1190	--	31	8.4
SEP.				
19...	1510	32	--	8.0

FIELD ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE (DEG C)	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION
OCT.				
16...	2000	23.0	12.9	159
NOV.				
07...	1380	14.5	12.3	127
DEC.				
19...	1580	.0	15.7	114
JAN.				
18...	1230	6.0	11.4	98
FEB.				
21...	2200	8.0	11.6	103
MAR.				
13...	290	13.0	8.0	82
APR.				
04...	430	11.0	8.8	85
24...	875	19.0	7.8	91
MAY				
17...	1700	22.0	8.2	100
JUNE				
06...	1980	22.0	7.9	95
JULY				
31...	1300	28.0	6.7	88
AUG.				
28...	2000	29.0	9.8	132
SEP.				
19...	2000	21.5	12.2	147

07152500 ARKANSAS RIVER AT RALSTON, OKLA.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), MEAN VALUES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(CONTINUOUS HOURLY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2010	509	1450	536	690	1970	552	1290	1890	2310	1310	2200
2	2120	819	1550	625	892	1890	420	1260	1850	2080	1440	2220
3	2430	870	1730	673	730	1930	438	1190	1930	2110	1470	2290
4	2300	1060	1810	482	521	1380	644	888	2030	2090	1430	2160
5	2480	1380	1980	635	382	1010	449	950	1920	2210	1570	2110
6	2400	1650	2060	568	438	780	514	1170	1780	2180	1830	2450
7	2440	1480	2160	700	572	550	588	1210	---	2210	2010	2090
8	2490	1710	2160	748	708	381	722	1200	---	2210	2060	1700
9	2510	1800	2130	1010	889	366	665	1360	1320	2200	1740	1760
10	2570	1800	2310	1060	1090	381	688	1450	1400	1950	1450	1890
11	2370	1900	2360	989	1420	321	900	1540	1550	1960	1580	2240
12	2480	1840	2340	1070	1610	296	1030	1560	1740	2070	1670	2070
13	2510	648	2220	1430	1790	289	1150	1520	1810	2160	2050	1630
14	2440	723	2440	1420	1920	329	1220	1580	1860	2120	1990	1510
15	2280	680	2750	1220	1940	390	1210	1640	1930	2150	2120	1660
16	2320	791	2820	1480	2030	532	650	1620	1890	1950	2480	1660
17	2340	714	2640	1720	2140	484	853	1860	1880	1970	2650	1740
18	2430	676	2600	1370	2060	590	1060	1670	1920	2270	2540	1820
19	2220	796	2400	1040	2050	822	1030	1750	1700	1990	2110	1690
20	2260	991	1300	745	2120	812	864	1810	1270	1990	2070	1840
21	1910	1080	1780	664	2020	1080	916	1780	1360	2310	2030	1830
22	1870	1120	1630	884	2290	1160	758	1740	1690	2100	1950	1690
23	1890	1390	1760	744	2270	1220	898	1870	1900	1950	1940	1480
24	1930	1440	1430	673	2170	984	838	1860	2070	2390	1890	1540
25	2100	1330	1270	615	2260	636	843	1830	2070	2200	1990	874
26	1670	1150	1390	665	2180	728	933	1940	2140	2050	2030	592
27	2390	1230	1680	662	2170	552	832	1840	2550	1840	1900	419
28	2120	1200	1770	926	2450	401	1020	1770	2210	1720	2210	431
29	1920	1130	1860	864	---	---	1270	1850	2140	1530	2220	326
30	1860	1300	---	1050	---	---	1460	1870	2120	1500	2210	271
31	1120	---	828	1000	---	---	---	1970	---	1280	2250	---
MONTH	2200	1170	1950	912	1560	795	847	1580	1850	2030	1940	1610

TEMPERATURE (°C) OF WATER, MEAN VALUES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(CONTINUOUS HOURLY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18.0	11.5	---	---	6.5	9.5	---	19.0	22.0	29.0	26.5	24.0
2	19.0	10.5	---	---	5.5	10.0	---	18.0	20.5	29.0	26.5	28.0
3	18.5	10.5	---	---	5.5	10.0	---	17.5	21.0	29.5	27.0	26.0
4	20.5	11.0	---	---	6.0	10.0	10.0	18.5	23.0	30.0	27.0	24.5
5	20.5	12.0	---	---	5.5	10.0	10.5	17.5	23.5	30.5	26.0	22.5
6	18.0	12.0	---	---	5.0	10.5	11.0	18.0	23.0	30.0	25.5	20.5
7	18.0	12.0	---	---	4.0	9.5	11.0	19.0	25.0	29.5	26.5	23.0
8	18.5	11.0	---	---	2.0	10.0	10.0	19.5	26.0	29.0	27.0	24.0
9	20.0	11.0	---	---	1.5	9.5	8.5	20.5	26.5	28.5	26.5	26.5
10	21.0	10.0	---	---	2.0	10.0	7.5	22.5	27.0	28.5	28.0	26.0
11	22.0	9.5	---	---	2.5	10.5	8.0	22.0	26.5	29.0	28.0	25.5
12	23.0	9.0	---	---	4.5	---	10.0	21.0	26.5	28.5	29.0	25.0
13	21.5	9.0	---	---	6.0	---	12.0	20.5	27.0	27.5	28.5	24.5
14	20.0	7.0	---	---	4.5	---	13.5	20.0	26.5	27.5	28.5	22.0
15	15.0	5.0	---	---	3.0	---	14.5	20.0	27.5	25.5	28.0	22.0
16	16.0	5.0	---	---	2.0	---	14.5	20.5	27.5	26.0	28.0	22.0
17	---	5.0	---	---	1.5	---	15.0	20.0	26.0	28.0	28.5	18.5
18	11.5	3.5	---	7.0	2.0	---	16.0	21.0	26.5	28.0	28.5	17.5
19	9.0	---	---	7.0	2.5	---	16.0	22.5	23.5	28.0	29.0	18.5
20	9.5	---	---	5.5	4.0	---	17.0	23.0	23.5	27.5	30.0	---
21	11.0	---	---	6.0	5.5	---	19.0	24.0	25.0	27.5	30.0	24.5
22	13.5	---	---	5.5	5.5	---	18.0	24.5	27.0	27.5	29.0	24.0
23	11.0	4.0	---	4.5	7.0	---	18.5	23.0	27.0	27.0	27.0	24.5
24	11.0	3.5	---	4.5	8.0	---	18.5	23.0	26.0	28.5	27.5	23.0
25	11.0	4.0	---	4.5	9.5	---	17.0	22.5	26.5	26.5	27.5	23.0
26	11.5	4.0	---	5.0	8.5	---	16.0	22.5	27.0	28.0	27.5	22.5
27	12.5	5.0	---	5.5	8.5	---	15.5	19.5	28.0	28.5	27.5	20.5
28	13.0	---	---	3.0	9.5	---	16.0	17.5	27.0	27.0	27.5	19.5
29	12.5	---	---	1.5	---	---	17.0	20.0	25.5	27.0	27.0	18.5
30	14.0	---	---	2.0	---	---	18.5	21.0	26.5	27.5	26.5	18.0
31	12.5	---	---	4.5	---	---	---	21.5	---	27.5	25.5	---
MONTH	15.5	---	---	---	5.0	---	14.0	20.5	25.5	28.0	27.5	22.5

07152500 ARKANSAS RIVER AT RALSTON, OKLA.--Continued

DISSOLVED SULFATE (SO_4), IN MILLIGRAMS PER LITRE, MEAN VALUES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	150	37	110	39	50	140	40	170	240	240	96	210
2	190	60	110	46	65	140	30	170	230	170	110	210
3	270	64	130	49	53	140	32	160	240	180	110	230
4	240	77	130	35	38	100	47	130	250	180	110	200
5	290	100	150	46	28	74	33	130	240	210	120	180
6	270	120	170	41	32	57	37	160	230	200	130	280
7	280	110	200	51	42	40	43	160	---	210	150	180
8	290	130	200	55	52	28	53	160	---	210	170	120
9	300	130	190	74	65	27	48	180	170	210	130	130
10	310	130	240	77	80	28	50	190	180	140	110	140
11	260	140	250	72	100	23	66	200	200	140	120	220
12	290	140	250	78	120	21	75	200	220	170	120	170
13	300	47	210	110	130	21	84	200	230	200	170	120
14	280	53	280	100	140	24	89	200	230	190	150	110
15	230	50	370	89	140	28	160	210	240	190	190	120
16	240	58	390	110	160	39	98	210	240	140	290	120
17	250	52	330	130	190	35	120	230	240	140	340	130
18	270	49	320	100	170	43	140	210	240	230	310	130
19	210	58	270	76	170	60	140	220	220	150	180	120
20	230	72	95	54	190	59	120	230	170	150	170	140
21	140	79	130	48	160	79	130	230	180	240	160	130
22	140	82	120	65	230	85	110	220	220	180	140	120
23	140	100	130	54	230	89	130	240	240	140	140	110
24	140	110	110	49	200	72	120	230	260	260	140	110
25	180	97	93	45	230	46	120	230	260	210	150	64
26	120	84	100	48	200	53	130	240	270	170	160	43
27	260	90	120	48	200	40	120	230	310	140	140	30
28	190	88	130	68	280	29	140	220	270	130	210	31
29	140	83	140	63	---	---	170	230	270	110	210	24
30	140	95	---	77	---	---	190	240	260	110	210	20
31	82	---	60	73	---	---	---	250	---	94	220	---
MONTH	220	86	180	67	130	58	95	200	230	180	170	130

DISSOLVED SULFATE (TONS/DAY), MEAN VALUES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	481	372	779	1400	1150	982	6570	8350	2610	1330	1230	646
2	520	505	766	907	1700	994	6240	8590	2540	919	1240	693
3	721	432	797	1420	3210	973	7840	11320	2570	925	1150	732
4	592	387	798	1160	3230	1130	7670	9750	2600	867	927	605
5	686	452	822	1540	1630	1450	4330	6840	2500	997	912	551
6	602	528	816	447	1420	3600	4520	7100	2770	934	1010	831
7	604	421	796	276	1450	4370	4300	7220	---	911	1100	520
8	615	450	632	228	1510	2970	4920	6690	---	854	1160	504
9	612	441	533	339	1530	3500	5090	6480	2700	865	1190	563
10	626	416	647	376	1530	5840	4740	6190	2280	771	857	579
11	487	428	713	332	1680	5890	4830	5880	2070	628	852	842
12	539	415	724	338	1700	6580	4590	5460	2070	733	944	613
13	544	485	664	508	1720	6540	4360	4890	2020	823	976	425
14	511	572	972	617	1710	6430	4190	4670	1990	810	759	388
15	407	675	1480	699	1630	3940	8740	4520	2030	962	850	427
16	413	997	1870	1170	1750	4430	8100	4190	1920	671	1250	423
17	403	734	1800	2080	1980	3150	8430	4290	1780	631	1440	447
18	419	510	2200	2000	1650	2830	10200	3590	1880	973	1280	468
19	332	524	1580	2420	1540	3220	9550	3590	2450	643	738	441
20	341	596	513	2020	1640	2700	6970	3500	2220	627	673	484
21	251	610	774	1300	1340	3470	10270	3320	1730	1020	602	488
22	323	601	844	1660	1930	3690	8290	3100	1580	819	524	454
23	308	741	1100	1900	1820	3710	8100	3230	1610	698	502	401
24	316	777	1050	2170	1550	3610	7900	3120	1530	1260	475	429
25	393	812	835	1500	1680	3250	7610	3150	1470	1200	499	1140
26	266	742	813	1440	1490	5880	10600	3390	1490	1160	516	1860
27	556	833	890	1140	1420	6100	9940	3180	1670	1110	451	3290
28	378	846	871	1380	1940	4840	8450	2770	1430	1160	678	5150
29	280	772	916	1240	---	---	7830	2720	1420	1180	664	4530
30	312	788	---	1550	---	---	7550	2740	1430	1180	644	4140
31	542	---	2710	1310	---	---	---	2910	---	1150	654	---
MONTH	464	595	1020	1190	1730	3790	7090	5060	2010	929	863	1100

07152500 ARKANSAS RIVER AT RALSTON, OKLA.--Continued

DISSOLVED CHLORIDE (CL), IN MILLIGRAMS PER LITRE, MEAN VALUES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	440	79	300	86	120	430	90	270	410	510	270	480
2	460	150	330	110	170	410	58	260	400	450	300	490
3	560	170	370	120	130	420	63	240	420	460	310	500
4	510	210	390	73	82	290	110	170	440	460	300	470
5	580	290	430	110	49	200	65	180	420	480	330	460
6	550	350	450	93	63	140	81	240	380	480	390	570
7	560	310	470	130	94	89	98	250	---	480	440	460
8	580	370	470	140	130	49	130	240	---	480	450	360
9	590	390	470	200	170	45	120	280	270	480	370	380
10	620	390	510	210	220	49	120	300	290	420	300	410
11	530	410	530	190	300	35	170	330	330	420	330	490
12	580	400	520	210	340	29	200	330	370	450	360	450
13	590	110	490	300	380	27	230	320	390	470	450	350
14	560	130	560	300	420	37	250	330	400	460	430	320
15	500	120	700	250	420	51	250	350	420	470	460	350
16	510	150	730	310	440	85	110	340	410	420	580	350
17	520	130	650	370	470	74	160	400	410	430	650	370
18	560	120	630	280	450	99	210	360	420	500	610	390
19	490	150	550	210	450	150	200	370	360	430	460	360
20	500	190	270	140	460	150	160	390	260	430	450	400
21	410	220	380	120	440	220	180	380	280	510	440	390
22	400	230	350	170	500	230	140	370	360	460	420	360
23	410	290	380	140	500	250	170	400	410	420	420	310
24	420	300	300	120	470	190	160	400	450	540	410	330
25	460	280	260	110	500	110	160	390	450	480	430	170
26	360	230	290	120	480	130	180	420	470	450	440	99
27	540	250	360	120	470	90	160	400	610	400	410	58
28	460	240	380	180	570	54	200	380	480	370	480	61
29	420	230	400	160	---	---	260	400	470	320	490	36
30	400	270	---	210	---	---	310	400	460	320	480	23
31	230	---	160	200	---	---	---	430	---	260	490	---
MONTH	490	240	440	180	330	150	160	330	400	440	430	340

DISSOLVED CHLORIDE (TONS/DAY), MEAN VALUES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1370	798	2230	3080	2800	2900	14670	13030	4490	2820	3480	1490
2	1300	1290	2210	2130	4460	2930	11930	13310	4340	2400	3530	1580
3	1470	1120	2330	3420	7950	2870	15430	17200	4450	2340	3290	1570
4	1260	1050	2340	2430	7020	3210	18220	13230	4540	2240	2640	1450
5	1380	1280	2430	3630	2900	3890	8660	9550	4320	2290	2630	1390
6	1240	1530	2180	1010	2790	9090	9760	10740	4710	2200	2950	1680
7	1230	1210	1910	674	3290	9730	9870	11030	---	2090	3130	1340
8	1230	1310	1520	570	3700	5270	12150	10200	---	1960	3100	1470
9	1220	1290	1320	911	3990	5990	12240	10270	4250	2000	3490	1650
10	1230	1220	1370	1020	4170	10370	11530	9990	3650	2280	2450	1710
11	1010	1260	1480	889	4780	8810	12660	9640	3410	1860	2460	1880
12	1080	1220	1510	919	4910	8870	12410	8980	3500	1930	2740	1620
13	1090	1150	1510	1450	5040	8510	12020	7990	3440	1980	2640	1230
14	1040	1410	1970	1760	5040	9900	11670	7710	3420	2020	2210	1110
15	881	1630	2830	1950	4820	7130	13360	7520	3520	2330	2120	1240
16	869	2530	3540	3350	4830	9720	9300	6960	3300	1980	2510	1230
17	842	1810	3510	6070	4840	6590	11230	7360	3060	1870	2790	1310
18	853	1230	4300	5660	4420	6500	14890	6010	3250	2120	2540	1370
19	756	1330	3240	6550	4150	8270	13780	6080	4110	1880	1860	1280
20	751	1600	1440	5050	4110	6910	9330	5970	3440	1830	1780	1420
21	740	1660	2270	3130	3750	9470	14130	5640	2740	2150	1670	1430
22	950	1650	2450	4340	4150	10180	10410	5240	2650	2090	1550	1320
23	906	2110	3210	4750	3980	10330	11050	5540	2780	2060	1480	1150
24	932	2220	3000	5240	3680	9660	10430	5350	2680	2600	1400	1240
25	1000	2290	2340	3500	3690	7700	10080	5380	2580	2780	1460	2970
26	774	2050	2310	3460	3500	14560	14700	5860	2640	3140	1430	4290
27	1140	2320	2590	2750	3370	13610	13080	5440	3280	3250	1330	6290
28	945	2350	2550	3660	3930	8950	12150	4700	2530	3370	1550	10020
29	826	2120	2690	3230	---	---	12160	4660	2510	3380	1510	6900
30	918	2220	---	4200	---	---	12210	4710	2520	3380	1480	4840
31	1490	---	6960	3520	---	---	---	5050	---	3230	1450	---
MONTH	1060	1610	2520	3040	4290	7930	12180	8080	3430	2380	2280	2320

07152500 ARKANSAS RIVER AT RALSTON, OKLA.--Continued

DISSOLVED SOLIDS, IN MILLIGRAMS PER LITRE, MEAN VALUES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1220	308	878	324	418	1190	334	781	1140	1400	793	1330
2	1280	496	938	378	540	1140	254	763	1120	1260	872	1340
3	1470	527	1050	407	442	1170	265	720	1170	1280	890	1390
4	1390	642	1100	292	315	835	390	538	1230	1270	866	1310
5	1500	835	1200	384	231	611	272	575	1160	1340	950	1280
6	1450	999	1250	344	265	472	311	709	1080	1320	1110	1480
7	1480	896	1310	424	346	333	356	732	---	1340	1220	1270
8	1510	1040	1310	453	429	231	437	726	---	1340	1250	1030
9	1520	1090	1290	611	538	222	403	823	799	1330	1050	1080
10	1560	1090	1400	642	660	231	416	878	848	1180	878	1140
11	1430	1150	1430	599	860	194	545	932	938	1190	956	1360
12	1500	1110	1420	648	975	179	624	944	1050	1250	1010	1250
13	1520	392	1340	866	1080	175	696	920	1100	1310	1240	987
14	1480	438	1480	860	1160	199	739	956	1130	1280	1200	914
15	1380	412	1660	739	1170	236	732	993	1170	1300	1280	1000
16	1400	479	1710	896	1230	322	393	981	1140	1180	1500	1000
17	1420	432	1600	1040	1300	293	516	1130	1140	1190	1600	1050
18	1470	409	1570	829	1250	357	642	1010	1160	1370	1540	1100
19	1340	482	1450	630	1240	498	624	1060	1030	1200	1280	1020
20	1370	600	787	451	1280	492	523	1100	769	1200	1250	1110
21	1160	654	1080	402	1220	654	555	1080	823	1400	1230	1110
22	1130	678	987	535	1390	702	459	1050	1020	1270	1180	1020
23	1140	841	1070	450	1370	739	544	1130	1150	1180	1170	896
24	1170	872	866	407	1310	596	507	1130	1250	1450	1140	932
25	1270	805	769	372	1370	385	510	1110	1250	1330	1200	529
26	1010	696	841	403	1320	441	565	1170	1300	1240	1230	358
27	1450	745	1020	401	1310	334	504	1110	1540	1110	1150	254
28	1280	726	1070	561	1480	243	617	1070	1340	1040	1340	261
29	1160	684	1130	523	---	---	769	1120	1300	926	1340	197
30	1130	787	---	636	---	---	884	1130	1280	908	1340	164
31	678	---	501	605	---	---	---	1190	---	775	1360	---
MONTH	1330	710	1180	552	947	481	513	954	1120	1230	1180	973

DISSOLVED SOLIDS (TONS/DAY), MEAN VALUES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3810	3090	6450	11650	9550	8110	54670	38370	12600	7780	10210	4140
2	3600	4190	6330	7540	14130	8220	52030	39330	12220	6660	10240	4350
3	3870	3580	6590	11770	26610	8040	65360	51350	12460	6480	9510	4340
4	3480	3210	6600	9690	26910	9360	63680	41950	12640	6220	7670	4020
5	3570	3740	6800	12770	13610	11980	36110	29810	12110	6320	7540	3860
6	3300	4370	6060	3710	11810	29830	37640	32150	13300	6090	8320	4400
7	3220	3480	5300	2290	12060	36320	35750	32830	---	5780	8740	3720
8	3180	3720	4200	1890	12500	24780	40830	30400	---	5420	8620	4170
9	3130	3650	3660	2810	12660	29190	42280	30010	12470	5540	9870	4650
10	3100	3440	3780	3120	12650	48760	39360	28910	10620	6370	7090	4790
11	2720	3540	4010	2750	13880	49270	40010	27690	9780	5190	7050	5200
12	2810	3430	4130	2800	14030	55150	38050	25750	9900	5380	7810	4500
13	2790	4020	4170	4210	14220	54790	36090	22980	9700	5470	7340	3520
14	2730	4750	5180	5110	14120	53770	34700	22080	9610	5610	6180	3210
15	2430	5600	6740	5780	13480	32890	39750	21440	9840	6470	5890	3530
16	2390	8270	8300	9680	13470	36870	32400	19860	9270	5550	6490	3500
17	2300	6090	8630	17210	13430	26260	35970	20670	8600	5220	6840	3700
18	2250	4230	10710	16530	12290	23530	45390	17090	9100	5860	6430	3870
19	2090	4350	8630	20060	11560	26740	42260	17190	11670	5240	5170	3650
20	2070	4940	4250	16800	11400	22430	29800	16830	10170	5110	4940	4000
21	2070	5050	6400	10820	10470	28770	44470	15910	8000	5930	4650	4040
22	2670	4980	6980	13780	11450	30530	34440	14850	7510	5800	4330	3760
23	2540	6130	9060	15810	10980	30710	34930	15560	7790	5770	4150	3310
24	2610	6430	8690	18040	10180	29910	33560	15050	7440	6950	3920	3550
25	2790	6720	6910	12460	10200	27030	32380	15130	7170	7700	4070	9440
26	2200	6150	6720	11960	9690	48790	46050	16390	7310	8750	3980	15480
27	3060	6900	7360	9500	9330	50700	42160	15310	8290	9140	3730	27460
28	2620	7000	7200	11470	10290	40370	37340	13280	7010	9560	4300	42900
29	2310	6390	7570	10310	---	---	35910	13090	6960	9730	4170	37880
30	2580	6520	---	12820	---	---	35320	13230	7000	9730	4080	34730
31	4480	---	22470	10870	---	---	---	14100	---	9520	4010	---
MONTH	2860	4930	7000	9870	13110	31540	40620	23500	9660	6660	6370	8790

07153150 KEYSTONE LAKE NEAR CLEVELAND, OKLA.

LOCATION.--Lat 36°14'30", long 96°21'40", in SW1/4SW1/4 sec.32, T.21 N., R.9 E., Pawnee County, 0.4 mi (0.6 km) upstream from Cowskin Creek, and 6.2 mi (10.0 km) southeast of Cleveland.

PERIOD OF RECORD.--Chemical analyses: October 1966 to current year.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	RESERVOIR STORAGE (AC-FT)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	DISSOLVED NITRATE (NO3) (MG/L)
OCT.										
04...	492400	--	--	290	146	0	100	440	.05	.20
25...	484200	--	--	250	122	0	95	360	.29	1.3
NOV.										
14...	588100	--	--	160	100	0	61	250	.05	.20
DEC.										
19...	560600	--	--	71	76	0	32	110	.05	.20
JAN.										
17...	591100	--	--	110	116	0	51	180	.09	.40
FEB.										
07...	733700	--	--	110	130	0	61	170	.05	.20
MAR.										
08...	764600	--	--	120	142	0	75	180	.05	.20
APR.										
19...	1433000	--	--	85	136	0	100	120	.07	.30
MAY										
02...	1534000	--	--	88	150	0	110	130	.09	.40
23...	879000	--	--	--	--	--	--	--	--	--
JUNE										
14...	632900	--	--	200	208	0	200	300	.05	.20
JULY										
11...	612300	91	27	230	198	0	210	340	.04	.20
AUG.										
01...	576200	92	27	250	214	0	190	380	.03	.10
22...	541800	75	21	230	159	0	150	330	.52	2.3
SEP.										
13...	536900	73	21	230	157	0	150	340	.06	.27

DATE	DISSOLVED NITRITE (N) (MG/L)	DISSOLVED NITRITE (NO2) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (TONS PER AC-FT)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)
OCT.									
04...	--	--	1020	1.39	220	100	8.5	1830	6.9
25...	--	--	858	1.17	190	90	7.9	1550	7.1
NOV.									
14...	--	--	613	.83	150	68	5.7	1110	7.0
DEC.									
19...	--	--	292	.40	96	34	3.2	554	6.7
JAN.									
17...	--	--	479	.65	150	55	3.9	864	6.4
FEB.									
07...	--	--	508	.69	160	53	3.8	889	6.7
MAR.									
08...	--	--	568	.77	190	74	3.8	955	7.2
APR.									
19...	--	--	488	.66	200	88	2.6	814	7.1
MAY									
02...	--	--	542	.74	230	110	2.5	854	7.1
23...	--	--	--	--	--	--	--	1170	--
JUNE									
14...	--	--	1040	1.41	360	190	4.6	1620	6.9
JULY									
11...	.00	.0	995	1.35	340	180	5.4	1640	8.3
AUG.									
01...	.00	.0	1080	1.47	340	170	5.9	1880	7.6
22...	.01	.0	904	1.23	270	140	6.1	1610	7.3
SEP.									
13...	.00	.0	922	1.25	270	140	6.1	1640	7.3

07157950 CIMARRON RIVER NEAR BUFFALO, OKLA.

LOCATION.--Lat 36°55'28", long 99°23'56", in NW1/4SW1/4 sec.7, T.28 N., R.20 W., Harper County, at bridge on U.S. Highway 64, 7.0 mi (11.3 km) downstream from gaging station, 14.0 mi (22.5 km) east of Buffalo, and at mile 289.0 (465.0 km).

DRAINAGE AREA.--11,930 sq mi (30,898.7 km^2), of which 4,813 sq mi (12,465.7 km^2) is probably noncontributing.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	DISSOLVED NITRATE (NO3) (MG/L)
OCT.										
05...	17	--	--	1200	218	0	360	1800	.09	.40
15...	18	--	--	1200	224	0	350	1800	.20	.90
25...	59	--	--	790	224	0	260	1200	.25	1.1
NOV.										
05...	84	--	--	830	228	0	220	1300	.27	1.2
15...	162	--	--	1600	254	0	250	2400	.81	3.6
25...	118	--	--	3500	264	0	320	5400	--	--
DEC.										
04...	78	--	--	1200	220	0	250	1800	.07	.30
18...	84	--	--	5200	304	0	460	8000	--	--
25...	164	--	--	1200	216	0	200	1900	1.1	4.8
JAN.										
04...	118	--	--	2400	234	0	300	3700	.23	1.0
15...	119	--	--	5400	244	0	410	8600	--	--
25...	162	--	--	4200	274	0	400	6600	--	--
FEB.										
05...	462	100	50	1500	212	0	300	2200	.00	.00
15...	104	120	45	1000	271	0	270	1500	.72	3.2
25...	119	120	45	1100	248	0	260	1700	.45	2.0
MAR.										
05...	216	--	--	920	216	0	220	1400	.07	.30
15...	878	--	--	420	200	0	150	640	.84	3.7
25...	2600	--	--	650	170	0	150	990	.72	3.2
APR.										
05...	464	--	--	280	158	4	110	400	.43	1.9
15...	482	--	--	780	240	10	260	1200	.43	1.9
25...	1580	--	--	790	208	0	250	1200	.50	2.2
MAY										
05...	216	85	40	480	183	0	240	730	.04	.18
15...	66	98	43	570	227	0	270	850	.02	.09
22...	39	93	46	720	220	0	290	1100	.01	.04
JUNE										
05...	18	87	47	580	165	0	290	860	.00	.00
24...	16	190	71	1800	208	0	590	2700	.16	.70
JULY										
02...	16	280	75	3000	155	0	800	4400	.18	.80
25...	71	160	55	6700	98	0	370	10000	.29	1.3
30...	216	71	29	300	238	0	170	400	.28	1.2
AUG.										
05...	27	110	35	580	209	8	240	830	1.1	4.8
15...	1.7	360	70	3300	185	0	920	5000	.57	2.5
SEP.										
06...	84	28	16	230	128	0	99	330	1.6	7.0
13...	2630	59	13	550	170	0	68	810	1.2	5.3
27...	3520	54	13	430	145	0	79	630	.37	1.6

07157950 CIMARRON RIVER NEAR BUFFALO, OKLA.

PERIOD OF RECORD.--Chemical analyses: October 1959 to September 1963, July 1968 to current year.
Water temperatures: July 1968 to current year.

REMARKS.--Continuous monitor records for water temperature and specific conductance are collected for this station.
No flow July 14, Aug. 18- Sept. 3.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS-SOLVED NITRITE (N) (MG/L)	DIS-SOLVED NITRITE (NO2) (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)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)
OCT.										
05...	--	--	3660	4.98	168	500	320	23	6120	8.3
15...	--	--	3700	5.03	180	500	320	23	6080	8.3
25...	--	--	2600	3.54	414	440	260	16	4410	8.3
NOV.										
05...	--	--	2680	3.64	608	430	240	17	4550	7.1
15...	--	--	4620	6.28	2020	500	290	31	7610	7.0
25...	--	--	9540	13.0	3040	620	400	61	14900	7.6
DEC.										
04...	--	--	3610	4.91	760	460	280	24	5880	7.5
18...	--	--	14300	19.4	3240	860	610	77	20300	7.7
25...	--	--	3560	4.84	1580	440	260	25	5920	7.5
JAN.										
04...	--	--	6860	9.33	2190	560	370	44	10800	6.9
15...	--	--	15300	20.8	4920	790	590	84	22200	7.2
25...	--	--	11900	16.2	5210	720	500	68	17700	8.2
FEB.										
05...	.00	.0	4370	5.94	5450	460	280	31	7520	8.2
15...	.00	.0	3140	4.27	882	490	260	20	5430	8.1
25...	.00	.0	3450	4.69	1110	490	280	22	5890	8.0
MAR.										
05...	--	--	2910	3.96	1700	400	220	20	4900	7.9
15...	--	--	1550	2.11	3670	310	150	10	2580	7.3
25...	--	--	2060	2.80	14500	270	130	17	3550	7.5
APR.										
05...	--	--	1050	1.43	1320	230	94	8.0	1790	8.5
15...	--	--	2780	3.78	3620	500	290	15	4400	8.5
25...	--	--	2670	3.63	11400	420	250	17	4380	8.2
MAY										
05...	.00	.0	1800	2.45	1050	380	230	11	2940	8.0
15...	.00	.0	2070	2.82	369	420	240	12	3360	8.1
22...	.00	.0	2440	3.32	257	420	240	15	4240	8.2
JUNE										
05...	.01	.0	--	--	--	410	280	12	3530	8.2
24...	.01	.0	5160	7.02	223	770	600	28	8950	7.9
JULY										
02...	.00	.0	8940	12.2	386	1000	880	41	14100	8.1
25...	.01	.0	17200	23.4	3300	630	550	117	26800	7.9
30...	.01	.0	1190	1.62	694	300	100	7.6	1870	7.8
AUG.										
05...	.02	.0	1840	2.50	134	420	230	12	3190	8.4
15...	.01	.0	9880	13.4	45.3	1200	1000	42	15600	7.8
SEP.										
06...	.01	.0	--	--	--	140	31	8.6	1460	8.1
13...	.01	.0	1620	2.20	11500	200	61	17	2900	7.8
27...	.02	.0	1320	1.80	12500	190	69	14	2420	7.8

07157950 CIMARRON RIVER NEAR BUFFALO, OKLA.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), MEAN VALUES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(CONTINUOUS HOURLY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4980	20000	7800	7440	15400	9300	2230	4560	4190	14200	2280	---
2	5140	5580	7450	5670	8320	9340	1930	3040	5690	13000	2280	---
3	4980	4020	7500	7540	7150	10100	1880	3040	4010	14000	2550	---
4	5710	4650	6410	9600	8850	9900	1560	3330	3970	---	3060	4550
5	6130	4550	9710	---	7340	5090	1780	2990	3510	---	3050	9800
6	6670	4640	14400	---	10600	6690	1860	---	3360	---	3910	1420
7	7080	5150	17600	---	10600	5240	2340	3300	3510	---	4710	2470
8	6760	4630	18200	---	8240	17500	---	3460	3640	---	5560	5910
9	6240	4470	18300	---	12300	10600	4000	3820	3830	---	7030	2370
10	6230	7660	18100	---	7840	9600	3800	3890	3720	---	7000	2520
11	5620	4290	19700	---	7160	4810	4290	3410	3970	---	8940	3300
12	5880	3580	19900	---	6860	3900	4290	3360	4190	---	9910	15700
13	6100	13300	19800	---	7280	3890	3970	3610	4260	---	10100	2900
14	6120	4480	20500	26700	5520	3490	4300	3470	4330	---	11200	1650
15	6120	7610	19400	22400	5310	2610	4840	3390	4290	---	14600	1750
16	5280	7610	19200	15400	6290	2540	3920	3830	4250	---	14400	2780
17	5010	5220	20300	7210	6860	2330	3320	3570	4830	---	---	2980
18	4900	16700	21500	7700	8410	2650	3530	3930	5160	---	---	2160
19	5260	16800	21000	5260	6670	3120	5260	4050	5940	---	---	1790
20	5180	9750	20400	8200	5380	3080	3830	3510	6130	---	---	2900
21	67300	12500	13800	8180	5110	4610	4770	3530	6350	---	---	3630
22	12500	9510	16300	17500	5340	4510	2830	4130	6700	---	---	3010
23	6260	8250	6070	11800	6150	5350	3250	4190	7000	---	---	---
24	4700	8110	5210	13400	5730	7360	10800	4170	8380	26400	---	14400
25	4420	14900	6080	18000	5740	4510	4590	3770	8780	25000	---	4410
26	4410	8180	6700	18000	5730	3020	6870	3420	9510	14400	---	9150
27	4590	8140	7300	---	5440	2810	4600	3640	9720	---	---	2420
28	5100	8530	12600	---	5450	2830	4030	13200	9720	10700	---	2780
29	5520	7140	16600	14500	---	2510	3950	3140	6480	3660	---	2810
30	7910	8760	14000	14500	---	4670	3910	14600	19800	1820	---	3090
31	21300	---	7450	9720	---	2820	---	9280	---	23400	---	---
MONTH	8370	8290	14170	---	7400	5510	3880	4490	5970	---	---	4330

TEMPERATURE (°C) OF WATER, MEAN VALUES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(CONTINUOUS HOURLY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18.5	6.5	4.5	1.0	---	10.5	9.5	---	23.5	---	---	28.0
2	18.5	7.0	5.5	1.0	5.5	11.5	10.5	---	22.0	---	---	27.0
3	20.0	9.0	2.0	---	5.0	9.5	8.5	---	24.0	---	27.0	25.0
4	19.5	11.0	0.5	---	7.0	8.5	8.0	---	24.5	---	24.0	---
5	20.5	12.5	0.5	---	8.0	8.0	10.0	---	22.5	---	23.0	---
6	16.0	13.0	0.5	---	5.0	11.0	12.0	---	24.0	---	23.5	---
7	17.5	10.5	0.5	---	2.5	11.0	10.0	---	26.0	---	24.0	---
8	19.0	10.5	0.5	---	---	10.5	---	---	26.0	---	24.5	---
9	19.5	9.5	0.5	---	4.0	9.0	---	---	---	---	27.0	---
10	22.0	8.5	0.5	---	2.5	7.5	---	25.5	---	---	26.5	---
11	24.0	8.0	0.0	---	2.0	8.5	11.0	21.5	---	---	26.0	---
12	19.5	8.0	0.0	---	6.0	12.0	14.0	21.0	---	---	25.5	---
13	19.5	5.5	0.0	3.5	5.5	13.0	15.5	19.5	---	---	22.5	---
14	18.0	2.0	0.0	6.5	3.0	10.5	17.0	19.0	---	---	24.0	---
15	15.5	1.5	0.0	5.5	3.5	10.5	17.5	19.5	---	---	25.5	---
16	19.5	3.0	0.0	6.0	1.0	10.0	13.5	20.5	---	---	25.5	---
17	19.5	3.0	0.0	---	1.5	10.0	15.5	20.0	---	---	25.0	---
18	15.0	1.0	0.0	---	5.0	11.5	17.0	23.5	---	---	26.5	---
19	10.0	2.5	0.0	---	6.0	9.5	15.0	24.5	---	---	28.0	---
20	---	3.0	0.0	---	6.0	8.5	14.0	23.0	---	---	27.5	---
21	---	3.0	1.0	---	7.0	10.0	18.0	25.5	---	---	26.5	---
22	---	2.5	2.0	---	6.0	11.5	18.0	22.0	---	---	28.0	---
23	---	1.5	1.5	---	7.5	12.0	19.0	24.0	---	---	29.0	---
24	---	1.5	1.5	---	9.5	11.0	17.0	24.0	---	---	27.5	---
25	---	3.5	2.0	---	7.0	7.5	15.0	22.5	---	---	29.0	---
26	---	3.0	3.5	---	8.0	9.5	11.5	22.5	---	---	27.5	---
27	12.0	3.5	3.5	---	8.5	10.5	---	13.0	---	---	27.5	---
28	12.0	2.0	6.5	---	9.0	10.5	---	18.0	---	---	27.5	---
29	12.0	2.0	2.0	---	---	9.5	---	20.0	---	---	27.0	---
30	10.5	2.5	2.0	---	---	8.0	---	19.5	---	---	27.0	---
31	4.5	---	2.0	---	---	8.0	---	22.5	---	---	26.5	---
MONTH	---	5.5	1.5	---	5.5	10.0	---	---	---	---	26.0	---

07157950 CIMARRON RIVER NEAR BUFFALO, OKLA.--Continued

DISSOLVED SULFATE (SO_4), IN MILLIGRAMS PER LITRE, MEAN VALUES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	220	470	310	310	410	330	100	200	190	400	100	---
2	230	250	310	260	320	330	86	140	260	380	100	---
3	220	180	310	310	310	340	84	140	180	390	110	---
4	260	210	290	340	330	340	70	150	180	---	140	200
5	270	200	340	---	310	230	80	130	160	---	140	340
6	300	210	400	---	350	300	83	---	150	---	180	64
7	310	230	440	---	350	240	110	150	160	---	210	110
8	300	210	450	---	320	440	---	160	160	---	250	270
9	280	200	450	---	370	350	180	170	170	---	300	110
10	280	310	450	---	320	340	170	170	170	---	300	110
11	250	190	470	---	310	220	190	150	180	---	330	150
12	260	160	470	---	300	180	190	150	190	---	340	420
13	270	390	470	---	310	170	180	160	190	---	340	130
14	270	200	480	560	250	160	190	160	190	---	360	74
15	270	310	460	500	240	120	220	150	190	---	400	78
16	240	310	460	410	280	110	180	170	190	---	400	120
17	220	230	480	310	300	100	150	160	220	---	---	130
18	220	430	490	310	320	120	160	180	230	---	---	97
19	240	430	480	240	300	140	240	180	270	---	---	80
20	230	340	480	320	240	140	170	160	270	---	---	130
21	90	380	390	320	230	210	210	160	280	---	---	160
22	380	340	420	440	240	200	130	190	300	---	---	140
23	280	320	270	370	280	240	150	190	300	---	---	---
24	210	320	230	390	260	310	350	190	320	550	---	400
25	200	410	270	450	260	200	210	170	330	540	---	200
26	200	320	300	450	260	140	300	150	340	400	---	330
27	210	320	310	---	240	130	210	160	340	---	---	110
28	230	320	380	---	240	130	180	380	340	350	---	120
29	250	310	430	400	---	110	180	140	290	160	---	130
30	320	330	390	400	---	210	180	400	470	81	---	140
31	490	---	310	340	---	130	---	330	---	520	---	---
MONTH	260	290	390	---	290	220	170	180	240	---	---	170

DISSOLVED SULFATE (TONS/DAY), MEAN VALUES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	125	126	81	680	135	2780	241	100	19	35	---
2	17	90	117	66	485	154	1080	175	109	15	29	---
3	15	57	108	96	289	188	734	142	64	14	22	---
4	14	55	70	77	239	196	566	134	53	---	17	114
5	13	47	48	---	158	129	278	115	49	---	11	137
6	11	46	24	---	142	167	194	---	44	---	13	15
7	11	44	31	---	123	125	220	107	40	---	13	23
8	11	39	36	---	78	276	---	109	36	---	12	264
9	11	39	34	---	103	305	249	123	34	---	12	44
10	13	64	29	---	110	984	262	119	29	---	11	29
11	11	44	33	---	132	1760	350	96	28	---	9.8	22
12	11	44	36	---	146	1410	316	89	26	---	8.1	638
13	9.6	112	32	---	109	964	242	95	24	---	5.9	1030
14	11	70	39	105	70	662	234	87	26	---	3.4	305
15	13	122	35	141	63	350	282	81	25	---	2.3	74
16	13	109	32	283	81	316	350	87	25	---	0.78	53
17	15	71	37	406	95	389	202	76	27	---	---	54
18	14	144	46	219	133	439	166	89	23	---	---	34
19	15	164	65	105	119	415	270	92	22	---	---	24
20	19	143	90	131	89	387	727	72	19	---	---	37
21	12	156	95	136	76	419	413	65	15	---	---	45
22	60	131	154	218	81	340	142	70	16	---	---	32
23	50	122	178	168	93	430	137	72	14	---	---	---
24	36	114	174	168	87	2220	586	72	14	100	---	555
25	32	139	171	195	87	2220	971	61	11	104	---	970
26	30	124	137	189	87	1300	794	56	10.0	72	---	11190
27	30	132	94	---	84	1380	474	57	9.0	---	---	2400
28	33	131	96	---	90	1930	266	126	12	81	---	400
29	35	135	121	151	---	1460	202	57	13	251	---	228
30	50	140	123	344	---	1940	177	168	25	48	---	230
31	84	---	85	404	---	2510	---	150	---	206	---	---
MONTH	23	98	81	---	147	835	471	103	31	---	---	729

07157950 CIMARRON RIVER NEAR BUFFALO, OKLA.--Continued

DISSOLVED CHLORIDE (CL), IN MILLIGRAMS PER LITRE, MEAN VALUES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1400	7700	2400	2300	5200	2900	510	1300	1200	4500	530	---
2	1500	1600	2300	1700	2600	2900	410	790	1700	4100	530	---
3	1400	1100	2300	2300	2200	3200	400	790	1100	4500	620	---
4	1700	1300	1900	3000	2700	3100	290	880	1100	---	790	1300
5	1800	1300	3000	---	2200	1500	360	770	940	---	790	3100
6	2000	1300	4600	---	3300	2000	390	---	890	---	1100	240
7	2100	1500	6400	---	3300	1500	550	870	940	---	1300	590
8	2000	1300	6700	---	2500	6300	---	930	990	---	1600	1700
9	1900	1300	6800	---	3900	3300	1100	1000	1100	---	2100	560
10	1900	2300	6700	---	2400	3000	1000	1100	1000	---	2100	610
11	1700	1200	7500	---	2200	1400	1200	910	1100	---	2800	870
12	1700	970	7700	---	2100	1100	1200	890	1200	---	3100	5300
13	1800	4200	7600	---	2200	1100	1100	980	1200	---	3200	740
14	1800	1300	8000	11400	1600	940	1200	930	1200	---	3500	320
15	1800	2300	7400	9000	1500	640	1400	900	1200	---	4700	350
16	1500	2300	7300	5200	1900	620	1100	1100	1200	---	4600	700
17	1400	1500	7900	2200	2100	550	880	960	1400	---	---	770
18	1400	5900	8500	2400	2600	650	950	1100	1500	---	---	490
19	1500	5900	8300	1500	2000	810	1500	1100	1800	---	---	370
20	1500	3000	7900	2500	1600	800	1100	940	1800	---	---	740
21	34000	4000	4400	2500	1500	1300	1400	950	1900	---	---	980
22	4000	3000	5700	6300	1600	1300	720	1200	2000	---	---	780
23	1900	2500	1800	3700	1800	1600	860	1200	2100	---	---	---
24	1300	2500	1500	4300	1700	2200	3400	1200	2600	11300	---	4600
25	1200	4900	1800	6600	1700	1300	1300	1000	2700	10500	---	1200
26	1200	2500	2000	6600	1700	780	2100	910	3000	4600	---	2800
27	1300	2500	2200	---	1600	710	1300	990	3000	---	---	580
28	1500	2600	4000	---	1600	720	1100	4200	3000	3400	---	700
29	1600	2200	5800	4700	---	610	1100	820	1900	990	---	710
30	2400	2700	4500	4700	---	1300	1100	4700	7600	380	---	800
31	8400	---	2300	3000	---	710	---	2900	---	9600	---	---
MONTH	3000	2600	5100	---	2300	1600	1100	1300	1800	---	---	1200

DISSOLVED CHLORIDE (TONS/DAY), MEAN VALUES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	116	2040	959	593	8510	1170	14270	1530	626	220	182	---
2	109	593	857	436	3870	1340	5180	1010	719	167	152	---
3	97	352	795	707	2050	1730	3450	818	396	157	119	---
4	95	347	466	686	1990	1780	2330	796	326	---	98	726
5	84	297	425	---	1140	832	1260	658	293	---	62	1230
6	76	293	273	---	1350	1120	904	---	260	---	81	57
7	75	286	448	---	1170	811	1150	634	239	---	84	123
8	77	246	544	---	615	3980	---	650	218	---	79	1740
9	75	249	512	---	1070	2890	1540	752	207	---	86	233
10	85	479	431	---	841	8710	1600	734	175	---	74	157
11	71	277	530	---	937	11250	2190	572	172	---	82	130
12	70	266	579	---	999	8700	1980	530	164	---	73	8160
13	64	1230	513	---	781	5930	1490	575	152	---	55	5860
14	74	445	647	2160	459	3970	1470	522	161	---	33	1310
15	84	908	558	2540	409	1920	1810	483	159	---	27	333
16	87	814	510	3540	542	1720	2160	530	158	---	9.1	300
17	94	459	617	2890	653	2040	1200	460	172	---	---	310
18	91	1970	808	1640	1070	2420	995	547	150	---	---	171
19	95	2260	1120	682	795	2410	1750	568	147	---	---	110
20	126	1280	1500	1030	581	2240	4450	433	123	---	---	211
21	4680	1650	1070	1070	492	2660	2640	390	102	---	---	273
22	631	1150	2060	3140	526	2150	803	438	109	---	---	182
23	333	965	1180	1710	617	2800	806	452	97	---	---	---
24	232	893	1130	1850	574	16120	5630	446	111	2040	---	6400
25	199	1670	1140	2890	571	14050	6170	373	95	2040	---	6120
26	188	976	919	2800	570	7460	5440	335	88	832	---	95750
27	190	1040	676	---	550	7740	3010	344	80	---	---	12770
28	215	1060	1020	---	590	10900	1650	1360	106	771	---	2240
29	232	957	1650	1760	---	7870	1240	334	89	1520	---	1280
30	386	1160	1400	4000	---	12380	1090	1970	411	219	---	1330
31	1460	---	624	3610	---	14130	---	1300	---	3840	---	---
MONTH	338	887	837	---	1230	5330	2750	686	210	---	---	5670

ARKANSAS RIVER BASIN

07157950 CIMARRON RIVER NEAR BUFFALO, OKLA.--Continued

DISSOLVED SOLIDS, IN MILLIGRAMS PER LITRE, MEAN VALUES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2960	12730	4740	4520	9540	5690	1230	2700	2470	8780	1260	---
2	3060	3340	4520	3530	5070	5710	1040	1740	3410	8020	1260	---
3	2960	2360	4550	4580	4330	6190	1010	1740	2350	8650	1430	---
4	3420	2760	3870	5880	5410	6070	806	1920	2330	---	1750	2690
5	3690	2690	5950	---	4450	3030	945	1710	2040	---	1750	6000
6	4030	2750	8910	---	6510	4040	995	---	1940	---	2290	717
7	4290	3070	10950	---	6510	3130	1300	1900	2040	---	2790	1380
8	4090	2740	11390	---	5020	10870	---	2000	2120	---	3330	3550
9	3760	2640	11470	---	7580	6510	2350	2230	2240	---	4260	1320
10	3750	4650	11320	---	4770	5880	2220	2280	2170	---	4240	1410
11	3370	2530	12510	---	4340	2860	2530	1970	2330	---	5460	1900
12	3530	2080	12660	---	4150	2280	2530	1940	2470	---	6070	9730
13	3670	8210	12580	---	4410	2280	2330	2100	2510	---	6190	1650
14	3680	2650	13100	17710	3300	2020	2530	2010	2550	---	6890	863
15	3680	4620	12290	14520	3170	1470	2880	1960	2530	---	9030	926
16	3150	4620	12140	9540	3790	1420	2290	2240	2500	---	8910	1580
17	2980	3120	12960	4370	4150	1290	1920	2070	2870	---	---	1700
18	2910	10360	13850	4680	5130	1490	2050	2300	3080	---	---	1180
19	3140	10420	13480	3140	4030	1790	3140	2380	3570	---	---	951
20	3090	5970	13030	5000	3220	1760	2240	2040	3690	---	---	1650
21	52080	7710	8530	4980	3050	2730	2830	2050	3830	---	---	2110
22	7710	5820	10110	10870	3190	2670	1610	2430	4050	---	---	1720
23	3770	5030	3650	7270	3700	3200	1870	2470	4240	---	---	---
24	2790	4940	3110	8280	3440	4470	6640	2450	5110	17490	---	6910
25	2610	9220	3660	11250	3440	2670	2720	2200	5360	16450	---	2600
26	2600	4980	4050	11250	3440	1730	4160	1980	5820	8910	---	5590
27	2720	4960	4430	---	3250	1590	2720	2120	5950	---	---	1350
28	3040	5200	7770	---	3260	1610	2360	8150	5950	6570	---	1580
29	3300	4330	10300	8970	---	1410	2310	1800	3910	2130	---	1590
30	4810	5350	8650	8970	---	2770	2290	9030	12580	970	---	1770
31	13700	---	4520	5950	---	1600	---	5680	---	15260	---	---
MONTH	5430	5060	8870	---	4490	3300	2270	2650	3600	---	---	2560

DISSOLVED SOLIDS (TONS/DAY), MEAN VALUES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	240	3370	1910	1180	15730	2300	34160	3190	1320	427	432	---
2	223	1210	1710	885	7670	2640	13050	2230	1460	325	361	---
3	200	745	1590	1410	4090	3390	8790	1810	838	304	274	---
4	194	722	939	1350	3940	3490	6530	1730	691	---	218	1510
5	169	618	835	---	2280	1710	3290	1460	632	---	137	2420
6	152	609	529	---	2640	2250	2310	---	566	---	173	169
7	151	589	769	---	2280	1660	2720	1380	517	---	173	287
8	154	511	923	---	1220	6840	---	1410	469	---	162	3540
9	152	521	867	---	2090	5660	3260	1600	441	---	172	548
10	172	955	734	---	1670	17140	3420	1560	375	---	149	362
11	145	580	878	---	1870	23290	4600	1240	364	---	162	283
12	143	573	957	---	2010	18490	4160	1150	346	---	144	14920
13	129	2390	849	---	1560	12600	3170	1240	318	---	107	13110
14	149	929	1060	3350	937	8580	3080	1130	338	---	65	3560
15	169	1810	929	4080	839	4400	3740	1050	334	---	51	875
16	179	1620	852	6540	1090	3960	4580	1130	331	---	18	676
17	193	942	1010	5780	1310	4810	2610	991	356	---	---	689
18	189	3470	1310	3270	2120	5520	2150	1160	307	---	---	412
19	195	3970	1820	1400	1600	5320	3590	1200	299	---	---	288
20	259	2520	2460	2050	1190	4960	9490	935	249	---	---	473
21	7170	3210	2070	2130	1010	5540	5470	841	207	---	---	587
22	1230	2260	3680	5400	1080	4490	1810	924	219	---	---	404
23	672	1910	2390	3340	1250	5740	1760	952	195	---	---	---
24	482	1770	2320	3600	1170	32190	11020	940	221	3160	---	12390
25	416	3160	2300	4920	1160	29310	12840	796	188	3200	---	12800
26	394	1940	1850	4770	1160	16550	10920	727	173	1610	---	188820
27	396	2060	1350	---	1120	17430	6270	738	158	---	---	29850
28	443	2110	1990	---	1210	24520	3490	2680	209	1510	---	5060
29	473	1920	2920	3390	---	18210	2640	735	179	3260	---	2890
30	767	2300	2710	7700	---	25710	2310	3780	680	566	---	2950
31	2370	---	1250	7110	---	31810	---	2560	---	6100	---	---
MONTH	592	1710	1540	---	2400	11310	6110	1440	433	---	---	11530

07158000 CIMARRON RIVER NEAR WAYNOKA, OKLA.

LOCATION.--Lat 36°30'55", 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 (1.3 km) downstream from Main Creek, 5.0 mi (8.0 km) south of Waynoka, and at mile 247.0 (397.4 km).

DRAINAGE AREA.--13,334 sq mi (34,535.1 km^2), of which 4,830 sq mi (12,509.7 km^2) is probably noncontributing.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (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)
OCT.											
05...	15	--	--	9600	184	0	660	15000	.8	--	--
15...	3.4	--	--	11000	188	0	860	17000	.7	--	--
25...	60	--	--	15000	184	0	1300	23000	.7	--	--
NOV.											
05...	132	--	--	4900	206	0	430	7600	--	--	--
15...	136	--	--	9700	208	0	550	15000	--	--	--
25...	182	--	--	6100	244	0	470	9600	--	--	--
DEC.											
05...	88	--	--	6200	272	0	380	9800	--	--	--
15...	116	--	--	15000	244	0	810	23000	--	--	--
25...	311	--	--	4000	210	0	300	6200	--	--	--
JAN.											
05...	195	--	--	6300	220	6	380	9900	--	--	--
15...	194	--	--	12000	196	0	680	18000	--	--	--
25...	247	--	--	9600	208	0	570	15000	--	--	--
FEB.											
05...	150	--	--	4400	238	0	400	7000	--	--	--
15...	245	--	--	4400	256	0	440	6900	--	--	--
25...	153	--	--	4700	236	0	490	7200	--	--	--
MAR.											
05...	250	--	--	5600	206	0	560	8800	--	--	--
15...	1570	--	--	1600	190	0	200	2500	--	.59	2.6
25...	3130	--	--	2100	184	0	360	3300	--	.29	1.3
APR.											
05...	3840	--	--	910	160	0	150	1400	--	1.1	4.9
15...	578	--	--	1800	238	4	560	2800	--	.88	3.9
25...	1160	--	--	1300	168	0	410	2000	--	.36	1.6
MAY											
05...	381	220	61	1400	215	0	610	2300	--	.30	1.3
15...	265	250	49	2000	188	0	760	3000	--	.27	1.2
25...	200	260	79	2700	150	0	790	4200	--	.23	1.0
JUNE											
05...	143	250	83	3700	168	0	700	5600	--	.12	.50
15...	48	300	100	5200	157	0	860	7900	--	.07	.30
25...	2.5	390	85	7400	174	0	1000	12000	--	.38	1.7
JULY											
25...	64	180	39	2500	107	0	450	3800	--	.63	2.8
AUG.											
05...	34	190	73	4500	221	0	450	6800	--	1.7	7.5
12...	2.0	270	98	8600	182	0	700	14000	--	.11	.50
SEP.											
05...	463	220	37	4000	125	0	530	6000	--	.98	4.3
15...	1350	130	45	4300	123	0	290	6500	--	.58	2.6
27...	32500	68	17	1500	146	0	110	2300	--	.78	3.5

07158000 CIMARRON RIVER NEAR WAYNOKA, OKLA.

PERIOD OF RECORD.--Chemical analyses: October 1952 to September 1963, July 1968 to current year.
Water temperatures: July 1968 to current year.

REMARKS.--Continuous monitor records for water temperature and specific conductance are collected for this station.
No flow July 4-24, Aug. 14- Sept. 3

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS-SOLVED NITRITE (N) (MG/L)	DIS-SOLVED NITRITE (NO2) (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)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)
OCT.											
05...	--	--	--	25400	34.5	1030	1100	950	126	37100	8.3
15...	--	--	--	30100	40.9	276	1300	1100	133	42500	8.3
25...	--	--	--	39900	54.3	6460	1400	1200	174	54100	8.0
NOV.											
05...	--	--	--	13600	18.5	4850	670	500	82	20500	7.3
15...	--	--	--	26100	35.5	9580	1000	830	133	35100	7.6
25...	--	--	--	16900	23.0	8310	820	620	93	24300	7.7
DEC.											
05...	--	--	--	17400	23.7	4130	880	660	91	25500	8.2
15...	--	--	--	40000	54.4	12500	1500	1300	169	52100	8.2
25...	--	--	--	11000	15.0	9240	580	410	72	17100	8.0
JAN.											
05...	--	--	--	17500	23.8	9210	880	690	92	25100	8.5
15...	--	--	--	30800	41.9	16100	1200	1000	151	41600	8.3
25...	--	--	--	26800	36.4	17900	1100	930	153	36300	8.2
FEB.											
05...	--	--	--	12300	16.7	4980	820	630	67	17700	8.2
15...	--	--	--	12600	17.1	8340	860	650	68	18000	8.3
25...	--	--	--	13300	18.1	5490	900	710	68	18700	8.3
MAR.											
05...	--	--	--	15700	21.4	10600	830	660	85	22800	8.0
15...	--	--	--	4630	6.30	19600	350	190	37	7510	7.4
25...	--	--	--	6140	8.35	51900	600	450	37	9860	7.1
APR.											
05...	--	--	--	2750	3.74	28500	280	150	24	4670	8.2
15...	--	--	--	5850	7.96	9130	840	640	27	9020	8.4
25...	--	--	--	4180	5.68	13100	610	470	23	6680	8.2
MAY											
05...	.00	.0	.22	4740	6.45	4880	800	620	22	8010	8.2
15...	.01	.0	.13	6490	8.83	4640	830	670	30	10700	8.1
25...	.01	.0	.10	8020	10.9	4330	970	850	38	13000	8.1
JUNE											
05...	.01	.0	.09	10400	14.1	4020	970	830	52	16700	8.0
15...	.01	.0	.09	14600	19.9	1890	1200	1000	66	21800	8.1
25...	.01	.0	.13	20800	28.3	140	1300	1200	89	29700	7.8
JULY											
25...	.00	.0	--	6990	9.51	1210	610	520	44	11600	7.8
AUG.											
05...	.01	.0	--	12200	16.6	1120	780	590	70	19800	7.8
12...	.13	.4	.12	21000	28.6	113	1100	930	114	29500	7.8
SEP.											
05...	.01	.0	--	10800	14.7	13500	700	600	66	18300	7.5
15...	.01	.0	--	11400	15.5	41600	510	410	83	19000	7.9
27...	.03	.1	--	377	.51	33100	240	120	42	7470	7.8

07158000 CIMARRON RIVER NEAR WAYNOKA, OKLA.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), MEAN VALUES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(CONTINUOUS HOURLY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	31800	32700	24100	32300	37600	18500	5390	8020	18700	28100	11100	---
2	33600	38000	24300	23400	19800	18600	5380	7350	18600	29100	12400	---
3	35000	32400	24500	23400	19700	18300	5680	8080	14700	32600	18300	---
4	37700	46600	24500	25100	18300	20700	5680	6580	14700	---	18300	---
5	37400	30300	25500	25200	18300	21400	4670	7200	15600	---	18300	16400
6	39300	21800	25800	25100	21100	17300	4680	8370	15600	---	18200	16400
7	38500	26500	42700	47600	21100	14800	5060	9010	15800	---	22000	19300
8	39600	27500	49800	47600	21100	12200	5840	9720	15700	---	22000	19200
9	39200	27400	43000	47500	27600	16000	9640	7890	16600	---	28700	41900
10	39500	28000	49800	48700	27600	15300	9780	9840	17000	---	28700	42100
11	40600	28000	49300	48900	26300	13800	9290	1260	18100	---	29400	17800
12	40800	29000	49800	50600	26300	9650	8540	9450	19200	---	29500	17600
13	41600	27400	49800	50500	19900	9510	8720	17700	20100	---	---	14500
14	41600	28700	51700	50500	21000	10600	8520	9370	19400	---	---	8840
15	43100	35300	52100	41600	17600	8010	9420	9630	20700	---	---	17300
16	43000	39700	51900	41600	18600	5510	8050	10200	19800	---	---	5330
17	39600	18900	55100	40600	18500	6320	10600	10100	25600	---	---	5290
18	42800	18100	55100	40500	19000	6140	8110	10800	23500	---	---	8160
19	51400	24000	45800	13600	19400	6240	6140	9870	25400	---	---	8140
20	37900	22100	45700	13500	23000	7270	12900	12100	24100	---	---	9800
21	37400	41900	45500	18000	22900	8020	7000	11200	24100	---	---	9890
22	52400	43500	44400	18000	18800	7990	6950	11300	25100	---	---	12600
23	55900	36600	39000	23400	25100	8500	7640	11600	26480	---	---	12600
24	51200	36500	39000	23400	20300	10900	7020	12100	25500	---	---	11900
25	57000	24300	17400	36300	19500	8560	6940	12200	27700	10900	---	11900
26	31300	24900	17300	35900	19700	7240	6050	13800	27700	10800	---	8850
27	37300	38100	17300	38800	19800	7270	7110	13800	30600	22400	---	6720
28	39100	40200	19900	38600	19500	6390	8330	13800	30600	22500	---	7800
29	34000	26400	19800	36400	---	6380	8810	17400	27500	31900	---	6940
30	32300	26200	19900	36000	---	5140	8290	17400	30900	31900	---	6970
31	34700	---	34000	37200	---	5130	---	17400	---	11200	---	---
MONTH	40540	30700	37220	34830	21690	10890	7540	10790	21840	---	---	14010

TEMPERATURE (°C) OF WATER, MEAN VALUES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(CONTINUOUS HOURLY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17.0	9.0	---	---	---	11.5	11.0	19.5	---	---	---	---
2	17.0	10.0	---	---	---	12.0	12.5	16.5	---	28.0	---	---
3	18.5	12.0	---	---	---	10.0	11.0	19.5	---	31.0	---	---
4	19.0	13.5	---	---	---	10.0	11.0	20.5	---	33.0	---	---
5	19.5	14.0	---	---	---	9.0	12.5	18.0	---	---	---	---
6	16.0	16.0	---	---	---	12.0	14.0	20.5	---	---	---	---
7	17.0	13.5	---	---	---	12.5	12.0	18.5	---	---	---	---
8	20.0	12.5	---	---	---	7.0	6.0	20.5	---	---	---	---
9	19.5	12.0	---	---	---	8.5	7.0	22.5	25.5	---	---	---
10	22.0	11.5	---	---	---	8.0	9.0	24.5	24.5	---	---	---
11	24.5	11.0	---	---	---	4.5	13.0	21.5	25.0	---	---	---
12	19.5	10.5	---	---	---	---	16.0	21.0	26.5	---	---	---
13	21.0	9.0	---	---	7.5	5.5	17.5	19.5	25.5	---	---	---
14	19.5	6.0	---	---	4.5	10.5	18.0	18.5	26.5	---	---	---
15	14.5	6.0	---	---	4.0	10.0	18.0	20.0	27.0	---	---	---
16	21.0	6.5	---	---	2.0	10.5	15.0	20.0	26.0	---	---	---
17	19.5	6.0	---	---	2.0	11.0	16.5	20.0	25.5	---	---	---
18	9.0	4.0	---	---	4.5	12.5	18.0	23.0	25.5	---	---	---
19	7.5	5.5	---	---	6.5	11.0	16.0	23.5	22.0	---	---	---
20	10.0	6.5	---	---	7.0	10.0	17.0	24.5	24.0	---	---	---
21	13.5	5.5	---	---	8.0	11.5	20.0	---	25.5	---	---	---
22	16.0	6.0	---	---	6.5	12.5	19.0	---	27.0	---	---	---
23	12.0	---	---	---	8.5	13.5	20.0	---	23.5	---	---	---
24	11.0	---	---	---	10.5	12.5	17.5	---	25.0	---	---	---
25	13.5	---	---	---	8.0	9.0	17.0	---	26.0	---	---	---
26	13.5	---	---	---	8.5	11.0	14.0	---	25.0	---	---	---
27	13.0	---	---	---	9.5	12.0	14.5	---	25.5	---	---	---
28	14.0	---	---	---	9.5	12.5	17.0	---	24.5	---	---	---
29	14.5	---	---	---	---	11.5	20.0	---	---	---	---	---
30	13.0	---	---	---	---	10.0	20.5	---	---	---	---	---
31	7.0	---	---	---	---	9.5	---	---	---	---	---	---

07158000 CIMARRON RIVER NEAR WAYNOKA, OKLA.--Continued

DISSOLVED SULFATE (SO_4), IN MILLIGRAMS PER LITRE, MEAN VALUES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	600	610	490	610	680	410	300	450	850	970	260	---
2	620	690	490	480	430	410	290	410	850	980	290	---
3	640	610	500	480	430	410	310	450	800	1000	410	---
4	680	810	500	500	410	440	310	360	800	---	410	---
5	680	580	510	510	410	450	250	400	820	---	410	380
6	700	460	510	500	450	390	250	470	820	---	410	380
7	690	520	750	820	450	340	280	510	820	---	460	420
8	710	540	850	820	450	280	320	550	820	---	460	420
9	700	540	760	820	540	370	540	440	830	---	550	740
10	710	540	850	840	540	360	550	560	830	---	550	740
11	720	540	850	840	520	320	520	53	850	---	560	400
12	730	560	850	860	520	220	480	530	860	---	570	400
13	740	540	850	860	430	540	490	840	870	---	---	340
14	740	550	880	860	450	600	480	530	860	---	---	210
15	760	650	890	740	400	450	530	540	880	---	---	390
16	760	710	880	740	410	300	450	580	870	---	---	120
17	710	420	930	720	410	350	600	570	940	---	---	120
18	750	400	930	720	420	340	450	610	910	---	---	190
19	880	490	800	320	420	340	340	560	940	---	---	190
20	680	460	800	310	470	410	730	690	920	---	---	230
21	680	740	790	400	470	450	390	630	920	---	---	230
22	890	760	780	400	410	450	390	640	930	---	---	290
23	940	670	700	480	500	480	430	660	950	---	---	290
24	870	670	700	480	440	620	390	690	940	---	---	280
25	960	490	390	660	420	480	390	690	960	250	---	280
26	590	500	390	660	430	400	330	790	960	250	---	210
27	680	690	390	700	430	410	400	790	1000	470	---	160
28	700	720	430	690	420	350	470	790	1000	470	---	180
29	630	520	430	660	---	350	500	840	960	600	---	160
30	610	520	430	660	---	280	460	840	1000	600	---	160
31	640	---	630	670	---	280	---	840	---	260	---	---
MONTH	720	580	680	640	460	400	420	590	890	---	---	300

DISSOLVED SULFATE (TONS/DAY), MEAN VALUES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	42	226	224	355	1240	191	7100	5930	620	21	89	---
2	37	344	210	255	719	206	5840	1350	566	29	69	---
3	31	226	186	272	442	229	3790	950	493	0.13	80	---
4	29	340	134	217	381	315	5090	601	387	---	68	---
5	26	196	96	177	296	380	2620	529	315	---	49	1070
6	21	127	48	163	295	333	1240	591	262	---	35	112
7	18	121	81	244	289	268	877	552	254	---	26	58
8	15	112	99	200	229	269	1340	556	225	---	20	67
9	12	101	84	164	204	435	2650	421	192	---	21	148
10	12	97	90	190	218	976	2590	539	166	---	13	321
11	9.4	103	94	163	261	3820	2550	46	146	---	6.9	105
12	8.6	122	97	163	285	2560	1890	418	132	---	2.9	176
13	8.2	205	94	233	324	3610	1350	636	143	---	---	418
14	7.6	235	107	326	284	3070	1000	384	142	---	---	1710
15	7.8	243	100	418	213	1800	1020	388	114	---	---	1510
16	8.0	309	95	386	204	801	1650	398	89	---	---	231
17	6.5	144	113	521	200	802	1390	385	84	---	---	156
18	6.9	130	145	1120	221	797	773	412	69	---	---	232
19	10	209	172	324	219	697	602	362	53	---	---	208
20	26	195	225	219	234	640	1190	415	42	---	---	227
21	60	302	306	257	238	663	1790	363	30	---	---	209
22	149	338	476	274	191	497	1260	349	28	---	---	240
23	137	280	444	382	226	482	571	384	20	---	---	212
24	123	271	654	330	187	1880	777	371	9.9	---	---	196
25	150	242	385	406	181	6660	3080	324	6.5	70	---	671
26	83	231	348	391	182	4470	2210	352	4.7	258	---	1470
27	89	310	324	320	184	2940	1660	357	3.0	56	---	9420
28	93	331	329	206	176	4140	1280	414	14	21	---	2060
29	82	232	290	340	---	5780	935	387	13	92	---	925
30	87	224	315	286	---	7790	767	378	19	176	---	667
31	119	---	489	333	---	8150	---	649	---	192	---	---
MONTH	49	218	221	311	297	2120	2030	651	155	---	---	877

07158000 CIMARRON RIVER NEAR WAYNOKA, OKLA.--Continued

DISSOLVED CHLORIDE (CL), IN MILLIGRAMS PER LITRE, MEAN VALUES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13100	13500	9500	13300	15800	6900	1400	2400	7000	11400	3600	---
2	13900	16000	9600	9200	7500	6900	1400	2200	6900	11800	4100	---
3	14600	13400	9700	9200	7400	6800	1500	2400	5100	13500	6800	---
4	15900	20000	9700	10000	6800	7900	1500	1900	5100	---	6800	---
5	15700	12400	10100	10000	6800	8200	1200	2100	5500	---	6800	5900
6	16600	8400	10300	10000	8100	6300	1200	2600	5500	---	6700	5900
7	16200	10600	18200	20500	8100	5100	1300	2800	5600	---	8500	7200
8	16700	11100	21500	20500	8100	4000	1600	3100	5600	---	8500	7200
9	16600	11000	18300	20400	11100	5700	3000	2400	6000	---	11600	17800
10	16700	11300	21500	21000	11100	5400	3100	3100	6200	---	11600	17900
11	17200	11300	21300	21100	10500	4700	2900	---	6700	---	12000	6500
12	17300	11800	21500	21900	10500	3000	2600	3000	7200	---	12000	6500
13	17700	11000	21500	21800	7500	3000	2700	6500	7600	---	---	5000
14	17700	11600	22400	21800	8000	3400	2600	2900	7300	---	---	2700
15	18400	14700	22600	17700	6500	2400	2900	3000	7900	---	---	6300
16	18300	16800	22500	17700	6900	1500	2400	3200	7500	---	---	1400
17	16700	7100	24000	17200	6900	1800	3400	3200	10200	---	---	1400
18	18200	6700	24000	17200	7100	1700	2500	3500	9200	---	---	2500
19	22300	9400	19600	4600	7300	1800	1700	3100	10100	---	---	2500
20	15900	8600	19600	4500	9000	2100	4300	4000	9500	---	---	3100
21	15700	17800	19500	6600	8900	2400	2000	3600	9500	---	---	3100
22	22700	18600	19000	6600	7000	2400	2000	3700	10000	---	---	4100
23	24400	15300	16500	9200	10000	2600	2300	3800	10600	---	---	4100
24	22200	15300	16500	9200	7700	3500	2000	4000	10100	---	---	3900
25	24900	9600	6400	15200	7300	2600	2000	4000	11200	3500	---	3900
26	12900	9900	6300	15000	7400	2100	1700	4700	11200	3500	---	2700
27	15700	16000	6300	16400	7500	2100	2100	4700	12500	8700	---	1900
28	16500	17000	7500	16300	7300	1800	2500	4700	12500	8700	---	2300
29	14100	10600	7500	15200	---	1800	2700	6400	11100	13100	---	2000
30	13300	10500	7500	15100	---	1300	2500	6400	12700	13100	---	2000
31	14500	---	14100	15600	---	1300	---	6400	---	3600	---	---
MONTH	17200	12600	15600	14500	8400	3600	2200	3600	8400	---	---	5000

DISSOLVED CHLORIDE (TONS/DAY), MEAN VALUES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	919	5000	4360	7810	28770	3210	34410	32030	5060	252	1240	---
2	828	8030	4090	4870	12560	3480	28280	7140	4600	351	979	---
3	709	4980	3630	5200	7710	3810	18730	5140	3120	1.8	1340	---
4	685	8430	2610	4300	6350	5650	25130	3100	2450	---	1130	---
5	594	4220	1920	3510	4920	6930	12000	2790	2130	---	824	16540
6	493	2340	972	3230	5350	5350	5710	3220	1770	---	582	1730
7	429	2460	1960	6080	5240	4010	4160	3050	1740	---	483	998
8	357	2300	2500	4980	4150	3800	6690	3110	1530	---	368	1150
9	286	2090	2030	4080	4210	6700	14820	2270	1390	---	440	3560
10	275	2020	2270	4760	4510	14810	14490	3020	1230	---	267	7740
11	223	2140	2360	4100	5280	55910	14170	---	1160	---	145	1710
12	206	2580	2440	4140	5770	34760	10320	2330	1110	---	62	2860
13	196	4230	2380	5900	5670	20140	7400	4910	1260	---	---	6230
14	181	4940	2720	8260	5120	17410	5470	2140	1200	---	---	22850
15	189	5530	2560	10020	3470	9730	5690	2170	1020	---	---	24200
16	193	7300	2430	9260	3440	3910	8930	2240	768	---	---	2630
17	154	2440	2920	12410	3360	4090	7900	2160	908	---	---	1770
18	167	2150	3760	26740	3760	4030	4180	2340	696	---	---	3030
19	264	4060	4240	4710	3780	3540	3050	2030	573	---	---	2720
20	603	3630	5560	3170	4440	3380	6900	2400	436	---	---	3090
21	1400	7260	7530	4230	4510	3580	9400	2070	308	---	---	2840
22	3810	8220	11640	4520	3240	2680	6590	2000	296	---	---	3410
23	3550	6460	10450	7300	4460	2630	3050	2200	229	---	---	3010
24	3110	6240	15380	6310	3310	10700	4070	2140	107	---	---	2760
25	3900	4710	6210	9320	3130	36430	16090	1870	75	966	---	9450
26	1810	4560	5590	8960	3170	23600	11140	2090	54	3580	---	19560
27	2070	7230	5210	7510	3210	15530	8750	2120	37	1060	---	116770
28	2180	7860	5770	4830	3050	21170	6990	2460	173	401	---	26700
29	1830	4710	5070	7820	---	29540	5140	2940	156	2020	---	11580
30	1910	4530	5530	6550	---	37120	4170	2870	240	3870	---	8370
31	2690	---	10980	7720	---	38810	---	4930	---	2680	---	---
MONTH	1170	4750	4740	6860	5570	14080	10460	3840	1190	---	---	11820

07158000 CIMARRON RIVER NEAR WAYNOKA, OKLA.--Continued

DISSOLVED SOLIDS, IN MILLIGRAMS PER LITRE, MEAN VALUES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21990	22670	16180	22370	26370	11950	2810	4560	12100	19200	6620	---
2	23350	26670	16330	15650	12930	12020	2800	4120	12020	19950	7480	---
3	24410	22450	16480	15650	12850	11800	3000	4600	9080	22600	11800	---
4	26450	33170	16480	16930	11800	13610	3000	3600	9080	---	11800	---
5	26220	20860	17230	17010	11800	14140	2330	4020	9760	---	11800	10360
6	27660	14440	17460	16930	13910	11040	2340	4800	9760	---	11720	10360
7	27050	17990	30220	33920	13910	9150	2590	5220	9910	---	14590	12550
8	27880	18740	35590	33920	13910	7350	3110	5700	9830	---	14590	12480
9	27580	18670	30450	33850	18820	10060	5640	4480	10510	---	19650	29620
10	27810	19120	35590	34750	18820	9530	5740	5780	10820	---	19650	29770
11	28640	19120	35210	34910	17840	8420	5410	---	11650	---	20180	11420
12	28790	19880	35590	36190	17840	5650	4910	5520	12480	---	20260	11270
13	29390	18670	35590	36110	13010	5560	5030	11340	13160	---	---	8930
14	29390	19650	37020	36110	13840	6280	4900	5460	12630	---	---	5110
15	30530	24640	37320	29390	11270	4560	5500	5640	13610	---	---	11040
16	30450	27960	37170	29390	12020	2890	4580	6020	12930	---	---	2770
17	27880	12250	39590	28640	11950	3430	6280	5950	17310	---	---	2740
18	30300	11650	39590	28560	12330	3310	4620	6420	15720	---	---	4660
19	36790	16100	32560	8280	12630	3380	3310	5800	17160	---	---	4640
20	26600	14670	32490	8220	15350	4060	7820	7280	16180	---	---	5750
21	26220	29620	32340	11570	15270	4560	3880	6680	16180	---	---	5810
22	37550	30830	31510	11570	12170	4540	3850	6750	16930	---	---	7620
23	40190	25620	27430	15650	16930	4880	4310	6950	17970	---	---	7620
24	36640	25540	27430	15650	13310	6480	3900	7280	17230	---	---	7150
25	41020	16330	11120	25390	12700	4920	3840	7350	18900	6480	---	7150
26	21610	16780	11040	25090	12850	4040	3250	8420	18900	6420	---	5120
27	26150	26750	11040	27280	12930	4060	3960	8420	21090	14890	---	3700
28	27500	28340	13010	27130	12700	3480	4770	8420	21090	14970	---	4420
29	23650	17910	12930	25470	---	3470	5090	11120	18740	22070	---	3840
30	22370	17760	13010	25160	---	2640	4740	11120	21310	22070	---	3860
31	24180	---	23650	26070	---	2640	---	11120	---	6680	---	---
MONTH	28590	21160	26080	24280	14360	6580	4240	6660	14470	---	---	8840

DISSOLVED SOLIDS (TONS/DAY), MEAN VALUES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1540	8390	7430	13110	47990	5580	67680	60370	8790	425	2290	---
2	1390	13400	6970	8320	21710	6040	55630	13560	7990	593	1800	---
3	1190	8360	6180	8870	13330	6630	36570	9680	5560	3.1	2330	---
4	1140	13970	4450	7310	11050	9740	49060	5940	4360	---	1970	---
5	991	7100	3260	5970	8570	11910	24160	5300	3770	---	1430	29100
6	821	4020	1650	5490	9200	9360	11480	6050	3140	---	1010	3050
7	716	4180	3260	10080	9010	7140	8250	5700	3080	---	827	1730
8	595	3900	4130	8240	7140	6990	13020	5780	2710	---	630	1990
9	477	3530	3370	6760	7110	11820	27580	4280	2440	---	743	5920
10	458	3410	3750	7880	7620	26250	26950	5610	2160	---	451	12860
11	371	3610	3900	6790	8960	100670	26440	---	2010	---	245	2990
12	342	4350	4040	6840	9780	64680	19360	4330	1920	---	104	4990
13	325	7160	3940	9750	9800	37510	13850	8580	2170	---	---	11110
14	302	8330	4500	13650	8820	32230	10260	3980	2080	---	---	42770
15	313	9250	4230	16670	6050	18330	10610	4030	1760	---	---	42340
16	321	12150	4010	15400	5970	7670	16830	4160	1330	---	---	5180
17	256	4230	4810	20640	5840	7880	14620	4020	1540	---	---	3480
18	278	3740	6200	44500	6520	7790	7880	4330	1190	---	---	5710
19	437	6910	7030	8520	6550	6840	5890	3770	973	---	---	5130
20	1010	6220	9210	5750	7580	6430	12660	4400	743	---	---	5740
21	2340	12080	12490	7370	7710	6750	17930	3830	524	---	---	5290
22	6290	13650	19310	7870	5620	5050	12580	3680	503	---	---	6250
23	5860	10790	17400	12460	7590	4940	5770	4050	388	---	---	5530
24	5140	10410	25620	10770	5710	19780	7760	3930	181	---	---	5080
25	6420	8020	10870	15560	5420	68330	30720	3430	128	1790	---	17390
26	3030	7750	9780	14970	5480	44870	21590	3770	92	6620	---	36610
27	3460	12060	9120	12520	5550	29510	16670	3820	63	1810	---	223570
28	3640	13080	9970	8060	5280	40740	13140	4430	290	687	---	50440
29	3070	7980	8760	13060	---	56870	9620	5130	263	3400	---	22100
30	3200	7670	9550	10940	---	73510	7840	5010	403	6490	---	15960
31	4510	---	18390	12880	---	76890	---	8620	---	4940	---	---
MONTH	1940	7990	7990	11520	9540	26410	20080	7120	2080	---	---	22010

07159750 COTTONWOOD CREEK AT SEWARD, OKLA.

LOCATION.--Lat 35°47'53", long 97°29'32", in SW1/4SW1/4 sec. 02, T.15 N., N. 03 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 sq mi (818.4 km^2).

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS-CHARGE (CFS)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (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)
FEB.											
20...	--	--	--	140	276	0	220	170	4.5	20	--
25...	--	--	--	130	254	0	230	160	4.3	19	--
28...	--	--	--	130	238	6	240	160	4.5	20	--
MAR.											
01-05	38	--	--	130	258	0	240	160	2.9	13	--
06-10	434	--	--	50	152	0	97	56	1.4	6.4	--
11-14	362	--	--	22	100	0	45	26	1.1	5.0	--
15-17	124	--	--	80	206	0	170	100	1.4	6.3	--
18-24	132	--	--	110	250	0	220	150	2.3	10	--
25-26	2440	--	--	22	92	0	43	25	.90	4.0	--
27-29	574	--	--	43	150	0	92	54	1.2	5.2	--
30-31	278	--	--	61	192	0	130	79	1.3	5.7	--
APR.											
01-03	341	--	--	74	212	0	150	95	1.6	7.2	--
04-05	352	--	--	46	166	0	95	55	1.3	5.6	--
06-09	199	--	--	78	232	0	160	100	1.6	7.1	--
10-11	170	--	--	59	200	0	120	74	1.4	6.3	--
12-15	105	--	--	91	264	0	180	120	1.6	7.3	--
16-17	910	--	--	45	146	0	83	58	1.3	5.7	--
18-21	304	--	--	66	210	0	140	82	1.4	6.0	--
22-30	105	--	--	96	286	0	200	120	1.6	7.1	--
MAY											
01-06	80	120	48	130	339	0	240	150	2.8	12	.00
07...	575	59	21	61	171	0	110	81	.82	3.6	.00
08-09	117	73	28	73	244	0	130	91	2.1	9.3	.00
10-23	60	130	48	140	341	0	250	170	3.6	16	.00
24-25	166	61	22	60	194	0	110	72	1.3	5.8	.00
26-31	86	91	35	96	277	0	210	110	2.5	11	.01
JUNE											
01-02	830	54	17	40	146	0	81	46	1.7	7.5	.00
03-06	2610	32	11	24	124	0	53	17	.70	3.1	.00
07-08	550	57	20	44	165	4	100	63	1.1	4.9	.00
09-20	127	97	39	91	301	0	190	110	2.1	9.3	.00
21-30	63	120	49	130	364	0	250	160	3.4	15	.00
JULY											
01-02	162	62	22	71	191	4	130	74	--	--	--
03-11	52	97	39	110	300	0	230	130	--	--	--
12-15	102	80	32	100	261	0	190	110	--	--	--
16...	170	55	20	52	161	0	110	69	--	--	--
17-22	60	76	29	82	239	0	160	90	--	--	--
23-25	119	57	21	67	180	0	120	77	--	--	--
26-31	52	85	33	110	274	0	200	120	--	--	--
AUG.											
01-02	71	55	22	72	171	0	110	86	2.5	11	.00
03-09	34	84	36	120	272	0	190	130	3.3	15	.00
10-11	72	53	21	68	167	0	120	72	2.5	11	.01
12-18	28	72	31	120	243	0	160	130	4.0	18	.00
19-31	18	90	39	150	297	0	200	160	5.4	24	.00
SEP.											
01-03	22	84	37	160	290	0	200	170	4.5	20	.01
04-11	549	50	18	48	157	0	100	52	1.2	5.3	.01
12...	79	72	29	84	234	0	150	96	1.9	8.4	.00
13-14	1780	24	7.4	17	89	0	28	20	.99	4.4	.01
15-16	218	61	22	49	198	0	100	62	1.2	5.2	.02
17-21	116	83	33	84	265	0	150	110	1.9	8.3	.02
22-26	68	110	42	110	332	0	210	140	2.6	11	.02
27-28	2680	25	8.1	21	94	0	31	24	1.2	5.3	.01
29-30	795	43	15	32	151	0	69	34	1.0	4.6	.07

07159750 COTTONWOOD CREEK AT SEWARD, OKLA.

PERIOD OF RECORD.--Chemical analyses: February 1973 to current year.
Water temperatures: February 1973 to current year.

EXTREMES, Current year.--Dissolved solids: Maximum, 1,000 mg/l May 10-23; minimum, 163 mg/l Sept. 13-14.
Hardness: Maximum, 520 mg/l May 10-23; minimum, 90 mg/l Sept. 13-14.
Specific conductance: 1,580 micromhos May 21; minimum daily 237 micromhos Sept. 28.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS- SOLVED NITRITE (NO2) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	PHOS- PHATE (PO4) (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)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)
FEB.											
20...	--	--	7.4	940	1.28	--	430	200	2.9	1370	8.2
25...	--	--	6.8	883	1.20	--	420	210	2.8	1300	7.3
28...	--	--	7.2	878	1.19	--	400	200	2.8	1300	8.5
MAR.											
01-05	--	--	8.0	908	1.23	93.2	420	210	2.8	1330	7.5
06-10	--	--	1.2	394	.54	462	200	75	1.5	622	7.3
11-14	--	--	.70	214	.29	209	130	48	.8	347	7.0
15-17	--	--	1.3	660	.90	221	320	150	1.9	962	7.7
18-24	--	--	2.6	878	1.19	313	440	240	2.3	1240	7.8
25-26	--	--	.68	206	.28	1360	110	35	.9	329	7.2
27-29	--	--	.67	374	.51	580	200	77	1.3	597	7.1
30-31	--	--	.98	510	.69	383	270	110	1.6	799	7.4
APR.											
01-03	--	--	2.1	586	.80	540	310	140	1.8	898	8.2
04-05	--	--	.88	408	.55	388	220	84	1.3	625	7.4
06-09	--	--	1.5	666	.91	358	340	150	1.8	972	8.0
10-11	--	--	1.2	499	.68	229	270	110	1.6	771	8.0
12-15	--	--	1.9	756	1.03	214	380	160	2.0	1090	8.2
16-17	--	--	1.1	356	.48	875	190	70	1.4	580	7.9
18-21	--	--	1.3	554	.75	455	290	120	1.7	843	7.8
22-30	--	--	2.3	810	1.10	230	400	170	2.1	1140	7.6
MAY											
01-06	.0	1.5	--	954	1.30	206	500	220	2.5	1380	8.2
07...	.0	.46	--	453	.62	703	230	94	1.7	728	8.3
08-09	.0	.98	--	588	.80	186	300	97	1.8	928	7.9
10-23	.0	1.4	--	1000	1.36	162	520	240	2.7	1450	7.8
24-25	.0	1.0	--	481	.65	216	240	84	1.7	762	8.1
26-31	.0	1.4	--	709	.96	165	370	140	2.2	1090	8.2
JUNE											
01-02	.0	.63	--	371	.50	831	200	85	1.2	565	8.1
03-06	.0	--	--	229	.31	1610	130	23	.9	378	8.1
07-08	.0	--	--	--	--	--	220	83	1.3	653	8.4
09-20	.0	1.1	--	768	1.04	263	400	160	2.0	1120	7.6
21-30	.0	1.9	--	896	1.22	152	500	200	2.5	1390	8.1
JULY											
01-02	--	.97	--	487	.66	213	250	82	2.0	789	8.4
03-11	--	2.1	--	797	1.08	112	400	160	2.4	1230	8.0
12-15	--	1.9	--	622	.85	171	330	120	2.4	1050	8.0
16...	--	.49	--	419	.57	192	220	88	1.5	668	7.6
17-22	--	1.5	--	604	.82	97.8	310	110	2.0	955	8.0
23-25	--	1.2	--	461	.63	148	230	81	1.9	758	7.8
26-31	--	2.0	--	725	.99	102	350	120	2.6	1120	7.9
AUG.											
01-02	.0	1.4	--	474	.64	90.9	230	88	2.1	802	7.8
03-09	.0	2.5	--	746	1.01	68.5	360	130	2.8	1190	7.7
10-11	.0	1.7	--	478	.65	92.9	220	82	2.0	746	7.8
12-18	.0	3.0	--	702	.95	53.1	310	110	3.0	1130	7.8
19-31	.0	4.8	--	860	1.17	41.8	390	140	3.3	1340	7.8
SEP.											
01-03	.0	6.4	--	887	1.21	52.7	360	120	3.7	1420	8.0
04-11	.0	.65		351	.48	520	200	70	1.5	633	8.0
12...	.0	--	--	617	.84	132	300	110	2.1	969	7.6
13-14	.0	.41	--	163	.22	783	90	17	.8	272	7.9
15-16	.0	.38	--	403	.55	237	240	81	1.4	718	8.2
17-21	.0	1.0		615	.84	193	340	130	2.0	1040	8.2
22-26	.0	1.3	--	855	1.16	157	450	180	2.3	1290	8.0
27-28	.0	.46	--	169	.23	1220	96	19	.9	299	8.0
29-30	.2	.33	--	275	.37	590	170	45	1.1	489	8.2

07159750 COTTONWOOD CREEK AT SEWARD, OKLA.--Continued

CHEMICAL ANALYSES OF ADDITIONAL SAMPLES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	INSTANTANEOUS DISCHARGE (CFS)	CHEMICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	CHEMICAL OXYGEN DEMAND (HIGH LEVEL) (MG/L)	BIOCHEMICAL OXYGEN DEMAND (MG/L)	PHENOLS (UG/L)
FEB. 23...	--	12	--	10	--
MAR. 14...	206	28	--	4.8	--
APR. 16...	14	80	--	11	--
MAY 10...	69	28	--	11	--
JUNE 21...	69	35	--	3.6	--
JULY 27...	52	25	--	3.4	--
AUG. 23...	14	--	19	6.9	2
SEP. 28...	3230	40	--	2.4	--

FIELD ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION
FEB. 23...	1280	--	6.0	10.2	87
MAR. 14...	725	--	13.0	9.4	97
APR. 16...	470	7.9	14.0	6.7	69
MAY 10...	1000	7.8	21.0	4.6	55
JUNE 21...	1050	--	24.0	7.1	89
JULY 27...	970	--	24.0	4.0	50
AUG. 23...	--	--	24.5	3.2	40

PESTICIDE ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	ALDRIN (UG/L)	CHLORDANE (UG/L)	DDD (UG/L)	DDE (UG/L)	DDT (UG/L)	DIELDRIN (UG/L)	ENDRIN (UG/L)	HEPTACHLOR (UG/L)	HEPTACHLOR EPOXIDE (UG/L)
MAR. 14...	.00	.0	.00	.00	.00	.00	--	.00	.00
JUNE 21...	--	--	--	--	--	--	--	--	--
AUG. 23...	.00	.0	.00	.00	.00	.00	.00	.00	.00

DATE	LINDANE (UG/L)	2,4-D (UG/L)	2,4,5-T (UG/L)	SILVEX (UG/L)	DIAZINON (UG/L)	ETHION (UG/L)	MALATHION (UG/L)	METHYL PARATHION (UG/L)	PARATHION (UG/L)
MAR. 14...	.00	.16	.01	.04	.00	.00	.00	.00	.00
JUNE 21...	--	--	--	--	--	--	--	--	--
AUG. 23...	.00	.08	.01	.01	.09	--	.00	.00	.00

DATE	PCB (UG/L)	DISSOLVED IRON (FE) (UG/L)	DISSOLVED MANGANESE (MN) (UG/L)	DISSOLVED CADMIUM (CD) (UG/L)	DISSOLVED CHROMIUM (CR) (UG/L)	DISSOLVED COPPER (CU) (UG/L)	DISSOLVED LEAD (PB) (UG/L)	DISSOLVED ZINC (ZN) (UG/L)
MAR. 14...	.0	--	--	--	--	--	--	--
JUNE 21...	--	50	180	1	0	12	2	40
AUG. 23...	.0	40	350	1	0	10	2	80

07159750 COTTONWOOD CREEK AT SEWARD, OKLA.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(ONCE-DAILY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	1310	865	1340	496	673	729	1410
2	---	---	---	---	---	1320	945	1380	611	861	806	1380
3	---	---	---	---	---	1350	918	1340	349	1060	997	1370
4	---	---	---	---	---	1370	514	1400	523	1180	1100	651
5	---	---	---	---	---	1360	747	1430	257	1260	1110	357
6	---	---	---	---	---	---	896	1470	338	1150	1150	565
7	---	---	---	---	---	600	1000	733	551	1250	1200	630
8	---	---	---	---	---	---	1090	832	727	1250	1290	622
9	---	---	---	---	---	---	942	1040	884	1360	1280	629
10	---	---	---	---	---	652	681	1220	983	1300	862	702
11	---	---	---	---	---	340	861	1300	1060	1260	594	781
12	---	---	---	---	---	---	1000	1360	1130	937	1030	942
13	---	---	---	---	---	---	1080	1400	1190	1120	1100	254
14	---	---	---	---	---	---	1140	1430	1230	991	1000	287
15	---	---	---	---	---	870	1160	1470	1270	1130	1080	607
16	---	---	---	---	---	959	616	1480	1210	658	1120	805
17	---	---	---	---	---	1080	556	1530	1170	722	1150	945
18	---	---	---	---	---	1160	815	1540	1250	843	1150	1050
19	---	---	---	---	---	1200	956	1540	1180	953	1190	950
20	---	---	---	---	1390	1250	721	1540	1040	1060	1250	1010
21	---	---	---	---	1430	1270	906	1560	1200	1070	1270	1120
22	---	---	---	---	1330	1280	1010	1430	1260	1100	1290	1190
23	---	---	---	---	1250	1300	1080	1460	1310	558	1290	1220
24	---	---	---	---	1300	1240	1090	621	1310	730	1300	1250
25	---	---	---	---	1310	280	1160	886	1370	871	1320	1290
26	---	---	---	---	1320	376	1210	1140	1430	953	1340	1330
27	---	---	---	---	1320	584	1250	1010	1480	1030	1380	344
28	---	---	---	---	1320	702	1290	1130	1500	1070	1410	237
29	---	---	---	---	---	510	1310	1180	1510	1170	1400	392
30	---	---	---	---	---	730	1370	1220	1470	1200	1390	574
31	---	---	---	---	---	870	---	1020	---	1230	1380	---
MONTH	---	---	---	---	---	959	973	1270	1040	1030	1160	830

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(ONCE-DAILY MEASUREMENT)

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

07161000 CIMARRON RIVER AT PERKINS, OKLA.

LOCATION.--Lat 35°57'32", long 97°01'49", in SW1/4SW1/4 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 sq mi (46,236.7 km^2), of which 4,926 sq mi (12,758.3 km^2) is probably noncontributing.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (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)
OCT.												
05...	109	--	--	2800	212	12	310	4300	.5	.20	.90	--
15...	46	--	--	2900	256	0	290	4700	.7	.09	.40	--
25...	242	--	--	1600	170	0	240	2500	.4	.36	1.6	--
NOV.												
05...	710	--	--	1000	102	0	150	1600	--	.43	1.9	--
15...	705	--	--	1800	162	0	210	2800	--	.43	1.9	--
25...	421	--	--	3800	210	0	390	6000	--	.29	1.3	--
DEC.												
05...	303	--	--	4900	244	0	390	7500	--	--	--	--
15...	167	--	--	3800	286	0	370	5900	--	--	--	--
25...	380	--	--	2800	216	0	300	4300	--	.45	2.0	--
JAN.												
05...	4860	--	--	750	140	0	120	1200	--	1.6	7.2	--
15...	286	--	--	2100	230	0	270	3200	--	.52	2.3	--
25...	1670	--	--	620	124	0	120	960	--	1.5	6.8	--
FEB.												
05...	2220	--	--	2900	118	0	420	4500	--	.56	2.5	--
15...	615	--	--	2800	278	0	490	4300	--	.61	2.7	--
25...	515	--	--	2800	286	0	440	4300	--	.47	2.1	--
MAR.												
05...	595	--	--	2700	264	0	420	4200	--	.38	1.7	--
15...	4520	--	--	1000	174	0	200	1600	--	1.3	5.6	--
25...	4240	--	--	480	152	2	140	740	--	1.1	4.8	--
APR.												
05...	7860	--	--	740	170	0	210	1200	--	.63	2.8	--
15...	3940	--	--	800	200	0	400	1200	--	.47	2.1	--
25...	3800	--	--	640	164	0	350	1000	--	.90	4.0	--
MAY												
05...	4030	--	--	420	148	0	380	600	--	.70	3.1	--
15...	1260	--	--	1400	234	0	540	2200	--	.52	2.3	--
25...	1580	--	--	1300	208	0	450	2000	--	.38	1.7	--
JUNE												
05...	4430	43	12	240	145	6	130	320	--	.42	1.9	.00
15...	778	140	57	1500	274	0	400	2300	--	.37	1.6	.00
25...	481	170	61	1500	276	0	400	2300	--	.47	2.1	.00
JULY												
05...	350	140	55	1300	264	0	340	2100	--	.58	2.6	.00
18...	770	49	13	220	120	0	84	340	--	1.4	6.1	.03
25...	634	98	34	690	223	0	220	970	--	.53	2.3	.01
AUG.												
08...	281	150	41	1600	281	0	350	2400	--	.68	3.0	.00
10...	2490	32	8.2	160	110	0	40	250	--	1.1	4.7	.03
25...	131	170	55	1900	255	0	350	2900	--	.13	.60	.73
SEP.												
08...	1450	51	15	170	131	0	100	270	--	1.2	5.3	.00
15...	3130	57	14	410	115	0	100	650	--	1.1	4.8	.01
28...	11600	55	14	380	144	0	88	610	--	1.2	5.3	.01

CHEMICAL ANALYSES OF ADDITIONAL SAMPLES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	INSTANTANEOUS DISCHARGE (CFS)	CHEMICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	CHEMICAL OXYGEN DEMAND (HIGH LEVEL) (MG/L)	BIOCHEMICAL OXYGEN DEMAND (MG/L)
OCT.				
17...	43	26	--	6.4
NOV.				
08...	330	20	--	.4
DEC.				
20...	303	35	--	2.7
JAN.				
17...	740	29	--	5.8
FEB.				
22...	550	9	--	1.2
MAR.				
14...	7590	84	--	4.2
APR.				
25...	3850	55	--	.8
MAY				
18...	1000	19	--	4.4
JUNE				
06...	7390	100	--	8.2
JULY				
31...	545	22	--	1.2
AUG.				
30...	110	--	63	6.3
SEP.				
20...	1060	97	--	4.0

07161000 CIMARRON RIVER AT PERKINS, OKLA.

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.

REMARKS.--Continuous monitor records for water temperature and specific conductance are collected for this station.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS- SOLVED NITRITE (NO2) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	PHOS- PHATE (PO4) (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)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)
OCT.											
05...	--	--	1.0	8120	11.0	2390	660	470	47	13000	8.6
15...	--	--	1.0	8720	11.9	1080	780	570	45	13800	8.3
25...	--	--	2.4	4730	6.43	3090	460	320	32	7930	7.5
NOV.											
05...	--	--	.77	3010	4.09	5770	290	210	26	5310	6.9
15...	--	--	1.1	5190	7.06	9880	410	280	39	8760	7.0
25...	--	--	.88	10700	14.6	12200	800	630	58	16800	7.3
DEC.											
05...	--	--	.77	13700	18.6	11200	840	640	74	20700	8.2
15...	--	--	1.8	11200	15.2	5050	840	610	57	16900	8.1
25...	--	--	2.2	8100	11.0	8310	640	460	48	12400	7.9
JAN.											
05...	--	--	.84	2200	2.99	28900	250	140	21	3900	6.8
15...	--	--	.81	5720	7.78	4420	530	340	40	9540	7.1
25...	--	--	.55	1840	2.50	8300	210	110	19	3320	6.8
FEB.											
05...	--	--	1.0	8200	11.2	49200	710	610	47	12500	7.0
15...	--	--	.98	8350	11.4	13900	860	630	42	12600	8.2
25...	--	--	1.4	8280	11.3	11500	880	650	41	12500	8.2
MAR.											
05...	--	--	1.2	8100	11.0	13000	750	530	43	12600	7.7
15...	--	--	.53	3020	4.11	36900	340	200	24	5080	7.2
25...	--	--	.58	1620	2.20	18500	270	140	13	2780	8.4
APR.											
05...	--	--	.30	2400	3.26	50900	360	220	17	4080	7.3
15...	--	--	.35	2900	3.94	30900	570	410	15	4600	7.4
25...	--	--	.42	2420	3.29	24800	510	380	12	3850	7.2
MAY											
05...	--	--	1.0	1800	2.45	19600	500	380	8.2	2770	7.9
15...	--	--	.28	4940	6.72	16800	860	670	21	7390	8.1
25...	--	--	.67	4320	5.88	18400	720	550	21	6700	7.9
JUNE											
05...	.0	.80	--	858	1.17	10300	160	28	8.3	1620	8.6
15...	.0	.82	--	4540	6.17	9540	580	360	27	7890	8.2
25...	.0	.33	--	4860	6.61	6310	680	450	25	7990	8.3
JULY											
05...	.0	--	--	4480	6.09	4230	580	360	24	6260	8.3
18...	.1	--	--	834	1.13	1730	180	77	7.2	1440	7.7
25...	.0	--	--	1980	2.69	3390	380	200	15	3500	7.9
AUG.											
08...	.0	.43	--	4800	6.53	3640	540	310	30	8260	8.2
10...	.1	.20	--	536	.73	3600	110	20	6.5	1040	7.7
25...	2.4	.35	--	5440	7.40	1920	650	440	32	9330	7.8
SEP.											
08...	.0	.38	--	714	.97	2800	190	82	5.4	1250	7.7
15...	.0	.31	--	1370	1.86	11600	200	110	13	2370	7.7
28...	.0	.53	--	1410	1.92	44200	200	77	12	2250	7.8

FIELD ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION
OCT.				
17...	12900	23.0	10.1	125
NOV.				
08...	5900	13.0	9.9	99
DEC.				
20...	11500	2.5	13.1	102
JAN.				
17...	10400	3.5	12.0	97
FEB.				
22...	12800	7.5	11.6	103
MAR.				
14...	5500	12.0	8.6	87
APR.				
05...	3500	13.0	9.1	92
25...	3950	18.5	8.0	92
MAY				
18...	9400	22.0	7.6	93
JUNE				
06...	2000	24.0	7.6	94
JULY				
31...	3050	25.0	7.4	94
AUG.				
30...	9200	26.0	8.8	113
SEP.				
20...	5000	25.0	7.6	96

07161000 CIMARRON RIVER AT PERKINS, OKLA.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), MEAN VALUES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(CONTINUOUS HOURLY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12000	1830	20300	3640	12100	13300	2190	4750	6080	8660	3910	9440
2	13100	3170	21500	3690	14000	13100	2200	4960	4690	8760	5850	10200
3	13200	2700	21400	1180	13000	12300	3150	3500	2460	5000	6920	9910
4	13500	3050	19600	4780	9830	11800	4050	3380	1770	7320	8040	5120
5	14100	5380	20700	3930	11600	11900	4170	2670	1660	6880	7750	3190
6	14100	4400	23900	2660	9770	11000	4370	2900	1820	7400	8700	1420
7	15900	4430	23900	5300	10500	7970	4660	2990	1590	8330	10600	1760
8	14200	5560	22700	7500	10700	4380	4110	4570	1600	9950	18700	1680
9	13800	8460	19400	8050	11400	3810	4120	4950	2980	4420	4790	2110
10	14000	12800	18800	7820	13000	3140	3370	5840	4190	5150	1250	7600
11	14000	13900	18400	8800	12100	1620	2850	5930	5220	4010	3760	5830
12	14200	15100	19000	9240	11200	1310	3850	---	5830	4430	1600	3900
13	14100	9000	18200	9560	12600	2160	4220	6990	6550	5110	1890	4570
14	14000	10700	18000	11200	12200	5780	5890	7420	6960	2430	2830	2810
15	14000	5850	17000	9540	12400	5020	4650	7420	7430	2780	4990	2360
16	14000	7460	16800	10300	12400	4870	2420	7450	7070	3860	4970	2250
17	13600	7450	16400	9750	13600	5210	2300	7560	7410	2180	5100	6220
18	13500	6180	15700	8210	14300	5490	2510	7720	6430	1160	6190	6310
19	13200	8470	11400	6490	15000	6380	3910	7780	6770	1810	7310	12100
20	12900	10400	10100	9490	14800	5750	3490	7920	7000	2090	8010	7140
21	11200	12300	12300	10400	14000	5650	3290	7910	5880	2930	8470	5340
22	3950	13700	9890	10100	13000	5790	4470	7910	6230	4150	8180	4850
23	6090	13000	10600	10900	12400	5730	5080	6880	6700	4590	10500	5060
24	7110	14600	12300	4300	12900	4170	5120	8290	7490	5560	8750	5710
25	8000	16900	12600	4850	13000	2530	4240	6730	7720	3790	8970	6290
26	6120	13800	13600	3440	12600	2970	3620	4940	8070	3710	8930	7840
27	9950	13800	14900	4410	13800	1970	4410	6760	8880	2940	9250	2510
28	11200	15600	16500	4700	13600	3750	2540	6650	9040	3350	9200	2200
29	11900	21300	19100	5530	---	3360	3200	7180	9070	3730	9170	2170
30	11400	22200	22800	7530	---	2900	5720	7580	8750	3920	9280	2960
31	5850	---	7270	12400	---	2890	---	6170	---	3410	10400	---
MONTH	11880	10120	16940	7090	12560	5740	3810	6120	5780	4640	7230	5030

TEMPERATURE (°C) OF WATER, MEAN VALUES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(CONTINUOUS HOURLY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	9.5	6.0	4.5	7.0	11.0	12.5	20.5	23.0	31.0	28.0	---
2	---	9.5	7.5	3.5	5.5	11.5	11.5	18.5	20.5	31.0	28.0	---
3	---	9.5	5.0	2.5	6.5	11.0	---	18.0	21.0	31.5	28.0	---
4	---	11.0	1.0	2.0	7.5	10.5	---	18.5	23.0	32.0	28.0	---
5	---	12.0	0.5	0.5	8.0	11.0	---	18.5	24.0	31.5	27.5	---
6	---	13.0	0.0	0.0	6.5	12.5	13.0	19.0	23.5	31.5	27.5	---
7	---	12.5	0.0	0.0	5.0	13.0	13.0	20.0	24.5	31.5	28.5	---
8	---	10.0	0.0	0.0	1.0	13.0	11.0	21.0	26.5	31.0	28.0	---
9	---	---	0.0	0.0	1.5	12.0	7.5	23.5	27.5	31.0	25.0	---
10	---	11.0	0.0	0.0	2.5	12.0	7.0	26.0	28.0	30.0	27.0	27.5
11	---	10.0	0.0	0.0	3.5	11.5	9.0	23.5	28.0	29.0	28.0	27.5
12	---	9.5	0.0	0.0	7.0	12.0	12.0	20.5	27.5	30.0	30.0	---
13	---	8.0	0.0	0.0	8.5	13.0	13.5	18.5	28.0	29.5	30.5	---
14	---	5.0	0.0	0.0	6.0	13.5	16.0	19.5	28.0	28.0	30.5	---
15	---	4.5	1.0	0.0	3.5	13.5	16.5	19.0	29.5	25.5	30.5	---
16	---	5.0	1.0	0.0	3.0	12.5	15.5	22.0	28.5	28.0	29.5	---
17	---	5.5	1.0	5.5	3.0	12.0	16.0	21.5	26.5	29.0	30.0	---
18	---	4.0	0.0	10.0	3.5	13.0	17.5	23.5	28.5	31.0	30.0	---
19	---	3.5	0.5	8.0	4.0	14.0	18.0	24.5	25.0	31.0	30.5	---
20	---	4.5	2.0	---	5.5	11.0	18.5	24.5	25.0	31.5	31.5	---
21	---	4.0	3.0	---	7.5	10.5	20.5	26.0	27.5	27.5	31.5	---
22	---	4.5	3.5	---	6.5	12.0	20.5	25.5	28.5	---	30.5	---
23	---	5.0	4.5	---	8.0	14.5	20.5	25.0	28.5	---	28.0	---
24	---	---	4.0	---	9.5	14.0	20.5	25.5	27.5	---	29.0	---
25	---	---	3.0	---	10.5	13.0	19.0	23.5	29.0	---	28.5	---
26	---	---	4.0	---	9.5	12.5	17.5	22.5	29.0	---	29.5	---
27	13.5	6.0	5.0	---	9.5	13.0	16.0	20.0	30.0	---	29.5	---
28	13.0	---	5.5	---	10.0	14.0	16.5	19.0	28.5	---	29.0	---
29	13.0	---	11.0	---	---	---	18.0	22.0	26.5	---	27.0	---
30	14.5	5.5	8.5	---	---	---	19.5	23.5	28.5	---	27.0	---
31	10.5	---	6.5	7.5	---	---	---	22.5	---	28.5	---	---
MONTH	---	7.5	2.5	---	6.0	12.5	15.5	22.0	26.5	---	29.0	---

07161000 CIMARRON RIVER AT PERKINS, OKLA.--Continued

DISSOLVED SULFATE (SO_4), IN MILLIGRAMS PER LITRE, MEAN VALUES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	390	81	510	160	400	410	120	260	340	480	220	520
2	410	140	530	160	420	410	120	280	260	490	330	570
3	410	120	530	52	410	400	180	190	140	280	380	550
4	420	140	500	190	340	390	230	190	98	410	450	280
5	420	210	520	170	390	390	230	150	92	380	430	180
6	420	180	560	120	340	380	240	160	100	410	480	79
7	450	180	560	210	360	290	260	170	88	460	590	98
8	430	210	550	270	370	180	230	250	89	550	---	93
9	420	300	500	290	390	160	230	280	170	250	270	120
10	420	410	490	280	410	140	190	320	230	290	69	420
11	420	420	480	310	400	71	160	330	290	220	210	320
12	430	440	490	320	380	58	210	---	320	250	89	220
13	420	320	480	330	400	95	230	390	360	280	110	250
14	420	370	480	380	400	220	330	410	390	140	160	160
15	420	220	460	330	400	200	260	410	410	150	280	130
16	420	270	460	360	400	190	130	410	390	210	280	130
17	420	270	460	340	420	200	130	420	410	120	280	350
18	420	230	450	290	430	210	140	430	360	64	340	350
19	410	300	390	240	440	240	220	430	380	100	410	670
20	410	360	350	330	430	220	190	440	390	120	440	400
21	380	400	400	360	420	220	180	440	330	160	470	300
22	170	420	340	350	410	220	250	440	350	230	450	270
23	230	410	360	370	400	220	280	380	370	260	580	280
24	260	430	400	180	410	170	280	460	420	310	490	320
25	290	460	400	190	410	110	240	370	430	210	500	350
26	230	420	420	150	400	130	200	270	450	210	500	440
27	350	420	430	180	420	87	250	380	490	160	510	140
28	380	440	460	190	420	160	140	370	500	190	510	120
29	390	530	490	210	---	150	180	400	500	210	510	120
30	390	540	550	270	---	130	320	420	490	220	520	160
31	220	---	270	400	---	130	---	340	---	190	580	---
MONTH	380	320	460	260	400	210	210	340	320	260	380	280

DISSOLVED SULFATE (TONS/DAY), MEAN VALUES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	211	403	472	802	1290	524	10730	1990	1060	480	264	158
2	177	1040	468	376	1330	514	4350	2780	1800	765	407	182
3	150	843	449	205	1630	500	5470	3610	1760	365	434	196
4	134	385	413	1540	1630	543	6370	3500	1840	408	438	160
5	122	367	423	1840	2090	630	4840	1490	1060	333	378	367
6	107	221	382	475	1150	1010	3850	1150	1730	345	443	621
7	99	189	464	463	1000	841	3740	1790	1450	437	464	474
8	89	193	468	173	957	880	2590	1730	649	787	---	398
9	79	239	335	156	946	1490	2960	1450	745	303	1550	540
10	74	318	241	182	907	8600	3150	1510	810	332	376	1790
11	69	290	254	277	821	6720	2080	1410	860	312	1120	1210
12	64	302	262	323	763	3260	2460	---	848	385	407	570
13	58	495	256	279	757	3160	2480	1470	854	742	232	780
14	57	437	235	274	690	4650	3480	1470	836	251	224	711
15	52	389	209	257	663	3420	2730	1400	833	217	294	1040
16	48	467	207	374	641	2610	3100	1260	769	1020	235	539
17	48	334	169	677	640	2050	3300	1260	972	735	207	1040
18	45	224	226	791	707	1670	1880	1200	776	203	223	1590
19	41	266	276	921	724	1570	2200	1160	879	194	245	2630
20	37	321	300	1000	690	1280	2840	1130	864	152	250	1220
21	121	348	369	837	660	1200	2150	1090	665	191	238	733
22	202	412	364	1380	605	1160	2000	1050	640	254	207	575
23	148	416	380	5030	582	1130	2370	1110	578	283	237	509
24	141	436	411	1870	581	1570	3370	1190	565	452	186	507
25	182	521	412	845	567	1960	2450	2270	523	342	176	518
26	119	440	380	861	542	5310	1690	1200	497	453	169	795
27	142	412	365	977	554	3680	4370	1150	507	480	172	1820
28	135	439	426	958	535	3760	2480	939	485	488	163	4180
29	128	496	604	737	---	3040	1960	851	494	525	163	6110
30	159	491	2430	781	---	2870	3400	826	512	404	153	4180
31	448	---	3200	1040	---	4990	---	1060	---	277	174	---
MONTH	119	404	511	861	881	2470	3360	1520	895	417	341	1200

07161000 CIMARRON RIVER AT PERKINS, OKLA.--Continued

DISSOLVED CHLORIDE (CL), IN MILLIGRAMS PER LITRE, MEAN VALUES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3900	440	7300	960	4000	4500	530	1300	1800	2700	1100	3000
2	4400	800	7800	980	4800	4400	530	1400	1300	2800	1700	3300
3	4400	650	7800	290	4400	4100	790	910	590	1400	2100	3200
4	4600	750	7000	1400	3100	3900	1100	870	430	2300	2500	1500
5	4800	1600	7500	1100	3800	3900	1100	640	400	2100	2400	800
6	4800	1200	8800	640	3100	3500	1200	700	440	2300	2700	340
7	5500	1200	8800	1500	3400	2500	1300	730	380	2600	3400	430
8	4800	1600	8300	2300	3400	1200	1100	1300	390	3200	6700	410
9	4700	2600	7000	2500	3700	1000	1100	1400	730	1200	1400	510
10	4800	4300	6700	2400	4400	780	870	1700	1200	1500	300	2300
11	4800	4700	6600	2800	4000	390	690	1800	1500	1100	1000	1700
12	4800	5200	6800	2900	3600	320	1000	---	1700	1200	390	1100
13	4800	2800	6500	3000	4200	520	1200	2100	2000	1500	460	1300
14	4800	3400	6400	3600	4000	1700	1700	2300	2100	590	680	680
15	4800	1700	6000	3000	4100	1400	1300	2300	2300	670	1400	570
16	4800	2300	5900	3300	4100	1400	580	2300	2200	1000	1400	540
17	4600	2300	5700	3100	4600	1500	560	2300	2300	530	1500	1900
18	4600	1900	5500	2600	4900	1600	610	2400	1900	280	1900	1900
19	4400	2700	3700	2000	5200	1900	1100	2400	2100	440	2200	4000
20	4300	3300	3200	3000	5100	1700	910	2500	2100	500	2500	2200
21	3600	4100	4100	3300	4800	1700	840	2500	1700	710	2700	1600
22	1100	4600	3200	3200	4400	1700	1300	2500	1900	1100	2600	1400
23	1800	4400	3400	3500	4100	1700	1500	2100	2000	1300	3400	1500
24	2200	5000	4100	1200	4300	1100	1500	2600	2300	1600	2800	1700
25	2500	5900	4200	1400	4400	610	1200	2000	2400	1000	2800	1900
26	1800	4700	4600	890	4200	730	950	1400	2500	980	2800	2400
27	3200	4700	5100	1200	4700	480	1200	2100	2800	710	2900	610
28	3600	5400	5800	1300	4600	1000	610	2000	2900	860	2900	530
29	3900	7700	6800	1600	---	860	810	2200	2900	990	2900	520
30	3700	8100	8400	2300	---	700	1700	2300	2800	1100	2900	720
31	1700	---	2200	4100	---	700	---	1800	---	880	3300	---
MONTH	4000	3300	6000	2200	4200	1700	1000	1800	1700	1300	2200	1500

DISSOLVED CHLORIDE (TONS/DAY), MEAN VALUES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2120	2210	6770	4900	13030	5690	46670	10200	5680	2720	1280	905
2	1900	5900	6930	2320	15050	5530	18930	14360	9180	4340	2180	1050
3	1620	4610	6640	1120	17400	5120	24670	16940	7650	1890	2390	1130
4	1480	2150	5800	10940	14960	5380	31280	16200	8010	2260	2460	830
5	1390	2750	6130	11800	20440	6280	23970	6490	4630	1830	2110	1660
6	1220	1510	5990	2600	10580	9480	19330	4990	7520	1910	2510	2700
7	1230	1300	7270	3450	9360	7290	19060	7900	6310	2460	2680	2060
8	1020	1470	7130	1470	8950	5990	12750	8780	2830	4520	5070	1730
9	885	2100	4680	1350	9100	9380	14620	7510	3280	1520	7950	2350
10	836	3360	3300	1570	9690	48700	14590	8080	4010	1730	1640	9950
11	784	3260	3430	2470	8290	36740	9050	7570	4490	1530	5380	6480
12	732	3600	3620	2920	7240	17840	11910	---	4530	1940	1770	2770
13	661	4440	3440	2540	7900	17310	12310	8070	4660	3860	1010	3960
14	643	4090	3140	2600	7020	36010	18650	8140	4600	1090	976	3090
15	592	3030	2700	2340	6830	24900	13900	7770	4630	942	1520	4540
16	540	3970	2650	3470	6600	18740	13470	7000	4240	4950	1220	2350
17	534	2830	2120	6200	7080	15210	14380	6990	5400	3200	1080	5640
18	492	1780	2770	6920	8110	12630	8200	6710	4220	885	1210	6600
19	443	2340	2660	7460	8590	12600	10700	6480	4810	846	1360	15610
20	396	2980	2770	9100	8110	9860	13320	6330	4760	662	1400	6730
21	1140	3560	3780	7780	7460	9210	9850	6090	3560	835	1350	3850
22	1290	4590	3340	12710	6470	9020	10100	5900	3460	1260	1160	2960
23	1170	4440	3540	47220	5990	8680	12340	6110	3160	1430	1370	2640
24	1180	5070	4210	12600	6170	10390	17560	6730	3140	2390	1050	2700
25	1580	6690	4300	6050	6060	10750	12190	12410	2920	1650	1000	2800
26	943	4920	4200	5070	5660	29340	8000	6190	2790	2170	957	4450
27	1310	4600	4310	6670	6190	20160	21970	6320	2880	2100	980	7930
28	1280	5350	5390	6760	5910	23360	10780	5130	2760	2250	927	18210
29	1280	7310	8370	5610	---	17670	8910	4700	2810	2520	931	26590
30	1530	7400	37200	6650	---	15690	18100	4600	2900	1960	872	18340
31	3480	---	26940	10680	---	27310	---	5730	---	1290	1010	---
MONTH	1150	3790	6310	6950	9080	15880	16050	7880	4530	2090	1900	5820

07161000 CIMARRON RIVER AT PERKINS, OKLA.--Continued

DISSOLVED SOLIDS, IN MILLIGRAMS PER LITRE, MEAN VALUES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7570	1100	13170	2180	7640	8450	1310	2850	3650	5320	2350	5850
2	8320	1900	13980	2210	8920	8320	1320	2980	2810	5390	3510	6360
3	8380	1620	13910	708	8250	7780	1890	2100	1480	3000	4150	6160
4	8590	1830	12700	2870	6110	7440	2430	2030	1060	4420	4900	3070
5	8990	3230	13440	2360	7300	7510	2500	1600	996	4130	4710	1910
6	8990	2640	15600	1600	6070	6900	2620	1740	1090	4470	5350	852
7	10200	2660	15600	3180	6560	4850	2800	1790	954	5100	6630	1060
8	9060	3340	14790	4540	6700	2630	2470	2740	960	6190	12090	1010
9	8790	5180	12570	4910	7170	2290	2470	2970	1790	2650	2870	1270
10	8920	8110	12160	4750	8250	1880	2020	3500	2510	3090	750	4600
11	8920	8860	11890	5410	7640	972	1710	3560	3130	2410	2260	3500
12	9060	9660	12300	5710	7030	786	2310	---	3500	2660	960	2340
13	8990	5550	11760	5930	7980	1300	2530	4190	3930	3070	1130	2740
14	8920	6700	11620	7030	7710	3470	3530	4480	4180	1460	1700	1690
15	8920	3510	10950	5910	7840	3010	2790	4480	4490	1670	2990	1420
16	8920	4510	10810	6430	7840	2920	1450	4500	4250	2320	2980	1350
17	8650	4500	10540	6060	8650	3130	1380	4580	4480	1310	3060	3730
18	8590	3710	10070	5020	9120	3290	1510	4690	3860	696	3710	3790
19	8380	5190	7170	3890	9600	3830	2350	4730	4060	1090	4410	7640
20	8180	6490	6290	5880	9460	3450	2090	4820	4200	1250	4880	4290
21	7030	7780	7780	6490	8920	3390	1970	4810	3530	1760	5190	3200
22	2370	8720	6150	6290	8250	3470	2680	4810	3740	2490	5000	2910
23	3650	8250	6630	6830	7840	3440	3050	4130	4020	2750	6560	3040
24	4270	9330	7780	2580	8180	2500	3070	5070	4530	3340	5380	3430
25	4870	10880	7980	2910	8250	1520	2540	4040	4690	2270	5530	3770
26	3670	8790	8650	2060	7980	1780	2170	2960	4920	2230	5500	4770
27	6190	8790	9530	2650	8790	1180	2650	4060	5470	1760	5720	1510
28	7030	10000	10610	2820	8650	2250	1520	3990	5580	2010	5680	1320
29	7510	13850	12360	3320	---	2020	1920	4320	5600	2240	5660	1300
30	7170	14450	14860	4560	---	1740	3430	4590	5380	2350	5740	1780
31	3510	---	4380	7840	---	1730	---	3700	---	2050	6490	---
MONTH	7500	6370	10900	4350	7950	3520	2280	3690	3490	2800	4450	3050

DISSOLVED SOLIDS (TONS/DAY), MEAN VALUES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4070	5480	12160	11140	24960	10750	116010	21550	11430	5310	2860	1770
2	3590	14120	12380	5250	28190	10460	47040	30050	19450	8480	4410	2040
3	3060	11460	11870	2790	32960	9780	59190	39070	19010	3940	4700	2200
4	2780	5240	10460	23080	29200	10340	68690	37840	19900	4440	4820	1730
5	2600	5670	11000	26230	39440	12060	52350	16130	11510	3600	4140	3970
6	2280	3240	10620	6460	20650	18480	41700	12400	18690	3750	4910	6720
7	2260	2780	12890	7130	18250	14290	40460	19380	15690	4820	5230	5130
8	1910	3010	12700	2880	17450	12910	27960	18730	7020	8820	9180	4300
9	1660	4120	8450	2650	17610	21050	32040	15720	8060	3280	16760	5850
10	1570	6370	5980	3080	18350	117000	34120	16370	8760	3590	4070	19520
11	1470	6120	6230	4820	15880	91330	22480	15270	9300	3380	12120	13130
12	1370	6680	6540	5710	14050	44350	26630	---	9170	4160	4410	6160
13	1240	8680	6250	4960	15040	43040	26800	15850	9240	8030	2510	8440
14	1200	7970	5710	5050	13420	73040	37690	15980	9040	2720	2430	7690
15	1110	6120	4940	4570	13020	51970	29530	15250	9080	2340	3180	11280
16	1010	7780	4850	6770	12600	39370	33480	13740	8330	11070	2540	5830
17	1000	5560	3900	12100	13320	31480	35730	13720	10590	7950	2240	11290
18	927	3570	5110	13540	15150	25880	20370	13160	8400	2200	2420	17170
19	837	4580	5150	14820	15940	25120	23820	12700	9510	2100	2670	29910
20	751	5820	5400	17780	15070	20030	30760	12400	9340	1650	2740	13220
21	2220	6800	7220	15170	13970	18760	23240	11930	7190	2060	2640	7920
22	2870	8620	6530	24800	12250	18290	21650	11550	6920	2750	2280	6210
23	2360	8420	6910	92040	11440	17640	25680	12040	6250	3060	2680	5510
24	2320	9440	8040	27310	11710	22700	36500	13170	6170	4890	2060	5490
25	3090	12250	8190	12730	11470	26720	26510	24530	5720	3700	1960	5600
26	1890	9230	7900	11760	10770	72170	18240	12960	5460	4900	1870	8710
27	2560	8640	8000	14360	11630	50100	47290	12480	5630	5190	1910	19720
28	2490	9880	9880	14310	11120	52670	26790	10160	5390	5280	1810	45260
29	2450	13090	15120	11470	---	41370	21250	9230	5500	5680	1820	66090
30	2960	13190	66200	13040	---	38990	36790	9020	5680	4370	1700	45170
31	7050	---	52890	20370	---	67890	---	11490	---	3000	1960	---
MONTH	2220	7460	11600	14130	17320	35810	36370	16460	9710	4530	3900	13100

07164200 KEYSTONE LAKE NEAR SAND SPRINGS, OKLA.

LOCATION.--Lat 36°09'05", long 96°15'05", in SW1/4SE1/4 sec.4, T.19 N., R.10 E., Tulsa County, at gaging station at Keystone Dam on Arkansas River, 8.5 mi (13.7 km) west of Sand Springs, and at mile 538.8 (866.9 km).

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	RESERVOIR STORAGE (AC-FT)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	DISSOLVED NITRATE (NO3) (MG/L)	DISSOLVED NITRITE (N) (MG/L)
OCT.											
05...	492400	--	--	490	158	0	140	740	.09	.40	--
NOV.											
15...	587100	--	--	460	150	0	120	700	.32	1.4	--
DEC.											
04...	602600	--	--	360	144	0	110	530	.41	1.8	--
JAN.											
16...	577600	--	--	170	134	0	68	260	.68	3.0	--
FEB.											
06...	737200	--	--	150	128	0	61	230	.68	3.0	--
16...	603600	--	--	150	124	0	61	230	.05	.20	--
MAR.											
01...	601500	--	--	210	136	0	65	320	.05	.20	--
APR.											
02...	1614000	--	--	110	124	0	68	160	.07	.30	--
15...	1343000	--	--	94	112	0	76	140	.29	1.3	--
MAY											
01...	1551000	--	--	100	146	0	110	150	.05	.20	--
16...	1236000	--	--	110	152	0	140	170	.05	.20	--
31...	706200	--	--	150	172	0	170	220	.07	.30	--
JUNE											
15...	628700	--	--	180	184	0	180	280	.11	.50	--
JULY											
01...	611000	--	--	200	184	0	190	300	.05	.20	--
15...	619500	90	24	210	193	0	200	310	.04	.20	.01
AUG.											
02...	579600	89	26	240	191	0	190	360	.09	.40	.01
17...	564700	87	25	280	183	0	190	390	.02	.10	.00
SEP.											
04...	488600	83	25	310	180	0	180	450	.29	1.3	.00
17...	544100	83	26	330	162	0	170	510	.37	1.6	.01

07164200 KEYSTONE LAKE NEAR SAND SPRINGS, OKLA.

DRAINAGE AREA.--74,506 sq mi (192,970.5 km^2), of which 12,541 sq mi (32,481.2 km^2) is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: February 1965 to current year.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS- SOLVED NITRITE (NO2) (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)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TUR- BID- ITY (MG/L)	TUR- BID- ITY (JTU)
OCT.										
05...	--	1570	2.14	280	150	13	2800	7.3	1	--
NOV.										
15...	--	1500	2.04	260	140	12	2680	7.6	4	--
DEC.										
04...	--	1170	1.59	230	110	10	2130	7.4	6	--
JAN.										
16...	--	664	.90	180	70	5.5	1190	6.7	10	--
FEB.										
06...	--	612	.83	170	65	5.0	1070	7.2	10	--
16...	--	592	.81	160	58	5.2	1050	6.8	3	--
MAR.										
01...	--	792	1.08	190	78	6.6	1380	6.9	1	--
APR.										
02...	--	494	.67	160	58	3.8	856	7.0	16	--
15...	--	465	.63	160	68	3.2	787	7.2	36	--
MAY										
01...	--	586	.80	220	100	2.9	926	6.9	1	--
16...	--	646	.88	250	130	3.0	1030	6.9	2	--
31...	--	800	1.09	300	160	3.8	1270	7.1	3	--
JUNE										
15...	--	932	1.27	330	180	4.3	1490	6.8	3	--
JULY										
01...	--	976	1.33	330	180	4.8	1580	6.9	5	--
15...	.0	900	1.22	320	170	5.1	1620	7.7	--	2
AUG.										
02...	.0	1020	1.39	330	170	5.8	1760	7.7	--	2
17...	.0	1090	1.48	320	170	6.8	1850	7.8	--	2
SEP.										
04...	.0	1060	1.44	310	160	7.7	1910	7.9	--	2
17...	.0	1240	1.69	310	180	8.1	2080	7.9	--	--

07164400 ARKANSAS RIVER AT SAND SPRINGS BRIDGE, NEAR TULSA, OKLA.

LOCATION.--Lat 36°06'48", long 96°06'49", in SW1/4NW1/4 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 10.0 mi (16.1 km) upstream from gaging station at Tulsa.

DRAINAGE AREA.--74,615 sq mi (193,252.8 km^2) upstream from gaging station, of which 12,541 sq mi (32,481.2 km^2) is probably noncontributing.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS-CHARGE (CFS)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (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)
OCT.											
05...	1030	--	--	510	160	0	150	780	.52	2.3	--
15...	2090	--	--	540	160	0	150	830	.45	2.0	--
24...	949	--	--	470	162	0	140	730	.61	2.7	--
NOV.											
05...	591	--	--	490	162	0	140	750	.02	.10	--
15...	6850	--	--	470	160	0	140	700	.45	2.0	--
25...	1690	--	--	400	154	0	130	580	.45	2.0	--
DEC.											
05...	3620	--	--	480	144	0	120	720	.47	2.1	--
15...	4790	--	--	520	158	0	120	790	.66	2.9	--
25...	636	--	--	770	160	0	160	1200	.14	.60	--
JAN.											
05...	20500	--	--	400	156	0	100	620	.88	3.9	--
15...	6990	--	--	370	138	0	96	580	.75	3.3	--
25...	14700	--	--	280	138	0	87	430	.86	3.8	--
FEB.											
05...	21200	--	--	250	136	0	75	380	.32	1.4	--
15...	15400	--	--	330	128	0	80	520	1.1	4.8	--
25...	3530	--	--	520	146	0	110	810	.99	4.4	--
MAR.											
05...	11200	--	--	630	146	8	130	970	.52	2.3	--
15...	82000	--	--	60	92	0	38	90	.86	3.8	--
25...	27000	--	--	100	96	0	46	160	.75	3.3	--
APR.											
05...	78600	--	--	120	112	0	66	180	.63	2.8	--
14...	41500	--	--	200	102	0	85	300	.56	2.5	--
24...	17400	--	--	180	130	0	110	270	.59	2.6	--
MAY											
05...	36100	--	--	140	140	0	120	200	.43	1.9	--
15...	23000	--	--	200	136	8	150	290	.52	2.3	--
25...	24600	--	--	210	180	0	180	310	.52	2.3	--
JUNE											
05...	13300	91	17	260	163	0	200	400	.49	2.2	.00
15...	6850	96	17	280	174	0	200	430	.44	1.9	.00
25...	219	93	18	270	174	0	200	420	.47	2.1	.00
JULY											
05...	726	100	26	290	212	0	170	490	.27	1.2	.00
15...	488	81	24	280	194	0	160	450	.13	.60	.00
27...	4790	97	27	380	207	0	190	540	.37	1.6	.00
AUG.											
05...	1300	94	28	380	204	0	190	590	.40	1.8	.00
15...	6180	88	26	300	190	0	190	480	.38	1.7	.06
25...	4270	90	26	320	192	0	170	470	.21	.90	.07
SEP.											
05...	2600	85	25	290	176	0	170	430	.44	1.9	.00
15...	3290	83	25	330	169	0	160	490	.44	1.9	.00
25...	6170	78	23	310	162	0	160	480	.54	2.4	.06

07164400 ARKANSAS RIVER AT SAND SPRINGS BRIDGE, NEAR TULSA, OKLA.

PERIOD OF RECORD.--Chemical analyses: October 1946 to current year.
Water temperatures: October 1946 to current year.

REMARKS.--Continuous monitor records for water temperature and specific conductance are collected for this station.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS- SOLVED NITRITE (NO2) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	PHOS- PHATE (PO4) (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)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)
OCT.											
05...	--	--	.32	1670	2.27	4640	280	150	13	2920	7.6
15...	--	--	.29	1720	2.34	9710	280	150	14	3060	7.4
24...	--	--	.35	1540	2.09	3950	280	150	12	2730	7.5
NOV.											
05...	--	--	.11	1650	2.24	2630	270	140	13	2800	8.3
15...	--	--	.31	1550	2.11	28700	260	130	13	2670	8.2
25...	--	--	.44	1360	1.85	6210	220	94	12	2370	8.0
DEC.											
05...	--	--	.37	1540	2.09	15100	250	130	13	2680	7.9
15...	--	--	.37	1640	2.23	21200	260	130	14	2840	7.6
25...	--	--	.45	2340	3.18	4020	320	190	19	3980	7.7
JAN.											
05...	--	--	.53	1350	1.84	74700	240	110	11	2370	6.6
15...	--	--	.44	1230	1.67	23200	220	110	11	2190	7.0
25...	--	--	.44	970	1.32	38500	200	87	8.6	1740	6.8
FEB.											
05...	--	--	.34	882	1.20	50500	200	88	7.7	1590	7.7
15...	--	--	.40	1100	1.50	45700	200	95	10	1960	7.3
25...	--	--	.45	1650	2.24	15700	260	140	14	2920	7.5
MAR.											
05...	--	--	.14	2010	2.73	60800	280	150	16	3460	8.7
15...	--	--	.43	300	.41	66400	110	35	2.5	531	8.1
25...	--	--	.43	440	.60	32100	130	51	3.8	772	8.1
APR.											
05...	--	--	.37	552	.75	117000	150	58	4.3	917	6.8
14...	--	--	.34	738	1.00	82700	160	76	6.9	1300	7.1
24...	--	--	.33	764	1.04	35900	210	100	5.4	1260	6.9
MAY											
05...	--	--	.27	652	.89	63600	230	120	4.0	1080	7.9
15...	--	--	.29	888	1.21	55100	270	150	5.3	1440	8.5
25...	--	--	.22	992	1.35	65900	300	150	5.3	1560	8.0
JUNE											
05...	.0	.09	--	1170	1.59	42000	300	160	6.6	1820	7.7
15...	.0	.08	--	1240	1.69	22900	310	170	6.9	1930	7.8
25...	.0	.09	--	1180	1.60	698	310	160	6.7	1900	7.7
JULY											
05...	.0	--	--	1340	1.82	2630	360	180	6.7	2100	8.1
15...	.0	--	--	1240	1.69	1630	300	140	7.0	1980	8.0
27...	.0	--	--	1400	1.90	18100	350	180	8.8	2290	8.0
AUG.											
05...	.0	.13	--	1350	1.84	4740	350	180	8.8	2290	7.9
15...	.2	.07	--	1160	1.58	19400	330	170	7.2	2000	8.0
25...	.2	.11	--	1120	1.52	12900	330	170	7.6	2050	8.0
SEP.											
05...	.0	.06	--	1170	1.59	8210	320	170	7.1	1970	8.1
15...	.0	.06	--	1260	1.71	11200	310	170	8.2	2140	8.1
25...	.2	.10	--	1200	1.63	20000	290	160	7.9	2110	8.0

07164400 ARKANSAS RIVER AT SAND SPRINGS BRIDGE, NEAR TULSA, OKLA.--Continued

CHEMICAL ANALYSES OF ADDITIONAL SAMPLES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS-CHARGE (CFS)	CHEMICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	BIO-CHEMICAL OXYGEN DEMAND (MG/L)
OCT.			
16...	791	14	1.2
NOV.			
07...	4210	11	.3
DEC.			
19...	3160	13	1.0
JAN.			
18...	7250	12	1.5
FEB.			
21...	6400	15	1.8
MAR.			
13...	50300	27	1.6
APR.			
24...	17400	13	.6
MAY			
17...	1430	10	3.1
JUNE			
05...	13300	18	.5
AUG.			
01...	4470	27	.6
29...	4600	13	.6
SEP.			
20...	4040	20	4.4

FIELD ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	TEMPER-ATURE (DEG C)	DIS-SOLVED OXYGEN (MG/L)	PER-CENT SATUR-ATION
OCT.				
16...	2000	21.5	8.1	96
NOV.				
07...	2600	16.0	8.6	90
DEC.				
19...	4600	6.0	10.9	92
JAN.				
18...	2400	6.5	11.0	96
FEB.				
21...	2750	8.0	10.7	94
MAR.				
13...	825	11.5	11.3	112
APR.				
04...	850	11.5	11.6	113
24...	1520	15.0	9.5	101
MAY				
17...	1800	22.0	7.9	95
JUNE				
05...	2000	23.0	7.6	93
AUG.				
01...	1990	24.0	6.9	85
29...	1600	29.0	7.2	96
SEP.				
20...	2050	25.0	7.0	89

07164400 ARKANSAS RIVER AT SAND SPRINGS BRIDGE, NEAR TULSA, OKLA.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), MEAN VALUES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(CONTINUOUS HOURLY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2790	2000	2320	3430	1950	3520	1080	1190	1700	2160	2100	2020
2	2860	2640	2430	2940	1520	3090	1070	1090	2180	2090	2160	1910
3	2930	2750	2530	1970	1540	2760	900	1080	2170	2210	2070	1940
4	2950	2720	2360	2170	1590	1110	880	1090	2050	2310	2230	1950
5	2910	2800	2520	2360	1590	3450	900	1080	1840	2250	2270	1930
6	3000	2860	2410	2300	1270	2360	888	1280	2060	2130	2030	1930
7	2870	2840	2490	2100	1290	2270	980	1240	2010	2270	2110	1890
8	3050	2760	2710	2180	1230	2000	910	1130	2100	2260	2020	1890
9	3150	2790	2700	2140	1230	2120	870	1140	2270	2170	1700	1890
10	3230	2760	2780	2090	1560	1410	850	1180	2910	2270	1940	1870
11	3400	2720	2910	2010	1780	1300	900	1280	2240	2270	1920	1930
12	3240	1550	3090	2050	1870	1120	1040	1270	2210	2270	1940	2130
13	3140	2170	3050	2130	2110	806	1190	1430	2080	2300	1940	2120
14	3180	2640	3040	2160	1870	511	1350	1360	2030	2350	1970	2110
15	3040	2850	2940	2130	1960	531	1140	1440	2090	1960	2000	2080
16	3060	2690	3110	2170	2210	531	970	1540	2000	1830	2000	1970
17	2970	2740	3530	2310	2060	557	1080	1670	1970	2420	2100	1990
18	2970	2650	3660	2120	2240	685	1160	1500	1960	2320	2100	2080
19	2810	2540	3810	2390	2690	690	1150	1560	1960	2190	2080	2070
20	2880	2620	3520	2090	2450	680	1170	1600	1860	2220	2080	2050
21	2660	2590	3410	1920	3140	850	1200	1550	1850	2100	2100	2040
22	1690	2370	3480	1710	2840	1040	1650	1510	1890	2140	2080	2020
23	2600	2350	3860	1670	2920	970	1680	1510	1820	2080	2080	2100
24	2740	2380	3700	1640	3030	738	1180	1550	1870	2110	2010	2090
25	2670	2260	4050	1710	2850	780	1210	1570	1940	2150	2040	2070
26	2720	2070	3740	1970	3050	830	1240	1830	1920	2120	1980	2130
27	2760	2300	4080	2040	3570	920	1220	1470	2020	2230	2010	2210
28	2740	2370	3560	1830	3720	960	1160	1530	2050	2330	1960	2060
29	2870	2430	3720	2100	---	1040	1220	1640	2020	2340	1940	1930
30	1560	2440	3510	2310	---	1160	1100	1660	2090	2340	2010	1710
31	1480	---	3130	2400	---	1100	---	1640	---	2090	1960	---
MONTH	2800	2520	3170	2150	2180	1350	1110	1410	2040	2200	2030	2000

TEMPERATURE (°C) OF WATER, MEAN VALUES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(CONTINUOUS HOURLY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21.0	13.5	7.5	3.0	4.0	---	11.5	---	---	31.0	25.5	26.0
2	21.5	13.5	8.5	3.5	4.0	---	11.5	---	---	30.5	29.0	25.5
3	21.5	14.5	7.5	3.5	---	---	11.5	---	---	30.5	26.0	26.5
4	22.5	14.5	5.5	3.0	---	---	11.5	---	---	30.0	26.5	25.5
5	22.0	14.5	5.5	2.5	---	---	12.0	---	21.5	29.5	25.5	24.5
6	20.5	14.5	3.5	2.5	---	---	12.0	---	21.5	25.5	24.0	23.5
7	20.5	14.0	4.5	2.0	---	---	12.0	---	22.0	---	25.5	24.5
8	21.0	14.0	5.0	2.0	---	---	11.5	---	22.0	---	25.5	27.0
9	21.0	13.5	2.5	1.5	---	---	11.0	---	22.0	---	25.5	26.5
10	21.0	12.0	1.5	1.0	---	---	11.0	---	22.5	---	26.5	25.0
11	21.5	13.0	2.0	0.5	---	---	11.0	---	22.5	---	27.0	25.5
12	22.0	11.5	3.5	0.5	---	---	11.5	---	22.5	30.5	27.5	26.5
13	21.0	11.0	2.5	1.5	---	---	11.5	---	22.5	29.5	26.5	26.0
14	21.5	11.0	3.0	2.0	---	---	12.0	---	22.5	25.0	26.5	23.5
15	18.5	11.5	2.5	2.0	---	---	12.0	---	23.0	27.0	26.0	24.5
16	20.5	11.5	2.0	2.5	---	---	11.5	---	23.0	23.0	28.5	22.0
17	20.5	11.0	2.5	5.0	---	---	11.5	---	23.5	29.5	29.5	24.0
18	18.0	10.5	3.0	4.5	---	---	12.0	---	26.0	29.0	26.0	22.5
19	16.0	10.0	4.5	2.5	---	---	12.5	---	21.5	28.0	28.0	21.5
20	16.5	10.0	4.0	3.0	---	11.0	12.0	---	22.5	29.0	30.0	24.0
21	16.5	9.5	4.0	3.5	5.5	11.5	---	---	23.5	31.0	29.0	24.5
22	17.0	9.5	3.0	3.0	4.5	11.5	---	---	25.0	28.5	29.0	23.5
23	15.0	8.5	4.0	3.0	6.0	11.5	---	---	28.0	24.0	29.0	23.5
24	14.5	8.5	4.0	3.0	7.0	11.5	---	---	29.0	---	29.0	23.5
25	15.0	8.0	3.5	3.0	---	11.0	---	---	27.5	---	28.5	23.5
26	15.0	7.5	3.0	3.5	---	11.0	---	---	27.5	---	27.5	23.0
27	15.5	8.5	3.5	3.5	---	11.5	---	---	28.5	32.0	28.5	22.5
28	15.0	12.0	3.5	3.0	---	12.0	---	---	24.5	24.0	28.5	22.5
29	15.0	7.5	6.5	3.0	---	12.0	---	---	23.0	25.0	26.0	22.0
30	16.0	7.5	5.5	4.0	---	12.0	---	---	27.0	27.0	27.5	22.0
31	15.0	---	3.5	4.5	---	11.5	---	---	---	26.0	26.0	---
MONTH	18.5	11.0	4.0	3.0	---	---	---	---	24.0	---	27.0	24.0

07164400 ARKANSAS RIVER AT SAND SPRINGS BRIDGE, NEAR TULSA, OKLA.--Continued

DISSOLVED SULFATE (SO_4), IN MILLIGRAMS PER LITRE, MEAN VALUES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	120	87	96	160	87	170	73	120	160	190	190	180
2	130	110	100	130	83	140	72	110	200	190	190	170
3	130	120	110	87	83	120	60	110	190	200	190	180
4	130	120	98	89	84	75	58	110	190	210	200	180
5	130	120	110	98	84	160	60	110	170	200	200	180
6	140	130	100	95	81	98	59	120	190	190	180	180
7	130	130	110	88	81	93	66	120	180	200	190	170
8	140	120	120	89	80	87	61	110	190	200	180	170
9	140	120	120	88	80	88	58	110	200	190	160	170
10	150	120	120	88	83	82	56	110	260	200	180	170
11	160	120	130	87	85	81	60	120	200	200	170	180
12	150	83	140	88	86	76	70	120	200	200	180	190
13	140	89	140	88	88	53	80	130	190	210	180	190
14	150	110	140	89	86	32	82	130	180	210	180	190
15	140	130	130	88	87	33	77	140	190	180	180	190
16	140	120	140	89	90	33	65	140	180	170	180	180
17	130	120	170	95	88	35	73	150	180	220	190	180
18	130	120	170	88	91	44	79	140	180	210	190	190
19	120	110	180	100	120	45	78	150	180	200	190	190
20	130	110	170	88	100	44	79	150	170	200	190	190
21	120	110	160	87	140	56	80	140	170	190	190	180
22	85	99	160	85	130	70	84	140	170	190	190	180
23	110	98	190	84	130	65	84	140	170	190	190	190
24	120	99	180	84	140	48	80	140	170	190	180	190
25	120	92	200	85	130	51	120	150	180	190	180	190
26	120	88	180	87	140	55	120	170	170	190	180	190
27	120	95	200	88	170	61	120	140	180	200	180	200
28	120	99	170	86	180	64	110	140	190	210	180	190
29	130	100	180	88	---	70	120	150	180	210	180	180
30	83	100	170	95	---	79	110	150	190	210	180	160
31	83	---	140	100	---	74	---	150	---	190	180	---
MONTH	130	110	150	93	100	74	79	130	180	200	180	180

DISSOLVED SULFATE (TONS/DAY), MEAN VALUES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	323	497	852	1290	3940	2570	9860	9690	5560	465	2280	1480
2	570	745	522	3150	4730	3250	11770	8830	6640	807	2030	172
3	376	639	476	3150	4740	1200	10940	8760	5880	1440	2240	1850
4	271	217	1010	4910	4790	587	11610	9230	5680	972	2360	967
5	362	197	1050	5440	4790	4880	12690	10300	6020	394	711	1230
6	380	810	1210	5140	4600	3710	12760	11100	6710	1550	1530	600
7	424	1430	1670	4730	4610	5530	12940	10930	6510	1270	3030	120
8	444	760	1610	4320	4690	4990	12280	9980	5450	910	3440	556
9	341	642	745	3320	4730	6060	10810	10060	5740	798	2940	79
10	485	341	920	2640	4880	9410	9110	10510	7360	1520	3010	212
11	680	778	1970	2520	4840	9240	9350	11100	5570	1160	1770	869
12	1010	274	2450	2300	4630	8600	9760	10960	3700	1560	1040	1370
13	886	798	1990	1270	3670	7200	9900	12100	3160	2110	2210	1800
14	987	1560	1780	665	3580	5980	9130	11580	2960	1740	2810	1760
15	776	2340	1160	1670	3610	7330	8700	8380	3480	234	3010	1660
16	296	2170	837	1440	3120	7030	5620	464	3410	549	3430	118
17	912	2220	1190	986	1750	7310	6050	593	2490	2120	3330	1280
18	1070	2170	768	1730	1010	8400	6490	10610	2930	2800	2060	1690
19	1120	2050	1550	2940	2560	8000	6430	13830	2750	4130	894	1230
20	1210	2130	960	2350	2930	6110	6640	14710	5070	3750	1590	2010
21	774	2090	1420	2360	2480	5520	6990	14070	3040	1720	3080	1500
22	415	1860	1050	3360	1780	6300	4820	13480	3130	835	2890	1500
23	321	467	859	3350	2040	5780	3150	13180	1400	2750	2630	1170
24	308	910	503	3360	1760	4300	3760	12670	193	2930	2780	1440
25	176	422	336	3360	1210	3730	7630	9670	1650	3880	2120	3100
26	289	356	1710	3520	2120	2350	7630	7020	2160	3100	1420	3160
27	302	312	1170	3480	2730	3930	8410	4750	1800	2580	1270	7950
28	185	392	1020	3380	2760	5760	9300	4880	1710	1160	2480	10470
29	195	450	1060	3450	---	7910	9700	5230	1530	613	2180	9870
30	324	819	578	3780	---	9160	8810	5330	1420	2500	1350	8860
31	1020	---	330	4070	---	9800	---	5350	---	3110	1740	---
MONTH	556	1030	1120	3010	3400	5870	8770	9330	3840	1790	2250	2340

07164400 ARKANSAS RIVER AT SAND SPRINGS BRIDGE, NEAR TULSA, OKLA.--Continued

DISSOLVED CHLORIDE (CL), IN MILLIGRAMS PER LITRE, MEAN VALUES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	750	460	600	---	440	---	230	250	380	500	480	460
2	770	700	630	800	340	850	220	230	500	480	500	430
3	800	740	670	450	340	740	180	230	500	560	470	440
4	800	730	610	500	350	230	170	230	470	590	570	440
5	790	750	660	610	350	---	180	230	420	570	580	440
6	820	770	630	590	270	610	180	280	470	490	460	440
7	780	770	650	480	280	580	200	270	460	580	480	430
8	840	740	720	500	260	460	180	240	480	580	460	430
9	870	750	720	490	260	490	170	240	580	500	380	430
10	890	740	750	480	350	310	170	250	790	580	440	420
11	950	730	790	460	400	280	180	280	570	580	440	440
12	900	340	850	470	420	240	220	270	560	580	440	490
13	870	500	840	490	480	160	250	310	480	590	440	490
14	880	700	830	500	420	82	290	300	460	610	450	480
15	830	770	800	490	450	87	240	320	480	450	460	480
16	840	720	860	500	560	87	200	340	460	410	460	450
17	810	730	---	590	470	93	230	370	450	630	480	450
18	810	700	---	490	570	130	250	330	450	600	480	480
19	760	670	---	620	720	130	240	350	450	500	480	470
20	780	700	---	480	640	120	250	360	420	560	480	470
21	710	690	---	440	870	170	260	340	420	480	480	470
22	380	610	---	380	770	220	370	330	430	490	480	460
23	690	610	---	370	790	200	380	330	410	480	480	480
24	730	620	---	370	830	140	250	340	420	480	460	480
25	710	580	---	380	770	150	260	350	440	490	470	470
26	730	470	---	450	840	160	270	410	440	490	450	490
27	740	590	---	470	---	180	260	320	460	570	460	560
28	730	610	---	410	---	190	250	340	470	600	450	470
29	780	630	---	480	---	220	260	370	460	600	440	440
30	350	640	---	590	---	250	230	370	480	600	460	380
31	330	---	860	620	---	230	---	370	---	480	450	---
MONTH	750	660	---	500	510	270	230	310	470	540	470	460

DISSOLVED CHLORIDE (TONS/DAY), MEAN VALUES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1970	2590	5300	---	20080	---	30440	21310	13540	1190	5800	3730
2	3470	4560	3230	19080	19070	19660	36270	18820	17020	2050	5200	430
3	2280	3900	2930	16190	19360	7300	32850	18610	15050	4070	5680	4630
4	1640	1330	6250	27550	20170	1820	34710	19680	14390	2800	6700	2430
5	2200	1200	6470	33730	20170	---	38080	21890	14900	1120	2040	3070
6	2300	4930	7480	32010	15510	23040	38200	24990	17010	3950	3870	1500
7	2580	8710	10280	25800	15790	34450	39370	24370	16430	3650	7720	299
8	2680	4640	9830	24310	15290	26050	36940	21570	13870	2600	8700	1390
9	2060	3910	4550	18400	15430	33280	32260	21800	16440	2040	7160	196
10	2920	2080	5610	14320	20200	35260	27080	23050	22810	4350	7550	528
11	4080	4750	11940	13220	22680	31870	28050	24990	15850	3320	4420	2170
12	6060	1130	14820	12250	22700	26660	29950	24620	10480	4460	2610	3490
13	5350	4480	12020	6990	20070	21170	31180	28160	8030	6070	5540	4600
14	5950	9580	10760	3720	17570	15470	32740	26580	7490	5060	7060	4480
15	4700	14240	7060	9200	18510	19250	27040	19550	8830	586	7590	4220
16	1790	13270	5060	8080	19510	18450	17070	1100	8590	1360	8640	296
17	5530	13570	---	6130	9390	19510	18670	1440	6260	6220	8480	3230
18	6470	13290	---	9500	6310	23830	20210	25020	7370	8080	5240	4290
19	6820	12630	---	18220	15630	22730	20000	32960	6900	10590	2270	3110
20	7370	13030	---	12740	18110	17320	20680	35260	12590	10650	4040	5100
21	4740	12850	---	11860	14940	16400	22210	33460	7530	4370	7830	3810
22	1850	11550	---	15180	10830	19350	21030	31850	7790	2130	7350	3790
23	1970	2900	---	14780	12390	17550	13970	31130	3470	6980	6670	2970
24	1880	5640	---	14580	10670	12410	11730	30130	479	7470	7010	3650
25	1070	2630	---	15180	7340	10890	16870	23070	4120	9920	5360	7870
26	1770	1910	---	18130	12810	6950	17010	17380	5390	7910	3570	8070
27	1850	1940	---	18460	---	11850	18650	11140	4530	7330	3210	22540
28	1130	2430	---	16260	---	17490	20270	11570	4330	3370	6230	26530
29	1190	2780	---	18800	---	24270	21520	12610	3860	1770	5470	24690
30	1340	5060	---	23540	---	28530	18840	12880	3600	7240	3410	21580
31	4010	---	1990	25210	---	30310	---	12910	---	7910	4360	---
MONTH	3260	6250	---	16780	16180	20450	25800	21420	9970	4860	5700	5960

07164400 ARKANSAS RIVER AT SAND SPRINGS BRIDGE, NEAR TULSA, OKLA.--Continued

DISSOLVED SOLIDS, IN MILLIGRAMS PER LITRE, MEAN VALUES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1600	1130	1320	1980	1100	2040	682	759	1120	1440	1190	1140
2	1640	1510	1390	1690	859	1780	675	689	1450	1390	1230	1080
3	1680	1580	1450	1110	870	1580	556	682	1450	1470	1170	1100
4	1700	1560	1340	1230	898	627	542	689	1360	1540	1270	1100
5	1670	1610	1440	1340	898	2000	556	682	1210	1500	1290	1090
6	1730	1640	1370	1310	718	1340	547	822	1370	1420	1150	1090
7	1650	1630	1420	1190	729	1290	612	794	1330	1520	1200	1070
8	1760	1580	1550	1240	695	1130	563	717	1400	1510	1140	1070
9	1820	1600	1550	1210	695	1200	535	724	1520	1450	961	1070
10	1860	1580	1600	1180	881	797	521	752	1970	1520	1100	1060
11	1970	1560	1670	1140	1010	735	556	822	1500	1520	1080	1090
12	1870	876	1780	1160	1060	633	654	815	1470	1520	1100	1210
13	1810	1230	1760	1210	1200	455	759	927	1380	1540	1100	1200
14	1830	1510	1750	1230	1060	283	871	878	1350	1570	1110	1200
15	1750	1640	1690	1210	1110	297	724	934	1390	1300	1130	1180
16	1760	1540	1790	1230	1260	297	605	1000	1330	1210	1130	1110
17	1710	1570	2040	1310	1170	315	682	1100	1310	1620	1190	1120
18	1710	1520	2120	1200	1270	405	738	976	1300	1550	1190	1180
19	1610	1450	2210	1360	1540	409	731	1020	1300	1460	1180	1170
20	1660	1500	2040	1180	1400	402	745	1050	1230	1480	1180	1160
21	1520	1480	1970	1080	1810	521	766	1010	1220	1400	1190	1150
22	955	1350	2010	966	1630	654	1080	983	1250	1430	1180	1140
23	1490	1340	2240	944	1680	605	1100	983	1200	1380	1180	1190
24	1570	1360	2140	927	1740	442	752	1010	1240	1400	1140	1180
25	1530	1290	2350	966	1640	472	773	1030	1280	1430	1150	1170
26	1560	1170	2170	1110	1760	507	794	1210	1270	1410	1120	1210
27	1580	1310	2370	1150	2070	570	780	955	1340	1490	1140	1260
28	1570	1350	2060	1030	2160	598	738	998	1360	1560	1110	1170
29	1650	1390	2160	1190	---	654	780	1070	1340	1570	1100	1090
30	881	1390	2030	1310	---	738	696	1090	1390	1570	1140	966
31	836	---	1800	1370	---	696	---	1070	---	1390	1110	---
MONTH	1610	1440	1830	1220	1250	789	704	911	1350	1470	1150	1130

DISSOLVED SOLIDS (TONS/DAY), MEAN VALUES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4200	6440	11730	15960	49980	31620	92440	64150	39800	3450	14360	9250
2	7360	9840	7080	40360	48930	41240	110260	57110	49440	5970	12870	1070
3	4820	8350	6360	40270	49570	15610	101740	56530	43730	10710	14080	11540
4	3470	2840	13800	68160	51420	4910	107810	59720	41930	7300	14990	6040
5	4650	2560	14080	74430	51420	60330	117950	66470	43630	2940	4530	7650
6	4850	10470	16440	71040	40880	50830	118530	74810	49530	11490	9610	3740
7	5480	18540	22430	63920	41520	76690	120770	73120	47910	9540	19110	747
8	5640	9920	21100	60140	40530	64680	114270	65240	40360	6810	21580	3460
9	4300	8340	9780	45540	40900	82410	100350	65880	42990	5940	18100	490
10	6090	4450	11980	35480	51640	91420	84500	69450	56770	11380	18790	1320
11	8440	10190	25300	32820	57020	83690	86890	74810	41580	8680	11010	5420
12	12620	2880	31100	30380	56770	71930	91290	73740	27590	11670	6510	8640
13	11190	11070	25280	17310	49710	61850	93870	83630	23380	15820	13790	11390
14	12430	20660	22640	9200	43930	53420	97630	79210	21840	13120	17550	11110
15	9880	30280	14930	22790	46050	65770	81720	58030	25710	1710	18860	10460
16	3760	28510	10600	19980	43720	63050	52420	3250	25050	3980	21450	736
17	11670	29070	14670	13600	23290	65810	56720	4230	18270	16020	21010	8010
18	13660	28650	9390	23520	14090	76880	60980	74090	21500	21030	12980	10620
19	14550	27450	18860	40100	33590	73250	60400	97350	20130	30750	5630	7720
20	15640	28150	11820	31580	39650	55940	62370	103990	36830	28000	10020	12650
21	10200	27810	17620	29580	31280	51180	66810	98870	22040	12710	19400	9440
22	4690	25460	12990	38350	23030	58970	61910	94270	22780	6200	18220	9400
23	4260	6400	10400	37450	26250	53890	41090	92140	10150	20320	16540	7360
24	4030	12420	6140	37030	22470	39520	35330	89040	1400	21720	17390	9040
25	2310	5860	4040	38350	15600	34380	50730	68120	12040	28850	13300	19520
26	3790	4750	20840	45080	26940	21750	51030	50870	15750	23010	8880	19990
27	3950	4310	14020	45800	33590	36620	56030	33020	13220	19250	7970	50500
28	2420	5360	12520	40760	33650	53750	61180	34200	12610	8750	15490	65790
29	2520	6100	12870	46580	---	73980	64670	37140	11260	4610	13610	61530
30	3430	11090	7130	52190	---	86090	57130	37920	10470	18810	8470	54520
31	10320	---	4170	55430	---	91900	---	38010	---	23010	10850	---
MONTH	6990	13610	14260	39460	38840	57850	78630	63820	28320	13340	14100	14640

07171400 VERDIGRIS RIVER NEAR OOLOGAH, OKLA.

LOCATION.--Lat 36°25'17", long 95°41'01", in NW1/4 sec.2, T.22 N., R.15 E., Rogers County, at gaging station, 0.3 mi (0.5 km) downstream from Oologah Dam, 1.2 mi (1.9 km) upstream from Fourmile Creek, 2.0 mi (3.2 km) southeast of Oologah and at mile 90.0 (144.8 km).

DRAINAGE AREA.--4,339 sq mi (11,238.0 km²).

PERIOD OF RECORD.--Chemical analyses: October 1964 to current year.

DATE	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	DISSOLVED NITRATE (NO3) (MG/L)
OCT.										
10...	101	--	--	27	166	0	34	44	.07	.30
25...	6130	--	--	27	168	0	32	44	.11	.50
NOV.										
06...	11000	--	--	25	158	0	30	40	.18	.80
08...	--	--	--	--	--	--	--	--	--	--
DEC.										
08...	2410	--	--	--	--	--	--	--	--	--
18...	1310	--	--	14	102	0	22	20	.38	1.7
JAN.										
03...	9720	--	--	14	106	0	28	21	.41	1.8
18...	3280	--	--	--	--	--	--	--	--	--
26...	11900	--	--	--	--	--	--	--	--	--
FEB.										
13...	3080	--	--	17	124	0	34	27	.05	.20
27...	1340	--	--	--	--	--	--	--	--	--
MAR.										
20...	21400	--	--	19	138	0	37	29	.52	2.3
APR.										
11...	17800	--	--	15	120	0	31	22	.36	1.6
MAY										
08...	16900	--	--	13	116	0	31	19	.09	.40
23...	24700	--	--	--	--	--	--	--	--	--
JULY										
03...	739	--	--	15	142	0	31	21	.38	1.7
AUG.										
01...	4490	48	8.4	16	160	0	31	23	.25	1.1
14...	82	49	8.3	17	163	0	32	23	.24	1.1
SEP.										
11...	109	50	9.1	18	164	0	36	24	.42	1.9
25...	82	53	9.4	20	164	0	37	26	.31	1.4

DATE	DISSOLVED NITRITE (N) (MG/L)	DISSOLVED NITRITE (NO2) (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)	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)
OCT.										
10...	--	--	264	.36	72.0	170	34	.9	465	8.1
25...	--	--	262	.36	4340	170	32	.9	467	7.6
NOV.										
06...	--	--	243	.33	7220	160	30	.9	433	7.3
08...	--	--	--	--	--	--	--	--	424	--
DEC.										
08...	--	--	--	--	--	--	--	--	290	--
18...	--	--	169	.23	598	100	16	.6	287	7.5
JAN.										
03...	--	--	179	.24	4700	110	23	.6	298	6.5
18...	--	--	--	--	--	--	--	--	376	--
26...	--	--	--	--	--	--	--	--	384	--
FEB.										
13...	--	--	216	.29	1800	140	38	.6	348	6.9
27...	--	--	--	--	--	--	--	--	355	--
MAR.										
20...	--	--	235	.32	13600	150	37	.7	382	7.3
APR.										
11...	--	--	200	.27	9610	130	32	.6	324	7.4
MAY										
08...	--	--	191	.26	8720	130	35	.5	303	6.8
23...	--	--	--	--	--	--	--	--	306	--
JULY										
03...	--	--	217	.30	433	150	34	.5	352	7.0
AUG.										
01...	.00	.0	221	.30	2680	150	23	.6	376	7.7
14...	.01	.0	235	.32	52.0	160	23	.6	387	7.6
SEP.										
11...	.00	.0	250	.34	73.6	160	28	.6	404	7.8
25...	.00	.0	234	.32	51.8	170	37	.7	415	7.8

ARKANSAS RIVER BASIN

07175500 CANEY RIVER NEAR RAMONA, OKLA.

LOCATION.--Lat 36°30'31", long 95°50'36", in NE1/4NW1/4 sec.5, T.23 N., R.14 E., Washington County, at gaging station at bridge on county road 1.0 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 sq mi (5,063.4 km²).

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	DISSOLVED NITRATE (NO3) (MG/L)
OCT.										
05...	42	--	--	42	76	0	27	75	.77	3.4
15...	18	--	--	56	92	0	23	110	.59	2.6
25...	550	--	--	27	68	0	20	50	.63	2.8
NOV.										
05...	1720	--	--	27	130	0	19	50	.32	1.4
15...	9200	--	--	14	52	0	15	26	.50	2.2
25...	2880	--	--	28	138	0	22	50	.27	1.2
DEC.										
05...	642	--	--	39	174	0	30	75	.32	1.4
15...	280	--	--	58	186	0	36	120	.66	2.9
25...	1360	--	--	32	166	0	30	59	.41	1.8
JAN.										
05...	9750	--	--	15	60	0	17	27	.43	1.9
15...	1100	--	--	42	160	0	30	85	.45	2.0
25...	4630	--	--	27	84	0	24	41	.47	2.1
FEB.										
05...	3360	--	--	21	152	0	26	36	.32	1.4
15...	1180	--	--	37	164	0	32	72	.43	1.9
25...	490	--	--	60	194	0	41	120	.50	2.2
MAR.										
05...	5660	--	--	28	96	0	29	51	.41	1.8
15...	6420	--	--	21	90	0	21	38	.38	1.7
25...	10300	--	--	20	94	0	21	34	.43	1.9
APR.										
05...	1760	--	--	33	124	0	25	62	.29	1.3
15...	5650	--	--	15	140	0	21	24	.36	1.6
25...	6700	--	--	20	88	0	19	36	.54	2.4
MAY										
05...	4680	--	--	13	144	0	18	20	.43	1.9
15...	4700	--	--	14	154	0	21	22	.36	1.6
25...	4360	--	--	22	152	0	40	40	.45	2.0
JUNE										
05...	1570	52	8.3	23	160	0	22	43	.46	2.0
15...	173	68	10	45	170	0	26	99	.88	3.9
25...	106	52	9.1	43	141	0	25	85	.72	3.2
JULY										
05...	320	83	12	63	189	0	58	140	.81	3.6
15...	55	73	12	60	195	0	24	140	.31	1.4
25...	183	75	11	62	198	0	28	130	.48	2.1
AUG.										
05...	45	100	15	100	200	0	41	220	.46	2.0
15...	40	83	12	88	200	0	32	190	.37	1.6
25...	22	85	13	83	189	0	48	89	.12	.50
SEP.										
05...	730	110	17	130	216	0	23	290	.79	3.5
15...	95	46	7.3	43	113	0	19	91	1.2	5.3
27...	3520	17	3.1	18	50	0	13	31	.66	2.9

07175500 CANEY RIVER NEAR RAMONA, OKLA.

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.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS-SOLVED NITRITE (N) (MG/L)	DIS-SOLVED NITRITE (NO2) (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)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)
OCT.										
05...	--	--	262	.36	29.7	110	48	1.7	432	6.8
15...	--	--	349	.47	17.0	130	55	2.1	557	6.4
25...	--	--	208	.28	309	88	32	1.3	317	6.4
NOV.										
05...	--	--	235	.32	1090	140	33	1.0	403	6.4
15...	--	--	130	.18	3230	64	21	.8	202	6.3
25...	--	--	262	.36	2040	140	27	1.0	419	6.5
DEC.										
05...	--	--	343	.47	595	200	57	1.2	574	7.5
15...	--	--	436	.59	330	230	77	1.7	743	7.4
25...	--	--	309	.42	1140	180	44	1.0	506	7.5
JAN.										
05...	--	--	145	.20	3820	72	23	.8	228	6.8
15...	--	--	350	.48	1040	190	59	1.3	583	8.2
25...	--	--	197	.27	2460	100	31	1.2	315	7.8
FEB.										
05...	--	--	244	.33	2210	160	35	.7	405	7.9
15...	--	--	331	.45	1060	190	55	1.2	548	8.0
25...	--	--	475	.65	628	250	91	1.7	763	8.0
MAR.										
05...	--	--	230	.31	3520	120	41	1.1	382	7.4
15...	--	--	193	.26	3350	100	26	.9	309	7.4
25...	--	--	188	.26	5230	100	27	.9	307	7.5
APR.										
05...	--	--	268	.36	1270	140	38	1.2	449	8.3
15...	--	--	211	.29	3220	140	25	.6	340	8.3
25...	--	--	195	.27	3530	98	26	.9	302	7.6
MAY										
05...	--	--	204	.28	2580	140	22	.5	322	6.7
15...	--	--	213	.29	2700	150	24	.5	343	7.0
25...	--	--	284	.39	3340	170	45	.7	445	6.9
JUNE										
05...	.00	.0	267	.36	1130	160	33	.8	439	8.5
15...	.00	.0	391	.53	183	210	72	1.3	648	8.1
25...	.01	.0	285	.39	81.6	170	52	1.4	565	7.3
JULY										
05...	.00	.0	511	.70	442	260	100	1.7	814	7.8
15...	.00	.0	508	.69	75.4	230	72	1.7	786	7.6
25...	.01	.0	478	.65	236	230	70	1.8	786	7.8
AUG.										
05...	.01	.0	643	.87	78.1	310	150	2.5	1080	7.6
15...	.00	.0	569	.77	61.5	260	93	2.4	967	7.7
25...	.10	.3	564	.77	33.5	270	110	2.2	942	8.0
SEP.										
05...	.00	.0	822	1.12	1620	340	170	3.0	1320	8.1
15...	.00	.0	322	.44	82.6	150	52	1.6	526	7.6
27...	.03	.1	117	.16	1110	55	14	1.1	211	7.2

07175500 CANEY RIVER NEAR RAMONA, OKLA.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(ONCE-DAILY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	424	331	481	439	438	702	222	424	384	872	994	944
2	440	235	462	427	391	721	242	345	384	878	997	957
3	430	278	504	386	367	653	307	270	432	732	960	1000
4	442	319	542	232	391	386	403	355	442	712	938	927
5	432	403	574	225	405	382	452	326	437	808	1050	1280
6	421	423	575	278	418	274	515	333	491	739	1150	452
7	417	448	580	367	420	222	559	336	311	927	1200	324
8	417	459	573	406	551	219	505	342	484	573	1190	348
9	417	485	584	400	490	270	476	258	435	834	1140	385
10	436	506	585	372	492	286	447	325	452	872	1140	418
11	456	554	605	382	498	192	348	323	491	702	1050	428
12	481	617	636	378	515	198	381	333	520	727	1020	436
13	518	332	668	399	549	223	346	342	561	747	986	449
14	539	177	698	510	549	237	336	344	580	795	963	472
15	557	202	743	597	548	309	342	347	640	788	948	512
16	573	264	735	648	562	362	176	347	685	861	931	535
17	584	330	744	579	601	365	149	344	713	910	919	527
18	623	354	767	610	628	372	168	351	743	994	899	509
19	658	362	647	449	670	371	213	340	640	1020	900	497
20	667	382	740	462	716	496	282	347	690	766	902	505
21	611	434	372	373	752	423	315	344	455	894	---	503
22	302	440	405	377	762	370	277	352	442	874	908	512
23	199	381	450	236	775	368	349	351	493	840	915	501
24	295	374	481	241	773	429	406	403	512	820	913	481
25	317	419	506	315	768	307	298	442	548	767	922	486
26	369	540	516	429	728	207	406	359	601	803	918	312
27	419	501	525	277	722	202	330	364	686	880	909	209
28	462	445	524	305	726	263	363	379	717	961	907	199
29	499	424	---	350	---	314	336	445	768	1000	907	209
30	531	420	578	382	---	312	352	383	776	953	911	233
31	254	---	---	382	---	302	---	386	---	975	928	---
MONTH	458	395	579	394	579	346	343	353	550	839	981	518

07175500 CANEY RIVER NEAR RAMONA, OKLA.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(ONCE-DAILY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20.0	13.0	7.0	6.0	6.0	8.0	14.0	19.0	21.0	29.0	25.0	28.0
2	19.0	12.0	7.0	5.0	7.0	9.0	13.0	17.0	21.0	29.0	30.0	28.0
3	20.0	13.0	6.0	3.0	8.0	10.0	13.0	17.0	22.0	28.0	25.0	27.0
4	22.0	13.0	5.0	3.0	8.0	10.0	12.0	17.0	23.0	20.0	30.0	28.0
5	22.0	12.0	4.0	6.0	8.0	11.0	13.0	17.0	22.0	31.0	28.0	25.0
6	19.0	12.0	8.0	5.0	7.0	12.0	15.0	18.0	22.0	26.0	30.0	25.0
7	21.0	14.0	7.0	5.0	7.0	13.0	14.0	17.0	22.0	30.0	30.0	25.0
8	28.0	12.0	6.0	6.0	5.0	12.0	12.0	18.0	25.0	28.0	30.0	25.0
9	19.0	12.0	6.0	5.0	4.0	12.0	10.0	20.0	25.0	30.0	29.0	25.0
10	19.0	12.0	6.0	5.0	5.0	12.0	10.0	19.0	25.0	29.0	28.0	26.0
11	22.0	11.0	5.0	5.0	4.0	12.0	9.0	20.0	23.0	27.0	30.0	25.0
12	20.0	10.0	6.0	5.0	5.0	12.0	12.0	19.0	27.0	30.0	30.0	25.0
13	20.0	10.0	6.0	6.0	6.0	15.0	14.0	19.0	27.0	30.0	28.0	25.0
14	21.0	10.0	6.0	7.0	5.0	14.0	13.0	18.0	26.0	30.0	32.0	25.0
15	17.0	8.0	6.0	8.0	5.0	13.0	13.0	20.0	28.0	31.0	27.0	25.0
16	24.0	8.0	6.0	8.0	5.0	12.0	10.0	19.0	29.0	26.0	30.0	22.0
17	18.0	8.0	5.0	5.0	5.0	13.0	15.0	20.0	27.0	27.0	30.0	22.0
18	17.0	8.0	6.0	6.0	4.0	912.0	16.0	20.0	28.0	29.0	30.0	23.0
19	14.0	7.0	7.0	6.0	5.0	13.0	16.0	21.0	25.0	27.0	---	20.0
20	14.0	7.0	7.0	6.0	6.0	11.0	17.0	21.0	25.0	30.0	33.0	21.0
21	15.0	5.0	7.0	8.0	7.0	12.0	18.0	20.0	25.0	32.0	---	25.0
22	15.0	6.0	8.0	7.0	5.0	11.0	20.0	21.0	25.0	29.0	32.0	23.0
23	15.0	6.0	4.0	6.0	8.0	12.0	20.0	21.0	27.0	32.0	31.0	25.0
24	14.0	6.0	8.0	5.0	9.0	12.0	20.0	21.0	29.0	27.0	30.0	25.0
25	13.0	6.0	9.0	5.0	9.0	12.0	17.0	22.0	29.0	28.0	---	25.0
26	12.0	5.0	4.0	6.0	8.0	11.0	17.0	21.0	28.0	30.0	32.0	24.0
27	13.0	6.0	5.0	6.0	8.0	10.0	15.0	20.0	30.0	30.0	28.0	22.0
28	13.0	6.0	4.0	5.0	9.0	14.0	15.0	19.0	29.0	30.0	32.0	21.0
29	14.0	5.0	5.0	5.0	---	14.0	17.0	20.0	27.0	30.0	30.0	21.0
30	15.0	6.0	6.0	5.0	---	14.0	17.0	20.0	28.0	30.0	28.0	20.0
31	15.0	---	8.0	5.0	---	13.0	---	20.0	---	28.0	30.0	---
MONTH	17.5	9.0	6.0	5.5	6.5	41.0	14.5	19.5	25.5	29.0	29.5	24.0

07177500 BIRD CREEK NEAR SPERRY, OKLA.

LOCATION.--Lat 36°16'42", long 95°57'14", in NW1/4NW1/4 sec.29, T.21 N., R.13 E., Tulsa County, at gaging station at bridge on county road, 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 sq mi (2,344.0 km²).

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	DISSOLVED NITRATE (NO3) (MG/L)
OCT.										
05...	28	--	--	49	56	0	13	99	.52	2.3
15...	4.5	--	--	56	70	0	16	100	.27	1.2
25...	287	--	--	25	52	0	13	48	.50	2.2
NOV.										
05...	345	--	--	21	70	0	14	39	.25	1.1
15...	1690	--	--	14	64	0	17	24	.33	1.4
25...	475	--	--	36	118	0	27	72	.16	.70
DEC.										
04...	226	--	--	49	154	0	31	97	.27	1.2
14...	191	--	--	54	168	0	32	100	.23	1.0
25...	331	--	--	40	116	0	28	78	.32	1.4
JAN.										
05...	5790	--	--	12	46	0	18	22	.34	1.5
15...	390	--	--	48	136	0	31	95	.29	1.3
25...	556	--	--	28	104	0	28	54	.23	1.0
FEB.										
05...	526	--	--	26	100	2	28	46	.23	1.0
15...	300	--	--	44	138	0	34	85	.18	.80
25...	201	--	--	57	172	2	37	110	.27	1.2
MAR.										
05...	7320	--	--	21	68	0	22	38	.41	1.8
15...	892	--	--	24	108	0	23	44	.27	1.2
25...	12100	--	--	14	56	0	11	24	.36	1.6
APR.										
05...	952	--	--	27	104	0	26	49	.11	.50
15...	1600	--	--	48	112	0	34	95	.34	1.5
25...	6380	--	--	18	56	0	16	32	.43	1.9
MAY										
05...	375	--	--	44	136	0	25	87	.29	1.3
15...	251	--	--	43	138	0	24	81	.70	3.1
26...	110	--	--	65	166	0	27	130	.45	2.0
JUNE										
05...	485	37	11	62	96	5	25	120	.05	.22
15...	656	66	18	110	155	0	23	230	.01	.04
22...	318	23	5.5	23	79	0	12	41	.32	1.4
JULY										
05...	271	56	14	71	157	0	19	140	.44	1.9
15...	135	50	13	82	122	0	19	160	.58	2.6
25...	304	57	14	46	130	0	29	200	.48	2.1
AUG.										
05...	24	65	16	95	185	0	20	180	.40	1.8
18...	67	34	8.4	46	100	0	15	93	.49	2.2
25...	17	72	18	130	165	0	22	280	.39	1.7
SEP.										
05...	529	55	13	59	140	0	23	130	.35	1.6
14...	322	73	19	150	133	0	16	340	.24	1.1
28...	3280	25	4.1	23	62	0	13	35	.55	2.4

07177500 BIRD CREEK NEAR SPERRY, OKLA.

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.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS-SOLVED NITRITE (N) (MG/L)	DIS-SOLVED NITRITE (NO2) (MG/L)	DIS-SOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARDNESS (CA,MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)
OCT.										
05...	--	--	270	.37	20.4	92	46	2.2	451	6.6
15...	--	--	297	.40	3.61	100	43	2.4	510	7.4
25...	--	--	177	.24	137	68	25	1.3	271	6.7
NOV.										
05...	--	--	172	.23	160	82	25	1.0	275	6.4
15...	--	--	136	.18	621	72	19	.7	215	6.2
25...	--	--	278	.38	357	150	53	1.3	468	6.6
DEC.										
04...	--	--	361	.49	220	180	54	1.6	612	7.3
14...	--	--	388	.53	200	200	62	1.7	660	7.4
25...	--	--	307	.42	274	150	55	1.4	496	7.1
JAN.										
05...	--	--	115	.16	1800	62	24	.7	188	6.4
15...	--	--	344	.47	362	170	58	1.6	584	6.3
25...	--	--	246	.33	369	130	45	1.1	396	6.6
FEB.										
05...	--	--	225	.31	320	120	35	1.0	358	8.5
15...	--	--	327	.44	265	170	57	1.5	549	8.3
25...	--	--	417	.57	226	220	76	1.7	704	8.4
MAR.										
05...	--	--	184	.25	3640	84	28	1.0	280	7.7
15...	--	--	212	.29	511	120	31	1.0	348	7.4
25...	--	--	130	.18	4250	60	14	.8	202	7.9
APR.										
05...	--	--	244	.33	627	120	35	1.1	379	7.0
15...	--	--	335	.46	1450	160	68	1.7	554	6.8
25...	--	--	165	.22	2840	70	24	.9	235	6.6
MAY										
05...	--	--	330	.45	334	160	48	1.5	543	6.5
15...	--	--	334	.45	226	160	47	1.5	534	6.9
26...	--	--	447	.61	133	210	74	2.0	717	7.9
JUNE										
05...	.00	.0	318	.43	416	140	51	2.3	596	8.9
15...	.00	.0	596	.81	1060	240	110	3.1	1050	7.9
22...	.01	.0	176	.24	151	80	15	1.1	281	7.1
JULY										
05...	.00	.0	414	.56	303	200	69	2.2	737	7.7
15...	.00	.0	445	.61	162	180	78	2.7	741	7.8
25...	.01	.0	519	.71	426	200	93	1.4	867	7.4
AUG.										
05...	.00	.0	596	.81	38.6	230	76	2.7	900	7.8
18...	.12	.3	323	.44	58.4	120	37	1.8	502	7.4
25...	.03	.1	682	.93	31.3	250	120	3.6	1170	7.6
SEP.										
05...	.01	.0	380	.52	543	190	76	1.9	655	7.6
14...	.03	.1	820	1.12	713	260	150	4.0	1260	8.0
28...	.01	.0	167	.23	1480	79	28	1.1	253	7.4

07177500 BIRD CREEK NEAR SPERRY, OKLA.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(ONCE-DAILY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	315	168	---	471	344	714	232	---	---	---	830	1190
2	331	154	577	---	351	238	284	---	567	---	844	1150
3	335	204	580	254	334	248	311	384	567	---	856	1020
4	409	238	612	212	330	247	365	544	661	---	860	950
5	451	275	---	190	362	281	381	543	619	725	884	656
6	452	319	---	250	381	206	426	522	744	631	889	585
7	455	325	616	289	416	171	497	282	813	629	904	---
8	444	326	664	343	---	177	---	354	757	574	895	---
9	446	354	694	381	436	290	439	355	771	682	900	646
10	492	380	702	417	436	290	444	381	754	736	920	678
11	541	398	741	462	495	125	463	---	722	772	775	599
12	507	398	663	492	---	162	470	444	682	810	775	685
13	595	148	649	519	499	276	464	470	739	784	---	1320
14	---	166	660	550	503	279	556	522	798	728	697	1320
15	510	215	---	584	549	348	156	534	1010	728	816	---
16	696	266	624	565	553	440	---	582	1010	539	675	1020
17	711	326	623	594	575	436	141	---	572	1150	592	895
18	678	326	648	---	586	466	240	---	644	1210	493	776
19	1320	317	---	584	621	504	299	---	285	1190	---	736
20	854	423	592	575	634	521	300	740	182	1170	1250	809
21	1070	423	525	495	659	560	201	800	218	---	1310	---
22	278	406	---	384	665	---	199	800	278	1030	1280	---
23	151	423	484	382	682	592	341	816	---	988	1210	749
24	223	465	475	384	703	565	---	---	---	1020	1200	574
25	271	470	496	398	713	202	233	---	---	856	1160	698
26	308	470	521	393	---	158	249	722	---	445	1140	673
27	361	517	532	273	720	238	379	722	---	623	1150	430
28	361	551	542	---	---	---	379	722	---	1100	1170	246
29	390	564	568	292	---	324	468	801	---	918	1200	246
30	440	570	586	330	---	243	497	801	---	780	1220	257
31	232	---	408	343	---	245	---	814	---	768	---	---
MONTH	488	353	591	407	523	329	349	---	---	830	961	756

07177500 BIRD CREEK NEAR SPERRY, OKLA.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(ONCE-DAILY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18.0	12.0	---	5.0	6.0	6.0	13.0	---	---	---	25.5	26.5
2	21.0	12.0	7.0	---	7.0	9.0	13.0	---	23.0	---	25.0	28.0
3	21.0	13.0	6.0	3.0	6.0	9.0	12.0	19.0	23.0	---	25.0	28.0
4	20.0	13.0	5.0	2.0	7.0	10.0	12.5	18.0	24.0	---	27.0	28.0
5	20.0	12.5	---	2.0	7.0	11.0	13.0	18.0	23.5	29.0	28.0	25.0
6	18.0	12.0	---	0.0	7.0	12.0	14.0	17.0	25.0	29.0	29.0	25.0
7	20.0	12.0	4.0	1.5	5.0	12.0	---	19.0	26.0	27.0	29.0	25.0
8	18.0	12.5	1.0	0.0	---	12.0	---	19.0	21.5	29.0	29.0	---
9	20.0	12.0	1.0	0.0	5.0	12.0	---	21.0	25.0	29.0	26.5	26.0
10	20.0	11.5	0.0	0.0	4.0	12.0	---	23.0	27.0	30.0	26.5	25.0
11	22.0	10.0	0.0	0.0	4.0	13.0	---	---	26.5	30.0	29.0	25.0
12	22.0	10.0	0.0	0.0	---	14.0	---	23.0	27.5	28.0	29.0	25.0
13	23.0	9.5	1.0	0.5	5.0	14.0	---	20.0	20.5	29.0	---	25.0
14	---	9.0	1.0	0.0	5.0	14.0	---	20.0	26.0	27.0	28.0	22.0
15	18.0	9.0	---	2.5	4.0	14.0	---	20.0	27.0	26.5	28.0	---
16	20.0	8.0	1.0	2.0	4.0	14.0	---	20.0	27.0	26.0	24.0	23.0
17	21.0	8.0	1.0	5.0	3.0	13.5	16.0	---	26.0	29.0	---	22.0
18	16.0	7.0	1.0	---	4.0	14.0	17.0	---	26.0	28.0	---	20.0
19	15.0	---	---	6.0	4.5	14.0	16.0	---	27.0	29.0	---	20.0
20	14.0	5.5	2.0	7.0	5.0	12.0	19.0	24.0	23.5	28.0	---	24.0
21	14.0	5.5	2.0	7.0	6.0	13.0	20.0	24.0	24.5	---	---	---
22	14.5	5.5	---	6.0	5.0	13.0	20.0	24.5	26.0	30.0	---	---
23	14.0	5.0	3.5	6.0	6.0	13.5	---	24.0	---	28.0	---	22.0
24	13.0	5.0	3.0	7.0	5.0	12.0	---	---	---	29.5	29.0	23.0
25	13.5	5.5	3.0	6.0	8.5	11.0	18.0	---	---	26.0	28.5	24.0
26	13.5	5.0	4.0	7.0	---	11.0	17.0	22.0	---	26.0	27.0	24.0
27	13.0	5.5	5.0	6.0	6.0	11.5	17.0	21.0	---	28.0	28.0	22.0
28	12.0	6.0	4.0	---	---	13.0	18.0	20.0	---	27.5	29.0	20.0
29	13.0	5.0	7.0	4.0	---	13.0	18.0	20.0	---	25.0	28.0	20.0
30	14.0	6.0	4.5	5.0	---	12.5	18.5	21.0	---	27.0	28.0	20.0
31	13.0	---	7.0	6.0	---	13.0	---	22.0	---	26.0	---	---
MONTH	17.0	8.5	3.0	3.5	5.5	12.0	---	---	---	28.0	---	24.0

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.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (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)
OCT.										
11...	--	--	45	88	0	32	60	5.6	25	--
25...	--	--	26	56	0	19	46	1.2	5.4	--
NOV.										
08...	--	--	31	100	0	28	55	.99	4.4	--
29...	--	--	--	--	--	--	--	--	--	--
DEC.										
08...	--	--	50	176	0	47	92	1.2	5.3	--
JAN.										
04...	--	--	11	40	0	19	20	.11	.50	--
16...	--	--	--	--	--	--	--	--	--	--
FEB.										
13...	--	--	51	134	0	47	88	1.9	8.3	--
MAR.										
20...	--	--	--	--	--	--	--	--	--	--
30...	--	--	30	108	0	33	50	.59	2.6	--
MAY										
04...	--	--	40	130	0	34	67	.14	.60	--
09...	--	--	--	--	--	--	--	--	--	--
24...	66	16	73	174	0	56	140	3.9	17	.00
JUNE										
22...	23	5.6	24	79	0	17	43	.81	3.6	.00
JULY										
06...	51	12	65	135	0	30	130	2.8	12	.00
AUG.										
01...	61	14	77	159	0	40	150	2.9	13	.01
14...	51	11	65	140	0	40	100	4.4	19	.00
27...	55	12	78	139	0	40	130	7.1	31	.00
SEP.										
11...	49	11	62	136	0	36	120	2.1	9.3	.01
26...	47	9.9	61	118	0	46	100	3.6	16	.00

07178050 BIRD CREEK NEAR CATOOSA, OKLA.

DRAINAGE AREA.--1,080 sq mi (2,797.2 km²).

PERIOD OF RECORD.--Chemical analyses: October 1964 to current year.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS-SOLVED NITRITE (NO2) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	PHOS-PHATE (PO4) (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)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)
OCT.										
11...	--	--	8.6	283	.38	120	48	1.8	465	6.9
25...	--	--	1.1	166	.23	74	28	1.3	293	6.8
NOV.										
08...	--	--	1.5	242	.33	120	38	1.2	400	7.0
29...	--	--	--	--	--	--	--	--	593	--
DEC.										
08...	--	--	--	402	.55	210	66	1.5	655	7.6
JAN.										
04...	--	--	.14	107	.15	48	15	.7	160	6.3
16...	--	--	--	--	--	--	--	--	627	--
FEB.										
13...	--	--	1.5	365	.50	180	70	1.7	608	7.2
MAR.										
20...	--	--	--	--	--	--	--	--	604	--
30...	--	--	.60	239	.33	130	41	1.1	408	7.3
MAY										
04...	--	--	.42	295	.40	150	43	1.4	495	6.9
09...	--	--	--	--	--	--	--	--	377	--
24...	.0	--	--	454	.62	230	88	2.1	836	7.4
JUNE										
22...	.0	--	--	163	.22	81	16	1.2	295	6.9
JULY										
06...	.0	--	--	373	.51	180	66	2.1	710	7.4
AUG.										
01...	.0	1.6	--	437	.59	210	80	2.3	810	7.5
14...	.0	2.0	--	357	.49	170	58	2.2	680	7.4
27...	.0	4.4	--	424	.58	190	73	2.5	781	7.2
SEP.										
11...	.0	1.7	--	410	.56	170	56	2.1	664	7.2
26...	.0	2.7	--	364	.50	160	61	2.1	649	7.3

07178620 NEWT GRAHAM LOCK AND DAM NEAR INOLA, OKLA.

LOCATION.--Lat 36°03'33", long 95°32'12", NW1/4NE1/4 sec. 7, T.18 N., R. 17 E., Wagoner County, at lock wall at dam, 6.2 mi. (10.0 km), at 25.3 (40.7 km), and at mile 35.5 (57.1 km).

DRAINAGE AREA.--8,030 sq mi (20,797 km^2).

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (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)
OCT.										
05...	--	--	31	160	0	35	52	.29	1.3	--
15...	--	--	31	162	0	33	49	.38	1.7	--
25...	--	--	19	48	0	17	33	.43	1.9	--
NOV.										
05...	--	--	25	152	0	27	40	.34	1.5	--
15...	--	--	13	52	0	16	25	.38	1.7	--
25...	--	--	19	116	0	28	30	.45	2.0	--
DEC.										
05...	--	--	22	130	0	33	36	.54	2.4	--
15...	--	--	23	124	0	38	40	.77	3.4	--
25...	--	--	20	104	0	33	36	.86	3.8	--
JAN.										
05...	--	--	15	76	0	24	26	.52	2.3	--
15...	--	--	18	142	0	33	31	.50	2.2	--
25...	--	--	18	100	0	32	30	.47	2.1	--
FEB.										
05...	--	--	20	126	0	33	33	.52	2.3	--
15...	--	--	23	132	0	46	39	.63	2.8	--
25...	--	--	24	140	0	45	40	.72	3.2	--
MAR.										
05...	--	--	24	94	0	34	42	.68	3.0	--
15...	--	--	15	90	0	23	25	.52	2.3	--
26...	--	--	15	76	0	23	24	.47	2.1	--
APR.										
05...	--	--	18	94	0	34	30	.43	1.9	--
15...	--	--	15	122	0	28	22	.52	2.3	--
25...	--	--	16	112	0	29	24	.52	2.3	--
MAY										
05...	--	--	15	116	0	29	23	.56	2.5	--
15...	--	--	14	122	0	27	20	.52	2.3	--
25...	--	--	14	126	0	28	20	.45	2.0	--
JUNE										
05...	41	7.3	17	130	0	29	23	.31	1.4	.01
15...	46	7.7	19	147	0	30	26	.68	3.0	.01
25...	24	5.2	19	68	0	15	35	.61	2.7	.04
JULY										
05...	39	8.1	23	125	--	37	32	.97	4.3	.03
15...	51	9.2	28	150	0	35	57	.67	3.0	.03
25...	47	8.0	16	152	0	33	29	.55	2.4	.00
AUG.										
05...	49	8.9	19	148	5	36	27	.43	1.9	.00
15...	49	9.3	20	154	0	40	25	.23	1.0	.00
SEP.										
05...	47	9.5	31	141	0	42	47	.52	2.3	.00
15...	57	12	44	154	0	51	73	.95	4.2	.03
25...	64	13	55	170	0	49	100	.88	3.9	.01

CHEMICAL ANALYSES OF ADDITIONAL SAMPLES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	CHEM-ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	BIO-CHEM-ICAL OXYGEN DEMAND (MG/L)
OCT.		
16...	15	3.2
NOV.		
07...	13	.6
DEC.		
19...	15	1.2
JAN.		
18...	16	1.2
FEB.		
21...	14	1.5
MAR.		
13...	41	2.4
APR.		
24...	38	.6
MAY		
17...	10	1.4
JUNE		
05...	17	1.2
AUG.		
01...	36	1.1
29...	16	--
SEP.		
20...	18	--

07178620 NEWT GRAHAM LOCK AND DAM NEAR INOLA, OKLA.

PERIOD OF RECORD.--Chemical analyses: December 1971 to current year.
Water temperatures: December 1971 to current year.

REMARKS.--Continuous monitor records for water temperature and specific conductance are collected for this station.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS- SOLVED NITRITE (NO2) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	PHOS- PHATE (PO4) (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)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)
OCT.										
05...	--	--	.19	282	.38	180	49	1.0	479	7.8
15...	--	--	.15	283	.38	170	37	1.0	476	7.4
25...	--	--	.32	146	.20	66	27	1.0	222	6.5
NOV.										
05...	--	--	.19	239	.33	150	25	.9	410	6.7
15...	--	--	.24	134	.18	64	21	.7	202	6.2
25...	--	--	.19	207	.28	120	25	.8	334	6.6
DEC.										
05...	--	--	.30	241	.33	140	33	.8	385	7.6
15...	--	--	.44	253	.34	150	48	.8	401	7.5
25...	--	--	.30	205	.28	120	35	.8	351	7.6
JAN.										
05...	--	--	.21	154	.21	88	26	.7	225	6.4
15...	--	--	.17	236	.32	150	34	.6	385	6.7
25...	--	--	.23	204	.28	120	38	.7	322	6.6
FEB.										
05...	--	--	.17	219	.30	140	37	.7	371	7.5
15...	--	--	.32	232	.32	160	52	.8	405	7.3
25...	--	--	.53	255	.35	170	55	.8	434	7.0
MAR.										
05...	--	--	.25	222	.30	120	100	1.0	356	7.5
15...	--	--	.22	166	.23	98	24	.7	275	7.3
26...	--	--	.26	163	.22	88	26	.7	258	7.5
APR.										
05...	--	--	.22	207	.28	110	33	.7	318	7.6
15...	--	--	.17	200	.27	130	30	.6	330	8.0
25...	--	--	.25	212	.29	120	28	.6	318	8.2
MAY										
05...	--	--	.20	177	.24	120	25	.6	318	6.7
15...	--	--	.18	203	.28	130	30	.5	315	6.8
25...	--	--	.15	209	.28	130	27	.5	319	7.0
JUNE										
05...	.0	--	--	214	.29	130	26	.6	352	7.6
15...	.0	--	--	231	.31	150	26	.7	381	7.6
25...	.1	--	--	186	.25	81	26	.9	262	7.6
JULY										
05...	.1	.32	--	251	.34	130	28	.9	392	8.3
15...	.1	--	--	300	.41	170	42	.9	472	7.5
25...	.0	--	--	253	.34	150	26	.6	384	7.9
AUG.										
05...	.0	.04	--	244	.33	160	29	.7	404	8.4
15...	.0	.04	--	254	.35	160	34	.7	408	8.1
SEP.										
05...	.0	.17	--	260	.35	160	41	1.1	468	8.1
15...	.1	.32	--	370	.50	190	65	1.4	602	7.7
25...	.0	.26	--	407	.55	210	74	1.6	713	7.8

FIELD ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION
OCT.				
03...	460	21.0	8.0	94
16...	442	20.5	7.8	91
16...	--	20.0	7.7	88
16...	--	20.0	7.4	85
16...	--	20.0	7.2	83
24...	200	14.0	7.0	71
NOV.				
07...	390	13.0	11.1	109
16...	220	8.0	8.8	78
DEC.				
07...	--	3.5	12.2	96
19...	475	1.5	12.4	92
27...	--	3.0	13.2	103
JAN.				
02...	--	5.0	10.4	85
15...	--	1.0	12.8	94
18...	--	--	--	101
18...	480	3.5	12.7	100
30...	360	4.5	12.0	98
30...	--	3.5	12.2	97
30...	--	3.5	12.4	98

07178620 NEWT GRAHAM LOCK AND DAM NEAR INOLA, OKLA.--Continued

FIELD ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

FEB.				
21...	420	4.5	12.8	102
21...	--	4.5	13.0	104
21...	--	5.0	14.0	113
MAR.				
02...	510	7.0	11.6	101
13...	225	13.0	8.2	83
13...	--	13.0	8.2	83
13...	--	13.5	8.0	82
20...	370	10.0	11.1	104
APR.				
04...	280	12.0	8.2	80
04...	--	12.0	8.2	80
04...	--	12.0	8.2	80
10...	460	9.5	10.2	94
24...	300	19.5	6.3	72
24...	--	20.0	6.4	74
24...	--	20.5	6.4	75
MAY				
02...	320	16.0	9.2	96
17...	300	19.5	8.1	92
22...	315	20.0	8.7	102
JUNE				
05...	340	24.0	7.5	92
05...	340	22.0	7.5	89
05...	340	22.0	7.4	88
13...	370	23.5	7.6	94
26...	280	26.0	7.6	97
26...	280	25.0	7.4	94
26...	280	25.0	7.4	94
JULY				
06...	340	27.5	5.4	71
19...	--	26.5	7.0	92
AUG.				
01...	407	27.5	7.3	95
01...	--	27.0	7.4	95
01...	--	27.0	7.0	90
13...	380	29.0	7.0	93
29...	450	29.0	6.4	85
SEP.				
11...	--	27.0	6.6	86
20...	590	24.0	8.0	99

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(ONCE-DAILY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	460	340	525	408	392	681	320	330	---	371	389	446
2	466	365	340	475	394	433	237	327	---	352	392	449
3	469	381	387	418	392	385	261	330	---	387	386	450
4	474	370	380	344	371	416	257	327	---	393	393	453
5	480	411	386	243	374	382	319	312	354	380	396	462
6	477	406	380	343	372	308	359	312	347	338	395	469
7	479	413	371	381	342	261	376	315	383	369	396	503
8	476	420	371	324	364	255	386	318	395	388	389	491
9	429	420	371	333	369	250	406	304	366	395	396	501
10	478	418	375	352	383	306	460	304	396	401	387	514
11	477	426	374	382	375	252	389	304	361	400	406	524
12	475	414	395	368	373	202	351	310	375	413	379	521
13	476	359	392	375	372	216	335	307	361	558	403	558
14	475	221	407	387	376	272	335	310	368	471	400	553
15	476	202	407	394	406	280	325	310	378	470	391	584
16	476	229	412	393	415	308	315	307	385	420	393	593
17	479	321	409	404	414	352	247	310	391	415	410	582
18	480	347	416	565	442	379	163	---	394	408	421	602
19	485	372	423	468	431	383	175	---	424	384	431	594
20	484	354	345	434	437	376	---	---	397	394	445	630
21	481	359	502	442	516	397	358	---	246	400	458	611
22	484	368	500	370	428	384	283	---	270	389	440	626
23	305	336	420	377	438	383	191	---	273	388	474	624
24	224	336	354	337	439	372	272	---	262	380	441	685
25	222	331	352	329	443	245	315	---	257	379	442	700
26	419	327	355	361	493	257	258	---	267	389	447	684
27	452	342	341	340	502	239	317	---	293	362	450	783
28	455	354	352	342	510	274	304	---	315	378	455	549
29	440	377	359	340	---	308	314	---	367	385	444	327
30	451	394	355	368	---	331	316	---	396	385	444	396
31	429	---	345	380	---	304	---	---	---	391	442	---
MONTH	446	357	390	380	413	329	308	---	347	398	417	549

07178620 NEWT GRAHAM LOCK AND DAM NEAR INOLA, OKLA.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(ONCE-DAILY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20.5	13.0	5.5	4.0	5.0	8.0	14.0	19.5	21.0	27.0	29.0	28.5
2	20.5	12.5	5.5	4.5	5.5	8.5	14.0	19.0	21.0	27.0	28.5	28.5
3	20.5	12.5	5.5	3.5	6.0	9.5	14.0	19.0	20.0	28.0	27.5	28.5
4	20.0	12.5	5.0	2.5	6.0	10.0	14.0	20.5	---	29.0	26.5	28.5
5	20.5	13.0	5.0	1.5	6.0	10.5	14.0	20.0	21.5	28.0	27.0	28.0
6	20.5	13.0	3.5	1.0	6.0	11.0	14.0	20.5	22.0	27.5	26.5	27.5
7	19.5	12.5	3.0	0.5	6.0	11.5	14.0	17.0	25.0	28.0	27.0	27.5
8	19.5	12.5	2.5	0.5	5.5	11.5	14.0	17.5	24.0	27.5	27.0	28.0
9	20.0	12.0	2.0	0.5	5.0	11.5	13.0	18.0	23.0	28.0	27.0	27.5
10	19.5	11.5	1.5	0.0	5.0	11.5	12.0	18.0	23.0	28.0	27.0	28.0
11	20.0	11.5	1.0	0.0	5.0	13.5	12.0	18.0	23.5	28.5	27.5	27.5
12	20.0	11.5	1.0	0.0	5.0	13.5	13.0	19.0	24.0	27.0	28.0	26.5
13	20.5	10.5	1.0	0.0	5.5	14.0	13.5	19.0	24.0	29.0	29.5	26.0
14	20.5	9.0	0.5	0.0	5.5	14.0	13.5	19.0	23.5	29.0	29.5	26.0
15	20.0	8.5	0.5	0.5	5.0	13.5	13.5	19.0	24.0	27.0	29.5	25.0
16	20.5	8.0	0.5	0.5	4.5	13.0	15.0	19.0	24.0	27.5	29.5	25.0
17	20.0	9.0	0.5	2.0	4.5	13.0	16.0	19.0	24.0	28.0	29.5	25.0
18	19.5	9.0	0.5	4.0	4.5	12.5	17.0	19.0	24.0	27.5	29.0	23.0
19	18.0	8.5	1.0	5.0	5.0	12.0	18.0	19.0	24.0	28.0	29.0	23.0
20	17.0	8.0	1.5	4.5	5.0	11.5	18.0	19.0	24.0	28.0	30.0	24.0
21	16.5	6.5	1.0	5.0	5.5	11.5	18.5	20.0	24.0	28.0	30.0	24.5
22	16.5	6.5	1.0	6.0	6.0	11.5	20.0	20.0	24.5	28.0	29.5	24.5
23	14.5	7.0	1.5	6.0	6.0	12.0	21.5	20.0	25.0	28.0	29.0	24.5
24	13.5	7.0	1.5	5.5	6.5	12.0	20.5	20.0	24.0	28.0	29.5	24.5
25	13.0	7.0	2.0	6.5	7.0	12.5	19.0	20.0	25.0	29.0	29.5	24.5
26	14.5	6.0	2.0	5.0	7.0	12.5	19.0	20.0	25.0	28.0	29.5	22.0
27	14.5	6.5	2.0	8.0	7.5	12.0	19.0	20.5	26.0	27.0	29.5	23.5
28	14.5	6.0	2.0	9.5	8.0	12.5	19.0	19.5	25.5	28.5	29.0	23.0
29	14.0	6.0	3.0	8.0	---	13.0	19.0	20.0	25.5	28.0	29.0	23.0
30	14.5	5.5	3.5	4.5	---	13.5	19.0	20.0	26.0	28.0	29.0	22.0
31	14.0	---	4.0	5.0	---	14.0	---	20.0	---	28.5	29.0	---
MONTH	18.0	9.5	2.5	3.5	5.5	12.0	16.0	19.5	24.0	28.0	28.5	25.5

DISSOLVED SULFATE (SO_4), IN MILLIGRAMS PER LITRE, MEAN VALUES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	31	23	36	28	27	46	22	22	---	25	26	30
2	32	25	23	32	27	29	16	22	---	24	27	30
3	32	26	26	28	27	26	18	22	---	26	26	31
4	32	25	26	23	25	28	17	22	---	27	27	31
5	33	28	26	16	25	26	22	21	24	26	27	31
6	32	28	26	23	25	21	24	21	24	23	27	32
7	33	28	25	26	23	18	26	21	26	25	27	34
8	32	29	25	22	25	17	26	22	27	26	26	33
9	29	29	25	23	25	17	28	21	25	27	27	34
10	32	28	25	24	26	21	31	21	27	27	26	35
11	32	29	25	26	25	17	26	21	24	27	28	36
12	32	28	27	25	25	14	24	21	25	28	26	35
13	32	24	27	25	25	15	23	21	24	38	27	38
14	32	15	28	26	26	18	23	21	25	32	27	38
15	32	14	28	27	28	19	22	21	26	32	27	40
16	32	16	28	27	26	21	21	21	26	29	27	40
17	33	22	28	27	28	24	17	21	27	28	28	39
18	33	24	28	38	30	26	11	---	27	28	29	41
19	33	25	29	32	29	26	12	---	29	26	29	40
20	33	24	23	29	30	26	---	---	27	27	30	43
21	33	24	34	30	35	27	24	---	17	27	31	41
22	33	25	34	25	29	26	19	---	18	26	30	42
23	21	23	29	26	30	26	13	---	19	26	32	42
24	15	23	24	23	30	25	18	---	18	26	30	46
25	15	22	24	22	30	17	21	---	17	26	30	48
26	28	22	24	24	33	17	18	---	18	26	30	46
27	31	23	23	23	34	16	22	---	20	25	31	53
28	31	24	24	23	35	19	21	---	21	26	31	37
29	30	26	24	23	---	21	21	---	25	26	30	22
30	31	27	24	25	---	22	21	---	27	26	30	27
31	29	---	23	26	---	21	---	---	---	27	30	---
MONTH	30	24	26	26	28	22	21	---	24	27	28	37

07178620 NEWT GRAHAM LOCK AND DAM NEAR INOLA, OKLA.--Continued

DISSOLVED CHLORIDE (TONS/DAY), MEAN VALUES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	46	27	57	38	35	92	23	25	---	32	35	44
2	47	31	27	49	35	42	15	25	---	29	35	44
3	48	33	34	39	35	34	17	25	---	34	34	45
4	48	32	33	27	32	39	16	25	---	35	35	45
5	49	38	34	16	32	33	23	22	29	33	36	46
6	49	37	33	27	32	21	30	22	28	26	36	48
7	49	39	32	33	27	17	32	23	34	31	36	53
8	49	40	32	24	31	16	34	23	36	34	35	51
9	41	40	32	25	31	16	37	21	31	36	36	53
10	49	39	32	29	34	21	46	21	36	37	34	55
11	49	41	32	33	32	16	35	21	30	36	37	57
12	49	39	36	31	32	13	28	22	32	39	33	56
13	49	30	35	32	32	14	26	21	30	63	37	63
14	49	14	38	34	32	17	26	22	31	48	36	62
15	49	13	38	35	37	18	24	22	33	48	35	69
16	49	15	38	35	39	21	23	21	34	40	35	71
17	49	24	38	37	39	29	16	22	35	39	38	69
18	49	28	39	65	43	33	10	---	35	38	40	73
19	50	32	40	47	41	34	11	---	40	34	41	71
20	50	29	27	42	42	32	---	---	36	35	44	80
21	50	30	53	43	55	36	30	---	16	36	46	75
22	50	31	53	32	41	34	18	---	17	35	43	79
23	21	26	40	33	43	34	12	---	17	34	48	79
24	14	26	29	26	43	32	17	---	17	33	43	93
25	14	25	29	25	43	16	23	---	16	33	43	96
26	39	25	29	30	52	16	16	---	17	35	44	93
27	45	27	27	27	53	15	23	---	19	30	45	120
28	45	29	29	27	54	17	21	---	23	33	45	61
29	43	33	30	27	---	21	22	---	31	34	44	25
30	45	35	29	31	---	25	23	---	36	34	44	36
31	41	---	27	33	---	21	---	---	---	35	43	---
MONTH	44	30	35	33	39	27	23	---	28	36	39	64

DISSOLVED SOLIDS, IN MILLIGRAMS PER LITRE, MEAN VALUES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	281	208	321	249	239	416	195	202	---	227	238	272
2	285	223	208	290	241	265	145	200	---	215	239	274
3	287	233	236	255	239	235	159	202	---	236	236	275
4	290	226	232	210	227	254	157	200	---	240	240	277
5	293	251	236	148	228	233	195	191	216	232	242	282
6	291	248	232	210	227	188	219	191	212	206	241	287
7	293	252	227	233	209	159	230	192	234	225	242	307
8	291	257	227	198	222	156	236	194	241	237	238	300
9	262	257	227	203	225	153	248	186	224	241	242	306
10	292	255	229	215	234	187	281	186	242	245	236	314
11	291	260	228	233	229	154	238	186	221	244	248	320
12	290	253	241	225	228	123	214	189	229	252	232	318
13	291	219	239	229	227	132	205	188	221	341	246	341
14	290	135	249	236	230	166	205	189	225	288	244	338
15	291	123	249	241	248	171	199	189	231	287	239	357
16	291	140	252	240	254	188	192	188	235	257	240	362
17	293	196	250	247	253	215	151	189	239	254	250	356
18	293	212	254	345	270	232	100	---	241	249	257	368
19	296	227	258	286	263	234	107	---	259	235	263	363
20	296	216	211	265	267	230	---	---	243	241	272	385
21	294	219	307	270	315	243	219	---	150	244	280	373
22	296	225	305	226	261	235	173	---	165	238	269	382
23	186	205	257	230	268	234	117	---	167	237	290	381
24	137	205	216	206	268	227	166	---	160	232	269	418
25	136	202	215	201	271	150	192	---	157	232	270	428
26	256	200	217	221	301	157	158	---	163	238	273	418
27	276	209	208	208	307	146	194	---	179	221	275	478
28	278	216	215	209	312	167	186	---	192	231	278	335
29	269	230	219	208	---	188	192	---	224	235	271	200
30	276	241	217	225	---	202	193	---	242	235	271	242
31	262	---	211	232	---	186	---	---	---	239	270	---
MONTH	273	218	238	232	252	201	188	---	212	243	255	335

07185000 NEOSHO RIVER NEAR COMMERCE, OKLA.

LOCATION.--Lat 36°55'43", long 94°57'26", in SW1/4SE1/4 sec.5, T.28 N., R.22 E., Ottawa County, at gaging station at bridge on county road, 1.3 mi (2.1 km) upstream from Mud Creek, 2.2 mi (3.5 km) downstream from Fourmile Creek, 4.5 mi (7.2 km) west of Commerce, and at mile 153.4 (246.8 km).

DRAINAGE AREA.--5,876 sq mi (15,218.8 km^2).

PERIOD OF RECORD.--Chemical analyses: October 1947 to September 1954, December 1959 to current year. Water temperatures: November 1947 to September 1954.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SODIUM (NA) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	DISSOLVED NITRATE (NO3) (MG/L)	PHOSPHATE (PO4) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (TONS PER AC-FT)
OCT.											
26...	1320	16	100	0	70	14	.56	2.5	.82	226	.31
NOV.											
29...	2140	18	152	0	71	18	.59	2.6	.41	276	.38
DEC.											
20...	8460	13	100	0	59	13	.56	2.5	.05	210	.29
JAN.											
30...	7450	14	138	0	51	14	.79	3.5	.22	227	.31
FEB.											
28...	1730	18	216	0	78	19	.81	3.6	.40	335	.46
MAR.											
21...	21200	7.7	112	0	35	8.0	.66	2.9	.18	190	.26
APR.											
24...	26000	7.3	94	0	30	5.6	.63	2.8	.37	152	.21
MAY											
23...	10100	12	198	0	54	11	.79	3.5	.54	280	.38
JUNE											
27...	921	13	156	0	44	15	1.1	5.0	.14	255	.35

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DISSOLVED SOLIDS (TONS PER DAY)	TOTAL NONFILTRABLE RESIDUE (MG/L)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	COLOR (PLATINUM-COBALT UNITS)	TURBIDITY (MG/L)	CHEMICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	BIOCHEMICAL OXYGEN DEMAND (MG/L)
OCT.											
26...	805	--	140	58	.6	353	7.6	50	30	24	1.6
NOV.											
29...	1600	41	190	65	.6	436	7.9	22	20	16	2.3
DEC.											
20...	4800	186	130	48	.5	327	7.0	40	50	50	5.4
JAN.											
30...	4570	137	150	37	.5	355	6.4	60	40	23	2.4
FEB.											
28...	1570	31	250	73	.5	533	7.5	12	20	4	2.0
MAR.											
21...	10900	604	120	28	.3	275	7.4	150	210	40	2.5
APR.											
24...	10700	360	100	23	.3	232	7.0	240	100	30	.8
MAY											
23...	7640	202	210	48	.4	436	7.7	28	95	16	1.8
JUNE											
27...	634	114	170	42	.4	381	7.6	28	110	22	2.8

07185000 NEOSHO RIVER NEAR COMMERCE, OKLA.

FIELD ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION
OCT. 26...	350	--	10.5	9.6	91
NOV. 29...	420	8.1	3.0	12.8	99
DEC. 20...	325	8.1	1.0	12.8	96
JAN. 30...	365	8.2	2.0	12.9	98
FEB. 28...	520	8.1	6.0	11.4	96
MAR. 21...	280	8.2	9.0	10.0	91
APR. 24...	260	8.3	18.0	6.4	72
MAY 23...	420	8.3	20.0	8.4	99
JUNE 27...	380	8.0	26.5	6.6	84

07192060 PRYOR CREEK BELOW SULFUR CREEK, NEAR PRYOR, OKLA.

LOCATION.--Lat 36°13'20", long 95°15'20", in NW1/4NE1/4 sec.10, T.20 N., R.19 E., Mayes County, at abandoned bridge, approximately 2.0 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.
Water temperatures: July 1966 to September 1967.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	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)	TOTAL PHOS-PHORUS (P) (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)
OCT.										
07...	83	3.2	14	--	--	1.7	2.2	--	678	--
13...	68	1.9	8.2	--	--	.02	.02	--	678	--
22...	12	1.1	4.9	--	--	.62	.80	--	253	--
27...	40	1.0	4.5	--	--	.47	.60	--	319	--
NOV.										
03...	3.6	.54	2.4	--	--	.94	1.2	--	135	--
10...	28	2.7	12	--	--	1.2	1.6	--	374	--
18...	12	.54	2.4	--	--	.39	.50	--	244	--
24...	12	.88	3.9	--	--	.18	.23	--	235	--
DEC.										
01...	20	1.1	4.8	--	--	.45	.58	--	319	--
08...	24	1.6	7.3	--	--	1.0	1.3	--	364	--
16...	18	.70	3.1	--	--	.23	.29	--	307	--
22...	8.4	.61	2.7	--	--	.23	.29	--	212	--
29...	21	.70	3.1	--	--	.78	1.0	--	320	--
JAN.										
07...	10	1.6	6.9	--	--	.59	.76	--	208	--
14...	22	.75	3.3	--	--	.94	1.2	--	353	--
19...	12	.75	3.3	--	--	.51	.66	--	217	--
28...	12	.66	2.9	--	--	.38	.49	--	246	--
FEB.										
02...	9.0	.43	1.9	--	--	.03	.04	--	211	--
10...	15	.90	4.0	--	--	.09	.12	--	299	--
16...	20	1.1	5.0	--	--	.30	.39	--	338	--
23...	23	1.3	5.9	--	--	.42	.54	--	354	--
MAR.										
02...	12	.77	3.4	--	--	.45	.58	--	265	--
09...	13	.47	2.1	--	--	.26	.34	--	193	--
16...	10	.43	1.9	--	--	.18	.23	--	199	--
23...	12	.61	2.7	--	--	.33	.42	--	265	--
APR.										
01...	3.0	.20	.90	--	--	.18	.23	--	134	--
06...	8.0	.29	1.3	--	--	.78	1.0	--	187	--
13...	6.0	.43	1.9	--	--	.30	.38	--	212	--
20...	6.4	.36	1.6	--	--	.30	.38	--	171	--
29...	8.0	.09	.40	--	--	.30	.38	--	158	--
MAY										
04...	12	.43	1.9	--	--	.21	.27	--	234	--
11...	18	.18	.80	--	--	.34	.44	--	123	--
18...	18	.95	4.2	--	--	.23	.30	--	279	--
25...	6.0	.61	2.7	--	--	.17	.22	--	172	--
JUNE										
01...	16	1.9	8.3	--	--	1.2	1.5	--	269	--
08...	9.0	.79	3.5	--	--	.52	.67	--	203	--
15...	38	1.5	6.5	--	--	.86	1.1	--	396	--
22...	9.0	1.2	5.5	--	--	2.1	2.7	--	2460	--
29...	13	1.7	7.4	--	--	1.1	1.4	--	224	--
JULY										
06...	7.0	1.2	5.4	--	--	.65	.84	--	181	--
13...	7.7	.78	3.5	.04	.1	.35	.45	--	165	7.6
20...	16	1.3	5.8	.10	.3	--	--	.13	232	8.0
27...	13	6.3	28	.24	.8	5.6	7.2	.15	355	7.9
AUG.										
03...	48	2.9	13	.22	.7	.01	.01	.19	545	7.8
10...	37	2.7	12	.18	.6	4.4	5.7	.11	579	7.7
17...	4.8	.29	1.3	.04	.1	.63	.81	.31	105	7.4
24...	47	2.8	12	.15	.5	.79	1.0	.06	470	7.7
31...	40	2.5	11	.15	.5	.65	.84	--	513	7.8
SEP.										
07...	32	2.4	11	.26	.8	2.0	2.6	.12	430	7.8
14...	110	1.5	6.8	.27	.9	1.1	1.4	.32	672	7.5
23...	65	3.6	16	.41	1.3	1.5	1.9	.24	703	7.9
28...	4.1	.15	.66	.00	.0	--	--	--	97	8.0

07193500 NEOSHO RIVER BELOW FORT GIBSON LAKE, NEAR FORT GIBSON, OKLA.

LOCATION.--Lat 35°51'15", long 95°13'45", in SE1/4NW1/4 sec.19, T.16 N., R.20 E., Cherokee County at Fort Gibson Dam, 1.1 mi (1.8 km) upstream from gaging station, and 4.0 mi (6.4 km) north of Fort Gibson, and at mile 6.6 (10.6 km).

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	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)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
OCT.										
01...	33	--	--	--	--	--	--	--	--	--
15...	18	--	--	--	13	--	120	0	46	14
NOV.										
01...	20000	--	--	--	12	--	118	0	43	15
15...	36100	--	--	--	--	--	--	--	--	--
DEC.										
01...	15000	--	--	--	8.8	--	94	0	38	9.7
15...	15900	--	--	--	--	--	--	--	--	--
JAN.										
01...	11000	--	--	--	--	--	--	--	--	--
15...	11000	--	--	--	--	--	--	--	--	--
24...	36200	.9	31	5.8	6.5	3.0	86	0	34	7.5
FEB.										
01...	24600	--	--	--	--	--	--	--	--	--
15...	19800	--	--	--	--	--	--	--	--	--
21...	10900	3.7	37	5.8	8.2	2.8	100	0	38	9.2
MAR.										
01...	11100	--	--	--	--	--	--	--	--	--
15...	33000	--	--	--	--	--	--	--	--	--
21...	45800	8.4	38	5.8	2.5	2.7	94	0	36	6.0
22...	48600	--	--	--	--	--	--	--	--	--
APR.										
01...	36800	--	--	--	--	--	--	--	--	--
16...	11000	--	--	--	--	--	--	--	--	--
18...	34000	14	30	4.4	5.6	2.5	84	0	28	5.6
MAY										
01...	54200	--	--	--	--	--	--	--	--	--
15...	48700	--	--	--	--	--	--	--	--	--
16...	59400	7.6	30	4.6	5.6	2.5	94	0	25	5.3
JUNE										
01...	25700	--	33	4.7	6.8	--	97	0	26	4.5
15...	13700	--	33	4.5	6.3	--	106	0	25	6.2
20...	11800	6.2	33	4.4	5.7	2.2	103	0	25	5.7
JULY										
01...	6930	--	35	4.7	6.2	--	106	0	25	5.0
15...	6020	3.2	35	4.8	6.4	2.2	108	0	26	7.3
25...	3480	2.3	35	4.9	7.0	2.3	110	0	26	7.1
AUG.										
01...	7310	2.2	36	4.8	6.8	3.2	109	0	25	7.3
15...	4560	2.9	35	4.9	7.6	3.0	116	0	25	7.9
22...	11100	3.4	36	4.9	8.0	3.0	105	0	26	7.0
SEP.										
01...	88	3.9	37	5.2	7.6	2.5	115	0	26	7.1
15...	50	3.8	36	5.1	7.9	2.4	113	0	26	6.7
26...	5840	3.5	37	4.9	8.1	2.3	119	0	25	9.7

07193500 NEOSHO RIVER BELOW FORT GIBSON LAKE, NEAR FORT GIBSON, OKLA.

DRAINAGE AREA.--12,492 sq mi (32,354.3 km²).

PERIOD OF RECORD.--Chemical analyses: October 1951 to current year.
Water temperatures: October 1951 to September 1963.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS-SOLVED FLUO-RIDE (F) (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 KJEL. NITRO-GEN (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	PHOS-PHATE (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)
OCT.										
01...	--	--	--	--	--	--	--	--	--	--
15...	--	.05	.20	--	--	--	--	--	188	.26
NOV.										
01...	--	.02	.10	--	--	--	--	--	192	.26
15...	--	--	--	--	--	--	--	--	--	--
DEC.										
01...	--	.70	3.1	--	--	--	--	--	166	.23
15...	--	--	--	--	--	--	--	--	--	--
JAN.										
01...	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--
24...	.2	1.1	5.0	.03	.1	.38	--	.26	145	.20
FEB.										
01...	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--
21...	.5	1.1	4.8	.00	.0	.54	--	.22	171	.23
MAR.										
01...	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--
21...	.1	.99	4.4	--	--	.52	--	.32	170	.23
22...	--	--	--	--	--	--	--	--	--	--
APR.										
01...	--	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	--
18...	.1	.88	3.9	.00	.0	.44	.10	.36	148	.20
MAY										
01...	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--
16...	.2	.23	1.0	--	--	.19	.08	.22	124	.17
JUNE										
01...	--	.64	2.8	.01	.0	--	--	--	147	.20
15...	--	.00	.00	.01	.0	--	--	--	129	.18
20...	.2	.56	2.5	--	--	.12	.05	.26	123	.17
JULY										
01...	--	.45	2.0	.00	.0	--	--	--	151	.21
15...	.1	--	--	--	--	--	--	--	142	.19
25...	.2	--	--	--	--	--	.03	--	156	.21
AUG.										
01...	.1	--	--	--	--	--	.28	--	139	.19
15...	.1	--	--	--	--	--	.05	--	146	.20
22...	.2	--	--	--	--	--	.03	--	104	.14
SEP.										
01...	.4	--	--	--	--	--	.04	--	162	.22
15...	.3	--	--	--	--	--	.02	--	154	.21
26...	.2	--	--	--	--	--	.10	--	167	.23

07193500 NEOSHO RIVER BELOW FORT GIBSON LAKE, NEAR FORT GIBSON, OKLA.--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TUR-BID-ITY (MG/L)	TUR-BID-ITY (JTU)	CHEM-ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	BIO-CHEM-ICAL OXYGEN DEMAND (MG/L)
OCT.										
01...	--	--	--	--	324	--	--	--	--	--
15...	9.14	140	42	--	327	7.4	--	--	--	--
NOV.										
01...	10400	130	33	.5	317	7.9	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--
DEC.										
01...	6720	110	33	.4	267	7.1	--	--	--	--
15...	--	--	--	--	246	--	--	--	--	--
JAN.										
01...	--	--	--	--	242	--	--	--	--	--
15...	--	--	--	--	227	--	--	--	--	--
24...	14200	100	29	.3	240	6.2	3	--	11	1.6
FEB.										
01...	--	--	--	--	267	--	--	--	--	--
15...	--	--	--	--	286	--	--	--	--	--
21...	5030	120	38	.3	274	7.3	--	--	10	1.2
MAR.										
01...	--	--	--	--	264	--	--	--	--	--
15...	--	--	--	--	233	--	--	--	--	--
21...	21000	120	43	.1	268	7.4	8	--	--	--
22...	--	--	--	--	--	--	--	--	13	1.3
APR.										
01...	--	--	--	--	240	--	--	--	--	--
16...	--	--	--	--	223	--	--	--	--	--
18...	13600	94	25	.3	221	7.1	--	--	12	1.6
MAY										
01...	--	--	--	--	217	--	--	--	--	--
15...	--	--	--	--	220	--	--	--	--	--
16...	19900	94	17	.3	222	7.3	--	3	8	1.6
JUNE										
01...	10200	100	22	.3	226	7.9	--	--	--	--
15...	4770	100	14	.3	239	7.1	--	--	--	--
20...	3920	100	16	.2	150	7.2	--	10	11	.4
JULY										
01...	2830	110	20	.3	250	7.0	--	--	--	--
15...	2310	110	19	.3	243	7.4	--	3	--	--
25...	1470	110	17	.3	247	7.9	--	4	--	1.6
AUG.										
01...	2740	110	20	.3	251	7.6	--	3	--	--
15...	1800	110	12	.3	253	7.4	--	2	--	--
22...	3120	110	24	.3	2570	7.8	--	7	--	--
SEP.										
01...	38.5	110	19	.3	264	7.5	--	--	--	--
15...	20.8	110	18	.3	260	7.5	--	--	--	--
26...	2630	110	15	.3	267	8.0	--	10	--	--

INSTANTANEOUS SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	TIME	DISCHARGE (CFS)	CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)
JAN.				
24...	1145	36200	35	3420
FEB.				
21...	1115	10900	23	677
MAR.				
21...	1500	45800	30	3730
MAY				
16...	1100	59400	28	2570
JUN.				
20...	1300	11800	18	573
JUL.				
25...	1500	3480	15	141
AUG.				
22...	1100	11100	12	360
SEPT.				
26...	1200	5840	17	268

07193500 NEOSHO RIVER BELOW FORT GIBSON LAKE, NEAR FORT GIBSON, OKLA.--Continued

CHEMICAL ANALYSES OF MINOR AND TRACE CONSTITUENTS, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS-SOLVED CADMIUM (CD) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	DIS-SOLVED CHROMIUM (CR) (UG/L)	TOTAL CHROMIUM (CR) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL IRON (FE) (UG/L)
MAR.							
21...	--	--	--	--	--	--	--
APR.							
18...	1	1	0	0	10	10	540
JULY							
25...	1	<10	0	0	7	20	230
SEP.							
01...	--	--	0	--	--	--	--
15...	--	--	0	--	--	--	--

DATE	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)	TOTAL ZINC (ZN) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)
MAR.						
21...	80	--	--	--	--	--
APR.						
18...	140	7	30	0	50	50
JULY						
25...	60	3	110	70	20	70
SEP.						
01...	20	--	--	8	--	20
15...	40	--	--	6	--	20

FIELD ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE (DEG C)	DIS-SOLVED OXYGEN (MG/L)	PER-CENT SATURATION	IMMEDIATE COLIFORM (COL. PER 100 ML)	FECAL COLIFORM (COL. PER 100 ML)	STREPTOCOCCI (COLONIES PER 100 ML)
JAN.							
24...	230	5.5	13.6	112	8370	8130	--
FEB.							
21...	295	3.0	13.2	101	688	80	--
MAR.							
21...	260	10.0	11.8	--	--	--	--
21...	300	10.0	11.8	108	260	34	34
21...	260	10.0	11.8	--	--	--	--
21...	--	10.0	11.8	--	--	--	--
21...	--	10.0	12.4	--	--	--	--
21...	270	10.0	12.4	--	--	--	--
22...	--	10.0	12.2	--	--	--	--
22...	--	10.0	12.7	--	--	--	--
22...	280	9.5	12.4	--	--	--	--
22...	--	9.5	12.8	--	--	--	--
22...	--	9.5	12.7	--	--	--	--
22...	280	9.5	12.6	--	--	--	--
APR.							
18...	240	12.0	11.7	115	842	25	180
MAY							
16...	240	18.0	10.2	--	812	85	85
JUNE							
20...	220	24.0	6.9	84	540	50	45
JULY							
25...	285	28.0	6.4	83	1400	150	160
AUG.							
22...	260	27.0	3.6	46	8170	87	87
SEP.							
26...	280	24.0	7.0	86	320	28	--

07195500 ILLINOIS RIVER NEAR WATTS, OKLA.

LOCATION.--Lat 36°07'48", long 94°34'12", in NE1/4 sec.18, T.19 N., R.26 E., Adair County, at gaging station at 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 sq mi (1,644.6 km²).

PERIOD OF RECORD.--Chemical analyses: October 1955 to August 1956, October 1959 to May 1961, July, 1969 to current year.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SODIUM (NA) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	DISSOLVED NITRATE (NO3) (MG/L)	PHOSPHATE (PO4) (MG/L)
OCT.									
25...	430	10	124	0	10	8.5	1.3	5.6	.85
NOV.									
27...	715	4.7	98	0	10	7.5	2.2	9.8	.41
DEC.									
19...	436	5.9	112	0	12	9.3	2.0	9.0	.41
JAN.									
30...	721	5.1	86	0	11	8.0	2.3	10	.33
FEB.									
27...	499	5.5	100	0	10	8.6	2.1	9.1	.37
MAR.									
22...	1280	3.6	78	0	15	6.0	1.8	8.1	.26
APR.									
24...	3950	3.3	62	0	11	4.2	1.2	5.1	.42
MAY									
21...	780	4.1	98	0	7.4	6.1	1.7	7.4	.43
JUNE									
26...	510	4.1	108	0	7.6	6.6	1.4	6.3	.28

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)	NON-CARBONATE HARDNESS (MG/L)	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)
OCT.								
25...	154	.21	178	100	0	.4	245	7.8
NOV.								
27...	133	.18	257	98	18	.2	218	7.6
DEC.								
19...	145	.20	171	110	18	.2	240	7.0
JAN.								
30...	123	.17	239	88	17	.2	197	6.6
FEB.								
27...	130	.18	175	100	18	.2	222	7.0
MAR.								
22...	112	.15	387	86	22	.2	181	6.9
APR.								
24...	86	.12	917	64	13	.2	136	7.2
MAY								
21...	128	.17	270	92	12	.2	205	7.1
JUNE								
26...	130	.18	179	100	11	.2	214	7.0

FIELD ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION
OCT.					
25...	245	--	12.0	9.8	95
NOV.					
27...	230	8.3	7.0	1.1	97
DEC.					
19...	250	8.2	5.0	11.6	96
JAN.					
30...	200	8.2	6.0	12.0	102
FEB.					
27...	230	8.1	9.5	10.8	98
MAR.					
22...	190	8.1	11.0	10.1	88
APR.					
24...	140	8.0	18.0	8.4	94
MAY					
21...	210	6.5	21.5	8.2	99
JUNE					
26...	220	8.2	27.0	7.2	94

07198000 ILLINOIS RIVER NEAR GORE, OKLA.

LOCATION.--Lat 35°34'23", long 95°04'07", in NE1/4SW1/4 sec.27, T.13 N., R.21 E., Sequoyah County, at Tenkiller Ferry Dam, 4.3 mi (6.9 km) upstream from gaging station, 6.0 mi (9.6 km) northeast of Gore, and at mile 12.8 (20.6 km).

DRAINAGE AREA.--1,610 sq mi (4,169.9 km²).

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.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS-SOLVED NITRITE (N) (MG/L)	DIS-SOLVED NITRITE (NO2) (MG/L)	DIS-SOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARDNESS (CA,MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)
OCT.										
03...	--	--	--	--	--	--	--	--	208	--
17...	--	--	115	.16	9.31	90	6	.3	208	7.9
NOV.										
06...	--	--	134	.18	38.7	92	15	.3	218	7.1
15...	--	--	--	--	--	--	--	--	175	--
DEC.										
01...	--	--	107	.15	968	78	7	.2	173	6.9
15...	--	--	--	--	--	--	--	--	174	--
JAN.										
02...	--	--	100	.14	594	78	9	.2	175	6.5
15...	--	--	99	.13	858	78	9	.2	176	6.4
FEB.										
02...	--	--	--	--	--	--	--	--	175	--
15...	--	--	104	.14	2290	80	9	.2	175	7.1
MAR.										
01...	--	--	--	--	--	--	--	--	176	--
15...	--	--	104	.14	986	80	11	.2	175	7.2
APR.										
02...	--	--	--	--	--	--	--	--	171	--
16...	--	--	93	.13	999	74	15	.2	162	6.8
MAY										
01...	--	--	--	--	--	--	--	--	153	--
15...	--	--	92	.13	2510	70	13	.1	146	6.5
JUNE										
01...	--	--	--	--	--	--	--	--	144	--
15...	--	--	92	.13	1180	68	11	.1	147	6.6
JULY										
02...	--	--	88	.12	713	68	9	.1	146	6.7
17...	.01	.0	116	.16	16.0	72	5	.2	165	7.5
AUG.										
01...	.00	.0	109	.15	12.4	74	1	.3	179	7.4
SEP.										
05...	.46	1.5	123	.17	12.0	78	4	.4	196	7.2
17...	.00	.0	124	.17	8.70	77	4	.3	196	7.2

DATE	INSTANTANEOUS DISCHARGE (CFS)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (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)
OCT.										
03...	26	--	--	--	--	--	--	--	--	--
17...	30	--	--	5.5	102	0	7.0	9.5	.05	.20
NOV.										
06...	107	--	--	7.7	94	0	9.3	14	.77	3.4
15...	1800	--	--	--	--	--	--	--	--	--
DEC.										
01...	3350	--	--	3.4	86	0	10	5.1	.27	1.2
15...	1200	--	--	--	--	--	--	--	--	--
JAN.										
02...	2200	--	--	3.5	84	0	10	5.1	.34	1.5
15...	3210	--	--	3.6	84	0	10	5.0	.32	1.4
FEB.										
02...	3720	--	--	--	--	--	--	--	--	--
15...	8140	--	--	3.6	86	0	8.1	5.1	.27	1.2
MAR.										
01...	3200	--	--	--	--	--	--	--	--	--
15...	3510	--	--	3.5	84	0	11	5.1	.45	2.0
APR.										
02...	3590	--	--	--	--	--	--	--	--	--
16...	3980	--	--	3.0	72	0	9.5	5.6	.61	2.7
MAY										
01...	10600	--	--	--	--	--	--	--	--	--
15...	10100	--	--	2.5	70	0	10	5.2	.27	1.2
JUNE										
01...	5100	--	--	--	--	--	--	--	--	--
15...	4750	--	--	2.4	70	0	9.0	3.6	.70	3.1
JULY										
02...	3000	--	--	2.4	72	0	7.0	3.8	.59	2.6
17...	51	26	1.7	4.7	82	0	6.3	8.4	.57	2.5
AUG.										
01...	42	27	1.7	6.8	89	0	8.1	9.9	.52	2.3
SEP.										
05...	36	28	2.0	8.2	90	0	5.4	15	.24	1.1
17...	26	28	1.8	6.3	89	0	5.8	9.0	1.1	4.9

07228500 CANADIAN RIVER NEAR BRIDGEPORT, OKLA.

LOCATION.--Lat 35°34'00", long 98°22'45", in SEi/1SW1/4 sec. 28, T.13 N., R.11 W., Blaine County, at gaging station at Chicago, Rock Island and Pacific Railroad Company 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 sq mi (65,343.i km^2), of which 4,801 sq mi (12,434.9 km^2) is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: October 1969 to current year.
Water temperatures: October 1969 to current year.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS-CHARGE (CFS)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (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)
OCT.											
01-10	2.0	--	--	40	240	0	170	20	.47	2.1	--
11-18	2.0	--	--	41	202	14	160	23	.27	1.2	--
19-27	12	--	--	24	172	0	120	15	1.3	5.9	--
28-31	34	--	--	36	222	0	260	28	1.2	5.2	--
NOV.											
01-10	11	--	--	35	248	0	230	22	1.4	6.2	--
11-19	7.1	--	--	36	262	0	230	22	1.2	5.4	--
20-30	56	--	--	220	252	0	280	320	.45	2.0	--
DEC.											
01-10	72	--	--	240	300	0	340	350	.90	4.0	--
11-18	43	--	--	220	356	0	400	310	1.3	5.9	--
19-31	173	--	--	130	218	0	290	180	.86	3.8	--
JAN.											
01-14	61	--	--	230	258	0	330	320	.59	2.6	--
15-22	505	--	--	170	198	0	280	240	.52	2.3	--
23-31	209	--	--	220	250	0	330	320	.52	2.3	--
FEB.											
01-10	252	97	46	250	197	8	360	340	.01	.00	.00
11-20	216	130	46	230	262	0	360	330	.45	2.0	.00
21-28	176	130	45	220	223	7	380	310	.55	2.4	.00
MAR.											
01-10	1160	--	--	220	222	0	340	320	.38	1.7	--
11-18	1670	--	--	170	196	0	360	240	.54	2.4	--
19-26	318	--	--	250	280	0	330	360	.68	3.0	--
27-31	6310	--	--	180	220	0	290	240	.59	2.6	--
APR.											
01-03	3550	--	--	180	220	0	290	250	.63	2.8	--
04-19	928	--	--	220	240	0	390	320	.50	2.2	--
20-30	413	--	--	180	228	0	300	240	.50	2.2	--
MAY											
01-10	924	140	42	180	238	0	340	230	.52	2.3	.01
11-21	38	170	52	160	231	0	490	230	.42	1.9	.00
22-31	686	120	32	100	137	0	330	130	.40	1.8	.00
JUNE											
01-06	1400	110	28	81	156	0	300	110	.12	.50	.00
07-13	92	170	50	150	250	0	490	210	.35	1.6	.00
14-20	30	170	41	79	240	0	440	79	.54	2.4	.00
21-30	18	150	30	45	249	0	350	35	.47	2.1	.00
JULY											
01-07	17	140	31	48	196	0	360	37	--	--	--
08-15	55	120	27	46	189	0	290	30	--	--	--
16-27	30	84	19	34	159	0	190	27	--	--	--
28-31	18	120	29	47	111	0	380	34	--	--	--
AUG.											
01-03	14	120	29	45	145	0	340	29	.60	2.7	.00
04-12	11	120	27	39	206	0	300	21	.01	.04	.01
13-14	7.6	100	24	40	188	0	260	21	.16	.71	.00
15-17	18	36	7.4	17	99	0	59	13	1.2	5.3	.01
18-31	6.9	76	19	41	194	0	170	22	.11	.49	.00
SEP.											
01-03	14	60	16	41	156	0	140	20	.21	.93	.11
04-07	725	49	10	24	125	0	83	21	.49	2.2	.01
08-10	123	66	15	42	186	0	100	42	.63	2.8	.02
11-16	27	110	22	52	274	0	190	46	.18	.80	.03
17-19	59	93	19	40	189	0	190	37	.37	1.6	.01
20-26	43	120	24	49	256	0	240	39	.50	2.2	.01
27-28	586	89	17	34	153	0	190	29	.48	2.1	.03
29-30	156	110	22	51	238	0	190	47	.54	2.4	.01

07228500 CANADIAN RIVER NEAR BRIDGEPORT, OKLA.--Continued

EXTREMES, Current year.--Dissolved solids: Maximum, 1,420 mg/l Dec. 11-18; minimum, 252 mg/l Aug. 15-17.
Hardness: Maximum 680 mg/l Dec. 11-18; minimum 120 mg/l Aug. 15-17.
Specific conductance: Maximum daily, 2,360 micromhos Dec. 1; minimum daily,223 micromhos Aug. 16.
Water temperatures: Maximum,40.0°C July 9, 22; minimum, freezing point on several days in Dec. and Jan.

Period of record.--Dissolved solids: Maximum, 1,540 mg/l Apr. 3-16, 1970; minimum, 192 mg/l Sept. 24-25,1971.
Hardness: Maximum, 710 mg/l May 1-10, 1970; minimum, 120 mg/l Sept. 24-25, 1971, Aug. 15-17, 1973.
Specific conductance: Maximum daily, 2,360 micromhos Dec. 1, 1972; minimum daily, 223 micromhos Aug. 16, 1973.
Water temperatures: Maximum, 40.0°C July 9, 22, 1973; minimum, freezing point on many days during winter period.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS- SOLVED NITRITE (NO2) (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)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)
OCT.										
01-10	--	--	519	.71	2,80	320	120	1,0	724	8,2
11-18	--	--	496	.67	2,68	300	110	1,0	702	8,7
19-27	--	--	377	.51	12,2	230	89	.7	552	7,8
28-31	--	--	644	.88	59,1	420	240	.8	893	8,3
NOV.										
01-10	--	--	610	.83	18,1	400	200	.8	844	8,0
11-19	--	--	614	.84	11,8	410	200	.8	838	7,9
20-30	--	--	1190	1,62	180	460	250	4,5	1850	8,0
DEC.										
01-10	--	--	1360	1,85	264	580	330	4,3	2030	7,6
11-18	--	--	1420	1,93	165	680	390	3,7	2060	7,4
19-31	--	--	934	1,27	436	440	260	2,7	1390	8,3
JAN.										
01-14	--	--	1290	1,75	212	540	330	4,3	2000	8,0
15-22	--	--	1000	1,36	1360	440	280	3,5	1590	8,3
23-31	--	--	1300	1,77	734	540	340	4,1	1980	8,1
FEB.										
01-10	,0	--	1260	1,71	857	430	260	5,2	1950	8,4
11-20	,0	--	1350	1,84	787	510	300	4,4	1980	8,2
21-28	,0	--	1340	1,82	637	510	320	4,2	1890	8,5
MAR.										
01-10	--	--	1320	1,80	4130	520	340	4,2	1930	7,8
11-18	--	--	1210	1,65	5460	500	340	3,3	1670	7,4
19-26	--	--	1430	1,94	1230	540	310	4,7	2090	7,7
27-31	--	--	1140	1,55	19400	440	260	3,7	1600	7,8
APR.										
01-03	--	--	1100	1,50	10500	440	260	3,7	1590	8,3
04-19	--	--	1390	1,89	3480	560	360	4,0	1990	8,0
20-30	--	--	1100	1,50	1230	460	270	3,7	1610	8,1
MAY										
01-10	,0	--	1100	1,50	2740	520	330	3,4	1670	8,1
11-21	,0	,13	1360	1,85	140	640	450	2,8	1840	8,0
22-31	,0	--	842	1,15	1560	430	320	2,1	1220	8,1
JUNE										
01-06	,0	--	764	1,04	2890	390	260	1,8	1090	7,6
07-13	,0	--	1220	1,66	303	630	430	2,6	1740	8,3
14-20	,0	,24	1010	1,37	81,8	590	400	1,4	1360	7,8
21-30	,0	,22	748	1,02	36,4	500	290	,9	1040	7,9
JULY										
01-07	--	,23	800	1,09	36,7	480	320	1,0	1040	7,9
08-15	--	,23	714	,97	106	410	260	1,0	936	8,1
16-27	--	,36	505	,69	40,9	290	160	,9	718	7,9
28-31	--	,22	732	1,00	35,6	420	330	1,0	971	7,7
AUG.										
01-03	,0	--	712	,97	26,9	420	300	1,0	970	7,9
04-12	,0	--	688	,94	20,4	410	240	,8	921	7,8
13-14	,0	--	604	,82	12,4	350	190	,9	838	7,7
15-17	,0	--	252	,34	12,2	120	39	,7	332	7,6
18-31	,0	--	492	,67	9,17	270	110	1,1	696	7,9
SEP.										
01-03	,3	--	433	,59	16,4	220	88	1,2	604	7,7
04-07	,0	--	318	,43	622	160	61	,8	453	8,0
08-10	,0	--	434	,59	144	230	74	1,2	641	8,0
11-16	,1	--	608	,83	44,3	370	140	1,2	919	7,8
17-19	,0	--	506	,69	80,6	310	160	1,0	785	8,2
20-26	,0	--	690	,94	80,1	400	190	1,1	956	8,3
27-28	,1	--	505	,69	799	290	170	,9	716	8,0
29-30	,0	--	590	,80	249	370	170	1,2	882	8,2

07228500 CANADIAN RIVER NEAR BRIDGEPORT, OKLA.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(ONCE-DAILY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	649	904	2360	1820	2010	1820	1610	1740	1100	1020	958	577
2	658	909	2100	1910	2000	1820	1610	1730	1080	1020	961	626
3	656	904	2090	1910	2000	1850	1620	1740	1100	1030	935	577
4	754	826	2090	1890	2000	1880	2000	1700	1110	1030	908	---
5	749	824	2070	2040	2010	1870	1990	1720	1110	1030	904	425
6	746	822	2080	2080	2010	1860	1990	1580	1110	1030	906	429
7	746	825	2080	2070	2000	1860	2000	1580	1760	1030	903	488
8	746	825	2060	2080	2000	1860	2000	1580	1760	922	906	632
9	743	821	2040	2070	2020	1850	2000	1590	1760	924	906	628
10	737	822	2050	2040	2000	1850	1990	1580	1760	922	908	628
11	699	822	2090	2070	2000	1600	1990	1580	1750	920	885	891
12	702	845	2080	2080	2000	1600	2090	1580	1750	920	914	888
13	703	852	2090	2080	2010	1600	2090	1590	1750	917	817	898
14	711	841	2080	2070	2010	1800	2090	1900	1340	920	831	889
15	702	845	2080	1600	2010	1600	2080	1910	1350	922	431	886
16	709	845	2070	1600	---	1590	2080	1900	1350	708	223	900
17	706	843	2100	1610	---	1590	2100	1900	1340	698	316	---
18	714	843	2090	1600	1900	1590	2100	1900	1330	702	730	707
19	540	847	1400	1600	1900	1960	2090	1900	1350	708	660	834
20	544	1780	1400	1600	1890	1960	1600	1900	1350	706	656	915
21	543	1800	1400	1600	1900	2020	1590	1890	1040	703	685	940
22	540	1810	1410	1610	1890	2000	1600	1240	1040	702	686	917
23	541	1810	1400	1970	1880	2020	1600	1240	1040	699	730	934
24	542	1810	---	1980	1880	2030	1590	1240	1040	---	728	937
25	540	1810	---	1950	1890	2020	1590	1250	1040	---	697	936
26	544	1810	1410	1980	1890	1910	1590	1240	1040	---	683	931
27	658	1810	1400	1980	1880	1560	1600	1250	1040	---	674	656
28	902	2060	1410	1980	1890	1560	1720	1240	1040	958	640	751
29	900	2080	1400	1980	---	1550	1720	1240	1040	958	644	861
30	895	2080	1410	1980	---	1560	1740	1100	1020	958	637	864
31	905	---	1420	2030	---	1550	---	1100	---	---	635	---
MONTH	691	1220	1830	1900	1960	1780	1850	1570	1290	887	745	769

07228500 CANADIAN RIVER NEAR BRIDGEPORT, OKLA.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(ONCE-DAILY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28.5	14.0	8.0	8.0	6.0	18.0	11.0	17.0	23.0	38.0	32.0	24.0
2	28.0	13.0	6.0	5.0	8.0	19.0	10.0	19.0	18.0	37.0	34.0	25.0
3	29.0	15.0	4.0	2.0	9.0	14.0	10.0	20.0	20.0	36.0	32.0	25.0
4	30.0	17.0	0.0	2.0	10.0	12.0	12.0	21.0	22.0	37.5	31.0	---
5	29.5	20.0	0.0	2.5	10.0	10.0	11.0	21.0	23.0	38.0	33.0	19.0
6	23.0	20.0	0.0	3.0	8.0	12.0	9.0	19.0	24.0	39.0	32.0	20.0
7	28.0	20.0	0.0	0.0	4.0	15.0	8.0	20.0	28.0	38.0	---	19.0
8	30.0	21.0	0.0	0.0	5.0	8.0	7.5	21.0	29.0	39.0	---	19.0
9	30.0	18.0	0.0	0.0	6.0	6.0	6.0	24.0	30.0	40.0	35.0	21.0
10	31.0	19.0	3.0	0.0	7.0	5.0	8.0	23.0	30.0	39.0	34.0	21.0
11	31.5	15.0	0.0	0.0	9.0	17.0	10.0	21.0	31.0	39.5	36.0	23.0
12	30.0	14.0	0.0	2.0	6.0	16.0	12.0	20.0	32.0	38.0	37.0	22.0
13	29.0	12.0	0.0	2.5	4.0	14.0	15.0	22.0	31.0	37.0	35.0	19.0
14	28.0	9.0	0.0	5.0	4.0	15.0	15.0	25.0	33.0	39.0	36.0	19.0
15	29.0	9.0	0.0	5.0	5.0	14.0	10.0	26.0	32.0	38.5	23.0	18.0
16	29.5	10.0	0.0	7.0	---	14.5	15.0	27.0	31.0	37.0	28.0	17.0
17	28.0	9.0	2.0	10.0	---	17.0	16.0	28.0	30.0	38.0	33.0	---
18	18.0	8.0	1.0	9.0	7.0	---	17.0	29.0	31.0	35.0	30.0	15.0
19	25.0	7.0	3.0	7.0	6.0	15.0	15.0	31.0	30.0	38.0	25.0	20.0
20	26.0	8.0	4.0	5.0	8.0	18.0	18.0	33.0	29.0	37.0	26.0	22.0
21	25.0	8.0	6.0	0.0	6.0	17.0	19.0	30.0	32.0	39.0	25.0	22.0
22	24.0	7.0	7.0	3.0	4.0	19.0	22.0	24.0	32.0	40.0	22.0	23.0
23	24.0	9.0	5.0	4.0	11.0	15.0	22.0	23.0	34.0	38.0	23.0	23.0
24	24.0	6.0	---	6.0	14.0	8.0	23.0	25.0	36.0	---	24.0	22.0
25	27.0	7.0	---	5.0	---	5.0	18.0	26.0	38.0	---	25.0	23.0
26	24.0	7.0	10.0	6.0	15.0	12.0	15.0	24.0	38.0	---	25.0	20.0
27	24.0	8.0	9.0	3.0	16.0	10.0	12.0	23.0	36.0	---	24.0	16.0
28	20.0	6.0	12.0	2.0	17.0	13.0	14.0	26.0	36.0	33.0	25.0	16.0
29	20.0	7.0	13.0	5.0	---	11.0	18.0	28.0	37.0	34.0	25.5	19.0
30	19.0	7.0	10.0	6.0	---	8.0	15.0	24.0	38.0	32.0	25.0	17.0
31	18.0	---	12.0	7.0	---	9.0	---	22.0	---	---	23.0	---
MONTH	26.0	11.5	4.0	4.0	8.0	13.0	14.0	24.0	30.5	37.5	29.0	20.5

07229100 CANADIAN RIVER NEAR NOBLE, OKLA.

LOCATION.--Lat 35°04'55", long 97°22'52", in N1/2 sec.14, T.7 N., R.2 W., McClain County, at gaging station at 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 km).

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS-CHARGE (CFS)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (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)
MAY											
24-30	1320	100	32	88	176	0	290	110	.67	3.0	.01
31...	1830	68	19	52	121	5	160	60	.82	3.6	.00
JUNE											
01-06	4480	59	15	38	162	0	110	41	.29	1.3	.00
07-14	361	120	39	120	270	0	280	120	.74	3.3	.00
15...	581	65	23	60	152	0	140	62	1.1	4.8	.01
16-18	268	88	32	79	257	0	210	82	.85	3.8	.03
19-21	540	59	21	48	121	0	160	60	1.6	7.1	.00
22-29	70	88	32	77	220	0	210	78	1.6	7.1	.00
30...	407	49	21	51	207	0	96	44	.50	2.2	.01
JULY											
01-07	70	74	37	95	249	0	250	80	--	--	--
08-16	69	61	31	86	222	0	190	68	--	--	--
17-23	92	51	19	53	187	0	110	41	--	--	--
24-31	60	59	24	69	220	0	150	53	--	--	--
AUG.											
01-02	38	45	18	57	198	0	82	41	1.6	7.2	.17
03-11	14	44	24	110	257	0	120	71	3.5	15	.02
12-13	19	46	20	81	188	0	120	61	2.7	12	.00
14-18	16	42	20	110	225	0	120	67	4.1	18	.01
19-21	21	43	16	73	186	0	100	44	6.0	27	.01
22-29	8.0	21	11	140	270	0	56	53	17	75	.07
30-31	17	23	9.6	74	138	0	50	37	8.1	36	3.9
SEP.											
01...	13	23	10	140	386	0	30	53	.12	.53	.01
02...	21	23	8.2	39	121	0	34	23	4.3	19	.01
03-04	545	29	12	95	213	0	53	55	.12	.53	.62
05-12	353	43	12	35	151	0	68	28	1.3	5.7	.01
13-14	931	28	7.0	17	109	0	29	11	1.3	5.8	.09
15-21	239	44	13	32	159	0	67	23	1.6	6.9	.24
22-26	125	62	22	69	226	0	120	49	1.1	4.9	1.3
27-30	1890	37	9.8	24	142	0	46	18	1.1	4.8	.02

CHEMICAL ANALYSES OF ADDITIONAL SAMPLES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	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)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)
MAY									
24...	29	--	--	--	--	--	--	160	--
JUNE									
28...	45	70	41	110	242	0	250	81	3.8
JULY									
26...	75	--	--	--	--	--	--	--	.03
AUG.									
16...	13	31	16	120	228	46	83	62	.42
SEP.									
27...	6820	--	--	--	--	--	--	--	.45

DATE	DIS_SOLVED NITRATE (NO3) (MG/L)	DIS-SOLVED NITRITE (N) (MG/L)	DIS_SOLVED NITRITE (NO2) (MG/L)	DIS-SOLVED AMMONIA ORGANIC NITRO-GEN (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	PHOS-PHATE (PO4) (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)
MAY									
24...	--	--	--	.86	--	1.1	--	--	--
JUNE									
28...	17	.01	.0	.06	--	6.8	715	.97	86.9
JULY									
26...	.10	.20	.6	6.7	1.5	--	--	--	--
AUG.									
16...	1.9	.00	.0	8.3	.05	--	499	.68	17.5
SEP.									
27...	2.0	.03	.1	.68	1.4	--	--	--	--

07229100 CANADIAN RIVER NEAR NOBLE, OKLA.

DRAINAGE AREA.--25,911 sq mi (67,109.5 km²), of which 4,801 sq mi (12,434.6 km²) is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: October 1964 to current year.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS-SOLVED NITRITE (NO2) (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)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)
MAY										
24-30	.0	--	768	1.04	2740	380	240	2.0	1210	7.9
31...	.0	--	437	.59	2160	250	140	1.4	735	8.6
JUNE										
01-06	.0	.17	382	.52	4620	210	76	1.1	590	8.1
07-14	.0	--	873	1.19	851	460	240	2.4	1280	8.3
15...	.0	--	494	.67	775	260	130	1.6	845	7.7
16-18	.1	.68	708	.96	512	350	140	1.8	1010	8.1
19-21	.0	.53	687	.93	1000	230	130	1.4	699	8.2
22-29	.0	--	692	.94	131	350	170	1.8	1070	7.9
30...	.0	1.0	388	.53	426	210	39	1.5	622	8.2
JULY										
01-07	--	1.3	7	.01	1.32	340	130	2.3	1040	7.8
08-16	--	1.4	601	.82	112	280	98	2.2	907	7.8
17-23	--	1.1	407	.55	101	210	52	1.6	638	7.7
24-31	--	1.6	499	.68	80.8	250	66	1.9	788	7.7
AUG.										
01-02	.5	1.5	404	.55	41.5	190	24	1.8	618	7.9
03-11	.0	2.7	540	.73	20.4	210	0	3.3	883	7.9
12-13	.0	1.6	408	.55	20.9	200	43	2.5	751	8.0
14-18	.0	2.2	590	.80	25.5	190	3	3.5	855	7.5
19-21	.0	2.3	438	.60	24.8	170	21	2.4	678	7.6
22-29	.2	5.0	538	.73	11.6	98	0	6.2	816	6.9
30-31	13	7.0	364	.50	16.7	97	0	3.3	551	6.6
SEP.										
01...	.0	--	470	.64	16.5	99	0	6.1	842	8.0
02...	.0	2.3	206	.28	11.7	91	0	1.8	375	7.8
03-04	2.0	--	403	.55	593	120	0	3.7	707	7.2
05-12	.0	.81	293	.40	279	160	33	1.2	476	8.0
13-14	.3	.37	168	.23	422	99	9	.7	275	7.6
15-21	.7	.98	299	.41	193	160	33	1.1	474	7.9
22-26	4.3	2.0	468	.64	158	250	60	1.9	771	7.9
27-30	.0	.47	216	.29	1100	130	16	.9	380	7.9

CHEMICAL ANALYSES OF ADDITIONAL SAMPLES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	CHEM-ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	CHEM-ICAL OXYGEN DEMAND (HIGH LEVEL) (MG/L)	BIO-CHEM-ICAL OXYGEN DEMAND (MG/L)	PHENOLS (UG/L)
MAY									
24...	--	--	--	--	--	--	130	12	3
JUNE									
28...	340	150	2.6	1140	7.3	45	45	11	2
JULY									
26...	--	--	--	--	--	51	--	19	5
AUG.									
16...	140	0	4.4	834	8.9	--	--	--	6
SEP.									
27...	--	--	--	--	--	190	--	--	0

07229100 CANADIAN RIVER NEAR NOBLE, OKLA.--Continued

PESTICIDE ANALYSES OF MINOR AND TRACE CONSTITUENTS, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	ALDRIN (UG/L)	CHLORDANE (UG/L)	DDD (UG/L)	DDE (UG/L)	DDT (UG/L)	DIELDRIN (UG/L)	ENDRIN (UG/L)	HEPTACHLOR (UG/L)
MAY 24...	.00	.0	.00	.00	.00	.00	.00	.00
JUNE 28...	--	--	--	--	--	--	--	--
JULY 26...	.00	.1	.00	.00	.00	.01	.00	.00
AUG. 16...	.00	.1	.00	.00	.00	.01	.00	.00
SEP. 27...	.00	.0	.00	.01	.00	.01	.00	.00

DATE	HEPTACHLOR EPOXIDE (UG/L)	LINDANE (UG/L)	2,4-D (UG/L)	2,4,5-T (UG/L)	SILVEX (UG/L)	DIAZINON (UG/L)	MALATHION (UG/L)	METHYL PARATHION (UG/L)	PARATHION (UG/L)
MAY 24...	.00	.00	.43	.00	.00	.00	.00	.00	.00
JUNE 28...	--	--	.11	.01	.00	.08	.00	.00	.00
JULY 26...	.00	.00	.25	.02	.00	.03	.00	.00	.00
AUG. 16...	.00	.09	.10	.00	.00	.24	.00	.00	.00
SEP. 27...	.00	.00	.00	.12	.00	.00	.00	.00	.00

DATE	PCB (UG/L)	DISSOLVED CADMIUM (CD) (UG/L)	DISSOLVED CHROMIUM (CR) (UG/L)	DISSOLVED COPPER (CU) (UG/L)	DISSOLVED IRON (FE) (UG/L)	DISSOLVED LEAD (PB) (UG/L)	DISSOLVED MANGANESE (MN) (UG/L)	DISSOLVED ZINC (ZN) (UG/L)
MAY 24...	.0	--	--	--	--	--	--	--
JUNE 28...	--	0	0	10	80	2	13	30
JULY 26...	.0	--	--	--	--	--	--	--
AUG. 16...	.0	--	--	--	--	--	--	--
SEP. 27...	.0	--	--	--	--	--	--	--

FIELD ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION
MAY 24...	900	7.8	24.5	7.9	101
JUNE 28...	950	8.7	25.0	9.5	122
JULY 26...	780	8.8	30.5	11.4	158
AUG. 16...	800	9.0	34.0	19.4	281
SEP. 27...	220	7.6	20.0	6.9	81

07229100 CANADIAN RIVER NEAR NOBLE, OKLA.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(ONCE-DAILY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	688	1070	562	820
2	---	---	---	---	---	---	---	---	475	1090	648	394
3	---	---	---	---	---	---	---	---	475	1030	796	711
4	---	---	---	---	---	---	---	---	674	1000	842	783
5	---	---	---	---	---	---	---	---	446	930	864	474
6	---	---	---	---	---	---	---	---	774	945	867	399
7	---	---	---	---	---	---	---	---	1020	1080	851	358
8	---	---	---	---	---	---	---	---	1180	858	876	444
9	---	---	---	---	---	---	---	---	1300	937	836	478
10	---	---	---	---	---	---	---	---	1390	930	887	503
11	---	---	---	---	---	---	---	---	1400	864	866	523
12	---	---	---	---	---	---	---	---	1400	869	708	602
13	---	---	---	---	---	---	---	---	1330	925	743	230
14	---	---	---	---	---	---	---	---	1130	994	806	326
15	---	---	---	---	---	---	---	---	753	860	812	379
16	---	---	---	---	---	---	---	---	1000	806	866	435
17	---	---	---	---	---	---	---	---	1010	632	749	516
18	---	---	---	---	---	---	---	---	988	327	951	446
19	---	---	---	---	---	---	---	---	619	636	695	424
20	---	---	---	---	---	---	---	---	795	685	675	532
21	---	---	---	---	---	---	---	---	655	619	661	601
22	---	---	---	---	---	---	---	---	871	548	816	652
23	---	---	---	---	---	---	---	---	1030	650	823	711
24	---	---	---	---	---	---	---	1040	1100	743	823	773
25	---	---	---	---	---	---	---	991	1060	770	926	833
26	---	---	---	---	---	---	---	1060	1110	879	796	864
27	---	---	---	---	---	---	---	1190	1080	759	810	212
28	---	---	---	---	---	---	---	1240	1050	847	956	316
29	---	---	---	---	---	---	---	1290	1050	854	902	421
30	---	---	---	---	---	---	---	1370	630	740	435	544
31	---	---	---	---	---	---	---	719	---	673	762	---
MONTH	---	---	---	---	---	---	---	---	949	824	794	523

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(ONCE-DAILY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	24.0	31.5	29.0	24.5
2	---	---	---	---	---	---	---	---	20.0	32.0	31.0	22.0
3	---	---	---	---	---	---	---	---	23.5	34.0	27.5	23.0
4	---	---	---	---	---	---	---	---	25.0	30.5	30.0	27.0
5	---	---	---	---	---	---	---	---	24.0	33.5	30.0	21.0
6	---	---	---	---	---	---	---	---	28.0	34.0	29.0	21.0
7	---	---	---	---	---	---	---	---	28.5	34.0	30.0	26.0
8	---	---	---	---	---	---	---	---	29.5	33.5	32.0	23.0
9	---	---	---	---	---	---	---	---	29.0	29.0	33.0	23.0
10	---	---	---	---	---	---	---	---	30.0	31.0	29.0	27.0
11	---	---	---	---	---	---	---	---	27.0	32.0	35.0	25.0
12	---	---	---	---	---	---	---	---	28.5	32.0	33.5	23.0
13	---	---	---	---	---	---	---	---	27.0	30.0	34.5	21.0
14	---	---	---	---	---	---	---	---	30.5	33.0	36.0	19.0
15	---	---	---	---	---	---	---	---	31.0	26.5	32.0	20.5
16	---	---	---	---	---	---	---	---	29.5	32.0	34.5	20.0
17	---	---	---	---	---	---	---	---	31.5	30.5	33.5	15.5
18	---	---	---	---	---	---	---	---	30.0	31.0	29.5	14.5
19	---	---	---	---	---	---	---	---	21.5	34.0	30.5	16.5
20	---	---	---	---	---	---	---	---	29.0	34.0	29.5	20.0
21	---	---	---	---	---	---	---	---	31.0	31.5	34.5	21.5
22	---	---	---	---	---	---	---	---	31.0	33.5	26.5	21.0
23	---	---	---	---	---	---	---	---	29.0	34.0	28.0	21.0
24	---	---	---	---	---	---	---	24.5	32.0	32.0	32.0	21.5
25	---	---	---	---	---	---	---	24.0	30.0	31.5	27.0	22.5
26	---	---	---	---	---	---	---	27.5	30.5	32.5	34.0	23.0
27	---	---	---	---	---	---	---	19.5	35.0	33.5	32.0	19.5
28	---	---	---	---	---	---	---	24.0	29.0	26.5	22.0	18.0
29	---	---	---	---	---	---	---	27.0	30.5	26.0	26.5	18.0
30	---	---	---	---	---	---	---	28.0	28.5	28.5	24.5	15.5
31	---	---	---	---	---	---	---	24.5	---	28.0	25.0	---
MONTH	---	---	---	---	---	---	---	---	28.5	31.5	30.5	21.0

07229900 LAKE THUNDERBIRD NEAR NORMAN, OKLA.

LOCATION.--Lat 35°13'15", long 97°13'05", in NW1/4SE1/4 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).

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	RESERVOIR STORAGE (AC-FT)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	DISSOLVED NITRATE (NO3) (MG/L)	DISSOLVED NITRITE (N) (MG/L)
OCT.											
25...	96500	--	--	18	218	0	10	30	.07	.30	--
NOV.											
30...	105800	--	--	17	210	0	10	27	.05	.20	--
DEC.											
29...	105300	--	--	17	206	0	10	26	.02	.10	--
JAN.											
22...	111000	--	--	17	204	0	10	26	.02	.10	--
FEB.											
21...	112000	--	--	17	200	0	11	27	.02	.10	--
MAR.											
26...	132000	--	--	17	200	0	9.5	26	.05	.20	--
APR.											
23...	133500	--	--	17	190	0	11	25	.09	.40	--
MAY											
21...	124000	--	--	16	190	0	11	25	.07	.30	--
JUNE											
28...	123000	--	--	15	188	0	12	24	.07	.30	--
JULY											
23...	120000	34	19	15	197	0	7.3	24	.05	.20	.00
AUG.											
22...	116000	34	20	16	191	8	7.5	25	.08	.40	.00

07229900 LAKE THUNDERBIRD NEAR NORMAN, OKLA.

DRAINAGE AREA.--256 sq mi (633.0 km^2).

PERIOD OF RECORD.--Chemical analyses: October 1966 to current year.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS- SOLVED NITRITE (NO2) (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)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TUR- BID- ITY (MG/L)	TUR- BID- ITY (JTU)
OCT.										
25...	--	237	.32	190	11	.6	435	7.9	2	--
NOV.										
30...	--	232	.32	180	8	.6	413	6.9	3	--
DEC.										
29...	--	221	.30	180	11	.6	412	6.4	1	--
JAN.										
22...	--	218	.30	170	3	.6	408	6.6	0	--
FEB.										
21...	--	221	.30	180	16	.6	407	7.4	5	--
MAR.										
26...	--	220	.30	170	6	.6	401	7.5	4	--
APR.										
23...	--	209	.28	170	14	.6	383	7.3	6	--
MAY										
21...	--	213	.29	170	14	.5	388	7.2	2	--
JUNE										
28...	--	208	.28	160	6	.5	380	7.2	1	--
JULY										
23...	.0	219	.30	160	2	.5	357	7.9	--	2
AUG.										
22...	.0	220	.30	170	0	.5	390	8.4	--	2

07231000 LITTLE RIVER NEAR SASAKWA, OKLA.

LOCATION.--Lat 34°59'02", long 96°33'01", in NE1/4 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 24.1 (38.8 km).

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	DISSOLVED NITRATE (NO3) (MG/L)
OCT.										
05...	.18	--	--	350	210	0	21	690	.38	1.7
14...	.09	--	--	350	188	0	10	700	.27	1.2
25...	52	--	--	120	90	0	17	220	.50	2.2
NOV.										
05...	638	--	--	36	88	0	10	68	.23	1.0
15...	1310	--	--	40	88	0	14	76	.34	1.5
25...	127	--	--	230	190	0	14	490	.25	1.1
DEC.										
05...	53	--	--	390	288	0	34	820	.27	1.2
15...	46	--	--	470	350	0	41	980	.27	1.2
24...	95	--	--	170	184	0	26	350	.41	1.8
JAN.										
05...	820	--	--	61	126	0	16	120	.50	2.2
15...	282	--	--	320	216	0	27	670	.52	2.3
25...	160	--	--	210	216	0	25	430	.27	1.2
FEB.										
05...	247	--	--	190	206	0	21	400	.34	1.5
16...	121	--	--	310	294	4	30	640	.27	1.2
25...	185	--	--	360	326	4	36	740	.32	1.4
MAR.										
05...	641	--	--	120	172	0	22	250	.34	1.5
15...	822	--	--	110	200	0	21	210	.27	1.2
25...	4980	--	--	37	100	0	9.5	68	.36	1.6
APR.										
05...	948	--	--	76	182	0	17	150	.36	1.6
18...	2220	--	--	53	140	0	14	100	.34	1.5
25...	3200	--	--	49	132	0	12	96	.36	1.6
MAY										
05...	701	--	--	96	228	0	18	180	.38	1.7
15...	666	--	--	63	182	12	18	120	.38	1.7
25...	542	--	--	160	198	0	23	300	.66	2.9
JUNE										
05...	5980	22	6.9	28	79	7	7.0	48	.06	.27
15...	724	42	24	90	207	3	16	170	.01	.04
25...	725	40	23	83	208	0	12	150	.14	.62
JULY										
05...	174	70	32	150	229	0	17	280	.34	1.5
15...	35	110	60	380	284	0	28	740	.02	.10
25...	18	110	63	410	311	0	40	790	.58	2.6
AUG.										
05...	26	110	56	390	312	0	9.2	760	.21	.90
15...	7.1	74	34	220	249	0	28	400	.21	.90
SEP.										
06...	1260	45	13	120	121	0	12	220	.41	1.8
13...	2520	28	8.6	49	100	0	11	86	.36	1.6
27...	3860	24	7.1	38	96	0	6.9	64	.29	1.3

07231000 LITTLE RIVER NEAR SASAKWA, OKLA.

DRAINAGE AREA.--865 sq mi (2,240.4 km²).

PERIOD OF RECORD.--Chemical analyses: September 1951 to current year.
Water temperatures: October 1955 to current year.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS-SOLVED NITRITE (N) (MG/L)	DIS-SOLVED NITRITE (NO2) (MG/L)	DIS-SOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARDNESS (CA,MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)
OCT.										
05...	--	--	1400	1.90	.68	400	230	7.6	2450	6.8
14...	--	--	1400	1.90	.34	390	240	7.7	2420	7.5
25...	--	--	469	.64	65.8	140	66	4.4	866	7.3
NOV.										
05...	--	--	210	.29	362	96	24	1.6	375	6.8
15...	--	--	231	.31	817	110	38	1.7	415	6.5
25...	--	--	1150	1.56	394	360	200	5.3	1840	7.1
DEC.										
05...	--	--	1730	2.35	248	610	370	6.9	2930	8.0
15...	--	--	2120	2.88	263	720	430	7.6	3520	8.0
24...	--	--	860	1.17	221	310	160	4.2	1410	8.1
JAN.										
05...	--	--	351	.48	777	160	57	2.1	619	7.6
15...	--	--	1500	2.04	1140	470	290	6.4	2400	8.1
25...	--	--	1030	--	445	370	190	4.8	1700	8.1
FEB.										
05...	--	--	1000	1.36	667	350	180	4.4	1580	8.2
16...	--	--	1510	2.05	493	520	270	5.9	2420	8.4
25...	--	--	1640	2.23	819	590	320	6.5	2760	8.4
MAR.										
05...	--	--	662	.90	1150	260	120	3.2	1120	7.7
15...	--	--	568	.77	1260	260	96	3.0	1040	7.9
25...	--	--	238	.32	3200	110	28	1.5	405	7.4
APR.										
05...	--	--	434	.59	1110	210	61	2.3	791	8.1
18...	--	--	326	.44	1950	160	45	1.8	582	7.9
25...	--	--	314	.43	2710	150	42	1.7	544	7.9
MAY										
05...	--	--	556	.76	1050	270	83	2.5	975	8.2
15...	--	--	472	.64	849	220	51	1.8	782	8.6
25...	--	--	772	1.05	1130	290	130	4.1	1320	7.8
JUNE										
05...	.02	.0	--	--	--	83	7	1.3	315	9.0
15...	.01	.0	--	--	--	200	29	2.7	853	8.4
25...	.01	.0	--	--	--	190	24	2.6	764	7.8
JULY										
05...	.00	.0	734	1.00	345	310	120	3.7	1280	8.1
15...	.03	.1	1660	2.26	157	520	290	7.2	2840	8.0
25...	.02	.0	1930	2.62	93.8	530	280	7.7	2820	7.6
AUG.										
05...	.00	.0	1810	2.46	127	510	250	7.6	2720	8.0
15...	.00	.0	966	1.31	18.5	320	120	5.3	1670	8.0
SEP.										
06...	.03	.1	534	.73	1820	170	67	4.1	912	7.9
13...	.03	.1	256	.35	1740	110	23	2.1	454	7.7
27...	.04	.1	192	.26	2000	89	10	1.8	377	7.5

07231000 LITTLE RIVER NEAR SASAKWA, OKLA.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(ONCE-DAILY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	230	---	2650	---	2860	887	1730	720	972	---	1690
2	---	224	2610	2360	---	2970	678	1840	752	650	---	1890
3	---	---	2730	815	---	---	858	1860	354	885	---	6540
4	---	---	---	733	---	---	934	1050	389	1140	---	2920
5	2450	377	2930	619	1580	1120	789	975	319	1250	2690	1390
6	2450	474	---	720	---	785	---	963	420	1510	2700	873
7	2450	678	---	---	---	706	1110	1020	459	1340	2680	577
8	---	739	---	1310	---	688	---	560	612	1180	2740	786
9	2450	907	3630	---	---	824	1260	708	725	1570	2740	1000
10	---	988	3290	---	---	638	---	1060	809	1920	2770	1450
11	2430	---	3370	---	1070	569	---	1440	872	2150	1120	1350
12	---	1100	---	1870	---	567	1180	881	906	3480	1740	1410
13	---	320	3920	---	2050	698	---	784	911	2230	1650	434
14	2420	450	4030	2640	---	979	---	790	978	2400	1500	463
15	2430	416	3520	2440	---	1030	---	798	874	2720	1640	466
16	2420	588	3930	1580	2420	1000	---	801	752	2810	1140	600
17	---	773	3440	1300	2510	1200	---	806	991	2970	1600	733
18	---	912	3430	1200	---	---	581	940	719	3000	1980	1190
19	2400	721	3510	850	---	---	921	1040	371	2950	2050	1460
20	2420	1000	3770	---	2760	---	696	1320	492	2960	1970	1560
21	2410	---	3300	---	---	---	815	1440	632	2920	1890	1560
22	618	1360	3430	1010	2740	---	384	1520	874	4900	1870	1660
23	1210	---	---	1130	2940	---	428	1760	980	3100	1890	1760
24	1430	1680	1430	1170	---	---	481	1530	798	2810	1850	1840
25	868	1850	---	1700	2760	405	539	1300	824	2840	1770	1690
26	593	---	---	938	2850	537	821	940	778	2860	1800	762
27	642	2130	---	997	2800	466	1140	1040	738	2860	1770	355
28	822	2120	---	---	---	656	1360	1050	737	2770	1760	455
29	960	2140	2520	---	---	897	1490	1140	829	2960	1720	466
30	1010	2240	2520	---	---	1170	1630	1200	1390	1750	1720	536
31	246	---	3850	1890	---	1210	---	2060	---	3420	1680	---
MONTH	---	1020	---	---	---	---	---	1170	734	2360	1940	1330

07231000 LITTLE RIVER NEAR SASAKWA, OKLA.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(ONCE-DAILY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	11.0	---	4.0	---	10.0	12.0	20.0	24.0	29.0	31.0	28.0
2	---	11.5	7.0	4.5	---	10.5	13.0	19.0	21.5	30.5	31.5	29.5
3	---	---	8.5	3.0	---	9.5	12.0	19.0	21.0	31.0	32.0	21.5
4	---	---	---	4.0	---	9.0	11.0	18.5	22.5	32.5	31.0	31.5
5	19.0	---	4.0	3.0	7.5	10.5	10.0	18.0	23.0	29.5	31.0	23.0
6	20.0	---	---	1.0	---	12.0	14.0	19.0	23.5	31.5	31.0	22.0
7	20.5	17.0	---	---	---	12.5	12.0	19.5	25.0	32.0	32.0	25.0
8	---	13.0	---	0.5	---	14.0	---	22.5	26.5	---	30.5	26.5
9	19.0	14.0	0.0	---	---	14.0	11.0	22.0	27.0	30.5	33.0	29.0
10	---	14.0	0.5	---	3.0	14.0	11.5	23.0	27.5	32.0	33.0	29.5
11	20.5	---	1.0	---	2.0	14.0	---	25.5	27.0	31.0	30.5	28.0
12	---	10.5	---	0.0	---	15.0	12.5	24.5	27.0	32.0	33.5	29.0
13	---	11.0	1.0	---	7.5	16.0	---	22.0	26.0	31.0	32.5	21.5
14	22.0	8.5	1.5	2.0	---	15.0	---	21.5	26.5	31.5	34.0	22.0
15	20.5	7.0	1.0	0.5	---	13.0	---	22.0	28.0	29.0	34.0	23.0
16	24.5	7.0	0.0	1.0	2.0	11.5	---	23.0	28.0	31.0	32.0	22.5
17	---	7.5	5.0	5.5	3.0	---	---	23.0	27.0	31.0	33.5	20.0
18	---	7.0	1.0	9.0	---	---	15.5	24.0	28.0	32.5	32.5	20.0
19	14.0	5.0	6.5	8.5	---	---	17.5	24.5	22.0	33.0	33.5	22.0
20	14.0	5.0	4.0	---	9.5	---	20.0	26.0	23.5	34.0	34.5	25.0
21	14.0	---	5.0	---	---	---	21.0	28.0	27.0	32.5	33.0	27.0
22	16.5	6.0	2.0	6.0	6.0	---	19.5	25.5	28.0	33.5	33.0	27.0
23	14.5	---	---	4.5	9.0	14.0	20.0	26.0	28.5	34.5	31.5	26.0
24	12.0	6.0	4.5	7.0	---	---	21.0	25.0	29.0	34.5	32.0	26.0
25	13.0	6.0	---	6.0	7.5	10.0	21.0	23.0	29.0	33.5	33.0	25.0
26	11.5	---	---	6.5	11.0	10.0	18.0	26.0	29.5	33.0	31.5	25.0
27	11.0	5.0	---	2.0	9.0	10.0	17.0	22.0	30.5	34.0	32.0	21.0
28	13.0	7.5	---	2.0	9.0	12.0	19.0	22.5	29.0	29.0	30.5	21.5
29	15.0	5.0	9.0	2.0	---	13.0	19.5	24.5	27.0	33.0	30.0	21.5
30	15.0	5.0	10.0	---	---	15.5	19.0	25.5	26.0	32.0	31.0	21.0
31	13.0	---	6.0	5.0	---	14.0	---	22.0	---	30.5	31.0	---
MONTH	---	---	---	---	---	---	---	23.0	26.5	32.0	32.0	24.5

07231500 CANADIAN RIVER AT CALVIN, OKLA.

LOCATION.--Lat 34°58'32", long 96°14'24", in NE1/4SW1/4 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).

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	DISSOLVED NITRATE (NO3) (MG/L)	DISSOLVED NITRITE (N) (MG/L)	DISSOLVED NITRITE (NO2) (MG/L)
OCT.												
05...	11	--	--	320	228	0	29	630	.11	.50	--	--
15...	16	--	--	380	208	0	28	750	.23	1.0	--	--
25...	276	--	--	50	120	0	29	71	.95	4.2	--	--
NOV.												
05...	1470	--	--	47	122	0	22	82	.38	1.7	--	--
15...	2100	--	--	38	132	0	20	65	.54	2.4	--	--
25...	410	--	--	84	162	0	38	160	.36	1.6	--	--
DEC.												
05...	410	--	--	170	284	0	99	290	.68	3.0	--	--
15...	459	--	--	200	322	0	89	360	1.3	5.7	--	--
25...	459	--	--	220	320	0	82	380	.97	4.3	--	--
JAN.												
05...	2250	--	--	60	144	0	41	98	.61	2.7	--	--
15...	1140	--	--	150	218	0	56	280	.72	3.2	--	--
25...	1490	--	--	98	190	0	89	160	.81	3.6	--	--
FEB.												
05...	1500	--	--	110	2380	0	89	180	.09	.40	--	--
15...	1120	--	--	160	196	4	89	270	.54	2.4	--	--
24...	632	--	--	180	2060	6	110	310	.56	2.5	--	--
MAR.												
05...	5310	--	--	32	164	0	23	50	.54	2.4	--	--
15...	4790	--	--	93	186	2	130	140	.66	2.9	--	--
25...	27500	--	--	34	110	2	25	56	.47	2.1	--	--
APR.												
05...	4190	--	--	100	186	0	120	150	.41	1.8	--	--
15...	10800	--	--	140	228	0	160	230	.52	2.3	--	--
25...	7120	--	--	51	158	0	41	86	.38	1.7	--	--
MAY												
05...	3870	--	--	110	206	0	160	170	.38	1.7	--	--
15...	1050	--	--	88	216	10	72	140	.18	.80	--	--
25...	3360	--	--	97	212	0	83	160	.47	2.1	--	--
JUNE												
05...	18800	38	9.3	26	129	0	33	41	.66	2.9	.01	.0
15...	2620	69	9.4	87	225	0	74	170	.47	2.1	.00	.0
25...	1370	59	16	73	207	0	27	130	.47	2.1	.00	.0
JULY												
05...	700	59	22	80	225	0	32	130	.48	2.1	.00	.0
15...	118	74	41	200	268	0	55	380	.37	1.6	.02	.0
25...	110	60	27	140	210	0	42	240	.80	3.5	.01	.0
AUG.												
05...	83	66	38	180	248	0	53	320	.78	3.5	.02	.0
15...	84	67	32	180	222	0	38	340	.63	2.8	.00	--
25...	54	60	33	150	250	0	39	280	.49	2.2	.00	--
SEP.												
08...	2890	34	9.9	40	130	0	19	63	.41	1.8	.01	--
15...	2910	41	12	38	155	0	24	60	.94	4.2	.02	--
28...	14600	.0	.0	27	121	0	14	46	.56	2.5	.02	--

07231500 CANADIAN RIVER AT CALVIN, OKLA.

DRAINAGE AREA.--27,952 sq mi (72,395.7 km²), of which 4,801 sq mi (12,434.6 km²) is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: July 1965 to current year.
Water temperatures: July 1965 to current year.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	TOTAL PHOSPHORUS (P) (MG/L)	PHOSPHATE (PO4) (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)	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	DISSOLVED BORON (B) (UG/L)
OCT.											
05...	--	.03	1340	1.82	39.8	420	230	6.8	2350	8.0	--
15...	--	.10	1550	2.11	67.0	440	270	7.9	2700	7.7	--
25...	--	.26	278	.38	207	120	22	2.0	488	7.7	--
NOV.											
05...	--	.12	287	.39	1140	140	40	1.7	502	6.7	96
15...	--	.19	268	.36	1520	140	32	1.4	460	6.7	37
25...	--	.16	476	.65	527	210	77	2.5	820	7.6	48
DEC.											
05...	--	.49	952	1.29	1050	380	110	3.8	1530	8.0	180
15...	--	.79	1060	1.44	1310	430	170	4.2	1750	7.5	210
25...	--	.85	1110	1.51	1380	440	170	4.6	1810	8.1	240
JAN.											
05...	--	.31	366	.50	2220	170	52	2.0	632	6.8	60
15...	--	.39	772	1.05	2380	310	130	3.7	1320	6.8	130
25...	--	.37	569	.77	2290	260	100	2.6	960	6.9	70
FEB.											
05...	--	.05	703	.96	2850	310	0	2.7	1090	8.3	100
15...	--	.11	800	1.09	2420	310	140	4.0	1300	8.6	100
24...	--	.15	924	1.26	1580	350	0	4.2	1480	8.6	140
MAR.											
05...	--	.18	259	.35	3710	160	25	1.1	440	8.1	80
15...	--	.29	608	.83	7860	300	140	2.3	992	8.4	90
25...	--	.22	233	.32	17300	120	26	1.4	409	8.4	0
APR.											
05...	--	.04	672	.91	7600	270	120	2.6	986	7.7	50
15...	--	.17	870	1.18	25400	360	170	3.2	1320	7.9	70
25...	--	.15	366	.50	7040	180	50	1.7	601	7.2	20
MAY											
05...	--	.27	774	1.05	8090	340	170	2.6	1150	8.3	--
15...	--	.19	604	.82	1710	290	96	2.2	936	8.6	--
25...	--	.26	632	.86	5730	280	110	2.5	992	8.2	--
JUNE											
05...	1.0	--	260	.35	13200	130	27	1.0	413	7.6	60
15...	.35	--	565	.77	4000	210	26	2.6	937	7.9	150
25...	.25	--	650	.88	2400	210	43	2.2	628	7.2	100
JULY											
05...	--	--	522	.71	987	240	53	2.3	842	8.2	180
15...	--	--	930	1.26	296	350	130	4.6	1640	7.9	220
25...	--	--	630	.86	187	260	89	3.8	1160	7.9	180
AUG.											
05...	.13	--	843	1.15	189	320	120	4.4	1450	8.0	250
15...	.0	.10	775	1.05	176	300	120	4.5	1450	7.7	240
25...	.0	.08	744	1.01	108	290	81	3.9	1320	7.9	270
SEP.											
08...	.0	.13	252	.34	1970	130	19	1.6	458	7.9	160
15...	.0	.12	349	.47	2740	150	25	1.3	508	7.9	110
28...	1.0	3.7	213	.29	8400	110	13	1.1	369	8.0	100

07231500 CANADIAN RIVER AT CALVIN, OKLA.--Continued

CHEMICAL ANALYSES OF ADDITIONAL SAMPLES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	DISSOLVED NITRATE (NO3) (MG/L)
OCT.										
10...	11	--	--	--	--	--	--	630	.02	.10
26...	152	--	--	--	--	--	--	130	.50	2.2
NOV.										
14...	4450	--	--	--	--	--	--	48	.27	1.2
29...	390	--	--	--	--	--	--	290	.20	.90
DEC.										
19...	387	--	--	--	--	--	--	350	.77	3.4
JAN.										
23...	2940	--	--	--	--	--	--	200	.56	2.5
FEB.										
06...	1280	--	--	--	--	--	--	230	.41	1.8
20...	710	--	--	--	--	--	--	330	.36	1.6
MAR.										
07...	8410	--	--	--	--	--	--	60	.00	.00
20...	1590	--	--	--	--	--	--	230	.20	.90
APR.										
03...	8300	--	--	--	--	--	--	89	.18	.80
25...	10100	--	--	--	--	--	--	88	.05	.20
MAY										
08...	3680	--	--	--	--	--	--	110	.29	1.3
30...	650	--	--	--	--	--	--	140	.25	1.1
JUNE										
19...	4280	--	--	--	--	--	--	100	.16	.70
27...	966	--	--	--	--	--	--	130	.09	.40
JULY										
10...	340	--	--	--	--	--	--	--	.00	.00
24...	377	--	--	--	--	--	--	--	.02	.10
AUG.										
07...	115	73	39	200	247	0	53	390	.00	.00
28...	48	--	--	--	--	--	--	--	--	--
SEP.										
11...	600	--	--	--	--	--	--	--	1.7	7.7
25...	267	--	--	--	--	--	--	--	.02	.10

DATE	DISSOLVED NITRITE (N) (MG/L)	DISSOLVED NITRITE (NO2) (MG/L)	DISSOLVED AMMONIA ORGANIC NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	PHOSPHATE (PO4) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (TONS PER AC-FT)	DISSOLVED SOLIDS (TONS PER DAY)	TOTAL NONFILTRABLE RESIDUE (MG/L)
OCT.									
10...	.00	.0	1.0	--	.16	1360	1.85	40.4	4
26...	--	--	.66	--	.15	394	.54	162	254
NOV.									
14...	--	--	.45	--	.90	233	.32	2800	2190
29...	.00	.0	.90	--	.58	814	1.11	857	32
DEC.									
19...	.01	.0	.72	--	1.0	992	1.35	1040	38
JAN.									
23...	.03	.1	1.8	--	.19	725	.99	5760	1220
FEB.									
06...	--	--	1.8	--	.20	810	1.10	2800	732
20...	--	--	1.5	--	.32	978	1.33	1880	161
MAR.									
07...	--	--	1.3	--	.20	345	.47	7830	2090
20...	--	--	.91	--	.13	815	1.11	3500	383
APR.									
03...	--	--	.62	--	.08	452	.61	10100	1560
25...	--	--	.74	--	.07	378	.51	10300	1460
MAY									
08...	--	--	.90	--	.22	508	.69	5050	1290
30...	--	--	.14	--	.26	676	.92	1190	333
JUNE									
19...	--	--	.08	--	.13	354	.48	4090	3900
27...	--	--	.80	--	--	480	.65	1250	276
JULY									
10...	.00	.0	--	.11	--	581	.79	533	--
24...	.01	.0	--	--	--	609	.83	620	--
AUG.									
07...	.00	.0	.43	.11	--	936	1.27	291	--
28...	--	--	--	--	--	--	--	--	--
SEP.									
11...	.06	.2	.66	.20	--	336	.46	544	--
25...	.01	.0	--	.34	--	496	.67	358	--

07231500 CANADIAN RIVER AT CALVIN, OKLA.--Continued

CHEMICAL ANALYSES OF ADDITIONAL SAMPLES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	LOSS ON IGNITION (MG/L)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	CHEMICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	BIOCHEMICAL OXYGEN DEMAND (MG/L)	PHENOLS (UG/L)
OCT.									
10...	270	--	--	--	2320	--	13	2.3	--
26...	99	--	--	--	686	--	22	1.4	--
NOV.									
14...	62	--	--	--	389	--	63	4.6	4
29...	166	--	--	--	1410	--	14	2.5	0
DEC.									
19...	103	--	--	--	1690	--	14	1.2	--
JAN.									
23...	32	--	--	--	1240	--	46	2.8	--
FEB.									
06...	178	--	--	--	1330	--	18	3.5	--
20...	218	--	--	--	1660	--	14	1.6	--
MAR.									
07...	151	--	--	--	541	--	73	4.4	--
20...	206	--	--	--	1300	--	53	2.6	--
APR.									
03...	139	--	--	--	708	--	68	4.0	--
25...	109	--	--	--	622	--	45	.7	--
MAY									
08...	140	--	--	--	810	--	55	3.4	1
30...	272	--	--	--	1050	--	33	1.8	--
JUNE									
19...	128	--	--	--	579	--	88	3.8	--
27...	149	--	--	--	800	--	25	4.0	--
JULY									
10...	--	--	--	--	1010	--	--	--	--
24...	--	--	--	--	1010	--	23	3.6	--
AUG.									
07...	--	340	140	4.7	1680	7.4	25	--	--
28...	--	--	--	--	--	--	--	--	--
SEP.									
11...	--	--	--	--	532	--	25	--	--
25...	--	--	--	--	887	--	--	--	--

CHEMICAL ANALYSES OF MINOR AND TRACE CONSTITUENTS, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DISSOLVED CADMIUM (CD) (UG/L)	DISSOLVED CHROMIUM (CR) (UG/L)	DISSOLVED COPPER (CU) (UG/L)	DISSOLVED IRON (FE) (UG/L)	DISSOLVED LEAD (PB) (UG/L)	DISSOLVED MANGANESE (MN) (UG/L)	DISSOLVED ZINC (ZN) (UG/L)
OCT.							
10...	--	0	--	--	--	--	20
26...	--	0	--	--	--	--	110
NOV.							
14...	--	0	--	--	--	--	70
29...	--	0	--	--	--	--	60
DEC.							
19...	--	0	--	--	--	--	20
JAN.							
23...	--	0	--	--	--	--	20
FEB.							
06...	--	0	--	--	--	--	20
20...	--	0	--	--	--	--	60
MAR.							
07...	--	0	--	--	--	--	180
20...	--	0	--	--	--	--	70
APR.							
03...	--	0	--	--	--	--	50
25...	--	0	--	--	--	--	40
MAY							
08...	1	0	22	100	3	0	50
30...	--	0	--	--	--	--	50
JUNE							
19...	--	0	--	--	--	--	80
27...	--	0	--	--	--	--	50
JULY							
10...	--	0	--	--	--	--	--
24...	--	0	--	--	--	--	140
AUG.							
07...	--	0	--	--	--	--	30
SEP.							
11...	--	0	--	--	--	--	690

07231500 CANADIAN RIVER AT CALVIN, OKLA.--Continued

FIELD ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION
OCT.					
10...	1700	7.6	23.0	9.2	112
26...	650	8.1	11.0	10.6	102
NOV.					
14...	320	8.6	7.0	11.4	98
29...	1400	--	5.0	13.0	106
DEC.					
19...	1650	--	5.0	12.3	102
JAN.					
23...	1000	8.1	6.0	12.0	102
FEB.					
06...	1350	8.4	6.0	11.8	100
20...	1500	8.4	6.0	11.6	97
MAR.					
07...	590	7.7	14.0	8.7	89
20...	1300	--	9.0	9.2	84
APR.					
03...	725	--	11.0	10.9	106
25...	580	8.1	19.5	7.4	86
MAY					
08...	890	8.0	19.0	8.1	92
30...	1100	8.2	23.0	8.5	104
JUNE					
19...	520	8.1	21.0	7.6	90
27...	700	8.1	28.0	7.4	99
JULY					
10...	1200	8.2	31.5	11.2	156
24...	981	--	28.0	7.5	99

07231500 CANADIAN RIVER AT CALVIN, OKLA.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(ONCE-DAILY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2080	205	1360	1430	842	1460	589	1260	792	694	953	1510
2	2220	303	1380	1540	660	1030	667	1250	445	594	961	1700
3	2510	291	1430	1020	813	1180	596	1250	361	586	1090	1520
4	2360	397	1500	642	874	498	1000	1500	462	670	1160	1290
5	2370	502	1530	617	1090	440	1020	1160	387	980	1420	1290
6	2430	720	1550	753	1320	665	969	1080	383	833	1430	1000
7	2440	509	1750	797	1440	591	1140	850	453	1140	1620	652
8	2400	660	1660	836	700	694	1290	700	538	1140	1750	431
9	2420	---	1660	1000	725	685	1290	698	646	1080	1760	474
10	2310	808	1860	1100	948	634	1350	820	858	1010	1410	474
11	2360	898	1920	1250	1030	550	1340	974	865	997	1340	508
12	2870	846	1880	1380	1140	550	1320	1130	888	1260	1050	572
13	2910	---	1880	1350	1280	636	1340	1030	926	1430	1150	546
14	3210	387	1680	1380	1360	681	1400	975	897	1430	1160	439
15	2710	460	1750	1320	1300	992	1380	953	925	1640	1420	459
16	2260	478	1830	1120	1470	1150	556	953	920	1510	1150	699
17	2140	577	1810	1070	1560	1240	601	978	859	1370	1490	531
18	2080	701	1650	978	---	1240	637	980	811	1370	1110	654
19	2150	753	1710	876	1630	1280	541	1070	678	1170	1110	701
20	2160	816	1930	803	1680	1300	878	1130	375	1300	1310	781
21	2100	679	1720	845	1700	1320	643	1190	411	1430	1310	702
22	661	866	1770	1180	1780	1280	352	1300	546	1350	1360	749
23	1290	858	1750	1180	1480	1280	371	1320	687	1100	1280	795
24	553	911	1990	970	1620	---	494	1400	830	1000	1360	793
25	488	831	1810	951	1480	409	600	964	792	1140	1280	849
26	642	868	1300	975	1550	410	717	604	783	1210	1450	352
27	1120	871	1290	792	1500	537	888	765	820	1430	1380	338
28	1200	1430	1250	879	1410	---	986	892	788	1430	1670	354
29	1110	1120	1400	951	---	766	1270	977	781	1150	1410	413
30	1050	1350	1440	1000	---	1180	1250	1040	807	1250	1430	428
31	262	---	1390	1130	---	693	---	1050	---	1560	1500	---
MONTH	1900	718	1640	1040	1270	875	916	1040	690	1170	1330	733

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(ONCE-DAILY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14.0	11.0	4.5	4.0	8.5	9.5	10.0	18.0	22.0	25.0	23.0	23.0
2	15.5	10.0	6.5	4.0	5.0	10.0	12.0	16.5	20.0	26.0	22.0	23.5
3	15.5	9.5	9.0	4.0	5.0	10.0	10.5	15.0	19.0	26.5	21.5	23.5
4	18.0	10.0	4.0	3.0	6.5	10.0	10.0	17.5	20.0	27.0	22.5	23.0
5	18.5	11.5	3.0	2.0	8.0	9.5	9.0	17.0	20.5	27.0	21.5	21.5
6	18.0	12.0	0.0	0.0	7.0	13.0	11.0	18.5	20.0	25.0	22.0	21.0
7	17.0	12.0	0.0	0.0	8.0	11.5	11.0	17.0	21.0	24.0	24.0	21.0
8	19.0	10.0	1.0	0.0	2.0	12.5	9.0	18.0	21.0	26.0	23.5	23.0
9	19.5	11.5	0.0	0.0	2.0	13.0	5.0	18.5	22.5	25.0	23.5	24.0
10	18.0	10.0	0.0	0.0	1.0	13.5	6.0	20.5	23.0	26.0	25.0	25.0
11	19.5	9.0	0.0	0.0	2.0	12.0	8.5	23.0	24.0	24.5	24.0	25.0
12	20.0	11.0	1.5	0.0	4.5	12.0	12.0	19.0	23.0	24.0	26.0	24.5
13	19.5	---	0.0	0.0	8.0	15.0	14.5	20.0	23.5	24.5	26.0	21.0
14	20.0	9.0	1.0	2.5	5.0	13.0	14.5	17.0	25.5	25.0	26.5	20.0
15	18.0	8.0	0.0	0.0	4.0	12.5	15.0	---	25.0	26.0	25.0	19.5
16	19.0	8.0	0.0	2.0	1.5	10.0	13.5	16.5	25.5	23.0	23.5	18.5
17	19.0	8.0	0.5	6.5	3.0	11.0	12.0	16.5	22.5	23.0	24.0	19.0
18	20.0	6.5	2.0	10.5	4.0	11.5	15.0	17.5	24.5	23.5	24.0	16.5
19	10.5	5.0	3.5	9.0	4.0	13.5	15.0	19.5	22.0	26.0	24.5	18.5
20	11.0	4.5	4.5	9.0	5.5	11.0	17.0	21.0	21.5	26.0	24.5	17.0
21	12.5	4.5	5.0	10.0	8.0	10.0	20.0	22.5	21.5	25.0	24.5	22.5
22	16.0	4.0	2.0	7.0	5.5	11.0	18.5	22.0	21.5	26.0	24.5	22.5
23	14.5	3.5	4.0	5.0	5.5	11.0	18.5	19.0	24.0	25.0	24.0	22.5
24	11.0	5.0	5.0	4.5	6.0	12.5	19.0	19.0	23.5	26.0	21.5	22.5
25	9.0	5.5	2.0	5.0	6.5	11.0	19.0	20.0	24.0	26.5	23.0	23.0
26	10.5	5.5	3.0	5.5	10.0	9.0	17.0	20.0	24.5	26.5	23.5	22.0
27	11.0	5.5	4.0	5.5	7.0	8.5	14.0	20.0	25.0	26.0	23.5	20.0
28	11.0	5.0	5.0	4.0	8.5	10.0	14.5	16.5	26.0	26.0	23.0	19.5
29	12.5	5.0	10.0	1.5	---	12.5	15.0	18.0	24.0	24.5	23.0	18.5
30	15.0	5.0	10.0	3.0	---	14.0	18.0	19.0	24.0	23.0	23.0	18.5
31	14.0	---	5.0	6.0	---	11.0	---	20.5	---	24.0	23.0	---
MONTH	15.5	8.0	3.0	3.5	5.5	11.5	13.5	19.0	23.0	25.0	23.5	21.5

07232500 BEAVER RIVER NEAR GUYMON, OKLA.

LOCATION.--Lat 36°43'24", long 101°29'30", in NW1/4SW1/4 sec.18, T.3 N., R.15 E., Texas County, at gaging station at 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).

DRAINAGE AREA.--2,139 sq mi (5,540 km^2), includes that of Dry Sand Draw, of which 964 sq mi (2,496.8 km^2) is probably noncontributing.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	DISSOLVED NITRATE (NO3) (MG/L)	DISSOLVED NITRITE (N) (MG/L)	DISSOLVED NITRITE (NO2) (MG/L)
NOV.												
01...	5.1	--	--	--	--	--	--	--	--	--	--	--
28...	5.8	--	--	27	244	0	45	15	.36	1.6	--	--
DEC.												
12...	5.0	--	--	30	256	0	58	16	.05	.20	.00	.0
18...	3.9	--	--	30	298	0	58	16	.72	3.2	--	--
JAN.												
15...	13	--	--	25	240	0	47	13	.52	2.3	--	--
FEB.												
14...	7.8	--	--	28	258	0	59	15	.38	1.7	--	--
26...	8.4	--	--	--	--	--	--	--	--	--	--	--
MAR.												
26...	16	--	--	39	292	0	71	20	.27	1.2	--	--
APR.												
09...	17	--	--	33	284	0	65	19	.29	1.3	.00	.0
09...	16	--	--	35	282	0	65	19	.36	1.6	--	--
MAY												
02...	9.1	--	--	33	260	0	60	18	.11	.50	--	--
25...	3.7	--	--	--	--	--	--	--	--	--	--	--
JULY												
17...	.62	49	23	26	258	0	50	14	.16	.70	.00	.0
AUG.												
06...	16	55	7.8	8.8	207	0	13	6.2	.14	.62	.01	.0

07232500 BEAVER RIVER NEAR GUYMON, OKLA.

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.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS-SOLVED AMMONIA ORGANIC NITRO-GEN (N) (MG/L)	PHOS-PHATE (PO4) (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)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	CHEM-ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	BIO-CHEM-ICAL OXYGEN DEMAND (MG/L)
NOV.												
01...	--	--	--	--	--	--	--	--	608	--	--	--
28...	--	--	304	.41	4.76	210	10	.8	498	8.0	--	--
DEC.												
12...	.00	--	326	.44	4.40	230	20	.9	538	6.9	3	1.7
18...	--	--	374	.51	3.94	260	16	.8	600	8.1	--	--
JAN.												
15...	--	--	301	.41	10.6	210	13	.8	497	7.0	--	--
FEB.												
14...	--	--	336	.46	7.08	230	18	.8	539	7.8	--	--
26...	--	--	--	--	--	--	--	--	535	--	--	--
MAR.												
26...	--	--	388	.53	16.8	260	20	1.1	630	7.7	--	--
APR.												
09...	.06	.00	370	.50	17.0	260	27	.9	600	7.9	3	.6
09...	--	--	369	.50	15.9	250	19	1.0	601	7.8	--	--
MAY												
02...	--	--	354	.48	8.70	230	17	.9	562	8.1	--	--
25...	--	--	--	--	--	--	--	--	541	--	--	--
JULY												
17...	--	--	321	.44	.54	220	5	.8	500	7.9	--	--
AUG.												
06...	--	--	234	.32	10.1	170	0	.3	357	7.6	--	--

07234000 BEAVER RIVER AT BEAVER, OKLA.

LOCATION.--Lat 36°49'20", long 100°31'05", in SW1/4 sec.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, 5.0 mi (8.0 km) upstream from Clear Creek, and at mile 576.0 (926.8 km).

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	DISSOLVED NITRATE (NO3) (MG/L)	DISSOLVED NITRITE (N) (MG/L)
OCT.											
05...	.80	--	--	560	206	0	480	880	.20	.90	--
15...	.08	--	--	470	136	0	570	800	.29	1.3	--
25...	2.8	--	--	630	214	0	420	1000	.20	.90	--
NOV.											
05...	14	110	61	570	226	0	360	870	.09	.40	--
15...	24	120	61	620	208	0	380	960	.20	.90	--
25...	40	110	61	530	180	0	270	860	.70	3.1	--
DEC.											
05...	24	150	68	620	336	0	370	960	.41	1.8	--
15...	25	170	80	680	336	0	410	1100	.59	2.6	--
25...	61	96	45	360	244	0	240	540	1.0	4.6	--
JAN.											
05...	30	180	75	720	360	0	420	1100	.54	2.4	--
15...	60	120	63	520	244	0	310	820	.54	2.4	--
25...	36	140	75	610	304	0	360	950	.45	2.0	--
FEB.											
05...	52	120	58	520	230	0	320	820	.05	.20	--
15...	36	140	61	560	280	0	360	880	.32	1.4	--
25...	35	140	63	600	250	0	370	960	.11	.50	--
MAR.											
05...	35	120	64	610	216	0	360	960	.05	.20	--
15...	139	120	46	390	266	0	260	590	1.5	6.5	--
25...	2460	56	16	61	202	0	53	90	.25	1.1	--
APR.											
05...	225	130	50	340	280	0	290	540	.09	.40	--
15...	189	150	68	460	286	0	400	710	.54	2.4	--
25...	81	140	68	520	280	0	400	800	.43	1.9	--
MAY											
05...	67	120	75	650	222	0	410	990	.10	.44	.00
15...	40	94	76	630	126	0	430	970	.01	.04	.00
25...	120	78	28	230	223	0	150	340	.94	4.2	.01
JUNE											
05...	16	94	72	630	349	0	540	900	.00	.00	.01
15...	.19	160	110	620	225	0	670	940	.46	2.0	.00
25...	.05	180	98	570	186	0	650	940	.59	2.6	.00
JULY											
15...	660	87	30	180	147	0	220	280	.33	1.5	.00
25...	.38	150	72	450	171	0	470	750	.20	.90	.09
AUG.											
05...	.90	93	46	350	144	0	320	530	.10	.40	1.1
SEP.											
26...	112	33	6.8	12	128	0	18	14	.46	2.0	--

07234000 BEAVER RIVER AT BEAVER, OKLA.

DRAINAGE AREA.--7,955 sq mi (20,603.4 km^2), of which 4,270 sq mi (11,059.3 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.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS-SOLVED NITRITE (NO2) (MG/L)	PHOS-PHATE (PO4) (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)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)
OCT.										
05...	--	--	2300	3.13	4.97	680	510	9.3	3660	8.3
15...	--	--	2200	2.99	.48	790	680	7.3	3480	8.1
25...	--	--	2500	3.40	18.9	630	450	11	3980	8.3
NOV.										
05...	--	.03	2150	2.92	81.3	540	360	11	3480	8.3
15...	--	.16	2330	3.17	151	540	370	11	3780	8.3
25...	--	2.0	2080	2.83	225	520	370	10	3310	8.3
DEC.										
05...	--	--	2440	3.32	158	660	380	11	3930	7.5
15...	--	--	2720	3.70	184	760	480	11	4290	7.1
25...	--	--	1460	1.99	240	420	220	7.6	2440	7.0
JAN.										
05...	--	--	2850	3.88	231	770	480	11	4540	7.4
15...	--	--	2040	2.77	330	560	360	9.6	3280	7.1
25...	--	--	2440	3.32	237	670	420	10	3840	7.5
FEB.										
05...	--	--	2120	2.88	298	530	340	9.8	3370	8.1
15...	--	--	2310	3.14	225	610	380	9.9	3610	8.0
25...	--	--	2520	3.43	238	620	420	11	3830	8.0
MAR.										
05...	--	--	2500	3.40	236	570	390	11	3850	7.6
15...	--	--	1740	2.37	653	480	260	7.7	2680	7.3
25...	--	--	412	.56	2740	210	44	1.9	692	7.3
APR.										
05...	--	--	1660	2.26	1010	530	300	6.4	2550	7.1
15...	--	--	2090	2.84	1070	650	420	7.8	3210	7.4
25...	--	--	2220	3.02	486	640	410	9.0	3450	7.8
MAY										
05...	.0	--	2460	3.35	445	610	430	11	4240	8.0
15...	.0	--	2320	3.16	251	550	440	12	4080	8.2
25...	.0	--	982	1.34	318	310	130	5.7	1760	7.7
JUNE										
05...	.0	--	2360	3.21	102	530	250	12	3860	8.3
15...	.0	--	2710	3.69	1.39	850	670	9.2	4350	7.8
25...	.0	--	2530	3.44	.34	850	700	8.5	4130	7.5
JULY										
15...	.0	--	868	1.18	1550	340	220	4.2	1480	8.0
25...	.3	--	2000	2.72	2.05	670	530	7.6	3190	7.9
AUG.										
05...	3.6	--	1490	2.03	3.62	420	300	7.4	2340	7.1
SEP.										
26...	.01	.0	164	.22	49.6	110	5	.5	286	7.9

07234000 BEAVER RIVER AT BEAVER, OKLA.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(ONCE-DAILY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3700	3460	3500	3490	3520	3580	1210	3120	3120	3890	997	2420
2	3810	3810	3510	3620	3180	3780	1430	3460	3580	4010	1400	---
3	3780	4090	3510	3670	3250	3780	1900	3590	3570	3990	1350	---
4	3710	3560	3760	3960	3250	3780	2350	3820	3620	4170	1560	---
5	3730	3530	3950	4540	3370	3850	2600	3940	3750	3890	2300	---
6	3700	3690	4370	4400	3520	3840	2220	3940	3920	4140	3130	---
7	3670	3820	4500	4400	3860	3850	2280	4110	3980	4320	3360	---
8	3660	3900	4580	4390	3700	3650	2280	4030	4090	4560	3420	---
9	3670	3860	4580	4280	3690	3700	2770	4020	4080	4560	4140	---
10	3670	3910	4960	4280	3850	2570	2990	4210	4220	1570	4070	---
11	3520	3630	4900	4180	4040	1410	3070	3640	4200	3890	3910	---
12	3530	3600	4590	4140	3890	1710	3070	4010	4070	4160	4860	---
13	3520	3560	4470	3780	3560	1590	3210	4000	4010	4520	5130	---
14	3560	3570	4280	3780	3590	2170	3260	4000	4040	4510	---	---
15	3550	3830	4330	3300	3610	2680	3120	4020	4100	1460	---	---
16	3560	3340	4340	3100	3700	2970	3230	4080	3990	1450	---	---
17	3600	3250	4110	2820	3780	3200	3120	4020	4050	2240	---	---
18	3560	2950	4120	2830	---	3420	3060	3970	4040	3000	---	4360
19	3570	3160	3720	2730	3770	3480	3080	4070	3980	3250	---	4680
20	3380	3360	3410	3100	3790	3550	3650	4220	3930	3570	---	4650
21	3450	3160	3150	3470	3770	3660	2970	4230	3900	3560	---	4490
22	3930	3020	3130	3660	3790	3660	2970	4250	3890	3120	---	4930
23	3950	3180	3070	3750	3830	3040	2960	4120	3880	3620	---	5120
24	4060	3400	2720	3780	3850	1320	3140	4120	3880	3300	---	254
25	4040	3370	2440	3880	3830	692	3450	1670	3880	3230	---	1760
26	3960	3170	2500	3880	3820	851	3540	1640	3860	3600	---	239
27	3900	3160	---	3960	3810	1210	3540	1640	3850	3750	---	454
28	3880	3330	---	3960	3790	1700	3520	2400	4140	3710	---	1030
29	3840	3240	2970	3670	---	2020	3540	2410	3920	3040	---	2200
30	3850	3310	---	3790	---	1870	3580	2610	3850	2010	513	3130
31	3000	---	---	3790	---	1290	---	2780	---	839	2420	---
MONTH	3690	3470	3830	3750	3680	2710	2900	3550	3910	3380	---	---

07234000 BEAVER RIVER AT BEAVER, OKLA.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(ONCE-DAILY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19.5	7.5	5.5	4.0	5.5	13.5	12.5	15.0	26.0	30.0	26.0	26.5
2	23.0	11.5	6.0	2.0	7.0	10.5	9.0	17.0	26.5	26.5	30.0	---
3	23.5	14.5	1.0	1.5	8.5	7.0	8.0	22.5	26.0	26.0	28.0	---
4	23.5	11.5	0.0	0.0	12.0	8.5	11.0	21.5	25.5	33.5	32.0	---
5	24.5	11.0	0.0	0.0	12.5	10.5	14.0	19.5	28.5	32.5	30.0	---
6	17.0	12.0	0.0	0.0	5.0	13.5	16.0	21.0	31.0	33.5	26.5	---
7	25.5	15.5	0.0	0.5	5.0	15.0	4.0	22.0	32.0	32.5	30.0	---
8	25.5	14.0	0.0	0.0	0.5	10.0	4.5	24.5	31.0	32.0	34.5	---
9	26.0	8.0	0.0	0.0	1.5	9.5	13.0	26.0	31.5	30.5	32.0	---
10	22.5	9.5	0.0	0.0	7.5	6.0	13.5	28.0	27.0	34.0	26.0	---
11	26.0	8.5	0.0	0.0	5.0	11.0	18.5	24.5	29.5	26.5	24.0	---
12	20.5	8.0	0.0	0.0	12.0	15.0	18.5	24.5	31.0	25.0	25.5	---
13	22.0	3.5	0.0	0.5	5.5	12.0	16.5	16.5	30.5	26.5	24.5	---
14	14.0	6.0	0.0	2.0	6.5	13.0	22.5	20.5	29.0	26.5	---	---
15	20.0	2.5	0.0	1.0	9.0	13.5	16.5	24.5	29.0	30.5	---	---
16	25.0	4.5	1.0	4.5	4.0	13.0	18.0	24.5	28.5	31.0	---	---
17	24.5	2.5	0.5	9.0	7.0	16.0	20.5	25.0	30.5	32.0	---	---
18	8.0	10.0	0.5	9.5	---	16.0	16.5	20.5	30.0	30.0	---	16.5
19	8.5	6.5	1.0	7.5	9.5	10.5	15.0	25.0	29.0	30.5	---	18.0
20	9.5	3.0	1.0	8.5	10.5	15.0	18.5	27.5	29.5	30.0	---	18.5
21	17.0	3.5	1.0	3.5	11.0	13.0	21.0	29.5	32.5	27.5	---	23.5
22	14.5	1.0	1.0	3.5	8.5	14.5	21.5	22.5	34.5	28.5	---	23.5
23	15.0	0.5	3.0	4.5	8.0	10.0	22.5	24.5	32.5	28.0	---	23.0
24	13.5	3.0	4.5	8.0	9.0	7.5	17.5	19.0	33.0	33.0	---	23.5
25	18.0	6.0	5.5	8.5	7.5	6.0	15.0	18.5	32.0	31.5	---	24.5
26	26.5	6.5	6.0	9.0	14.5	11.5	18.0	16.0	35.0	29.0	---	17.0
27	11.5	3.0	---	0.0	13.5	8.5	19.5	11.5	36.0	28.5	---	14.5
28	11.0	1.5	6.5	1.0	10.0	12.0	22.0	25.5	33.5	28.0	---	15.0
29	11.5	1.0	8.5	1.0	---	7.5	26.5	26.0	33.0	29.5	---	15.0
30	5.5	2.5	4.0	5.0	---	7.0	19.5	19.5	35.5	29.0	27.0	18.0
31	2.5	---	4.5	5.0	---	8.0	---	24.0	---	29.0	25.0	---
MONTH	18.0	6.5	2.0	3.0	8.0	11.0	16.5	22.0	30.5	29.5	---	---

07238500 CANTON LAKE NEAR CANTON, OKLA.

LOCATION.--Lat 36°05'03", long 98°36'05", in SE1/4NE1/4 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 sq mi (32,331.0 km^2), of which 4,883 sq mi (12,647.0 km^2) is probably noncontributing.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	RESERVOIR STORAGE (AC-FT)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	DISSOLVED NITRATE (NO3) (MG/L)
OCT.										
01...	70440	--	--	170	188	0	190	230	.09	.40
15...	69210	--	--	180	151	0	222	240	.07	.30
DEC.										
01...	70320	--	--	170	190	0	190	240	.16	.70
JAN.										
15...	74780	--	--	170	196	0	220	250	.11	.50
FEB.										
05...	82970	--	--	170	194	0	200	250	.05	.20
15...	88170	--	--	180	200	0	210	250	.02	.10
MAR.										
01...	92660	--	--	180	178	0	240	250	.02	.10
16...	106400	--	--	180	200	0	210	250	.07	.30
APR.										
01...	141600	--	--	180	200	0	200	250	.20	.90
15...	161400	--	--	160	192	0	200	220	.20	.90
MAY										
01...	159100	--	--	150	202	0	190	230	.25	1.1
16...	139300	--	--	160	208	0	190	230	.07	.30
JUNE										
01...	125400	--	--	160	220	0	210	240	.07	.30
JULY										
02...	115200	--	--	170	216	0	220	250	.25	1.1
SEP.										
14...	105900	81	40	190	178	0	230	280	.28	1.2

07238500 CANTON LAKE NEAR CANTON, OKLA.

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.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS-SOLVED NITRITE (N) (MG/L)	DIS-SOLVED NITRITE (NO2) (MG/L)	DIS-SOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	HARDNESS (CA,MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TURBIDITY (MG/L)
OCT.										
01...	--	--	834	1.13	330	180	4.1	1420	7.7	6
15...	--	--	874	1.19	320	200	4.4	1460	7.1	30
DEC.										
01...	--	--	854	1.16	330	170	4.1	1440	8.1	25
JAN.										
15...	--	--	890	1.21	350	190	4.0	1480	6.9	1
FEB.										
05...	--	--	878	1.19	340	180	4.0	1440	7.4	1
15...	--	--	910	1.24	350	190	4.2	1460	7.8	1
MAR.										
01...	--	--	928	1.26	360	210	4.1	1480	7.5	15
16...	--	--	920	1.25	360	200	4.1	1480	7.2	6
APR.										
01...	--	--	910	--	340	180	4.2	1450	7.6	6
15...	--	--	868	1.18	330	170	3.8	1350	7.7	9
MAY										
01...	--	--	878	1.19	350	180	3.5	1380	6.9	2
16...	--	--	890	1.21	350	180	3.7	1390	7.4	2
JUNE										
01...	--	--	934	1.27	380	200	3.6	1450	7.6	6
JULY										
02...	--	--	948	1.29	380	200	3.8	1490	7.5	8
SEP.										
14...	.00	.0	964	1.31	370	220	4.3	1590	7.8	--

07241550 NORTH CANADIAN RIVER NEAR HARRAH, OKLA.

LOCATION.--Lat 35°30'01", long 97°11'37", in SW1/4NW1/4 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 sq mi (34,967.6 km²), of which 4,899 sq mi (12,688.4 km²) is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: October 1968 to current year.
Water temperatures: October 1968 to current year.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS-CHARGE (CFS)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (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)
OCT.											
01...	58	--	--	150	154	0	89	200	3.6	16	--
02-10	47	--	--	240	182	0	150	320	5.4	24	--
11-21	48	--	--	250	178	0	160	330	6.8	30	--
22...	1040	--	--	77	168	0	43	110	.05	.20	--
23...	534	--	--	26	102	0	28	35	1.5	6.8	--
24...	133	--	--	72	116	0	68	110	3.2	14	--
25-26	82	--	--	180	164	0	100	280	5.4	24	--
27-31	187	--	--	250	196	0	120	370	7.7	34	--
NOV.											
01-02	1470	--	--	23	100	0	22	32	1.0	4.6	--
03...	229	--	--	59	112	0	54	84	2.5	11	--
04-06	112	--	--	180	178	0	98	260	4.7	21	--
07-12	89	--	--	280	224	0	130	430	10	46	--
13-15	412	--	--	75	120	0	55	110	2.5	11	--
16-19	160	--	--	160	168	0	84	240	5.4	24	--
20-21	152	--	--	130	140	0	78	200	4.3	19	--
22-27	116	--	--	200	194	0	100	310	6.8	30	--
28-30	92	--	--	260	222	0	140	400	8.4	37	--
DEC.											
01-10	88	--	--	280	228	0	140	420	12	52	--
11-21	118	--	--	280	208	0	140	420	9.3	41	--
22-23	182	--	--	140	138	0	72	210	5.2	23	--
24-31	119	--	--	270	218	4	130	410	9.5	42	--
JAN.											
01-02	109	--	--	200	198	0	110	300	7.0	31	--
03...	404	--	--	110	154	0	55	170	4.1	18	--
04-05	522	--	--	50	130	0	40	68	1.3	5.8	--
06-07	162	--	--	100	148	4	69	140	4.5	20	--
08-21	146	--	--	200	200	0	100	310	8.6	38	--
22-23	617	--	--	52	132	4	39	79	1.1	4.8	--
24-26	235	--	--	120	172	0	77	170	5.0	22	--
27-28	372	--	--	60	128	0	46	84	2.3	10	--
29-31	141	--	--	150	190	0	83	230	5.9	26	--
FEB.											
01-03	168	--	--	170	206	0	90	260	3.8	17	--
04-10	113	--	--	240	256	0	120	390	6.6	29	--
11-20	100	--	--	290	270	0	140	470	6.8	30	--
21-28	95	--	--	300	260	0	140	490	7.9	35	--
MAR.											
01-05	100	100	36	310	267	0	130	450	9.3	41	.00
06...	575	54	17	110	163	0	55	170	3.7	16	.00
07-08	696	45	11	58	154	0	41	88	1.6	7.1	.00
09-10	617	56	17	110	179	0	58	160	3.8	17	.00
11-12	1360	42	9.1	38	143	0	33	58	1.8	8.0	.00
13-23	429	78	28	170	237	0	130	250	4.3	19	.00
24...	1170	50	22	140	193	0	69	210	4.9	22	.01
25-27	2950	42	11	43	142	0	50	59	1.7	7.5	.01
28-31	1490	51	17	76	165	0	82	100	2.0	8.8	.01
APR.											
01...	1520	--	--	82	194	0	89	110	1.9	8.4	--
02-06	1940	--	--	56	158	0	72	74	1.3	5.9	--
07-08	598	--	--	94	206	0	100	140	1.9	8.4	--
09-17	1380	--	--	130	194	0	140	190	1.4	6.0	--
18-21	1320	--	--	61	158	0	78	82	1.2	5.5	--
22-30	1150	--	--	150	200	0	170	220	.93	4.1	--
MAY											
01-05	1020	87	31	160	215	0	190	240	1.2	5.3	.00
06-07	1270	86	30	150	207	0	190	230	1.3	5.8	.00
08-23	980	89	32	170	222	0	190	230	1.2	5.3	.00
24...	460	65	20	120	175	0	77	170	2.6	11	.01
25-31	734	89	31	170	225	9	160	230	2.1	9.3	.00
JUNE											
01-02	2580	60	17	87	175	0	100	120	1.2	5.3	.01
03-08	3440	50	12	48	159	0	55	67	.92	4.1	.00
09-18	969	81	28	140	233	0	140	210	1.4	6.2	.01
19-22	344	99	35	180	294	0	160	240	2.3	10	.03
23-30	180	130	39	210	332	0	170	340	2.5	11	.01
JULY											
01-10	115	110	40	230	318	0	180	350	--	--	--
11-21	179	80	27	170	230	0	130	250	--	--	--
22...	234	41	11	86	138	0	48	130	--	--	--
23-27	142	75	25	150	212	0	120	220	--	--	--
28-31	136	100	36	250	289	0	140	390	--	--	--
AUG.											
01-02	138	60	19	120	186	0	90	170	2.9	13	.00
03-11	61	100	36	270	283	0	120	420	4.0	18	.00
12...	118	48	13	96	135	1	50	150	1.6	7.1	.00
13-14	56	89	28	190	229	0	110	300	2.9	13	.01
15-31	59	100	36	320	279	0	130	480	4.7	21	.00
SEP.											
01-04	240	100	34	300	236	0	130	490	4.2	18	.03

07241550 NORTH CANADIAN RIVER NEAR HARRAH, OKLA.

EXTREMES, Current year.--Dissolved solids: Maximum, 1,420 mg/1 Feb. 21-28; minimum, 184 mg/1 Nov. 1-2.
Hardness: Maximum, 490 mg/1 June 23-30; minimum, 98 mg/1 Nov. 1-2.
Specific conductance: Maximum daily, 2,640 micromhos Sept. 3; minimum daily, 300 micromhos Sept. 28.
Water temperatures: Maximum, 28.5°C Aug. 9; minimum, 0.5°C Dec. 11, 16, Jan. 7, 16.

Period of record.--Dissolved solids: Maximum, 1,710 mg/1 Dec. 23, 1969; minimum, 167 mg/1 Sept. 24, 1970.
Hardness: Maximum, 525 mg/1 Dec. 23, 1969; minimum, 88 mg/1 Sept. 24, 1970.
Specific conductance: Maximum daily, 3,400 micromhos Oct. 2, 1968, Oct. 31, 1969; minimum daily, 268 micromhos Sept. 24, 1970.
Water temperatures: Maximum, 35.0 °C July 11, Aug. 9, 1969; minimum, freezing point on Jan. 1, 1969.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS- SOLVED NITRITE (NO2) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	PHOS- PHATE (PO4) (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)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)
OCT.											
01...	--	--	13	645	.88	101	200	74	4.6	1130	7.1
02-10	--	--	27	946	1.29	120	270	120	6.5	1630	8.1
11-21	--	--	26	1010	1.37	131	280	130	6.5	1730	7.3
22...	--	--	4.9	392	.53	1100	170	32	2.6	684	7.2
23...	--	--	1.3	206	.28	297	110	26	1.1	347	7.1
24...	--	--	2.1	389	.53	140	160	65	2.5	701	7.0
25-26	--	--	9.1	776	1.06	172	260	130	4.8	1370	8.2
27-31	--	--	18	1020	1.39	515	310	150	6.2	1790	8.3
NOV.											
01-02	--	--	1.3	184	.25	730	98	16	1.0	322	7.7
03...	--	--	2.8	340	.46	210	140	48	2.2	584	8.1
04-06	--	--	7.6	798	1.09	241	260	110	4.9	1360	7.5
07-12	--	--	16	1190	1.62	286	360	180	6.4	2000	7.8
13-15	--	--	3.9	392	.53	436	150	52	2.7	685	7.4
16-19	--	--	7.9	726	.99	314	240	100	4.5	1240	8.3
20-21	--	--	7.1	599	.81	246	220	110	3.8	1050	7.7
22-27	--	--	9.7	918	1.25	288	300	140	5.0	1560	7.7
28-30	--	--	16	1120	1.52	278	370	190	5.9	1920	7.5
DEC.											
01-10	--	--	20	1190	1.62	283	370	180	6.3	2050	7.8
11-21	--	--	16	1160	1.58	370	350	180	6.5	2000	8.0
22-23	--	--	6.0	627	.85	308	200	87	4.3	1090	8.1
24-31	--	--	15	1140	1.55	366	370	180	6.1	1960	8.4
JAN.											
01-02	--	--	12	968	1.32	285	300	140	5.0	1500	8.3
03...	--	--	7.1	591	.80	645	200	74	3.4	944	8.3
04-05	--	--	1.8	332	.45	468	140	33	1.8	522	8.3
06-07	--	--	6.8	554	.75	242	200	72	3.1	878	8.4
08-21	--	--	11	990	1.35	390	300	140	5.0	1540	8.0
22-23	--	--	1.7	344	.47	573	150	35	1.8	557	8.4
24-26	--	--	7.4	631	.86	400	230	89	3.4	1020	7.5
27-28	--	--	2.7	373	.51	375	150	45	2.1	594	7.8
29-31	--	--	8.8	756	1.03	288	270	110	4.0	1220	7.1
FEB.											
01-03	--	--	8.1	838	1.14	380	280	110	4.4	1330	7.6
04-10	--	--	13	1130	1.54	345	420	210	5.1	1850	7.8
11-20	--	--	16	1350	1.84	364	440	220	6.0	2140	7.3
21-28	--	--	13	1420	1.93	364	440	230	6.2	2180	8.0
MAR.											
01-05	.0	6.0	--	1310	1.78	354	400	180	6.8	2110	7.4
06...	.0	3.3	--	548	.75	851	200	71	3.3	961	7.7
07-08	.0	.68	--	365	.50	686	160	31	2.0	622	7.3
09-10	.0	1.8	--	553	.75	921	210	63	3.3	934	7.1
11-12	.0	.52	--	286	.39	1050	140	25	1.4	487	7.9
13-23	.0	1.8	--	862	1.17	998	310	120	4.2	1410	7.6
24...	.0	3.2	--	690	.94	2180	220	57	4.2	1160	7.7
25-27	.0	.39	--	309	.42	2460	150	34	1.5	519	7.3
28-31	.0	.59	--	453	.62	1820	200	62	2.4	774	7.4
APR.											
01...	--	--	1.8	520	.71	2130	240	81	2.3	844	7.1
02-06	--	--	1.3	394	.54	2060	190	60	1.8	624	7.4
07-08	--	--	2.5	572	.78	924	270	100	2.5	918	7.7
09-17	--	--	1.8	712	.97	2650	290	130	3.3	1150	7.7
18-21	--	--	1.4	417	.57	1490	190	60	1.9	667	7.8
22-30	--	--	1.5	800	1.09	2480	320	160	3.6	1280	7.9
MAY											
01-05	.0	.74	--	870	1.18	2400	350	170	3.8	1410	8.3
06-07	.0	.74	--	851	1.16	2920	340	170	3.6	1350	8.3
08-23	.0	--	--	869	1.18	2300	350	170	3.9	1430	8.1
24...	.0	--	--	586	.80	728	240	100	3.3	1010	8.2
25-31	.0	--	--	835	1.14	1660	350	150	4.0	1400	8.4
JUNE											
01-02	.0	--	--	532	.72	3710	220	76	2.6	867	7.8
03-08	.0	.39	--	366	.50	3400	170	44	1.6	587	7.2
09-18	.0	--	--	737	1.00	1930	320	130	3.4	1240	7.8
19-22	.1	--	--	920	1.25	854	390	150	4.0	1520	7.7
23-30	.0	2.6	--	1130	1.54	549	490	210	4.2	1800	7.6
JULY											
01-10	--	2.8	--	1210	1.65	376	440	180	4.8	1870	8.0
11-21	--	2.5	--	868	1.18	420	310	120	4.2	1390	7.8
22...	--	1.8	--	415	.56	262	150	34	3.1	664	7.7
23-27	--	2.9	--	749	1.02	287	290	120	3.8	1280	7.9
28-31	--	3.4	--	1140	1.55	419	400	160	5.5	1860	8.0
AUG.											
01-02	.0	2.0	--	600	.82	224	230	76	3.5	1030	7.5
03-11	.0	3.8	--	1220	1.66	201	400	170	5.9	2050	7.9
12...	.0	2.4	--	484	.66	154	170	61	3.2	799	8.4
13-14	.0	2.6	--	902	1.23	136	340	150	4.5	1560	7.9
15-31	.0	6.3	--	1270	1.73	202	400	170	7.0	2250	8.2
SEP.											
01-04	.1	3.5	--	1300	1.77	842	390	200	6.6	2180	8.0

07241550 NORTH CANADIAN RIVER NEAR HARRAH, OKLA.--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS-CHARGE (CFS)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (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)
SEP.											
05-08	282	46	11	72	139	0	43	110	1.9	8.3	.03
09-10	108	58	16	140	170	0	54	200	3.2	14	.01
11-12	82	110	31	260	265	0	94	450	4.1	18	.01
13-15	927	39	8.6	50	127	0	33	70	1.8	7.9	.01
16-27	270	95	27	210	246	0	84	350	4.1	18	.01
28-29	1580	34	6.7	28	119	0	21	39	1.2	5.2	.03
30...	312	55	15	92	185	0	43	150	2.3	10	.16
WTD. AVG.	--	--	--	120	189	0	108	175	2.2	9.5	--
TIME WTD. AVG.	488	--	--	191	216	0	120	285	4.6	20	--
TOT. LOAD (TONS)	--	--	--	57800	91000	152	51800	84300	1010	4460	--

CHEMICAL ANALYSES OF ADDITIONAL SAMPLES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	INSTAN-TANEOUS DIS-CHARGE (CFS)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (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)
OCT.									
05...	42	--	--	--	--	--	--	--	--
NOV.									
22...	121	--	--	--	--	--	--	--	--
DEC.									
20...	106	--	--	--	--	--	--	--	--
JAN.									
16...	179	--	--	--	--	--	--	--	--
FEB.									
14...	92	--	--	--	--	--	--	--	--
MAR.									
14...	852	--	--	--	--	--	--	--	--
APR.									
16...	1940	--	--	--	--	--	--	--	--
MAY									
30...	1080	--	--	--	330	.59	2.6	--	--
JUNE									
21...	330	--	--	--	230	.56	2.5	--	--
JULY									
27...	95	--	--	--	--	3.0	13	.29	.9
AUG.									
24...	53	45	35	5100	450	--	--	--	--
SEP.									
27...	2440	--	--	--	--	.32	1.4	.08	.2

07241550 NORTH CANADIAN RIVER NEAR HARRAH, OKLA.--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS-SOLVED NITRITE (NO2) (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)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)
SEP.										
05-08	.1	1.3	376	.51	286	160	46	2.5	704	7.9
09-10	.0	3.7	304	.41	88.6	210	71	4.2	1040	8.0
11-12	.0	4.2	1220	1.66	270	400	190	5.6	2020	8.1
13-15	.0	.86	324	.44	811	130	29	1.9	515	7.6
16-27	.0	3.6	978	1.33	713	350	150	4.9	1720	7.8
28-29	.1	.58	216	.29	921	110	15	1.1	371	8.0
30...	.5	--	508	.69	428	200	47	2.8	873	7.8
WTD. AVG.	--	--	644	.88	--	258	103	3.1	1060	7.7
TIME WTD. AVG.	--	--	897	2.22	--	314	137	4.6	1490	7.8
TOT. LOAD (TONS)	--	--	310000	--	--	--	--	--	--	--

CHEMICAL ANALYSES OF ADDITIONAL SAMPLES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS-SOLVED AMMONIA ORGANIC NITRO-GEN (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	PHOS-PHATE (PO4) (MG/L)	HARD-NESS (CA,MG) (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	CHEM-ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	CHEM-ICAL OXYGEN DEMAND (HIGH LEVEL) (MG/L)	BIO-CHEM-ICAL OXYGEN DEMAND (MG/L)	PHENOLS (UG/L)
OCT.									
05...	--	--	--	--	--	33	--	8.7	--
NOV.									
22...	--	--	--	--	--	23	--	13	--
DEC.									
20...	--	--	--	--	--	50	--	7.6	--
JAN.									
16...	--	--	--	--	--	70	--	23	--
FEB.									
14...	--	--	--	--	--	38	--	27	--
MAR.									
14...	--	--	--	--	--	44	--	9.2	--
APR.									
16...	--	--	--	--	--	73	--	23	--
MAY									
30...	2.3	--	2.2	--	--	45	--	2.1	0
JUNE									
21...	1.5	--	3.4	--	--	46	--	10	0
JULY									
27...	4.5	3.6	--	--	1420	60	--	14	2
AUG.									
24...	--	5.0	--	260	--	--	63	23	2
SEP.									
27...	1.3	10	--	--	--	450	--	12	3

DATE	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED MAN-GANESE (MN) (UG/L)	DIS-SOLVED CAD-MIUM (CD) (UG/L)	DIS-SOLVED CHRO-MIUM (CR) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	DIS-SOLVED NICKEL (NI) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)
OCT.								
05...	80	29	6	0	20	3	--	70
NOV.								
22...	70	120	1	0	70	2	--	110
DEC.								
20...	140	370	2	0	110	1	--	110
MAR.								
14...	40	410	0	0	20	8	6	40
MAY								
30...	--	--	--	--	--	--	--	--
JUNE								
21...	100	0	2	0	18	7	9	70
JULY								
27...	--	--	--	--	--	--	--	--
AUG.								
24...	50	13	1	0	9	3	30	50
SEP.								
27...	--	--	--	--	--	--	--	--

07241550 NORTH CANADIAN RIVER NEAR HARRAH, OKLA.--Continued

PESTICIDE ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	ALDRIN (UG/L)	CHLOR-DANE (UG/L)	DDD (UG/L)	DDE (UG/L)	DDT (UG/L)	DI-ELDRIN (UG/L)	ENDRIN (UG/L)	HEPTA-CHLOR (UG/L)	CHLOR EPOXIDE (UG/L)
OCT.									
05...	--	--	--	--	--	--	--	--	--
NOV.									
22...	--	--	--	--	--	--	--	--	--
DEC.									
20...	--	--	--	--	--	--	--	--	--
MAR.									
14...	--	--	--	--	--	--	--	--	--
MAY									
30...	.00	.0	.00	.00	.04	.00	.00	.00	.00
JUNE									
21...	--	--	--	--	--	--	--	--	--
JULY									
27...	.00	.1	.00	.00	.00	.03	.00	.00	.00
AUG.									
24...	.00	.0	.00	.00	.00	.02	.00	.00	.00
SEP.									
27...	.00	.1	.00	.00	.00	.04	.00	.00	.00

DATE	LINDANE (UG/L)	2,4-D (UG/L)	2,4,5-T (UG/L)	SILVEX (UG/L)	DI-AZINON (UG/L)	MALA-THION (UG/L)	METHYL PARA-THION (UG/L)	PARA-THION (UG/L)	PCB (UG/L)
OCT.									
05...	--	--	--	--	--	--	--	--	--
NOV.									
22...	--	--	--	--	--	--	--	--	--
DEC.									
20...	--	--	--	--	--	--	--	--	--
MAR.									
14...	--	--	--	--	--	--	--	--	--
MAY									
30...	.00	.07	.00	.00	.01	.00	.00	.00	.0
JUNE									
21...	--	.00	.01	.00	.04	.00	.00	.00	--
JULY									
27...	.00	.08	.02	.00	.08	.00	.00	.00	.0
AUG.									
24...	.01	.04	.01	.00	.15	.00	.00	.00	.0
SEP.									
27...	.00	.04	.18	.01	.04	.00	.00	.00	2.9

FIELD ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION
OCT.					
05...	1590	7.0	20.0	6.7	79
NOV.					
22...	165	--	4.0	10.8	87
DEC.					
20...	2000	--	8.0	8.4	77
21...	1500	8.0	5.0	11.1	92
JAN.					
16...	1600	--	10.0	9.7	92
FEB.					
14...	2150	8.0	5.0	10.6	88
MAR.					
14...	1100	--	12.0	8.2	83
APR.					
16...	630	7.9	15.5	5.4	57
MAY					
30...	1200	8.1	22.0	7.3	89
JUNE					
21...	1180	--	23.0	7.3	90
JULY					
27...	1240	8.5	30.0	13.3	182
AUG.					
24...	2350	8.4	26.5	14.8	195
SEP.					
27...	390	7.5	20.0	2.0	24

07241550 NORTH CANADIAN RIVER NEAR HARRAH, OKLA.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(ONCE-DAILY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1140	336	1990	1430	1330	2170	832	1390	801	1740	725	2240
2	1490	310	2010	1640	1370	2150	585	1410	901	1880	1270	2080
3	1620	584	1990	944	1300	2030	561	1420	530	2060	1740	2640
4	1630	1010	2080	527	1610	2010	686	1420	550	1770	1660	1580
5	1620	1410	2130	541	1840	2070	654	---	520	1740	1960	451
6	1680	1650	2140	886	2020	961	575	991	540	2040	2150	814
7	1690	1790	2170	886	2090	526	836	961	612	1750	2100	787
8	1680	1980	1980	1380	1940	694	978	1260	746	1920	2180	683
9	1730	2020	1850	1810	1840	1110	1160	1330	1050	1930	1880	972
10	1740	2100	2060	1780	1680	933	1020	1370	1230	2140	2070	1080
11	1680	2080	2080	1740	1950	391	1110	1410	1470	1580	1710	1980
12	1630	2120	1860	1820	1960	564	1200	1420	1330	744	783	1980
13	1710	897	---	1830	2030	1120	1320	1430	1370	1450	1230	463
14	1700	501	---	1760	2170	1110	1340	1440	1430	1640	1780	426
15	1680	647	---	1730	2200	1220	1360	1430	1240	1430	2020	616
16	1740	1010	1990	1790	2190	1230	1040	1430	1270	877	2070	1100
17	1990	1350	1970	1230	2180	1210	922	1440	1120	1460	2060	1470
18	1610	1860	2140	1190	2130	1180	631	1450	1080	2100	2150	1940
19	1780	1800	2000	1260	2060	1230	638	1450	1370	1170	2030	780
20	1820	861	2080	1500	2330	1380	713	1440	1540	1160	2150	1240
21	1760	1110	1790	1690	2100	1760	705	1440	1440	1440	2130	1700
22	684	1340	1120	507	2170	1670	1060	1370	1580	649	2130	1950
23	347	1600	1060	620	2200	1640	1190	1420	1690	1160	2130	2010
24	701	1550	1680	810	2100	1160	1260	997	1980	879	2150	2050
25	1200	1700	1820	1160	2250	386	1330	1340	1980	1780	2160	2010
26	1550	1640	1980	1080	2210	572	1350	1550	1780	1190	2120	2180
27	1810	1570	1960	493	2210	580	1380	1110	1760	1370	2310	1660
28	1860	1740	2150	696	2280	713	1350	1400	1810	1610	2320	300
29	1930	1910	2070	1110	---	754	1390	1400	1830	1680	2380	423
30	1860	2100	2110	1340	---	763	1410	1410	1640	1750	2160	840
31	1590	---	1940	1350	---	760	---	1350	---	2110	2130	---
MONTH	1570	1420	1940	1240	1990	1170	1020	1360	1270	1550	1930	1350

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(ONCE-DAILY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15.5	8.5	6.0	4.5	8.0	11.0	11.0	19.5	21.0	26.0	24.0	25.0
2	16.5	8.5	6.5	4.0	6.0	11.5	13.0	19.0	20.5	26.0	24.0	23.0
3	16.0	9.0	7.5	4.5	6.0	13.0	12.0	17.0	20.0	28.0	23.0	26.0
4	18.0	11.0	3.5	---	8.0	11.0	11.0	18.0	22.0	27.0	23.0	25.5
5	19.0	11.5	4.0	2.0	8.0	10.0	11.5	---	21.5	27.0	24.0	23.0
6	18.0	13.0	1.0	2.0	6.5	13.0	12.0	18.0	23.0	27.0	23.0	22.0
7	16.5	12.0	1.0	0.5	8.0	12.0	13.0	18.5	22.0	27.5	24.5	23.0
8	16.0	10.5	2.0	3.0	3.5	13.5	11.0	19.0	23.0	27.0	25.0	23.5
9	19.0	12.0	1.5	3.0	2.0	13.0	8.0	20.0	23.0	26.5	28.5	25.0
10	18.5	10.5	1.0	4.0	3.0	8.0	7.5	21.5	25.0	27.0	28.0	26.0
11	20.0	9.5	0.5	2.5	5.0	12.5	10.0	24.0	25.0	27.0	24.5	24.5
12	20.5	11.0	1.5	2.0	7.0	14.5	12.0	22.0	25.0	26.5	27.0	24.0
13	20.0	9.0	1.0	4.0	9.0	14.0	14.0	19.0	25.5	25.5	26.5	22.0
14	---	7.5	1.0	1.5	6.0	13.0	15.0	20.0	25.0	27.0	26.0	21.0
15	17.0	5.5	1.0	1.5	4.5	12.0	15.5	19.0	25.0	26.0	25.0	20.5
16	16.5	6.0	0.5	0.5	3.0	12.0	13.5	19.5	26.5	24.0	25.0	22.0
17	18.0	6.0	1.0	10.0	5.5	10.5	15.0	19.0	27.0	25.5	25.5	19.5
18	18.0	5.5	3.0	11.0	4.5	12.0	16.5	20.0	25.0	27.0	25.0	22.5
19	14.5	6.0	6.0	9.0	4.0	14.0	17.5	21.5	25.0	26.0	26.0	18.0
20	11.0	5.0	6.0	10.0	6.0	13.0	18.0	22.0	22.0	27.0	26.5	22.0
21	12.0	4.5	5.5	10.5	8.0	10.5	19.5	23.0	23.0	26.0	25.5	24.0
22	14.0	---	6.0	8.0	6.0	12.0	20.0	23.5	24.5	26.0	25.0	23.0
23	14.0	5.0	5.0	8.0	6.0	13.5	19.5	22.0	24.5	27.5	24.0	24.0
24	10.5	6.0	5.0	5.0	9.0	13.0	20.0	21.5	25.0	28.0	24.0	22.5
25	9.5	6.0	4.0	6.0	9.5	11.0	19.5	22.0	25.0	28.0	24.5	23.5
26	---	5.0	5.0	7.5	10.0	9.5	17.5	21.5	25.0	---	24.5	24.0
27	11.5	6.0	4.0	7.0	8.0	11.0	11.0	21.0	26.0	27.0	25.0	22.0
28	12.0	5.0	5.5	5.0	9.5	11.0	15.5	21.5	26.0	26.0	24.5	23.5
29	13.0	5.0	10.5	3.0	---	12.5	16.5	19.5	25.0	26.5	24.0	23.5
30	18.0	9.5	9.0	4.5	---	13.0	19.0	21.0	25.0	26.0	24.0	18.0
31	11.0	---	7.0	6.0	---	12.0	---	21.0	---	25.0	24.5	---
MONTH	15.5	8.0	4.0	5.0	6.5	12.0	14.5	20.5	24.0	26.5	25.0	23.0

07242000 NORTH CANADIAN RIVER NEAR WETUMKA, OKLA.

LOCATION.--Lat 35°15'53", long 96°12'25", in center of SW1/4 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).

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	DISSOLVED NITRATE (NO3) (MG/L)	DISSOLVED NITRITE (N) (MG/L)
OCT.											
05...	38	--	--	180	244	0	100	260	.90	4.0	--
15...	32	--	--	250	262	14	150	370	.50	2.2	--
25...	180	--	--	100	106	0	43	170	2.0	8.7	--
NOV.											
05...	1240	--	--	43	106	0	33	56	1.6	6.9	--
15...	1180	--	--	48	102	0	29	74	1.3	5.8	--
25...	457	--	--	120	194	0	46	200	1.6	7.2	--
DEC.											
05...	234	--	--	170	290	0	62	290	3.4	15	--
15...	220	--	--	210	298	0	78	370	3.8	17	--
25...	740	--	--	81	132	0	39	140	1.7	7.6	--
JAN.											
05...	2130	--	--	31	88	0	17	50	1.1	4.7	--
15...	702	--	--	110	172	0	41	200	2.5	11	--
25...	833	--	--	65	126	0	36	100	1.8	7.8	--
FEB.											
05...	624	--	--	110	180	0	48	190	1.8	8.0	--
15...	418	--	--	150	232	0	62	270	2.5	11	--
25...	301	--	--	200	256	22	81	370	2.9	13	--
MAR.											
05...	1860	--	--	61	118	0	24	110	1.5	6.5	--
15...	1680	--	--	45	142	0	22	80	1.1	4.8	--
25...	4480	--	--	70	158	0	27	120	1.2	5.2	--
APR.											
05...	3020	--	--	46	146	0	48	66	.99	4.4	--
14...	1820	--	--	120	240	0	84	200	1.6	7.2	--
25...	2760	--	--	50	136	0	51	77	.56	2.5	--
MAY											
05...	1020	--	--	160	232	0	150	250	.99	4.4	--
15...	1260	--	--	160	232	0	160	240	.88	3.9	--
25...	1050	--	--	170	234	0	170	260	.84	3.7	--
JUNE											
05...	13300	29	4.2	22	103	0	20	31	.00	.00	.01
15...	1380	98	28	140	280	0	130	220	.96	4.3	.00
25...	685	100	29	170	280	22	82	270	1.9	8.4	.00
JULY											
05...	565	72	21	110	226	0	57	180	.97	4.3	.00
15...	430	120	36	210	346	9	78	370	.97	4.3	.00
25...	326	81	26	170	235	9	110	250	.92	4.1	.01
AUG.											
05...	322	83	25	170	243	11	86	280	2.2	9.7	.00
14...	234	54	16	100	164	0	28	180	1.1	4.8	.01
25...	120	100	33	230	354	0	83	360	.16	.70	.27
SEP.											
05...	203	64	19	150	172	0	38	270	1.3	5.7	.01
14...	4650	30	4.9	23	101	0	12	38	1.2	5.2	.02
27...	3300	33	7.2	43	104	0	23	69	.79	3.5	.12

07242000 NORTH CANADIAN RIVER NEAR WETUMKA, OKLA.

DRAINAGE AREA.--14,290 sq mi (37,011.1 km²), of which 4,899 sq mi (12,688.4 km²) is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: Water year 1952 (partial-record station), October to current year.
Water tempertures: October 1953 to current year.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS-SOLVED NITRITE (NO2) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	PHOS-PHATE (PO4) (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)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)
OCT.											
05...	--	--	2.3	792	1.08	81.3	280	80	4.7	1390	7.4
15...	--	--	2.2	1080	1.47	93.3	370	130	5.7	1850	8.6
25...	--	--	4.8	479	.65	233	160	73	3.4	828	7.0
NOV.											
05...	--	--	1.8	258	.35	864	110	23	1.8	424	8.2
15...	--	--	1.6	285	.39	908	120	36	1.9	454	8.2
25...	--	--	2.6	632	.86	780	240	81	3.4	1040	8.0
DEC.											
05...	--	--	4.2	866	1.18	547	366	130	3.9	1460	7.0
15...	--	--	5.9	1040	1.41	618	420	180	4.5	1740	6.8
25...	--	--	2.5	427	.58	853	170	62	2.7	747	6.8
JAN.											
05...	--	--	.88	196	.27	1130	100	28	1.3	334	6.9
15...	--	--	2.2	582	.79	1100	230	89	3.2	980	7.1
25...	--	--	2.3	347	.47	780	140	37	2.4	597	8.1
FEB.											
05...	--	--	2.2	556	.76	937	240	92	3.1	972	7.6
15...	--	--	3.5	754	1.03	851	320	130	3.6	1300	8.3
25...	--	--	4.3	1000	1.36	813	410	160	4.3	1720	8.7
MAR.											
05...	--	--	.96	349	.47	1750	150	53	2.2	596	7.5
15...	--	--	.81	294	.40	1330	160	44	1.5	512	8.0
25...	--	--	.88	409	.56	4950	190	60	2.2	687	8.0
APR.											
05...	--	--	.97	344	.47	2810	160	40	1.6	555	7.3
14...	--	--	1.8	714	.97	3510	300	100	3.0	1140	8.2
25...	--	--	.72	361	.49	2690	160	48	1.7	574	7.2
MAY											
05...	--	--	1.4	884	1.20	2440	380	190	3.6	1420	7.9
15...	--	--	1.6	902	1.23	3070	370	180	3.6	1440	7.8
25...	--	--	.02	928	1.26	2630	370	180	3.8	1460	7.9
JUNE											
05...	.0	--	--	174	.24	6250	90	5	1.0	282	8.1
15...	.0	--	--	794	1.08	2960	360	130	3.2	1380	7.7
25...	.0	--	--	878	1.19	1620	370	100	3.9	1480	8.7
JULY											
05...	.0	--	--	629	.86	960	270	81	2.9	1010	8.0
15...	.0	--	--	1070	1.46	1240	450	150	4.3	1740	8.4
25...	.0	--	--	858	1.17	755	310	100	4.2	1380	8.5
AUG.											
05...	.0	1.1	--	768	1.04	668	310	93	4.2	1370	8.5
14...	.0	.51	--	483	.66	305	200	66	3.1	916	7.7
25...	.8	.68	--	1050	1.43	340	390	95	5.1	1740	8.3
SEP.											
05...	.0	.63	--	699	.95	383	240	97	4.2	1270	8.1
14...	.0	.33	--	171	.23	2150	95	12	1.0	309	7.7
27...	.3	.29	--	278	.38	2480	110	27	1.8	457	7.7

07242000 NORTH CANADIAN RIVER NEAR WETUMKA, OKLA.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(ONCE-DAILY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1890	156	1420	967	519	---	481	1320	837	977	1170	1720
2	1910	169	1490	1340	648	1520	481	1270	833	980	1110	966
3	1740	269	1500	---	761	1520	527	1260	434	501	1330	961
4	---	429	1390	556	766	448	705	1360	274	501	1330	1330
5	1400	424	1460	334	964	596	537	1420	293	997	1340	1240
6	1710	440	1470	---	964	485	536	1420	371	1210	1340	---
7	1710	523	1540	362	1230	356	559	1410	417	1200	1240	482
8	2060	774	1650	569	386	350	741	509	450	1620	1240	474
9	2080	777	1680	675	630	353	744	599	481	1620	1310	1110
10	2020	898	1690	972	630	448	796	895	482	1620	1330	656
11	2020	906	1690	975	865	327	974	1030	564	1660	1330	961
12	---	1030	1750	1070	868	319	1030	1030	730	1710	1220	917
13	1960	289	1750	1140	1120	433	1150	1360	731	1710	619	594
14	1880	401	1750	1140	1120	449	1150	1360	1320	1720	889	282
15	1850	454	1750	980	1300	512	---	1420	1320	1750	1500	310
16	1860	459	1760	882	1430	508	398	1420	870	1840	1500	308
17	1800	561	1740	1140	1430	648	436	1450	865	1380	1610	576
18	1790	563	1780	710	1500	650	436	1450	1290	1620	1290	475
19	1690	562	1770	549	1580	1080	572	1470	1290	1620	1290	499
20	1650	576	1780	481	1590	1150	672	1460	1350	1620	1410	568
21	1660	649	---	479	1650	1190	676	1460	1020	1210	1410	712
22	1090	651	541	464	1720	1230	251	1460	1230	1220	1600	712
23	1080	1210	556	717	1700	1240	318	1460	1230	1360	1720	1080
24	724	1210	556	752	1700	1240	400	1500	1320	1710	1710	1070
25	828	1040	747	599	1730	687	569	1470	1470	1390	1730	309
26	1040	1040	964	684	1740	335	---	1470	1500	1340	1720	671
27	559	1230	1230	504	1740	487	867	1220	1620	1590	1710	438
28	555	1240	1230	503	---	480	1020	1210	1630	1590	1740	321
29	626	1380	1080	---	---	528	1280	1220	1660	883	1810	317
30	625	1380	1080	802	---	589	1290	1530	1660	878	1770	333
31	258	---	1010	---	---	---	---	1180	---	1070	1780	---
MONTH	1450	723	1390	754	1200	695	700	1290	985	1360	1420	703

07242000 NORTH CANADIAN RIVER NEAR WETUMKA, OKLA.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(ONCE-DAILY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13.5	10.5	14.5	6.5	8.0	10.0	13.5	19.0	21.0	25.5	25.0	25.0
2	14.0	9.5	5.0	4.5	7.0	10.5	12.5	17.5	21.0	26.0	22.5	25.0
3	15.0	9.5	5.5	4.5	7.5	10.5	12.0	17.0	21.0	27.0	23.0	25.0
4	---	10.0	4.5	3.5	7.5	11.0	11.5	18.0	21.0	27.0	22.0	25.0
5	18.0	11.0	4.0	2.0	7.0	10.0	10.0	19.5	20.0	27.5	23.0	23.0
6	19.0	11.5	0.5	1.0	7.0	12.0	11.5	19.5	20.5	26.0	24.0	---
7	19.0	11.5	1.0	---	4.0	12.0	11.5	18.5	21.5	27.0	24.5	23.0
8	19.0	11.5	1.5	---	7.5	13.0	12.5	18.5	21.5	27.0	25.0	24.0
9	18.5	12.0	1.0	---	4.0	13.0	9.0	19.5	23.0	27.0	25.0	23.5
10	19.0	11.0	0.5	---	3.0	13.5	8.0	21.5	23.0	27.0	26.0	25.0
11	19.0	9.5	1.0	---	4.0	13.5	10.0	23.0	24.0	26.5	25.0	25.0
12	---	9.5	0.5	1.0	5.0	14.0	11.0	21.0	24.0	26.0	26.0	25.0
13	19.0	10.0	0.5	1.0	7.5	15.0	14.0	21.0	24.0	26.0	26.5	23.0
14	19.5	8.0	0.5	1.5	7.0	14.0	14.0	20.5	25.0	26.0	27.0	20.5
15	19.0	7.0	0.0	1.0	5.0	13.5	14.0	19.5	25.0	26.0	26.0	20.0
16	18.5	7.0	0.0	3.5	4.0	12.0	14.0	19.0	25.0	26.0	25.0	20.0
17	19.0	6.5	0.5	---	4.0	12.0	14.0	19.5	27.5	26.0	25.0	20.0
18	19.0	5.5	5.0	9.0	4.0	13.5	15.0	20.0	25.0	26.0	26.0	17.5
19	9.5	5.0	6.0	9.0	4.0	14.0	15.5	21.0	25.0	26.0	26.0	19.0
20	12.0	4.5	6.5	9.0	7.0	13.0	17.0	23.0	23.5	26.5	26.0	21.0
21	14.0	4.5	6.0	9.5	7.0	10.5	19.5	23.0	24.0	27.0	25.5	23.0
22	14.0	4.0	5.5	9.5	7.0	11.0	19.0	24.0	24.0	27.0	26.0	23.5
23	13.0	4.5	5.0	7.5	6.5	12.0	19.0	23.0	25.0	28.0	25.5	23.5
24	11.5	5.0	4.5	6.0	7.0	13.0	18.0	23.5	25.0	28.0	25.0	23.5
25	10.0	4.5	6.0	6.0	8.0	11.5	20.0	23.0	25.0	27.0	25.0	23.0
26	10.5	4.5	4.0	6.0	9.0	10.0	18.5	21.0	25.5	27.0	25.0	24.0
27	10.5	5.0	4.0	6.0	8.5	9.5	15.0	21.0	25.5	26.0	25.5	21.5
28	11.5	5.5	6.0	8.0	9.5	11.0	18.0	20.0	25.5	26.5	25.0	20.0
29	12.5	4.5	8.0	---	---	12.0	18.0	20.0	25.0	27.0	25.0	20.0
30	14.5	4.5	8.5	5.0	---	13.0	18.0	21.0	25.0	25.0	24.0	20.0
31	14.5	---	7.0	---	---	---	---	21.5	---	25.0	25.0	---
MONTH	15.5	7.5	4.0	---	6.5	12.0	14.5	20.5	23.5	26.5	25.0	22.5

07242350 DEEP FORK RIVER NEAR ARCADIA, OKLA.

LOCATION.--Lat 35°39'10", long 97°20'58", on south line of SW1/4 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 sq mi (280 km^2).

PERIOD OF RECORD.--Chemical analyses: October 1969 to current year.
Water temperatures: October 1969 to current year.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS-CHARGE (CFS)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (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)
OCT.											
01-10	21	--	--	270	102	0	170	370	12	54	--
11-21	41	--	--	280	102	0	170	370	16	70	--
22...	431	--	--	26	108	0	32	34	1.0	4.6	--
23...	41	--	--	96	108	0	87	130	6.3	28	--
24-30	51	--	--	200	136	0	140	270	9.5	42	--
31...	1210	--	--	28	88	0	42	34	.23	1.0	--
NOV.											
01...	569	--	--	22	104	0	29	28	1.9	8.4	--
02-03	100	--	--	130	162	0	110	170	5.4	24	--
04-12	49	--	--	190	226	0	130	240	6.8	30	--
13...	282	--	--	39	134	0	44	48	.68	3.0	--
14-18	51	--	--	180	174	0	130	240	7.7	34	--
19...	108	--	--	74	112	0	64	94	2.5	11	--
20-25	60	--	--	16	168	0	130	200	6.8	30	--
26-30	33	--	--	180	224	0	160	240	1.8	8.0	--
DEC.											
01-10	23	--	--	210	188	0	160	280	13	59	--
11-20	31	--	--	230	174	0	140	320	12	52	--
21-29	46	--	--	200	190	0	150	270	10	46	--
30...	93	--	--	100	182	0	86	140	.61	2.7	--
31...	38	--	--	160	178	0	120	230	8.1	36	--
JAN.											
01-02	29	--	--	210	196	0	160	300	8.1	36	--
03-04	312	--	--	56	154	0	56	75	.88	3.9	--
05-14	43	--	--	180	284	0	170	250	2.3	10	--
15-16	87	--	--	120	160	0	92	170	11	47	--
17-20	38	--	--	180	300	0	150	240	2.3	10	--
21-22	321	--	--	86	168	0	77	120	3.8	17	--
23-25	58	--	--	150	300	0	150	190	5.6	25	--
26-27	254	--	--	64	172	0	73	84	2.2	9.6	--
28-31	73	--	--	150	328	0	160	200	6.6	29	--
FEB.											
01-03	72	--	--	140	256	0	130	190	1.7	7.4	--
04-07	45	--	--	180	290	0	160	240	.47	2.1	--
08...	67	--	--	130	272	0	140	170	.23	1.0	--
09-20	39	--	--	170	236	0	170	230	12	55	--
21-28	34	--	--	180	220	0	170	240	14	61	--
MAR.											
01-05	35	72	39	180	397	0	140	240	3.7	16	.18
06...	521	52	18	46	191	0	61	67	.79	3.5	.00
07-09	114	59	27	97	219	0	110	120	5.5	24	.00
10-11	793	45	19	58	193	0	43	77	3.1	14	.00
12-23	50	78	41	130	283	0	160	190	8.0	35	.00
24-25	105	33	11	22	134	0	32	28	1.5	6.6	.01
26-30	155	74	36	110	271	0	140	140	4.4	19	.00
31...	224	55	25	65	219	0	85	85	2.0	8.9	.00
APR.											
01-02	110	--	--	120	288	0	150	150	3.4	15	--
03...	121	--	--	36	166	0	57	47	1.8	8.0	--
04-15	255	--	--	130	288	0	150	170	.56	2.5	--
16...	255	--	--	49	218	0	73	63	.59	2.6	--
17-20	114	--	--	110	268	0	120	150	.50	2.2	--
21-30	46	--	--	150	292	0	160	200	.77	3.4	--
MAY											
01-06	33	83	44	170	288	0	150	220	3.4	15	8.6
07...	86	70	34	98	258	0	110	130	.40	1.8	3.2
08-22	52	75	39	170	263	0	120	210	14	62	.00
23-24	192	69	30	98	224	0	100	120	6.2	28	.76
25-30	39	70	33	150	222	0	120	200	2.7	12	2.3
31...	442	41	14	33	156	0	46	46	.81	3.6	.00
JUNE											
01...	93	46	23	71	188	0	71	96	.03	.10	.00
02-03	648	60	29	84	164	0	35	38	1.1	4.9	.00
04...	251	40	13	31	250	0	34	39	.88	3.9	.00
05...	1380	39	12	22	157	0	32	28	.52	2.3	.00
06-16	120	77	36	120	278	0	130	150	5.0	22	.00
17...	137	44	19	54	187	0	70	72	.38	1.7	.00
18-28	50	72	33	130	250	0	140	180	8.2	36	.01
29-30	50	68	30	130	226	0	130	170	7.9	35	.01
JULY											
01-06	32	65	33	150	233	0	140	200	--	--	--
07-10	42	68	31	180	215	0	140	250	--	--	--
11...	89	39	15	74	130	0	72	98	--	--	--
12-14	32	59	27	150	200	0	120	210	--	--	--
15...	321	34	11	34	131	0	31	39	--	--	--
16-20	49	60	26	140	197	0	120	190	--	--	--
21...	123	34	12	53	124	0	60	62	--	--	--
22-30	45	60	27	150	182	0	130	220	--	--	--
31...	171	41	16	59	149	0	66	79	--	--	--
AUG.											
01-10	31	62	29	180	181	0	120	240	11	48	.05

07242350 DEEP FORK RIVER NEAR ARCADIA, OKLA.

EXTREMES, Current year.--Dissolved solids: Maximum, 1,070 mg/l Oct. 0-21; minimum, 164 mg/l Sept. 27.
Hardness: Maximum, 400 mg/l Jan. 28-31; minimum, 99 mg/l Sept. 27.
Specific conductance: Maximum daily, 2,070 micromhos Oct. 15; minimum daily,244 micromhos Sept. 27.
Water temperatures: Maximum,29.0°c July 2, Aug. 16;minimum, freezing point Dec. 9-10,12,15, Jan. 9.

Period of record.--Dissolved solids: Maximum, 1,140 mg/l Aug. 1-8, 1972; minimum, 202 mg/l Sept. 23, 1970.
Hardness: Maximum, 324 mg/l Jan. 21-32, 1970; minimum, 98 mg/l Sept. 23, 1970.
Specific conductance: Maximum daily, 1,970 micromhos Oct. 15, 1971; minimum daily, 300 micromhos Sept. 23, 1970.
Water temperatures: Maximum, 29.0°c June 17, 18, 1970; minimum, freezing point on several days during winter period.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS- SOLVED NITRITE (NO2) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	PHOS- PHATE (PO4) (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)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)
OCT.											
01-10	--	--	22	1070	1.46	60.7	250	170	7.4	1810	7.9
11-21	--	--	22	1070	1.46	118	250	170	7.7	1840	7.4
22...	--	--	2.1	206	.28	240	110	21	1.1	360	6.9
23...	--	--	5.5	472	.64	52.3	180	91	3.1	829	6.7
24-30	--	--	15	850	1.16	117	240	130	5.6	1440	6.8
31...	--	--	4.9	208	.28	680	100	28	1.2	365	6.7
NOV.											
01...	--	--	1.4	196	.27	301	110	25	.9	337	7.1
02-03	--	--	9.3	627	.85	169	230	97	3.7	1060	8.0
04-12	--	--	21	834	1.13	110	280	95	4.9	1470	7.0
13...	--	--	1.8	270	.37	206	140	30	1.4	477	7.0
14-18	--	--	12	808	1.10	111	270	130	4.8	1390	7.0
19...	--	--	6.1	423	.58	123	150	58	2.6	659	6.9
20-25	--	--	12	712	.97	115	250	110	.4	1220	7.8
26-30	--	--	13	870	1.18	77.5	310	130	4.4	1490	7.2
DEC.											
01-10	--	--	14	942	1.28	58.5	320	170	5.1	1610	7.0
11-20	--	--	13	980	1.33	82.0	300	160	5.8	1660	7.8
21-29	--	--	13	910	1.24	113	310	150	4.9	1540	7.2
30...	--	--	6.3	518	.70	130	220	71	2.9	905	7.4
31...	--	--	7.9	762	1.04	78.2	280	130	4.2	1310	8.0
JAN.											
01-02	--	--	13	1000	1.36	78.3	320	160	5.1	1600	6.9
03-04	--	--	2.4	355	.48	299	180	54	1.8	598	7.0
05-14	--	--	13	920	1.25	107	380	150	4.0	1510	7.1
15-16	--	--	13	640	.87	150	240	110	3.4	1030	8.0
17-20	--	--	18	884	1.20	90.7	330	84	4.3	1480	7.1
21-22	--	--	6.4	489	.67	424	210	72	2.6	807	6.9
23-25	--	--	12	790	1.07	124	340	94	3.5	1330	7.2
26-27	--	--	1.8	424	.58	291	200	59	2.0	689	7.2
28-31	--	--	15	800	1.09	158	400	130	3.3	1380	7.3
FEB.											
01-03	--	--	11	760	1.03	148	320	110	3.4	1270	7.3
04-07	--	--	17	924	1.26	112	380	140	4.0	1540	7.4
08...	--	--	9.6	724	.98	131	310	87	3.2	1240	7.0
09-20	--	--	19	1010	1.37	106	370	180	3.8	1500	7.2
21-28	--	--	17	984	1.34	90.3	360	180	4.1	1500	6.9
MAR.											
01-05	.5	7.4	--	888	1.21	83.9	340	15	4.2	1600	7.1
06...	.0	2.6	--	378	.51	532	200	47	1.4	630	7.5
07-09	.0	2.3	--	592	.81	182	260	79	2.6	971	6.6
10-11	.0	1.8	--	394	.54	844	190	32	1.8	669	7.4
12-23	.0	4.6	--	838	1.14	113	360	130	3.0	1350	6.9
24-25	.0	.59	--	239	.33	67.8	130	18	.8	377	7.4
26-30	.0	2.1	--	694	.94	290	330	110	2.6	1130	6.9
31...	.0	1.9	--	469	.64	284	240	61	1.8	784	7.4
APR.											
01-02	--	--	8.1	764	1.04	227	360	120	2.8	1170	8.0
03...	--	--	1.8	338	.46	110	190	52	1.1	525	7.9
04-15	--	--	11	788	1.07	543	370	130	2.9	1230	8.0
16...	--	--	1.7	420	.57	289	240	61	1.4	675	6.6
17-20	--	--	9.8	742	1.01	228	330	110	2.6	1110	7.3
21-30	--	--	14	940	1.28	117	390	150	3.3	1360	8.1
MAY											
01-06	28	--	--	884	1.20	78.8	390	150	3.8	1480	7.9
07...	11	--	--	600	.82	139	310	100	2.4	1010	8.3
08-22	.0	--	--	800	1.09	112	350	130	4.0	1360	8.2
23-24	2.5	--	--	606	.82	514	300	110	2.5	987	8.2
25-30	7.6	--	--	801	1.09	84.3	310	130	3.7	1270	7.3
31...	.0	3.7	--	294	.40	551	160	32	1.1	482	8.3
JUNE											
01...	.0	2.1	--	436	.59	109	210	55	2.1	728	8.2
02-03	.0	.81	--	278	.38	486	270	130	2.2	456	7.8
04...	.0	2.2	--	295	.40	200	150	0	1.1	930	8.0
05...	.0	.63	--	259	.35	965	150	18	.8	389	8.1
06-16	.0	4.0	--	734	1.00	238	340	110	2.8	1120	7.8
17...	.0	--	--	375	.51	139	190	35	1.7	643	8.0
18-28	.0	4.7	--	766	1.04	103	320	110	3.2	1230	7.7
29-30	.0	5.7	--	729	.99	98.4	290	110	3.3	1160	7.3
JULY											
01-06	--	5.4	--	744	1.01	64.3	300	110	3.8	1270	7.8
07-10	--	5.2	--	806	1.10	91.4	300	120	4.5	1420	7.7
11...	--	2.5	--	429	.58	103	160	53	2.6	704	8.0
12-14	--	4.4	--	785	1.07	67.8	260	94	4.1	1270	7.6
15...	--	1.1	--	236	.32	205	130	23	1.3	404	7.2
16-20	--	3.8	--	719	.98	95.1	260	95	3.8	1190	7.2
21...	--	1.7	--	322	.44	107	130	33	2.0	525	8.0
22-30	--	6.3	--	764	1.04	92.8	260	110	4.0	1280	7.2
31...	--	1.6	--	378	.51	175	170	46	2.0	633	7.7
AUG.											
01-10	.1	3.8	--	820	1.12	68.6	270	130	4.7	1410	7.0

07242350 DEEP FORK RIVER NEAR ARCADIA, OKLA.--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS-CHARGE (CFS)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (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)
AUG.											
11-12	114	41	16	74	134	0	63	97	5.9	26	.12
13-15	34	60	26	180	173	0	120	230	15	66	.00
16-30	27	58	27	200	165	0	130	250	15	66	.05
31...	24	58	26	220	151	0	130	300	18	79	.06
SEP.											
01-03	29	59	27	190	151	0	130	260	12	55	.51
04...	837	31	8.5	20	122	0	25	25	.50	2.2	.02
05-09	87	45	17	88	149	0	74	120	5.3	24	.07
10-12	43	59	26	150	186	0	110	200	8.7	39	1.1
13...	1180	34	8.8	20	124	0	28	24	1.4	6.0	.04
14-19	72	58	25	99	215	0	86	130	5.5	24	.24
20-26	95	63	28	150	220	0	110	190	8.2	36	.14
27...	1850	28	7.0	11	116	0	16	12	.40	1.8	.01
28...	190	47	17	44	182	0	58	50	2.6	11	.01
29-30	102	71	31	100	272	0	110	120	5.4	24	.01
WTD. AVG.	--	--	--	100	197	0	94	131	4.0	18	--
TIME WTD. AVG.	97	--	--	154	215	0	131	208	7.5	33	--
TOT. LOAD (TONS)	--	--	--	9580	19000	0	9000	12600	365	1620	--

CHEMICAL ANALYSES OF ADDITIONAL SAMPLES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	INSTAN-TANEOUS DIS-CHARGE (CFS)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (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)
OCT.									
05...	22	--	--	--	380	.77	3.4	.03	.1
NOV.									
22...	71	--	--	--	190	.16	.70	.03	.1
DEC.									
20...	36	--	--	--	280	.09	.40	.12	.4
JAN.									
16...	67	--	--	--	180	.09	.40	.09	.3
FEB.									
14...	34	--	--	--	240	.14	.60	.03	.1
MAR.									
14...	34	--	--	--	130	.29	1.3	.18	.6
APR.									
16...	179	--	--	--	68	.25	1.1	.03	.1
MAY									
10...	38	--	--	--	200	.16	.70	.00	.0
JUNE									
21...	48	--	--	--	170	.56	2.5	.46	1.5
JULY									
27...	27	--	--	--	--	.25	1.1	.51	1.7
AUG.									
23...	19	23	26	6000	260	--	--	--	--
SEP.									
27...	3870	--	--	--	--	.22	.97	.06	.2

07242350 DEEP FORK RIVER NEAR ARCADIA, OKLA.--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS-SOLVED NITRITE (NO2) (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)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)
AUG.										
11-12	.3	2.3	418	.57	129	170	58	2.5	723	7.3
13-15	.0	6.2	778	1.06	71.4	260	120	4.9	1340	7.0
16-30	.1	5.6	852	1.16	62.1	260	120	5.4	1440	7.0
31...	.2	3.8	932	1.27	60.4	260	140	5.9	1560	6.9
SEP.										
01-03	1.7	7.9	853	1.16	66.8	260	130	5.1	1470	6.9
04...	.0	--	226	.31	511	110	12	.8	328	7.9
05-09	.2	2.6	496	.67	117	180	60	2.8	814	7.5
10-12	3.6	5.1	714	.97	82.9	250	100	4.1	1250	7.4
13...	.1	--	234	.32	746	120	19	.8	339	7.4
14-19	.7	3.2	541	.74	105	250	71	2.7	962	8.2
20-26	.4	5.8	364	.50	93.4	270	92	4.0	1210	7.8
27...	.0	--	164	.22	819	99	4	.5	257	8.2
28...	.0	--	384	.52	197	190	38	1.4	589	7.9
29-30	.0	2.7	669	.91	184	310	82	2.5	1050	7.7
WTD. AVG.	--	--	560	.76	--	246	84	2.6	928	7.5
TIME WTD. AVG.	--	--	777	1.06	--	295	118	3.9	1300	7.4
TOT. LOAD (TONS)	--	--	53800	--	--	--	--	--	--	--

CHEMICAL ANALYSES OF ADDITIONAL SAMPLES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS-SOLVED AMMONIA ORGANIC NITRO-GEN (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	PHOS-PHATE (PO4) (MG/L)	HARD-NESS (CA,MG) (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	CHEM-ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	CHEM-ICAL OXYGEN DEMAND (HIGH LEVEL) (MG/L)	BIO-CHEM-ICAL OXYGEN DEMAND (MG/L)	PHENOLS (UG/L)
OCT.									
05...	21	--	22	--	--	26	--	16	18
NOV.									
22...	7.5	--	12	--	1140	51	--	27	--
DEC.									
20...	21	--	25	--	--	40	--	18	1
JAN.									
16...	21	--	17	--	--	87	--	42	2
FEB.									
14...	19	--	16	--	--	50	--	5.1	1
MAR.									
14...	7.1	--	1.2	--	--	39	--	19	1
APR.									
16...	3.0	--	6.3	--	--	58	--	33	--
MAY									
10...	17	--	23	--	--	79	--	45	3
JUNE									
21...	6.7	--	12	--	--	28	--	11	5
JULY									
27...	14	--	--	--	--	39	--	10	3
AUG.									
23...	--	9.6	--	160	--	--	38	--	6
SEP.									
27...	2.2	1.5	--	--	--	100	--	22	7

07242350 DEEP FORK RIVER NEAR ARCADIA, OKLA.--Continued

PESTICIDE ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	ALDRIN (UG/L)	CHLOR-DANE (UG/L)	DDD (UG/L)	DDE (UG/L)	DDT (UG/L)	DI-ELDRIN (UG/L)	ENDRIN (UG/L)	HEPTA-CHLOR (UG/L)	HEPTA-CHLOR EPOXIDE (UG/L)
OCT.									
05...	.00	.0	.00	.00	.00	.02	.00	.00	.00
NOV.									
22...	.00	.2	.00	.00	.00	.08	.00	.00	.00
DEC.									
20...	.00	.2	.00	.00	.00	.02	.00	.00	.00
JAN.									
16...	.00	.1	.01	.00	.00	.02	.00	.00	.00
FEB.									
14...	.00	.1	.00	.00	.01	.01	.00	.00	.00
MAR.									
14...	.00	.1	.00	.00	.00	.04	.00	.00	.00
APR.									
16...	.00	.2	.00	.00	.01	.08	.00	.00	.00
MAY									
10...	.00	.2	.00	.00	.00	.09	.00	.00	.00
JUNE									
21...	--	--	--	--	--	--	--	--	--
JULY									
27...	.00	.0	.00	.00	.00	.01	.00	.00	.00
AUG.									
23...	.00	.0	.00	.00	.00	.02	.00	.00	.00
SEP.									
27...	.00	.1	.00	.00	.02	.03	.00	.00	.00

DATE	LINDANE (UG/L)	2,4-D (UG/L)	2,4,5-T (UG/L)	SILVEX (UG/L)	DI-AZINON (UG/L)	MALA-THION (UG/L)	METHYL PARA-THION (UG/L)	PARA-THION (UG/L)	PCB (UG/L)
OCT.									
05...	.00	.00	.01	.00	--	--	--	--	.0
NOV.									
22...	.03	.00	.00	.00	--	--	--	--	.0
DEC.									
20...	.00	.00	.00	.00	--	--	--	--	.0
JAN.									
16...	.01	.05	.00	.02	--	--	--	--	.0
FEB.									
14...	.02	.00	.00	.00	--	--	--	--	.0
MAR.									
14...	.00	.49	.02	.12	.12	.00	.00	.00	.0
APR.									
16...	.00	.19	.00	.02	.07	.00	.00	.00	.0
MAY									
10...	.00	.08	.00	.00	.16	.00	.00	.00	.0
JUNE									
21...	--	.18	.04	.00	.17	.00	.00	.00	--
JULY									
27...	.03	.00	.02	.00	.35	.00	.00	.00	.0
AUG.									
23...	.01	.02	.04	.01	.39	.00	.00	.00	.0
SEP.									
27...	.00	--	--	--	.02	.00	.00	.00	.0

07242350 DEEP FORK RIVER NEAR ARCADIA, OKLA.--Continued

CHEMICAL ANALYSES OF MINOR AND TRACE CONSTITUENTS, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED MAN-GANESE (MN) (UG/L)	DIS-SOLVED CAD-MIUM (CD) (UG/L)	DIS-SOLVED CHRO-MIUM (CR) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	DIS-SOLVED NICKEL (NI) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)
OCT. 05...	--	--	--	--	--	--	--	--
NOV. 22...	--	--	--	--	--	--	--	--
DEC. 20...	120	330	0	0	90	1	--	40
JAN. 16...	--	--	--	--	--	--	--	--
FEB. 14...	--	--	--	--	--	--	--	--
MAR. 14...	50	30	8	0	30	14	12	40
APR. 16...	--	--	--	--	--	--	--	--
MAY 10...	--	--	--	--	--	--	--	--
JUNE 21...	--	--	--	--	--	--	--	--
JULY 27...	--	--	--	--	--	--	--	--
AUG. 23...	100	410	0	0	8	2	--	30
SEP. 27...	--	--	--	--	--	--	--	--

FIELD ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	DIS-SOLVED OXYGEN (MG/L)	PER-CENT SATUR-ATION
OCT. 05...	1700	6.5	19.0	6.9	79
NOV. 22...	1400	7.8	6.5	11.4	97
DEC. 20...	1450	--	8.0	8.5	78
JAN. 16...	1250	--	12.0	10.4	103
FEB. 14...	1600	7.9	5.0	11.0	92
MAR. 14...	1000	--	14.5	8.4	89
APR. 16...	580	7.8	15.0	7.0	74
MAY 10...	1250	7.6	20.5	5.1	61
JUNE 21...	1020	--	24.0	7.3	91
JULY 27...	1300	7.9	27.0	7.8	103
AUG. 23...	1600	7.6	27.0	7.8	103
SEP. 27...	208	8.0	20.0	7.2	85

07242350 DEEP FORK RIVER NEAR ARCADIA, OKLA.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(ONCE-DAILY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	337	1680	1630	1260	1580	1120	1440	719	1250	1130	1570
2	1920	904	1690	1730	1240	1520	1340	1400	342	1280	1370	1410
3	2020	1270	1700	538	1400	1580	537	1540	553	1390	1510	1370
4	1970	1460	1580	686	1480	1500	935	1520	940	1320	1480	323
5	1920	1570	1670	1190	1630	1500	1230	1460	388	1290	1490	740
6	1880	1590	1660	1470	1620	630	1300	1590	872	1290	1480	980
7	1840	1570	1680	1580	1620	856	1300	1030	1080	1500	1520	714
8	---	1350	1630	1570	1240	1170	1290	1320	1210	1520	1460	685
9	---	1380	1580	1530	1420	911	953	1480	1280	1490	1410	914
10	1700	1520	1580	1620	1540	673	1210	1460	1390	1320	1260	1200
11	1860	1610	1580	1600	1610	655	1370	1490	1290	720	595	1250
12	1920	1620	1580	1570	1610.	1090	1370	1460	1260	1340	858	1280
13	1900	477	1700	1610	1480	1270	1440	1430	1290	1170	1300	330
14	1920	988	2030	1680	1500	1010	1460	1540	1250	1340	1380	743
15	2070	1410	1580	977	1570	1260	1480	1510	858	392	1400	1030
16	1930	1540	1740	1260	1600	1380	668	---	1130	872	1470	1100
17	2060	1590	1840	1460	1550	1430	1080	---	647	1240	1450	1080
18	2020	1530	1740	1400	1570	1460	1230	1590	1100	1320	1450	744
19	1950	659	1540	1570	1450	1390	1160	1570	1160	1370	1450	1070
20	2030	1000	1610	1680	1570	1500	1110	1540	922	1320	1480	1150
21	1720	1320	1020	922	1440	1490	1250	1500	1110	533	1510	1160
22	360	1150	1310	754	1580	1490	1350	1440	1250	1170	1480	1140
23	839	1410	1470	1220	1560	1470	1380	940	1250	803	1480	1210
24	1400	1510	1710	1380	1630	424	1420	1080	1340	1130	1480	1320
25	1330	1070	1680	1490	1630	316	1480	1300	1320	1300	1410	1310
26	1470	1290	1710	542	1550	805	1410	1360	1360	1410	1520	1310
27	1500	1500	1820	856	1540	1080	1580	1350	1370	1450	1430	244
28	1570	1560	1720	1270	1630	1090	1470	1160	1410	1460	1390	565
29	1800	1480	1730	1340	---	1130	1490	1340	956	1500	1400	958
30	1360	1690	905	1530	---	1260	1440	1340	1190	1480	1490	1140
31	365	---	1340	1550	---	784	---	468	---	625	1600	---
MONTH	1670	1310	1610	1330	1520	1150	1260	1370	1070	1210	1390	1000

07242350 DEEP FORK RIVER NEAR ARCADIA, OKLA.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(ONCE-DAILY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	9.5	9.0	10.0	12.0	14.0	11.0	22.0	21.0	25.0	24.0	24.0
2	17.0	12.5	11.0	10.0	14.0	16.0	15.0	16.0	19.0	29.0	25.0	23.0
3	17.0	15.0	11.0	7.0	10.0	12.0	14.0	15.0	20.0	27.0	24.0	26.0
4	19.0	16.0	5.0	6.0	14.0	13.0	12.0	17.0	21.0	27.0	24.0	23.0
5	20.0	13.0	6.0	5.0	15.0	11.0	15.0	17.0	20.0	27.0	24.0	23.0
6	18.0	15.0	2.0	0.0	15.0	16.0	15.0	17.0	22.0	27.0	26.0	21.0
7	17.0	14.0	1.0	2.0	9.0	14.0	15.0	18.0	22.0	27.0	25.0	23.0
8	---	12.0	3.0	4.0	6.0	15.0	10.0	17.0	23.0	26.0	27.0	24.0
9	---	14.5	0.0	0.0	6.0	16.0	9.0	20.0	24.0	28.0	25.0	23.0
10	22.0	12.5	0.0	5.0	7.0	15.0	9.0	21.0	23.0	26.0	27.0	26.0
11	21.5	12.0	2.0	4.0	9.0	14.0	14.0	21.0	26.0	26.0	27.0	24.0
12	24.0	12.0	0.0	4.0	14.0	16.0	16.0	20.0	24.0	26.0	27.0	23.0
13	22.0	11.0	3.0	5.0	12.0	16.0	16.0	18.0	25.0	27.0	25.0	12.0
14	22.5	8.0	1.0	5.0	10.0	16.0	16.0	18.0	24.0	26.0	28.0	---
15	18.0	9.5	0.0	6.0	6.0	16.0	16.0	18.0	27.0	24.0	27.0	22.0
16	18.5	9.0	3.0	9.0	8.0	15.0	14.0	20.0	27.0	26.0	29.0	21.0
17	21.0	10.5	5.0	14.0	10.0	15.0	16.0	19.0	23.0	27.0	27.0	18.0
18	18.0	8.0	5.0	16.0	9.0	12.0	17.0	21.0	27.0	27.0	27.0	17.0
19	11.5	7.5	11.0	14.0	14.0	17.0	17.0	21.0	22.0	27.0	25.0	18.0
20	13.5	8.5	11.0	14.0	14.0	13.0	19.0	20.0	20.0	28.0	27.0	26.0
21	14.0	9.5	9.0	15.0	14.0	14.0	19.0	21.0	22.0	27.0	26.0	24.0
22	16.5	8.5	10.0	10.0	12.0	14.0	18.0	22.0	26.0	25.0	26.0	24.0
23	13.5	9.0	11.0	15.0	12.0	15.0	---	24.0	25.0	27.0	25.0	23.0
24	11.0	10.0	9.0	13.0	11.0	15.0	20.0	22.0	23.0	28.0	26.0	23.0
25	12.5	9.5	10.0	12.0	14.0	11.0	17.0	22.0	26.0	26.0	26.0	25.0
26	13.0	8.5	11.0	14.0	13.0	13.0	17.0	22.0	26.0	27.0	25.0	24.0
27	13.0	8.5	10.0	12.0	10.0	12.0	16.0	19.0	27.0	26.0	26.0	20.0
28	13.0	9.5	12.0	6.0	14.0	14.0	17.0	21.0	23.0	25.0	27.0	19.0
29	14.5	10.5	16.0	6.0	---	16.0	16.0	22.0	23.0	25.0	26.0	19.0
30	16.0	10.5	13.0	9.0	---	16.0	19.0	19.0	27.0	26.0	27.0	18.0
31	10.5	---	10.0	12.0	---	13.0	---	20.0	---	26.0	25.0	---
MONTH	16.5	11.0	7.0	8.5	11.0	14.5	15.5	19.5	23.5	26.5	26.0	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).

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	DISSOLVED NITRATE (NO3) (MG/L)	DISSOLVED NITRITE (N) (MG/L)
OCT.											
05...	7.6	--	--	200	214	0	85	340	.18	.80	--
15...	2.6	--	--	230	226	0	80	380	.14	.60	--
25...	159	--	--	44	50	0	23	68	.45	2.0	--
NOV.											
05...	2580	--	--	27	52	0	24	39	.05	.20	--
15...	2780	--	--	24	48	0	16	36	.34	1.5	--
25...	609	--	--	51	88	0	26	85	.68	3.0	--
DEC.											
05...	191	--	--	88	138	0	43	150	1.1	4.9	--
15...	138	--	--	120	160	0	51	220	1.4	6.4	--
25...	754	--	--	55	80	0	28	100	.75	3.3	--
JAN.											
04...	3040	--	--	24	40	0	14	42	.52	2.3	--
15...	698	--	--	60	108	0	27	110	.68	3.0	--
25...	530	--	--	58	116	0	28	110	.72	3.2	--
FEB.											
05...	1410	--	--	38	96	0	22	67	.56	2.5	--
15...	638	--	--	65	142	0	39	120	.72	3.2	--
25...	318	--	--	100	196	0	35	200	.72	3.2	--
MAR.											
05...	3620	--	--	20	46	0	14	34	.45	2.0	--
15...	6780	--	--	23	76	0	14	38	.32	1.4	--
25...	4400	--	--	19	48	0	12	35	.52	2.3	--
APR.											
05...	4470	--	--	31	110	0	20	54	.45	2.0	--
16...	4820	--	--	20	54	0	12	37	.41	1.8	--
25...	6460	--	--	24	92	0	14	44	.45	2.0	--
MAY											
05...	859	--	--	66	172	0	25	130	.52	2.3	--
15...	985	--	--	52	160	8	23	95	.56	2.5	--
25...	373	--	--	130	220	0	37	260	.59	2.6	--
JUNE											
05...	10500	10	4.2	12	41	0	8.4	21	.36	1.6	.02
15...	3210	34	15	35	138	3	17	63	.79	3.5	.01
25...	397	53	17	77	200	0	35	130	.93	4.1	.00
JULY											
05...	189	76	37	120	302	0	48	240	.48	2.1	.00
15...	136	59	29	89	251	0	41	160	.44	1.9	.00
25...	109	67	33	120	246	11	54	210	.51	2.3	.00
AUG.											
05...	117	60	30	110	254	18	56	180	.44	1.9	.00
15...	161	51	27	100	226	0	46	170	.74	3.3	.00
25...	44	48	25	100	217	0	45	390	.57	2.5	.00
SEP.											
05...	831	16	5.9	37	49	0	9.5	69	.40	1.8	.05
14...	1320	15	6.2	33	56	0	15	49	.45	2.0	.02
27...	2360	14	5.4	26	58	0	10	40	.46	2.0	.01

07243500 DEEP FORK NEAR BEGGS, OKLA.

DRAINAGE AREA.--2,018 sq mi (5,226.6 km²).

PERIOD OF RECORD.--Chemical analyses: November 1951 to current year.
Water temperatures: November 1951 to current year.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS-SOLVED NITRITE (NO2) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	PHOS-PHATE (PO4) (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)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)
OCT.											
05...	--	--	.09	908	1.23	18.6	320	140	--	1550	8.1
15...	--	--	.11	982	1.34	6.89	330	150	--	1710	7.7
25...	--	--	.08	242	.33	104	62	21	--	367	6.6
NOV.											
05...	--	--	.26	170	.23	1180	60	17	1.5	242	7.8
15...	--	--	.41	157	.21	1180	54	15	1.4	224	7.3
25...	--	--	.84	291	.40	478	110	38	2.1	470	7.7
DEC.											
05...	--	--	1.0	453	.62	234	180	67	2.9	794	6.5
15...	--	--	1.2	614	.84	229	240	110	3.4	1070	6.5
25...	--	--	.59	315	.43	641	120	54	2.2	515	6.2
JAN.											
04...	--	--	.08	149	.20	1220	54	21	1.4	238	6.8
15...	--	--	.54	347	.47	654	140	51	2.2	600	7.8
25...	--	--	.56	340	.46	487	150	55	2.1	591	7.1
FEB.											
05...	--	--	.51	231	.31	879	120	41	1.5	422	7.7
15...	--	--	.63	382	.52	658	190	74	2.1	670	7.3
25...	--	--	.90	550	.75	472	270	110	2.6	1000	7.5
MAR.											
05...	--	--	.27	196	.27	1920	58	20	1.1	225	7.1
15...	--	--	.25	193	.26	3530	82	20	1.1	286	7.2
25...	--	--	.26	171	.23	2030	60	21	1.1	215	7.2
APR.											
05...	--	--	.25	235	.32	2840	120	30	1.2	393	8.0
16...	--	--	.23	177	.24	2300	64	20	1.1	242	7.5
25...	--	--	.27	206	.28	3590	96	21	1.1	318	7.3
MAY											
05...	--	--	.27	435	.59	1010	220	79	1.9	739	7.5
15...	--	--	.41	374	.51	995	200	55	1.6	624	8.5
25...	--	--	.27	716	.97	721	310	130	3.2	1240	7.9
JUNE											
05...	.0	.17	--	161	.22	4560	42	9	.8	150	7.2
15...	.0	.31	--	291	.40	2520	150	28	1.3	466	8.4
25...	.0	.34	--	479	.65	513	200	38	2.4	811	7.8
JULY											
05...	.0	--	--	752	1.02	384	340	94	2.8	1240	8.0
15...	.0	--	--	574	.78	211	270	61	2.4	957	8.1
25...	.0	--	--	671	.91	197	300	83	3.0	1130	8.6
AUG.											
05...	.0	.22	--	596	.81	188	270	35	2.9	1050	8.5
15...	.0	--	--	518	.70	225	240	53	2.8	974	7.9
25...	.0	.16	--	605	.82	71.9	220	45	2.9	910	8.2
SEP.											
05...	.1	.06	--	210	.29	471	64	24	2.0	329	7.3
14...	.0	.11	--	189	.26	674	63	17	1.8	282	7.5
27...	.0	.13	--	152	.21	969	57	10	1.5	251	7.1

07243500 DEEP FORK NEAR BEGGS, OKLA.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(ONCE-DAILY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	181	657	670	214	---	324	462	419	1200	1110	1020
2	1450	126	704	766	182	692	342	438	401	1240	1290	747
3	1600	150	750	405	---	631	405	581	172	1300	---	1200
4	1550	---	765	238	207	239	400	672	118	1220	1140	1470
5	1550	242	794	---	422	222	393	741	149	1250	1030	325
6	1720	325	811	---	206	273	427	813	162	1190	1030	563
7	---	308	805	276	216	221	448	347	214	1060	946	641
8	1650	371	---	276	348	209	457	416	249	809	922	1020
9	1680	379	864	336	348	228	501	334	273	783	861	704
10	1930	379	884	426	375	282	516	446	297	745	1350	487
11	1930	406	882	455	505	233	541	408	317	768	1250	595
12	1890	404	912	478	499	199	605	475	329	811	853	640
13	1790	231	954	504	570	231	652	540	356	852	1040	372
14	---	205	1040	544	628	257	700	576	398	925	1070	278
15	1710	224	1070	605	670	285	---	629	459	948	941	351
16	1680	304	---	---	714	285	242	688	544	983	739	346
17	1680	249	1060	510	---	309	198	751	414	1050	---	265
18	1770	285	1050	525	---	332	248	807	448	1080	729	286
19	---	357	1060	448	827	366	279	840	601	1130	---	258
20	---	343	1070	510	---	424	337	884	664	1160	802	---
21	1580	368	330	468	877	496	347	956	713	1160	824	287
22	1440	379	254	384	848	567	389	1110	784	1150	1060	320
23	1040	422	---	434	902	614	337	1060	817	991	842	355
24	---	464	313	486	992	---	322	1380	967	1070	852	389
25	367	470	515	591	992	213	316	1240	802	1140	885	419
26	---	519	331	598	1000	---	310	1030	855	1140	916	441
27	1000	569	481	456	---	253	322	1010	897	1120	946	248
28	---	593	567	511	---	---	330	1070	950	1120	976	292
29	530	588	615	497	---	376	346	856	1000	1090	976	315
30	576	616	683	640	---	346	398	857	1060	---	958	356
31	227	---	---	554	---	328	---	872	---	1120	---	---
MONTH	---	361	749	485	570	337	394	751	528	1050	975	517

07243500 DEEP FORK NEAR BEGGS, OKLA.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(ONCE-DAILY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	12.0	9.0	7.0	7.0	---	17.0	23.0	22.0	31.0	29.0	27.0
2	23.0	13.0	10.0	7.0	9.0	13.0	14.0	19.0	20.0	31.0	29.0	28.0
3	22.0	12.0	7.0	4.0	---	12.0	14.0	21.0	24.0	31.0	---	30.0
4	23.0	---	4.0	3.0	10.0	12.0	13.0	16.0	24.0	32.0	28.0	31.0
5	23.0	14.0	5.0	3.0	10.0	13.0	17.0	19.0	24.0	32.0	27.0	23.0
6	22.0	14.0	3.0	---	8.0	13.0	16.0	20.0	25.0	33.0	31.0	26.0
7	---	14.0	3.0	2.0	7.0	16.0	17.0	21.0	26.0	34.0	30.0	30.0
8	21.0	13.0	---	2.0	5.0	16.0	13.0	21.0	24.0	30.0	28.0	29.0
9	22.0	14.0	2.0	1.0	6.0	14.0	11.0	23.0	27.0	29.0	30.0	29.0
10	26.0	13.0	2.0	1.0	5.0	18.0	13.0	27.0	27.0	32.0	31.0	25.0
11	24.0	12.0	2.0	2.0	5.0	18.0	15.0	24.0	27.0	32.0	31.0	27.0
12	23.0	11.0	2.0	3.0	7.0	18.0	17.0	23.0	27.0	32.0	32.0	27.0
13	24.0	11.0	3.0	5.0	7.0	18.0	16.0	23.0	27.0	30.0	31.0	25.0
14	26.0	10.0	3.0	6.0	7.0	19.0	17.0	22.0	27.0	33.0	31.0	22.0
15	21.0	9.0	3.0	4.0	5.0	16.0	---	23.0	29.0	28.0	31.0	24.0
16	23.0	9.0	---	---	6.0	17.0	15.0	23.0	29.0	29.0	29.0	24.0
17	24.0	9.0	7.0	9.0	---	16.0	18.0	23.0	26.0	32.0	---	23.0
18	18.0	8.0	3.0	8.0	---	18.0	21.0	25.0	29.0	33.0	30.0	21.0
19	---	7.0	7.0	12.0	9.0	15.0	24.0	25.0	25.0	33.0	---	23.0
20	16.0	7.0	6.0	10.0	---	14.0	20.0	24.0	27.0	33.0	32.0	---
21	15.0	5.0	7.0	9.0	8.0	14.0	24.0	26.0	29.0	31.0	31.0	21.0
22	17.0	7.0	7.0	8.0	8.0	14.0	21.0	24.0	27.0	32.0	32.0	27.0
23	16.0	7.0	---	8.0	9.0	14.0	25.0	25.0	29.0	32.0	31.0	26.0
24	---	6.0	6.0	10.0	9.0	---	24.0	26.0	28.0	33.0	30.0	25.0
25	16.0	7.0	6.0	9.0	12.0	12.0	19.0	25.0	29.0	33.0	32.0	26.0
26	---	11.0	7.0	8.0	10.0	---	15.0	23.0	30.0	34.0	32.0	26.0
27	14.0	9.0	8.0	8.0	12.0	14.0	18.0	24.0	31.0	33.0	31.0	23.0
28	---	8.0	8.0	6.0	11.0	---	21.0	22.0	28.0	29.0	29.0	22.0
29	14.0	6.0	9.0	6.0	---	17.0	19.0	25.0	29.0	29.0	26.0	22.0
30	14.0	9.0	8.0	8.0	---	16.0	18.0	24.0	29.0	---	29.0	23.0
31	14.0	---	8.0	9.0	---	14.0	---	23.0	---	30.0	---	---
MONTH	20.0	10.0	5.5	6.0	8.0	15.0	17.5	23.0	27.0	31.5	30.0	25.5

07245000 CANADIAN RIVER NEAR WHITEFIELD, OKLA.
(Irrigation network station)

LOCATION.--Lat 35°15'45", long 95°14'19", in SE1/4SE1/4 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 sq mi (123,221.8 km²), of which 9,700 sq mi (25,123 km²) is probably noncontributing.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	DISSOLVED NITRATE (NO3) (MG/L)	DISSOLVED NITRITE (N) (MG/L)
OCT.											
05...	72	--	--	48	140	4	28	79	.02	.10	--
15...	89	--	--	49	128	0	25	84	.11	.50	--
25...	80	--	--	35	136	0	23	55	.18	.80	--
NOV.											
05...	86	--	--	39	124	0	25	56	.00	.00	--
15...	600	--	--	55	100	0	30	89	.02	.10	--
25...	8700	--	--	55	98	0	29	90	.02	.10	--
DEC.											
05...	860	--	--	51	102	0	25	88	.09	.40	--
15...	1510	--	--	50	102	0	25	86	.14	.60	--
25...	145	--	--	44	128	0	27	74	.09	.40	--
JAN.											
05...	790	--	--	48	96	0	23	83	.09	.40	--
15...	800	--	--	23	62	0	20	34	.27	1.2	--
25...	15100	--	--	46	90	0	24	79	.23	1.0	--
FEB.											
05...	1980	--	--	40	84	0	21	68	.11	.50	--
15...	6090	--	--	43	86	0	24	72	.29	1.3	--
25...	159	--	--	40	116	0	25	66	.29	1.3	--
MAR.											
05...	10500	--	--	41	84	0	22	72	.34	1.5	--
15...	14900	--	--	41	80	0	22	69	.38	1.7	--
25...	4890	--	--	21	52	0	18	34	.38	1.7	--
APR.											
05...	14700	--	--	41	80	0	29	71	.36	1.6	--
15...	28400	--	--	40	74	0	28	70	.41	1.8	--
25...	37800	--	--	39	82	0	28	68	.32	1.4	--
MAY											
05...	33300	--	--	39	86	0	30	64	.32	1.4	--
15...	29500	--	--	33	80	0	18	55	.34	1.5	--
25...	16500	--	--	32	78	0	29	52	.41	1.8	--
JUNE											
05...	29700	23	7.2	30	74	0	23	45	.45	2.0	.01
15...	24800	29	9.4	36	88	0	32	61	.44	1.9	.01
25...	34200	28	9.1	36	88	0	30	60	.44	1.9	.01
JULY											
05...	13000	29	9.2	35	95	0	28	57	.37	1.6	.01
15...	860	40	11	33	160	0	27	55	.35	1.6	.00
25...	1250	28	8.7	33	98	0	27	55	.03	.10	.00
AUG.											
05...	676	28	8.8	33	105	0	26	53	.50	2.2	.00
15...	620	27	8.9	32	103	0	26	53	.29	1.3	.00
25...	1120	28	8.8	32	105	0	25	52	.22	1.0	.00
SEP.											
05...	286	31	9.9	33	108	0	28	51	.21	.93	.01
15...	590	29	9.3	31	108	0	23	49	.17	.75	.01
25...	731	29	9.5	31	111	0	22	49	.12	.53	.02

07245000 CANADIAN RIVER NEAR WHITEFIELD, OKLA.
(Irrigation network station)

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 current year.

REMARKS.--Continuous monitor records for water temperature and specific conductance are collected for this station.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS-SOLVED NITRITE (NO2) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	PHOS-PHATE (PO4) (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)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)
OCT.											
05...	--	--	5.0	294	.40	57.2	150	28	--	523	8.4
15...	--	--	.08	296	.40	71.1	140	35	--	518	8.2
25...	--	--	.10	259	.33	51.6	130	18	--	432	7.6
NOV.											
05...	--	--	.02	252	.34	58.5	120	18	1.5	420	7.5
15...	--	--	.02	299	.41	484	120	38	2.2	497	7.6
25...	--	--	.01	300	.41	7050	120	40	2.2	501	7.2
DEC.											
05...	--	--	.06	281	.38	652	120	36	2.0	503	6.6
15...	--	--	.09	272	.37	1110	120	36	2.0	488	6.6
25...	--	--	.06	275	.37	108	140	35	1.6	490	6.5
JAN.											
05...	--	--	.05	272	.37	580	110	31	2.0	470	7.5
15...	--	--	.09	149	.20	322	68	17	1.2	254	7.1
25...	--	--	.09	253	.34	10300	110	36	1.9	451	7.4
FEB.											
05...	--	--	.09	225	.31	1200	98	29	1.8	402	8.2
15...	--	--	.19	240	.33	3950	100	29	1.9	428	7.3
25...	--	--	.13	249	.34	107	130	35	1.5	445	7.2
MAR.											
05...	--	--	.15	240	.33	6800	100	31	1.8	416	7.8
15...	--	--	.14	235	.32	9450	96	30	1.8	404	8.2
25...	--	--	.22	140	.19	1850	62	19	1.2	234	7.6
APR.											
05...	--	--	.18	254	.35	10100	100	34	1.8	420	6.7
15...	--	--	.21	259	.35	19900	100	39	1.7	418	7.0
25...	--	--	.20	259	.35	26400	100	33	1.7	416	7.0
MAY											
05...	--	--	.15	259	.35	23300	110	39	1.6	408	6.8
15...	--	--	.17	237	.32	18900	94	28	1.5	361	6.6
25...	--	--	.20	233	.32	10400	96	32	1.4	354	6.7
JUNE											
05...	.0	.10	--	240	.33	19200	87	26	1.4	296	8.1
15...	.0	.08	--	269	.37	18000	110	39	1.5	412	7.7
25...	.0	.13	--	251	.34	23200	110	35	1.5	404	8.2
JULY											
05...	.0	--	--	240	.33	8420	110	32	1.5	408	8.1
15...	.0	--	--	278	.38	646	150	14	1.2	465	8.2
25...	.0	--	--	227	.31	766	110	25	1.4	393	8.3
AUG.											
05...	.0	.07	--	245	.33	447	110	20	1.4	398	7.8
15...	.0	.06	--	219	.30	367	100	20	1.4	387	7.8
25...	.0	.06	--	224	.30	677	110	20	1.4	390	7.8
SEP.											
05...	.0	--	--	244	.33	188	120	30	1.3	381	7.9
15...	.0	.06	--	229	.31	365	110	22	1.3	396	7.8
25...	.0	.04	--	252	.34	497	110	20	1.3	394	8.1

07245000 CANADIAN RIVER NEAR WHITEFIELD, OKLA.--Continued

CHEMICAL ANALYSES OF ADDITIONAL SAMPLES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	INSTANTANEOUS DISCHARGE (CFS)	CHEMICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	BIOCHEMICAL OXYGEN DEMAND (MG/L)
OCT.			
16...	86	7	.9
NOV.			
07...	221	12	.4
DEC.			
19...	9500	8	8.0
JAN.			
18...	10800	11	.8
FEB.			
21...	3680	7	1.6
MAR.			
13...	15100	12	.6
APR.			
04...	15300	--	--
24...	26800	13	.8
MAY			
30...	15500	13	.3
JUNE			
05...	22500	16	.5
AUG.			
01...	345	51	.6
SEP.			
05...	250	14	2.4
20...	66	12	.8

07245000 CANADIAN RIVER NEAR WHITEFIELD, OKLA.--Continued

FIELD ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE (DEG C)	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION
OCT.				
16...	490	18.5	8.4	93
NOV.				
07...	400	13.0	9.0	88
DEC.				
19...	570	7.0	11.5	99
JAN.				
18...	460	7.0	11.2	97
FEB.				
21...	450	5.0	11.8	97
MAR.				
13...	420	9.0	10.5	96
APR.				
04...	400	10.5	9.8	92
24...	410	15.0	10.1	106
MAY				
30...	275	22.0	8.2	98
JUNE				
05...	290	20.0	7.6	87
AUG.				
01...	380	26.5	7.0	90
SEP.				
05...	360	28.0	7.4	96
20...	440	24.0	9.0	111

07245000 CANADIAN RIVER NEAR WHITEFIELD, OKLA.--Continued
(Irrigation network station)

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), MEAN VALUES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(CONTINUOUS HOURLY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	453	132	576	581	309	413	408	412	334	421	384	383
2	504	511	500	522	460	263	405	413	334	414	398	442
3	494	370	504	489	405	368	419	411	159	398	393	419
4	515	406	504	503	381	182	421	412	314	389	386	452
5	527	421	527	520	403	416	420	409	330	397	387	387
6	532	418	501	501	460	409	419	410	324	397	448	416
7	498	429	501	484	411	412	420	399	335	441	381	391
8	518	498	500	542	428	416	421	382	354	402	387	365
9	531	489	496	471	431	415	421	366	379	398	353	420
10	496	509	486	471	432	409	420	374	396	389	363	444
11	486	508	498	386	430	552	420	371	382	403	324	382
12	501	591	494	463	424	389	420	374	388	397	412	379
13	500	180	495	420	430	407	423	369	411	392	450	368
14	501	488	508	387	429	405	419	363	396	400	395	425
15	518	498	488	254	427	404	415	359	406	439	361	384
16	536	506	486	332	421	382	413	359	379	408	345	431
17	512	502	486	332	420	389	415	354	371	397	321	456
18	510	496	493	389	412	394	415	354	410	382	360	390
19	585	379	486	463	423	396	416	344	397	388	442	391
20	518	404	488	462	417	412	416	349	398	385	395	430
21	506	454	482	458	415	414	416	344	396	385	382	423
22	126	560	525	462	426	411	410	348	395	391	381	387
23	235	590	572	494	423	411	413	351	397	383	381	386
24	385	544	501	458	364	410	413	346	394	383	382	347
25	466	631	567	452	444	233	416	352	400	400	378	392
26	480	530	569	446	495	425	409	340	393	447	385	370
27	530	513	492	446	433	427	406	327	390	457	435	384
28	538	614	393	444	421	423	404	318	406	455	382	419
29	521	500	383	449	---	423	414	324	395	485	381	374
30	365	502	288	471	---	424	412	327	418	495	382	381
31	161	---	514	459	---	423	---	324	---	386	380	---
MONTH	469	472	494	452	421	395	415	364	373	410	385	401

TEMPERATURE (°C) OF WATER, MEAN VALUES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(CONTINUOUS HOURLY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19.5	---	10.5	---	8.0	6.5	---	---	---	27.0	---	25.5
2	22.5	---	11.0	---	5.0	6.5	---	---	---	26.0	---	26.0
3	22.0	---	---	---	5.0	7.0	---	---	---	27.0	---	28.5
4	24.5	---	9.5	---	6.5	7.5	---	---	---	23.0	---	---
5	23.5	---	9.0	---	5.5	7.0	---	---	21.0	23.0	---	---
6	19.0	---	8.5	---	5.0	7.0	---	---	---	23.5	---	---
7	---	---	9.0	---	5.0	---	---	---	---	23.5	26.5	---
8	---	---	8.0	---	5.0	---	---	---	---	23.0	28.0	---
9	---	---	7.0	---	5.0	---	---	---	---	23.0	28.0	---
10	---	---	4.0	---	5.0	---	---	---	---	23.5	28.5	---
11	---	---	7.5	---	5.0	---	---	---	---	26.0	28.5	---
12	26.5	---	8.0	---	5.0	---	---	---	---	26.5	31.0	---
13	24.0	---	7.0	---	5.5	---	---	---	---	26.5	28.5	---
14	24.5	---	6.5	---	5.0	---	---	---	---	28.0	28.5	---
15	20.0	---	6.0	---	4.5	---	---	---	---	25.5	27.5	---
16	18.0	---	---	---	5.0	---	---	---	---	25.0	25.5	---
17	---	---	---	---	5.0	---	---	18.5	---	26.0	27.5	---
18	---	---	---	---	---	---	---	18.5	---	27.0	30.0	---
19	---	---	---	---	---	---	---	19.5	---	24.0	31.0	---
20	---	---	---	---	---	---	---	19.5	23.0	24.0	28.5	---
21	---	---	10.0	---	8.0	---	---	20.0	22.5	24.5	29.0	---
22	---	12.5	6.0	---	5.5	---	---	20.0	22.5	26.5	28.5	24.0
23	---	12.5	5.5	---	5.5	---	---	---	---	24.0	27.5	24.5
24	---	12.0	---	---	7.0	---	---	---	---	20.5	29.0	24.5
25	---	11.5	---	---	10.0	---	---	---	---	26.0	30.5	23.5
26	---	11.0	---	---	8.0	---	---	---	24.5	27.0	30.5	---
27	---	11.0	---	---	6.0	---	---	---	24.0	---	29.0	---
28	---	11.0	---	---	6.5	---	---	---	23.0	---	27.5	21.5
29	---	10.5	---	---	---	---	---	---	22.5	---	25.5	---
30	---	10.5	---	5.5	---	---	---	---	25.5	---	25.5	---
31	---	---	---	5.5	---	---	---	---	---	---	26.0	---
MONTH	---	---	---	---	6.0	---	---	---	---	25.0	28.5	---

07245000 CANADIAN RIVER NEAR WHITEFIELD, OKLA.--Continued
(Irrigation network station)

DISSOLVED SULFATE (SO_4), IN MILLIGRAMS PER LITRE, MEAN VALUES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	27	9.9	25	25	24	27	27	27	25	27	26	26
2	26	26	26	26	27	21	27	27	25	27	27	27
3	26	26	26	26	27	26	27	27	12	27	27	27
4	26	27	26	26	26	14	27	27	24	26	26	27
5	26	27	26	26	27	27	28	27	25	27	26	26
6	26	27	26	26	27	27	27	27	24	27	27	27
7	26	27	26	26	27	27	28	27	25	27	26	27
8	26	26	26	25	27	27	27	26	25	27	26	26
9	26	26	26	27	27	27	27	26	26	27	25	28
10	26	26	26	27	27	27	28	26	27	26	26	27
11	26	26	26	26	27	25	28	26	26	27	24	26
12	26	24	26	27	27	26	28	26	26	27	27	26
13	26	14	26	28	27	27	27	26	27	27	27	26
14	26	26	26	26	27	27	27	26	27	27	27	27
15	26	26	26	20	27	27	27	25	27	27	26	26
16	25	26	26	25	27	26	27	25	26	27	25	27
17	26	26	26	25	28	26	27	25	26	27	24	27
18	26	26	26	26	27	27	27	25	27	26	26	27
19	25	26	26	27	27	27	27	25	27	26	27	27
20	26	27	26	27	27	27	27	25	27	26	27	27
21	26	27	26	27	27	27	27	25	27	26	26	27
22	9.4	25	26	27	27	27	27	25	27	27	26	26
23	18	24	25	26	27	27	27	25	27	26	26	26
24	26	25	26	27	26	27	27	25	27	26	26	25
25	27	24	25	27	27	18	27	25	27	27	26	27
26	26	26	25	27	26	27	27	25	27	27	26	26
27	26	26	26	27	27	27	27	24	27	27	27	26
28	25	24	27	27	27	27	27	24	27	27	26	27
29	26	26	26	27	---	27	27	24	27	26	26	26
30	26	26	23	27	---	27	27	24	27	26	26	26
31	12	---	26	27	---	27	---	24	---	26	26	---
MONTH	25	25	26	26	27	26	27	26	26	27	26	27

DISSOLVED SULFATE (TONS/DAY), MEAN VALUES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.5	23	614	12	481	358	137	2450	998	409	124	79
2	19	42	298	20	696	330	560	2430	607	464	71	24
3	8.3	32	77	148	677	353	1100	2440	283	461	299	22
4	5.0	6.2	371	178	651	181	1140	2460	686	634	253	78
5	4.5	5.2	551	475	665	842	1130	2440	1990	881	66	49
6	17	39	590	153	659	1400	1120	2440	1900	873	282	13
7	13	27	893	105	709	1650	1130	1900	2080	674	387	75
8	4.9	62	639	289	849	1490	1140	1570	2440	365	376	34
9	4.9	18	205	633	1060	1300	1140	2380	2640	609	297	7.3
10	62	104	186	718	1070	1400	1130	2270	2650	617	382	119
11	207	12	687	655	1070	331	1130	2070	2180	415	98	276
12	132	5.8	1000	567	1070	695	1250	2060	1800	324	50	258
13	87	76	819	176	1050	1100	1750	2010	1820	336	320	66
14	36	317	742	58	1050	1090	1960	2000	1770	72	251	167
15	6.0	248	447	148	813	1080	1920	1970	1620	89	259	68
16	79	352	237	246	742	708	1250	1970	1410	329	223	8.1
17	44	349	136	296	532	679	1140	2140	1380	262	241	49
18	25	78	248	496	224	697	1370	2330	1450	433	64	73
19	79	21	183	1080	451	786	1820	2050	1230	792	37	20
20	21	9.5	27	1090	378	1080	1950	1820	1030	775	249	200
21	28	169	455	1150	483	1320	1930	1690	1010	643	322	207
22	15	644	316	1090	487	1770	2000	1250	1110	395	326	140
23	5.5	661	98	1050	428	2060	1350	1080	1570	667	316	164
24	5.8	792	12	1090	70	1910	2290	1090	2050	671	353	275
25	5.6	724	9.3	1090	12	453	2700	1090	2480	214	202	179
26	10	814	337	1100	169	1120	2550	1070	2410	209	52	163
27	11	858	399	1090	315	1390	2450	1070	1560	91	318	16
28	11	818	379	1090	258	1730	2430	1010	664	9.9	320	11
29	4.8	873	356	1080	---	1700	2460	1020	659	7.8	352	34
30	10	844	61	1060	---	1550	2440	1020	393	148	313	41
31	30	---	15	703	---	897	---	1020	---	504	374	---
MONTH	32	301	374	618	611	1080	1590	1790	1530	431	245	97

07245000 CANADIAN RIVER NEAR WHITEFIELD, OKLA.--Continued
(Irrigation network station)

DISSOLVED CHLORIDE (CL), IN MILLIGRAMS PER LITRE, MEAN VALUES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	79	15	100	100	46	66	63	65	48	70	50	50
2	89	90	88	92	81	39	61	66	48	66	58	77
3	87	49	89	86	61	49	69	65	20	58	55	69
4	91	62	89	89	50	24	70	65	47	53	51	79
5	93	70	93	92	60	67	70	64	47	57	52	52
6	94	68	88	88	81	64	69	64	47	57	78	67
7	88	74	88	85	65	65	70	58	48	77	50	54
8	91	88	88	96	74	67	70	50	49	60	52	49
9	94	86	87	83	75	67	70	49	50	58	49	70
10	87	90	85	83	75	64	70	50	57	53	49	78
11	85	90	88	51	75	98	70	49	50	60	47	50
12	88	110	87	81	72	53	70	50	52	57	65	50
13	88	24	87	70	75	63	71	49	65	54	79	49
14	88	86	90	52	74	61	69	49	57	59	56	72
15	91	88	86	37	73	61	67	49	62	77	49	50
16	95	89	85	48	70	50	66	49	50	63	48	75
17	90	88	85	48	70	53	67	49	49	57	47	80
18	90	87	87	53	65	55	67	49	64	50	49	53
19	100	50	85	81	71	57	67	48	57	52	77	54
20	91	61	86	81	68	65	67	48	58	51	56	75
21	89	79	85	80	67	66	67	48	57	51	50	71
22	14	99	93	81	73	65	64	48	56	54	50	52
23	34	110	100	87	71	65	66	48	57	50	50	51
24	51	96	88	80	49	64	66	48	55	50	50	48
25	82	110	100	79	78	34	67	48	59	59	50	54
26	84	94	100	78	87	72	64	48	55	78	51	49
27	94	90	87	78	76	73	62	47	53	80	76	50
28	95	110	55	78	70	71	61	47	62	80	50	69
29	92	88	50	79	---	71	66	47	56	85	50	50
30	49	88	44	83	---	72	65	47	68	87	50	50
31	20	---	91	80	---	71	---	47	---	51	50	---
MONTH	81	81	86	77	70	62	67	52	53	62	55	60

DISSOLVED CHLORIDE (TONS/DAY), MEAN VALUES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	35	3370	48	938	863	318	5860	1930	1040	236	151
2	66	146	1010	72	2090	630	1270	5860	1170	1130	153	67
3	27	61	261	483	1540	674	2780	5800	465	992	618	55
4	18	14	1270	605	1240	313	2900	5880	1340	1260	491	229
5	16	13	2010	1690	1490	2070	2850	5720	3850	1880	128	95
6	64	98	2000	519	1980	3280	2810	5750	3690	1860	819	31
7	45	75	3030	340	1690	3960	2850	4110	4020	1910	736	153
8	18	208	2160	1090	2290	3660	2900	2980	4680	812	736	64
9	18	58	684	1970	2920	3180	2900	4550	5020	1310	570	18
10	206	359	602	2230	2950	3280	2850	4330	5620	1230	732	342
11	671	42	2310	1270	2940	1290	2850	3960	4150	930	190	525
12	445	25	3330	1720	2790	1380	3160	3930	3550	692	119	492
13	295	131	2730	445	2900	2550	4540	3850	4330	687	935	127
14	122	1040	2560	113	2850	2470	4920	3820	3750	158	526	439
15	21	833	1460	281	2180	2430	4690	3770	3710	251	495	129
16	294	1210	768	476	1890	1350	3020	3770	2690	766	429	22
17	155	1190	441	572	1350	1350	2800	4100	2640	559	468	145
18	85	259	820	988	537	1450	3340	4470	3430	823	123	147
19	334	41	595	3290	1170	1660	4480	3950	2620	1560	107	41
20	74	21	88	3300	937	2590	4800	3500	2210	1490	523	549
21	95	500	1460	3440	1180	3200	4750	3250	2140	1240	613	538
22	22	2560	1140	3300	1290	4210	4730	2410	2330	800	621	273
23	10	2830	403	3500	1110	4890	3250	2080	3340	1270	602	317
24	11	3010	40	3250	134	4520	5520	2090	4270	1280	672	529
25	17	3430	37	3200	33	842	6640	2090	5420	469	384	365
26	33	2980	1370	3180	562	2970	5970	2060	4980	606	100	310
27	39	3000	1320	3160	873	3720	5620	2080	3130	270	888	31
28	42	3720	783	3120	659	4480	5490	1960	1520	29	609	29
29	17	2950	677	3140	---	4420	5980	1970	1380	25	670	66
30	19	2860	119	3300	---	4050	5850	1980	980	492	596	77
31	49	---	51	2110	---	2330	---	1970	---	977	713	---
MONTH	108	1120	1250	1810	1590	2580	3890	3670	3150	929	503	212

07245000 CANADIAN RIVER NEAR WHITEFIELD, OKLA.--Continued
(Irrigation network station)

DISSOLVED SOLIDS, IN MILLIGRAMS PER LITRE, MEAN VALUES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	269	79	318	320	185	248	245	247	200	253	230	230
2	290	292	288	297	272	158	243	248	200	248	239	265
3	286	222	290	284	243	221	251	247	95	239	236	251
4	294	244	290	289	229	109	253	247	188	233	232	269
5	299	253	299	296	242	250	252	245	198	238	232	232
6	301	251	288	288	272	245	251	246	194	238	267	250
7	287	257	288	282	247	247	252	239	201	264	229	235
8	295	287	288	305	257	250	253	229	212	241	232	219
9	300	284	286	276	259	249	253	220	227	239	212	252
10	286	292	282	276	259	245	252	224	238	233	218	266
11	282	291	287	232	258	309	252	223	229	242	194	229
12	288	324	286	273	254	233	252	224	233	238	247	227
13	288	108	286	252	258	244	254	221	247	235	268	221
14	288	283	291	232	257	243	251	218	238	240	237	255
15	295	287	283	152	256	242	249	215	244	263	217	230
16	302	290	282	199	253	229	248	215	227	245	207	259
17	293	289	282	199	252	233	249	212	223	238	193	270
18	292	286	285	233	247	236	249	212	246	229	216	234
19	322	227	282	273	254	238	250	206	238	233	265	235
20	295	242	283	273	250	247	250	209	239	231	237	258
21	290	270	281	271	249	248	250	206	238	231	229	254
22	76	312	298	273	256	247	246	209	237	235	229	232
23	141	324	317	286	254	247	248	211	238	230	229	232
24	231	306	288	271	218	246	248	208	236	230	229	208
25	274	340	315	269	266	140	250	211	240	240	227	235
26	280	300	316	266	286	255	245	204	236	267	231	222
27	300	293	285	266	260	256	244	196	234	271	261	230
28	303	334	236	266	253	254	242	191	244	270	229	251
29	296	288	230	268	---	254	248	194	237	282	229	224
30	219	289	173	276	---	254	247	196	251	286	229	229
31	97	---	294	272	---	254	---	194	---	232	228	---
MONTH	270	272	284	265	252	237	249	218	224	245	231	240

DISSOLVED SOLIDS (TONS/DAY), MEAN VALUES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	55	186	10490	151	3740	3250	1240	22230	8120	3760	1090	695
2	215	474	3300	232	7060	2540	5040	22080	4930	4220	635	230
3	90	275	852	1590	6100	3020	10110	22110	2240	4110	2650	202
4	57	56	4130	1980	5680	1420	10430	22290	5390	5590	2230	777
5	52	48	6440	5470	5970	7680	10340	22060	16090	7850	576	428
6	206	360	6530	1700	6690	12660	10250	22050	15220	7780	2790	115
7	148	259	9890	1130	6430	15020	10340	16940	16930	6570	3380	665
8	57	680	7060	3470	7970	13550	10430	13680	20470	3280	3310	287
9	58	192	2240	6580	10050	11830	10430	20340	22960	5440	2490	67
10	676	1170	1990	7460	10150	12660	10340	19630	23610	5440	3250	1170
11	2220	135	7550	5750	10100	4060	10340	17850	19060	3730	782	2410
12	1460	77	10950	5800	9890	6130	11430	17810	15840	2890	451	2250
13	964	598	8960	1610	9960	9960	16170	17280	16510	2970	3180	569
14	400	3420	8330	509	9870	9780	17920	16990	15780	648	2230	1550
15	69	2730	4820	1140	7610	9690	17480	16630	14600	861	2190	595
16	939	3940	2540	2000	6820	6190	11370	16630	12280	2970	1840	77
17	504	3880	1460	2400	4880	5990	10420	17950	11900	2330	1920	491
18	277	851	2700	4370	2040	6180	12440	19560	13150	3780	545	644
19	1030	185	1970	11060	4170	6990	16580	16940	10930	6980	365	181
20	238	85	291	11120	3450	9810	17790	15150	9160	6800	2210	1890
21	310	1700	4840	11640	4400	12010	17590	13930	8980	5640	2820	1920
22	121	8040	3670	11120	4540	16050	18130	10430	9850	3490	2850	1230
23	43	8750	1260	11490	3950	18640	12240	9040	13960	5830	2760	1440
24	51	9570	131	10980	596	17340	20810	9020	18190	5870	3090	2280
25	58	10390	117	10890	114	3510	24600	9120	22160	1920	1750	1580
26	110	9560	4280	10860	1850	10470	23060	8760	21390	2070	456	1400
27	124	9740	4330	10790	3000	13000	22100	8630	13770	914	3050	144
28	133	11350	3360	10690	2370	15970	21860	7980	5990	99	2800	104
29	55	9640	3110	10690	---	15760	22400	8140	5860	83	3070	297
30	86	9360	471	11040	---	14360	22160	8210	3590	1610	2740	354
31	235	---	166	7130	---	8290	---	8140	---	4430	3260	---
MONTH	356	3590	4140	6220	5700	9800	14530	15410	13300	3870	2150	868

07246400 ROBERT S. KERR LOCK AND DAM NEAR SALLISAW, OKLA.

LOCATION.--Lat 35°21'57", long 94°46'43", in SE1/4SW1/4 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).

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (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)
OCT.											
04...	--	--	120	128	0	55	180	.20	.90	--	--
NOV.											
08...	--	--	26	92	0	30	38	.07	.30	--	--
DEC.											
05...	--	--	38	104	0	33	60	.09	.40	--	--
JAN.											
30...	--	--	48	100	0	38	73	.61	2.7	--	--
FEB.											
28...	--	--	77	100	0	41	120	.66	2.9	--	--
MAR.											
27...	--	--	45	90	0	32	68	.34	1.5	--	--
APR.											
24...	--	--	38	80	0	37	56	.68	3.0	--	--
MAY											
08...	--	--	41	98	0	45	60	.34	1.5	--	--
JUNE											
05...	--	--	38	86	0	43	57	.23	1.0	--	--
JULY											
31...	45	10	75	124	0	65	110	.08	.35	.03	.1
AUG.											
28...	51	12	110	139	0	73	160	.03	.10	.02	.0
SEP.											
18...	50	13	110	142	0	76	180	.04	.18	.02	.0

07246400 ROBERT S. KERR LOCK AND DAM NEAR SALLISAW, OKLA.

DRAINAGE AREA.--147,750 sq mi (382,672 km^2) of which 22,241 sq mi (57,604 km^2) is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: December 1969 to current year.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

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)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	CHEM-ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	BIO-CHEM-ICAL OXYGEN DEMAND (MG/L)
OCT.										
04...	--	524	.71	160	55	4.1	927	7.7	13	3.2
NOV.										
08...	--	188	.26	100	25	1.1	338	6.9	11	.4
DEC.										
05...	--	238	.32	120	35	1.5	434	6.7	11	.5
JAN.										
30...	--	282	.38	120	38	1.9	485	7.1	15	4.0
FEB.										
28...	--	382	.52	130	48	2.9	640	7.1	9	1.0
MAR.										
27...	--	257	.35	160	86	1.5	440	7.0	19	1.6
APR.										
24...	--	234	.32	100	34	1.7	394	7.0	20	2.9
MAY										
08...	--	273	.37	120	40	1.6	448	6.7	10	.8
JUNE										
05...	--	235	.32	110	39	1.6	408	6.8	17	1.7
JULY										
31...	.05	390	.53	150	52	2.6	668	7.3	12	1.6
AUG.										
28...	.11	495	.67	180	63	3.6	879	7.8	12	--
SEP.										
18...	.05	549	.75	180	62	3.6	891	7.7	14	--

FIELD ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	DIS-SOLVED OXYGEN (MG/L)	PER-CENT SATUR-ATION
OCT.					
03...	800	7.4	22.0	8.2	96
NOV.					
08...	335	8.2	13.0	10.4	103
08...	335	--	13.0	10.2	101
08...	335	--	13.0	10.2	101
DEC.					
05...	280	8.6	7.0	11.2	97
JAN.					
30...	520	8.4	5.0	12.2	100
FEB.					
28...	600	8.1	7.0	11.6	100
28...	--	--	7.0	11.4	98
28...	--	--	7.0	11.1	96
MAR.					
27...	450	7.6	11.0	10.2	97
APR.					
24...	320	--	17.0	8.8	97
MAY					
08...	420	--	17.0	8.9	97
08...	420	--	16.5	8.8	95
08...	420	--	16.5	8.9	96
JUNE					
05...	380	8.2	20.0	7.5	86
05...	385	--	20.0	7.6	87
JULY					
31...	670	8.1	29.0	6.2	83
31...	670	--	28.5	6.0	79
31...	670	--	28.0	5.8	76
AUG.					
28...	850	--	27.0	7.7	99
SEP.					
18...	900	--	24.0	6.9	84

07301500 NORTH FORK RED RIVER NEAR CARTER, OKLA.

LOCATION.--Lat 34°10'05", long 99°30'25", in NW1/4SE1/4 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 sq mi (6,052.8 km²), of which 399 sq mi (1,033.4 km²) is probably noncontributing.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	DISSOLVED NITRATE (NO3) (MG/L)	DISSOLVED NITRITE (N) (MG/L)
NOV.											
20...	5.2	--	--	210	196	0	760	310	.77	3.4	--
25...	44	--	--	290	194	0	720	490	.66	2.9	--
30...	28	--	--	340	192	0	820	540	.36	1.6	--
DEC.											
05...	23	--	--	330	220	0	840	520	.77	3.4	--
20...	18	--	--	200	192	0	670	260	1.0	4.6	--
24...	85	--	--	250	196	0	520	440	.97	4.3	--
JAN.											
05...	5.7	--	--	320	244	0	750	480	.77	3.4	--
15...	15	--	--	300	254	0	790	430	1.0	4.5	--
24...	52	--	--	310	282	0	760	480	.36	1.6	--
25...	60	--	--	290	204	0	690	430	.79	3.5	--
FEB.											
05...	64	--	--	290	232	0	650	440	.66	2.9	--
07...	52	--	--	300	264	0	720	460	.29	1.3	--
15...	60	--	--	300	230	0	750	460	.66	2.9	--
25...	118	--	--	320	180	0	800	500	.36	1.6	--
MAR.											
05...	64	--	--	300	188	0	660	460	.16	.70	--
15...	122	--	--	270	252	0	580	390	.59	2.6	--
25...	437	--	--	270	206	0	450	470	1.1	4.7	--
29...	329	--	--	260	222	0	600	410	.38	1.7	--
APR.											
05...	330	--	--	250	270	0	620	370	.79	3.5	--
10...	299	--	--	260	256	0	650	400	.43	1.9	--
15...	1930	--	--	140	200	0	280	210	.09	.40	--
24...	2350	--	--	120	158	0	360	170	.25	1.1	--
MAY											
05...	154	140	60	210	102	0	570	290	.01	.04	.00
15...	61	220	81	290	236	0	780	400	.40	1.8	.01
25...	118	160	58	170	66	0	570	240	.89	3.9	.00
31...	1010	--	--	260	238	0	680	360	.23	1.0	--
JUNE											
04...	952	190	69	210	95	0	630	340	.00	.00	.01
14...	15	180	88	300	242	0	730	400	.28	1.2	.01
19...	28	--	--	310	208	0	850	420	.07	.30	--
25...	11	210	100	300	228	0	850	410	.33	1.5	.00
JULY											
05...	.20	220	96	250	174	0	840	320	.46	2.0	.00
09...	.54	270	100	290	173	0	980	380	.40	1.8	.06
SEP.											
05...	30	40	9.8	12	134	0	44	11	1.0	4.5	--
17...	1.6	220	49	130	146	0	630	190	.61	2.7	--
28...	61	150	33	100	139	0	380	130	.80	3.5	--

07301500 NORTH FORK RED RIVER NEAR CARTER, OKLA.

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.

REMARKS.--Continuous monitor records for water temperatures and specific conductance are collected for this station. No flow Oct. 1-Nov. 16, July 16-Sept. 4, Sept 15, 20-21.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS-SOLVED NITRITE (NO2) (MG/L)	PHOS-PHATE (PO4) (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)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)
NOV.										
20...	--	--	1830	2.49	25.7	920	760	3.0	2390	8.2
25...	--	--	2130	2.90	253	950	790	4.1	2820	8.1
30...	--	--	2360	3.21	178	1000	840	4.7	3170	8.3
DEC.										
05...	--	--	2330	3.17	145	1100	920	4.5	3110	7.9
20...	--	--	1630	2.22	79.2	810	650	3.1	2200	7.7
24...	--	--	1700	2.31	390	810	650	3.8	2430	7.7
JAN.										
05...	--	--	2100	2.86	32.3	1000	800	4.4	3000	8.1
15...	--	--	2120	2.88	85.9	1000	790	4.1	2940	7.9
24...	--	.52	2100	2.86	295	1000	770	4.3	2930	7.8
25...	--	--	1920	2.61	311	920	750	4.2	2770	7.8
FEB.										
05...	--	--	1930	2.62	334	860	670	4.3	2650	8.2
07...	--	.47	2060	2.80	289	960	740	4.2	2830	7.0
15...	--	--	2090	2.84	339	970	780	4.2	2820	8.2
25...	--	--	2180	2.96	695	1000	850	4.4	2950	8.3
MAR.										
05...	--	--	2000	2.72	346	880	730	4.4	2780	8.3
15...	--	--	1880	2.56	619	820	610	4.1	2550	8.1
25...	--	--	1840	2.50	2170	740	570	4.3	2510	7.9
29...	--	.22	1790	2.43	1590	820	640	4.0	2480	7.7
APR.										
05...	--	--	1880	2.56	1680	840	620	3.8	2480	8.2
10...	--	.30	1820	2.48	1470	880	670	3.8	2580	7.7
15...	--	--	1070	1.46	5580	450	290	2.9	1470	7.9
24...	--	--	1060	1.44	6730	510	380	2.3	1460	7.9
MAY										
05...	.0	--	1400	1.90	582	600	510	3.7	2120	8.0
15...	.0	--	1970	2.68	324	880	690	4.2	2890	8.0
25...	.0	--	1340	1.82	427	640	580	2.9	2030	7.5
31...	--	.33	1980	2.69	5400	850	660	3.9	2550	7.7
JUNE										
04...	.0	--	1610	2.19	4140	760	680	3.3	2480	8.0
14...	.0	--	1910	2.60	77.4	810	610	4.6	2850	7.5
19...	--	.24	2220	3.02	168	940	770	4.4	2850	7.2
25...	.0	--	2070	2.82	61.5	940	750	4.3	3000	7.4
JULY										
05...	.0	--	1970	2.68	1.06	940	800	3.5	2590	7.9
09...	.2	--	2220	3.02	3.24	1100	940	3.8	2750	8.3
SEP.										
05...	.09	.3	212	.29	17.2	140	30	.4	335	7.8
17...	.00	.0	1440	1.96	6.22	750	630	2.1	1940	7.5
28...	.00	.0	921	1.25	152	510	400	1.9	1360	7.6

FIELD ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	DIS-SOLVED OXYGEN (MG/L)	PER-CENT SATUR-ATION
JAN.					
24...	3300	8.2	4.0	12.1	101
FEB.					
07...	2800	8.2	5.0	11.6	100
MAR.					
29...	2200	8.2	11.0	9.4	94
APR.					
10...	2780	8.3	11.0	9.6	95
MAY					
31...	2800	8.2	20.0	8.5	102
JUNE					
19...	3100	8.2	27.0	7.8	105

07301500 NORTH FORK RED RIVER NEAR CARTER, OKLA.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), MEAN VALUES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(CONTINUOUS HOURLY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	3220	2860	2920	2730	1650	2720	2110	2700	---	---
2	---	---	3150	3110	2630	2680	2100	1920	1330	2780	---	---
3	---	---	3260	2730	2680	2820	2530	1590	1940	2630	---	---
4	---	---	3160	2610	2630	3130	2450	1700	2320	2650	---	---
5	---	---	3170	3110	2660	2880	2600	1970	2390	2560	---	825
6	---	---	3800	3590	2700	2340	2520	2880	2180	2480	---	420
7	---	---	4060	3330	2770	2430	2580	2550	2330	2650	---	673
8	---	---	3950	3610	2620	3190	2300	2560	2470	2650	---	702
9	---	---	3770	3740	2770	2750	2480	2580	2580	2830	---	873
10	---	---	4100	3720	2710	1810	2580	2560	2830	---	---	1140
11	---	---	4440	3860	2900	1840	2610	2740	2810	---	---	1470
12	---	---	4180	3780	2820	2340	2190	2790	2430	---	---	1370
13	---	---	4050	3130	3060	2620	2000	2740	3240	---	---	1300
14	---	---	3950	3070	2710	2220	2950	2660	2700	---	---	1400
15	---	---	3810	2970	2760	2210	1350	2670	2720	---	---	---
16	---	---	3410	3240	2760	2200	1310	2810	2600	---	---	835
17	---	---	3140	2200	2910	2110	1800	2610	2640	---	---	1820
18	---	2740	2800	2340	2850	2760	2010	2730	2720	---	---	1600
19	---	2780	2960	2390	2930	2920	2230	2670	2840	---	---	1540
20	---	2410	2260	2530	2980	2900	1600	2770	2070	---	---	---
21	---	3140	3390	2720	2660	3010	1750	2770	2170	---	---	---
22	---	3040	2410	2570	3020	2970	2060	2790	2000	---	---	1480
23	---	3040	2260	2940	2600	2860	2000	1390	2810	---	---	1900
24	---	3260	2420	2890	2660	2530	1390	2220	2810	---	---	1810
25	---	2840	1980	2770	3110	2490	2630	1920	2810	---	---	1710
26	---	3160	2410	2880	2830	2140	1790	2100	2800	---	---	1830
27	---	3060	2600	3160	2660	2320	2190	2190	2710	---	---	1750
28	---	2960	2440	3160	2940	2160	2220	2890	2530	---	---	1320
29	---	3120	2890	3140	---	2480	2490	2380	2270	---	---	1720
30	---	3170	2860	3020	---	1160	2570	2230	2670	---	---	1920
31	---	---	2850	---	---	1650	---	2500	---	---	---	---
MONTH	---	---	3200	3040	2790	2470	2160	2440	2490	---	---	---

TEMPERATURE (°C) OF WATER, MEAN VALUES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(CONTINUOUS HOURLY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	6.5	---	7.5	13.5	15.0	20.0	26.0	---	---	---
2	---	---	7.5	---	7.0	13.5	13.5	19.5	27.0	---	---	---
3	---	---	3.5	---	7.5	13.5	8.5	21.5	27.5	---	---	---
4	---	---	2.0	---	9.5	13.0	9.0	24.0	27.5	---	---	---
5	---	---	2.0	---	10.0	12.5	11.0	26.0	27.0	---	---	22.0
6	---	---	1.5	---	9.5	15.5	14.0	24.0	27.0	---	---	18.5
7	---	---	1.5	---	7.0	14.5	17.0	20.0	27.0	---	---	23.5
8	---	---	1.5	---	2.5	14.0	17.0	18.0	26.0	---	---	25.0
9	---	---	1.5	---	4.0	14.0	18.5	18.5	28.0	---	---	26.5
10	---	---	1.5	---	4.5	11.5	19.0	20.5	28.5	---	---	27.0
11	---	---	1.5	---	6.5	11.0	17.0	21.0	27.5	---	---	27.0
12	---	---	1.5	---	10.0	14.5	17.5	22.0	29.0	---	---	26.0
13	---	---	1.5	---	7.5	16.5	19.5	24.0	30.0	---	---	26.0
14	---	---	1.5	---	6.5	---	18.0	26.0	25.0	---	---	24.0
15	---	---	1.5	---	7.0	16.0	17.5	25.5	---	---	---	---
16	---	---	1.5	---	6.5	14.0	22.0	27.0	---	---	---	19.0
17	---	---	1.5	---	5.5	15.0	21.0	24.5	---	---	---	29.5
18	---	4.0	1.5	---	8.0	15.5	21.5	22.5	---	---	---	---
19	---	5.5	1.5	---	8.5	14.0	20.0	25.5	25.5	---	---	---
20	---	4.5	---	---	9.0	10.5	18.5	25.0	26.5	---	---	---
21	---	4.5	3.5	---	9.0	12.5	16.0	25.5	28.5	---	---	---
22	---	6.0	4.5	---	6.5	12.5	15.5	19.5	28.5	---	---	---
23	---	5.5	8.0	---	9.0	14.0	18.0	19.5	27.5	---	---	---
24	---	5.5	6.0	---	11.0	13.0	21.0	23.5	---	---	---	---
25	---	6.0	5.5	---	11.0	12.0	21.0	24.0	28.5	---	---	---
26	---	5.5	5.0	---	11.0	12.5	21.0	23.0	33.5	---	---	---
27	---	6.0	5.5	---	12.0	13.5	17.5	23.0	---	---	---	---
28	---	4.5	---	---	10.5	14.0	18.5	21.5	---	---	---	---
29	---	4.0	---	---	---	12.5	20.0	24.0	---	---	---	---
30	---	6.0	5.0	---	---	12.0	18.0	26.5	---	---	---	---
31	---	---	---	---	---	13.5	---	24.5	---	---	---	---
MONTH	---	---	3.0	---	8.0	13.5	17.5	23.0	---	---	---	---

07301500 NORTH FORK RED RIVER NEAR CARTER, OKLA.--Continued

DISSOLVED SULFATE (SO_4), IN MILLIGRAMS PER LITRE, MEAN VALUES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	890	750	770	700	460	700	580	690	---	---
2	---	---	860	850	660	680	580	540	360	720	---	---
3	---	---	910	700	680	740	620	440	540	660	---	---
4	---	---	870	650	660	860	590	470	580	670	---	---
5	---	---	870	850	670	760	650	550	580	630	---	200
6	---	---	1100	1000	690	580	620	760	580	600	---	78
7	---	---	1200	940	720	580	640	630	580	670	---	160
8	---	---	1200	1000	660	880	580	630	600	670	---	160
9	---	---	1100	1100	720	710	600	640	640	740	---	220
10	---	---	1200	1100	690	500	640	630	740	---	---	300
11	---	---	1400	1100	770	510	650	700	730	---	---	400
12	---	---	1300	1100	740	580	580	720	580	---	---	370
13	---	---	1200	860	830	660	560	700	900	---	---	350
14	---	---	1200	830	690	580	790	670	690	---	---	380
15	---	---	1100	790	710	580	360	680	700	---	---	---
16	---	---	970	900	710	580	350	730	650	---	---	210
17	---	---	860	580	770	580	500	650	670	---	---	510
18	---	700	730	580	750	710	570	700	700	---	---	440
19	---	720	790	580	780	770	580	680	740	---	---	420
20	---	580	580	620	800	770	440	720	580	---	---	---
21	---	860	960	700	670	810	490	720	580	---	---	---
22	---	820	580	640	810	790	580	720	560	---	---	400
23	---	820	580	780	650	750	560	380	730	---	---	530
24	---	910	580	760	670	620	380	580	730	---	---	500
25	---	740	560	720	850	610	660	540	730	---	---	470
26	---	870	580	760	740	580	500	580	730	---	---	510
27	---	830	650	870	670	580	580	580	690	---	---	490
28	---	790	590	870	780	580	580	760	620	---	---	350
29	---	850	760	860	---	600	610	580	580	---	---	480
30	---	870	750	810	---	310	640	580	680	---	---	540
31	---	---	750	---	---	460	---	610	---	---	---	---
MONTH	---	---	890	830	730	640	560	630	640	---	---	---

DISSOLVED SULFATE (TONS/DAY), MEAN VALUES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	63	14	148	134	737	1270	200	15	---	---
2	---	---	63	14	203	132	683	465	351	12	---	---
3	---	---	74	12	215	159	739	169	513	7.9	---	---
4	---	---	63	12	150	197	638	182	590	6.0	---	---
5	---	---	54	16	116	131	579	230	371	4.8	---	16
6	---	---	11	16	104	88	542	348	253	3.3	---	2.7
7	---	---	11	13	100	77	520	309	189	2.3	---	4.1
8	---	---	11	12	76	273	435	373	155	1.6	---	3.4
9	---	---	10	10	70	346	480	369	130	1.1	---	2.8
10	---	---	11	13	79	891	518	335	120	---	---	4.6
11	---	---	13	15	77	1300	459	365	101	---	---	2.6
12	---	---	11	19	73	503	428	346	72	---	---	0.99
13	---	---	11	19	92	303	1100	325	117	---	---	0.93
14	---	---	11	22	93	200	1200	320	93	---	---	0.51
15	---	---	12	26	85	189	2140	347	113	---	---	---
16	---	---	14	36	81	163	1630	442	82	---	---	0.11
17	---	---	17	286	79	144	528	383	72	---	---	2.2
18	---	3.0	20	261	75	173	371	348	64	---	---	0.23
19	---	7.0	30	175	88	197	1310	296	56	---	---	0.22
20	---	14	28	151	95	193	763	271	34	---	---	---
21	---	72	354	152	82	210	458	251	33	---	---	---
22	---	58	188	119	101	199	366	246	29	---	---	0.21
23	---	53	152	120	89	191	365	588	34	---	---	1.2
24	---	83	133	107	98	385	2380	438	28	---	---	2.7
25	---	80	122	93	209	715	7190	298	22	---	---	7.5
26	---	138	92	107	202	292	743	220	17	---	---	17
27	---	130	89	138	151	262	605	171	17	---	---	125
28	---	77	71	115	154	467	396	171	13	---	---	145
29	---	67	95	72	---	535	434	98	17	---	---	112
30	---	66	107	99	---	1180	439	84	20	---	---	58
31	---	---	42	---	---	1990	---	166	---	---	---	---
MONTH	---	---	64	75	114	394	973	330	130	---	---	---

07301500 NORTH FORK RED RIVER NEAR CARTER, OKLA.--Continued

DISSOLVED CHLORIDE (CL), IN MILLIGRAMS PER LITRE, MEAN VALUES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	560	460	480	430	190	420	260	420	---	---
2	---	---	540	530	400	410	260	220	150	440	---	---
3	---	---	570	430	410	450	370	180	220	400	---	---
4	---	---	540	390	400	530	350	190	320	400	---	---
5	---	---	540	530	410	470	390	220	330	380	---	98
6	---	---	710	650	420	320	370	470	280	360	---	54
7	---	---	780	580	440	350	390	380	320	400	---	82
8	---	---	750	660	400	550	310	380	360	400	---	85
9	---	---	700	690	440	430	360	390	390	450	---	100
10	---	---	790	690	420	200	390	380	450	---	---	130
11	---	---	880	730	470	210	390	430	450	---	---	170
12	---	---	810	700	450	320	280	440	350	---	---	160
13	---	---	780	530	510	400	230	430	560	---	---	150
14	---	---	750	520	420	290	480	410	420	---	---	160
15	---	---	710	490	430	290	150	410	420	---	---	---
16	---	---	610	560	430	280	150	450	390	---	---	99
17	---	---	530	280	470	260	200	390	400	---	---	210
18	---	430	440	320	460	430	230	430	420	---	---	180
19	---	440	490	330	480	480	290	410	450	---	---	180
20	---	340	300	370	490	470	180	440	250	---	---	---
21	---	530	600	420	410	500	200	440	280	---	---	---
22	---	510	340	380	500	490	250	440	230	---	---	170
23	---	510	300	480	390	460	230	160	450	---	---	210
24	---	570	340	470	410	370	160	290	450	---	---	200
25	---	450	230	440	530	360	400	220	450	---	---	190
26	---	540	340	470	450	270	200	260	440	---	---	210
27	---	510	390	540	410	320	280	280	420	---	---	200
28	---	490	350	540	480	270	290	470	370	---	---	150
29	---	530	470	530	---	360	360	330	300	---	---	190
30	---	540	460	500	---	130	380	290	410	---	---	220
31	---	---	460	---	---	190	---	360	---	---	---	---
MONTH	---	---	550	510	440	360	290	350	370	---	---	---

DISSOLVED CHLORIDE (TONS/DAY), MEAN VALUES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	39	8.8	91	81	302	773	91	9.1	---	---
2	---	---	39	8.5	123	80	306	186	150	7.1	---	---
3	---	---	46	7.1	130	97	441	70	205	4.7	---	---
4	---	---	39	7.3	90	122	378	74	324	3.6	---	---
5	---	---	34	9.9	70	80	348	93	216	2.9	---	7.9
6	---	---	6.7	10	63	49	324	213	123	1.9	---	1.9
7	---	---	7.1	7.9	61	46	312	185	105	1.4	---	2.1
8	---	---	7.1	7.6	46	170	235	223	92	0.95	---	1.8
9	---	---	6.6	6.6	42	210	285	221	78	0.65	---	1.3
10	---	---	7.0	8.0	48	360	311	201	73	---	---	2.0
11	---	---	8.1	9.8	47	522	276	222	61	---	---	1.1
12	---	---	7.2	12	45	281	210	211	43	---	---	0.42
13	---	---	7.1	11	57	183	451	197	73	---	---	0.40
14	---	---	7.3	14	57	101	736	193	56	---	---	0.21
15	---	---	7.7	16	51	94	909	210	68	---	---	---
16	---	---	8.8	23	49	80	697	270	50	---	---	0.05
17	---	---	10	141	48	65	214	230	43	---	---	0.88
18	---	1.8	12	146	46	105	153	211	39	---	---	0.09
19	---	4.3	18	102	54	121	667	179	34	---	---	0.09
20	---	8.3	15	90	58	118	314	165	15	---	---	---
21	---	45	222	92	49	129	186	153	16	---	---	---
22	---	36	111	71	62	123	157	150	12	---	---	0.09
23	---	33	79	74	54	117	149	249	20	---	---	0.46
24	---	52	79	66	59	230	1010	220	17	---	---	1.1
25	---	49	49	56	129	426	4330	119	13	---	---	3.1
26	---	86	54	65	123	136	301	99	11	---	---	6.7
27	---	80	54	86	91	144	296	84	10	---	---	51
28	---	47	42	71	95	222	199	105	8.0	---	---	62
29	---	41	58	45	---	318	258	56	9.0	---	---	46
30	---	41	66	61	---	521	263	43	12	---	---	23
31	---	---	26	---	---	816	---	99	---	---	---	---
MONTH	---	---	38	44	69	198	501	184	69	---	---	---

07301500 NORTH FORK RED RIVER NEAR CARTER, OKLA.--Continued

DISSOLVED SOLIDS, IN MILLIGRAMS PER LITRE, MEAN VALUES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	2420	2090	2140	1970	1170	1960	1500	1950	---	---
2	---	---	2350	2320	1880	1930	1490	1360	940	2020	---	---
3	---	---	2450	1970	1930	2050	1800	1130	1380	1880	---	---
4	---	---	2360	1870	1880	2330	1740	1200	1650	1900	---	---
5	---	---	2370	2320	1910	2110	1860	1400	1700	1820	---	579
6	---	---	2940	2750	1950	1660	1790	2110	1550	1760	---	289
7	---	---	3170	2510	2010	1730	1840	1810	1660	1900	---	470
8	---	---	3070	2770	1870	2390	1630	1820	1760	1900	---	491
9	---	---	2910	2880	2010	1990	1760	1840	1840	2060	---	613
10	---	---	3210	2870	1960	1280	1840	1820	2060	---	---	804
11	---	---	3520	2990	2130	1300	1870	1980	2050	---	---	1040
12	---	---	3280	2920	2050	1660	1560	2030	1730	---	---	969
13	---	---	3160	2330	2270	1870	1420	1980	2430	---	---	919
14	---	---	3070	2280	1960	1580	2170	1910	1950	---	---	990
15	---	---	2950	2190	2000	1570	954	1920	1960	---	---	---
16	---	---	2590	2430	2000	1560	926	2050	1860	---	---	586
17	---	---	2340	1560	2140	1500	1280	1870	1890	---	---	1290
18	---	1980	2040	1660	2080	2000	1430	1970	1960	---	---	1130
19	---	2020	2180	1700	2150	2140	1580	1920	2070	---	---	1090
20	---	1710	1610	1800	2200	2130	1130	2010	1470	---	---	---
21	---	2340	2570	1960	1910	2230	1240	2010	1540	---	---	---
22	---	2250	1710	1830	2230	2190	1460	2030	1420	---	---	1050
23	---	2250	1610	2160	1860	2090	1420	983	2050	---	---	1350
24	---	2450	1720	2120	1910	1800	983	1580	2050	---	---	1280
25	---	2070	1410	2010	2320	1770	1880	1360	2050	---	---	1210
26	---	2360	1710	2110	2060	1520	1270	1490	2040	---	---	1300
27	---	2270	1860	2360	1910	1650	1560	1560	1960	---	---	1240
28	---	2180	1730	2360	2160	1530	1580	2120	1800	---	---	933
29	---	2330	2120	2340	---	1760	1770	1690	1610	---	---	1220
30	---	2370	2090	2230	---	818	1830	1580	1920	---	---	1360
31	---	---	2080	---	---	1170	---	1780	---	---	---	---
MONTH	---	---	2410	2260	2030	1780	1540	1750	1790	---	---	---

DISSOLVED SOLIDS (TONS/DAY), MEAN VALUES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	170	40	411	378	1890	3600	522	43	---	---
2	---	---	171	38	580	375	1770	1180	924	33	---	---
3	---	---	199	33	609	444	2140	435	1300	22	---	---
4	---	---	172	35	427	536	1880	465	1690	17	---	---
5	---	---	147	44	330	364	1650	581	1100	14	---	47
6	---	---	28	43	294	256	1570	968	681	9.5	---	10
7	---	---	29	34	282	228	1490	891	545	6.7	---	12
8	---	---	29	32	218	742	1240	1070	455	4.5	---	10
9	---	---	28	27	195	973	1400	1060	372	3.0	---	7.9
10	---	---	29	33	222	2270	1480	963	334	---	---	12
11	---	---	32	40	212	3290	1310	1030	282	---	---	6.7
12	---	---	29	50	205	1450	1160	969	214	---	---	2.6
13	---	---	29	50	251	865	2780	915	315	---	---	2.5
14	---	---	30	62	264	549	3310	908	263	---	---	1.3
15	---	---	32	71	238	517	5620	985	318	---	---	---
16	---	---	38	99	227	443	4300	1240	236	---	---	0.31
17	---	---	46	776	219	376	1340	1090	204	---	---	5.6
18	---	8.6	55	754	208	486	936	980	180	---	---	0.61
19	---	20	82	518	244	544	3620	839	157	---	---	0.58
20	---	42	78	437	261	534	1960	760	87	---	---	---
21	---	196	950	430	232	577	1170	705	87	---	---	---
22	---	156	560	341	278	550	932	690	73	---	---	0.56
23	---	146	425	333	256	531	920	1540	94	---	---	2.9
24	---	225	395	297	279	1110	6240	1200	77	---	---	6.9
25	---	224	307	260	569	2090	20490	754	61	---	---	19
26	---	376	273	296	563	771	1890	572	48	---	---	42
27	---	356	256	376	428	752	1640	462	48	---	---	318
28	---	212	211	312	426	1250	1090	475	39	---	---	383
29	---	182	263	196	---	1570	1270	288	48	---	---	286
30	---	179	299	272	---	3180	1260	231	57	---	---	147
31	---	---	118	---	---	5110	---	485	---	---	---	---
MONTH	---	---	178	211	319	1070	2660	913	360	---	---	---

07303395 ELM FORK OF NORTH FORK RED RIVER AT SALTON CROSSING NEAR CARL, OKLA.

LOCATION.--Lat 35°01'15", long 99°56'58", in NE1/4SW1/4 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 mi) upstream from Carl gage, and at mile 56.6 (91.9 km).

DRAINAGE AREA.--411 sq mi (1,023 km^2).

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	DISSOLVED NITRATE (NO3) (MG/L)	DISSOLVED NITRITE (N) (MG/L)
APR.											
24...	1150	--	--	48	106	0	890	78	.68	3.0	--
30...	64	--	--	640	164	0	1500	1100	1.7	7.5	--
MAY											
08...	49	--	--	1100	136	0	1700	1800	.50	2.2	--
23...	110	--	--	510	120	0	1500	880	.90	4.0	--
26...	33	--	--	1300	126	0	1800	2200	.56	2.5	--
JUNE											
01...	46	550	100	890	79	0	1600	1300	.48	2.1	.01
02...	811	330	25	28	33	3	840	46	.02	.09	.01
28...	15	730	130	1500	101	0	1900	2400	.48	2.1	.00
JULY											
18...	20	740	140	2000	115	0	2100	3200	.43	1.9	.01
24...	50	460	67	470	85	0	1200	780	.84	3.7	.00
AUG.											
09...	320	420	33	72	102	0	1100	99	1.1	4.9	.00
21...	7.4	700	120	1300	93	0	1900	2300	.53	2.3	.02
27...	5.5	760	140	2100	88	0	2000	3400	.25	1.1	.02
SEP.											
05...	25	810	170	1800	112	0	2500	2900	.38	1.7	.00
08...	65	590	86	700	107	0	1600	1100	.83	3.7	.00
16...	366	220	19	56	115	0	510	84	.22	.97	.16

07303395 ELM FORK OF NORTH FORK RED RIVER AT SALTON CROSSING NEAR CARL, OKLA.

PERIOD OF RECORD.--Chemical analyses: April 1973 to current year.
Water temperatures: April 1973 to current year.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS-SOLVED NITRITE (NO2) (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)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)
APR.										
24...	--	--	1690	2.30	5250	1100	1000	.6	1850	7.9
30...	--	--	4390	5.97	759	1800	1700	6.6	5550	8.2
MAY										
08...	--	--	5760	7.83	762	2000	1900	11	7340	8.2
23...	--	--	3960	5.39	1180	1800	1700	5.2	4760	7.8
26...	--	--	6790	9.23	605	2200	2100	12	8610	8.0
JUNE										
01...	.0	.13	4860	6.61	604	1800	1700	9.2	6510	8.0
02...	.0	.79	1450	1.97	3180	930	900	.4	1680	8.6
28...	.0	.04	6940	9.44	281	2400	2300	13	10100	8.1
JULY										
18...	.3	--	8570	11.7	463	2400	2300	18	11000	7.5
24...	.0	--	3250	4.42	439	1400	1400	5.4	9480	8.0
AUG.										
09...	.0	--	1940	2.64	1680	1200	1100	.9	2140	7.6
21...	.0	--	6860	9.33	137	2200	2200	12	9310	8.1
27...	.0	--	8540	11.6	127	2500	2400	18	11900	7.9
SEP.										
05...	.0	--	9140	12.4	617	2700	2600	15	11900	7.6
08...	.0	--	4460	6.07	783	1800	1700	7.1	5810	7.9
16...	.5	--	1130	1.54	1120	630	530	1.0	1360	7.5

07303395 ELM FORK OF NORTH FORK RED RIVER AT SALTON CROSSING NEAR CARL, OKLA.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), MEAN VALUES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(CONTINUOUS HOURLY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	5750	7730	9650	8480	9040
2	---	---	---	---	---	---	---	6200	4070	10700	8420	8730
3	---	---	---	---	---	---	---	6680	2590	10800	8830	8870
4	---	---	---	---	---	---	---	6890	4480	10400	6800	9750
5	---	---	---	---	---	---	---	6740	5820	10600	7810	7580
6	---	---	---	---	---	---	---	6690	6390	10400	8370	10800
7	---	---	---	---	---	---	---	7210	4230	10700	9590	5490
8	---	---	---	---	---	---	---	7390	5130	11300	3450	5530
9	---	---	---	---	---	---	---	7240	5400	10700	2200	6110
10	---	---	---	---	---	---	---	7200	---	11000	2950	6820
11	---	---	---	---	---	---	---	7320	5720	12800	4250	7130
12	---	---	---	---	---	---	---	7430	---	10800	5040	7210
13	---	---	---	---	---	---	---	7390	6880	10400	5560	5740
14	---	---	---	---	---	---	---	6780	5930	---	6330	5040
15	---	---	---	---	---	---	---	6960	---	10000	7310	6150
16	---	---	---	---	---	---	---	7310	5970	10600	7380	2380
17	---	---	---	---	---	---	---	7120	---	10800	7770	2360
18	---	---	---	---	---	---	---	7880	6860	11300	8100	3840
19	---	---	---	---	---	---	---	8370	6960	11000	8410	4290
20	---	---	---	---	---	---	---	8560	7490	---	8620	4880
21	---	---	---	---	---	---	---	---	7660	---	8360	5160
22	---	---	---	---	---	---	---	9640	7530	---	9340	---
23	---	---	---	---	---	---	---	8340	---	6820	9500	5900
24	---	---	---	---	---	---	1850	10500	---	4240	10300	5920
25	---	---	---	---	---	---	3250	10000	8640	6570	11000	6020
26	---	---	---	---	---	---	3730	9970	8790	7410	11500	5810
27	---	---	---	---	---	---	4360	7500	8750	8540	11500	1870
28	---	---	---	---	---	---	4870	6080	9260	8190	10800	3410
29	---	---	---	---	---	---	5210	7920	9080	10800	10800	---
30	---	---	---	---	---	---	5560	9740	10000	8940	10300	4620
31	---	---	---	---	---	---	---	9090	---	8230	8860	---
MONTH	---	---	---	---	---	---	---	7730	6720	9770	8000	5940

TEMPERATURE (°C) OF WATER, MEAN VALUES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(CONTINUOUS HOURLY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	31.5	28.0	29.0	---
2	---	---	---	---	---	---	---	---	26.5	27.0	31.0	---
3	---	---	---	---	---	---	---	---	27.5	27.5	28.0	---
4	---	---	---	---	---	---	---	---	34.0	28.0	26.5	---
5	---	---	---	---	---	---	---	---	33.5	27.5	---	---
6	---	---	---	---	---	---	---	---	33.0	29.0	26.0	---
7	---	---	---	---	---	---	---	---	34.5	29.0	26.5	---
8	---	---	---	---	---	---	---	---	33.0	29.0	---	---
9	---	---	---	---	---	---	---	28.5	---	26.5	---	---
10	---	---	---	---	---	---	---	25.5	---	28.0	---	---
11	---	---	---	---	---	---	---	23.0	---	28.0	---	---
12	---	---	---	---	---	---	---	19.5	---	---	---	---
13	---	---	---	---	---	---	---	17.0	---	---	---	---
14	---	---	---	---	---	---	---	18.0	---	---	---	---
15	---	---	---	---	---	---	---	19.5	---	---	---	---
16	---	---	---	---	---	---	---	21.0	---	---	---	---
17	---	---	---	---	---	---	---	27.0	---	---	---	---
18	---	---	---	---	---	---	---	31.5	---	---	---	---
19	---	---	---	---	---	---	---	33.5	---	---	---	---
20	---	---	---	---	---	---	---	33.0	---	---	---	---
21	---	---	---	---	---	---	---	34.0	---	28.5	---	---
22	---	---	---	---	---	---	---	32.0	---	29.0	---	---
23	---	---	---	---	---	---	---	29.0	---	28.5	---	---
24	---	---	---	---	---	---	---	33.0	---	29.5	---	---
25	---	---	---	---	---	---	---	32.0	---	29.5	---	---
26	---	---	---	---	---	---	---	33.0	---	29.5	---	---
27	---	---	---	---	---	---	---	27.0	---	28.5	---	---
28	---	---	---	---	---	---	---	23.0	---	28.5	---	---
29	---	---	---	---	---	---	---	28.5	31.5	27.5	---	---
30	---	---	---	---	---	---	---	31.5	29.5	30.0	---	---
31	---	---	---	---	---	---	---	30.5	---	28.5	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

07303395 ELM FORK OF NORTH FORK RED RIVER AT SALTON CROSSING NEAR CARL, OKLA.--Continued

DISSOLVED SULFATE (SO_4), IN MILLIGRAMS PER LITRE, MEAN VALUES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	1600	1700	1900	1800	1800
2	---	---	---	---	---	---	---	1600	1400	2000	1800	1800
3	---	---	---	---	---	---	---	1600	1300	2000	1800	1800
4	---	---	---	---	---	---	---	1700	1500	2000	1700	1900
5	---	---	---	---	---	---	---	1700	1600	2000	1700	1700
6	---	---	---	---	---	---	---	1700	1600	2000	1800	2000
7	---	---	---	---	---	---	---	1700	1500	2000	1900	1600
8	---	---	---	---	---	---	---	1700	1500	2000	1400	1600
9	---	---	---	---	---	---	---	1700	1500	2000	1200	1600
10	---	---	---	---	---	---	---	1700	---	2000	1300	1700
11	---	---	---	---	---	---	---	1700	1600	2100	1500	1700
12	---	---	---	---	---	---	---	1700	---	2000	1500	1700
13	---	---	---	---	---	---	---	1700	1700	2000	1600	1600
14	---	---	---	---	---	---	---	1700	1600	---	1600	1500
15	---	---	---	---	---	---	---	1700	---	1900	1700	1600
16	---	---	---	---	---	---	---	1700	1600	2000	1700	1300
17	---	---	---	---	---	---	---	1700	---	2000	1700	1300
18	---	---	---	---	---	---	---	1700	1700	2000	1800	1400
19	---	---	---	---	---	---	---	1800	1700	2000	1800	1500
20	---	---	---	---	---	---	---	1800	1700	---	1800	1500
21	---	---	---	---	---	---	---	---	1700	---	1800	1500
22	---	---	---	---	---	---	---	1900	1700	---	1900	---
23	---	---	---	---	---	---	---	1800	---	1700	1900	1600
24	---	---	---	---	---	---	960	2000	---	1500	1900	1600
25	---	---	---	---	---	---	1400	1900	1800	1600	2000	1600
26	---	---	---	---	---	---	1400	1900	1800	1700	2000	1600
27	---	---	---	---	---	---	1500	1700	1800	1800	2000	970
28	---	---	---	---	---	---	1500	1600	1900	1800	2000	1400
29	---	---	---	---	---	---	1500	1700	1800	2000	2000	---
30	---	---	---	---	---	---	1600	1900	1900	1800	1900	1500
31	---	---	---	---	---	---	---	1800	---	1800	1800	---
MONTH	---	---	---	---	---	---	---	1700	1700	1900	1800	1600

DISSOLVED SULFATE (TONS/DAY), MEAN VALUES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	536	1070	66	73	24
2	---	---	---	---	---	---	---	483	6140	59	77	27
3	---	---	---	---	---	---	---	414	923	59	64	59
4	---	---	---	---	---	---	---	369	465	58	63	67
5	---	---	---	---	---	---	---	384	299	46	56	60
6	---	---	---	---	---	---	---	334	233	33	48	102
7	---	---	---	---	---	---	---	288	188	33	81	134
8	---	---	---	---	---	---	---	263	173	26	135	105
9	---	---	---	---	---	---	---	265	163	26	452	65
10	---	---	---	---	---	---	---	260	---	42	379	45
11	---	---	---	---	---	---	---	239	140	58	141	28
12	---	---	---	---	---	---	---	217	---	59	78	25
13	---	---	---	---	---	---	---	276	135	53	84	37
14	---	---	---	---	---	---	---	269	142	---	79	74
15	---	---	---	---	---	---	---	248	---	52	46	143
16	---	---	---	---	---	---	---	207	129	58	25	833
17	---	---	---	---	---	---	---	191	---	46	37	681
18	---	---	---	---	---	---	---	184	103	47	52	464
19	---	---	---	---	---	---	---	169	99	42	42	354
20	---	---	---	---	---	---	---	165	88	---	30	240
21	---	---	---	---	---	---	---	---	89	---	30	173
22	---	---	---	---	---	---	---	1940	83	---	35	---
23	---	---	---	---	---	---	---	1320	---	99	35	81
24	---	---	---	---	---	---	7180	328	---	110	37	56
25	---	---	---	---	---	---	1350	228	68	75	42	37
26	---	---	---	---	---	---	876	176	69	60	39	388
27	---	---	---	---	---	---	738	153	69	53	30	1730
28	---	---	---	---	---	---	621	108	70	53	26	1160
29	---	---	---	---	---	---	562	99	70	107	26	---
30	---	---	---	---	---	---	530	97	72	109	29	601
31	---	---	---	---	---	---	---	329	---	96	27	---
MONTH	---	---	---	---	---	---	---	351	462	60	77	278

07303395 ELM FORK OF NORTH FORK RED RIVER AT SALTON CROSSING NEAR CARL, OKLA.--Continued

DISSOLVED CHLORIDE (CL), IN MILLIGRAMS PER LITRE, MEAN VALUES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	1200	1800	2300	2000	2100
2	---	---	---	---	---	---	---	1300	710	2600	2000	2000
3	---	---	---	---	---	---	---	1500	280	2600	2100	2100
4	---	---	---	---	---	---	---	1500	820	2500	1500	2300
5	---	---	---	---	---	---	---	1500	1200	2600	1800	1700
6	---	---	---	---	---	---	---	1500	1400	2500	1900	2600
7	---	---	---	---	---	---	---	1600	750	2600	2300	1100
8	---	---	---	---	---	---	---	1700	1000	2800	530	1100
9	---	---	---	---	---	---	---	1600	1100	2600	170	1300
10	---	---	---	---	---	---	---	1600	---	2700	390	1500
11	---	---	---	---	---	---	---	1600	1200	3200	760	1600
12	---	---	---	---	---	---	---	1700	---	2600	980	1600
13	---	---	---	---	---	---	---	1700	1500	2500	1100	1200
14	---	---	---	---	---	---	---	1500	1200	---	1400	980
15	---	---	---	---	---	---	---	1500	---	2400	1600	1300
16	---	---	---	---	---	---	---	1600	1300	2600	1700	220
17	---	---	---	---	---	---	---	1600	---	2600	1800	220
18	---	---	---	---	---	---	---	1800	1500	2800	1900	640
19	---	---	---	---	---	---	---	1900	1500	2700	1900	770
20	---	---	---	---	---	---	---	2000	1700	---	2000	940
21	---	---	---	---	---	---	---	---	1700	---	1900	1000
22	---	---	---	---	---	---	---	2300	1700	---	2200	---
23	---	---	---	---	---	---	---	1900	---	1500	2300	1200
24	---	---	---	---	---	---	71	2500	---	760	2500	1200
25	---	---	---	---	---	---	470	2400	2000	1400	2700	1300
26	---	---	---	---	---	---	610	2400	2100	1700	2800	1200
27	---	---	---	---	---	---	790	1700	2000	2000	2800	77
28	---	---	---	---	---	---	940	1300	2200	1900	2600	520
29	---	---	---	---	---	---	1000	1800	2100	2600	2600	---
30	---	---	---	---	---	---	1100	2300	2400	2100	2500	860
31	---	---	---	---	---	---	---	2100	---	1900	2100	---
MONTH	---	---	---	---	---	---	---	1800	1500	2300	1800	1200

DISSOLVED CHLORIDE (TONS/DAY), MEAN VALUES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	404	1080	81	80	28
2	---	---	---	---	---	---	---	395	3010	77	84	30
3	---	---	---	---	---	---	---	365	198	78	73	67
4	---	---	---	---	---	---	---	335	260	75	56	82
5	---	---	---	---	---	---	---	342	228	60	58	60
6	---	---	---	---	---	---	---	295	196	42	52	135
7	---	---	---	---	---	---	---	273	98	44	99	96
8	---	---	---	---	---	---	---	255	115	36	51	76
9	---	---	---	---	---	---	---	253	114	34	65	52
10	---	---	---	---	---	---	---	247	---	57	108	40
11	---	---	---	---	---	---	---	230	105	87	74	26
12	---	---	---	---	---	---	---	212	---	78	50	24
13	---	---	---	---	---	---	---	268	122	68	61	28
14	---	---	---	---	---	---	---	240	110	---	66	48
15	---	---	---	---	---	---	---	228	---	65	44	116
16	---	---	---	---	---	---	---	199	101	77	25	142
17	---	---	---	---	---	---	---	179	---	61	37	114
18	---	---	---	---	---	---	---	189	93	64	55	209
19	---	---	---	---	---	---	---	183	91	57	45	187
20	---	---	---	---	---	---	---	183	86	---	34	149
21	---	---	---	---	---	---	---	---	89	---	32	116
22	---	---	---	---	---	---	---	2360	82	---	42	---
23	---	---	---	---	---	---	---	1430	---	89	43	63
24	---	---	---	---	---	---	531	426	---	57	47	43
25	---	---	---	---	---	---	465	286	76	65	57	29
26	---	---	---	---	---	---	378	220	78	58	54	296
27	---	---	---	---	---	---	399	150	77	59	42	136
28	---	---	---	---	---	---	386	87	83	56	34	433
29	---	---	---	---	---	---	379	103	81	142	34	---
30	---	---	---	---	---	---	386	120	91	125	37	350
31	---	---	---	---	---	---	---	382	---	102	31	---
MONTH	---	---	---	---	---	---	---	361	278	70	54	113

07303395 ELM FORK OF NORTH FORK RED RIVER AT SALTON CROSSING NEAR CARL, OKLA.--Continued

DISSOLVED SOLIDS, IN MILLIGRAMS PER LITRE, MEAN VALUES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	4530	5910	7240	6430	6820
2	---	---	---	---	---	---	---	4840	3360	7970	6390	6600
3	---	---	---	---	---	---	---	5180	2280	8040	6670	6700
4	---	---	---	---	---	---	---	5320	3650	7760	5260	7310
5	---	---	---	---	---	---	---	5220	4580	7900	5960	5800
6	---	---	---	---	---	---	---	5180	4980	7760	6350	8040
7	---	---	---	---	---	---	---	5550	3470	7970	7200	4350
8	---	---	---	---	---	---	---	5670	4100	8390	2930	4380
9	---	---	---	---	---	---	---	5570	4290	7970	1930	4780
10	---	---	---	---	---	---	---	5540	---	8180	2580	5270
11	---	---	---	---	---	---	---	5620	4510	9430	3490	5490
12	---	---	---	---	---	---	---	5700	---	8040	4040	5550
13	---	---	---	---	---	---	---	5670	5320	7760	4400	4520
14	---	---	---	---	---	---	---	5250	4660	---	4930	4040
15	---	---	---	---	---	---	---	5370	---	7480	5610	4810
16	---	---	---	---	---	---	---	5610	4680	7900	5660	2090
17	---	---	---	---	---	---	---	5480	---	8040	5930	2080
18	---	---	---	---	---	---	---	6010	5300	8390	6160	3200
19	---	---	---	---	---	---	---	6350	5370	8180	6380	3520
20	---	---	---	---	---	---	---	6480	5740	---	6530	3930
21	---	---	---	---	---	---	---	---	5860	---	6340	4120
22	---	---	---	---	---	---	---	7230	5770	---	7030	---
23	---	---	---	---	---	---	---	6330	---	5270	7140	4630
24	---	---	---	---	---	---	1630	7830	---	3480	7690	4650
25	---	---	---	---	---	---	2790	7480	6540	5100	8180	4720
26	---	---	---	---	---	---	3130	7460	6640	5680	8530	4570
27	---	---	---	---	---	---	3560	5750	6620	6470	8530	1640
28	---	---	---	---	---	---	3920	4760	6970	6230	8040	2900
29	---	---	---	---	---	---	4160	6040	6850	8040	8040	---
30	---	---	---	---	---	---	4400	7300	7480	6750	7690	3750
31	---	---	---	---	---	---	---	6850	---	6250	6690	---
MONTH	---	---	---	---	---	---	---	5910	5200	7320	6090	4650

DISSOLVED SOLIDS (TONS/DAY), MEAN VALUES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	1540	3650	254	260	88
2	---	---	---	---	---	---	---	1450	14350	237	276	98
3	---	---	---	---	---	---	---	1300	1590	239	234	217
4	---	---	---	---	---	---	---	1180	1150	231	199	257
5	---	---	---	---	---	---	---	1210	866	183	193	204
6	---	---	---	---	---	---	---	1050	712	130	171	412
7	---	---	---	---	---	---	---	943	450	133	311	376
8	---	---	---	---	---	---	---	873	465	109	285	296
9	---	---	---	---	---	---	---	872	451	103	731	194
10	---	---	---	---	---	---	---	852	---	172	726	142
11	---	---	---	---	---	---	---	789	402	255	339	92
12	---	---	---	---	---	---	---	723	---	239	207	82
13	---	---	---	---	---	---	---	919	431	210	238	105
14	---	---	---	---	---	---	---	850	415	---	240	196
15	---	---	---	---	---	---	---	798	---	202	152	428
16	---	---	---	---	---	---	---	682	379	235	84	1340
17	---	---	---	---	---	---	---	622	---	187	125	1090
18	---	---	---	---	---	---	---	633	329	195	183	1050
19	---	---	---	---	---	---	---	600	319	172	148	854
20	---	---	---	---	---	---	---	595	294	---	109	625
21	---	---	---	---	---	---	---	---	301	---	106	467
22	---	---	---	---	---	---	---	7420	280	---	133	---
23	---	---	---	---	---	---	---	4700	---	313	135	238
24	---	---	---	---	---	---	12210	1310	---	263	145	163
25	---	---	---	---	---	---	2750	889	247	234	172	110
26	---	---	---	---	---	---	1940	685	251	200	161	1120
27	---	---	---	---	---	---	1800	512	250	192	127	2930
28	---	---	---	---	---	---	1620	321	263	185	104	2430
29	---	---	---	---	---	---	1530	342	259	434	104	---
30	---	---	---	---	---	---	1500	375	283	401	114	1520
31	---	---	---	---	---	---	---	1220	---	338	99	---
MONTH	---	---	---	---	---	---	---	1210	1180	224	213	611

07303400 ELM FORK OF NORTH FORK RED RIVER NEAR CARL, OKLA.

LOCATION.--Lat 35°00'42", long 99°54'12", in SW1/4NW1/4 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 sq mi (1,077.4 km²).

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	DISSOLVED NITRATE (NO3) (MG/L)	DISSOLVED NITRITE (N) (MG/L)
OCT.											
05...	3.3	--	--	15000	82	0	2400	24000	--	--	--
14...	4.5	--	--	14000	74	0	2300	22000	--	--	--
25...	7.1	--	--	12000	108	0	2000	19000	--	--	--
NOV.											
06...	6.5	--	--	8000	112	0	1700	13000	--	--	--
15...	8.4	--	--	7100	152	0	2100	11000	--	--	--
25...	16	--	--	4800	120	0	1800	7600	--	--	--
DEC.											
05...	11	--	--	8700	178	0	2000	14000	--	--	--
15...	32	--	--	8500	196	0	1700	14000	--	--	--
24...	10	--	--	6100	148	0	1600	9900	--	--	--
JAN.											
05...	12	--	--	7700	168	0	1800	12000	--	--	--
15...	58	--	--	4100	150	0	1400	6500	--	--	--
25...	19	--	--	6900	134	0	1500	11000	--	--	--
FEB.											
05...	16	--	--	6600	114	0	1600	11000	--	--	--
15...	16	--	--	6600	140	0	1700	11000	--	--	--
26...	53	--	--	6400	120	0	1600	10000	--	--	--
MAR.											
04...	16	--	--	6200	102	0	1800	9900	--	--	--
15...	37	--	--	3700	132	0	1600	6000	--	--	--
26...	39	--	--	4300	148	0	1600	7000	--	--	--
APR.											
05...	42	--	--	2800	132	0	1600	4600	.20	.90	--
15...	1000	--	--	480	114	0	1100	790	.72	3.2	--
25...	980	--	--	910	132	0	1300	1500	.43	1.9	--
MAY											
05...	74	600	130	2600	79	0	1600	4000	1.2	5.3	.01
15...	50	630	140	3200	126	0	1600	5400	1.1	4.8	.01
25...	30	650	150	3900	131	0	1700	6000	.92	4.1	.00
JUNE											
05...	71	530	95	2100	153	0	1400	3200	.55	2.4	.00
14...	34	640	140	3200	112	0	1700	5100	1.2	5.3	.00
25...	14	770	220	7200	99	0	2000	11000	1.0	4.4	.00
JULY											
05...	9.8	790	250	8800	90	0	2100	14000	.93	4.1	.00
15...	11	830	280	10000	77	0	2200	17000	.42	1.9	.04
25...	18	590	150	5300	113	0	1500	8000	.86	3.8	.30
AUG.											
05...	13	690	230	9900	98	0	2000	15000	.72	3.2	.01
15...	11	750	220	9000	105	0	1900	14000	.62	2.7	
25...	9.0	930	390	17000	88	0	2400	28000	.30	1.3	
SEP.											
05...	14	730	250	7200	104	0	2400	11000	.63	2.8	
15...	48	700	170	6000	100	0	1800	9500	.84	3.7	
27...	618	430	32	240	106	0	1000	380	.88	3.9	

07303400 ELM FORK OF NORTH FORK RED RIVER NEAR CARL, OKLA.

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.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS-SOLVED NITRITE (NO2) (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)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)
OCT.										
05...	--	--	43500	59.2	388	3900	3800	105	55100	7.2
14...	--	--	41300	56.2	502	3400	3300	104	52400	7.3
25...	--	--	34800	47.3	667	3100	3000	94	44700	7.9
NOV.										
06...	--	--	22800	31.0	400	2600	2500	68	31000	7.2
15...	--	--	20900	28.4	474	2600	2500	61	28900	7.1
25...	--	--	15200	20.7	657	2200	2100	45	21400	7.1
DEC.										
05...	--	--	26000	35.4	772	3000	2900	69	35500	7.8
15...	--	--	25300	34.4	2190	2800	2600	70	34600	8.0
24...	--	--	18900	25.7	510	2400	2300	54	26600	7.8
JAN.										
05...	--	--	23800	32.4	771	2700	2600	64	29200	8.1
15...	--	--	13300	18.1	2080	2200	2100	38	18000	8.1
25...	--	--	21400	29.1	1100	2700	2600	58	27300	8.1
FEB.										
05...	--	--	20400	27.7	881	2700	2600	55	25900	8.1
15...	--	--	20400	27.7	881	2600	2500	56	25800	8.1
26...	--	--	19500	26.5	2790	2400	2300	57	25000	8.2
MAR.										
04...	--	--	19100	26.0	825	2400	2300	55	26000	7.6
15...	--	--	12600	17.1	1260	2100	2000	35	17700	7.6
26...	--	--	14200	19.3	1500	2200	2100	40	19600	7.7
APR.										
05...	--	--	10400	14.1	1180	2100	2000	27	14500	7.4
15...	--	--	3180	4.32	8590	1300	1200	5.8	4190	7.2
25...	--	--	4620	6.28	12200	1200	1100	11	6260	7.1
MAY										
05...	.0	.08	9410	12.8	1880	2000	2000	25	14400	7.9
15...	.0	.05	10800	14.7	1460	2200	2000	30	16600	8.1
25...	.0	.11	13000	17.7	1050	2200	2100	36	20100	8.0
JUNE										
05...	.0	.09	7620	10.4	1460	1700	1600	22	11900	8.2
14...	.0	.06	10900	14.8	1000	2200	2100	30	16700	8.0
25...	.0	.08	21200	28.8	801	2800	2700	59	31700	8.1
JULY										
05...	.0	--	26800	36.4	709	3000	2900	70	23200	7.5
15...	.1	--	29700	40.4	882	3200	3200	77	39600	7.9
25...	1.0	--	15700	21.4	763	2100	2000	50	22900	7.8
AUG.										
05...	.0	--	27900	37.9	979	2700	2600	83	36600	8.0
15...	.00	.0	25800	35.1	766	2800	2700	74	37500	7.7
25...	.16	.5	47000	63.9	1140	3900	3900	118	56700	7.8
SEP.										
05...	.02	.0	22900	31.1	866	2900	2800	59	31500	7.5
15...	.00	.0	18300	24.9	2370	2400	2400	56	27200	7.7
27...	.01	.0	2520	3.43	4210	1200	1100	3.0	2950	7.5

07303400 ELM FORK OF NORTH FORK RED RIVER, NEAR CARL, OKLA.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), MEAN VALUES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(CONTINUOUS HOURLY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	50600	22300	27000	23600	24900	23400	9530	10400	14700	29700	30800	---
2	52300	22400	30400	26100	24800	24400	10800	10900	2190	33200	37400	50900
3	53700	25000	33100	26300	27300	23500	14000	11200	6160	---	35800	---
4	52800	28500	40600	26800	27500	20900	13600	12000	8540	34200	39400	54800
5	56200	31300	39500	29400	27400	26600	14400	12800	10900	34200	36600	28600
6	60400	31300	69600	31900	20500	24400	14800	12400	11700	35600	31600	39700
7	55700	31200	38900	30800	25300	20200	15200	13700	12500	35900	50600	21800
8	57200	34200	31600	32700	29100	19800	14400	13500	13600	37900	6090	22300
9	53000	38300	36800	30100	23100	17800	12400	13400	15100	37900	4300	---
10	50100	31200	50700	29600	34500	6460	11300	14700	3920	36700	15500	27300
11	55100	35400	35800	29100	21500	7860	13400	14300	17900	40900	16500	---
12	55100	33600	31700	37600	25600	12000	13900	14100	3920	42900	15400	32400
13	51700	29900	30500	35500	26100	14200	6560	15700	12000	38200	---	20200
14	52600	24400	31000	29000	21200	16400	4400	13800	15200	41800	30300	12900
15	55000	28800	32700	18800	27000	17100	4220	14200	16100	38700	33100	24900
16	57300	27600	39000	17600	26600	17600	7700	15300	17300	32300	35300	2790
17	41100	29300	30700	21100	26800	19200	10600	14700	18400	37900	---	9180
18	60500	27300	20500	20700	25700	19800	10600	16000	19600	43400	36900	14900
19	56800	26000	15800	24900	23500	20900	3020	15800	21400	44400	---	24700
20	51800	24000	21000	26500	26700	20700	9330	16800	21500	39400	44400	20200
21	30600	25200	22200	27400	26500	19700	9860	15800	21500	35200	42900	20700
22	25000	26200	23000	26300	28000	20100	---	14600	21300	19700	45100	---
23	38000	27600	26700	23600	23000	15900	11700	12700	---	18100	45700	26600
24	40100	29200	25300	26700	14700	10900	2580	15800	---	13900	49700	26500
25	47000	22000	25200	25200	26300	12300	6290	17200	27800	14900	56700	25600
26	39800	21800	25420	25500	21300	19400	7910	18000	26500	30900	60200	21000
27	38700	23200	27000	18500	16200	18700	8470	16000	26900	27900	59100	2990
28	39900	24300	28700	23300	30400	11200	10200	18900	27300	31800	---	10100
29	38300	27800	27800	25000	---	17500	9970	18700	28700	21600	53100	---
30	33600	26300	24600	16000	---	7150	10600	13300	---	2900	51500	16700
31	25600	---	24800	20000	---	7240	---	15700	---	31500	---	---
MONTH	47600	27850	31210	25990	25050	17270	10060	14590	16390	32120	37080	23240

TEMPERATURE (°C) OF WATER, MEAN VALUES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(CONTINUOUS HOURLY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18.0	9.5	6.0	4.0	8.0	---	14.5	---	23.0	---	---	---
2	19.5	11.5	7.0	4.0	7.5	---	12.5	---	18.5	---	27.0	---
3	21.0	13.0	3.5	5.0	7.5	---	11.0	---	23.5	---	27.0	---
4	22.0	13.5	2.0	3.0	11.0	---	11.5	---	26.5	---	26.0	---
5	22.5	14.5	1.5	0.5	11.0	---	14.0	---	22.5	---	26.0	---
6	17.5	16.0	---	1.0	11.0	---	15.0	---	---	---	27.0	---
7	19.5	13.5	---	---	8.0	---	12.0	---	---	---	30.0	---
8	23.5	12.5	0.5	---	1.5	---	6.0	---	---	---	---	---
9	26.0	11.5	0.5	1.0	3.0	13.0	8.5	---	---	---	---	---
10	27.0	10.5	0.5	1.0	5.0	8.5	11.5	26.5	---	---	---	---
11	24.5	11.5	0.5	2.0	7.5	12.0	15.0	23.5	---	30.0	---	---
12	22.5	11.5	0.5	1.5	11.0	14.5	18.0	20.0	---	26.0	---	---
13	21.0	8.0	1.0	1.5	7.5	14.5	15.5	17.5	28.0	27.0	---	---
14	20.0	5.5	1.0	2.0	7.0	12.5	17.0	19.0	28.5	27.0	---	---
15	17.5	5.0	1.0	3.0	7.5	12.0	18.0	21.0	28.0	---	---	---
16	20.5	7.0	1.0	4.5	5.5	11.5	16.0	22.5	27.5	31.0	---	---
17	21.5	6.0	1.5	8.5	5.5	12.5	17.0	22.0	28.5	33.0	---	---
18	13.0	5.0	2.5	10.0	9.5	13.0	17.0	25.0	30.0	28.5	---	---
19	9.0	6.0	4.0	9.0	9.5	13.0	---	26.0	25.5	27.5	---	---
20	10.5	5.0	5.5	10.0	9.0	12.5	---	25.0	---	28.5	---	---
21	12.5	4.5	6.5	7.5	9.0	12.5	---	25.0	---	26.0	---	---
22	16.5	6.0	5.5	6.0	---	14.0	---	23.0	---	26.0	---	---
23	14.5	5.5	7.0	5.0	---	14.5	---	23.5	---	27.0	---	---
24	13.5	5.5	7.0	6.0	---	12.0	---	26.5	---	26.5	---	---
25	14.5	6.0	6.5	7.0	---	8.5	---	25.5	---	27.0	---	---
26	13.5	6.0	5.5	9.0	---	14.0	---	24.5	---	28.0	---	---
27	13.0	6.0	6.0	7.0	---	11.0	---	18.0	---	26.0	---	---
28	14.0	5.0	6.5	2.0	---	14.0	---	19.5	---	25.0	---	---
29	16.0	4.0	8.5	2.5	---	12.0	---	23.0	---	25.5	---	---
30	14.5	5.0	6.0	5.5	---	11.0	---	23.0	---	28.0	---	---
31	6.5	---	3.5	9.0	---	11.5	---	22.5	---	---	---	---
MONTH	17.5	8.5	4.0	4.5	---	---	---	---	---	---	---	---

07303400 ELM FORK OF NORTH FORK RED RIVER, NEAR CARL, OKLA.--Continued

DISSOLVED SULFATE (SO_4), IN MILLIGRAMS PER LITRE, MEAN VALUES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2100	1800	1800	1800	1800	1800	1200	1300	1500	1900	1900	---
2	2200	1800	1900	1800	1800	1800	1300	1300	800	1900	2000	2100
3	2200	1800	1900	1800	1800	1800	1500	1300	1000	---	1900	---
4	2200	1800	2000	1800	1800	1700	1500	1400	1200	1900	2000	2200
5	2200	1900	2000	1900	1800	1800	1500	1400	1300	1900	2000	1800
6	2300	1900	2400	1900	1700	1800	1500	1400	1400	1900	1900	2000
7	2200	1900	2000	1900	1800	1700	1600	1500	1400	1900	2100	1800
8	2200	1900	1900	1900	1900	1700	1500	1500	1500	2000	1000	1800
9	2200	2000	2000	1900	1800	1700	1400	1500	1600	2000	920	---
10	2100	1900	2100	1900	1900	1000	1300	1500	900	2000	1600	1800
11	2200	1900	1900	1900	1800	1100	1500	1500	1700	2000	1600	---
12	2200	1900	1900	2000	1800	1400	1500	1500	900	2000	1600	1900
13	2100	1900	1900	1900	1800	1500	1100	1600	1400	2000	---	1700
14	2200	1800	1900	1900	1700	1600	930	1500	1600	2000	1900	1400
15	2200	1800	1900	1700	1800	1700	920	1500	1600	2000	1900	1800
16	2200	1800	2000	1700	1800	1700	1100	1600	1700	1900	1900	830
17	2000	1900	1900	1700	1800	1700	1300	1500	1700	2000	---	1200
18	2300	1800	1700	1700	1800	1700	1300	1600	1700	2000	2000	1500
19	2200	1800	1600	1800	1800	1700	840	1600	1800	2100	---	1800
20	2200	1800	1700	1800	1800	1700	1200	1700	1800	2000	2100	1700
21	1900	1800	1800	1800	1800	1700	1200	1600	1800	1900	2000	1700
22	1800	1800	1800	1800	1800	1700	---	1500	1800	1700	2100	---
23	2000	1800	1800	1800	1800	1600	1400	1400	---	1700	2100	1800
24	2000	1900	1800	1800	1500	1300	820	1600	---	1500	2100	1800
25	2100	1800	1800	1800	1800	1400	1000	1700	1800	1500	2200	1800
26	2000	1800	1800	1800	1800	1700	1100	1700	1800	1900	2300	1700
27	2000	1800	1800	1700	1600	1700	1200	1600	1800	1800	2200	840
28	2000	1800	1800	1800	1900	1300	1300	1700	1800	1900	---	1300
29	2000	1800	1800	1800	---	1700	1300	1700	1800	1800	2200	---
30	1900	1800	1800	1600	---	1100	1300	1500	---	840	2100	1700
31	1800	---	1800	1700	---	1100	---	1600	---	1900	---	---
MONTH	2100	1800	1900	1800	1800	1600	1300	1500	1500	1900	1900	1700

DISSOLVED SULFATE (TONS/DAY), MEAN VALUES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	32	86	54	53	92	86	368	436	949	70	81	---
2	29	71	56	54	82	87	239	393	3390	62	90	39
3	30	49	57	69	74	86	274	337	720	---	73	---
4	26	41	59	59	69	75	210	308	370	62	80	83
5	25	38	53	60	74	65	172	334	251	51	68	70
6	23	31	27	47	70	58	133	287	198	39	56	108
7	24	27	24	46	73	52	114	255	186	39	98	156
8	26	27	26	41	55	126	123	229	171	32	102	124
9	23	32	31	33	72	225	132	232	168	32	348	---
10	18	28	38	28	78	1280	104	232	87	47	444	54
11	21	28	37	25	80	665	102	216	157	60	164	---
12	25	42	40	27	78	297	100	194	75	66	85	34
13	21	60	41	33	73	268	512	262	115	59	56700	46
14	23	48	39	45	66	234	462	244	144	60	96	73
15	24	42	36	65	69	177	1150	228	140	59	57	165
16	23	44	54	170	69	152	1170	195	141	56	35	532
17	20	42	76	132	79	135	698	178	116	52	---	633
18	20	69	89	85	83	131	583	174	112	54	63	505
19	20	78	78	78	86	122	1060	155	109	50	---	441
20	44	72	71	79	79	108	1030	157	95	59	41	281
21	101	68	62	94	79	98	671	164	95	104	41	202
22	73	64	57	78	94	89	---	1570	90	121	46	---
23	53	59	54	72	115	143	575	1050	---	106	46	98
24	42	75	49	69	91	251	6140	272	---	116	47	69
25	41	76	49	83	98	162	1020	204	74	75	54	48
26	38	71	49	88	80	130	704	161	74	71	50	434
27	40	62	49	83	70	153	589	144	74	60	41	1500
28	41	58	55	45	81	373	524	121	74	61	---	1060
29	36	55	59	68	---	266	461	102	75	99	35	---
30	88	54	58	83	---	1570	440	78	---	52	39	669
31	88	---	58	89	---	812	---	288	---	102	---	---
MONTH	37	53	51	67	79	273	685	297	306	66	2190	309

07303400 ELM FORK OF NORTH FORK RED RIVER, NEAR CARL, OKLA.--Continued

DISSOLVED CHLORIDE (CL), IN MILLIGRAMS PER LITRE, MEAN VALUES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22100	9000	11100	9600	10200	9500	3000	3400	5400	12400	12900	---
2	22900	9000	12700	10700	10100	9900	3600	3700	---	14000	16000	22200
3	23500	10200	14000	10800	11300	9500	5100	3800	1500	---	15200	---
4	23100	11800	17400	11000	11400	8300	4900	4200	2600	14500	16900	24000
5	24700	13100	16900	12200	11300	11900	5300	4500	3700	14500	15600	11900
6	26600	13100	30900	13400	8100	9900	5500	4400	4000	15100	13300	17000
7	24400	13100	16600	12900	10300	8000	5700	5000	4400	15300	22100	8700
8	25100	14500	13300	13800	12100	7800	5300	4900	4900	16200	1400	9000
9	23200	16400	15700	12600	9300	6900	4400	4800	5600	16200	600	---
10	21800	13100	22100	12300	14600	1600	3800	5400	430	15600	5800	11300
11	24200	15000	15200	12100	8600	2300	4800	5200	6900	17600	6300	---
12	24200	14200	13300	16000	10500	4200	5100	5100	430	18500	5800	13600
13	22600	12500	12800	15100	10700	5200	1700	5900	4200	16300	---	8000
14	23000	9900	13000	12100	8400	6200	650	5000	5700	18000	12700	4600
15	24100	12000	13800	7300	11100	6500	570	5200	6100	16600	14000	10200
16	25200	11400	16700	6800	10900	6800	2200	5700	6600	13600	15000	---
17	17700	12200	12800	8400	11000	7500	3500	5400	7100	16200	---	2900
18	26700	11300	8100	8200	10500	7800	3500	6000	7700	18700	15700	5500
19	25000	10700	5900	10200	9500	8300	9.3	5900	8500	19200	---	10100
20	22600	9700	8300	10900	11000	8200	2900	6400	8600	16900	19200	8000
21	12800	10300	8900	11300	10900	7700	3200	5900	8600	14900	18500	8200
22	10200	10800	9300	10800	11600	7900	---	5400	8500	7700	19500	---
23	16200	11400	11000	9600	9300	6000	4000	4500	---	7000	19800	10900
24	17200	12200	10300	11000	5400	3700	---	5900	---	5100	21700	10900
25	20400	8800	10300	10300	10800	4300	1500	6600	11500	5500	24900	10500
26	17100	8700	10400	10400	8500	7600	2300	7000	10900	12900	26500	8300
27	16600	9400	11100	7200	6100	7300	2500	6000	11100	11500	26000	---
28	17100	9900	11900	9400	12700	3800	3300	7400	11300	13400	---	3300
29	16400	11500	11500	10200	---	6700	3200	7300	11900	8600	23200	---
30	14200	10800	10000	6000	---	1900	3500	4800	---	---	22500	6400
31	10500	---	10100	7900	---	2000	---	5900	---	13200	---	---
MONTH	20700	11500	13100	10700	10200	6600	3400	5400	6500	14000	15800	---

DISSOLVED CHLORIDE (TONS/DAY), MEAN VALUES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	328	435	331	284	521	460	908	1170	3350	468	557	---
2	309	364	377	318	464	482	664	1100	---	454	732	402
3	324	275	415	408	456	462	937	965	1020	---	575	---
4	274	265	518	358	429	359	703	935	812	469	684	908
5	280	262	452	397	458	417	600	1070	702	383	547	449
6	266	220	350	337	329	322	473	895	588	302	394	919
7	264	191	202	313	419	237	412	857	583	305	1010	777
8	292	203	186	298	359	568	428	763	571	262	143	628
9	244	270	245	221	378	908	412	768	606	262	228	---
10	183	198	394	183	592	1960	301	820	41	380	1630	335
11	228	215	287	163	394	1330	339	750	634	522	625	---
12	274	314	280	217	453	902	341	667	36	600	311	247
13	226	404	282	260	434	926	802	970	349	485	56700	211
14	242	268	266	293	319	889	324	825	519	534	650	236
15	267	275	260	277	421	689	709	785	525	492	415	932
16	258	271	451	676	414	603	2280	708	555	404	271	---
17	172	277	520	635	477	588	1900	630	482	428	---	1500
18	238	426	416	399	483	589	1590	651	499	496	509	1800
19	222	461	289	439	462	583	12	577	530	467	---	2470
20	464	394	338	471	475	510	2480	605	463	501	384	1290
21	691	389	313	581	471	439	1710	609	463	806	370	953
22	413	378	301	467	595	407	---	5520	435	544	432	---
23	438	370	326	387	601	533	1710	3340	---	435	438	591
24	362	492	279	415	322	702	---	1010	---	396	480	412
25	397	381	278	473	584	501	1500	800	466	268	605	277
26	323	353	281	507	390	575	1410	657	441	489	587	2070
27	331	329	301	349	264	649	1280	537	449	374	471	---
28	356	320	354	239	549	1070	1380	518	456	433	---	2760
29	296	342	373	386	---	1050	1190	433	483	489	376	---
30	651	321	325	309	---	2770	1200	258	---	---	407	2570
31	509	---	328	404	---	1460	---	1070	---	714	---	---
MONTH	327	322	333	370	447	772	1000	1010	618	454	2610	---

07303400 ELM FORK OF NORTH FORK RED RIVER, NEAR CARL, OKLA.--Continued

DISSOLVED SOLIDS, IN MILLIGRAMS PER LITRE, MEAN VALUES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	37750	15610	18990	16540	17480	16400	6420	7040	10140	20930	21720	---
2	39380	15680	21430	18340	17400	17120	7330	7400	1140	23450	26470	38040
3	40710	17550	23380	18480	19200	16470	9630	7620	3990	---	25320	---
4	39850	20070	28770	18840	19350	14600	9350	8200	5710	24170	27910	41760
5	43100	22080	27980	20710	19280	20140	9920	8770	7400	24170	25900	20140
6	47110	22080	55890	22510	14310	17120	10210	8480	7980	25180	22300	28130
7	42620	22010	27550	21720	17760	14100	10500	9420	8550	25390	37750	15250
8	44050	24170	22300	23090	20500	13810	9920	9270	9350	26830	3940	15610
9	40050	27120	26040	21220	16180	12370	8480	9200	10430	26830	2650	---
10	37280	22010	37850	20860	24380	4210	7690	10140	2380	25970	10710	19200
11	42050	25030	25320	20500	15030	5220	9200	9850	12440	28990	11430	---
12	42050	23740	22370	26610	17980	8200	9560	9710	2380	30430	10640	22870
13	38800	21070	21510	25100	18340	9780	4280	10860	8200	27050	---	14100
14	39660	17120	21870	20430	14810	11360	2730	9490	10500	29640	21360	8840
15	41950	20280	23090	13090	18990	11860	2600	9780	11150	27410	23380	17480
16	44150	19420	27620	12220	18700	12220	5100	10570	12010	22800	24960	1570
17	29130	20640	21650	14740	18840	13380	7190	10140	12800	26830	---	6170
18	47200	19200	14310	14450	18050	13810	7190	11070	13660	30880	26110	10280
19	43670	18270	10930	17480	16470	14600	1730	10930	14960	31840	---	17330
20	38900	16830	14670	18630	18770	14450	6270	11650	15030	27910	31840	14100
21	21580	17690	15530	19280	18630	13740	6660	10930	15030	24890	30430	14450
22	17550	18410	16110	18480	19710	14020	---	10070	14890	13740	32500	---
23	26900	19420	18770	16540	16110	11000	7980	8700	---	12580	33080	18700
24	28410	20570	17760	18770	10140	7400	1420	10930	---	9560	36900	18630
25	34320	15390	17690	17690	18480	8410	4090	11940	19560	10280	43580	17980
26	28200	15250	17850	17910	14890	13520	5250	12510	18630	21790	46920	14670
27	27410	16250	18990	12870	11220	13020	5660	11070	18920	19640	45870	1710
28	28270	17050	20210	16330	21430	7620	6900	13160	19200	22440	---	6830
29	27120	19560	19560	17550	---	12150	6730	13020	20210	15100	40140	---
30	23740	18480	17260	11070	---	4710	7190	9130	---	1650	38610	11580
31	17980	---	17400	13950	---	4770	---	10860	---	22230	---	---
MONTH	35510	19600	22280	18260	17590	11990	6800	10060	11360	22690	27020	16480

DISSOLVED SOLIDS (TONS/DAY), MEAN VALUES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	561	758	564	491	897	797	1920	2400	6270	791	938	---
2	532	635	637	545	799	832	1350	2220	4850	760	1220	688
3	561	474	694	699	778	800	1770	1930	2790	---	957	---
4	473	450	855	611	731	631	1340	1840	1800	783	1130	1580
5	489	441	748	671	781	707	1130	2060	1420	639	909	761
6	471	370	634	565	580	555	882	1740	1160	503	662	1520
7	460	321	335	528	719	419	765	1630	1130	507	1730	1360
8	511	339	313	499	609	1010	804	1450	1090	435	394	1100
9	422	447	408	372	655	1640	802	1470	1130	435	1000	---
10	312	333	674	310	988	5140	602	1530	231	631	3010	570
11	397	358	479	277	690	3070	646	1410	1140	861	1140	---
12	477	526	471	359	777	1770	645	1260	199	986	575	414
13	388	683	476	434	743	1740	2080	1790	686	803	56700	373
14	418	462	449	496	560	1630	1360	1560	964	880	1100	454
15	464	465	436	495	718	1250	3250	1480	963	814	694	1600
16	453	461	746	1220	707	1090	5340	1310	1010	677	452	1000
17	283	468	877	1110	814	1050	3880	1180	864	710	---	3230
18	421	726	734	703	829	1040	3240	1200	885	817	846	3360
19	389	789	531	755	800	1020	2190	1060	929	774	---	4260
20	798	682	594	805	811	898	5300	1100	812	829	636	2280
21	1170	669	545	989	805	779	3580	1120	812	1340	608	1680
22	711	646	522	799	1010	719	---	10330	764	964	720	---
23	726	629	558	670	1040	980	3380	6460	---	781	732	1010
24	598	833	480	710	602	1420	10640	1860	---	749	817	704
25	667	665	478	812	998	977	4030	1450	792	500	1060	476
26	533	617	482	870	683	1020	3260	1180	754	824	1040	3640
27	548	571	513	626	485	1160	2860	987	766	636	830	3050
28	588	552	600	414	926	2140	2850	924	778	727	---	5720
29	491	581	634	663	---	1900	2470	773	819	856	650	---
30	1090	549	559	568	---	6770	2450	493	---	102	699	4690
31	874	---	564	716	---	3540	---	1960	---	1200	---	---
MONTH	557	550	567	638	769	1560	2580	1910	1330	744	3010	1900

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 sq mi (2,170.4 km²).

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	DISSOLVED NITRATE (NO3) (MG/L)
OCT.										
05...	5.2	--	--	7800	94	0	2200	13000	--	--
15...	4.5	--	--	7800	114	0	2200	13000	--	--
25...	13	--	--	6700	116	0	1600	11000	--	--
NOV.										
05...	119	--	--	5200	116	0	1600	8400	--	--
15...	16	--	--	7600	130	0	1900	12000	--	--
25...	21	--	--	5600	144	0	1600	9000	--	--
DEC.										
05...	16	--	--	6300	130	0	1800	10000	--	--
15...	19	--	--	6900	170	0	1800	11000	--	--
25...	19	--	--	5400	130	0	1700	9000	--	--
JAN.										
05...	24	--	--	5500	138	0	1500	9000	--	--
15...	36	--	--	5700	140	0	1600	9400	--	--
25...	24	--	--	5900	138	0	1600	9600	--	--
FEB.										
05...	15	--	--	5900	98	0	1800	9800	--	--
15...	15	--	--	6300	134	0	1800	10000	--	--
24...	16	--	--	6000	124	0	1700	9800	--	--
MAR.										
05...	17	--	--	6400	90	0	1800	10000	--	--
15...	60	--	--	2000	138	0	1400	3200	--	--
APR.										
05...	111	--	--	1600	160	0	1400	2500	--	--
25...	681	--	--	280	104	0	940	440	--	--
MAY										
05...	49	620	130	2300	49	0	1700	3600	.53	2.3
15...	66	650	150	2900	81	0	1800	4700	1.0	4.4
25...	111	490	72	1200	35	0	1400	2000	.03	.13
JUNE										
05...	122	440	62	860	31	0	1200	1400	.01	.04
15...	10	650	140	2600	94	0	1700	4300	.44	1.9
25...	26	770	190	4100	106	0	2000	6800	.17	.75
JULY										
05...	16	850	220	5400	102	0	2100	9500	.18	.80
15...	7.9	880	240	6200	102	0	2300	9800	.13	.60
25...	26	740	180	4900	102	0	2000	7800	2.0	8.9
AUG.										
05...	17	820	220	6200	121	0	2200	10000	.19	.80
15...	23	730	170	5100	91	0	1900	8200	.08	.40
SEP.										
06...	330	150	22	580	96	0	300	910	.69	3.1
15...	20	800	210	6800	104	0	2000	14000	.11	.49
27...	1070	140	16	290	86	0	360	450	.58	2.6

07303500 ELM FORK OF NORTH FORK RED RIVER NEAR MANGUM, OKLA.

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.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS-SOLVED NITRITE (N) (MG/L)	DIS-SOLVED NITRITE (NO2) (MG/L)	DIS-SOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARDNESS (CA,MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)
OCT.										
05...	--	--	24300	33.0	341	3500	3400	57	32200	7.6
15...	--	--	25200	34.3	293	3500	3400	57	33600	7.2
25...	--	--	20800	28.3	730	2600	2500	57	28800	7.7
NOV.										
05...	--	--	16200	22.0	5210	2300	2200	47	22500	7.1
15...	--	--	23400	31.8	1010	2700	2600	64	31300	7.2
25...	--	--	17400	23.7	987	2300	2200	51	24000	6.9
DEC.										
05...	--	--	20600	28.0	890	2600	2500	54	25800	7.2
15...	--	--	21300	29.0	1090	2700	2600	58	27000	7.3
25...	--	--	17900	24.3	918	2500	2400	47	23200	7.4
JAN.										
05...	--	--	17200	23.4	1120	2500	2400	48	22600	8.2
15...	--	--	18200	24.8	1770	2300	2200	52	23200	8.1
25...	--	--	18700	25.4	1210	2400	2300	52	24000	8.2
FEB.										
05...	--	--	18900	25.7	765	2600	2500	50	24200	8.1
15...	--	--	20700	28.2	838	3000	2900	50	25500	8.1
24...	--	--	19200	26.1	829	2500	2400	52	24600	8.1
MAR.										
05...	--	--	20200	27.5	927	2500	2400	56	27100	7.6
15...	--	--	7720	10.5	1250	1800	1700	21	10900	7.3
APR.										
05...	--	--	6790	9.23	2040	1800	1700	16	9140	6.2
25...	--	--	2360	3.21	4340	1100	1000	3.7	2990	7.8
MAY										
05...	.01	.0	8940	12.2	1180	2100	2000	22	13107	8.1
15...	.00	.0	10800	14.7	1930	2200	2200	27	16963	7.9
25...	.00	.0	5760	7.86	1730	1500	1500	13	8632	8.3
JUNE										
05...	.00	.0	4440	6.04	1460	1400	1300	10	6375	8.2
15...	.01	.0	9900	13.5	267	2200	2100	24	15787	7.9
25...	.00	.0	15900	21.6	1120	2700	2600	34	23192	8.0
JULY										
05...	.04	.1	18700	25.4	808	3000	2900	43	26300	7.7
15...	.00	.0	21400	29.1	456	3200	3100	48	29600	7.9
25...	.00	.0	15400	20.9	1080	2600	2500	42	23000	7.6
AUG.										
05...	.05	.1	20300	27.6	932	3000	2900	50	27100	7.8
15...	.10	.3	16500	22.4	1030	2500	2400	44	23900	7.8
SEP.										
06...	.00	.0	2010	2.73	1790	470	390	12	3327	7.7
15...	.08	.2	21800	29.6	1180	2900	2800	55	32000	7.8
27...	.02	.0	1270	1.73	3670	420	350	6.2	2170	7.7

07303500 ELM FORK OF NORTH FORK RED RIVER NEAR MANGUM, OKLA.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), MEAN VALUES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(CONTINUOUS HOURLY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29400	9700	26460	26850	23200	24510	3840	9860	8590	24200	12400	29200
2	31800	12960	26430	26180	23150	25460	6360	10400	2350	23600	20400	30300
3	30600	18830	24030	23570	24560	25340	5720	11000	1990	24400	24000	30900
4	28600	20620	27210	23020	25700	31670	7010	11700	3780	24300	25500	16100
5	30880	22370	25310	23610	25430	26190	9420	12000	5870	24200	26700	6250
6	30290	23760	31300	25410	25400	23500	10010	12000	7650	24800	28800	3340
7	27630	28240	31350	26300	25270	25870	10180	12400	9180	24900	30800	9920
8	28570	30380	28590	26470	27250	28460	10280	12800	10000	25600	29300	10500
9	33640	32100	29870	25560	26120	11040	10460	13600	11100	26200	---	15500
10	36450	32630	30470	26630	26090	9820	9140	13900	11900	26200	7970	20300
11	35390	33130	32540	28470	25840	4130	10040	14200	12700	27100	7590	23200
12	33230	33000	32200	32390	27660	4300	10900	14400	13400	26700	13200	24900
13	33510	32900	30450	30940	25810	5490	2410	14600	13900	26600	17800	26100
14	35700	32220	30270	26090	23990	8630	3470	14600	14000	26900	19800	27800
15	32830	30900	26610	25440	25280	10200	1040	14700	13200	27500	21900	28500
16	31460	31930	30070	25020	23560	12830	4030	15200	14000	27700	22800	20400
17	33360	31290	27270	21930	26980	14310	4160	15200	11600	28400	24900	8660
18	34900	27930	27550	19470	23950	16090	6660	15600	15600	28500	26200	5970
19	36500	26440	29260	19710	24880	17210	7980	16200	17200	28900	26600	10300
20	13910	25530	28630	21500	27100	18220	4250	16800	16700	28800	27800	14400
21	27940	24600	24900	23320	28550	18760	4700	16800	18100	29400	28400	17600
22	10050	25680	23150	20830	25600	19680	7850	17000	18500	29400	28900	19800
23	13530	26770	21200	21020	22780	19260	9350	2800	19300	37400	29600	21700
24	24770	25380	23420	22170	24100	18770	2870	3270	20100	22700	29700	22400
25	27970	23910	23330	25260	25950	15330	2950	7690	20400	20900	30200	23500
26	31020	26070	25880	26330	24360	12130	3300	9040	20700	25700	30200	2910
27	33150	26400	26570	23790	24480	12350	6890	11800	21600	26500	30200	2120
28	33950	26170	26860	25320	25330	10650	7680	13200	20800	24000	30100	3580
29	34770	25110	27200	25940	---	6800	8570	14500	22600	24000	30000	5920
30	31300	23280	26340	15200	---	3470	9510	15400	22300	24000	30200	8740
31	11380	---	27050	22550	---	2770	---	14000	---	24300	30100	---
MONTH	29310	26340	27480	24400	25300	15520	6700	12800	13970	26250	24740	16360

TEMPERATURE (°C) OF WATER, MEAN VALUES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(CONTINUOUS HOURLY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19.0	6.5	5.5	2.0	5.0	12.0	12.0	21.5	---	31.5	---	---
2	19.5	8.5	6.0	2.0	4.5	11.5	11.0	15.0	---	31.5	26.5	---
3	21.5	10.0	4.0	1.5	5.5	12.0	9.5	17.5	---	31.5	27.0	---
4	23.0	11.5	2.0	1.5	8.0	11.5	10.0	18.5	---	31.0	25.0	---
5	22.5	11.5	1.0	-1.0	8.5	11.0	12.0	17.5	---	31.0	27.5	---
6	20.0	14.0	-1.5	-1.5	8.0	14.0	13.5	21.5	---	31.5	29.0	---
7	20.0	12.5	-1.5	-2.0	5.0	12.5	11.0	20.5	29.0	32.0	29.5	---
8	21.5	11.5	-1.0	-1.5	-0.5	13.0	---	21.5	25.5	31.0	20.5	---
9	22.5	10.5	-1.5	-2.0	1.0	11.5	---	25.0	26.0	30.5	---	---
10	24.0	10.0	-1.5	-2.0	2.0	8.5	9.0	25.5	26.5	27.0	---	---
11	24.0	10.5	-1.5	-2.0	4.5	8.0	8.5	22.0	25.0	27.5	---	---
12	24.0	10.0	-1.0	-2.0	8.0	12.0	---	18.0	23.5	26.5	---	---
13	23.5	8.0	-1.0	-2.0	5.5	13.5	---	15.5	23.5	27.0	---	---
14	22.0	5.0	-1.5	-1.5	4.5	11.5	---	17.0	28.5	25.0	---	---
15	18.5	4.0	-1.0	-1.0	4.5	11.0	---	18.5	29.0	26.0	---	---
16	22.0	5.5	-1.0	-0.5	3.5	10.5	---	22.5	25.5	32.0	---	---
17	23.0	5.5	-0.5	5.0	2.5	11.0	---	22.0	30.0	29.5	---	---
18	11.5	4.0	2.0	1.5	6.0	11.5	17.5	24.5	27.5	27.5	---	---
19	7.0	4.0	4.5	---	6.0	12.0	17.0	27.0	20.0	28.5	---	---
20	8.0	3.5	6.0	---	6.0	11.0	17.0	25.0	29.0	30.5	---	---
21	9.5	3.0	5.5	---	6.5	11.5	22.0	27.5	25.0	29.0	---	---
22	12.0	4.0	4.5	---	3.5	13.5	20.5	23.0	27.5	25.5	---	---
23	10.5	4.0	5.5	---	6.5	13.0	21.5	19.0	28.5	27.0	---	---
24	10.5	4.0	5.0	---	8.0	12.0	17.0	23.0	28.5	29.0	---	---
25	11.5	4.5	4.5	4.0	8.0	8.0	17.0	23.5	29.0	25.5	---	---
26	11.0	4.5	4.0	6.0	9.0	11.0	14.5	26.0	30.0	24.0	---	---
27	10.5	4.5	4.5	5.0	9.5	9.5	12.0	19.0	30.0	26.5	---	---
28	10.5	3.5	5.0	0.0	8.0	11.5	16.0	21.0	25.5	25.0	---	---
29	12.5	3.0	8.0	0.0	---	10.0	20.5	20.5	29.0	24.5	---	---
30	12.5	4.5	5.0	3.0	---	9.0	20.0	22.0	31.0	28.0	---	---
31	6.0	---	3.0	5.5	---	10.5	---	20.0	---	---	---	---
MONTH	16.5	7.0	2.5	1.0	5.5	11.5	---	21.5	27.0	28.5	---	---

07303500 ELM FORK OF NORTH FORK RED RIVER NEAR MANGUM, OKLA.--Continued

DISSOLVED SULFATE (SO_4), IN MILLIGRAMS PER LITRE, MEAN VALUES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1900	1400	1800	1800	1700	1700	1000	1400	1400	1700	1500	1900
2	2100	1500	1800	1800	1700	1700	1200	1400	880	1700	1700	2000
3	2000	1800	1700	1700	1700	1700	1100	1400	850	1700	1700	2000
4	1900	1700	1800	1700	1700	2000	1300	1400	990	1700	1700	1700
5	2000	1700	1700	1700	1700	1800	1400	1500	1200	1700	1800	1200
6	2000	1700	2000	1700	1700	1700	1400	1500	1300	1700	1900	960
7	1800	1900	2000	1800	1700	1700	1400	1500	1400	1700	2000	1400
8	1900	2000	1900	1800	1800	1900	1400	1500	1400	1700	1900	1400
9	2200	2100	2000	1700	1800	1400	1400	1600	1400	1800	---	1700
10	2300	2100	2000	1800	1800	1400	1400	1600	1500	1800	1300	1700
11	2200	2100	2100	1900	1700	1000	1400	1600	1500	1800	1300	1700
12	2100	2100	2100	2100	1800	1000	1400	1600	1600	1800	1500	1700
13	2100	2100	2000	2000	1700	1100	880	1600	1600	1800	1800	1800
14	2300	2100	2000	1800	1700	1400	970	1600	1600	1800	1800	1800
15	2100	2000	1800	1700	1700	1400	770	1600	1500	1800	1700	1900
16	2000	2100	2000	1700	1700	1500	1000	1700	1600	1800	1700	1700
17	2100	2000	1800	1700	1800	1600	1000	1700	1400	1900	1700	1400
18	2200	1800	1800	1800	1700	1700	1200	1700	1700	1900	1800	1200
19	2300	1800	1900	1800	1700	1800	1300	1700	1800	1900	1800	1400
20	1600	1700	1900	1700	1800	1800	1000	1800	1800	1900	1800	1600
21	1800	1700	1700	1700	1900	1800	1100	1800	1800	1900	1900	1800
22	1400	1700	1700	1700	1700	1800	1300	1800	1800	1900	1900	1800
23	1600	1800	1700	1700	1700	1800	1400	920	1800	2300	1900	1700
24	1700	1700	1700	1700	1700	1800	920	950	1700	1700	1900	1700
25	1900	1700	1700	1700	1700	1500	930	1300	1700	1700	2000	1700
26	2000	1800	1700	1800	1700	1500	960	1400	1700	1700	2000	920
27	2100	1800	1800	1700	1700	1500	1200	1500	1700	1800	2000	860
28	2200	1800	1800	1700	1700	1400	1300	1500	1700	1700	2000	980
29	2200	1700	1800	1700	---	1200	1400	1600	1700	1700	2000	1200
30	2000	1700	1800	1700	---	970	1400	1700	1700	1700	2000	1400
31	1400	---	1800	1700	---	910	---	1600	---	1700	2000	---
MONTH	2000	1800	1800	1800	1700	1500	1200	1500	1500	1800	1800	1500

DISSOLVED SULFATE (TONS/DAY), MEAN VALUES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	37	242	77	97	96	81	765	416	670	90	145	57
2	34	173	76	95	91	84	519	397	11670	86	103	52
3	32	134	72	114	81	83	667	378	3720	76	86	54
4	28	99	73	119	79	99	595	371	931	72	79	93
5	30	78	69	109	74	85	450	356	617	72	82	804
6	27	68	25	111	69	86	386	340	454	68	97	481
7	23	65	27	100	69	80	359	330	378	64	86	718
8	22	69	30	86	69	122	374	319	325	61	83	355
9	24	67	36	70	66	284	423	304	266	62	---	241
10	24	68	41	58	66	1010	431	304	256	57	348	146
11	24	63	50	71	75	2040	363	294	265	58	249	114
12	22	63	56	96	79	486	340	279	272	58	187	100
13	21	74	59	119	75	278	1560	273	252	58	164	95
14	21	78	75	128	68	299	1350	261	266	58	133	94
15	21	76	72	153	69	242	2400	291	241	59	116	101
16	22	78	95	215	68	201	2980	284	266	59	105	245
17	22	71	93	176	73	183	755	270	221	61	91	452
18	22	80	118	176	72	181	648	260	224	56	85	199
19	22	105	130	137	73	179	582	257	208	51	86	140
20	23	102	127	121	78	173	1240	253	186	51	85	127
21	120	99	109	123	81	163	568	210	173	50	81	116
22	397	93	100	136	75	152	513	216	158	52	77	95
23	194	92	98	121	82	157	461	3630	148	216	73	83
24	123	88	91	101	86	182	7700	1030	132	160	68	83
25	105	90	87	101	85	297	3030	455	127	140	58	82
26	98	95	89	110	81	187	915	329	112	140	58	177
27	103	95	86	104	81	156	802	262	107	110	58	2260
28	94	90	87	97	79	333	621	237	103	90	53	1030
29	95	83	93	89	---	414	532	219	106	108	53	315
30	131	77	95	77	---	4320	484	213	101	108	53	195
31	465	---	102	87	---	4160	---	318	---	221	49	---
MONTH	78	92	79	113	76	542	1090	432	765	86	103	304

07303500 ELM FORK OF NORTH FORK RED RIVER NEAR MANGUM, OKLA.--Continued

DISSOLVED CHLORIDE (CL), IN MILLIGRAMS PER LITRE, MEAN VALUES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11500	2300	10400	10500	9100	9600	760	2400	2000	9500	3200	11400
2	12400	3400	10400	10300	9100	10000	1400	2600	360	9300	7200	11900
3	12000	5800	9400	9300	9600	9900	1300	2800	260	9600	9400	12100
4	11200	7300	10700	9100	10100	12400	1600	3000	750	9500	10000	4500
5	12100	8800	9900	9300	10000	10300	2300	3100	1300	9500	10500	1400
6	11800	9300	12200	10000	10000	9200	2400	3100	1800	9700	11300	630
7	10800	11100	12300	10300	9900	10100	2500	3200	2200	9800	12000	2400
8	11200	11900	11200	10400	10700	11100	2500	3400	2400	10000	11500	2600
9	13100	12500	11700	10000	10200	2800	2600	3600	2800	10300	---	4300
10	14200	12700	11900	10400	10200	2400	2200	3700	3100	10300	1900	7100
11	13800	12900	12700	11100	10100	840	2400	3800	3300	10600	1800	9100
12	13000	12900	12600	12700	10800	890	2700	3900	3600	10500	3500	9800
13	13100	12900	11900	12100	10100	1200	380	4000	3700	10400	5000	10200
14	13900	12600	11800	10200	9400	2100	660	4000	3800	10500	6600	10900
15	12800	12100	10400	10000	9900	2500	---	4000	3500	10800	8400	11200
16	12300	12500	11800	9800	9300	3400	810	4200	3800	10900	9000	7200
17	13000	12200	10700	8500	10600	3900	850	4200	3000	11100	9800	2100
18	13600	10900	10800	6400	9400	4500	1500	4300	4300	11200	10300	1300
19	14200	10400	11500	6600	9800	4800	1900	4500	4800	11300	10400	2500
20	3700	10000	11200	8100	10600	5300	870	4700	4700	11300	10900	3900
21	10900	9700	9800	9200	11200	5800	1000	4700	5200	11500	11100	5000
22	2400	10100	9100	7500	10000	6500	1800	4800	5500	11500	11300	6600
23	3600	10500	7800	7700	9000	6200	2300	480	6200	14600	11600	8300
24	9700	10000	9200	8700	9500	5800	500	610	6900	8900	11600	8800
25	11000	9400	9200	9900	10200	3500	520	1800	7200	7600	11800	9200
26	12100	10200	10200	10300	9600	3100	620	2200	7400	10100	11800	510
27	12900	10400	10400	9300	9600	3200	1600	3000	8200	10400	11800	300
28	13300	10300	10500	9900	9900	2600	1800	3500	7500	9400	11800	690
29	13600	9900	10700	10200	---	1600	2000	3900	8900	9400	11700	1300
30	12200	9200	10300	4200	---	660	2300	4200	8800	9400	11800	2100
31	2900	---	10600	8900	---	470	---	3800	---	9500	11800	---
MONTH	11200	10100	10700	9400	9900	5100	1600	3400	4200	10300	9400	5600

DISSOLVED CHLORIDE (TONS/DAY), MEAN VALUES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	221	405	448	568	517	468	584	709	994	513	314	339
2	208	387	448	554	491	486	624	725	4790	476	425	314
3	194	439	408	625	469	483	736	745	1150	440	484	326
4	166	416	432	635	463	602	768	768	699	412	459	241
5	179	404	402	601	431	499	729	752	697	411	480	954
6	160	378	149	646	404	474	669	718	624	394	578	315
7	137	388	165	585	402	466	637	715	595	369	520	1230
8	130	417	178	504	404	722	673	708	563	353	495	658
9	149	406	215	406	387	561	780	705	528	361	---	610
10	146	413	248	338	387	1720	675	715	537	333	492	591
11	145	384	305	421	438	1680	632	703	584	344	340	616
12	133	383	340	581	468	417	662	673	625	339	425	581
13	127	451	354	719	437	296	663	663	594	338	462	553
14	132	476	448	746	382	444	921	685	630	342	502	559
15	128	457	422	869	402	431	---	712	547	349	569	603
16	133	472	572	1250	375	446	2390	708	630	352	557	1000
17	134	429	548	868	428	438	626	675	456	360	528	674
18	132	473	699	635	406	470	806	661	569	331	499	227
19	135	616	773	514	422	483	822	668	561	305	507	252
20	54	595	757	568	459	514	1050	672	491	304	500	305
21	709	574	633	668	483	528	529	558	504	298	480	322
22	692	544	541	589	434	565	717	579	492	311	458	358
23	448	538	444	539	435	550	741	1910	520	1340	438	402
24	709	511	497	515	486	591	4190	661	521	844	408	428
25	621	507	470	589	495	678	1710	627	521	614	351	449
26	589	552	521	641	465	398	591	509	480	817	351	98
27	629	559	506	580	467	338	1020	548	508	645	351	785
28	573	526	512	563	456	628	855	538	445	509	318	727
29	586	479	547	522	---	523	787	531	552	611	317	357
30	793	420	558	191	---	2960	792	537	521	611	319	293
31	943	---	601	455	---	2160	---	752	---	1260	292	---
MONTH	330	467	456	597	439	710	944	704	731	493	441	506

07303500 ELM FORK OF NORTH FORK RED RIVER NEAR MANGUM, OKLA.--Continued

DISSOLVED SOLIDS, IN MILLIGRAMS PER LITRE, MEAN VALUES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21950	6780	19650	19960	16720	17960	2460	6900	5960	17670	8530	21790
2	23830	8810	19630	19430	16670	18860	4320	7300	1360	17100	14070	22650
3	22890	12580	17510	17070	18010	18750	3850	7740	1100	17860	17480	23120
4	21320	14280	20240	16550	19060	23730	4800	8180	2420	17760	18900	10400
5	23110	15940	18720	17110	18830	19440	6580	8330	3960	17670	19840	4240
6	22650	17250	23440	18810	18810	17010	7010	8330	5270	16240	21480	2090
7	20570	21040	23480	19530	18680	19190	7140	8530	6400	18330	23050	6950
8	21300	22720	21320	19660	20270	21220	7210	8730	7000	18980	21870	7370
9	25270	24060	22320	18950	19380	7770	7340	9130	7820	19450	---	10090
10	27460	24480	22790	19780	19360	6870	6570	9290	8280	19450	5510	13980
11	26630	24870	24410	21220	19170	2680	7030	9440	8680	20150	5230	16720
12	24950	24770	24140	24290	20590	2800	7670	9540	9030	19840	8930	18330
13	25160	24690	22770	23150	19140	3660	1410	9640	9290	19760	11610	19370
14	26880	24160	22630	19360	17470	5990	2190	9640	9340	19990	13500	20700
15	24630	23120	19770	18840	18690	7150	398	9690	8930	20460	15490	21250
16	23560	23930	22470	18450	17060	8750	2600	9940	9340	20620	16340	14070
17	25050	23430	20280	15520	20060	9490	2700	9940	8130	21170	18330	6020
18	26250	20800	20500	13190	17430	10390	4540	10140	10140	21250	19450	4030
19	27500	19640	21840	13420	18310	11050	5520	10450	11040	21560	19760	7230
20	9290	18920	21350	15110	20150	12010	2760	10750	10700	21480	20700	9540
21	20810	18050	18330	16840	21290	12520	3100	10750	11690	21950	21170	11420
22	7040	19040	16670	14480	18980	13390	5420	10850	12270	21950	21560	13500
23	9100	19890	14830	14660	16320	12990	6530	1700	13030	22210	22110	15300
24	18210	18790	16930	15750	17570	12530	1750	2040	13790	16250	22180	15960
25	20830	17390	16840	18670	19250	9000	1810	5300	14070	14540	22580	17010
26	23220	19350	19200	19550	17820	8390	2060	6300	14350	19060	22580	1760
27	24880	19600	19740	17280	17930	8500	4710	8230	15210	19660	22580	1190
28	25510	19420	19960	18730	18740	7480	5290	8930	14450	17480	22500	2270
29	26150	18530	20230	19240	---	4650	5950	9590	16150	17480	22420	4000
30	23440	16800	19560	9940	---	2190	6640	10040	15870	17460	22580	6060
31	8020	---	20110	16110	---	1670	---	9340	---	17760	22500	---
MONTH	21850	19440	20380	17760	18640	10910	4570	8540	9510	19380	18160	11610

DISSOLVED SOLIDS (TONS/DAY), MEAN VALUES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	421	1170	849	1080	948	873	1890	2050	2900	954	829	647
2	399	999	848	1050	900	917	1870	2070	18120	877	836	599
3	371	951	756	1150	875	911	2230	2090	4810	820	897	624
4	317	810	820	1160	875	1150	2280	2100	2270	767	868	561
5	343	731	758	1110	814	945	2110	2020	2110	763	911	2860
6	306	699	285	1220	762	872	1930	1930	1840	739	1100	1050
7	261	739	317	1110	757	881	1830	1890	1730	693	996	3560
8	247	797	340	955	766	1570	1930	1840	1630	666	945	1870
9	287	780	410	767	733	1570	2220	1780	1480	683	---	1440
10	282	793	474	641	732	4970	1960	1780	1450	630	1440	1170
11	280	739	586	802	828	5350	1820	1730	1520	653	1000	1130
12	256	736	652	1110	889	1320	1860	1650	1590	643	1090	1090
13	245	867	676	1380	827	903	2480	1610	1480	640	1070	1050
14	254	913	855	1410	708	1290	3050	1670	1560	648	1020	1060
15	246	874	801	1660	757	1240	1240	1730	1400	663	1050	1150
16	254	905	1090	2340	691	1160	7660	1690	1560	668	1010	1980
17	257	822	1040	1590	812	1080	1990	1610	1250	686	990	1970
18	255	899	1330	1320	753	1090	2400	1560	1340	631	945	686
19	260	1170	1470	1050	791	1100	2410	1550	1280	582	960	722
20	135	1120	1440	1060	871	1170	3330	1540	1130	580	950	747
21	1350	1070	1190	1230	920	1150	1650	1280	1160	569	914	740
22	2000	1030	990	1130	820	1160	2110	1320	1090	593	873	729
23	1130	1020	841	1030	793	1160	2150	6730	1090	2590	836	744
24	1330	964	914	935	902	1290	14630	2220	1040	1540	779	776
25	1180	939	864	1110	936	1730	5900	1850	1030	1180	671	826
26	1130	1040	985	1210	866	1070	1980	1480	930	1540	671	341
27	1210	1060	959	1070	872	896	3040	1490	944	1220	671	3140
28	1100	996	970	1060	860	1780	2520	1370	858	944	607	2390
29	1130	901	1040	987	---	1560	2300	1290	1000	1130	605	1080
30	1520	771	1060	456	---	9770	2300	1270	943	1130	610	853
31	2620	---	1140	826	---	7630	---	1870	---	2350	559	---
MONTH	689	910	863	1130	823	1910	2900	1870	2080	928	890	1250

07304500 ELK CREEK NEAR HOBART, OKLA.

LOCATION.--Lat 34°54'51", long 99°06'49", in NE1/4NE1/4 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 sq mi (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.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS-CHARGE (CFS)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (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)
OCT.											
01-20	.56	--	--	140	318	0	250	130	.25	1.1	--
21...	19	--	--	140	298	0	310	150	.29	1.3	--
22...	13	--	--	50	176	0	92	46	.99	4.4	--
23...	2.0	--	--	30	132	0	52	28	1.3	5.7	--
24-30	5.7	--	--	75	206	8	120	70	.36	1.6	--
31...	53	--	--	12	108	0	23	10	1.3	5.7	--
NOV.											
01...	50	--	--	10	82	0	37	9.0	1.2	5.4	--
02...	25	--	--	24	98	0	120	28	1.2	5.1	--
03...	12	--	--	14	78	0	39	16	.88	3.9	--
04...	5.1	--	--	24	102	0	91	26	1.1	4.9	--
05-07	3.9	--	--	44	166	0	240	49	1.0	4.6	--
08-19	12	--	--	72	278	0	260	77	.95	4.2	--
20-30	18	--	--	52	324	0	120	46	1.1	4.8	--
DEC.											
01-10	8.3	--	--	75	384	0	180	67	1.0	4.6	--
11-20	8.9	--	--	90	424	0	280	87	1.9	8.2	--
21-31	8.5	--	--	88	416	0	250	83	1.4	6.1	--
JAN.											
01-10	8.3	--	--	84	384	0	230	81	1.4	6.1	--
11-17	9.6	--	--	92	364	28	260	89	1.8	7.9	--
18...	16	--	--	54	258	0	150	52	2.0	8.8	--
19-20	14	--	--	85	382	0	230	83	2.5	11	--
21-26	158	--	--	15	88	0	38	17	.75	3.3	--
27-28	31	--	--	36	136	0	73	49	1.2	5.2	--
29...	17	--	--	50	204	0	110	56	1.4	6.2	--
30-31	18	--	--	65	278	0	160	72	1.9	8.6	--
FEB.											
01-10	17	100	56	80	361	21	220	79	2.9	13	.00
11-20	14	110	61	86	433	0	230	83	3.2	14	.00
21-28	15	100	61	90	350	33	240	86	2.1	9.3	.00
MAR.											
01-08	17	110	61	87	430	0	230	87	1.8	8.0	.00
09-11	686	37	11	12	123	0	57	11	.76	3.4	.00
12-14	136	56	22	33	184	0	110	29	1.5	6.6	.00
15-18	72	72	37	50	268	0	160	46	1.9	8.4	.00
19-23	58	82	46	58	337	0	170	52	2.3	10	.00
24-28	95	69	42	49	341	0	110	42	2.5	11	.00
29...	208	53	20	25	191	0	78	24	2.1	9.3	.00
30-31	3060	23	6.7	11	75	0	29	14	.95	4.2	.01
APR.											
01-02	1250	--	--	19	160	0	70	19	.84	3.7	--
03-05	457	--	--	28	168	0	100	28	1.1	4.8	--
06-13	194	--	--	45	268	0	150	42	1.4	6.4	--
14-15	796	--	--	30	166	0	87	32	1.8	8.0	--
16...	3430	--	--	9.4	110	0	31	10	.86	3.8	--
17-18	398	--	--	31	192	0	95	30	.97	4.3	--
19-23	164	--	--	56	272	16	180	53	1.3	5.8	--
24...	439	--	--	27	190	0	76	30	.95	4.2	--
25-26	184	--	--	51	220	0	160	63	1.1	4.9	--
27-30	96	--	--	69	362	0	220	67	1.3	5.8	--
MAY											
01-10	66	110	66	80	423	0	250	78	2.4	11	.01
11-23	64	110	70	86	391	0	250	84	2.3	10	.00
24-25	200	57	21	25	171	0	120	21	.21	.90	.00
26...	70	66	32	38	208	0	170	29	1.3	5.8	.00
27-31	84	97	46	60	299	0	250	53	1.5	6.8	.06
JUNE											
01-03	1060	40	11	14	146	0	55	16	--	--	--
04-11	158	60	28	34	225	0	110	28	1.2	5.3	.01
12-16	134	76	41	52	313	0	140	47	2.0	8.9	.00
17-18	370	47	17	17	160	0	81	13	.57	2.5	.00
19-22	90	59	29	33	233	0	110	26	1.3	5.7	.01
23-25	46	78	43	49	312	0	150	43	1.7	7.5	.00
26-30	58	94	60	73	382	0	240	67	--	--	--
JULY											
01-03	90	45	20	24	191	0	73	16	--	--	--
04-06	30	74	39	51	281	11	150	42	--	--	--
07-14	22	94	55	77	355	0	230	75	--	--	--
15-17	22	54	23	34	178	0	110	36	--	--	--
18-25	21	100	63	88	364	0	310	89	--	--	--
26-31	20	75	44	68	292	0	180	59	--	--	--
AUG.											
01-04	20	85	45	73	283	0	210	70	1.1	4.9	.00
05-16	9.6	83	55	89	305	0	240	82	1.1	4.9	.00
17-24	3.8	100	68	120	344	0	330	110	.72	3.2	.01
25-31	.80	120	79	150	359	0	420	140	.34	1.5	.01

07304500 ELK CREEK NEAR HOBART, OKLA.--Continued

EXTREMES, Current year.--Dissolved solids: Maximum,1,200 mg/l Sept. 1-3; minimum, 155 mg/l Nov. 1.
Hardness: Maximum, 630 mg/l Aug. 25-31; minimum,85 mg/l Mar. 30-31.
Specific conductance: Maximum daily, 1,680 micromhos Aug. 31, Sept. 1; minimum daily, 187 micromhos Sept. 7.
Water temperatures: Maximum 26.0°C on several days during July; minimum, freezing point on several days during Dec.-Feb.

Period of record.--Dissolved solids (1949-51, 1958-63, 1969-73): Maximum, 2,620 mg/l Nov. 26-30, 1958; minimum, 94 mg/l Sept. 5, 1971.
Hardness (1949-51, 1958-63, 1969-73): Maximum, 1,640 mg/l Nov. 26-30, 1958; minimum, 62 mg/l Sept. 5, 1971.
Specific conductance (1949-51, 1958-63, 1969-73); Maximum daily, 3,100 micromhos Nov. 27, 1958; minimum, 153 micromhos Sept. 5, 1971.
Water temperatures (1949-51, 1958-61, 1969-73): Maximum, 35.0°C July 8, 1951; minimum, freezing point on many days during winter period.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS-SOLVED NITRITE (NO2) (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)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)
OCT.										
01-20	--	--	854	1.16	1.29	410	150	3.0	1310	8.3
21...	--	--	967	1.32	49.6	460	220	2.8	1460	8.2
22...	--	--	375	.51	13.2	200	56	1.5	612	7.2
23...	--	--	269	.37	1.45	130	22	1.1	430	7.2
24-30	--	--	510	.69	7.85	240	58	2.1	810	8.5
31...	--	--	159	.22	22.8	100	11	.5	265	7.2
NOV.										
01...	--	--	155	.21	20.9	96	29	.4	248	6.6
02...	--	--	322	.44	21.7	190	110	.8	500	7.1
03...	--	--	162	.22	5.25	96	32	.6	269	6.1
04...	--	--	268	.36	3.69	160	0	2.6	444	6.8
05-07	--	--	584	.79	6.15	360	220	1.0	849	7.2
08-19	--	--	746	1.01	24.2	450	220	1.5	1080	7.9
20-30	--	--	528	.72	25.7	340	74	1.2	826	8.0
DEC.										
01-10	--	--	686	.93	15.4	440	130	1.6	1050	7.6
11-20	--	--	872	1.19	21.0	550	200	1.7	1280	7.5
21-31	--	--	832	1.13	19.1	520	180	1.7	1240	7.7
JAN.										
01-10	--	--	745	1.01	16.7	480	170	1.7	1150	8.3
11-17	--	--	850	1.16	22.0	540	200	1.7	1260	8.7
18...	--	--	524	.71	22.6	330	120	1.3	834	6.9
19-20	--	--	766	1.04	29.0	490	180	1.7	1210	7.7
21-26	--	--	163	.22	69.5	100	28	.7	288	6.8
27-28	--	--	299	.41	25.0	180	66	1.2	527	6.8
29...	--	--	425	.58	19.5	260	93	1.3	714	7.2
30-31	--	--	574	.78	27.9	360	130	1.5	935	7.3
FEB.										
01-10	.0	--	814	1.11	37.4	480	150	1.6	1160	8.6
11-20	.0	--	841	1.14	31.8	530	170	1.6	1240	8.4
21-28	.0	--	852	1.16	34.5	500	160	1.8	1210	8.7
MAR.										
01-08	.0	--	820	1.12	37.6	530	170	1.7	1250	8.2
09-11	.0	--	224	.30	415	140	37	.4	349	7.5
12-14	.0	--	388	.53	142	230	80	.9	604	8.0
15-18	.0	--	561	.76	109	330	110	1.2	836	8.1
19-23	.0	--	655	.89	103	390	120	1.3	961	8.0
24-28	.0	--	531	.72	136	350	66	1.1	840	8.3
29...	.0	--	343	.47	193	210	58	.7	542	7.5
30-31	.0	--	171	.23	1410	85	24	.5	237	7.7
APR.										
01-02	--	--	278	.38	938	190	59	.6	439	8.1
03-05	--	--	358	.49	442	230	92	.8	555	7.7
06-13	--	--	522	.71	273	340	120	1.1	798	7.9
14-15	--	--	343	.47	737	210	74	.9	540	7.8
16...	--	--	178	.24	1650	110	20	.4	277	6.8
17-18	--	--	362	.49	389	230	72	.9	567	7.8
19-23	--	--	616	.84	273	390	140	1.2	904	8.7
24...	--	--	331	.45	392	220	64	.8	538	6.9
25-26	--	--	558	.76	277	330	150	1.2	836	7.0
27-30	--	--	732	1.00	190	480	180	1.4	1100	7.6
MAY										
01-10	.0	.14	883	1.20	157	550	200	1.5	1250	8.1
11-23	.0	.04	960	1.31	166	560	240	1.6	1260	8.2
24-25	.0	--	353	.48	191	230	89	.7	559	8.0
26...	.0	--	482	.66	91.1	300	130	1.0	733	7.9
27-31	.2	.44	723	.98	164	430	190	1.3	1020	8.2
JUNE										
01-03	--	--	246	.33	704	150	25	.5	364	8.3
04-11	.0	.24	426	.58	182	270	81	.9	651	7.9
12-16	.0	.35	588	.80	213	360	100	1.2	858	8.2
17-18	.0	.21	294	.40	294	190	56	.5	452	8.0
19-22	.0	.20	411	.56	99.9	270	76	.9	643	8.3
23-25	.0	.20	600	.82	74.5	370	120	1.1	881	8.1
26-30	--	.25	794	1.08	124	480	170	1.4	1130	8.3
JULY										
01-03	--	.25	298	.41	72.4	190	38	.7	480	8.1
04-06	--	.33	572	.78	46.3	350	97	1.2	834	8.4
07-14	--	.31	784	1.07	46.6	460	170	1.6	1140	8.1
15-17	--	.25	380	.52	22.6	230	84	1.0	593	8.2
18-25	--	.32	894	1.22	50.7	510	210	1.7	1280	8.2
26-31	--	.34	630	.86	34.0	370	130	1.5	918	8.3
AUG.										
01-04	.0	.41	664	.90	35.9	400	170	1.6	1030	7.9
05-16	.0	.25	746	1.01	19.3	430	180	1.9	1150	8.1
17-24	.0	.21	962	1.31	9.87	530	250	2.3	1440	8.0
25-31	.0	.15	1140	1.55	2.46	630	330	2.6	1700	8.0

07304500 ELK CREEK NEAR HOBART, OKLA.--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS-CHARGE (CFS)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (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)
SEP.											
01-03	1.6	110	82	150	353	0	430	150	.42	1.9	.03
04-07	2570	30	7.3	9.3	121	0	22	8.4	.42	1.9	.06
08-10	194	38	12	18	144	0	47	17	.87	3.9	.00
11-13	112	56	23	38	205	0	99	34	1.1	4.8	.01
14-16	99	43	15	22	171	0	54	18	1.1	4.8	.01
17-19	38	64	27	45	235	0	120	43	1.2	5.2	.02
20-25	21	91	42	65	307	0	190	60	1.6	7.1	.00
26-28	588	33	9.1	13	118	0	37	12	.56	2.5	.02
29-30	68	56	24	40	209	0	100	38	1.2	5.3	.00

DATE	DIS_SOLVED NITRITE (NO2) (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)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)
SEP.										
01-03	.1	--	1200	1.63	5.18	610	320	2.6	1710	8.0
04-07	.2	--	185	.25	1280	110	6	.4	259	7.6
08-10	.0	--	261	.36	137	140	26	.7	386	7.8
11-13	.0	--	408	.55	123	230	66	1.1	628	8.2
14-16	.0	--	270	.37	72.2	170	29	.7	449	7.9
17-19	.0	--	458	.62	47.0	270	78	1.2	728	7.9
20-25	.0	--	676	.92	38.3	400	150	1.4	1000	8.1
26-28	.0	--	222	.30	352	120	23	.5	313	7.7
29-30	.0	--	428	.58	78.6	240	67	1.1	646	7.9

07304500 ELK CREEK NEAR HOBART, OKLA.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(ONCE-DAILY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1210	248	907	1180	1080	1210	435	1220	390	365	1140	1680
2	1290	500	910	1180	1080	1220	459	1240	320	460	846	1670
3	1310	269	924	1150	1180	1210	516	1260	367	573	848	1670
4	1320	444	997	1120	1200	1260	528	1160	498	721	1180	253
5	1320	718	1020	1130	1150	1230	641	1230	576	827	1220	314
6	1340	870	1050	1130	1170	1240	689	1250	619	937	1320	251
7	1350	980	1270	1180	1200	1220	717	1260	670	1040	1280	187
8	1370	1140	1140	1260	1190	1230	741	1290	699	1140	1180	320
9	1380	1180	1150	1240	1170	348	742	1290	715	1160	1080	344
10	1330	1130	1200	1280	1220	397	854	1320	733	1160	961	452
11	---	1080	1270	1260	1250	297	887	1290	736	1190	925	537
12	---	1070	1280	1330	1220	505	887	1300	791	1160	989	631
13	---	1060	1280	1330	1210	573	935	1170	799	868	1100	704
14	---	1000	1320	1330	1230	693	608	1220	824	1290	1180	344
15	---	1090	1280	1330	1230	831	479	1290	863	538	1170	446
16	---	1080	1310	1280	1220	823	252	1330	935	643	1210	523
17	---	1060	1360	1260	1220	757	519	1340	409	580	1290	635
18	---	1100	1320	842	1220	872	629	1340	482	1260	1350	738
19	---	1200	1270	1190	1180	920	786	1330	570	1270	1380	788
20	---	871	1230	1240	1210	950	913	1350	630	1260	1370	969
21	1460	708	1200	232	1200	1300	966	1370	659	1270	1400	903
22	612	720	1200	248	1220	905	974	1380	736	1260	1430	958
23	430	748	1310	279	1210	960	983	1170	795	1390	1460	1020
24	800	720	1270	301	1200	792	495	622	872	1210	1480	1010
25	915	739	1280	343	1190	803	798	466	930	1230	1530	1060
26	912	773	1280	329	1250	826	865	728	1070	937	1560	282
27	865	814	1280	506	1210	864	1010	916	1090	948	1590	224
28	816	847	1260	559	1180	857	1040	1040	1150	787	1630	382
29	782	916	1230	720	---	542	1150	1100	1160	851	1650	600
30	789	907	1210	870	---	265	1180	1010	1190	935	1670	677
31	265	---	1190	1020	---	202	---	1090	---	1050	1680	---
MONTH	---	866	1200	956	1200	842	756	1170	743	978	1290	686

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(ONCE-DAILY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15.5	6.0	4.0	3.0	3.5	9.0	11.0	18.0	18.0	24.0	24.0	23.5
2	16.0	7.0	4.5	3.0	4.0	10.0	11.0	16.0	18.0	25.0	23.0	24.0
3	16.5	8.0	5.0	2.0	4.0	10.0	9.5	15.0	19.0	25.5	23.0	25.0
4	14.0	9.5	2.0	2.0	5.5	9.5	9.0	15.0	20.5	25.0	23.0	16.0
5	18.5	10.0	2.0	0.5	6.0	9.5	9.0	15.5	20.0	26.0	23.0	16.5
6	17.0	13.0	0.0	1.0	4.5	10.0	10.0	17.0	21.0	26.0	23.0	17.0
7	16.0	12.0	0.5	0.0	6.0	11.0	12.0	16.0	21.0	26.0	24.0	17.0
8	16.5	11.0	0.5	0.0	1.0	11.0	9.0	16.5	21.0	26.0	24.5	19.5
9	18.0	10.5	1.0	0.0	0.0	9.5	7.0	18.0	22.0	25.5	25.0	20.0
10	20.0	9.0	0.5	0.0	1.0	9.5	7.0	19.5	22.0	26.0	25.0	21.0
11	---	9.0	0.0	0.5	1.5	9.0	8.0	20.5	23.0	25.0	25.5	21.0
12	---	10.5	1.0	0.0	4.0	10.0	11.0	20.0	22.5	25.0	25.5	22.0
13	---	8.0	0.5	0.0	6.5	11.5	13.0	18.0	22.5	25.0	26.0	22.0
14	---	6.5	1.0	0.5	4.0	11.0	13.5	17.0	23.0	25.0	26.0	21.0
15	---	6.0	1.0	1.0	4.0	11.0	13.5	15.0	24.0	23.0	26.0	20.0
16	---	5.0	0.5	1.5	4.0	10.0	14.0	16.5	24.5	23.0	25.5	20.0
17	---	5.0	1.5	2.0	4.0	10.0	14.0	17.0	23.0	25.0	25.0	19.0
18	---	6.0	1.5	2.0	4.0	11.0	14.0	17.5	24.0	25.5	25.0	16.0
19	---	4.5	1.0	3.0	5.0	11.5	15.0	19.0	24.0	25.0	25.0	16.0
20	---	4.5	1.5	6.0	5.0	10.0	15.0	19.0	21.0	25.0	25.5	16.5
21	12.0	4.0	2.0	2.5	5.0	10.0	18.0	22.0	21.0	25.0	25.0	20.0
22	13.0	4.0	1.5	2.5	5.0	10.5	18.0	22.0	22.0	25.0	25.0	21.0
23	12.0	4.0	4.0	2.0	5.0	13.0	18.0	20.0	23.0	25.0	25.0	22.0
24	10.0	5.0	4.5	2.5	6.0	13.0	14.0	19.5	23.0	26.0	24.0	22.0
25	10.0	4.5	4.0	4.0	7.0	10.5	17.0	20.0	23.0	25.0	24.0	22.5
26	12.0	4.0	4.0	4.0	8.0	9.5	15.5	20.0	24.0	25.0	24.0	22.5
27	11.0	4.0	4.0	5.0	8.0	10.5	12.0	19.5	24.5	25.0	23.0	19.0
28	12.0	4.0	4.5	1.0	8.0	10.0	13.0	17.0	24.5	25.0	23.0	17.0
29	12.0	4.0	6.0	0.0	---	9.0	15.0	17.5	23.0	24.5	23.0	17.0
30	14.0	4.0	6.0	1.0	---	11.0	18.0	18.0	25.0	24.0	23.0	17.0
31	6.5	---	4.5	4.0	---	11.0	---	19.5	---	25.0	23.0	---
MONTH	---	7.0	2.5	2.0	4.5	10.5	13.0	18.0	22.0	25.0	24.5	20.0
YEAR	MAX	26.0	MIN	0.0	MEAN	13.5						

07305000 NORTH FORK RED RIVER NEAR HEADRICK, OKLA.

LOCATION.--Lat 34°38'04", long 99°05'47", in NW1/4NE1/4 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.--4,244 sq mi (10,992 km²), of which 399 sq mi (1,033.4 km²) is probably noncontributing.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	DISSOLVED NITRATE (NO3) (MG/L)
OCT.										
05...	7.6	--	--	2900	136	0	1400	4700	.05	.20
15...	2.0	--	--	2700	140	0	1400	4400	.14	.60
25...	54	--	--	2100	108	0	730	3400	.29	1.3
NOV.										
05...	51	--	--	1300	94	0	570	2100	.18	.80
15...	21	--	--	3100	170	0	1100	5100	--	--
25...	34	--	--	2800	190	0	900	4600	.23	1.0
DEC.										
05...	20	--	--	3000	212	0	1000	5000	--	--
15...	16	--	--	3000	242	0	1100	5000	--	--
25...	24	--	--	4200	172	0	1300	6900	--	--
JAN.										
05...	32	--	--	3200	116	0	1000	5300	--	--
15...	34	--	--	2600	170	0	920	4200	.14	.60
25...	138	--	--	480	94	0	180	820	.99	4.4
FEB.										
05...	57	--	--	2400	222	0	800	4000	.47	2.1
15...	47	--	--	2500	236	0	920	4100	.18	.80
25...	46	--	--	2600	178	0	860	4200	.29	1.3
MAR.										
05...	47	--	--	2800	208	0	1000	4500	.14	.60
15...	284	--	--	380	136	0	560	580	1.1	4.8
25...	123	--	--	1200	258	0	630	2000	.84	3.7
APR.										
05...	465	--	--	340	132	2	430	550	.97	4.3
15...	1410	--	--	320	142	0	420	510	1.2	5.5
25...	2380	--	--	130	114	0	150	200	1.1	4.9
MAY										
05...	292	340	90	1300	689	0	880	1900	.99	4.4
15...	203	290	73	1200	188	0	830	1800	.67	3.0
25...	1500	330	33	330	122	0	890	520	1.5	6.6
JUNE										
05...	1500	160	22	140	115	0	430	190	.62	2.7
25...	138	280	82	1400	225	0	850	2200	.59	2.6
JULY										
05...	110	280	79	1300	226	0	700	2100	.71	3.1
15...	68	340	100	1500	206	0	850	2600	.13	.60
25...	56	360	110	2100	200	0	1000	3300	.33	1.5
AUG.										
05...	48	410	110	2800	177	0	1100	4300	.45	2.0
15...	50	460	79	1700	119	0	1400	2500	.10	.40
25...	14	500	130	3000	148	0	1300	4800	.02	.10
SEP.										
05...	5420	52	11	110	131	0	63	280	.78	3.5
15...	178	88	24	330	148	0	180	490	1.1	4.8
27...	1270	100	28	390	171	0	220	580	.74	3.3

07305000 NORTH FORK RED RIVER NEAR HEADRICK, OKLA.

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.

REMARKS.--Continuous monitor records for water temperature and specific conductance are collected for this station.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS-SOLVED NITRITE (N) (MG/L)	DIS-SOLVED NITRITE (NO2) (MG/L)	DIS-SOLVED SOLIDS (RESIDUE 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)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)
OCT.										
05...	--	--	10100	13.7	207	1900	1800	29	14600	7.6
15...	--	--	9660	13.1	52.2	1900	1800	27	13800	8.0
25...	--	--	6740	9.17	983	1000	910	29	10500	6.7
NOV.										
05...	--	--	4470	6.08	616	800	720	20	7150	6.8
15...	--	--	10300	14.0	584	1700	1600	33	14800	7.2
25...	--	--	9180	12.5	843	1400	1200	33	13600	7.2
DEC.										
05...	--	--	10400	14.1	562	1700	1500	32	14600	7.6
15...	--	--	10500	14.3	454	1800	1600	31	14600	7.5
25...	--	--	13800	18.8	894	2100	2000	40	18700	7.0
JAN.										
05...	--	--	10200	13.9	881	1600	1500	35	15200	8.3
15...	--	--	8440	11.5	775	1500	1400	29	12900	8.3
25...	--	--	1690	2.30	630	330	250	11	3030	7.4
FEB.										
05...	--	--	8250	11.2	1270	1700	1500	25	11900	8.1
15...	--	--	8480	11.5	1080	1700	1500	26	12200	8.2
25...	--	--	8710	11.8	1080	1500	1400	29	12600	8.2
MAR.										
05...	--	--	9140	12.4	1160	1500	1300	31	13500	7.4
15...	--	--	2080	2.83	1600	700	590	6.3	2940	7.0
25...	--	--	4700	6.39	1560	1000	790	17	7130	7.5
APR.										
05...	--	--	1740	2.37	2190	580	470	6.1	2600	8.4
15...	--	--	1690	2.30	6430	550	430	5.9	2470	8.1
25...	--	--	694	.94	4460	260	170	3.5	1140	8.1
MAY										
05...	.01	.0	4610	6.27	3640	1200	650	16	7606	7.8
15...	.01	.0	4290	5.83	2350	1000	870	16	7160	7.4
25...	.00	.0	2220	3.02	8990	960	860	4.6	3170	7.2
JUNE										
05...	.00	.0	1030	1.40	4170	490	400	2.8	1520	8.1
25...	.01	.0	4640	6.31	1730	1000	850	19	7973	8.0
JULY										
05...	.00	.0	4920	6.69	1460	1000	840	18	8600	8.1
15...	.00	.0	5860	7.97	1080	1300	1100	18	7600	7.8
25...	.00	.0	7120	9.68	1080	1400	1200	25	8760	7.8
AUG.										
05...	.00	.0	8990	12.2	1170	1500	1300	32	13800	7.6
15...	.13	.4	6390	8.69	863	1500	1400	19	9370	7.8
25...	.10	.3	10100	13.7	382	1800	1700	31	15400	7.9
SEP.										
05...	.00	.0	536	.73	7840	180	68	3.6	939	7.7
15...	.01	.0	1210	1.65	582	320	200	8.0	2110	7.6
27...	.15	.4	1500	2.04	5140	370	220	8.9	2510	7.7

07305000 NORTH FORK RED RIVER NEAR HEADRICK, OKLA.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), MEAN VALUES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(CONTINUOUS HOURLY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16200	6580	16000	15100	10500	14400	873	5470	7920	6900	12100	11000
2	15300	6580	16200	15900	10500	12600	984	6750	1200	3400	8390	11600
3	15000	4100	15200	13600	12200	13100	1440	7090	997	5440	12000	13100
4	14900	4140	16900	14400	11100	12000	1650	7130	1340	6150	9830	1250
5	14800	7180	16000	15500	13400	13800	2560	7150	1510	8090	3000	862
6	15000	8600	21000	14800	12500	12700	2840	7100	2340	10200	11300	506
7	14700	10000	16500	15100	12200	12600	3390	7300	3330	8100	8600	764
8	14500	11800	18000	15800	13400	12800	3760	7630	4180	8940	9380	493
9	14500	12100	16600	15900	13200	12800	4160	7830	4710	8580	10100	1720
10	14400	13100	19000	15200	11100	1840	4180	7680	5120	9090	9980	2220
11	14100	13800	17200	15400	15100	1180	4920	7960	5540	9780	11200	3530
12	14200	14000	19300	15800	13700	2420	5340	8360	5860	9780	11200	4670
13	14100	13600	16300	14400	11700	2500	4490	8010	6090	7170	9920	5050
14	13800	14200	15200	13800	13100	2440	4770	8560	6350	8950	8520	5420
15	14000	14800	17800	12100	14500	2790	2500	8620	6640	8420	8750	2070
16	13500	15200	15100	12400	13200	4330	750	8710	7020	7710	10500	3300
17	13900	15400	14600	12600	12200	4880	686	8870	7410	5730	10800	4630
18	13400	15100	16600	13600	12300	5170	2140	9740	1890	7130	10900	6500
19	13700	16100	15500	14000	12100	7050	2150	8870	3900	8140	13700	14400
20	12600	14600	18100	15100	13400	7930	2980	9090	4830	9200	12800	7290
21	6110	13200	20500	7950	12100	6790	3900	9000	5100	9230	13600	4550
22	8230	13400	19400	1850	12500	6360	4330	9380	5860	8160	14900	4780
23	11400	14600	19200	1040	13400	7440	3510	2270	6630	9940	15700	6480
24	12700	13900	20500	1960	12400	7690	2580	4870	7090	9480	14100	7140
25	10600	14100	19800	3310	13400	7130	1140	3050	7440	10200	13800	7800
26	8610	14500	16100	4850	12600	7560	2240	2320	7860	8580	14100	7400
27	9620	13600	17900	7140	12800	9090	2640	3500	8280	12900	13300	2550
28	10700	13600	12500	7900	12630	8290	3510	5340	8540	14700	13400	1630
29	12000	14500	14500	6610	---	6420	5030	6090	8830	13200	14200	1450
30	13000	17900	14200	8470	---	1790	5370	6620	8710	8400	12200	3840
31	5880	---	15300	9640	---	737	---	7560	---	10800	13800	---
MONTH	12760	12480	17000	11330	12620	7380	3030	7030	5420	8790	11490	4930

TEMPERATURE (°C) OF WATER, MEAN VALUES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(CONTINUOUS HOURLY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	5.5	7.0	14.0	---	26.0	---	30.0	---	24.0
2	---	---	---	5.0	---	14.0	---	---	---	29.0	28.0	26.5
3	---	---	5.0	5.0	---	14.5	---	---	---	28.0	26.0	27.0
4	---	---	3.0	4.0	---	14.0	---	---	---	27.0	25.0	21.5
5	---	---	3.0	2.0	---	16.0	---	---	---	25.5	25.0	21.0
6	---	---	1.0	1.0	---	15.5	---	---	---	28.5	25.5	20.5
7	---	---	1.0	1.0	---	15.5	---	16.0	---	27.5	26.5	21.0
8	---	---	1.5	1.5	---	14.0	---	17.0	---	27.0	26.5	22.5
9	---	---	1.0	1.0	4.5	---	---	17.0	---	26.0	28.5	25.0
10	---	---	1.5	1.0	6.0	---	---	---	---	28.0	29.0	26.0
11	---	---	1.0	1.0	7.5	12.5	---	---	---	28.5	29.0	27.0
12	---	---	1.5	1.0	11.0	14.5	---	---	---	27.5	28.5	27.5
13	---	---	1.5	1.0	9.0	---	---	---	---	26.5	28.5	26.5
14	---	---	1.0	1.5	8.0	---	---	---	---	27.0	28.5	23.5
15	---	---	1.5	---	---	14.0	---	---	---	28.0	27.0	22.5
16	---	---	1.5	---	---	14.0	---	28.0	---	28.0	28.5	22.0
17	---	---	2.5	---	6.0	14.0	---	21.0	---	30.5	28.5	20.5
18	---	---	5.0	---	8.0	14.5	---	23.0	---	---	28.0	---
19	---	---	7.5	10.5	7.5	15.0	---	23.0	---	---	28.5	---
20	---	---	8.0	10.5	11.5	13.0	---	---	28.0	---	29.0	---
21	---	2.5	7.5	6.5	10.0	---	---	---	25.5	---	29.0	---
22	---	4.0	7.5	5.5	---	---	---	---	---	---	27.5	---
23	---	4.0	8.5	5.5	9.5	---	---	---	---	---	26.0	---
24	---	4.5	7.5	5.5	11.5	---	---	---	---	---	25.5	---
25	---	7.0	7.0	6.5	12.0	---	---	---	---	26.0	25.5	---
26	---	8.0	6.0	8.0	11.5	---	---	---	---	---	25.5	---
27	---	5.5	7.5	7.0	11.5	---	---	---	---	26.0	26.0	---
28	---	4.5	7.5	3.5	14.0	---	17.5	---	---	26.5	26.0	---
29	---	2.5	---	4.0	---	---	20.0	---	30.5	26.5	25.0	---
30	---	6.0	9.0	6.5	---	---	20.5	---	30.5	---	25.0	---
31	---	---	6.5	8.5	---	---	---	---	---	---	24.0	---
MONTH	---	---	4.5	4.5	---	---	---	---	---	---	27.0	---

07305000 NORTH FORK RED RIVER NEAR HEADRICK, OKLA.--Continued

DISSOLVED SULFATE (SO_4), IN MILLIGRAMS PER LITRE, MEAN VALUES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1200	690	1200	1100	830	1100	91	570	830	720	940	860
2	1200	690	1200	1200	830	970	100	700	130	350	870	900
3	1100	430	1100	1000	940	1000	150	740	100	570	930	1000
4	1100	430	1300	1100	870	930	170	740	140	640	780	130
5	1100	750	1200	1200	1000	1100	270	740	160	840	310	90
6	1100	900	1500	1100	960	980	300	740	240	810	880	53
7	1100	790	1200	1100	940	970	350	760	350	840	900	80
8	1100	920	1300	1200	1000	990	390	790	440	930	750	51
9	1100	940	1200	1200	1000	990	430	820	490	890	800	180
10	1100	1000	1400	1100	870	190	440	800	530	730	790	230
11	1100	1100	1300	1200	1100	120	510	830	580	780	880	370
12	1100	1100	1400	1200	1000	250	560	870	610	780	880	490
13	1100	1000	1200	1100	910	260	470	830	630	750	790	530
14	1100	1100	1100	1100	1000	250	500	890	660	930	890	560
15	1100	1100	1300	940	1100	290	260	900	690	880	910	220
16	1000	1100	1100	960	1000	450	78	910	730	800	830	340
17	1100	1200	1100	970	940	510	71	920	770	600	850	480
18	1000	1100	1200	1000	950	540	220	780	200	740	860	680
19	1000	1200	1200	1100	940	730	220	920	410	850	1000	1100
20	970	1100	1300	1100	1000	830	310	730	500	740	990	760
21	640	1000	1500	830	940	710	410	940	530	740	1000	470
22	860	1000	1400	190	960	660	450	750	610	850	1100	500
23	890	1100	1400	110	1000	780	370	240	690	790	1200	680
24	980	1100	1500	200	960	820	270	510	740	760	1100	740
25	830	1100	1500	350	1000	740	120	320	780	810	1100	810
26	900	1100	1200	510	970	790	230	240	820	890	1100	770
27	770	1000	1300	740	990	730	280	360	860	990	1000	270
28	840	1000	960	820	970	860	370	560	890	1100	1000	170
29	930	1100	1100	690	---	670	520	630	920	1000	1100	150
30	1000	1300	1100	880	---	190	560	690	910	880	940	400
31	610	---	1200	770	---	77	---	790	---	850	1100	---
MONTH	1000	990	1300	910	970	660	320	710	560	800	920	470

DISSOLVED SULFATE (TONS/DAY), MEAN VALUES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	36	555	81	74	141	139	1890	623	833	464	230	56
2	31	461	79	81	134	123	656	683	685	284	208	39
3	27	124	68	87	150	125	393	670	2410	255	186	38
4	26	78	68	80	134	116	506	635	2140	220	125	246
5	23	97	55	76	155	131	328	591	628	250	42	1370
6	21	94	58	64	141	129	215	569	526	207	117	464
7	20	75	40	62	140	121	176	546	523	196	109	672
8	18	77	40	61	141	125	159	556	510	191	85	273
9	17	66	34	58	137	167	151	528	465	169	86	318
10	16	65	34	53	115	412	133	475	438	134	77	180
11	14	63	28	53	148	1040	144	470	425	147	111	134
12	10	60	35	55	133	1460	120	470	417	162	258	101
13	8.4	62	33	53	115	568	138	428	406	129	200	74
14	7.4	61	37	63	125	262	520	433	409	161	151	358
15	6.3	64	54	76	137	218	885	412	388	159	118	97
16	7.5	62	55	116	123	276	1730	392	379	323	89	61
17	7.2	63	63	176	112	280	1010	384	1340	139	80	56
18	6.4	65	77	196	113	257	660	306	356	162	69	93
19	4.8	91	73	193	111	299	395	349	362	156	79	269
20	9.4	90	84	200	119	299	379	251	352	126	66	107
21	38	96	98	990	109	240	479	301	323	144	65	51
22	86	100	89	775	115	220	508	268	313	131	61	42
23	132	105	88	250	130	236	275	321	317	119	54	46
24	240	97	90	159	121	277	812	1570	315	104	43	42
25	119	99	91	141	127	247	1350	1160	284	135	40	42
26	97	98	78	228	121	270	1870	326	261	181	38	272
27	70	87	86	401	122	355	764	310	249	174	33	1120
28	68	81	60	264	121	345	662	351	235	175	30	708
29	55	83	71	154	---	424	748	339	246	167	35	416
30	162	97	73	162	---	1030	681	333	228	156	28	445
31	826	---	78	129	---	1790	---	346	---	142	28	---
MONTH	71	110	64	178	128	387	631	497	559	183	95	273

07305000 NORTH FORK RED RIVER NEAR HEADRICK, OKLA.--Continued

DISSOLVED CHLORIDE (CL), IN MILLIGRAMS PER LITRE, MEAN VALUES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5700	1800	5600	5300	3400	5000	150	1500	2400	2000	4100	3600
2	5300	1800	5700	5600	3400	4300	180	1900	240	870	2600	3900
3	5200	1100	5300	4700	4100	4500	310	2000	180	1400	4000	4500
4	5200	1100	6000	5000	3600	4000	370	2000	280	1700	3100	260
5	5100	2100	5600	5400	4600	4700	630	2100	330	2400	750	150
6	5200	2600	7600	5100	4200	4300	710	2000	560	3300	3700	44
7	5100	3200	5800	5300	4100	4300	860	2100	850	2400	2600	120
8	5000	3900	6400	5500	4600	4300	970	2200	1100	2800	3000	41
9	5000	4100	5900	5600	4500	4300	1100	2300	1200	2600	3200	390
10	5000	4500	6800	5300	3600	420	1100	2300	1400	2800	3200	530
11	4900	4700	6100	5400	5300	240	1300	2400	1500	3100	3700	900
12	4900	4800	7000	5500	4700	590	1400	2500	1600	3100	3700	1200
13	4900	4700	5700	5000	3900	610	1200	2400	1600	2100	3200	1300
14	4700	4900	5300	4700	4500	590	1300	2600	1700	2800	2600	1400
15	4800	5100	6400	4100	5000	690	610	2600	1800	2600	2700	490
16	4600	5300	5300	4200	4500	1100	110	2700	2000	2300	3400	840
17	4800	5400	5100	4300	4100	1300	95	2700	2200	1500	3500	1200
18	4600	5300	5900	4700	4100	1400	510	3100	440	2000	3600	1800
19	4700	5700	5400	4800	4100	2000	510	2700	1000	2500	4700	5000
20	4300	5100	6500	5300	4600	2400	750	2800	1300	2900	4300	2100
21	1600	4500	7400	2400	4100	1900	1000	2800	1300	2900	4700	1200
22	2500	4600	7000	430	4200	1700	1100	3000	1600	2500	5200	1300
23	3800	5100	6900	200	4600	2200	900	540	1800	3200	5500	1800
24	4300	4800	7400	460	4200	2400	630	1300	2000	3000	4900	2100
25	3400	4900	7200	840	4600	2000	220	770	2200	3300	4700	2300
26	2600	5000	5700	1300	4300	2200	540	560	2300	2600	4900	2200
27	3100	4700	6400	2100	4300	2800	650	890	2500	4400	4500	620
28	3500	4700	4200	2400	4300	2500	900	1400	2600	5100	4600	360
29	4000	5000	5000	1800	---	1800	1300	1600	2700	4500	4900	310
30	4400	6400	4900	2600	---	410	1400	1800	2700	2600	4100	990
31	1600	---	5300	3100	---	110	---	2200	---	3500	4700	---
MONTH	4300	4200	6000	3800	4300	2300	760	2100	1500	2700	3800	1400

DISSOLVED CHLORIDE (TONS/DAY), MEAN VALUES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	170	1480	380	341	579	632	3080	1590	2390	1260	996	234
2	143	1230	370	377	552	540	1150	1840	1320	693	607	166
3	126	310	315	390	652	553	810	1840	4250	651	802	168
4	118	194	324	363	562	498	1080	1750	4310	566	500	482
5	106	268	258	352	692	589	771	1630	1310	723	101	2220
6	97	278	289	292	614	568	513	1560	1220	843	493	389
7	90	303	189	284	608	528	430	1520	1280	566	321	992
8	83	329	191	285	630	550	391	1570	1270	570	335	216
9	77	284	158	272	607	737	376	1510	1170	497	350	689
10	71	289	166	243	483	908	331	1350	1110	521	311	412
11	63	282	132	247	682	2000	364	1350	1080	589	468	329
12	46	273	169	255	596	3410	306	1370	1070	648	1090	255
13	38	277	155	242	494	1330	345	1230	1040	356	805	187
14	33	278	172	282	553	611	1310	1270	1070	481	443	912
15	29	292	257	328	624	518	2070	1220	1040	464	350	219
16	34	286	256	507	546	691	2510	1160	1040	917	368	149
17	32	291	287	770	486	708	1340	1140	3740	354	333	141
18	28	298	365	880	491	653	1960	1220	790	447	289	247
19	22	428	337	872	481	821	901	1040	897	450	355	1220
20	41	410	402	924	531	857	912	973	888	490	293	296
21	97	425	482	2840	471	649	1190	900	818	563	289	129
22	249	445	435	1710	501	576	1270	1050	801	379	280	105
23	560	478	430	451	581	662	675	739	846	481	253	120
24	1060	439	442	355	530	794	1910	3980	866	412	197	116
25	493	446	445	342	569	679	2550	2790	797	550	179	119
26	285	447	367	575	528	761	4300	754	746	533	171	762
27	280	390	414	1110	538	1380	1810	759	725	768	147	2630
28	282	365	262	757	530	1000	1620	894	692	799	136	1510
29	238	380	325	411	---	1120	1890	870	730	741	159	859
30	715	466	331	475	---	2250	1730	889	674	456	122	1100
31	2120	---	361	512	---	2560	---	977	---	591	125	---
MONTH	252	412	305	582	561	972	1330	1380	1330	592	376	579

07305000 NORTH FORK RED RIVER NEAR HEADRICK, OKLA.--Continued

DISSOLVED SOLIDS, IN MILLIGRAMS PER LITRE, MEAN VALUES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11180	4340	11040	10400	7130	9900	551	3550	5290	4570	8260	7480
2	10540	4340	11180	10960	7130	8620	621	4460	757	2150	5630	7910
3	10320	2590	10470	9330	8340	8970	909	4700	629	3530	8190	8970
4	10250	2610	11670	9900	7550	8190	1040	4730	845	4040	6650	789
5	10180	4770	11040	10680	9190	9470	1620	4750	953	5410	1890	544
6	10320	5780	14580	10180	8550	8690	1790	4710	1480	6910	7700	319
7	10110	6770	11390	10400	8340	8620	2140	4850	2100	5420	5780	482
8	9970	8050	12450	10890	9190	8760	2370	5090	2640	6020	6330	311
9	9970	8260	11460	10960	9050	8760	2620	5230	3010	5760	6640	1090
10	9900	8970	13160	10470	7550	1160	2640	5120	3300	6130	6760	1400
11	9690	9470	11880	10610	10400	744	3160	5320	3600	6620	7620	2230
12	9760	9610	13370	10890	9400	1530	3460	5610	3830	6620	7620	2960
13	9690	9330	11250	9900	7980	1580	2860	5360	3990	4760	6710	3250
14	9470	9760	10470	9470	8970	1540	3060	5750	4180	6030	5720	3520
15	9610	10180	12310	8260	9970	1760	1580	5790	4380	5650	5880	1310
16	9260	10470	10400	8480	9050	2740	473	5850	4650	5140	7130	2080
17	9540	10610	10040	8620	8340	3140	433	5970	4930	3740	7340	2960
18	9190	10400	11460	9330	8410	3340	1350	6590	1190	4730	7410	4280
19	9400	11110	10680	9610	8260	4680	1360	5970	2460	5450	9400	9900
20	8620	10040	12520	10400	9190	5300	1880	6130	3100	6200	8760	4850
21	4010	9050	14220	5310	8260	4490	2460	6060	3290	6220	9330	2900
22	5510	9190	13440	1170	8550	4180	2740	6330	3830	5460	10250	3060
23	7770	10040	13300	656	9190	4950	2210	1430	4380	6730	10820	4270
24	8690	9540	14220	1240	8480	5270	1630	3130	4700	6400	9690	4740
25	7200	9690	13730	2090	9190	4730	719	1920	4950	6910	9470	5210
26	5780	9970	11110	3110	8620	5040	1410	1460	5250	5760	9690	4920
27	6500	9330	12380	4740	8760	6130	1670	2210	5550	8830	9120	1610
28	7270	9330	8550	5280	8640	5560	2210	3460	5730	10110	9190	1030
29	8190	9970	9970	4360	---	4230	3240	3990	5940	9050	9760	915
30	8900	12380	9760	5680	---	1130	3480	4370	5850	5630	8340	2420
31	3840	---	10540	6520	---	465	---	5040	---	7340	9470	---
MONTH	8730	8530	11740	7740	8630	4960	1920	4680	3560	5910	7830	3260

DISSOLVED SOLIDS (TONS/DAY), MEAN VALUES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	332	3520	745	674	1210	1260	11450	3880	5350	2950	2030	485
2	282	2920	724	740	1150	1090	3970	4340	4150	1720	1340	342
3	248	754	622	781	1330	1110	2380	4270	14590	1590	1640	339
4	233	473	630	722	1160	1020	3060	4050	12990	1380	1060	1490
5	209	618	507	692	1390	1180	1990	3770	3810	1610	256	8310
6	192	608	551	577	1250	1150	1300	3620	3190	1770	1020	2810
7	177	640	369	561	1240	1070	1070	3490	3170	1260	702	4070
8	164	674	370	559	1270	1110	961	3560	3090	1230	718	1650
9	153	580	309	533	1220	1490	914	3390	2850	1090	739	1930
10	142	582	320	480	999	2500	805	3040	2710	1120	657	1090
11	126	563	257	487	1350	6330	888	3020	2660	1250	968	812
12	92	545	325	500	1190	8860	747	3030	2620	1380	2240	620
13	76	554	304	481	1010	3440	841	2750	2560	823	1700	457
14	66	553	339	563	1110	1590	3200	2790	2580	1040	973	2230
15	57	577	499	669	1240	1320	5370	2660	2460	1020	762	585
16	67	565	505	1030	1100	1680	10480	2530	2410	2070	770	371
17	64	573	569	1560	990	1730	6100	2480	8530	868	694	343
18	57	589	712	1760	999	1600	5210	2600	2160	1030	600	590
19	43	840	663	1740	982	1910	2400	2260	2190	1000	711	2430
20	84	813	778	1820	1070	1920	2300	2100	2170	1060	591	680
21	238	855	922	6360	959	1530	2900	1950	2000	1210	579	313
22	551	893	835	4700	1020	1390	3090	2260	1960	841	554	256
23	1150	949	826	1510	1170	1510	1670	1950	2010	1020	497	288
24	2140	876	845	962	1080	1780	4920	9710	2010	882	392	269
25	1030	889	852	852	1140	1570	8200	7010	1820	1160	358	267
26	625	888	720	1400	1070	1730	11330	1980	1670	1170	340	1740
27	597	781	802	2560	1090	2980	4630	1880	1600	1550	295	6780
28	589	731	531	1700	1070	2220	4010	2190	1520	1580	273	4290
29	487	754	646	977	---	2680	4630	2130	1590	1490	316	2520
30	1440	903	659	1040	---	6220	4240	2110	1470	1000	248	2700
31	5190	---	711	1090	---	10860	---	2220	---	1230	251	---
MONTH	545	868	595	1290	1140	2510	3840	3190	3460	1300	783	1700

07311000 EAST CACHE CREEK NEAR WALTERS, OKLA.

LOCATION.--Lat 34°21'44", long 98°16'56", on south line of SE1/4SE1/4 sec. 19, T.2 S., R.10 W., Cotton County, at gaging station on State Highway 53, 1.75 mi (2.8 km) west of Walters, 12.2 mi (19.6 km) upstream from West Cache Creek, and at mile 19.7 (31.7 km).

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	DISSOLVED NITRATE (NO3) (MG/L)	DISSOLVED NITRITE (N) (MG/L)
OCT.											
05...	9.0	--	--	73	208	0	66	69	2.7	12	--
15...	4.0	--	--	82	210	0	72	77	2.7	12	--
25...	28	--	--	27	116	0	40	23	1.8	8.0	--
NOV.											
05...	72	--	--	42	132	0	41	52	1.9	8.2	--
15...	104	--	--	29	120	0	29	33	1.2	5.3	--
25...	47	--	--	68	174	0	47	95	2.9	13	--
DEC.											
05...	28	--	--	74	194	0	58	86	6.6	29	--
15...	25	--	--	72	190	0	58	89	5.0	22	--
25...	26	--	--	84	210	0	63	100	2.7	12	--
JAN.											
05...	383	--	--	26	112	0	23	28	1.6	7.0	--
15...	69	--	--	89	178	0	47	140	4.3	19	--
25...	225	--	--	38	120	0	27	55	1.2	5.5	--
FEB.											
05...	58	--	--	66	172	8	49	82	2.7	12	--
15...	41	--	--	76	210	0	61	92	3.8	17	--
25...	49	--	--	76	206	0	60	91	4.7	21	--
MAR.											
05...	164	--	--	59	176	0	41	74	2.1	9.2	--
15...	170	--	--	48	170	4	44	53	1.4	6.2	--
25...	2440	--	--	14	124	0	25	9.0	.47	2.1	--
APR.											
05...	218	--	--	38	174	0	40	38	1.2	5.5	--
15...	201	--	--	53	176	0	47	66	1.4	6.4	--
25...	1350	--	--	19	128	0	23	13	.93	4.1	--
MAY											
04...	66	--	--	70	240	0	63	77	2.7	12	--
15...	64	--	--	81	252	0	67	90	3.2	14	--
25...	132	--	--	42	158	0	42	38	2.0	8.8	--
JUNE											
05...	255	49	8.6	31	152	0	47	29	1.3	5.8	.00
15...	59	71	11	65	226	0	56	73	3.2	14	.00
25...	81	60	11	54	204	0	51	54	2.6	11	.00
JULY											
05...	41	63	12	73	239	0	53	76	2.7	12	.00
15...	61	70	14	110	232	0	56	130	3.4	15	.03
25...	141	29	4.0	16	111	0	16	15	1.5	6.5	.03
AUG.											
05...	32	44	7.4	38	173	0	36	35	2.0	9.0	.06
15...	25	62	13	79	249	0	55	77	3.0	13	.21
25...	18	62	12	81	232	0	53	78	2.6	11	.02
SEP.											
09...	673	33	4.8	23	137	0	21	12	1.4	6.2	.00
15...	50	44	7.7	43	174	0	39	38	2.3	10	.00
27...	901	30	3.6	17	122	0	14	11	.47	2.1	.01

07311000 EAST CACHE CREEK NEAR WALTERS, OKLA.

DRAINAGE AREA.--675 sq mi (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.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS-SOLVED NITRITE (NO2) (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)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)
OCT.										
05...	--	--	424	.58	10.3	190	19	2.3	699	7.3
15...	--	--	461	.63	4.98	190	18	2.6	746	7.3
25...	--	--	223	.30	16.9	120	25	1.1	362	7.0
NOV.										
05...	--	--	287	.39	55.8	140	32	1.5	478	6.4
15...	--	--	214	.29	60.1	110	12	1.2	358	6.4
25...	--	--	402	.55	51.0	190	47	2.1	690	6.8
DEC.										
05...	--	--	452	.61	34.2	200	41	2.3	741	7.9
15...	--	--	458	.62	30.9	210	54	2.2	748	7.1
25...	--	--	490	.67	34.4	220	48	2.5	818	7.2
JAN.										
05...	--	--	191	.26	198	100	8	1.1	338	6.9
15...	--	--	525	.71	97.8	210	64	2.7	859	6.9
25...	--	--	258	.35	157	130	32	1.5	445	7.1
FEB.										
05...	--	--	402	.55	63.0	190	36	2.1	667	8.7
15...	--	--	459	.62	50.8	220	48	2.2	771	7.7
25...	--	--	453	.62	59.9	210	41	2.3	769	7.7
MAR.										
05...	--	--	358	.49	159	170	26	2.0	611	8.3
15...	--	--	324	.44	149	160	14	1.7	540	8.6
25...	--	--	175	.24	1150	110	8	.6	281	7.4
APR.										
05...	--	--	291	.40	171	160	17	1.3	485	8.0
15...	--	--	350	.48	190	170	26	1.8	583	8.3
25...	--	--	187	.25	682	110	5	.8	300	7.8
MAY										
04...	--	--	455	.62	81.1	230	33	2.0	751	7.1
15...	--	--	500	.68	86.4	240	33	2.3	825	7.1
25...	--	--	286	.39	102	140	10	1.5	471	6.7
JUNE										
05...	.0	.85	290	.39	200	160	33	1.1	463	7.3
15...	.0	3.0	458	.62	73.0	220	37	1.9	748	8.0
25...	.0	2.8	394	.54	86.2	200	28	1.7	507	7.7
JULY										
05...	.0	--	448	.61	49.6	210	11	2.2	738	8.2
15...	.1	--	582	.79	95.9	230	42	3.1	925	7.9
25...	.1	--	177	.24	67.4	89	0	.7	263	8.2
AUG.										
05...	.2	--	304	.41	26.3	140	0	1.4	468	7.5
15...	.21	.6	465	.63	31.4	210	4	2.4	774	7.8
25...	.02	.0	484	.66	23.5	200	14	2.5	743	7.8
SEP.										
09...	.00	.0	230	.31	418	100	0	1.0	312	7.7
15...	.00	.0	304	.41	41.0	140	0	1.6	495	7.6
27...	.01	.0	160	.22	389	90	0	.8	257	7.7

07311000 EAST CACHE CREEK NEAR WALTERS, OKLA.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(ONCE-DAILY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	632	101	606	700	740	796	379	684	750	737	298	717
2	656	140	661	745	627	814	414	698	301	764	360	719
3	643	292	690	367	674	816	488	753	268	749	383	720
4	674	376	698	286	626	333	412	753	349	742	443	727
5	699	478	746	334	667	614	479	769	452	730	464	234
6	660	550	714	388	674	146	556	783	489	747	---	624
7	658	584	733	431	725	350	588	762	558	733	575	426
8	691	648	766	650	782	519	639	768	596	750	609	285
9	699	653	749	629	745	560	663	780	575	744	656	276
10	727	648	739	651	747	239	665	744	642	749	686	253
11	725	715	690	688	738	242	696	739	700	749	273	316
12	752	741	782	719	796	382	740	742	746	754	662	352
13	748	1240	838	828	787	470	779	789	761	749	708	386
14	743	353	792	822	786	491	534	802	748	738	743	429
15	746	358	752	859	775	539	592	830	741	913	758	182
16	752	387	787	468	752	592	446	810	717	765	798	560
17	741	478	812	343	740	658	383	792	723	772	764	580
18	804	571	814	336	822	704	456	805	647	792	770	558
19	748	402	829	372	861	753	577	824	572	759	759	602
20	732	384	840	460	816	740	468	850	304	655	769	631
21	674	387	803	506	771	740	483	852	416	701	739	638
22	266	449	787	382	727	769	315	876	421	751	766	643
23	238	584	811	314	840	749	358	956	456	751	762	653
24	319	588	816	362	846	273	363	433	534	520	761	706
25	364	700	832	445	771	281	297	466	630	264	752	688
26	410	635	850	273	732	290	380	446	674	423	758	616
27	449	622	838	244	721	391	487	531	649	528	780	218
28	465	529	829	304	785	507	560	531	688	512	748	256
29	547	587	829	387	---	528	608	660	747	535	744	275
30	573	571	1800	470	---	558	665	694	730	440	741	328
31	164	---	951	556	---	315	---	758	---	216	740	---
MONTH	603	525	812	494	753	521	516	732	586	669	659	487

07311000 EAST CACHE CREEK NEAR WALTERS, OKLA.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(ONCE-DAILY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20.0	11.0	7.5	7.0	6.0	12.0	15.0	20.5	23.0	29.0	26.5	26.0
2	19.5	11.0	7.5	6.0	7.0	13.0	13.0	20.0	20.0	29.0	26.5	27.0
3	20.0	11.0	6.0	5.0	8.0	12.0	14.0	20.0	21.0	29.5	26.0	27.0
4	20.5	12.0	5.0	4.0	7.0	13.0	14.0	20.0	23.0	30.0	26.0	27.5
5	21.0	14.0	0.0	2.0	9.0	14.0	14.0	19.0	24.0	30.0	26.5	24.0
6	20.0	14.0	2.0	1.0	9.5	15.0	14.0	20.0	24.0	30.0	---	22.0
7	19.0	14.0	1.0	0.0	8.0	15.0	14.0	20.0	25.0	29.5	27.0	22.5
8	19.5	13.0	3.0	0.0	5.0	15.0	12.5	20.5	25.0	29.0	27.5	23.0
9	21.0	13.0	2.0	0.0	5.0	15.0	12.0	22.0	25.0	28.5	28.0	24.0
10	22.0	13.0	1.0	0.0	6.0	14.0	12.0	23.0	25.0	28.0	28.5	25.0
11	23.0	12.0	4.5	1.0	6.0	13.0	14.0	24.0	25.0	28.0	26.0	25.0
12	24.0	12.0	2.0	2.0	8.0	13.0	15.5	23.0	25.0	27.5	28.0	26.0
13	24.0	11.0	2.0	2.0	8.0	15.0	17.0	21.0	24.5	28.0	28.5	26.0
14	24.0	10.0	1.0	2.0	8.0	15.0	17.0	20.0	26.5	27.0	29.0	23.0
15	20.5	8.0	2.0	3.0	8.0	14.5	17.0	20.0	37.0	25.5	29.0	23.0
16	22.0	9.0	2.0	3.0	7.0	14.5	17.0	21.0	27.0	27.0	28.5	23.0
17	22.0	8.0	3.0	5.0	6.0	15.0	16.0	20.0	28.0	27.0	28.5	19.0
18	14.0	7.0	4.0	8.0	7.0	15.0	17.5	22.0	28.0	28.0	28.0	18.0
19	18.0	7.0	5.0	9.0	6.0	15.0	18.0	23.0	25.0	28.0	28.5	20.5
20	13.0	6.0	6.0	10.0	7.0	15.5	19.5	22.0	22.0	29.0	29.0	22.0
21	14.0	5.0	6.0	9.0	8.0	15.5	21.0	25.0	23.0	28.0	29.0	24.0
22	15.0	6.0	7.0	7.0	6.0	16.0	20.0	23.0	23.0	29.0	29.0	24.0
23	15.0	6.0	7.0	7.0	8.0	14.5	21.0	23.5	24.0	29.0	28.5	24.0
24	14.0	6.0	8.0	7.0	9.0	14.5	21.0	21.0	23.0	28.0	29.0	24.0
25	13.0	6.0	8.0	6.0	10.0	14.0	19.0	24.0	24.0	27.5	28.0	25.0
26	12.5	7.0	8.0	6.0	9.5	13.0	17.0	24.0	28.0	28.0	28.5	24.0
27	12.5	7.0	7.5	6.0	10.0	12.0	18.0	23.0	28.0	28.5	28.0	21.0
28	12.5	7.0	7.0	5.0	10.0	14.0	18.0	22.0	26.5	28.0	27.0	21.0
29	12.5	6.0	11.0	5.0	---	14.0	19.0	23.0	28.0	26.0	27.0	20.0
30	15.0	7.0	9.5	6.0	---	14.5	19.0	23.0	28.5	26.0	27.0	20.0
31	11.5	---	8.5	6.0	---	15.0	---	23.0	---	26.0	27.0	---
MONTH	18.0	9.5	5.0	4.5	7.5	14.0	16.5	22.0	25.5	28.0	28.0	23.5

07311200 BLUE BEAVER CREEK NEAR CACHE, OKLA.
(Hydrologic bench-mark station)

LOCATION.--Lat 34°37'24", long 98°33'48", in NE1/4NE1/4 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).

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	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)	DISSOLVED SULFATE (SO4) (MG/L)
NOV.									
22...	28	10	7.2	3.4	7.0	1.2	30	0	16
DEC.									
20...	4.8	10	10	3.9	9.3	1.0	40	0	19
JAN.									
04...	25	--	--	--	7.7	--	36	0	15
31...	30	11	9.6	3.4	7.5	1.1	38	0	14
FEB.									
22...	9.5	--	--	--	9.4	--	42	0	17
MAR.									
13...	46	11	9.6	3.4	7.5	1.2	38	0	14
APR.									
25...	63	--	--	--	7.8	--	42	0	14
MAY									
16...	5.1	14	17	3.8	14	1.5	68	0	21
JUNE									
06...	17	--	--	--	--	--	--	--	--
27...	3.4	--	--	--	13	--	76	0	18
JULY									
19...	.60	17	20	5.6	18	1.7	100	0	15
AUG.									
10...	.19	17	22	6.1	19	1.9	111	0	15

07311200 BLUE BEAVER CREEK NEAR CACHE, OKLA.
(Hydrologic bench-mark station)

DRAINAGE AREA.--24.6 sq mi (63.7 km²).

PERIOD OF RECORD.--Water year 1965-67 (partial-record station), October 1967 to current year.

REMARKS.--No flow Oct. 1-20, 22-29, Aug. 25-28, 31.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (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 PHOS-PHORUS (P) (MG/L)	PHOS-PHATE (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)
NOV.									
22...	5.0	.3	.05	.20	--	--	--	.00	70
DEC.									
20...	6.0	.3	.02	.10	--	--	--	.01	89
JAN.									
04...	5.3	--	.07	.30	--	--	--	.02	73
31...	6.0	.3	.02	.10	--	--	--	.02	77
FEB.									
22...	6.8	--	.02	.10	--	--	--	.01	82
MAR.									
13...	6.0	.3	.02	.10	--	--	--	.04	80
APR.									
25...	3.7	--	.09	.40	--	--	--	.02	72
MAY									
16...	9.5	.3	.07	.30	--	--	--	.02	116
JUNE									
06...	--	--	--	--	--	--	--	--	--
27...	9.3	--	.00	.00	--	--	--	.00	112
JULY									
19...	13	.4	.10	.40	.00	.0	.05	--	129
AUG.									
10...	14	.4	.12	.50	.01	.0	.04	--	137

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)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	DIS-SOLVED BORON (B) (UG/L)
NOV.								
22...	.10	5.29	32	7	.5	97	6.5	44
DEC.								
20...	.12	1.15	42	9	.6	129	6.4	60
JAN.								
04...	.10	4.93	34	4	.6	106	6.4	--
31...	.10	6.24	38	7	.5	101	6.8	0
FEB.								
22...	.11	2.10	40	6	.6	122	6.9	--
MAR.								
13...	.11	9.94	38	7	.5	102	6.9	20
APR.								
25...	.10	12.2	36	2	.6	104	6.9	--
MAY								
16...	.16	1.60	58	2	.8	182	7.0	--
JUNE								
06...	--	--	--	--	--	123	--	--
27...	.15	1.03	64	2	.7	182	6.6	--
JULY								
19...	.18	.21	73	0	.9	230	7.7	50
AUG.								
10...	.19	.07	80	0	.9	241	7.5	60

07316500 WASHITA RIVER NEAR CHEYENNE, OKLA.

LOCATION.--Lat 35°37'35", long 99°40'05", in SW1/4 sec. 5, T.13 N., R.23 W., Roger Mills County, at gaging station at 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 sq mi (2,056 km^2).

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SODIUM (NA) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	DISSOLVED NITRATE (NO3) (MG/L)	PHOSPHATE (PO4) (MG/L)
FEB.									
06...	1.5	150	418	0	460	83	.05	.20	1.5
MAR.									
29...	23	120	394	0	360	76	.07	.30	.19
APR.									
10...	38	110	366	0	350	67	.07	.30	.22
MAY									
30...	16	110	382	0	410	71	.18	.80	.49
JUNE									
19...	1.9	170	320	--	870	94	.07	.30	.80

07316500 WASHITA RIVER NEAR CHEYENNE, OKLA.

PERIOD OF RECORD.--Chemical analyses: February 1950 to September 1953, October 1959 to August 1961, March 1969 to current year (discontinued).

REMARKS.--No flow Oct. 1-Jan. 29, July 3-Sept 3, Sept. 10-14, 22-23, 25.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

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)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	COLOR (PLAT-INUM-COBALT UNITS)
FEB.									
06...	1160	1.58	4.70	600	260	2.7	1580	7.8	30
MAR.									
29...	1010	1.37	62.7	540	220	2.2	1370	8.2	37
APR.									
10...	900	1.22	92.3	510	210	2.1	1270	7.7	30
MAY									
30...	1080	1.47	46.7	590	280	2.0	1430	7.8	22
JUNE									
19...	1820	2.48	9.34	900	640	2.5	2080	8.1	27

FIELD ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	DIS-SOLVED OXYGEN (MG/L)	PER-CENT SATUR-ATION
FEB.					
06...	1330	8.3	7.5	12.0	112
MAR.					
29...	1600	8.4	11.0	9.2	93
APR.					
10...	1250	8.2	10.5	11.0	109
MAY					
30...	1000	8.6	22.0	9.0	112
JUNE					
19...	2300	8.3	26.0	10.8	146

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 of 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 (795.6 km).

DRAINAGE AREA.--1,387 sq. mi (3,592 sq. km).

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	DISSOLVED NITRATE (NO3) (MG/L)
APR.										
05...	29	--	--	77	292	0	430	49	.25	1.1
15...	207	--	--	51	204	0	470	32	.59	2.6
25...	92	--	--	81	320	0	520	48	.20	.90
MAY										
05...	149	--	--	53	240	0	230	17	.29	1.3
15...	46	--	--	79	312	0	460	51	.20	.90
25...	210	--	--	32	158	0	360	19	.59	2.6
JUNE										
05...	65	140	69	64	207	0	510	33	.01	.04
15...	13	120	81	75	216	0	560	41	.15	.66
25...	3.4	140	88	60	151	0	650	32	.01	.04
JULY										
05...	8.1	160	76	61	268	0	570	27	.25	1.1
15...	1.4	200	96	60	252	0	740	31	.12	.50
25...	9.2	160	66	21	113	0	570	5.9	.94	4.2
AUG.										
05...	.18	180	79	41	214	0	660	27	1.3	5.5
15...	.01	120	61	55	185	0	470	37	.07	.30
SEP.										
05...	158	31	11	14	150	0	25	5.6	.34	1.5
15...	4.7	62	25	22	158	0	160	9.8	.52	2.3
26...	2.5	110	47	25	205	0	330	13	.24	1.1

07324200 WASHITA RIVER NEAR HAMMON, OKLA.

PERIOD OF RECORD.--Chemical analyses: October 1969 to current year.

REMARKS.--Continuous monitor records for water temperacure and specific conductance are collected for this station. No flow Oct. 1-Mar. 29, Aug. 16-Sept. 3.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS-SOLVED NITRITE (N) (MG/L)	DIS-SOLVED NITRITE (NO2) (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)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)
APR.										
05...	--	--	1050	1.43	82.2	560	320	1.4	1290	7.4
15...	--	--	932	1.27	521	570	400	.9	1160	7.2
25...	--	--	1160	1.58	288	680	420	1.4	1450	7.5
MAY										
05...	--	--	628	.85	253	360	160	1.2	880	7.3
15...	--	--	1090	1.48	135	650	390	1.3	1380	7.6
25...	--	--	722	.98	409	450	320	.7	927	6.6
JUNE										
05...	.00	.0	1020	1.39	179	630	460	1.1	1360	8.1
15...	.00	.0	1080	1.47	37.9	630	460	1.3	1470	8.1
25...	.00	.0	1150	1.56	10.6	710	590	1.0	1470	8.1
JULY										
05...	.00	.0	1080	1.47	23.6	710	490	1.0	1410	7.9
15...	.03	.1	1360	1.85	5.14	890	690	.9	1650	7.8
25...	.16	.5	1020	1.39	25.3	670	580	.4	1240	7.6
AUG.										
05...	.15	.5	1150	1.56	.56	770	600	.6	1470	7.8
15...	.18	.6	880	1.20	.02	550	400	1.0	1220	7.7
SEP.										
05...	.00	.0	188	.26	80.2	120	0	.6	270	7.9
15...	.01	.0	392	.53	4.97	260	130	.6	568	7.9
26...	.01	.0	742	1.01	5.01	470	300	.5	942	7.9

07324200 WASHITA RIVER NEAR HAMMON,OKLA.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), MEAN VALUES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(CONTINUOUS HOURLY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	924	1290	1070	696	1580	---
2	---	---	---	---	---	---	1070	1460	800	1330	1630	---
3	---	---	---	---	---	---	1180	1250	1140	1400	1600	---
4	---	---	---	---	---	---	1250	1080	1300	1380	1500	1190
5	---	---	---	---	---	---	1310	935	1380	1390	1430	373
6	---	---	---	---	---	---	1370	944	1400	1410	1360	393
7	---	---	---	---	---	---	1410	1090	1420	1400	1280	359
8	---	---	---	---	---	---	1390	1220	1370	1420	1300	388
9	---	---	---	---	---	---	1410	1210	1370	1450	1240	438
10	---	---	---	---	---	---	1410	1330	1420	1470	---	402
11	---	---	---	---	---	---	1440	1350	1510	1470	1270	430
12	---	---	---	---	---	---	1560	1420	1500	1530	1220	498
13	---	---	---	---	---	---	1550	1450	1510	1560	1290	419
14	---	---	---	---	---	---	1340	1410	1520	1590	1200	616
15	---	---	---	---	---	---	1290	1360	1490	1620	1190	601
16	---	---	---	---	---	---	1030	1380	1490	1660	---	538
17	---	---	---	---	---	---	1180	1400	1530	1630	---	500
18	---	---	---	---	---	---	1270	1400	1490	1550	---	477
19	---	---	---	---	---	---	1200	1400	1500	1400	---	651
20	---	---	---	---	---	---	1310	1410	1450	1370	---	663
21	---	---	---	---	---	---	1230	1340	1530	1320	---	728
22	---	---	---	---	---	---	1190	1390	1510	1300	---	881
23	---	---	---	---	---	---	1250	667	1480	1180	---	959
24	---	---	---	---	---	---	1270	980	1500	1680	---	945
25	---	---	---	---	---	---	1400	912	1520	1210	---	970
26	---	---	---	---	---	---	1250	1030	1520	1460	---	966
27	---	---	---	---	---	---	1290	1130	1540	1620	---	1170
28	---	---	---	---	---	---	1270	1240	1520	1540	---	939
29	---	---	---	---	---	---	1230	1260	1520	1470	---	813
30	---	---	---	---	---	708	1270	1310	489	1520	---	946
31	---	---	---	---	---	714	---	766	---	1560	---	---
MONTH	---	---	---	---	---	---	1280	1220	1390	1440	---	676

TEMPERATURE (°C) OF WATER, MEAN VALUES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(CONTINUOUS HOURLY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	7.0	21.5	---	---	---	---
2	---	---	---	---	---	---	7.5	16.0	---	---	---	---
3	---	---	---	---	---	---	9.0	19.5	---	---	---	---
4	---	---	---	---	---	---	9.5	19.0	---	---	---	---
5	---	---	---	---	---	---	10.0	17.0	---	---	---	22.0
6	---	---	---	---	---	---	---	22.5	---	---	---	16.5
7	---	---	---	---	---	---	---	21.5	---	---	---	20.5
8	---	---	---	---	---	---	---	23.5	---	---	---	22.0
9	---	---	---	---	---	---	---	23.5	---	---	---	22.0
10	---	---	---	---	---	---	---	22.5	---	---	---	22.0
11	---	---	---	---	---	---	---	23.0	---	---	---	21.0
12	---	---	---	---	---	---	17.5	20.0	---	---	---	21.5
13	---	---	---	---	---	---	16.5	17.5	---	---	---	19.0
14	---	---	---	---	---	---	16.5	16.5	---	---	---	16.5
15	---	---	---	---	---	---	16.0	17.0	---	---	---	18.5
16	---	---	---	---	---	---	13.5	19.0	---	---	---	---
17	---	---	---	---	---	---	16.0	19.0	---	---	---	---
18	---	---	---	---	---	---	15.0	21.0	---	---	---	---
19	---	---	---	---	---	---	18.5	23.0	---	---	---	---
20	---	---	---	---	---	---	21.5	23.0	---	---	---	18.5
21	---	---	---	---	---	---	24.5	24.5	---	---	---	24.5
22	---	---	---	---	---	---	19.5	23.0	---	---	---	23.0
23	---	---	---	---	---	---	20.5	18.5	---	---	---	22.5
24	---	---	---	---	---	---	17.0	21.5	---	---	---	21.0
25	---	---	---	---	---	---	---	22.5	---	---	---	22.0
26	---	---	---	---	---	---	---	23.0	---	---	---	---
27	---	---	---	---	---	---	---	18.5	---	---	---	---
28	---	---	---	---	---	---	---	17.0	---	---	---	---
29	---	---	---	---	---	---	24.0	19.5	---	---	---	---
30	---	---	---	---	---	7.0	20.5	19.0	---	---	---	---
31	---	---	---	---	---	8.5	---	---	---	---	---	---
MONTH	---	---	---	---	---	---	---	20.5	---	---	---	---

07324200 WASHITA RIVER NEAR HAMMON, OKLA.--Continued

DISSOLVED SULFATE (SO_4), IN MILLIGRAMS PER LITRE, MEAN VALUES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	330	500	400	220	650	---
2	---	---	---	---	---	---	400	580	270	520	680	---
3	---	---	---	---	---	---	450	480	430	550	660	---
4	---	---	---	---	---	---	480	400	510	540	600	450
5	---	---	---	---	---	---	510	330	540	550	570	72
6	---	---	---	---	---	---	540	340	550	560	530	81
7	---	---	---	---	---	---	560	410	560	550	500	65
8	---	---	---	---	---	---	550	470	540	560	510	79
9	---	---	---	---	---	---	560	460	540	580	480	100
10	---	---	---	---	---	---	560	520	560	590	---	85
11	---	---	---	---	---	---	570	530	610	590	490	98
12	---	---	---	---	---	---	640	560	600	620	470	130
13	---	---	---	---	---	---	630	580	610	640	500	93
14	---	---	---	---	---	---	520	560	610	650	460	190
15	---	---	---	---	---	---	500	530	600	670	450	180
16	---	---	---	---	---	---	380	540	600	690	---	150
17	---	---	---	---	---	---	450	550	620	680	---	130
18	---	---	---	---	---	---	490	550	600	630	---	120
19	---	---	---	---	---	---	460	550	600	550	---	200
20	---	---	---	---	---	---	510	560	580	540	---	210
21	---	---	---	---	---	---	470	520	620	520	---	240
22	---	---	---	---	---	---	450	550	610	510	---	310
23	---	---	---	---	---	---	480	210	590	450	---	350
24	---	---	---	---	---	---	490	360	600	710	---	340
25	---	---	---	---	---	---	550	320	610	460	---	350
26	---	---	---	---	---	---	480	380	610	580	---	350
27	---	---	---	---	---	---	500	430	630	670	---	440
28	---	---	---	---	---	---	490	480	610	630	---	340
29	---	---	---	---	---	---	470	490	610	590	---	280
30	---	---	---	---	---	230	490	510	130	610	---	340
31	---	---	---	---	---	230	---	260	---	640	---	---
MONTH	---	---	---	---	---	---	500	470	550	580	---	210

DISSOLVED SULFATE (TONS/DAY), MEAN VALUES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	48	111	146	16	0.31	---
2	---	---	---	---	---	---	42	166	163	25	0.25	---
3	---	---	---	---	---	---	44	204	175	18	0.17	---
4	---	---	---	---	---	---	47	162	132	13	0.52	7.4
5	---	---	---	---	---	---	37	148	103	12	0.27	28
6	---	---	---	---	---	---	31	112	77	9.0	0.17	19
7	---	---	---	---	---	---	29	103	64	7.2	0.13	12
8	---	---	---	---	---	---	27	101	52	5.0	0.11	13
9	---	---	---	---	---	---	35	91	46	3.7	0.07	12
10	---	---	---	---	---	---	41	84	39	3.2	---	8.0
11	---	---	---	---	---	---	40	77	36	2.8	0.05	5.0
12	---	---	---	---	---	---	41	77	31	2.8	0.05	3.5
13	---	---	---	---	---	---	46	73	30	2.6	0.05	4.5
14	---	---	---	---	---	---	69	69	27	2.3	0.02	5.0
15	---	---	---	---	---	---	307	66	24	2.5	0.01	2.3
16	---	---	---	---	---	---	244	69	19	2.4	---	1.4
17	---	---	---	---	---	---	109	61	18	1.3	---	7.4
18	---	---	---	---	---	---	85	60	14	0.76	---	12
19	---	---	---	---	---	---	79	54	10	0.56	---	4.1
20	---	---	---	---	---	---	124	48	4.5	0.43	---	1.3
21	---	---	---	---	---	---	142	47	14	0.34	---	1.2
22	---	---	---	---	---	---	118	52	9.5	0.27	---	0.56
23	---	---	---	---	---	---	122	273	8.0	0.75	---	0.35
24	---	---	---	---	---	---	118	320	6.8	34	---	0.29
25	---	---	---	---	---	---	140	194	5.1	15	---	0.24
26	---	---	---	---	---	---	156	152	5.1	6.3	---	2.8
27	---	---	---	---	---	---	118	129	4.7	4.2	---	17
28	---	---	---	---	---	---	115	111	4.6	2.9	---	4.5
29	---	---	---	---	---	---	107	91	22	1.9	---	1.5
30	---	---	---	---	---	38	91	73	52	0.66	---	2.8
31	---	---	---	---	---	52	---	90	---	0.34	---	---
MONTH	---	---	---	---	---	---	92	112	45	6.4	---	6.5

07324200 WASHITA RIVER NEAR HAMMON, OKLA.--Continued

DISSOLVED CHLORIDE (CL), IN MILLIGRAMS PER LITRE, MEAN VALUES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	19	31	23	14	43	---
2	---	---	---	---	---	---	23	38	17	33	45	---
3	---	---	---	---	---	---	27	30	25	36	44	---
4	---	---	---	---	---	---	30	23	32	35	40	27
5	---	---	---	---	---	---	32	20	35	35	37	7.2
6	---	---	---	---	---	---	35	20	36	36	34	7.7
7	---	---	---	---	---	---	36	23	37	36	31	6.9
8	---	---	---	---	---	---	35	28	35	37	32	7.6
9	---	---	---	---	---	---	36	28	35	38	29	8.7
10	---	---	---	---	---	---	36	33	37	39	---	7.9
11	---	---	---	---	---	---	37	34	40	39	30	8.5
12	---	---	---	---	---	---	42	37	40	41	28	10.0
13	---	---	---	---	---	---	42	38	40	42	31	8.3
14	---	---	---	---	---	---	33	36	41	44	27	13
15	---	---	---	---	---	---	31	34	39	45	27	12
16	---	---	---	---	---	---	22	35	39	47	---	11
17	---	---	---	---	---	---	27	36	41	45	---	10
18	---	---	---	---	---	---	30	36	39	42	---	9.5
19	---	---	---	---	---	---	27	36	40	36	---	13
20	---	---	---	---	---	---	32	36	38	35	---	14
21	---	---	---	---	---	---	29	33	41	32	---	15
22	---	---	---	---	---	---	27	35	40	32	---	18
23	---	---	---	---	---	---	30	14	39	27	---	20
24	---	---	---	---	---	---	30	21	40	47	---	20
25	---	---	---	---	---	---	36	19	41	28	---	20
26	---	---	---	---	---	---	30	22	41	38	---	20
27	---	---	---	---	---	---	31	25	42	45	---	26
28	---	---	---	---	---	---	30	29	41	42	---	20
29	---	---	---	---	---	---	29	30	41	39	---	17
30	---	---	---	---	---	15	30	32	9.8	41	---	20
31	---	---	---	---	---	15	---	16	---	42	---	---
MONTH	---	---	---	---	---	---	31	29	36	38	---	14

DISSOLVED CHLORIDE (TONS/DAY), MEAN VALUES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	2.8	6.9	8.3	1.0	0.02	---
2	---	---	---	---	---	---	2.4	11	10	1.6	0.01	---
3	---	---	---	---	---	---	2.6	13	10	1.2	0.01	---
4	---	---	---	---	---	---	2.9	9.2	8.3	0.86	0.03	0.43
5	---	---	---	---	---	---	2.3	8.7	6.6	0.78	0.01	2.8
6	---	---	---	---	---	---	2.0	6.6	5.0	0.58	0.01	1.8
7	---	---	---	---	---	---	1.9	5.9	4.1	0.46	0.00	1.3
8	---	---	---	---	---	---	1.7	6.1	3.4	0.32	0.00	1.2
9	---	---	---	---	---	---	2.2	5.5	3.0	0.24	0.00	1.0
10	---	---	---	---	---	---	2.6	5.3	2.6	0.20	---	0.74
11	---	---	---	---	---	---	2.6	4.9	2.4	0.18	0.00	0.43
12	---	---	---	---	---	---	2.7	5.0	2.0	0.18	0.00	0.27
13	---	---	---	---	---	---	3.1	4.8	2.0	0.17	0.00	0.40
14	---	---	---	---	---	---	4.4	4.5	1.8	0.15	0.00	0.34
15	---	---	---	---	---	---	19	4.2	1.6	0.17	0.00	0.15
16	---	---	---	---	---	---	14	4.4	1.3	0.16	---	0.10
17	---	---	---	---	---	---	6.5	4.0	1.2	0.08	---	0.57
18	---	---	---	---	---	---	5.2	3.9	0.91	0.05	---	0.97
19	---	---	---	---	---	---	4.7	3.5	0.66	0.03	---	0.27
20	---	---	---	---	---	---	7.8	3.1	0.29	0.02	---	0.08
21	---	---	---	---	---	---	8.6	3.0	0.93	0.02	---	0.07
22	---	---	---	---	---	---	7.0	3.3	0.63	0.01	---	0.03
23	---	---	---	---	---	---	7.5	18	0.52	0.04	---	0.02
24	---	---	---	---	---	---	7.3	19	0.45	2.3	---	0.01
25	---	---	---	---	---	---	9.1	11	0.34	0.90	---	0.01
26	---	---	---	---	---	---	9.6	8.8	0.34	0.41	---	0.16
27	---	---	---	---	---	---	7.3	7.4	0.31	0.27	---	0.99
28	---	---	---	---	---	---	7.1	6.8	0.30	0.19	---	0.26
29	---	---	---	---	---	---	6.5	5.6	1.4	0.12	---	0.09
30	---	---	---	---	---	2.4	5.7	4.6	4.1	0.04	---	0.16
31	---	---	---	---	---	3.3	---	5.6	---	0.02	---	---
MONTH	---	---	---	---	---	---	5.6	6.9	2.8	0.41	---	0.54

07324200 WASHITA RIVER NEAR HAMMON, OKLA.--Continued

DISSOLVED SOLIDS, IN MILLIGRAMS PER LITRE, MEAN VALUES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	693	1030	829	480	1300	---
2	---	---	---	---	---	---	829	1190	577	1070	1350	---
3	---	---	---	---	---	---	932	997	894	1140	1320	---
4	---	---	---	---	---	---	997	838	1040	1120	1230	941
5	---	---	---	---	---	---	1050	703	1120	1130	1160	238
6	---	---	---	---	---	---	1110	711	1140	1150	1100	253
7	---	---	---	---	---	---	1150	848	1160	1140	1020	228
8	---	---	---	---	---	---	1130	969	1110	1160	1040	249
9	---	---	---	---	---	---	1150	960	1110	1180	988	286
10	---	---	---	---	---	---	1150	1070	1160	1200	---	260
11	---	---	---	---	---	---	1170	1090	1240	1200	1020	280
12	---	---	---	---	---	---	1290	1160	1230	1260	969	331
13	---	---	---	---	---	---	1280	1180	1240	1290	1030	272
14	---	---	---	---	---	---	1080	1150	1250	1310	950	418
15	---	---	---	---	---	---	1030	1100	1220	1340	941	407
16	---	---	---	---	---	---	792	1120	1220	1380	---	360
17	---	---	---	---	---	---	932	1140	1260	1350	---	332
18	---	---	---	---	---	---	1020	1140	1220	1280	---	315
19	---	---	---	---	---	---	950	1140	1230	1140	---	444
20	---	---	---	---	---	---	1050	1150	1180	1110	---	452
21	---	---	---	---	---	---	978	1080	1260	1060	---	510
22	---	---	---	---	---	---	941	1130	1240	1040	---	653
23	---	---	---	---	---	---	997	455	1210	932	---	725
24	---	---	---	---	---	---	1020	745	1230	1400	---	712
25	---	---	---	---	---	---	1140	682	1250	960	---	736
26	---	---	---	---	---	---	997	792	1250	1190	---	732
27	---	---	---	---	---	---	1030	885	1270	1340	---	922
28	---	---	---	---	---	---	1020	988	1250	1270	---	707
29	---	---	---	---	---	---	978	1010	1250	1200	---	589
30	---	---	---	---	---	491	1020	1050	324	1250	---	713
31	---	---	---	---	---	497	---	545	---	1290	---	---
MONTH	---	---	---	---	---	---	1030	969	1130	1170	---	484

DISSOLVED SOLIDS (TONS/DAY), MEAN VALUES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(CALCULATED FROM CONTINUOUS MONITOR RECORDS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	101	229	304	35	0.63	---
2	---	---	---	---	---	---	87	341	347	52	0.51	---
3	---	---	---	---	---	---	91	423	365	37	0.35	---
4	---	---	---	---	---	---	97	337	273	28	1.1	15
5	---	---	---	---	---	---	77	311	211	25	0.56	92
6	---	---	---	---	---	---	63	236	160	19	0.35	59
7	---	---	---	---	---	---	59	215	131	15	0.27	43
8	---	---	---	---	---	---	55	209	108	10	0.22	40
9	---	---	---	---	---	---	71	189	96	7.7	0.16	33
10	---	---	---	---	---	---	84	174	81	6.5	---	25
11	---	---	---	---	---	---	82	159	74	5.8	0.11	14
12	---	---	---	---	---	---	83	159	63	5.8	0.10	8.9
13	---	---	---	---	---	---	93	150	60	5.2	0.11	13
14	---	---	---	---	---	---	143	142	54	4.6	0.05	11
15	---	---	---	---	---	---	634	137	49	5.1	0.02	5.2
16	---	---	---	---	---	---	511	142	40	4.8	---	3.4
17	---	---	---	---	---	---	226	126	37	2.6	---	19
18	---	---	---	---	---	---	175	123	28	1.6	---	32
19	---	---	---	---	---	---	164	111	21	1.2	---	9.0
20	---	---	---	---	---	---	256	99	9.3	0.89	---	2.9
21	---	---	---	---	---	---	293	96	29	0.71	---	2.5
22	---	---	---	---	---	---	244	107	19	0.56	---	1.2
23	---	---	---	---	---	---	253	595	16	1.6	---	0.74
24	---	---	---	---	---	---	244	670	14	68	---	0.61
25	---	---	---	---	---	---	289	408	10	31	---	0.51
26	---	---	---	---	---	---	323	318	10	13	---	5.9
27	---	---	---	---	---	---	243	268	9.6	8.3	---	35
28	---	---	---	---	---	---	239	229	9.4	5.8	---	9.5
29	---	---	---	---	---	---	222	187	44	3.9	---	3.2
30	---	---	---	---	---	81	189	151	135	1.3	---	5.8
31	---	---	---	---	---	111	---	193	---	0.69	---	---
MONTH	---	---	---	---	---	---	190	233	94	13	---	18

07324300 FOSS RESERVOIR NEAR FOSS, OKLA.

LOCATION.--Lat 35°32'18", long 99°10'40", in S1/2 sec.2, T.12 N., R.19 W., Custer County, near outlet works at 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 (9.6 km) north of Foss, and at mile 474.4 (763.3 km).

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	RESERVOIR STORAGE (AC-FT)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	DISSOLVED NITRATE (NO3) (MG/L)	DISSOLVED NITRITE (N) (MG/L)	DISSOLVED NITRITE (NO2) (MG/L)
OCT.												
13...	90500	240	160	110	138	0	1200	55	.07	.30	--	--
NOV.												
28...	89600	230	160	100	148	0	1200	56	.05	.20	--	--
JAN.												
19...	90000	230	160	110	146	0	1200	56	.00	.00	--	--
FEB.												
06...	90400	230	160	110	148	0	1200	55	.00	.00	--	--
MAR.												
30...	94400	220	150	100	144	0	1200	52	.25	1.1	--	--
APR.												
20...	98000	220	160	100	148	0	1200	52	.02	.10	--	--
MAY												
03...	99800	220	150	99	153	0	1200	51	.05	.20	.01	.0
JUNE												
07...	106000	210	150	98	161	0	1100	50	.07	.30	.01	.0
JULY												
11...	105000	210	150	96	173	0	1100	51	.19	.80	.00	.0
AUG.												
20...	102000	220	150	99	156	0	1200	53	.15	.70	.00	.0
SEP.												
11...	101000	220	150	100	148	0	1100	51	.03	.13	.00	.0

07324300 FOSS RESERVOIR NEAR FOSS, OKLA.

DRAINAGE AREA.--1,496 sq mi (3,874.6 km²).

PERIOD OF RECORD.--Chemical analyses: May 1963 to current year.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	TOTAL PHOS-PHORUS (P) (MG/L)	PHOS-PHATE (PO4) (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)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TUR-BID-ITY (MG/L)	TUR-BID-ITY (JTU)
OCT.											
13...	--	.00	2020	2.75	1200	1100	1.3	2240	7.9	2	--
NOV.											
28...	--	.03	2050	2.79	1200	1100	1.2	2270	7.0	2	--
JAN.											
19...	--	.07	2040	2.77	1200	1100	1.4	2280	6.8	0	--
FEB.											
06...	--	--	2020	2.75	1200	1100	1.4	2250	6.6	1	--
MAR.											
30...	--	.18	2000	2.72	1200	1100	1.3	2160	7.2	10	--
APR.											
20...	--	.02	2010	2.73	1200	1100	1.3	2170	7.0	2	--
MAY											
03...	--	--	1820	2.48	1200	1000	1.3	2270	7.7	--	1
JUNE											
07...	--	--	1830	2.49	1100	1000	1.3	2230	7.5	--	2
JULY											
11...	.04	--	1800	2.45	1100	1000	1.2	2200	7.5	--	2
AUG.											
20...	.06	--	1800	2.45	1200	1000	1.3	2210	7.9	--	2
SEP.											
11...	.02	--	1880	2.56	1200	1000	1.3	2160	7.8	--	--
TIME WTD. AVG.	--	--	1930	2.63	1180	1050	1.3	2220	7.4	--	--

07324400 WASHITA RIVER NEAR FOSS, OKLA.

LOCATION.--Lat 35°32'20", long 99°10'10", in SW1/4SW1/4 sec., T.12 N., R.19 W., Custer County, at gaging station at 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 (9.6 km) north of Foss, and at mile 473.5 (761.9 km).

DRAINAGE AREA.--1,551 sq mi (4,017 km^2).

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	DISSOLVED NITRATE (NO3) (MG/L)
OCT.										
05...	.40	--	--	67	404	0	860	20	.09	.40
15...	.33	--	--	92	432	0	1500	29	.27	1.2
25...	.98	--	--	44	406	0	390	13	.23	1.0
NOV.										
05...	.98	--	--	47	418	0	380	13	.38	1.7
15...	2.9	--	--	51	450	0	420	14	.16	.70
25...	5.2	--	--	48	442	0	360	13	.09	.40
DEC.										
05...	1.8	--	--	--	--	--	--	--	.05	.20
15...	2.0	--	--	52	448	0	440	15	.16	.70
25...	1.7	--	--	50	436	0	420	15	.16	.70
JAN.										
05...	4.0	--	--	51	426	0	450	14	.11	.50
15...	4.7	--	--	50	424	0	440	14	.23	1.0
25...	5.2	--	--	42	420	0	240	11	.11	.50
FEB.										
05...	7.5	120	59	52	362	0	380	14	.07	.30
15...	8.3	89	65	48	415	0	240	13	.08	.40
25...	8.3	100	72	48	423	0	310	12	.21	.90
MAR.										
05...	8.0	--	--	47	430	0	310	14	.09	.40
15...	8.0	--	--	44	436	0	240	14	.54	2.4
25...	10	--	--	35	354	0	180	10	.86	3.8
APR.										
05...	74	--	--	22	250	0	49	9.0	.95	4.2
15...	59	--	--	28	296	0	68	12	1.4	6.2
25...	35	--	--	36	356	8	100	14	.86	3.8
MAY										
05...	16	--	--	39	388	0	120	14	.81	3.6
15...	10	--	--	43	424	0	160	14	.79	3.5
25...	15	--	--	40	410	0	120	14	.99	4.4
JUNE										
05...	34	31	46	36	250	0	110	13	.37	1.6
15...	20	34	56	42	253	0	170	12	.18	.80
25...	7.2	22	49	37	218	0	150	12	.01	.04
JULY										
05...	15	75	46	37	376	0	130	13	.83	3.7
15...	12	84	56	40	365	0	170	14	.52	2.3
25...	9.1	78	57	43	334	0	210	29	.54	2.4
AUG.										
05...	8.0	83	56	42	342	0	220	12	.54	2.4
15...	20	220	170	98	254	0	1200	42	.50	2.2
25...	4.2	160	90	51	368	0	520	14	.49	2.2
SEP.										
05...	126	44	23	30	225	0	56	20	.75	3.3
14...	--	--	--	--	--	--	--	--	--	--
15...	200	54	32	25	268	0	89	8.6	.75	3.3
25...	5.2	85	52	36	388	0	160	12	.44	1.9

07324400 WASHITA RIVER NEAR FOSS, OKLA.

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.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS-SOLVED NITRITE (N) (MG/L)	DIS-SOLVED NITRITE (NO2) (MG/L)	DIS-SOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARDNESS (CA,MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)
OCT.										
05...	--	--	1600	2.18	1.73	1100	770	.9	1860	7.3
15...	--	--	2540	3.45	2.26	1700	1300	1.0	2640	7.3
25...	--	--	930	1.26	2.46	660	330	.7	1220	7.9
NOV.										
05...	--	--	920	1.25	2.43	660	320	.8	1220	7.7
15...	--	--	1000	1.36	7.83	720	350	.8	1330	7.9
25...	--	--	906	1.23	12.7	650	290	.8	1220	7.0
DEC.										
05...	--	--	--	--	--	--	--	--	--	--
15...	--	--	1000	1.36	5.40	720	350	.8	1330	7.1
25...	--	--	972	1.32	4.46	700	340	.8	1290	7.0
JAN.										
05...	--	--	1030	1.40	11.1	730	380	.8	1340	7.4
15...	--	--	1000	1.36	12.7	710	360	.8	1320	7.6
25...	--	--	704	.96	9.88	510	170	.8	1000	7.5
FEB.										
05...	.00	.0	940	1.28	19.0	540	250	1.0	1260	7.7
15...	.00	.0	713	.97	16.0	490	150	.9	1040	7.8
25...	.00	.0	799	1.09	--	550	200	.9	1140	7.7
MAR.										
05...	--	--	873	1.19	18.9	610	260	.8	1170	8.0
15...	--	--	775	1.05	16.7	540	180	.8	1080	8.3
25...	--	--	582	.79	15.7	420	130	.7	862	8.2
APR.										
05...	--	--	299	.41	59.7	220	15	.6	504	8.2
15...	--	--	370	.50	58.9	270	27	.7	611	7.9
25...	--	--	483	.66	45.6	360	55	.8	762	8.4
MAY										
05...	--	--	506	.69	21.9	380	62	.9	796	7.8
15...	--	--	610	.83	16.5	450	100	.9	919	7.2
25...	--	--	547	.74	22.2	400	64	.9	838	7.8
JUNE										
05...	.01	.0	458	.62	42.0	270	62	1.0	774	8.2
15...	.00	.0	508	.69	27.4	320	110	1.0	886	7.9
25...	.00	.0	418	.57	8.13	260	78	1.0	793	8.0
JULY										
05...	.00	.0	562	.76	22.8	380	68	.8	813	8.1
15...	.00	.0	602	.82	19.5	440	140	.8	853	7.9
25...	.00	.0	635	.86	15.6	430	160	.9	915	8.1
AUG.										
05...	.12	.3	688	.94	14.9	440	160	.9	917	8.1
15...	.14	.4	2000	2.72	108	1300	1000	1.2	2240	8.0
25...	.01	.0	1100	1.50	12.5	770	470	.8	1420	8.1
SEP.										
05...	.01	.0	316	.43	108	200	20	.9	491	7.7
14...	--	--	--	--	--	--	--	--	--	--
15...	.01	.0	384	.52	--	270	47	.7	598	8.0
25...	.01	.0	581	.79	8.16	430	110	.8	883	8.3

07324400 WASHITA RIVER NEAR FOSS, OKLA.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(ONCE-DAILY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1620	920	1270	1480	1290	1070	421	768	814	657	932	1260
2	1660	950	1210	1420	1150	1060	428	768	---	657	915	1260
3	1870	1120	1210	1230	1250	1090	471	794	---	697	943	1250
4	1880	1220	1210	1220	1250	1150	469	794	726	798	940	573
5	1860	1230	1150	1340	1250	1150	505	795	786	798	942	458
6	1970	1220	1570	1380	1150	1150	531	803	843	823	942	423
7	1930	1230	1510	---	1100	---	---	797	899	849	988	367
8	1920	1310	1420	1310	1060	1230	595	811	881	847	974	402
9	1930	1300	1400	1420	1240	1000	597	814	911	861	988	537
10	2110	1310	1410	1360	1140	796	606	809	909	864	1010	537
11	2160	1310	1420	1370	1040	794	626	893	911	864	1030	628
12	2270	1360	1380	1440	997	910	---	890	913	874	1030	---
13	2450	1320	1400	1310	1110	862	510	926	926	881	1020	656
14	2450	1340	1350	1310	1000	917	---	926	940	885	1070	582
15	2640	1330	1330	1310	1020	1060	610	931	940	890	2240	---
16	2640	1320	1330	1280	1060	1040	473	989	406	892	1960	---
17	2480	1380	1330	1160	1060	1060	556	905	598	883	1940	438
18	2400	1240	1330	1180	1060	981	605	897	598	902	1900	592
19	2480	1240	1050	1060	1060	943	640	902	682	920	1900	708
20	1880	1240	1060	1120	1120	978	696	895	705	924	1960	753
21	1160	1150	1280	1030	---	986	727	956	768	---	1240	799
22	1150	1150	1250	1030	1060	1450	762	943	800	937	1270	793
23	1150	1220	1250	956	1100	1040	747	1550	840	940	1340	830
24	1220	1220	1250	961	1020	844	756	774	843	937	1300	882
25	1220	1220	1290	1000	1110	863	759	838	871	942	1380	860
26	1220	1220	1290	1100	1080	865	705	836	876	956	1380	814
27	1170	1220	1330	1100	1080	906	717	943	880	953	1390	431
28	1210	1210	1320	1210	1080	746	724	---	889	950	---	605
29	---	1180	1320	1320	---	---	736	953	---	922	469	669
30	1120	1240	1460	1030	---	164	750	953	493	940	1210	768
31	913	---	1470	1020	---	428	---	615	---	958	1240	---
MONTH	1800	1240	1320	1220	1110	949	619	882	802	873	1260	699

07324400 WASHITA RIVER NEAR FOSS, OKLA.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(ONCE-DAILY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18.0	7.0	4.0	3.0	5.0	10.0	11.0	16.0	18.0	24.0	21.0	22.0
2	15.0	7.0	5.0	3.0	3.5	10.0	11.0	15.0	---	24.0	25.0	22.0
3	16.0	7.0	3.0	3.0	5.0	10.0	9.0	15.0	---	23.0	22.0	22.0
4	18.0	9.0	1.0	2.0	5.0	10.0	8.0	15.0	20.0	23.0	22.0	21.5
5	19.0	13.0	2.0	1.0	8.0	10.0	9.0	14.5	18.5	23.0	21.0	20.5
6	19.0	13.0	0.0	0.0	5.0	10.0	10.0	16.0	18.0	24.0	21.0	19.0
7	19.0	11.0	1.0	0.0	6.0	---	---	15.0	22.0	24.0	22.0	20.0
8	18.0	10.0	1.0	0.0	0.0	11.0	6.0	15.0	19.0	20.0	26.0	21.0
9	18.0	10.0	1.0	0.0	0.5	11.0	7.0	16.0	20.0	23.0	22.0	21.0
10	19.0	9.0	1.0	0.0	3.5	10.0	7.0	21.0	22.0	24.0	23.0	21.0
11	21.5	9.0	1.0	0.0	2.0	9.0	9.0	16.0	23.0	24.0	23.0	24.0
12	19.5	9.0	1.0	0.0	8.5	11.0	---	16.0	23.0	21.5	23.0	---
13	19.0	7.0	2.0	0.5	3.5	14.0	13.0	14.0	20.5	22.5	28.0	20.0
14	18.0	5.0	1.0	0.5	2.0	10.0	---	14.0	20.0	20.0	23.0	19.0
15	18.0	5.0	2.0	1.0	2.5	9.5	15.0	13.0	22.0	20.0	24.0	---
16	18.0	5.0	2.0	2.0	4.0	8.5	11.0	15.0	22.0	19.0	23.0	---
17	16.0	5.5	2.0	2.5	3.0	7.5	12.0	14.0	22.0	21.0	24.0	13.0
18	15.0	5.0	2.0	4.5	4.0	14.0	13.5	17.0	24.0	23.0	24.0	14.0
19	10.0	5.0	1.5	4.5	4.5	12.0	14.5	15.0	21.0	23.0	27.0	14.5
20	10.0	4.0	1.5	6.5	4.0	7.5	15.5	19.5	18.0	23.0	24.5	14.0
21	10.0	4.5	2.0	4.0	---	14.5	22.0	19.0	19.0	---	24.5	20.0
22	10.0	4.5	2.5	4.5	5.0	5.0	16.0	19.0	20.0	22.0	22.0	22.0
23	10.0	5.0	3.0	5.0	4.5	13.0	15.0	18.0	20.0	22.0	22.0	22.0
24	6.0	4.0	4.0	2.0	7.0	12.0	18.0	19.0	20.0	23.0	22.0	21.0
25	9.5	4.5	4.0	4.0	7.0	9.0	15.0	18.5	21.0	23.0	22.0	19.5
26	12.0	5.0	4.0	4.0	7.0	10.0	13.0	20.0	22.0	23.0	22.0	20.0
27	11.0	5.0	5.0	6.0	7.0	10.0	10.0	15.5	26.5	22.0	22.0	17.5
28	11.0	5.5	5.0	0.0	8.0	12.0	17.0	---	22.0	22.5	---	14.5
29	---	4.5	8.0	0.0	---	---	15.0	19.0	---	25.0	22.0	15.5
30	15.0	4.0	4.0	0.0	---	12.0	18.0	17.0	24.0	22.5	22.0	15.0
31	7.0	---	4.0	0.5	---	11.0	---	16.0	---	22.0	22.0	---
MONTH	15.0	6.5	2.5	2.0	4.5	10.5	12.5	16.5	21.0	22.5	23.0	19.0

07325500 WASHITA RIVER AT CARNEGIE, OKLA.

LOCATION.--Lat 35°07'02", long 98°33'49", in NW1/4NW1/4 sec.3, T.7 N., R.13 W., Caddo County, at gaging station at 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).

DRAINAGE AREA.--3,129 sq mi (8,104.1 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.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS-CHARGE (CFS)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (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)
OCT.											
01-10	15	--	--	110	204	0	590	130	.45	2.0	--
11-19	11	--	--	120	250	0	570	140	.54	2.4	--
20-22	19	--	--	94	226	0	470	110	.79	3.5	--
23-27	31	--	--	180	246	0	760	240	.72	3.2	--
28-31	54	--	--	97	244	0	670	98	1.5	6.6	--
NOV.											
01-02	788	--	--	16	104	0	49	13	.54	2.4	--
03...	302	--	--	28	108	0	130	30	.88	3.9	--
04-06	88	--	--	39	148	0	300	38	.84	3.7	--
07-14	44	--	--	64	208	0	410	69	.88	3.9	--
15-23	41	--	--	110	280	0	730	130	.47	2.1	--
24-30	48	--	--	83	248	0	530	88	.50	2.2	--
DEC.											
01-10	33	--	--	100	290	0	740	110	.54	2.4	--
11-20	36	--	--	120	334	0	860	130	1.0	4.6	--
21-31	44	--	--	92	308	0	800	90	1.2	5.5	--
JAN.											
01-10	52	--	--	93	288	0	710	98	.72	3.2	--
11-17	49	--	--	100	312	0	770	110	1.1	5.0	--
18-20	147	--	--	60	178	0	370	58	1.2	5.4	--
21-23	1420	--	--	13	112	0	79	13	.63	2.8	--
24-27	662	--	--	29	120	0	130	32	.81	3.6	--
28-31	220	--	--	38	140	0	200	40	.72	3.2	--
FEB.											
01-03	142	--	--	58	178	0	330	61	.93	4.1	--
04-10	80	--	--	82	242	0	550	86	.77	3.4	--
11-20	67	--	--	96	266	0	620	100	.88	3.9	--
21-28	61	--	--	100	272	0	710	110	.56	2.5	--
MAR.											
01-07	116	--	--	100	264	0	740	100	.50	2.2	--
08-09	484	--	--	36	142	0	370	35	.88	3.9	--
10...	1570	--	--	7.6	138	0	72	7.0	.05	.20	--
11-12	2900	--	--	18	110	0	140	21	.34	1.5	--
13-14	716	--	--	34	128	0	200	43	.72	3.2	--
15-20	287	--	--	48	190	0	340	50	.59	2.6	--
21-29	200	--	--	70	246	0	560	68	.93	4.1	--
30-31	3600	--	--	9.8	84	0	73	11	.77	3.4	--
APR.											
01-02	4490	--	--	14	116	0	100	14	.93	4.1	--
03-04	2060	--	--	24	148	0	140	22	1.0	4.6	--
05-07	1080	--	--	30	160	0	220	29	.90	4.0	--
08-15	667	--	--	46	218	0	420	44	1.3	5.6	--
16...	3020	--	--	20	146	0	250	21	.99	4.4	--
17...	3650	--	--	13	116	0	96	13	.75	3.3	--
18-20	1260	--	--	35	164	0	240	38	.84	3.7	--
21-30	597	--	--	54	222	0	370	57	.93	4.1	--
MAY											
01-10	247	210	72	95	318	0	600	78	1.6	7.0	.01
11-21	147	240	82	100	323	0	790	75	1.5	6.6	.00
22-24	415	230	65	89	231	0	720	78	.75	3.3	.05
25-26	568	120	36	41	150	0	360	46	.99	4.4	.01
27-31	305	180	60	50	239	0	530	48	1.5	6.6	.02
JUNE											
01...	1080	140	37	47	165	0	380	47	.11	.50	.00
02-05	1950	76	18	22	138	0	170	20	.16	.70	.01
06-07	720	94	33	32	184	0	230	28	.94	4.2	.00
08-10	390	140	42	42	222	0	340	35	.96	4.3	.04
11-14	223	190	58	59	276	0	500	53	1.1	4.9	.00
15-17	241	230	71	88	309	0	660	78	1.1	4.8	.01
18-24	213	160	50	49	239	0	420	50	.84	3.7	.00
25-30	123	240	74	97	288	0	670	99	.99	4.4	.01
JULY											
01...	158	240	82	110	239	0	830	120	--	--	--
02-05	104	190	60	68	270	0	580	61	--	--	--
06-11	81	200	66	98	273	0	640	97	--	--	--
12-13	74	150	46	72	161	0	470	85	--	--	--
14-15	120	230	78	130	223	0	790	150	--	--	--
16-22	208	160	47	68	195	0	490	68	--	--	--
23-26	226	96	28	47	143	0	280	48	--	--	--
27-31	85	200	65	83	200	0	640	91	--	--	--

07325500 WASHITA RIVER AT CARNEGIE, OKLA.

EXTREMES, Current year.--Dissolved solids: Maximum, 1770 mg/l Oct. 23-27; minimum, 15 mg/l June 15-17.
Hardness: Maximum, 1100 mg/l Dec. 11-20; minimum, 120 mg/l Nov. 1-2.
Specific conductance: Maximum daily, 2620 micromhos Oct. 25; minimum daily, 296 micromhos Nov. 1.
Water temperatures: Maximum, 31.0 °C June 27; minimum, 0.0 °C Dec. 8-11, 15, Jan. 9-12.

Period of record.--Dissolved solids (1953-1973): Maximum, 2480 mg/l Feb. 16, 1971; minimum, 15 mg/l June 15-17, 1973.
Hardness(1953-1973): Maximum, 1,480 mg/l May 9-10, 1956; minimum, 102 mg/l Apr. 12, 1967.
Specific conductance(1953-1973): Maximum daily, 3,530 micromhos Aug. 26, 1954; minimum daily, 197 micromhos Sept. 25, 1971.
Water temperatures(1953-1973): maximum, 35.0 °C Sept. 2, 1971; minimum, freezing point on many days during winter period.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS-SOLVED NITRITE (NO2) (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)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)
OCT.										
01-10	--	--	1280	1.74	51.8	740	570	1.8	1680	8.2
11-19	--	--	1360	1.85	40.4	780	580	1.9	1780	7.8
20-22	--	--	1120	1.52	57.5	660	480	1.6	1480	8.1
23-27	--	--	1770	2.41	148	960	760	2.5	2320	7.8
28-31	--	--	1400	1.90	204	870	670	1.4	1780	7.5
NOV.										
01-02	--	--	200	.27	426	120	35	.6	309	6.4
03...	--	--	352	.48	287	200	110	.9	533	6.6
04-06	--	--	634	.86	151	400	280	.8	879	6.9
07-14	--	--	890	1.21	106	560	390	1.2	1220	7.8
15-23	--	--	1560	2.12	173	940	710	1.6	1940	8.1
24-30	--	--	1160	1.58	150	700	500	1.4	1500	7.8
DEC.										
01-10	--	--	1530	2.08	136	930	690	1.4	1890	7.0
11-20	--	--	1770	2.41	172	1100	830	1.6	2120	7.6
21-31	--	--	1600	2.18	190	1000	750	1.3	1910	7.4
JAN.										
01-10	--	--	1420	1.93	199	910	670	1.3	1800	7.6
11-17	--	--	1600	2.18	212	1000	740	1.4	1960	7.6
18-20	--	--	785	1.07	312	480	330	1.2	1100	7.1
21-23	--	--	225	.31	863	170	78	.4	376	6.7
24-27	--	--	353	.48	631	220	120	.9	565	6.7
28-31	--	--	476	.65	283	300	190	1.0	720	7.1
FEB.										
01-03	--	--	790	1.07	303	460	310	1.2	1060	7.8
04-10	--	--	1220	1.66	264	700	500	1.3	1500	7.6
11-20	--	--	1380	1.88	250	810	590	1.5	1700	7.6
21-28	--	--	1520	2.07	250	900	680	1.5	1820	7.8
MAR.										
01-07	--	--	1600	2.18	501	940	720	1.4	1880	7.6
08-09	--	--	814	1.11	1060	480	360	.7	1000	7.1
10...	--	--	250	.34	1060	180	67	.2	386	7.1
11-12	--	--	363	.49	2840	230	140	.5	533	7.1
13-14	--	--	510	.69	986	320	220	.8	727	7.4
15-20	--	--	852	1.16	660	480	320	1.0	1050	7.6
21-29	--	--	1240	1.69	670	740	540	1.1	1490	7.7
30-31	--	--	218	.30	2120	140	71	.4	329	7.1
APR.										
01-02	--	--	295	.40	3580	190	95	.4	443	7.3
03-04	--	--	395	.54	2200	250	130	.7	581	7.3
05-07	--	--	503	.68	1470	330	200	.7	730	7.1
08-15	--	--	950	1.29	1710	580	400	.8	1160	7.3
16...	--	--	568	.77	4630	360	240	.5	758	7.1
17...	--	--	297	.40	2930	180	85	.4	429	6.8
18-20	--	--	566	.77	1930	350	220	.8	796	7.4
21-30	--	--	956	1.30	1540	540	360	1.0	1140	7.6
MAY										
01-10	.0	.09	1300	1.77	867	820	560	1.4	1630	8.0
11-21	.0	.05	1540	2.09	611	940	670	1.4	1870	8.0
22-24	.1	.06	1450	1.97	1630	840	650	1.3	1700	7.9
25-26	.0	.18	774	1.05	1190	450	320	.8	1010	8.0
27-31	.0	--	1110	1.51	914	700	500	.8	1390	7.9
JUNE										
01...	.0	.39	854	1.16	2490	500	370	.9	1080	7.7
02-05	.0	--	416	.57	2190	260	150	.6	614	7.9
06-07	.0	.09	602	.82	1170	370	220	.7	815	7.1
08-10	.1	--	780	1.06	821	520	340	.8	1070	7.8
11-14	.0	.15	1150	1.56	692	710	490	1.0	1390	7.4
15-17	.0	.06	15	.02	9.76	870	610	1.3	1730	7.5
18-24	.0	.13	984	1.34	566	610	410	.9	1210	7.6
25-30	.0	--	1470	2.00	488	900	670	1.4	1810	7.9
JULY										
01...	--	.13	1600	2.18	683	940	740	1.6	1950	7.7
02-05	--	.17	1160	1.58	326	720	500	1.1	1450	8.2
06-11	--	.18	1310	1.78	286	770	550	1.5	1670	8.0
12-13	--	.17	987	1.34	197	560	430	1.3	1330	8.0
14-15	--	.16	1620	2.20	525	900	710	1.9	1990	7.9
16-22	--	.20	969	1.32	544	590	430	1.2	1300	8.1
23-26	--	.19	618	.84	377	360	240	1.1	889	7.8
27-31	--	.17	1300	1.77	298	770	600	1.3	1620	8.2

07325500 WASHITA RIVER AT CARNEGIE, OKLA.--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS-CHARGE (CFS)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (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)
AUG.											
01...	559	86	27	56	154	0	230	56	.97	4.3	.13
02-05	123	120	35	49	151	0	360	48	.99	4.4	.31
06-09	67	160	51	83	183	0	480	89	.28	1.2	.00
10-14	38	210	73	110	233	0	650	120	.26	1.2	.00
15-29	25	270	79	140	263	0	800	160	.32	1.4	.00
30-31	56	220	63	140	224	0	650	170	.52	2.3	.00
SEP.											
01-04	32	200	57	120	206	0	590	140	.81	3.6	.01
05-09	1890	48	10	13	125	0	82	12	.79	3.5	.01
10-17	859	59	15	21	135	0	110	18	1.1	4.8	.01
18-20	368	94	27	31	160	0	230	26	.76	3.4	.01
21-26	182	120	36	44	198	0	310	38	1.4	6.2	.01
27-30	1440	57	15	21	126	0	120	19	.93	4.1	.02

DATE	DIS-SOLVED NITRITE (NO2) (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)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)
AUG.										
01...	.4	--	610	.83	921	330	200	1.4	886	7.6
02-05	1.0	--	778	1.06	256	440	320	1.0	1070	7.7
06-09	.0	--	1060	1.44	192	610	460	1.5	1450	7.8
10-14	.0	--	1410	1.92	145	830	630	1.7	1820	7.9
15-29	.0	.17	1690	2.30	114	1000	780	1.9	2240	7.9
30-31	.0	.21	1440	1.96	218	810	630	2.1	1980	7.8
SEP.										
01-04	.0	--	1330	1.81	115	730	570	1.9	1790	7.6
05-09	.0	--	266	.36	1360	160	59	.4	406	7.9
10-17	.0	--	338	.46	784	210	98	.6	520	7.8
18-20	.0	--	568	.77	564	350	210	.7	790	8.2
21-26	.0	--	745	1.01	366	450	290	.9	1010	8.2
27-30	.0	--	389	.53	1510	200	100	.6	521	7.8

07325500 WASHITA RIVER AT CARNEGIE, OKLA.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(ONCE-DAILY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1480	296	1860	1990	968	1880	414	1490	1070	1930	841	1910
2	1620	312	1860	2000	1030	1910	471	1570	659	1350	994	1730
3	1610	533	1980	1950	1150	1930	555	1570	530	1400	953	1720
4	1650	856	1990	1760	1290	2000	609	1580	588	1710	1030	1520
5	1790	919	1800	1760	1290	2000	707	1630	644	1390	1110	365
6	1790	864	1840	1760	1500	1980	688	1670	764	1540	1260	430
7	1790	1010	1930	1760	1510	1480	798	---	852	1540	1340	434
8	1750	1010	1930	1750	1500	970	983	1740	980	1660	1450	336
9	1750	1010	1930	1760	1580	1050	988	1750	1040	1720	1520	366
10	1780	1060	1880	1690	1730	345	1070	1750	1140	1750	1580	445
11	1780	1220	1910	1930	1730	506	1170	1750	1300	1880	1630	483
12	1760	1290	1840	1930	1550	571	1180	1760	1380	1330	1810	488
13	1780	1470	2180	1930	1660	681	1160	1820	1450	1300	1810	541
14	1860	1640	2210	2030	1720	787	1370	1870	1480	1950	1940	538
15	1870	1840	2190	2020	1710	961	1090	1930	1670	2010	2070	407
16	1810	1840	2150	1950	1700	1120	735	1920	1660	1520	2070	554
17	1810	1980	2150	1960	1680	956	420	1920	1840	1430	2080	556
18	1820	1910	2240	972	1680	1020	730	1960	900	913	2080	763
19	1760	2020	2240	997	1680	1090	785	1950	1220	1270	2110	764
20	1460	2020	2050	1350	1700	1210	865	1950	1270	1270	2100	789
21	1440	1960	2060	414	1740	1440	1000	1930	1160	1330	2160	927
22	1660	1930	2110	304	1760	1300	1070	1970	1250	1260	2140	925
23	2240	2100	1990	410	1790	1520	1120	1630	1260	980	2210	997
24	2380	1500	1980	457	1830	1540	1260	1720	1380	837	2220	1080
25	2620	1510	1880	496	1840	1590	1120	1140	1630	667	2160	889
26	2250	1490	1820	539	1830	1680	920	872	1750	997	2160	1090
27	2260	1490	1820	491	1870	1690	1190	1250	1800	1560	2160	490
28	1870	1460	1860	610	1860	1240	1360	1250	1880	1700	2170	416
29	1870	1490	1840	704	---	1340	1360	1480	1800	1580	2160	507
30	1830	1540	---	853	---	305	1430	1480	1840	1650	1900	585
31	1600	---	---	853	---	363	---	1440	---	1540	1890	---
MONTH	1830	1390	1980	1330	1600	1240	954	1660	1270	1450	1780	768

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(ONCE-DAILY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17.0	9.0	6.0	7.0	7.0	10.0	11.0	18.0	21.0	29.0	29.0	28.5
2	22.0	10.0	6.0	6.0	8.0	11.0	12.0	17.0	21.0	29.0	26.0	29.0
3	21.0	9.0	6.0	5.0	9.0	12.0	13.0	19.0	21.0	28.0	29.0	29.5
4	22.0	13.0	2.0	3.0	7.0	9.0	11.5	18.0	22.0	29.0	28.5	29.0
5	20.0	12.0	4.0	2.5	7.0	10.0	12.0	19.0	21.0	28.0	28.5	29.0
6	20.0	10.0	1.0	3.0	10.0	10.5	12.0	21.0	23.0	29.0	28.0	29.0
7	21.0	11.0	1.0	2.0	4.0	11.0	13.0	---	23.0	29.0	27.0	22.0
8	21.0	11.5	0.0	1.0	5.0	11.0	10.0	18.0	22.0	29.0	29.5	22.0
9	20.0	12.0	0.0	0.0	7.0	12.0	9.0	23.0	24.0	29.5	29.0	20.0
10	21.0	10.0	0.0	0.0	5.0	10.0	9.0	23.0	25.0	29.0	29.0	21.0
11	22.0	12.0	0.0	0.0	5.0	9.0	10.0	22.5	27.0	27.0	29.5	24.0
12	21.0	10.0	1.0	0.0	5.0	10.0	12.0	22.0	26.0	30.0	29.0	24.0
13	22.0	---	2.0	1.5	7.0	14.0	13.0	21.0	27.0	25.5	29.5	24.0
14	21.0	8.0	1.0	6.0	6.0	14.0	15.0	20.0	25.0	28.0	29.5	22.0
15	18.0	7.0	0.0	6.0	5.0	14.0	17.0	11.0	28.0	28.5	29.0	23.0
16	21.0	6.0	1.0	5.0	5.0	13.0	15.0	13.0	27.0	28.5	29.5	22.0
17	20.0	7.0	2.0	5.0	4.0	12.0	15.0	---	27.0	25.0	29.0	20.0
18	18.5	7.0	3.5	12.5	6.0	14.0	16.0	20.0	27.0	27.0	29.5	20.0
19	11.0	6.0	4.0	8.5	5.5	14.0	16.0	22.0	25.0	26.5	29.0	19.0
20	15.0	5.0	5.0	8.0	6.0	13.0	16.0	23.5	23.0	25.0	29.0	20.0
21	12.0	5.0	10.0	---	5.5	14.0	16.0	23.0	24.0	28.0	29.5	24.0
22	15.0	5.0	10.0	---	6.0	12.0	16.0	22.0	27.0	25.5	29.5	23.0
23	14.0	4.0	7.0	5.0	6.5	14.0	18.0	20.0	24.0	21.0	29.5	24.0
24	14.0	10.0	5.0	6.0	6.5	13.0	17.0	23.5	28.0	30.0	29.0	24.0
25	11.0	7.0	5.0	6.0	9.0	13.0	15.0	23.0	29.0	25.5	29.5	23.5
26	12.0	8.0	9.0	6.0	8.0	13.0	17.0	23.0	28.0	27.0	28.5	24.0
27	12.0	7.0	7.0	6.0	9.0	12.0	16.0	23.5	31.0	26.5	28.0	20.0
28	14.0	5.5	12.0	6.0	9.0	13.0	17.0	23.0	27.0	29.0	29.0	20.0
29	14.0	5.0	10.0	2.0	---	12.5	17.0	20.0	28.0	28.5	29.0	20.0
30	14.0	6.5	6.0	6.0	---	13.0	18.0	20.0	27.0	24.0	29.0	20.0
31	10.0	---	10.0	6.0	---	12.0	---	20.0	---	29.0	29.0	---
MONTH	17.5	8.0	4.5	4.5	6.5	12.0	14.0	20.5	25.5	27.5	29.0	23.5

07331000 WASHITA RIVER NEAR DURWOOD, OKLA.

LOCATION.--Lat 34°14'03", long 96°58'32", in NW1/4SW1/4 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, 4.0 mi (6.4 km) north of Durwood, and at mile 63.4 (102.0 km).

DRAINAGE AREA.--7,202 sq mi (18,653.2 km²).

PERIOD OF RECORD.--Chemical analyses: May 1944 to current year.
Water temperatures: April 1947 to current year.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS-CHARGE (CFS)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (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)
OCT.											
01-10	20	--	--	37	198	0	69	45	.41	1.8	--
11-21	10	--	--	46	274	0	75	56	.32	1.4	--
22...	997	--	--	30	98	0	47	37	.72	3.2	--
23...	1440	--	--	15	128	0	16	17	.32	1.4	--
24-27	357	--	--	23	112	0	36	29	.84	3.7	--
28-30	329	--	--	40	160	0	110	46	.90	4.0	--
31...	13900	--	--	9.8	132	0	16	9.0	.23	1.0	--
NOV.											
01...	18200	--	--	10	110	0	18	11	.70	3.1	--
02-06	5690	--	--	15	124	0	32	20	.52	2.3	--
07-13	1620	--	--	26	156	0	72	33	.59	2.6	--
14-18	2010	--	--	20	144	0	47	28	.45	2.0	--
19-24	1020	--	--	31	188	0	56	47	.38	1.7	--
25-30	445	--	--	44	262	0	110	68	.43	1.9	--
DEC.											
01-10	267	--	--	63	316	0	190	92	.43	1.9	--
11-20	214	--	--	71	354	0	220	100	.56	2.5	--
21-31	254	--	--	71	324	0	220	100	.45	2.0	--
JAN.											
01-02	186	--	--	84	266	0	270	120	.02	.10	--
03-08	1630	--	--	33	180	0	83	43	.47	2.1	--
09-19	784	--	--	42	242	0	110	65	.59	2.6	--
20-26	1630	--	--	38	210	0	120	52	.61	2.7	--
27-31	2940	--	--	26	172	0	63	37	.63	2.8	--
FEB.											
01-07	2060	--	--	32	188	8	69	46	.59	2.6	--
08-10	2920	--	--	27	178	6	43	38	.45	2.0	--
11-18	1090	--	--	41	240	8	94	58	.38	1.7	--
19-28	625	--	--	61	282	10	150	93	.43	1.9	--
MAR.											
01...	864	99	38	69	284	0	190	100	.46	2.0	.00
02-03	1780	66	20	35	210	0	84	52	.46	2.0	.00
04...	7480	47	11	20	158	0	43	27	.53	2.3	.00
05-09	5430	57	16	29	189	0	60	43	.42	1.9	.00
10-11	8980	46	12	18	163	0	39	26	.47	2.1	.00
12-16	5360	64	18	25	178	0	99	32	.78	3.5	.00
17-24	2190	76	22	35	206	0	120	53	.77	3.4	.01
25-29	5650	53	16	23	171	0	68	33	.71	3.1	.00
30-31	4110	68	23	33	200	0	110	51	.60	2.7	.00
APR.											
01-07	4550	--	--	28	168	0	110	38	.68	3.0	--
08-15	2340	--	--	41	212	4	160	58	.63	2.8	--
16-21	8400	--	--	24	172	0	75	32	.41	1.8	--
22-23	2620	--	--	10	114	0	26	12	.29	1.3	--
24-26	13000	--	--	19	160	0	44	28	.36	1.6	--
27-30	5270	--	--	30	202	0	89	42	.36	1.6	--
MAY											
01-05	2340	85	28	42	245	0	130	56	.59	2.6	.00
06...	2620	61	16	26	178	0	88	37	.04	.20	.00
07-13	1820	95	31	40	260	0	160	61	.63	2.8	.00
14-25	805	120	51	68	304	0	290	95	.12	.50	.18
26...	2520	91	35	49	225	0	190	56	1.3	5.8	.00
27-29	1680	64	23	28	185	0	110	38	.66	2.9	.00
30-31	960	100	37	46	236	0	240	56	.98	4.3	.00
JUNE											
03-04	16800	47	12	15	147	0	54	20	.27	1.2	.00
05-08	9530	59	16	19	163	0	84	26	.68	3.0	.00
09-13	2550	75	22	28	200	0	110	40	.70	3.1	.00
14-19	1880	97	32	48	0	0	170	250	.68	3.0	.00
20-21	6080	45	14	19	157	0	46	24	.51	2.3	.01
22-23	2700	73	23	27	198	0	130	34	.65	2.9	.00
25-30	1340	97	34	41	258	0	170	52	.46	2.0	.00
JULY											
01-08	706	100	40	57	275	0	230	70	--	--	--
09-14	468	120	55	76	267	0	360	96	--	--	--
15-18	481	110	52	67	273	0	290	88	--	--	--
19-23	571	110	46	69	228	0	310	89	--	--	--
24-29	1230	110	51	42	162	0	280	59	--	--	--
30-31	2700	61	13	26	147	0	93	39	--	--	--
AUG.											
01-02	1380	84	22	37	191	0	150	47	.62	2.7	.00
03-07	668	110	30	49	236	0	200	59	.42	1.9	.00
08-10	530	150	45	68	242	0	350	94	.30	1.3	.00
11-20	372	95	37	60	209	0	230	74	.34	1.5	.22
21-31	181	91	48	70	206	0	260	85	.90	4.0	.07

07331000 WASHITA RIVER NEAR DURWOOD, OKLA.

EXTREMES, Current year.--Dissolved solids: Maximum, 900 mg/l Aug. 8-10; minimum, 149 mg/l Nov. 1.
Hardness: Maximum, 560 mg/l Aug. 8-10; minimum, 100 mg/l Nov. 1.
Specific conductance: Maximum daily, 1,350 micromhos May 25; minimum daily, 240 micromhos Nov. 1.
Water temperatures: Maximum, 34.0 °C Aug. 14-15; minimum 1.0 °C Dec. 11, Jan. 10.

Period of record.--Dissolved solids(1944-49, 1950-1973): Maximum, 1,470 mg/l June 15-17, 1966; minimum, 70 mg/l Nov. 2, 1951.
Hardness(1944-49, 1950-1973): Maximum, 860 mg/l June 15-17, 1966; minimum, 41 mg/l Nov. 2, 1951.
Specific conductance(1944-49, 1950-1973): Maximum daily, 2,120 micromhos Nov. 15, 1963; minimum daily, 94.9 micromhos Nov. 2, 1951.
Water temperatures(1947-1973): Maximum, 37.0 °C July 8, 1964; minimum, freezing point on many days during winter period.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS-SOLVED NITRITE (NO2) (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)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)
OCT.										
01-10	--	--	345	.47	18.6	220	58	1.1	582	8.2
11-21	--	--	434	.59	11.7	280	55	1.2	724	8.0
22...	--	--	238	.32	641	110	30	1.2	393	7.7
23...	--	--	167	.23	649	110	5	.6	280	7.3
24-27	--	--	214	.29	206	120	28	.9	351	8.0
28-30	--	--	381	.52	338	220	89	1.2	615	7.6
31...	--	--	156	.21	5860	110	2	.4	268	7.5
NOV.										
01...	--	--	149	.20	7320	100	10	.4	240	7.7
02-06	--	--	205	.28	3150	130	28	.6	326	6.9
07-13	--	--	307	.42	1340	190	62	.8	486	6.8
14-18	--	--	249	.34	1350	160	42	.7	410	6.8
19-24	--	--	335	.46	923	210	56	.9	536	7.5
25-30	--	--	505	.69	607	320	110	1.1	789	7.6
DEC.										
01-10	--	--	706	.96	509	450	190	1.3	1070	7.3
11-20	--	--	790	1.07	456	500	210	1.4	1180	7.6
21-31	--	--	772	1.05	529	480	210	1.4	1140	8.0
JAN.										
01-02	--	--	808	1.10	406	480	260	1.7	1220	6.9
03-08	--	--	344	.47	1510	220	72	1.0	576	6.9
09-19	--	--	473	.64	1000	320	120	1.0	776	7.2
20-26	--	--	426	.58	1880	290	120	1.0	695	7.2
27-31	--	--	293	.40	2330	200	59	.8	511	6.9
FEB.										
01-07	--	--	352	.48	1960	230	62	.9	574	8.7
08-10	--	--	299	.41	2360	190	34	.9	485	8.6
11-18	--	--	480	.65	1410	300	90	1.0	732	8.6
19-28	--	--	689	.94	1160	420	170	1.3	1020	8.6
MAR.										
01...	.0	--	669	.91	1560	400	170	1.5	1050	8.2
02-03	.0	--	390	.53	1870	250	75	1.0	650	7.9
04...	.0	--	254	.35	5130	160	33	.7	422	7.9
05-09	.0	--	331	.45	4850	210	53	.9	555	7.7
10-11	.0	--	254	.35	6160	160	31	.6	420	7.8
12-16	.0	--	364	.50	5270	230	88	.7	572	7.3
17-24	.0	--	460	.63	2720	280	110	.9	707	7.9
25-29	.0	--	321	.44	4900	200	58	.7	510	7.1
30-31	.0	--	432	.59	4790	260	100	.9	670	7.5
APR.										
01-07	--	--	429	.58	5270	250	110	.8	598	7.9
08-15	--	--	560	.76	3540	340	160	1.0	796	7.9
16-21	--	--	348	.47	7890	210	69	.7	509	7.6
22-23	--	--	164	.22	1160	110	16	.4	262	6.9
24-26	--	--	274	.37	9620	170	39	.6	422	7.4
27-30	--	--	415	.56	5910	250	84	.8	603	7.3
MAY										
01-05	.0	--	503	.68	3180	330	130	1.0	782	8.0
06...	.0	.05	371	.50	2620	220	72	.8	545	8.1
07-13	.0	.06	576	.78	2830	360	150	.9	874	8.2
14-25	.5	.02	839	1.14	1820	510	260	1.3	1180	8.1
26...	.0	--	591	.80	4020	370	190	1.1	871	8.3
27-29	.0	.13	403	.55	1830	250	100	.8	614	7.9
30-31	.0	.13	672	.91	1740	400	210	1.0	950	8.2
JUNE										
03-04	.0	.07	251	.34	11400	170	46	.5	410	7.9
05-08	.0	.06	323	.44	8310	210	80	.6	491	8.1
09-13	.0	.09	439	.60	3020	280	110	.7	651	8.0
14-19	.0	.14	798	1.09	4050	370	370	1.1	1310	3.5
20-21	.0	.08	287	.39	4710	170	41	.6	426	8.1
22-23	.0	.09	439	.60	3200	280	110	.7	647	7.4
25-30	.0	.05	596	.81	2160	380	170	.9	867	7.8
JULY										
01-08	--	.11	670	.91	1280	410	190	1.2	1010	8.2
09-14	--	.14	870	1.18	1100	530	310	1.4	1250	8.2
15-18	--	.19	823	1.12	1070	490	260	1.3	1160	8.1
19-23	--	.13	796	1.08	1230	460	280	1.4	1110	8.1
24-29	--	.30	667	.91	2220	400	270	.9	940	8.0
30-31	--	.19	346	.47	2520	210	85	.8	532	7.8
AUG.										
01-02	.0	.12	468	.64	1740	300	140	.9	742	7.9
03-07	.0	.11	622	.85	1120	400	200	1.1	961	8.0
08-10	.0	.13	900	1.22	1290	560	360	1.3	1290	7.9
11-20	.7	.13	648	.88	651	390	220	1.3	994	7.7
21-31	.2	.14	638	.87	312	420	260	1.5	1110	7.8

07331000 WASHITA RIVER NEAR DURWOOD, OKLA.--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS-CHARGE (CFS)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (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)
SEP.											
01-05	246	93	48	79	223	0	260	99	.39	1.7	.34
06-08	5230	47	9.6	17	152	0	46	22	.68	3.0	.01
09-12	3200	65	17	23	170	0	110	26	.99	4.4	.01
13-15	5720	45	10	14	153	0	34	19	.70	3.1	.01
16-26	1500	70	18	26	183	0	110	32	.77	3.4	.00
27-30	6390	47	11	16	152	0	48	20	.36	1.6	.13
WTD. AVG.	--	--	--	28	178	0	91	41	.54	2.4	--
TIME WTD. AVG.	2170	--	--	43	215	1	143	61	.53	2.4	--
TOT. LOAD (TONS)	--	--	--	58900	377000	1010	194000	86300	1120	4940	--

CHEMICAL ANALYSES OF ADDITIONAL SAMPLES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	INSTAN-TANEOUS DIS-CHARGE (CFS)	DIS-SOLVED SODIUM (NA) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	PHOS-PHATE (PO4) (MG/L)
OCT.							
26...	322	24	108	0	45	31	.16
NOV.							
27...	455	44	260	0	110	67	.64
DEC.							
26...	259	78	342	0	270	110	.36
JAN.							
26...	4720	29	186	0	130	36	.10
FEB.							
23...	507	67	322	0	200	100	.58
MAR.							
28...	4200	24	176	0	64	33	.23
APR.							
26...	8940	24	178	0	53	34	.17
MAY							
24...	670	71	280	0	290	99	.58
JUNE							
25...	1680	34	228	0	150	45	.10

PESTICIDE ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	ALDRIN (UG/L)	CHLOR-DANE (UG/L)	DDD (UG/L)	DDE (UG/L)	DDT (UG/L)	DI-ELDRIN (UG/L)	ENDRIN (UG/L)	HEPTA-CHLOR (UG/L)	HEPTA-CHLOR EPOXIDE (UG/L)
DEC.									
26...	.00	.0	.00	.00	.00	.00	.00	.00	.00
MAR.									
28...	.00	.0	.00	.01	.00	.01	.00	.00	.00
JUNE									
25...	.00	.0	.00	.00	.00	.00	.00	.00	.00
AUG.									
27...	.00	.0	.00	.00	.00	.00	.00	.00	.00

07331000 WASHITA RIVER NEAR DURWOOD, OKLA.--Continued

DATE	DIS-SOLVED NITRITE (NO2) (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)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)
SEP.										
01-05	1.1	--	776	1.06	515	430	250	1.7	1140	7.7
06-08	.0	--	234	.32	3300	160	32	.6	395	7.6
09-12	.0	--	353	.48	3050	230	93	.7	569	8.2
13-15	.0	--	214	.29	3310	150	28	.5	379	7.9
16-26	.0	--	390	.53	1580	250	99	.7	601	8.2
27-30	.4	--	274	.37	4730	160	38	.5	401	7.8
WTD. AVG.	--	--	375	.51	--	233	87	.8	577	7.6
TIME WTD. AVG.	--	--	509	.69	--	315	138	1.0	779	7.7
TOT. LOAD (TONS)	--	--	746000	--	--	--	--	--	--	--

CHEMICAL ANALYSES OF ADDITIONAL SAMPLES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

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)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)
OCT.								
26...	206	.28	179	130	41	.9	349	7.6
NOV.								
27...	490	.67	602	330	120	1.1	787	7.4
DEC.								
26...	866	1.18	559	--	--	--	--	--
26...	860	1.17	--	540	260	1.5	1260	8.2
26...	--	--	--	--	--	--	--	--
JAN.								
26...	408	.55	5200	280	130	.8	627	6.9
FEB.								
23...	722	.98	988	460	200	1.4	1100	7.6
MAR.								
28...	303	.41	3440	210	66	.7	488	7.6
APR.								
26...	285	.39	6860	200	54	.7	471	7.7
MAY								
24...	832	1.13	1510	520	290	1.4	1190	7.7
JUNE								
25...	509	.69	2310	330	140	.8	715	8.0

PESTICIDE ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	LINDANE (UG/L)	2,4-D (UG/L)	2,4,5-T (UG/L)	SILVEX (UG/L)	DI-AZINON (UG/L)	MALA-THION (UG/L)	METHYL PARA-THION (UG/L)	PARA-THION (UG/L)	PCB (UG/L)
DEC.									
26...	.00	.00	.00	.00	.04	.00	.00	.00	.0
MAR.									
28...	.00	.04	.01	.00	.02	.00	.04	.00	.0
JUNE									
25...	.00	.04	.02	.00	.01	.00	.00	.00	.0
AUG.									
27...	.00	.10	.00	.00	.00	.00	.00	.00	.0

07331000 WASHITA RIVER NEAR DURWOOD, OKLA.--Continued

FIELD ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION
OCT.					
26...	370	--	12.0	9.6	96
NOV.					
27...	850	--	6.5	11.1	101
DEC.					
26...	125	--	8.5	12.2	109
JAN.					
26...	530	7.8	5.0	11.6	97
FEB.					
25...	1090	8.0	9.0	13.0	118
MAR.					
28...	460	8.0	13.0	10.0	101
APR.					
26...	385	7.7	17.0	8.3	91
MAY					
24...	1000	7.8	27.0	8.4	110
JUNE					
25...	610	7.8	28.5	7.5	100

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(ONCE-DAILY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	240	939	---	475	1040	454	733	1150	977	681	1100
2	522	285	938	1260	506	768	618	703	754	833	758	1040
3	547	315	978	680	566	504	849	759	351	980	895	1160
4	576	333	1040	462	597	422	---	842	434	986	878	1160
5	598	340	1090	---	600	715	552	866	483	1010	925	1100
6	590	396	1090	506	645	464	542	544	500	1070	904	361
7	597	546	1140	---	660	---	611	806	455	1120	1020	400
8	605	453	1150	662	404	436	653	894	502	1140	1190	396
9	615	433	1170	---	515	579	720	860	562	1200	1230	571
10	631	447	1140	753	547	414	747	843	607	1220	1300	561
11	665	481	1180	714	595	412	791	809	650	1220	976	554
12	671	499	1180	771	624	552	798	1010	771	1280	1030	536
13	699	548	1190	787	670	544	828	---	699	1300	1030	---
14	714	362	1140	785	708	608	916	1140	825	1260	931	348
15	713	350	1150	844	816	517	956	1140	835	1120	761	384
16	718	416	1170	907	849	530	535	1170	1020	1200	846	507
17	731	475	1200	788	886	567	534	1180	908	1160	1000	496
18	752	455	1200	747	---	619	583	1170	920	1140	989	514
19	823	493	1190	742	975	660	615	1220	793	893	1020	499
20	821	525	1210	631	---	713	422	1210	375	986	1080	555
21	838	525	1030	681	1060	752	367	1220	474	1150	1030	533
22	393	519	1040	689	1130	795	253	1230	581	1240	984	569
23	280	554	1070	692	1110	820	270	1220	692	1250	1020	615
24	321	603	1080	813	962	535	351	1230	---	922	---	679
25	374	703	1180	724	973	494	448	1350	720	908	1060	709
26	314	748	1260	700	925	467	471	885	825	900	1100	728
27	414	778	1250	509	992	460	515	614	800	950	1090	375
28	497	797	---	450	978	488	576	560	---	972	1110	318
29	691	818	1260	526	---	571	633	761	983	910	1140	451
30	669	907	1220	540	---	633	692	855	972	507	1160	410
31	268	---	1210	545	---	669	---	1050	---	522	1020	---
MONTH	588	511	1140	700	760	592	597	962	701	1040	1010	608

07331000 WASHITA RIVER NEAR DURWOOD, OKLA.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(ONCE-DAILY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25.0	13.0	13.0	7.5	10.0	15.0	15.0	21.0	24.0	31.0	28.0	31.0
2	26.0	17.0	12.0	9.0	12.0	17.0	14.0	20.0	23.0	31.0	29.0	30.0
3	26.0	15.0	12.0	11.0	12.0	16.0	14.0	22.0	23.0	32.0	30.0	31.0
4	27.0	16.0	9.0	7.0	14.0	14.0	---	23.0	25.0	33.0	30.0	29.0
5	28.0	16.0	8.0	7.0	15.0	16.0	16.0	21.0	22.0	30.0	30.0	24.0
6	24.0	17.0	2.5	4.5	13.0	14.0	16.0	19.0	24.0	32.0	31.0	22.0
7	25.0	17.0	4.0	---	10.5	---	16.0	22.0	25.0	33.0	30.0	25.0
8	26.0	17.0	5.0	2.0	10.0	17.0	15.0	25.0	20.0	30.0	32.0	24.0
9	27.0	15.0	5.0	---	10.0	14.0	12.0	25.0	29.0	30.0	31.0	29.0
10	27.0	15.0	2.5	1.0	7.0	18.5	15.0	25.0	28.0	29.0	32.0	28.0
11	24.0	15.0	1.0	2.5	12.0	17.0	16.0	25.0	26.0	29.0	33.0	29.0
12	27.0	14.0	3.5	3.5	12.0	18.0	19.0	22.0	22.0	32.0	33.0	28.0
13	29.0	14.0	3.0	8.0	11.0	18.0	19.0	22.0	26.0	31.0	33.0	---
14	28.0	12.0	4.0	9.0	10.0	17.0	19.0	22.0	28.0	31.0	34.0	23.0
15	27.0	14.0	5.0	7.0	13.0	15.0	18.0	23.0	29.0	27.0	34.0	22.0
16	29.0	10.0	2.5	12.0	12.0	17.0	16.0	25.0	29.0	---	32.0	25.0
17	32.0	11.0	7.0	10.0	7.0	15.0	15.0	25.0	30.0	32.0	32.0	22.0
18	20.0	10.0	6.0	14.0	---	17.0	18.0	27.0	30.0	32.0	32.0	22.0
19	16.0	9.0	8.0	---	9.0	20.0	21.0	25.0	27.0	31.0	32.0	27.0
20	17.0	10.0	7.0	15.0	---	17.0	19.0	25.0	25.0	33.0	31.0	25.0
21	14.0	8.0	8.0	14.0	12.0	18.0	18.0	26.0	28.0	32.0	32.0	25.0
22	22.0	10.0	10.0	14.0	10.0	14.0	---	28.0	27.0	33.0	32.0	28.0
23	16.0	11.0	10.0	12.0	12.0	17.0	23.0	26.0	26.0	32.0	32.0	28.0
24	16.0	13.0	10.0	13.0	12.0	15.0	15.0	28.0	---	---	---	28.0
25	16.0	10.0	10.0	11.0	12.0	13.5	19.0	25.0	30.0	32.0	32.0	28.0
26	17.0	11.0	10.0	8.0	11.0	11.0	18.0	26.0	28.0	29.0	32.0	31.0
27	18.0	13.0	10.0	9.0	14.0	14.0	18.0	24.0	33.0	32.0	30.0	23.0
28	15.0	13.0	10.0	8.0	13.0	15.0	20.0	24.0	---	30.0	28.0	22.0
29	16.0	12.0	11.0	10.0	---	18.0	19.0	25.0	31.0	28.0	30.0	23.0
30	16.0	13.0	10.5	12.0	---	17.0	19.0	24.0	27.0	26.0	30.0	24.0
31	15.0	---	11.5	12.0	---	15.0	---	24.0	---	30.0	31.0	---
MONTH	22.5	13.0	7.5	9.0	11.5	16.0	17.0	24.0	26.5	31.0	31.5	26.0

07332800 CANEY BOGGY CREEK NEAR ASHLAND, OKLA.

LOCATION.--Lat 34°45'11", long 96°08'52", in SW1/4SE1/4SE1/4 sec. 4, T.3 N., R.11 E., Coal County, end of county road bridge, 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.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (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)
OCT.											
19...	--	--	7.3	76	0	10	6.0	.29	1.3	--	--
25...	--	--	4.0	24	0	17	3.5	.34	1.5	--	--
NOV.											
05...	--	--	7.6	28	0	18	6.5	.23	1.0	--	--
15...	--	--	7.4	32	0	18	6.5	1.6	7.0	--	--
25...	--	--	8.7	36	0	18	8.0	1.4	6.0	--	--
DEC.											
05...	--	--	11	54	0	22	11	.90	4.0	--	--
15...	--	--	12	52	0	22	12	2.0	9.0	--	--
25...	--	--	11	46	0	24	12	.90	4.0	--	--
JAN.											
05...	--	--	7.1	16	0	15	6.1	.23	1.0	--	--
15...	--	--	11	38	--	22	10	.14	.60	--	--
25...	--	--	8.5	24	0	16	6.5	.20	.90	--	--
FEB.											
05...	--	--	9.4	40	0	21	9.0	.14	.60	--	--
15...	--	--	9.5	44	0	21	9.5	.09	.40	--	--
25...	--	--	9.3	40	0	21	9.0	.36	1.6	--	--
MAR.											
05...	--	--	4.1	18	0	11	3.0	.23	1.0	--	--
15...	--	--	6.4	32	0	14	5.5	.23	1.0	--	--
25...	--	--	5.5	30	0	11	4.0	.29	1.3	--	--
APR.											
05...	--	--	5.8	32	0	13	5.2	.18	.80	--	--
15...	--	--	3.5	25	0	9.6	2.4	.38	1.7	--	--
25...	--	--	6.2	42	0	13	5.3	.20	.90	--	--
MAY											
05...	--	--	12	88	0	22	9.1	.11	.50	--	--
15...	--	--	17	128	0	26	12	.23	1.0	--	--
25...	--	--	5.3	30	0	9.3	4.5	.68	3.0	--	--
JUNE											
05...	5.7	2.7	4.2	28	0	8.3	5.5	.29	1.3	.02	.0
15...	24	9.3	15	106	0	24	12	.19	.80	.00	.0
25...	23	9.6	14	111	0	19	11	.27	1.2	.00	.0
JULY											
05...	29	12	18	160	0	23	14	.31	1.4	.00	.0
15...	37	15	24	184	0	29	18	.22	1.0	.00	.0
24...	33	13	18	173	0	17	14	.55	2.4	.00	.0
AUG.											
05...	25	10	17	133	0	18	17	.35	1.6	.01	.0
16...	8.9	3.8	6.7	47	0	7.0	4.5	.00	.00	1.3	4.3
25...	48	9.9	26	150	0	44	37	.33	1.5	.00	.0
SEP.											
05...	6.8	2.8	8.9	34	0	7.5	6.9	.31	1.4	.05	.1
15...	9.3	3.7	8.8	47	0	8.4	6.0	.23	1.0	.00	.0
27...	4.6	1.6	2.8	18	0	5.5	3.5	.13	.58	.06	.2

07332800 CANEY BOGGY CREEK NEAR ASHLAND, OKLA.

DRAINAGE AREA.--49 sq mi (126.9 km^2).

PERIOD OF RECORD.--Chemical analyses: February 1972 to current year.
Water temperatures: February 1972 to current year.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	TOTAL PHOSPHORUS (P) (MG/L)	PHOSPHATE (PO4) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (TONS PER AC-FT)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	DISSOLVED BORON (B) (UG/L)
OCT.										
19...	--	.08	100	.14	64	2	.4	154	6.5	40
25...	--	.16	54	.07	36	16	.3	78	5.8	140
NOV.										
05...	--	--	82	.11	34	11	.6	102	6.1	43
15...	--	--	90	.12	36	10	.5	106	6.0	37
25...	--	--	94	.13	40	10	.6	120	6.2	11
DEC.										
05...	--	--	120	.16	56	12	.6	166	7.4	--
15...	--	--	127	.17	58	15	.7	178	6.5	--
25...	--	--	118	.16	54	16	.7	163	6.9	--
JAN.										
05...	--	--	67	.09	24	11	.6	75	6.4	30
15...	--	--	101	.14	44	13	.7	142	6.3	20
25...	--	--	82	.11	28	8	.7	91	6.0	40
FEB.										
05...	--	--	92	.13	46	10	.6	132	7.2	45
15...	--	--	94	.13	54	0	.6	139	7.1	6
25...	--	--	94	.13	46	13	.6	138	7.1	0
MAR.										
05...	--	--	44	.06	22	7	.4	67	6.4	30
15...	--	--	64	.09	34	8	.5	99	6.6	60
25...	--	--	54	.07	30	5	.4	84	7.4	80
APR.										
05...	--	.09	84	.11	34	8	.4	95	6.5	7
15...	--	.20	87	.12	25	4	.3	61	6.6	30
25...	--	.10	90	.12	42	8	.4	108	6.2	30
MAY										
05...	--	.04	141	.19	80	8	.6	209	7.0	--
15...	--	.03	194	.26	110	5	.7	291	6.8	--
25...	--	.18	83	.11	32	7	.4	88	6.4	--
JUNE										
05...	.30	--	108	.15	25	2	.4	68	6.5	40
15...	.03	--	171	.23	98	11	.7	265	7.3	40
25...	.05	--	171	.23	97	6	.6	253	8.3	50
JULY										
05...	--	--	214	.29	120	0	.7	325	7.9	70
15...	--	--	242	.33	150	3	.8	391	7.8	40
24...	--	--	251	.34	140	0	.7	350	7.6	90
AUG.										
05...	.07	--	160	.22	100	0	.7	268	8.3	90
16...	.09	--	87	.12	38	0	.5	119	7.6	50
25...	.11	--	276	.38	160	38	.9	454	7.8	90
SEP.										
05...	.10	--	104	.14	29	1	.7	87	7.6	150
15...	.06	--	102	.14	38	0	.6	109	7.4	190
27...	.08	--	74	.10	18	3	.3	51	6.7	260

07332800 CANEY BOGGY CREEK NEAR ASHLAND, OKLA.--Continued

CHEMICAL ANALYSES OF ADDITIONAL SAMPLES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (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)
OCT.									
10...	--	--	--	--	--	--	10	.11	.50
26...	--	--	--	--	--	--	3.0	.20	.90
NOV.									
14...	--	--	--	--	--	--	7.4	.27	1.2
29...	--	--	--	--	--	--	28	.09	.40
DEC.									
19...	--	--	--	--	--	--	12	.09	.40
JAN.									
23...	--	--	--	--	--	--	8.0	--	--
FEB.									
06...	--	--	--	--	--	--	10	.11	.50
20...	--	--	--	--	--	--	11	.07	.30
MAR.									
07...	--	--	--	--	--	--	4.0	.11	.50
20...	--	--	--	--	--	--	29	.11	.50
APR.									
03...	--	--	--	--	--	--	6.0	.18	.80
25...	--	--	--	--	--	--	5.0	.23	1.0
MAY									
08...	--	--	--	--	--	--	7.0	.09	.40
30...	--	--	--	--	--	--	7.0	.14	.60
JUNE									
19...	--	--	--	--	--	--	9.0	.18	.80
27...	--	--	--	--	--	--	9.6	.05	.20
JULY									
10...	--	--	--	--	--	--	--	.00	.00
24...	--	--	--	--	--	--	--	.02	.10
AUG.									
07...	31	13	19	172	0	19	15	.00	.00
28...	--	--	--	--	--	--	--	.00	.00
SEP.									
11...	--	--	--	--	--	--	--	.12	.50
25...	--	--	--	--	--	--	--	.00	.00

DATE	DIS-SOLVED NITRITE (N) (MG/L)	DIS-SOLVED NITRITE (NO2) (MG/L)	DIS-SOLVED AMMONIA ORGANIC NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	PHOSPHATE (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	TOTAL NON-FILTRABLE RESIDUE (MG/L)	LOSS ON IGNITION (MG/L)
OCT.									
10...	.00	.0	1.6	--	.22	95	.13	190	31
26...	--	--	5.4	--	3.7	88	.12	175	48
NOV.									
14...	--	--	.45	--	.90	53	.07	70	22
29...	.00	.0	.27	--	.05	114	.16	12	45
DEC.									
19...	.27	.9	.03	--	.12	99	.13	11	31
JAN.									
23...	--	--	.42	--	.13	76	.10	50	26
FEB.									
06...	--	--	.90	--	.12	131	.18	55	44
20...	--	--	1.2	--	.09	126	.17	46	45
MAR.									
07...	--	--	.51	--	.01	50	.07	65	19
20...	.03	.1	.34	--	.01	126	.17	63	43
APR.									
03...	--	--	.56	--	.11	106	.14	534	28
25...	--	--	.65	--	.07	101	.14	60	37
MAY									
08...	--	--	.18	--	.13	158	.21	58	54
30...	--	--	.14	--	.17	165	.22	65	93
JUNE									
19...	--	--	.36	--	.23	141	.19	1820	58
27...	--	--	.80	--	.09	169	.23	39	58
JULY									
10...	--	--	--	--	--	--	--	--	--
24...	.01	.0	--	--	--	236	.32	--	--
AUG.									
07...	.00	.0	.58	.08	--	193	.26	--	--
28...	.01	.0	.56	.08	--	195	.27	--	--
SEP.									
11...	.01	.0	1.7	.08	--	121	.16	--	--
25...	.04	.1	.51	.09	--	146	.20	--	--

07332800 CANEY BOGGY CREEK NEAR ASHLAND, OKLA.--Continued

CHEMICAL ANALYSES OF ADDITIONAL SAMPLES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	CHEMICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	BIOCHEMICAL OXYGEN DEMAND (MG/L)	PHENOLS (UG/L)
OCT.								
10...	--	--	--	137	--	27	2.6	--
26...	--	--	--	95	--	34	.9	--
NOV.								
14...	--	--	--	80	--	56	2.4	7
29...	--	--	--	139	--	11	--	--
DEC.								
19...	--	--	--	169	--	12	.9	--
JAN.								
23...	--	--	--	97	--	21	1.2	--
FEB.								
06...	--	--	--	140	--	14	2.0	--
20...	--	--	--	160	--	24	1.2	--
MAR.								
07...	--	--	--	77	--	25	1.8	--
20...	--	--	--	188	--	13	2.3	--
APR.								
03...	--	--	--	111	--	37	3.4	--
25...	--	--	--	104	--	24	.8	--
MAY								
08...	--	--	--	160	--	19	2.0	0
30...	--	--	--	212	--	19	1.2	--
JUNE								
19...	--	--	--	174	--	60	3.4	--
27...	--	--	--	266	--	21	4.2	--
JULY								
10...	--	--	--	--	--	--	1.7	--
24...	--	--	--	376	--	19	1.9	--
AUG.								
07...	130	0	.7	332	7.2	23	--	--
28...	--	--	--	302	7.4	16	--	--
SEP.								
11...	--	--	--	157	--	20	1.8	--
25...	--	--	--	233	--	20	2.4	--

FIELD ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION
OCT.					
10...	120	8.0	19.0	4.2	47
26...	100	8.2	7.0	11.2	97
NOV.					
14...	90	8.3	9.0	11.2	102
29...	140	--	4.0	12.8	102
DEC.					
19...	200	--	4.0	12.5	101
JAN.					
23...	100	8.6	5.0	12.4	102
FEB.					
06...	180	7.2	6.0	11.8	99
20...	170	7.9	6.0	11.6	97
MAR.					
07...	80	6.8	14.0	10.0	102
20...	220	--	14.0	9.0	93
APR.					
03...	120	--	10.0	10.6	100
25...	125	7.8	18.0	7.7	86
MAY					
08...	170	7.9	20.0	7.9	92
30...	270	7.6	23.0	6.9	84
JUNE					
19...	158	8.4	22.0	6.7	81
27...	220	7.0	28.0	5.4	72
JULY					
10...	360	7.8	30.5	9.0	123
24...	383	--	27.5	7.5	97
AUG.					
07...	320	--	27.0	7.7	100
28...	300	--	28.0	7.6	100
SEP.					
11...	260	--	28.0	7.5	100
25...	275	--	22.0	3.6	43

07332800 CANEY BOGGY CREEK NEAR ASHLAND, OKLA.--Continued

CHEMICAL ANALYSES OF MINOR AND TRACE CONSTITUENTS, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS-SOLVED CHRO-MIUM (CR) (UG/L)	TOTAL MERCURY (HG) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)
OCT.			
10...	0	--	10
26...	0	--	10
NOV.			
14...	0	--	20
29...	0	--	20
DEC.			
19...	0	--	20
JAN.			
23...	0	--	110
FEB.			
06...	0	--	110
20...	0	--	90
MAR.			
07...	0	--	90
20...	0	--	30
APR.			
03...	0	--	50
25...	1	--	60
MAY			
08...	--	.2	--
JULY			
24...	0	--	100
AUG.			
07...	0	--	40
28...	0	--	60
SEP.			
11...	0	--	520
25...	0	--	70

07332800 CANEY BOGGY CREEK NEAR ASHLAND, OKLA.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(ONCE-DAILY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	129	66	154	158	101	97	74	208	92	267	185	281
2	131	75	156	159	99	94	127	141	94	302	244	262
3	132	88	161	72	99	95	91	162	92	308	240	264
4	136	102	161	70	132	66	94	188	93	308	269	357
5	135	102	166	75	132	67	94	208	67	323	269	87
6	133	74	182	84	132	86	139	208	96	320	324	85
7	133	76	182	96	64	75	136	179	175	317	327	82
8	140	76	183	117	62	75	136	158	176	317	309	82
9	139	106	182	116	85	104	92	182	194	344	309	122
10	143	106	184	135	85	113	111	---	196	345	225	121
11	142	127	183	135	106	71	132	242	244	328	223	136
12	145	135	191	142	106	70	153	242	246	328	204	136
13	147	65	191	138	123	101	154	263	272	322	202	62
14	150	77	178	138	123	99	180	272	259	343	245	62
15	149	106	178	138	139	99	60	240	259	390	245	108
16	150	104	167	89	139	134	54	303	284	234	110	109
17	154	115	167	89	153	134	96	308	208	273	152	149
18	154	98	162	85	153	159	118	322	206	274	152	149
19	154	96	161	85	161	163	67	322	109	305	174	182
20	154	82	161	89	161	188	117	321	112	296	175	173
21	151	81	160	83	171	175	119	334	112	316	202	174
22	58	92	160	85	172	194	116	324	207	316	224	201
23	57	110	164	110	164	195	79	324	208	342	223	201
24	78	120	163	109	164	84	81	326	250	342	235	208
25	78	120	163	91	138	83	107	89	247	348	236	215
26	95	133	171	87	138	83	107	160	278	355	274	53
27	102	134	171	84	138	83	147	147	283	394	273	51
28	116	---	178	84	144	102	166	157	278	391	271	78
29	116	141	177	105	---	102	167	179	314	244	292	97
30	55	213	183	104	---	135	199	215	314	244	272	96
31	58	---	183	95	---	70	---	226	---	185	286	---
MONTH	123	104	172	105	128	110	117	233	199	314	238	146

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(ONCE-DAILY MEASUREMENT)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17.0	12.5	6.0	---	7.0	10.0	---	---	25.0	26.0	27.0	25.0
2	17.0	12.0	7.0	---	7.5	11.0	12.0	20.0	24.0	29.0	21.5	---
3	17.0	12.0	6.0	4.0	8.5	12.0	12.0	19.0	25.0	30.0	22.0	---
4	17.0	13.0	5.0	4.5	8.5	12.0	10.0	18.0	24.0	31.0	24.5	---
5	17.5	13.0	4.5	4.5	8.0	11.0	11.0	19.0	22.0	27.0	24.5	23.0
6	20.0	13.0	4.0	2.0	7.0	11.0	12.0	19.0	21.0	27.0	26.0	22.0
7	18.0	14.0	4.0	2.0	6.0	12.0	14.0	18.0	23.0	29.0	27.0	23.0
8	19.0	13.0	7.0	1.0	4.0	14.5	11.0	20.0	24.5	27.5	25.0	24.0
9	19.0	14.0	5.5	1.0	4.0	15.0	10.0	19.5	23.0	30.0	26.0	24.0
10	19.0	13.0	5.0	2.0	4.5	14.0	9.0	24.0	23.0	31.0	29.0	25.0
11	19.0	11.0	---	2.0	5.0	14.0	12.0	21.0	25.0	27.0	28.0	25.0
12	20.0	12.0	1.0	1.0	7.0	14.0	16.0	19.0	23.0	26.0	28.5	26.0
13	21.0	12.0	2.0	1.0	9.0	15.0	13.0	22.0	24.5	34.0	28.0	24.0
14	22.0	8.5	1.0	1.0	4.0	14.5	14.0	19.0	21.0	27.0	28.0	23.0
15	20.0	9.0	1.0	1.0	5.0	15.0	13.0	20.0	28.0	27.0	29.0	23.0
16	19.5	9.0	3.0	6.0	5.0	15.0	14.0	17.0	27.0	26.0	27.0	21.0
17	21.0	9.0	4.0	7.0	4.0	13.0	15.0	21.0	23.5	26.0	28.0	19.0
18	20.5	7.0	1.0	7.0	5.0	13.0	16.0	21.0	24.0	25.0	28.0	20.0
19	12.0	8.0	2.0	7.5	5.5	13.0	11.0	22.0	23.0	28.5	29.0	21.0
20	15.0	5.5	5.0	---	---	18.0	18.0	21.0	23.0	28.0	29.0	23.0
21	15.0	5.0	4.5	8.5	5.5	15.0	20.0	26.0	23.5	26.5	30.0	26.0
22	18.5	5.0	5.0	7.5	6.5	16.0	21.0	24.0	26.5	28.0	28.5	25.0
23	18.0	7.5	5.0	6.0	6.5	15.0	21.0	23.0	27.0	28.0	28.5	25.0
24	13.5	6.0	5.0	5.0	6.0	14.0	23.0	25.0	25.5	27.0	28.5	26.0
25	13.5	6.0	4.5	7.0	8.0	13.0	19.0	20.0	25.5	29.5	28.0	23.0
26	13.5	6.0	5.0	6.5	8.0	12.0	15.0	20.0	26.0	28.0	28.0	22.0
27	12.0	6.0	5.0	7.5	8.0	10.0	16.0	25.0	26.5	27.0	29.0	22.0
28	13.0	---	5.0	4.0	10.0	10.0	17.0	20.0	26.0	27.0	29.0	22.0
29	13.0	4.5	5.0	4.0	---	11.0	17.5	20.0	25.0	24.0	27.5	19.0
30	13.0	5.0	10.0	6.0	---	---	18.0	24.0	26.0	24.0	25.0	20.0
31	13.0	---	9.0	8.0	---	13.0	---	24.0	---	27.0	26.0	---
MONTH	17.0	9.5	4.5	4.5	6.5	13.0	15.0	21.0	24.5	27.5	27.0	23.0

07335000 CLEAR BOGGY CREEK NEAR CANEY, OKLA.

LOCATION.--Lat 34°15'09", long 96°12'19", in NW1/4SE1/4 sec. 36, T.3 S., R.10 E., Atoka County, at gaging station at bridge on old U.S. Highway 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).

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	DISSOLVED NITRATE (NO3) (MG/L)
OCT.										
03...	30	--	--	--	--	--	--	--	--	--
16...	8.4	--	--	46	224	0	22	90	.02	.10
24...	422	--	--	29	114	0	16	57	.14	.60
NOV.										
08...	1890	--	--	8.0	106	0	15	13	.09	.40
30...	202	--	--	--	--	--	--	--	--	--
DEC.										
19...	121	--	--	33	268	0	37	53	.02	.10
JAN.										
16...	1310	--	--	22	144	0	27	37	.11	.50
FEB.										
01...	1210	--	--	--	--	--	--	--	--	--
08...	4380	--	--	7.8	90	0	16	11	.11	.50
14...	628	--	--	--	--	--	--	--	--	--
21...	276	--	--	--	--	--	--	--	--	--
28...	533	--	--	--	--	--	--	--	--	--
MAR.										
05...	6770	--	--	5.3	76	0	15	6.5	.23	1.0
13...	5580	--	--	--	--	--	--	--	--	--
21...	724	--	--	--	--	--	--	--	--	--
26...	3430	--	--	--	--	--	--	--	--	--
APR.										
10...	701	--	--	--	--	--	--	--	--	--
16...	8660	--	--	6.2	58	0	10	8.0	.36	1.6
MAY										
02...	3290	--	--	--	--	--	--	--	--	--
08...	3920	--	--	13	116	0	14	18	.29	1.3
17...	304	--	--	--	--	--	--	--	--	--
25...	251	--	--	--	--	--	--	--	--	--
JUNE										
01...	110	--	--	--	--	--	--	--	--	--
06...	6620	--	--	5.5	82	0	10	8.0	.18	.80
12...	1750	--	--	--	--	--	--	--	--	--
JULY										
02...	184	--	--	33	264	0	25	58	.14	.60
12...	199	62	14	29	237	0	19	47	.22	1.0
17...	191	140	32	330	240	0	22	680	.26	1.2
AUG.										
02...	217	32	7.4	24	122	0	15	38	.38	1.7
14...	193	27	5.3	15	105	0	9.3	24	.28	1.2
31...	56	83	24	95	282	0	25	200	.06	.27
SEP.										
14...	990	42	7.6	30	133	0	30	47	.22	.97
20...	--	59	11	18	207	0	21	27	.02	.09

07335000 CLEAR BOGGY CREEK NEAR CANEY, OKLA.

DRAINAGE AREA.--720 sq mi (1,865 km^2).

PERIOD OF RECORD.--Chemical analyses: Water years 1952-1955 (partial-record station), October 1955 to September 1959, water years 1960-1961 (partial-record station), October 1961 to current year.
Water temperatures: October 1955 to September 1959.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS-SOLVED NITRITE (N) (MG/L)	DIS-SOLVED NITRITE (NO2) (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)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)
OCT.										
03...	--	--	--	--	--	--	--	--	405	--
16...	--	--	374	.51	8.48	230	46	1.3	667	7.8
24...	--	--	232	.32	764	124	30	1.1	395	7.5
NOV.										
08...	--	--	149	.20	760	100	13	.3	238	7.4
30...	--	--	--	--	--	--	--	--	530	--
DEC.										
19...	--	--	365	.50	119	260	40	.9	640	7.9
JAN.										
16...	--	--	239	.33	845	150	32	.8	398	6.8
FEB.										
01...	--	--	--	--	--	--	--	--	332	--
08...	--	--	138	.19	1630	88	14	.4	214	6.7
14...	--	--	--	--	--	--	--	--	412	--
21...	--	--	--	--	--	--	--	--	542	--
28...	--	--	--	--	--	--	--	--	363	--
MAR.										
05...	--	--	114	.16	2080	76	14	.3	172	6.9
13...	--	--	--	--	--	--	--	--	228	--
21...	--	--	--	--	--	--	--	--	411	--
26...	--	--	--	--	--	--	--	--	262	--
APR.										
10...	--	--	--	--	--	--	--	--	482	--
16...	--	--	103	.14	2410	56	8	.4	143	6.8
MAY										
02...	--	--	--	--	--	--	--	--	246	--
08...	--	--	167	.23	1770	110	15	.5	272	7.3
17...	--	--	--	--	--	--	--	--	536	--
25...	--	--	--	--	--	--	--	--	649	--
JUNE										
01...	--	--	--	--	--	--	--	--	701	--
06...	--	--	115	.16	2060	76	9	.3	179	6.6
12...	--	--	--	--	--	--	--	--	291	--
JULY										
02...	--	--	364	.50	181	250	33	.9	621	6.6
12...	.00	.0	317	.43	170	210	18	.9	523	8.1
17...	.01	.0	1500	2.04	774	480	280	6.5	2480	7.7
AUG.										
02...	.01	.0	170	.23	99.6	110	10	1.0	312	7.4
14...	.02	.0	158	.21	82.3	89	3	.7	247	7.4
31...	.00	.0	606	.82	91.6	310	75	2.4	1050	7.9
SEP.										
14...	.01	.0	252	.34	674	140	27	1.1	381	7.5
20...	.01	.0	268	.36	--	190	23	.6	438	7.9

07335700 KIAMICHI RIVER NEAR BIG CEDAR, OKLA.
(Hydrologic bench-mark station)

LOCATION.--Lat 34°38'18", long 94°36'45", in SW1/4SE1/4 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).

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	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)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
OCT.										
25...	.75	6.9	2.4	1.2	2.4	1.4	14	0	4.3	3.0
NOV.										
07...	285	7.5	1.2	.7	1.6	.8	6	0	3.4	2.2
DEC.										
05...	25	.7	1.6	1.4	1.9	.6	6	0	4.9	3.4
JAN.										
16...	23	.8	1.6	.1	1.9	.5	4	0	4.5	3.4
FEB.										
13...	29	6.5	1.2	.5	1.8	.5	5	0	1.0	3.0
MAR.										
13...	172	6.5	.8	.7	1.5	.6	5	0	.9	2.8
APR.										
10...	64	7.5	1.2	1.2	1.8	.6	6	0	3.6	3.0
MAY										
16...	32	7.8	1.6	1.4	1.6	.7	8	0	3.6	3.0
JUNE										
12...	35	7.9	1.2	1.2	1.7	.6	8	0	3.5	2.6
JULY										
17...	16	8.7	4.3	.9	2.5	.8	15	0	3.0	3.0
AUG.										
14...	2.2	8.3	2.0	.9	3.9	1.1	14	0	4.7	3.2
SEP.										
18...	5.8	9.0	2.1	.8	1.9	1.0	12	0	4.5	1.6

07335700 KIAMICHI RIVER NEAR BIG CEDAR, OKLA.
(Hydrologic bench-mark station)

DRAINAGE AREA.--40.1 sq mi (103.9 km²).

PERIOD OF RECORD.--Chemical analyses: December 1965 to current year.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS-SOLVED FLUO-RIDE (F) (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 PHOS-PHORUS (P) (MG/L)	PHOS-PHATE (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)
OCT. 25...	.2	.07	.30	--	--	--	.01	32	.04
NOV. 07...	.3	.05	.20	--	--	--	.01	21	.03
DEC. 05...	.0	.02	.10	--	--	--	.02	18	.02
JAN. 16...	.1	.02	.10	--	--	--	.02	16	.02
FEB. 13...	.0	.02	.10	--	--	--	.02	17	.02
MAR. 13...	.1	.02	.10	--	--	--	.02	17	.02
APR. 10...	.0	.09	.40	--	--	--	.01	22	.03
MAY 16...	.0	.07	.30	--	--	--	.01	24	.03
JUNE 12...	.0	.00	.00	--	--	--	.00	16	.02
JULY 17...	.0	.02	.10	.00	.0	.02	--	24	.03
AUG. 14...	.7	.04	.18	.00	.0	.02	--	33	.04
SEP. 18...	.0	.23	1.0	.00	.0	.00	--	34	.05

DATE	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	CHEM-ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	BIO-CHEM-ICAL OXYGEN DEMAND (MG/L)	DIS-SOLVED BORON (B) (UG/L)
OCT. 25...	.06	11	0	.3	37	6.2	16	1.5	40
NOV. 07...	16.2	6	1	.3	22	6.1	5	.4	40
DEC. 05...	1.21	10	5	.3	19	7.4	2	.5	30
JAN. 16...	.99	8	5	.4	18	6.8	2	.5	20
FEB. 13...	1.33	5	1	.3	18	6.2	1	1.0	0
MAR. 13...	7.89	5	0	.3	17	6.1	3	.6	0
APR. 10...	3.80	8	3	.3	19	6.4	2	.2	--
MAY 16...	2.07	10	3	.2	20	6.4	1	.2	--
JUNE 12...	1.51	8	1	.3	21	6.9	0	1.2	0
JULY 17...	1.04	14	2	.3	23	7.5	8	.0	10
AUG. 14...	.20	9	0	.6	30	6.8	7	.5	10
SEP. 18...	.53	9	0	.3	23	7.9	8	.6	10

07335700 KIAMICHI RIVER NEAR BIG CEDAR, OKLA.--Continued

PESTICIDE ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	ALDRIN (UG/L)	CHLOR-DANE (UG/L)	DDD (UG/L)	DDE (UG/L)	DDT (UG/L)	DI-ELDRIN (UG/L)	ENDRIN (UG/L)	HEPTA-CHLOR (UG/L)	HEPTA-CHLOR EPOXIDE (UG/L)
OCT. 25...	.00	.0	.00	.00	.00	.00	.00	.00	.00

DATE	LINDANE (UG/L)	2,4-D (UG/L)	2,4,5-T (UG/L)	SILVEX (UG/L)	DI-AZINON (UG/L)	MALA-THION (UG/L)	METHYL PARA-THION (UG/L)	PARA-THION (UG/L)	PCB (UG/L)
OCT. 25...	.00	.00	.00	.00	.01	.00	.00	.00	.0

ANALYSES OF MINOR AND TRACE CONSTITUENTS, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED MAN-GANESE (MN) (UG/L)	DIS-SOLVED CAD-MIUM (CD) (UG/L)	DIS-SOLVED CHRO-MIUM (CR) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)
MAY 16...	80	0	0	0	8	2	30

RADIOCHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS-SOLVED URANIUM (U) (UG/L)	DIS-SOLVED RA-226 (RADON METHOD) (PC/L)	DIS-SOLVED GROSS ALPHA AS U-NAT. (UG/L)	DIS-SOLVED GROSS BETA AS SR90 /Y90 (PC/L)	DIS-SOLVED GROSS BETA AS CS-137 (PC/L)	TOTAL FILT-RABLE RESIDUE (MG/L)	SUS-PENDED GROSS ALPHA AS U-NAT. (UG/L)	SUS-PENDED GROSS BETA AS SR90 /Y90 (PC/L)	SUS-PENDED GROSS BETA AS CS-137 (PC/L)	TOTAL NON-FILT-RABLE RESIDUE (MG/L)
OCT. 25...	<.01	.04	.4	2.3	2.8	28	.4	.5	.5	8

INSTANTANEOUS SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	TIME	DISCHARGE (CFS)	CONCEN-TRATION (MG/L)	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)
OCT. 25...	1400	0.8	8	.02
NOV. 07...	1300	285	8	6.9
DEC. 05...	1500	25	2	.12
JAN. 16...	1330	23	0	.00
FEB. 13...	1100	29	0	.00
MAR. 13...	1400	172	2	.93
APR. 10...	1430	64	0	.00
MAY 16...	1600	32	3	.26
JUN. 12...	--	35	3	.28
JUL. 17...	1430	16	5	.22
AUG. 14...	1500	2.2	2	.01
SEP. 18...	1700	5.8	4	.06

07335700 KIAMICHI RIVER NEAR BIG CEDAR, OKLA.--Continued

FIELD ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	IMMEDIATE COLIFORM (COL. PER 100 ML)	FECAL COLIFORM (COL. PER 100 ML)	STREPTOCOCCI (COLONIES PER 100 ML)
OCT.								
25...	32	6.9	14.0	6.8	69	620	90	--
NOV.								
07...	30	8.6	14.0	9.0	92	--	60	--
DEC.								
05...	30	8.7	10.0	10.4	99	--	8	--
JAN.								
16...	30	7.9	7.0	11.8	103	--	--	--
FEB.								
13...	25	8.1	9.0	10.6	99	36	--	--
MAR.								
13...	16	6.7	15.0	8.9	95	--	--	--
APR.								
10...	18	7.2	12.0	9.2	90	55	0	0
MAY								
16...	22	8.2	17.0	9.1	100	380	70	73
JUNE								
12...	22	7.4	23.0	10.4	128	--	20	29
JULY								
17...	28	7.8	25.0	8.2	104	69	21	23
AUG.								
14...	37	7.8	30.0	7.3	100	450	67	--
SEP.								
18...	22	6.9	27.0	7.3	96	1600	34	--

07336730 RED RIVER NEAR VALLIANT, OKLA.

LOCATION.--Lat 33°55'20", long 95°04'56", McCurtain County, 5.75 mi (9.25 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.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	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 PHOS-PHORUS (P) (MG/L)	PHOS-PHATE (PO4) (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)
OCT.								
04...	290	.20	.90	--	--	--	.16	1420
11...	350	.27	1.2	--	--	--	.12	1660
18...	380	.20	.90	--	--	--	.13	1750
NOV.								
22...	34	.05	.20	--	--	--	.10	267
DEC.								
20...	240	.20	.90	--	--	--	.11	1200
28...	120	.16	.70	--	--	--	.19	729
JAN.								
03...	79	.02	.10	--	--	--	.00	545
17...	120	.09	.40	--	--	--	.03	694
24...	19	.18	.80	--	--	--	.13	199
31...	32	.09	.40	--	--	--	.06	285
FEB.								
07...	180	.18	.80	--	--	--	.06	909
14...	160	.14	.60	--	--	--	.08	822
21...	250	.20	.90	--	--	--	.08	1250
MAR.								
07...	19	.11	.50	--	--	--	.14	245
21...	210	.02	.10	--	--	--	.08	1080
APR.								
11...	230	.18	.80	--	--	--	.07	1160
MAY								
02...	170	.23	1.0	--	--	--	.11	979
09...	66	.25	1.1	--	--	--	.18	429
16...	200	.18	.80	--	--	--	.09	1110
30...	76	.32	1.4	--	--	--	.14	512
JUNE								
20...	140	.09	.40	--	--	--	.13	802
27...	220	.14	.60	--	--	--	.11	1130
JULY								
11...	200	.09	.40	.00	.0	.05	--	1100
AUG.								
01...	170	.01	.00	.00	.0	.06	--	1050
08...	250	1.3	5.7	.01	.0	.16	--	1250
15...	170	.01	.00	.00	.0	.06	--	974
22...	95	.00	.00	.01	.0	.12	--	1070
29...	230	.01	.00	.01	.0	.11	--	1260
SEP.								
12...	29	.25	1.1	.01	.0	.19	--	263
26...	210	.07	.31	.01	.0	.10	1100	

FIELD ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	TEMPER-ATURE (DEG C)	DIS-SOLVED OXYGEN (MG/L)	PER-CENT SATUR-ATION
OCT.				
04...	1300	21.0	9.6	110
11...	1500	22.0	9.2	107
18...	1050	23.0	8.6	104
NOV.				
22...	320	7.0	12.0	100
DEC.				
20...	1200	5.0	12.6	103
28...	650	6.0	12.6	106
JAN.				
03...	520	6.0	12.2	102
17...	700	6.0	12.4	103
24...	220	7.0	11.4	97
31...	280	6.0	12.0	102
FEB.				
07...	900	9.0	11.1	100
14...	750	6.0	12.0	101
21...	1200	7.0	12.0	102
MAR.				
07...	220	13.0	9.0	89
21...	1100	13.0	10.0	99
APR.				
11...	1280	11.5	10.2	96

07336730 RED RIVER NEAR VALLIANT, OKLA.

DRAINAGE AREA.--46,730 sq mi (121,030.7 km2).

PERIOD OF RECORD.--Chemical analyses: July 1970 to current year.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	PH (UNITS)	COLOR (PLATINUM-COBALT UNITS)	TURBIDITY (MG/L)	TURBIDITY (JTU)	CHEMICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	CHEMICAL OXYGEN DEMAND (HIGH LEVEL) (MG/L)	BIO-CHEMICAL OXYGEN DEMAND (MG/L)	PHENOLS (UG/L)
OCT.								
04...	7.7	10	45	--	15	--	4.7	5
11...	7.7	10	30	--	15	--	4.9	6
18...	7.8	5	30	--	14	--	2.2	7
NOV.								
22...	6.6	25	45	--	24	--	--	--
DEC.								
20...	6.9	15	10	--	33	--	1.3	0
28...	7.2	30	10	--	10	--	1.3	0
JAN.								
03...	7.0	5	1	--	7	--	2.6	0
17...	7.6	15	6	--	11	--	1.0	0
24...	7.6	100	140	--	24	--	1.0	0
31...	7.1	50	60	--	22	--	1.0	0
FEB.								
07...	8.0	--	--	--	--	--	--	--
14...	7.8	30	55	--	13	--	2.1	0
21...	8.0	10	35	--	10	--	1.1	0
MAR.								
07...	7.4	60	290	--	53	--	2.3	0
21...	7.5	20	70	--	41	--	3.4	0
APR.								
11...	7.4	10	70	--	11	--	.8	0
MAY								
02...	8.0	30	100	--	17	--	.9	0
09...	--	160	300	--	25	--	2.8	0
16...	--	40	50	--	14	--	1.4	0
30...	--	90	60	--	14	--	2.3	0
JUNE								
20...	7.4	20	80	--	20	--	1.1	1
27...	7.5	20	45	--	17	--	3.4	1
JULY								
11...	7.6	9	--	7	--	20	2.4	0
AUG.								
01...	7.3	10	--	7	19	--	3.0	3
08...	7.2	10	--	20	20	--	3.4	2
15...	7.6	20	--	30	15	--	4.0	1
22...	8.1	20	--	20	17	--	2.8	4
29...	8.1	10	--	10	15	--	2.2	4
SEP.								
12...	7.5	90	--	60	24	--	2.4	0
26...	8.2	20	20	--	18	--	2.5	0

FIELD ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE (DEG C)	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION
MAY				
02...	900	17.5	7.9	86
09...	418	19.5	6.8	77
16...	950	19.0	8.4	93
23...	940	24.0	8.1	108
30...	420	22.5	7.9	94
JUNE				
20...	640	25.0	6.8	85
27...	--	27.0	7.7	99
JULY				
11...	1100	27.0	7.8	100
11...	1100	27.0	7.9	101
11...	1100	27.0	7.8	100
AUG.				
01...	1050	28.0	8.0	105
08...	1300	27.0	7.8	100
15...	940	29.0	7.6	100
22...	1060	29.0	7.1	93
29...	1200	26.0	7.8	99
SEP.				
12...	240	26.0	7.3	92
26...	1100	2.6	7.8	99

07336760 RED RIVER NEAR MILLERTON, OKLA.

LOCATION.--Lat 33°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.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	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 PHOS-PHORUS (P) (MG/L)	PHOS-PHATE (PO4) (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)
OCT.								
04...	300	.25	1.1	--	--	--	.12	1480
11...	350	.25	1.1	--	--	--	.12	1700
18...	380	.09	.40	--	--	--	.60	1780
25...	37	.41	1.8	--	--	--	.26	335
NOV.								
01...	15	.47	2.1	--	--	--	.37	180
08...	16	.38	1.7	--	--	--	.31	152
15...	66	.18	.80	--	--	--	.27	441
22...	40	.05	.20	--	--	--	.11	306
29...	92	.27	1.2	--	--	--	.49	588
DEC.								
06...	140	.09	.40	--	--	--	.10	805
20...	240	.20	.90	--	--	--	.13	1180
28...	130	.14	.60	--	--	--	.16	766
JAN.								
03...	91	.05	.20	--	--	--	.02	610
17...	140	.25	1.1	--	--	--	.06	772
24...	24	.29	1.3	--	--	--	.17	226
31...	32	.34	1.5	--	--	--	.11	284
FEB.								
07...	160	.18	.80	--	--	--	.10	851
14...	150	.14	.60	--	--	--	.10	796
21...	240	.32	1.4	--	--	--	.06	1190
28...	140	.09	.40	--	--	--	.10	813
MAR.								
07...	14	.18	.80	--	--	--	.14	237
14...	61	.18	.80	--	--	--	.14	399
21...	200	.11	.50	--	--	--	.11	1040
28...	90	.27	1.2	--	--	--	.20	526
APR.								
05...	160	.11	.50	--	--	--	.18	852
11...	230	.02	.10	--	--	--	.02	1170
18...	49	.02	.10	--	--	--	.07	369
25...	64	.05	.20	--	--	--	.13	414
MAY								
02...	180	.43	1.9	--	--	--	.09	968
09...	67	.23	1.0	--	--	--	.18	475
16...	200	.18	.80	--	--	--	.10	1080
23...	200	.16	.70	--	--	--	.12	1090
30...	97	.16	.70	--	--	--	.14	617
JUNE								
06...	44	.34	1.5	--	--	--	.22	338
13...	190	1.0	4.6	--	--	--	.18	1000
20...	150	.09	.40	--	--	--	.20	842
27...	220	.05	.20	--	--	--	.13	1110
JULY								
11...	180	.01	.00	.00	.0	.06	--	1060
18...	170	.04	.20	.00	.0	.07	--	1040
25...	200	.00	.00	.01	.0	.10	--	1090
AUG.								
01...	200	.01	.00	.00	.0	.13	--	1110
08...	250	.92	4.1	.01	.0	.28	--	1300
15...	190	.00	.00	.00	.0	.10	--	1000
22...	195	.01	.00	.01	.0	.05	--	1070
29...	240	.00	.00	.00	.0	.22	--	1260
SEP.								
05...	200	.12	.50	.00	.0	.15	--	1150
12...	33	1.1	4.7	.04	.1	.27	--	285
19...	140	.09	.40	.02	.0	.14	--	780
26...	200	.03	.13	.02	.0	.14	--	1080
TIME WTD. AVG.	147	.21	.93	--	--	--	.17	816

07336760 RED RIVER NEAR MILLERTON, OKLA.

DRAINAGE AREA.--46,930 sq mi (121,548.7 km^2).

RERIOD OF RECORD.--Chemical analyses: July 1970 to current year.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	PH (UNITS)	COLOR (PLATINUM-COBALT UNITS)	TURBIDITY (MG/L)	TURBIDITY (JTU)	CHEMICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	CHEMICAL OXYGEN DEMAND (HIGH LEVEL) (MG/L)	BIO-CHEMICAL OXYGEN DEMAND (MG/L)	PHENOLS (UG/L)
OCT.								
04...	7.8	23	30	--	22	--	5.8	12
11...	7.7	5	20	--	17	--	4.5	2
18...	7.6	3	30	--	21	--	3.0	5
25...	7.7	120	1100	--	37	--	1.4	4
NOV.								
01...	7.6	160	1200	--	46	--	3.8	3
08...	7.7	170	550		25	--	1.6	9
15...	6.6	25	90	--	20	--	2.3	4
22...	6.7	35	30	--	16	--	--	--
29...	6.9	30	20	--	17	--	2.2	0
DEC.								
06...	7.0	20	10	--	15	--	1.0	0
20...	7.0	20	15	--	38	--	1.1	1
28...	7.4	35	20	--	10	--	1.8	0
JAN.								
03...	7.5	15	2	--	13	--	3.2	0
17...	7.6	25	5	--	16	--	1.6	0
24...	7.4	80	130	--	24	--	1.5	2
31...	7.6	60	100	--	25	--	1.0	2
FEB.								
07...	8.0	35	80	--	16	--	2.4	1
14...	8.0	50	130	--	13	--	2.2	0
21...	7.9	15	30	--	13	--	2.3	1
28...	7.4	10	20	--	6	--	1.9	0
MAR.								
07...	7.5	70	200	--	42	--	2.0	2
14...	7.0	40	140	--	28	--	3.6	1
21...	7.4	20	50	--	46	--	4.0	0
28...	7.3	55	120	--	26	--	4.5	2
APR.								
05...	7.6	60	100	--	19	--	4.1	1
11...	8.0	15	50	--	15	--	2.0	0
18...	8.1	60	280	--	38	--	7.6	0
25...	8.0	80	320	--	16	--	.4	5
MAY								
02...	7.9	30	140	--	20	--	1.1	1
09...	--	160	340	--	24	--	2.6	6
16...	--	25	60	--	23	--	2.6	2
23...	--	70	60	--	16	--	2.7	2
30...	--	80	45	--	20	--	2.6	0
JUNE								
06...	7.4	65	110	--	32	--	1.1	1
13...	7.3	20	70	--	24	--	5.2	1
20...	7.8	25	80	--	22	--	4.6	2
27...	7.5	20	75	--	20	--	3.4	1
JULY								
11...	7.5	20	--	10	--	34	2.4	1
18...	7.7	20	6	6	22	--	2.0	5
25...	8.1	20	7	7	22	--	2.8	8
AUG.								
01...	7.3	20	--	6	16	--	4.4	2
08...	7.5	9	--	9	20	--	3.9	4
15...	7.7	30	--	30	19	--	2.4	2
22...	7.8	20	--	30	15	--	2.3	2
29...	8.2	20	--	30	17	--	2.4	0
SEP.								
05...	7.7	20	--	20	19	--	1.9	0
12...	7.1	100	--	80	26	--	2.0	0
19...	8.3	50	--	70	16	--	1.8	0
26...	8.0	20	--	30	23	--	2.3	1
TIME WTD. AVG.	7.6	--	--	--	22	--	2.7	2

07336760 RED RIVER NEAR MILLERTON, OKLA.--Continued

FIELD ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION
OCT.					
04...	1250	--	20.0	8.8	100
11...	1400	--	22.0	9.3	109
18...	1100	--	22.0	8.4	100
25...	310	--	15.0	9.6	99
NOV.					
01...	120	--	16.0	9.4	99
08...	160	--	13.0	10.2	100
15...	410	--	9.0	11.3	102
22...	340	--	7.0	12.4	105
29...	590	--	6.5	11.4	97
DEC.					
06...	515	--	5.0	12.8	102
20...	1210	--	5.0	12.8	105
28...	650	--	6.0	12.2	102
JAN.					
03...	580	--	6.0	11.8	100
17...	650	--	6.0	12.4	104
24...	220	--	6.0	12.2	102
31...	320	--	6.0	12.2	103
FEB.					
07...	900	--	9.0	11.1	101
14...	750	--	6.0	12.0	101
21...	1150	--	6.0	12.2	102
23...	1075	--	9.5	9.8	89
28...	700	--	10.0	11.1	102
MAR.					
07...	200	--	11.5	9.2	88
14...	300	--	16.0	8.6	91
21...	950	--	13.0	10.0	99
28...	--	7.5	12.0	9.4	91
APR.					
05...	740	--	12.0	9.8	94
11...	1310	--	11.0	10.2	95
18...	280	--	15.0	8.6	89
25...	440	--	19.0	7.2	82

07336760 RED RIVER NEAR MILLERTON, OKLA.--Continued

FIELD ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION
MAY					
02...	810	--	17.0	8.7	94
09...	440	--	19.0	7.1	80
16...	730	--	19.0	8.4	93
23...	920	--	24.0	7.9	99
30...	525	--	22.0	8.4	99
JUNE					
06...	305	--	21.0	6.9	80
13...	750	--	23.0	6.8	83
20...	720	--	25.0	6.9	86
27...	940	--	27.0	7.6	97
JULY					
11...	1100	--	26.5	7.8	100
11...	1100	--	26.0	7.9	101
11...	1100	--	28.0	7.9	101
18...	980	--	28.0	8.2	106
18...	980	--	28.0	8.3	108
18...	980	--	28.0	8.3	108
25...	930	--	30.5	7.3	99
25...	940	--	30.5	7.2	97
25...	940	--	31.0	7.4	99
AUG.					
01...	1100	--	--	--	--
01...	1050	--	28.0	8.0	105
08...	1350	--	27.0	7.8	100
15...	930	--	29.0	7.6	100
22...	1010	7.8	29.5	6.8	91
29...	1200	--	26.0	7.8	99
SEP.					
05...	950	--	29.0	7.7	103
12...	240	--	26.0	7.3	92
19...	890	--	28.0	7.4	96
26...	1000	7.6	25.0	8.9	111

07338500 LITTLE RIVER BELOW LUKFATA CREEK, NEAR IDABEL, OKLA.

LOCATION.--Lat 33°56'28", long 94°45'30", in SE1/4SE1/4 sec. 14, T.7 S., R.24 E., McCurtain County, at gaging station on 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).

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	INSTANTANEOUS DISCHARGE (CFS)	DISSOLVED SODIUM (NA) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	DISSOLVED NITRATE (NO3) (MG/L)	PHOSPHATE (PO4) (MG/L)
OCT.									
18...	13	47	46	0	11	76	.05	.20	.43
NOV.									
15...	8590	2.1	10	0	6.6	2.7	.14	.60	.11
DEC.									
27...	709	5.0	14	0	8.2	7.5	.05	.20	.02
JAN.									
03...	755	5.6	28	0	93	8.0	.09	.40	7.0
FEB.									
06...	2650	3.6	12	0	7.3	4.4	.02	.10	.06
MAR.									
06...	5470	2.5	22	0	7.0	3.6	.11	.50	.04
APR.									
17...	9440	3.0	11	0	4.6	3.0	.16	.70	.16
MAY									
08...	10000	2.6	10	0	4.0	3.0	.09	.40	.22
JUNE									
05...	10700	2.4	17	0	5.2	1.8	.23	1.0	.13

07338500 LITTLE RIVER BELOW LUKFATA CREEK, NEAR IDABEL, OKLA.

DRAINAGE AREA.--1,226 sq mi (3,175 km^2).

PERIOD OF RECORD.--Chemical analyses: October 1947 to September 1954, November 1960 to September 1963, October 1968 to current year (discontinued).
Water temperatures: October 1947 to September 1954.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

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)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)
OCT.								
18...	191	.26	6.70	48	10	3.0	344	7.6
NOV.								
15...	33	.04	765	12	4	.3	35	5.9
DEC.								
27...	54	.07	103	20	9	.5	65	6.6
JAN.								
03...	54	.07	110	30	7	--	82	6.8
FEB.								
06...	39	.05	279	16	6	.4	42	6.2
MAR.								
06...	50	.07	738	24	6	.2	56	6.7
APR.								
17...	31	.04	790	12	3	.4	34	6.3
MAY								
08...	30	.04	810	10	2	.4	28	6.3
JUNE								
05...	45	.06	1300	16	2	.3	43	6.6

FIELD ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	DIS-SOLVED OXYGEN (MG/L)	PER-CENT SATUR-ATION
OCT.					
18...	350	8.2	24.0	8.2	100
NOV.					
15...	--	8.3	12.0	10.6	102
DEC.					
27...	70	--	7.0	11.8	101
JAN.					
03...	70	8.3	8.0	11.6	103
FEB.					
06...	60	7.9	8.0	11.6	102
MAR.					
06...	54	8.2	11.0	9.0	86
APR.					
17...	32	6.8	15.0	9.8	101
MAY					
08...	28	7.3	20.0	8.2	94
JUNE					
05...	38	8.2	20.0	7.2	82

ARKANSAS RIVER BASIN

07232610 BEAVER RIVER NEAR OPTIMA, OKLA. (LAT 36°43'57", LONG 101°23'46")

DATE	DIS-SOLVED SODIUM (NA) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (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)	DIS-SOLVED AMMONIA ORGANIC NITRO-GEN (N) (MG/L)
DEC. 12...	77	288	0	110	76	.99	4.4	.03	.1	.24

DATE	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)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	CHEM-ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	BIO-CHEM-ICAL OXYGEN DEMAND (MG/L)
DEC. 12...	538	.73	290	54	2.0	815	7.0	4	1.8

07232630 BEAVER RIVER NEAR HOOKER, OKLA. (LAT 36°41'22", LONG 101°12'19")

DATE	DIS-SOLVED SODIUM (NA) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (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)	DIS-SOLVED AMMONIA ORGANIC NITRO-GEN (N) (MG/L)
DEC. 12...	58	276	0	160	38	.99	4.4	.01	.0	13
APR. 09...	86	302	0	160	76	.47	2.1	.00	.0	.12
JUNE 19...	70	220	0	210	36	.07	.30	.00	.0	67

DATE	PHOS-PHATE (PO4) (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)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	CHEM-ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	BIO-CHEM-ICAL OXYGEN DEMAND (MG/L)
DEC. 12...	--	532	.72	320	94	1.4	816	7.7	3	.8
APR. 09...	1.1	639	.87	340	92	2.0	989	7.6	19	5.5
JUNE 19...	.13	564	.77	300	120	1.8	845	7.5	7	.2

07243000 DRY CREEK NEAR KENDRICK, OKLA. (LAT 35°46'55", LONG 96°51'20")

DATE	DIS-SOLVED SODIUM (NA) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	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)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)
MAR. 10...	6.7	54	0	12	7.9	93	.13	54	10	.4	128	6.5

INSTANTANEOUS SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	TIME	SUSPENDED SEDIMENT DISCHARGE (TONS/DAY)
MAR. 10...	1250	6090
10...	1438	3060

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