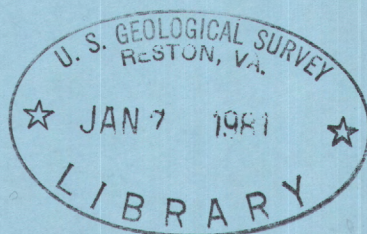


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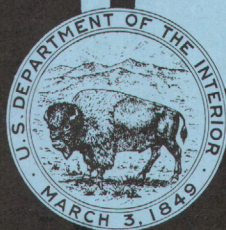
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Water Resources Data for Oklahoma

Part 2. Water Quality Records



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**UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY**

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

CALENDAR FOR WATER YEAR 1974

1973

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

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30	31					

1974

JANUARY

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FEBRUARY

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MARCH

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31						

APRIL

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MAY

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23	24	25	26	27	28	29
30						

JULY

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28	29	30	31			

AUGUST

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SEPTEMBER

S	M	T	W	T	F	S
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8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

1974

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
Corps of Engineers, U.S. Army
Environmental Protection Agency

Water resources records, 1974, 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
Room 621, 201 Northwest 3rd Street
Oklahoma City, Oklahoma 73102

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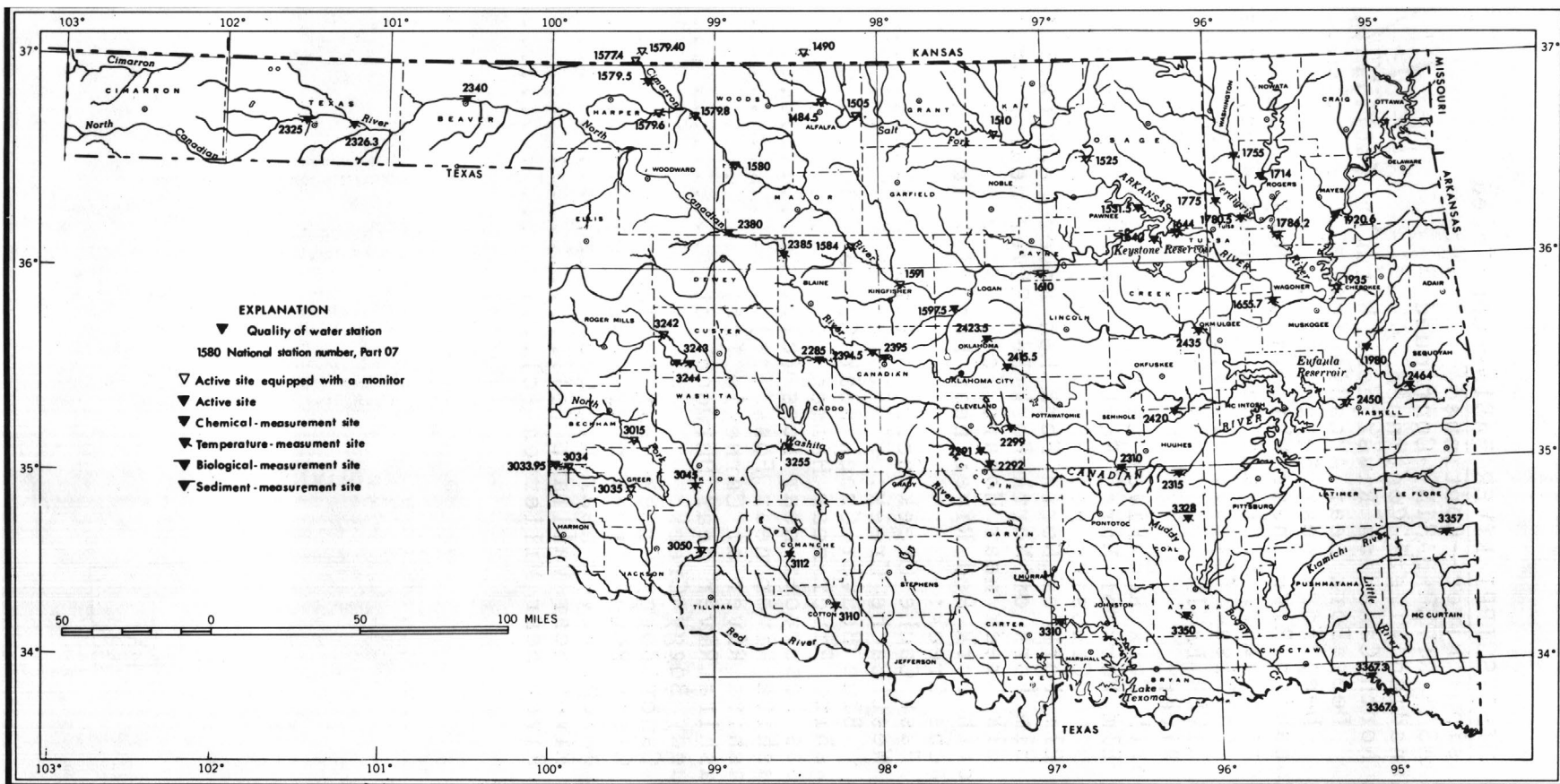
(Letters after station name designate type of data:
(c) chemical, (t) water temperature, (s) sediment)

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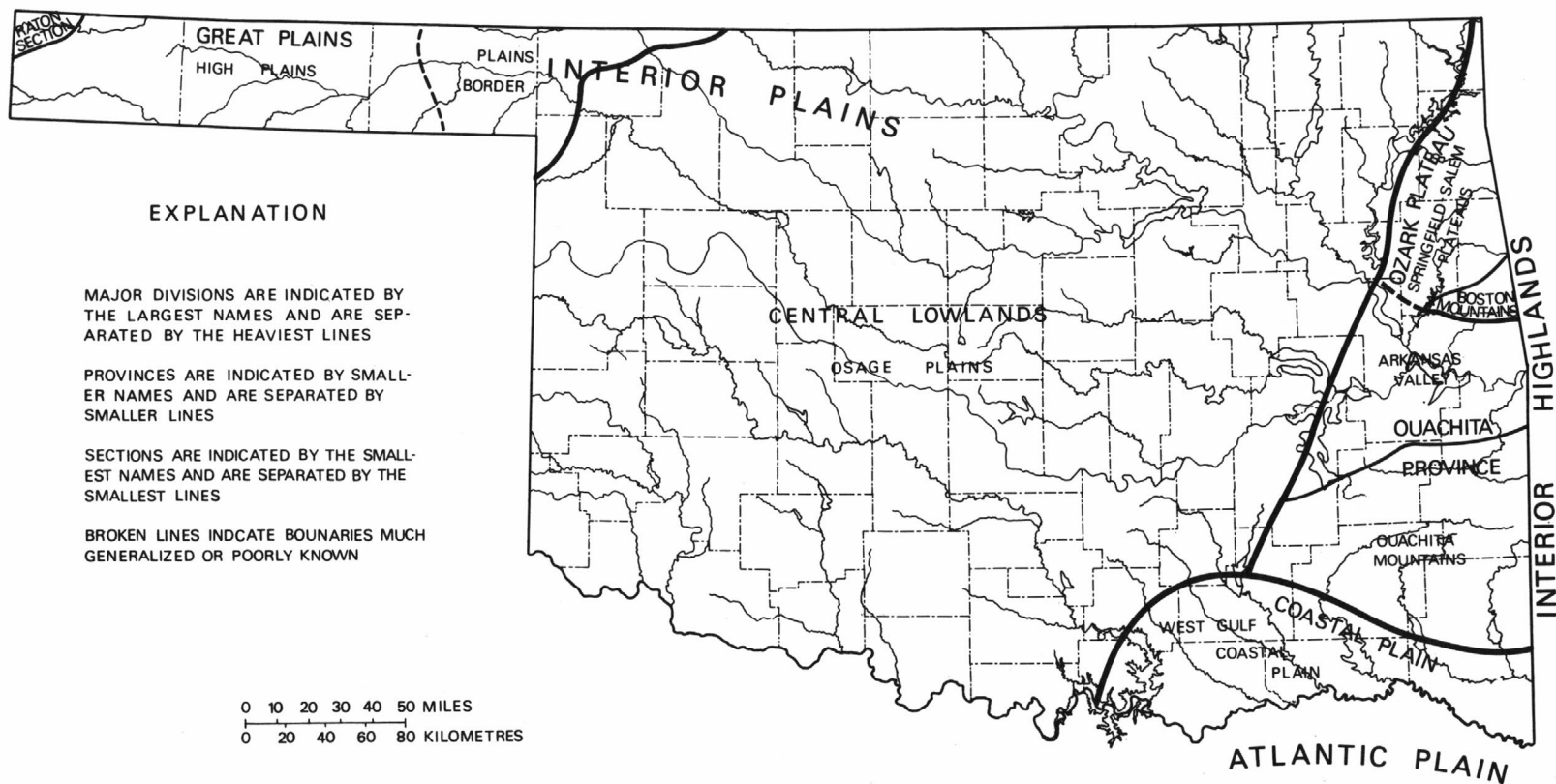


Figure 2.--Map showing physiographic regions in Oklahoma.

WATER RESOURCES DATA FOR OKLAHOMA, 1974

Part 2. Water Quality Records

by J.K. Kurklin

INTRODUCTION

Water resources data for the 1974 water year for Oklahoma include records of data for the chemical and physical characteristics of surface water. Water-quality data on chemical, physical, and biological characteristics of surface water were collected from designated sampling sites at predetermined 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 63 continuous record stations. Locations of surface water-quality stations are shown in figure 1. 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 and preparation of data included W.B. Mills, T.E. Waldrep, D.M. Ferree, T.L. Huntzinger, C.R. Haddock, J.F. James, L.D. Mize, D.K. White, D.M. Walters, G.L. Keller, R.W. Chadd, T.E. Coffey, C.J. Henry, G.M. Lake, S.W. Standridge, R.D. Lenz, R.L. Karr, M.R. Johnston, B.T. Gaines, K.R. Clark. These data represent that part of the National Water Data System collected by the U.S. Geological Survey and cooperating State and Federal agencies in 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, Lloyd E. Church, chairman, succeeded by Gerald E. Borelli; Forrest Nelson, executive director.

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

Agencies furnishing assistance 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 below. See also table for converting English units to International System of units (SI) on page 22.

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

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

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

Total coliform bacteria are a particular group of bacteria that are used as indicators of possible sewage pollution. They are characterized as aerobic or facultative anaerobic, gram-negative, nonspore-forming, rod-shaped bacteria which ferment lactose with gas formation within 48 hours at 35°C. In the laboratory these bacteria are

defined as all the organisms which produce colonies with a golden-green metallic sheen within 24 hours when incubated at $35^{\circ}\text{C} + 1.0^{\circ}\text{C}$ on M-Endo medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 ml of sample.

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

Fecal streptococcal bacteria are bacteria found also in the intestine of warmblooded animals. Their presence in water is considered to verify fecal pollution. They are characterized as gram-positive, cocci bacteria which are capable of growth in brain-heart infusion broth. In the laboratory they are defined as all the organisms which produce red or pink colonies within 48 hours at $35^{\circ}\text{C} + 1.0^{\circ}\text{C}$ on M-enterococcus medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 ml of sample.

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

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

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

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

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

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

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

Continuing record station is a specified site which meets one or all conditions listed:

1. When chemical samples are collected daily or monthly for 10 or more months during the water year.
2. When water temperature records include observations taken once or more times daily.
3. When sediment discharge records include those periods for which sediment loads are computed and are considered to be representative of the runoff for the water year.

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 or 0.02832 cubic metres per second.

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

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

Instantaneous discharge is the discharge at a given time.

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

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

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

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

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

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

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

Organism count/area refers to the number of organisms collected and enumerated in a sample and adjusted to the

number per area habitat, usually square metres (m^2), acres, or hectares. Periphyton, benthic organisms, and macrophytes are expressed in these terms.

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

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

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

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

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

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

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

<u>Ion</u>	<u>Multi- ply by</u>	<u>Ion</u>	<u>Multi- ply by</u>
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)

<u>Range of concentration in 1000 mg/l</u>	<u>Di- vide by</u>	<u>Range of concentration in 1000 mg/l</u>	<u>Di- vide by</u>	<u>Range of concentration in 1000 mg/l</u>	<u>Di- vide by</u>	<u>Range of concentration in 1000 mg/l</u>	<u>Di- vide by</u>
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

Table 2.--Continued.

Range of concentration in 1000 mg/l	Di- vide by	Range of concentration in 1000 mg/l	Di- vide by	Range of concentration in 1000 mg/l	Di- vide by	Range of concentration in 1000 mg/l	Di- vide by
137 -152	1.09	347-361	1.22	566-570	1.35	765-780	1.48
153 -169	1.10	363-378	1.23	572-585	1.36	782-796	1.49
170 -185	1.11	380-393	1.24	587-602	1.37	798-810	1.50
186 -200	1.12	395-409	1.25	604-617	1.38		

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

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

Pesticides include insecticides and herbicides.

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

Technical names for insecticides analyzed are:

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

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-chlorophenyl) 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.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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.

Substrate is the physical surface upon which an organism lives.

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

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

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.

Weighted average is used in this report to indicate discharge-weighted average. It is computed by multiplying the discharge for a sampling period by the concentrations of individual constituents for the corresponding period and dividing the sum of the products by the sum of the discharges. A discharge-weighted average approximates the composition of water that would be found in a reservoir containing all the water passing a given location during the water year after thorough mixing in the reservoir. See also table for converting English Units to International Units (SI) on page 22.

SPECIAL NETWORKS AND PROGRAMS

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

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

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

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

Pesticides are chemical compounds used to control the growth of undesirable plants and animals. Major categories of pesticides includes insecticides, miticides, fungicides, herbicides, and rodenticides. Since the first application of DDT as an insecticide in the early 1930's, there have been almost 60,000 pesticide formulations registered, each containing at least one of the approximately 800 different basic pesticide compounds. The United States annually produces about 1 billion pounds of these compounds. Although efforts are being made to substitute many of the chlorinated hydrocarbon pesticides with more specific, fast-acting, and easily degradable compounds, chlorinated hydrocarbon pesticides are still commonly used in many areas of the country.

• DOWNSTREAM ORDER AND STATION NUMBER

Stations are listed in downstream direction along the main stream, and stations on tributaries are listed between stations on the main stream in the order in which those tributaries enter the main stream. Stations on tributaries entering above all mainstream stations are listed before the first mainstream station. Stations on tributaries to tributaries are listed in a similar manner. In the 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 07245000 which appears just to left of the station name includes the 2-digit part number "07" plus the 6-digit downstream order number "245000". In this report, the records are listed in downstream order by parts. The part number refers to an area whose boundaries coincide with certain natural drainage lines. Records in this report are in Part 7 (Lower Mississippi River basin). All records for a drainage basin encompassing more than one State could be arranged in downstream order by assembling pages from the various State reports by station number to include all records in the basin.

EXPLANATION OF WATER QUALITY DATA

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, period 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, biological, and microbiological quality, 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 (thermograph) furnished 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 reporting data for chemical constituents and concentrations of suspended sediment in milligrams per litre (mg/l) and water temperatures in degrees Celsius (°C). In waters with a density of 1.000 g/ml (grams per millilitre), parts per million and milligrams per litre can be considered equal. In waters 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 below.

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. 22).

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

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

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

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

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

For chemical-quality stations equipped with 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 district office at the address given on the back of the title page of this report.

Temperature

Water temperatures are measured at most of the water-quality stations. In addition, water temperatures are taken at time of discharge measurements for surface-water stations. For daily stations, the water temperatures are taken at about the same time each day when sample is collected. Large streams 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 the following table.

Table 4.--Water-supply paper numbers, water years 1947-71

<u>Year</u>	<u>WSP</u>	<u>Parts 7-8</u>	<u>Year</u>	<u>WSP</u>
1941	942	----	1957	1522
1942	950	----	1958	1573
1943	970	----	1959	1644
1944	1022	----	1960	1744
1945	1030	----	1961	1884
1946	1050	----	1962	1944
1947	1102	----	1963	1950
1948	1133	1133	1964	1957
1949	1163	1163	1965	1964
1950	1188	1188	1966	1994
1951	1199	1199	1967	2014
1952	1252	1252	1968	B2096
1953	1292	1292	1969	BC2146
1954	1352	1352	1970	BC2156
1955	1402	1402	1971	BC2166
1956	1452	1452		

A Part 3. B Part 7. C In press.

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WATER RESOURCES DATA FOR OKLAHOMA,

Factors for Converting English Units to International System (SI) Units

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

Multiply English Units	By	To obtain SI units
Length		
inches (in)	25.4	millimetre (mm)
	.0254	metres (m)
feet (ft)	.3048	metres (m)
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 hectometre (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)
	3.785x10 ⁻³	cubic metres (m ³)
million gallons (10 ⁶ gal)	3785	cubic metres (m ³)
	3.785x10 ⁻³	cubic hectometres (hm ³)
cubic feet (ft ³)	28.32	cubic decimetres (dm ³)
	.02832	cubic metres (m ³)
cfs-day (ft ³ /s day)	2447	cubic metres (m ³)
	2.447x10 ⁻³	cubic hectometres (hm ³)
acre-feet (acre-ft)	1233	cubic metres (m ³)
	1.233x10 ⁻³	cubic hectometres (hm ³)
	1.233x10 ⁻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)
	6.309x10 ⁻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		
ton (short)	.9072	tonne (t)

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

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

WATER QUALITY RECORDS

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PART 7. LOWER MISSISSIPPI RIVER BASIN

ARKANSAS RIVER BASIN

07148450 SALT FORK ARKANSAS RIVER NEAR INGERSOLL, OKLA.

LOCATION.--Lat 36°49'09", long 98°21'27", in NW 1/4 sec.14, T.27 N., R.11 W., Alfalfa County, at gaging station on State Highways 8 and 58, 2 mi (3.2 km) upstream from Medicine Lodge River, 2.5 mi (4.0 km) northeast of Ingersoll, 17 mi (27.4 km) upstream from Great Salt Plains Dam, and at mile 120.9 (194.5 km).

DRAINAGE AREA.--1,140 mi² (2,950 km²).

PERIOD OF RECORD.--Chemical analyses: October 1961 to September 1962, current year.
Water temperatures: October 1961 to September 1962, current year.

EXTREMES, Current year.--Specific conductance: Maximum, 2,840 micromhos/cm July 18; minimum, 663 micromhos/cm Aug. 29.
Water temperatures: Maximum, 34.0°C June 14; minimum, freezing point on many days during December and January.

Period of record.--Specific conductance: Maximum, 2,840 micromhos/cm July 18, 1974; minimum daily, 560 micromhos/cm Sept. 17-24, 1962.
Water temperatures: Maximum, 34.0°C June 14, 1974; minimum, freezing point on many days during winter months.

REMARKS.--Continuous monitor records for specific conductance are collected for this station. Records of maximum and minimum specific conductance values are available in district office at Oklahoma City, Okla.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	DIS- CHARGE (CFS)	INSTAN- TANEOUS DIS- CHARGE (CFS)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED NITRATE (N) (MG/L)	DIS- SOLVED NITRATE (NO3) (MG/L)
OCT.												
12...	4490	--	120	12	16	95	0	78	270	26	.62	2.7
16...	797	--	270	40	120	209	0	171	690	170	.10	.44
31...	178	--	300	55	200	217	0	178	830	--	.25	1.1
NOV.												
01...	169	--	310	57	210	203	0	167	810	310	.54	2.4
12...	131	--	290	59	200	177	0	145	810	280	.82	3.6
23...	163	--	270	48	100	214	0	176	710	140	.57	2.5
DEC.												
06...	322	--	130	22	51	158	0	130	310	66	.99	4.4
14...	135	--	280	51	160	238	0	195	730	240	.66	2.9
23...	105	--	300	58	220	237	0	194	810	--	1.0	4.4
JAN.												
17...	211	--	290	57	170	239	0	196	780	260	.85	3.8
20...	336	--	--	40	76	200	0	164	600	110	.56	2.5
25...	135	--	280	51	140	228	0	187	760	200	.59	2.6
FEB.												
10...	87	--	280	58	200	230	0	189	710	290	.78	3.5
16...	79	--	250	59	170	108	0	89	780	250	.69	3.1
22...	87	--	290	60	170	215	0	176	780	260	.62	2.7
MAR.												
01...	79	--	--	61	180	192	0	157	770	260	--	--
12...	963	--	150	23	40	139	0	114	360	49	--	--
31...	131	--	310	64	180	194	0	159	830	270	--	--
APR.												
08...	--	102	310	62	200	191	0	157	860	290	.54	2.4
16...	--	102	--	62	170	192	0	157	810	--	.46	2.0
22...	--	752	110	19	--	144	0	118	290	50	1.5	6.6
MAY												
09...	--	87	280	60	180	180	0	148	780	260	--	--
19...	--	48	300	64	210	180	0	148	830	320	--	--
26...	--	209	300	38	80	101	0	83	780	120	--	--
JUNE												
10...	--	171	280	44	--	195	0	160	830	230	--	--
21...	--	29	290	65	170	128	0	105	770	260	--	--
30...	--	9.6	290	65	150	140	0	115	810	220	--	--
JULY												
01...	--	7.0	270	70	140	197	0	162	760	210	--	--
20...	--	.42	360	90	160	216	0	177	1000	240	--	--
29...	--	7.8	290	46	110	160	0	131	790	170	--	--
AUG.												
07...	--	1.5	340	82	160	301	0	247	850	290	--	--
19...	--	20	280	46	83	146	0	120	770	110	--	--
29...	--	3380	100	11	18	83	0	68	240	21	--	--
SEP.												
04...	--	644	240	21	44	102	0	84	570	62	--	--
14...	--	102	290	50	200	185	0	152	740	280	--	--
27...	--	59	--	53	220	185	0	152	770	320	--	--

ARKANSAS RIVER BASIN

07148450 SALT FORK ARKANSAS RIVER NEAR INGERSOLL, OKLA.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	DIS- SOLVED NITRITE (N) (MG/L)	DIS- SOLVED NITRITE (NO2) (MG/L)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	CARBON DIOXIDE (CO2) (MG/L)
OCT.												
12...	.00	.00	.62	550	.75	6670	350	270	.4	774	7.3	7.6
16...	.00	.00	.10	--	--	--	840	670	1.8	1880	7.4	13
31...	.02	.07	.27	1880	2.56	904	980	800	2.8	2460	8.2	2.2
NOV.												
01...	.01	.03	.55	1880	2.56	858	1000	840	2.9	2500	8.0	3.2
12...	.01	.03	.83	1820	2.48	644	970	820	2.8	2440	8.1	2.3
23...	.01	.03	.58	1460	1.99	643	870	700	1.5	1940	8.1	2.7
DEC.												
06...	.01	.03	1.0	708	.96	616	420	290	1.1	1030	7.4	10
14...	.03	.10	.69	1680	2.28	612	910	710	2.3	2200	8.0	3.8
23...	.00	.00	1.0	1930	2.62	547	990	790	3.0	2550	8.2	2.4
JAN.												
17...	.05	.16	.90	1720	2.34	980	960	760	2.4	2290	8.0	3.8
20...	.02	.07	.58	1190	1.62	1080	--	--	--	1590	8.0	3.2
25...	.01	.03	.60	1590	2.16	580	910	720	2.0	2100	8.0	3.6
FEB.												
10...	.01	.03	.79	1810	2.46	425	940	750	2.8	2510	8.2	2.3
16...	.01	.03	.70	1700	2.31	363	870	780	2.5	2270	8.1	1.4
22...	.01	.03	.63	1790	2.43	420	970	800	2.4	2390	8.2	2.2
MAR.												
01...	--	--	.38	1810	2.46	386	--	--	--	2400	8.3	1.5
12...	--	--	.67	752	1.02	1960	470	360	.8	1050	7.6	5.6
31...	--	--	.51	1900	2.58	672	1000	880	2.4	2490	8.2	2.0
APR.												
08...	.01	.03	.55	1910	2.60	526	1000	870	2.7	2520	8.2	1.9
16...	.01	.03	.47	1850	2.52	509	--	--	--	2380	8.3	1.5
22...	.71	2.3	2.2	605	.82	1230	350	230	--	866	7.7	4.6
MAY												
09...	--	--	.33	1770	2.41	416	950	800	2.5	2350	8.3	1.4
19...	--	--	.31	1930	2.62	250	1000	870	2.9	2580	8.3	1.4
26...	--	--	.42	1520	2.07	858	910	820	1.2	1880	7.6	4.1
JUNE												
10...	--	--	.38	2000	2.72	923	880	720	--	1790	8.2	2.0
21...	--	--	2.6	--	--	--	990	890	2.4	2470	7.4	8.2
30...	--	--	.57	1870	2.54	48.5	990	880	2.1	2310	8.0	2.2
JULY												
01...	--	--	.59	1860	2.53	35.2	960	800	2.0	2300	7.9	4.0
20...	--	--	1.5	2180	2.96	2.47	1300	1100	2.0	2610	7.5	11
29...	--	--	1.9	1610	2.19	33.9	910	780	1.6	1990	8.3	1.3
AUG.												
07...	--	--	5.9	2160	2.94	8.75	1200	940	2.0	2730	7.5	15
19...	--	--	.33	1540	2.09	83.2	890	770	1.2	1840	7.9	2.9
29...	--	--	.46	470	.64	4290	300	230	.5	663	7.7	2.6
SEP.												
04...	--	--	.40	1060	1.44	1840	690	600	.7	1310	7.7	3.3
14...	--	--	.33	1900	2.58	523	930	780	2.9	2460	8.2	1.9
27...	--	--	.31	2010	2.73	320	--	--	--	2590	8.3	1.5

ARKANSAS RIVER BASIN

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07148450 SALT FORK ARKANSAS RIVER NEAR INGERSOLL, OKLA.--Continued

SULFATE (MG/L AS SO4) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	350	800	780	---	770	780	790	760	790	780	840	660
2	430	800	750	---	780	780	770	740	800	770	830	690
3	500	800	750	---	780	780	770	750	500	770	820	600
4	560	800	710	---	780	780	790	750	780	770	800	500
5	630	800	730	---	780	790	770	750	790	770	800	550
6	660	800	330	---	780	790	790	750	790	770	800	680
7	670	790	340	---	780	780	770	760	750	780	840	730
8	680	790	550	---	780	780	800	770	740	770	840	770
9	690	790	690	---	800	---	760	780	750	770	800	770
10	350	790	720	---	800	580	---	780	700	780	800	780
11	310	790	730	---	790	620	690	790	710	780	730	780
12	260	790	750	---	780	330	730	790	740	780	700	800
13	280	790	750	---	780	630	790	790	750	700	700	810
14	640	790	760	---	780	630	730	800	770	780	540	800
15	670	780	760	---	780	720	770	800	790	780	590	800
16	690	790	760	---	770	720	770	800	790	790	580	810
17	730	790	770	770	780	740	790	800	790	790	670	810
18	740	780	770	760	780	760	780	810	780	790	690	810
19	750	780	770	700	780	760	770	810	790	820	710	800
20	770	780	770	660	780	770	760	810	800	830	710	810
21	770	---	---	660	780	760	360	800	800	820	710	810
22	770	710	760	710	780	770	290	800	790	820	690	810
23	780	710	810	710	790	780	340	790	790	810	690	810
24	780	730	780	730	790	780	340	770	780	820	390	800
25	790	760	730	740	790	790	570	740	770	810	440	810
26	790	760	740	750	790	780	680	700	780	800	730	820
27	790	770	750	760	790	790	---	750	780	810	710	820
28	790	770	770	760	790	790	690	770	760	730	410	820
29	790	770	760	770	---	790	690	780	770	730	240	820
30	790	770	770	760	---	790	660	780	780	770	300	820
31	800	---	770	770	---	800	---	800	---	770	420	---
MONTH	650	780	720	---	780	740	690	780	760	780	660	760

DISSOLVED SO4 DISCHARGE (TONS/DAY) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	230	365	233	---	240	167	278	337	116	15	4.1	712
2	261	341	226	---	241	150	253	295	112	15	2.3	922
3	287	341	234	---	241	167	240	268	70	9.9	2.7	1420
4	302	321	567	---	220	166	237	258	110	10.0	2.2	789
5	339	321	890	---	221	167	228	234	111	6.8	2.6	650
6	358	304	283	---	203	150	228	212	127	6.2	3.9	617
7	361	301	363	---	203	167	219	204	261	6.3	3.4	523
8	347	299	333	---	184	167	221	194	340	3.8	2.9	448
9	727	278	289	---	170	---	206	185	419	3.8	3.2	393
10	575	300	301	---	188	644	---	175	322	3.4	4.1	347
11	581	279	308	---	205	3140	230	165	192	3.4	4.5	313
12	3200	278	340	---	202	858	272	158	133	1.8	9.6	263
13	2580	278	295	---	183	782	302	147	121	0.66	32	233
14	2320	278	276	---	183	592	253	140	100	1.5	33	210
15	1810	256	257	---	166	548	231	136	92	1.3	505	196
16	1490	258	258	---	164	479	211	127	88	2.8	258	198
17	1290	258	240	438	167	447	208	119	75	2.6	83	190
18	1100	234	241	556	184	455	181	111	63	1.2	46	179
19	941	233	217	664	182	433	196	105	54	0.92	38	171
20	838	255	192	596	182	414	482	96	45	0.93	33	172
21	725	---	---	480	184	390	541	89	43	1.1	27	164
22	646	311	164	426	184	371	580	89	41	1.1	26	151
23	568	311	230	361	168	373	316	94	36	1.1	146	140
24	514	320	304	328	168	396	190	186	34	1.1	119	138
25	498	313	328	270	169	354	268	754	31	1.5	73	135
26	500	290	250	275	151	345	259	466	29	2.2	80	132
27	475	271	253	277	169	348	---	285	27	1.2	165	129
28	452	272	258	277	168	346	207	198	24	7.1	2600	125
29	428	252	236	258	---	324	212	160	21	15	1580	123
30	381	232	239	237	---	300	370	139	20	17	678	117
31	384	---	239	238	---	282	---	127	---	7.4	608	---
MONTH	823	288	295	---	189	464	272	202	109	4.9	231	343

ARKANSAS RIVER BASIN

07148450 SALT FORK ARKANSAS RIVER NEAR INGERSOLL, OKLA.--Continued

CHLORIDE (MG/L AS CL) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	57	280	250	---	240	250	260	210	280	250	350	95
2	69	280	200	---	250	250	240	190	280	240	350	110
3	77	280	200	---	250	250	240	190	76	220	330	88
4	83	280	130	---	250	250	270	200	250	230	280	76
5	91	280	160	---	250	260	240	200	270	230	280	82
6	96	280	51	---	260	260	270	200	280	220	280	110
7	100	270	56	---	260	250	240	220	200	250	360	160
8	110	260	83	---	250	250	290	240	180	240	360	220
9	110	260	110	---	280	---	220	250	190	240	290	230
10	57	270	140	---	290	86	---	250	120	250	280	250
11	45	270	160	---	270	91	110	260	130	250	160	260
12	31	260	200	---	250	52	160	270	170	250	120	280
13	36	260	200	---	250	91	280	270	190	120	120	300
14	93	260	210	---	250	91	160	280	240	240	81	290
15	100	260	220	---	250	140	240	290	270	250	87	280
16	110	270	220	---	230	140	230	280	280	260	86	300
17	170	270	220	230	250	190	260	290	270	270	100	300
18	190	250	230	220	250	210	250	300	240	270	110	300
19	190	250	230	120	240	220	240	310	280	310	120	290
20	220	250	240	95	240	230	220	310	280	330	130	300
21	230	---	---	95	250	220	60	290	280	310	130	300
22	240	120	210	120	250	240	38	290	270	320	110	310
23	240	120	310	120	270	240	54	280	270	300	110	300
24	250	160	250	160	270	240	56	230	250	320	63	290
25	260	220	160	180	270	260	85	180	240	300	69	300
26	270	220	180	200	270	260	110	120	240	290	160	310
27	270	220	200	220	270	270	---	190	250	310	130	330
28	270	230	220	220	270	260	110	240	210	160	65	310
29	270	240	210	220	---	270	110	250	240	160	23	310
30	270	240	240	220	---	270	95	250	250	240	44	320
31	280	---	240	230	---	280	---	280	---	230	67	---
MONTH	160	250	190	---	260	210	180	250	230	250	170	250

DISSOLVED CL DISCHARGE (TONS/DAY) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	38	130	74	---	75	54	93	92	40	4.6	1.7	103
2	41	121	60	---	76	49	78	73	40	4.5	0.93	147
3	44	121	63	---	76	54	74	68	11	2.9	1.1	208
4	45	113	100	---	70	54	80	69	35	3.0	0.76	121
5	49	113	196	---	71	55	71	63	38	2.0	0.90	97
6	52	108	44	---	66	50	77	56	44	1.8	1.4	97
7	54	103	60	---	66	54	66	58	71	2.0	1.5	117
8	54	99	50	---	60	54	80	60	84	1.2	1.2	131
9	116	92	46	---	61	---	60	58	107	1.2	1.2	116
10	95	101	57	---	67	95	---	57	53	1.1	1.5	111
11	85	94	69	---	69	457	37	55	35	1.1	0.97	102
12	375	93	92	---	65	136	58	53	31	0.56	1.6	94
13	331	93	80	---	59	114	105	50	30	0.11	5.4	85
14	336	92	76	---	59	86	55	50	30	0.45	5.0	76
15	272	84	73	---	54	106	70	49	31	0.41	75	69
16	242	87	75	---	49	94	63	45	31	0.91	38	73
17	296	87	70	132	54	111	69	43	26	0.86	12	70
18	274	76	72	157	60	125	58	41	20	0.41	7.4	66
19	240	74	64	111	57	123	60	40	19	0.35	6.4	62
20	245	82	60	86	57	122	137	36	16	0.37	6.1	64
21	218	---	---	69	60	113	90	32	15	0.41	5.0	61
22	200	54	46	73	60	113	77	32	14	0.42	4.2	57
23	178	54	88	62	56	117	51	33	12	0.39	23	52
24	165	69	96	71	56	124	31	55	11	0.42	20	50
25	164	89	71	66	58	117	40	186	9.7	0.56	11	50
26	168	83	62	74	51	113	40	77	9.2	0.77	17	50
27	161	79	67	78	58	118	---	74	8.8	0.46	29	51
28	156	82	75	78	56	115	33	60	6.7	1.6	418	48
29	147	78	66	75	---	110	34	52	6.4	3.4	153	48
30	131	72	73	69	---	101	53	45	6.4	5.3	98	45
31	136	---	73	71	---	99	---	45	---	2.2	97	---
MONTH	165	90	73	---	62	108	66	58	30	1.5	34	84

07148450 SALT FORK ARKANSAS RIVER NEAR INGERSOLL, OKLA.--Continued

DISSOLVED SOLIDS (RESIDUE ON EVAPORATION, MG/L AT 180 DEG. C) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	758	1850	1760	---	1750	1780	1800	1670	1830	1760	2180	1250
2	889	1850	1660	---	1760	1780	1750	1620	1850	1750	2120	1390
3	999	1850	1660	---	1760	1780	1740	1630	988	1710	1950	1150
4	1090	1840	1480	---	1760	1770	1810	1650	1770	1730	1850	988
5	1200	1840	1560	---	1770	1790	1750	1660	1820	1710	1840	1070
6	1260	1850	702	---	1780	1790	1810	1640	1830	1710	1850	1380
7	1310	1820	751	---	1780	1780	1730	1700	1660	1760	2330	1570
8	1360	1790	1080	---	1780	1780	1860	1750	1610	1750	2240	1710
9	1390	1790	1390	---	1850	---	1700	1760	1630	1750	1850	1710
10	758	1800	1500	---	1850	1120	---	1780	1430	1770	1850	1770
11	654	1800	1570	---	1810	1190	1410	1790	1490	1770	1560	1780
12	531	1800	1660	---	1770	716	1550	1810	1590	1770	1440	1850
13	572	1800	1660	---	1770	1200	1830	1820	1630	1450	1450	1870
14	1220	1790	1680	---	1770	1200	1560	1850	1730	1750	1050	1860
15	1330	1780	1690	---	1770	1510	1730	1860	1810	1760	1130	1840
16	1420	1810	1700	---	1720	1520	1720	1840	1830	1790	1120	1880
17	1580	1810	1710	1730	1780	1620	1790	1860	1820	1810	1310	1880
18	1620	1780	1720	1690	1780	1670	1770	1880	1750	1820	1400	1880
19	1630	1770	1710	1460	1750	1690	1730	1900	1830	1920	1470	1860
20	1710	1770	1750	1240	1750	1710	1690	1900	1850	2010	1500	1890
21	1730	---	---	1240	1780	1700	783	1850	1850	1920	1500	1890
22	1750	1470	1680	1470	1780	1730	591	1870	1820	1920	1400	1900
23	1750	1470	1910	1470	1800	1750	730	1830	1810	1890	1380	1890
24	1770	1560	1760	1560	1800	1750	751	1710	1770	1920	811	1850
25	1790	1700	1560	1610	1820	1790	1110	1620	1750	1880	900	1880
26	1800	1700	1610	1660	1800	1780	1360	1450	1750	1850	1550	1910
27	1810	1710	1650	1690	1820	1810	---	1640	1770	1910	1480	1940
28	1820	1730	1710	1690	1800	1800	1400	1730	1670	1570	844	1910
29	1820	1740	1680	1710	---	1810	1420	1770	1740	1560	465	1920
30	1820	1750	1730	1700	---	1800	1240	1780	1760	1740	639	1920
31	1850	---	1730	1720	---	1840	---	1840	---	1710	866	---
MONTH	1390	1760	1580	---	1780	1630	1500	1760	1720	1780	1460	1720

DISSOLVED SOLIDS DISCHARGE (TUNS/DAY) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	505	843	527	---	542	379	636	744	267	33	11	1350
2	535	788	497	---	546	341	571	643	259	33	5.7	1870
3	569	788	515	---	546	379	540	586	139	22	6.3	2720
4	587	741	1180	---	499	378	542	567	249	22	5.0	1570
5	647	741	1910	---	502	382	514	517	256	15	5.9	1270
6	683	704	610	---	463	343	523	466	291	14	9.0	1240
7	707	691	795	---	463	379	491	453	575	14	9.4	1120
8	693	682	650	---	418	379	512	439	740	8.5	7.9	1000
9	1470	633	585	---	394	---	459	418	916	8.5	7.5	880
10	1260	687	634	---	436	1240	---	398	662	7.7	9.5	787
11	1230	638	661	---	469	5990	468	377	403	7.6	9.7	713
12	6430	636	750	---	459	1860	581	362	287	4.0	20	609
13	5300	636	651	---	416	1490	696	338	263	1.4	67	541
14	4420	633	611	---	416	1130	542	324	225	3.3	65	487
15	3570	583	570	---	378	1150	520	317	210	3.0	975	453
16	3050	591	574	---	367	1010	474	293	202	6.3	499	463
17	2780	591	535	984	379	975	474	276	172	5.9	163	447
18	2400	533	539	1240	418	1010	411	259	142	2.8	94	417
19	2060	529	486	1380	412	962	440	246	123	2.2	79	397
20	1870	579	434	1130	412	926	1070	226	105	2.3	69	402
21	1630	---	---	909	418	868	1170	205	100	2.5	57	382
22	1460	648	363	887	418	833	1200	207	94	2.5	53	354
23	1280	648	540	752	385	842	688	217	83	2.5	295	326
24	1170	685	689	701	385	894	416	417	77	2.5	252	320
25	1140	696	701	588	387	808	518	1640	71	3.6	148	315
26	1140	645	544	606	346	785	519	961	66	5.0	171	310
27	1090	604	557	616	387	797	---	624	62	2.9	343	304
28	1040	611	577	616	385	791	420	445	54	15	5400	294
29	984	568	522	577	---	743	432	364	47	33	3050	290
30	876	523	538	528	---	687	701	317	46	39	1430	275
31	888	---	538	534	---	649	---	293	---	17	1260	---
MONTH	1720	651	643	---	430	980	591	450	240	11	470	730

ARKANSAS RIVER BASIN

07148450 SALT FORK ARKANSAS RIVER NEAR INGERSOLL, OKLA.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1080	2440	2300	---	2280	2330	2360	2160	2410	2300	2680	1550
2	1220	2440	2140	---	2300	2330	2280	2080	2440	2280	2660	1720
3	1320	2440	2140	---	2300	2330	2270	2100	1310	2220	2600	1460
4	1400	2430	1860	---	2300	2320	2380	2140	2320	2250	2440	1310
5	1500	2430	1990	---	2320	2350	2280	2150	2400	2230	2420	1380
6	1560	2440	1000	---	2340	2350	2380	2120	2410	2220	2440	1700
7	1600	2390	1070	---	2340	2330	2260	2200	2150	2300	2730	2000
8	1670	2350	1390	---	2330	2330	2460	2280	2070	2280	2700	2220
9	1720	2350	1720	---	2440	---	2210	2300	2100	2280	2450	2230
10	1080	2370	1900	---	2450	1430	---	2330	1790	2320	2440	2310
11	932	2370	2000	---	2380	1490	1750	2350	1880	2310	1980	2340
12	756	2360	2150	---	2320	1020	1970	2380	2030	2310	1800	2440
13	815	2360	2150	---	2320	1500	2410	2390	2090	1810	1820	2480
14	1520	2350	2170	---	2320	1500	1980	2440	2260	2290	1370	2460
15	1620	2340	2190	---	2320	1910	2260	2460	2380	2300	1440	2430
16	1760	2380	2210	---	2240	1920	2240	2430	2410	2350	1430	2500
17	2020	2380	2220	2250	2330	2080	2350	2460	2400	2380	1600	2490
18	2080	2330	2240	2190	2330	2160	2320	2490	2290	2400	1730	2490
19	2100	2310	2230	1830	2290	2190	2260	2520	2410	2550	1840	2460
20	2220	2320	2280	1540	2290	2230	2190	2520	2440	2620	1890	2500
21	2250	---	---	1540	2330	2210	1120	2450	2440	2550	1890	2500
22	2280	1850	2180	1850	2330	2260	842	2470	2400	2560	1730	2520
23	2290	1850	2530	1850	2370	2290	1040	2410	2380	2500	1710	2500
24	2320	1980	2300	1980	2370	2290	1070	2230	2320	2560	1150	2450
25	2350	2200	1980	2070	2390	2350	1420	2080	2280	2490	1230	2490
26	2370	2200	2070	2150	2370	2340	1680	1810	2290	2450	1970	2540
27	2380	2220	2130	2190	2390	2380	---	2110	2320	2530	1860	2590
28	2400	2250	2220	2190	2370	2360	1740	2260	2160	2000	1180	2540
29	2400	2270	2180	2220	---	2380	1760	2320	2270	1990	663	2550
30	2400	2280	2260	2210	---	2370	1540	2330	2300	2270	911	2560
31	2440	---	2260	2240	---	2420	---	2430	---	2230	1200	---
MONTH	1800	2300	2050	---	2340	2130	1960	2300	2240	2330	1870	2260

TEMPERATURE (DEG. C) OF WATER , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
(ONCE-DAILY)

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

ARKANSAS RIVER BASIN

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07149000 MEDICINE LODGE NEAR KIOWA, KANS.

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

DRAINAGE AREA.--903 mi² (2,340 km²).

PERIOD OF RECORD.--Chemical analyses: October 1954 to September 1955, current year.

Water temperatures: October 1954 to September 1955, current year.

EXTREMES, Current year.--Specific conductance: Maximum, 1,570 micromhos/cm July 21; minimum, 359 micromhos/cm Aug. 17.

Water temperatures: Maximum, 33.0°C Aug. 10; minimum, freezing point on many days during December and January.

REMARKS.--Continuous monitor records for specific conductance are collected for this station. Records of maximum and minimum specific conductance values are available in district office at Oklahoma City, Okla.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

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)	ALKA- LINITY AS CACO3 (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLU- RIDE (CL) (MG/L)	DIS- SOLVED NITRATE (N) (MG/L)	DIS- SOLVED NITRATE (NO3) (MG/L)	DIS- SOLVED NITRITE (N) (MG/L)
OCT.												
05...	340	160	29	68	247	0	203	350	89	.63	2.8	.01
11...	5260	67	11	14	96	0	79	150	16	.52	2.3	.03
24...	305	190	36	75	264	0	217	450	--	.64	2.8	.00
NOV.												
02...	218	180	38	75	249	0	204	430	93	.70	3.1	.00
13...	167	170	37	72	222	0	182	400	85	.74	3.3	.01
22...	302	140	30	50	188	0	154	340	56	.86	3.8	.01
DEC.												
06...	358	130	31	53	217	0	178	300	68	.97	4.3	.01
26...	218	170	39	67	268	0	220	390	84	1.2	5.3	.01
31...	106	180	41	73	287	0	235	410	93	1.3	5.7	.01
JAN.												
03...	80	190	43	84	315	0	258	400	120	1.3	5.8	.00
16...	170	150	31	62	268	0	220	290	82	1.4	6.2	.00
31...	197	170	39	--	255	0	209	380	82	1.1	4.9	.00
FEB.												
02...	194	170	37	66	266	0	218	380	82	1.1	4.8	.01
14...	170	160	36	67	247	0	203	360	80	1.1	4.9	.00
28...	164	150	34	65	249	0	204	340	81	1.1	4.9	.00
MAR.												
12...	744	130	31	47	165	0	135	340	52	.93	4.1	.02
23...	214	200	46	80	260	0	213	480	87	.93	4.1	.01
31...	176	180	41	75	243	0	199	420	81	.82	3.6	.01
APR.												
04...	155	130	42	75	169	0	139	400	85	--	--	--
12...	246	190	50	79	237	0	194	510	91	--	--	--
21...	2580	78	13	18	136	0	112	150	20	--	--	--
MAY												
03...	249	180	43	76	269	0	221	430	95	.59	2.6	.01
14...	123	160	38	76	222	0	182	390	93	.33	1.5	.01
28...	88	140	36	76	206	0	169	360	93	.31	1.4	.00
JUNE												
05...	182	81	17	36	155	0	127	160	39	--	--	--
20...	70	130	30	76	215	0	176	270	92	--	--	--
30...	52	120	36	91	163	0	134	330	120	--	--	--
JULY												
06...	52	120	12	54	166	0	136	--	64	--	--	--
21...	6.0	--	40	130	197	0	162	420	170	--	--	--
31...	17	160	36	98	201	0	165	420	130	--	--	--
AUG.												
05...	19	160	42	110	198	0	162	420	150	--	--	--
16...	445	66	9.4	19	123	0	101	120	22	--	--	--
30...	155	140	17	41	199	0	163	260	49	--	--	--
SEP.												
03...	207	110	20	52	212	0	174	190	67	--	--	--
14...	74	120	26	65	234	0	192	250	81	--	--	--
30...	68	110	26	63	222	0	182	230	76	--	--	--

ARKANSAS RIVER BASIN

07149000 MEDICINE LODGE RIVER NEAR KIOWA, KANS.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	DIS- SOLVED NITRITE (NO2) (MG/L)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	CARBON DIOXIDE (CO2) (MG/L)
OCT.											
05...	.03	.64	848	1.15	778	520	320	1.3	1210	8.3	2.0
11...	.10	.55	321	.44	4560	210	130	.4	488	8.0	1.5
24...	.00	.64	898	1.22	740	620	410	1.3	1410	8.2	2.7
NOV.											
02...	.00	.70	993	1.35	584	610	400	1.3	1410	8.1	3.2
13...	.03	.75	940	1.28	424	580	390	1.3	1300	7.9	4.5
22...	.03	.87	747	1.02	609	470	320	1.0	1080	8.3	1.5
DEC.											
06...	.03	.98	722	.98	698	450	270	1.1	1070	7.7	6.9
26...	.03	1.2	922	1.25	543	590	370	1.2	1320	8.1	3.4
31...	.03	1.3	996	1.35	285	620	380	1.3	1390	8.0	4.6
JAN.											
03...	.00	1.3	1080	1.47	233	650	390	1.4	1550	8.2	3.2
16...	.00	1.4	788	1.07	362	500	280	1.2	1190	8.1	3.4
31...	.00	1.1	1010	1.37	537	590	380	--	1300	8.1	3.2
FEB.											
02...	.03	1.1	908	1.23	476	580	360	1.2	1310	8.1	3.4
14...	.00	1.1	871	1.18	400	550	350	1.2	1270	8.1	3.1
28...	.00	1.1	832	1.13	368	510	310	1.2	1220	8.1	3.2
MAR.											
12...	.07	.95	738	1.00	1480	450	320	1.0	1020	7.5	8.3
23...	.03	.94	1100	1.50	636	690	480	1.3	1490	8.1	3.3
31...	.03	.83	1010	1.37	480	620	420	1.3	1380	8.1	3.1
APR.											
04...	--	.72	936	1.27	392	500	360	1.5	1290	7.9	3.4
12...	--	.90	1100	1.50	731	680	490	1.3	1480	8.3	1.9
21...	--	.66	387	.53	2700	250	140	.5	569	7.6	5.5
MAY											
03...	.03	.60	1040	1.41	699	630	410	1.3	1410	8.1	3.4
14...	.03	.34	949	1.29	315	560	370	1.4	1310	8.1	2.8
28...	.00	.31	873	1.19	207	500	330	1.5	1230	8.1	2.6
JUNE											
05...	--	1.4	460	.63	226	270	150	1.0	690	8.3	1.2
20...	--	1.0	798	1.09	151	450	270	1.6	1150	8.1	2.7
30...	--	.12	906	1.23	78.3	450	310	1.9	1320	7.9	3.3
JULY											
06...	--	.36	699	.95	98.1	350	210	1.3	994	8.0	2.7
21...	--	.17	1110	1.51	18.0	--	--	--	1570	8.2	2.0
31...	--	.26	1030	1.40	47.3	550	380	1.8	1440	8.2	2.0
AUG.											
05...	--	.16	1080	1.47	55.4	570	410	2.0	1510	8.2	2.0
16...	--	1.2	329	.45	395	200	100	.6	499	7.6	4.9
30...	--	.63	656	.89	275	420	260	.9	934	8.2	2.0
SEP.											
03...	--	1.1	592	.81	331	360	180	1.2	881	8.0	3.4
14...	--	.64	717	.98	143	410	210	1.4	1040	8.3	1.9
30...	--	.38	663	.90	122	380	200	1.4	994	8.3	1.8

ARKANSAS RIVER BASIN

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07149000 MEDICINE LODGE RIVER NEAR KIOWA, KANS.--Continued

SULFATE (MG/L AS SO₄) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	220	410	360	450	370	---	360	410	390	390	440	200
2	270	420	350	450	380	---	380	420	380	390	470	190
3	300	410	330	470	370	---	380	430	380	420	470	190
4	320	400	340	440	370	---	350	430	350	430	470	200
5	330	350	380	420	370	---	340	420	170	420	470	210
6	340	390	270	430	380	---	370	410	210	250	440	190
7	340	400	330	410	380	---	360	420	180	320	410	240
8	350	390	340	390	360	340	320	410	230	380	360	250
9	350	390	350	380	350	350	340	400	200	420	280	250
10	350	390	360	390	360	410	370	400	250	430	290	250
11	130	390	360	400	360	320	340	400	290	450	270	260
12	130	380	370	420	370	260	420	390	270	440	300	250
13	140	390	380	410	360	340	410	390	280	450	310	260
14	230	350	370	380	360	390	350	390	290	470	140	270
15	300	390	370	340	360	430	350	390	280	470	140	270
16	350	380	370	320	360	450	360	390	290	450	130	210
17	380	390	370	320	350	440	320	390	290	460	140	220
18	390	380	370	410	350	440	270	380	310	480	170	210
19	410	370	390	380	350	450	360	380	310	480	170	220
20	410	290	410	360	350	450	230	390	320	480	190	250
21	410	280	430	340	350	440	140	390	330	510	210	240
22	420	270	380	350	350	450	150	390	340	500	220	220
23	420	350	340	380	350	460	200	390	350	500	150	120
24	420	350	370	380	350	450	270	350	350	500	160	250
25	420	360	380	380	360	440	330	370	360	390	190	260
26	420	370	380	390	350	400	360	370	360	320	190	250
27	410	360	370	380	340	430	350	360	330	410	190	250
28	420	370	370	380	340	430	380	350	340	410	170	240
29	420	370	380	380	---	430	390	360	360	430	190	240
30	410	370	370	370	---	420	400	360	410	440	200	250
31	410	---	400	370	---	410	---	380	---	450	200	---
MONTH	340	370	370	390	360	---	330	390	310	430	260	230

DISSOLVED SO₄ DISCHARGE (TONS/DAY) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	324	253	144	105	198	---	170	311	71	31	20	53
2	348	245	140	98	197	---	167	288	69	29	21	57
3	336	224	147	102	183	---	162	292	69	27	22	106
4	317	211	305	95	177	---	146	269	113	27	22	92
5	305	180	504	91	166	---	138	243	83	34	24	69
6	290	200	257	94	161	---	150	222	211	35	24	55
7	281	199	245	93	161	---	141	204	291	31	27	62
8	274	192	223	88	155	394	125	186	201	26	37	59
9	268	189	228	86	148	318	123	162	219	25	31	58
10	275	177	223	90	161	460	129	151	189	23	30	57
11	1820	177	203	91	155	829	170	145	155	23	26	54
12	3190	169	205	95	163	516	276	138	118	20	28	51
13	1090	174	200	99	165	397	238	129	104	20	26	52
14	626	158	189	123	165	354	166	129	101	18	106	54
15	653	171	171	127	167	341	152	121	87	18	431	54
16	623	165	171	146	162	326	143	116	77	18	154	43
17	576	167	171	172	157	301	126	114	68	15	79	47
18	521	164	175	264	163	298	108	108	68	15	53	44
19	505	160	158	295	168	300	140	105	65	13	45	45
20	467	132	113	343	165	287	498	106	60	10	39	51
21	417	277	172	272	146	261	940	104	57	8.2	34	44
22	397	217	176	261	146	267	702	101	56	7.6	266	41
23	371	199	188	270	139	263	314	98	53	8.1	184	21
24	346	186	202	224	139	234	337	96	54	11	72	46
25	327	191	197	213	141	215	351	96	52	24	90	49
26	308	189	221	218	140	218	340	95	52	161	65	47
27	292	178	195	206	140	234	298	92	46	84	69	45
28	283	168	171	203	151	232	299	84	42	36	152	43
29	276	154	167	200	---	221	313	80	40	29	129	44
30	261	148	154	195	---	207	336	76	35	24	82	46
31	258	---	115	198	---	196	---	73	---	21	63	---
MONTH	536	187	198	166	160	---	257	146	97	28	79	53

ARKANSAS RIVER BASIN

07149000 MEDICINE LODGE RIVER NEAR KIOWA, KANS.--Continued

CHLORIDE (MG/L AS CL) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	55	110	83	130	85	---	84	110	88	88	130	48
2	66	110	82	130	86	---	86	110	86	91	140	45
3	71	100	77	150	85	---	87	120	86	110	150	44
4	75	100	78	130	85	---	81	120	82	120	150	47
5	77	82	87	110	84	---	78	110	34	110	150	52
6	78	94	64	120	86	---	85	110	52	61	130	45
7	79	97	77	110	86	---	83	110	40	76	100	60
8	80	88	79	88	84	79	76	110	57	87	83	61
9	82	88	82	86	82	80	78	100	46	110	68	61
10	81	88	84	94	84	110	84	97	61	120	69	61
11	15	88	84	97	84	75	79	97	69	130	65	62
12	18	87	84	110	84	62	110	94	64	130	70	61
13	19	88	86	100	83	79	110	91	67	130	72	63
14	57	81	85	87	83	94	81	91	69	140	18	65
15	71	88	85	78	84	120	81	94	67	150	20	65
16	80	87	85	75	83	130	84	88	69	130	15	53
17	87	88	85	75	82	130	75	88	69	140	21	56
18	94	86	84	100	82	130	66	86	72	150	33	53
19	100	84	88	86	82	130	84	87	73	160	36	55
20	110	69	110	84	82	130	57	88	75	160	44	61
21	110	67	120	78	81	130	18	88	77	170	53	58
22	110	64	86	80	81	130	26	91	78	160	55	54
23	110	80	78	87	80	140	47	88	81	170	23	9.7
24	110	81	84	87	80	130	65	82	82	160	31	61
25	110	83	86	86	83	130	77	85	83	94	42	62
26	110	84	86	88	82	100	84	84	84	76	44	61
27	110	84	84	87	79	120	81	84	77	100	44	60
28	110	85	85	86	79	120	86	82	79	110	33	59
29	110	84	86	86	---	120	91	84	84	120	43	59
30	110	84	84	85	---	110	97	83	100	130	47	61
31	110	---	100	85	---	110	---	86	---	130	48	---
MONTH	84	87	85	96	83	---	77	94	72	120	65	55

DISSOLVED CL DISCHARGE (TONS/DAY) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	81	65	33	31	45	---	39	80	16	7.1	5.9	13
2	84	64	32	29	45	---	38	76	16	6.9	6.6	13
3	80	57	34	32	42	---	37	82	16	7.1	6.7	25
4	74	52	71	27	41	---	34	74	26	7.5	6.7	22
5	71	42	115	24	38	---	32	65	17	9.2	7.5	17
6	67	48	62	26	37	---	34	57	53	8.5	6.9	13
7	65	49	57	24	37	---	33	54	65	7.1	7.0	15
8	64	44	52	20	36	91	29	48	50	5.9	8.5	14
9	62	43	53	20	34	74	29	40	52	6.5	7.5	14
10	64	40	51	22	37	119	30	37	46	6.4	7.0	14
11	216	40	47	22	36	194	40	35	37	6.7	6.1	13
12	424	39	47	25	37	125	73	33	28	5.7	6.6	13
13	153	40	46	25	38	92	61	30	25	5.8	6.2	13
14	155	36	43	28	38	85	38	30	24	5.4	14	13
15	155	39	39	30	38	95	35	29	21	5.5	61	13
16	144	38	39	34	37	95	33	27	18	5.4	18	11
17	132	38	39	40	36	87	29	26	16	4.4	12	12
18	124	37	40	67	38	86	26	25	16	4.9	10	11
19	128	37	36	68	39	89	32	24	15	4.2	9.2	11
20	121	31	29	79	38	84	123	24	14	3.3	8.9	13
21	108	66	47	63	34	74	128	24	13	2.8	8.7	11
22	106	52	40	61	34	78	119	24	13	2.5	66	10
23	97	46	44	62	32	79	75	22	12	2.7	29	1.8
24	93	43	47	51	32	68	81	22	12	3.5	14	11
25	87	44	45	49	33	61	82	22	12	5.8	20	12
26	81	44	51	50	32	54	78	22	12	38	15	12
27	75	41	45	47	32	66	69	21	11	21	16	11
28	74	38	39	47	35	64	68	19	9.8	9.2	30	10
29	73	35	38	46	---	61	73	19	9.3	7.8	30	11
30	67	34	35	45	---	55	82	17	8.9	6.7	19	11
31	67	---	29	45	---	50	---	17	---	6.0	15	---
MONTH	109	44	46	40	37	---	56	36	23	7.4	16	13

ARKANSAS RIVER BASIN

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07149000 MEDICINE LODGE RIVER NEAR KIOWA, KANS.--Continued

DISSOLVED SOLIDS (RESIDUE ON EVAPORATION, MG/L AT 180 DEG. C) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	637	951	864	1020	886	---	871	951	908	908	1000	578
2	727	958	857	1020	893	---	893	958	893	915	1040	555
3	770	944	821	1050	886	---	900	987	893	958	1040	552
4	799	936	828	994	886	---	850	980	857	984	1040	577
5	821	857	900	965	879	---	828	965	467	970	1040	616
6	828	922	713	973	893	---	886	951	613	684	1000	560
7	835	929	814	951	893	---	864	958	519	806	944	677
8	843	908	835	908	871	835	806	951	651	900	864	685
9	857	908	857	893	857	843	828	936	568	958	741	689
10	850	908	871	922	871	951	879	929	691	980	749	691
11	313	908	871	929	871	799	835	929	749	1010	720	698
12	334	900	879	958	879	698	958	922	713	994	763	687
13	345	908	893	944	864	835	951	915	734	1020	778	705
14	654	850	886	900	864	922	850	915	756	1040	338	720
15	770	908	886	828	871	987	850	922	734	1040	349	720
16	843	900	886	799	864	1010	871	908	756	1020	313	619
17	900	908	886	799	857	1000	799	908	749	1020	357	645
18	922	893	879	944	857	1000	727	893	778	1060	456	622
19	944	879	908	893	857	1020	871	900	785	1070	480	639
20	951	749	951	871	857	1010	654	908	799	1070	544	689
21	951	734	973	828	850	994	339	908	814	1100	625	663
22	965	713	893	843	850	1010	398	915	828	1090	640	631
23	958	843	828	900	843	1020	569	908	850	1100	379	268
24	965	850	879	900	843	1010	720	857	857	1090	444	687
25	965	864	893	893	864	994	821	886	864	922	534	698
26	958	879	893	908	857	936	871	879	871	806	551	687
27	951	871	879	900	835	987	850	871	817	944	544	683
28	958	886	886	893	835	980	893	857	835	951	458	669
29	958	879	893	893	---	980	915	871	871	973	538	667
30	951	879	879	886	---	965	929	864	944	994	569	687
31	951	---	936	886	---	951	---	893	---	1010	583	---
MONTH	822	881	875	912	865	---	809	916	772	980	659	642

DISSOLVED SOLIDS DISCHARGE (TONS/DAY) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	940	585	348	236	471	---	407	719	167	74	46	156
2	923	564	338	219	468	---	395	662	164	69	48	165
3	861	520	363	227	435	---	384	664	164	62	48	308
4	794	490	751	215	421	---	356	614	273	61	48	269
5	754	435	1190	209	396	---	340	558	230	79	54	205
6	713	468	689	215	381	---	356	513	626	96	54	160
7	688	464	609	216	381	---	341	471	830	76	64	172
8	669	453	546	208	372	965	311	429	573	61	89	163
9	648	446	551	205	359	776	302	377	638	57	82	160
10	668	417	536	212	386	1060	308	351	517	53	77	157
11	4450	417	487	213	372	2080	417	339	404	52	68	147
12	7980	399	491	220	389	1400	636	324	316	46	72	141
13	2760	409	475	229	397	972	549	304	274	44	67	141
14	1780	383	450	292	397	829	404	304	261	39	265	144
15	1670	402	407	313	400	775	369	284	230	39	1090	144
16	1520	391	407	367	390	735	344	274	200	41	376	127
17	1360	395	407	432	379	681	315	270	178	33	203	136
18	1220	388	418	611	393	673	287	256	172	34	145	131
19	1170	382	372	699	407	675	336	248	165	29	124	131
20	1080	344	262	823	400	648	1420	250	151	23	112	141
21	963	730	394	671	356	593	2360	245	141	18	101	125
22	912	581	417	637	356	602	1860	237	139	17	770	119
23	854	487	463	639	339	591	915	230	128	18	480	49
24	795	452	484	530	339	528	898	231	130	24	197	126
25	751	460	468	506	341	489	869	230	126	57	258	132
26	709	453	526	515	338	506	816	228	125	403	187	130
27	675	428	467	486	343	533	725	221	115	194	198	125
28	652	399	407	482	370	529	709	204	104	82	420	119
29	636	368	395	475	---	505	736	193	96	66	372	122
30	603	353	368	464	---	474	783	182	82	54	238	126
31	596	---	268	471	---	452	---	174	---	46	186	---
MONTH	1320	449	476	395	385	---	642	341	257	66	211	149

ARKANSAS RIVER BASIN

07149000 MEDICINE LODGE RIVER NEAR KIOWA, KANS.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	926	1360	1240	1450	1270	---	1250	1360	1300	1300	1430	843
2	1050	1370	1230	1450	1280	---	1280	1370	1280	1310	1480	812
3	1110	1350	1180	1500	1270	---	1290	1410	1280	1370	1490	807
4	1150	1340	1190	1420	1270	---	1220	1400	1230	1410	1490	842
5	1180	1230	1290	1380	1260	---	1190	1380	690	1390	1490	896
6	1190	1320	1030	1390	1280	---	1270	1360	892	991	1430	819
7	1200	1330	1170	1360	1280	---	1240	1370	762	1160	1350	981
8	1210	1300	1200	1300	1250	1200	1160	1360	945	1290	1240	992
9	1230	1300	1230	1280	1230	1210	1190	1340	830	1370	1070	997
10	1220	1300	1250	1320	1250	1360	1260	1330	1000	1400	1080	1000
11	477	1300	1250	1330	1250	1150	1200	1330	1080	1440	1040	1010
12	506	1290	1260	1370	1260	1010	1370	1320	1030	1420	1100	994
13	521	1300	1280	1350	1240	1200	1360	1310	1060	1450	1120	1020
14	949	1220	1270	1290	1240	1320	1220	1310	1090	1480	511	1040
15	1110	1300	1270	1190	1250	1410	1220	1320	1060	1490	527	1040
16	1210	1290	1270	1150	1240	1440	1250	1300	1090	1450	477	900
17	1290	1300	1270	1150	1230	1430	1150	1300	1080	1460	538	937
18	1320	1280	1260	1350	1230	1430	1050	1280	1120	1510	675	905
19	1350	1260	1300	1280	1230	1450	1250	1290	1130	1520	708	928
20	1360	1080	1360	1250	1230	1440	949	1300	1150	1520	797	997
21	1360	1060	1390	1190	1220	1420	513	1300	1170	1570	909	961
22	1380	1030	1280	1210	1220	1440	594	1310	1190	1550	929	917
23	1370	1210	1190	1290	1210	1460	831	1300	1220	1560	568	415
24	1380	1220	1260	1290	1210	1440	1040	1230	1230	1550	658	994
25	1380	1240	1280	1280	1240	1420	1180	1270	1240	1320	783	1010
26	1370	1260	1280	1300	1230	1340	1250	1260	1250	1160	806	994
27	1360	1250	1260	1290	1200	1410	1220	1250	1180	1350	797	989
28	1370	1270	1270	1280	1200	1400	1280	1230	1200	1360	677	970
29	1370	1260	1280	1280	---	1400	1310	1250	1250	1390	788	967
30	1360	1260	1260	1270	---	1380	1330	1240	1350	1420	831	994
31	1360	---	1340	1270	---	1360	---	1280	---	1440	851	---
MONTH	1180	1260	1250	1310	1240	---	1160	1310	1110	1400	956	932

TEMPERATURE (DEG. C) OF WATER , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
(UNCE-DAILY)

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

ARKANSAS RIVER BASIN

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07150500 SALT FORK ARKANSAS RIVER NEAR JET, OKLA.

LOCATION.--Lat 36°45'11", long 98°07'44", in NW 1/4 NE 1/4 sec.11, T.26 N., R.9 W., Alfalfa County, at gaging station at bridge on county road, 0.6 mi (.97 km) downstream from Great Salt Plains Dam, 4 mi (6.4 km) upstream from Wagon Creek, 6 mi (9.6 km) northeast of Jet, and at mile 102.7 (165.2 km).

DRAINAGE AREA.--3,202 mi² (8,293 km²), of which 8 mi² (20.7 km²) is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: October 1953 to September 1959, water years 1960-61 (partial-record station), October 1961 to September 1963, July 1968 to current year.

Water temperatures: October 1954 to September 1955, October 1957 to September 1959, October 1961 to September 1963, July 1968 to current year.

EXTREMES, Current year.--Specific conductance: Maximum, 27,700 micromhos/cm July 30; minimum, 1,740 micromhos/cm Aug. 31.

Water temperatures: Maximum, 35.5°C July 28; minimum, freezing point on Dec. 31-Jan. 1.

Period of record.--Specific conductance: Maximum daily, 42,200 micromhos/cm Mar. 9, 1955; minimum, 1,420 micromhos/cm Apr. 2, 1973.

Water temperatures: Maximum, 35.5°C July 28, 1974; minimum, freezing point on many days during winter months.

REMARKS.--Continuous monitor records for specific conductance and water temperature are collected for this station. Records of maximum and minimum specific conductance values and temperature values are available in district office at Oklahoma City, Okla.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	INSTANTANEOUS DIS-CHARGE (CFS)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG)	DIS-SOLVED SODIUM (NA) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CaCO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	DIS-SOLVED NITRATE (NO3) (MG/L)	DIS-SOLVED NITRITE (N) (MG/L)
OCT.												
05...	2170	130	37	1100	97	0	80	380	--	.14	.62	.72
15...	1170	82	17	400	95	0	78	190	620	.25	1.1	.03
25...	1280	120	24	460	144	0	118	290	720	.63	2.8	.01
NOV.												
05...	455	140	34	560	162	0	133	360	850	.54	2.4	.01
15...	400	160	34	480	191	0	157	390	720	.51	2.3	.02
25...	301	160	36	550	197	0	162	390	870	.70	3.1	.01
DEC.												
05...	570	170	41	590	205	0	168	470	920	.67	3.0	.01
15...	470	170	41	610	211	0	173	430	940	.58	2.6	.01
25...	415	180	41	570	219	0	180	460	840	.18	.80	.12
JAN.												
05...	398	190	46	--	230	0	189	490	1200	.49	2.2	.01
15...	300	210	53	770	251	0	206	560	1200	.42	1.9	.01
25...	445	210	57	1100	258	0	212	570	--	.63	2.8	.00
FEB.												
05...	440	170	45	450	219	0	180	460	680	.58	2.6	.01
15...	325	160	46	530	199	0	163	440	820	.32	1.4	.01
25...	224	170	46	530	200	0	164	460	770	.36	1.6	.01
MAR.												
05...	207	170	46	460	198	0	162	450	700	.32	1.4	.02
15...	1780	130	38	--	146	0	120	380	1100	.42	1.9	.00
25...	839	160	43	680	168	0	138	470	970	.20	.89	.07
APR.												
05...	435	170	52	--	179	0	147	510	1100	--	--	--
15...	1020	150	43	650	172	0	141	450	1000	--	--	--
25...	2580	140	41	760	163	0	134	400	1200	--	--	--
MAY												
05...	882	120	38	870	156	0	128	340	1300	--	--	--
15...	264	150	27	800	190	0	156	400	1200	--	--	--
25...	613	100	50	--	190	0	156	420	1300	--	--	--
JUNE												
05...	140	150	53	1000	180	0	148	450	1600	--	--	--
15...	168	160	47	1100	171	0	140	440	1700	--	--	--
24...	13	150	48	1200	144	0	118	450	1800	--	--	--
JULY												
05...	4.0	180	57	--	164	0	135	630	3400	--	--	--
15...	13	170	52	1500	149	0	122	530	2400	--	--	--
25...	40	180	60	1400	129	0	106	560	2200	--	--	--
AUG.												
05...	17	200	65	--	149	0	122	630	3500	--	--	--
15...	340	170	64	2200	111	0	91	580	3500	--	--	--
25...	556	140	46	--	114	0	94	420	2800	--	--	--
SEP.												
05...	980	120	33	--	119	0	98	360	2100	--	--	--
15...	345	140	31	1000	118	0	97	370	1600	--	--	--
25...	250	160	36	650	154	0	126	430	980	--	--	--

ARKANSAS RIVER BASIN

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	DIS- SOLVED NITRITE (NO2) (MG/L)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CUN- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	CARBON DIOXIDE (CO2) (MG/L)
OCT.											
05...	2.4	.86	3520	4.79	20600	480	400	22	6160	7.3	7.8
15...	.10	.28	1410	1.92	4450	270	200	11	2470	8.1	1.2
25...	.03	.64	1740	2.37	6010	400	280	10	2930	7.8	3.7
NOV.											
05...	.03	.55	2050	2.79	2520	490	360	11	3560	7.9	3.3
15...	.07	.53	1940	2.64	2100	540	380	9.0	3270	8.1	2.4
25...	.03	.71	2210	3.01	1800	550	390	10	3780	7.7	6.3
DEC.											
05...	.03	.68	2310	3.14	3560	590	430	11	3640	7.7	6.5
15...	.03	.59	2380	3.24	3020	590	420	11	3760	7.7	6.7
25...	.39	.30	2220	3.02	2490	620	440	10	3480	8.0	3.5
JAN.											
05...	.03	.50	2740	3.73	2940	660	480	--	4490	7.9	4.6
15...	.03	.43	2940	4.00	2380	740	540	12	4730	7.9	5.1
25...	.00	.63	3780	5.14	4540	760	550	17	6450	8.0	4.1
FEB.											
05...	.03	.59	1920	2.61	2280	610	430	7.9	3180	7.8	5.6
15...	.03	.33	2160	2.94	1900	590	430	9.5	3640	7.5	10
25...	.03	.37	2160	2.94	1310	610	450	9.3	3540	7.7	6.4
MAR.											
05...	.07	.34	2020	2.75	1130	610	450	8.1	3310	7.7	6.3
15...	.00	.42	2510	3.41	12100	480	360	--	4270	7.8	3.7
25...	.23	.27	2440	3.32	5530	580	440	12	4000	8.0	2.7
APR.											
05...	--	.47	2630	3.58	3090	640	490	--	4330	8.1	2.3
15...	--	.66	2440	3.32	6720	550	410	12	4150	7.7	5.5
25...	--	.32	--	--	--	520	380	15	4590	7.7	5.2
MAY											
05...	--	.45	2910	3.96	6930	460	330	18	4710	7.9	3.1
15...	--	1.1	2820	3.84	2010	490	330	16	4550	7.8	4.8
25...	--	1.4	3040	4.13	5030	460	300	--	4870	7.8	4.8
JUNE											
05...	--	1.1	3490	4.75	1320	590	450	18	5500	7.6	7.2
15...	--	1.3	3760	5.11	1710	590	450	20	6060	7.4	11
24...	--	.96	3980	5.41	140	570	450	22	6450	8.0	2.3
JULY											
05...	--	.05	6650	9.04	71.8	680	550	--	10500	7.3	13
15...	--	.06	4850	6.60	170	640	520	26	7800	7.3	12
25...	--	.90	4690	6.38	507	700	590	23	7450	8.2	1.3
AUG.											
05...	--	1.1	6780	9.22	311	770	640	--	10700	7.3	12
15...	--	1.0	6900	9.38	6330	690	600	37	10900	7.2	11
25...	--	1.1	5080	6.91	7630	540	450	--	8560	7.2	12
SEP.											
05...	--	.83	4140	5.63	11000	440	340	--	6890	7.8	3.0
15...	--	.59	3330	4.53	3100	480	380	20	5510	7.4	7.5
25...	--	.56	2410	3.28	1630	550	420	12	3930	7.5	7.8

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

SULFATE (MG/L AS SO₄) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	470	300	360	500	500	470	390	510	440	530	630	420
2	500	280	270	500	500	430	440	500	450	470	600	470
3	160	310	330	500	380	460	500	510	440	470	600	460
4	410	350	320	500	430	350	490	450	410	580	590	460
5	430	370	440	470	330	360	490	440	410	600	600	460
6	430	350	450	490	310	420	490	450	420	630	620	470
7	410	350	490	490	340	420	500	460	440	650	620	510
8	470	330	440	490	340	410	510	450	440	650	610	450
9	410	320	390	490	360	390	500	460	410	660	610	470
10	410	380	410	490	400	390	490	460	410	660	610	470
11	450	330	240	470	400	330	500	470	440	510	620	450
12	440	330	240	470	390	400	460	470	430	540	600	450
13	320	250	410	470	360	490	470	490	460	600	600	430
14	220	250	440	460	330	470	490	450	410	630	510	430
15	190	310	470	450	400	450	500	460	450	510	600	410
16	190	300	470	450	410	440	500	470	440	560	590	460
17	130	260	510	450	400	490	490	460	440	490	560	430
18	110	350	470	450	330	510	460	430	440	540	550	430
19	75	390	500	430	380	500	460	450	430	510	560	470
20	96	350	450	430	390	500	450	420	420	470	510	420
21	110	350	440	420	340	510	410	420	430	510	460	420
22	150	370	470	450	410	470	400	420	440	530	460	450
23	170	420	410	460	390	500	460	430	450	520	530	440
24	280	410	410	450	410	510	420	430	440	560	530	500
25	290	410	400	440	400	480	400	410	430	500	530	410
26	250	360	420	430	380	510	300	410	480	560	510	470
27	250	370	400	420	340	470	340	410	440	590	510	420
28	320	350	400	410	410	470	470	470	520	620	530	480
29	330	350	400	440	---	430	490	410	500	980	530	450
30	320	340	500	460	---	440	490	410	520	1000	510	430
31	290	---	490	450	---	480	---	410	---	830	470	---
MONTH	290	340	410	460	380	450	460	450	440	600	560	450

DISSOLVED SO₄ DISCHARGE (TONS/DAY) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3190	463	419	375	661	263	647	1830	303	17	26	1390
2	3230	386	322	337	626	250	675	1800	282	51	73	1410
3	938	399	356	311	470	296	910	1520	272	17	24	1350
4	2180	435	528	270	509	273	634	1230	228	7.7	22	1300
5	1920	452	704	281	404	200	566	1090	168	6.6	19	1240
6	1710	419	733	279	325	256	629	981	181	7.4	20	1180
7	1410	424	823	290	327	323	671	943	230	6.8	20	1190
8	1360	389	757	299	363	561	546	751	281	7.2	16	949
9	974	371	688	390	363	685	518	654	426	7.1	20	891
10	1020	434	669	383	364	1050	419	633	258	7.8	28	784
11	3230	379	379	342	381	1370	1580	580	293	26	30	720
12	5820	396	399	301	345	2020	1860	522	307	8.1	23	607
13	6530	297	577	316	311	3020	1840	619	339	8.4	21	493
14	5040	291	562	346	250	2560	1610	353	300	10	29	459
15	4140	344	608	374	318	2270	1430	310	288	38	393	400
16	3720	304	585	401	336	2010	1270	390	254	11	687	451
17	2220	283	619	443	360	2000	1100	328	251	42	712	417
18	1680	343	524	494	263	1870	932	242	225	10	706	392
19	950	342	612	486	282	1660	855	190	226	47	772	427
20	989	265	560	524	277	1590	918	155	224	8.3	660	379
21	879	787	540	542	284	1540	874	157	194	44	495	339
22	1020	782	585	588	311	1230	1180	136	97	7.9	419	345
23	924	742	464	612	292	1180	1830	138	59	41	540	318
24	1290	617	454	635	251	1220	1710	325	51	7.8	689	360
25	1060	529	449	632	239	1080	1580	580	49	61	811	294
26	753	461	482	610	232	1090	1050	623	40	5.9	738	318
27	657	461	454	590	195	980	1070	575	27	4.5	741	249
28	746	431	461	596	236	943	1340	619	28	4.2	1270	303
29	651	411	442	634	---	856	1430	422	42	69	1650	229
30	566	391	471	640	---	753	1760	406	15	70	1950	166
31	502	---	401	603	---	818	---	288	---	63	1820	---
MONTH	1980	434	536	449	342	1170	1110	625	198	23	497	645

ARKANSAS RIVER BASIN

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

CHLORIDE (MG/L AS CL) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1200	600	710	1100	1000	920	780	1000	1800	2700	3400	1400
2	1000	570	550	1000	470	840	860	980	1900	2100	3500	2100
3	340	630	660	1000	760	900	970	1000	1800	2100	3400	2100
4	1500	700	650	1000	840	690	1100	1200	1500	3200	3300	2000
5	1700	730	860	1200	660	710	1100	1300	1500	3400	3400	2000
6	1300	700	890	1100	630	820	1100	1200	1600	3700	3600	2100
7	820	700	950	1100	670	820	1000	1200	1800	3900	3600	2500
8	910	670	870	1100	680	810	1000	1200	1800	3900	3500	1900
9	1400	650	780	1100	720	780	1000	1200	1400	4000	3500	2200
10	1400	750	810	1100	790	760	1100	1200	1500	4000	3500	2100
11	1200	650	500	1200	790	660	970	1200	1800	2500	3600	1900
12	1300	670	490	1200	780	800	1200	1200	1700	2800	3400	1200
13	650	520	800	1200	720	1100	1200	950	2000	3400	3500	1700
14	460	510	860	1200	660	1100	1100	1200	1500	3700	2500	1700
15	400	630	920	1200	790	1200	1000	1200	1900	2500	3500	1500
16	410	600	920	1200	810	1300	1100	1100	1800	3000	3300	1200
17	290	530	1000	1300	790	1100	1100	1200	1800	2300	3000	1700
18	260	700	930	1200	660	1000	1200	1300	1800	2800	2900	1700
19	190	770	970	1300	750	980	1200	1300	1700	2500	3000	2100
20	230	700	890	1300	780	980	1300	1400	1400	2200	2500	1600
21	250	690	860	1600	680	990	1500	1400	1700	2500	2000	1600
22	330	740	920	1900	820	910	1400	1400	1800	2700	2000	1300
23	360	820	810	2000	770	980	900	1700	1900	2600	2700	1300
24	570	810	810	1900	610	1000	1400	1300	1300	3000	2700	1000
25	590	810	790	1800	780	930	1400	1500	1700	2500	2700	1500
26	510	720	820	1700	760	1000	610	1500	2200	3000	2500	1100
27	510	730	780	1600	690	930	680	1400	1300	3300	2500	1400
28	650	700	790	1500	800	920	920	1100	2600	3600	2700	1100
29	660	690	800	1300	---	840	1100	1500	2400	7200	2700	1300
30	640	680	1000	1200	---	870	1100	1500	2600	7800	2500	1700
31	590	---	1100	1300	---	950	---	1500	---	5800	1200	---
MONTH	730	680	820	1300	760	930	1100	1300	1800	3400	3000	1700

DISSOLVED CL DISCHARGE (TONS/DAY) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8010	936	835	795	1370	516	1280	3580	1240	87	152	4480
2	6660	785	656	699	1220	492	1330	3500	1190	229	419	6350
3	2040	804	713	641	932	581	1780	3000	1130	75	137	5980
4	8140	867	1060	561	1000	546	1420	3360	819	43	125	5640
5	7500	898	1380	683	809	397	1270	3120	618	37	111	5340
6	5250	836	1440	607	653	505	1360	2710	685	44	115	5210
7	2780	845	1610	644	654	637	1400	2480	931	41	118	5890
8	2660	778	1490	650	726	1110	1090	2050	1140	44	90	4060
9	3390	745	1360	858	721	1360	1070	1750	1440	43	113	4040
10	3520	861	1320	853	718	2080	898	1690	938	48	160	3530
11	8700	760	780	846	753	2750	3080	1440	1190	130	173	3080
12	16750	793	823	756	682	3990	4790	1310	1210	42	129	1640
13	13270	609	1140	778	618	6770	4530	1210	1490	48	121	1930
14	10490	598	1110	900	502	6240	3630	962	1120	62	143	1820
15	8760	693	1190	1020	629	6280	2980	814	1210	187	2240	1450
16	7850	614	1150	1100	663	5950	2680	950	1030	58	3860	1160
17	4970	578	1230	1240	712	4470	2360	848	1040	199	3800	1670
18	3860	684	1030	1330	528	3760	2440	767	915	54	3750	1580
19	2390	678	1190	1540	559	3240	2210	598	901	230	4140	1910
20	2350	529	1100	1640	548	3090	2600	505	726	38	3270	1470
21	2040	1570	1060	2090	569	3000	3180	499	772	213	2140	1280
22	2230	1550	1150	2510	613	2410	4200	442	397	41	1840	969
23	1990	1460	916	2690	579	2310	3590	538	246	203	2760	930
24	2620	1220	896	2650	496	2380	5500	1010	150	42	3520	758
25	2150	1040	888	2610	473	2110	5610	2080	192	298	4140	1090
26	1540	917	950	2440	460	2200	2120	2320	183	31	3640	765
27	1350	917	898	2230	390	1920	2140	2030	79	25	3670	797
28	1500	861	911	2150	465	1850	2620	1500	140	25	6450	709
29	1300	820	873	1850	---	1680	3070	1540	203	505	8370	646
30	1140	781	966	1670	---	1480	3880	1500	77	529	9550	663
31	1020	---	858	1700	---	1600	---	1080	---	435	4450	---
MONTH	4780	868	1060	1380	680	2510	2670	1650	780	132	2380	2560

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

DISSOLVED SOLIDS (RESIDUE ON EVAPORATION, MG/L AT 180 DEG. C) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2790	1840	2030	2590	2570	2380	2140	2500	3840	5300	7230	3110
2	2560	1790	1760	2570	2450	2250	2280	2480	3990	4360	6690	4360
3	1410	1890	1940	2560	2110	2340	2460	2510	3880	4410	6550	4250
4	3410	2010	1930	2570	2250	2000	2660	2890	3260	6300	6420	4140
5	3610	2060	2280	2760	1950	2030	2660	2960	3360	6550	6620	4090
6	3040	2010	2320	2630	1890	2210	2620	2910	3460	7090	6890	4260
7	2210	2020	2430	2650	1970	2220	2580	2850	3780	7430	7020	5070
8	2360	1960	2290	2630	1980	2190	2530	2890	3790	7560	6750	4070
9	3200	1930	2140	2640	2050	2140	2560	2880	3160	7630	6750	4410
10	3190	2090	2190	2650	2170	2120	2610	2870	3300	7700	6750	4370
11	2880	1940	1680	2780	2160	1950	2460	2780	3790	5040	6890	4070
12	2960	1960	1660	2790	2140	2180	2830	2790	3660	5450	6620	2890
13	1930	1710	2180	2770	2050	2660	2770	2430	4210	6620	6690	3610
14	1610	1700	2270	2840	1940	2760	2660	2890	3410	7090	5030	3660
15	1520	1900	2370	2890	2160	2910	2580	2850	3980	4940	6690	3300
16	1530	1850	2380	2910	2200	3000	2590	2760	3780	5860	6460	2830
17	1330	1740	2520	2930	2160	2660	2610	2830	3880	4660	5820	3710
18	1280	2020	2390	2880	1940	2540	2840	3080	3810	5510	5770	3740
19	1170	2130	2460	3080	2090	2470	2830	3060	3700	4990	5870	4310
20	1230	2010	2320	3070	2140	2480	2940	3110	3110	4410	5050	3580
21	1260	2000	2270	3540	1980	2490	3310	3090	3690	4930	4130	3470
22	1400	2080	2380	4060	2210	2360	3240	3110	3830	5410	4220	2930
23	1440	2210	2190	4210	2130	2480	2350	3600	3930	5160	5350	2980
24	1800	2190	2200	3930	2190	2510	3100	3060	2990	5960	5350	2590
25	1830	2190	2160	3880	2150	2390	3230	3260	3660	4910	5340	3390
26	1700	2050	2220	3710	2110	2540	1860	3400	4470	5820	5030	2740
27	1700	2060	2150	3460	1990	2390	1980	3220	2970	6480	5060	3090
28	1930	2010	2170	3270	2180	2370	2380	2750	5160	7020	5320	2710
29	1940	2000	2180	2980	---	2250	2610	3320	4870	13370	5300	2940
30	1920	1980	2560	2840	---	2290	2640	3370	5130	14520	4970	3690
31	1840	---	2610	2940	---	2420	---	3410	---	10800	2760	---
MONTH	2060	1980	2210	3030	2120	2390	2630	2970	3790	6560	5850	3610

DISSOLVED SOLIDS DISCHARGE (TONS/DAY) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19080	2890	2390	1960	3400	1330	3520	8990	2640	172	293	10230
2	16540	2480	2110	1730	3100	1310	3520	8840	2510	471	813	13070
3	8540	2420	2100	1590	2590	1510	4500	7530	2390	155	265	12390
4	17970	2490	3150	1390	2670	1580	3470	7890	1840	83	243	11750
5	16260	2540	3670	1640	2380	1140	3100	7260	1370	73	214	11160
6	12080	2410	3770	1490	1970	1360	3340	6350	1510	84	223	10780
7	7510	2430	4100	1570	1910	1710	3460	5860	1990	78	228	11740
8	6890	2290	3930	1590	2110	3000	2730	4810	2430	84	175	8510
9	7650	2210	3740	2100	2050	3740	2650	4130	3260	82	219	8290
10	7960	2410	3590	2080	1960	5780	2210	3980	2090	91	310	7270
11	20460	2250	2620	2020	2060	8110	7830	3440	2540	259	335	6460
12	38950	2330	2800	1800	1880	10860	11360	3120	2620	82	250	3870
13	39400	2020	3100	1860	1750	16510	10840	3090	3090	93	235	4180
14	36920	1990	2930	2130	1480	14950	8840	2260	2470	119	285	3920
15	33130	2080	3080	2390	1720	14710	7370	1920	2550	374	4350	3240
16	29560	1890	2960	2590	1800	13770	6620	2280	2200	114	7510	2750
17	22970	1880	3070	2890	1950	10900	5810	2010	2200	402	7460	3580
18	19160	1960	2640	3140	1560	9390	5770	1760	1950	107	7370	3390
19	14710	1880	3030	3530	1560	8200	5240	1370	1940	458	8120	3940
20	12700	1520	2880	3770	1510	7820	6070	1150	1660	77	6510	3190
21	10460	4540	2820	4550	1660	7540	7090	1140	1660	426	4470	2820
22	9490	4370	2960	5270	1660	6250	9440	1010	847	80	3820	2260
23	8070	3940	2490	5580	1600	5820	9330	1170	520	404	5460	2160
24	8230	3310	2420	5610	1350	5980	12550	2320	347	82	6960	1870
25	6700	2830	2430	5540	1300	5420	12630	4670	415	597	8200	2410
26	5140	2600	2560	5240	1280	5480	6520	5120	375	61	7260	1840
27	4490	2590	2470	4900	1130	4940	6240	4570	184	49	7310	1820
28	4440	2480	2490	4810	1270	4780	6750	3590	279	47	12780	1710
29	3850	2370	2380	4300	---	4500	7550	3430	408	939	16590	1510
30	3390	2270	2400	3950	---	3910	9490	3330	153	980	19070	1430
31	3140	---	2110	3970	---	4090	---	2380	---	817	10670	---
MONTH	14700	2520	2880	3130	1880	6340	6530	3900	1680	256	4770	5450

ARKANSAS RIVER BASIN

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

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4470	2950	3250	4150	4110	3810	3430	4010	6140	8450	11300	4970
2	4100	2870	2810	4110	3930	3600	3640	3970	6380	6980	10500	6980
3	2260	3030	3110	4100	3380	3740	3940	4020	6210	7050	10300	6800
4	5460	3220	3080	4120	3600	3200	4260	4630	5210	9930	10100	6630
5	5770	3290	3640	4410	3120	3250	4260	4730	5380	10300	10400	6550
6	4870	3210	3710	4200	3030	3540	4190	4660	5540	11100	10800	6820
7	3530	3230	3890	4240	3150	3550	4120	4560	6050	11600	11000	8100
8	3780	3130	3660	4200	3170	3510	4050	4630	6060	11800	10600	6510
9	5120	3090	3430	4220	3270	3420	4100	4600	5060	11900	10600	7060
10	5100	3350	3500	4240	3470	3390	4170	4590	5280	12000	10600	6990
11	4610	3100	2690	4440	3460	3120	3930	4450	6070	8060	10800	6510
12	4740	3130	2660	4470	3420	3480	4520	4470	5860	8670	10400	4620
13	3090	2730	3490	4430	3280	4250	4430	3880	6740	10400	10500	5770
14	2580	2720	3630	4540	3110	4410	4260	4630	5450	11100	8050	5850
15	2430	3040	3790	4630	3460	4660	4120	4560	6360	7910	10500	5280
16	2440	2960	3810	4650	3510	4800	4150	4410	6040	9270	10170	4520
17	2130	2780	4030	4680	3460	4250	4180	4530	6210	7450	9210	5930
18	2050	3230	3820	4610	3110	4060	4550	4930	6090	8760	9140	5990
19	1870	3400	3930	4930	3350	3950	4530	4920	5920	7990	9290	6900
20	1970	3220	3710	4910	3420	3960	4710	4980	4980	7060	8080	5720
21	2020	3200	3630	5670	3160	3990	5290	4940	5900	7890	6610	5550
22	2240	3320	3810	6490	3530	3780	5180	4980	6120	8610	6760	4690
23	2310	3540	3500	6730	3410	3970	3760	5760	6290	8230	8520	4770
24	2890	3500	3520	6280	3500	4010	4960	4890	4780	9420	8520	4140
25	2920	3500	3450	6210	3440	3830	5160	5210	5860	7860	8510	5420
26	2720	3280	3550	5940	3380	4060	2970	5440	7160	9220	8050	4390
27	2720	3300	3440	5530	3180	3820	3160	5150	4750	10200	8090	4950
28	3090	3210	3470	5230	3490	3790	3810	4400	8240	11000	8470	4340
29	3110	3200	3480	4770	---	3600	4180	5310	7790	20400	8440	4700
30	3070	3170	4090	4540	---	3660	4230	5390	8200	22100	7960	5910
31	2940	---	4170	4700	---	3870	---	5460	---	16600	4420	---
MONTH	3300	3160	3540	4850	3390	3820	4210	4740	6070	10300	9250	5780

TEMPERATURE (DEG. C) OF WATER , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

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

ARKANSAS RIVER BASIN

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07151000 SALT FORK ARKANSAS RIVER AT TONKAWA, OKLA.

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

DRAINAGE AREA.--4,528 mi² (11,730 km²), of which 8 mi² (20.7 km²) is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: September 1951 to September 1963, July 1968 to current year.
Water temperatures: November 1959 to September 1963, July 1968 to current year.

EXTREMES, Current year.--Specific conductance: Maximum, 8,800 micromhos/cm Aug. 21; minimum, 193 micromhos/cm Aug. 17.
Water temperatures: Maximum, 30.5°C July 21; minimum, freezing point on several days during December and January.

Period of record.--Specific conductance: Maximum, 14,800 micromhos/cm June 30, 1972, Dec. 30, 1973; minimum, 193 micromhos/cm Aug. 17, 1974.
Water temperatures: Maximum, 35.0°C July 14, 1969; minimum, freezing point on several days during winter months.

REMARKS.--Continuous monitor records for specific conductance and temperature are collected for this station. Temperature record was poor and once-daily values were used in their place. Records of maximum and minimum specific conductance values are available in district office at Oklahoma City, Okla.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	INSTANTANEOUS DIS-CHARGE (CFS)	DIS-SOLVED CALCIUM (MG/L)	DIS-SOLVED MAGNESIUM (MG/L)	DIS-SOLVED SODIUM (MG/L)	BICARBONATE (MG/L)	CARBONATE (MG/L)	ALKALINITY AS CaCO ₃ (MG/L)	DIS-SOLVED SULFATE (MG/L)	DIS-SOLVED CHLORIDE (MG/L)	DIS-SOLVED NITRATE (MG/L)	DIS-SOLVED NITRATE (MG/L)	DIS-SOLVED NITRITE (MG/L)
OCT.												
05...	1990	93	21	390	126	0	103	240	600	.53	2.3	.01
14...	19000	57	16	390	86	0	71	150	610	.68	3.0	.01
25...	3200	140	30	380	197	0	162	330	560	.45	2.0	.01
NOV.												
05...	835	120	29	520	224	0	184	260	770	.54	2.4	.01
15...	680	160	38	470	258	11	230	380	690	.57	2.5	.02
25...	619	140	36	450	263	0	216	330	680	.45	2.0	.01
DEC.												
04...	5950	30	8.7	67	70	0	57	62	95	1.2	5.2	.02
15...	795	150	40	390	259	0	212	340	620	.38	1.7	.11
25...	700	140	40	470	276	0	226	340	710	.69	3.1	.02
JAN.												
05...	775	170	44	590	--	0	--	410	930	.74	3.3	.01
15...	2020	160	43	580	--	0	--	400	910	.75	3.3	.00
25...	575	180	50	860	279	0	229	--	1400	.77	3.4	.01
FEB.												
05...	685	160	48	610	269	0	221	430	920	.47	2.1	.01
15...	510	140	43	--	155	0	127	380	710	.42	1.9	.00
25...	530	120	36	370	229	0	188	290	560	.68	3.0	.01
MAR.												
05...	342	140	46	520	253	0	208	380	--	.36	1.6	.00
11...	22600	23	6.7	49	64	0	53	46	65	1.4	6.1	.02
25...	1060	140	43	570	257	0	211	380	810	.47	2.1	.00
APR.												
05...	715	150	49	620	252	0	207	470	860	--	--	--
15...	1740	140	41	600	189	0	155	420	920	--	--	--
30...	5340	57	16	--	105	0	86	140	310	.74	3.3	.01
MAY												
02...	6330	50	16	220	58	0	48	130	330	--	--	--
15...	673	120	41	690	207	0	170	340	1000	.00	.00	.99
26...	7220	32	8.9	86	97	0	80	59	120	--	--	--
JUNE												
07...	3060	27	8.5	110	87	0	71	54	150	--	--	--
15...	565	120	40	800	216	0	177	290	1200	--	--	--
25...	213	120	36	800	280	0	230	260	1200	--	--	--
JULY												
05...	130	100	39	--	310	0	254	240	1200	--	--	--
15...	89	97	39	--	347	0	285	180	1100	--	--	--
25...	94	85	37	750	277	0	227	200	--	--	--	--
AUG.												
05...	91	110	44	1300	287	0	235	--	2000	--	--	--
15...	103	31	7.9	68	135	0	111	33	87	--	--	--
28...	1480	69	23	620	105	0	86	180	960	--	--	--
SEP.												
02...	14500	18	4.5	--	49	0	40	35	80	--	--	--
15...	420	130	32	--	176	0	144	320	1400	--	--	--
25...	320	120	30	--	199	0	163	290	1200	--	--	--

ARKANSAS RIVER BASIN

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	DIS- SOLVED NITRITE (NO2) (MG/L)	DIS- SOLVED NITRATE (N) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TUNS PER DAY)	HARD- NESS (CA, MG) (MG/L)	MIN- ERALS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	CARBON DIOXIDE (CO2) (MG/L)
OCT.											
05...	.03	.54	1470	2.00	7900	320	220	9.5	2500	8.3	1.0
14...	.03	.69	--	--	--	210	140	12	2350	7.5	4.4
25...	.03	.46	1560	2.12	13500	470	310	7.6	2200	8.2	2.0
NOV.											
05...	.03	.55	1860	2.53	4190	420	240	11	3270	8.1	2.8
15...	.07	.59	1880	2.56	3450	560	330	8.7	3140	8.4	1.8
25...	.03	.46	1850	2.52	3090	500	280	8.8	3170	8.0	4.2
DEC.											
04...	.07	1.2	315	.43	5060	110	53	2.8	596	7.5	3.5
15...	.36	.49	1740	2.37	3740	540	330	7.3	2880	8.2	2.6
25...	.07	.71	1890	2.57	3570	510	290	9.0	3060	7.9	5.0
JAN.											
05...	.03	.75	2330	3.17	4880	610	--	10	3920	8.1	--
15...	.00	.75	2220	3.02	12100	580	--	11	3750	8.2	--
25...	.03	.78	3130	4.26	4860	660	430	15	5080	8.0	4.5
FEB.											
05...	.03	.48	2310	3.14	4270	600	380	11	3970	8.2	2.7
15...	.00	.42	1950	2.65	2690	530	400	--	3250	8.1	2.0
25...	.03	.69	1550	2.11	2220	450	260	7.6	2680	8.1	2.9
MAR.											
05...	.00	.36	1980	2.69	1830	540	330	9.7	3300	7.8	6.4
11...	.07	1.4	260	.35	15900	85	33	2.3	370	7.5	3.2
25...	.00	.47	2140	2.91	6130	530	320	11	3640	7.9	5.2
APR.											
05...	--	.43	2320	3.16	4480	580	370	11	3860	7.7	8.0
15...	--	.40	2240	3.05	10500	520	360	11	3780	8.0	3.0
30...	.03	.75	815	1.11	11800	210	120	--	1440	7.6	4.2
MAY											
02...	--	.71	822	1.12	14000	190	140	6.9	1480	7.9	1.2
15...	3.3	.33	2450	3.33	4450	470	300	14	4170	7.8	5.3
26...	--	.53	392	.53	7640	120	37	3.5	683	7.3	7.8
JUNE											
07...	--	2.8	--	--	--	100	31	4.7	754	7.6	3.5
15...	--	.71	2600	3.54	3970	460	290	16	4310	7.9	4.4
25...	--	.62	2610	3.55	1500	450	220	16	4410	7.7	8.9
JULY											
05...	--	.20	2510	3.41	881	410	160	--	4280	7.7	9.9
15...	--	.02	2350	3.20	565	400	120	--	4030	8.0	5.6
25...	--	.89	2440	3.32	619	360	140	17	4160	7.7	8.8
AUG.											
05...	--	.97	4060	5.52	998	460	220	27	6800	7.6	12
15...	--	2.0	325	.44	90.4	110	0	2.8	554	7.9	2.7
28...	--	2.6	2040	2.77	8150	270	180	17	3540	7.5	5.3
SEP.											
02...	--	1.2	240	.33	9400	63	23	--	432	7.0	7.8
15...	--	.35	2900	3.94	3290	460	310	--	4890	7.5	8.9
25...	--	.43	2700	3.67	2330	420	260	--	4530	7.9	4.0

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	INSTAN- TANEDUS DIS- CHARGE (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	CHEM- ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	CHEM- ICAL OXYGEN DEMAND (HIGH LEVEL) (MG/L)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)
OCT.								
25...	3200	2200	17.0	8.6	95	27	--	1.8
NOV.								
13...	715	3600	17.0	9.0	101	42	--	3.8
DEC.								
12...	981	3400	6.0	12.5	109	25	--	2.1
JAN.								
08...	624	4500	.0	15.0	110	51	--	1.8
FEB.								
12...	548	3020	6.0	11.2	97	--	29	2.9
APR.								
25...	1670	4040	20.0	8.6	100	45	--	3.1
MAY								
22...	334	3500	25.0	7.9	101	--	--	3.4
JUNE								
19...	383	4730	27.8	8.0	110	50	--	20

ARKANSAS RIVER BASIN

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

SULFATE (MG/L AS SO₄) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	300	300	350	340	570	370	370	140	---	240	240	610
2	300	310	330	370	450	350	440	160	---	250	490	120
3	570	310	49	400	390	350	440	200	480	250	500	64
4	270	310	49	440	420	350	430	310	480	240	500	160
5	270	340	110	440	440	360	430	430	330	240	790	460
6	620	310	140	430	340	360	430	450	320	180	800	570
7	620	300	210	430	330	350	430	500	64	190	510	550
8	510	360	360	430	330	250	430	500	140	240	500	560
9	390	350	360	420	340	240	410	470	160	200	170	460
10	350	380	360	---	350	34	410	500	380	190	130	630
11	---	360	330	---	360	32	210	400	460	190	130	560
12	---	330	330	---	350	59	250	450	460	190	170	540
13	---	330	330	---	360	84	290	450	460	190	260	520
14	240	370	310	---	350	360	290	470	530	180	140	510
15	250	370	320	420	360	360	420	470	510	190	110	390
16	230	350	410	420	---	440	420	430	550	190	80	380
17	240	350	420	250	360	440	570	430	500	200	34	390
18	210	320	390	210	360	420	570	450	570	220	1200	370
19	210	340	390	160	330	420	300	450	570	250	950	370
20	200	120	380	240	350	390	260	450	570	250	360	340
21	200	230	420	240	49	390	250	450	580	270	1100	350
22	200	320	420	360	140	410	260	380	590	270	1000	310
23	200	350	320	360	140	380	270	410	530	220	870	350
24	240	300	320	500	290	370	490	140	530	250	460	160
25	280	330	340	610	290	400	540	66	520	210	450	320
26	270	350	340	610	310	400	570	70	520	250	710	270
27	290	310	330	610	300	410	290	200	510	220	740	290
28	270	360	330	480	340	410	290	210	510	250	240	250
29	300	350	330	620	---	360	170	340	510	250	560	260
30	300	350	520	570	---	440	130	340	500	260	560	230
31	300	---	---	540	---	370	---	---	---	280	420	---
MONTH	310	530	310	420	330	330	370	360	460	230	490	380

DISSOLVED SO₄ DISCHARGE (TUNS/DAY) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3380	984	582	398	1190	511	727	2180	---	98	55	2610
2	2710	919	556	444	914	479	857	2590	---	103	147	3110
3	4360	865	157	478	781	487	808	2550	735	93	130	1870
4	1820	770	755	531	800	474	768	2080	728	81	118	1830
5	1500	775	972	706	812	476	842	2070	521	88	199	3100
6	3230	678	909	716	626	459	632	1770	1030	61	191	2930
7	2630	637	895	672	595	441	550	1680	559	60	122	2000
8	1770	761	1220	712	552	418	569	1510	628	71	120	1630
9	1110	716	1100	663	559	686	553	1280	1160	57	56	1170
10	823	744	1040	---	596	1190	484	1140	1330	53	50	1400
11	---	694	924	---	580	1870	507	809	1060	51	42	1120
12	---	635	884	---	531	2890	1600	860	711	49	62	935
13	---	626	849	---	550	1960	4140	771	629	47	88	831
14	14180	727	806	---	520	4650	2160	747	710	45	40	693
15	8630	694	713	1690	517	2900	2180	799	731	45	30	456
16	6080	637	882	2130	---	3060	1600	563	748	47	215	421
17	5440	609	900	1060	509	2700	1790	497	591	47	64	405
18	4370	521	795	738	514	2280	1550	555	607	53	1740	364
19	4000	662	784	491	526	2040	699	508	587	59	1240	381
20	3460	933	516	609	507	1640	975	451	544	60	428	359
21	3140	545	723	577	663	1530	1230	411	533	64	1400	348
22	2790	619	953	858	1700	1490	1140	340	509	66	1220	293
23	2450	593	726	832	557	1290	936	471	439	52	885	296
24	2440	501	804	1120	578	1110	1920	600	371	62	491	140
25	2400	558	750	1360	479	1130	2400	1130	309	55	523	248
26	1930	578	774	1360	476	1100	2480	1420	287	67	924	200
27	1810	512	747	1340	475	1070	1190	2090	265	56	1230	213
28	1490	602	755	1050	505	1020	1090	1190	256	66	655	190
29	1400	604	735	1380	---	878	1040	1160	236	58	1780	182
30	1200	605	698	1260	---	1020	1710	862	213	58	2400	158
31	1050	---	---	1160	---	840	---	---	---	64	1650	---
MONTH	3270	677	797	936	652	1420	1300	1170	608	62	590	995

ARKANSAS RIVER BASIN

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

CHLORIDE (MG/L AS CL) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	590	600	680	650	1300	710	710	300	---	1100	1100	1700
2	590	610	650	720	910	680	880	350	---	1100	1500	590
3	1200	620	100	770	760	680	880	420	990	1100	1500	260
4	540	620	100	880	820	680	870	600	1000	1100	1500	850
5	530	660	260	870	880	700	870	850	640	1100	2000	1400
6	1400	600	320	850	670	700	850	920	630	970	2000	1600
7	1400	580	430	850	640	680	850	1000	150	970	1500	1600
8	1100	700	690	840	640	500	850	1100	310	1100	1500	1600
9	750	680	700	820	660	490	800	970	340	990	890	1400
10	680	730	690	---	690	64	800	1100	730	980	650	1700
11	---	700	640	---	700	58	440	770	930	970	650	1600
12	---	650	650	---	680	130	510	920	930	980	920	1600
13	---	640	650	---	690	200	570	900	930	970	1100	1500
14	490	710	600	---	690	700	570	960	1100	970	690	1500
15	510	710	620	820	690	700	830	970	1100	970	530	1300
16	480	670	790	810	---	880	830	850	1200	980	350	1300
17	480	670	830	510	690	880	1300	850	1100	1000	82	1300
18	440	620	750	430	690	830	1300	910	1300	1000	2700	1300
19	440	670	750	340	650	830	590	920	1300	1100	2300	1300
20	420	270	730	480	680	750	520	910	1300	1100	1300	1200
21	420	480	820	480	100	760	510	900	1300	1100	2500	1300
22	420	630	820	700	310	790	510	740	1300	1100	2400	1200
23	420	690	630	690	310	730	550	790	1200	1000	2100	1200
24	490	600	630	1000	570	720	1000	310	1200	1100	1400	870
25	550	650	670	1400	570	770	1200	150	1100	1000	1400	1200
26	530	680	670	1400	600	770	1300	160	1100	1100	1900	1100
27	570	620	650	1400	600	790	570	420	1100	1000	1900	1200
28	550	690	650	990	670	790	570	430	1100	1100	1100	1100
29	590	690	640	1400	---	700	360	660	1100	1100	1600	1100
30	580	690	630	1300	---	880	290	660	1100	1100	1600	1100
31	590	---	---	1200	---	720	---	---	---	1100	1400	---
MONTH	640	640	610	870	660	650	750	730	980	1000	1400	1300

DISSOLVED CL DISCHARGE (TUNS/DAY) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6690	1940	1130	777	2620	989	1410	4880	---	435	248	7270
2	5350	1810	1090	858	1850	931	1720	5590	---	444	445	15150
3	9620	1700	336	920	1500	947	1620	5310	1530	400	391	7540
4	3630	1510	1610	1060	1570	922	1530	4090	1520	362	356	9650
5	3010	1510	2280	1410	1630	923	1680	4120	1020	390	504	9690
6	7330	1340	2010	1420	1220	891	1250	3590	2020	320	484	8350
7	5980	1260	1850	1340	1170	859	1090	3550	1260	310	366	5800
8	3790	1480	2380	1410	1080	846	1130	3210	1390	317	360	4700
9	2140	1390	2140	1300	1090	1390	1080	2650	2510	285	303	3650
10	1600	1440	2010	---	1160	2270	944	2420	2560	271	246	3860
11	---	1350	1810	---	1120	3470	1050	1560	2150	263	209	3210
12	---	1240	1730	---	1030	6430	3210	1750	1450	253	339	2740
13	---	1230	1660	---	1070	4630	8220	1560	1280	244	376	2470
14	28740	1410	1590	---	1010	9020	4290	1540	1530	240	202	2070
15	17380	1340	1400	3300	1000	5630	4300	1650	1550	235	145	1550
16	12370	1240	1710	4160	---	6150	3150	1120	1640	238	948	1450
17	11060	1190	1780	2140	988	5410	3950	987	1250	234	158	1370
18	9000	1020	1530	1530	997	4480	3420	1130	1350	251	3950	1260
19	8260	1290	1510	1070	1030	4010	1380	1030	1300	254	2990	1320
20	7200	2160	996	1240	987	3170	1960	914	1210	262	1520	1300
21	6530	1110	1410	1170	1420	2950	2480	830	1190	262	3220	1240
22	5800	1220	1870	1660	3800	2880	2300	656	1140	269	2870	1110
23	5090	1150	1420	1620	1240	2480	1870	912	952	243	2180	1070
24	4960	987	1580	2370	1150	2150	4040	1330	803	267	1530	747
25	4780	1090	1460	3060	951	2170	5220	2580	663	264	1660	935
26	3870	1120	1510	3060	938	2110	5470	3260	615	287	2440	836
27	3590	1010	1460	3020	937	2070	2350	4340	565	262	3190	840
28	2970	1170	1480	2170	984	1970	2150	2470	546	283	2930	817
29	2770	1170	1440	3120	---	1700	2230	2270	504	251	5130	769
30	2380	1170	1370	2800	---	2040	3860	1680	452	244	6900	710
31	2080	---	---	2540	---	1630	---	---	---	255	5410	---
MONTH	6710	1330	1580	1940	1320	2820	2680	2430	1280	287	1680	3450

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

DISSOLVED SOLIDS (RESIDUE ON EVAPORATION, MG/L AT 180 DEG. C) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1570	1600	1820	1750	2800	1890	1890	848	---	2500	2490	3480
2	1580	1620	1740	1920	2260	1820	2220	959	---	2530	3180	1580
3	2790	1650	332	2030	2020	1820	2220	1140	2390	2530	3200	725
4	1460	1650	333	2210	2120	1820	2200	1620	2400	2490	3210	2160
5	1440	1770	725	2200	2210	1850	2200	2170	1720	2500	3980	3090
6	3040	1620	883	2170	1790	1850	2170	2270	1680	2350	3990	3400
7	3060	1570	1170	2170	1710	1810	2170	2470	441	2360	3220	3320
8	2550	1880	1850	2160	1720	1340	2170	2510	865	2500	3210	3360
9	1990	1820	1850	2120	1770	1330	2100	2360	947	2390	2230	3090
10	1810	1940	1840	---	1840	229	2100	2490	1940	2380	1740	3530
11	---	1860	1710	---	1870	216	1190	2050	2290	2360	1720	3360
12	---	1730	1740	---	1820	400	1380	2270	2290	2370	2270	3290
13	---	1710	1740	---	1850	576	1530	2250	2300	2360	2540	3240
14	1330	1890	1620	---	1830	1860	1530	2340	2630	2350	1850	3230
15	1380	1900	1670	2120	1850	1850	2150	2360	2520	2360	1420	2900
16	1290	1790	2070	2110	---	2220	2150	2170	2740	2370	975	2860
17	1300	1790	2150	1380	1850	2220	2790	2170	2510	2400	277	2900
18	1200	1660	1990	1170	1850	2140	2800	2270	2820	2440	5100	2850
19	1190	1790	1990	935	1740	2140	1570	2270	2830	2530	4440	2860
20	1140	760	1940	1310	1800	2000	1390	2270	2830	2530	2810	2780
21	1150	1290	2120	1310	332	2020	1380	2250	2880	2580	4880	2810
22	1150	1670	2120	1860	854	2070	1390	1970	2880	2590	4660	2700
23	1150	1830	1700	1850	854	1930	1470	2070	2650	2460	4190	2780
24	1320	1610	1690	2480	1530	1920	2460	860	2640	2540	3100	2200
25	1480	1740	1780	2970	1530	2050	2680	451	2580	2430	3060	2710
26	1430	1820	1780	2980	1620	2050	2790	481	2580	2540	3750	2570
27	1530	1650	1740	2980	1610	2080	1530	1150	2540	2460	3850	2640
28	1470	1840	1720	2390	1780	2080	1530	1170	2550	2530	2490	2530
29	1580	1830	1710	3020	---	1880	982	1770	2540	2530	3360	2550
30	1570	1840	1680	2830	---	2220	818	1760	2510	2570	3370	2480
31	1580	---	---	2690	---	1920	---	---	---	2620	2970	---
MONTH	1630	1700	1640	2120	1730	1730	1900	1840	2300	2470	3020	2800

DISSOLVED SOLIDS DISCHARGE (TUNS/DAY) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17960	5210	3020	2080	5860	2630	3750	13600	---	1020	585	14960
2	14360	4860	2910	2280	4610	2480	4330	15440	---	1040	945	40660
3	21530	4560	1080	2440	4000	2530	4090	14500	3690	936	829	21330
4	9790	4060	5160	2680	4070	2460	3890	10970	3650	854	754	24700
5	8120	4040	6460	3570	4110	2460	4260	10510	2720	919	998	20790
6	15840	3580	5580	3630	3260	2380	3200	8900	5410	780	958	17330
7	12880	3380	5050	3410	3120	2290	2790	8410	3820	752	774	12120
8	8830	3930	6330	3610	2890	2290	2880	7530	3880	748	763	9800
9	5690	3710	5700	3370	2910	3760	2820	6440	6930	689	760	7840
10	4270	3830	5370	---	3090	8170	2470	5710	6810	655	659	7920
11	---	3590	4840	---	3000	12810	2850	4130	5320	638	559	6700
12	---	3320	4620	---	2760	19790	8680	4330	3580	614	841	5750
13	---	3280	4440	---	2840	13430	22080	3890	3170	593	879	5220
14	77750	3750	4260	---	2700	24040	11540	3750	3520	584	539	4370
15	46940	3580	3750	8570	2680	15010	11060	4010	3650	573	391	3410
16	33520	3310	4500	10830	---	15490	8110	2850	3700	577	2610	3210
17	29960	3160	4570	5770	2630	13640	8830	2520	2950	563	531	3020
18	24500	2740	4070	4170	2660	11550	7640	2800	3000	599	7570	2800
19	22480	3440	4020	2950	2750	10340	3710	2560	2900	595	5800	2920
20	19640	6070	2650	3350	2640	8420	5300	2270	2680	614	3390	2910
21	17820	3010	3670	3170	4540	7840	6710	2070	2620	607	6200	2760
22	15830	3250	4850	4440	10580	7600	6210	1740	2510	622	5540	2520
23	13870	3070	3810	4310	3460	6620	5030	2400	2180	577	4260	2390
24	13410	2650	4220	5600	3090	5710	9610	3720	1840	623	3290	1890
25	12860	2910	3900	6670	2560	5760	11880	7750	1540	630	3560	2120
26	10440	3000	4030	6670	2510	5600	12220	9700	1430	671	4910	1940
27	9640	2690	3900	6590	2510	5440	6330	11850	1320	623	6380	1930
28	8000	3120	3950	5250	2630	5180	5790	6720	1270	663	6930	1910
29	7440	3130	3850	6750	---	4530	6150	6050	1180	588	10690	1790
30	6390	3130	3660	6230	---	5140	10810	4490	1060	568	14370	1680
31	5580	---	---	5770	---	4330	---	---	---	587	11790	---
MONTH	17690	3580	4270	4780	3500	7730	6830	6390	3150	681	3520	7960

ARKANSAS RIVER BASIN

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

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2690	2730	3120	2990	4790	3240	3230	1450	---	4270	4260	5960
2	2700	2770	2970	3290	3870	3110	3800	1640	---	4330	5440	2700
3	4770	2830	568	3480	3450	3110	3790	1950	4090	4330	5470	1240
4	2490	2820	569	3780	3630	3110	3760	2770	4100	4260	5490	3700
5	2460	3020	1240	3770	3780	3170	3760	3720	2940	4280	6800	5290
6	5200	2770	1510	3710	3060	3170	3710	3890	2880	4020	6820	5810
7	5230	2680	2000	3720	2930	3090	3720	4230	754	4040	5510	5690
8	4370	3210	3160	3690	2940	2290	3720	4300	1480	4270	5490	5750
9	3400	3120	3170	3620	3030	2270	3590	4040	1620	4080	3820	5290
10	3100	3320	3150	---	3140	392	3590	4260	3320	4070	2980	6040
11	---	3190	2920	---	3200	369	2040	3500	3920	4040	2950	5740
12	---	2960	2970	---	3120	685	2360	3890	3920	4050	3890	5630
13	---	2930	2980	---	3160	985	2610	3850	3930	4040	4350	5540
14	2270	3230	2770	---	3130	3180	2610	4000	4500	4020	3160	5520
15	2360	3250	2850	3620	3160	3170	3670	4040	4310	4030	2430	4960
16	2210	3070	3540	3610	---	3790	3670	3720	4690	4060	1670	4900
17	2220	3070	3670	2360	3160	3790	4780	3720	4300	4100	473	4960
18	2050	2840	3400	2000	3160	3660	4790	3880	4830	4170	8550	4880
19	2040	3060	3400	1600	2980	3660	2690	3890	4840	4330	7540	4890
20	1950	1300	3320	2240	3080	3420	2380	3880	4640	4320	4810	4750
21	1970	2200	3620	2240	568	3450	2360	3850	4920	4420	8220	4800
22	1970	2860	3620	3190	1460	3540	2370	3370	4930	4430	7890	4620
23	1970	3130	2900	3160	1460	3300	2510	3550	4530	4200	7160	4760
24	2260	2750	2890	4240	2610	3290	4200	1470	4520	4340	5300	3760
25	2530	2980	3050	5080	2620	3510	4590	771	4410	4160	5240	4630
26	2450	3120	3050	5090	2770	3510	4780	823	4410	4340	6410	4400
27	2620	2830	2970	5090	2750	3550	2620	1960	4340	4200	6580	4520
28	2510	3150	2950	4080	3050	3550	2620	2000	4360	4330	4260	4330
29	2710	3130	2930	5170	---	3210	1680	3020	4340	4330	5740	4370
30	2680	3140	2880	4840	---	3790	1400	3010	4290	4390	5760	4250
31	2700	---	---	4600	---	3280	---	---	---	4480	5080	---
MONTH	2780	2920	2800	3630	2970	2960	3250	3150	3940	4220	5150	4790

TEMPERATURE (DEG. C) OF WATER , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
(UNCE-DAILY)

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

ARKANSAS RIVER BASIN

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07152500 ARKANSAS RIVER AT RALSTON, OKLA.

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

DRAINAGE AREA.--54,465 mi² (141,064 km²), of which 7,615 mi² (19,723 km²) is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: January 1950 to September 1963, May 1965 to current year.

Water temperatures: January 1950 to September 1963, May 1965 to current year.

EXTREMES, Current year.--Specific conductance: Maximum, 2,580 micromhos/cm Sept. 11; minimum, 200 micromhos/cm Aug. 16.

Water temperatures: Maximum, 34.5°C July 21; minimum, freezing point on several days during December to February.

Period of record.--Specific conductance: Maximum daily, 7,510 micromhos/cm Sept. 14, 1955; minimum, 200 micromhos/cm Aug. 16, 1974.

Water temperatures (1950-1963, 1965-70, 1972-74): Maximum, 37.0°C July 28, 1956; minimum, freezing point on many days during winter months.

REMARKS.--Continuous monitor records for specific conductance and temperature are collected for this station. Temperature record for the periods Dec.13-Jan. 21, May 10-June 6, and July 30-Sept. 30 was poor. Once-daily temperature values were used in their place. Records of maximum and minimum specific conductance values are available in district office in Oklahoma City, Okla.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	INSTANTANEOUS DIS-CHARGE (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)	ALKALINITY AS CaCO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	DIS-SOLVED NITRATE (NO3) (MG/L)	DIS-SOLVED NITRITE (N) (MG/L)
OCT.												
05...	38500	--	--	47	111	0	91	28	69	.87	3.9	.01
13...	204000	22	4.5	--	77	0	63	18	25	.88	3.9	.01
25...	14000	75	16	140	187	0	153	120	210	.99	4.4	.01
NOV.												
05...	8580	86	18	--	213	4	181	120	270	1.1	4.8	.02
15...	6340	94	21	--	221	16	208	130	300	1.3	5.7	.01
25...	15600	56	10	--	155	0	127	44	130	.76	3.4	.00
DEC.												
05...	21000	59	12	93	155	0	127	--	150	1.2	5.3	.00
15...	7000	78	16	140	202	3	171	100	220	1.3	5.7	.01
25...	5680	110	23	190	276	0	226	140	300	1.4	6.2	.00
JAN.												
04...	4000	110	25	250	276	0	228	160	380	1.6	6.9	.04
15...	8970	120	28	250	303	0	249	170	400	1.7	7.7	.07
25...	11900	59	13	91	158	0	130	69	140	2.7	12	.00
FEB.												
05...	5190	110	25	210	253	6	218	160	330	1.7	7.5	.00
15...	4540	110	26	200	270	0	221	180	310	1.6	7.1	.00
25...	9850	80	19	110	213	0	175	100	160	1.7	7.3	.04
MAR.												
05...	5770	99	23	180	252	0	207	150	--	.15	.66	.03
11...	104000	29	3.6	20	96	0	79	18	25	.33	1.5	.10
25...	6700	110	26	190	284	0	233	--	310	1.3	5.6	.03
APR.												
05...	4620	110	30	230	254	0	208	190	360	--	--	--
15...	9040	88	23	180	203	0	167	170	270	--	--	--
25...	17600	37	6.5	31	107	0	88	--	46	--	--	--
MAY												
05...	13300	71	16	140	191	0	157	99	210	--	--	--
15...	5370	80	19	190	213	0	175	120	280	--	--	--
27...	43000	36	6.3	52	119	0	96	26	44	--	--	--
JUNE												
08...	49900	40	6.0	50	126	0	103	25	42	--	--	--
15...	9080	50	4.3	--	153	0	126	47	99	--	--	--
25...	4920	90	23	--	233	0	191	--	340	--	--	--
JULY												
05...	2020	90	25	--	232	0	190	140	400	--	--	--
15...	1460	86	27	280	227	0	186	150	430	--	--	--
25...	988	85	27	310	209	0	171	150	470	--	--	--
AUG.												
11...	10500	29	12	54	100	0	82	40	76	--	--	--
15...	1920	53	17	150	137	0	112	84	240	--	--	--
25...	2730	64	17	340	141	0	116	120	530	--	--	--
SEP.												
05...	16000	35	9.1	110	95	0	78	45	170	--	--	--
15...	2600	88	18	360	192	0	157	140	570	--	--	--
25...	2610	74	17	250	173	0	142	120	--	--	--	--

ARKANSAS RIVER BASIN

07152500 ARKANSAS RIVER AT RALSTON, OKLA.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	DIS- SOLVED NITRITE (NO2) (MG/L)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AL- SULF- TIDE RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MOS)	PH (UNITS)	CARBON DIOXIDE (CO2) (MG/L)
OCT.												
05...	.03	.88	.92	269	.37	28000	--	--	--	464	7.7	3.5
13...	.03	.89	.97	145	.20	79900	73	10	--	241	7.6	3.1
25...	.03	1.0	.26	672	.91	25400	250	100	3.8	1240	8.2	1.9
NOV.												
05...	.07	1.1	.37	791	1.08	18300	290	110	--	1400	8.4	1.4
15...	.03	1.3	.54	907	1.23	15500	320	110	--	1540	8.6	1.0
25...	.00	.76	.36	432	.59	18200	180	54	--	733	8.3	1.2
DEC.												
05...	.00	1.2	.56	498	.68	--	200	70	2.9	860	8.3	1.2
15...	.03	1.3	.42	695	.95	13100	260	90	3.8	1210	8.4	1.3
25...	.00	1.4	.67	952	1.24	14600	370	140	4.3	1620	8.0	4.4
JAN.												
04...	.13	1.6	.24	--	--	--	380	150	5.6	1610	8.0	4.4
15...	.23	1.8	.29	1160	1.56	28100	420	170	5.3	1950	8.3	2.4
25...	.00	2.7	.25	495	.67	15900	200	71	2.8	876	7.7	5.0
FEB.												
05...	.00	1.7	.27	1030	1.40	14400	380	160	4.7	1760	8.5	1.3
15...	.00	1.6	.27	1020	1.34	12500	380	160	4.5	1740	8.2	2.7
25...	.13	1.7	--	622	.85	16500	280	100	2.9	1060	7.6	5.4
MAR.												
05...	.10	.18	.25	855	1.16	--	340	140	4.2	1480	8.1	3.2
11...	.33	.43	.14	156	.21	43800	87	9	.9	257	7.9	1.9
25...	.10	1.3	.20	--	--	--	380	150	4.2	1700	8.2	2.9
APR.												
05...	--	.80	--	--	--	--	400	190	5.0	1890	7.6	10
15...	--	.74	--	861	1.17	21000	310	150	4.4	1480	7.6	8.2
25...	--	1.1	.79	232	.32	--	120	31	1.2	400	7.6	4.3
MAY												
05...	--	1.1	.37	664	.90	23800	240	47	3.9	1130	8.1	2.4
15...	--	.69	.34	823	1.12	11900	280	100	5.0	1420	7.8	5.4
27...	--	1.2	.62	241	.33	28000	120	18	1.3	395	7.5	6.0
JUNE												
08...	--	1.2	.62	--	--	--	120	21	1.2	377	7.7	4.0
15...	--	1.2	.42	384	.52	9410	160	38	--	649	7.9	3.1
25...	--	.82	.46	983	1.34	13000	320	130	--	1880	7.8	5.9
JULY												
05...	--	.40	8.3	1050	1.43	5730	330	140	--	1810	7.9	4.7
15...	--	.29	.36	1110	1.51	4380	330	140	6.6	1920	7.9	4.6
25...	--	1.2	.39	1150	1.56	3070	320	150	7.5	2010	8.2	2.1
AUG.												
11...	--	3.5	2.3	--	--	--	120	40	2.1	395	7.7	3.2
15...	--	.94	.76	650	.88	3370	200	90	4.6	1160	7.8	3.5
25...	--	.85	1.0	1190	1.62	8770	230	110	9.8	2100	7.6	5.7
SEP.												
05...	--	1.5	1.3	455	.62	19700	120	47	4.3	810	7.5	4.8
15...	--	.89	.51	1330	1.81	9340	290	140	9.1	2290	7.9	3.9
25...	--	.65	.35	1010	1.37	7120	250	110	6.6	1760	7.6	7.0

ARKANSAS RIVER BASIN

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07152500 ARKANSAS RIVER AT RALSTON, OKLA.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	INSTANTANEOUS DIS- CHARGE (CFS)	TOTAL IRON (FE) (UG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL- NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (NO3) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)
OCT.												
25...	14000	--	--	--	--	--	--	--	--	--	--	--
NOV.												
13...	7140	--	--	--	--	--	--	--	--	--	--	--
DEC.												
12...	9710	--	--	--	--	--	--	--	--	--	--	--
JAN.												
23...	13800	--	--	--	--	--	--	--	--	--	--	--
FEB.												
14...	4570	610	1.4	.15	.58	.73	2.1	9.4	.33	1030	1.40	12700
27...	6560	5300	1.2	.16	1.0	1.2	2.4	11	.34	732	1.00	13000
MAR.												
12...	88900	27000	.65	.07	2.9	3.0	3.6	16	.50	212	.29	50900
27...	6000	--	1.0	.37	.51	.88	1.9	8.3	.22	989	1.35	16000
APR.												
23...	28300	--	1.2	.63	2.2	2.8	4.0	18	1.2	603	.82	46100
MAY												
15...	5580	--	.01	.15	1.6	1.8	1.8	8.0	.13	840	1.14	12700
30...	15800	16000	.73	.75	.85	1.6	2.3	10	.68	271	.37	11600
JUNE												
12...	29100	21000	.75	.05	.50	.55	1.3	5.8	.64	226	.31	17800
26...	3200	2600	.00	.06	1.4	1.5	1.5	6.6	.31	985	1.34	8510
JULY												
10...	1650	1300	.02	.03	1.4	1.4	1.4	6.3	.27	1110	1.51	4950
24...	966	820	.02	.00	1.4	1.4	1.4	6.3	.41	1150	1.57	3000
AUG.												
13...	3640	14000	.06	.04	2.5	2.5	2.6	11	.38	629	.86	6180
27...	4290	11000	1.5	.08	4.1	4.2	5.7	25	.78	516	.70	5980
SEP.												
10...	3480	5800	.00	.15	1.1	1.3	1.3	5.8	.42	1260	1.71	11800
24...	2220	5300	.62	.05	1.7	1.8	2.4	11	.39	1100	1.50	6590

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TOTAL NON- FILT- RABLE RESIDUE (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	CHEM- ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	CHEM- ICAL OXYGEN DEMAND (HIGH LEVEL) (MG/L)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)	CHLORO- PHYLL A (UG/L)
OCT.											
25...	--	1240	--	18.5	--	8.8	100	15	--	1.4	--
NOV.											
13...	--	1500	--	16.0	--	9.0	99	28	--	1.5	--
DEC.											
12...	--	900	--	6.5	--	11.4	100	39	--	2.8	--
JAN.											
23...	--	760	--	2.0	--	12.7	96	37	--	4.6	--
FEB.											
14...	--	1610	8.9	7.0	10	11.1	98	--	23	2.0	--
27...	--	1260	8.2	6.0	70	11.3	97	--	24	--	--
MAR.											
12...	225	245	7.6	10.5	200	8.8	83	--	78	4.0	50
27...	89	1680	--	17.0	40	8.7	96	30	--	6.0	28
APR.											
23...	2180	1050	8.0	18.0	400	6.1	68	130	--	6.6	--
MAY											
15...	206	1500	--	21.0	70	8.5	100	40	--	5.9	81
30...	623	485	7.9	24.5	200	6.9	88	60	--	--	130
JUNE											
12...	668	410	7.6	21.0	200	9.2	86	15	--	--	--
26...	113	1800	8.5	26.0	40	7.1	117	29	--	--	61
JULY											
10...	60	2190	--	26.5	10	7.2	94	26	--	--	73
24...	60	2000	6.5	26.0	20	7.8	101	41	--	6.4	61
AUG.											
13...	730	1100	7.6	25.0	300	5.8	73	60	--	--	--
27...	864	925	7.8	26.0	300	7.6	99	75	--	--	82
SEP.											
10...	222	2400	8.4	23.0	90	7.4	91	43	--	--	130
24...	184	2000	--	16.0	80	8.5	91	55	--	--	98

ARKANSAS RIVER BASIN

07152500 ARKANSAS RIVER AT RALSTON, OKLA.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	CHLORO- PHYLL B (UG/L)	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)	OIL AND GREASE (MG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CAD- MIUM (CD) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL ZINC (ZN) (UG/L)
OCT.											
25...	--	--	--	--	--	--	--	--	--	--	--
NOV.											
13...	--	--	--	--	--	--	--	--	--	--	--
DEC.											
12...	--	--	--	--	--	--	--	--	--	--	--
JAN.											
23...	--	--	--	--	--	--	--	--	--	--	--
FEB.											
14...	--	110	59	5.0	--	25	<10	0	<100	.1	30
27...	--	350	230	9.5	--	8	<10	0	<100	.2	60
MAR.											
12...	90	--	--	6.6	--	18	10	40	100	.2	220
27...	14	93	814	6.1	0	2	10	0	<100	--	20
APR.											
23...	--	--	1400	39	1	14	<10	80	100	.2	360
MAY											
15...	29	320	220	7.3	0	3	10	0	100	.0	50
30...	220	--	--	7.8	2	8	<10	10	<100	.1	80
JUNE											
12...	--	4400	1500	--	2	13	<10	10	<100	.3	110
26...	88	83	80	--	0	4	<10	0	<100	.0	50
JULY											
10...	63	--	160	5.2	--	11	<10	0	<100	.0	40
24...	9.1	270	270	4.4	0	6	<10	<10	<100	.0	20
AUG.											
13...	--	1800	--	13	2	10	10	0	<100	.1	220
27...	83	--	1100	25	4	15	<10	10	<100	.5	110
SEP.											
10...	36	840	190	8.3	0	4	<10	0	<100	.2	50
24...	28	760	470	7.4	0	6	<10	0	<100	.1	40

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	INSTAN- TANEOUS DIS- CHARGE (CFS)	TOTAL CAL- CIUM (CA) (MG/L)	TOTAL MAG- NE- SIUM (MG) (MG/L)	TOTAL SODIUM (NA) (MG/L)	TOTAL PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)
JUNE											
26...	3200	93	24	230	8.1	241	0	198	130	350	.5
AUG.											
13...	3640	53	20	150	7.6	122	0	100	76	240	.3

ARKANSAS RIVER BASIN

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07152500 ARKANSAS RIVER AT RALSTON, OKLA.--Continued

SULFATE (MG/L AS SO4) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23	84	100	100	130	110	140	57	40	150	180	120
2	22	91	110	120	130	120	150	71	38	140	180	160
3	26	100	130	120	140	110	150	62	47	150	170	170
4	27	100	28	130	150	120	150	65	54	150	180	34
5	34	110	57	130	140	120	150	92	65	150	180	59
6	39	110	55	150	150	120	150	100	66	150	180	93
7	43	110	55	150	150	120	150	120	25	150	180	130
8	64	110	43	160	130	130	160	130	28	160	180	150
9	89	110	48	150	150	110	150	140	26	160	74	180
10	100	120	59	150	140	28	150	130	32	160	38	210
11	88	120	61	150	130	20	150	140	31	160	29	220
12	33	120	65	150	130	22	130	110	30	160	32	210
13	17	120	73	160	140	31	140	96	30	160	45	210
14	18	120	80	170	140	33	93	110	39	160	75	200
15	20	120	89	160	140	43	120	110	49	160	88	200
16	23	120	94	130	140	53	120	140	62	160	15	200
17	28	120	97	110	150	69	150	66	80	150	68	190
18	33	130	100	63	140	82	150	65	89	160	43	190
19	42	130	110	110	140	130	160	62	100	170	44	190
20	51	77	110	88	130	120	170	69	110	170	67	60
21	62	86	110	68	110	120	130	79	120	170	140	98
22	68	87	110	57	52	120	110	91	120	170	190	120
23	78	81	110	62	98	130	79	65	130	170	170	150
24	84	85	130	59	66	140	32	37	130	170	220	160
25	96	60	130	61	80	140	29	29	140	170	88	150
26	98	80	120	69	83	140	41	33	150	170	73	130
27	100	86	120	83	99	140	58	28	140	170	180	150
28	100	71	100	91	100	140	69	27	150	170	86	160
29	82	72	73	69	---	150	88	31	140	170	150	170
30	87	92	86	110	---	150	78	34	150	190	86	160
31	86	---	87	90	---	160	---	37	---	180	100	---
MONTH	57	100	88	110	120	100	120	78	80	160	110	150

DISSOLVED SO4 DISCHARGE (TONS/DAY) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4440	2550	1720	1740	2080	1770	1890	2100	1730	971	421	1700
2	2930	2530	1850	1700	2020	1890	1950	3870	1260	890	416	4910
3	2980	2600	2080	1540	2020	1870	2000	3390	1130	900	394	7460
4	3050	2510	1180	1390	2130	1890	1860	2820	1020	851	391	1860
5	3410	2490	3350	1580	1910	1850	1900	3160	1020	820	387	2320
6	2990	2400	3360	2060	1970	1830	1840	2460	952	796	396	2210
7	2200	2370	3290	2470	1950	1820	1820	2430	2280	778	398	2220
8	2550	2320	1450	2580	1750	1840	1770	2390	3670	755	385	1830
9	2930	2280	1550	2570	1880	1900	1660	2460	2510	752	998	1860
10	2310	2250	1840	2650	1740	3720	1630	2210	2410	717	561	1940
11	2750	2180	1660	2900	1670	5520	1730	2190	2580	679	675	2020
12	8670	2160	1620	2980	1640	5050	1750	2240	2350	670	476	1780
13	8880	2120	1620	3310	1670	5310	2500	1650	1500	648	416	1660
14	8070	2020	1590	3970	1680	3360	2660	1720	1230	648	443	1460
15	7370	1950	1690	3910	1670	2650	2870	1660	1140	634	460	1360
16	5550	1960	1730	3370	1720	2500	2360	2790	1180	606	185	1280
17	4240	1900	1710	3100	1760	2610	2460	2220	1310	557	1450	1200
18	3860	1840	1720	2220	1710	2610	2290	1870	1330	575	749	1120
19	3680	1790	1770	4230	1650	3700	2240	1340	1410	546	435	1760
20	3570	1720	1810	3290	2010	3020	2230	1230	1350	504	584	1210
21	3670	2630	1770	3520	1820	2800	2010	1260	1450	478	1080	1070
22	3540	2510	1560	2460	1920	2490	2460	1810	1530	458	1390	1020
23	3600	1720	1600	2300	4810	2580	6540	2390	1620	458	1520	954
24	3500	1940	1850	2070	2230	2550	3460	1960	1700	438	1530	931
25	3700	2310	2100	1950	2130	2460	1860	1990	1580	441	934	975
26	3490	2280	1910	1880	1640	2330	1890	3350	1250	437	1160	921
27	3370	2070	1700	1940	1740	2300	1940	3180	1140	440	2100	875
28	3430	1530	2590	1910	1720	2180	1890	2480	1150	435	879	841
29	3550	1400	1480	1370	---	2240	2280	1940	1060	419	1900	833
30	3350	1640	1080	2020	---	2120	2670	1490	1030	449	2040	769
31	3150	---	1480	1550	---	2250	---	1580	---	416	2320	---
MONTH	4030	2130	1860	2470	1950	2680	2280	2250	1560	618	886	1740

ARKANSAS RIVER BASIN

07152500 ARKANSAS RIVER AT RALSTON, OKLA.--Continued

CHLORIDE (MG/L AS CL) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	34	210	240	240	310	270	340	130	83	370	510	280
2	32	220	270	280	310	280	370	180	76	350	510	450
3	40	240	300	280	330	270	410	150	110	390	490	470
4	45	250	46	310	380	280	380	160	130	390	500	65
5	65	260	130	310	350	280	400	220	160	390	500	140
6	81	260	130	380	370	290	390	240	160	390	510	230
7	92	270	130	400	380	290	410	280	39	400	530	310
8	160	270	91	430	320	300	420	300	47	420	530	370
9	220	270	110	390	380	260	400	350	41	450	180	510
10	240	280	140	390	340	46	400	330	61	440	77	620
11	210	280	150	400	330	28	380	330	57	420	50	700
12	62	280	160	400	320	32	310	270	53	420	59	630
13	20	280	180	430	330	57	360	230	53	430	97	620
14	23	280	200	460	340	61	230	260	81	430	190	580
15	27	280	220	430	330	92	290	270	110	440	220	580
16	34	280	230	310	350	120	290	340	150	420	14	590
17	47	290	230	250	380	170	370	160	200	390	170	570
18	61	300	240	150	370	200	390	160	220	450	93	550
19	88	300	260	260	330	320	420	150	250	460	96	540
20	120	190	270	210	310	290	460	170	260	460	160	140
21	150	210	270	170	270	300	330	190	280	470	330	240
22	170	210	260	140	120	280	270	220	290	470	530	280
23	190	200	270	150	240	310	190	160	300	470	490	400
24	210	210	300	140	160	330	59	74	310	460	690	430
25	230	140	300	150	200	330	50	50	350	460	220	370
26	240	200	290	170	200	340	88	62	370	450	180	310
27	240	210	280	200	240	360	140	47	350	470	510	370
28	250	180	240	220	250	350	170	45	390	480	210	420
29	200	180	180	170	---	390	220	57	370	480	390	460
30	210	220	210	270	---	370	190	65	390	540	210	450
31	210	---	210	220	---	420	---	74	---	510	250	---
MONTH	130	240	210	280	310	250	300	180	190	440	310	420

DISSOLVED CL DISCHARGE (TONS/DAY) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6540	6240	4160	4200	4940	4260	4650	4910	3590	2490	1200	4080
2	4230	6160	4440	4080	4840	4530	4980	9540	2550	2230	1180	13410
3	4690	6270	4960	3680	4940	4470	5290	8130	2520	2340	1110	20680
4	5050	6040	1980	3300	5480	4520	4790	6850	2370	2210	1110	3560
5	6550	5980	7850	3770	4790	4430	5010	7670	2480	2140	1100	5490
6	6160	5760	7820	5290	5050	4380	4790	5930	2320	2080	1130	5370
7	4720	5690	7640	6480	5030	4340	4830	5830	3560	2050	1150	5280
8	6170	5570	3090	6930	4230	4380	4730	5700	6210	2020	1110	4670
9	7130	5450	3450	6650	4860	4580	4370	6130	3990	2050	2460	5300
10	5580	5380	4350	6850	4300	6250	4290	5370	4510	1940	1140	5840
11	6700	5220	3970	7640	4060	7560	4430	5350	4720	1810	1170	6260
12	16360	5160	3910	7860	3950	7270	4180	5380	4180	1790	883	5370
13	10290	5080	3990	8930	4080	9700	6290	4000	2660	1740	902	5010
14	10100	4840	3910	10900	4150	6310	6460	4140	2520	1750	1090	4310
15	9960	4680	4100	10510	4090	5670	6840	3980	2560	1720	1120	4010
16	8240	4680	4180	8020	4320	5750	5630	6860	2840	1620	177	3800
17	7180	4530	4130	7470	4330	6390	6290	5380	3200	1450	3550	3530
18	7260	4380	4140	5330	4360	6400	5980	4530	3240	1570	1610	3270
19	7790	4260	4250	10180	4020	8950	6020	3220	3400	1500	941	5100
20	8110	4240	4350	8010	4810	7230	6140	3000	3250	1390	1420	2870
21	8790	6430	4240	8600	4360	6690	4890	3100	3460	1330	2640	2580
22	8670	6120	3750	5780	4370	5970	5900	4400	3660	1270	4020	2440
23	8860	4220	3840	5510	11620	6150	16080	5780	3870	1270	4260	2510
24	8550	4740	4420	4910	5420	6230	6420	3920	4070	1210	4730	2510
25	8950	5500	4990	4650	5230	6030	3210	3450	3930	1220	2280	2500
26	8430	5600	4560	4610	4020	5740	3990	6310	3180	1200	2860	2200
27	8140	5050	4080	4750	4200	5780	4570	5370	2860	1220	5960	2230
28	8280	3780	6240	4650	4140	5410	4650	4110	2980	1210	2140	2250
29	8690	3460	3660	3370	---	5810	5550	3560	2690	1170	4970	2300
30	8180	3980	2630	4860	---	5440	6560	2860	2680	1300	4980	2100
31	7680	---	3600	3760	---	6010	---	3170	---	1190	5600	---
MONTH	7810	5150	4410	6180	4790	5890	5590	5090	3330	1660	2260	4690

ARKANSAS RIVER BASIN

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07152500 ARKANSAS RIVER AT RALSTON, OKLA.--Continued

DISSOLVED SOLIDS (RESIDUE ON EVAPORATION, MG/L AT 180 DEG. C) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	179	642	734	740	925	808	976	447	314	1030	1230	826
2	174	682	814	837	942	826	1020	559	297	1000	1220	1140
3	201	734	908	849	965	820	1080	492	374	1050	1200	1160
4	213	751	218	925	1030	837	1030	515	429	1050	1210	266
5	267	780	448	936	998	843	1070	688	510	1060	1220	464
6	308	785	436	1030	1030	854	1060	737	522	1060	1230	694
7	340	803	433	1070	1040	885	1080	826	199	1070	1250	936
8	507	808	335	1110	955	902	1100	914	220	1100	1250	1020
9	669	820	375	1040	1040	774	1070	988	204	1140	579	1230
10	733	831	466	1040	982	217	1070	959	255	1120	299	1390
11	662	826	480	1070	959	161	1030	965	247	1100	226	1490
12	259	837	509	1070	948	173	942	797	236	1100	251	1400
13	134	843	573	1110	965	245	1000	711	235	1110	351	1380
14	144	826	613	1150	976	257	694	791	308	1110	585	1330
15	158	826	671	1110	971	339	860	814	384	1120	665	1330
16	182	843	699	925	999	421	860	976	492	1100	115	1340
17	220	885	717	768	1030	544	1030	518	613	1050	534	1320
18	257	914	734	494	1020	628	1060	515	671	1140	341	1290
19	328	908	780	780	962	953	1100	492	763	1150	349	1270
20	402	598	814	661	942	854	1150	541	774	1150	525	475
21	487	654	820	535	808	897	959	608	837	1170	971	722
22	538	657	780	452	408	837	809	682	885	1160	1260	843
23	604	619	797	490	722	931	608	513	919	1170	1190	1070
24	640	648	902	468	524	965	252	290	942	1160	1480	1110
25	714	475	919	482	613	971	226	228	988	1150	665	1030
26	722	613	860	543	631	976	327	259	1020	1140	573	942
27	740	654	826	632	728	1000	457	219	999	1160	1220	1020
28	745	559	740	679	763	988	547	213	1050	1180	654	1100
29	625	568	573	544	---	1040	665	247	1020	1180	1060	1160
30	660	688	654	797	---	1030	602	267	1040	1270	654	1140
31	654	---	659	677	---	1100	---	292	---	1230	757	---
MONTH	435	736	654	807	888	744	858	583	592	1120	810	1060

DISSOLVED SOLIDS DISCHARGE (TONS/DAY) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	34980	19420	12680	12780	14960	12790	13440	16520	13630	6850	2880	12220
2	23080	18970	13340	12200	14520	13580	13790	30490	9940	6320	2860	34040
3	23470	19100	15050	11000	14460	13410	13990	26700	8950	6320	2710	51550
4	24070	18350	9290	9990	15020	13540	13140	22270	8060	5980	2690	14650
5	26910	18060	26390	11380	13550	13240	13300	23590	8070	5760	2660	18310
6	23570	17370	26510	14510	13930	13080	12890	18060	7510	5590	2710	16500
7	17350	17120	25950	17290	13720	13220	12760	17480	17940	5450	2720	15950
8	20140	16740	11410	17940	12510	13300	12340	17270	28930	5270	2630	12940
9	22040	16360	12250	18050	13270	13830	11640	17520	19780	5210	7820	12750
10	17010	16120	14470	18620	12360	29330	11440	15820	19010	4980	4420	13060
11	20740	15650	13100	20280	11960	43500	12160	15660	20300	4730	5320	13480
12	68360	15440	12740	20860	11770	39780	12540	16200	18500	4680	3760	11960
13	69970	15180	12690	23020	11930	41870	17690	12250	11810	4510	3280	11220
14	63590	14510	12260	27470	11990	26480	19850	12480	9660	4510	3460	9870
15	58110	14020	12680	27210	11900	20860	20410	11960	9010	4410	3470	9190
16	43720	13990	12840	24280	12220	19680	16790	19850	9320	4230	1460	8690
17	33440	13810	12640	22610	12410	20550	17340	17470	10050	3910	11460	8110
18	30440	13270	12620	17480	12130	20000	16080	14740	10000	3990	5900	7630
19	29040	12920	12840	30740	11790	26520	15640	10570	10310	3780	3430	11990
20	28150	13350	13060	24810	14420	21570	15410	9660	9820	3480	4600	9520
21	28950	19940	12710	27730	13100	20330	14400	9750	10350	3300	7880	7880
22	27910	18980	11330	19400	15100	17850	17740	13560	11160	3170	9500	7280
23	27870	13220	11550	18110	35500	18600	50540	18820	11720	3160	10430	6690
24	26630	14730	13420	16310	17540	18240	27240	15430	12210	3030	10210	6490
25	27390	18220	15120	15360	16410	17560	14640	15650	11250	3050	7040	6880
26	25750	17560	13610	14810	12550	16610	14910	26380	8800	3030	9090	6610
27	24760	15670	12220	14840	12820	16280	15300	25070	8090	3040	14380	6180
28	25150	12070	18990	14330	12540	15470	14920	19580	8060	3000	6650	5860
29	27170	11030	11640	10830	---	15790	17180	15310	7490	2890	13370	5760
30	25320	12260	8150	14630	---	14980	20640	11760	7280	3060	15460	5340
31	23820	---	11160	11600	---	15680	---	12450	---	2850	16980	---
MONTH	31250	15780	14020	18080	14160	19920	16670	17110	11900	4310	6480	12290

ARKANSAS RIVER BASIN

07152500 ARKANSAS RIVER AT RALSTON, OKLA.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	313	1120	1280	1290	1580	1410	1670	779	547	1760	2110	1440
2	303	1190	1420	1460	1610	1440	1750	975	518	1710	2100	1950
3	351	1280	1550	1480	1650	1430	1850	858	653	1800	2060	2000
4	372	1310	380	1580	1770	1460	1770	899	748	1800	2080	464
5	466	1360	782	1600	1710	1470	1840	1200	890	1810	2090	810
6	538	1370	761	1770	1760	1490	1810	1290	910	1810	2110	1210
7	593	1400	755	1830	1780	1510	1850	1440	347	1840	2150	1600
8	885	1410	585	1900	1630	1540	1880	1560	383	1880	2150	1750
9	1170	1430	654	1790	1780	1350	1830	1690	355	1950	1010	2110
10	1280	1450	813	1790	1680	379	1830	1640	445	1920	521	2390
11	1160	1440	838	1840	1640	281	1770	1650	430	1880	395	2580
12	452	1460	887	1840	1620	302	1610	1390	412	1880	438	2410
13	233	1470	1000	1910	1650	428	1720	1240	410	1900	612	2380
14	252	1440	1070	1970	1670	449	1210	1380	538	1910	1020	2290
15	276	1440	1170	1900	1660	591	1500	1420	670	1920	1160	2290
16	317	1470	1220	1580	1710	735	1500	1670	858	1880	200	2300
17	383	1510	1250	1340	1770	948	1760	903	1070	1800	932	2270
18	449	1560	1280	862	1740	1100	1810	898	1170	1950	595	2220
19	572	1550	1360	1360	1650	1630	1890	859	1330	1970	608	2190
20	702	1040	1420	1150	1610	1490	1980	944	1350	1980	915	829
21	850	1140	1430	933	1410	1530	1640	1060	1460	2000	1660	1260
22	939	1150	1360	788	712	1460	1410	1190	1510	1990	2170	1470
23	1050	1080	1390	854	1260	1590	1060	894	1570	2020	2050	1830
24	1120	1130	1540	817	914	1650	440	506	1610	1990	2560	1900
25	1250	829	1570	841	1070	1660	394	398	1690	1980	1160	1760
26	1260	1070	1500	947	1100	1670	570	452	1750	1960	1000	1610
27	1290	1140	1440	1100	1270	1720	797	382	1710	2000	2100	1750
28	1300	975	1290	1180	1330	1690	954	372	1800	2020	1140	1890
29	1090	990	1000	949	---	1790	1160	430	1740	2030	1810	1990
30	1150	1200	1140	1390	---	1760	1050	466	1790	2190	1140	1950
31	1140	---	1150	1180	---	1880	---	509	---	2110	1320	---
MONTH	758	1280	1140	1390	1530	1280	1480	1010	1020	1920	1400	1830

TEMPERATURE (DEG. C) OF WATER , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

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

ARKANSAS RIVER BASIN

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07153150 KEYSTONE LAKE NEAR CLEVELAND, OKLA.

LOCATION.--Lat 36°14'30", long 96°21'40", in SW 1/4 SW 1/4 sec.32, T.21 N., R.9 E., Pawnee County, 0.4 mi (0.64 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.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	RESER- VOIR STORAGE (AC-FT)	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)	ALKA- LINITY AS CACO3 (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED NITRATE (N) (MG/L)	DIS- SOLVED NITRATE (NO3) (MG/L)	DIS- SOLVED NITRITE (N) (MG/L)
OCT. 04...	1147000	25	5.4	32	83	0	68	22	47	.68	3.0	.05
NOV. 09...	615400	70	14	120	175	0	144	100	180	.88	3.9	.01
29...	788800	70	17	140	190	0	156	93	220	.32	1.4	.06
FEB. 20...	635300	63	17	140	164	0	135	99	210	.04	.18	.00
MAR. 13...	1329000	47	10	70	136	0	112	50	98	.16	.71	.04
APR. 03...	723000	85	20	160	218	0	179	120	240	.32	1.4	.03
24...	709300	88	27	220	213	0	175	160	350	.00	.00	.01
MAY 16...	716900	67	16	150	184	0	151	93	220	.00	.00	.01
30...	873700	56	14	120	160	0	131	78	180	.23	1.0	.03
JUNE 27...	790300	47	11	69	146	0	120	47	110	.15	.66	.04

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	DIS- SOLVED NITRITE (NO2) (MG/L)	DIS- SOLVED NITRATE (N) (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)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (JTU)	CARBON DIOXIDE (CO2) (MG/L)
OCT. 04...	.16	.73	188	.26	85	17	1.5	329	7.9	20.0	--	1.7
NOV. 09...	.03	.89	604	.82	230	89	3.4	1070	8.1	12.0	--	2.2
29...	.20	.38	671	.91	240	89	3.9	1180	7.8	12.5	--	4.8
FEB. 20...	.00	.04	625	.85	230	93	4.0	1130	7.6	--	4	6.6
MAR. 13...	.13	.20	371	.50	160	47	2.4	674	7.5	--	50	6.9
APR. 03...	.10	.35	--	--	290	120	4.1	1320	8.0	--	--	3.5
24...	.03	.00	982	1.34	330	160	5.3	1670	7.7	20.0	9	6.8
MAY 16...	.03	.00	668	.91	230	82	4.3	1160	7.6	23.0	20	7.4
30...	.10	.26	556	.76	200	66	3.7	981	7.8	21.0	7	4.1
JUNE 27...	.13	.19	383	.52	160	43	2.4	661	7.5	26.5	30	7.4

ARKANSAS RIVER BASIN

07157740 CIMARRON RIVER NEAR BUTTERMILK, KANS.

LOCATION.--Lat 37°01'36", long 99°28'45", in NW 1/4 sec.3, T.35 S., R.20 W., Comanche County, Kansas, at gaging station at county road bridge, 0.5 mi (0.8 km) upstream from Bluff Creek, 2 mi (3.2 km) north of Kansas-Oklahoma state line, 11.5 mi (18.5 km) southwest of Buttermilk, and at mile 304.8 (490.4 km).

DRAINAGE AREA.--11,120 mi² (28,800 km²), of which 4,737 mi² (12,270 km²) is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: Current year.

Water temperatures: Current year.

EXTREMES, Current year.--Specific conductance: Maximum, 3,950 micromhos/cm Sept. 24; minimum, 404 micromhos/cm Aug. 9.

Water temperatures: Maximum, 33.0°C June 14; minimum, freezing point on many days during December and January.

REMARKS.--Continuous monitor records for specific conductance are collected for this station. Records of maximum and minimum specific conductance values are available in district office at Oklahoma City, Okla. No flow June 26-Aug. 4.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	INSTANTANEOUS DIS-CHARGE (CFS)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNE- SIUM (MG)	DIS-SOLVED SODIUM (NA) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	ALKA- LINITY AS CaCO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO- RIDE (CL) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	DIS-SOLVED NITRATE (NO3) (MG/L)	DIS-SOLVED NITRITE (N) (MG/L)
OCT.												
11...	1590	67	23	190	167	0	137	140	260	.64	2.8	.00
16...	181	110	45	360	260	0	213	250	560	.57	2.5	.00
25...	74	120	55	--	261	0	214	300	640	.47	2.1	.00
NOV.												
01...	88	110	51	440	257	0	211	260	680	.59	2.6	.01
20...	493	92	43	240	192	0	157	230	370	.80	3.5	.01
25...	181	110	49	460	271	0	222	240	710	.79	3.5	.01
DEC.												
03...	172	110	44	410	236	0	194	240	640	.74	3.3	.01
19...	167	150	68	520	328	0	269	380	840	.85	3.8	.00
30...	211	110	51	--	268	0	220	280	700	1.1	4.8	.01
JAN.												
20...	875	88	38	360	224	0	184	200	550	.97	4.3	.02
27...	138	120	52	450	285	0	234	280	720	.88	3.9	.05
30...	172	110	47	--	273	0	224	260	690	.74	3.3	.02
FEB.												
08...	124	120	55	460	292	0	240	300	--	.68	3.0	.00
11...	142	100	48	430	246	0	202	250	670	.91	4.0	.00
27...	109	110	48	--	264	0	217	270	710	.64	2.8	.00
MAR.												
04...	77	110	55	480	245	0	201	300	730	.44	1.9	.01
11...	697	95	52	380	229	0	188	320	540	.00	.00	.40
31...	102	110	58	490	244	0	200	320	750	.73	3.2	.02
APR.												
06...	99	110	55	460	256	0	210	300	730	.32	1.4	.00
08...	67	130	67	530	256	0	210	370	860	--	--	.04
30...	24	140	70	470	262	0	215	420	710	--	--	--
MAY												
02...	10	130	70	470	258	0	212	420	700	--	--	--
09...	14	140	74	530	236	0	194	520	800	--	--	--
20...	2.0	170	79	550	186	0	153	620	810	--	--	--
JUNE												
08...	105	76	37	270	169	0	139	210	420	--	--	--
15...	22	100	53	540	201	0	165	310	800	--	--	--
AUG.												
05...	.18	180	53	290	106	0	87	550	450	--	--	--
09...	62	40	9.6	28	131	0	107	41	38	--	--	--
21...	38	82	26	--	231	0	189	140	350	--	--	--
SEP.												
02...	62	46	14	90	133	0	109	63	130	--	--	--
14...	29	120	55	--	245	0	201	310	720	--	--	--
23...	34	110	48	500	236	0	194	290	780	--	--	--

ARKANSAS RIVER BASIN

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07157740 CIMARRON RIVER NEAR BUTTERMILK, KANS.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	DIS- SOLVED NITRITE (NO2) (MG/L)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	CARBON DIOXIDE (CO2) (MG/L)
OCT.											
11...	.00	.64	808	1.10	3470	260	130	5.1	1400	7.7	5.3
16...	.00	.57	1570	2.14	767	460	250	7.3	2510	8.3	2.1
25...	.00	.47	1810	2.46	362	530	310	--	2900	8.2	2.6
NOV.											
01...	.03	.60	1750	2.38	416	480	270	8.7	2950	8.2	2.6
20...	.03	.81	--	--	--	410	250	5.2	1920	7.7	6.1
25...	.03	.80	1770	2.41	865	480	250	9.2	3060	8.2	2.7
DEC.											
03...	.03	.75	1590	2.16	738	460	260	8.4	2660	8.0	3.8
19...	.00	.85	2170	2.95	978	650	390	8.8	3560	8.2	3.3
30...	.03	1.1	1750	2.38	997	480	260	--	2970	8.3	2.2
JAN.											
20...	.07	1.0	1410	1.92	3330	380	190	8.1	2380	8.3	1.8
27...	.16	.93	1810	2.46	674	510	280	8.6	3050	8.2	2.9
30...	.07	.76	1720	2.34	799	470	240	--	2940	8.3	2.2
FEB.											
08...	.00	.68	1860	2.53	--	530	290	8.7	3170	8.2	2.9
11...	.00	.91	1710	2.33	656	450	250	8.8	2950	8.3	2.0
27...	.00	.64	1740	2.37	512	470	260	--	3030	8.1	3.4
MAR.											
04...	.03	.45	1870	2.54	389	500	300	9.3	3190	8.1	3.1
11...	1.3	.19	1550	2.11	2920	450	260	7.8	2600	7.7	7.3
31...	.07	.75	1930	2.62	532	510	310	9.4	3280	8.2	2.5
APR.											
06...	.03	.33	1910	2.60	511	500	290	8.9	3180	8.1	3.3
08...	.13	--	2170	2.95	393	600	390	9.4	3570	8.0	4.1
30...	--	.13	2040	2.77	132	640	420	8.1	3330	8.1	3.3
MAY											
02...	--	.13	2030	2.76	54.8	610	400	8.3	3330	8.1	3.3
09...	--	.14	2210	3.01	83.5	650	460	9.0	3580	8.0	3.8
20...	--	.18	2370	3.22	12.8	750	600	8.7	3720	8.0	3.0
JUNE											
08...	--	.33	1150	1.56	326	340	200	6.4	1910	8.1	2.1
15...	--	1.4	2030	2.76	121	470	310	11	3340	8.3	1.6
AUG.											
05...	--	.44	--	--	--	670	580	4.9	2570	7.5	5.4
09...	--	1.2	247	.34	41.3	140	33	1.0	404	8.0	2.1
21...	--	.32	1030	1.40	106	310	120	--	1750	8.1	2.9
SEP.											
02...	--	1.0	456	.62	76.3	170	63	3.0	783	8.0	2.1
14...	--	.19	2000	2.72	157	530	330	--	3230	8.2	2.5
23...	--	.14	1940	2.64	178	470	280	10	3190	8.3	1.9

ARKANSAS RIVER BASIN

07157740 CIMARRON RIVER NEAR BUTTERMILK, KANS.--Continued

SULFATE (MG/L AS SO₄) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	140	270	270	---	280	280	270	300	310	---	---	250
2	140	270	270	---	280	280	270	300	310	---	---	78
3	140	270	210	---	270	280	290	320	310	---	---	140
4	150	270	270	---	280	290	290	310	310	---	---	200
5	160	260	270	---	280	290	290	440	310	---	240	230
6	180	260	240	---	280	270	250	440	---	---	58	240
7	200	260	280	---	---	270	320	400	180	---	58	240
8	210	260	280	---	290	---	320	460	180	---	92	270
9	220	260	280	---	280	270	300	320	250	---	38	280
10	180	260	280	---	270	260	280	410	260	---	95	280
11	130	260	280	---	270	240	300	320	280	---	190	270
12	160	260	280	---	270	280	290	320	300	---	220	300
13	210	260	280	---	280	---	310	470	270	---	230	280
14	210	270	---	---	280	290	290	460	300	---	240	300
15	220	270	270	---	270	290	290	460	310	---	200	290
16	230	270	270	---	270	290	300	440	320	---	110	280
17	240	270	270	---	270	290	290	320	320	---	110	270
18	250	270	280	---	270	290	290	380	320	---	110	300
19	250	270	320	220	280	290	280	410	320	---	130	300
20	260	170	320	220	280	290	---	530	320	---	120	290
21	260	240	300	220	280	280	270	530	350	---	160	290
22	260	250	300	250	280	290	290	320	320	---	150	340
23	270	270	280	270	280	290	300	320	320	---	150	300
24	270	270	260	270	270	290	310	320	320	---	170	320
25	270	280	270	270	280	280	310	320	320	---	200	170
26	270	270	260	270	280	290	290	320	---	---	210	310
27	270	270	260	270	280	280	280	480	---	---	130	300
28	270	270	270	270	280	290	290	480	---	---	140	290
29	270	270	270	270	---	290	290	400	---	---	170	300
30	270	270	270	260	---	300	290	400	---	---	180	300
31	270	---	---	270	---	300	---	360	---	---	260	---
MONTH	220	260	270	---	280	280	290	390	300	---	150	270

DISSOLVED SO₄ DISCHARGE (TONS/DAY) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	118	60	95	---	117	61	65	15	0.84	---	---	47
2	113	58	95	---	115	60	64	15	0.75	---	---	21
3	93	54	105	---	114	61	67	14	0.67	---	---	115
4	83	51	450	---	115	60	57	14	1.7	---	---	105
5	66	53	302	---	115	54	64	19	3.0	---	0.64	73
6	59	63	180	---	116	56	60	20	---	---	43	48
7	57	67	186	---	---	60	57	20	56	---	3.5	32
8	50	70	169	---	93	---	59	22	53	---	3.0	36
9	42	69	149	---	98	88	57	13	73	---	100	37
10	102	70	129	---	109	303	46	13	79	---	38	33
11	351	68	130	---	100	379	43	8.6	53	---	36	29
12	238	68	137	---	91	258	34	6.9	37	---	29	26
13	186	67	133	---	84	---	30	9.4	30	---	9.2	23
14	138	62	---	---	86	206	23	7.8	25	---	7.8	23
15	110	62	113	---	82	167	22	6.4	17	---	72	21
16	101	58	112	---	83	142	22	6.6	12	---	33	19
17	93	58	150	---	85	127	21	4.4	8.5	---	30	22
18	93	69	131	---	76	118	20	5.0	5.7	---	25	28
19	89	103	150	78	68	118	21	4.4	3.4	---	24	29
20	89	196	118	101	79	120	---	3.6	2.4	---	16	30
21	83	238	150	148	80	115	214	2.4	1.9	---	13	30
22	81	206	115	134	77	122	102	1.1	0.69	---	24	34
23	79	183	184	125	77	117	64	0.93	0.34	---	52	29
24	68	161	198	115	66	113	43	1.7	0.17	---	80	31
25	66	139	161	110	65	108	33	3.6	0.15	---	158	21
26	66	125	143	110	78	100	24	3.2	---	---	141	36
27	63	123	155	102	78	98	20	3.9	---	---	45	36
28	63	110	144	106	63	95	17	3.2	---	---	110	35
29	64	101	138	104	---	90	16	1.9	---	---	93	36
30	63	98	145	125	---	83	15	1.5	---	---	49	36
31	61	---	---	119	---	78	---	1.2	---	---	57	---
MONTH	98	97	158	---	89	123	48	8.2	19	---	48	37

ARKANSAS RIVER BASIN

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07157740 CIMARRON RIVER NEAR BUTTERMILK, KANS.--Continued

CHLORIDE (MG/L AS CL) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	300	660	670	---	690	700	680	760	790	---	---	600
2	300	660	670	---	690	700	660	750	790	---	---	140
3	320	660	500	---	680	700	730	820	790	---	---	310
4	330	660	660	---	690	720	720	790	790	---	---	460
5	370	650	670	---	690	720	730	850	780	---	580	550
6	420	650	590	---	700	680	600	850	---	---	85	580
7	480	640	690	---	---	680	810	840	410	---	86	590
8	500	640	690	---	720	---	820	850	410	---	170	670
9	530	640	690	---	710	670	760	820	600	---	34	710
10	430	640	700	---	670	630	690	840	650	---	180	700
11	270	640	700	---	660	570	760	810	690	---	450	680
12	340	640	680	---	680	710	730	820	760	---	510	750
13	500	650	690	---	690	---	770	850	680	---	550	690
14	490	660	---	---	690	720	720	850	760	---	580	760
15	510	660	680	---	670	720	720	850	790	---	480	740
16	560	680	680	---	680	720	760	850	810	---	210	690
17	590	680	680	---	670	710	740	810	810	---	220	680
18	610	670	690	---	680	710	730	840	820	---	220	740
19	630	660	820	540	690	710	700	840	800	---	270	760
20	640	390	810	530	690	720	---	870	810	---	230	720
21	650	600	770	530	690	700	680	870	830	---	360	740
22	640	630	760	610	700	710	730	820	820	---	320	820
23	660	660	700	670	710	720	760	800	800	---	330	770
24	660	680	650	660	680	720	780	800	800	---	400	800
25	670	690	660	660	700	700	780	800	810	---	460	400
26	660	670	650	660	690	710	730	810	---	---	500	770
27	660	670	630	680	680	700	700	860	---	---	270	750
28	660	660	680	660	700	720	730	860	---	---	290	730
29	660	660	670	660	---	720	720	840	---	---	390	760
30	660	670	660	650	---	740	720	840	---	---	420	760
31	660	---	---	680	---	740	---	830	---	---	650	---
MONTH	530	650	680	---	690	700	730	830	740	---	340	660

DISSOLVED CL DISCHARGE (TONS/DAY) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	254	148	235	---	291	151	160	37	2.1	---	---	114
2	245	143	236	---	285	149	158	37	1.9	---	---	37
3	202	133	249	---	283	151	167	35	1.7	---	---	249
4	184	126	1110	---	285	149	142	34	4.3	---	---	247
5	149	131	749	---	285	135	160	37	7.6	---	1.6	177
6	135	155	439	---	288	139	147	39	---	---	64	118
7	134	166	462	---	---	149	144	43	130	---	5.1	79
8	119	172	421	---	232	---	149	41	123	---	5.6	90
9	101	170	371	---	245	219	144	33	179	---	90	91
10	235	172	323	---	269	745	115	27	195	---	73	81
11	737	168	324	---	247	921	107	22	132	---	84	73
12	529	168	341	---	227	642	84	18	92	---	69	65
13	443	165	330	---	209	---	75	17	75	---	22	58
14	328	152	---	---	213	515	58	14	62	---	19	58
15	264	152	281	---	202	418	56	12	42	---	169	52
16	245	144	277	---	207	356	55	13	31	---	65	48
17	227	144	373	---	210	317	54	11	21	---	59	55
18	229	171	326	---	189	296	51	11	14	---	50	70
19	219	255	380	189	170	294	53	9.1	8.7	---	50	72
20	220	446	300	242	198	300	---	5.8	6.1	---	32	74
21	206	582	379	356	199	286	532	4.0	4.5	---	29	76
22	199	506	289	327	193	303	255	2.9	1.8	---	52	85
23	195	452	458	311	193	291	161	2.4	0.86	---	114	72
24	167	400	488	285	163	283	109	4.3	0.43	---	183	78
25	164	346	399	271	161	270	82	9.0	0.39	---	370	47
26	163	310	355	273	194	250	61	8.1	---	---	337	92
27	157	305	383	253	193	244	49	6.9	---	---	94	89
28	157	272	357	263	156	237	43	5.8	---	---	236	87
29	158	251	343	258	---	225	41	4.1	---	---	211	90
30	156	243	359	310	---	208	39	3.2	---	---	112	90
31	152	---	---	295	---	197	---	2.7	---	---	141	---
MONTH	228	238	391	---	222	305	119	9	47	---	101	90

ARKANSAS RIVER BASIN

07157740 CIMARRON RIVER NEAR BUTTERMILK, KANS.--Continued

DISSOLVED SOLIDS (RESIDUE ON EVAPORATION, MG/L AT 180 DEG. C) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	881	1690	1710	---	1760	1780	1730	1940	2050	---	---	1570
2	887	1700	1720	---	1750	1780	1700	1930	2050	---	---	498
3	916	1700	1340	---	1740	1780	1840	2160	2070	---	---	898
4	958	1690	1690	---	1750	1820	1830	2060	2070	---	---	1240
5	1030	1660	1710	---	1750	1820	1860	2270	2020	---	1520	1440
6	1140	1660	1520	---	1780	1730	1550	2270	---	---	365	1520
7	1290	1650	1760	---	---	1730	2120	2230	1130	---	369	1520
8	1340	1640	1760	---	1820	---	2180	2280	1130	---	585	1710
9	1410	1640	1760	---	1800	1710	1960	2180	1570	---	239	1800
10	1160	1640	1790	---	1710	1620	1750	2240	1670	---	603	1780
11	810	1650	1780	---	1690	1490	1970	2120	1760	---	1210	1730
12	981	1650	1740	---	1730	1800	1840	2180	1940	---	1370	1920
13	1330	1670	1760	---	1750	---	1990	2290	1730	---	1450	1770
14	1300	1700	---	---	1750	1830	1820	2280	1970	---	1520	1970
15	1370	1700	1740	---	1710	1820	1820	2280	2050	---	1290	1870
16	1470	1730	1740	---	1730	1840	1960	2270	2140	---	674	1760
17	1540	1730	1740	---	1710	1810	1880	2150	2140	---	697	1730
18	1590	1720	1760	---	1740	1810	1850	2220	2170	---	692	1890
19	1610	1700	2170	1420	1770	1810	1780	2240	2110	---	804	1970
20	1650	1080	2140	1390	1760	1820	---	2330	2140	---	733	1830
21	1660	1550	1980	1390	1760	1780	1730	2330	2190	---	1020	1880
22	1650	1610	1950	1570	1780	1810	1840	2180	2170	---	934	2190
23	1700	1700	1780	1710	1800	1830	1970	2080	2100	---	940	1980
24	1690	1730	1670	1700	1730	1830	2030	2090	2100	---	1110	2090
25	1710	1750	1680	1680	1790	1790	2040	2090	2150	---	1240	1100
26	1700	1720	1680	1700	1750	1810	1860	2150	---	---	1330	2000
27	1690	1720	1630	1740	1740	1770	1780	2300	---	---	810	1930
28	1700	1690	1730	1690	1770	1840	1860	2300	---	---	863	1860
29	1700	1700	1720	1690	---	1830	1820	2230	---	---	1090	1940
30	1680	1720	1700	1670	---	1890	1820	2230	---	---	1140	1950
31	1700	---	---	1730	---	1900	---	2200	---	---	1670	---
MONTH	1390	1660	1750	---	1750	1790	1870	2200	1940	---	972	1710

DISSOLVED SOLIDS DISCHARGE (TONS/DAY) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	749	379	602	---	744	384	410	94	5.5	---	---	296
2	721	368	604	---	727	379	404	94	5.0	---	---	135
3	589	340	664	---	723	386	423	93	4.5	---	---	728
4	530	324	2860	---	727	378	360	89	11	---	---	667
5	419	336	1920	---	727	344	407	98	20	---	4.1	465
6	373	399	1140	---	735	355	382	104	---	---	276	308
7	360	427	1180	---	---	382	378	114	358	---	22	206
8	317	444	1070	---	590	---	394	111	338	---	19	231
9	266	439	946	---	623	560	371	88	465	---	632	233
10	644	444	822	---	690	1920	293	73	501	---	244	207
11	2230	433	826	---	634	2410	277	57	338	---	229	186
12	1510	433	871	---	580	1630	214	46	236	---	184	165
13	1180	423	844	---	534	---	193	46	192	---	59	148
14	878	391	---	---	543	1310	147	39	160	---	49	149
15	700	391	718	---	518	1060	143	32	110	---	454	131
16	641	368	708	---	528	903	143	34	81	---	209	123
17	591	368	952	---	537	806	137	30	57	---	188	140
18	592	437	832	---	483	752	130	29	38	---	159	178
19	566	655	1010	498	434	747	134	24	23	---	152	186
20	565	1240	791	640	504	762	---	16	16	---	99	187
21	529	1510	978	942	509	728	1360	11	12	---	82	193
22	512	1310	743	849	492	772	647	7.6	4.7	---	151	224
23	499	1160	1170	796	490	740	415	6.2	2.3	---	330	187
24	429	1020	1260	731	416	720	285	11	1.1	---	507	203
25	420	883	1020	696	411	687	214	24	1.0	---	1000	131
26	417	794	911	699	496	635	156	21	---	---	898	237
27	402	780	987	647	494	622	125	19	---	---	284	230
28	403	698	913	675	397	601	110	16	---	---	699	221
29	404	643	878	662	---	572	103	11	---	---	587	231
30	400	622	921	797	---	530	98	8.4	---	---	308	232
31	389	---	---	755	---	502	---	7.1	---	---	361	---
MONTH	620	616	1000	---	566	779	305	47	124	---	303	239

ARKANSAS RIVER BASIN

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07157740 CIMARRON RIVER NEAR BUTTERMILK, KANS.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1490	2860	2900	---	2970	3010	2920	3230	3340	---	---	2650
2	1500	2880	2910	---	2960	3010	2880	3220	3340	---	---	843
3	1550	2880	2260	---	2940	3020	3120	3460	3370	---	---	1520
4	1620	2860	2860	---	2960	3080	3090	3360	3370	---	---	2090
5	1750	2810	2890	---	2960	3080	3140	3580	3310	---	2570	2430
6	1930	2810	2580	---	3010	2930	2630	3580	---	---	618	2570
7	2190	2790	2970	---	---	2920	3420	3540	1920	---	624	2580
8	2260	2780	2980	---	3080	---	3480	3590	1910	---	989	2900
9	2380	2780	2980	---	3050	2900	3250	3480	2650	---	404	3040
10	1970	2780	3030	---	2900	2740	2960	3550	2830	---	1020	3020
11	1370	2800	3010	---	2860	2520	3260	3420	2980	---	2050	2920
12	1660	2800	2950	---	2930	3040	3120	3480	3230	---	2310	3200
13	2250	2820	2970	---	2960	---	3280	3600	2930	---	2450	2990
14	2200	2880	---	---	2960	3090	3080	3590	3260	---	2570	3260
15	2310	2880	2940	---	2900	3080	3080	3590	3340	---	2190	3150
16	2480	2920	2940	---	2930	3110	3250	3580	3440	---	1140	2970
17	2610	2920	2940	---	2900	3060	3160	3450	3440	---	1180	2920
18	2690	2910	2980	---	2940	3060	3130	3530	3470	---	1170	3170
19	2730	2870	3470	2400	2990	3060	3010	3550	3410	---	1360	3260
20	2790	1820	3440	2360	2980	3080	---	3650	3440	---	1240	3090
21	2810	2620	3270	2360	2980	3020	2930	3650	3500	---	1720	3160
22	2790	2730	3240	2660	3020	3060	3120	3480	3470	---	1580	3490
23	2870	2870	3010	2900	3040	3090	3260	3380	3400	---	1590	3270
24	2860	2930	2820	2880	2930	3090	3320	3390	3400	---	1870	3390
25	2890	2960	2850	2850	3030	3030	3330	3390	3450	---	2090	1860
26	2870	2910	2840	2880	2960	3060	3140	3450	---	---	2250	3290
27	2860	2910	2760	2940	2950	3000	3010	3610	---	---	1370	3220
28	2870	2860	2920	2860	3000	3110	3140	3610	---	---	1460	3140
29	2880	2880	2910	2860	---	3090	3080	3540	---	---	1840	3230
30	2850	2910	2870	2820	---	3170	3080	3540	---	---	1930	3240
31	2870	---	---	2920	---	3180	---	3510	---	---	2830	---
MONTH	2360	2810	2950	---	2970	3020	3130	3500	3180	---	1650	2860

TEMPERATURE (DEG. C) OF WATER , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
(ONCE-DAILY)

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

ARKANSAS RIVER BASIN

07157940 BLUFF CREEK NEAR BUTTERMILK, KANS.

LOCATION.--Lat 37°01'55", long 99°28'45", in NW 1/4 sec.3, T.35 S., R.20 W., Comanche County, Kansas, at gaging station at county road bridge, 2.2 mi (3.5 km) north of Kansas-Oklahoma State line, 11.3 mi (18.2 km) southwest of Buttermilk, and at mile 0.3 (0.5 km).

DRAINAGE AREA.--657 mi² (1,702 km²), of which 76 mi² (197 km²) is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: August 1973 to current year.

Water temperatures: August 1973 to current year.

EXTREMES, Current year.--Specific conductance: Maximum, 2,290 micromhos/cm July 13; minimum, 273 micromhos/cm Oct. 11.

Water temperatures: Maximum, 34.0°C July 20; minimum, freezing point on Jan. 3, 5, 10, and 12.

REMARKS.--Continuous monitor records for specific conductance are collected for this station. Records of maximum and minimum specific conductance values are available in district office in Oklahoma City, Okla.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	INSTANTANEOUS DISCHARGE (CFS)	DIS-SOLVED CALCIUM (MG/L)	DIS-SOLVED MAGNESIUM (MG/L)	DIS-SOLVED SODIUM (MG/L)	BICARBONATE (MG/L)	CARBONATE (MG/L)	ALKALINITY AS CaCO ₃ (MG/L)	DIS-SOLVED SULFATE (MG/L)	DIS-SOLVED CHLORIDE (MG/L)	DIS-SOLVED NITRATE (MG/L)	DIS-SOLVED NITRATE (MG/L)	DIS-SOLVED NITRITE (MG/L)
OCT.												
08...	102	120	29	49	299	0	245	230	42	.38	1.7	.00
11...	2660	38	6.5	7.9	128	0	105	30	7.4	.81	3.6	.01
25...	77	120	31	51	312	0	256	240	44	.31	1.4	.01
NOV.												
07...	69	84	30	51	192	0	157	220	40	.49	2.2	.01
20...	394	62	17	21	178	0	146	100	18	.60	2.7	.01
25...	95	100	30	53	267	0	219	210	47	.60	2.7	.01
DEC.												
03...	163	46	8.6	13	147	0	121	43	12	.38	1.7	.00
12...	188	120	29	46	311	0	255	210	37	.66	2.9	.02
31...	64	140	32	55	318	0	261	250	53	.86	3.8	.00
JAN.												
01...	64	140	34	57	331	0	271	240	57	.88	3.9	.00
17...	82	96	26	--	268	0	220	160	27	.75	3.3	.00
27...	72	110	29	45	293	0	240	200	35	.55	2.4	.00
FEB.												
01...	72	110	29	50	289	0	237	190	39	.61	2.7	.00
16...	60	100	28	46	276	0	226	200	36	.55	2.4	.00
22...	51	120	30	52	300	0	246	220	41	.70	3.1	.00
MAR.												
01...	55	110	30	54	287	0	235	210	46	.60	2.7	.06
12...	215	80	23	37	239	0	196	--	26	.92	4.1	.02
21...	82	120	31	51	299	0	245	230	35	.63	2.8	.02
APR.												
06...	56	110	30	45	281	0	230	200	37	--	--	--
14...	49	110	30	47	276	0	226	210	38	--	--	--
21...	221	59	14	26	182	0	149	89	17	--	--	--
MAY												
15...	27	110	13	51	246	0	202	--	47	.36	1.6	.00
21...	19	140	33	58	271	0	222	290	56	.35	1.6	.01
26...	23	88	28	47	191	0	157	220	43	.04	.18	.00
JUNE												
08...	90	60	19	28	174	0	143	120	19	--	--	--
18...	29	99	32	59	184	0	151	260	59	--	--	--
30...	7.5	200	47	110	212	0	174	520	130	--	--	--
JULY												
07...	2.8	200	59	150	143	0	117	580	240	--	--	--
20...	4.7	230	60	180	198	0	162	610	280	--	--	--
25...	24	110	23	31	133	0	109	--	30	--	--	--
AUG.												
03...	2.6	250	58	140	224	0	184	640	200	--	--	--
09...	132	49	7.9	7.9	124	0	102	63	5.8	--	--	--
13...	8.4	140	33	60	252	0	207	290	64	--	--	--
SEP.												
03...	63	66	13	23	220	0	180	67	16	--	--	--
15...	15	100	24	47	222	0	182	190	44	--	--	--
23...	13	120	27	52	266	0	218	230	51	--	--	--

ARKANSAS RIVER BASIN

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07157940 BLUFF CREEK NEAR BUTTERMILK, KANS.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	DIS- SOLVED NITRITE (NO2) (MG/L)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	CARBON DIOXIDE (CO2) (MG/L)
OCT.											
08...	.00	.38	652	.89	180	420	170	1.0	959	8.3	2.4
11...	.03	.82	191	.26	1370	120	17	.3	284	7.8	3.2
25...	.03	.32	684	.93	142	430	170	1.1	1000	8.3	2.5
NOV.											
07...	.03	.50	560	.76	104	330	180	1.2	858	8.1	2.4
20...	.03	.61	344	.47	366	220	79	.6	537	7.6	7.2
25...	.03	.61	625	.85	160	370	150	1.2	964	8.2	2.7
DEC.											
03...	.00	.38	225	.31	99.0	150	30	.5	359	7.7	4.7
12...	.07	.68	642	.87	326	420	160	1.0	949	8.2	3.1
31...	.00	.86	734	1.00	127	480	220	1.1	1090	8.1	4.0
JAN.											
01...	.00	.88	732	1.00	126	490	220	1.1	1090	8.2	3.3
17...	.00	.75	522	.71	116	350	130	1.1	795	8.2	2.7
27...	.00	.55	595	.81	116	390	150	1.0	913	8.3	2.4
FEB.											
01...	.00	.61	602	.82	117	390	160	1.1	906	8.2	2.9
16...	.00	.55	592	.81	95.9	370	140	1.0	893	8.1	3.5
22...	.00	.70	657	.89	90.5	420	180	1.1	976	8.1	3.8
MAR.											
01...	.20	.66	635	.86	94.3	400	160	1.2	921	8.1	3.6
12...	.07	.94	471	.64	273	290	98	.9	727	7.8	6.1
21...	.07	.65	654	.89	145	430	180	1.1	955	8.2	3.0
APR.											
06...	--	.40	637	.87	96.3	400	170	1.0	932	8.2	2.8
14...	--	.42	634	.86	83.9	400	170	1.0	922	8.2	2.8
21...	--	.72	340	.46	203	210	56	.8	512	7.6	7.3
MAY											
15...	.00	.36	653	.89	48.0	330	130	1.2	949	8.2	2.5
21...	.03	.36	774	1.05	40.5	490	260	1.1	1090	8.2	2.7
26...	.00	.04	566	.77	35.1	340	180	1.1	832	7.8	4.8
JUNE											
08...	--	.85	378	.51	91.9	230	85	.8	573	8.4	1.1
18...	--	.69	667	.91	52.8	380	230	1.3	1040	8.1	2.3
30...	--	.39	1290	1.75	26.1	690	520	1.8	1680	8.0	3.4
JULY											
07...	--	.09	1470	2.00	11.1	740	630	2.4	2050	7.9	2.9
20...	--	.69	1590	2.16	20.2	820	660	2.7	2220	8.1	2.5
25...	--	1.3	611	.83	40.3	370	260	.7	844	7.6	5.3
AUG.											
03...	--	.59	--	--	--	860	680	2.1	2000	7.7	7.2
09...	--	.77	232	.32	82.7	160	53	.3	329	7.7	4.0
13...	--	.54	780	1.06	17.7	490	280	1.2	1100	8.1	3.2
SEP.											
03...	--	.48	333	.45	56.6	220	38	.7	522	8.4	1.4
15...	--	.34	590	.80	23.9	350	170	1.1	873	7.8	5.6
23...	--	.53	688	.94	24.1	410	190	1.1	988	8.2	2.7

ARKANSAS RIVER BASIN

07157940 BLUFF CREEK NEAR BUTTERMILK, KANS.--Continued

SULFATE (MG/L AS SO₄) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	140	210	210	260	200	200	160	200	280	530	570	140
2	140	220	210	240	190	200	190	190	280	550	580	110
3	140	220	49	220	190	200	190	190	250	570	590	94
4	140	220	220	240	190	190	170	190	260	560	570	110
5	190	220	140	230	200	190	170	180	190	560	510	120
6	190	---	140	220	200	190	180	180	---	570	320	140
7	210	210	170	210	220	190	190	200	100	580	330	130
8	220	---	190	200	220	180	180	190	100	570	450	150
9	210	220	200	220	190	190	140	190	110	570	150	140
10	170	220	200	220	190	220	180	200	130	570	79	120
11	34	220	210	230	200	---	190	210	160	580	130	140
12	62	210	210	250	190	130	160	210	180	570	200	180
13	140	210	210	190	190	170	190	230	170	610	310	67
14	180	210	---	190	190	200	200	230	190	600	390	210
15	210	210	210	190	190	200	180	220	210	600	150	220
16	220	220	210	170	190	200	160	220	230	580	190	180
17	220	210	210	140	190	210	190	240	240	580	300	160
18	220	210	210	160	190	200	180	240	260	600	320	180
19	230	220	270	160	200	210	190	250	270	600	380	260
20	230	84	270	170	200	210	90	260	310	610	390	250
21	230	160	190	180	200	220	83	280	350	610	480	180
22	230	180	200	180	220	---	120	280	360	580	500	140
23	230	210	190	190	200	210	150	220	410	590	110	230
24	230	210	200	190	200	210	190	220	410	610	120	230
25	230	210	200	190	210	210	180	220	420	180	140	230
26	230	230	---	190	200	200	190	170	430	100	120	180
27	230	210	210	190	200	210	190	240	470	300	89	240
28	230	210	210	180	200	200	180	240	520	510	88	200
29	230	210	210	180	---	200	160	230	520	520	130	220
30	230	210	210	180	---	200	160	250	520	410	120	220
31	220	---	270	190	---	200	---	280	---	550	140	---
MONTH	190	210	200	200	200	200	170	220	290	530	290	170

DISSOLVED SO₄ DISCHARGE (TONS/DAY) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	106	40	43	31	38	29	26	28	11	9.8	4.0	7.5
2	94	42	42	32	37	29	31	27	11	8.3	3.9	20
3	84	39	22	30	36	30	29	27	8.8	7.5	3.8	19
4	70	39	552	26	35	28	25	25	12	6.3	3.7	13
5	73	40	92	22	36	28	26	22	12	6.0	4.7	10
6	65	---	68	17	36	27	27	22	---	5.5	26	9.6
7	65	39	60	22	37	27	28	23	85	4.7	5.2	8.1
8	60	---	57	34	36	29	26	20	28	4.0	5.6	8.2
9	53	38	52	33	33	34	21	20	23	3.6	35	7.4
10	92	38	50	25	33	171	26	20	23	3.2	6.8	6.0
11	172	37	49	21	33	---	26	19	24	2.8	6.1	6.7
12	174	36	45	26	32	91	22	18	23	3.2	5.3	7.9
13	120	36	44	25	32	76	26	19	22	3.8	6.4	2.7
14	107	37	---	29	32	80	27	18	22	4.4	7.1	8.5
15	97	37	40	30	31	71	23	16	21	5.0	7.2	8.8
16	88	36	38	28	31	62	21	16	21	5.5	9.5	7.5
17	81	35	36	32	31	57	24	16	20	5.6	12	6.8
18	74	34	33	44	31	54	22	15	20	6.3	9.6	7.8
19	71	46	38	43	31	53	23	15	20	6.8	8.0	11
20	66	70	38	43	30	50	90	15	20	7.4	6.6	10.0
21	61	61	33	43	30	48	75	14	20	8.4	6.4	6.8
22	57	52	35	41	32	---	38	13	18	8.8	23	4.9
23	55	54	33	42	29	42	36	11	18	11	7.7	8.0
24	52	53	34	38	27	41	39	13	17	12	7.6	8.2
25	49	52	35	38	30	41	33	14	17	11	13	8.1
26	47	55	---	38	30	39	34	11	15	9.4	8.1	6.4
27	46	49	37	37	30	39	32	15	15	8.8	5.5	8.5
28	45	47	35	36	30	38	29	12	14	8.5	26	6.9
29	45	45	34	37	---	35	25	10	12	5.7	19	9.0
30	45	44	33	37	---	33	24	11	10	3.8	11	8.3
31	43	---	35	37	---	32	---	10	---	4.6	9.4	---
MONTH	76	44	60	33	32	49	31	17	20	6.5	10	8.7

07157940 BLUFF CREEK NEAR BUTTERMILK, KANS.--Continued

CHLORIDE (MG/L AS CL) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	27	39	40	53	37	38	30	37	57	160	220	28
2	28	43	39	48	36	37	36	36	57	190	230	22
3	28	42	9.1	42	36	38	34	36	50	220	250	18
4	28	43	42	47	36	36	31	35	51	200	220	21
5	35	43	27	46	36	36	32	33	34	200	120	23
6	36	---	27	41	38	35	33	34	---	220	66	27
7	41	40	31	40	43	34	35	37	20	230	69	26
8	42	---	35	37	42	33	32	35	20	230	98	29
9	40	42	37	42	36	35	29	35	22	230	29	28
10	32	42	39	42	36	41	34	37	26	230	15	25
11	6.0	41	40	44	37	---	34	40	30	250	26	27
12	12	40	40	50	35	26	30	40	33	220	37	34
13	28	40	41	34	36	31	35	44	31	290	63	13
14	33	41	---	34	36	37	38	44	34	280	82	40
15	39	41	40	35	36	37	33	42	39	270	29	42
16	41	42	40	31	35	38	31	43	45	240	34	34
17	43	41	40	29	36	39	35	48	48	240	61	30
18	43	40	40	30	35	37	34	47	52	280	67	33
19	44	41	54	31	37	40	35	50	55	260	80	51
20	44	16	54	31	37	40	18	53	64	290	84	49
21	44	30	35	32	37	42	16	57	72	290	110	33
22	44	33	37	33	43	---	23	56	76	240	110	27
23	44	39	36	36	37	40	29	42	88	250	21	44
24	44	40	38	34	37	40	34	42	88	280	24	45
25	45	39	38	36	41	41	32	43	89	32	27	45
26	44	44	---	36	37	39	36	31	93	20	23	34
27	44	40	41	36	37	40	36	46	100	61	17	48
28	44	41	39	33	38	38	34	47	140	120	17	37
29	44	41	39	34	---	37	30	44	140	140	26	43
30	44	40	39	33	---	37	30	49	140	87	24	42
31	43	---	54	34	---	37	---	56	---	180	28	---
MONTH	37	39	38	38	37	37	32	43	62	210	74	33

DISSOLVED CL DISCHARGE (TONS/DAY) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	7.5	8.3	6.1	7.1	5.5	4.9	5.4	2.2	3.0	1.6	1.5
2	19	8.2	8.1	6.3	6.9	5.5	5.7	5.1	2.2	2.9	1.6	3.9
3	17	7.5	4.1	5.7	6.7	5.6	5.3	5.0	1.7	2.8	1.6	3.7
4	14	7.6	106	5.1	6.5	5.2	4.7	4.5	2.5	2.3	1.4	2.5
5	13	7.8	18	4.3	6.7	5.2	4.7	4.1	2.1	2.2	1.1	2.0
6	12	---	13	3.2	6.7	5.0	4.9	4.0	---	2.1	5.3	1.9
7	13	7.4	11	4.3	7.1	4.9	5.3	4.2	17	1.9	1.1	1.6
8	12	---	11	6.4	7.0	5.4	4.7	3.7	5.6	1.6	1.2	1.6
9	10	7.3	9.8	6.4	6.1	6.3	4.1	3.6	4.6	1.4	6.9	1.5
10	17	7.3	9.5	4.7	6.2	33	4.8	3.7	4.6	1.3	1.3	1.2
11	31	7.0	9.2	4.1	6.1	---	4.8	3.7	4.6	1.2	1.2	1.3
12	33	6.8	8.6	5.1	5.9	18	4.2	3.4	4.3	1.3	1.0	1.5
13	24	6.9	8.4	4.6	6.0	14	4.9	3.7	4.0	1.8	1.3	0.52
14	20	7.0	---	5.3	5.9	15	5.1	3.5	4.0	2.0	1.5	1.6
15	18	7.0	7.7	5.5	5.7	13	4.2	3.1	4.0	2.2	1.4	1.7
16	17	7.0	7.2	5.2	5.7	12	3.9	3.0	4.1	2.2	1.8	1.4
17	16	6.7	7.0	6.3	5.8	11	4.4	3.2	4.0	2.3	2.5	1.3
18	14	6.5	6.3	8.2	5.8	10	4.1	3.0	4.1	2.9	2.0	1.4
19	14	8.8	7.6	8.1	5.7	10	4.3	3.0	4.0	3.0	1.7	2.2
20	13	14	7.6	8.0	5.7	9.4	17	3.0	4.2	3.5	1.4	2.0
21	12	12	6.1	7.8	5.6	9.2	14	2.9	4.1	4.0	1.4	1.2
22	11	9.5	6.5	7.6	6.3	---	7.4	2.7	3.7	3.6	5.1	0.96
23	11	10	6.2	7.9	5.5	8.0	7.1	2.1	3.8	4.5	1.5	1.5
24	10	10	6.5	7.0	5.1	7.8	7.3	2.5	3.6	5.7	1.5	1.6
25	9.6	9.8	6.6	7.1	5.8	7.8	6.0	2.6	3.6	2.1	2.6	1.6
26	9.2	11	---	7.1	5.6	7.4	6.3	1.9	3.3	1.8	1.6	1.2
27	8.9	9.3	7.1	7.0	5.6	7.5	6.0	2.9	3.3	1.8	1.1	1.7
28	8.7	8.9	6.6	6.7	5.7	7.1	5.4	2.4	3.7	2.0	5.0	1.3
29	8.8	8.7	6.5	6.8	---	6.6	4.8	2.0	3.2	1.5	3.7	1.7
30	8.6	8.3	6.3	6.8	---	6.2	4.5	2.1	2.8	0.82	2.2	1.6
31	8.4	---	7.1	6.8	---	6.1	---	2.1	---	1.5	1.9	---
MONTH	15	8.4	12	6.2	6.1	9.2	5.8	3.3	4.1	2.4	2.1	1.7

ARKANSAS RIVER BASIN

07157940 BLUFF CREEK NEAR BUTTERMILK, KANS.--Continued

DISSOLVED SOLIDS (RESIDUE ON EVAPORATION, MG/L AT 180 DEG. C) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	483	615	623	716	596	603	534	602	746	1340	1460	486
2	496	646	616	678	591	598	590	590	746	1400	1480	396
3	496	632	219	637	589	605	577	591	693	1450	1520	350
4	496	640	636	672	591	589	542	585	701	1420	1460	381
5	582	642	474	663	594	594	558	569	578	1420	1260	410
6	592	---	472	632	604	583	569	574	---	1450	810	480
7	626	623	547	618	642	578	587	601	370	1480	840	455
8	635	---	587	597	635	570	562	581	368	1480	1130	518
9	620	634	597	638	592	582	504	588	410	1470	509	502
10	555	636	611	634	594	631	574	596	455	1470	307	438
11	176	630	619	651	596	---	577	623	525	1510	466	485
12	257	620	618	693	588	458	531	619	569	1460	599	575
13	486	619	625	578	591	548	587	649	552	1600	789	273
14	572	625	---	578	589	597	606	653	579	1580	965	622
15	615	625	622	587	591	597	569	639	613	1560	512	633
16	630	634	623	545	586	609	537	645	655	1500	578	576
17	641	626	623	504	594	612	585	678	678	1500	775	528
18	643	619	622	536	588	600	575	672	708	1570	822	568
19	649	630	724	537	596	623	581	693	731	1550	944	700
20	649	322	724	550	599	619	339	716	800	1600	986	686
21	651	531	585	563	600	632	320	746	871	1610	1200	569
22	648	572	600	566	644	---	420	739	913	1500	1230	484
23	651	613	589	591	600	619	511	639	1030	1530	384	651
24	553	620	606	578	596	623	577	635	1030	1590	433	661
25	559	617	606	589	626	627	559	640	1040	559	483	657
26	651	648	---	591	599	610	591	550	1080	374	412	575
27	650	620	627	591	599	619	589	667	1160	775	336	678
28	652	626	615	572	607	607	576	673	1290	1250	332	595
29	654	626	616	573	---	602	535	648	1290	1290	467	642
30	649	622	612	569	---	600	527	686	1300	1020	431	639
31	645	---	724	578	---	597	---	739	---	1380	490	---
MONTH	583	611	599	600	601	598	543	640	775	1380	788	540

DISSOLVED SOLIDS DISCHARGE (TONS/DAY) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	371	118	128	83	116	88	86	86	28	25	10	26
2	328	122	126	90	113	89	94	84	28	21	10	72
3	293	114	98	86	110	90	90	81	24	19	9.9	70
4	246	114	1610	73	107	86	82	76	34	16	9.4	47
5	225	116	323	63	109	85	83	71	36	15	12	37
6	198	---	237	49	108	83	85	68	---	14	66	34
7	193	114	195	67	106	83	87	68	312	12	13	28
8	175	---	174	103	106	92	82	63	104	10	14	28
9	157	111	159	97	101	105	72	60	84	9.2	122	26
10	295	110	150	72	101	501	82	60	82	8.4	26	21
11	891	107	144	60	100	---	81	57	81	7.4	21	24
12	722	106	133	71	98	319	75	53	74	8.3	16	25
13	422	107	130	78	99	249	81	54	70	9.9	17	11
14	335	108	---	89	97	244	82	51	67	12	18	25
15	289	108	119	92	94	216	72	47	63	13	25	26
16	257	106	111	91	95	187	68	45	60	14	30	23
17	234	103	108	112	95	172	73	46	57	15	31	23
18	215	102	97	145	95	162	70	44	55	17	24	25
19	203	134	102	142	93	158	72	41	53	18	20	30
20	189	269	102	141	92	147	337	41	52	19	16	28
21	176	204	101	137	91	140	286	38	49	22	16	22
22	164	164	105	131	94	---	134	36	44	23	57	17
23	157	161	102	129	89	125	126	31	44	27	28	23
24	150	157	103	119	84	121	123	38	42	32	27	23
25	141	153	105	118	90	120	106	40	42	36	46	23
26	135	158	---	116	91	117	104	34	38	34	29	20
27	132	144	108	115	91	117	99	41	38	23	21	24
28	129	137	103	114	90	113	92	35	35	21	98	21
29	129	134	101	116	---	106	84	30	30	14	66	26
30	128	129	99	117	---	101	80	30	26	9.6	40	24
31	125	---	96	115	---	98	---	28	---	12	33	---
MONTH	252	132	182	101	98	149	103	51	61	17	31	28

ARKANSAS RIVER BASIN

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07157940 BLUFF CREEK NEAR BUTTERMILK, KANS.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	743	917	928	1050	892	901	810	900	1090	1770	1990	748
2	760	958	918	1000	885	895	884	884	1090	1880	2030	616
3	761	940	340	946	883	904	867	886	1020	1970	2100	545
4	760	950	945	992	885	883	821	877	1030	1910	1980	593
5	874	953	731	980	890	889	842	856	868	1920	1630	638
6	887	---	729	939	903	875	857	863	---	1970	1170	740
7	931	927	828	921	953	869	880	899	575	2030	1210	706
8	944	---	880	894	943	858	848	872	573	2020	1490	789
9	924	942	893	948	887	874	771	881	637	2010	778	768
10	838	945	912	942	889	938	863	892	706	2010	477	682
11	273	937	923	965	892	---	867	927	799	2080	721	746
12	400	924	921	1020	881	710	807	922	856	1990	896	865
13	748	922	930	869	885	829	880	962	834	2230	1150	424
14	861	930	---	869	883	894	905	967	870	2200	1330	926
15	917	930	926	880	885	894	856	949	914	2160	781	941
16	937	942	928	825	879	909	815	957	970	2050	868	866
17	951	932	928	771	889	913	878	1000	1000	2060	1130	803
18	954	922	926	813	881	898	865	992	1040	2190	1190	855
19	962	937	1060	814	892	927	873	1020	1070	2150	1310	1030
20	962	501	1060	831	896	922	528	1050	1160	2230	1350	1010
21	965	807	878	849	898	940	497	1090	1240	2250	1560	857
22	960	860	898	853	955	---	654	1080	1280	2060	1590	745
23	965	915	883	886	898	922	780	949	1390	2110	597	964
24	967	924	905	869	892	927	867	944	1390	2220	674	977
25	975	920	905	883	931	933	844	950	1410	844	744	973
26	965	961	---	885	896	911	885	832	1440	582	641	864
27	963	924	933	885	896	922	883	986	1520	1130	522	1000
28	966	932	917	860	907	906	866	994	1680	1610	516	891
29	968	932	918	862	---	900	812	960	1680	1680	722	952
30	962	926	913	856	---	898	801	1010	1700	1380	670	949
31	957	---	1060	868	---	894	---	1080	---	1850	752	---
MONTH	871	911	894	898	898	894	820	949	1100	1890	1110	815

TEMPERATURE (DEG. C) OF WATER , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
(ONCE-DAILY)

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

ARKANSAS RIVER BASIN

07157950 CIMARRON RIVER NEAR BUFFALO, OKLA.

LOCATION.--Lat 36°55'28", long 99°23'56", in NW 1/4 SW 1/4 sec.7, T.28 N., R.20 W., Harper County, at bridge on U.S. Highway 64, 7 mi (11.3 km) downstream from gaging station, 14 mi (22.5 km) east of Buffalo, and at mile 289.0 (465.0 km).

DRAINAGE AREA.--11,930 mi² (30,899 km²), of which 4,813 mi² (12,466 km²) is probably noncontributing.

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

EXTREMES, Current year.--Specific conductance: Maximum, 41,500 micromhos/cm Aug. 23; minimum, 1,130 micromhos/cm Oct. 10.
Water temperatures: Maximum, 38.0°C Aug. 14; minimum, freezing point on many days during December and January.

Period of record.--Specific conductance (1969-74): Maximum, 72,800 micromhos/cm May 22, 1971; minimum, 1,130 micromhos/cm Oct. 10, 1973.
Water temperatures: Maximum, 38.0°C Aug. 14, 1974; minimum, freezing point on many days during months.

REMARKS.--Continuous monitor records for water temperature and specific conductance are collected for this station. Records of maximum and minimum specific conductance values and water temperature values are available in district office in Oklahoma City, Okla. No flow July 3-24, July 28-29, Aug. 1-4.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	INSTANTANEOUS DISCHARGE (CFS)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CaCO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	DIS-SOLVED NITRATE (NO3) (MG/L)	DIS-SOLVED NITRITE (N) (MG/L)
OCT.												
05...	332	100	32	500	249	0	204	190	760	.55	2.4	.01
15...	450	120	39	840	264	0	217	240	1300	.33	1.5	.03
25...	216	130	46	670	277	0	227	290	1000	.20	.89	.09
NOV.												
05...	131	140	49	1100	276	0	226	280	--	.67	1.6	.01
15...	131	110	46	840	208	0	171	310	--	.31	1.4	.02
25...	211	130	48	930	275	0	226	260	1500	.57	2.5	.02
DEC.												
05...	674	90	36	780	184	1	153	210	1200	.85	3.8	.02
15...	174	140	49	970	290	0	238	290	1500	.71	3.1	.02
25...	181	130	47	1100	274	0	225	280	1700	.96	4.3	.01
JAN.												
15...	131	160	59	2500	284	0	233	390	4000	.84	3.7	.00
25...	225	140	49	1100	287	0	235	340	1700	.82	3.6	.00
31...	227	130	47	--	267	3	224	300	1600	.65	2.9	.01
FEB.												
05...	183	130	50	1100	270	0	221	310	1700	.59	2.6	.03
15...	180	130	46	860	268	0	220	300	1300	.54	2.4	.00
25...	136	120	47	670	269	0	221	300	1000	.51	2.3	.01
MAR.												
08...	200	180	62	--	205	0	168	520	9000	.23	1.0	.11
15...	312	140	58	1400	284	0	233	320	2200	.29	1.3	.03
25...	188	140	53	--	284	0	233	340	1500	.51	2.3	.03
APR.												
05...	140	120	53	640	254	0	208	340	1000	--	--	--
15...	79	120	53	840	212	0	174	360	1300	--	--	--
27...	104	150	59	--	251	0	206	400	2800	--	--	--
MAY												
05...	66	140	55	1100	226	0	185	370	1700	--	--	--
15...	35	140	51	940	208	0	171	380	1500	--	--	--
25...	42	250	92	--	186	0	153	640	13000	--	--	--
JUNE												
05...	29	190	68	3900	196	0	161	520	6200	--	--	--
15...	46	98	91	1100	204	0	167	330	1700	--	--	--
25...	8.3	200	57	2100	167	0	137	--	3400	--	--	--
JULY												
01...	1.8	480	100	4500	164	0	135	1000	7400	--	--	--
AUG.												
09...	527	73	19	960	117	0	96	--	1500	--	--	--
16...	194	56	22	230	203	0	167	110	320	--	--	--
25...	248	110	39	1800	212	0	174	--	2600	--	--	--
SEP.												
05...	254	120	48	1600	215	0	176	290	2400	--	--	--
15...	62	190	66	2600	206	0	169	470	4200	--	--	--
25...	54	160	59	--	225	0	185	420	3100	--	--	--

ARKANSAS RIVER BASIN

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07157950 CIMARRON RIVER NEAR BUFFALO, OKLA.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	DIS- SOLVED NITRITE (NO ₂) (MG/L)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	CARBON DIOXIDE (CO ₂) (MG/L)
OCT.											
05...	.03	.56	1770	2.41	1590	380	180	11	3120	8.3	2.0
15...	.10	.36	2750	3.74	3340	460	240	17	4870	8.3	2.1
25...	.30	.29	2430	3.30	1420	510	290	13	3920	8.3	2.2
NOV.											
05...	.03	.38	3630	4.94	1280	550	330	20	6000	8.2	2.8
15...	.07	.33	2860	3.89	1010	460	290	17	4950	8.1	2.6
25...	.07	.59	3080	4.19	1760	520	300	18	5340	8.2	2.8
DEC.											
05...	.07	.87	2530	3.44	4600	370	220	18	4330	8.4	1.2
15...	.07	.73	3210	4.37	1510	550	310	18	5360	8.3	2.3
25...	.03	.97	3400	4.62	1660	520	290	21	5590	8.1	3.5
JAN.											
15...	.00	.84	7350	10.0	2600	640	410	43	12800	8.2	2.9
25...	.00	.82	3500	4.76	2130	550	320	20	6100	8.3	2.3
31...	.03	.66	3160	4.30	1940	520	290	--	5500	8.4	1.7
FEB.											
05...	.10	.62	3460	4.71	1710	530	310	21	6120	8.2	2.7
15...	.00	.54	2840	3.86	1380	510	290	17	4780	8.3	2.2
25...	.03	.52	2380	3.24	874	490	270	13	4110	8.2	2.7
MAR.											
08...	.36	.34	15800	21.5	8530	700	540	--	26100	8.3	1.6
15...	.10	.32	4490	6.11	3780	590	360	25	7360	8.3	2.3
25...	.10	.54	3160	4.30	1600	570	330	--	5510	8.3	2.3
APR.											
05...	--	.09	2400	3.26	907	520	310	12	4050	8.0	4.1
15...	--	.03	--	--	--	520	340	16	4880	8.0	3.4
27...	--	.08	5300	7.21	1490	620	410	--	9180	8.3	2.0
MAY											
05...	--	.13	3580	4.87	638	580	390	20	5830	8.2	2.3
15...	--	.07	3140	4.27	297	560	390	17	5220	8.1	2.6
25...	--	.09	21200	28.8	2400	1000	850	--	30200	8.2	1.9
JUNE											
05...	--	.07	11100	15.1	869	750	590	62	16700	8.3	1.6
15...	--	.11	3490	4.75	433	620	450	19	5680	8.3	1.6
25...	--	.26	--	--	--	730	600	34	10400	8.2	1.7
JULY											
01...	--	.28	14400	19.6	70.0	1600	1500	49	20600	7.9	3.3
AUG.											
09...	--	2.8	2690	3.66	3830	260	160	26	4680	8.0	1.9
16...	--	1.6	896	1.22	469	230	64	6.6	1520	7.7	6.5
25...	--	.61	4830	6.57	3230	440	260	38	8070	7.7	6.8
SEP.											
05...	--	.24	4920	6.69	3370	500	320	31	8080	8.2	2.2
15...	--	.03	7890	10.7	1320	750	580	41	12400	8.3	1.7
25...	--	.07	6050	8.23	882	640	460	--	9700	8.2	2.3

ARKANSAS RIVER BASIN

07157950 CIMARRON RIVER NEAR BUFFALO, OKLA.--Continued

SULFATE (MG/L AS SO4) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	190	310	300	370	310	310	320	330	330	500	---	370
2	220	320	360	320	320	310	290	390	330	---	---	430
3	190	230	360	310	300	320	310	370	340	---	---	330
4	170	320	360	290	300	310	310	320	450	---	---	340
5	180	320	310	330	320	260	260	320	450	---	---	340
6	260	310	290	330	330	310	310	330	320	---	---	340
7	260	320	320	340	280	300	310	320	330	---	---	360
8	240	330	330	360	310	540	320	320	190	---	---	360
9	380	320	330	340	320	350	310	320	300	---	290	380
10	70	270	320	360	290	460	310	340	200	---	260	390
11	220	320	330	350	280	320	320	320	210	---	310	410
12	150	320	330	340	320	310	350	320	250	---	310	400
13	220	310	320	350	310	320	330	320	430	---	210	370
14	290	310	320	360	310	330	330	320	330	---	300	360
15	290	290	310	370	300	340	310	310	320	---	310	400
16	290	240	310	390	320	310	310	310	320	---	130	400
17	290	290	320	410	310	390	330	310	320	---	91	430
18	310	310	330	340	320	330	340	310	320	---	97	390
19	310	330	350	300	300	310	340	360	330	---	110	350
20	310	330	360	280	310	320	360	320	---	---	130	340
21	310	250	370	300	320	320	270	320	360	---	180	340
22	310	260	340	320	240	330	320	320	370	---	540	340
23	310	270	340	310	260	300	320	320	380	---	720	340
24	230	320	320	320	230	310	310	530	370	---	380	350
25	240	310	310	320	250	320	320	620	380	---	350	370
26	310	320	330	320	310	320	340	420	390	---	240	380
27	300	310	330	310	300	330	340	350	410	---	240	380
28	250	260	340	350	290	320	330	340	440	---	360	420
29	250	280	330	320	---	310	640	350	440	---	340	400
30	310	310	330	320	---	270	400	350	500	---	370	350
31	300	---	330	310	---	320	---	350	---	---	370	---
MONTH	260	300	330	330	300	330	330	350	350	---	---	370

DISSOLVED SO4 DISCHARGE (TONS/DAY) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	297	122	133	69	194	142	120	76	17	2.4	---	92
2	313	118	170	55	193	146	112	91	18	---	---	565
3	244	81	389	46	180	146	118	80	18	---	---	869
4	180	113	1000	36	167	140	107	64	61	---	---	390
5	165	115	634	48	164	111	94	55	34	---	---	266
6	198	114	475	52	142	136	130	56	86	---	---	172
7	162	132	425	57	118	153	110	58	458	---	---	127
8	125	132	358	67	129	311	113	56	157	---	---	111
9	161	135	297	57	124	239	123	52	160	---	413	101
10	45	114	225	62	137	944	114	53	111	---	142	92
11	1600	140	204	53	131	1120	101	45	78	---	122	90
12	1020	134	199	49	151	729	92	41	59	---	62	83
13	523	133	181	59	153	431	76	40	102	---	12	69
14	458	126	161	73	156	321	66	34	67	---	14	63
15	377	110	148	91	144	283	62	30	46	---	77	67
16	327	87	137	116	146	228	66	29	36	---	69	65
17	295	107	129	142	149	253	70	28	31	---	39	72
18	285	117	125	145	157	185	72	32	26	---	33	70
19	260	141	122	204	137	159	113	33	21	---	29	80
20	252	402	106	341	151	147	1130	27	---	---	23	94
21	240	268	129	364	141	151	767	26	13	---	26	78
22	225	235	145	259	103	166	303	23	11	---	291	68
23	219	198	232	208	118	155	177	23	9.2	---	338	59
24	147	201	180	192	110	152	122	87	9.0	---	172	53
25	142	177	153	192	102	163	96	72	8.4	---	231	50
26	162	172	195	182	140	145	96	42	7.8	---	144	51
27	148	153	197	160	143	152	90	31	6.5	---	559	52
28	114	115	192	174	130	147	81	24	5.2	---	1490	67
29	111	124	190	191	---	130	176	21	3.1	---	416	62
30	137	135	103	203	---	99	97	20	2.5	---	203	56
31	121	---	74	198	---	126	---	17	---	---	138	---
MONTH	292	148	239	134	143	255	166	44	57	---	---	138

ARKANSAS RIVER BASIN

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07157950 CIMARRON RIVER NEAR BUFFALO, OKLA.--Continued

CHLORIDE (MG/L AS CL) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	760	1400	1400	3000	1400	1500	1600	2000	2000	7400	---	3000
2	920	1600	2900	1700	1600	1500	1300	3600	2000	---	---	5600
3	800	970	2900	1400	1300	1700	1500	3000	2300	---	---	2000
4	680	1800	2900	1300	1400	1500	1500	1700	6200	---	---	2200
5	750	1800	1400	1900	1700	1100	1200	1700	6200	---	---	2200
6	1200	1400	1300	2100	1900	1500	1500	1900	1800	---	---	2300
7	1100	1700	1700	2300	1300	1400	1500	1700	1900	---	---	2700
8	1100	1900	1900	2900	1400	8300	1600	1600	770	---	---	2900
9	3400	1700	1900	2200	1700	2500	1400	1600	1400	---	1300	3400
10	130	1200	1600	2800	1300	6400	1500	2200	850	---	1200	3500
11	960	1700	1900	2600	1300	1700	1800	1600	880	---	1500	4100
12	580	1700	2000	2200	1700	1400	2500	1600	1100	---	1400	4000
13	960	1400	1600	2600	1500	1600	1900	1600	5600	---	890	3000
14	1300	1400	1600	2700	1500	1900	1900	1600	2100	---	1400	2800
15	1300	1300	1500	2900	1400	2200	1400	1500	1700	---	1500	3900
16	1300	1100	1400	3600	1600	1500	1500	1500	1600	---	460	3900
17	1300	1300	1600	4100	1500	3600	2000	1500	1700	---	240	5700
18	1500	1500	2000	2100	1700	1800	2300	1500	1800	---	270	3700
19	1400	2000	2500	1400	1400	1500	2300	2700	2000	---	370	2500
20	1400	2000	2700	1300	1500	1600	2900	1700	---	---	420	2300
21	1400	1100	3000	1400	1800	1600	1200	1600	2800	---	750	2100
22	1400	1200	2100	1600	1000	1900	1800	1800	3100	---	8300	2100
23	1500	1200	2100	1400	1200	1400	1800	1700	3300	---	14900	2300
24	980	1700	1700	1600	990	1400	1400	8100	3000	---	3400	2600
25	1100	1400	1500	1700	1100	1700	1700	11000	3200	---	2400	3100
26	1400	1800	1900	1800	1400	1700	2400	4400	3500	---	1000	3300
27	1400	1400	2000	1500	1400	1900	2300	2600	4100	---	1000	3300
28	1100	1100	2100	2400	1300	1600	2100	2400	5900	---	2900	4300
29	1100	1200	1900	1800	---	1500	12000	2500	5800	---	2300	3800
30	1500	1400	1900	1600	---	1200	3900	2400	7200	---	3100	2500
31	1400	---	2000	1500	---	1600	---	2600	---	---	3000	---
MONTH	1200	1500	2000	2100	1400	2100	2200	2500	3000	---	---	3200

DISSOLVED CL DISCHARGE (TONS/DAY) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1210	562	608	568	894	662	618	464	104	36	---	759
2	1330	591	1350	292	971	690	508	846	108	---	---	7420
3	1000	349	3080	212	822	786	560	647	117	---	---	5180
4	711	617	7980	163	762	688	515	332	834	---	---	2500
5	668	628	2910	274	861	493	417	295	470	---	---	1750
6	882	526	2160	325	825	660	607	321	482	---	---	1160
7	718	710	2270	387	533	703	522	305	2620	---	---	955
8	550	759	2030	535	599	4790	563	287	642	---	---	880
9	1440	733	1730	373	656	1730	575	269	733	---	1880	893
10	82	512	1130	484	624	13140	537	352	464	---	635	834
11	6850	737	1170	396	592	5950	559	234	327	---	582	907
12	3850	707	1200	325	790	3360	663	204	261	---	285	815
13	2240	617	917	434	748	2130	441	197	1330	---	53	567
14	2080	584	796	551	738	1860	382	168	414	---	64	499
15	1710	503	724	732	658	1810	284	142	237	---	363	660
16	1490	380	631	1080	731	1120	312	140	187	---	241	635
17	1340	484	668	1420	706	2320	420	131	166	---	103	949
18	1350	564	749	927	823	1050	475	149	143	---	93	662
19	1200	838	875	936	626	774	767	244	127	---	93	565
20	1170	2390	806	1540	739	752	8990	144	---	---	77	629
21	1120	1180	1060	1670	768	758	3430	129	97	---	105	495
22	1030	1050	907	1320	448	948	1650	128	92	---	4480	427
23	1040	889	1480	957	525	709	974	122	80	---	6990	394
24	633	1080	968	959	473	700	563	1330	74	---	1540	397
25	622	825	740	1020	451	876	500	1270	73	---	1600	416
26	745	963	1140	1010	644	786	657	441	70	---	631	448
27	676	710	1200	788	654	878	605	225	65	---	2430	461
28	504	512	1210	1210	592	756	508	165	70	---	11760	701
29	489	557	1100	1040	---	637	3260	150	41	---	2770	593
30	676	621	588	1010	---	444	943	136	37	---	1700	403
31	552	---	440	970	---	631	---	126	---	---	1130	---
MONTH	1290	739	1440	771	688	1730	1060	326	361	---	---	1130

ARKANSAS RIVER BASIN

07157950 CIMARRON RIVER NEAR BUFFALO, OKLA.--Continued

DISSOLVED SOLIDS (RESIDUE ON EVAPORATION, MG/L AT 180 DEG. C) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2050	3370	3300	6610	3420	3460	3830	4620	4620	14290	---	6650
2	2390	3730	6380	3940	3740	3510	3160	7910	4590	---	---	10140
3	2130	2480	6340	3350	3250	4010	3520	6520	5150	---	---	4500
4	1900	4080	6400	3230	3250	3650	3560	3890	11430	---	---	4900
5	2030	4090	3370	4330	3900	2830	2870	3980	11500	---	---	5030
6	2870	3350	3150	4720	4360	3590	3460	4280	4210	---	---	5180
7	2830	4020	3990	5210	3120	3310	3530	3890	4300	---	---	5950
8	2690	4320	4270	6430	3440	16500	3700	3830	2070	---	---	6310
9	7430	4040	4390	5040	3930	5670	3450	3830	3280	---	3190	7360
10	770	2930	3720	6200	3180	12070	3500	5070	2230	---	2900	7640
11	2460	3930	4300	5830	3070	3980	4130	3830	2290	---	3550	8830
12	1700	3940	4570	5030	3890	3420	5650	3710	2770	---	3410	8570
13	2450	3430	3760	5770	3620	3680	4360	3670	10070	---	2310	6600
14	3160	3440	3660	5970	3510	4370	4340	3670	4720	---	3340	6290
15	3170	3210	3640	6500	3260	4880	3400	3560	3870	---	3480	8520
16	3200	2650	3370	7880	3710	3650	3480	3530	3850	---	1450	8470
17	3210	3150	3860	8740	3510	7720	4560	3490	3970	---	1000	10190
18	3510	3590	4530	4870	3890	4250	5090	3460	4090	---	1060	8050
19	3380	4500	5570	3330	3280	3610	5240	5920	4490	---	1250	5510
20	3450	4490	6020	3070	3630	3800	6390	4020	---	---	1370	5150
21	3450	2700	6670	3310	4080	3730	2920	3740	6100	---	2030	4840
22	3370	2880	4770	3800	2620	4300	4080	4070	6800	---	16640	4790
23	3500	3010	4860	3370	2900	3260	4120	4050	7160	---	27000	5140
24	2500	4000	4010	3720	2520	3390	3410	15930	6670	---	7440	5840
25	2690	3450	3590	3950	2740	4020	3870	21140	7090	---	5360	6760
26	3370	4210	4390	4180	3360	4050	5300	9500	7570	---	2640	7250
27	3260	3440	4620	3650	3320	4350	5200	5810	8800	---	2600	7300
28	2740	2820	4780	5380	3210	3820	4760	5280	10640	---	6330	9310
29	2740	3030	4330	4100	---	3640	22640	5630	10500	---	5110	8200
30	3650	3400	4290	3680	---	2990	8390	5390	13930	---	6820	5650
31	3280	---	4500	3640	---	3720	---	5770	---	---	6610	---
MONTH	2950	3520	4500	4800	3420	4620	4860	5580	6160	---	---	6830

DISSOLVED SOLIDS DISCHARGE (TONS/DAY) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3270	1350	1460	1250	2130	1580	1450	1060	237	69	---	1670
2	3440	1390	2980	681	2280	1640	1230	1840	248	---	---	13330
3	2680	891	6800	507	1980	1830	1330	1430	264	---	---	11860
4	1980	1430	17610	393	1840	1630	1220	776	1540	---	---	5670
5	1820	1460	6970	631	2010	1220	1030	687	869	---	---	3950
6	2180	1260	5230	740	1900	1560	1450	740	1110	---	---	2600
7	1780	1650	5290	872	1300	1690	1240	714	6040	---	---	2120
8	1380	1750	4690	1180	1430	9530	1330	672	1730	---	---	1940
9	3130	1700	3980	843	1530	3860	1370	631	1760	---	4540	1950
10	497	1260	2650	1070	1510	24610	1280	794	1220	---	1560	1810
11	17540	1720	2690	881	1440	13870	1290	548	854	---	1380	1950
12	11180	1650	2750	734	1850	8030	1480	481	650	---	681	1760
13	5750	1470	2150	967	1770	5030	1010	465	2390	---	137	1250
14	5040	1390	1880	1220	1750	4280	878	396	943	---	153	1100
15	4140	1210	1710	1610	1580	4110	678	336	554	---	864	1430
16	3600	957	1510	2340	1720	2650	743	333	437	---	757	1370
17	3240	1170	1560	3070	1680	5040	961	311	386	---	425	1710
18	3200	1340	1710	2100	1920	2420	1070	355	331	---	365	1430
19	2860	1920	1960	2250	1510	1830	1720	543	291	---	318	1260
20	2790	5480	1790	3750	1750	1760	19840	336	---	---	248	1420
21	2660	2950	2340	4000	1780	1780	8430	303	214	---	284	1120
22	2470	2590	2060	3100	1130	2180	3830	297	202	---	8940	971
23	2460	2180	3360	2290	1290	1710	2260	284	174	---	12680	888
24	1620	2510	2250	2260	1210	1670	1340	2620	162	---	3350	882
25	1560	1970	1750	2370	1120	2040	1170	2450	159	---	3590	913
26	1780	2230	2610	2350	1540	1830	1480	949	153	---	1590	979
27	1630	1640	2740	1860	1570	2020	1360	502	140	---	6140	1010
28	1260	1270	2750	2720	1430	1770	1160	371	126	---	25970	1510
29	1220	1360	2520	2420	---	1500	6170	335	74	---	6250	1280
30	1600	1490	1350	2370	---	1090	2040	305	71	---	3740	900
31	1330	---	1010	2290	---	1480	---	280	---	---	2480	---
MONTH	3260	1760	3290	1780	1640	3780	2390	714	805	---	---	2400

ARKANSAS RIVER BASIN

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07157950 CIMARRON RIVER NEAR BUFFALO, OKLA.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3010	4940	4840	9700	5020	5070	5620	6770	6780	20600	---	9750
2	3500	5470	9360	5780	5490	5150	4640	11600	6730	---	---	14790
3	3120	3640	9300	4920	4760	5880	5160	9560	7550	---	---	6600
4	2780	5980	9380	4740	4770	5350	5220	5700	16600	---	---	7180
5	2970	6000	4940	6350	5720	4150	4210	5830	16700	---	---	7380
6	4210	4920	4620	6930	6400	5270	5070	6280	6170	---	---	7600
7	4150	5900	5860	7640	4570	4850	5180	5700	6300	---	---	8730
8	3940	6330	6260	9430	5040	23700	5420	5620	3040	---	---	9260
9	10900	5930	6440	7390	5770	8320	5060	5620	4810	---	4680	10800
10	1130	4300	5450	9090	4660	17500	5140	7440	3270	---	4250	11200
11	3610	5770	6300	8550	4500	5840	6060	5620	3360	---	5210	12950
12	2490	5780	6700	7380	5700	5010	8290	5440	4060	---	5000	12570
13	3600	5030	5520	8470	5310	5390	6400	5380	14700	---	3390	9680
14	4640	5040	5370	8750	5150	6410	6360	5380	6920	---	4900	9220
15	4650	4710	5340	9530	4780	7160	4980	5220	5680	---	5100	12490
16	4700	3880	4940	11550	5440	5360	5110	5170	5650	---	2120	12430
17	4710	4620	5660	12820	5150	11320	6690	5120	5820	---	1470	14870
18	5150	5260	6650	7140	5710	6230	7460	5070	6000	---	1560	11810
19	4950	6600	8170	4880	4810	5290	7680	8680	6580	---	1840	8080
20	5060	6590	8830	4500	5330	5570	9370	5890	---	---	2010	7550
21	5060	3960	9780	4860	5980	5470	4280	5480	8940	---	2970	7100
22	4940	4220	7000	5580	3840	6310	5980	5970	9970	---	23900	7030
23	5140	4410	7130	4940	4260	4780	6040	5940	10500	---	38400	7540
24	3660	5870	5880	5450	3700	4970	5000	22900	9780	---	10910	8560
25	3940	5060	5260	5800	4020	5890	5670	30200	10400	---	7860	9920
26	4940	6170	6440	6130	4930	5940	7780	13900	11100	---	3870	10640
27	4780	5050	6770	5350	4870	6380	7630	8520	12900	---	3810	10710
28	4020	4130	7010	7890	4710	5600	6980	7750	15500	---	9280	13640
29	4020	4450	6350	6010	---	5340	32300	8260	15300	---	7490	12030
30	5350	4980	6290	5390	---	4380	12300	7900	20100	---	10000	8290
31	4810	---	6600	5340	---	5450	---	8460	---	---	9700	---
MONTH	4320	5170	6590	7040	5010	6750	7100	8140	9010	---	---	10010

TEMPERATURE (DEG. C) OF WATER , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

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

ARKANSAS RIVER BASIN

07157960 BUFFALO CREEK NEAR LOVEDALE, OKLA.

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

DRAINAGE AREA.--408 mi² (1,057 km²).

PERIOD OF RECORD.--Chemical analyses: Current year.

Water temperatures: Current year.

EXTREMES, Current year.--Specific conductance: Maximum, 6,990 micromhos/cm July 6; minimum, 349 micromhos/cm Sept 2.

Water temperatures: Maximum, 34.0°C June 18; minimum, freezing point on many days during January and February.

REMARKS.--Continuous monitor records for specific conductance are collected for this station. Records of maximum and minimum specific conductance values are available in district office in Oklahoma City, Okla. No flow July 9-Aug. 4, 18, and 20-21.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	INSTAN- TANEOUS DIS- CHARGE (CFS)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	ALKA- LINITY AS CACO ₃ (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED NITRATE (N) (MG/L)	DIS- SOLVED NITRATE (NO ₃) (MG/L)	DIS- SOLVED NITRITE (N) (MG/L)
OCT.												
11...	1800	74	12	12	128	0	105	--	23	.82	3.6	.01
23...	4.7	390	96	120	209	0	171	1200	160	.09	.40	.08
31...	2.6	530	120	140	200	0	164	1600	220	.06	.27	.00
NOV.												
06...	1.3	--	120	140	196	0	161	1500	220	.17	.75	.01
14...	3.6	550	120	150	182	0	149	1600	240	.09	.40	.00
28...	7.5	360	99	110	185	0	152	--	150	.11	.49	.00
DEC.												
09...	22	260	82	79	202	0	166	820	110	.33	1.5	.01
12...	17	290	95	92	224	0	184	960	130	.17	.75	.01
JAN.												
22...	20	300	100	110	176	0	144	1000	140	.14	.62	.00
26...	11	340	120	120	199	0	163	1200	150	.02	.09	.00
31...	10	360	120	130	184	0	151	1300	160	.01	.04	.01
FEB.												
01...	10	--	120	130	204	0	167	1300	170	.07	.31	.01
13...	7.9	380	130	140	148	0	121	1400	190	.04	.18	.04
27...	4.3	430	130	150	203	0	167	1500	200	.02	.09	.01
MAR.												
07...	3.3	450	140	180	215	0	176	1500	210	.21	.93	.01
11...	227	120	50	48	153	0	126	410	58	1.1	4.8	.01
25...	9.0	360	130	130	215	0	176	--	160	.24	1.1	.00
APR.												
03...	5.8	440	140	150	237	0	194	1400	230	--	--	--
18...	3.8	490	150	160	206	0	169	1600	220	--	--	--
20...	652	98	23	22	116	0	95	--	28	--	--	--
20...	1460	97	31	33	143	0	117	--	42	.21	.93	.03
MAY												
05...	4.0	380	130	130	234	0	192	1200	180	--	--	--
22...	.96	510	150	260	217	0	178	1600	380	--	--	--
28...	4.0	260	74	78	148	0	121	800	110	--	--	--
JUNE												
06...	25	330	69	83	104	0	85	1000	120	--	--	--
14...	23	--	110	130	139	0	114	1200	190	--	--	--
30...	.44	570	150	480	280	0	230	1700	850	--	--	--
JULY												
01...	.40	550	160	490	233	0	191	--	790	--	--	--
AUG.												
16...	.06	440	79	140	194	0	159	1200	230	--	--	--
28...	1340	75	15	19	--	0	--	120	28	--	--	--
SEP.												
02...	3290	61	12	9.1	115	0	94	100	9.3	--	--	--
18...	16	380	120	120	273	0	224	--	160	--	--	--
30...	5.8	440	120	46	257	--	211	1200	170	--	--	--

ARKANSAS RIVER BASIN

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07157960 BUFFALO CREEK NEAR LOVEDALE, OKLA.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	DIS- SOLVED NITRITE (NO2) (MG/L)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	CARBON DIOXIDE (CO2) (MG/L)
OCT.											
11...	.03	.83	366	.50	1780	230	130	.3	546	8.1	1.6
23...	.26	.17	2270	3.09	28.8	1400	1200	1.4	2520	8.0	3.3
31...	.00	.06	2870	3.90	20.1	1800	1700	1.4	3070	7.9	4.0
NOV.											
06...	.03	.18	2970	4.04	10.4	--	--	--	3200	8.0	3.1
14...	.00	.09	3070	4.18	29.8	1900	1700	1.5	3340	7.9	3.7
28...	.00	.11	2110	2.87	42.7	1300	1200	1.3	2430	8.1	2.4
DEC.											
09...	.03	.34	1540	2.09	91.5	990	820	1.1	1880	7.8	5.1
12...	.03	.18	1790	2.43	82.2	1100	930	1.2	2150	7.9	4.5
JAN.											
22...	.00	.14	1880	2.56	102	1200	1000	1.4	2280	7.9	3.5
26...	.00	.02	2140	2.91	63.6	1300	1200	1.4	2470	7.9	4.0
31...	.03	.02	2240	3.05	60.5	1400	1200	1.5	2570	8.0	2.9
FEB.											
01...	.03	.08	2280	3.10	61.6	--	--	--	2690	8.0	3.3
13...	.13	.08	2470	3.36	52.7	1500	1400	1.6	2850	8.0	2.4
27...	.03	.03	2680	3.64	31.1	1600	1400	1.6	3060	7.9	4.1
MAR.											
07...	.03	.22	2760	3.75	24.6	1700	1500	1.9	3110	7.9	4.3
11...	.03	1.1	806	1.10	494	510	380	.9	1120	7.4	9.7
25...	.00	.24	2350	3.20	57.0	1400	1300	1.5	2730	8.0	3.4
APR.											
03...	--	.18	2730	3.71	42.8	1700	1500	1.6	3070	8.0	3.8
18...	--	.08	3000	4.08	30.8	1800	1700	1.6	3270	8.0	3.3
20...	--	.58	549	.75	966	340	240	.5	761	7.7	3.7
20...	.10	.24	622	.85	2450	370	250	.7	904	7.4	9.1
MAY											
05...	--	.11	2350	3.20	25.4	1500	1300	1.5	2760	7.9	4.7
22...	--	.09	3380	4.60	8.76	1900	1700	2.6	3870	7.2	22
28...	--	.12	1580	2.15	17.1	950	830	1.1	1920	7.8	3.8
JUNE											
06...	--	.41	1890	2.57	128	1100	1000	1.1	2120	8.1	1.3
14...	--	.28	2520	3.43	156	--	--	--	2830	7.9	2.8
30...	--	.23	4170	5.67	4.95	2000	1800	4.6	4970	7.7	8.9
JULY											
01...	--	.26	4270	5.81	4.61	2000	1800	4.7	5100	7.7	7.4
AUG.											
16...	--	.22	2420	3.29	.39	1400	1300	1.6	2750	7.9	3.9
28...	--	.64	402	.55	1450	250	--	.5	567	7.1	--
SEP.											
02...	--	1.1	295	.40	2620	200	110	.3	427	7.8	2.9
18...	--	.11	2330	3.17	101	1400	1200	1.4	2600	8.0	4.4
30...	--	.15	2600	3.54	40.7	1600	1400	.5	2860	--	--

ARKANSAS RIVER BASIN

07157960 BUFFALO CREEK NEAR LOVEDALE, OKLA.--Continued

SULFATE (MG/L AS SO4) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	670	1500	---	---	1200	1400	1200	930	1100	1800	---	480
2	800	1500	---	---	1200	1400	1400	1000	1100	1800	---	110
3	890	1500	---	---	1200	1400	1300	1100	1200	1900	---	170
4	990	---	---	---	1300	1400	1300	1100	1100	1900	---	260
5	1200	1500	---	---	1300	1400	1400	1200	1100	1900	1500	440
6	1100	1500	---	---	1300	1400	1400	1200	910	2100	1400	540
7	1300	---	---	---	1300	1500	1500	1200	950	2000	1600	630
8	1400	1600	---	---	1300	960	1400	1300	1100	2000	760	680
9	1300	1600	740	---	1300	960	1400	1300	1100	---	650	---
10	---	---	740	---	1300	470	1300	1300	1200	---	510	880
11	130	1600	880	---	1300	400	1400	1400	1400	---	770	920
12	150	1600	880	---	1300	430	1400	1500	1300	---	680	1000
13	270	1500	---	---	1300	570	1400	1500	1300	---	660	1100
14	---	1600	---	---	1300	720	1500	1600	1300	---	1100	1100
15	510	---	---	---	1300	850	1300	1600	1100	---	1100	---
16	600	1600	---	---	1300	960	1400	1600	990	---	1300	1200
17	690	1600	---	---	1400	1000	1500	1600	510	---	1500	1200
18	750	1600	---	---	1400	1100	1600	1600	1100	---	---	1200
19	---	---	---	---	1300	1200	1400	1600	1200	---	1600	1200
20	---	---	---	---	1300	---	220	1600	1300	---	---	1200
21	---	---	---	---	1400	1200	530	1600	1500	---	---	1300
22	---	---	---	990	1400	1200	510	1700	1600	---	1700	1300
23	1100	---	---	1100	1400	1200	650	1600	1600	---	1700	1300
24	1200	---	---	1100	1400	1200	690	1200	1700	---	1600	1300
25	1300	---	---	1100	1400	1200	820	1200	1700	---	1000	1300
26	1300	---	---	1100	1400	1300	910	990	1700	---	1300	1300
27	1400	---	---	1100	1400	1300	930	870	1700	---	690	1300
28	1400	1100	---	1100	1400	1300	---	770	1700	---	180	1300
29	1400	1100	---	1200	---	1300	400	820	1700	---	140	1300
30	1400	1100	---	1200	---	1300	820	880	1700	---	290	1400
31	1500	---	---	1200	---	1300	---	990	---	---	340	---
MONTH	990	---	---	---	1300	1100	1100	1300	1300	---	---	980

DISSOLVED SO4 DISCHARGE (TONS/DAY) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	4.8	---	---	33	15	21	37	4.2	2.0	---	32
2	12	3.9	---	---	31	13	22	39	4.3	1.7	---	632
3	9.1	3.5	---	---	32	13	20	29	4.1	1.4	---	444
4	7.5	---	---	---	29	10	19	23	7.3	1.1	---	168
5	7.1	4.5	---	---	29	9.7	19	20	9.5	0.99	0.29	165
6	6.0	5.4	---	---	27	8.9	21	17	51	0.85	2.9	132
7	5.6	---	---	---	25	13	19	14	11	0.48	9.1	114
8	4.6	7.1	---	---	25	181	18	14	12	0.05	24	101
9	4.3	7.1	48	---	24	109	18	14	11	---	37	---
10	---	---	36	---	25	478	17	11	9.0	---	2.1	98
11	547	7.6	38	---	26	417	18	11	8.0	---	1.3	87
12	136	8.8	33	---	26	88	16	11	6.0	---	3.0	77
13	90	10	---	---	27	55	15	11	7.6	---	0.82	68
14	---	11	---	---	26	50	12	10	24	---	0.99	60
15	55	---	---	---	25	50	10	9.5	93	---	0.74	---
16	44	8.0	---	---	24	44	11	8.2	27	---	0.31	57
17	39	8.1	---	---	26	44	12	7.4	6.3	---	0.19	55
18	28	7.6	---	---	25	42	13	7.4	10	---	---	52
19	---	---	---	---	26	38	12	6.5	8.9	---	0.04	49
20	---	---	---	---	25	---	385	5.2	7.6	---	---	44
21	---	---	---	---	21	38	178	4.3	5.7	---	---	41
22	---	---	---	51	17	36	64	4.1	4.8	---	0.18	34
23	16	---	---	43	18	33	61	3.9	4.2	---	0.86	29
24	12	---	---	39	14	30	49	13	4.3	---	1.1	29
25	12	---	---	32	14	30	40	242	3.8	---	1.9	28
26	12	---	---	34	15	30	34	66	3.4	---	0.95	25
27	11	---	---	30	15	29	27	18	2.9	---	265	25
28	11	20	---	30	15	28	---	9.5	2.5	---	468	24
29	11	20	---	31	---	26	67	6.4	2.2	---	71	24
30	10	18	---	31	---	24	40	5.0	2.0	---	76	21
31	4.7	---	---	32	---	25	---	4.3	---	---	45	---
MONTH	45	---	---	---	24	67	43	22	12	---	---	97

ARKANSAS RIVER BASIN

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07157960 BUFFALO CREEK NEAR LOVEDALE, OKLA.--Continued

CHLORIDE (MG/L AS CL) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	90	210	---	---	170	200	170	130	160	850	---	58
2	110	210	---	---	170	200	190	150	160	1000	---	17
3	120	210	---	---	170	200	190	150	160	1200	---	24
4	140	---	---	---	180	200	190	160	160	1200	---	33
5	170	210	---	---	180	200	190	160	160	1200	210	53
6	160	220	---	---	180	200	200	170	130	1200	200	66
7	180	---	---	---	190	210	210	160	130	1200	230	83
8	200	220	---	---	190	130	190	180	150	1200	110	92
9	190	220	100	---	190	130	190	180	160	---	86	---
10	---	---	100	---	190	56	180	190	170	---	62	120
11	20	220	120	---	190	49	200	190	200	---	110	130
12	22	220	120	---	180	53	190	210	180	---	93	140
13	35	220	---	---	190	72	200	210	180	---	89	150
14	---	220	---	---	190	99	210	220	190	---	150	160
15	61	---	---	---	190	120	190	220	150	---	160	---
16	78	220	---	---	190	130	200	230	140	---	180	160
17	94	220	---	---	190	140	220	230	61	---	210	170
18	110	220	---	---	190	160	220	230	160	---	---	170
19	---	---	---	---	190	160	190	240	170	---	240	170
20	---	---	---	---	190	---	30	240	190	---	---	170
21	---	---	---	---	190	170	66	290	210	---	---	180
22	---	---	---	140	190	170	62	390	230	---	500	180
23	160	---	---	150	200	170	87	340	330	---	530	180
24	170	---	---	160	200	170	94	170	430	---	270	180
25	180	---	---	150	200	170	120	160	420	---	140	190
26	180	---	---	160	200	180	130	140	530	---	180	190
27	190	---	---	160	200	180	130	120	610	---	94	190
28	190	150	---	160	200	180	---	110	680	---	25	190
29	200	150	---	160	---	180	49	110	770	---	21	190
30	200	160	---	160	---	190	120	120	810	---	37	190
31	200	---	---	170	---	190	---	140	---	---	42	---
MONTH	140	---	---	---	190	160	160	190	270	---	---	140

DISSOLVED CL DISCHARGE (TONS/DAY) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.4	0.67	---	---	4.6	2.1	3.0	5.2	0.58	0.96	---	3.9
2	1.6	0.55	---	---	4.4	1.9	3.1	5.5	0.60	0.93	---	103
3	1.3	0.49	---	---	4.4	1.8	2.8	4.1	0.57	0.84	---	64
4	1.0	---	---	---	4.1	1.5	2.7	3.2	1.0	0.68	---	22
5	0.99	0.63	---	---	4.1	1.4	2.6	2.8	1.3	0.61	0.04	20
6	0.83	0.75	---	---	3.7	1.2	2.9	2.4	7.2	0.50	0.40	16
7	0.78	---	---	---	3.5	1.8	2.6	1.9	1.5	0.29	1.3	15
8	0.64	0.99	---	---	3.5	25	2.5	2.0	1.6	0.03	3.4	14
9	0.60	0.99	6.7	---	3.4	15	2.5	1.9	1.5	---	4.9	---
10	---	---	5.0	---	3.5	58	2.4	1.6	1.3	---	0.25	14
11	84	1.1	5.3	---	3.6	51	2.6	1.6	1.1	---	0.17	12
12	20	1.2	4.6	---	3.7	11	2.2	1.6	0.84	---	0.40	11
13	12	1.5	---	---	3.8	7.0	2.2	1.5	1.1	---	0.11	9.6
14	---	1.5	---	---	3.7	6.9	1.7	1.4	3.4	---	0.14	8.4
15	6.6	---	---	---	3.6	7.0	1.5	1.3	13	---	0.10	---
16	5.7	1.1	---	---	3.4	6.1	1.6	1.2	3.7	---	0.04	7.9
17	5.3	1.1	---	---	3.7	6.1	1.6	1.0	0.76	---	0.02	7.7
18	4.0	1.1	---	---	3.6	6.0	1.8	1.0	1.4	---	---	7.3
19	---	---	---	---	3.6	5.3	1.6	0.96	1.3	---	0.00	6.9
20	---	---	---	---	3.6	---	52	0.79	1.1	---	---	6.1
21	---	---	---	---	2.9	5.4	22	0.77	0.79	---	---	5.8
22	---	---	---	7.1	2.4	5.1	7.7	0.96	0.68	---	0.05	4.8
23	2.2	---	---	6.0	2.5	4.6	8.2	0.79	0.84	---	0.27	4.1
24	1.7	---	---	5.5	2.0	4.3	6.6	1.9	1.1	---	0.17	4.1
25	1.7	---	---	4.5	2.0	4.2	5.6	34	0.96	---	0.26	4.0
26	1.7	---	---	4.7	2.2	4.2	4.8	9.3	1.1	---	0.13	3.6
27	1.6	---	---	4.2	2.1	4.1	3.8	2.5	1.0	---	36	3.5
28	1.6	2.9	---	4.2	2.1	4.0	---	1.3	1.0	---	66	3.4
29	1.6	2.7	---	4.4	---	3.7	8.2	0.89	0.97	---	11	3.4
30	1.5	2.6	---	4.4	---	3.4	5.6	0.70	0.94	---	9.7	3.0
31	0.66	---	---	4.5	---	3.5	---	0.59	---	---	5.7	---
MONTH	6.4	---	---	---	3.3	8.7	5.8	3.1	1.8	---	---	14

ARKANSAS RIVER BASIN

07157960 BUFFALO CREEK NEAR LOVEDALE, OKLA.--Continued

DISSOLVED SOLIDS (RESIDUE ON EVAPORATION, MG/L AT 180 DEG. C) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1310	2630	---	---	2200	2500	2220	1750	2040	4260	---	929
2	1550	2690	---	---	2160	2500	2460	1920	2080	4470	---	400
3	1690	2690	---	---	2240	2530	2390	2030	2130	4640	---	485
4	1860	---	---	---	2280	2540	2390	2090	2080	4730	---	606
5	2180	2690	---	---	2300	2560	2460	2130	2090	4790	2710	860
6	2040	2720	---	---	2310	2550	2540	2180	1720	5350	2520	1040
7	2330	---	---	---	2390	2600	2640	2120	1790	4910	2860	1230
8	2510	2730	---	---	2390	1800	2480	2290	1980	5110	1480	1330
9	2400	2730	1450	---	2390	1810	2450	2350	2070	---	1260	---
10	---	---	1450	---	2370	900	2360	2420	2180	---	996	1680
11	431	2740	1670	---	2370	801	2560	2450	2520	---	1490	1740
12	462	2740	1670	---	2350	854	2450	2620	2350	---	1340	1890
13	633	2720	---	---	2390	1110	2530	2630	2310	---	1300	1960
14	---	2760	---	---	2390	1410	2690	2780	2390	---	1950	2050
15	986	---	---	---	2420	1630	2390	2800	2000	---	2100	---
16	1180	2740	---	---	2420	1800	2500	2840	1850	---	2350	2130
17	1350	2760	---	---	2440	1890	2720	2860	986	---	2610	2170
18	1470	2740	---	---	2450	2070	2810	2830	2040	---	---	2190
19	---	---	---	---	2420	2120	2470	2980	2160	---	2940	2200
20	---	---	---	---	2420	---	557	3040	2400	---	---	2260
21	---	---	---	---	2450	2160	1030	3160	2660	---	---	2300
22	---	---	---	1850	2450	2210	996	3390	2900	---	3580	2300
23	2080	---	---	1970	2550	2230	1270	3280	3250	---	3630	2340
24	2180	---	---	2050	2510	2200	1360	2170	3460	---	3110	2350
25	2280	---	---	2010	2540	2260	1590	2130	3440	---	1910	2390
26	2350	---	---	2080	2540	2300	1720	1850	3620	---	2350	2390
27	2450	---	---	2050	2540	2310	1750	1660	3750	---	1360	2410
28	2470	1950	---	2090	2510	2330	---	1490	3870	---	500	2390
29	2530	2030	---	2120	---	2350	808	1580	4020	---	449	2410
30	2530	2080	---	2130	---	2420	1590	1680	4140	---	658	2440
31	2590	---	---	2150	---	2420	---	1850	---	---	720	---
MONTH	1830	---	---	---	2400	2040	2070	2370	2540	---	---	1820

DISSOLVED SOLIDS DISCHARGE (TONS/DAY) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	34	8.5	---	---	59	26	38	71	7.7	4.8	---	63
2	23	7.0	---	---	57	24	40	73	7.9	4.1	---	2350
3	17	6.2	---	---	57	23	36	54	7.5	3.4	---	1280
4	14	---	---	---	53	19	35	42	13	2.7	---	399
5	13	8.0	---	---	53	17	34	37	18	2.5	0.51	325
6	11	9.5	---	---	48	16	37	31	98	2.2	5.1	256
7	10	---	---	---	45	22	33	25	20	1.2	16	223
8	8.1	13	---	---	45	340	32	26	21	0.13	48	198
9	7.8	13	94	---	44	205	32	25	20	---	72	---
10	---	---	71	---	45	923	31	20	16	---	4.0	186
11	1820	13	72	---	46	846	33	20	14	---	2.5	165
12	413	16	63	---	47	173	28	20	11	---	5.8	143
13	207	18	---	---	49	108	27	19	14	---	1.6	127
14	---	19	---	---	47	99	22	18	43	---	1.8	111
15	106	---	---	---	46	97	19	17	173	---	1.4	---
16	86	14	---	---	44	83	20	15	50	---	0.57	104
17	76	14	---	---	47	82	21	13	12	---	0.35	100
18	56	13	---	---	46	78	22	13	19	---	---	95
19	---	---	---	---	46	69	21	12	16	---	0.08	89
20	---	---	---	---	46	---	974	9.9	14	---	---	79
21	---	---	---	---	37	70	346	8.4	10	---	---	74
22	---	---	---	95	31	66	124	8.4	8.6	---	0.38	62
23	29	---	---	80	32	60	120	7.7	8.4	---	1.9	53
24	22	---	---	72	26	55	95	25	9.0	---	2.0	52
25	22	---	---	60	25	54	77	443	8.0	---	3.6	51
26	22	---	---	62	27	54	65	125	7.3	---	1.7	46
27	20	---	---	55	26	52	52	34	6.4	---	521	44
28	20	38	---	55	27	51	---	19	5.7	---	1310	44
29	20	36	---	57	---	47	135	12	5.1	---	223	43
30	18	34	---	58	---	44	77	9.5	4.8	---	170	36
31	8.4	---	---	58	---	44	---	8.0	---	---	97	---
MONTH	123	---	---	---	43	128	91	41	22	---	---	243

07157960 BUFFALO CREEK NEAR LOVEDALE, OKLA.--Continued

SPECIFIC CONDUCTANCE (MICROMHUS/CM AT 25 DEG. C) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1680	3060	---	---	2610	2920	2630	2140	2440	5080	---	1280
2	1930	3120	---	---	2570	2920	2680	2320	2490	5290	---	492
3	2080	3120	---	---	2650	2960	2810	2430	2540	5450	---	621
4	2250	---	---	---	2690	2970	2810	2500	2480	5540	---	805
5	2590	3120	---	---	2710	2990	2880	2540	2500	5600	3140	1190
6	2440	3150	---	---	2730	2980	2970	2590	2110	6140	2950	1400
7	2750	---	---	---	2810	3030	3070	2530	2180	5710	3300	1600
8	2940	3170	---	---	2810	2190	2900	2700	2380	5910	1860	1700
9	2820	3170	1830	---	2810	2200	2870	2770	2470	---	1630	---
10	---	---	1830	---	2790	1250	2780	2840	2590	---	1350	2070
11	540	3180	2060	---	2790	1100	2990	2870	2950	---	1870	2130
12	586	3180	2060	---	2770	1180	2870	3050	2770	---	1710	2290
13	845	3150	---	---	2810	1470	2960	3060	2730	---	1670	2360
14	---	3200	---	---	2810	1780	3120	3220	2810	---	2350	2450
15	1340	---	---	---	2840	2010	2810	3240	2400	---	2510	---
16	1540	3180	---	---	2840	2190	2920	3280	2240	---	2770	2540
17	1720	3200	---	---	2860	2290	3150	3300	1340	---	3040	2580
18	1850	3180	---	---	2870	2470	3250	3270	2400	---	---	2600
19	---	---	---	---	2840	2530	2890	3430	2570	---	3380	2610
20	---	---	---	---	2840	---	730	3490	2830	---	---	2670
21	---	---	---	---	2870	2570	1390	3620	3090	---	---	2710
22	---	---	---	2240	2870	2620	1350	3870	3340	---	4160	2710
23	2490	---	---	2370	2980	2640	1640	3740	3710	---	4240	2760
24	2590	---	---	2450	2930	2610	1730	2580	3970	---	3560	2770
25	2690	---	---	2410	2970	2670	1970	2540	3950	---	2310	2810
26	2770	---	---	2480	2970	2710	2110	2240	4230	---	2770	2810
27	2870	---	---	2450	2970	2730	2140	2050	4440	---	1730	2830
28	2890	2350	---	2500	2940	2750	---	1870	4620	---	644	2810
29	2960	2430	---	2530	---	2770	1110	1960	4850	---	566	2830
30	2960	2480	---	2540	---	2840	1970	2070	4970	---	883	2860
31	3020	---	---	2560	---	2840	---	2240	---	---	978	---
MONTH	2210	---	---	---	2820	2440	2470	2790	3010	---	---	2190

TEMPERATURE (DEG. C) OF WATER , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
(ONCE-DAILY)

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

ARKANSAS RIVER BASIN

07157980 CIMARRON RIVER AT FREEDOM, OKLA.

LOCATION.--Lat 36°45'18", long 99°06'58", in SE 1/4 SE 1/4 sec.3, T.26 N., R.18 W., Woodward County, at gaging station at bridge on State Highway 50, 1 mi (1.60 km) south of Freedom, 1.1 mi (1.77 km) upstream from unnamed tributary, and at mile 272.4 (438.3 km).

DRAINAGE AREA.--12,706 mi² (32,909 km²), of which 4,813 mi² (12,466 km²) is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: Current year.
Water temperatures: Current year.

EXTREMES, Current year.--Specific conductance: Maximum, 69,100 micromhos/cm June 26; minimum, 5,540 micromhos/cm Sept. 2.

Water temperatures: Maximum, 37.0°C June 14; minimum, freezing point on many days during December and January.

REMARKS.--Continuous monitor records for specific conductance and water temperature are collected for this station. Monitor temperature record began June 7. Prior to that date daily observer temperature records were substituted. Records of maximum and minimum specific conductance values are available in district office in Oklahoma City, Oklahoma. No flow June 27-Aug. 5.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

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)	ALKA- LINITY AS CACO3 (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED NITRATE (N) (MG/L)	DIS- SOLVED NITRATE (NO3) (MG/L)	DIS- SOLVED NITRITE (N) (MG/L)
OCT.												
12...	2620	94	24	1200	142	0	116	190	1800	.64	2.8	.00
17...	520	190	58	2500	245	7	213	430	3800	.23	1.0	.02
NOV.												
15...	146	190	69	3400	228	0	187	480	--	.27	1.2	.01
20...	392	270	94	8000	207	0	170	650	12000	.63	2.8	.01
22...	550	140	54	2100	195	3	165	340	3300	.84	3.7	.01
DEC.												
05...	1280	110	42	--	190	0	156	270	2600	.73	3.2	.01
20...	200	290	110	7800	303	0	249	660	12000	.62	2.7	.07
26...	384	190	71	3400	258	0	212	450	5400	.65	2.9	.01
JAN.												
02...	150	390	150	--	303	0	249	1000	20000	.84	3.7	.01
21...	590	140	54	2100	219	5	188	370	--	.85	3.8	.00
26...	234	200	72	3100	276	0	226	480	4900	.75	3.3	.00
FEB.												
10...	186	180	70	--	263	0	216	450	5000	.52	2.3	.00
19...	204	190	74	--	253	0	208	470	6200	.26	1.2	.02
25...	137	170	67	2600	268	0	220	--	4200	.39	1.7	.01
MAR.												
09...	328	260	96	6800	185	0	152	730	11000	.43	1.9	.02
12...	1200	140	55	1700	210	0	172	420	2600	1.2	5.1	.04
22...	296	210	77	3100	262	0	215	600	4900	.41	1.8	.01
APR.												
08...	137	210	5.3	3900	218	0	179	600	6100	.31	1.4	.01
11...	137	270	110	--	216	0	177	790	12000	.16	.71	.01
22...	645	160	58	1500	174	0	143	470	2300	.34	1.5	.03
MAY												
05...	64	260	92	5200	137	0	112	720	7800	--	--	--
14...	35	320	120	8800	194	0	159	780	14000	--	--	--
25...	139	450	160	--	135	0	111	1100	30000	--	--	--
JUNE												
03...	12	460	180	16000	133	0	109	1200	25000	--	--	--
07...	176	290	91	--	147	0	121	710	12000	--	--	--
11...	150	150	55	2900	206	0	169	370	4600	--	--	--
AUG.												
11...	111	130	51	--	113	0	93	310	7600	--	--	--
23...	104	650	140	--	104	0	85	770	30000	--	--	--
29...	1420	98	29	1500	136	0	112	230	2400	--	--	--
SEP.												
03...	1450	89	28	1500	129	0	106	230	2400	--	--	--
13...	80	320	93	--	226	0	185	790	9000	--	--	--
28...	53	340	110	--	189	0	155	910	14000	--	--	--

ARKANSAS RIVER BASIN

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07157980 CIMARRON RIVER AT FREEDOM, OKLA.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	DIS- SOLVED NITRITE (NO2) (MG/L)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	CARBON DIOXIDE (CO2) (MG/L)
OCT.											
12...	.00	.64	3430	4.66	24300	330	220	29	5530	7.8	3.6
17...	.07	.25	7540	10.3	10600	710	500	41	10200	8.4	1.7
NOV.											
15...	.03	.28	--	--	--	760	570	54	15600	8.0	3.6
20...	.03	.64	20700	28.2	21900	1100	890	107	34000	7.8	5.3
22...	.03	.85	6240	8.49	9270	570	410	38	10200	8.4	1.3
DEC.											
05...	.03	.74	4790	6.51	16600	450	290	--	8520	7.7	6.1
20...	.23	.69	21600	29.4	11700	1200	930	99	32200	8.1	3.9
26...	.03	.66	9690	13.2	10000	770	560	53	15700	8.2	2.6
JAN.											
02...	.03	.85	32200	38.0	13000	1600	1300	--	43200	8.0	4.8
21...	.00	.85	6120	8.32	9750	570	380	38	10600	8.4	1.5
26...	.00	.75	8820	12.0	5570	800	570	48	15100	8.2	2.8
FEB.											
10...	.00	.52	9070	12.3	4560	740	520	--	15400	8.2	2.7
19...	.07	.28	10700	14.6	5890	780	570	--	18200	8.2	2.6
25...	.03	.40	7720	10.5	2860	700	480	43	13300	8.2	2.7
MAR.											
09...	.07	.45	18300	24.9	16200	1000	890	92	29400	7.9	3.7
12...	.13	1.2	5010	6.81	16200	580	400	31	8690	7.7	6.7
22...	.03	.42	9090	12.4	7270	840	630	47	15300	8.2	2.6
APR.											
08...	.03	.32	11200	15.2	4140	550	370	73	18200	7.9	4.4
11...	.03	.17	21000	28.6	7770	1100	950	--	31900	8.2	2.2
22...	.10	.37	4720	6.42	8220	640	500	26	7900	7.6	7.0
MAY											
05...	--	.26	14500	19.7	2510	1000	920	71	20900	8.0	2.2
14...	--	.42	24100	32.8	2280	1300	1100	107	32500	8.1	2.5
25...	--	.30	49200	66.9	18500	1800	1700	--	58800	7.8	3.4
JUNE											
03...	--	.04	50400	68.5	1700	1900	1800	160	60300	8.2	1.3
07...	--	.57	21800	29.6	10400	1100	980	--	30200	7.8	3.7
11...	--	.45	8100	11.0	3280	600	430	51	12700	8.0	3.3
AUG.											
11...	--	.71	13400	18.2	4020	530	440	--	20300	8.0	1.8
23...	--	.49	50000	68.0	14000	2200	2100	334	61200	7.8	2.6
29...	--	.75	4540	6.17	17400	360	250	34	7640	7.8	3.4
SEP.											
03...	--	.48	4400	5.98	17200	340	230	36	7420	7.7	4.1
13...	--	.13	16200	22.0	3500	1200	1000	--	24400	8.2	2.3
28...	--	.03	24600	33.5	3520	1300	1100	--	33700	8.2	1.9

ARKANSAS RIVER BASIN

07157980 CIMARRON RIVER AT FREEDOM, OKLA.--Continued

SULFATE (MG/L AS SO₄) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	250	540	460	790	470	520	470	760	1100	---	---	460
2	270	490	460	990	480	530	490	750	1100	---	---	340
3	280	460	460	830	440	550	530	780	1200	---	---	250
4	260	500	460	---	430	490	500	710	1000	---	---	310
5	260	570	270	---	490	490	470	710	1100	---	---	410
6	300	570	320	---	450	520	480	750	750	---	---	460
7	330	600	370	---	440	510	490	780	780	---	740	520
8	350	630	450	---	450	720	570	760	650	---	740	590
9	340	510	450	---	500	760	540	800	760	---	700	690
10	640	570	430	---	480	670	580	750	460	---	530	790
11	290	580	530	---	430	310	710	730	430	---	640	800
12	200	580	530	---	470	280	700	760	500	---	1200	790
13	280	600	470	---	500	360	720	710	790	---	1100	790
14	310	650	460	---	490	440	640	810	780	---	1100	780
15	370	530	460	---	480	490	640	770	750	---	960	740
16	400	530	430	---	490	420	650	900	770	---	660	720
17	400	500	490	---	520	420	720	920	790	---	470	780
18	430	530	530	640	560	470	760	920	910	---	400	770
19	460	570	560	460	560	420	800	940	990	---	510	770
20	460	730	710	360	520	---	740	960	1000	---	760	710
21	470	330	740	340	510	520	260	980	1100	---	730	740
22	470	320	680	360	450	480	260	1000	1100	---	720	780
23	500	390	620	390	500	440	340	1000	1100	---	1200	780
24	470	460	500	430	510	430	410	960	1200	---	980	770
25	430	450	500	480	420	430	460	1200	1200	---	730	800
26	490	530	490	470	510	450	560	770	1300	---	470	800
27	500	500	680	470	500	500	650	920	---	---	420	830
28	510	440	520	530	450	460	610	920	---	---	350	900
29	500	440	500	520	---	470	680	980	---	---	250	860
30	510	450	520	470	---	420	720	1000	---	---	390	870
31	540	---	780	430	---	490	---	1100	---	---	440	---
MONTH	400	520	510	---	480	480	570	860	910	---	690	690

DISSOLVED SO₄ DISCHARGE (TONS/DAY) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	457	295	245	403	338	220	214	274	58	---	---	1120
2	436	226	201	400	322	220	180	184	61	---	---	2620
3	410	188	4380	269	273	234	203	171	38	---	---	1870
4	301	209	4850	---	267	186	172	131	159	---	---	634
5	278	200	926	---	275	186	144	122	119	---	---	425
6	310	209	576	---	192	209	183	133	336	---	---	306
7	319	275	664	---	177	162	166	135	369	---	208	214
8	327	286	652	---	197	636	211	131	1190	---	86	245
9	739	254	588	---	171	670	165	138	561	---	173	212
10	7960	251	424	---	242	1880	195	101	206	---	300	187
11	6230	255	411	---	267	1990	264	95	175	---	192	185
12	1380	256	402	---	237	898	234	84	163	---	233	172
13	891	244	444	---	235	684	201	77	634	---	262	170
14	836	265	441	---	170	649	134	77	268	---	326	164
15	748	208	356	---	204	597	125	72	129	---	253	152
16	557	214	325	---	187	412	126	85	107	---	140	145
17	557	195	361	---	230	363	139	87	85	---	74	156
18	527	224	333	1150	246	290	140	89	74	---	56	154
19	474	286	315	1020	310	1100	138	71	61	---	61	166
20	461	769	383	713	286	---	4250	67	50	---	82	176
21	407	589	536	535	290	574	1390	50	41	---	55	160
22	338	473	547	587	217	382	444	57	33	---	299	152
23	323	511	589	412	200	387	355	50	27	---	332	134
24	292	531	882	270	211	341	292	906	13	---	384	138
25	267	431	385	351	154	323	241	427	4.9	---	366	137
26	306	445	509	298	195	256	273	199	1.5	---	267	127
27	317	368	813	300	209	347	265	205	---	---	4650	123
28	236	312	626	317	198	293	280	94	---	---	3830	129
29	237	304	596	321	---	242	324	74	---	---	969	125
30	242	272	518	315	---	204	247	51	---	---	584	129
31	263	---	524	267	---	220	---	53	---	---	166	---
MONTH	885	318	767	---	232	505	390	145	191	---	574	361

ARKANSAS RIVER BASIN

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07157980 CIMARRON RIVER AT FREEDOM, OKLA.--Continued

CHLORIDE (MG/L AS CL) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2400	5500	4700	12800	4900	5300	4900	10100	24200	---	---	4700
2	2600	5100	4700	19500	5000	5500	5000	10300	28200	---	---	3400
3	2700	4800	4700	13400	4500	5700	5500	9500	30200	---	---	2400
4	2500	5200	4700	---	4400	5000	5200	7600	21100	---	---	3100
5	2500	5900	2600	---	5000	5000	4800	7500	24800	---	---	4200
6	3000	5900	3200	---	4600	5300	5000	8100	8100	---	---	4700
7	3300	6200	3800	---	4500	5300	5000	8600	12700	---	8000	5300
8	3500	6600	4600	---	4600	7700	5900	8300	6800	---	10700	6100
9	3400	5200	4600	---	5100	10100	5500	9000	8300	---	11500	7300
10	6700	5900	4400	---	5000	7000	6100	10400	4700	---	5500	8600
11	2900	6000	5500	---	4400	3100	11300	10900	4400	---	6700	8800
12	1800	6100	5500	---	4800	2700	7400	10200	5200	---	33800	9100
13	2700	6300	4800	---	5100	3600	7600	11800	8800	---	24800	9300
14	3100	6800	4800	---	5000	4500	6700	13100	8600	---	25200	9500
15	3700	5500	4700	---	4900	5100	6700	12600	8100	---	17700	10500
16	4000	5500	4400	---	5100	4300	6800	14500	9900	---	7000	11900
17	4000	5100	5100	---	5400	4300	7600	15500	9200	---	4900	12800
18	4400	5400	5500	6700	5800	4800	8300	15400	15200	---	4000	12600
19	4700	5900	5800	4800	5800	4300	9000	16900	19400	---	5200	12600
20	4800	12000	11800	3600	5400	---	8000	17900	21400	---	10200	11400
21	4800	3300	10700	3400	5300	5400	2500	18700	24500	---	10800	8000
22	4900	3200	7200	3700	4600	4900	2500	20800	26700	---	11200	8600
23	5100	3900	6500	4000	5100	4500	3400	21900	28000	---	30700	9600
24	4900	4700	5100	4400	5300	4400	4200	18100	31400	---	18700	12700
25	4400	4700	5100	4900	4300	4400	4800	29200	32100	---	7800	13000
26	5000	5500	5100	4800	5300	4600	5800	12600	35100	---	4800	12900
27	5200	5200	7200	4900	5200	5200	6800	15200	---	---	4300	13400
28	5300	4500	5300	5500	4600	4800	6300	15500	---	---	3500	14500
29	5100	4500	5200	5400	---	4800	7100	18700	---	---	2500	13800
30	5300	4700	5400	4800	---	4300	7700	22900	---	---	4000	14000
31	5600	---	8500	4400	---	5000	---	25100	---	---	4500	---
MONTH	4000	5500	5500	---	5000	5000	6100	14400	17600	---	11100	9300

DISSOLVED CL DISCHARGE (TONS/DAY) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4450	3060	2510	6570	3480	2270	2200	3670	1310	---	---	11500
2	4280	2330	2070	7890	3320	2280	1860	2540	1520	---	---	26260
3	4030	1930	45010	4350	2800	2430	2100	2080	978	---	---	18190
4	2940	2150	49830	---	2730	1910	1780	1390	3310	---	---	6310
5	2720	2080	9090	---	2830	1910	1480	1300	2750	---	---	4330
6	3080	2170	5760	---	1970	2160	1890	1450	3640	---	---	3140
7	3200	2870	6720	---	1810	1670	1710	1480	6040	---	2250	2210
8	3280	2980	6690	---	2020	6800	2190	1430	12400	---	1240	2550
9	7430	2620	5620	---	1760	8980	1710	1550	6110	---	2840	2230
10	83230	2600	4340	---	2490	19730	2030	1400	2110	---	3100	2050
11	61600	2650	4260	---	2730	19870	4180	1410	1790	---	2010	2040
12	13000	2670	4170	---	2430	8840	2470	1130	1680	---	6390	1970
13	8770	2550	4570	---	2430	6900	2140	1270	7000	---	6030	2000
14	8330	2770	4530	---	1750	6640	1400	1240	2950	---	7560	2000
15	7560	2160	3650	---	2100	6160	1310	1190	1400	---	4690	2160
16	5660	2220	3330	---	1930	4210	1320	1370	1390	---	1460	2410
17	5660	2010	3720	---	2380	3710	1480	1460	996	---	764	2550
18	5390	2320	3450	11990	2560	2980	1530	1490	1230	---	566	2520
19	4870	2970	3270	10430	3220	11210	1550	1270	1210	---	634	2720
20	4740	12730	6370	7190	2950	---	45900	1260	1040	---	1100	2830
21	4190	5900	7820	5370	3000	5940	13560	961	928	---	814	1730
22	3480	4720	5750	5930	2230	3930	4330	1180	792	---	4640	1670
23	3330	5190	6150	4190	2070	3960	3570	1070	665	---	8630	1660
24	3000	5450	9090	2760	2180	3490	2980	17010	339	---	7380	2260
25	2730	4430	3970	3610	1570	3300	2470	10820	130	---	3930	2220
26	3150	4610	5250	3060	2010	2620	2840	3260	43	---	2750	2060
27	3270	3800	8550	3080	2150	3580	2770	3410	---	---	47420	1990
28	2440	3190	6470	3280	2030	3010	2920	1590	---	---	38480	2070
29	2440	3120	6150	3320	---	2490	3400	1420	---	---	9440	2010
30	2500	2790	5360	3240	---	2080	2650	1110	---	---	5930	2070
31	2730	---	5740	2730	---	2270	---	1220	---	---	1710	---
MONTH	8950	3430	8040	---	2390	5240	4120	2400	2450	---	6870	4060

ARKANSAS RIVER BASIN

07157980 CIMARRON RIVER AT FREEDOM, OKLA.--Continued

DISSOLVED SOLIDS (RESIDUE ON EVAPORATION, MG/L AT 180 DEG. C) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4520	9660	8250	21410	8560	9290	8560	17090	40250	---	---	8310
2	4860	8860	8250	32230	8680	9540	8800	17410	46890	---	---	6050
3	4980	8370	8250	22430	8010	9900	9600	16070	50270	---	---	4440
4	4680	9050	8250	---	7820	8800	9050	12930	34970	---	---	5540
5	4650	10270	4830	---	8740	8800	8440	12850	41200	---	---	7400
6	5460	10210	5830	---	8130	9290	8680	13790	13720	---	---	8250
7	5930	10760	6720	---	7890	9230	8740	14500	21250	---	13640	9290
8	6230	11430	8070	---	8070	13090	10270	14030	11740	---	17950	10640
9	6170	9110	8130	---	8990	17090	9660	15210	14030	---	19370	12410
10	11610	10270	7700	---	8680	12100	10510	17480	8230	---	9540	14660
11	5230	10450	9540	---	7820	5600	18970	18270	7780	---	11550	14890
12	3530	10510	9600	---	8500	5000	12620	17170	9070	---	56390	15440
13	4960	10880	8440	---	8920	6480	13010	19760	14830	---	41200	15680
14	5590	11800	8370	---	8740	7890	11490	21960	14580	---	41940	16070
15	6660	9540	8250	---	8620	8860	11610	21020	13790	---	29280	17720
16	7150	9540	7760	---	8860	7640	11740	24080	16700	---	11980	19920
17	7150	8920	8860	---	9410	7580	13010	25480	15600	---	8560	21330
18	7820	9470	9600	11610	10090	8500	14110	25270	24950	---	7150	21090
19	8250	10270	10020	8370	10150	7640	15210	27800	32130	---	9110	21090
20	8370	20150	19760	6480	9350	---	13640	29590	35500	---	17170	19130
21	8500	5960	18030	6060	9230	9350	4680	30970	40770	---	18110	13640
22	8560	5750	12350	6540	8070	8620	4600	34450	44360	---	18740	14580
23	8990	6970	11190	7030	8920	7890	6170	36340	46580	---	51220	16230
24	8560	8250	8920	7700	9170	7700	7400	29910	52380	---	30970	21170
25	7820	8190	8920	8620	7520	7700	8370	48690	53540	---	13320	21800
26	8740	9540	8860	8500	9230	8130	10150	21020	58520	---	8500	21640
27	9050	9050	12350	8560	9050	9050	11800	25060	---	---	7520	22430
28	9230	7890	9290	9540	8130	8370	10940	25480	---	---	6230	24080
29	8990	7950	9050	9410	---	8440	12290	30970	---	---	4560	23060
30	9170	8190	9410	8500	---	7580	13170	37930	---	---	7090	23290
31	9780	---	14420	7820	---	8800	---	41720	---	---	7950	---
MONTH	7140	9570	9590	---	8690	8800	10580	24010	29370	---	18760	15710

DISSOLVED SOLIDS DISCHARGE (TONS/DAY) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8240	5320	4410	10980	6100	3960	3860	6180	2170	---	---	20200
2	7870	4070	3630	13050	5810	3960	3260	4280	2530	---	---	47220
3	7390	3390	79090	7270	4930	4220	3650	3510	1630	---	---	33790
4	5430	3760	87560	---	4820	3350	3100	2370	5480	---	---	11440
5	5020	3600	16710	---	4960	3350	2600	2220	4560	---	---	7670
6	5600	3780	10390	---	3470	3760	3300	2460	6180	---	---	5530
7	5760	4970	11980	---	3190	2920	3000	2510	10100	---	3830	3860
8	5890	5150	11760	---	3550	11590	3800	2420	21390	---	2080	4420
9	13330	4570	9880	---	3080	15140	2970	2630	10380	---	4760	3820
10	143610	4520	7650	---	4360	33980	3520	2360	3710	---	5410	3480
11	112310	4600	7410	---	4820	35980	7020	2370	3150	---	3460	3460
12	24950	4630	7260	---	4270	16200	4220	1900	2940	---	10660	3340
13	16080	4410	8020	---	4240	12330	3650	2130	11860	---	10010	3390
14	15080	4780	7960	---	3070	11710	2420	2070	5000	---	12570	3380
15	13490	3760	6420	---	3680	10770	2260	1990	2380	---	7750	3640
16	10040	3860	5870	---	3370	7430	2280	2280	2340	---	2520	4030
17	10040	3520	6510	---	4140	6550	2530	2410	1680	---	1340	4260
18	9510	4040	6010	20700	4440	5230	2590	2460	2020	---	1000	4210
19	8560	5160	5680	18310	5590	19800	2630	2100	1990	---	1110	4560
20	8320	21330	10670	12860	5150	---	78060	2080	1730	---	1850	4750
21	7340	10620	13150	9650	5230	10350	25030	1590	1540	---	1370	2950
22	6100	8530	9870	10600	3920	6890	8020	1950	1320	---	7790	2830
23	5820	9220	10630	7440	3610	6980	6400	1770	1110	---	14580	2800
24	5270	9580	15900	4870	3810	6160	5270	28100	566	---	12210	3770
25	4820	7780	6940	6330	2780	5820	4340	18010	217	---	6690	3710
26	5520	8030	9190	5370	3510	4610	4930	5450	71	---	4820	3450
27	5720	6640	14670	5410	3760	6250	4780	5620	---	---	83840	3330
28	4260	5620	11290	5720	3580	5290	5050	2610	---	---	69020	3450
29	4270	5490	10750	5790	---	4370	5840	2340	---	---	17480	3360
30	4360	4910	9350	5690	---	3680	4510	1840	---	---	10530	3460
31	4750	---	9740	4820	---	3970	---	2030	---	---	3000	---
MONTH	15960	5990	14080	---	4190	9220	7160	4000	4160	---	11980	7120

07157980 CIMARRON RIVER AT FREEDOM, OKLA.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7400	15800	13500	31800	14000	15200	14000	26300	50800	---	---	13600
2	7950	14500	13500	43200	14200	15600	14400	26700	57100	---	---	9900
3	8140	13700	13500	33100	13100	16200	15700	25000	60300	---	---	7260
4	7650	14800	13500	---	12800	14400	14800	21000	45800	---	---	9060
5	7600	16800	7910	---	14300	14400	13800	20900	51700	---	---	12100
6	8930	16700	9540	---	13300	15200	14200	22100	22000	---	---	13500
7	9700	17600	11000	---	12900	15100	14300	23000	31600	---	21900	15200
8	10200	18700	13200	---	13200	21200	16800	22400	19200	---	27400	17400
9	10100	14900	13300	---	14700	26300	15800	23900	22400	---	29200	20310
10	19000	16800	12600	---	14200	19800	17200	26800	13460	---	15600	23200
11	8560	17100	15600	---	12800	9160	28700	27800	12720	---	18900	23500
12	5770	17200	15700	---	13900	8180	20600	26400	14840	---	66100	24200
13	8120	17800	13800	---	14600	10600	21100	29700	23430	---	51700	24500
14	9140	19300	13700	---	14300	12900	18800	32500	23100	---	52400	25000
15	10900	15600	13500	---	14100	14500	19000	31300	22100	---	40400	27100
16	11700	15600	12700	---	14500	12500	19200	35200	25800	---	19600	29900
17	11700	14600	14500	---	15400	12400	21100	36800	24400	---	14000	31700
18	12800	15500	15700	19000	16500	13900	22500	36600	36300	---	11700	31400
19	13500	16800	16400	13700	16600	12500	23900	39000	43100	---	14900	31400
20	13700	30200	29700	10600	15300	---	21900	40700	46300	---	26400	28900
21	13900	9750	27500	9910	15100	15300	7660	42000	51300	---	27600	21900
22	14000	9400	20200	10700	13200	14100	7530	45300	54700	---	28400	23100
23	14700	11400	18300	11500	14600	12900	10100	47100	56800	---	61200	25200
24	14000	13500	14600	12600	15000	12600	12100	41000	62300	---	42000	31500
25	12800	13400	14600	14100	12300	12600	13700	58800	63400	---	21500	32300
26	14300	15600	14500	13900	15100	13300	16600	31300	68120	---	13900	32100
27	14800	14800	20200	14000	14800	14800	19300	36400	---	---	12300	33100
28	15100	12900	15200	15600	13300	13700	17900	36800	---	---	10200	35200
29	14700	13000	14800	15400	---	13800	20100	42000	---	---	7460	33900
30	15000	13400	15400	13900	---	12400	21300	48600	---	---	11600	34200
31	16000	---	22900	12800	---	14400	---	52200	---	---	13000	---
MONTH	11670	15570	15520	---	14220	14330	17140	34050	38580	---	26370	24050

TEMPERATURE (DEG. C) OF WATER , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

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

ARKANSAS RIVER BASIN

07158000 CIMARRON RIVER NEAR WAYNOKA, OKLA.

LOCATION.--Lat 36°31'02", long 98°52'45", near center of sec.35, T.24 N., R.16 W., Woods County, at gaging station at bridge on U.S. Highway 281, 0.8 mi (1.39 km) downstream from Main Creek, 5 mi (8.0 km) south of Waynoka, and at mile 247.0 (397.4 km).

DRAINAGE AREA.--13,334 mi² (34,535 km²), of which 4,830 mi² (12,510 km²) is probably noncontributing.

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

Water temperatures: July 1968 to current year.

EXTREMES, Current year.--Specific conductance: Maximum, 61,500 micromhos/cm Aug. 8; minimum,

2,430 micromhos/cm Sept. 2.

Water temperatures: Maximum, 33.5°C May 18; minimum, freezing point on several days during December to February.

Period of record.--Specific conductance: Maximum, 102,000 micromhos/cm Oct. 10, 1970; minimum, 1,260 micromhos/cm May 11, 1973.

Water temperatures: Maximum, 34.5°C July 22, 1969; minimum, freezing point on several days during months.

REMARKS.--Continuous monitor records for specific conductance and water temperature are collected for this station. Records of maximum and minimum specific conductance values and water temperature values are available in district office in Oklahoma City, Okla. No flow June 28-July 24, July 26-Aug. 5.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	INSTANTANEOUS 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)	ALKA- LINITY AS CACO3 (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED NITRATE (N) (MG/L)	DIS- SOLVED NITRATE (NO3) (MG/L)	DIS- SOLVED NITRITE (N) (MG/L)
OCT.												
05...	649	120	39	1600	226	0	185	240	2500	.57	2.5	.02
12...	177	--	--	1300	146	0	120	190	2100	.50	2.2	.02
15...	847	140	35	1600	161	0	132	310	2500	.36	1.6	.02
25...	204	210	73	3200	242	0	198	540	5200	.10	.44	.07
NOV.												
05...	171	230	75	3400	229	14	211	550	5100	.13	.58	.02
15...	185	220	82	--	221	0	181	570	7700	.17	.75	.02
25...	377	170	63	2600	223	0	183	420	4000	.59	2.6	.01
DEC.												
05...	3950	220	61	4100	163	0	134	490	6400	.94	4.2	.01
15...	289	210	74	3300	276	0	226	510	5000	.64	2.8	.02
25...	432	230	77	4200	257	0	211	610	6600	.54	2.4	.01
JAN.												
05...	264	400	140	--	320	0	262	1100	15000	.76	3.4	.00
15...	381	300	110	6900	302	0	248	720	11000	.68	3.0	.04
25...	328	190	65	2900	262	0	215	480	4600	.69	3.1	.01
FEB.												
05...	258	200	74	--	255	0	209	500	5400	.29	1.3	.00
15...	235	200	73	--	238	0	195	520	5200	.14	.62	.04
25...	119	220	78	3600	267	0	219	580	5600	.20	.89	.01
MAR.												
05...	116	210	83	3900	205	2	171	630	6300	.05	.22	.02
15...	395	160	60	1900	222	0	182	440	3000	.42	1.9	.07
25...	229	220	80	3000	264	0	217	--	4700	.21	.93	.02
APR.												
05...	176	240	90	3600	239	0	196	--	5800	--	--	--
15...	164	280	100	--	229	0	188	870	7900	--	--	--
25...	219	180	62	1900	192	0	157	530	2800	--	--	--
MAY												
05...	106	310	100	5500	205	0	168	780	--	--	--	--
15...	41	330	120	6800	202	0	166	880	--	--	--	--
25...	403	310	81	11000	132	0	108	--	17000	--	--	--
JUNE												
05...	176	340	120	8300	158	0	130	1000	--	--	--	--
15...	119	250	74	3500	165	0	135	--	5600	--	--	--
AUG.												
07...	50	450	130	--	130	0	107	1100	30000	--	--	--
15...	320	150	22	860	93	0	76	--	1400	--	--	--
28...	11000	110	25	1900	116	0	95	190	3000	--	--	--
SEP.												
05...	445	120	30	--	128	0	105	290	2300	--	--	--
15...	89	330	100	--	219	0	180	910	8200	--	--	--
25...	70	350	84	5500	212	0	174	890	8700	--	--	--

ARKANSAS RIVER BASIN

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07158000 CIMARRON RIVER NEAR WAYNOKA, OKLA.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	DIS- SOLVED NITRITE (NO2) (MG/L)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	CARBON DIOXIDE (CO2) (MG/L)
OCT.											
05...	.07	.59	4860	6.61	8520	460	270	32	8590	8.1	2.9
12...	.07	.52	3830	5.21	1830	--	--	--	7070	7.9	2.9
15...	.07	.38	4840	6.58	11100	490	360	31	8680	8.0	2.6
25...	.23	.17	9550	13.0	5260	830	630	48	16000	8.3	1.9
NOV.											
05...	.07	.15	--	--	--	880	670	50	16100	8.4	1.6
15...	.07	.19	13200	18.0	6590	890	710	--	21800	8.1	2.8
25...	.03	.60	7580	10.3	7720	680	500	43	12500	8.2	2.3
DEC.											
05...	.03	.95	11200	15.2	119000	800	670	63	17100	7.7	5.2
15...	.07	.66	9270	12.6	7230	830	600	50	15600	8.2	2.8
25...	.03	.55	11500	15.6	13400	890	680	61	18600	8.2	2.6
JAN.											
05...	.00	.76	25700	35.0	18300	1600	1300	--	36900	8.0	5.1
15...	.13	.72	19200	26.1	19800	1200	950	87	29200	8.0	4.8
25...	.03	.70	8140	11.1	7210	740	530	46	14100	8.3	2.1
FEB.											
05...	.00	.29	9160	12.5	6380	800	600	--	15900	8.3	2.0
15...	.13	.18	9220	12.5	5850	800	600	--	15800	8.3	1.9
25...	.03	.21	10300	14.0	3310	870	650	53	17200	8.2	2.7
MAR.											
05...	.07	.07	11500	15.6	3600	870	690	58	19400	8.4	1.3
15...	.23	.49	5900	8.02	6290	650	460	33	10200	8.0	3.6
25...	.07	.23	8820	12.0	5450	880	660	44	15200	8.2	2.7
APR.											
05...	--	.09	10400	14.1	4940	970	770	50	17400	8.2	2.4
15...	--	.08	14300	19.4	6330	1100	920	--	23300	8.2	2.3
25...	--	.04	5720	7.78	3380	700	550	31	8670	7.9	3.9
MAY											
05...	--	.08	15700	21.4	4490	1200	1000	70	22600	7.9	4.1
15...	--	.09	19600	26.7	2170	1300	1200	82	27400	8.0	3.2
25...	--	2.4	29200	39.7	31800	1100	1000	144	38800	7.5	6.7
JUNE											
05...	--	.09	23400	31.8	1110	1300	1200	99	31900	7.9	3.2
15...	--	.44	10000	13.6	3210	930	790	50	15200	8.2	1.7
AUG.											
07...	--	.78	51100	69.5	6900	1700	1600	--	--	7.7	4.2
15...	--	1.3	2890	3.93	2500	470	390	17	4510	7.8	2.4
28...	--	1.1	5330	7.25	158000	380	280	43	8960	7.7	3.7
SEP.											
05...	--	.66	4710	6.41	5660	420	320	--	7810	7.7	4.1
15...	--	.12	15900	21.6	3820	1200	1100	--	22500	8.3	1.8
25...	--	.15	16000	21.8	3020	1200	1000	69	23000	8.1	2.7

ARKANSAS RIVER BASIN

07158000 CIMARRON RIVER NEAR WAYNOKA, OKLA.--Continued

SULFATE (MG/L AS SO₄) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	220	530	440	620	490	530	520	480	1000	---	---	320
2	250	500	470	600	440	480	520	480	1000	---	---	140
3	250	490	470	1000	470	480	520	1000	1000	---	---	250
4	250	500	560	1000	470	580	520	1000	1000	---	---	280
5	250	490	560	1000	470	580	520	860	1000	---	---	230
6	280	590	250	1000	480	570	500	850	520	---	---	340
7	280	580	250	1000	480	540	500	860	520	---	1100	400
8	280	560	350	1000	480	490	540	860	600	---	1100	660
9	330	570	350	1000	490	860	540	860	650	---	860	490
10	330	610	450	1000	500	480	580	970	480	---	1000	610
11	180	630	450	1000	490	620	580	970	500	---	500	610
12	220	530	450	1000	430	310	550	1000	460	---	450	810
13	220	530	450	1000	430	310	550	1000	470	---	560	810
14	250	580	450	1000	470	310	750	1000	570	---	550	860
15	250	640	450	1000	470	310	750	1000	520	---	350	850
16	330	560	450	1000	470	440	710	1000	1000	---	130	880
17	330	560	450	1000	470	440	700	1000	1000	---	1000	890
18	380	510	470	1000	510	400	710	1000	1000	---	1000	1000
19	380	510	460	720	510	400	720	1000	1000	---	530	1000
20	420	520	610	720	510	440	340	1000	1000	---	530	980
21	490	520	570	360	520	450	340	1000	1000	---	590	1000
22	490	320	1000	360	540	550	270	1000	1000	---	590	870
23	550	320	940	370	540	540	270	1000	1000	---	710	860
24	510	370	560	370	510	450	290	1000	1000	---	990	880
25	480	370	560	480	520	450	280	1000	1000	---	690	880
26	470	460	480	470	450	440	420	1000	1000	---	600	1000
27	470	460	480	480	440	440	380	1000	1000	---	340	1000
28	470	500	600	460	540	490	590	1000	---	---	320	1000
29	510	500	600	470	---	490	590	1000	---	---	250	1000
30	510	450	550	530	---	490	740	1000	---	---	300	1000
31	510	---	600	500	---	490	---	1000	---	---	290	---
MONTH	360	510	510	770	490	480	530	960	840	---	620	730

DISSOLVED SO₄ DISCHARGE (TONS/DAY) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	676	283	322	285	391	213	230	242	100	---	---	105
2	616	245	349	245	344	180	219	221	97	---	---	6000
3	558	220	415	353	352	166	237	415	103	---	---	2830
4	490	223	2960	244	342	176	241	325	193	---	---	829
5	418	227	4710	305	332	178	239	234	402	---	---	303
6	394	273	727	360	341	191	219	205	344	---	---	313
7	335	280	451	414	336	183	213	191	530	---	250	317
8	293	287	472	498	346	227	224	175	577	---	316	439
9	315	292	417	438	335	692	208	159	845	---	225	279
10	2340	300	466	466	330	1650	213	167	280	---	496	292
11	7430	294	431	384	337	5470	205	149	228	---	324	246
12	6110	259	413	328	316	1680	186	138	181	---	125	260
13	1450	274	401	381	301	703	178	125	163	---	99	218
14	724	303	359	448	305	425	240	120	258	---	187	208
15	461	313	351	571	299	327	232	95	152	---	283	200
16	477	257	327	665	290	404	214	90	199	---	18	201
17	367	243	323	868	283	354	205	87	158	---	126	204
18	378	221	347	1080	300	314	195	85	127	---	183	223
19	363	229	312	966	293	301	247	77	99	---	80	236
20	355	373	345	1350	302	324	860	61	74	---	67	238
21	374	942	384	869	284	349	2310	58	56	---	54	252
22	348	618	730	684	256	391	846	50	36	---	45	195
23	358	470	746	532	217	348	300	44	28	---	169	159
24	300	436	459	405	198	281	205	109	24	---	260	169
25	260	374	600	442	181	261	152	1050	17	---	242	167
26	271	429	472	397	174	260	206	529	11	---	243	177
27	271	413	459	375	159	266	168	325	0.83	---	6490	158
28	258	419	533	358	209	276	204	215	---	---	10000	156
29	271	379	520	347	---	258	396	155	---	---	1660	161
30	270	328	438	393	---	232	484	125	---	---	597	159
31	272	---	357	396	---	230	---	106	---	---	190	---
MONTH	897	340	664	511	291	555	343	197	196	---	909	523

ARKANSAS RIVER BASIN

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07158000 CIMARRON RIVER NEAR WAYNOKA, OKLA.--Continued

CHLORIDE (MG/L AS CL) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2100	5500	4500	6500	5000	5400	5300	4900	14300	---	---	3200
2	2400	5200	4800	6300	4400	4900	5300	4900	14300	---	---	1300
3	2500	5100	4800	10500	4800	4900	5300	10200	14300	---	---	2500
4	2400	5100	5700	10400	4800	6000	5300	10200	12800	---	---	2700
5	2400	5000	5800	13900	4800	6000	5300	8300	12800	---	---	2200
6	2700	6100	2500	13800	4900	5800	5100	8200	5300	---	---	3400
7	2700	6000	2500	13300	4900	5600	5100	8400	5300	---	30000	4100
8	2700	5800	3600	13600	4900	5000	5500	8400	6200	---	30100	6800
9	3300	5800	3600	11900	5000	8400	5600	8400	6700	---	8300	5000
10	3300	6400	4500	12000	5100	4900	6000	9200	4900	---	10200	6300
11	1700	6500	4500	11900	5000	6400	6000	9200	5200	---	5200	6300
12	2100	5400	4500	11700	4400	3100	5600	10200	4700	---	4600	7900
13	2100	5400	4600	10800	4400	3100	5700	10200	4800	---	5700	7900
14	2400	6000	4600	10400	4800	3100	7500	10500	5900	---	5700	8300
15	2400	6600	4600	10500	4800	3100	7500	10600	5400	---	3600	8300
16	3300	5700	4600	10300	4800	4500	7200	11500	11400	---	1200	8500
17	3300	5800	4600	10200	4800	4500	7100	11500	11400	---	11300	8600
18	3800	5300	4800	10200	5200	4100	7200	11500	12600	---	11300	10300
19	3800	5200	4700	7200	5200	4100	7200	12700	12200	---	5400	10300
20	4200	5300	6400	7200	5300	4500	3400	12600	12200	---	5400	9300
21	5000	5300	5900	3600	5300	4600	3400	12700	14500	---	6100	10100
22	5000	3200	9700	3600	5600	5600	2600	12700	14400	---	6100	8400
23	5700	3200	9000	3800	5600	5600	2600	12700	14100	---	7200	8400
24	5200	3700	5700	3700	5300	4600	2800	14600	14100	---	9400	8500
25	4900	3700	5800	4900	5300	4500	2700	15700	14000	---	7000	8500
26	4800	4600	4900	4800	4500	4400	4300	15800	14000	---	6300	10600
27	4800	4600	4900	4900	4500	4500	3800	17900	13800	---	3400	10600
28	4800	5100	6300	4700	5600	5000	6100	17900	---	---	3200	11600
29	5300	5100	6300	4800	---	5000	6100	14200	---	---	2400	11500
30	5300	4500	5600	5400	---	5000	7400	14200	---	---	3000	12500
31	5300	---	6300	5100	---	5000	---	14400	---	---	2900	---
MONTH	3600	5200	5200	8500	5000	4900	5300	11400	10400	---	7800	7500

DISSOLVED CL DISCHARGE (TONS/DAY) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6500	2910	3280	2970	4010	2190	2360	2470	1390	---	---	1050
2	6000	2520	3570	2550	3500	1840	2250	2270	1350	---	---	53990
3	5450	2250	4240	3700	3600	1690	2430	4190	1420	---	---	27690
4	4770	2290	30510	2540	3490	1820	2480	3310	2420	---	---	8170
5	4070	2330	48630	4130	3400	1840	2460	2270	5050	---	---	2920
6	3890	2820	7110	4830	3500	1970	2250	2000	3540	---	---	3140
7	3300	2900	4410	5400	3440	1890	2180	1850	5450	---	6810	3210
8	2880	2960	4750	6630	3550	2330	2310	1690	6000	---	8610	4500
9	3150	3010	4190	5140	3440	5740	2140	1540	8710	---	2180	2860
10	23450	3140	4750	5500	3390	16950	2200	1590	2870	---	5060	3050
11	69700	3060	4400	4520	3460	57190	2120	1410	2340	---	3330	2570
12	58800	2660	4220	3800	3210	16710	1910	1400	1850	---	1270	2550
13	13950	2820	4090	4090	3060	7010	1840	1270	1670	---	1020	2140
14	7050	3130	3660	4630	3120	4230	2390	1250	2670	---	1920	2020
15	4490	3240	3580	5950	3060	3260	2310	1010	1560	---	2850	1940
16	4770	2650	3340	6810	2960	4120	2170	1020	2240	---	164	1940
17	3670	2510	3300	8860	2900	3620	2070	990	1790	---	1400	1960
18	3820	2270	3540	11000	3080	3180	1970	959	1570	---	2050	2290
19	3660	2360	3190	9730	3010	3050	2490	957	1180	---	824	2430
20	3610	3840	3620	13630	3100	3300	8630	749	888	---	687	2260
21	3840	9690	3960	8740	2920	3560	23190	721	783	---	564	2540
22	3570	6170	7080	6890	2640	4030	8310	618	507	---	465	1890
23	3690	4690	7110	5370	2230	3590	2940	549	380	---	1700	1540
24	3080	4400	4730	4090	2030	2870	2030	1540	335	---	2460	1630
25	2670	3780	6190	4530	1860	2660	1490	15810	231	---	2450	1610
26	2770	4380	4840	4060	1780	2650	2100	8040	151	---	2530	1860
27	2770	4220	4700	3840	1620	2710	1700	5570	11	---	65060	1670
28	2640	4300	5560	3660	2160	2830	2110	3670	---	---	99890	1780
29	2790	3880	5420	3550	---	2640	4100	2150	---	---	16190	1820
30	2770	3350	4510	4050	---	2380	4840	1720	---	---	5930	1950
31	2800	---	3710	4070	---	2350	---	1470	---	---	1880	---
MONTH	8720	3480	6780	5460	2980	5680	3460	2450	2160	---	9490	5030

ARKANSAS RIVER BASIN

07158000 CIMARRON RIVER NEAR WAYNOKA, OKLA.--Continued

DISSOLVED SOLIDS (RESIDUE ON EVAPORATION, MG/L AT 180 DEG. C) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB.	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4170	9640	8020	11070	8910	9560	9380	8670	24690	---	---	5960
2	4610	9090	8500	10870	7910	8670	9320	8730	24780	---	---	2790
3	4730	8930	8500	18030	8530	8610	9320	17340	24690	---	---	4740
4	4610	9060	10030	17850	8500	10380	9320	17420	22090	---	---	5140
5	4630	8910	10090	24080	8570	10440	9320	14050	22090	---	---	4250
6	5140	10630	4740	23810	8680	10210	8970	13880	9320	---	---	6310
7	5140	10440	4730	23030	8610	9730	8970	14140	9320	---	51170	7380
8	5120	10130	6490	23570	8730	8910	9680	14140	10770	---	51270	11490
9	6080	10210	6490	20470	8790	14140	9730	14140	11360	---	14050	8910
10	6140	10970	8080	20600	8970	8740	10380	15610	8670	---	17510	10910
11	3500	11120	8080	20550	8910	11030	10440	15610	9090	---	9090	10910
12	4180	9560	8080	20170	7850	5730	9850	17420	8380	---	8140	13360
13	4180	9500	8240	18550	7650	5800	9910	17420	8500	---	10030	13360
14	4600	10380	8230	17770	8500	5760	12580	18030	10330	---	9970	14050
15	4610	11270	8240	17940	8550	5790	12580	18200	9430	---	6500	13960
16	6080	10030	8140	17600	8500	8070	11970	19670	19500	---	2640	14310
17	6080	10090	8140	17510	8500	8060	11890	19670	19640	---	19330	14480
18	6900	9260	8440	17400	9140	7330	11970	19670	21790	---	19410	17680
19	6900	9140	8380	12060	9140	7300	12060	21830	20970	---	9560	17680
20	7590	9320	10960	12060	9260	8010	6310	21750	20970	---	9500	15780
21	8840	9370	10240	6550	9320	8150	6310	21920	25120	---	10680	17250
22	8900	5900	16560	6610	9790	9860	4940	21920	25030	---	10680	14220
23	9920	5880	15240	6840	9790	9780	4960	21920	24340	---	11990	14140
24	9220	6780	10010	6780	9260	8210	5280	25380	24430	---	15950	14390
25	8610	6780	10120	8630	9380	8080	5120	27210	24260	---	11770	14390
26	8500	8260	8730	8500	8080	7910	7680	27370	24260	---	10860	18110
27	8500	8260	8670	8660	8020	8050	6950	30750	23910	---	6250	18200
28	8500	9030	10860	8380	9790	8850	10640	30650	---	---	5940	19840
29	9260	8970	10860	8500	---	8910	10680	24600	---	---	4680	19670
30	9260	8080	9860	9500	---	8850	12410	24520	---	---	5520	21490
31	9260	---	10800	9070	---	8850	---	24860	---	---	5390	---
MONTH	6570	9170	9110	14610	8780	8640	9300	19630	18060	---	13510	12840

DISSOLVED SOLIDS DISCHARGE (TONS/DAY) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12730	5100	5850	5080	7070	3850	4150	4380	2400	---	---	1930
2	11520	4440	6330	4400	6250	3250	3950	4010	2340	---	---	117540
3	10410	3980	7520	6330	6380	3000	4280	7160	2470	---	---	52900
4	9160	4030	53350	4340	6190	3170	4350	5640	4180	---	---	15400
5	7820	4110	84990	7150	6010	3210	4330	3830	8710	---	---	5700
6	7320	4910	13580	8360	6190	3440	3970	3370	6220	---	---	5740
7	6220	5050	8420	9330	6090	3310	3850	3130	9590	---	11610	5770
8	5430	5170	8660	11460	6270	4110	4050	2860	10380	---	14670	7600
9	5790	5260	7640	8840	6080	9690	3760	2600	14760	---	3680	5050
10	43070	5390	8470	9450	5980	29970	3840	2700	5080	---	8650	5250
11	141940	5220	7830	7770	6110	98010	3690	2400	4120	---	5860	4420
12	115040	4670	7510	6540	5740	30970	3350	2400	3280	---	2260	4290
13	27290	4950	7280	7010	5470	12970	3210	2160	2960	---	1790	3610
14	13540	5460	6510	7920	5530	7840	4010	2140	4660	---	3370	3410
15	8620	5510	6360	10170	5430	6040	3870	1720	2750	---	5190	3280
16	8780	4630	5940	11640	5250	7340	3620	1750	3840	---	364	3280
17	6740	4390	5870	15130	5140	6440	3470	1700	3080	---	2400	3320
18	6910	4000	6290	18790	5430	5720	3300	1650	2710	---	3510	3910
19	6640	4150	5660	16280	5310	5480	4170	1650	2040	---	1450	4150
20	6470	6750	6210	22790	5450	5880	15800	1290	1530	---	1210	3830
21	6780	17020	6910	15930	5130	6340	42440	1240	1360	---	980	4330
22	6300	11390	12070	12540	4630	7060	15750	1070	879	---	807	3190
23	6460	8670	12060	9740	3910	6280	5580	947	657	---	2850	2600
24	5420	7990	8270	7420	3580	5100	3810	2670	580	---	4180	2760
25	4720	6850	10820	8020	3270	4740	2820	27480	399	---	4100	2720
26	4910	7780	8560	7200	3160	4720	3750	13970	262	---	4370	3180
27	4910	7490	8310	6800	2880	4830	3080	9550	19	---	119210	2850
28	4680	7580	9580	6490	3780	4990	3680	6290	---	---	184290	3050
29	4900	6850	9350	6290	---	4670	7120	3720	---	---	30990	3130
30	4880	5960	7900	7100	---	4210	8110	2980	---	---	11050	3370
31	4930	---	6420	7170	---	4160	---	2550	---	---	3520	---
MONTH	16790	6160	11950	9470	5280	10030	6170	4230	3750	---	17290	9720

ARKANSAS RIVER BASIN

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07158000 CIMARRON RIVER NEAR WAYNOKA, OKLA.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7070	16340	13600	18770	15100	16200	15900	14700	34900	---	---	10100
2	7810	15400	14400	18430	13400	14700	15800	14800	35000	---	---	4730
3	8010	15140	14400	27200	14460	14600	15800	26400	34900	---	---	8040
4	7820	15350	17000	27000	14400	17600	15800	26500	31900	---	---	8710
5	7840	15100	17100	34200	14520	17700	15800	22600	31900	---	---	7210
6	8720	18020	8040	33890	14720	17300	15200	22400	15800	---	---	10700
7	8720	17700	8020	32980	14600	16500	15200	22700	15800	---	61400	12500
8	8680	17170	11000	33610	14800	15100	16400	22700	18250	---	61500	19470
9	10300	17300	11000	30020	14900	22700	16500	22700	19260	---	22600	15100
10	10400	18590	13700	30170	15200	14810	17600	24400	14700	---	26600	18500
11	5940	18850	13700	30120	15100	18700	17700	24400	15400	---	15400	18500
12	7080	16200	13700	29680	13300	9720	16700	26500	14200	---	13790	21800
13	7080	16100	13970	27800	13300	9830	16800	26500	14400	---	17000	21800
14	7800	17590	13950	26900	14400	9770	20900	27200	17510	---	16900	22600
15	7820	19100	13970	27100	14500	9820	20900	27400	15980	---	11010	22500
16	10300	17000	13800	26700	14400	13670	20200	29100	28900	---	4480	22900
17	10300	17100	13800	26600	14400	13660	20100	29100	29070	---	28700	23100
18	11700	15700	14300	26470	15500	12430	20200	29100	31550	---	28800	26800
19	11700	15500	14200	20300	15500	12380	20300	31600	30600	---	16200	26800
20	12860	15800	18580	20300	15700	13580	10700	31500	30600	---	16100	24600
21	14980	15880	17360	11100	15800	13810	10700	31700	35400	---	18100	26300
22	15090	10000	25500	11200	16600	16720	8380	31700	35300	---	18100	22800
23	16820	9970	23980	11600	16600	16570	8400	31700	34500	---	20230	22700
24	15620	11500	16970	11500	15700	13910	8950	35700	34600	---	24800	23000
25	14600	11500	17150	14630	15900	13700	8670	37820	34400	---	19950	23000
26	14400	14000	14800	14400	13700	13410	13010	38000	34400	---	18400	27300
27	14400	14000	14700	14670	13600	13650	11780	41600	34000	---	10600	27400
28	14400	15300	18400	14200	16600	15000	18040	41500	---	---	10060	29300
29	15700	15200	18400	14400	---	15100	18100	34800	---	---	7940	29100
30	15700	13700	16700	16100	---	15000	20700	34700	---	---	9360	31200
31	15700	---	18310	15370	---	15000	---	35100	---	---	9130	---
MONTH	11140	15540	15310	22500	14880	14600	15710	28920	26790	---	20290	20290

TEMPERATURE (DEG. C) OF WATER , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

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

ARKANSAS RIVER BASIN

07158400 SALT CREEK NEAR OKEENE, OKLA.

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

DRAINAGE AREA.--196 mi² (508 km²).

PERIOD OF RECORD.--Chemical analyses: Current year.

Water temperatures: Current year.

EXTREMES, Current year.--Specific conductance: Maximum, 34,500 micromhos/cm Aug. 2; minimum, 1,130 micromhos/cm Oct. 11.

Water temperatures: Maximum, 35.0°C July 14; minimum, freezing point on several days during January.

REMARKS.--Continuous monitor records for specific conductance are collected for this station. Records of maximum and minimum specific conductance values are available in district office at Oklahoma City, Okla.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	DIS- CHARGE (CF8)	INSTAN- TANEOUS DIS- CHARGE (CF8)	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)	ALKA- LINITY AS CACO3 (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED NITRATE (N) (MG/L)	DIS- SOLVED NITRATE (NO3) (MG/L)
OCT.												
10...	--	--	260	69	2300	195	0	160	790	3400	.25	1.1
11...	--	--	56	11	150	91	0	75	150	210	.75	3.3
25...	--	--	260	64	1800	249	0	204	840	2700	.13	.58
NOV.												
01...	--	--	270	72	1700	272	0	223	870	2500	.73	3.2
14...	--	--	310	86	2700	215	0	176	900	4000	.41	1.8
30...	--	--	330	87	3700	299	0	245	750	5800	1.4	6.2
DEC.												
03...	501	--	52	13	220	130	0	107	110	330	.23	1.0
22...	11	--	440	120	6300	288	0	236	980	10000	1.7	7.4
30...	10	--	290	78	2200	309	0	253	860	3300	1.2	5.2
JAN.												
01...	--	10	310	80	2100	329	0	270	920	3200	1.6	7.1
02...	--	9.0	330	84	--	333	0	273	990	3800	1.6	7.1
16...	--	12	370	110	--	262	0	215	890	8600	1.4	6.2
FEB.												
08...	--	10	290	86	--	241	0	198	980	4000	.89	3.9
20...	--	17	420	120	--	269	0	221	1100	8300	.98	4.3
22...	--	70	110	28	--	141	0	116	270	1100	1.4	6.2
MAR.												
07...	--	15	260	89	2300	180	0	148	920	3400	.42	1.9
10...	--	1240	51	9.9	250	88	0	72	110	380	1.3	5.5
26...	--	33	340	93	1800	270	0	221	1100	2700	.85	3.8
APR.												
01...	--	21	320	91	1800	251	0	206	1100	2700	--	--
20...	--	1300	--	21	600	111	0	91	340	940	--	--
30...	--	38	420	100	--	218	0	179	--	6500	--	--
MAY												
01...	--	2220	56	12	240	100	0	82	130	350	--	--
08...	--	22	360	87	1600	275	0	226	1000	2500	--	--
22...	--	14	400	95	3800	206	0	169	930	5900	--	--
JUNE												
01...	--	33	170	35	590	139	0	114	470	900	--	--
09...	--	17	450	100	3500	244	0	200	1100	5400	--	--
24...	--	6.2	230	65	2000	224	0	184	750	2900	--	--
JULY												
05...	--	5.7	160	50	1300	291	0	239	570	1900	--	--
18...	--	3.6	120	45	990	288	0	236	490	1300	--	--
26...	--	4.3	160	60	1800	251	0	206	720	2500	--	--
AUG.												
02...	--	11	620	110	8900	170	0	139	1300	14000	--	--
16...	--	4.0	260	62	2800	177	0	145	710	4400	--	--
28...	--	275	100	15	290	110	0	90	260	430	--	--
SEP.												
13...	--	8.7	320	63	1700	195	0	160	890	2600	--	--
19...	--	1860	52	11	170	108	0	89	86	250	--	--
29...	--	20	420	82	2000	312	0	256	1000	3000	--	--

ARKANSAS RIVER BASIN

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07158400 SALT CREEK NEAR OKEENE, OKLA.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	DIS- SOLVED NITRITE (N) (MG/L)	DIS- SOLVED NITRITE (NO2) (MG/L)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	CARBON DIOXIDE (CO2) (MG/L)
OCT.												
10...	.00	.00	.25	7300	9.93	--	930	770	33	10500	8.0	3.1
11...	.00	.00	.75	--	--	--	190	110	4.8	1120	7.7	2.9
25...	.16	.53	.29	5870	7.98	--	910	710	26	8090	8.0	4.0
NOV.												
01...	.01	.03	.74	5650	7.68	--	970	750	24	8240	8.1	3.5
14...	.01	.03	.42	8130	11.1	--	1100	950	35	13300	8.2	2.2
30...	.01	.03	1.4	10500	14.3	--	1200	940	47	15900	8.0	4.8
DEC.												
03...	.01	.03	.24	815	1.11	1100	180	77	7.1	1470	7.4	8.3
22...	.02	.07	1.7	18200	24.8	541	1600	1400	69	27800	8.1	3.7
30...	.03	.10	1.2	6850	9.32	185	1000	790	30	11100	8.0	4.9
JAN.												
01...	.00	.00	1.6	6810	9.26	184	1100	830	28	11300	7.9	6.6
02...	.00	.00	1.6	7830	10.6	190	1200	900	--	12800	8.1	4.2
16...	.00	.00	1.4	14500	19.7	470	1400	1200	--	24000	8.1	3.3
FEB.												
08...	.05	.16	.94	8090	11.0	218	1100	880	--	13100	8.2	2.4
20...	.01	.03	.99	15000	20.4	688	1500	1300	--	24000	8.0	4.3
22...	.01	.03	1.4	2300	3.13	435	390	270	--	4010	7.6	5.7
MAR.												
07...	.01	.03	.43	7160	9.74	290	1000	870	31	11800	8.1	2.3
10...	.05	.16	1.3	868	1.18	2910	170	96	8.4	1600	7.6	3.5
26...	.00	.00	.85	6220	8.46	554	1200	1000	22	9960	7.8	6.8
APR.												
01...	--	--	.51	6230	8.47	353	1200	970	23	9870	7.9	5.1
20...	--	--	.56	2090	2.84	7340	--	--	--	3610	7.5	5.6
30...	--	--	.78	11800	16.0	1210	1500	1300	--	19200	7.6	8.8
MAY												
01...	--	--	1.3	--	--	--	190	110	7.6	1600	7.8	2.5
08...	--	--	.59	5880	8.00	349	1300	1000	20	9180	8.0	4.4
22...	--	--	.38	11600	15.8	438	1400	1200	44	18800	7.8	5.2
JUNE												
01...	--	--	1.0	2290	3.11	204	570	450	11	3660	7.6	5.6
09...	--	--	.76	11800	16.0	542	1500	1300	39	17400	8.0	3.9
24...	--	--	.60	6250	8.50	105	840	660	30	9610	7.8	5.7
JULY												
05...	--	--	.64	4290	5.83	66.0	610	370	23	7390	8.2	2.9
18...	--	--	.69	3290	4.47	32.0	490	250	20	5330	8.0	4.6
26...	--	--	.64	5590	7.60	64.9	650	440	31	8820	8.3	2.0
AUG.												
02...	--	--	1.2	26300	35.8	781	2000	1900	87	34500	7.9	3.4
16...	--	--	.85	8620	11.7	93.1	900	760	41	13400	7.6	7.1
28...	--	--	3.3	1230	1.67	913	310	220	7.2	2040	7.5	5.6
SEP.												
13...	--	--	.24	5680	7.72	133	1100	900	23	8660	8.0	3.1
19...	--	--	1.0	689	.94	3460	180	87	5.6	1220	7.5	5.5
29...	--	--	.98	6960	9.47	376	1400	1100	23	10400	8.0	5.0

ARKANSAS RIVER BASIN

07158400 SALT CREEK NEAR OKEENE, OKLA.--Continued

SULFATE (MG/L AS SO₄) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	770	710	1000	880	1000	790	730	210	300	640	680	730
2	810	720	1000	980	1000	730	690	180	460	640	1300	280
3	810	730	120	1000	1000	810	760	380	190	690	1100	630
4	820	780	210	1000	1000	860	740	490	760	620	1100	670
5	680	830	390	1000	1000	890	750	580	840	620	1000	790
6	790	830	640	1000	1000	850	---	660	810	650	1300	770
7	780	780	780	1000	1000	920	770	710	1000	640	1100	790
8	840	830	710	1000	1000	---	730	730	1000	620	1000	800
9	830	960	750	1000	1000	890	740	770	1000	620	1000	770
10	880	---	800	950	---	130	800	790	1000	600	810	730
11	94	1000	800	1000	1000	160	590	800	880	590	1000	750
12	170	1000	890	1000	980	340	450	830	860	590	1000	740
13	340	1000	810	1000	1000	440	580	850	810	590	1000	720
14	470	1000	820	1000	1000	500	630	1000	800	570	1000	800
15	650	1000	---	1100	810	560	780	1000	800	520	1000	820
16	560	1000	830	1100	910	600	710	1000	790	570	1000	750
17	700	1000	870	1000	940	610	670	1000	840	490	1000	740
18	680	1000	950	1000	1000	640	680	900	910	450	1000	690
19	780	1000	---	1000	1000	690	740	910	840	450	1000	100
20	730	1000	730	1000	1100	700	290	900	---	640	970	200
21	730	970	930	1000	290	740	420	1000	860	590	930	---
22	760	1000	1100	---	330	890	530	1000	810	570	850	590
23	740	1000	1000	---	640	920	630	1000	830	570	1000	640
24	740	950	930	1000	670	790	670	190	930	680	810	670
25	750	1000	990	1000	750	750	710	170	760	710	800	680
26	730	1000	930	1000	---	780	730	230	750	740	640	670
27	730	930	---	1000	660	790	750	380	730	740	420	770
28	720	840	830	1000	730	810	810	520	710	600	170	830
29	710	940	---	1000	---	800	900	570	700	710	340	870
30	700	1000	850	1000	---	820	1000	650	660	680	680	860
31	780	---	860	1000	---	820	---	340	---	680	710	---
MONTH	690	930	800	1000	880	700	690	670	780	610	900	680

DISSOLVED SO₄ DISCHARGE (TONS/DAY) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	30	24	27	41	41	501	60	9.6	8.7	20
2	---	---	30	24	27	36	39	365	25	9.6	76	47
3	---	---	168	22	26	39	41	85	25	9.8	17	46
4	---	---	119	20	26	39	44	52	37	9.2	14	23
5	---	---	56	18	27	41	42	48	34	9.3	12	23
6	---	---	26	20	26	37	---	48	30	9.8	40	21
7	---	---	21	24	26	37	41	46	57	9.1	17	21
8	---	---	19	27	26	---	37	44	58	8.4	13	21
9	---	---	20	24	27	152	36	44	62	7.8	38	20
10	---	---	22	21	---	462	35	43	41	8.4	149	18
11	---	---	22	20	27	334	557	37	31	8.6	23	19
12	---	---	23	19	26	195	128	36	30	8.8	16	18
13	---	---	19	22	27	174	76	37	29	8.2	13	17
14	---	---	17	28	27	151	66	46	28	8.7	14	19
15	---	---	---	40	81	119	76	38	28	7.7	13	18
16	---	---	18	34	145	107	67	35	26	8.3	11	17
17	---	---	17	30	48	97	61	35	25	5.4	11	17
18	---	---	18	30	41	94	61	27	29	4.5	11	15
19	---	---	---	27	47	88	66	27	27	5.4	12	722
20	---	---	22	26	258	81	611	24	---	8.2	10	2010
21	---	---	28	25	319	100	161	52	20	6.8	9.2	---
22	---	---	32	---	57	113	82	45	18	6.2	9.2	263
23	---	---	36	---	69	97	58	170	19	6.5	362	250
24	---	---	30	24	50	76	38	211	19	9.8	78	269
25	---	---	29	23	53	66	38	326	13	8.3	37	468
26	---	---	27	24	---	69	37	58	13	8.4	14	185
27	---	---	---	23	50	70	38	27	12	8.2	102	85
28	---	---	25	26	47	63	39	25	12	6.4	230	72
29	---	---	---	27	---	54	51	25	11	7.4	40	63
30	---	---	23	30	---	53	100	25	9.9	8.5	27	53
31	---	---	23	28	---	53	---	269	---	10.0	23	---
MONTH	---	---	34	25	62	105	96	92	29	8.1	47	167

ARKANSAS RIVER BASIN

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07158400 SALT CREEK NEAR OKEENE, OKLA.--Continued

CHLORIDE (MG/L AS CL) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2600	2400	4000	3000	4000	2700	2500	530	880	2100	2300	2500
2	2800	2400	3500	3400	4000	2500	2300	440	1500	2100	14000	800
3	2800	2500	230	3900	3700	2800	2600	1200	470	2300	8900	2100
4	2800	2700	560	4000	3800	3000	2500	1600	2600	2100	6800	2300
5	2300	2800	1200	3800	3800	3100	2600	1900	2900	2100	5300	2700
6	2700	2800	2100	3500	3700	2900	---	2200	2800	2200	13900	2600
7	2700	2700	2700	4000	3700	3200	2600	2400	4200	2100	8100	2700
8	2900	2900	2400	4400	3600	---	2500	2500	4300	2100	5900	2800
9	2800	3300	2600	3500	3600	3100	2500	2600	5700	2100	4300	2600
10	3000	---	2800	3300	---	260	2800	2700	4100	2000	2800	2500
11	120	3600	2700	4000	3500	380	2000	2800	3000	2000	3900	2600
12	390	3800	3100	6000	3400	1000	1400	2900	3000	2000	5100	2500
13	1000	3800	2800	5800	3500	1400	1900	2900	2800	1900	5400	2500
14	1500	3500	2800	5400	3600	1600	2100	3800	2800	1900	5700	2700
15	2200	3600	---	7000	2800	1800	2700	3900	2700	1700	4900	2800
16	1900	3700	2900	7300	3100	2000	2400	3900	2700	1900	4100	2600
17	2400	3700	3000	3800	3300	2000	2300	3600	2900	1600	4000	2500
18	2300	3700	3300	3900	3600	2200	2300	3100	3100	1400	3800	2300
19	2700	3800	---	4200	4500	2300	2500	3100	2900	1400	3600	150
20	2500	3500	2500	4000	7400	2400	840	3100	---	2100	3400	520
21	2500	3400	3200	3600	830	2500	1300	4100	3000	1900	3200	---
22	2600	3600	9000	---	980	3100	1700	5700	2800	1900	2900	2000
23	2500	4900	5300	---	2100	3200	2100	4200	2900	1900	4400	2200
24	2500	3300	3200	3800	2300	2700	2300	480	3200	2300	2800	2300
25	2500	4500	3500	4300	2600	2500	2400	400	2600	2400	2800	2300
26	2500	4000	3200	4000	---	2700	2500	640	2500	2500	2100	2300
27	2500	3200	---	3500	2200	2700	2500	1200	2500	2500	1300	2600
28	2500	2900	2900	3600	2500	2800	2800	1700	2400	2000	400	2900
29	2400	3300	---	3700	---	2800	3100	1900	2400	2400	1000	3000
30	2400	4900	2900	3700	---	2800	5400	2200	2200	2300	2300	3000
31	2700	---	3000	4600	---	2800	---	1000	---	2300	2400	---
MONTH	2300	3400	3000	4200	3300	2400	2400	2400	2800	2100	4600	2300

DISSOLVED CL DISCHARGE (TONS/DAY) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	120	82	108	140	140	1300	177	32	30	67
2	---	---	105	83	107	122	132	888	80	32	793	136
3	---	---	310	84	97	135	140	263	62	33	139	155
4	---	---	312	78	100	136	149	168	126	31	88	79
5	---	---	176	69	103	142	145	160	118	31	60	80
6	---	---	87	70	98	127	---	161	105	33	414	71
7	---	---	72	94	97	129	142	156	235	31	127	74
8	---	---	65	118	94	---	127	149	242	28	73	71
9	---	---	69	85	96	525	123	149	339	26	163	67
10	---	---	74	71	---	904	119	147	165	28	511	63
11	---	---	74	77	95	769	1850	127	106	29	90	64
12	---	---	78	110	92	593	409	124	104	29	80	60
13	---	---	66	122	94	555	254	127	98	27	66	58
14	---	---	59	146	98	492	221	173	97	29	77	64
15	---	---	---	265	277	392	261	147	96	25	62	63
16	---	---	60	237	502	358	229	136	88	28	44	57
17	---	---	60	114	168	323	207	126	86	18	45	57
18	---	---	63	115	145	314	206	93	102	14	42	52
19	---	---	---	112	204	297	226	94	94	17	41	1040
20	---	---	74	105	1800	274	1780	84	---	28	35	5160
21	---	---	96	92	928	342	513	209	69	23	32	---
22	---	---	267	---	172	392	269	244	63	21	32	876
23	---	---	185	---	230	335	194	710	67	21	1560	839
24	---	---	104	93	170	262	128	528	67	33	269	908
25	---	---	103	97	180	226	130	767	45	28	126	1580
26	---	---	95	94	---	236	127	158	45	29	46	624
27	---	---	---	82	168	241	130	83	41	28	324	290
28	---	---	85	94	161	218	135	83	40	21	540	247
29	---	---	---	99	---	186	177	82	37	25	122	218
30	---	---	79	110	---	183	528	83	33	20	93	184
31	---	---	80	124	---	183	---	815	---	34	78	---
MONTH	---	---	112	108	245	318	317	275	104	27	200	459

ARKANSAS RIVER BASIN

07158400 SALT CREEK NEAR OKEENE, OKLA.--Continued

DISSOLVED SOLIDS (RESIDUE ON EVAPORATION, MG/L AT 180 DEG. C) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5890	5430	8900	6740	8770	6110	5560	1490	2230	4860	5170	5620
2	6250	5520	7790	7590	8710	5640	5280	1290	3500	4880	26490	2050
3	6270	5620	845	8580	8180	6220	5840	2840	1360	5270	16370	4840
4	6300	5960	1550	8840	8380	6610	5650	3730	5840	4720	13090	5110
5	5190	6360	2910	8310	8450	6870	5750	4400	6500	4700	10800	6050
6	6040	6360	4890	7790	8250	6550	---	5020	6200	4960	26360	5880
7	5970	6010	5990	8710	8180	7070	5890	5440	9100	4860	15120	6110
8	6480	6420	5470	9430	7860	---	5590	5640	9270	4750	11780	6170
9	6360	7400	5760	7730	8050	6870	5690	5920	11490	4720	9360	5940
10	6740	---	6170	7330	---	903	6180	6100	8980	4590	6230	5620
11	609	7990	6150	8770	7790	1160	4500	6190	6760	4510	8510	5750
12	1170	8310	6870	11920	7530	2570	3380	6420	6610	4500	10610	5680
13	2540	8450	6260	11590	7730	3290	4410	6550	6250	4470	10930	5530
14	3550	7790	6290	11000	7990	3760	4800	8310	6180	4380	11520	6140
15	4980	7860	---	13490	6220	4240	6030	8580	6160	3930	10280	6290
16	4280	8120	6420	13940	7010	4600	5470	8510	6080	4350	8970	5750
17	5330	8180	6680	8450	7270	4640	5120	7920	6480	3730	8900	5710
18	5170	8120	7330	8510	7920	4910	5240	6940	7010	3380	8380	5280
19	5980	8380	---	9100	9560	5300	5710	7010	6480	3380	7860	668
20	5560	7790	5640	8840	14080	5340	2140	6940	---	4860	7460	1460
21	5560	7460	7200	7990	2110	5700	3200	8970	6610	4460	7140	---
22	5830	7990	16500	---	2430	6870	4050	11390	6270	4380	6550	4510
23	5700	10210	10800	---	4860	7070	4820	9230	6380	4340	9430	4920
24	5700	7330	7140	8450	5110	6050	5110	1370	7200	5240	6200	5130
25	5730	9690	7660	9300	5770	5720	5430	1200	5860	5450	6170	5170
26	5620	8900	7140	8840	---	5960	5590	1700	5720	5680	4880	5140
27	5600	7200	---	7730	5040	6060	5720	2860	5560	5670	3180	5890
28	5540	6480	6400	8050	5600	6230	6220	3950	5430	4620	1200	6400
29	5420	7270	---	8120	---	6190	6940	4380	5340	5410	2530	6680
30	5370	10280	6550	8180	---	6330	11060	4980	5030	5240	5190	6610
31	5980	---	6610	9750	---	6330	---	2520	---	5230	5470	---
MONTH	5250	7550	6590	9070	7260	5370	5390	5410	6270	4690	9420	5240

DISSOLVED SOLIDS DISCHARGE (TONS/DAY) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	264	182	237	313	316	3620	445	74	67	150
2	---	---	231	185	235	274	299	2600	189	74	1500	349
3	---	---	1140	185	214	302	315	637	179	75	256	353
4	---	---	859	172	219	304	336	393	284	70	170	179
5	---	---	425	153	228	316	326	368	263	71	122	180
6	---	---	198	156	216	283	---	366	234	75	783	159
7	---	---	162	207	214	286	318	353	516	70	237	165
8	---	---	148	255	208	---	287	335	526	64	146	160
9	---	---	156	188	213	1170	276	336	682	60	354	151
10	---	---	167	158	---	3170	267	329	364	64	1140	141
11	---	---	166	171	210	2360	4250	284	237	66	198	144
12	---	---	174	219	203	1460	967	277	232	67	166	135
13	---	---	147	244	209	1320	583	283	219	63	136	130
14	---	---	132	297	216	1150	505	382	217	66	156	143
15	---	---	---	510	621	903	586	324	216	58	130	141
16	---	---	135	452	1120	819	517	299	197	63	97	129
17	---	---	133	251	373	738	470	278	192	41	99	128
18	---	---	141	253	321	716	467	206	227	34	93	118
19	---	---	---	246	439	673	509	208	210	41	91	4740
20	---	---	167	231	3420	619	4530	187	---	63	79	14470
21	---	---	214	203	2360	770	1220	460	154	52	71	---
22	---	---	490	---	426	872	624	492	140	47	71	2010
23	---	---	379	---	525	745	442	1550	150	49	3360	1910
24	---	---	231	205	387	588	290	1510	148	75	603	2060
25	---	---	227	211	405	510	293	2310	101	63	283	3590
26	---	---	212	208	---	531	287	423	100	64	105	1420
27	---	---	---	181	381	540	294	201	93	63	772	652
28	---	---	190	209	363	488	302	192	91	49	1630	553
29	---	---	---	219	---	418	393	189	84	57	301	487
30	---	---	177	243	---	410	1080	188	76	65	210	411
31	---	---	179	263	---	410	---	2010	---	78	177	---
MONTH	---	---	268	229	537	781	736	696	233	62	439	1220

ARKANSAS RIVER BASIN

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07158400 SALT CREEK NEAR OKEENE, OKLA.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9200	8500	13800	10500	13600	9530	8700	2470	3600	7630	8100	8780
2	9750	8630	12100	11800	13500	8810	8260	2170	5540	7650	34500	3330
3	9770	8780	1490	13300	12700	9700	9120	4540	2270	8250	25200	7600
4	9830	9310	2560	13700	13000	10300	8830	5900	9120	7410	20200	8010
5	8120	9920	4650	12900	13100	10700	8990	6920	10130	7380	16700	9440
6	9420	9920	7670	12100	12800	10200	---	7870	9670	7770	34400	9180
7	9320	9380	9350	13500	12700	11000	9200	8510	14100	7630	23300	9530
8	10100	10000	8560	14600	12200	---	8740	8810	14360	7460	18200	9630
9	9910	11500	9000	12000	12500	10700	8890	9240	17750	7410	14500	9280
10	10500	---	9630	11400	---	1580	9640	9520	13920	7210	9720	8780
11	1130	12400	9600	13600	12100	1970	7070	9650	10530	7090	13200	8980
12	1990	12900	10700	18400	11700	4120	5360	10000	10290	7070	16400	8870
13	4080	13100	9760	17900	12000	5230	6930	10200	9750	7030	16900	8650
14	5620	12100	9810	17000	12400	5950	7530	12900	9640	6890	17800	9580
15	7810	12200	---	20800	9700	6670	9410	13300	9610	6210	15900	9810
16	6730	12600	10000	21500	10900	7220	8550	13200	9480	6840	13900	8990
17	8340	12700	10400	13100	11300	7280	8020	12300	10100	5900	13800	8920
18	8100	12600	11400	13200	12300	7700	8210	10800	10900	5360	13000	8270
19	9340	13000	---	14100	14800	8300	8920	10900	10100	5360	12200	1220
20	8700	12100	8810	13700	21700	8350	3470	10800	---	7630	11600	2430
21	8700	11600	11200	12400	3420	8910	5090	13900	10300	7020	11100	---
22	9100	12400	25400	---	3910	10700	6390	17600	9770	6890	10210	7090
23	8910	15800	16700	---	7630	11000	7560	14300	9940	6830	14600	7710
24	8910	11400	11100	13100	8010	9440	8010	12290	11200	8200	9670	8030
25	8950	15000	11900	14400	9010	8940	8490	2040	9150	8530	9630	8100
26	8790	13800	11100	13700	---	9300	8740	2800	8940	8870	7660	8050
27	8750	11200	---	12000	7900	9460	8940	4570	8700	8860	5050	9200
28	8660	10100	9970	12500	8750	9720	9700	6240	8500	7250	2040	9970
29	8480	11300	---	12600	---	9650	10800	6890	8360	8460	4070	10400
30	8410	15900	10200	12700	---	9870	17100	7800	7880	8210	8120	10300
31	9340	---	10300	15100	---	9870	---	4050	---	8190	8550	---
MONTH	8220	11730	10270	14060	11290	8410	8440	8470	9780	7370	14200	8210

TEMPERATURE (DEG. C) OF WATER , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
(UNCE-DAILY)

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

ARKANSAS RIVER BASIN

07159100 CIMARRON RIVER NEAR DOVER, OKLA.

LOCATION.--Lat 35°57'06", long 97°54'51", in SW 1/4 NE 1/4 sec.14, T.17 N., R.7 W., Kingfisher County, at gaging station at bridge on U.S. Highway 81, 1 mi (1.6 km) downstream from Turkey Creek, 2 mi (3.2 km) south of Dover, 2.5 mi (4.0 km) upstream from Kingfisher Creek, and at mile 160.6 (258.4 km).

DRAINAGE AREA.--15,713 mi² (40,697 km²), of which 4,926 mi² (12,758 km²) is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: Current year.
Water temperatures: Current year.

EXTREMES, Current year.--Specific conductance: Maximum, 20,600 micromhos/cm Aug. 14; minimum, 1,590 micromhos/cm Sept. 20.

Water temperatures: Maximum, 33.0°C June 18; minimum, freezing point on many days during December and January.

REMARKS.--Continuous monitor records for specific conductance are collected for this station. Records of maximum and minimum specific conductance values are available in district office in Oklahoma City, Okla.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	INSTANTANEOUS DIS-CHARGE (CFS)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG)	DIS-SOLVED SODIUM (NA) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CaCO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	DIS-SOLVED NITRATE (NO3) (MG/L)	DIS-SOLVED NITRITE (N) (MG/L)
OCT.												
05...	1320	130	37	1500	210	0	172	--	2200	.86	3.8	.00
12...	23800	80	13	430	111	0	91	150	640	.98	4.3	.01
29...	348	210	67	2500	261	0	214	540	3900	.16	.71	.10
NOV.												
01...	326	230	70	2800	283	0	232	520	4200	.47	2.1	.01
19...	326	220	75	3200	240	0	197	580	5000	.50	2.2	.01
21...	524	160	48	1700	191	0	157	--	2700	.90	4.0	.01
DEC.												
04...	2450	77	21	600	169	0	139	150	930	.32	1.4	.01
14...	584	200	66	2600	281	0	230	520	4000	.70	3.1	.01
26...	524	240	81	3500	283	0	232	600	5400	.75	3.3	.03
JAN.												
21...	1030	230	76	4300	204	2	171	610	6800	.80	3.5	.00
23...	941	170	55	2400	237	0	194	--	3800	.77	3.4	.00
25...	679	160	55	2000	247	0	203	460	3100	1.1	4.9	.00
FEB.												
03...	499	210	75	--	280	0	230	570	4700	.59	2.6	.00
06...	499	200	73	--	288	0	236	530	4300	.50	2.2	.00
21...	3870	44	11	--	130	0	107	85	460	.29	1.3	.81
MAR.												
10...	3180	200	73	2900	225	0	185	570	4500	.96	4.3	.02
11...	19300	68	15	520	118	0	97	150	820	1.4	6.0	.44
28...	559	210	74	2200	310	0	254	630	3400	.55	2.4	.02
APR.												
13...	2640	110	25	370	131	0	107	320	530	--	--	--
18...	348	210	67	2100	272	0	223	540	3200	--	--	--
23...	2310	270	64	3000	151	0	124	680	4700	--	--	--
MAY												
02...	5150	59	13	270	123	0	101	120	390	--	--	--
08...	530	210	65	2100	263	0	216	470	3300	--	--	--
20...	179	220	82	2800	259	0	212	630	4400	--	--	--
JUNE												
08...	672	130	35	1200	177	0	145	--	1900	--	--	--
12...	439	220	70	3600	198	0	162	540	5700	--	--	--
27...	80	170	68	2900	271	0	222	520	4500	--	--	--
JULY												
01...	67	190	73	2700	270	0	221	520	--	--	--	--
16...	51	150	57	--	250	0	205	440	3700	--	--	--
28...	22	110	61	--	216	0	177	370	2800	--	--	--
AUG.												
03...	68	120	46	--	211	0	173	350	2500	--	--	--
14...	293	210	63	4800	157	0	129	520	7300	--	--	--
17...	2320	100	19	430	117	0	96	250	640	--	--	--
SEP.												
10...	941	230	50	--	173	0	142	560	3100	--	--	--
20...	14800	55	9.1	260	104	0	85	90	380	--	--	--
30...	596	270	67	2900	249	0	204	680	4600	--	--	--

ARKANSAS RIVER BASIN

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07159100 CIMARRON RIVER NEAR DOVER, OKLA.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	DIS- SOLVED NITRITE (NO2) (MG/L)	DIS- SOLVED NITRATE (N) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	CARBON DIOXIDE (CO2) (MG/L)
OCT.											
05...	.00	.86	4550	6.19	16200	480	300	30	7020	8.0	3.4
12...	.03	.99	1480	2.01	95100	250	160	12	2560	7.8	2.8
29...	.33	.26	7810	10.6	7340	800	590	38	10400	8.0	4.2
NOV.											
01...	.03	.48	7900	10.7	6950	860	630	42	13200	8.1	3.6
19...	.03	.51	9320	12.7	8200	860	660	48	14800	8.1	3.1
21...	.03	.91	5160	7.02	7300	600	440	30	8240	7.6	7.7
DEC.											
04...	.03	.33	1940	2.64	12800	280	140	16	3350	7.4	11
14...	.03	.71	7450	10.1	11700	770	540	41	12700	8.1	3.6
26...	.10	.78	9960	13.5	14100	930	700	50	16300	8.2	2.9
JAN.											
21...	.00	.80	12000	16.3	33400	890	720	63	20200	8.4	1.3
23...	.00	.77	7070	9.62	18000	650	460	41	12300	8.1	3.0
25...	.00	1.1	5850	7.96	10700	630	420	35	10300	8.3	2.0
FEB.											
03...	.00	.59	8670	11.8	11700	830	600	--	14800	8.2	2.8
06...	.00	.50	7970	10.8	10700	800	560	--	13500	8.1	3.7
21...	2.7	1.1	965	1.31	10100	160	49	--	1820	7.6	5.2
MAR.											
10...	.07	.98	8200	11.2	70400	800	620	45	13900	8.2	2.3
11...	1.4	1.8	1680	2.28	87500	230	130	15	2980	7.7	3.8
28...	.07	.57	6810	9.26	10300	830	570	33	11600	7.8	7.9
APR.											
13...	--	.67	--	--	--	380	270	8.3	2470	7.6	5.3
18...	--	.86	6500	8.84	6110	800	580	32	10700	8.1	3.5
23...	--	.75	8900	12.1	55500	940	810	43	14700	7.4	9.6
MAY											
02...	--	.31	986	1.34	13700	200	100	8.3	1740	7.9	2.5
08...	--	.79	6460	8.79	9240	790	580	32	10100	7.8	6.7
20...	--	.31	8340	11.3	4030	890	670	41	12800	7.8	6.6
JUNE											
08...	--	.95	3590	4.88	6510	470	320	24	6130	8.0	2.8
12...	--	.63	10600	14.4	12600	840	680	54	16400	7.8	5.0
27...	--	.51	8310	11.3	1800	700	480	48	13000	8.0	4.3
JULY											
01...	--	.45	7990	10.9	1450	780	550	42	12700	8.1	3.4
16...	--	.60	6940	9.44	956	610	400	--	11300	8.2	2.5
28...	--	.51	5360	7.29	318	530	350	--	8810	8.2	2.2
AUG.											
03...	--	.65	4950	6.73	909	490	320	--	8110	7.6	8.5
14...	--	.85	14100	19.2	11200	780	660	75	20300	7.7	5.0
17...	--	1.2	1590	2.16	9960	330	230	10	2700	7.6	4.7
SEP.											
10...	--	.40	6110	8.31	15500	780	640	--	9670	7.7	5.5
20...	--	1.4	913	1.24	36500	170	90	8.6	1670	7.8	2.6
30...	--	.34	8770	11.9	14100	950	750	41	13500	8.1	3.2

ARKANSAS RIVER BASIN

07159100 CIMARRON RIVER NEAR DOVER, OKLA.--Continued

SULFATE (MG/L AS SO₄) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	320	550	530	---	560	520	520	260	310	570	500	360
2	310	570	570	---	570	520	540	100	350	570	300	320
3	300	520	490	---	610	540	550	160	430	570	370	200
4	340	520	170	---	600	550	540	150	470	550	560	230
5	350	530	220	---	580	550	530	250	430	540	630	270
6	350	570	460	---	570	540	540	330	490	550	590	330
7	340	560	650	---	580	570	540	420	370	500	610	330
8	370	540	400	---	600	580	550	460	300	490	630	360
9	390	540	370	---	580	580	550	480	470	510	510	420
10	390	570	390	---	590	580	550	500	480	530	300	440
11	150	580	430	---	600	150	500	510	710	530	240	470
12	130	590	480	---	580	240	190	540	720	520	450	500
13	200	610	510	---	580	360	130	540	690	530	530	530
14	190	630	530	---	580	340	130	550	660	530	760	540
15	220	600	520	---	590	270	250	560	650	520	630	560
16	220	560	540	---	560	290	340	550	600	510	320	550
17	230	590	550	---	520	350	400	580	590	510	170	580
18	230	620	540	580	540	410	450	570	580	500	210	580
19	250	640	470	530	560	430	470	570	610	520	240	520
20	340	590	440	620	510	450	480	580	670	510	280	110
21	390	380	530	810	98	440	300	450	660	500	340	150
22	420	530	520	690	130	440	320	290	670	500	520	290
23	460	570	540	510	---	460	600	400	670	490	300	430
24	480	400	520	470	270	460	560	180	630	510	230	490
25	510	400	550	440	460	470	380	170	580	510	190	440
26	510	410	670	450	490	520	330	140	610	520	240	410
27	520	430	660	490	510	500	360	140	610	550	420	480
28	530	400	640	490	510	490	410	260	580	410	290	540
29	540	440	570	510	---	490	400	470	550	440	240	590
30	520	510	530	550	---	500	440	510	570	490	210	610
31	540	---	620	540	---	500	---	270	---	500	330	---
MONTH	360	530	500	---	520	450	430	390	560	520	390	420

DISSOLVED SO₄ DISCHARGE (TUNS/DAY) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1710	487	819	---	751	591	591	1800	965	99	47	2150
2	1490	532	879	---	763	553	583	2110	408	89	84	1880
3	1380	491	1190	---	827	569	541	1850	397	89	64	6030
4	1380	456	1090	---	803	570	507	855	404	95	62	3840
5	1230	464	1010	---	774	542	469	770	350	96	56	2560
6	1100	498	2210	---	763	503	460	697	371	89	59	2000
7	956	491	2890	---	786	504	441	700	676	81	70	1460
8	941	507	1260	---	803	495	434	651	539	79	74	1270
9	943	507	926	---	580	511	405	597	936	76	57	1230
10	752	542	828	---	593	12740	427	546	712	71	514	1100
11	10790	544	836	---	597	6470	657	492	932	72	395	1060
12	8410	556	828	---	510	4580	2580	471	851	64	398	991
13	5950	573	897	---	506	4810	779	420	641	58	352	970
14	2870	558	831	---	510	3050	326	384	513	59	572	926
15	1910	489	824	---	552	1760	381	381	458	58	367	889
16	1600	461	770	---	631	1290	402	343	380	56	1270	859
17	928	486	776	---	519	1230	412	340	401	56	883	865
18	837	481	758	1010	475	1180	412	315	338	55	339	832
19	813	567	666	919	631	1050	405	295	305	57	179	1030
20	784	933	501	1200	981	1030	582	276	271	48	127	3410
21	678	537	596	2250	1020	964	1070	690	225	47	145	1050
22	511	706	698	1760	1050	919	1450	329	201	47	224	991
23	648	807	770	1310	---	914	3390	288	183	47	389	1080
24	642	598	904	987	493	872	2000	765	156	56	663	1080
25	544	894	872	798	690	822	868	1410	137	57	492	1260
26	613	788	954	707	659	859	544	1430	139	57	418	1110
27	586	745	936	729	693	798	474	920	129	52	532	974
28	562	814	905	735	595	731	462	816	119	26	4330	950
29	511	868	852	693	---	684	457	848	106	41	6520	997
30	491	865	752	655	---	652	596	662	100	47	3440	943
31	537	---	874	698	---	617	---	676	---	47	3170	---
MONTH	1710	608	965	---	687	1710	770	746	411	64	848	1530

ARKANSAS RIVER BASIN

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07159100 CIMARRON RIVER NEAR DOVER, OKLA.--Continued

CHLORIDE (MG/L AS CL) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2200	4000	3900	---	4100	3800	3800	1700	2100	4200	3600	2500
2	2100	4100	4200	---	4100	3800	4000	410	2400	4100	2000	2200
3	2000	3800	3600	---	4500	3900	4000	910	3000	4100	2600	1200
4	2400	3800	940	---	4400	4000	4000	840	3300	4000	4100	1400
5	2400	3800	1400	---	4200	4000	3900	1600	3100	3900	4600	1800
6	2400	4100	3300	---	4100	3900	3900	2300	3500	4000	4400	2300
7	2400	4100	4800	---	4300	4100	4000	3000	2600	3600	4500	2300
8	2600	3900	2800	---	4400	4200	4000	3300	2000	3500	4600	2500
9	2700	3900	2500	---	4300	4300	4000	3500	3400	3700	3700	3000
10	2700	4200	2700	---	4400	4300	4000	3600	3500	3800	2000	3100
11	810	4300	3100	---	4400	790	3600	3700	5300	3900	1500	3400
12	660	4400	3400	---	4300	1500	1200	3900	5400	3800	3200	3600
13	1200	4500	3700	---	4200	2500	620	4000	5200	3800	3800	3800
14	1200	4600	3800	---	4300	2300	660	4000	4900	3900	5700	4000
15	1400	4400	3800	---	4300	1800	1600	4100	4800	3800	4600	4100
16	1400	4100	4000	---	4100	1900	2300	4100	4400	3700	2200	4000
17	1500	4400	4000	---	3800	2400	2800	4300	4400	3700	970	4300
18	1400	4600	3900	4300	3900	2900	3200	4200	4200	3600	1300	4300
19	1600	4800	3400	3800	4100	3000	3400	4200	4500	3800	1500	3800
20	2300	4400	3200	4600	3700	3200	3500	4200	4900	3700	1800	520
21	2700	2700	3800	6100	400	3200	2000	3200	4900	3600	2400	800
22	3000	3800	3800	5200	640	3100	2100	2000	4900	3600	3800	1900
23	3300	4200	4000	3700	---	3300	4400	2800	5000	3600	2000	3100
24	3500	2800	3800	3400	1800	3300	4100	1000	4700	3700	1400	3500
25	3700	2800	4000	3100	3300	3400	2700	990	4300	3700	1200	3100
26	3700	2900	5000	3200	3600	3800	2300	720	4500	3800	1500	2900
27	3800	3000	4900	3500	3700	3600	2500	730	4500	4000	3000	3400
28	3800	2800	4700	3600	3700	3500	2900	1700	4200	2900	1900	3900
29	4000	3100	4200	3700	---	3500	2800	3400	4000	3100	1600	4300
30	3800	3700	3900	4000	---	3600	3200	3700	4200	3600	1300	4500
31	3900	---	4600	3900	---	3600	---	1800	---	3600	2300	---
MONTH	2500	3900	3700	---	3700	3200	3000	2700	4100	3700	2700	3000

DISSOLVED CL DISCHARGE (TUNS/DAY) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11640	3560	5970	---	5500	4300	4290	11670	6530	723	343	14880
2	10040	3900	6450	---	5590	4020	4260	8730	2810	650	564	12770
3	9290	3570	8600	---	6100	4150	3950	10410	2820	650	445	36640
4	9520	3320	6200	---	5920	4170	3700	4700	2900	693	455	24310
5	8500	3380	6350	---	5680	3960	3420	4990	2490	702	413	16850
6	7600	3650	15850	---	5590	3670	3350	4780	2680	650	435	13670
7	6590	3590	21420	---	5780	3700	3220	4970	4710	588	518	9990
8	6560	3700	8920	---	5920	3630	3170	4670	3620	573	551	8820
9	6610	3700	6440	---	4260	3760	2960	4310	6730	554	413	8700
10	5280	3980	5810	---	4360	93590	3120	3950	5140	518	3450	7870
11	58540	4000	5960	---	4400	34750	4750	3570	6960	523	2520	7620
12	42610	4090	5970	---	3740	29180	15570	3440	6360	462	2850	7170
13	35910	4220	6510	---	3710	33390	3830	3070	4770	425	2560	7060
14	17280	4130	6050	---	3740	20910	1650	2810	3810	429	4290	6760
15	11920	3610	5990	---	4060	11590	2470	2790	3400	421	2720	6510
16	10010	3380	5620	---	4620	8580	2760	2510	2800	409	8660	6280
17	5900	3580	5670	---	3770	8510	2900	2500	2950	405	5070	6350
18	5280	3550	5530	7420	3470	8330	2950	2310	2480	402	2080	6110
19	5250	4200	4790	6690	4620	7470	2910	2170	2250	417	1140	7480
20	5380	6870	3580	8860	7120	7410	4200	2020	2020	349	840	15640
21	4760	3760	4340	16950	4170	6880	7150	4940	1670	343	1000	5690
22	3630	5140	5080	13100	5250	6560	9820	2200	1500	343	1620	6620
23	4640	5920	5620	9480	---	6560	24980	2030	1360	336	2610	7660
24	4630	4210	6570	7090	3250	6260	14650	4470	1160	405	4180	7770
25	3940	6300	6380	5680	4950	5910	6080	8120	1010	413	2960	9010
26	4440	5570	7100	5050	4770	6250	3720	7470	1020	417	2670	7860
27	4260	5300	6950	5260	5030	5780	3290	4830	952	382	3780	7010
28	4090	5740	6710	5310	4320	5280	3270	5310	877	187	28980	6930
29	3740	6190	6250	5030	---	4940	3220	6100	775	293	41820	7340
30	3570	6270	5480	4790	---	4720	4260	4800	734	336	21190	6960
31	3910	---	6460	5100	---	4470	---	4440	---	340	21710	---
MONTH	10490	4410	6920	---	4800	11700	5330	4660	2980	462	5580	10150

ARKANSAS RIVER BASIN

07159100 CIMARRON RIVER NEAR DOVER, OKLA.--Continued

DISSOLVED SOLIDS (RESIDUE ON EVAPORATION, MG/L AT 180 DEG. C.) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4170	7600	7290	---	7660	7160	7100	3270	4070	7850	6640	4760
2	4010	7790	7850	---	7790	7100	7470	1000	4570	7790	3900	4190
3	3930	7160	6720	---	8480	7410	7540	1900	5790	7790	4430	2450
4	4520	7100	1960	---	8230	7540	7470	1780	6310	7540	7730	2840
5	4590	7220	2750	---	7920	7540	7290	3220	5840	7410	8670	3500
6	4660	7790	6280	---	7790	7350	7350	4400	6640	7540	8170	4360
7	4550	7660	8990	---	8040	7790	7470	5720	4970	6840	8360	4360
8	4940	7410	5420	---	8230	7920	7540	4270	3870	6670	8670	4850
9	5200	7410	4860	---	7980	7980	7600	6540	6370	7030	7030	5670
10	5240	7850	5240	---	8170	7980	7540	6780	6570	7220	3840	5940
11	1720	7980	5870	---	8230	1680	6780	6930	9810	7290	2980	6400
12	1460	8170	6470	---	7980	2960	2380	7340	10000	7160	6130	6780
13	2390	8420	7030	---	7920	4820	1370	7450	9620	7220	7200	7220
14	2380	8670	7220	---	7980	4430	1460	7610	9110	7290	10560	7470
15	2740	8230	7160	---	8100	3500	3200	7740	9050	7160	8690	7660
16	2760	7730	7470	---	7660	3750	4480	7620	8290	6970	4190	7600
17	2930	8170	7540	---	7100	4690	5370	7990	8170	6910	2620	7980
18	2840	8610	7350	7980	7410	5540	6150	7800	7920	6840	2540	8040
19	3170	8920	6400	7220	7660	5780	6340	7850	8480	7100	2960	7160
20	4460	8170	6000	8610	6970	6150	6590	7950	9240	6970	3580	1190
21	5210	5080	7220	11320	978	5990	3840	6080	9110	6840	4540	1700
22	5690	7220	7100	9620	1420	5930	4140	3800	9240	6840	7060	3760
23	6210	7850	7470	7030	---	6210	8290	5370	9300	6720	3890	5820
24	6530	5380	7100	6340	3470	6280	7660	2140	8700	6910	2830	6620
25	6970	5410	7600	5880	6280	6340	5100	2050	8040	7030	2370	5970
26	6910	5510	9370	6070	6720	7100	4350	1560	8360	7100	3030	5490
27	7100	5770	9180	6650	7030	6840	4830	1580	8360	7600	5710	6480
28	7220	5420	8860	6720	7030	6650	5580	5280	7920	5480	3780	7350
29	7470	5940	7850	7030	---	6650	5410	6410	7600	5880	3070	8120
30	7160	6910	7290	7600	---	6780	5980	6940	7850	6720	2590	8450
31	7350	---	8550	7410	---	6840	---	3460	---	6780	4400	---
MONTH	4730	7290	6880	---	7050	6150	5790	5160	7640	7050	5230	5680

DISSOLVED SOLIDS DISCHARGE (TONS/DAY) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22510	6690	11230	---	10320	8100	8080	22980	12650	1360	647	28540
2	19470	7320	12110	---	10490	7570	8010	21200	5410	1220	1100	24690
3	18040	6730	16230	---	11430	7800	7430	21810	5360	1220	852	74200
4	18320	6250	12930	---	11090	7840	6960	9940	5490	1300	855	48410
5	16340	6360	12700	---	10660	7450	6430	9830	4730	1320	773	32990
6	14600	6860	29990	---	10490	6900	6310	9210	5050	1220	816	26360
7	12660	6750	40040	---	10830	6940	6050	9450	9020	1110	970	19260
8	12560	6960	16990	---	11090	6820	5960	8840	7030	1080	1030	16890
9	12630	6960	12340	---	7990	7040	5560	8140	12730	1040	779	16530
10	10080	7460	11100	---	8180	175570	5860	7450	9710	975	6700	14940
11	124600	7500	11300	---	8250	74290	8970	6730	12980	983	5000	14420
12	93630	7670	11280	---	7020	57950	31650	6460	11850	870	5400	13530
13	72930	7910	12270	---	6970	64010	8540	5770	8910	799	4820	13300
14	35120	7730	11390	---	7020	40290	3630	5280	7110	806	7990	12710
15	23850	6760	11290	---	7620	22680	4860	5240	6350	792	5080	12230
16	20020	6340	10570	---	8670	16720	5320	4710	5240	772	16740	11800
17	11720	6700	10660	---	7110	16340	5540	4680	5540	765	10520	11910
18	10520	6650	10400	13920	6520	15850	5600	4340	4660	758	4190	11460
19	10360	7860	9060	12600	8670	14180	5510	4070	4210	786	2260	14090
20	10370	12880	6790	16570	13420	14030	7940	3800	3770	659	1640	36050
21	9090	7180	8170	31490	10220	13060	13900	9360	3130	647	1930	12140
22	6900	9670	9560	24440	11610	12410	18990	4280	2790	647	3060	12890
23	8790	11110	10570	17870	---	12410	46800	3870	2540	635	5080	14560
24	8740	8030	12380	13420	6360	11840	27520	9210	2160	765	8330	14640
25	7430	12010	11980	10790	9370	11180	11610	16830	1890	779	6020	17090
26	8370	10610	13250	9580	9000	11760	7180	16190	1920	786	5300	14960
27	8030	10070	12980	9940	9480	10900	6310	10430	1780	718	7180	13260
28	7700	10940	12540	10030	8150	9970	6220	10450	1650	355	56400	13030
29	7020	11750	11720	9480	---	9320	6140	11540	1460	556	82770	13750
30	6730	11820	10310	9010	---	8900	8070	9050	1380	635	42660	13030
31	7360	---	12090	9580	---	8430	---	8710	---	641	41840	---
MONTH	21180	8320	13100	---	9190	22540	10230	9350	5620	871	10930	19790

ARKANSAS RIVER BASIN

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07159100 CIMARRON RIVER NEAR DOVER, OKLA.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6860	12300	11800	---	12400	11600	11500	5440	6710	12700	11100	7800
2	6600	12600	12700	---	12600	11500	12100	1840	7490	12600	6440	6900
3	6480	11600	10900	---	13700	12000	12200	3270	9430	12600	8070	4140
4	7420	11500	5350	---	13300	12200	12100	3070	10260	12200	12500	4820
5	7520	11700	4810	---	12800	12200	11800	5360	9510	12000	14000	5800
6	7640	12600	10200	---	12600	11900	11900	7230	10770	12200	13200	7190
7	7470	12400	14500	---	13000	12600	12100	9320	8130	11100	13500	7190
8	8090	12000	8850	---	13300	12800	12200	10190	6390	10830	14000	7940
9	8490	12000	7950	---	12900	12900	12300	10680	10350	11400	11400	9240
10	8550	12700	8580	---	13200	12900	12200	11000	10670	11700	6340	9670
11	2980	12900	9560	---	13300	2910	11000	11230	15800	11800	4970	10400
12	2560	13200	10500	---	12900	4950	4020	11890	16100	11600	9970	11000
13	4040	13600	11400	---	12800	7890	2420	12060	15500	11700	11660	11700
14	4070	14000	11700	---	12900	7270	2560	12310	14700	11800	17000	12100
15	4600	13300	11600	---	13100	5800	5330	12520	14600	11600	14010	12400
16	4620	12500	12100	---	12400	6200	7360	12330	13400	11300	6890	12300
17	4900	13200	12200	---	11500	7690	8760	12920	13200	11200	3450	12900
18	4760	13900	11900	12900	12000	9030	10000	12610	12800	11100	4280	13000
19	5280	14400	10400	11700	12400	9420	10300	12690	13700	11500	4950	11600
20	7320	13200	9760	13900	11300	10000	10700	12850	14900	11300	5920	2140
21	8510	8400	11700	18200	1800	9750	6340	9890	14700	11100	7450	2950
22	9270	11700	11500	15500	2500	9650	6810	6280	14900	11100	11480	6210
23	10100	12700	12100	11400	---	10100	13400	8760	15000	10900	6410	9470
24	10600	8780	11500	10300	5750	10200	12400	3650	14050	11200	4740	10750
25	11300	8830	12300	9580	10200	10300	4330	3500	13000	11400	4010	9720
26	11200	8990	15100	9880	10900	11500	7150	2720	13500	11500	5050	8950
27	11500	9400	14800	10800	11400	11100	7910	2760	13500	12300	9300	10520
28	11700	8850	14300	10900	11400	10800	9090	5450	12800	6940	6250	11900
29	12100	9660	12700	11400	---	10800	8830	10410	12300	9570	5120	13130
30	11600	11200	11600	12300	---	11000	9730	11250	12700	10900	4350	13650
31	11900	---	13800	12000	---	11100	---	5730	---	11000	7230	---
MONTH	7740	11800	11170	---	11420	16000	9430	8430	12360	11420	8550	9250

TEMPERATURE (DEG. C) OF WATER , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
(MINCE-DAILY)

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

ARKANSAS RIVER BASIN

07159750 COTTONWOOD CREEK AT SEWARD, OKLA.

LOCATION.--Lat 35°47'43", long 97°29'32", in SW 1/4 sec.2, T.15 N., R.3 W., Logan County, at county road bridge, 0.3 mi (0.48 km) west of Seward, 7.7 mi (12.4 km) southwest of Guthrie, and at mile 19.2 (30.9 km).

DRAINAGE AREA.--316 mi² (818 km²).

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

EXTREMES, Current year.--Dissolved solids: Maximum, 1,030 mg/l Jan. 1-7; minimum, 199 mg/l June 9-10.

Hardness: Maximum, 550 mg/l Jan. 1-7; minimum, 94 mg/l Mar. 11.

Specific conductance: Maximum daily, 1,610 micromhos/cm Jan. 3; minimum daily, 252 micromhos/cm Mar. 11.

Water temperatures: Maximum, 26.5°C July 22, 24-25; minimum, 1.0°C on several days during January.

Period of record.--Dissolved solids: Maximum, 1,030 mg/l Jan. 1-7, 1974; minimum, 163 mg/l Sept. 13-14, 1973.

Hardness: Maximum, 550 mg/l Jan. 1-7, 1974; minimum, 90 mg/l Sept. 13-14, 1973.

Specific conductance: Maximum daily, 1,610 micromhos/cm Jan. 3, 1974; minimum daily, 237 micromhos/cm Sept. 28, 1973.

Water temperatures (1974): Maximum, 26.5°C July 22, 24-25; minimum, 1.0°C on several days during January.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	DIS- CHARGE (CFS)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	ALKA- LITY AS CACO3 (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED NITRATE (N) (MG/L)	DIS- SOLVED NITRATE (NO3) (MG/L)	DIS- SOLVED NITRITE (N) (MG/L)
OCT.												
01-11	197	76	29	69	258	0	212	120	85	1.8	7.9	.01
12-14	1010	36	13	29	135	0	111	45	33	1.1	4.9	.00
15-16	194	67	25	55	228	4	194	94	61	1.2	5.3	.00
17-22	94	94	38	87	319	0	262	160	110	2.1	9.3	.00
27-31	56	120	48	120	389	0	319	200	150	2.7	12	.01
NOV.												
01-12	53	120	55	140	359	20	328	210	170	3.8	17	.00
13-19	46	120	48	130	398	0	326	200	160	3.5	16	.00
20-24	100	95	39	100	327	0	268	140	130	2.4	11	.01
25-26	848	42	15	40	155	0	127	49	46	1.3	5.8	.00
27-30	124	78	30	71	278	0	228	110	76	1.7	7.5	.00
DEC.												
01-03	75	110	42	96	365	0	299	180	120	2.1	9.3	.01
04-06	714	51	19	46	176	0	144	77	52	1.3	5.7	.01
07-12	98	100	39	94	329	0	270	170	120	2.6	12	.00
13-31	48	120	49	130	403	0	331	220	160	3.7	16	.02
JAN.												
01-07	22	130	54	150	421	0	345	240	180	4.5	20	.26
08-15	21	130	52	140	413	0	339	240	170	4.4	19	.01
16-27	24	110	47	130	371	0	304	240	150	4.0	18	.02
28-31	20	120	50	140	384	0	315	240	170	4.3	19	.05
FEB.												
01-20	19	120	50	140	385	0	316	230	160	4.2	18	.04
21-22	1700	40	16	39	131	0	107	76	46	1.4	6.4	.06
23-25	320	75	29	68	245	0	201	140	75	1.6	7.0	.01
26-28	102	100	41	100	348	0	285	180	120	2.2	9.7	.01
MAR.												
01-07	66	120	51	120	410	0	336	230	150	2.4	11	.01
08...	59	54	19	59	174	0	143	87	71	.47	2.1	.01
09...	1330	120	52	130	418	0	343	240	150	2.6	11	.02
10...	1910	53	19	46	163	0	134	92	61	.93	4.1	.01
11...	4980	24	8.3	--	85	0	70	48	38	.94	4.2	.04
12-14	1200	51	20	43	170	0	139	94	44	1.3	5.7	.02
15-31	167	100	44	100	367	0	301	190	120	2.2	9.7	.02
APR.												
01-12	68	120	54	130	380	0	312	260	160	--	--	--
13-30	95	120	59	120	395	0	324	250	150	--	--	--
MAY												
01...	640	54	22	55	179	0	147	110	64	--	--	--
02-03	1220	--	13	33	139	0	114	67	32	--	--	--
04-09	166	80	32	73	270	0	221	150	75	--	--	--
10-22	76	110	47	120	385	0	316	230	130	--	--	--
23-27	547	--	15	35	148	0	121	68	39	--	--	--
28-31	183	67	28	68	247	0	203	130	68	--	--	--
JUNE												
01...	952	41	10	26	117	0	96	54	28	2.8	12	.00
02-08	904	55	22	52	202	0	166	110	51	1.9	8.4	.00
09-10	5480	--	9.2	19	111	0	91	46	20	.64	2.8	.00
11-16	485	55	21	44	--	0	--	97	48	1.1	4.9	.00
17-30	67	110	46	110	378	0	310	200	120	2.6	11	.03
JULY												
01-15	30	110	50	140	384	0	315	230	170	--	--	--
16-31	16	100	49	150	363	4	304	220	160	--	--	--
AUG.												
01-11	19	93	40	150	334	0	274	210	170	--	--	--
12-23	46	71	29	110	237	0	194	160	120	--	--	--
24-31	158	45	16	48	152	0	125	--	46	--	--	--

07159750 COTTONWOOD CREEK AT SEWARD, OKLA.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	DIS- CHARGE (CFS)	DIS-	SOLVED	DIS-	BICAR-	CAR-	ALKA-	DIS-	DIS-	DIS-	DIS-	DIS-
		SOLVED CAL- CIUM (CA) (MG/L)	MAG- NE- SIUM (MG) (MG/L)	SOLVED SODIUM (NA) (MG/L)	BONATE (HCO3) (MG/L)	BONATE (CO3) (MG/L)	LINITY AS CACO3 (MG/L)	SOLVED SULFATE (SU4) (MG/L)	SOLVED CHLU- RIDE (CL) (MG/L)	SOLVED NITRATE (N) (MG/L)	SOLVED NITRATE (NO3) (MG/L)	SOLVED NITRITE (N) (MG/L)
SEP.												
01-02	61	61	23	75	202	0	166	120	77	--	--	--
03-05	110	--	14	49	151	0	124	77	52	--	--	--
06-25	45	77	31	100	240	0	213	160	110	--	--	--
26-27	207	48	14	44	155	0	127	81	44	--	--	--
28-30	45	69	26	73	229	0	188	140	76	--	--	--
DATE	DIS- SOLVED NITRITE (NO2) (MG/L)	DIS- SOLVED NITRATE (N) (MG/L)	DIS- SOLVED SOLIDS DUE AT (RESI- 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)	CARRON DIOXIDE (CO2) (MG/L)	
OCT.												
01-11	.03	1.8	563	.77	299	310	98	1.7	912	8.0	4.1	
12-14	.00	1.1	--	--	--	140	33	1.1	427	7.9	2.7	
15-16	.00	1.2	453	.62	237	270	77	1.5	746	8.4	1.5	
17-22	.00	2.1	694	.94	176	390	130	1.9	1099	8.0	5.1	
23-31	.03	2.7	892	1.21	140	500	180	2.3	1397	8.0	6.2	
NOV.												
01-12	.00	3.8	963	1.31	138	530	200	2.7	1460	8.4	2.5	
13-19	.00	3.5	940	1.28	117	500	170	2.5	1450	8.3	3.2	
20-24	.03	2.4	755	1.03	204	400	130	2.2	1190	8.0	5.2	
25-26	.00	1.3	321	.44	735	170	40	1.3	530	7.8	3.9	
27-30	.00	1.7	576	.78	193	320	90	1.7	916	8.3	2.2	
DEC.												
01-03	.03	2.1	776	1.06	157	450	150	2.0	1230	8.3	2.9	
04-06	.03	1.3	360	.49	694	210	61	1.4	609	7.8	4.5	
07-12	.00	2.6	714	.97	189	410	140	2.0	1160	8.2	3.3	
13-31	.07	3.7	928	1.26	120	500	170	2.5	1450	8.2	4.1	
JAN.												
01-07	.85	4.8	1030	1.40	61.2	550	200	2.8	1590	7.9	8.5	
08-15	.03	4.4	990	1.35	56.1	540	200	2.6	1540	8.1	5.2	
16-27	.07	4.0	892	1.21	57.8	470	160	2.6	1400	8.2	3.7	
28-31	.16	4.3	956	1.30	51.7	510	190	2.7	1500	7.8	9.7	
FEB.												
01-20	.13	4.2	941	1.28	48.3	510	190	2.7	1510	7.7	12	
21-22	.20	1.5	317	.43	1460	170	58	1.3	529	7.3	11	
23-25	.03	1.6	549	.75	474	310	110	1.7	900	7.9	4.9	
26-28	.03	2.2	768	1.04	212	420	130	2.1	1230	7.7	11	
MAR.												
01-07	.03	2.4	934	1.27	166	510	170	2.3	1440	8.0	6.6	
08...	.03	.48	375	.51	59.7	210	70	1.8	669	7.4	11	
09...	.07	2.6	--	--	--	510	170	2.5	1490	7.9	8.4	
10...	.03	.94	--	--	--	210	77	1.4	616	7.5	8.2	
11...	.13	.98	215	.29	2890	94	24	--	263	7.2	8.6	
12-14	.07	1.3	370	.50	1200	210	70	1.3	618	7.8	4.3	
15-31	.07	2.2	781	1.06	352	430	130	2.1	1250	8.0	5.9	
APR.												
01-12	--	3.6	940	1.28	173	520	210	2.5	1470	7.8	9.6	
13-30	--	2.8	921	1.25	236	540	220	2.2	1440	8.0	6.3	
MAY												
01...	--	1.2	427	.58	738	230	79	1.6	714	7.7	5.7	
02-03	--	1.2	285	.39	939	--	--	--	460	7.7	4.4	
04-09	--	2.0	586	.80	263	330	110	1.7	954	7.7	8.6	
10-22	--	3.2	893	1.21	183	470	150	2.4	1400	8.1	4.9	
23-27	--	3.3	302	.41	487	--	--	--	504	7.6	5.9	
28-31	--	3.1	531	.72	262	280	80	1.8	856	8.0	4.0	
JUNE												
01...	.00	2.8	237	.32	609	140	48	.9	387	7.5	5.9	
02-08	.00	1.9	411	.56	1000	230	62	1.5	672	7.7	6.4	
09-10	.00	.64	199	.27	2940	--	--	--	324	7.5	5.6	
11-16	.00	1.1	396	.54	519	220	--	1.3	642	7.8	--	
17-30	.10	2.6	836	1.14	151	460	150	2.2	1290	8.0	6.0	
JULY												
01-15	--	4.9	952	1.29	77.1	480	170	2.8	1480	8.1	4.9	
16-31	--	4.8	926	1.26	40.0	450	150	3.1	1460	8.4	2.4	
AUG.												
01-11	--	4.9	902	1.23	46.3	400	120	3.3	2350	8.0	5.3	
12-23	--	4.2	666	.91	82.7	300	100	2.8	1080	7.7	7.6	
24-31	--	4.1	363	.49	155	180	54	1.6	579	7.6	6.1	
SEP.												
01-02	--	10	518	.70	85.3	250	81	2.1	812	7.5	10	
03-05	--	4.1	359	.49	107	--	--	--	576	7.4	9.6	
06-25	--	4.3	675	.92	82.0	320	110	2.4	1080	7.7	8.3	
26-27	--	1.9	352	.48	197	180	50	1.4	569	7.6	6.2	
28-30	--	2.4	544	.74	66.1	280	92	1.9	868	7.7	7.3	

07159750 COTTONWOOD CREEK AT SEWARD, OKLA.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	INSTANTANEOUS DIS-CHARGE (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHDS)	PH (UNITS)	TEMPER-ATURE (DEG C)	DIS-SOLVED OXYGEN (MG/L)	PER-CENT SATUR-ATION	CHEM-ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	CHEM-ICAL OXYGEN DEMAND (HIGH LEVEL) (MG/L)	BIO-CHEM-ICAL OXYGEN DEMAND 5 DAY (MG/L)	TOTAL IRON (UG/L)	DIS-SOLVED IRON (FE) (UG/L)	TOTAL MAN-GANESE (MN) (UG/L)
OCT. 25...	42	1210	7.3	15.9	5.4	59	33	--	4.4	--	30	--
NOV. 27...	188	840	--	7.0	10.0	89	19	--	5.7	--	50	--
DEC. 17...	56	1340	--	5.0	--	--	--	--	37	--	--	--
JAN. 30...	20	1200	--	5.0	9.6	81	25	--	6.3	--	--	--
FEB. 27...	102	1060	--	9.0	9.0	84	--	22	6.6	--	20	--
MAR. 20...	156	1150	--	10.0	7.8	76	--	24	6.0	--	--	--
APR. 23...	55	1500	--	17.0	3.3	35	24	--	8.1	--	--	--
MAY 22...	785	370	--	19.5	--	--	--	--	--	25000	380	1300
22...	883	670	--	20.5	--	--	--	--	--	25000	310	1200
22...	785	875	--	21.5	--	--	--	--	--	19000	130	1400
22...	252	370	--	21.0	--	--	--	--	--	27000	140	1300
30...	84	990	--	24.0	--	--	--	--	6.8	--	--	--
JUNE 26...	45	1500	--	19.5	4.2	49	--	--	4.8	--	--	--
JULY 29...	16	1400	--	27.0	2.7	35	26	--	7.6	--	--	--
AUG. 21...	11	730	--	24.5	4.6	58	31	--	5.4	--	--	--
SEP. 17...	60	1330	--	19.0	3.6	41	34	--	16	--	--	--

[illegible]

ARKANSAS RIVER BASIN

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07159750 COTTONWOOD CREEK AT SEWARD, OKLA.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	INSTAN- TANEOUS DIS- CHARGE (CFS)	ALDRIN (UG/L)	CHLOR- DANE (UG/L)	DDD (UG/L)	DDE (UG/L)	DDT (UG/L)	DI- AZINON (UG/L)	DI- ELDRIN (UG/L)	ENDRIN (UG/L)	HEPTA- CHLOR (UG/L)
OCT. 25...	42	.00	.0	.00	.00	.00	.02	.00	.00	.00
NOV. 27...	188	.00	.0	.00	.00	.00	.01	.00	.00	.00
FEB. 27...	102	.00	.0	.00	.00	.00	.02	.00	.00	.00
MAY 22...	785	.00	<.1	.00	.00	.00	.03	.01	.00	.00
22...	883	.00	.0	.00	.00	.00	.04	.01	.00	.00
22...	785	.00	.0	.00	.00	.00	.04	<.01	.00	.00
22...	252	.00	<.1	.00	.00	.00	.09	.01	.00	.00
AUG. 21...	11	.00	.0	.00	.00	.00	.33	.00	.00	.00

DATE	HEPTA- CHLOR EPOXIDE (UG/L)	LINDANE (UG/L)	MALA- THION (UG/L)	METHYL PARA- THION (UG/L)	PARA- THION (UG/L)	PCB (UG/L)	TOX- APHENE (UG/L)	2,4-D (UG/L)	2,4,5-T (UG/L)	SILVEX (UG/L)
OCT. 25...	.00	.00	.00	.00	.00	.0	--	.00	.00	.00
NOV. 27...	.00	.00	.00	.00	.00	.0	--	.00	.00	.00
FEB. 27...	.00	.00	.00	.00	.00	.0	--	.05	.01	.01
MAY 22...	.00	.00	.04	.00	.00	.0	0	--	--	--
22...	.00	.00	.03	.00	.00	.0	0	--	--	--
22...	.00	.00	.03	.00	.00	.0	0	.00	.00	.00
22...	.00	.00	.05	.00	.00	.0	0	1.4	.40	.30
AUG. 21...	.00	.00	.00	.00	.00	.0	0	.02	.01	.00

ARKANSAS RIVER BASIN

07159750 COTTONWOOD CREEK AT SEWARD, OKLA.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	722	1410	1120	1510	1490	1330	1370	728	387	1490	1410	861
2	870	1430	1190	1560	1410	1370	1420	343	592	1510	1440	750
3	965	1450	1230	1610	1440	1380	1440	598	720	1510	1450	496
4	1010	1430	619	1580	1460	1390	1420	742	764	1510	1460	524
5	602	1480	453	1550	1450	1440	1490	842	563	1520	1450	685
6	716	1470	696	1570	1460	1470	1480	959	716	1540	1420	873
7	876	1460	846	1560	1500	1490	1470	1030	782	1330	1420	980
8	909	1470	934	1520	1520	668	1460	1090	525	1460	1430	1040
9	968	1440	1120	1480	1510	1450	1540	1170	252	1490	1410	1100
10	1040	1450	1210	1510	1500	610	1550	1260	395	1460	1390	1140
11	935	---	1240	1520	1470	261	1470	1310	534	1490	1370	1180
12	339	---	1280	1550	1500	488	1510	1360	588	1440	984	1210
13	422	1390	1350	1540	1500	635	1310	1380	621	1440	1120	1250
14	481	1400	1350	1500	1490	694	1250	1410	614	1440	1170	1290
15	655	1420	1360	1460	1460	839	1230	1420	702	1420	1170	1300
16	808	1460	1370	1420	1400	941	1310	1450	874	1440	1180	1280
17	933	1420	1410	1400	1460	1020	1360	1490	1020	1450	1260	1290
18	1020	1440	1400	1380	1480	1110	1380	1490	1100	1440	1360	1030
19	1110	1400	1420	1360	1420	1170	1410	1510	1170	1470	902	980
20	1170	1280	1420	1360	1400	1210	1430	1520	1180	1490	944	978
21	1210	1250	1420	1340	559	1200	1430	1530	1210	1540	912	972
22	1240	1010	1380	1330	479	1210	1430	1410	1290	1480	954	855
23	1300	1100	1390	1340	720	1210	1440	725	1370	1480	914	902
24	1340	1180	1430	1380	877	1270	1440	317	1400	1450	293	992
25	1350	449	1430	1390	1030	1280	1440	467	1440	1440	482	912
26	1370	583	1450	1400	1120	1330	1460	441	1460	1450	608	463
27	1360	728	1400	1420	1220	1370	1470	628	1480	1440	721	649
28	1370	860	1420	1450	1270	1300	1500	736	1470	1440	421	770
29	1410	978	1430	1470	---	1280	1460	827	1490	1440	596	885
30	1370	1070	1450	1490	---	1360	1270	964	1520	1430	708	929
31	1410	---	1470	1470	---	1380	---	964	---	1420	776	---
MONTH	1010	1250	1250	1470	1310	1130	1420	1040	941	1460	1070	952

TEMPERATURE (DEG. C) OF WATER , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
(ONCE-DAILY)

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

ARKANSAS RIVER BASIN

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07161000 CIMARRON RIVER AT PERKINS, OKLA.

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

DRAINAGE AREA.--17,852 mi² (46,237 km²) of which 4,926 mi² (12,758 km²) is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: October 1952 to September 1963, June 1965 to current year.

Water temperatures: October 1952 to September 1963, June 1965 to current year.

EXTREMES, Current year.--Specific conductance: Maximum, 14,500 micromhos/cm Aug. 2; minimum, 652 micromhos/cm June 10.

Water temperatures: Maximum, 39.0°C June 18; minimum, -0.5°C Dec. 31, Jan. 1.

Period of record.--Specific conductance: Maximum daily, 32,400 micromhos/cm Mar. 18, 1957; minimum, 353 micromhos/cm Apr. 30, 1970.

Water temperatures: Maximum, 39.0°C June 18, 1974; minimum, -1.0°C Jan. 19-20, 1970.

REMARKS.--Continous monitor records for specific conductance and water temperature are collected for this station. Records of maximum and minimum specific conductance values and water temperature values are available in district office in Oklahoma City, Okla.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

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)	RICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED NITRATE (N) (MG/L)	DIS- SOLVED NITRATE (NO3) (MG/L)	DIS- SOLVED NITRITE (N) (MG/L)
OCT.												
05...	2140	82	24	950	180	0	148	180	1500	.77	3.4	.01
13...	30500	42	8.7	180	99	0	81	68	280	.88	3.9	.01
25...	1210	150	42	1300	270	0	221	310	2100	.70	3.1	.02
NOV.												
05...	657	190	58	1700	295	14	265	310	2700	.64	2.8	.01
15...	557	180	64	1900	329	0	270	410	3000	.66	2.9	.01
25...	4740	59	18	360	139	0	114	93	560	.73	3.2	.01
DEC.												
05...	5260	48	16	280	135	0	111	94	410	1.2	5.3	.00
15...	1000	150	50	1500	295	0	242	340	2200	.93	4.1	.05
25...	784	160	58	1500	353	0	290	370	2300	1.3	5.9	.06
JAN.												
05...	886	190	70	1900	354	0	290	440	2900	1.4	6.2	.00
15...	808	220	75	2200	398	0	326	550	--	1.7	7.5	.00
25...	1150	180	63	2800	251	0	206	450	4500	1.1	4.8	.01
FEB.												
05...	634	190	64	--	320	0	262	450	3100	.93	4.1	.00
15...	538	170	65	1900	306	0	251	430	3000	.31	1.4	.12
24...	6040	36	10	93	105	0	86	68	130	.93	4.1	.01
MAR.												
05...	925	150	58	1300	335	0	275	330	--	.63	2.8	.00
15...	6000	95	27	860	149	0	122	210	1300	.61	2.7	.05
25...	1020	--	--	1100	349	0	286	380	1700	.05	.22	.10
APR.												
05...	862	170	69	1500	333	0	273	400	2400	--	--	--
15...	3690	91	28	380	165	0	135	280	540	--	--	--
24...	2580	130	43	870	187	0	153	--	1400	--	--	--
MAY												
03...	18700	63	16	230	151	0	124	--	--	--	--	--
15...	620	140	57	1300	250	0	205	--	--	--	--	--
27...	10400	49	12	160	133	0	109	--	--	--	--	--
JUNE												
10...	15000	38	9.8	88	122	0	100	43	--	--	--	--
15...	578	110	38	1200	225	2	188	240	1900	--	--	--
25...	531	150	54	--	289	12	257	320	2200	--	--	--
JULY												
05...	290	130	57	--	269	0	221	330	2200	--	--	--
15...	173	150	57	1400	310	0	254	340	2100	--	--	--
25...	112	150	57	1400	314	0	258	320	--	--	--	--
AUG.												
05...	265	130	55	980	350	0	287	350	1500	--	--	--
AUG.												
15...	515	97	27	800	138	0	113	210	1200	--	--	--
25...	2190	55	14	310	134	0	110	93	480	--	--	--
SEP.												
05...	7440	140	20	550	98	0	80	350	850	--	--	--
15...	737	210	48	1600	212	0	174	490	--	--	--	--
25...	7980	100	21	--	147	0	121	200	910	--	--	--

ARKANSAS RIVER BASIN

07161000 CIMARRON RIVER AT PERKINS, OKLA.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	DIS- SOLVED NITRITE (NO2) (MG/L)	DIS- SOLVED NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	CARBON DIOXIDE (CO2) (MG/L)
OCT.												
05...	.03	.78	.96	--	--	--	300	160	24	5250	8.1	2.3
13...	.03	.89	1.1	656	.89	54000	140	60	6.6	1220	7.9	2.0
25...	.07	.72	.31	4050	5.51	13200	550	330	24	6390	8.2	2.7
NOV.												
05...	.03	.65	.47	5300	7.21	9400	710	450	28	8820	8.6	1.3
15...	.03	.67	.51	5800	7.89	8720	710	440	31	9680	8.3	2.6
25...	.03	.74	.15	--	--	--	220	110	11	2220	8.1	1.8
DEC.												
05...	.00	1.2	.97	933	1.27	13300	190	75	8.9	1690	8.1	1.7
15...	.16	.98	.23	4450	6.05	12000	580	340	27	7190	8.1	3.8
25...	.20	1.4	.81	4620	6.28	9780	640	350	26	7410	8.2	3.6
JAN.												
05...	.00	1.4	.29	5760	7.83	13800	760	470	30	9640	8.3	2.8
15...	.00	1.7	.41	6910	9.40	15100	860	530	33	11000	8.0	6.4
25...	.03	1.1	.20	8250	11.2	25600	710	500	46	13900	8.0	4.0
FEB.												
05...	.00	.93	.41	5940	8.08	10200	740	480	--	10200	8.3	2.6
15...	.39	.43	.27	5880	8.00	8540	690	440	31	10000	8.3	2.5
24...	.03	.94	.31	423	.58	6900	130	45	3.5	845	7.7	3.4
MAR.												
05...	.00	.63	.24	3850	5.24	9620	610	340	23	6870	8.3	2.7
15...	.16	.66	.17	2560	3.48	41500	350	230	20	--	7.8	3.8
25...	.33	.15	.25	3680	5.00	10100	--	--	--	6570	8.2	3.5
APR.												
05...	--	.38	--	4860	6.61	11300	710	440	25	8330	8.1	4.2
15...	--	.52	--	--	--	--	340	210	8.9	2480	7.7	5.3
24...	--	.33	.75	2930	3.98	20400	500	350	17	5100	7.7	6.0
MAY												
03...	--	.03	1.3	915	1.24	46200	220	99	6.7	1610	7.6	6.1
15...	--	.25	.26	4240	5.77	7100	580	380	23	6880	7.8	6.3
27...	--	.02	1.2	638	.87	17900	170	63	5.3	1100	7.8	3.4
JUNE												
10...	--	.00	1.1	386	.53	15600	140	35	3.3	688	7.6	4.9
15...	--	.55	.39	3590	4.88	5600	430	240	25	6050	8.4	1.5
25...	--	.57	.31	4300	5.85	6170	600	340	--	7100	8.5	1.5
JULY												
05...	--	.41	.01	4220	5.74	3300	560	340	--	6990	7.7	8.6
15...	--	.32	.75	4240	5.77	1980	610	360	25	7020	8.1	3.9
25...	--	.40	.33	4390	5.97	1330	610	350	25	7330	8.3	2.5
AUG.												
05...	--	.87	.60	3360	4.57	2400	550	260	18	5466	8.2	3.5
15...	--	1.1	1.1	2510	3.41	3490	350	240	19	4260	8.1	1.8
25...	--	4.4	1.9	1100	1.50	6500	200	85	9.7	1940	7.7	4.3
SEP.												
05...	--	2.8	1.1	--	--	--	430	350	12	3290	7.7	3.1
15...	--	.08	.34	5250	7.14	10400	720	550	26	8370	8.1	2.7
25...	--	.73	--	2030	2.76	43700	340	220	--	3420	7.8	3.7

DATE	INSTAN- TANEOUS DIS- CHARGE (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	CHEM- ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	CHEM- ICAL OXYGEN DEMAND (HIGH LEVEL) (MG/L)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)
OCT.								
16...	6020	2400	17.5	8.0	89	--	--	7.3
NOV.								
14...	564	9450	15.0	9.5	99	120	--	3.2
DEC.								
11...	1370	5500	5.0	13.5	113	86	--	2.0
JAN.								
23...	1240	12000	4.5	12.0	98	83	--	1.5
FEB.								
12...	512	10300	6.5	12.0	105	--	150	1.5
APR.								
25...	2050	11000	20.5	10.9	130	170	--	3.1
MAY								
22...	388	5300	27.0	9.5	125	--	--	3.7
JUNE								
19...	538	6430	28.8	10.3	139	46	--	4.9

ARKANSAS RIVER BASIN

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07161000 CIMARRON RIVER AT PERKINS, OKLA.--Continued

SULFATE (MG/L AS SO₄) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	180	400	310	480	420	240	350	260	58	350	330	---
2	230	410	280	470	440	300	350	120	130	350	340	---
3	250	400	330	450	450	220	360	160	110	350	340	120
4	250	400	96	470	450	310	370	68	110	330	360	220
5	240	410	170	460	460	320	380	94	130	340	270	170
6	240	420	110	320	480	330	380	120	130	350	360	210
7	230	420	120	450	480	340	390	150	110	340	250	240
8	250	410	310	400	480	350	380	200	62	340	210	300
9	270	420	480	430	470	310	380	240	78	330	210	310
10	270	420	420	460	470	260	380	360	47	310	190	300
11	220	430	300	460	480	71	370	290	94	320	52	310
12	110	430	310	430	480	57	360	320	130	340	83	340
13	63	430	270	450	470	61	230	320	190	350	84	370
14	95	440	320	480	470	170	160	320	290	340	99	390
15	130	440	350	530	450	280	130	340	280	340	210	410
16	130	460	380	550	430	240	100	340	270	350	280	410
17	140	470	400	540	390	210	130	350	280	350	340	420
18	140	470	400	530	440	200	190	360	330	350	500	430
19	160	470	400	470	410	220	240	380	330	360	130	410
20	180	420	420	480	160	250	270	380	320	360	160	390
21	200	400	440	470	150	270	300	370	340	360	200	190
22	230	210	400	440	160	280	250	430	320	360	210	59
23	270	190	380	500	51	310	200	390	320	360	170	61
24	310	210	360	620	50	300	230	98	340	360	99	130
25	330	100	360	700	96	310	410	73	380	360	100	170
26	340	210	390	490	150	320	520	81	390	360	130	180
27	360	150	390	420	190	320	390	62	420	350	230	190
28	370	180	400	380	230	320	320	62	410	350	140	220
29	380	250	460	370	---	350	260	98	360	350	210	230
30	390	260	520	400	---	350	190	110	360	360	260	280
31	390	---	480	410	---	340	---	240	---	330	250	---
MONTH	240	360	350	470	350	270	300	230	240	350	220	270

DISSOLVED SO₄ DISCHARGE (TONS/DAY) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2690	789	887	780	794	795	819	1100	880	315	86	---
2	2300	772	690	631	800	886	829	2270	1900	296	95	---
3	1910	739	773	551	787	615	844	7890	831	280	85	1730
4	1570	722	1570	504	758	819	852	1940	479	275	150	8340
5	1360	731	2710	542	774	789	884	1250	628	270	173	3130
6	1440	731	1150	457	787	771	847	922	656	273	176	2580
7	1170	712	807	588	785	744	826	818	764	278	97	1990
8	1160	693	2020	436	745	747	775	836	940	256	67	1830
9	1130	698	2460	449	709	1130	763	856	2260	233	86	1460
10	1020	693	1750	525	693	7370	772	1070	1690	199	126	1160
11	2040	695	1100	523	676	8650	782	777	1600	185	396	1030
12	12920	715	1020	500	665	5510	1430	743	1090	181	846	961
13	5090	647	815	549	633	2480	2190	670	1240	176	330	902
14	3500	666	911	645	633	4300	1600	599	1540	166	176	845
15	2770	653	933	824	659	4610	716	570	1290	159	285	799
16	2040	676	950	988	724	2540	349	515	1030	158	331	789
17	1560	691	963	1120	649	1440	366	499	917	153	378	776
18	1320	691	891	1180	806	943	436	470	913	145	2110	756
19	1260	678	899	1120	1590	888	503	438	863	141	579	749
20	1250	782	853	1150	1140	873	517	396	768	138	330	3150
21	1160	1890	774	1210	1510	882	552	375	737	130	256	7480
22	1070	1300	647	1110	6530	858	1160	439	591	123	189	1510
23	1090	582	627	1600	1700	891	1170	1990	574	120	851	491
24	1090	646	693	2010	713	839	1590	553	536	119	633	610
25	1050	1260	798	2140	677	843	2260	758	545	112	575	1050
26	993	2840	1080	1360	731	868	2140	1840	518	116	527	1420
27	999	976	976	1060	758	857	1230	1560	526	105	738	1530
28	944	719	887	876	839	834	820	796	446	97	384	1000
29	896	850	1030	790	---	895	627	770	363	106	2730	693
30	857	1010	1160	821	---	870	680	525	338	104	6760	667
31	825	---	1070	807	---	846	---	2450	---	87	4500	---
MONTH	1950	875	1090	898	1050	1820	978	1180	914	177	808	1760

ARKANSAS RIVER BASIN

07161000 CIMARRON RIVER AT PERKINS, OKLA.--Continued

CHLORIDE (MG/L AS CL) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	950	2500	1900	3000	2600	1400	2200	1500	180	2200	2100	---
2	1200	2600	1700	2900	2700	1800	2200	550	630	2200	2100	---
3	1400	2500	2100	2900	2800	1200	2300	830	510	2200	2100	560
4	1400	2500	420	2900	2800	1900	2300	240	500	2100	2300	1200
5	1400	2600	910	2900	2900	2000	2400	410	640	2100	1600	850
6	1400	2700	480	2000	3000	2000	2400	540	630	2200	2300	1200
7	1300	2600	590	2900	3000	2100	2500	720	530	2200	1500	1400
8	1400	2600	1900	2600	3000	2200	2400	1000	200	2100	1100	1800
9	1600	2600	3000	2700	3000	1900	2400	1400	310	2100	1100	1900
10	1600	2700	2600	2900	2900	1500	2400	2300	110	1900	1000	1800
11	1200	2700	1800	2900	3000	260	2400	1800	410	2000	140	1900
12	480	2700	1900	2700	3000	170	2300	2000	660	2100	340	2200
13	210	2700	1600	2800	2900	200	1300	2000	1000	2200	340	2300
14	410	2800	2000	3000	2900	900	820	2000	1700	2200	430	2500
15	620	2800	2200	3400	2900	1700	600	2100	1700	2200	1100	2600
16	630	2900	2400	3600	2700	1400	450	2100	1600	2200	1600	2600
17	660	3000	2600	3500	2500	1100	640	2200	1700	2200	2100	2600
18	690	3000	2500	3400	2800	1100	990	2300	2000	2200	3100	2700
19	800	3000	2500	2900	2600	1200	1300	2400	2100	2300	640	2600
20	950	2700	2700	3000	810	1400	1600	2400	2000	2300	620	2500
21	1100	2500	2800	3000	770	1600	1800	2400	2100	2300	1100	1000
22	1300	1200	2500	2800	810	1700	1500	2700	2000	2300	1100	190
23	1600	1000	2400	3200	140	1900	1100	2500	2000	2300	870	200
24	1900	1100	2300	4200	130	1800	1300	430	2200	2300	440	600
25	2000	450	2300	4900	420	1900	2600	280	2400	2300	460	890
26	2100	1100	2500	3100	750	2000	3300	330	2500	2200	600	960
27	2300	750	2500	2600	970	2000	2500	210	2600	2200	1300	1000
28	2400	930	2500	2400	1300	2000	2000	210	2600	2200	670	1200
29	2400	1400	2900	2400	---	2200	1500	430	2300	2200	1100	1300
30	2500	1500	3300	2500	---	2200	1000	490	2300	2300	1500	1700
31	2500	---	3000	2600	---	2200	---	1300	---	2000	1500	---
MONTH	1400	2200	2200	3000	2200	1600	1800	1400	1400	2200	1200	1600

DISSOLVED CL DISCHARGE (TONS/DAY) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14120	5000	5430	4900	5020	4530	5150	6430	2740	1990	538	---
2	12770	4890	4110	3970	5040	5370	5230	10650	9230	1870	598	---
3	11020	4680	4820	3470	4950	3360	5360	40420	3830	1770	534	8160
4	9030	4580	6850	3170	4770	5020	5420	6910	2200	1720	949	45930
5	7740	4620	14100	3410	4860	4870	5620	5410	3060	1690	1020	16130
6	8190	4610	5200	2820	4940	4790	5380	4300	3180	1720	1120	13970
7	6490	4500	3860	3700	4930	4650	5240	4080	3560	1750	558	11330
8	6680	4380	12410	2760	4670	4710	4920	4450	3110	1600	361	11090
9	6640	4410	15420	2840	4450	6960	4850	4880	8870	1460	460	8970
10	6040	4380	11040	3300	4350	42900	4910	6760	4060	1220	668	7050
11	11220	4390	6660	3290	4240	31860	4980	4690	6910	1140	1090	6340
12	58630	4510	6290	3150	4180	16820	9070	4590	5310	1130	3440	6040
13	17250	4080	4810	3450	3980	8130	12340	4160	6550	1110	1350	5740
14	15180	4200	5640	4050	3980	22380	8180	3700	9260	1040	774	5360
15	13400	4120	5890	5280	4150	27630	3430	3580	7710	999	1540	5060
16	9870	4250	6030	6470	4570	14480	1550	3230	6080	996	1970	4990
17	7630	4340	6100	7240	4120	7720	1780	3160	5480	961	2370	4900
18	6560	4340	5650	7630	5080	5030	2300	2990	5670	917	13210	4770
19	6400	4260	5690	7070	10060	4880	2850	2780	5390	894	2820	4740
20	6570	4940	5390	7240	5830	5020	3050	2520	4760	875	1690	19960
21	6200	11950	4880	7570	7630	5220	3360	2390	4630	824	1370	39510
22	5980	7060	4100	6970	33310	5140	6720	2770	3650	782	1020	4810
23	6450	3080	3980	10060	4580	5450	6250	12660	3560	766	4400	1600
24	6690	3490	4400	13690	1850	5100	8840	2430	3370	754	2800	2930
25	6530	5610	5070	15140	2950	5150	14330	2860	3460	709	2570	5440
26	6220	15280	6840	8510	3670	5370	13670	7370	3290	733	2530	7460
27	6350	4900	6190	6700	3990	5320	7790	5190	3320	663	4130	8060
28	6010	3760	5620	5560	4690	5170	5070	2650	2820	615	1890	5540
29	5690	4900	6460	5020	---	5660	3660	3390	2310	672	14740	3870
30	5440	5880	7400	5200	---	5500	3600	2400	2140	659	39420	3980
31	5230	---	6700	5100	---	5320	---	13850	---	544	25990	---
MONTH	9940	5180	6550	5770	5740	9340	5830	6050	4650	1120	4450	9780

ARKANSAS RIVER BASIN

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07161000 CIMARRON RIVER AT PERKINS, OKLA.--Continued

DISSOLVED SOLIDS (RESIDUE ON EVAPORATION, MG/L AT 180 DEG. C) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2130	4880	3730	5960	5150	2890	4210	3160	550	4330	4060	---
2	2680	4990	3370	5780	5370	3580	4270	1300	1470	4300	4150	---
3	3020	4910	4020	5600	5500	2580	4400	1870	1220	4330	4150	1340
4	2990	4950	1040	5770	5570	3760	4500	676	1210	4060	4350	2630
5	2890	5090	2040	5640	5690	3860	4660	1020	1500	4160	3240	1930
6	2900	5230	1150	3890	5990	3980	4680	1280	1460	4230	4450	2520
7	2690	5160	1400	5610	5990	4100	4790	1660	1270	4180	3030	2890
8	2970	5080	3760	4960	5950	4270	4670	2310	598	4100	2510	3600
9	3230	5150	5990	5260	5850	3780	4600	2900	810	4050	2430	3750
10	3250	5190	5110	5720	5800	3100	4650	4360	413	3760	2290	3640
11	2620	5290	3600	5630	5900	713	4530	3540	1020	3880	471	3810
12	1170	5280	3780	5310	5900	535	4410	3870	1520	4090	870	4180
13	620	5250	3250	5580	5750	592	2800	3940	2250	4220	882	4520
14	1030	5430	3920	5910	5780	2020	1860	3900	3490	4200	1070	4840
15	1450	5390	4280	6530	5610	3440	1400	4160	3430	4180	2510	5000
16	1470	5630	4680	6890	5340	2890	1100	4160	3300	4240	3340	5060
17	1530	5850	4960	6650	4760	2430	1490	4310	3400	4240	4160	5160
18	1600	5850	4870	6590	5440	2360	2210	4450	3960	4320	6160	5250
19	1820	5850	4940	5800	5030	2610	2850	4620	4070	4380	1490	5100
20	2130	5180	5190	5960	1840	2990	3260	4610	3950	4400	1850	4820
21	2400	4910	5440	5830	1750	3290	3660	4590	4170	4360	2400	2220
22	2710	2530	4930	5390	1630	3430	3030	5340	3890	4400	2480	568
23	3240	2250	4720	6220	461	3710	2410	4750	3950	4440	1960	586
24	3700	2490	4410	7670	445	3630	2720	1060	4190	4410	1080	1410
25	3960	1100	4420	8700	1030	3720	5030	743	4710	4370	1110	2010
26	4120	2470	4760	6040	1710	3920	6440	846	4740	4340	1410	2150
27	4440	1710	4800	5130	2170	3950	4820	604	5120	4250	2740	2220
28	4560	2080	4880	4700	2750	3920	3900	604	5060	4280	1560	2680
29	4680	3000	5720	4590	---	4310	3140	1060	4440	4300	2480	2740
30	4780	3110	6410	4950	---	4280	2270	1190	4380	4360	3120	3380
31	4800	---	5950	5020	---	4210	---	2840	---	3990	3020	---
MONTH	2820	4380	4240	5780	4300	3190	3620	2760	2650	4230	2610	3210

DISSOLVED SOLIDS DISCHARGE (TONS/DAY) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	31590	9700	10780	9660	9780	9530	10010	13230	8370	3850	1050	---
2	27460	9500	8340	7810	9860	10740	10140	25330	21540	3620	1160	---
3	22960	9090	9430	6800	9710	7320	10330	91550	9200	3420	1040	19330
4	18860	8890	16970	6230	9360	9960	10440	19340	5290	3360	1830	99360
5	16300	9000	31670	6700	9560	9610	10840	13490	7120	3290	2090	36430
6	17230	9000	12620	5560	9740	9400	10390	10260	7420	3330	2160	30620
7	13940	8760	9080	7270	9720	9080	10140	9380	8500	3400	1160	23670
8	13970	8530	24600	5360	9220	9140	9510	9870	9130	3120	792	22170
9	13590	8600	30430	5540	8770	13790	9360	10260	23390	2850	1020	17800
10	12350	8540	21510	6490	8570	88720	9470	13060	14820	2430	1480	14070
11	24300	8570	13320	6460	8360	87410	9580	9420	17210	2250	3610	12540
12	142020	8810	12450	6160	8230	52040	17480	9040	12330	2210	8880	11740
13	49890	7970	9830	6780	7830	23980	26210	8170	14570	2150	3480	11060
14	37720	8220	11100	7980	7820	50290	18540	7290	18640	2030	1910	10390
15	31330	8050	11410	10220	8140	55770	8060	6960	15570	1940	3380	9840
16	23040	8350	11660	12280	8930	30470	3800	6290	12380	1930	4010	9710
17	17700	8540	11840	13910	7970	107070	4150	6100	11100	1860	4620	9560
18	15130	8540	10950	14710	9950	11150	5130	5750	11130	1770	26130	9320
19	14540	8390	11050	13910	19570	10580	6020	5370	10530	1720	6570	9230
20	14690	9630	10510	14280	13240	10480	6240	4860	9350	1690	3820	38670
21	13730	23180	9560	14910	17410	10650	6700	4600	9010	1590	3020	88020
22	12820	15450	7950	13640	75640	10390	13980	5420	7200	1510	2240	14450
23	13210	6860	7700	19830	15440	10830	13830	24490	6990	1480	9920	4750
24	13300	7670	8480	25070	6400	10180	18940	6000	6540	1450	6880	6870
25	12820	13750	9770	26780	7310	10240	27860	7730	6690	1370	6270	12240
26	12130	33700	13230	16810	8400	10570	26590	19190	6370	1420	5930	16670
27	12230	11220	12000	13060	8910	10440	15080	15160	6480	1290	8810	17960
28	11580	8420	10900	10750	10020	10170	9980	7750	5490	1190	4380	11930
29	11000	10220	12700	9680	---	10950	7550	8360	4440	1300	32460	8280
30	10530	12160	14420	10100	---	10640	8020	5790	4130	1270	81410	8060
31	10130	---	13210	9920	---	10330	---	29290	---	1070	54090	---
MONTH	22330	10580	13210	11120	12280	20710	11810	13510	10360	2170	9540	20890

ARKANSAS RIVER BASIN

07161000 CIMARRON RIVER AT PERKINS, OKLA.--Continued

SPECIFIC CONDUCTANCE (MICROMHUS/CM AT 25 DEG. C) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3620	8180	6280	9970	8630	4890	7070	5330	1010	7270	6820	---
2	4540	8350	5670	9670	8990	6030	7160	2250	2540	7220	6960	---
3	5090	8220	6760	9360	9200	4370	7380	3200	2120	7260	6960	2310
4	5040	8290	1820	9640	9320	6320	7540	1220	2100	6820	7300	4450
5	4880	8520	3470	9430	9520	6480	7810	1780	2580	6990	5460	3290
6	4900	8750	2010	6530	10020	6690	7840	2210	2520	7100	7460	4270
7	4550	8640	2410	9380	10010	6880	8030	2850	2200	7020	5110	4880
8	5020	8510	6330	8310	9940	7170	7830	3930	1090	6880	4250	6060
9	5440	8630	10020	8800	9780	6360	7710	4900	1440	6810	4120	6300
10	5470	8690	8550	9570	9700	5230	7800	7310	783	6320	3890	6130
11	4430	8850	6060	9410	9860	1280	7590	5950	1780	6520	880	6400
12	2030	8840	6360	8880	8660	986	7390	6500	2620	6860	1540	7020
13	1130	8780	5480	9330	9620	1080	4730	6620	3820	7080	1560	7580
14	1800	9080	6580	9880	9670	3450	3180	6560	5870	7050	1870	8110
15	2500	9030	7190	10900	9390	5800	2420	6980	5780	7020	4260	8370
16	2530	9420	7850	11500	8930	4890	1920	6980	5560	7110	5630	8480
17	2640	9780	8310	11100	7980	4120	2570	7240	5720	7110	6990	8640
18	2750	9780	8160	11000	9110	4010	3750	7460	6660	7250	10300	8790
19	3110	9780	8270	9690	8430	4420	4810	7740	6830	7340	2570	8540
20	3630	8670	8690	9970	3150	5040	5500	7730	6630	7380	3160	8080
21	4070	8220	9110	9740	3000	5540	6160	7700	7000	7320	4070	3770
22	4590	4290	8250	9020	3130	5780	5110	8930	6530	7380	4210	1040
23	5460	3820	7910	10400	863	6240	4080	7960	6630	7450	3350	1070
24	6230	4230	7400	12800	837	6100	4600	1850	7040	7400	1880	2440
25	6650	1920	7410	14500	1810	6250	8430	1330	7890	7330	1940	3420
26	6920	4190	7970	10100	2930	6580	10750	1500	7950	7280	2430	3660
27	7450	2930	8040	8590	3690	6630	8070	1100	8580	7140	4640	3770
28	7640	3540	8170	7880	4650	6590	6560	1100	8470	7190	2680	4530
29	7840	5070	9570	7690	---	7240	5300	1860	7440	7220	4210	4630
30	8010	5240	10700	8290	---	7190	3850	2070	7340	7320	5260	5690
31	8050	---	9940	8410	---	7060	---	4800	---	6700	5100	---
MONTH	4770	7340	7120	9670	7220	5380	6100	4680	4820	7100	4410	5420

TEMPERATURE (DEG. C) OF WATER , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

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

07164200 KEYSTONE LAKE NEAR SAND SPRINGS, OKLA.

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

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

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	RESER- VOIR STORAGE (AC-FT)	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)	ALKA- LITY AS CACO3 (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED NITRATE (N) (MG/L)	DIS- SOLVED NITRATE (NO3) (MG/L)	DIS- SOLVED NITRITE (N) (MG/L)
NOV.												
01...	743400	48	9.9	140	121	0	99	74	--	.07	.31	.00
16...	594200	--	--	180	173	0	142	100	290	.59	2.6	.01
DEC.												
01...	794400	78	17	190	194	0	159	120	290	.58	2.6	.00
16...	944600	68	15	150	174	0	143	94	230	.44	1.9	.01
JAN.												
03...	732200	62	15	--	160	0	131	89	230	.58	2.6	.07
15...	626300	72	16	--	185	0	152	100	250	.13	.58	.01
FEB.												
01...	709000	88	20	170	222	0	182	110	250	.84	3.7	.01
15...	625800	80	18	160	200	0	164	110	240	1.3	5.7	.01
MAR.												
15...	1336000	42	9.9	--	118	0	97	47	110	.63	2.8	.34
APR.												
01...	750000	47	12	110	126	0	103	65	170	.82	3.6	.38
15...	691600	61	16	160	160	0	131	96	250	--	--	--
MAY												
01...	760400	70	18	160	183	0	150	140	240	.02	.09	.00
17...	723900	59	17	150	158	0	130	88	230	.25	1.1	.01
JUNE												
17...	1077000	40	11	76	124	0	102	47	110	.17	.75	.01
JULY												
01...	767900	41	11	85	124	0	102	49	--	.48	.21	.04
15...	601000	49	11	100	144	0	118	52	150	--	--	--
AUG.												
01...	480600	58	14	130	166	0	136	74	200	--	--	--
15...	586600	66	16	170	181	0	148	89	250	--	--	--
30...	597500	56	14	--	154	0	126	73	240	--	--	--
SEP.												
30...	653100	52	12	210	120	0	98	86	320	--	--	--

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	DIS- SOLVED NITRITE (NO2) (MG/L)	DIS- SOLVED NITRATE (N) (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)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (JTU)	CARBON DIOXIDE (CO2) (MG/L)
NOV.												
01...	.00	.07	557	.76	160	61	4.8	1030	7.4	19.0	--	7.7
16...	.03	.60	761	1.04	--	--	--	1380	7.8	--	--	4.4
DEC.												
01...	.00	.58	821	1.12	260	110	5.1	1450	7.6	--	--	7.8
16...	.03	.45	665	.90	230	89	4.3	1190	7.9	--	--	3.5
JAN.												
03...	.23	.65	634	.86	220	85	--	1140	7.5	--	--	8.1
15...	.03	.14	698	.95	250	94	--	1260	7.2	--	--	19
FEB.												
01...	.03	.85	770	1.05	300	120	4.3	1380	7.7	--	1	7.1
15...	.03	1.3	716	.97	270	110	4.2	1310	7.6	--	1	8.0
MAR.												
15...	1.1	.97	387	.53	150	49	--	699	7.5	--	30	6.0
APR.												
01...	1.2	1.2	--	--	170	63	3.7	918	7.8	--	--	3.2
15...	--	.55	696	.95	220	87	4.7	1250	7.7	12.0	10	5.1
MAY												
01...	.00	.02	721	.98	250	99	4.4	1250	7.6	--	--	7.4
17...	.03	.26	658	.89	220	88	4.4	1150	7.4	24.0	3	10
JUNE												
17...	.03	.18	367	.50	150	43	2.7	654	7.4	23.0	40	7.9
JULY												
01...	.13	.52	404	.55	150	46	3.0	718	7.5	25.0	30	6.3
15...	--	.42	481	.65	170	50	3.4	847	7.8	29.0	40	3.7
AUG.												
01...	--	.15	601	.82	200	66	4.0	1060	7.9	29.0	7	3.3
15...	--	.27	731	.99	230	82	4.9	1280	8.1	25.0	10	2.3
30...	--	.10	643	.87	200	71	--	1150	7.6	26.0	4	6.2
SEP.												
30...	--	.62	790	1.07	180	81	6.8	1420	7.6	21.0	20	4.8

ARKANSAS RIVER BASIN

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

LOCATION.--Lat 36°07'22", long 96°07'23", in NW 1/4 SW 1/4 sec.14, T.19 N., R.11 E., Tulsa County, at bridge on State Highway 97 in Sand Springs, 5.1 mi (8.2 km) downstream from Keystone Dam, and 10 mi (16.1 km) upstream from gaging station at Tulsa.

DRAINAGE AREA.--74,615 mi² (193,253 km²) upstream from gaging station, of which 12,541 mi² (32,481 km²) is probably noncontributing.

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

EXTREMES, Current year.--Specific conductance: Maximum, 3,200 micromhos/cm Jan. 22; minimum, 405 micromhos/cm Oct. 16.

Water temperatures: Maximum, 32.0°C July 14; minimum, freezing point on several days during January and February.

Period of record.--Specific conductance: Maximum, 21,200 micromhos/cm Oct. 19, 1956; minimum, 269 micromhos/cm Nov. 21, 1964.

Water temperatures: Maximum, 36.0°C Aug. 7, 1947; minimum, freezing point on many days during winter months.

REMARKS.--Continuous monitor records for specific conductance and water temperature are collected for this station. Records of maximum and minimum specific conductance values and water temperature values are available in district office in Oklahoma City, Okla.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	INSTANTANEOUS DIS-CHARGE (CFS)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG)	DIS-SOLVED SODIUM (NA) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CaCO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	DIS-SOLVED NITRATE (NO3) (MG/L)	DIS-SOLVED NITRITE (N) (MG/L)
OCT.												
05...	27800	35	8.3	75	100	0	82	44	110	.99	4.4	.01
13...	87600	--	6.1	51	89	0	73	33	78	.89	3.9	.00
25...	57100	40	9.0	130	104	0	85	53	200	.74	3.3	.01
NOV.												
05...	15500	53	--	170	132	0	108	84	270	.73	3.2	.01
15...	7440	82	18	280	184	3	156	120	430	.78	3.5	.01
25...	8590	84	19	280	198	0	162	120	440	.81	3.6	.00
DEC.												
05...	7260	82	18	210	200	4	171	120	330	.98	4.3	.02
15...	13000	69	16	180	180	0	148	100	280	.95	4.2	.02
25...	13800	62	15	180	157	0	129	86	290	.83	3.7	.00
JAN.												
04...	13600	77	20	310	174	0	143	120	490	1.0	4.4	.00
15...	7890	90	23	390	201	0	165	140	620	1.1	4.8	.02
25...	8030	97	25	--	229	0	168	150	620	1.3	5.7	.01
FEB.												
05...	13800	89	22	310	212	0	174	130	450	1.4	6.2	.00
15...	2830	92	23	--	210	0	172	130	570	1.5	6.6	.00
25...	14600	87	22	270	205	4	175	140	420	1.6	7.0	.01
MAR.												
05...	11600	89	21	210	221	0	181	130	300	1.3	5.7	.02
15...	38700	51	12	120	144	0	118	81	170	.72	3.2	.01
25...	26500	41	11	120	113	0	93	63	180	1.1	4.7	.03
APR.												
05...	2830	56	14	160	146	0	120	89	240	--	--	--
15...	7440	66	17	200	164	0	135	110	310	--	--	--
25...	18800	87	25	260	207	4	176	160	400	--	--	--
MAY												
05...	25900	69	18	220	165	1	137	120	340	.78	3.5	.01
15...	3300	63	16	190	164	0	135	100	290	.66	2.9	.34
25...	15200	58	16	150	157	0	129	88	230	.73	3.2	.01
JUNE												
05...	18600	51	13	160	147	0	121	79	230	--	--	--
15...	21700	--	8.9	89	124	0	102	51	140	--	--	--
25...	12900	--	9.4	93	123	0	101	51	150	--	--	--
JULY												
05...	7350	45	12	--	136	0	112	50	--	--	--	--
15...	1440	59	15	200	170	0	139	81	--	--	--	--
25...	2370	57	15	200	165	0	135	79	310	--	--	--
AUG.												
05...	32	60	18	200	183	0	150	78	290	--	--	--
15...	3880	62	18	160	171	0	140	84	260	--	--	--
25...	2200	56	17	--	160	0	131	78	240	--	--	--
SEP.												
05...	21000	54	15	220	140	0	115	91	330	--	--	--
15...	1580	50	14	260	121	0	99	100	400	--	--	--
25...	13200	66	13	330	126	1	105	110	500	--	--	--

ARKANSAS RIVER BASIN

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	DIS- SOLVED NITRITE (NO2) (MG/L)	DIS- SOLVED NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	CARBON DIOXIDE (CO2) (MG/L)
OCT.												
05...	.03	1.0	.65	350	.48	26300	120	40	3.0	632	7.8	2.5
13...	.00	.89	.73	263	.36	62200	--	--	--	473	7.8	2.3
25...	.03	.75	.38	525	.71	80900	140	52	4.8	948	8.3	.8
NOV.												
05...	.03	.74	.20	--	--	--	--	--	--	1230	8.2	1.3
15...	.03	.79	.25	1060	1.44	21300	280	120	7.3	1930	8.4	1.2
25...	.00	.81	.23	1070	1.46	24800	290	130	7.2	1940	8.3	1.6
DEC.												
05...	.07	1.0	1.0	895	1.22	17500	280	110	5.5	1530	8.4	1.3
15...	.07	.97	1.3	--	--	--	240	91	5.1	1400	8.3	1.4
25...	.00	.83	.19	768	1.04	28600	220	88	5.3	1380	8.0	2.5
JAN.												
04...	.00	1.0	.16	1100	1.50	40400	270	130	8.1	1870	8.1	2.2
15...	.07	1.1	.17	1380	1.88	29400	320	150	9.5	2400	8.2	2.0
25...	.03	1.3	.20	1410	1.92	30600	350	160	--	2400	8.1	2.9
FEB.												
05...	.00	1.4	.17	1200	1.63	44700	310	140	7.6	2160	8.0	3.4
15...	.00	1.5	.17	--	--	--	320	150	--	2380	8.2	2.1
25...	.03	1.6	.19	1090	1.48	43000	310	130	6.7	1930	8.5	1.1
MAR.												
05...	.07	1.3	.20	906	1.23	28400	310	130	5.2	1620	8.1	2.8
15...	.03	.73	.15	540	.73	56400	180	59	3.9	1050	8.2	1.5
25...	.10	1.1	.12	497	.68	35600	150	55	4.3	919	7.9	2.3
APR.												
05...	--	.74	--	668	.91	5100	200	78	5.0	1210	7.9	2.9
15...	--	.76	--	811	1.10	16300	230	100	5.7	1470	8.0	2.6
25...	--	.48	.12	1060	1.44	53800	320	140	6.3	1870	8.6	.9
MAY												
05...	.03	.79	--	887	1.21	62000	250	110	6.1	1550	8.5	.8
15...	1.1	1.0	--	785	1.07	6990	220	89	5.5	1380	8.0	2.6
25...	.03	.74	--	647	.88	26600	210	82	4.5	1150	8.4	1.0
JUNE												
05...	--	1.1	.25	607	.83	30500	180	60	5.2	1100	8.4	.9
15...	--	.82	.16	424	.58	24800	--	--	--	750	7.9	2.5
25...	--	1.1	.21	436	.59	15200	--	--	--	773	8.3	1.0
JULY												
05...	--	.67	.17	523	.71	10400	160	50	--	943	7.9	2.7
15...	--	.61	.15	797	1.08	3100	210	70	6.0	1430	7.9	3.4
25...	--	.68	.16	--	--	--	200	65	6.1	1400	7.9	3.3
AUG.												
05...	--	.38	.15	778	1.06	67.2	220	70	5.8	1360	8.0	2.9
15...	--	.65	.12	700	.95	7330	230	89	4.6	1240	7.9	3.4
25...	--	.59	.09	--	--	--	210	79	--	1180	7.9	3.2
SEP.												
05...	--	.67	1.1	--	1.08	45000	200	82	6.8	1470	8.1	1.8
15...	--	.75	.15	925	1.26	3950	180	83	8.4	1710	8.0	1.9
25...	--	.80	.14	1150	1.56	41000	220	110	9.7	2050	8.4	.8

ARKANSAS RIVER BASIN

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	INSTANTANEOUS DIS- CHARGE (CFS)	TOTAL IRON (FE) (UG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUCE AT 100 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER DAY)	DIS- SOLVED SOLIDS (TONS PER DAY)
OCT.												
26...	47400	--	--	--	--	--	--	--	--	--	--	--
NOV.												
13...	7210	--	--	--	--	--	--	--	--	--	--	--
DEC.												
11...	13000	--	--	--	--	--	--	--	--	--	--	--
JAN.												
29...	14700	--	--	--	--	--	--	--	--	--	--	--
FEB.												
14...	7260	240	1.2	.21	.52	.73	1.9	8.5	.19	--	--	--
26...	17400	1500	1.3	.88	.09	.97	2.3	10	.20	1070	1.46	50300
MAR.												
13...	47700	--	.87	.44	.16	.60	1.5	6.5	.16	474	.92	44400
27...	26000	--	.55	.36	.49	.85	1.4	6.2	.15	542	.74	38000
APR.												
09...	1480	--	.01	.14	--	--	--	--	.17	659	.90	2430
23...	12600	--	.51	.31	.36	.69	1.2	5.3	1.1	1200	1.63	40800
MAY												
14...	3490	--	.71	.12	.53	.65	1.4	6.0	.14	624	1.12	7770
30...	30400	--	.75	.18	.50	.68	1.4	6.3	.24	615	.84	50500
JUNE												
11...	19600	2800	.75	.05	1.9	2.0	2.7	12	.21	460	.63	24300
26...	3200	1900	.00	.09	.57	.66	.09	2.9	.18	450	.61	3890
JULY												
09...	8500	1100	.53	.06	.50	.56	1.1	4.8	.15	590	.80	13500
24...	3390	510	.39	.09	.41	.50	.89	3.9	.13	772	1.05	7070
AUG.												
13...	2770	970	.23	.21	.65	.86	1.1	4.8	.13	725	.99	5420
27...	815	700	.00	.12	.71	.83	.83	3.7	.08	739	1.01	1630
SEP.												
10...	1280	2000	.63	.08	.54	.62	1.2	5.5	.14	878	1.19	3030
24...	12800	1200	.45	.43	.67	1.1	1.5	6.9	.14	1180	1.61	40800

DATE	TOTAL NUN- FILT- RABLE RESIDUE (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	CHEM- ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	CHEM- ICAL OXYGEN DEMAND (HIGH LEVEL) (MG/L)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)	CHLORO- PHYLL A (UG/L)
OCT.											
26...	--	995	--	19.0	--	10.5	119	8	--	.7	--
NOV.											
13...	--	1800	--	15.0	--	9.3	100	23	--	1.1	--
DEC.											
11...	--	1420	--	11.0	--	10.4	100	22	--	.4	--
JAN.											
29...	--	2150	--	4.0	--	12.6	103	21	--	1.0	--
FEB.											
14...	--	2180	7.8	6.0	7	11.4	97	--	23	2.0	--
26...	--	1900	7.6	7.0	7	12.2	105	--	19	--	--
MAR.											
13...	688	1190	8.1	11.5	40	11.6	112	--	23	1.7	17
27...	55	950	--	11.0	40	10.2	97	22	--	1.6	8.0
APR.											
09...	42	1140	8.1	12.0	30	9.6	94	31	--	--	27
23...	43	2000	8.1	17.0	20	8.9	97	20	--	.7	--
MAY											
14...	26	1460	--	20.0	20	8.9	105	19	--	1.4	16
30...	65	1100	7.9	23.0	40	9.2	115	21	--	--	71
JUNE											
11...	67	900	7.7	24.0	50	9.3	115	41	--	--	--
26...	62	850	7.6	21.5	50	6.0	70	33	--	--	--
JULY											
09...	28	1100	--	28.0	20	5.4	72	13	--	--	41
24...	12	1400	7.7	25.0	9	6.1	77	22	--	--	10
AUG.											
13...	26	1350	7.6	28.5	20	5.4	72	21	--	--	--
27...	26	1350	7.7	25.5	10	7.2	92	19	--	--	12
SEP.											
10...	60	1650	7.8	21.5	50	4.6	55	20	--	--	12
24...	24	1900	--	20.0	1	6.6	76	22	--	--	12

ARKANSAS RIVER BASIN

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	CHLOROPHYLL A (UG/L)	FECAL COLIFORM (COL. PER 100 ML)	STREPTOCOCCI (COL. PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)	OIL AND GREASE (MG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	TOTAL CHROMIUM (CR) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL ZINC (ZN) (UG/L)
OCT.											
26...	--	--	--	--	--	--	--	--	--	--	--
NOV.											
13...	--	--	--	--	--	--	--	--	--	--	--
DEC.											
11...	--	--	--	--	--	--	--	--	--	--	--
JAN.											
29...	--	--	--	--	--	--	--	--	--	--	--
FEB.											
14...	--	3600	52	4.5	--	3	<10	0	<100	.1	30
26...	--	86	814	6.9	--	1	<10	0	<100	.1	70
MAR.											
13...	23	150	530	6.3	--	2	<10	0	<100	.0	20
27...	22	42	828	6.5	--	2	<10	0	<100	--	20
APR.											
09...	34	87	22	7.0	1	2	10	0	<100	.0	30
23...	--	87	88	4.4	2	4	<10	10	<100	.1	140
MAY											
14...	12	812	52	4.4	1	3	10	0	<100	1.8	120
30...	140	--	--	4.3	1	2	10	0	100	.1	40
JUNE											
11...	--	180	83	--	1	4	10	0	100	.3	40
26...	--	200	52	--	--	4	10	0	100	.1	60
JULY											
09...	41	48	838	6.7	--	8	<10	0	<100	.1	80
24...	5.1	140	220	5.1	1	4	10	10	100	.0	40
AUG.											
13...	--	831	43	6.8	0	3	<10	0	<100	.0	60
27...	17	--	90	4.4	1	2	<10	0	<100	.2	0
SEP.											
10...	18	58	54	5.2	1	2	<10	0	<100	.1	30
24...	22	835	8210	5.8	1	3	<10	0	<100	.3	40

DATE	INSTANTANEOUS DISCHARGE (CFS)	TOTAL CALCIUM (CA) (MG/L)	TOTAL MAGNESIUM (MG)	TOTAL SODIUM (NA) (MG/L)	TOTAL POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CaCO3 (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLORIDE (CL) (MG/L)	DIS- SOLVED FLUORIDE (F) (MG/L)
JUNE											
26...	3200	44	11	98	6.2	134	0	110	49	160	.2
AUG.											
13...	2770	61	17	170	6.6	174	0	143	78	280	.3
27...	815	55	17	190	--	160	0	131	71	290	.3

ARKANSAS RIVER BASIN

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

SULFATE (MG/L AS SO₄) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	83	61	120	110	140	110	73	100	69	54	89	85
2	55	64	120	110	140	110	81	110	72	56	86	87
3	46	71	100	110	150	100	64	96	75	54	82	77
4	45	71	110	120	150	79	64	93	71	59	84	89
5	39	73	88	120	110	100	72	97	69	60	86	93
6	39	79	89	120	110	98	73	95	64	62	83	94
7	35	97	90	120	110	78	89	98	60	66	88	99
8	38	110	95	140	110	100	68	95	56	69	86	98
9	39	120	90	150	110	97	73	110	50	68	89	97
10	47	130	80	150	110	65	82	100	53	68	78	100
11	40	120	89	170	120	85	87	110	52	70	83	110
12	46	120	92	160	140	81	88	95	56	77	83	98
13	39	120	61	170	130	67	93	100	59	76	84	98
14	29	120	88	150	130	67	78	99	49	79	78	110
15	29	120	82	150	140	59	91	86	46	92	77	110
16	25	120	86	150	130	58	87	89	49	82	73	110
17	25	120	88	150	95	63	100	84	53	87	80	110
18	32	120	89	150	150	56	120	81	56	92	80	110
19	38	120	85	130	140	51	130	78	50	89	80	86
20	46	99	86	120	160	51	140	80	45	91	81	90
21	46	110	100	140	140	48	150	77	46	97	78	120
22	50	120	100	180	100	54	140	75	47	98	78	120
23	55	120	100	160	140	50	130	76	45	92	73	130
24	56	120	94	150	110	50	130	71	47	85	74	130
25	58	120	86	150	120	56	110	70	49	88	74	130
26	44	120	90	140	110	55	130	75	52	88	77	120
27	57	120	87	130	110	62	120	76	52	85	88	130
28	62	110	98	130	100	63	120	76	54	88	85	110
29	62	120	100	130	---	55	110	69	52	88	86	100
30	73	120	100	140	---	59	100	72	55	83	85	110
31	67	---	100	140	---	66	---	75	---	82	92	---
MONTH	47	110	94	140	120	71	100	87	55	78	82	110

DISSOLVED SO₄ DISCHARGE (TUNS/DAY) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4750	4410	2390	3950	5600	4190	2900	3990	3680	909	560	2330
2	5210	4490	2360	4110	5570	4330	2960	3970	3830	1530	639	3370
3	2850	4490	2020	4130	5750	2410	2290	4970	4020	1350	579	3300
4	3350	3390	2090	4310	5770	2260	2230	6940	3790	1640	158	5230
5	2690	3080	1690	4360	3600	3120	1360	7220	3750	1810	94	5640
6	400	3310	2000	4220	3450	3070	1220	7030	3420	1900	329	5380
7	1650	4070	3100	3460	3490	2530	1510	7180	3440	1650	266	3580
8	2740	4530	3320	3010	3680	2800	1200	5480	3400	1750	260	3530
9	2850	4820	3120	3220	1120	683	1280	4030	3370	1900	522	3470
10	3380	5270	2780	3100	211	946	1390	3820	2950	1540	423	3710
11	3740	5000	3130	3490	1730	4230	1600	3640	2980	1670	349	3850
12	9720	2470	3210	3420	2840	8790	1620	3470	3230	1920	1030	1960
13	8930	2330	2850	3590	2700	8660	1580	3760	3480	1180	1660	1750
14	6630	2360	3100	3170	2680	8450	1580	2570	3080	665	1540	2030
15	6580	2320	2860	3140	3360	6260	2600	2120	2910	1110	1530	1620
16	5690	2360	2950	3130	1370	6070	2920	2250	3090	1100	1450	1440
17	5680	2560	3130	3090	169	6580	3430	2030	3540	1370	1140	1520
18	6960	2400	3200	3090	2370	5760	4060	2010	4290	1400	1210	2190
19	7940	2450	3110	889	3350	5000	4490	1910	3800	1620	1600	1630
20	9230	2370	3130	192	4100	4120	3080	1910	3340	1440	1620	2010
21	9100	2240	3710	582	3590	3620	3380	2000	3400	1310	1670	4250
22	9870	2510	3800	3890	3320	4050	3020	2750	3140	1450	1690	4250
23	10580	2430	3900	3390	5350	3650	4390	2820	2480	1340	1570	4410
24	10230	2870	3430	3230	4170	3640	5150	2860	2030	1380	1430	4740
25	9080	2940	3200	3860	4890	4030	5600	3530	1780	1260	887	4620
26	5570	2540	3370	5200	5090	3880	6400	4890	1250	1250	707	4510
27	6080	2370	3250	4710	4380	4360	5450	4440	1080	1030	1550	2810
28	4730	2240	3750	5240	4000	4330	4400	5970	897	932	1560	2390
29	5210	2300	3860	5290	---	3720	4000	6180	832	1210	1700	2260
30	4720	2400	3410	5350	---	3930	3850	5790	907	1260	1690	2020
31	5010	---	3770	5490	---	3710	---	4070	---	602	1890	---
MONTH	5710	3110	3080	3590	3500	4300	3030	4080	2910	1370	1070	3190

ARKANSAS RIVER BASIN

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

CHLORIDE (MG/L AS CL) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	280	190	440	370	550	380	240	360	220	170	300	290
2	170	200	430	390	540	390	270	370	230	170	290	300
3	140	230	350	390	570	360	200	330	250	170	270	250
4	130	230	370	420	580	260	200	320	230	180	280	300
5	110	240	300	430	380	350	230	340	220	190	290	320
6	110	260	300	410	380	340	240	330	200	190	280	320
7	97	340	310	420	380	260	300	340	190	210	300	350
8	110	390	330	540	410	350	220	330	170	220	290	340
9	110	410	310	610	390	340	240	390	150	220	300	340
10	140	460	270	580	380	210	270	370	160	220	260	360
11	120	430	300	700	430	290	300	370	160	230	280	380
12	140	440	310	680	510	270	300	330	170	250	280	340
13	110	430	270	730	500	210	320	360	180	250	280	340
14	76	440	300	600	450	210	260	350	150	260	260	360
15	77	410	270	590	520	180	310	290	140	320	250	380
16	63	410	290	580	460	180	290	300	150	280	240	370
17	63	440	300	560	330	200	360	280	160	290	270	380
18	85	410	300	560	570	170	430	270	170	320	270	400
19	110	420	290	500	540	150	480	260	150	300	270	290
20	140	350	290	440	640	150	510	270	130	310	270	310
21	140	390	350	520	560	140	620	260	140	340	260	450
22	150	440	360	800	360	170	520	250	140	340	260	450
23	170	430	370	640	510	150	460	250	130	310	240	460
24	170	430	320	590	370	150	490	230	140	290	240	480
25	180	430	290	570	420	170	400	220	150	300	240	460
26	130	430	310	530	390	170	450	250	160	300	250	440
27	170	420	290	450	390	190	430	250	160	290	300	470
28	190	400	340	480	360	200	430	250	160	300	290	400
29	190	410	360	490	---	170	390	220	160	300	290	360
30	240	440	360	510	---	180	350	230	170	280	290	390
31	210	---	350	540	---	210	---	250	---	280	310	---
MONTH	140	380	320	540	460	230	350	300	170	260	280	370

DISSOLVED CL DISCHARGE (TONS/DAY) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16000	13710	8590	13900	21600	14800	9450	14000	11820	2770	1910	7880
2	9830	14080	8470	14560	21440	15320	9910	13990	12430	4690	2170	11440
3	8450	14520	7050	14650	22560	8440	7190	17210	13180	4110	1940	10920
4	9870	10980	7370	15400	22720	7490	7010	23870	12270	5080	531	17840
5	7690	10040	5760	15610	12720	10880	4410	25020	12030	5610	318	19390
6	1140	11010	6830	15080	12200	10670	3970	24270	10710	5910	1110	18470
7	4580	14110	10590	12400	12330	8380	5160	24940	10670	5230	903	12470
8	7780	16030	11470	11590	13610	9750	3840	18940	10410	5640	680	12290
9	8160	17200	10670	12990	3980	2370	4180	14250	10170	6080	1780	12010
10	10060	19020	9250	12260	746	2990	4650	13410	8960	4920	1400	13020
11	10780	17950	10660	14740	6190	14270	5440	13500	9040	5390	1180	13580
12	28860	8880	11020	14310	10650	29370	5530	12010	9910	6340	3450	6800
13	25450	8370	9540	15450	10000	27620	5430	13130	10740	3880	5580	6080
14	17400	8540	10580	12700	9690	26920	5220	8950	9230	2210	5080	7160
15	17320	8280	9590	12450	12670	19360	8920	7170	8640	3800	5060	5720
16	14150	8430	9980	12340	4960	18730	9910	7690	9270	3690	4710	5050
17	14130	9210	10650	12080	583	20590	11980	6830	10740	4650	3790	5350
18	18770	8570	10910	12070	9280	17660	14570	6730	13150	4800	4020	7800
19	22500	8790	10520	3300	12840	15090	16440	6340	11450	5520	5330	5520
20	27310	8250	10610	692	16810	12420	11560	6370	9850	4950	5420	6860
21	26910	7910	12940	2210	13990	10830	13680	6620	10090	4530	5530	15320
22	29710	9010	13320	17180	11600	12370	11360	9050	9340	5040	5590	15320
23	32370	6730	13700	13900	20000	10980	15890	9300	7320	4600	5120	15970
24	31370	10300	11820	12850	14700	10970	18970	9270	6020	4650	4660	17350
25	27990	10550	10850	15180	17520	12380	19940	11360	5360	4300	2900	16690
26	16340	9130	11500	19810	18050	11850	23130	16030	3780	4270	2330	16220
27	18690	8460	11020	16990	15510	13590	19570	16280	3260	3470	5270	10160
28	14720	7950	13030	19170	14000	13520	15820	19650	2730	3170	5270	8520
29	9990	8200	13510	19500	---	11370	14160	19840	2520	4110	5740	7940
30	15390	8640	13710	20000	---	12160	13410	18800	2770	4240	5700	7140
31	15980	---	13130	20980	---	11770	---	13360	---	2020	6470	---
MONTH	16760	10830	10600	13750	12970	13710	10690	13810	8930	4510	3590	11210

ARKANSAS RIVER BASIN

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

DISSOLVED SOLIDS (RESIDUE ON EVAPORATION, MG/L AT 180 DEG. C) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	747	549	1080	942	1270	958	650	925	616	484	797	758
2	495	568	1070	986	1260	982	727	947	641	497	770	780
3	416	635	904	992	1300	908	574	858	672	484	732	689
4	399	635	942	1040	1310	705	569	830	635	529	752	795
5	348	657	784	1060	969	891	642	864	617	536	766	830
6	348	708	797	1040	969	877	651	847	569	557	747	841
7	312	869	802	1050	964	698	796	875	540	592	786	886
8	339	975	852	1260	1020	891	611	852	498	619	769	880
9	352	1040	802	1360	989	864	653	981	451	611	797	864
10	420	1130	713	1310	957	585	730	930	470	604	694	925
11	362	1070	797	1480	1060	757	780	942	464	629	747	953
12	415	1090	819	1450	1220	724	791	852	503	685	747	880
13	345	1070	727	1520	1200	602	830	908	526	683	753	880
14	260	1090	791	1340	1120	602	698	886	435	704	696	958
15	262	1030	730	1320	1230	532	813	769	414	825	688	953
16	226	1030	769	1310	1130	520	774	797	440	735	651	936
17	226	1100	786	1290	846	566	908	752	472	774	713	958
18	282	1040	797	1290	1300	501	1080	725	499	825	720	1000
19	337	1060	763	1200	1260	453	1180	695	450	797	719	769
20	408	886	769	1100	1400	452	1220	712	401	813	726	802
21	408	975	903	1240	1290	432	1370	691	416	869	699	1110
22	449	1090	919	1610	908	486	1230	675	417	880	696	1110
23	493	1060	930	1400	1210	446	1140	683	401	819	654	1140
24	502	1080	841	1330	947	450	1190	637	417	763	659	1180
25	517	1070	769	1300	1050	503	1010	622	441	791	660	1130
26	392	1080	802	1250	992	489	1120	669	464	786	689	1100
27	508	1040	774	1110	981	556	1060	682	462	758	785	1150
28	554	1000	880	1180	914	560	1080	677	479	786	763	1010
29	554	1040	914	1190	---	489	975	617	465	786	769	925
30	652	1080	925	1210	---	528	891	642	492	747	758	975
31	602	---	891	1250	---	593	---	671	---	735	819	---
MONTH	417	958	840	1240	1110	632	892	781	492	700	733	939

DISSOLVED SOLIDS DISCHARGE (TUNS/DAY) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	42530	39450	21380	35340	50070	37520	25960	35710	32940	8130	5010	20870
2	28720	40200	21130	36740	49860	38700	26500	35550	34280	13690	5720	30120
3	25470	40130	18060	36950	51390	21600	20450	44480	35920	12050	5170	29560
4	29980	30350	18740	38540	51610	20170	19990	62090	33920	14700	1410	46800
5	24070	27510	15150	38970	32190	27920	12140	64590	33500	16210	841	50430
6	3580	29610	17900	37770	30890	27470	10900	62880	30560	16980	2940	47930
7	14740	36370	27730	30990	31230	22620	13530	64240	30790	14750	2380	32050
8	24510	40540	29690	26940	34690	25030	10730	49020	30390	15690	2330	31610
9	25480	43090	27940	28810	10050	6110	11460	36010	30180	17000	4670	31010
10	30240	47100	24840	27760	1890	8470	12410	34170	26410	13800	3780	33210
11	33440	44770	27960	31170	15460	37820	14320	34320	26690	14950	3120	34470
12	86970	22090	28750	30590	25400	78610	14530	31070	28900	17190	9170	17490
13	79840	20880	25500	32160	24190	77490	14120	33590	31100	10530	14820	15640
14	59290	21250	27770	28390	24010	75550	14100	23010	27570	5950	13730	18160
15	58890	20760	25620	28130	30020	55970	23280	18930	26040	9910	13720	14510
16	50930	21120	26360	28030	12280	54320	26140	20160	27650	9830	12950	12860
17	50810	22860	28000	27680	1510	58840	30650	18110	31640	12250	10170	13560
18	62260	21460	28610	27640	21210	51520	36290	18000	38370	12510	10790	19630
19	70990	21950	27820	7950	29950	44760	40180	17130	33990	14480	14270	14590
20	82590	21190	28020	1720	36660	36840	27570	17110	29890	12910	14490	17960
21	81370	20010	33140	5210	32140	32410	30200	17930	30410	11690	14920	38020
22	88280	22410	34000	34780	29670	36250	27000	24610	28130	12980	15100	38020
23	94650	21780	34920	30320	47880	32650	39260	25250	22200	12010	14050	39470
24	91490	25650	30660	28870	37340	32570	46030	25620	18120	12300	12770	42410
25	81250	26310	28650	34570	43780	36090	50100	31590	15960	11280	7930	41330
26	49810	22730	30110	46500	45520	34700	57290	43720	11150	11220	6320	40300
27	54410	21180	29060	42120	39180	39030	48840	44190	9640	9210	13860	25100
28	42320	20010	33510	46880	35770	38740	39400	53410	8020	8340	13950	21410
29	28710	20540	34540	47320	---	33280	35800	55290	7440	10800	15170	20250
30	42240	21490	34960	47880	---	35190	34420	51810	8120	11270	15100	18060
31	44840	---	33700	49080	---	33160	---	36400	---	5380	16870	---
MONTH	51120	27830	27560	32120	31280	38430	27120	36450	26000	12260	9600	28560

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

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1340	986	1950	1690	2280	1720	1170	1660	1110	869	1430	1360
2	888	1020	1910	1770	2270	1760	1310	1700	1150	892	1380	1400
3	746	1140	1620	1780	2340	1630	1030	1540	1210	869	1310	1240
4	717	1140	1690	1870	2350	1270	1020	1490	1140	949	1350	1430
5	625	1180	1410	1910	1740	1600	1150	1550	1110	962	1370	1490
6	624	1270	1430	1860	1740	1570	1170	1520	1020	999	1340	1510
7	560	1560	1440	1890	1730	1250	1430	1570	970	1060	1410	1590
8	608	1750	1530	2270	1830	1600	1100	1530	894	1110	1380	1580
9	632	1860	1440	2440	1780	1550	1170	1760	809	1100	1430	1550
10	753	2020	1280	2360	1720	1050	1310	1670	844	1080	1250	1660
11	650	1920	1430	2650	1910	1360	1400	1690	833	1130	1340	1710
12	745	1950	1470	2600	2190	1300	1420	1530	902	1230	1340	1580
13	620	1920	1300	2730	2150	1080	1490	1630	944	1230	1350	1580
14	467	1950	1420	2410	2010	1080	1250	1590	780	1260	1250	1720
15	470	1850	1310	2370	2210	954	1460	1380	743	1480	1230	1710
16	405	1850	1380	2350	2030	933	1390	1430	789	1320	1170	1680
17	406	1980	1410	2320	1520	1020	1630	1350	848	1390	1280	1720
18	506	1860	1430	2320	2330	899	1930	1300	895	1480	1290	1800
19	605	1900	1370	2160	2260	813	2120	1250	807	1430	1290	1380
20	732	1590	1380	1980	2510	811	2190	1280	720	1460	1300	1440
21	732	1750	1620	2220	2310	775	2460	1240	746	1560	1250	1990
22	805	1960	1650	2890	1630	873	2200	1210	748	1580	1250	1990
23	885	1910	1670	2510	2180	801	2060	1230	720	1470	1170	2050
24	901	1940	1510	2390	1700	808	2140	1140	748	1370	1180	2120
25	928	1920	1380	2340	1890	902	1820	1120	792	1420	1190	2020
26	703	1940	1440	2240	1780	877	2020	1200	832	1410	1240	1970
27	911	1870	1390	2000	1760	998	1910	1220	829	1360	1410	2060
28	994	1800	1580	2120	1640	1010	1940	1220	860	1410	1370	1820
29	994	1860	1640	2140	---	878	1750	1110	834	1410	1380	1660
30	1170	1940	1660	2180	---	947	1600	1150	883	1340	1360	1750
31	1080	---	1600	2250	---	1070	---	1200	---	1320	1470	---
MONTH	748	1720	1510	2230	1990	1130	1600	1400	883	1260	1320	1690

TEMPERATURE (DEG. C) OF WATER , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

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

ARKANSAS RIVER BASIN

07165570 ARKANSAS RIVER NEAR HASKELL, OKLA.

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

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

PERIOD OF RECORD.--Chemical analyses: Current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	INSTAN- TANEOUS DIS- CHARGE (CFS)	TOTAL IRON (FE) (UG/L)	TOTAL NITRITE PLUS NITRATE (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (NO3) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)
MAR.										
26...	27600	--	.70	.41	.58	.99	1.7	7.5	.30	501
APR.										
09...	6060	--	.78	.32	--	--	--	--	.22	720
24...	13400	--	.58	.22	.59	.81	1.4	6.2	.19	1170
MAY										
15...	12600	--	.63	.34	1.9	2.2	2.8	13	.47	--
29...	32400	--	.75	.29	.52	.81	1.6	6.9	.26	678
JUNE										
11...	29100	5300	.70	.08	1.1	1.2	1.9	8.4	.28	434
25...	14600	3100	.00	.09	.76	.85	.85	3.8	.26	414
JULY										
09...	8260	2100	.54	.07	.65	.72	1.3	5.6	.22	545
23...	2750	410	.08	.20	.67	.87	.95	4.2	.19	836
AUG.										
14...	3870	1300	.19	.03	.88	.91	1.1	4.9	.17	761
28...	3540	800	.34	.06	.70	.76	1.1	4.9	.16	700
SEP.										
11...	13800	2300	.53	.08	.14	.22	.75	3.3	.16	840
25...	15800	2000	1.8	.14	.60	.94	2.7	12	.20	1020

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	CHEM- ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)
MAR.										
26...	.68	37300	133	890	7.9	15.0	70	9.7	100	27
APR.										
09...	.98	11800	52	1250	8.0	11.5	30	9.8	94	24
24...	1.59	42300	78	2110	8.2	18.0	30	8.9	98	15
MAY										
15...	--	--	941	910	--	18.0	300	8.7	98	48
29...	.92	59300	202	1000	8.0	24.0	50	7.9	99	22
JUNE										
11...	.59	34100	170	800	7.7	23.5	80	7.1	86	37
25...	.56	16300	92	750	8.0	25.0	60	7.8	98	24
JULY										
09...	.74	12200	49	1010	--	26.5	30	8.3	106	19
23...	1.14	6210	9	1490	8.5	29.0	6	10.0	133	22
AUG.										
14...	1.04	7950	57	1300	7.0	26.0	20	7.0	89	23
28...	.95	6690	30	1300	8.4	25.0	7	8.2	104	18
SEP.										
11...	1.14	31300	82	1600	7.9	21.5	60	7.4	88	17
25...	1.59	43500	54	2000	--	17.5	40	9.0	99	24

ARKANSAS RIVER BASIN

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07165570 ARKANSAS RIVER NEAR HASKELL, OKLA.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	CHLORO- PHYLL A (UG/L)	CHLORO- PHYLL B (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	OIL AND GREASE (MG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CAD- MIUM (CD) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL ZINC (ZN) (UG/L)
MAR. 26...	28	53	7.5	0	2	<10	0	<100	--	60
APR. 09...	25	36	10	1	4	20	0	<100	2.6	60
24...	17	25	6.1	1	3	10	0	<100	.0	70
MAY 15...	31	41	22	1	12	<10	20	<100	.1	200
29...	67	120	3.6	1	3	<10	0	<100	.1	40
JUNE 11...	--	--	--	0	6	<10	10	<100	.3	50
25...	--	--	--	0	3	<10	0	<100	.1	50
JULY 09...	21	26	4.7	--	9	<10	0	<100	.1	70
23...	66	14	--	2	5	<10	<10	<100	.0	40
AUG. 14...	--	--	5.2	0	4	<10	0	<100	.1	80
28...	30	11	5.3	2	3	<10	0	<100	.1	30
SEP. 11...	19	31	6.2	2	2	<10	0	<100	.2	20
25...	14	18	8.4	1	3	<10	0	<100	.0	40

DATE	INSTAN- TANEOUS DIS- CHARGE (CF8)	TOTAL CAL- CIUM (CA) (MG/L)	TOTAL MAG- NE- SIUM (MG) (MG/L)	TOTAL SODIUM (NA) (MG/L)	TOTAL PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)
JUNE 25...	14600	42	10	88	6.1	127	0	104	48	140	.4
AUG. 14...	3870	61	18	180	6.7	182	0	149	77	290	.3
28...	3540	58	16	160	--	170	0	139	69	270	.3

ARKANSAS RIVER BASIN

07171400 VERDIGRIS RIVER NEAR OOLOGAH, OKLA.

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

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

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	INSTANTANEOUS 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)	ALKA- LINITY AS CACO3 (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLU- RIDE (CL) (MG/L)	DIS- SOLVED NITRATE (N) (MG/L)	DIS- SOLVED NITRATE (NO3) (MG/L)	DIS- SOLVED NITRITE (N) (MG/L)
OCT.												
04...	50	36	6.0	12	118	0	97	20	18	.31	1.4	.01
11...	108	53	8.6	18	163	0	134	33	25	.03	.13	.00
25...	81	--	--	--	--	--	--	--	--	--	--	--
NOV.												
07...	17100	38	6.2	14	129	0	106	24	20	.21	.93	.00
29...	96	41	6.3	14	122	0	100	30	20	.41	1.8	.01
JAN.												
03...	12500	38	5.7	14	106	0	87	24	22	1.9	8.3	.02
23...	9280	38	6.0	12	114	0	94	25	17	.41	1.8	.07
FEB.												
21...	990	44	7.2	16	140	0	115	30	22	.37	1.6	.01
MAR.												
19...	20500	49	7.9	18	150	0	123	38	26	.50	2.2	.32
APR.												
10...	8030	34	5.0	11	98	0	80	24	14	--	--	--
MAY												
06...	701	35	5.3	11	109	0	89	32	16	.33	1.5	.01
JUNE												
17...	13300	47	7.5	17	148	0	121	36	23	.52	2.3	.01
27...	1920	--	--	--	--	--	--	--	--	--	--	--
JULY												
17...	6950	21	5.2	13	71	0	58	24	17	--	--	--
SEP.												
11...	7430	42	5.3	14	133	0	109	30	17	--	--	--

DATE	DIS- SOLVED NITRITE (NO2) (MG/L)	DIS- SOLVED NITRATE (N) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	CARBON DIOXIDE (CO2) (MG/L)
OCT.												
04...	.03	.32	188	.26	25.4	110	18	.5	289	8.2	15.0	1.2
11...	.00	.03	227	.31	66.2	170	34	.6	410	7.7	--	5.2
25...	--	--	--	--	--	--	--	--	383	--	17.0	--
NOV.												
07...	.00	.21	183	.25	8550	120	15	.6	313	7.8	--	3.3
29...	.03	.42	198	.27	51.3	130	28	.5	326	7.9	--	2.5
JAN.												
03...	.07	1.9	183	.25	6180	120	31	.6	298	7.7	--	3.4
23...	.23	.48	186	.25	4660	120	26	.5	304	7.4	--	7.3
FEB.												
21...	.03	.38	197	.27	527	140	25	.6	355	7.6	--	5.6
MAR.												
19...	1.1	.82	228	.31	12600	160	32	.6	397	7.8	--	3.8
APR.												
10...	--	.56	151	.21	3270	110	25	.5	253	7.5	6.0	5.0
MAY												
06...	.03	.34	163	.22	309	110	20	.5	276	7.5	18.0	5.5
JUNE												
17...	.03	.53	222	.30	7970	150	27	.6	372	7.6	23.5	5.9
27...	--	--	--	--	--	--	--	--	272	7.4	11.0	--
JULY												
17...	--	.06	134	.18	2520	74	16	.7	223	8.2	29.0	.7
SEP.												
11...	--	.34	191	.26	3830	130	21	.5	324	7.8	23.0	3.4

ARKANSAS RIVER BASIN

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07175500 CANEY RIVER NEAR RAMONA, OKLA.

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

DRAINAGE AREA.--1,955 mi² (5,063 km²).

PERIOD OF RECORD.--Chemical analyses: November 1951 to August 1953, October 1959 to August 1962, October 1964 to current year.

Water temperatures: October 1966 to current year.

EXTREMES, Current year.--Specific conductance: Maximum daily, 1,540 micromhos/cm Aug. 17; minimum daily, 117 micromhos/cm Mar. 13.

Water temperatures: Maximum, 35.0°C July 21; minimum, 3.0°C Dec. 19 and 22.

Period of record.--Specific conductance: Maximum daily, 1,880 micromhos/cm Feb. 5, 1967; minimum daily, 114 micromhos/cm Oct. 20, 1973.

Water temperatures: Maximum, 35.0°C Aug. 6, 1970, Aug. 26, 1971, July 21, 1974; minimum, freezing point on many days during winter period.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

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)	ALKA- LINITY AS CACO3 (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED NITRATE (N) (MG/L)	DIS- SOLVED NITRATE (NO3) (MG/L)	DIS- SOLVED NITRITE (N) (MG/L)
OCT.												
05...	160	38	6.3	33	105	0	86	21	62	.70	3.1	.01
13...	9410	20	3.1	14	64	0	53	15	21	.37	1.6	.03
25...	91	58	9.5	57	155	0	127	25	110	.55	2.4	.03
NOV.												
04...	219	62	10	60	147	7	132	33	120	.70	3.1	.00
15...	402	59	10	36	181	0	148	23	70	.73	3.2	.01
25...	10800	16	2.9	10	53	0	43	9.3	18	.25	1.1	.01
DEC.												
05...	8790	19	3.8	15	60	0	49	14	26	.37	1.6	.02
15...	1460	46	7.1	23	140	0	115	19	43	.47	2.1	.01
25...	6710	23	4.8	16	72	0	59	17	28	.54	2.4	.01
JAN.												
05...	736	56	8.9	30	168	0	138	25	57	.47	2.1	.01
15...	431	77	13	53	212	0	174	35	110	.77	3.4	.00
25...	1860	54	8.1	39	143	0	117	32	71	.76	3.4	.00
FEB.												
05...	491	57	9.6	44	164	0	135	31	86	.42	1.9	.00
15...	374	73	12	58	193	0	158	37	120	.66	2.9	.00
24...	3440	42	7.4	41	124	0	102	29	68	.59	2.6	.02
MAR.												
05...	1320	62	9.6	36	180	0	148	34	59	.32	1.4	.01
12...	29600	13	2.0	13	35	0	29	9.5	18	.13	.58	.11
25...	6430	35	5.5	17	103	0	84	21	27	.54	2.4	.01
APR.												
02...	5500	40	5.6	12	128	0	105	17	19	--	--	--
15...	349	90	14	76	219	0	180	41	160	--	--	--
25...	942	67	9.6	35	188	1	156	29	67	--	--	--
MAY												
03...	4700	29	5.8	17	90	0	74	19	28	.40	1.8	.01
15...	946	60	10	26	180	0	148	24	48	.60	2.7	.00
27...	8470	21	3.8	13	64	0	53	12	22	.64	2.8	.00
JUNE												
09...	7940	20	3.9	11	65	0	53	15	16	.85	3.8	.00
15...	3680	37	6.2	13	135	0	111	14	18	.81	3.6	.01
25...	2280	46	6.6	14	159	0	130	16	130	--	--	--
JULY												
05...	108	67	9.1	31	200	0	164	26	62	--	--	--
15...	41	94	12	60	251	0	206	26	130	--	--	--
25...	34	99	13	65	247	0	203	41	150	--	--	--
AUG.												
09...	269	110	17	87	234	0	192	41	200	--	--	--
17...	203	130	19	150	233	0	191	41	360	--	--	--
24...	151	51	7.3	66	105	0	86	23	140	--	--	--
SEP.												
03...	3990	30	4.5	26	87	0	71	16	44	--	--	--
15...	276	53	8.1	22	170	0	139	16	36	--	--	--
25...	719	23	4.8	16	75	0	62	16	26	--	--	--

ARKANSAS RIVER BASIN

07175500 CANEY RIVER NEAR RAMONA, OKLA.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	DIS- SOLVED NITRITE (NO2) (MG/L)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	CARBON DIOXIDE (CO2) (MG/L)
OCT.											
05...	.03	.71	251	.34	108	120	35	1.3	419	7.6	4.2
13...	.10	.40	131	.18	3330	63	10	.8	198	7.3	5.1
25...	.10	.58	382	.52	93.9	180	57	1.8	553	7.9	3.1
NOV.											
04...	.00	.70	412	.56	244	200	64	1.9	682	8.5	.8
15...	.03	.74	336	.46	365	190	40	1.1	564	7.9	3.6
25...	.03	.26	104	.14	3030	52	8	.6	168	7.1	6.7
DEC.											
05...	.07	.39	137	.19	3250	63	14	.8	214	7.2	6.1
15...	.03	.48	230	.31	907	140	29	.8	389	8.2	1.4
25...	.03	.55	152	.21	2750	77	18	.8	258	7.5	3.6
JAN.											
05...	.03	.48	298	.41	592	180	39	1.0	501	7.9	3.4
15...	.00	.77	394	.54	458	250	72	1.5	724	7.7	6.8
25...	.00	.76	275	.37	1380	170	51	1.3	435	7.9	2.9
FEB.											
05...	.00	.42	319	.43	423	180	47	1.4	625	7.8	4.2
15...	.00	.66	412	.56	416	230	73	1.7	745	8.0	3.1
24...	.07	.61	276	.38	2560	140	34	1.5	398	7.5	6.3
MAR.											
05...	.03	.33	304	.41	1080	190	47	1.1	531	7.8	4.6
12...	.36	.24	92	.13	7350	41	12	.9	127	7.2	3.5
25...	.03	.55	196	.27	3400	110	26	.7	275	7.7	3.3
APR.											
02...	--	.30	181	.25	2690	120	18	.5	301	7.7	4.1
15...	--	.66	529	.72	498	280	100	2.0	952	7.8	5.6
25...	--	.55	--	--	--	210	51	1.1	574	8.4	1.2
MAY											
03...	.03	.41	168	.23	2130	96	22	.8	284	7.6	3.6
15...	.00	.60	285	.39	728	190	43	.8	485	7.8	4.6
27...	.00	.64	125	.17	2860	68	16	.7	210	7.6	2.6
JUNE											
09...	.00	.85	117	.16	2510	66	13	.6	189	7.8	1.6
15...	.03	.82	183	.25	1820	120	7	.5	300	7.7	4.3
25...	--	.55	212	.29	1310	140	10	.5	342	7.9	3.2
JULY											
05...	--	.81	334	.45	97.4	200	41	.9	552	7.7	6.4
15...	--	.31	507	.69	56.1	280	78	1.6	856	7.8	6.4
25...	--	.13	553	.75	50.8	300	98	1.6	917	7.8	6.3
AUG.											
09...	--	.58	643	.87	467	340	150	2.0	1070	8.4	1.5
17...	--	.95	961	1.31	527	400	210	3.3	1540	7.8	5.9
24...	--	1.3	401	.55	163	160	74	2.3	675	7.3	8.4
SEP.											
03...	--	.78	189	.26	2040	93	22	1.2	320	7.5	4.4
15...	--	.75	246	.33	183	170	31	.7	436	8.1	2.2
25...	--	1.6	150	.20	291	77	16	.8	240	7.8	1.9

ARKANSAS RIVER BASIN

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07175500 CANEY RIVER NEAR RAMONA, OKLA.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	276	837	390	451	456	501	298	399	355	449	1270	394
2	320	817	424	445	464	505	296	348	375	466	945	271
3	356	717	434	456	497	514	310	284	378	488	952	320
4	391	669	261	464	552	521	346	325	376	520	960	271
5	410	---	212	488	621	524	422	387	378	552	970	276
6	428	622	210	---	643	519	484	416	473	557	970	302
7	---	607	259	632	660	518	436	446	290	570	984	301
8	462	606	319	669	668	520	428	464	222	618	1010	309
9	478	601	351	685	680	540	430	481	189	635	1070	315
10	495	580	374	704	684	355	483	501	200	665	968	386
11	508	527	395	717	696	136	584	361	200	757	1090	382
12	222	533	389	730	708	126	661	391	252	789	1110	392
13	196	543	405	707	720	117	829	426	255	810	1220	416
14	241	557	418	708	728	150	909	471	286	831	1250	431
15	305	549	395	710	730	187	927	485	300	856	835	436
16	365	556	400	735	731	287	951	474	352	860	884	419
17	401	560	400	838	759	227	1010	465	327	866	1540	429
18	437	572	404	685	750	243	1010	479	333	875	1210	445
19	469	595	358	396	631	318	1040	490	333	888	870	415
20	504	466	486	375	583	275	1000	520	333	889	772	223
21	527	312	429	386	401	265	992	520	338	890	913	293
22	566	224	444	399	440	286	965	522	337	892	846	280
23	581	323	437	430	382	276	905	522	338	892	485	291
24	621	376	335	452	396	277	825	521	339	905	675	331
25	633	165	251	427	429	270	552	386	342	917	674	240
26	649	160	294	434	452	272	466	459	345	953	652	455
27	373	186	367	446	479	271	548	210	347	963	675	486
28	604	251	389	447	495	268	528	230	368	948	670	503
29	701	302	439	539	---	269	519	257	404	941	658	547
30	783	371	---	479	---	276	404	314	417	939	671	611
31	752	---	557	466	---	294	---	339	---	936	707	---
MONTH	468	489	374	550	587	326	652	416	326	778	920	372

TEMPERATURE (DEG. C) OF WATER , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20.0	15.0	10.0	6.0	6.0	10.0	9.0	20.0	22.0	29.0	28.0	22.0
2	20.0	14.0	11.0	6.0	5.0	10.0	10.0	---	25.0	29.0	31.0	20.0
3	23.0	14.0	12.0	5.0	6.0	11.0	10.0	20.0	25.0	27.0	24.0	20.0
4	22.0	13.0	11.0	6.0	7.0	14.0	9.0	20.0	23.0	27.0	30.0	19.0
5	20.0	14.0	10.0	6.0	8.0	11.0	10.0	21.0	23.0	26.0	28.0	20.0
6	21.0	11.0	8.0	---	6.0	14.0	8.0	21.0	23.0	26.0	25.0	19.0
7	21.0	11.0	7.0	6.0	5.0	15.0	15.0	22.0	21.0	28.0	25.0	18.0
8	23.0	12.0	6.0	6.0	5.0	15.0	14.0	22.0	20.0	32.0	30.0	20.0
9	23.0	11.0	8.0	6.0	4.0	16.0	15.0	22.0	22.0	30.0	25.0	22.0
10	24.0	10.0	6.0	5.0	6.0	15.0	14.0	23.0	23.0	30.0	28.0	22.0
11	22.0	10.0	7.0	6.0	6.0	13.0	15.0	22.0	22.0	31.0	26.0	23.0
12	20.0	13.0	8.0	6.0	7.0	12.0	15.0	23.0	22.0	30.0	28.0	22.0
13	18.0	13.0	7.0	7.0	6.0	12.0	20.0	22.0	23.0	28.0	30.0	20.0
14	20.0	15.0	7.0	6.0	8.0	10.0	17.0	22.0	25.0	29.0	28.0	20.0
15	19.0	15.0	7.0	6.0	7.0	10.0	18.0	21.0	23.0	28.0	25.0	20.0
16	19.0	15.0	5.0	7.0	6.0	10.0	15.0	25.0	24.0	29.0	25.0	20.0
17	19.0	13.0	5.0	7.0	7.0	11.0	17.0	25.0	23.0	33.0	26.0	20.0
18	18.0	14.0	6.0	8.0	9.0	14.0	15.0	24.0	23.0	32.0	26.0	22.0
19	19.0	15.0	3.0	8.0	8.0	12.0	20.0	26.0	25.0	34.0	28.0	21.0
20	19.0	16.0	7.0	8.0	9.0	12.0	18.0	25.0	25.0	28.0	28.0	20.0
21	18.0	15.0	5.0	7.0	9.0	10.0	20.0	21.0	26.0	35.0	28.0	20.0
22	20.0	14.0	3.0	8.0	9.0	11.0	22.0	26.0	25.0	33.0	29.0	20.0
23	19.0	12.0	4.0	9.0	7.0	10.0	20.0	23.0	25.0	32.0	25.0	19.0
24	20.0	12.0	6.0	8.0	6.0	9.0	20.0	23.0	25.0	30.0	25.0	13.0
25	19.0	11.0	6.0	9.0	7.0	10.0	21.0	22.0	25.0	28.0	25.0	15.0
26	20.0	11.0	5.0	5.0	6.0	11.0	20.0	20.0	25.0	32.0	30.0	18.0
27	18.0	12.0	5.0	5.0	7.0	10.0	20.0	21.0	25.0	30.0	25.0	18.0
28	15.0	11.0	5.0	6.0	10.0	12.0	21.0	23.0	25.0	28.0	25.0	16.0
29	15.0	10.0	5.0	5.0	---	13.0	20.0	23.0	24.0	28.0	27.0	18.0
30	15.0	10.0	4.0	6.0	---	14.0	19.0	25.0	25.0	32.0	22.0	17.0
31	15.0	---	7.0	7.0	---	12.0	---	23.0	---	28.0	25.0	---
MONTH	19.5	12.5	6.5	6.5	7.0	12.0	16.0	22.5	23.5	29.5	27.0	19.5

ARKANSAS RIVER BASIN

07177500 BIRD CREEK NEAR SPERRY, OKLA.

LOCATION.--Lat 36°16'42", long 95°57'14", in NW 1/4 NW 1/4 sec.29, T.21 N., R.13 E., Tulsa County, at gaging station on county road bridge, 1.5 mi (2.4 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 mi² (2,344 km²).

PERIOD OF RECORD.--Chemical analyses: October 1951 to September 1953, December 1959 to August 1962, October 1964 to current year.

Water temperatures: October 1951 to September 1953, October 1964 to September 1968.

EXTREMES, Current year.--Specific conductance: Maximum daily, 1,240 micromhos/cm Aug. 1; minimum daily, 131 micromhos/cm Nov. 25.

Water temperatures: Maximum, 31.0°C July 28; minimum, freezing point on Jan. 6, 11-14.

Period of record.--Specific conductance: Maximum daily, 1,600 micromhos/cm Mar. 24, 1972; minimum daily, 82 micromhos/cm Sept. 5-8, 1971.

Water temperatures: Maximum, 36.0°C June 24, 1971; minimum, freezing point on several days during winter months.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	INSTANTANEOUS DIS- CHARGE (CFS)	DIS- SOLVED CAL- CIUM (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG/L)	DIS- SOLVED SODIUM (MG/L)	BICAR- BONATE (MG/L)	CAR- BONATE (MG/L)	ALKA- LITY AS CACO ₃ (MG/L)	DIS- SOLVED SULFATE (MG/L)	DIS- SOLVED CHLO- RIDE (MG/L)	DIS- SOLVED NITRATE (MG/L)	DIS- SOLVED NITRATE (MG/L)	DIS- SOLVED NITRITE (MG/L)
OCT.												
05...	65	31	7.5	35	89	0	73	15	71	.41	1.8	.02
25...	98	39	8.6	40	124	0	102	18	76	.23	1.0	.06
NOV.												
05...	98	42	9.0	34	136	0	112	18	64	.22	.97	.01
15...	34	51	12	55	157	0	129	21	100	.22	.97	.01
25...	14200	10	2.5	11	30	0	25	8.5	19	.32	1.4	.01
DEC.												
05...	9460	19	3.6	12	62	0	51	12	20	.32	1.4	.01
15...	288	48	9.8	37	152	0	125	24	69	.32	1.4	.00
25...	1190	30	7.8	39	81	0	66	22	67	.20	.89	.01
JAN.												
05...	129	67	15	67	178	0	146	36	140	.62	2.7	.00
15...	91	80	18	90	202	0	166	44	180	.50	2.2	.00
24...	274	72	16	75	191	0	157	43	--	.43	1.9	.00
FEB.												
05...	141	62	15	86	154	0	126	39	170	.27	1.2	.01
15...	106	73	17	93	180	0	148	40	200	.15	.66	.01
25...	584	40	9.0	31	115	0	94	31	55	.51	2.3	.04
MAR.												
05...	280	51	11	37	148	0	121	31	70	1.9	8.4	.00
12...	31000	20	4.1	52	56	0	46	20	80	1.6	7.2	.08
25...	463	63	14	53	180	0	148	37	100	.38	1.7	.00
APR.												
05...	217	72	15	57	--	0	--	41	120	--	--	--
15...	190	79	18	77	210	0	172	44	160	--	--	--
25...	171	82	21	90	213	0	175	47	190	--	--	--
MAY												
04...	1050	28	6.3	23	91	0	75	19	39	--	--	--
15...	1040	52	11	--	167	0	137	28	80	--	--	--
25...	6530	21	5.1	24	61	0	50	14	44	--	--	--
JUNE												
09...	11500	17	3.1	9.6	53	0	43	9.4	15	--	--	--
15...	305	42	8.6	32	135	0	111	19	58	--	--	--
25...	138	56	11	45	182	0	149	23	77	--	--	--
JULY												
05...	32	66	16	76	199	0	163	27	150	--	--	--
28...	15	71	20	--	212	0	174	26	210	--	--	--
AUG.												
05...	10	74	20	120	207	0	170	25	250	--	--	--
11...	7560	11	3.8	14	35	0	29	7.2	--	--	--	--
24...	2420	21	4.9	28	52	0	43	11	57	--	--	--
SEP.												
03...	11600	12	2.9	--	40	0	33	7.6	16	--	--	--
15...	54	46	11	46	146	0	120	17	91	--	--	--
25...	3270	29	6.8	25	84	0	69	16	47	--	--	--

ARKANSAS RIVER BASIN

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07177500 BIRD CREEK NEAR SPERRY, OKLA.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	DIS- SOLVED NITRITE (NO2) (MG/L)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	CARBON DIOXIDE (CO2) (MG/L)
OCT.											
05...	.07	.43	240	.33	42.1	110	35	1.5	412	7.5	4.5
25...	.20	.29	282	.38	74.6	130	31	1.5	492	7.7	4.0
NOV.											
05...	.03	.23	278	.38	73.6	140	30	1.2	472	7.7	4.3
15...	.03	.23	368	.50	33.8	180	48	1.8	630	7.6	6.3
25...	.03	.33	90	.12	3450	35	11	.8	131	6.9	6.0
DEC.											
05...	.03	.33	126	.17	3220	62	11	.7	193	7.8	1.6
15...	.00	.32	295	.40	229	160	36	1.3	506	7.8	3.9
25...	.03	.21	223	.30	716	110	41	1.6	369	7.6	3.3
JAN.											
05...	.00	.62	441	.60	154	230	83	1.9	804	7.6	7.2
15...	.00	.50	544	.74	134	270	110	2.4	986	7.7	6.4
24...	.00	.43	458	.62	339	250	89	2.1	863	7.7	6.1
FEB.											
05...	.03	.28	466	.63	177	220	90	2.5	849	7.6	6.2
15...	.03	.16	520	.71	149	250	100	2.5	984	8.0	2.9
25...	.13	.55	245	.33	386	140	43	1.2	436	7.9	2.3
MAR.											
05...	.00	1.9	288	.39	218	170	51	1.2	536	7.6	5.9
12...	.26	1.7	--	--	--	67	21	2.8	136	7.2	5.7
25...	.00	.38	381	.52	476	220	67	1.6	689	7.8	4.6
APR.											
05...	--	.35	424	.58	248	240	--	1.6	775	7.7	--
15...	--	.33	501	.68	257	270	99	2.0	921	7.8	5.3
25...	--	.09	565	.77	261	290	120	2.3	1040	8.3	1.7
MAY											
04...	--	.33	198	.27	561	96	21	1.0	305	7.8	2.3
15...	--	.35	335	.46	941	180	38	--	566	7.5	8.5
25...	--	.39	165	.22	2910	73	23	1.2	267	6.8	15
JUNE											
09...	--	2.0	116	.16	3600	55	12	.6	--	8.0	.8
15...	--	.72	258	.35	212	140	30	1.2	428	8.2	1.4
25...	--	.49	341	.46	127	190	36	1.4	571	7.6	7.3
JULY											
05...	--	.62	493	.67	42.6	230	67	2.2	858	8.0	3.2
28...	--	.48	587	.80	23.8	260	86	--	1090	8.0	3.4
AUG.											
05...	--	.29	648	.88	17.5	270	97	3.2	1140	7.6	8.3
11...	--	1.7	109	.15	2230	43	14	.9	164	6.9	7.0
24...	--	.75	182	.25	1190	73	30	1.4	303	7.1	6.6
SEP.											
03...	--	1.3	93	.13	2910	42	9	--	137	7.1	5.1
15...	--	.36	333	.45	48.6	160	40	1.6	564	7.6	5.9
25...	--	.56	198	.27	1750	100	32	1.1	326	7.7	2.7

ARKANSAS RIVER BASIN

07177500 BIRD CREEK NEAR SPERRY, OKLA.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	287	392	380	659	---	480	750	476	428	707	1240	436
2	320	418	428	720	793	483	758	326	419	783	1070	166
3	348	439	480	---	798	488	758	302	455	769	1070	137
4	372	443	263	767	835	512	756	305	500	792	1140	161
5	405	460	192	787	829	531	760	---	501	858	1140	254
6	419	467	234	824	---	531	762	402	284	852	1120	299
7	496	484	318	864	852	562	777	402	282	851	1120	330
8	504	538	318	803	872	569	820	---	260	890	1090	---
9	514	562	355	826	887	589	877	---	156	894	976	400
10	531	563	396	---	918	348	917	526	183	950	417	436
11	497	590	428	875	944	168	931	526	295	948	164	497
12	276	602	462	875	963	136	1020	527	251	964	312	497
13	266	604	---	896	971	138	920	746	269	956	312	---
14	236	620	500	935	974	301	918	746	347	---	310	547
15	303	630	501	961	966	402	901	566	428	---	359	564
16	350	679	512	924	1040	425	978	---	455	---	364	605
17	350	678	557	---	1030	486	981	---	486	---	---	637
18	371	673	565	889	---	530	1040	745	499	---	303	667
19	384	691	501	891	729	589	1050	636	---	---	304	652
20	386	---	---	960	717	591	1040	613	---	---	335	176
21	387	296	503	1150	560	642	1030	614	539	---	345	141
22	401	296	382	934	427	654	810	494	540	---	340	147
23	414	323	365	843	423	613	811	494	553	---	202	269
24	443	325	325	845	416	638	995	398	570	---	303	309
25	468	131	359	---	433	680	1020	267	571	---	---	326
26	462	136	450	991	434	717	1020	---	576	---	266	283
27	475	194	531	939	455	713	974	197	576	---	291	332
28	384	252	559	1010	455	720	---	309	---	1090	339	331
29	306	341	532	832	---	732	1010	309	705	1040	369	386
30	---	341	617	760	---	739	462	---	713	1070	394	400
31	392	---	644	---	---	738	---	---	---	1070	384	---
MONTH	392	454	436	875	749	530	891	---	439	---	565	371

TEMPERATURE (DEG. C) OF WATER , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
(ONCE-DAILY)

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

ARKANSAS RIVER BASIN

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07178050 BIRD CREEK NEAR CATOOSA, OKLA.

LOCATION.--Lat 36°13'51", long 95°49'55", Tulsa County, at bridge on U.S. Highway 75, approximately 5.5 mi (8.8 km) northwest of Catoosa.

DRAINAGE AREA.--1,080 mi² (2,797 km²).

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

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)	ALKA- LINITY AS CACO3 (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED NITRATE (N) (MG/L)	DIS- SOLVED NITRATE (NO3) (MG/L)	DIS- SOLVED NITRITE (N) (MG/L)
OCT. 25...	46	9.6	41	132	0	108	32	67	1.4	6.2	.01
NOV. 07...	52	10	45	149	0	122	43	66	4.9	22	.01
28...	25	6.0	22	77	0	63	16	42	.15	.66	.00
JAN. 03...	63	13	54	166	0	136	44	110	1.6	6.9	.05
29...	69	17	110	153	0	126	48	220	1.5	6.6	.02
FEB. 21...	51	13	62	128	0	105	40	120	.84	3.7	.00
MAR. 04...	52	12	47	138	0	113	45	79	.65	2.9	.01
MAY 22...	60	11	--	170	0	139	46	87	2.6	12	.00
JUNE 26...	49	11	59	145	0	119	40	92	--	--	--
JULY 17...	33	2.3	71	80	0	66	41	100	--	--	--
AUG. 13...	21	4.3	23	59	0	48	16	40	--	--	--
SEP. 10...	37	6.5	32	109	0	89	23	53	--	--	--
30...	40	7.1	31	118	0	97	28	53	--	--	--

DATE	DIS- SOLVED NITRITE (NO2) (MG/L)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (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)	CARBON DIOXIDE (CO2) (MG/L)
OCT. 25...	.03	1.4	1.2	296	.40	150	46	1.4	516	8.0	2.1
NOV. 07...	.03	4.9	.01	330	.45	170	49	1.5	580	8.2	1.5
28...	.00	.15	.32	178	.24	87	24	1.0	310	8.0	1.2
JAN. 03...	.16	1.6	.52	386	.53	210	75	1.6	697	7.6	6.7
29...	.07	1.5	.47	533	.72	240	120	3.1	922	7.6	6.2
FEB. 21...	.00	.84	.15	376	.51	180	76	2.0	702	7.5	6.5
MAR. 04...	.03	.66	.66	336	.46	180	66	1.5	595	7.9	2.8
MAY 22...	.00	2.6	1.5	380	.52	200	56	--	640	7.7	5.4
JUNE 26...	--	2.2	.97	--	--	170	49	2.0	638	7.4	9.2
JULY 17...	--	.95	.46	--	--	92	26	3.2	574	7.6	3.2
AUG. 13...	--	1.1	.57	171	.23	70	22	1.2	276	7.3	4.7
SEP. 10...	--	2.0	1.1	249	.34	120	30	1.3	415	8.1	1.4
30...	--	1.1	.54	260	.35	130	32	1.2	424	8.0	1.9

ARKANSAS RIVER BASIN

07178620 NEWT GRAHAM LOCK AND DAM (VERDIGRIS RIVER) NEAR INOLA, OKLA.

LOCATION (Corrected).--Lat 36°03'24", long 95°32'06", in NW 1/4 NE 1/4 sec.7, T.18 N., R.17 E., Wagoner County, at lock wall at dam, 6.8 mi (10.9 km) southwest of Inola, and at 25.7 navigation channel miles (41.4 km).

DRAINAGE AREA.--8,030 mi² (20,797 km²).

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

Water temperatures: December 1971 to current year.

EXTREMES, Current year.--Specific conductance: Maximum, 699 micromhos/cm Apr. 30; minimum, 125 micromhos/cm Mar. 13-14.

Water temperatures: Maximum, 31.5°C July 23; minimum, 0.5°C Jan. 12-13.

Period of record.--Specific conductance: Maximum, 892 micromhos/cm Apr. 22, 1972; minimum, 125 micromhos/cm Mar. 13-14, 1974.

Water temperatures: Maximum, 31.5°C July 23, 1974; minimum, freezing point on Jan. 10-14, 1973.

REMARKS.--Continuous monitor records for specific conductance and water temperature are collected for this station. Records of maximum and minimum specific conductance and water temperature values are available in district office in Oklahoma City, Okla.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	ALKA- LINITY AS CACO ₃ (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED NITRATE (N) (MG/L)	DIS- SOLVED NITRATE (NO ₃) (MG/L)	DIS- SOLVED NITRITE (N) (MG/L)
OCT.											
05...	--	4.9	18	69	0	57	21	31	.66	2.9	.01
15...	26	4.7	14	80	0	66	20	22	.34	1.5	.04
25...	47	8.5	20	150	0	123	36	29	.54	2.4	.01
NOV.											
05...	41	7.0	16	132	1	110	26	23	.65	2.9	.00
15...	--	6.7	15	127	0	104	24	24	.59	2.6	.00
25...	33	5.2	13	--	0	--	21	19	.56	2.5	.01
DEC.											
05...	--	6.2	18	104	0	85	26	31	.48	2.1	.00
15...	39	6.1	15	124	0	102	23	23	.50	2.2	.00
25...	--	5.6	17	89	0	73	24	28	.43	1.9	.01
JAN.											
05...	37	6.3	15	116	0	95	24	24	.69	3.1	.01
15...	39	6.3	15	119	0	98	25	24	.64	2.8	.00
25...	41	6.8	17	122	0	100	28	29	.56	2.5	.11
FEB.											
05...	44	7.6	--	138	0	113	33	29	.57	2.5	.01
15...	51	10	--	151	0	124	47	42	.76	3.4	.01
25...	38	7.7	26	112	0	92	33	42	.66	2.9	.02
MAR.											
05...	49	8.1	21	145	0	119	37	32	.43	1.9	.50
12...	17	3.6	16	48	0	39	--	21	1.1	4.7	.04
25...	36	7.7	--	115	0	94	--	--	--	--	--
APR.											
05...	35	5.4	12	--	0	--	23	18	--	--	--
15...	36	6.2	16	109	0	89	30	23	--	--	--
25...	49	8.6	27	137	0	112	40	47	--	--	--
MAY											
05...	29	5.8	19	89	0	73	25	--	--	--	--
15...	37	7.2	15	110	0	90	--	23	--	--	--
25...	44	8.3	17	--	0	--	37	27	--	--	--
JUNE											
05...	46	8.7	17	--	0	--	34	26	--	--	--
15...	42	7.7	16	133	0	109	--	23	--	--	--
25...	46	7.1	16	139	0	114	30	23	--	--	--
JULY											
04...	42	7.4	15	132	0	108	--	22	--	--	--
15...	40	6.5	13	125	0	103	--	20	--	--	--
25...	41	7.1	15	127	0	104	30	18	--	--	--
AUG.											
05...	39	8.1	14	131	0	107	--	17	--	--	--
15...	26	6.1	16	80	0	66	20	28	--	--	--
25...	39	8.6	31	109	0	89	24	56	--	--	--
SEP.											
04...	18	2.2	--	51	0	42	13	23	--	--	--
15...	42	5.2	--	132	0	108	27	19	--	--	--
25...	28	5.7	14	--	0	--	23	21	--	--	--

ARKANSAS RIVER BASIN

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07178620 NEWT GRAHAM LOCK AND DAM (VERDIGRIS RIVER) NEAR INOLA, OKLA.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	DIS- SOLVED NITRITE (NO2) (MG/L)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (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)	CARBON DIOXIDE (CO2) (MG/L)
OCT.											
05...	.03	.67	.11	159	.22	--	--	--	261	7.9	1.4
15...	.13	.38	1.1	156	.21	84	19	.7	244	7.5	4.0
25...	.03	.55	.92	232	.32	150	29	.7	403	8.1	1.9
NOV.											
05...	.00	.65	.24	203	.28	130	21	.6	316	8.5	.7
15...	.00	.59	.27	193	.26	--	--	--	332	8.2	1.3
25...	.03	.57	.49	165	.22	100	--	.6	278	7.7	--
DEC.											
05...	.00	.48	.25	200	.27	--	--	--	325	8.1	1.3
15...	.00	.50	.30	202	.27	120	21	.6	328	8.2	1.3
25...	.03	.44	.27	183	.25	--	--	--	295	7.5	4.5
JAN.											
05...	.03	.70	.09	182	.25	120	23	.6	309	8.2	1.2
15...	.00	.64	.11	186	.25	120	26	.6	318	7.8	3.0
25...	.36	.67	.10	197	.27	130	30	.6	350	7.7	3.9
FEB.											
05...	.03	.58	.14	221	.30	140	28	--	382	8.0	2.2
15...	.03	.77	.16	276	.38	170	45	--	479	7.8	3.8
25...	.07	.68	.15	--	--	130	35	1.0	398	7.4	7.1
MAR.											
05...	1.6	.93	.10	235	.32	160	37	.7	422	7.8	3.7
12...	.13	1.1	.22	--	--	57	18	.9	160	7.1	6.1
25...	--	.68	.06	238	.32	120	27	--	343	7.8	2.9
APR.											
05...	--	.54	--	171	.23	110	--	.5	284	7.9	--
15...	--	.65	--	188	.26	120	26	.6	316	7.8	2.8
25...	--	.82	.16	257	.35	160	45	.9	445	7.9	2.8
MAY											
05...	--	.01	.23	182	.25	96	23	.8	293	7.9	1.8
15...	--	.78	.19	192	.26	120	32	.6	311	7.6	4.4
25...	--	.60	.14	222	.30	140	--	.6	363	7.9	--
JUNE											
05...	--	.56	--	223	.30	150	--	.6	374	8.0	--
15...	--	.54	.11	211	.29	140	28	.6	344	8.1	1.7
25...	--	1.0	.23	201	.27	140	26	.6	350	8.0	2.2
JULY											
04...	--	.81	.04	199	.27	140	27	.6	331	7.9	2.7
15...	--	.71	.00	192	.26	130	24	.5	311	8.0	2.0
25...	--	.65	.09	185	.25	130	26	.6	319	8.3	1.0
AUG.											
05...	--	.34	.08	207	.28	130	23	.5	328	8.0	2.1
15...	--	.67	.28	156	.21	90	24	.7	263	7.6	3.2
25...	--	.96	.38	244	.33	130	41	1.2	412	8.0	1.7
SEP.											
04...	--	.91	.18	125	.17	54	12	--	189	7.2	5.1
15...	--	.74	.14	194	.26	130	22	--	325	7.8	3.3
25...	--	1.3	.16	156	.21	93	--	.6	257	8.2	--

ARKANSAS RIVER BASIN

07178620 NEWT GRAHAM LOCK AND DAM (VERDIGRIS RIVER) NEAR INOLA, OKLA.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	INSTAN- TANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO2) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	ALKA- LITY AS CACO3 (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)
OCT.										
03...	--	--	--	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--
NOV.										
12...	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--	--
DEC.										
04...	--	--	--	--	--	--	--	--	--	--
11...	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--
JAN.										
29...	10600	9.6	44	7.3	19	3.1	133	0	109	29
FEB.										
04...	--	--	--	--	--	--	--	--	--	--
26...	7740	7.5	44	7.7	20	2.9	123	0	101	30
MAR.										
06...	--	--	--	--	--	--	--	--	--	--
26...	30100	--	--	--	--	--	--	--	--	--
APR.										
04...	--	--	--	--	--	--	--	--	--	--
24...	1870	6.5	40	7.7	17	2.4	113	0	93	37
MAY										
08...	--	--	--	--	--	--	--	--	--	--
29...	18000	6.9	31	5.3	15	--	97	0	80	23
JUNE										
06...	--	--	--	--	--	--	--	--	--	--
25...	10600	7.0	44	7.1	16	2.3	138	0	113	29
JULY										
23...	74	7.4	38	7.4	14	2.5	122	0	100	33
AUG.										
28...	550	6.2	44	8.1	39	4.4	119	0	98	--
SEP.										
25...	7000	7.3	29	5.5	14	3.1	89	--	73	22

DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (NO3) (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)
OCT.										
03...	--	--	--	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--
NOV.										
12...	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--	--
DEC.										
04...	--	--	--	--	--	--	--	--	--	--
11...	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--
JAN.										
29...	34	.3	.45	.98	.25	1.4	6.3	--	--	--
FEB.										
04...	--	--	--	--	--	--	--	--	--	--
26...	33	.3	.48	1.1	.17	1.6	7.0	221	.30	4620
MAR.										
06...	--	--	--	--	--	--	--	--	--	--
26...	--	--	.59	.64	.10	1.2	5.4	202	.27	16400
APR.										
04...	--	--	--	--	--	--	--	--	--	--
24...	29	.3	.64	.66	.19	1.3	5.8	219	.30	1110
MAY										
08...	--	--	--	--	--	--	--	--	--	--
29...	23	.3	.50	1.1	.29	1.6	7.1	165	.22	8020
JUNE										
06...	--	--	--	--	--	--	--	--	--	--
25...	22	.2	.47	.63	.13	1.1	4.9	193	.26	5520
JULY										
23...	18	.2	.08	.73	.09	.81	3.6	198	.27	39.6
AUG.										
28...	67	.3	.76	.85	.27	1.6	7.1	--	--	--
SEP.										
25...	21	.1	.37	.86	.17	1.2	5.4	169	.23	3190

07178620 NEWT GRAHAM LOCK AND DAM (VERDIGRIS RIVER) NEAR INOLA, OKLA.--Continued

DATE	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	CHEM- ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	CHEM- ICAL OXYGEN DEMAND (HIGH LEVEL) (MG/L)
OCT.										
03...	--	--	285	--	21.5	--	5.4	64	--	--
26...	--	--	375	--	19.5	--	8.6	98	9	--
29...	--	--	395	--	18.5	--	8.8	99	--	--
NOV.										
12...	--	--	310	--	13.0	--	10.0	100	--	--
27...	--	--	160	--	11.0	--	7.6	73	--	--
DEC.										
04...	--	--	--	--	10.5	--	10.2	98	--	--
11...	--	--	325	--	8.0	--	11.0	98	16	--
17...	--	--	--	--	7.0	--	11.6	101	--	--
JAN.										
29...	140	31	381	7.7	3.0	50	11.6	91	21	--
FEB.										
04...	--	--	380	--	4.5	--	12.0	97	--	--
26...	140	41	380	7.7	5.0	70	11.6	95	--	25
MAR.										
06...	--	--	405	--	10.5	--	10.4	99	--	--
26...	--	--	328	7.8	9.5	40	10.8	99	18	--
APR.										
04...	--	--	280	--	11.5	--	10.5	102	--	--
24...	130	39	320	7.7	16.5	50	8.6	92	--	--
MAY										
08...	--	--	360	--	20.0	--	6.3	73	--	--
29...	99	20	285	8.0	21.5	--	6.6	78	--	--
JUNE										
06...	--	--	--	--	23.0	--	6.0	74	--	--
25...	140	27	360	8.0	24.5	30	7.8	96	--	--
JULY										
23...	130	25	316	7.8	29.5	7	10.2	138	--	--
AUG.										
28...	140	46	480	7.8	26.5	40	4.0	52	--	--
SEP.										
25...	95	22	270	--	18.5	40	5.8	64	--	--

DATE	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	TOTAL PHYTO- PLANK- TON (CELLS PER ML)	CHLORO- PHYLL A (UG/L)	CHLORO- PHYLL B (UG/L)	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (CUL- ONIES PER 100 ML)	SUS- PENDED SEDI- MENT (MG/L)	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM
OCT.									
03...	--	--	--	--	--	--	--	--	--
26...	.3	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--
NOV.									
12...	1.8	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--
DEC.									
04...	--	--	--	--	--	--	--	--	--
11...	.8	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--
JAN.									
29...	1.0	4.2	--	--	--	--	110	--	--
FEB.									
04...	--	--	--	--	--	--	--	--	--
26...	1.0	3.9	--	--	--	--	550	87	93
MAR.									
06...	--	--	--	--	--	--	--	--	--
26...	2.2	--	--	--	--	1200	140	--	--
APR.									
04...	--	--	--	--	--	--	--	--	--
24...	.7	3.6	--	--	--	53	6	60	98
MAY									
08...	--	--	--	--	--	--	--	--	--
29...	2.2	1.6	--	--	--	--	--	367	99
JUNE									
06...	--	--	--	--	--	--	--	--	--
25...	1.0	2.2	--	--	--	100	120	93	97
JULY									
23...	1.9	3.1	--	--	--	7	15	74	98
AUG.									
28...	1.3	3.0	310	--	--	--	--	78	99
SEP.									
25...	1.6	--	--	14	22	670	190	59	90

ARKANSAS RIVER BASIN

07178620 NEWT GRAHAM LOCK AND DAM (VERDIGRIS RIVER) NEAR INOLA, OKLA.--Continued

DATE	INSTANTANEOUS DIS-CHARGE (CFS)	TOTAL IRON (FE) (UG/L)	DIS-SOLVED IRON (FE) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	SUS-PENDED MANGANESE (MN) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL ARSENIC (AS) (UG/L)	SUS-PENDED ARSENIC (AS) (UG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	SUS-PENDED CADMIUM (CD) (UG/L)
MAY 29...	18000	5600	130	200	200	0	7.7	3	3	0	<10	<9
JUNE 25...	10600	2300	30	100	80	20	--	3	1	2	<10	<9
SEP. 25...	7000	1800	260	40	30	10	--	2	0	2	<10	<9

DATE	DIS-SOLVED CADMIUM (CD) (UG/L)	TOTAL CHROMIUM (CR) (UG/L)	SUS-PENDED CHROMIUM (CR) (UG/L)	DIS-SOLVED CHROMIUM (CR) (UG/L)	TOTAL COBALT (CU) (UG/L)	SUS-PENDED COBALT (CU) (UG/L)	DIS-SOLVED COBALT (CU) (UG/L)	TOTAL COPPER (CU) (UG/L)	SUS-PENDED COPPER (CU) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)
MAY 29...	0	10	10	0	<50	<49	1	50	38	12	<100
JUNE 25...	1	0	0	0	<50	<50	0	<10	<6	4	<100
SEP. 25...	1	0	0	0	<50	<49	1	<10	<7	3	<100

DATE	SUS-PENDED LEAD (PB) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	TOTAL MERCURY (HG) (UG/L)	SUS-PENDED MERCURY (HG) (UG/L)	DIS-SOLVED MERCURY (HG) (UG/L)	TOTAL SELENIUM (SE) (UG/L)	SUS-PENDED SELENIUM (SE) (UG/L)	DIS-SOLVED SELENIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	SUS-PENDED ZINC (ZN) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)
MAY 29...	<97	3	.0	.0	.0	1	1	0	90	50	40
JUNE 25...	<96	4	.1	.1	.0	0	0	1	30	30	0
SEP. 25...	<95	5	--	--	.0	0	0	0	40	40	0

SULFATE (MG/L AS SO4) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	29	24	25	35	35	21	43	28	31	27	46
2	27	29	24	25	33	36	22	53	29	32	27	44
3	23	29	26	25	32	39	23	41	30	29	27	18
4	21	28	26	25	30	37	23	27	29	28	28	14
5	21	27	23	25	29	36	25	24	32	28	28	18
6	22	27	19	25	29	35	26	28	31	27	28	20
7	21	27	18	24	28	35	26	28	28	27	28	20
8	21	27	19	24	31	35	26	29	21	27	28	25
9	23	27	23	25	27	37	25	29	16	27	28	28
10	23	27	25	25	27	37	24	29	13	27	28	27
11	23	26	25	25	33	22	24	29	15	28	36	29
12	27	25	26	25	30	14	25	32	18	26	51	27
13	27	25	26	25	41	11	25	32	26	26	25	27
14	22	25	26	26	35	11	25	30	28	26	21	27
15	24	27	26	26	32	13	24	26	27	26	21	28
16	30	26	26	26	30	17	24	29	29	27	21	28
17	33	26	26	26	41	30	25	29	31	27	28	27
18	34	26	25	27	43	31	25	34	30	27	17	28
19	31	26	25	27	44	28	24	28	29	27	19	23
20	33	27	23	26	38	31	25	28	28	27	14	19
21	33	25	27	27	37	30	27	28	28	27	21	15
22	33	25	28	27	36	29	24	28	29	27	22	16
23	33	25	26	26	35	29	25	29	29	27	23	16
24	33	24	24	27	35	27	33	30	28	27	34	19
25	33	22	23	27	35	27	44	31	29	27	42	22
26	34	13	25	29	31	26	56	23	29	27	37	25
27	33	13	22	30	32	24	60	22	29	27	40	27
28	36	15	24	35	35	24	52	19	29	27	43	25
29	33	18	25	35	---	23	60	23	30	27	44	26
30	31	20	25	32	---	22	63	25	30	27	44	26
31	29	---	25	32	---	22	---	26	---	27	43	---
MONTH	28	25	24	27	34	28	31	29	27	27	30	24

ARKANSAS RIVER BASIN

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07178620 NEWT GRAHAM LOCK AND DAM (VERDIGRIS RIVER) NEAR INOLA, OKLA.--Continued

CHLORIDE (MG/L AS CL) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	30	22	22	39	39	22	51	28	33	25	55
2	25	30	22	22	36	41	22	65	30	34	25	55
3	22	29	22	22	34	46	22	48	31	29	26	22
4	22	28	23	22	32	43	22	25	30	27	26	22
5	22	26	22	22	30	41	22	22	34	26	27	22
6	22	25	22	22	29	39	22	27	33	26	27	22
7	22	24	22	22	27	39	23	28	28	25	27	22
8	22	23	22	22	33	39	22	30	22	26	27	22
9	22	23	22	22	25	42	22	29	22	25	27	22
10	22	24	22	22	25	42	22	28	21	24	26	25
11	22	22	22	22	37	22	22	29	22	23	41	29
12	26	22	22	22	31	22	22	35	22	23	62	25
13	25	22	22	22	49	21	22	35	23	23	22	25
14	22	22	22	22	40	21	22	31	26	22	22	25
15	22	24	22	22	35	22	22	22	26	22	22	27
16	31	22	22	22	32	22	22	30	28	24	22	27
17	36	22	22	22	49	31	22	29	33	24	22	26
18	37	22	22	24	51	34	22	38	31	24	22	27
19	34	23	22	25	53	28	22	28	30	24	22	22
20	37	26	22	22	43	33	22	27	28	25	22	22
21	36	22	26	24	42	32	25	27	27	24	22	22
22	36	22	27	25	41	30	22	28	30	24	22	22
23	36	22	23	22	40	29	22	30	30	24	22	22
24	36	22	22	25	39	26	37	31	28	25	41	22
25	37	22	22	24	40	25	52	33	30	25	50	22
26	37	22	22	29	33	22	71	22	30	25	43	22
27	37	21	22	31	35	22	76	22	30	25	46	25
28	40	22	22	39	39	22	65	22	30	25	51	22
29	36	22	22	39	---	22	76	22	31	24	52	22
30	33	22	22	34	---	22	81	22	32	24	53	23
31	30	---	22	34	---	22	---	23	---	24	51	---
MONTH	29	24	22	25	37	30	32	30	28	25	32	25

DISSOLVED SOLIDS (RESIDUE ON EVAPORATION, MG/L AT 180 DEG. C) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	170	220	186	189	244	243	167	277	212	228	204	290
2	205	218	186	192	236	251	169	319	219	231	206	289
3	179	217	197	190	231	263	179	270	221	215	207	142
4	160	212	199	190	225	256	177	206	221	211	209	116
5	162	207	178	190	220	251	188	183	232	209	210	132
6	167	206	153	188	217	244	197	212	227	207	211	153
7	162	202	143	186	211	243	199	212	214	206	211	159
8	166	201	152	185	227	243	196	219	165	207	210	189
9	174	201	174	189	206	252	191	215	128	206	210	173
10	179	202	189	189	204	254	186	215	106	202	209	205
11	180	196	193	191	238	171	187	216	120	200	249	215
12	207	193	196	192	221	116	189	233	146	200	310	205
13	205	192	197	188	272	94	190	233	199	199	191	205
14	166	191	197	194	247	96	193	222	208	194	165	205
15	181	201	195	197	232	108	184	197	207	198	162	211
16	223	198	194	197	226	137	186	220	215	201	163	211
17	236	196	196	196	272	222	188	217	227	201	157	207
18	240	197	194	202	279	230	193	243	221	201	139	212
19	230	194	184	205	284	212	187	214	221	201	152	179
20	238	207	189	194	257	228	190	210	214	205	153	148
21	237	191	207	204	253	226	206	211	211	203	160	121
22	237	192	216	204	256	220	185	217	218	204	168	127
23	235	191	199	197	247	215	191	219	218	202	175	131
24	236	189	188	204	244	207	239	222	214	206	251	147
25	239	170	180	202	247	205	262	228	220	206	274	171
26	239	188	191	215	229	196	333	180	218	204	254	192
27	238	186	171	223	234	181	347	170	221	205	265	205
28	248	182	188	243	243	181	316	150	218	206	278	189
29	236	142	183	244	---	175	350	178	223	204	282	196
30	227	156	182	231	---	173	362	190	225	204	283	200
31	219	---	18	232	---	173	---	209	---	203	277	---
MONTH	207	187	192	201	234	202	218	216	204	205	213	184

ARKANSAS RIVER BASIN

07178620 NEWT GRAHAM LOCK AND DAM (VERDIGRIS RIVER) NEAR INOLA, OKLA.--Continued

SPECIFIC CONDUCTANCE (MICROMHUS/CM AT 25 DEG. C) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	272	361	301	305	406	404	265	465	348	376	333	489
2	335	358	301	311	390	417	270	540	360	382	336	486
3	287	356	320	308	382	440	288	452	364	353	338	220
4	254	348	323	307	371	426	284	336	363	345	342	174
5	256	339	285	307	362	418	304	295	383	341	344	203
6	266	337	240	303	356	405	320	347	375	339	345	241
7	257	329	222	301	345	404	324	348	350	337	345	251
8	264	327	238	299	375	404	318	360	263	339	343	306
9	287	327	279	305	337	420	310	353	196	337	343	277
10	288	330	305	305	333	423	300	352	156	330	342	334
11	289	318	313	310	394	274	302	354	181	326	414	353
12	339	313	318	312	364	174	305	386	228	325	525	335
13	334	311	320	304	455	134	308	386	323	324	309	335
14	267	309	320	315	411	138	313	366	340	315	263	335
15	291	328	322	320	384	160	297	321	338	322	257	346
16	368	322	322	321	373	211	301	362	352	328	259	345
17	390	319	318	318	455	365	303	357	375	328	247	338
18	398	320	314	329	468	380	313	403	364	328	215	347
19	380	323	304	335	478	348	302	350	363	328	238	288
20	394	338	289	315	428	377	307	344	351	334	240	231
21	393	309	339	332	421	373	337	345	346	331	253	182
22	392	311	344	333	416	362	299	348	359	332	268	194
23	390	310	323	320	411	353	310	360	358	329	281	201
24	391	297	300	333	406	338	396	365	350	336	418	229
25	396	272	289	330	410	336	473	376	362	336	460	273
26	397	160	310	353	378	318	566	289	358	333	424	312
27	395	156	274	368	387	291	592	271	363	334	443	334
28	413	185	301	404	404	292	536	235	358	336	467	305
29	391	221	307	406	---	260	596	286	367	332	473	318
30	375	246	305	382	---	276	618	308	371	332	475	326
31	360	---	307	383	---	276	---	325	---	331	465	---
MONTH	339	303	302	328	396	330	354	354	332	335	349	297

TEMPERATURE (DEG. C) OF WATER , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

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

ARKANSAS RIVER BASIN

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

LOCATION.--Lat 36°13'29", long 95°15'20", in NW 1/4 NE 1/4 sec. 10, T.20 N., R.19 E., Mayes County, at abandoned bridge, approximately 2 mi (3.2 km) downstream from Sulfur Creek and 5.4 mi (8.7 km) southeast of Pryor.

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

Water temperatures: July 1966 to September 1967.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

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 NITRITE PLUS NITRATE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	DIS- SOLVED AMMONIA NITRO- GEN (N) (MG/L)	DIS- SOLVED AMMONIA (NH4) (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)
OCT.												
05...	9.0	.48	2.1	.03	.10	.51	--	.85	1.1	865	7.3	19.5
12...	20	.89	3.9	.03	.10	.92	--	.98	1.3	250	7.5	20.0
19...	13	1.1	4.7	.04	.13	1.1	--	.59	.76	276	7.4	--
26...	25	1.7	7.6	.09	.30	1.8	--	.35	.45	390	7.6	19.5
NOV.												
02...	14	.81	3.6	.05	.16	.86	--	--	--	250	7.5	14.0
09...	38	1.7	7.6	.08	.26	1.8	--	.85	1.1	445	7.5	12.5
16...	37	2.1	9.1	.14	.46	2.2	--	.77	.99	494	7.7	1.5
23...	12	.48	2.1	.03	.10	.51	--	.51	.66	206	7.3	15.5
30...	9.0	.36	1.6	.01	.03	.37	--	.54	.70	188	7.4	11.5
DEC.												
08...	6.8	.12	.53	.01	.03	.13	--	.13	.17	150	7.5	8.0
14...	13	.75	3.3	.01	.03	.76	--	.58	.75	248	7.4	--
21...	10	.50	2.2	.04	.13	.54	--	.48	.62	148	7.4	--
28...	11	.84	3.7	.03	.10	.87	--	.39	.50	215	7.4	18.5
JAN.												
05...	22	8.1	36	.02	.07	8.1	--	.06	.08	432	7.5	20.0
12...	47	3.6	16	.03	.10	3.6	--	4.5	5.8	500	7.5	15.0
18...	28	1.6	7.0	.03	.10	1.6	--	1.6	2.1	399	7.5	7.0
25...	23	1.1	5.0	.07	.23	1.2	.64	.60	.77	402	7.6	5.0
FEB.												
01...	17	.85	3.8	.02	.07	.87	.38	.24	.31	376	7.4	8.0
08...	26	1.4	6.1	.03	.10	1.4	.48	.48	.62	412	7.8	--
16...	8.7	1.4	6.1	.02	.07	1.4	1.8	1.3	1.7	235	7.7	--
22...	8.1	.58	2.6	.03	.10	.61	.50	.39	.50	192	7.7	--
MAR.												
01...	17	1.1	4.6	.05	.16	1.1	.39	.38	.49	302	7.6	--
08...	23	1.4	6.4	.06	.20	1.5	.54	.53	.68	366	7.7	18.0
15...	11	.68	3.0	.03	.10	.71	--	.56	.72	210	7.0	12.0
23...	13	.63	2.8	.00	.00	.63	.99	.57	.73	278	7.5	15.0
29...	22	1.1	4.7	.03	.10	1.1	--	.49	.63	338	7.6	15.0
APR.												
05...	41	1.2	5.2	.03	.10	1.2	.30	.30	.39	443	7.7	13.5
12...	26	1.2	5.5	.06	.20	1.3	--	.83	1.1	432	7.5	17.5
21...	43	.04	.18	.06	.20	.10	--	--	--	480	7.5	19.0
MAY												
03...	14	.91	4.0	.04	.13	.95	--	.44	.57	324	7.5	20.5
10...	20	1.8	8.0	.10	.33	1.9	--	.75	.97	377	7.0	23.0
17...	5.8	1.7	7.5	.10	.33	1.8	--	1.9	2.4	496	7.4	24.0
24...	78	2.7	12	.12	.39	2.8	--	1.3	1.7	777	7.6	24.0
31...	14	--	--	--	--	--	--	--	--	521	7.3	22.5
JUNE												
07...	5.7	.66	2.9	.02	.07	.68	--	.54	.70	--	7.2	20.5
14...	5.7	.14	.62	.01	.03	.15	--	1.6	2.1	384	6.9	24.5
21...	17	.73	3.2	.03	.10	.76	--	1.6	2.1	523	6.3	26.5
28...	24	2.0	8.8	.11	.36	2.1	--	1.1	1.4	492	7.4	24.0
JULY												
05...	39	5.0	22	.17	.56	5.2	--	2.7	3.5	578	7.3	28.0
12...	56	2.8	13	.26	.85	3.1	--	2.0	2.6	736	6.6	28.5
19...	77	3.4	15	.16	.53	3.6	--	1.5	1.9	800	7.6	30.0
28...	69	2.2	9.9	.16	.53	2.4	--	1.3	1.7	801	7.4	28.0
AUG.												
02...	51	3.1	14	.39	1.3	3.5	--	1.6	2.1	691	7.8	26.0
09...	56	15	68	.69	2.3	16	--	11	14	825	6.9	25.0
16...	52	4.4	20	.07	.23	4.5	12	11	14	643	6.7	24.0
23...	35	6.6	29	.00	.00	6.6	9.2	9.0	12	587	7.1	27.0
30...	62	15	66	.00	.00	15	23	22	28	822	6.7	24.0
SEP.												
06...	11	1.4	6.0	.04	.13	.13	.93	1.4	1.8	268	6.6	19.0
13...	22	2.2	9.8	.19	.62	2.4	1.4	1.4	1.8	435	7.1	22.0
20...	13	40	180	.01	.03	40	--	1.6	2.1	221	7.1	21.5
27...	9.1	.88	3.9	.04	.13	.92	--	.92	1.2	229	7.2	21.0

LOCATION.--Lat 35°51'15", long 95°13'45", in SE 1/4 NW 1/4 sec.19, T.16 N., R.20 E., Cherokee County, at gaging station, 1.1 mi (1.8 km) downstream from Fort Gibson Dam, 4.5 mi (7.2 km) north of Fort Gibson, and at mile 6.6 (10.6 km).

PERIOD OF RECORD.--Chemical analyses: October 1951 to current year.

Water temperatures: October 1951 to September 1963, October 1973 to current year.

EXTREMES, Current year.--Specific conductance: Maximum daily, 365 micromhos/cm Aug. 26; minimum daily, 208 micromhos/cm Jan. 8-9, June 11.

Water temperatures: Maximum, 29.0°C July 25, July 28; minimum, 2.0°C Jan. 11-12.

Period of record.--Specific conductance (1974): Maximum daily, 365 micromhos/cm Aug. 26; minimum daily, 208 micromhos/cm Jan. 8-9, June 11.

Water temperatures: Maximum, 31.5°C July 31, Aug. 1, 1955; minimum, freezing point Jan. 23-25, 1962.

[illegible][illegible]

ARKANSAS RIVER BASIN

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TEMPER- ATURE (DEG C)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	CARBON DIOXIDE (CO2) (MG/L)	TOTAL PHYTO- PLANK- TON (CELLS PER ML)	CHLORO- PHYLL A (UG/L)	CHLORO- PHYLL B (UG/L)	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- UNIES PER 100 ML)	SUS- PENDE SEDI- MENT (MG/L)	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM
OCT. 24...	22.0	9	8.5	102	1.9	--	--	--	10	--	--	--
NOV. 20...	14.0	20	10.9	112	1.4	--	--	--	10	31	--	--
DEC. 19...	13.0	30	10.0	99	2.6	--	--	--	--	--	--	--
JAN. 31...	5.0	30	11.8	99	10	--	--	--	30	79	17	97
FEB. 28...	8.0	--	10.6	95	--	--	--	--	36	49	--	--
MAR. 26...	16.0	30	9.4	99	3.4	58	--	--	56	56	51	73
APR. 26...	19.0	40	8.6	99	4.4	760	--	--	39	68	63	96
MAY 31...	24.0	30	7.8	98	2.9	440	--	--	--	--	467	100
JUNE 20...	24.5	10	7.9	98	11	1200	--	--	--	--	21	98
JULY 31...	27.0	10	7.9	101	2.6	12000	--	--	67	22	3	68
AUG. 28...	29.0	10	8.1	106	3.3	2300	--	--	73	80	24	84
SEP. 24...	20.0	--	7.9	90	--	6500	--	--	45	70	32	87

DATE	INSTAN- TANEOUS DIS- CHARGE (CFS)	TOTAL IRON (FE) (UG/L)	DIS- SOLVED IRON (FE) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	SUS- PENDE MAN- GANESE (MN) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL ARSENIC (AS) (UG/L)	SUS- PENDE ARSENIC (AS) (UG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	TOTAL CAD- MIUM (CD) (UG/L)	SUS- PENDE CAD- MIUM (CD) (UG/L)
OCT. 24...	18200	--	30	--	--	--	4.5	0	0	2	--	--
DEC. 19...	35500	1400	80	70	57	13	6.2	1	1	0	<10	9
JUNE 20...	50400	400	60	40	40	0	--	0	0	1	<10	<9

DATE	DIS- SOLVED CAD- MIUM (CD) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	SUS- PENDE CHRO- MIUM (CR) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	TOTAL COBALT (CO) (UG/L)	SUS- PENDE COBALT (CO) (UG/L)	DIS- SOLVED COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)	SUS- PENDE COPPER (CU) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)
OCT. 24...	--	--	--	--	--	--	--	--	--	--	--
DEC. 19...	1	0	0	0	<50	49	1	<10	0	<10	<100
JUNE 20...	1	0	0	0	<50	<50	0	<10	<5	5	<100

DATE	SUS- PENDE LEAD (PB) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	TOTAL MERCURY (HG) (UG/L)	SUS- PENDE MERCURY (HG) (UG/L)	DIS- SOLVED MERCURY (HG) (UG/L)	TOTAL SELE- NIUM (SE) (UG/L)	SUS- PENDE SELE- NIUM (SE) (UG/L)	DIS- SOLVED SELE- NIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	SUS- PENDE ZINC (ZN) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)
OCT. 24...	--	--	--	--	.0	--	--	--	--	--	--
DEC. 19...	90	10	.0	.0	.0	2	0	3	40	0	40
JUNE 20...	<98	2	.0	.0	.0	0	0	0	20	0	40

ARKANSAS RIVER BASIN

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

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
(UNCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	266	264	213	219	240	268	256	234	238	262	254	254
2	266	259	214	217	242	268	260	236	241	261	255	254
3	264	261	---	219	246	268	256	238	243	259	258	253
4	265	257	214	220	252	274	252	238	248	261	258	253
5	265	258	215	222	254	276	254	235	252	257	259	253
6	255	257	216	220	256	276	252	238	249	258	250	251
7	255	258	220	220	257	272	249	237	245	260	---	252
8	256	255	232	208	255	275	249	237	237	256	250	249
9	250	256	232	208	254	275	248	238	233	259	250	249
10	248	255	---	220	257	270	243	238	212	255	251	242
11	251	252	---	221	253	271	242	241	208	256	265	241
12	249	252	232	221	260	266	244	237	218	255	249	245
13	255	253	222	220	258	289	244	236	220	254	246	242
14	255	251	234	220	258	283	240	236	222	256	248	242
15	259	252	235	225	256	287	241	233	232	257	250	244
16	263	252	235	224	252	286	240	234	245	252	248	243
17	267	251	235	225	251	285	246	232	245	253	249	242
18	265	252	230	228	261	288	239	234	250	254	247	242
19	265	254	230	223	260	295	238	234	247	252	252	242
20	266	252	234	233	262	295	236	232	257	252	251	242
21	264	252	230	218	264	294	238	232	255	253	250	244
22	264	252	227	221	268	294	303	233	256	253	250	239
23	270	219	227	---	266	294	241	234	262	253	249	241
24	269	219	226	232	269	295	235	233	288	252	251	242
25	273	219	224	---	271	288	236	232	264	256	251	244
26	271	232	222	233	277	285	230	233	268	254	365	240
27	272	230	209	238	280	276	237	235	266	251	256	233
28	270	217	214	233	271	271	222	236	268	253	253	237
29	271	215	212	234	---	268	225	240	262	262	253	237
30	271	214	211	236	---	261	231	242	264	253	253	237
31	267	---	212	238	---	258	---	237	---	253	252	---
MONTH	263	246	223	224	259	280	244	236	247	256	256	244

TEMPERATURE (DEG. C) OF WATER , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
(UNCE-DAILY)

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

ARKANSAS RIVER BASIN

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07198000 ILLINOIS RIVER NEAR GORE, OKLA.

LOCATION.--Lat 35°34'23", long 95°04'07", in NE 1/4 SW 1/4 sec.27, T.13 N., R.21 E., Sequoyah County at Tenkiller Ferry Dam, 4.3 mi (6.9 km) upstream from gaging station, 6 mi (9.6 km) northeast of Gore, and at mile 12.8 (20.6 km).

DRAINAGE AREA.--1,610 mi² (4,170 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.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

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)	ALKA- LINITY AS CACO3 (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED NITRATE (N) (MG/L)	DIS- SOLVED NITRATE (NO3) (MG/L)	DIS- SOLVED NITRITE (N) (MG/L)
OCT.												
01...	253	29	1.8	5.9	89	0	73	4.3	7.7	1.2	5.3	.01
NOV.												
01...	1960	27	1.3	2.5	85	0	70	5.5	3.4	.25	1.1	.01
15...	2000	27	1.4	4.0	86	0	71	7.1	4.6	.16	.71	.01
DEC.												
04...	11200	24	1.3	2.4	78	0	64	5.3	3.5	.14	.62	.00
17...	10400	23	1.4	3.2	71	0	58	4.5	4.4	.38	1.7	.00
JAN.												
02...	3630	23	1.3	2.4	71	0	58	7.3	4.4	.27	1.2	.01
15...	2130	23	1.3	2.8	69	0	57	6.3	4.8	.37	1.6	.01
FEB.												
04...	891	23	1.1	2.9	73	0	60	6.4	3.6	.01	.04	.00
19...	1400	23	1.1	2.9	69	0	57	5.6	3.2	.35	1.6	.02
MAR.												
01...	3450	23	1.0	2.3	71	0	58	6.0	3.0	.16	.71	.01
15...	875	24	1.1	2.8	73	0	60	7.2	3.2	.55	2.4	.02
APR.												
01...	3160	25	1.1	3.1	71	0	58	7.3	4.2	.74	3.3	.01
15...	2290	27	1.7	2.6	79	0	65	10	4.9	--	--	--
MAY												
01...	3540	--	1.1	3.2	80	0	66	9.0	3.9	.51	2.3	.04
15...	1760	27	1.1	3.2	82	0	67	8.6	3.6	.65	2.9	.03
30...	2110	28	1.9	--	83	0	68	8.5	4.7	.74	3.3	.00
JUNE												
14...	10600	27	1.9	3.0	82	0	67	8.1	5.1	.55	2.4	.03
JULY												
01...	3330	21	.9	2.8	63	0	52	7.3	2.4	.48	2.1	.00
15...	1400	20	.0	--	57	0	47	5.3	2.7	--	--	--
AUG.												
01...	1780	19	.0	--	62	0	51	4.8	2.5	--	--	--
15...	1350	22	1.8	2.3	71	0	58	4.9	3.5	--	--	--
SEP.												
03...	365	--	.3	5.0	72	0	59	5.0	8.5	--	--	--
16...	603	--	1.1	5.6	75	0	62	3.5	11	--	--	--

ARKANSAS RIVER BASIN

07198000 ILLINOIS RIVER NEAR GORE, OKLA.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	DIS- SOLVED NITRITE (NO2) (MG/L)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SURP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	CARBON DIOXIDE (CO2) (MG/L)
OCT.											
01...	.03	1.2	112	.15	76.5	80	7	.3	192	8.2	.9
NOV.											
01...	.03	.26	90	.12	476	73	3	.1	163	8.2	.9
15...	.03	.17	104	.14	562	73	3	.2	162	8.1	1.1
DEC.											
04...	.00	.14	81	.11	2450	65	1	.1	144	7.4	5.0
17...	.03	.39	84	.11	2360	63	5	.2	145	7.6	2.9
JAN.											
02...	.03	.28	81	.11	794	63	5	.1	142	7.8	1.8
15...	.03	.38	85	.12	489	63	6	.2	142	7.7	2.2
FEB.											
04...	.00	.01	78	.11	188	62	2	.2	142	7.3	5.9
19...	.07	.37	88	.12	333	62	5	.2	146	7.4	4.4
MAR.											
01...	.03	.17	79	.11	736	62	3	.1	144	7.2	7.2
15...	.07	.57	85	.12	201	64	5	.2	147	7.6	2.9
APR.											
01...	.03	.75	94	.13	802	67	9	.2	154	7.6	2.9
15...	--	.55	89	.12	550	74	10	.1	159	7.8	2.0
MAY											
01...	.13	.55	97	.13	927	--	--	--	160	7.6	3.2
15...	.10	.68	101	.14	480	72	5	.2	163	7.6	3.3
30...	.00	.74	106	.14	604	78	10	--	--	7.4	5.3
JUNE											
14...	.10	.58	103	.14	2950	75	8	.2	162	7.6	3.3
JULY											
01...	.00	.48	81	.11	728	56	4	.2	127	7.6	2.5
15...	--	.26	68	.09	257	50	3	--	117	7.8	1.4
AUG.											
01...	--	.42	80	.11	384	47	0	--	123	7.8	1.6
15...	--	.10	81	.11	295	62	4	.1	132	7.4	4.5
SEP.											
03...	--	.77	105	.14	103	--	--	--	164	7.8	1.8
16...	--	.89	107	.15	174	--	--	--	170	8.0	1.2

07228500 CANADIAN RIVER AT BRIDGEPORT, OKLA.

LOCATION.--Lat 35°34'00", long 98°22'45", in SE 1/4 SW1/4 sec.28, T.13 N., R.11 W., Blaine County, at gaging station at Chicago, Rock Island and Pacific Railroad Co. bridge, 1.0 mi (1.6 km) north of Bridgeport, 2.8 mi (4.5 km) upstream from Lumpmouth Creek, and at mile 267.1 (429.8 km).

DRAINAGE AREA.--25,229 mi² (65,343 km²), of which 4,801 mi² (12,435 km²) is probably noncontributing.

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

EXTREMES, Current year.--Dissolved solids: Maximum, 1,290 mg/l Mar. 17-31; minimum, 289 mg/l Oct. 11-12.
Hardness: Maximum, 750 mg/l May 5-19; minimum, 190 mg/l Oct. 11-12.

Specific conductance: Maximum daily, 2,030 micromhos/cm Mar. 24-27; minimum daily, 370 micromhos/cm Aug. 25.

Water temperatures: Maximum, 31.0°C June 20; minimum, freezing point on several days during December to February.

Period of record.--Dissolved solids: Maximum, 1,540 mg/l Apr. 3-16, 1970; minimum, 192 mg/l Sept. 24-25, 1971.

Hardness: Maximum, 750 mg/l May 5-19, 1974; minimum, 120 mg/l Sept. 24-25, 1971, Aug. 15-17, 1973.

Specific conductance: Maximum daily, 2,360 micromhos/cm Dec. 1, 1972; minimum daily, 223 micromhos/cm Aug. 16, 1973.

Water temperatures: Maximum, 40.0°C July 9, 22, 1973; minimum, freezing point on many days during winter months.

REMARKS.--No flow July 22-31.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	DIS- CHARGE (CFS)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED NITRATE (N) (MG/L)	DIS- SOLVED NITRATE (NO3) (MG/L)	DIS- SOLVED NITRITE (N) (MG/L)
OCT.												
01-03	33	110	24	52	261	0	214	200	48	.80	3.5	.01
04-05	134	84	18	41	195	0	160	150	41	.85	3.8	.01
06-08	58	110	25	53	247	0	203	220	46	.49	2.2	.01
09-10	108	65	24	39	219	0	180	120	29	.42	1.9	.01
11-12	550	60	10	18	140	0	115	88	17	.50	2.2	.01
13-14	154	93	21	36	142	0	116	220	39	.34	1.5	.02
15-30	24	130	24	--	269	0	221	260	40	.66	2.9	.02
NOV.												
01-09	18	150	25	44	287	0	235	260	30	.74	3.3	.01
10-20	19	150	26	41	286	0	235	300	29	.54	2.4	.01
21-30	120	140	27	50	273	0	224	270	46	.42	1.9	.01
DEC.												
01-09	84	150	28	56	271	0	222	310	49	.43	1.9	.00
10-14	67	160	34	79	282	0	231	360	87	.57	2.5	.01
15-21	80	--	37	130	277	0	227	360	170	.72	3.2	.01
22-31	75	160	36	91	277	0	227	380	100	.93	4.1	.01
JAN.												
01-08	31	190	43	110	328	0	269	440	130	1.3	5.8	.00
09-16	30	200	38	67	332	0	272	420	64	1.4	6.2	.01
17-22	82	140	30	69	245	0	201	310	75	.65	2.9	.01
23-31	118	130	38	160	249	0	204	310	230	.47	2.1	.02
FEB.												
01-14	95	150	44	170	257	0	211	380	240	.12	.53	.01
15-17	226	110	35	140	213	0	175	300	180	.37	1.6	.00
18-28	250	150	44	170	260	0	213	370	240	.37	1.6	.00
MAR.												
01-08	159	150	45	160	264	0	217	--	230	.31	1.4	.02
09-16	1530	120	39	180	220	0	180	340	250	.29	1.3	.02
17-31	200	140	46	220	261	0	214	350	310	.44	1.9	.03
APR.												
01-11	140	160	50	180	248	0	203	450	240	.17	.75	.01
12-14	346	130	31	87	168	0	138	330	110	.76	3.4	.07
15-28	195	180	47	120	200	0	164	500	140	.21	.93	.02
29-30	394	160	49	140	197	0	162	480	170	.63	2.8	.04
MAY												
01-04	1520	120	280	85	173	0	142	290	110	.46	2.0	.04
05-19	110	220	49	130	243	0	199	560	150	.06	.27	.00
20-26	96	--	35	54	217	0	178	380	47	.32	1.4	.00
27-30	98	220	42	81	172	0	141	580	93	.51	2.3	.00
JUNE												
01-07	91	--	31	50	209	0	171	340	54	.56	2.5	.00
08-13	306	95	20	26	150	0	123	220	25	.32	1.4	.01
14-30	21	--	26	35	218	0	179	280	24	.22	.97	.01
JULY												
01-13	13	--	29	31	176	0	144	410	17	--	--	--
14-21	1.2	70	19	47	148	0	121	200	25	--	--	--
AUG.												
01-07	17	110	24	42	205	0	168	260	23	--	--	--
08-24	19	100	20	28	176	0	144	220	14	--	--	--
25-31	4520	64	11	17	108	0	89	130	15	--	--	--
SEP.												
01-07	190	150	31	54	196	0	161	350	55	--	--	--
08-18	131	190	42	63	282	0	231	440	64	--	--	--
19-26	499	130	25	54	191	0	157	300	54	--	--	--
27-30	114	170	42	94	241	0	198	440	110	--	--	--

ARKANSAS RIVER BASIN

07228500 CANADIAN RIVER NEAR BRIDGEPORT, OKLA.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	DIS- SOLVED NITRITE (NO ₂) (MG/L)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	CARBON DIOXIDE (CO ₂) (MG/L)
OCT.											
01-03	.03	.81	614	.84	54.7	370	160	1.2	934	8.2	2.6
04-05	.03	.86	471	.64	170	280	120	1.1	745	8.1	2.5
06-08	.03	.50	624	.85	97.7	380	180	1.2	939	8.1	3.1
09-10	.03	.43	429	.58	125	260	82	1.1	687	8.2	2.2
11-12	.03	.51	289	.39	429	190	76	.6	466	7.6	5.6
13-14	.07	.36	529	.72	220	320	200	.9	790	8.1	1.8
15-30	.07	.68	685	.93	44.4	420	200	--	991	8.3	2.2
NOV.											
01-09	.03	.75	715	.97	34.7	480	240	.9	1010	8.3	2.3
10-20	.03	.55	729	.99	37.4	480	250	.8	1040	8.3	2.3
21-30	.03	.43	712	.97	231	460	240	1.0	1040	8.3	2.2
DEC.											
01-09	.00	.43	760	1.03	172	490	270	1.1	1100	7.9	5.5
10-14	.03	.58	906	1.23	164	540	310	1.5	1310	7.9	5.7
15-21	.03	.73	1010	1.37	218	--	--	--	1520	8.2	2.8
22-31	.03	.94	959	1.30	194	550	320	1.7	1380	8.1	3.5
JAN.											
01-08	.00	1.3	1090	1.48	91.2	650	380	1.9	1560	8.2	3.3
09-16	.03	1.4	978	1.33	79.2	660	380	1.1	1370	8.1	4.2
17-22	.03	.66	780	1.06	173	470	270	1.4	1130	8.1	3.1
23-31	.07	.49	1040	1.41	331	480	280	3.2	1610	8.1	3.2
FEB.											
01-14	.03	.13	1140	1.55	292	560	350	3.1	1770	7.8	6.5
15-17	.00	.37	917	1.25	560	420	240	3.0	1460	7.6	8.6
18-28	.00	.37	1170	1.59	790	560	340	3.1	1800	8.0	4.2
MAR.											
01-08	.07	.33	1180	1.60	507	560	340	2.9	1790	7.9	5.3
09-16	.07	.31	1100	1.50	4540	460	280	3.7	1750	7.9	4.4
17-31	.10	.47	1290	1.75	697	540	330	4.1	2040	8.0	4.2
APR.											
01-11	.03	.18	1250	1.70	472	610	400	3.2	1880	8.1	3.2
12-14	.23	.83	815	1.11	761	450	310	1.8	1210	8.0	2.7
15-28	.07	.23	1140	1.55	600	640	480	2.1	1570	8.1	2.5
29-30	.13	.67	1150	1.56	1220	600	440	2.5	1690	7.8	5.0
MAY											
01-04	.13	.50	761	1.04	3120	420	270	1.8	1140	7.9	3.5
05-19	.00	.06	1250	1.70	371	750	550	2.1	1700	8.1	3.1
20-26	.00	.32	835	1.14	216	--	--	--	1140	8.0	3.5
27-30	.00	.51	1140	1.55	302	720	580	1.3	1490	8.0	2.8
JUNE											
01-07	.00	.56	741	1.01	182	--	--	--	1040	7.7	6.7
08-13	.03	.33	491	.67	406	320	200	.6	711	7.5	7.6
14-30	.03	.23	662	.90	37.5	--	--	--	922	7.9	4.4
JULY											
01-13	--	.34	792	1.08	27.8	--	--	--	1040	8.2	1.8
14-21	--	.36	472	.64	1.53	250	130	1.3	705	7.9	3.0
AUG.											
01-07	--	.14	615	.84	28.2	370	210	.9	861	8.1	2.6
08-24	--	.23	506	.69	26.0	330	190	.7	731	8.0	2.8
25-31	--	.79	322	.44	3930	210	120	.5	492	7.8	2.7
SEP.											
01-07	--	.33	849	1.15	436	500	340	1.0	1110	8.0	3.1
08-18	--	.38	1100	1.50	389	650	420	1.1	1370	8.1	3.6
19-26	--	.41	741	1.01	998	430	270	1.1	1000	7.9	3.8
27-30	--	.27	1140	1.55	351	600	400	1.7	1470	8.1	3.1

ARKANSAS RIVER BASIN

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07228500 CANADIAN RIVER NEAR BRIDGEPORT, OKLA.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

	INSTAN- TANEOUS DIS- CHARGE (CFS)	DIS- SOLVED NITRATE (N) (MG/L)	DIS- SOLVED NITRATE (NO3) (MG/L)	DIS- SOLVED NITRITE (N) (MG/L)	DIS- SOLVED NITRITE (NO2) (MG/L)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS- SOLVED AMMONIA NITRO- GEN (N) (MG/L)	DIS- SOLVED AMMONIA (NH4) (MG/L)	DIS- SOLVED ORGANIC NITRO- GEN (N) (MG/L)	
DEC. 12...	65	.57	2.5	.04	.13	.61	.19	.24	.30	
DATE	DIS- SOLVED KJEL. NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	PHENOLS (UG/L)	TOTAL IRON (FE) (UG/L)	DIS- SOLVED IRON (FE) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	
DEC. 12...	.49	.27	1376	8.2	10.0	5	1300	20	80	
DATE	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL CAD- MIUM (CD) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	TOTAL COPPER (CU) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)	
DEC. 12...	40	<10	0	10	9	<100	1	30	30	
DATE	INSTAN- TANEOUS DIS- CHARGE (CFS)	ALDRIN (UG/L)	CHLOR- DANE (UG/L)	DDD (UG/L)	DDE (UG/L)	DDT (UG/L)	DI- AZINON (UG/L)	DI- ELDRIN (UG/L)	ENDRIN (UG/L)	HEPTA- CHLOR (UG/L)
DEC. 14...	--	.00	.0	.00	.00	.00	.00	.00	.00	.00
DATE	HEPTA- CHLOR EPOXIDE (UG/L)	LINDANE (UG/L)	MALA- THION (UG/L)	METHYL PARA- THION (UG/L)	PARA- THION (UG/L)	PCB (UG/L)	TOX- APHENE (UG/L)	2,4-D (UG/L)	2,4,5-T (UG/L)	SILVEX (UG/L)
DEC. 14...	.00	.00	.00	.00	.00	.0	--	.00	.00	.00

ARKANSAS RIVER BASIN

07228500 CANADIAN RIVER NEAR BRIDGEPORT, OKLA.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	852	912	1090	---	1720	1790	2000	1290	1120	904	1240	959
2	931	1010	1080	1640	1730	1770	1990	1190	1060	909	1440	1130
3	921	1000	1090	1630	1780	1750	1970	928	959	892	698	1130
4	678	957	994	1580	1720	1700	1940	1120	979	889	1320	1120
5	759	992	934	1500	1750	1700	1930	1620	1040	872	696	1190
6	929	990	1000	1450	1760	1700	1900	1900	1080	868	788	1260
7	929	986	1110	1450	1770	1680	1850	1740	1080	849	---	1250
8	882	965	1060	1500	1720	---	1760	1610	772	844	672	1320
9	516	973	1120	1390	1740	1650	1800	1730	637	842	660	1390
10	794	1000	1210	1330	1670	1670	1710	1910	589	842	667	1400
11	450	1000	1170	1370	1690	1580	1680	1890	698	839	684	1450
12	462	1010	1350	1320	1660	---	1300	1860	850	831	617	1430
13	747	1000	1250	1380	1670	1540	1020	1820	751	834	548	1440
14	802	1000	1290	1370	1670	1640	1280	1780	935	705	821	1470
15	---	992	1420	1140	1470	1710	1450	1680	932	705	1020	1470
16	---	981	1460	1380	1300	1760	1450	1620	919	724	859	1420
17	---	1010	1500	966	1480	1870	1530	1570	911	710	817	1380
18	914	1010	1460	891	1660	1900	1600	1490	904	717	788	1380
19	896	1000	1500	955	1510	1960	1580	1400	919	709	755	1170
20	964	1000	1340	1190	1720	1990	1580	1250	909	690	746	1050
21	978	1000	1420	1100	1700	1980	1380	1240	924	680	---	964
22	986	997	1320	1010	1720	1980	1390	1110	956	---	---	852
23	983	1010	1330	1450	1730	1950	1410	1000	956	---	---	700
24	980	937	1310	1450	1710	2030	1510	1020	942	---	---	928
25	980	892	1270	1500	1720	2030	1620	1090	945	---	370	1250
26	967	932	1300	1560	1820	2030	1740	1180	951	---	375	1290
27	972	1070	1280	1580	1840	2030	1800	1390	940	---	396	1320
28	964	1090	1320	1610	1820	2020	1960	1340	932	---	421	1480
29	919	1080	1440	1610	---	2010	---	1500	916	---	423	1660
30	936	1080	1560	1650	---	2000	1660	1650	918	---	580	1650
31	---	---	1470	1690	---	1990	---	---	---	---	870	---
MONTH	855	996	1270	1390	1690	1840	1650	1460	914	---	741	1260

TEMPERATURE (DEG. C) OF WATER , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16.0	13.0	9.0	---	5.0	8.0	17.0	19.0	24.0	23.0	25.0	24.0
2	21.0	10.0	10.0	0.0	4.0	9.0	17.0	19.0	24.0	25.0	24.0	19.0
3	22.0	9.0	10.0	0.0	4.0	10.0	13.0	20.0	25.0	25.0	23.0	18.0
4	15.0	7.0	5.0	2.0	4.0	13.0	10.0	20.0	25.0	25.0	24.0	19.0
5	14.0	9.0	4.0	2.0	3.0	13.0	10.0	22.0	23.0	24.0	23.0	20.0
6	17.0	10.0	4.0	1.0	2.0	12.0	12.0	22.0	23.0	25.0	25.0	20.0
7	18.0	10.0	4.0	0.0	0.0	14.0	10.0	23.0	22.0	25.0	---	22.0
8	21.0	9.0	5.0	0.0	2.0	---	10.0	---	23.0	26.0	25.0	22.0
9	25.0	9.0	6.0	0.0	3.0	15.0	11.0	24.0	25.0	26.0	24.0	21.0
10	22.0	10.0	5.0	0.0	4.0	10.0	13.0	24.0	25.0	24.0	24.0	21.0
11	15.0	10.0	5.0	0.0	4.0	10.0	12.0	22.0	26.0	24.0	---	22.0
12	14.0	10.0	7.0	0.0	5.0	---	15.0	23.5	26.0	24.0	---	19.0
13	15.0	11.0	8.0	0.0	5.0	10.0	15.0	24.0	27.0	25.0	24.0	19.0
14	---	12.0	8.0	2.0	4.0	10.0	15.0	24.0	27.0	---	25.0	18.0
15	---	10.0	4.0	3.0	4.0	9.0	13.0	21.0	29.0	25.0	25.0	18.0
16	---	12.0	4.0	3.0	5.0	---	14.0	20.0	28.0	26.0	26.0	20.0
17	---	12.0	5.0	2.0	3.0	10.0	15.0	25.0	28.0	28.0	26.0	20.0
18	15.0	13.0	5.0	2.0	7.0	12.0	18.0	24.0	30.0	28.0	25.0	20.0
19	17.0	19.0	0.0	1.0	6.0	10.0	19.0	25.0	30.0	28.0	25.0	22.0
20	16.5	10.0	2.0	3.0	6.0	8.0	17.0	25.0	31.0	30.0	24.0	20.0
21	---	9.0	2.0	4.0	3.0	6.0	17.0	23.0	30.0	30.0	---	18.0
22	19.0	13.0	4.0	3.0	4.0	4.0	18.0	25.0	29.0	---	---	18.0
23	18.0	10.0	3.0	3.0	5.0	0.0	20.0	26.0	23.0	---	---	19.0
24	18.0	9.0	3.0	4.0	3.0	3.0	20.0	24.0	25.0	---	---	15.0
25	18.0	9.0	4.0	3.0	3.0	5.0	19.0	25.0	23.0	---	23.0	16.0
26	16.0	8.0	3.0	4.0	5.0	7.0	20.0	26.0	25.0	---	22.0	18.0
27	15.0	8.0	3.0	4.0	7.0	9.0	20.0	26.0	24.0	---	20.0	---
28	14.0	7.0	3.5	4.5	7.0	11.0	20.0	27.0	---	---	19.0	15.5
29	14.0	8.0	3.0	3.0	---	12.0	---	28.0	25.0	---	19.0	8.0
30	15.0	8.0	2.0	5.0	---	14.0	20.0	28.0	23.0	---	21.0	16.0
31	---	---	2.0	4.0	---	16.0	---	---	---	---	23.0	---
MONTH	17.0	10.0	4.5	2.0	4.0	9.5	15.5	23.5	26.0	---	---	19.0

ARKANSAS RIVER BASIN

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07229100 CANADIAN RIVER NEAR NOBLE, OKLA.

LOCATION.--Lat 35°04'55", long 97°22'52", in N 1/2 sec.14, T.7 N., R.2 W., McClain County, 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).

DRAINAGE AREA.--25,911 mi² (67,109 km²), of which 4,801 mi² (12,435 km²) is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: October 1964 to May 1974 (discontinued).
Water temperatures: June 1973 to May 1974 (discontinued).

EXTREMES, Current year.--Dissolved solids: Maximum, 1,140 mg/l Apr. 1-10; minimum, 300 mg/l Oct. 12-14.
Hardness: Maximum, 540 mg/l Jan. 1-10, May 5-19; minimum, 160 mg/l Oct. 11.
Specific conductance: Maximum daily, 1,800 micromhos/cm Apr. 3; minimum daily, 439 micromhos/cm Oct. 13.
Water temperatures: Maximum, 30.5° C May 19; minimum, freezing point on several days during December and January.

Period of record.--Dissolved solids: Maximum, 1,140 mg/l Apr. 1-10, 1974; minimum, 168 mg/l Sept. 13-14, 1973.

Hardness: Maximum, 540 mg/l Jan. 1-10, 1974; minimum, 91 mg/l Sept. 2, 1973.

Specific conductance: Maximum daily, 1,800 micromhos/cm Apr. 3, 1974; minimum daily, 212 micromhos/cm Sept. 27, 1973.

Water temperatures: Maximum, 36.°C Aug. 14, 1973; minimum, freezing point on several days during winter months in 1974.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

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)	ALKA- LITY AS CACO3 (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLOR- IDE (CL) (MG/L)	DIS- SOLVED NITRATE (N) (MG/L)	DIS- SOLVED NITRATE (NO3) (MG/L)	DIS- SOLVED NITRITE (N) (MG/L)
OCT.												
01-05	209	63	20	55	223	0	183	110	41	2.0	8.8	.01
06-08	317	56	18	48	--	0	178	90	39	1.7	7.5	.00
09-10	118	72	24	65	279	0	229	--	51	2.6	12	.00
11...	296	39	14	63	208	0	171	54	44	.79	3.5	.01
12-14	1460	47	13	--	162	0	133	76	25	.74	3.3	.01
15-18	235	71	23	51	236	0	194	130	42	1.3	5.8	.00
19-26	68	81	31	79	302	0	248	170	62	2.6	11	.32
27-29	213	60	22	51	232	0	190	100	43	1.9	8.4	.01
30-31	82	83	32	77	331	0	271	140	61	3.1	14	.00
NOV.												
01-19	65	97	35	92	362	0	297	180	64	3.1	14	.00
20-21	245	47	19	41	221	0	181	45	32	1.3	5.7	.01
22-24	393	73	27	55	273	0	224	100	44	1.8	8.0	.00
25-30	706	75	29	63	326	0	267	85	52	2.0	8.8	.01
DEC.												
01-03	208	100	39	84	425	0	349	140	69	2.6	11	.01
04-09	300	89	31	67	314	0	258	150	56	2.2	9.7	.02
10-20	144	110	40	88	409	0	335	180	78	2.6	11	.01
21-31	168	120	42	99	384	0	315	230	97	2.5	11	.13
JAN.												
01-10	121	140	47	120	432	0	354	270	110	3.4	15	.37
11-13	137	120	53	130	--	0	380	310	130	4.3	19	.03
14-23	206	--	37	--	339	0	278	200	75	2.5	11	.00
24-31	211	120	38	140	296	0	243	250	170	2.1	9.3	.00
FEB.												
01-13	96	120	43	140	321	0	263	250	180	1.9	8.4	.01
14-20	192	110	41	140	266	0	218	290	170	1.4	6.2	.01
21-24	1240	74	26	74	226	0	185	150	77	1.2	5.3	.01
25-28	325	110	40	130	323	0	265	230	150	1.6	7.0	.01
MAR.												
01-09	175	120	45	150	307	0	252	300	160	.75	3.3	.12
10-12	3190	60	18	46	192	0	157	110	41	.87	3.9	.23
13-31	790	120	44	180	285	0	234	290	230	.87	3.9	.04
APR.												
01-10	142	120	55	180	295	0	242	360	220	--	--	--
11-16	457	100	35	89	212	0	174	280	96	--	--	--
17-20	140	130	44	98	245	0	201	380	100	--	--	--
21...	500	90	31	69	198	0	162	--	71	--	--	--
22-28	714	140	43	110	201	0	165	410	130	--	--	--
29-30	1900	95	31	--	195	0	160	280	86	--	--	--
MAY												
01-04	3440	77	24	61	187	0	153	180	64	--	--	--
05-19	228	130	52	130	272	0	223	370	140	--	--	--

ARKANSAS RIVER BASIN

07229100 CANADIAN RIVER NEAR NOBLE, OKLA.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	DIS- SOLVED NITRITE (NO ₂) (MG/L)	DIS- SOLVED NITRATE (N) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	CARBON DIOXIDE (CO ₂) (MG/L)
OCT.											
01-05	.03	2.0	443	.60	250	240	57	1.5	706	7.8	5.7
06-08	.00	1.7	400	.54	342	210	--	1.4	640	7.8	5.5
09-10	.00	2.6	514	.70	164	280	50	1.7	835	7.8	7.1
11...	.03	.80	360	.49	288	160	0	2.2	605	7.2	21
12-14	.03	.75	300	.41	1180	170	38	--	482	7.8	4.1
15-18	.00	1.3	471	.64	299	270	78	1.3	753	7.8	6.0
19-26	1.1	2.9	625	.85	115	330	82	1.9	991	8.0	4.8
27-29	.03	1.9	418	.57	240	240	50	1.4	691	7.8	5.9
30-31	.00	3.1	609	.83	135	340	68	1.8	966	8.0	5.3
NOV.											
01-19	.00	3.1	705	.96	124	390	89	2.0	1090	7.9	7.3
20-21	.03	1.3	348	.47	230	200	14	1.3	561	8.2	2.2
22-24	.00	1.8	489	.67	519	290	70	1.4	804	8.3	2.2
25-30	.03	2.0	524	.71	999	310	39	1.6	847	8.1	4.1
DEC.											
01-03	.03	2.6	669	.91	376	410	62	1.8	1080	7.8	11
04-09	.07	2.2	594	.81	481	350	92	1.6	950	7.9	6.3
10-20	.03	2.6	745	1.01	290	440	100	1.8	1190	7.9	8.2
21-31	.43	2.6	819	1.11	371	470	160	2.0	1270	7.9	7.7
JAN.											
01-10	1.2	3.8	937	1.27	306	540	190	2.2	1420	7.9	8.7
11-13	.10	4.3	1060	1.44	392	520	140	2.5	1590	8.0	7.4
14-23	.00	2.5	700	.95	389	--	--	--	1100	7.9	6.8
24-31	.00	2.1	891	1.21	508	460	210	2.9	1410	8.0	4.7
FEB.											
01-13	.03	1.9	933	1.27	242	480	210	2.8	1500	8.0	5.1
14-20	.03	1.4	905	1.23	469	440	230	2.9	1450	7.9	5.4
21-24	.03	1.2	536	.73	1800	290	110	1.9	898	7.8	5.7
25-28	.03	1.6	872	1.19	765	440	170	2.7	1400	8.0	5.2
MAR.											
01-09	.39	.87	981	1.33	464	490	230	3.0	1510	8.0	4.9
10-12	.76	1.1	401	.55	3450	220	66	1.3	645	7.8	4.9
13-31	.13	.91	1070	1.46	2280	480	250	3.6	1690	8.1	3.6
APR.											
01-10	--	1.4	1140	1.55	437	530	280	3.4	1750	7.9	5.9
11-16	--	1.1	751	1.02	927	390	220	2.0	1150	7.6	8.5
17-20	--	.91	918	1.25	347	510	300	1.9	1340	7.7	7.8
21...	--	.62	638	.87	861	350	190	1.6	978	7.5	10
22-28	--	1.4	989	1.35	1910	530	360	2.1	1440	7.7	6.4
29-30	--	1.7	702	.95	3600	360	210	--	1070	7.5	9.9
MAY											
01-04	--	.33	545	.74	5060	290	140	1.6	857	7.7	6.0
05-19	--	.90	1050	1.43	646	540	320	2.4	1550	7.8	6.9

DATE	INSTAN- TANEDUS UIS- CHARGE (CFS)	DIS- SOLVED NITRATE (N) (MG/L)	DIS- SOLVED NITRATE (NO ₃) (MG/L)	DIS- SOLVED NITRITE (N) (MG/L)	DIS- SOLVED NITRITE (NO ₂) (MG/L)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS- SOLVED AMMONIA GEN (N) (MG/L)	DIS- SOLVED AMMONIA (NH ₄) (MG/L)	DIS- SOLVED ORGANIC NITRO- GEN (N) (MG/L)	DIS- SOLVED KJEL. NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)
OCT.												
25...	117	.13	.58	.11	.36	.24	--	--	--	--	1.7	1150
NOV.												
29...	304	.20	.89	.02	.07	.22	--	--	--	--	.72	2050
DEC.												
12...	154	.60	2.7	.05	.16	.65	1.4	1.8	.90	2.3	.91	1163
FEB.												
22...	1720	.61	2.7	.02	.07	.62	--	--	--	--	--	690
MAR.												
14...	2120	.22	.97	.01	.03	.23	--	--	--	--	--	1450
APR.												
26...	264	.16	.71	.05	.16	.21	--	--	--	--	.83	1410

07229100 CANADIAN RIVER NEAR NOBLE, OKLA.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	PH (UNITS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	CHEM- ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	CHEM- ICAL OXYGEN DEMAND (HIGH LEVEL) (MG/L)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)	PHENOLS (UG/L)	TOTAL IRON (FE) (UG/L)	DIS- SOLVED IRON (FE) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)
OCT. 25...	8.1	16.0	11.4	124	--	--	7.2	7	--	--	--
NOV. 29...	7.9	10.0	10.7	101	19	--	36	5	--	50	--
DEC. 12...	8.1	10.5	10.0	97	--	22	5.2	0	1800	10	100
FEB. 22...	7.2	3.0	12.1	96	--	29	6.8	8	17000	80	1200
MAR. 14...	7.7	12.0	9.5	95	--	98	7.1	3	--	40	--
APR. 26...	--	21.0	9.8	118	38	--	4.6	8	6600	--	340

DATE	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL CAD- MIUM (CD) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)
OCT. 25...	--	--	--	--	--	--	--	--	--	--	--
NOV. 29...	20	--	0	--	0	--	25	--	1	--	30
DEC. 12...	30	<10	0	0	0	20	4	<100	2	380	30
FEB. 22...	17	30	0	20	0	40	40	<100	1	140	100
MAR. 14...	25	--	1	--	0	--	6	--	1	--	20
APR. 26...	--	<10	1	10	--	10	--	100	--	100	--

DATE	INSTAN- TANEOUS DIS- CHARGE (CF8)	ALDRIN (UG/L)	CHLOR- DANE (UG/L)	DDD (UG/L)	DDE (UG/L)	DDT (UG/L)	DI- AZINON (UG/L)	DI- ELDRIN (UG/L)	ENDRIN (UG/L)	ETHION (UG/L)	HEPTA- CHLOR (UG/L)
OCT. 25...	117	.00	.0	.00	.00	.00	.02	.01	.00	--	.00
NOV. 29...	304	.00	.0	.00	.00	.00	.02	.00	.00	--	.00
DEC. 14...	161	.00	.0	.00	.00	.00	.02	.00	.00	--	.00
FEB. 22...	1720	.00	.0	.00	.00	.00	.00	.00	.00	--	.00
MAR. 14...	2120	.00	.0	.00	.00	.00	.00	.00	.00	--	.00
APR. 26...	264	.00	.0	.00	.00	.00	.04	.00	.00	.00	.00
30...	5340	.00	.0	.00	.00	.00	.01	.00	.00	.00	.00
30...	4770	.00	.0	.00	.00	.00	.00	.00	.00	.00	.00
MAY 01...	3540	.00	.0	.00	--	.00	.00	.00	.00	.00	.00
02...	8900	.00	.0	.00	.00	.00	.00	.00	.00	.00	.00

DATE	HEPTA- CHLOR EPOXIDE (UG/L)	LINDANE (UG/L)	MALA- THION (UG/L)	METHYL PARA- THION (UG/L)	PARA- THION (UG/L)	PCB (UG/L)	TOX- APHENE (UG/L)	TRI- THION (UG/L)	2,4-D (UG/L)	2,4,5-T (UG/L)	SILVEX (UG/L)
OCT. 25...	.00	.02	.00	.00	.00	.0	--	--	.00	.00	.00
NOV. 29...	.00	.00	.00	.00	.00	.0	--	--	.00	.00	.00
DEC. 14...	.00	.00	.00	.00	.00	.0	--	--	.00	.00	.00
FEB. 22...	.00	.00	.00	.00	.00	.0	--	--	.12	.00	.01
MAR. 14...	.00	.00	.00	.00	.00	.0	--	--	.02	.00	.00
APR. 26...	.00	.00	.00	.00	.00	.0	--	.00	--	--	.00
30...	.00	.00	.00	.00	.00	.0	0	.00	.08	.01	--
30...	.00	.00	.00	.00	.00	.0	--	.00	.13	.01	--
MAY 01...	.00	.00	.00	.00	.02	.0	--	.00	.16	.01	--
02...	.00	.00	.00	.00	.00	.0	0	.00	.00	.00	.00

ARKANSAS RIVER BASIN

07229100 CANADIAN RIVER NEAR NOBLE, OKLA.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	615	1030	1020	1340	1450	1490	1750	833	---	---	---	---
2	697	1050	1050	1450	1430	1490	1760	639	---	---	---	---
3	793	1080	1060	1480	1440	1450	1800	848	---	---	---	---
4	685	1060	942	1470	1470	1460	1760	1050	---	---	---	---
5	747	1070	978	1490	1440	1470	1690	1280	---	---	---	---
6	527	1080	863	1480	1450	1440	1730	1390	---	---	---	---
7	616	1060	822	1450	1400	1470	1730	1460	---	---	---	---
8	718	1070	904	1350	1520	1450	1660	1490	---	---	---	---
9	796	1080	978	1170	1570	1440	1630	1560	---	---	---	---
10	889	1080	1050	1370	1480	654	1610	1580	---	---	---	---
11	619	1080	1090	1540	1530	552	1040	1600	---	---	---	---
12	494	1080	1080	1550	1510	679	1060	1620	---	---	---	---
13	439	1080	1130	1620	---	1260	1140	1600	---	---	---	---
14	486	1050	1120	1250	1450	1620	1140	1590	---	---	---	---
15	604	1040	1130	1220	1400	1540	1150	1540	---	---	---	---
16	714	1070	1170	1070	1400	1590	1190	1530	---	---	---	---
17	869	1160	1200	1030	1580	1660	1250	1460	---	---	---	---
18	815	1100	1190	1040	1420	1680	1300	1450	---	---	---	---
19	912	1080	1260	997	1280	1690	1330	1440	---	---	---	---
20	935	---	1150	988	1420	1650	1360	---	---	---	---	---
21	958	554	1360	1020	841	1580	962	---	---	---	---	---
22	975	686	1260	1060	728	1560	1380	---	---	---	---	---
23	986	873	1220	1120	856	1650	1250	---	---	---	---	---
24	997	---	1280	1300	1070	1670	1320	---	---	---	---	---
25	1020	724	1260	1380	1240	1710	1390	---	---	---	---	---
26	1020	732	1180	1380	1310	1710	1450	---	---	---	---	---
27	556	789	1200	1380	1430	1700	1510	---	---	---	---	---
28	676	876	1200	1420	1500	1680	1550	---	---	---	---	---
29	791	939	1180	1410	---	1670	1250	---	---	---	---	---
30	920	959	1160	1400	---	1680	840	---	---	---	---	---
31	991	---	1230	1420	---	1720	---	---	---	---	---	---
MONTH	770	983	1120	1310	1360	1490	1400	---	---	---	---	---

TEMPERATURE (DEG. C) OF WATER , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
(ONCE-DAILY)

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

ARKANSAS RIVER BASIN

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07229200 CANADIAN RIVER AT PURCELL, OKLA.

LOCATION.--Lat 35°00'50", long 97°20'50", in NW 1/4 sec.7, T.6 N., R.1 W., McClain County, at bridge on U.S. Highway 77, 0.5 mi (0.8 km) east of Purcell, 1 mi (1.6 km) upstream from Walnut Creek, and at mile 184.9 (297.5 km).

DRAINAGE AREA.--25,939 mi² (67,182 km²), of which 4,801 mi² (12,434 km²) is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: May 1974 to current year.
Water temperatures: May 1974 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

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)	ALKA- LINITY AS CACO3 (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED NITRATE (N) (MG/L)	DIS- SOLVED NITRATE (NO3) (MG/L)	DIS- SOLVED NITRITE (N) (MG/L)
MAY												
20-23	114	100	49	110	254	0	208	330	110	--	--	--
24-27	295	60	20	45	163	0	134	130	43	--	--	--
28-31	197	75	32	71	209	0	171	--	64	--	--	--
JUNE												
01-05	267	75	25	54	198	0	162	180	47	1.6	7.1	.00
06-07	283	48	14	32	156	0	128	--	28	1.8	7.8	.14
08-14	1210	63	18	40	185	0	152	--	34	1.4	6.2	.00
15-30	34	65	33	95	242	0	198	200	--	1.9	8.4	.00
JULY												
01-14	8.8	32	17	120	--	18	--	86	68	--	--	--
AUG.												
01-09	21	--	14	--	213	0	175	82	46	--	--	--
10-13	386	--	9.6	27	130	0	107	67	22	--	--	--
14-28	154	--	13	--	163	0	134	91	33	--	--	--
29-31	3650	74	18	--	140	0	115	160	29	--	--	--

DATE	DIS- SOLVED NITRITE (NO2) (MG/L)	DIS- SOLVED NITRATE (N) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	CARBON DIOXIDE (CO2) (MG/L)
MAY											
20-23	--	1.0	908	.87	342	450	240	2.3	1360	7.6	10
24-27	--	1.3	408	.55	325	230	98	1.3	672	7.8	4.1
28-31	--	1.5	643	.42	238	320	150	1.7	994	7.6	8.4
JUNE											
01-05	.00	1.6	522	.71	376	290	130	1.4	793	7.8	5.0
06-07	.46	1.9	312	.55	--	180	50	1.0	508	7.6	6.3
08-14	.00	1.4	406	.84	56.8	230	80	1.1	636	7.6	7.4
15-30	.00	1.9	619	.84	56.8	300	100	2.4	975	7.8	6.1
JULY											
01-14	--	2.0	544	.74	12.9	150	--	4.3	895	8.5	--
AUG.											
01-09	--	4.0	405	.55	23.0	--	--	--	664	7.7	6.8
10-13	--	2.3	260	.35	271	--	--	--	409	7.4	8.3
14-28	--	2.9	346	.47	144	--	--	--	572	7.2	16
29-31	--	1.8	417	.57	4110	260	140	--	631	7.6	5.6

DATE	INSTAN- TANEOUS DIS- CHARGE (CFS)	DIS- SOLVED NITRATE (N) (MG/L)	DIS- SOLVED NITRATE (NO3) (MG/L)	DIS- SOLVED NITRITE (N) (MG/L)	DIS- SOLVED NITRITE (NO2) (MG/L)	DIS- SOLVED NITRITE (N) (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)
JUNE										
27...	14	.03	.13	.32	1.1	.35	1080	9.5	27.0	14.0
JULY										
17...	6.4	.00	.00	.00	.00	.00	800	10.0	34.0	13.1
AUG.										
16...	36	.02	.09	.31	1.0	.33	590	9.0	32.0	10.9
SEP.										
27...	354	.34	1.5	.03	.10	.43	1200	8.1	23.0	8.7

ARKANSAS RIVER BASIN

07229200 CANADIAN RIVER NEAR PURCELL, OKLA.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

	PER- CENT SATUR- ATION	CHEM- ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)	PHENOLS (UG/L)	TOTAL IRON (FE) (UG/L)	DIS- SOLVED IRON (FE) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL CAD- MIUM (CD) (UG/L)	
DATE										
JUNE 27...	189	14	7.5	4	130	20	40	40	<1	
JULY 17...	190	75	5.8	4	--	30	--	10	--	
AUG. 16...	156	--	18	10	--	50	--	0	--	
SEP. 27...	107	--	.4	4	--	70	--	30	--	
	DIS- SOLVED CAD- MIUM (CD) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)	
DATE										
JUNE 27...	--	0	0	10	--	<100	--	130	10	
JULY 17...	1	--	0	--	9	--	4	--	0	
AUG. 16...	<1	--	0	--	--	--	3	--	20	
SEP. 27...	<1	--	0	--	9	--	3	--	20	
INSTAN- TANEOUS DIS- CHARGE (CFS)	ALDRIN (UG/L)	CHLOR- DANE (UG/L)	DDD (UG/L)	DDE (UG/L)	DDT (UG/L)	DI- AZINON (UG/L)	DI- ELDRIN (UG/L)	ENDRIN (UG/L)	ETHION (UG/L)	HEPTA- CHLOR (UG/L)
DATE										
JUNE 27...	14	.00	.0	.00	.00	.09	.01	.00	--	.00
JULY 17...	6.4	.00	.0	.00	.00	.06	.00	.00	--	.00
AUG. 16...	36	.00	.0	.00	.00	.07	.00	.00	--	.00
SEP. 27...	354	.00	.0	.00	.00	.01	.00	.00	.00	.00
HEPTA- CHLOR EPOXIDE (UG/L)	LINDANE (UG/L)	MALA- THION (UG/L)	METHYL PARA- THION (UG/L)	PARA- THION (UG/L)	PCB (UG/L)	TUX- APHENE (UG/L)	TRI- THION (UG/L)	2,4-D (UG/L)	2,4,5-T (UG/L)	SILVEX (UG/L)
DATE										
JUNE 27...	.00	.01	.00	.00	.00	.0	0	--	.00	.00
JULY 17...	.00	.00	.00	.00	.00	.0	0	--	.00	.00
AUG. 16...	.00	.00	.00	.00	.00	.0	0	--	.09	.00
SEP. 27...	.00	.00	.00	.00	.00	.0	0	.00	.03	.00

ARKANSAS RIVER BASIN

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07229200 CANADIAN RIVER NEAR PURCELL, OKLA.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	638	1010	633	---
2	---	---	---	---	---	---	---	---	722	986	474	---
3	---	---	---	---	---	---	---	---	1050	921	616	---
4	---	---	---	---	---	---	---	---	790	933	614	---
5	---	---	---	---	---	---	---	---	798	870	681	---
6	---	---	---	---	---	---	---	---	482	842	675	---
7	---	---	---	---	---	---	---	---	535	828	758	---
8	---	---	---	---	---	---	---	---	709	809	746	---
9	---	---	---	---	---	---	---	---	528	830	747	---
10	---	---	---	---	---	---	---	---	592	---	384	---
11	---	---	---	---	---	---	---	---	592	887	364	---
12	---	---	---	---	---	---	---	---	649	894	439	---
13	---	---	---	---	---	---	---	---	694	887	458	---
14	---	---	---	---	---	---	---	---	743	898	515	---
15	---	---	---	---	---	---	---	---	805	---	616	---
16	---	---	---	---	---	---	---	---	911	---	---	---
17	---	---	---	---	---	---	---	---	948	---	---	---
18	---	---	---	---	---	---	---	---	994	---	---	---
19	---	---	---	---	---	---	---	---	919	---	---	---
20	---	---	---	---	---	---	---	1410	985	---	---	---
21	---	---	---	---	---	---	---	1380	1020	---	---	---
22	---	---	---	---	---	---	---	1310	1050	---	---	---
23	---	---	---	---	---	---	---	1250	1040	---	---	---
24	---	---	---	---	---	---	---	691	1000	---	---	---
25	---	---	---	---	---	---	---	674	1020	---	---	---
26	---	---	---	---	---	---	---	619	953	---	---	---
27	---	---	---	---	---	---	---	---	973	---	---	---
28	---	---	---	---	---	---	---	---	1010	---	---	---
29	---	---	---	---	---	---	---	823	968	---	467	---
30	---	---	---	---	---	---	---	946	1200	---	768	---
31	---	---	---	---	---	---	---	1140	---	---	---	---
MONTH	---	---	---	---	---	---	---	---	844	---	---	---

TEMPERATURE (DEG. C) OF WATER , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
(ONCE-DAILY)

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

ARKANSAS RIVER BASIN

07229900 LAKE THUNDERBIRD NEAR NORMAN, OKLA.

LOCATION.--Lat 35°13'15", long 97°13'05", in NW 1/4 SE 1/4 sec.29, T.9 N., R.1 E., Cleveland County, upstream face of dam at outlet gate, 0.2 mi (0.3 km) upstream from gaging station, 13.0 mi (20.9 km) east of Norman, and at mile 96.4 (155.1 km).

DRAINAGE AREA.--256 mi² (633 km²).

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	RESER- VOIR STORAGE (AC-FT)	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)	ALKA- LINITY AS CACO3 (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED NITRATE (N) (MG/L)	DIS- SOLVED NITRATE (NO3) (MG/L)	DIS- SOLVED NITRITE (N) (MG/L)
OCT. 23...	122200	33	19	15	191	0	157	9.5	24	.16	.71	.00
NOV. 15...	123000	33	19	16	194	0	159	8.2	--	.15	.66	.01
FEB. 01...	122700	35	20	16	--	0	--	7.6	23	.01	.04	.00
12...	121900	35	21	16	202	0	166	7.6	23	.03	.13	.00
MAR. 06...	121100	36	20	16	205	0	168	8.1	23	.02	.09	.00
25...	122200	36	20	16	200	0	164	8.9	25	.12	.53	.01
MAY 09...	122400	36	22	17	213	0	175	11	26	.00	.00	.01
31...	121800	37	22	17	214	0	176	13	28	.12	.53	.01
JULY 11...	119400	38	22	18	219	0	180	9.6	27	.06	.27	.01
AUG. 19...	115000	36	21	19	209	0	171	9.4	29	--	--	--
SEP. 20...	113600	33	23	18	206	0	169	8.9	27	--	--	--

DATE	DIS- SOLVED NITRITE (NO2) (MG/L)	DIS- SOLVED NITRATE (N) (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)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (JTU)	CARBON DIOXIDE (CO2) (MG/L)
OCT. 23...	.00	.16	211	.29	160	4	.5	382	7.9	--	--	3.8
NOV. 15...	.03	.16	237	.32	160	2	.6	387	7.8	--	--	4.9
FEB. 01...	.00	.01	214	.29	170	--	.5	398	7.6	--	--	--
12...	.00	.03	221	.30	170	8	.5	399	7.7	--	2	6.4
MAR. 06...	.00	.02	218	.30	170	4	.5	408	7.7	--	1	6.5
25...	.03	.13	223	.30	170	8	.5	411	8.2	--	1	2.0
MAY 09...	.03	.00	234	.32	180	6	.6	420	7.8	21.5	4	5.4
31...	.03	.13	235	.32	180	7	.5	422	8.0	24.0	8	3.4
JULY 11...	.03	.07	244	.33	190	6	.6	427	7.9	37.0	30	4.4
AUG. 19...	--	.08	237	.32	180	5	.6	425	7.8	28.0	20	5.3
SEP. 20...	--	.23	223	.30	180	8	.6	416	8.1	23.5	8	2.6

ARKANSAS RIVER BASIN

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07231000 LITTLE RIVER NEAR SASAKWA, OKLA.

LOCATION.--Lat 34°59'02", long 96°33'01", in NE 1/4 sec.22, T.6 N., R.7 E., Seminole County, at gaging station at bridge on county road, 2.8 mi (4.5 km) northwest of Sasakwa, 8.7 mi (14.0 km) downstream from Salt Creek, and at mile 84.1 (38.8 km).

DRAINAGE AREA.--865 mi² (2,240 km²).

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

EXTREMES, Current year.--Specific conductance: Maximum daily, 3,960 micromhos/cm July 5; minimum daily, 264 micromhos/cm Nov. 25.

Water temperatures: Maximum, 36.5°C July 22; minimum, 0.5°C Jan. 3, 9.

Period of record.--Specific conductance (1955-64, 66-74): Maximum daily, 138,000 micromhos/cm Oct. 31, 1956; minimum daily, 134 micromhos/cm Sept. 22, 1972.

Water temperatures (1955-64, 1966-74): Maximum, 38.0°C July 20, 27, 28, 30, 1961; minimum, freezing point on several days during winter months.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	INSTANTANEOUS DIS- CHARGE (CFS)	DIS- SOLVED CAL- CIUM (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG/L)	DIS- SOLVED SODIUM (MG/L)	BICAR- BONATE (MG/L)	CAR- BONATE (MG/L)	ALKA- LINITY AS CACU3 (MG/L)	DIS- SOLVED SULFATE (MG/L)	DIS- SOLVED CHLO- RIDE (MG/L)	DIS- SOLVED NITRATE (MG/L)	DIS- SOLVED NITRATE (MG/L)	DIS- SOLVED NITRITE (MG/L)
OCT.												
05...	225	55	24	120	188	0	154	13	230	.14	.62	.01
13...	4540	24	8.7	31	95	0	78	7.3	58	.23	1.0	.01
25...	153	65	31	--	229	0	188	13	300	.18	.80	.03
NOV.												
05...	88	89	40	220	268	0	220	18	470	.18	.80	.01
15...	51	120	59	340	335	0	275	29	--	.07	.31	.01
25...	9090	19	6.5	--	79	0	65	6.4	39	.28	1.2	.02
DEC.												
05...	1030	50	23	73	203	0	167	14	150	.18	.80	.01
15...	207	65	51	280	189	0	155	29	570	.24	1.1	.01
25...	164	94	50	290	284	0	233	25	570	.23	1.0	.01
JAN.												
05...	17600	140	70	380	411	0	337	47	780	.23	1.0	.00
15...	94	120	58	340	362	0	297	45	--	.28	1.2	.00
FEB.												
05...	73	120	65	360	345	0	283	43	750	.03	.13	.00
15...	152	59	26	120	210	0	172	23	230	.91	4.0	.01
25...	287	68	33	--	266	0	218	24	270	.36	1.6	.24
MAR.												
05...	250	74	36	170	268	0	220	38	310	.12	.53	.01
15...	161	86	38	190	277	0	227	29	380	.17	.75	.01
25...	117	100	52	270	327	0	268	44	520	.15	.66	.03
APR.												
05...	74	--	58	250	347	0	285	42	540	--	--	--
15...	74	95	56	270	317	0	260	45	540	--	--	--
30...	8430	31	9.9	--	111	0	91	9.9	87	--	--	--
MAY												
05...	461	56	25	99	205	0	168	18	200	.36	1.6	.02
15...	246	54	29	83	246	0	202	18	160	.24	1.1	.00
26...	1750	32	13	57	112	0	92	16	110	.41	1.8	.89
JUNE												
05...	839	41	17	--	131	0	107	12	160	--	--	--
15...	117	67	31	150	243	0	199	20	300	--	--	--
25...	32	50	58	320	328	0	269	39	550	--	--	--
JULY												
05...	30	130	78	580	231	0	189	45	1200	--	--	--
15...	5.1	94	55	340	336	0	276	49	650	--	--	--
25...	2.2	100	57	320	351	0	288	33	590	--	--	--
AUG.												
05...	6.4	51	26	150	203	4	173	--	260	--	--	--
15...	8.8	110	59	430	210	0	172	31	870	--	--	--
25...	1.1	96	64	390	256	0	210	29	780	--	--	--
SEP.												
05...	65	30	13	61	119	0	98	14	100	--	--	--
15...	16	69	26	170	232	0	190	23	320	--	--	--
25...	148	100	--	410	159	0	130	26	830	--	--	--

ARKANSAS RIVER BASIN

07231000 LITTLE RIVER NEAR SASAKWA, OKLA.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	DIS- SOLVED NITRITE (NO2) (MG/L)	DIS- SOLVED NITRATE (N) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	CARBON DIOXIDE (CO2) (MG/L)
OCT.											
05...	.03	.15	577	.78	351	240	82	3.4	1070	8.3	1.5
13...	.03	.24	205	.28	2510	96	18	1.4	354	7.8	2.4
25...	.10	.21	698	.95	288	290	100	--	1300	8.1	2.9
NOV.											
05...	.03	.19	1020	1.39	242	390	170	4.9	1890	8.3	2.2
15...	.03	.08	1560	2.12	215	540	270	6.4	2800	8.2	3.4
25...	.07	.30	166	.23	4070	74	9	--	270	8.0	1.3
DEC.											
05...	.03	.19	432	.59	1200	220	53	2.1	811	7.8	5.1
15...	.03	.25	1150	1.56	643	370	220	6.3	2090	8.3	1.5
25...	.03	.24	1190	1.62	527	440	210	6.0	2200	7.8	7.2
JAN.											
05...	.00	.23	1650	2.24	78400	640	300	6.5	3000	8.0	6.6
15...	.00	.28	1440	1.96	365	540	240	6.4	2670	8.0	5.8
FEB.											
05...	.00	.03	1540	2.09	304	570	280	6.6	2880	8.0	5.5
15...	.03	.92	565	.77	232	250	82	3.3	1100	7.6	8.4
25...	.79	.60	649	.88	503	310	87	--	1240	8.1	3.4
MAR.											
05...	.03	.13	732	1.00	494	330	110	4.1	1300	8.1	3.4
15...	.03	.18	887	1.21	386	370	140	4.3	1710	8.0	4.4
25...	.10	.18	1180	1.60	373	460	200	5.5	2070	8.2	3.3
APR.											
05...	--	.08	1200	1.63	240	--	--	--	2240	8.1	4.4
15...	--	.22	1210	1.65	242	470	210	5.4	2240	8.1	4.0
30...	--	.55	266	.36	6050	120	27	--	489	7.6	4.5
MAY											
05...	.07	.38	530	.72	660	240	75	2.8	972	8.4	1.3
15...	.00	.24	497	.68	330	250	52	2.3	896	8.0	3.9
26...	2.9	1.3	317	.43	1500	130	42	2.1	537	7.5	5.7
JUNE											
05...	--	2.3	430	.58	974	170	65	--	724	7.5	6.6
15...	--	.68	735	1.00	232	300	96	3.8	1320	8.0	3.9
25...	--	.59	1320	1.80	114	360	91	7.3	2320	8.2	3.3
JULY											
05...	--	.17	2320	3.16	188	650	460	9.9	3960	7.9	4.7
15...	--	.11	1380	1.88	19.0	460	190	6.9	2480	8.0	5.4
25...	--	.26	1370	1.86	8.14	480	190	6.3	2410	8.0	5.6
AUG.											
05...	--	.32	679	.92	11.7	230	61	4.3	1210	8.5	1.1
15...	--	.28	1790	2.43	42.5	520	350	8.2	3050	8.0	3.4
25...	--	.45	1660	2.26	4.93	500	290	7.6	2880	7.7	8.2
SEP.											
05...	--	1.1	308	.42	54.1	130	32	2.3	560	7.6	4.8
15...	--	.40	787	1.07	34.0	280	90	4.4	1400	7.9	4.7
25...	--	21	1690	2.30	675	--	--	--	2830	8.1	2.0

ARKANSAS RIVER BASIN

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07231000 LITTLE RIVER NEAR SASAKWA, OKLA.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	657	1170	764	2440	2680	1340	1460	820	933	2580	2020	1390
2	818	1300	820	2250	2770	1360	1760	766	788	2560	1510	1560
3	857	1330	828	2890	2770	1340	2110	741	857	2560	1510	2400
4	896	1580	740	2800	2840	1340	2140	803	906	2350	1260	564
5	1050	1810	782	2890	2800	1280	2190	972	724	3960	1210	560
6	1040	1970	972	2860	---	1240	2320	1120	766	3420	1290	718
7	762	2110	1180	2720	2960	1570	2490	1280	641	3080	1390	720
8	901	2250	1400	2610	---	1940	2710	1430	836	2670	1510	963
9	970	2340	1580	2750	2260	2230	2690	1610	804	2940	1510	960
10	860	2340	1740	2610	---	2340	2560	1290	837	2940	1380	1030
11	479	2340	2210	2630	1560	2300	2650	1020	833	3020	1300	1190
12	580	2450	2030	2840	1590	1100	3300	946	1270	2990	1680	1190
13	349	2480	2120	2880	1590	1070	2030	910	1200	2480	1810	1260
14	400	2570	2110	2840	1570	1360	2150	903	1200	2470	1810	1400
15	456	2670	2210	2650	1070	1670	2180	896	1320	2480	3050	1400
16	629	2680	2200	2650	1530	1930	2120	857	1460	2360	3530	1890
17	750	2570	2230	2610	1420	2010	2320	839	1580	2520	3630	962
18	813	2610	2340	2580	1260	2110	2390	816	1820	2790	3620	3280
19	845	2660	1650	2550	1860	2310	2610	788	1990	2900	3430	1060
20	830	533	1480	2340	1590	2290	2690	752	1960	3130	3420	917
21	872	516	1700	2410	828	1990	1200	740	2030	3130	3340	1220
22	878	691	1980	2450	1310	1950	2160	745	2100	2920	3340	1540
23	878	691	2080	2520	1100	2150	2430	780	2200	2740	3220	2120
24	920	452	2220	2470	1270	2060	1940	1430	2350	2430	3220	2220
25	1280	264	2240	2550	1210	2010	2200	1020	2320	2410	2880	2830
26	1550	339	2270	2550	1280	2230	2150	537	2440	2260	2880	1370
27	1650	348	2380	2730	1310	2270	2360	457	2410	2150	1280	1690
28	1360	482	2360	2340	1340	1190	2460	514	2480	2140	1970	1010
29	1450	644	2580	2410	---	1110	2180	632	2560	2150	976	1160
30	1420	718	2450	2390	---	1000	482	761	2600	2220	1140	1160
31	800	---	2580	2700	---	1040	---	989	---	1960	1280	---
MONTH	903	1560	1810	2610	1750	1710	2210	909	1540	2670	2170	1390

TEMPERATURE (DEG. C) OF WATER , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21.0	15.0	12.0	1.0	12.0	15.5	21.0	19.5	25.0	32.5	30.0	25.5
2	23.0	14.0	13.5	1.0	12.0	18.0	19.5	22.0	26.0	32.0	29.5	20.0
3	25.0	14.0	15.0	0.5	11.0	17.5	19.5	23.0	27.0	31.5	28.0	21.0
4	23.0	14.0	13.0	1.0	11.0	19.0	16.5	22.0	23.0	32.5	31.0	21.5
5	22.0	11.0	10.0	3.0	11.5	18.0	17.5	22.0	25.0	33.0	29.5	22.5
6	21.0	11.0	7.5	2.0	9.0	19.0	18.0	23.0	26.5	35.0	26.0	22.5
7	22.0	11.5	7.5	2.5	4.0	20.0	19.5	23.5	23.0	34.5	27.5	24.5
8	25.0	13.0	7.0	3.5	6.0	19.5	19.0	24.5	26.0	34.5	29.0	25.0
9	24.5	12.0	7.5	0.5	6.0	19.5	19.5	25.5	26.0	34.5	29.5	26.0
10	25.0	12.5	6.0	1.0	6.5	20.0	15.0	26.0	27.0	34.0	29.5	25.0
11	21.0	11.5	7.5	1.0	7.5	19.5	20.0	26.0	27.0	34.0	28.0	26.0
12	19.5	14.5	10.5	1.5	9.5	18.0	21.5	25.0	27.5	35.0	29.5	26.0
13	19.0	16.5	9.5	3.0	8.5	16.0	24.0	26.0	28.5	35.0	30.5	23.0
14	19.5	18.5	8.0	3.0	13.0	15.5	19.5	24.0	29.5	35.0	32.0	24.0
15	19.0	17.0	8.0	5.0	9.0	14.0	20.5	25.5	30.5	33.0	34.0	24.0
16	19.5	14.0	5.5	8.0	11.5	15.0	20.5	26.5	28.0	34.0	32.0	22.0
17	18.0	13.5	5.5	11.0	12.0	16.0	20.0	27.0	25.0	34.0	34.0	21.5
18	19.0	16.0	8.0	10.0	12.0	20.0	21.0	27.5	29.5	34.0	34.0	22.0
19	19.0	17.0	6.5	8.0	12.0	16.0	23.0	27.5	31.0	34.5	33.0	22.5
20	19.5	16.0	2.5	9.0	13.0	11.5	20.0	28.0	33.5	35.5	32.5	23.0
21	19.0	13.5	8.0	9.5	10.0	10.0	21.0	28.0	33.5	36.0	32.0	23.5
22	19.5	15.0	4.5	9.0	9.0	11.5	22.0	28.0	30.5	36.5	31.5	22.0
23	20.0	16.0	7.5	8.0	9.0	8.0	24.0	29.0	30.5	36.0	32.5	20.5
24	20.0	15.0	8.0	9.0	9.0	8.0	24.0	24.0	29.5	34.5	32.0	17.0
25	19.5	13.0	7.0	8.0	10.0	8.5	24.0	23.0	29.0	33.0	32.5	18.0
26	19.0	13.5	6.0	10.0	9.5	15.5	25.5	21.5	28.5	35.0	31.5	20.5
27	19.0	13.0	5.5	10.0	11.5	18.5	21.0	23.0	29.5	35.0	28.0	21.5
28	16.5	12.0	6.0	9.5	13.5	18.5	24.0	25.5	29.5	33.0	26.0	21.0
29	14.5	11.0	7.0	10.0	---	19.5	20.5	28.0	30.5	33.0	27.0	21.5
30	14.0	12.0	7.0	10.0	---	19.0	18.0	29.0	31.5	33.5	28.0	21.0
31	14.0	---	4.5	11.5	---	20.5	---	24.5	---	33.0	30.5	---
MONTH	20.0	14.0	8.0	6.0	10.0	16.5	20.5	25.0	28.0	34.0	30.0	22.5

ARKANSAS RIVER BASIN

07231500 CANADIAN RIVER AT CALVIN, OKLA.

LOCATION.--Lat 34°58'32", long 96°14'24", in NE 1/4 SW 1/4 sec.22, T.6 N., R.10 E., Hughes County, at gaging station at bridge on U.S. Highway 75, 0.5 mi (0.8 km) northeast of Calvin, 2.5 mi (4.0 km) upstream from Shawnee Creek, 8.5 mi (13.7 km) downstream from Little River, and at mile 93.9 (151.1 km).

DRAINAGE AREA.--27,952 mi² (72,396 km²), of which 4,801 mi² (12,435 km²) is probably noncontributing.

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

Water temperatures: July 1965 to current year.

EXTREMES, Current year.--Specific conductance: Maximum daily, 2,420 micromhos/cm July 28; minimum daily, 238 micromhos/cm Nov. 25.

Water temperatures: Maximum, 26.0°C Aug. 21, 23; minimum, freezing point on Dec. 20, Jan. 2-4, and Feb. 8.

Period of record.--Specific conductance: Maximum daily, 11,400 micromhos/cm Nov. 17, 1966; minimum daily, 205 micromhos/cm Nov. 1, 1972.

Water temperatures: Maximum, 32.0°C July 8, 1965; minimum, freezing point on many days during the winter months.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	INSTANTANEOUS DISCHARGE (CFS)	DIS-SOLVED CALCIUM (MG/L)	DIS-SOLVED MAGNESIUM (MG/L)	DIS-SOLVED SODIUM (MG/L)	BICARBONATE (MG/L)	CARBONATE (MG/L)	ALKALINITY AS CaCO ₃ (MG/L)	DIS-SOLVED SULFATE (MG/L)	DIS-SOLVED CHLORIDE (MG/L)	DIS-SOLVED NITRATE (MG/L)	DIS-SOLVED NITRATE (NO ₃) (MG/L)	DIS-SOLVED NITRITE (MG/L)
OCT.												
05...	870	54	19	64	211	0	173	33	110	.26	1.2	.04
13...	21000	33	9.3	29	125	0	103	14	50	.35	1.6	.01
25...	465	59	26	78	247	0	203	35	140	.17	.75	.01
NOV.												
05...	847	78	30	100	261	25	256	45	170	.50	2.2	.01
15...	273	81	36	140	302	0	248	52	260	.52	2.3	.00
25...	44600	27	6.1	12	113	0	93	8.7	18	.32	1.4	.01
DEC.												
05...	3610	56	20	54	221	6	191	30	92	.45	2.0	.00
15...	959	89	31	110	319	9	277	54	200	.34	1.5	.04
25...	883	98	37	120	354	0	290	76	220	.73	3.2	.01
JAN.												
05...	436	110	41	170	417	0	342	66	300	.71	3.1	.00
15...	619	100	40	150	380	0	312	81	260	.98	4.3	.01
25...	458	97	38	150	348	0	285	80	270	.58	2.6	.00
FEB.												
05...	443	81	38	150	280	0	230	90	260	.33	1.5	.00
15...	480	82	36	140	303	0	249	77	250	.20	.89	.01
25...	1600	65	25	80	224	0	184	82	120	.77	3.4	.04
MAR.												
05...	769	72	34	120	277	0	227	87	210	.18	.80	.00
15...	3880	96	33	140	221	0	181	200	220	.79	3.5	.00
25...	972	100	39	160	332	0	272	140	240	.79	3.5	.01
APR.												
05...	473	91	44	170	300	0	246	150	270	.37	1.6	.01
15...	1100	110	46	170	268	0	220	280	250	.81	3.6	.01
22...	2060	39	12	49	121	0	99	38	80	--	--	--
MAY												
05...	2950	70	25	72	214	0	176	110	120	--	--	--
15...	738	81	33	100	267	7	231	110	160	--	--	--
26...	15500	53	16	45	185	0	152	63	62	--	--	--
JUNE												
05...	4120	35	9.0	33	126	0	103	23	60	--	--	--
15...	707	59	20	68	215	0	176	49	120	--	--	--
25...	154	70	33	160	242	8	242	62	290	--	--	--
JULY												
05...	182	78	37	270	188	0	154	54	520	--	--	--
15...	50	80	41	260	244	0	200	43	500	--	--	--
25...	26	95	43	250	245	0	201	31	540	--	--	--
AUG.												
05...	32	82	43	230	260	0	213	29	460	--	--	--
13...	530	43	18	64	166	0	136	40	98	--	--	--
25...	24	83	26	170	217	0	178	28	350	--	--	--
SEP.												
05...	505	62	23	83	143	0	117	120	140	--	--	--
15...	138	100	34	110	224	0	184	180	170	--	--	--
25...	727	56	19	50	147	0	121	110	76	--	--	--

ARKANSAS RIVER BASIN

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07231500 CANADIAN RIVER AT CALVIN, OKLA.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	DIS- SOLVED NITRITE (NO ₂) (MG/L)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (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)	CARBON DIOXIDE (CO ₂) (MG/L)
OCT.												
05...	.13	.30	.13	420	.57	987	210	40	1.9	745	8.1	2.7
13...	.03	.36	.11	224	.30	12700	120	18	1.1	389	7.8	3.2
25...	.03	.18	.11	474	.64	595	250	52	2.1	871	8.2	2.5
NOV.												
05...	.03	.51	.28	620	.84	1420	320	63	2.4	1070	8.4	2.0
15...	.00	.52	.48	757	1.03	558	350	100	3.3	1350	8.3	2.4
25...	.03	.33	.22	144	.20	17300	93	0	.5	262	8.2	1.1
DEC.												
05...	.00	.45	.80	399	.54	3890	220	31	1.6	709	8.5	1.2
15...	.13	.38	.57	679	.92	1760	350	73	2.6	1170	8.4	2.1
25...	.03	.74	.14	715	.97	1710	400	110	2.6	1300	8.3	2.8
JAN.												
05...	.00	.71	.13	898	1.22	1060	440	100	3.5	1610	8.1	5.3
15...	.03	.99	.20	837	1.14	1400	410	100	3.2	1480	8.2	3.8
25...	.00	.58	.15	800	1.09	989	400	110	3.3	1400	8.3	2.8
FEB.												
05...	.00	.33	.06	793	1.08	949	360	130	3.4	1440	8.3	2.2
15...	.03	.21	.14	771	1.05	999	350	100	3.2	1400	8.1	3.9
25...	.13	.81	.27	501	.68	2160	270	82	2.1	887	7.6	9.0
MAR.												
05...	.00	.18	.06	681	.93	1410	320	93	2.9	1240	8.0	4.4
15...	.00	.79	.33	887	1.21	9290	380	190	7.6	1420	7.7	7.1
25...	.03	.80	.13	--	--	--	410	140	3.4	1500	8.1	4.2
APR.												
05...	.03	.38	--	907	1.23	1160	410	160	3.7	1570	7.8	7.6
15...	.03	.82	--	1020	1.39	3030	460	240	3.4	1650	7.7	8.6
22...	--	.32	.53	--	--	--	150	48	1.8	552	7.5	6.1
MAY												
05...	--	.77	.31	535	.73	4260	280	100	1.9	857	8.1	2.7
15...	--	.23	.09	636	.87	1270	340	110	2.4	1090	8.5	1.4
26...	--	2.8	.93	379	.52	15900	200	46	1.4	550	7.7	5.9
JUNE												
05...	--	.54	.42	265	.36	2950	120	21	1.3	417	7.7	4.0
15...	--	.58	.23	--	--	--	230	53	2.0	782	8.1	2.7
25...	--	1.5	.14	765	1.04	318	310	99	4.0	1380	8.6	1.0
JULY												
05...	--	.52	.15	1110	1.51	545	350	190	5.8	1930	7.7	6.0
15...	--	.25	.16	--	--	--	370	170	5.9	1940	7.9	4.9
25...	--	.06	.06	1170	1.59	82.1	410	210	5.3	2040	8.0	3.9
AUG.												
05...	--	.40	.06	--	--	--	380	170	5.1	1870	7.9	5.2
13...	--	1.3	.79	--	--	--	180	45	2.1	658	8.3	1.3
25...	--	.42	.23	860	1.17	55.7	310	140	4.2	1520	8.0	3.5
SEP.												
05...	--	.94	.28	--	--	--	250	130	2.3	888	7.8	3.6
15...	--	.49	.17	760	1.03	283	390	210	2.4	1230	7.7	7.2
25...	--	1.1	.75	416	.57	817	220	98	1.5	692	7.9	3.0

07231500 CANADIAN RIVER AT CALVIN, OKLA.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	INSTANTANEOUS DIS- CHARGE (CFS)	DIS- SOLVED NITRATE (N) (MG/L)	DIS- SOLVED NITRATE (NO3) (MG/L)	DIS- SOLVED NITRITE (N) (MG/L)	DIS- SOLVED NITRITE (NO2) (MG/L)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	SUS- PENDE SOLIDS (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)
OCT.												
10...	1070	.37	1.6	.03	.10	.40	.31	430	.58	1240	118	950
23...	637	.08	.35	.01	.03	.09	.20	459	.62	789	127	910
NOV.												
06...	707	.03	.13	.00	.00	.03	.30	661	.90	1260	132	1100
21...	10500	.42	1.9	.01	.03	.43	.30	227	.31	6440	580	412
DEC.												
04...	4280	.13	.58	.03	.10	.16	.29	391	.53	4520	240	698
JAN.												
08...	637	.36	1.6	.02	.07	.38	.25	--	--	--	63	1450
22...	656	--	--	--	--	.64	.24	--	--	--	14	1350
FEB.												
13...	410	.06	.27	.01	.03	.07	.12	804	1.09	890	3	1400
26...	921	.58	2.6	.02	.07	.60	.20	620	.84	1540	120	1100
MAR.												
13...	4780	--	--	--	--	.33	.26	--	--	--	1010	780
26...	758	.31	1.4	.02	.07	.33	.15	878	1.19	1800	182	1200
APR.												
09...	347	.03	.13	.00	.00	.03	.11	928	1.26	869	5	720
23...	1660	1.3	5.6	.04	.13	1.3	.28	670	.91	3000	96	1100
MAY												
07...	1220	.29	1.3	.00	.00	.29	.35	639	.87	2110	454	1040
22...	450	.09	.40	.00	.00	.09	.14	539	.73	655	50	1000
JUNE												
11...	2510	.39	1.7	.07	.23	.46	--	390	.53	2640	458	600
26...	137	.02	.09	.00	.00	.02	--	784	1.07	290	4	1400
JULY												
09...	54	.01	.04	.00	.00	.01	.06	976	1.33	142	30	1800
23...	23	.03	.13	.00	.00	.03	.06	--	--	--	10	2130
AUG.												
06...	47	.03	.13	.00	.00	.03	.14	783	1.06	99.4	14	1370
20...	63	.02	.09	.01	.03	.03	.27	695	.95	118	129	1200
SEP.												
03...	1660	.97	4.3	.00	.00	.97	.43	439	.60	1970	602	745
17...	530	.06	.27	.01	.03	.07	.42	614	.84	879	224	1020

DATE	PH (UNITS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	CHEM- ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	CHEM- ICAL OXYGEN DEMAND (HIGH LEVEL) (MG/L)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)	PHENOLS (UG/L)	OIL AND GREASE (MG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)
OCT.											
10...	--	25.0	7.9	99	79	--	1.0	--	--	0	30
23...	--	17.5	9.2	101	20	--	3.2	--	--	0	60
NOV.											
06...	--	16.0	9.5	101	38	--	4.0	--	--	0	70
21...	--	18.0	--	--	--	--	--	--	--	--	--
DEC.											
04...	8.0	7.0	11.0	97	38	--	2.4	--	--	0	30
JAN.											
08...	7.2	1.0	12.8	97	35	--	3.2	--	--	--	--
22...	7.3	11.0	10.2	100	18	--	3.2	--	--	0	90
FEB.											
13...	--	18.0	--	--	--	23	--	2	--	0	--
26...	8.4	20.0	10.2	119	--	29	2.1	--	--	0	20
MAR.											
13...	8.2	12.5	9.3	92	--	39	6.3	--	--	0	10
26...	8.3	9.0	10.6	96	29	--	3.2	--	--	0	30
APR.											
09...	7.8	16.0	8.7	94	27	--	2.3	--	--	0	30
23...	8.1	21.0	8.3	98	69	--	6.8	--	--	10	90
MAY											
07...	8.1	19.5	8.7	99	37	--	3.0	--	1	20	0
22...	--	27.0	--	--	23	--	--	--	--	0	80
JUNE											
11...	7.1	24.0	7.9	99	44	--	2.0	--	--	0	70
26...	7.8	24.0	7.9	98	13	--	6.2	--	--	0	40
JULY											
09...	8.1	29.0	8.2	111	25	--	2.5	--	--	0	20
23...	8.0	33.0	7.9	113	24	--	.8	--	--	--	--
AUG.											
06...	7.8	30.0	8.0	107	19	--	1.6	--	--	0	--
20...	7.8	31.0	8.1	112	--	--	3.1	--	--	0	50
SEP.											
03...	7.4	28.0	7.7	101	35	--	3.6	--	--	--	--
17...	7.8	26.0	7.7	97	41	--	5.0	--	--	--	--

07231500 CANADIAN RIVER AT CALVIN, OKLA.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	ALDRIN IN FILT. FRAC. (UG/L)	ALDRIN IN SUSP. FRAC. (UG/L)	ALDRIN (UG/L)	CHLOR- DANE IN FILT. FRAC. (UG/L)	CHLOR- DANE IN SUSP. FRAC. (UG/L)	CHLOR- DANE (UG/L)	DDD IN FILT. FRAC. (UG/L)	DDD IN SUSP. FRAC. (UG/L)	DDD (UG/L)	DDE IN FILT. FRAC. (UG/L)	DDE IN SUSP. FRAC. (UG/L)
NOV. 21...	.00	.00	.00	.0	.0	.0	.00	.00	.00	.00	.00
MAR. 26...	.00	.00	.00	.0	.0	.0	.00	.00	.00	.00	.00
APR. 09...	.00	.00	.00	.0	.0	.0	.00	.00	.00	.00	.00
JUNE 11...	--	--	.00	--	--	.0	--	--	.00	--	--

DATE	DDT IN FILT. FRAC. (UG/L)	DDT IN SUSP. FRAC. (UG/L)	DDT (UG/L)	DI- AZINON IN FILT. FRAC. (UG/L)	DI- AZINON IN SUSP. FRAC. (UG/L)	DI- AZINON (UG/L)	DI- ELDRIN IN FILT. FRAC. (UG/L)	DI- ELDRIN IN SUSP. FRAC. (UG/L)	DI- ELDRIN (UG/L)	ENDRIN IN FILT. FRAC. (UG/L)	ENDRIN IN SUSP. FRAC. (UG/L)
NOV. 21...	.00	.00	.00	.01	.00	.01	.00	.00	.00	.00	.00
MAR. 26...	.00	.00	.00	.01	.00	.01	.00	.00	.00	.00	.00
APR. 09...	.00	.00	.00	.01	.00	.01	.00	.00	.00	.00	.00
JUNE 11...	--	--	.00	--	--	.00	--	--	.00	--	--

DATE	ENDRIN (UG/L)	HEPTA- CHLOR IN FILT. FRAC. (UG/L)	HEPTA- CHLOR IN SUSP. FRAC. (UG/L)	HEPTA- CHLOR (UG/L)	HEPTA- CHLOR EPOXIDE IN FILT. FRAC. (UG/L)	HEPTA- CHLOR EPOXIDE IN SUSP. FRAC. (UG/L)	HEPTA- CHLOR EPOXIDE (UG/L)	LINDANE IN FILT. FRAC. (UG/L)	LINDANE IN SUSP. FRAC. (UG/L)	LINDANE (UG/L)	MALA- THION IN FILT. FRAC. (UG/L)
NOV. 21...	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
MAR. 26...	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
APR. 09...	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
JUNE 11...	.00	--	--	.00	--	--	.00	--	--	.00	--

DATE	MALA- THION IN SUSP. FRAC. (UG/L)	MALA- THION (UG/L)	METHYL PARA- THION IN FILT. FRAC. (UG/L)	METHYL PARA- THION IN SUSP. FRAC. (UG/L)	METHYL PARA- THION (UG/L)	PARA- THION IN FILT. FRAC. (UG/L)	PARA- THION IN SUSP. FRAC. (UG/L)	PARA- THION (UG/L)	PCB IN FILT. FRAC. (UG/L)	PCB IN SUSP. FRAC. (UG/L)	PCB (UG/L)
NOV. 21...	.00	.00	.00	.00	.00	.00	.00	.00	.0	.0	.0
MAR. 26...	.00	.00	.00	.00	.00	.00	.00	.00	.0	.0	.0
APR. 09...	.00	.00	.00	.00	.00	.00	.00	.00	.0	.0	.0
JUNE 11...	--	.00	--	--	.00	--	--	.00	--	--	.0

DATE	TOX- APHENE (UG/L)	2,4-D IN FILT. FRAC. (UG/L)	2,4-D IN SUSP. FRAC. (UG/L)	2,4-D (UG/L)	2,4,5-T IN FILT. FRAC. (UG/L)	2,4,5-T IN SUSP. FRAC. (UG/L)	2,4,5-T (UG/L)	SILVEX IN FILT. FRAC. (UG/L)	SILVEX IN SUSP. FRAC. (UG/L)	SILVEX (UG/L)
NOV. 21...	--	.00	.00	.00	.00	.00	.00	.00	.00	.00
MAR. 26...	--	.00	.00	.00	.00	.00	.00	.00	.00	.00
APR. 09...	--	.02	.00	.02	.00	.00	.00	.00	.00	.00
JUNE 11...	0	--	--	.00	--	--	.00	--	--	.00

ARKANSAS RIVER BASIN

07231500 CANADIAN RIVER AT CALVIN, OKLA.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	480	652	1030	1450	1360	1180	1190	410	785	1520	1980	668
2	539	878	1250	1440	1450	1220	1240	494	---	1510	1960	630
3	622	846	1580	1520	1450	1220	1330	622	809	1590	2020	564
4	682	931	699	1630	1440	1200	1420	689	719	1520	1400	757
5	729	1040	689	1590	1450	1220	1530	857	417	1930	1870	888
6	681	1040	716	1500	1500	1250	1570	851	486	1180	1850	820
7	731	1170	783	1540	1540	1220	1600	956	491	1610	1400	822
8	507	1120	861	1350	1510	1260	1600	1100	503	1620	1390	812
9	649	1170	903	1440	1660	1270	1570	1100	453	1620	1560	816
10	725	1180	944	1470	1670	1320	1570	1160	554	1920	758	1000
11	410	1200	981	1520	1660	1120	1440	1120	593	1800	655	1060
12	369	1200	1030	1500	1390	711	1280	1120	653	1800	---	1140
13	365	1240	1060	1570	1620	865	1350	1120	703	1920	658	1100
14	348	1240	1100	1560	1360	763	1610	1100	800	1940	660	1220
15	417	1300	1150	1450	1350	1390	1620	1090	782	1940	614	1230
16	484	1250	1160	1500	1350	1400	1450	1100	963	1960	761	1100
17	575	1290	1220	1460	1280	1460	1400	1090	955	1940	---	1170
18	727	1300	1200	1430	1280	1460	1350	1080	1070	1880	1100	1020
19	730	---	1220	1430	1270	1510	1330	1050	1070	1940	1100	943
20	757	265	1050	1400	1210	1530	1300	994	1130	2040	1100	479
21	784	395	1090	1400	---	1510	577	994	1270	2030	1140	618
22	818	468	1070	1310	---	1360	534	966	1270	2030	1250	744
23	817	544	1190	1310	881	1370	634	966	1340	2040	1440	747
24	834	240	1190	1340	950	1450	1030	960	1340	2050	1410	690
25	847	238	1260	1370	884	1480	1210	1090	1380	2040	1520	692
26	674	277	1270	1370	1000	1470	1280	550	1380	2040	1510	501
27	674	362	1320	1270	1060	1480	1250	453	1500	1970	1510	622
28	734	432	1320	1290	1140	1480	1270	464	1500	2420	1480	836
29	660	612	1370	1480	---	1670	---	521	1500	1990	1120	835
30	707	1120	1350	1310	---	1280	260	624	1480	2010	854	929
31	623	---	1360	1370	---	1230	---	718	---	2020	578	---
MONTH	635	862	1110	1440	1340	1300	1270	884	962	1870	1260	848

TEMPERATURE (DEG. C) OF WATER , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
(ONCE-DAILY)

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

ARKANSAS RIVER BASIN

167

07232500 BEAVER RIVER NEAR GUYMON, OKLA.
(Headwater of the North Canadian River)

LOCATION.--Lat 36°43'24", long 101°29'30", in NW 1/4 SW 1/4 sec.18, T.3 N., R.15 E., Texas County, at gaging station at bridge on U.S. Highway at Dry Sand Draw, 1.2 mi (1.9 km) upstream from Goff Creek, 2.5 mi (4.0 km) north of Guymon, and at mile 650.7 (1,047.0 km).

DRAINAGE AREA.--2,139 mi² (5,540 km²) includes that of Dry Sand Draw, of which 964 mi² (2,497 km²) is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: Water years 1952-59 (partial-record station), November 1959 to September 1963, October 1967 to current year.
Water temperatures: November 1959 to September 1963.

REMARKS.--No flow Oct. 1-8, 20, 21, 23, May 15-31, June 29-30, Aug. 1-7, 26-28, Sept. 2-6, 9-13.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	INSTANTANEOUS DIS- CHARGE (CFS)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED NITRATE (N) (MG/L)	DIS- SOLVED NITRATE (NO3) (MG/L)	DIS- SOLVED NITRITE (N) (MG/L)
NOV.												
09...	287	45	28	29	267	0	219	47	18	.27	1.2	.01
12...	268	46	27	28	259	0	212	48	13	.63	2.8	.00
DEC.												
10...	11	46	26	27	257	0	211	48	14	.49	2.2	.00
JAN.												
16...	15	46	26	27	251	0	206	43	14	.47	2.1	.01
FEB.												
15...	6.4	47	27	29	269	0	221	43	12	.38	1.7	.01
MAR.												
11...	15	49	34	44	307	0	252	69	20	.17	.75	.13
APR.												
08...	4.0	43	28	27	269	0	221	49	13	--	--	--
MAY												
07...	1.9	30	27	29	225	0	185	50	14	.00	.00	.01
JUNE												
03...	30	47	10	12	184	0	151	40	9.4	.41	1.8	.09
AUG.												
10...	60	60	7.3	5.9	221	0	181	12	3.3	--	--	--

DATE	DIS- SOLVED NITRITE (NO2) (MG/L)	DIS- SOLVED NITRATE (N) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	CARBON DIOXIDE (CO2) (MG/L)
NOV.											
09...	.03	.28	334	.45	259	230	9	.8	553	7.9	5.4
12...	.00	.63	331	.45	240	230	14	.8	547	7.8	6.6
DEC.											
10...	.00	.49	321	.44	9.53	220	11	.8	539	7.7	8.2
JAN.											
16...	.03	.48	323	.44	13.1	220	16	.8	536	7.9	5.1
FEB.											
15...	.03	.39	320	.44	5.53	230	8	.8	539	8.1	3.4
MAR.											
11...	.43	.30	403	.55	16.9	260	11	1.2	670	7.8	7.8
APR.											
08...	--	.29	324	.44	3.50	220	2	.8	543	7.9	5.4
MAY											
07...	.03	.00	290	.39	1.49	190	2	.9	481	8.0	3.6
JUNE											
03...	.30	.50	228	.31	18.9	160	8	.4	370	7.9	3.7
AUG.											
10...	--	.05	227	.31	36.8	180	0	.2	3760	--	--

ARKANSAS RIVER BASIN

07234000 BEAVER RIVER AT BEAVER, OKLA.
(Headwater of the North Canadian River)

LOCATION.--Lat 36°49'20", long 100°31'05", in SW 1/4 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 mi (8.0 km) upstream from Clear Creek, and at mile 576.0 (926.8 km).

DRAINAGE AREA.--7,955 mi² (20,603 km²), of which 4,270 mi² (11,059 km²) is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: Water years 1958-59 (partial-record station), November 1961 to September 1963, October 1967 to current year.
Water temperatures: October 1967 to current year.

EXTREMES,Current year.--Specific conductance: Maximum daily, 5,730 micromhos/cm Nov. 30; minimum daily, 936 micromhos/cm June 13.

Water temperatures: Maximum, 33.5°C June 18; minimum, freezing point on Jan. 2.

Period of record.--Specific conductance: Maximum daily, 5,730 micromhos/cm Nov. 30, 1973; minimum daily, 286 micromhos/cm July 31, 1971.

Water temperatures: Maximum, 36.0°C July 12, 14, 1970, July 27, 1972, June 27, 1973; minimum, freezing point on many days during winter months.

REMARKS.--No flow Oct. 1-2, 7-8, 26-28, May 29, 31, June 27-Sept. 30.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	INSTANTANEOUS DIS-CHARGE (CFS)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNE-SIUM (MG)	DIS-SOLVED SODIUM (NA) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CaCO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	DIS-SOLVED NITRATE (NO3) (MG/L)	DIS-SOLVED NITRITE (N) (MG/L)
OCT.												
05...	.06	210	98	520	287	0	235	650	830	.20	.89	.01
15...	.08	220	110	480	268	0	220	720	800	.18	.80	.15
25...	.06	220	110	530	295	0	242	720	880	.47	2.1	.01
NOV.												
05...	.30	230	130	860	483	0	396	740	1300	.74	3.3	.01
15...	.58	210	140	920	464	0	381	750	1400	.63	2.8	.01
25...	.30	210	130	910	450	0	369	700	1400	.42	1.9	.31
DEC.												
05...	.63	240	130	840	412	0	338	800	1300	1.1	4.7	.04
15...	2.9	230	120	820	480	0	394	670	1300	.37	1.6	.13
25...	3.4	160	80	560	317	0	260	510	830	.53	2.3	.01
JAN.												
05...	2.4	210	110	780	396	0	325	690	1200	1.8	8.0	.00
15...	3.7	190	91	620	235	0	193	560	990	.82	3.6	.01
25...	15	130	59	--	260	3	218	360	780	.42	1.9	.01
FEB.												
05...	22	130	68	580	260	0	213	390	880	.23	1.0	.00
15...	18	120	69	560	239	0	196	390	900	.23	1.0	.00
25...	16	140	74	580	258	0	212	430	940	.17	.75	.01
MAR.												
05...	18	140	79	640	225	0	185	470	940	.15	.66	.01
15...	50	--	62	540	274	0	225	440	800	.23	1.0	.04
25...	26	150	80	680	266	0	218	450	1000	.12	.53	.16
APR.												
04...	11	150	82	650	255	0	209	460	1000	.47	2.1	.00
15...	5.2	160	87	680	228	0	187	500	1100	.17	.75	.01
MAY												
07...	.52	190	110	620	284	0	233	600	960	--	--	--
15...	.52	180	110	630	239	0	196	600	--	--	--	--
25...	.92	180	--	600	250	0	205	530	960	--	--	--
JUNE												
05...	.78	180	110	600	218	0	179	590	970	--	--	--
15...	28	100	51	310	215	0	176	250	490	--	--	--
25...	.08	160	110	690	203	0	167	620	1100	--	--	--

ARKANSAS RIVER BASIN

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07234000 BEAVER RIVER AT BEAVER, OKLA.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	DIS- SOLVED NITRITE (NO2) (MG/L)	DIS- SOLVED NITRATE (N) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	CARBON DIOXIDE (CO2) (MG/L)
OCT.											
05...	.03	.21	2550	3.47	.41	930	690	7.4	3810	7.9	5.8
15...	.49	.33	2580	3.51	.56	1000	780	6.6	3740	7.8	6.8
25...	.03	.48	2690	3.66	.44	1000	760	7.3	3990	7.8	7.5
NOV.											
05...	.03	.75	3690	5.02	2.99	1100	710	11	5800	7.9	9.7
15...	.03	.64	3730	5.07	5.84	1100	720	12	5820	7.7	15
25...	1.0	.73	3690	5.02	2.99	1100	690	12	6020	8.2	4.5
DEC.											
05...	.13	1.1	3620	4.92	6.16	1100	800	11	5360	8.0	6.6
15...	.43	.50	3490	4.75	27.4	1100	670	11	5220	8.1	6.1
25...	.03	.54	2380	3.24	22.2	730	470	9.0	3670	8.2	3.2
JAN.											
05...	.00	1.8	3250	4.42	21.1	980	650	11	5080	7.5	20
15...	.03	.83	2660	3.62	26.6	850	660	9.3	4160	7.8	6.0
25...	.03	.43	1980	2.69	80.2	570	--	--	3410	8.4	1.7
FEB.											
05...	.00	.23	2300	3.13	137	600	390	10	3750	8.0	4.2
15...	.00	.23	2220	3.02	108	580	390	10	3770	8.1	3.0
25...	.03	.18	2400	3.26	104	650	440	9.9	3980	8.1	3.3
MAR.											
05...	.03	.16	2470	3.36	120	680	490	11	4140	7.6	9.0
15...	.13	.27	2070	2.82	279	--	--	--	3520	8.1	3.5
25...	.53	.28	2560	3.48	180	700	490	11	4270	8.0	4.3
APR.											
04...	.00	.47	2650	3.60	78.7	710	500	11	4230	8.0	4.1
15...	.03	.18	2810	3.82	39.5	760	570	11	4370	8.2	2.3
MAY											
07...	--	.38	2770	3.77	3.89	930	690	8.9	4200	7.8	7.2
15...	--	.35	2830	3.85	3.97	900	710	9.1	4290	8.2	2.4
25...	--	.65	2690	3.66	6.68	--	--	--	4130	7.8	6.3
JUNE											
05...	--	.59	2740	3.73	5.77	900	720	8.7	4340	7.7	7.0
15...	--	1.3	1430	1.94	108	460	280	6.3	2310	7.5	11
25...	--	1.4	2970	4.04	.64	850	685	10	4520	7.8	5.1

DATE	INSTAN- TANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO2) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)
JAN.										
22...	23	20	110	54	430	7.3	254	0	208	350
FEB.										
12...	17	20	140	74	640	10	258	0	212	440
MAR.										
06...	17	17	140	76	620	9.6	233	0	191	450
APR.										
02...	11	--	--	--	--	--	--	--	--	--
MAY										
07...	.78	29	250	110	600	9.6	289	0	237	660
JUNE										
05...	1.4	30	240	130	560	7.0	239	0	196	680

DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (NO3) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)
JAN.									
22...	--	1.5	.11	1.1	1.2	5.4	.12	1770	2.41
FEB.									
12...	1000	1.5	.07	.49	.56	2.5	.08	--	3.33
MAR.									
06...	990	1.5	.00	.77	.77	3.4	.05	2460	3.35
APR.									
02...	--	--	.03	.77	.80	3.5	.03	--	--
MAY									
07...	1000	1.3	.32	.41	.73	3.2	.04	2990	4.07
JUNE									
05...	980	.9	.03	1.0	1.0	4.6	.04	2800	3.81

ARKANSAS RIVER BASIN

07234000 BEAVER RIVER AT BEAVER, OKLA.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DIS- SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)
JAN. 22...	--	110	500	290	65	8.4	2840	8.2	3.0
FEB. 12...	2450	112	650	440	68	11	4010	8.1	5.0
MAR. 06...	2420	113	660	470	67	10	3840	8.1	5.0
APR. 02...	--	--	--	--	--	--	4600	8.3	10.0
MAY 07...	2800	6.30	1100	840	55	8.0	4610	7.7	16.5
JUNE 05...	2750	10.6	1100	940	52	7.2	5100	7.8	28.5

DATE	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	CARBON DIOXIDE (CO2) (MG/L)	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)	SUS- PENDE SEDI- MENT (MG/L)	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM
JAN. 22...	50	12.4	103	2.6	61	420	--	300	69
FEB. 12...	30	14.0	111	3.3	82	140	--	243	70
MAR. 06...	10	11.8	102	3.0	--	380	--	594	92
APR. 02...	--	11.0	99	--	210	420	5.1	123	88
MAY 07...	4	10.4	107	9.2	--	150	--	48	95
JUNE 05...	2	10.0	126	6.1	460	8650	--	72	73

DATE	INSTAN- TANEOUS DIS- CHARGE (CFS)	TOTAL IRON (FE) (UG/L)	DIS- SOLVED IRON (FE) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	SUS- PENDE MAN- GANESE (MN) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL ARSENIC (AS) (UG/L)	SUS- PENDE ARSENIC (AS) (UG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	TOTAL CAD- MIUM (CD) (UG/L)	SUS- PENDE CAD- MIUM (CD) (UG/L)
JUNE 05...	1.4	460	20	110	70	40	--	6	0	6	10	8

DATE	DIS- SOLVED CAD- MIUM (CD) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	SUS- PENDE CHRO- MIUM (CR) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	TOTAL COBALT (CO) (UG/L)	SUS- PENDE COBALT (CO) (UG/L)	DIS- SOLVED COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)	SUS- PENDE COPPER (CU) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)
JUNE 05...	2	0	0	0	<50	<49	1	10	6	4	<100

DATE	SUS- PENDE LEAD (PB) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	TOTAL MERCURY (HG) (UG/L)	SUS- PENDE MERCURY (HG) (UG/L)	DIS- SOLVED MERCURY (HG) (UG/L)	TOTAL SELE- NIUM (SE) (UG/L)	SUS- PENDE SELE- NIUM (SE) (UG/L)	DIS- SOLVED SELE- NIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	SUS- PENDE ZINC (ZN) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)
JUNE 05...	<94	6	.1	.0	.1	0	0	0	60	50	10

ARKANSAS RIVER BASIN

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07234000 BEAVER RIVER AT BEAVER, OKLA.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3680	5200	5720	4290	3540	4050	4290	4230	4580	---	---	---
2	4180	5330	5660	4530	3460	4050	4410	4570	4460	---	---	---
3	3260	5370	5280	4340	3520	4010	4280	4520	4320	---	---	---
4	3260	5370	4360	4570	3650	4030	4200	4250	4020	---	---	---
5	3740	5400	5710	4900	3680	4020	4210	4250	4150	---	---	---
6	3750	5370	5650	4720	3810	4000	4400	4260	4220	---	---	---
7	4380	5420	3340	4570	4010	4000	4200	4200	4080	---	---	---
8	4350	5470	3550	4420	4000	4370	4360	4190	1300	---	---	---
9	3690	5500	3540	4550	3780	3130	4340	4230	1300	---	---	---
10	3370	5550	4720	4450	3950	3100	4450	4240	2500	---	---	---
11	3740	5540	4940	4640	4040	3690	4440	4260	1320	---	---	---
12	3690	5560	5090	4140	4080	3370	4540	4150	1200	---	---	---
13	3720	5560	5220	4040	3890	3230	4440	4270	936	---	---	---
14	3730	5540	5310	4270	3630	3310	4450	4500	1760	---	---	---
15	3680	5490	5330	4090	3630	3410	4390	4290	2310	---	---	---
16	3660	5400	5290	3640	3800	3510	4380	4420	3360	---	---	---
17	3700	5370	5400	2650	3800	3510	4400	4440	3370	---	---	---
18	3730	5400	5040	2510	3780	3680	4280	4340	3720	---	---	---
19	3740	2820	4980	2870	3840	3830	4380	4350	3970	---	---	---
20	3730	4950	5420	3040	3900	3900	4390	4360	4260	---	---	---
21	3780	5300	3680	2660	3940	3840	4560	4230	4360	---	---	---
22	3740	5370	4550	2870	4030	3970	4590	4200	4480	---	---	---
23	3800	5390	4020	3040	4020	4040	4350	4260	4380	---	---	---
24	3860	5520	3730	3090	4030	4040	4520	4220	4720	---	---	---
25	3940	5600	3660	3260	3860	4130	4350	4130	4520	---	---	---
26	4210	5580	3610	3540	3800	4110	4300	4190	4630	---	---	---
27	4910	5660	3610	3650	3960	4030	4350	4150	4960	---	---	---
28	4920	5680	3230	3470	4050	4200	4200	4300	---	---	---	---
29	4930	5720	3220	3370	---	4270	4220	4450	---	---	---	---
30	5040	5730	3410	3210	---	4280	4200	4470	---	---	---	---
31	5130	---	4140	3320	---	4230	---	4640	---	---	---	---
MONTH	3970	5370	4530	3760	3840	3850	4360	4310	3450	---	---	---

TEMPERATURE (DEG. C) OF WATER , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
(ONCE-DAILY)

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

ARKANSAS RIVER BASIN

07238000 NORTH CANADIAN RIVER NEAR SEILING, OKLA.

LOCATION.--Lat 36°11'06", long 98°55'15", in NW 1/4 sec.28, T.20 N., R.16 W., Major County, at gaging station at bridge on U.S. Highway 60, 2.0 mi (3.2 km) upstream from Seiling Creek, 2.2 mi (3.5 km) north of Seiling, 2.8 mi (4.5 km) downstream from Deep Creek, and at mile 422.6 (680.0 km).

DRAINAGE AREA.--12,261 mi² (31,756 km²), of which 4,847 mi² (12,554 km²) is probably noncontributing.

PERIOD OF RECORD.--Water years 1951 and 1953-58 (partial-record station), October 1967 to current year.

REMARKS.--No flow July 18-Aug. 8, Aug. 19-21.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	INSTAN- TANEOUS DIS- CHARGE (CFS)	TOTAL IRON (FE) (UG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (NO3) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)
FEB.											
13...	60	430	.61	.29	.53	.82	1.4	6.3	.37	2050	2.79
26...	83	370	.15	.03	.87	.90	1.0	4.6	.27	1110	1.51
MAR.											
07...	31	430	.00	.02	.42	.44	.44	1.9	.31	1100	1.50
19...	338	--	.16	.61	1.4	2.0	2.2	9.6	.37	848	1.15
APR.											
03...	130	--	.08	.07	.72	.79	.87	3.9	.24	1110	1.51
16...	99	--	.00	.12	.41	.53	.53	2.3	.31	1180	1.61
MAY											
07...	110	1000	.00	.08	1.1	1.2	1.2	5.3	.27	1300	1.77
21...	63	530	.05	.06	.70	.76	.81	3.6	.25	--	--
JUNE											
06...	58	10	.01	.01	1.4	1.4	1.4	6.2	.27	1530	2.08
19...	18	230	.00	.04	.78	.82	.82	3.6	.28	1410	1.92
JULY											
02...	3.9	0	.05	.19	.20	.39	.44	1.9	.10	1830	2.49
16...	.20	840	.01	.13	.87	1.0	1.0	4.5	.20	2750	3.74
SEP.											
04...	254	9300	.51	.22	3.8	4.0	4.5	20	.53	719	.98
18...	31	300	.24	.03	.74	.77	1.0	4.5	.39	1580	2.15
DATE	DIS- SOLVED SOLIDS (TONS PER DAY)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	CHEM- ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	CHEM- ICAL OXYGEN DEMAND (HIGH LEVEL) (MG/L)	CHLORO- PHYLL A (UG/L)
FEB.											
13...	332	--	1950	8.5	5.5	8	11.1	98	--	16	--
26...	249	--	1780	--	16.0	7	8.7	99	--	20	--
MAR.											
07...	92.1	23	1700	8.3	10.5	3	9.6	92	--	20	26
19...	774	245	1150	8.3	11.5	100	9.2	94	--	34	21
APR.											
03...	390	60	1780	8.5	10.5	20	9.7	98	21	--	--
16...	315	26	1790	8.4	10.0	10	10.0	94	20	--	40
MAY											
07...	386	41	2000	8.5	23.5	20	10.3	134	31	--	79
21...	--	10	2090	8.3	19.0	3	8.3	99	23	--	64
JUNE											
06...	240	17	2300	8.2	20.0	6	7.9	98	16	--	--
19...	68.5	9	2000	8.4	23.5	3	8.2	106	30	--	66
JULY											
02...	19.3	5	2440	8.2	23.0	1	8.4	108	34	--	47
16...	1.48	18	3850	7.8	23.5	6	4.1	52	39	--	37
SEP.											
04...	493	320	1050	7.7	16.0	100	7.9	88	34	--	22
18...	132	19	2250	8.2	18.0	4	7.6	88	13	--	--

ARKANSAS RIVER BASIN

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07238000 NORTH CANADIAN RIVER NEAR SEILING, OKLA.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	CHLORO- PHYLL B (UG/L)	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)	OIL AND GREASE (MG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CAD- MIUM (CD) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL ZINC (ZN) (UG/L)
FEB.											
13...	--	84	80	4.6	--	6	<10	0	<100	.0	20
26...	--	8	818	6.2	--	6	<10	0	<100	.5	30
MAR.											
07...	8.1	260	8260	6.8	--	4	<10	0	<100	.4	20
19...	4.5	3600	840	12	--	5	<10	0	<100	.1	50
APR.											
03...	--	56	73	7.4	3	2	20	0	<100	.0	100
16...	30	817	8110	6.2	9	5	10	0	<100	.0	210
MAY											
07...	42	--	240	10	--	4	<10	0	100	.7	90
21...	77	--	--	5.5	4	7	10	0	<100	.0	60
JUNE											
06...	--	150	150	--	0	6	<10	0	<100	.0	30
19...	93	--	200	--	0	10	<10	0	<100	.1	10
JULY											
02...	72	380	620	--	1	4	<10	0	<100	.1	20
16...	31	--	--	9.3	0	6	<10	0	<100	.0	30
SEP.											
04...	34	--	--	17	3	7	<10	0	<100	.4	40
18...	--	8300	8220	7.3	0	6	<10	0	<100	.0	20

DATE	TOTAL CAL- CIUM (CA) (MG/L)	TOTAL MAG- NE- SIUM (MG) (MG/L)	TOTAL SODIUM (NA) (MG/L)	TOTAL PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)
JUNE 19...	220	62	160	6.4	287	0	235	510	230	.0

07238500 CANTON LAKE NEAR CANTON, OKLA.

LOCATION.--Lat 36°05'03", long 98°36'05", in SE 1/4 NE 1/4 sec.32, T.19 N., R.13 W., Blaine County, near right end of Canton Dam on North Canadian River, 2.0 mi (3.2 km) northwest of Canton, and at mile 394.3 (634.4 km).

DRAINAGE AREA.--12,483 mi² (32,331 km²), of which 4,883 mi² (12,647 km²) is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: October 1951 to September 1954, December 1955 to September 1963, October 1967 to current year.

Water temperatures: October 1951 to September 1954.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	RESER- VOIR STORAGE (AC-FT)	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)	ALKA- LINITY AS CACO3 (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED NITRATE (N) (MG/L)	DIS- SOLVED NITRATE (NO3) (MG/L)	DIS- SOLVED NITRITE (N) (MG/L)
OCT.												
01...	105400	80	38	190	182	0	149	230	270	.25	1.1	.01
NOV.												
05...	106700	82	37	180	186	0	153	210	270	.05	.22	.01
DEC.												
01...	106600	85	37	180	188	0	154	240	270	.08	.35	.00
14...	107300	84	37	180	190	0	156	230	270	.07	.31	.00
JAN.												
15...	108300	94	40	190	202	0	166	250	290	.03	.13	.01
31...	111700	89	37	180	191	0	157	240	270	.04	.18	.01
FEB.												
15...	114500	88	37	180	199	0	163	250	250	.04	.18	.01
MAR.												
01...	115900	92	37	180	204	0	167	240	260	.02	.09	.00
15...	123400	89	37	180	202	0	166	230	250	.04	.18	.00
APR.												
01...	119700	94	39	180	204	0	167	250	260	.19	.84	.06
22...	118000	94	38	180	211	0	173	260	250	--	--	--
MAY												
02...	117400	94	37	170	21	0	173	240	260	.00	.00	.01
15...	114100	97	38	170	217	0	178	250	240	.07	.31	.01
JUNE												
05...	116700	99	38	--	214	0	176	--	260	.12	.53	.02
JULY												
01...	112900	93	39	180	195	0	160	--	260	.00	.00	.17
15...	109300	98	43	170	193	0	158	--	270	.07	.31	.01
AUG.												
02...	106200	--	--	--	174	0	143	--	290	--	--	--
15...	105000	--	--	--	176	0	144	--	270	--	--	--
SEP.												
03...	114600	71	27	--	157	0	129	200	180	--	--	--
16...	93400	80	31	--	167	0	137	250	220	--	--	--

DATE	DIS- SOLVED NITRITE (NO2) (MG/L)	DIS- SOLVED NITRATE (N) (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)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (JTU)	CARBON DIOXIDE (CO2) (MG/L)
OCT.												
01...	.03	.26	941	1.28	360	210	4.4	1590	8.3	19.5	--	1.5
NOV.												
05...	.03	.06	936	1.27	360	200	4.1	1550	8.1	11.5	--	2.4
DEC.												
01...	.00	.08	937	1.27	360	210	4.1	1560	7.6	--	--	7.6
14...	.00	.07	937	1.27	360	210	4.1	1560	7.8	--	--	4.8
JAN.												
15...	.03	.04	1010	1.37	400	230	4.1	1660	7.9	--	--	4.1
31...	.03	.05	948	1.29	370	220	4.0	1560	8.0	--	--	3.1
FEB.												
15...	.03	.05	945	1.29	370	210	4.1	1600	8.2	--	1	2.0
MAR.												
01...	.00	.02	962	1.31	380	210	4.0	1620	7.6	--	1	8.2
15...	.00	.04	949	1.29	370	210	4.0	1570	7.8	--	1	5.1
APR.												
01...	.20	.25	978	1.33	400	230	3.9	1590	8.1	--	--	2.6
22...	--	.05	--	--	390	220	4.0	1600	7.9	16.5	--	4.3
MAY												
02...	.03	.00	949	1.29	390	210	3.8	1530	7.9	19.0	--	4.3
15...	.03	.08	971	1.32	400	220	3.7	1560	7.7	23.0	--	6.9
JUNE												
05...	.07	.14	965	1.31	400	230	--	1550	7.9	23.0	--	1.5
JULY												
01...	.56	.08	969	1.32	39	230	4.0	1550	7.7	25.0	--	6.2
15...	.03	.08	982	1.34	420	260	3.6	1560	8.0	25.0	--	3.1
AUG.												
02...	--	--	1050	1.43	390	250	--	1580	7.7	27.0	--	5.6
15...	--	--	1040	1.41	400	260	--	1580	8.0	26.0	--	2.8
SEP.												
03...	--	.09	743	1.01	290	160	--	1220	7.6	23.0	20	6.3
16...	--	.03	888	1.21	330	190	--	1430	7.6	20.0	2	6.7

ARKANSAS RIVER BASIN

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07239450 NORTH CANADIAN RIVER NEAR FORT RENO, OKLA.

LOCATION.--Lat 35°36'59", long 98°03'57", in E 1/2 sec.9, T.13 N., R.8 W., Canadian County, at bridge on county road, 4 mi (6.4 km) northwest of Fort Reno, 3 mi (4.8 km) east and 1 mi (1.6 km) north of Calumet.

DRAINAGE AREA.--Not determined.

PERIOD OF RECORD.--Chemical analyses: February 1974 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	INSTAN- TANEOUS DIS- CHARGE (CFS)	TOTAL IRON (FE) (UG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (NO3) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)
FEB.											
19...	24	350	.04	.11	.59	.70	.74	3.3	.54	1090	1.48
26...	62	1600	.30	.49	1.1	1.6	1.9	8.4	.39	642	.87
MAR.											
07...	30	370	.03	.15	.57	.72	.75	3.3	.38	1160	1.58
19...	158	--	.02	.17	1.2	1.4	1.4	6.3	.21	965	1.31
APR.											
03...	860	--	.23	.21	--	--	--	--	.34	953	1.30
16...	184	--	.01	.29	.81	1.1	1.1	4.9	.29	979	1.33
MAY											
08...	503	3900	.00	.14	.33	.47	.47	2.1	.22	939	1.28
21...	590	2300	.01	.07	1.1	1.2	1.2	5.4	.24	962	1.31
JUNE											
06...	105	2700	.02	.02	1.9	1.9	1.9	8.5	.44	634	.86
19...	49	530	.10	.02	1.2	1.2	1.3	5.8	.33	1080	1.47
JULY											
02...	19	190	.03	--	--	.46	.49	2.2	.20	1260	1.71
16...	9.3	160	.00	.05	.83	.88	.88	3.9	.13	1200	1.63
AUG.											
06...	4.9	520	.03	.25	1.0	1.3	1.3	5.9	.22	719	.98
SEP.											
04...	710	5700	.04	.07	1.8	1.9	1.9	8.6	.33	945	1.29
17...	846	3700	.01	.07	1.1	1.2	1.2	5.4	.17	884	1.20
DATE	DIS- SOLVED SOLIDS (TONS PER DAY)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	CHEM- ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	CHEM- ICAL OXYGEN DEMAND (HIGH LEVEL) (MG/L)	CHLORO- PHYLL A (UG/L)
FEB.											
19...	70.6	--	1740	8.4	7.0	1	12.9	117	--	29	--
26...	107	--	1080	--	6.0	30	11.0	98	--	22	--
MAR.											
07...	94.0	20	1750	8.3	18.0	1	10.6	122	--	25	41
19...	412	56	1200	8.4	13.5	20	10.6	112	--	31	20
APR.											
03...	2210	483	1400	8.3	12.5	100	9.2	96	42	--	--
16...	486	145	1600	8.5	13.5	60	10.3	105	31	--	54
MAY											
08...	1280	153	1540	8.4	20.0	60	7.8	94	27	--	44
21...	1530	89	1590	8.3	23.0	30	--	--	35	--	42
JUNE											
06...	180	94	1080	8.3	23.5	50	--	--	27	--	--
19...	143	14	1640	8.5	29.5	7	9.3	129	13	--	--
JULY											
02...	64.6	4	2020	8.4	29.0	1	9.6	133	22	--	62
16...	30.1	2	1950	8.4	34.5	2	12.4	182	31	--	27
AUG.											
06...	9.51	13	1190	8.0	22.0	7	9.6	118	17	--	54
SEP.											
04...	1810	190	1600	8.2	18.5	70	8.3	96	40	--	35
17...	2020	187	1500	8.3	19.0	50	8.0	93	36	--	37

ARKANSAS RIVER BASIN

07239450 NORTH CANADIAN RIVER NEAR FORT RENO, OKLA.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	CHLORO- PHYLL B (UG/L)	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)	OIL AND GREASE (MG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CAD- MIUM (CD) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL ZINC (ZN) (UG/L)
FEB.											
19...	--	--	120	6.5	--	2	20	0	100	.3	40
26...	--	310	340	7.5	--	7	10	0	100	.0	20
MAR.											
07...	44	50	44	8.9	--	10	10	0	100	.3	30
19...	12	240	110	8.8	3	3	10	0	100	.1	20
APR.											
03...	--	560	240	10	3	4	20	10	100	.0	350
16...	45	380	220	12	2	6	10	0	100	.0	80
MAY											
08...	95	480	460	14	--	4	10	30	100	.1	50
21...	48	--	--	5.9	0	9	10	0	100	.1	50
JUNE											
06...	--	--	--	--	2	6	10	0	100	.0	40
19...	--	--	350	--	0	10	10	0	100	.1	20
JULY											
02...	70	46	210	--	--	6	10	0	100	.1	110
16...	22	10	61	9.1	0	6	10	0	100	.0	70
AUG.											
06...	23	--	460	8.9	0	8	10	0	100	.0	10
SEP.											
04...	19	--	980	17	2	6	10	0	100	.6	50
17...	18	110	90	7.8	0	4	10	0	100	.0	30

ARKANSAS RIVER BASIN

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07239500 NORTH CANADIAN RIVER NEAR EL RENO, OKLA.

LOCATION.--Lat 35°33'44", long 97°57'32", on east line of sec.32, T.13 N., R.7 W., Canadian County, at gaging station at bridge on U.S. Highway 81, 2.0 mi (3.2 km) north of courthouse in El Reno, 2.2 mi (3.5 km) downstream from Target Creek, and at mile 307.4 (494.6 km).

DRAINAGE AREA.--13,042 mi² (33,779 km²), of which 4,899 mi² (12,688 km²) is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: May 1974 to current year.

Water temperatures: May 1974 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	DIS- CHARGE (CFS)	INSTAN- TANEOUS DIS- CHARGE (CFS)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	ALKA- LITY AS CACO3 (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L)
DEC. 13...	--	26	130	50	180	377	0	309	280	220	.24
JUNE 08...	--	838	35	9.5	34	--	0	--	55	30	3.8
15...	--	66	110	41	150	377	0	309	230	170	.58
30...	--	23	120	58	220	352	0	289	340	270	.76
JULY 01-15	17	--	110	57	--	262	10	232	360	260	.57
16-30	39	--	96	61	200	268	0	220	390	230	.74
31...	3.1	--	58	21	67	142	2	120	160	65	1.0
AUG. 01-04	8.1	--	64	29	95	206	0	169	190	99	.89
05-11	7.2	--	92	49	150	287	0	235	300	150	.75
12-13	12	--	55	24	79	176	0	144	160	84	1.4
14-28	7.1	--	78	50	180	244	0	200	300	180	.72
29-31	146	--	51	21	--	143	0	117	140	120	3.4
SEP. 01-20	804	--	83	34	--	168	0	138	240	220	.60
21-22	768	--	51	19	--	126	0	103	130	120	.59
23-30	642	--	81	31	--	169	0	139	230	200	.42

DATE	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	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)	CARBON DIOXIDE (CO2) (MG/L)
DEC. 13...	.31	1070	1.46	75.7	530	220	3.4	1700	8.2	3.8
JUNE 08...	1.1	276	.38	624	130	--	1.3	407	8.0	--
15...	.42	--	--	--	440	130	3.1	1430	8.1	4.8
30...	.21	--	--	--	540	250	4.1	1950	8.3	2.8
JULY 01-15	.25	1200	1.63	55.1	510	280	--	1830	8.5	1.4
16-30	.22	1190	1.62	125	490	270	3.9	1790	8.0	4.3
31...	.43	484	.66	4.05	230	110	1.9	780	8.4	.9
AUG. 01-04	.28	657	.89	14.4	280	110	2.5	1040	8.0	3.3
05-11	.25	968	1.32	18.8	430	200	3.1	1470	8.1	3.6
12-13	.30	533	.72	17.3	240	92	2.2	856	8.2	1.8
14-28	.29	968	1.32	18.6	400	200	3.9	1500	8.0	3.9
29-31	.67	549	.75	216	210	97	--	893	7.7	4.6
SEP. 01-20	.19	882	1.20	1920	350	210	--	1440	7.9	3.4
21-22	.46	494	.67	1020	210	110	--	847	8.0	2.0
23-30	.28	821	1.12	1420	330	190	--	1340	8.2	1.7

DATE	INSTAN- TANEOUS DIS- CHARGE (CFS)	DIS- SOLVED NITRATE (N) (MG/L)	DIS- SOLVED NITRATE (NO3) (MG/L)	DIS- SOLVED NITRITE (N) (MG/L)	DIS- SOLVED NITRITE (NO2) (MG/L)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS- AMMONIA NITRO- GEN (N) (MG/L)	DIS- SOLVED AMMONIA (NH4) (MG/L)	DIS- SOLVED ORGANIC NITRO- GEN (N) (MG/L)	DIS- SOLVED KJEL. NITRO- GEN (N) (MG/L)
DEC. 13...	26	.23	1.0	.01	.03	.24	.33	.43	.67	1.0
JULY 25...	3.6	.05	.22	.01	.03	.06	--	--	--	--
AUG. 27...	8.2	.00	.00	.00	.00	.00	--	--	--	--

ARKANSAS RIVER BASIN

07239500 NORTH CANADIAN RIVER NEAR EL RENO, OKLA.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TOTAL PHOS- PHORUS (P) (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	CHEM- ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	CHEM- ICAL OXYGEN DEMAND (HIGH LEVEL) (MG/L)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)	PHENOLS (UG/L)
DEC. 13...	.31	1700	8.2	10.0	10.8	104	--	20	3.5	1
JULY 25...	--	2200	8.2	28.5	10.8	150	24	--	2.2	0
AUG. 27...	.06	1350	8.5	25.0	10.0	132	--	--	5.4	1

DATE	INSTAN- TANEOUS DIS- CHARGE (CFS)	ALDRIN (UG/L)	CHLOR- DANE (UG/L)	DDD (UG/L)	DDE (UG/L)	DDT (UG/L)	DI- AZINON (UG/L)	DI- ELDRIN (UG/L)	ENDRIN (UG/L)	HEPTA- CHLOR (UG/L)
DEC. 14...	26	.00	.0	.00	.00	.00	.01	.00	.00	.00
JULY 25...	3.6	.00	.0	.00	.00	.00	.00	.00	.00	.00

DATE	HEPTA- CHLOR EPOXIDE (UG/L)	LINDANE (UG/L)	MALA- THION (UG/L)	METHYL PARA- THION (UG/L)	PARA- THION (UG/L)	PCB (UG/L)	TOX- APHENE (UG/L)	2,4-D (UG/L)	2,4,5-T (UG/L)	SILVEX (UG/L)
DEC. 14...	.00	.00	.00	.00	.00	.0	--	.00	.00	.00
JULY 25...	.00	.00	.00	.00	.00	.0	0	.00	.00	.00

DATE	INSTAN- TANEOUS DIS- CHARGE (CFS)	TOTAL IRON (FE) (UG/L)	DIS- SOLVED IRON (FE) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED BORON (B) (UG/L)	TOTAL CAD- MIUM (CD) (UG/L)
DEC. 13...	26	580	10	110	80	260	<10

DATE	DIS- SOLVED CAD- MIUM (CD) (UG/L)	TOTAL COPPER (CU) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)
DEC. 13...	0	20	2	<100	1	10	0

ARKANSAS RIVER BASIN

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07239500 NORTH CANADIAN RIVER NEAR EL RENO, OKLA.--Continued

SPECIFIC CONDUCTANCE (MICROMHUS/CM AT 25 DEG. C) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
(UNCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	912	1950	746	1600
2	---	---	---	---	---	---	---	---	606	1950	1040	1590
3	---	---	---	---	---	---	---	---	761	1960	1080	1580
4	---	---	---	---	---	---	---	---	1140	1130	1270	1540
5	---	---	---	---	---	---	---	---	562	1670	1470	1460
6	---	---	---	---	---	---	---	---	951	1820	1540	1370
7	---	---	---	---	---	---	---	---	1190	1910	1530	1360
8	---	---	---	---	---	---	---	---	407	1890	1500	1450
9	---	---	---	---	---	---	---	---	410	1900	1550	1440
10	---	---	---	---	---	---	---	---	468	1910	1310	1420
11	---	---	---	---	---	---	---	---	769	1890	1330	1430
12	---	---	---	---	---	---	---	---	948	1900	814	1420
13	---	---	---	---	---	---	---	---	1100	1900	890	1440
14	---	---	---	---	---	---	---	---	1270	1880	1230	1450
15	---	---	---	---	---	---	---	1800	1430	1870	1360	1440
16	---	---	---	---	---	---	---	1830	1610	1840	1440	1410
17	---	---	---	---	---	---	---	1820	1660	1840	1540	1420
18	---	---	---	---	---	---	---	1830	1690	1840	1610	1440
19	---	---	---	---	---	---	---	1840	1720	1860	1700	1400
20	---	---	---	---	---	---	---	1850	1740	1840	1760	1360
21	---	---	---	---	---	---	---	673	1830	1800	1810	846
22	---	---	---	---	---	---	---	1340	1870	1820	1750	833
23	---	---	---	---	---	---	---	810	1890	1810	1200	---
24	---	---	---	---	---	---	---	1420	1910	1780	1350	1200
25	---	---	---	---	---	---	---	767	1920	1750	1390	1160
26	---	---	---	---	---	---	---	908	1910	1800	1490	1330
27	---	---	---	---	---	---	---	1360	1910	1790	1310	1380
28	---	---	---	---	---	---	---	1080	1930	1810	1460	1420
29	---	---	---	---	---	---	---	---	1940	1780	679	1420
30	---	---	---	---	---	---	---	---	1950	1510	477	1430
31	---	---	---	---	---	---	---	---	---	780	1520	---
MONTH	---	---	---	---	---	---	---	---	1350	1780	1330	1380

TEMPERATURE (DEG. C) OF WATER , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
(UNCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	23.0	24.5	27.5	30.0
2	---	---	---	---	---	---	---	---	25.0	31.0	26.5	24.5
3	---	---	---	---	---	---	---	---	29.0	30.5	31.0	23.0
4	---	---	---	---	---	---	---	---	26.5	24.5	34.5	24.0
5	---	---	---	---	---	---	---	---	29.0	30.5	37.0	25.0
6	---	---	---	---	---	---	---	---	26.0	28.0	24.0	26.0
7	---	---	---	---	---	---	---	---	21.0	30.5	34.0	27.0
8	---	---	---	---	---	---	---	---	23.0	30.5	34.0	26.5
9	---	---	---	---	---	---	---	---	24.5	30.0	30.0	27.0
10	---	---	---	---	---	---	---	---	24.5	30.0	34.0	27.0
11	---	---	---	---	---	---	---	---	26.5	32.5	31.5	27.0
12	---	---	---	---	---	---	---	---	24.5	24.0	34.0	24.5
13	---	---	---	---	---	---	---	---	22.0	33.5	36.5	23.0
14	---	---	---	---	---	---	---	---	28.0	---	33.0	23.0
15	---	---	---	---	---	---	---	25.0	30.0	---	35.0	22.0
16	---	---	---	---	---	---	---	27.0	27.0	35.0	32.0	23.0
17	---	---	---	---	---	---	---	28.0	22.5	35.0	34.5	23.5
18	---	---	---	---	---	---	---	27.0	28.0	33.5	33.0	24.0
19	---	---	---	---	---	---	---	27.0	29.0	28.0	31.5	24.5
20	---	---	---	---	---	---	---	29.0	29.5	34.0	30.0	24.5
21	---	---	---	---	---	---	---	23.0	28.5	40.0	30.0	24.0
22	---	---	---	---	---	---	---	28.0	24.5	37.0	36.0	23.5
23	---	---	---	---	---	---	---	30.0	29.0	34.5	33.0	---
24	---	---	---	---	---	---	---	23.5	29.5	28.0	37.0	18.5
25	---	---	---	---	---	---	---	22.0	27.0	36.5	34.0	21.0
26	---	---	---	---	---	---	---	22.5	27.0	40.0	31.0	23.0
27	---	---	---	---	---	---	---	28.0	21.0	34.5	31.0	22.0
28	---	---	---	---	---	---	---	22.0	20.5	34.0	30.0	22.5
29	---	---	---	---	---	---	---	---	28.5	32.0	30.0	22.5
30	---	---	---	---	---	---	---	---	29.0	31.5	31.0	22.0
31	---	---	---	---	---	---	---	---	---	34.5	31.0	---
MONTH	---	---	---	---	---	---	---	---	26.0	32.0	32.0	24.0

ARKANSAS RIVER BASIN

07241550 NORTH CANADIAN RIVER NEAR HARRAH, OKLA.

LOCATION.--Lat 35°30'01", long 97°11'37", in SW 1/4 NW 1/4 sec.22, T.12 N., R.1 E., Oklahoma County, at gaging station at bridge on county road, 2.2 mi (3.5 km) northwest of Harrah, 3.8 mi (6.1 km) downstream from Choctaw Creek, and at mile 230.0 (370.1 km).

DRAINAGE AREA.--13,501 mi² (34,968 km²), of which 4,899 mi² (12,688 km²) is probably noncontributing.

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

Water temperatures: October 1968 to current year.

EXTREMES, Current year.--Dissolved solids: Maximum, 1,320 mg/l July 1-15; minimum, 313 mg/l Nov. 25-26.

Hardness: Maximum, 560 mg/l Jan. 7-14; minimum, 150 mg/l Nov. 25-26.

Specific conductance: Maximum daily, 2,890 micromhos/cm July 9; minimum daily, 262 micromhos/cm June 9.

Water temperatures: Maximum, 32.0°C Aug. 13; minimum, freezing point on several days during January.

Period of record.--Dissolved solids: Maximum, 1,710 mg/l Dec. 23, 1969; minimum, 167 mg/l Sept. 24, 1970.

Hardness: Maximum, 560 mg/l Jan. 7-14, 1974; minimum, 88 mg/l Sept. 24, 1970.

Specific conductance: Maximum daily, 3,400 micromhos/cm Oct. 2, 1968, Oct. 31, 1969; minimum daily, 262 micromhos/cm June 9, 1974.

Water temperatures: Maximum, 35.0°C July 11, Aug. 9, 1969; minimum, freezing point on several days during winter months.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

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)	ALKA- LITY AS CACO3 (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED NITRATE (N) (MG/L)	DIS- SOLVED NITRATE (NO3) (MG/L)	DIS- SOLVED NITRITE (N) (MG/L)
OCT.												
01-11	218	86	26	170	261	0	214	82	--	4.2	19	.01
12-14	1170	51	13	62	166	0	136	48	89	1.4	6.2	.00
15-17	378	56	18	87	191	0	157	77	120	2.3	10	.00
18-21	244	92	29	200	282	0	231	91	330	4.5	20	.00
22-24	202	120	38	260	341	0	280	120	410	4.6	20	.00
25-31	179	85	28	180	264	0	217	110	260	3.8	17	.29
NOV.												
01-19	135	110	37	250	279	20	262	120	400	5.8	26	.00
20-22	720	49	13	74	159	0	130	43	110	2.0	8.8	.01
23-24	228	91	28	180	242	11	217	100	290	4.4	19	.01
25-26	1080	45	10	49	151	0	124	31	--	1.2	5.3	.01
27-30	285	66	24	110	--	0	--	94	170	3.5	15	.01
DEC.												
01-04	262	89	29	170	266	0	218	110	270	4.8	21	.01
05-06	256	60	20	99	198	0	162	80	--	3.8	17	.01
07-12	187	90	29	180	273	0	224	120	270	6.0	27	.01
13-20	173	100	34	220	298	0	244	120	350	6.2	27	.00
21-22	193	75	24	140	232	0	190	100	210	5.0	22	.01
23-31	197	110	38	250	313	0	257	130	400	6.4	28	.15
JAN.												
01-06	148	100	41	270	323	0	265	150	--	7.7	34	.00
07-14	106	160	40	280	306	0	251	130	520	8.4	37	.07
15-20	108	--	38	250	292	0	240	130	460	8.8	39	.02
21-31	104	140	38	290	296	0	243	130	510	7.9	35	.29
FEB.												
01-15	123	110	38	280	287	0	235	120	470	7.9	35	.01
16-21	278	71	21	150	199	0	163	76	240	4.6	20	.00
22-23	742	50	14	64	168	0	138	50	93	1.9	8.4	.00
24-28	184	76	27	140	237	0	194	95	220	5.0	22	.01
MAR.												
01-08	112	110	39	250	328	0	269	140	400	7.6	34	.03
09-13	1470	48	10	46	157	0	129	44	69	1.2	5.2	.03
14-23	398	70	25	110	209	0	171	120	140	2.8	12	.03
24-31	341	96	37	170	259	0	212	200	240	3.0	13	.02
APR.												
01-05	575	100	39	180	238	0	195	--	270	--	--	--
06-11	629	92	36	180	224	0	184	230	260	--	--	--
12...	817	51	15	73	152	0	125	72	110	--	--	--
13-21	340	96	37	180	266	0	218	--	270	--	--	--
22...	417	62	21	85	187	0	153	110	120	--	--	--
23-25	310	85	34	160	236	0	194	190	230	--	--	--
26-29	413	96	34	200	259	0	212	--	310	--	--	--
30...	2980	--	11	47	146	0	120	45	67	--	--	--
MAY												
01-03	2180	52	12	47	166	0	136	--	69	--	--	--
04-07	1020	68	22	91	197	0	162	120	120	--	--	--
08-21	424	99	39	180	284	0	233	180	270	--	--	--

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	DIS- CHARGE (CFS)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED NITRATE (N) (MG/L)	DIS- SOLVED NITRATE (NO3) (MG/L)	DIS- SOLVED NITRITE (N) (MG/L)
MAY												
22-27	832	52	15	68	166	0	136	69	95	--	--	--
28-31	368	71	26	120	--	0	--	120	180	--	--	--
JUNE												
01-04	670	51	15	63	169	0	139	--	88	--	--	--
05-07	1390	65	22	120	212	0	174	98	160	--	--	--
08-13	55	45	10	42	--	0	--	46	59	--	--	--
14-17	384	88	23	130	295	0	242	94	190	--	--	--
18-30	172	110	38	--	348	0	285	140	330	--	--	--
JULY												
01-15	96	120	37	280	330	0	271	140	480	--	--	--
16-31	69	100	39	280	283	0	232	130	450	--	--	--
AUG.												
01-10	69	95	31	270	268	0	220	120	420	--	--	--
11-13	164	60	18	130	169	0	139	71	210	--	--	--
14-27	82	79	23	190	213	0	175	100	300	--	--	--
28-31	117	71	21	150	197	0	162	88	240	--	--	--
SEP.												
01...	121	120	36	250	266	0	218	250	370	--	--	--
02-03	896	55	13	72	161	0	132	76	98	--	--	--
04-25	416	85	30	--	187	0	153	200	230	--	--	--
26-27	222	49	12	69	159	0	130	58	94	--	--	--
28-30	121	93	30	190	250	0	205	140	290	--	--	--

DATE	DIS- SOLVED NITRITE (NO2) (MG/L)	DIS- SOLVED NITRITE (N) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	CARBON DIOXIDE (CO2) (MG/L)
OCT.											
01-11	.03	4.2	848	1.15	499	320	110	4.1	1435	7.9	5.3
12-14	.00	1.4	381	.52	1200	180	45	2.0	670	7.9	3.3
15-17	.00	2.3	488	.66	498	210	57	2.6	864	7.8	4.8
18-21	.00	4.5	945	1.29	623	350	120	4.7	1622	7.8	7.2
22-24	.00	4.6	1220	1.66	665	460	180	5.3	2027	7.9	6.9
25-31	.95	4.1	841	1.14	406	330	110	4.3	1455	7.8	6.7
NOV.											
01-19	.00	5.8	1170	1.59	426	430	160	5.3	2010	8.4	2.0
20-22	.03	2.0	418	.57	813	180	45	2.4	730	8.1	2.0
23-24	.03	4.4	896	1.22	552	340	130	4.2	1560	8.4	1.7
25-26	.03	1.2	313	.43	913	150	30	1.7	574	8.0	2.4
27-30	.03	3.5	633	.86	487	260	--	2.9	1090	8.2	--
DEC.											
01-04	.03	4.8	846	1.15	598	340	120	4.0	1480	7.8	6.7
05-06	.03	3.8	546	.74	377	230	70	2.8	959	7.6	8.0
07-12	.03	6.0	862	1.17	435	340	120	4.2	1500	7.7	8.7
13-20	.00	6.2	1050	1.43	490	390	150	4.9	1810	7.6	12
21-22	.03	5.0	705	.96	367	290	96	3.6	1220	7.7	7.4
23-31	.49	6.5	1150	1.56	612	430	170	5.2	1990	7.5	16
JAN.											
01-06	.00	7.7	1240	1.69	496	420	150	5.7	2090	7.9	6.5
07-14	.23	8.5	1300	1.77	372	560	310	5.1	2230	7.6	12
15-20	.07	8.8	1190	1.62	347	--	--	--	2060	7.9	5.9
21-31	.95	8.2	1290	1.75	362	510	260	5.6	2200	7.5	15
FEB.											
01-15	.03	7.9	1270	1.73	422	430	200	5.9	2230	7.8	7.3
16-21	.00	4.6	712	.97	534	260	100	4.0	1290	7.8	5.0
22-23	.00	1.9	379	.52	759	180	45	2.1	692	7.8	4.3
24-28	.03	5.0	--	--	--	300	110	3.5	1300	7.6	9.5
MAR.											
01-08	.10	7.6	1180	1.60	357	440	170	5.2	2100	7.6	13
09-13	.10	1.2	317	.43	1260	160	32	1.6	564	7.7	5.0
14-23	.10	2.8	597	.81	642	280	110	2.9	1060	7.8	5.3
24-31	.07	3.0	915	1.24	842	390	180	3.7	1580	7.7	8.3
APR.											
01-05	--	2.4	994	1.35	1540	410	220	3.9	1640	7.8	6.0
06-11	--	1.6	950	1.29	1610	380	190	4.0	1570	7.8	5.7
12...	--	1.6	431	.59	951	190	64	2.3	738	7.7	4.9
13-21	--	3.4	--	--	--	390	170	4.0	1610	7.8	6.7
22...	--	.67	--	--	--	240	88	2.4	886	7.6	7.5
23-25	--	2.8	857	1.17	717	350	160	3.7	1420	7.7	7.5
26-29	--	3.2	1000	1.36	1120	380	170	4.5	1700	7.6	10
30...	--	.25	--	--	--	--	--	--	545	7.4	9.3
MAY											
01-03	--	1.9	357	.49	2100	180	43	1.5	600	7.6	6.7
04-07	--	2.1	556	.76	1530	260	99	2.5	952	7.8	5.0
08-21	--	2.8	969	1.32	1110	410	170	3.9	1640	7.9	5.7

ARKANSAS RIVER BASIN

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	DIS- SOLVED NITRITE (NO2) (MG/L)	DIS- SOLVED NITRATE (N) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	CARBON DIOXIDE (CO2) (MG/L)
MAY											
22-27	--	1.5	416	.57	935	190	55	2.1	717	7.7	5.3
28-31	--	2.8	686	.93	682	280	--	3.1	1170	8.0	--
JUNE											
01-04	--	1.6	420	.57	760	190	51	2.0	689	8.0	2.7
05-07	--	2.9	612	.83	2300	250	79	3.3	1050	7.7	6.8
08-13	--	1.3	303	.41	45.0	150	--	1.5	529	8.0	--
14-17	--	2.5	740	1.01	767	310	72	3.2	1230	7.9	5.9
18-30	--	3.0	1050	1.43	488	430	150	--	1770	8.0	5.6
JULY											
01-15	--	2.8	1320	1.80	342	450	180	5.7	2210	8.1	4.2
16-31	--	4.7	1230	1.67	229	410	180	6.0	2070	7.9	5.7
AUG.											
01-10	--	5.7	1160	1.58	216	360	150	6.2	1970	7.6	11
11-13	--	2.8	633	.86	280	220	85	3.8	1110	7.7	5.4
14-27	--	4.3	857	1.17	190	290	120	4.8	1470	7.7	6.8
28-31	--	4.3	720	.98	227	260	100	4.0	1260	7.5	10
SEP.											
01...	--	3.1	1240	1.69	405	450	230	5.1	2000	7.4	17
02-03	--	2.3	437	.59	1060	190	59	2.3	743	7.3	13
04-25	--	2.6	853	1.16	958	340	180	--	1390	7.7	6.0
26-27	--	2.4	409	.56	245	170	41	2.3	701	7.4	10
28-30	--	5.1	968	1.32	316	360	150	4.4	1610	7.6	10

DATE	INSTAN- TANEOUS DIS- CHARGE (CFS)	DIS- SOLVED NITRATE (N) (MG/L)	DIS- SOLVED NITRATE (NO3) (MG/L)	DIS- SOLVED NITRITE (N) (MG/L)	DIS- SOLVED NITRITE (NO2) (MG/L)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)
JAN.										
30...	98	.14	.62	.00	.00	.16	5.7	1660	--	11.0
FEB.										
27...	132	2.5	11	.11	.36	2.5	.00	1520	8.2	11.5
MAR.										
22...	398	--	--	--	--	--	--	725	8.2	8.0
APR.										
05...	750	.88	3.9	.06	.20	.95	--	1440	8.2	12.1
MAY										
29...	296	--	--	--	--	--	--	1210	7.5	25.0
JUNE										
27...	200	--	--	--	--	--	--	--	--	21.0
JULY										
26...	68	1.9	8.4	.60	2.0	2.5	--	1750	--	27.0
AUG.										
21...	55	--	--	--	--	3.3	--	1750	8.8	31.5
SEP.										
17...	754	--	--	--	--	.65	1.6	1200	7.6	19.0

DATE	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	CHEM- ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	CHEM- ICAL OXYGEN DEMAND (HIGH LEVEL) (MG/L)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)	PHENOLS (UG/L)	TOTAL IRON (FE) (UG/L)	DIS- SOLVED IRON (FE) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)
JAN.										
30...	13.6	133	46	--	--	3	480	320	820	820
FEB.										
27...	9.2	91	--	41	--	6	1300	120	190	160
MAR.										
22...	9.2	84	--	37	3.4	--	--	--	--	--
APR.										
05...	8.3	82	43	--	--	2	--	30	--	0
MAY										
29...	9.6	125	--	--	6.5	4	5900	30	390	0
JUNE										
27...	6.8	82	--	--	--	--	--	--	--	--
JULY										
26...	3.3	43	49	--	9.2	12	--	--	--	--
AUG.										
21...	14.0	197	--	--	5.6	--	--	--	--	--
SEP.										
17...	6.0	69	--	--	5.5	--	--	--	--	--

ARKANSAS RIVER BASIN

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TOTAL CAD- MIUM (CD) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)
JAN. 30...	10	4	0	0	20	24	<100	21	50	90
FEB. 27...	<10	2	0	0	10	13	<100	10	70	40
MAR. 22...	--	--	--	--	--	--	--	--	--	--
APR. 05...	--	0	--	0	--	4	--	1	--	40
MAY 29...	<10	2	20	0	50	13	<100	6	60	20
JUNE 27...	--	--	--	--	--	--	--	--	--	--
JULY 26...	--	--	--	--	--	--	--	--	--	--
AUG. 21...	--	--	--	--	--	--	--	--	--	--
SEP. 17...	--	--	--	--	--	--	--	--	--	--

DATE	INSTAN- TANEOUS DIS- CHARGE (CFS)	ALDRIN (UG/L)	CHLOR- DANE (UG/L)	DDD (UG/L)	DDE (UG/L)	DDT (UG/L)	DI- AZINON (UG/L)	DI- ELDRIN (UG/L)	ENDRIN (UG/L)	ETHION (UG/L)	HEPTA- CHLOR (UG/L)
OCT. 24...	207	.00	.0	.00	.00	.00	.08	.03	.00	--	.00
NOV. 27...	335	.00	.0	.00	.00	.00	.03	.01	.00	--	.00
DEC. 14...	270	.00	.0	.00	.00	.00	.06	.02	.00	--	.00
JAN. 30...	93	.00	.0	.00	.00	.00	.09	.01	.00	--	.00
FEB. 21...	188	.00	.0	.00	.00	.00	.04	.01	.00	--	.00
21...	611	.00	.1	.00	.00	.00	.05	.02	.00	--	.00
21...	1600	.00	.4	.00	.00	.00	.05	.09	.00	--	.00
22...	1090	.00	.1	.00	.00	.00	.05	.02	.00	--	.00
27...	132	.00	.0	.00	.00	.00	.09	.01	.00	--	.00
MAR. 22...	398	.00	.0	.00	.00	.00	.03	.01	.00	--	.00
APR. 05...	750	.00	.0	.00	.00	.00	.02	.01	.00	--	.00
MAY 24...	1170	--	--	--	--	--	.04	--	--	.00	--
24...	1770	.00	.0	.00	.00	.00	.04	.00	.00	.00	.00
24...	1120	.00	.2	.00	.00	.00	.08	.02	.00	.00	.00
25...	579	.00	.2	.00	.00	.00	.08	.03	.00	.00	.00
29...	296	.00	.1	.00	--	.00	.05	.02	.00	--	.00
JUNE 05...	409	.00	.0	.00	.00	.00	.06	.01	.00	--	.00
JULY 26...	68	.00	.0	.00	.00	.00	.10	.01	.00	--	.00
AUG. 21...	55	.00	.0	.00	.00	.00	.11	.00	.00	--	.00
SEP. 17...	754	.00	.0	.00	.00	.00	.03	.01	.00	.00	.00

ARKANSAS RIVER BASIN

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	HEPTA- CHLOR EPOXIDE (UG/L)	LINDANE (UG/L)	MALA- THION (UG/L)	METHYL PARA- THION (UG/L)	PARA- THION (UG/L)	PCB (UG/L)	TOX- APHENE (UG/L)	TRI- THION (UG/L)	2,4-D (UG/L)	2,4,5-T (UG/L)	SILVEX (UG/L)
OCT. 24...	.00	.00	.00	.00	.00	.0	--	--	.00	.00	.00
NOV. 27...	.00	.00	.00	.00	.00	.0	--	--	.00	.01	.00
DEC. 14...	.00	.00	.00	.00	.00	.0	--	--	.00	.00	.00
JAN. 30...	.00	.00	.00	.00	.00	.0	--	--	.08	.00	.00
FEB. 21...	.00	.00	.00	.00	.00	.0	--	--	.08	.03	.02
21...	.00	.00	.00	.00	.00	.1	--	--	.09	.02	.02
21...	.00	.00	.00	.00	.00	.2	--	--	.31	.04	.13
22...	.00	.00	.00	.00	.00	.1	--	--	.22	.03	.04
27...	.00	.01	.00	.00	.00	.0	--	--	.38	.11	.01
MAR. 22...	.00	.00	.00	.00	.00	.0	--	--	.23	.02	.00
APR. 05...	.00	.00	.00	.00	.00	.0	--	--	.05	.00	.00
MAY 24...	--	--	.02	.00	.00	--	--	.00	.25	.05	.02
24...	.00	.00	5.5	.00	.00	.2	0	.00	.68	.16	.08
24...	.00	.00	.05	.00	.00	.1	0	.00	.66	.24	.12
25...	.00	.00	.05	.00	.00	.0	0	.00	.52	.22	.10
29...	.00	.00	.00	.00	.00	.0	0	--	.12	.03	.02
JUNE 05...	.00	.00	.00	.00	.00	.0	0	--	.00	.00	.00
JULY 26...	.00	.00	.00	.00	.00	.0	0	--	.00	.00	.00
AUG. 21...	.00	.00	.00	.00	.00	.0	0	--	.01	--	.00
SEP. 17...	.00	.00	.00	.00	.00	.0	0	.00	.00	.00	.00

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

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1210	1850	1260	2170	2260	1900	1640	467	532	2030	2010	2000
2	1510	1660	1540	2040	2150	1900	1660	602	741	2070	1990	879
3	1780	1890	1620	2040	2320	1980	1610	697	784	2020	2290	616
4	1890	1940	1400	2100	2370	1990	1580	834	---	2050	1950	1380
5	1930	1920	789	1960	2300	2020	1520	884	1050	2000	1940	1520
6	1030	1760	1070	2110	2370	2100	1540	875	1090	2300	1910	1550
7	1510	1730	1320	2240	2110	2070	1520	1110	1020	2140	1950	1460
8	1390	1980	1530	2290	2170	2030	1500	1390	520	2610	1940	1500
9	942	2040	1460	2190	1650	718	1510	1440	262	2890	2000	1640
10	1310	2100	1530	2230	2080	536	1620	1420	493	2400	1740	1430
11	1510	1880	1470	2330	2130	432	1540	1410	544	2440	1260	1460
12	560	2060	1460	2260	1990	444	727	1540	543	2060	738	1470
13	721	2000	1620	2160	2200	---	1290	1590	771	1940	1280	1340
14	643	1910	1540	2200	2230	768	1480	1600	1020	2200	1560	1460
15	717	2060	1760	1980	2090	778	1580	1680	1120	1980	1770	1450
16	820	2070	1750	1990	1140	1000	1620	1590	1310	2130	938	1420
17	926	1900	1660	2100	1190	1220	1710	1620	1430	2260	1160	1180
18	1480	1930	1680	2010	1720	1030	1660	1700	1660	2250	1640	1250
19	1720	2110	1800	2120	1700	1070	1590	1720	1590	2220	1680	---
20	1440	972	2220	2080	868	1300	1650	1820	---	2130	1810	1470
21	1720	501	1020	2230	840	1070	1580	1820	1600	2150	1840	1200
22	1970	827	1360	2270	582	800	871	738	1660	2080	1710	1460
23	2080	1310	1740	2200	673	1240	1390	969	1730	2090	948	1280
24	2020	1660	1850	2250	1210	1450	1480	733	1830	1970	742	1330
25	1150	606	2000	2010	865	1380	1310	564	1920	2110	1120	1340
26	1800	482	1980	2060	1130	1510	1640	460	1990	1980	1520	502
27	1390	889	2050	2210	1480	1550	2070	766	1860	1980	1780	890
28	1720	1130	2000	2340	1760	1560	1550	937	1910	1980	1650	1420
29	1080	1100	1900	2260	---	1590	1370	1140	1890	1930	663	1650
30	1370	1120	1950	2080	---	1640	516	1280	1970	1950	1150	1770
31	1510	---	1990	2240	---	1400	---	1220	---	1980	1540	---
MONTH	1380	1580	1620	2150	1700	1350	1480	1180	1240	2140	1560	1360

TEMPERATURE (DEG. C) OF WATER , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
(ONCE-DAILY)

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

ARKANSAS RIVER BASIN

07242000 NORTH CANADIAN RIVER NEAR WETUMKA, OKLA.

LOCATION.--Lat 35°15'53", long 96°12'25", in center of SW 1/4 sec.12, T.9 N., R.10 E., Hughes County, at gaging station at bridge on U.S. Highway 75, 2.3 mi (3.7 km) upstream from Wewoka Creek, 2.5 mi (4.0 km) northeast of Wetumka, and at mile 84.4 (135.8 km).

DRAINAGE AREA.--14,290 mi² (37,011 km²), of which 4,899 mi² (12,668 km²) is probably noncontributing.

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

Water temperatures: October 1953 to current year.

EXTREMES, Current year.--Specific conductance: Maximum daily, 2,000 micromhos/cm July 16; minimum daily, 181 micromhos/cm Nov. 26.

Water temperatures: Maximum, 27.5°C on several days during July; minimum, freezing point on Jan. 2-5.

Period of record.--Specific conductance: Maximum daily, 37,100 micromhos/cm Dec. 31, 1954; minimum daily, 156 micromhos/cm Nov. 1, 1972.

Water temperatures: Maximum, 39.0°C July 5, 1971; minimum, freezing point on many days during winter months.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

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 (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	ALKA- LINITY AS CACO ₃ (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED NITRATE (N) (MG/L)	DIS- SOLVED NITRATE (NO ₃) (MG/L)	DIS- SOLVED NITRITE (N) (MG/L)
OCT.												
05...	565	56	13	61	205	0	168	27	100	.98	4.3	.01
25...	352	100	29	160	319	8	275	54	270	1.7	7.5	.00
NOV.												
05...	318	96	27	130	316	0	259	55	220	.35	1.6	.00
15...	270	110	32	180	284	--	--	67	310	1.9	8.4	.01
25...	12200	22	4.6	24	73	0	60	12	39	.71	3.1	.01
DEC.												
05...	1580	52	15	69	180	0	148	32	120	.93	4.1	.03
15...	490	110	30	150	335	0	275	60	270	2.0	8.8	.02
25...	570	100	30	170	311	0	255	68	310	2.6	12	.00
JAN.												
05...	337	120	34	200	360	0	295	79	370	2.9	13	.01
15...	333	120	33	190	344	0	282	65	360	3.2	14	.01
25...	266	--	31	190	345	0	283	60	350	3.9	17	.01
FEB.												
05...	235	120	32	200	347	0	285	57	360	1.9	8.4	.00
15...	1090	66	19	100	197	0	162	44	180	1.4	6.2	.00
26...	735	53	13	92	170	0	139	40	150	2.1	9.1	.04
MAR.												
05...	325	87	25	130	283	0	232	61	220	1.6	7.1	.00
14...	1820	45	12	66	150	0	123	61	--	1.5	6.5	.03
25...	628	79	26	--	262	0	215	97	170	1.7	7.5	.01
APR.												
05...	422	97	33	160	296	0	243	150	240	--	--	--
15...	901	87	31	150	230	0	189	--	240	--	--	--
25...	614	110	37	180	315	0	258	160	280	--	--	--
MAY												
05...	2610	44	11	48	136	0	112	54	66	--	--	--
15...	638	86	30	140	236	0	194	160	200	--	--	--
29...	1180	--	13	64	189	0	155	59	83	--	--	--
JUNE												
10...	7150	39	6.3	21	--	0	--	16	29	--	--	--
15...	3330	45	9.6	42	150	0	123	43	55	--	--	--
24...	505	110	32	150	--	--	--	65	230	--	--	--
JULY												
05...	306	100	32	170	--	--	--	82	320	--	--	--
15...	206	--	35	220	344	0	282	84	410	--	--	--
25...	169	92	34	220	329	0	270	84	370	--	--	--
AUG.												
05...	86	110	35	210	362	0	297	70	340	--	--	--
15...	241	86	31	210	243	0	199	95	340	--	--	--
25...	96	89	26	150	316	0	259	60	240	--	--	--
SEP.												
03...	2330	26	5.0	24	90	0	74	11	38	--	--	--
15...	318	84	29	150	194	0	159	--	230	--	--	--
25...	431	71	28	120	186	0	153	140	190	--	--	--

ARKANSAS RIVER BASIN

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	DIS- SOLVED NITRITE (NO2) (MG/L)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (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)	CARBON DIOXIDE (CO2) (MG/L)
OCT.												
05...	.03	.99	.73	392	.53	598	190	25	1.9	680	8.0	3.3
25...	.00	1.7	1.2	--	--	--	370	94	3.6	1468	8.5	1.7
NOV.												
05...	.00	.35	1.7	733	1.00	629	350	92	3.0	1310	7.9	6.4
15...	.03	1.9	1.4	--	--	--	410	--	3.9	1690	8.5	2.0
25...	.03	.72	1.3	--	--	--	74	14	1.2	280	7.9	1.5
DEC.												
05...	.10	.96	1.8	--	--	--	190	44	2.2	765	8.2	1.8
15...	.07	2.0	1.8	--	--	--	400	120	3.3	1480	8.0	5.4
25...	.00	2.6	2.7	891	1.21	1370	370	120	3.8	1550	7.9	6.3
JAN.												
05...	.03	2.9	1.1	1020	1.39	928	440	140	4.2	1830	8.2	3.6
15...	.03	3.2	1.3	978	1.33	879	440	150	4.0	1740	8.1	4.4
25...	.03	3.9	1.1	960	1.31	689	--	--	--	1740	8.0	5.5
FEB.												
05...	.00	1.9	1.3	975	1.33	619	430	150	4.2	1760	7.8	8.8
15...	.00	1.4	.60	548	.75	1610	240	81	2.8	980	8.1	2.5
26...	.13	2.1	.56	460	.63	913	190	46	2.9	742	7.5	8.6
MAR.												
05...	.00	1.6	.97	706	.96	620	320	88	3.2	1260	8.1	3.6
14...	.10	1.5	.59	378	.51	1860	160	39	2.3	607	8.0	2.4
25...	.03	1.7	1.4	--	--	--	300	89	--	1180	8.0	4.2
APR.												
05...	--	1.7	--	854	1.16	973	380	140	3.6	1480	7.8	7.5
15...	--	2.2	--	--	--	--	350	160	3.5	1400	7.8	5.8
25...	--	1.9	1.8	961	1.31	1590	430	170	3.8	1630	8.2	3.2
MAY												
05...	--	.85	1.0	--	--	--	160	44	1.7	542	8.2	1.4
15...	--	.85	1.1	--	--	--	340	140	3.3	1310	8.3	1.9
29...	--	1.2	1.6	367	.50	1170	--	--	--	647	7.7	6.0
JUNE												
10...	--	2.4	.87	--	--	--	120	--	.8	299	7.7	--
15...	--	1.1	.87	--	--	--	150	29	1.5	501	8.1	1.9
24...	--	.95	1.1	--	--	--	410	--	3.2	1410	8.7	--
JULY												
05...	--	.71	.73	942	1.28	778	380	--	3.8	1590	8.6	--
15...	--	.48	.91	--	--	--	--	--	--	1850	8.0	5.5
25...	--	.90	.88	1030	1.40	470	370	100	5.0	1780	8.3	2.6
AUG.												
05...	--	.50	.73	--	--	--	420	120	4.5	1710	8.1	4.6
15...	--	1.3	.88	961	1.31	625	340	140	4.9	1640	7.7	7.8
25...	--	1.1	.89	770	1.05	200	330	70	3.6	1350	7.9	6.4
SEP.												
03...	--	1.6	1.5	173	.24	1090	86	12	1.1	287	7.9	1.8
15...	--	1.9	2.1	861	1.17	739	330	170	3.6	1380	8.3	1.6
25...	--	2.1	1.4	695	.95	809	290	140	3.1	1170	8.1	2.4

ARKANSAS RIVER BASIN

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

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	443	878	551	1680	1590	769	1430	959	775	1720	1790	1010
2	445	1440	938	1690	1640	1030	1460	1110	776	1720	1700	285
3	385	1440	997	1730	1630	1140	1500	622	997	1700	1710	287
4	496	1260	956	1770	1670	1150	1550	440	1150	1600	1720	429
5	667	1270	727	1760	1700	1240	1440	535	576	1590	1710	456
6	836	1370	917	1710	1710	1370	1430	531	534	1640	1680	589
7	917	1470	917	1710	1710	1440	1630	628	443	1720	1670	843
8	925	1560	928	1680	1710	1450	1630	818	310	1640	1720	1080
9	1170	1500	986	1680	1780	1450	1530	831	246	1640	1550	1290
10	1340	1510	978	1630	1770	1440	1540	898	299	1720	1550	1400
11	1140	1600	1100	1620	1810	1290	1280	896	298	1750	1380	1360
12	389	1600	1250	---	1810	1250	1330	1380	307	1760	1380	1280
13	387	1530	1350	1720	1790	685	1390	1330	354	1790	1500	1180
14	286	1670	1350	1700	1850	602	1360	1330	501	1770	1820	1170
15	505	1610	1430	1700	955	---	1360	1280	501	1850	1640	1380
16	437	1530	1430	1690	1450	800	1110	1220	692	2000	1840	1380
17	559	1610	1450	1680	1220	---	1020	1340	691	1990	1500	1360
18	560	1640	1450	1700	1480	894	1280	1380	828	1800	830	1210
19	700	1600	1280	1660	1550	---	1390	1390	994	1760	827	1100
20	699	742	828	1590	1250	922	1390	1490	1100	1760	981	1380
21	775	318	1340	1590	1060	957	1500	1530	1280	1780	1360	1140
22	935	382	1230	1610	927	1000	1520	1510	1290	1800	1370	1240
23	1080	381	1310	1620	838	1000	1590	1540	1290	1800	1350	1240
24	1300	394	1510	1650	901	1150	1460	1520	1410	1810	1350	1240
25	1430	276	1500	1670	716	1150	1600	1520	---	1780	1350	1170
26	1360	181	1440	1680	717	1190	1460	798	1480	1790	1340	1160
27	1360	202	1260	1660	718	919	1220	797	1580	1770	1390	1160
28	1580	488	1390	1630	774	1210	1060	1050	1530	1760	1670	857
29	1580	480	1610	1640	---	1330	1460	625	1690	1760	---	853
30	1400	545	1610	1520	---	1320	407	521	1700	1760	1350	962
31	1270	---	1620	1580	---	1440	---	584	---	1770	1000	---
MONTH	882	1080	1210	1670	1380	1130	1380	1050	884	1760	1470	1050

TEMPERATURE (DEG. C) OF WATER , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
(ONCE-DAILY)

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

ARKANSAS RIVER BASIN

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07242350 DEEP FORK NEAR ARCADIA, OKLA.

LOCATION.--Lat 35°39'10", long 97°20'58", on south line of SW 1/4 sec.30, T.14 N., R.1 W., Oklahoma County, at gaging station on county road bridge, 1.6 mi (2.6 km) upstream from Coffee Creek, 1.6 mi (2.6 km) southwest of Arcadia, and at mile 212.8 (342.4 km).

DRAINAGE AREA.--108 mi² (280 km²).

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

EXTREMES, Current year.--Dissolved solids: Maximum, 836 mg/l July 1-15; minimum, 184 mg/l June 8-9.
Hardness: Maximum, 380 mg/l June 10-30; minimum, 91 mg/l Aug. 23.
Specific conductance: Maximum daily, 1,750 micromhos/cm Aug. 9; minimum daily, 198 micromhos/cm June 8.
Water temperatures: Maximum, 29.0°C July 18-19; minimum, freezing point on Jan. 12.

Period of record.--Dissolved solids: Maximum, 1,140 mg/l Aug. 1-8, 1972; minimum, 184 mg/l June 8-9, 1974.
Hardness: Maximum, 380 mg/l June 10-30, 1974; minimum 91 mg/l Aug. 23, 1974.
Specific conductance: Maximum daily, 1,970 micromhos/cm Oct. 15, 1971; minimum daily, 198 micromhos/cm June 8, 1974.
Water temperatures: Maximum, 29.0°C June 17-18, 1970, July 18-19, 1974; minimum, freezing point on several days during winter months.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

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)	ALKA- LITY AS CACO3 (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED NITRATE (N) (MG/L)	DIS- SOLVED NITRATE (NO3) (MG/L)	DIS- SOLVED NITRITE (N) (MG/L)
OCT.												
01-04	90	74	35	120	290	0	238	110	170	3.8	17	.17
05-07	87	60	28	98	248	0	203	86	--	3.7	16	.09
08-10	61	70	34	130	267	0	219	110	190	3.7	17	.07
11...	322	39	15	47	200	0	164	22	61	.22	.97	.01
12-13	155	46	19	60	187	0	153	57	73	1.7	7.5	.01
14-22	53	75	35	120	274	0	225	120	150	7.3	32	.01
23-31	35	66	34	140	243	0	199	120	--	5.3	23	.01
NOV.												
01-19	28	66	32	150	241	0	198	110	200	10	44	.02
20...	355	46	17	45	169	0	139	52	62	.66	2.9	.02
21-24	150	60	29	130	213	0	175	110	170	10	44	.00
25...	262	35	13	32	138	0	113	25	43	2.8	12	.02
26-30	64	61	29	100	239	0	196	73	130	7.2	32	.01
DEC.												
01-03	58	72	35	130	272	0	223	140	170	1.2	5.3	1.9
04...	207	39	16	44	158	0	130	45	57	.11	.49	.05
05-08	56	66	33	110	289	0	237	110	140	.30	1.3	3.2
09-24	38	74	37	150	267	0	219	130	200	4.3	19	.00
25-31	32	69	35	150	264	0	217	140	190	.50	2.2	2.4
JAN.												
01-10	32	70	35	--	247	0	203	140	210	7.5	33	1.4
11-20	28	69	36	160	242	0	198	140	210	8.5	38	.48
21-31	25	67	35	160	237	0	194	140	210	11	49	.01
FEB.												
01-20	32	62	34	150	229	0	188	120	200	6.2	27	2.3
21-22	357	41	16	40	158	0	130	47	54	1.8	7.9	.01
23-28	49	70	37	130	266	0	218	120	170	7.5	33	.19
MAR.												
01-08	37	76	39	140	283	0	232	150	190	5.2	23	1.1
09-11	594	45	18	46	174	0	143	59	57	3.4	15	.03
12-31	49	79	42	--	317	0	260	150	170	6.1	27	.74
APR.												
01-10	30	76	42	150	294	0	241	150	200	--	--	--
11-12	125	47	24	68	204	0	167	76	87	--	--	--
13-20	34	75	39	150	276	0	226	150	190	--	--	--
21...	90	44	18	55	176	0	144	64	72	--	--	--
22-25	44	71	37	130	258	0	212	130	170	--	--	--
26-28	45	74	38	150	268	0	220	140	200	--	--	--
29...	350	52	25	89	230	0	189	64	120	--	--	--
30...	898	36	11	21	136	0	112	31	28	--	--	--
MAY												
01-04	154	63	30	77	253	0	208	89	99	--	--	--
05-21	62	70	41	150	275	0	226	150	200	--	--	--
22-26	478	44	15	38	--	0	--	50	50	--	--	--
27-30	110	75	38	120	286	0	235	110	170	--	--	--
31...	629	30	9.9	21	126	0	103	27	27	--	--	--
JUNE												
01...	117	44	18	49	186	0	153	55	60	--	--	--

07242350 DEEP FORK NEAR ARCADIA, OKLA.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	DIS- CHARGE (CFS)	DIS- SOLVED	DIS- SOLVED	DIS- SOLVED	BICAR- BONATE	CAR- BONATE	ALKA- LITY	DIS- SOLVED	DIS- SOLVED	DIS- SOLVED	DIS- SOLVED
		CAL- CIUM (CA) (MG/L)	MAG- NE- SIUM (MG) (MG/L)	SODIUM (NA) (MG/L)	(HCO3) (MG/L)	(CO3) (MG/L)	AS CACO3 (MG/L)	SULFATE (SO4) (MG/L)	CHLO- RIDE (CL) (MG/L)	NITRATE (N) (MG/L)	NITRATE (NO3) (MG/L)
JUNE											
02-03	84	71	33	110	277	0	227	120	150	--	--
04-05	180	44	16	42	179	0	147	48	56	--	--
06-07	72	65	31	100	265	0	217	--	130	--	--
08-09	2570	35	9.8	13	--	0	--	23	16	--	--
10-30	56	84	42	140	341	0	280	130	180	--	--
JULY											
01-15	352	71	36	160	257	0	211	120	230	--	--
16-31	33	62	28	170	212	0	174	120	230	--	--
AUG.											
01-09	35	62	28	180	193	0	158	120	260	--	--
10-11	100	42	15	64	150	0	123	61	80	--	--
12-22	28	59	26	160	168	0	138	120	230	--	--
23...	701	24	7.5	15	100	0	82	17	18	--	--
24-31	55	53	24	120	176	0	144	93	160	--	--
SEP.											
01-15	43	54	25	150	183	0	150	110	210	--	--
16...	121	--	10	43	124	0	102	43	52	--	--
17-24	45	55	22	120	173	0	142	97	--	--	--
25-26	94	40	14	56	144	0	118	53	73	--	--
27-30	34	63	27	150	201	0	165	120	200	--	--
DATE	DIS- SOLVED NITRITE (NO2) (MG/L)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	CARBON DIOXIDE (CO2) (MG/L)
OCT.											
01-04	.56	4.0	700	.95	170	330	91	2.9	1210	7.3	23
05-07	.30	3.8	569	.77	134	270	62	2.6	994	7.3	20
08-10	.23	3.8	731	.99	120	310	96	3.2	1252	7.1	34
11...	.03	.23	303	.41	263	160	0	1.6	565	7.2	20
12-13	.03	1.7	379	.52	159	190	40	1.9	669	7.5	9.5
14-22	.03	7.3	704	.96	101	330	110	2.9	1198	7.3	22
23-31	.03	5.3	733	1.00	69.3	300	110	3.5	1241	6.9	49
NOV.											
01-19	.07	10	777	1.06	58.7	300	99	3.8	1290	8.0	3.9
20...	.07	.68	343	.47	329	180	46	1.4	596	8.2	1.7
21-24	.00	10	680	.92	275	270	95	3.4	1120	8.1	2.7
25...	.07	2.8	259	.35	183	140	28	1.2	464	8.0	2.2
26-30	.03	7.2	597	.81	103	270	76	2.6	1030	7.9	4.8
DEC.											
01-03	6.2	3.1	729	.99	114	320	100	3.1	1260	7.1	35
04...	.16	.16	309	.42	173	160	34	1.5	531	7.5	8.0
05-08	11	3.5	634	.86	95.9	300	64	2.8	1140	7.0	46
09-24	.00	4.3	800	1.09	82.1	340	120	3.6	1370	7.0	43
25-31	7.9	2.9	746	1.01	64.5	320	100	3.7	1320	6.9	53
JAN.											
01-10	4.6	8.9	806	1.10	69.6	320	120	--	1360	7.1	31
11-20	1.6	9.0	807	1.10	61.0	320	120	3.9	1360	7.1	31
21-31	.03	11	806	1.10	54.4	310	120	3.9	1360	7.0	38
FEB.											
01-20	7.6	8.5	750	1.02	64.8	290	110	3.8	1310	7.2	23
21-22	.03	1.8	303	.41	292	170	39	1.3	538	7.9	3.2
23-28	.62	7.7	716	.97	94.7	330	110	3.1	1250	7.3	21
MAR.											
01-08	3.6	6.3	809	1.10	80.8	350	120	3.3	1400	7.2	29
09-11	.10	3.4	342	.47	548	190	44	1.5	606	7.4	11
12-31	2.4	7.5	776	1.06	103	370	110	--	1340	7.5	16
APR.											
01-10	--	7.8	832	1.13	67.4	360	120	3.4	1420	7.3	24
11-12	--	2.3	448	.61	151	220	49	2.0	769	7.2	21
13-20	--	6.2	804	1.09	73.8	350	120	3.5	1380	7.3	22
21...	--	.60	370	.50	89.9	180	40	1.8	642	7.3	14
22-25	--	8.3	738	1.00	87.7	330	120	3.1	1270	7.4	16
26-28	--	9.3	815	1.11	99.0	340	120	3.5	1370	7.3	22
29...	--	1.4	506	.69	478	230	44	2.5	921	7.0	37
30...	--	1.8	226	.31	548	140	24	.8	373	7.5	6.9
MAY											
01-04	--	4.0	529	.72	220	280	73	2.0	905	7.5	13
05-21	--	7.9	809	1.10	135	340	120	3.5	1390	7.4	18
22-26	--	1.2	308	.42	398	170	--	1.3	534	7.4	11
27-30	--	6.0	722	.98	214	340	110	2.8	1220	7.4	18
31...	--	.84	194	.26	329	120	12	.9	334	7.7	4.0
JUNE											
01...	--	2.1	353	.48	112	180	31	1.6	604	7.4	12

ARKANSAS RIVER BASIN

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07242350 DEEP FORK NEAR ARCADIA, OKLA.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	DIS- SOLVED NITRITE (NO2) (MG/L)	DIS- SOLVED NITRATE (N) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	CARBON DIOXIDE (CO2) (MG/L)
JUNE											
02-03	--	5.7	682	.93	155	310	86	2.7	1130	7.6	11
04-05	--	2.3	330	.45	160	180	29	1.4	568	7.6	7.2
06-07	--	5.1	622	.85	121	290	73	2.6	1060	7.4	17
08-09	--	1.2	184	.25	1280	130	--	.5	321	7.9	2.9
10-30	--	6.9	800	1.09	121	380	100	3.1	1330	7.7	11
JULY											
01-15	--	8.8	836	1.14	795	330	120	3.9	1410	7.9	5.2
16-31	--	10	814	1.11	72.5	270	96	4.5	1390	7.7	6.8
AUG.											
01-09	--	10	828	1.13	78.2	270	110	4.8	1400	7.8	4.9
10-11	--	3.9	366	.50	98.8	170	47	2.2	634	7.6	6.0
12-22	--	9.8	764	1.04	57.8	250	110	4.4	1300	7.2	17
23...	--	1.8	--	--	--	91	9	.7	226	7.7	3.2
24-31	--	7.4	606	.82	90.0	230	87	3.4	1040	7.3	14
SEP.											
01-15	--	7.0	725	.99	84.2	240	88	4.2	1250	7.1	23
16...	--	1.4	--	--	--	--	--	--	460	7.4	7.9
17-24	--	7.4	638	.87	77.5	230	86	3.5	1090	7.1	22
25-26	--	4.2	367	.50	93.1	160	39	1.9	617	7.2	15
27-30	--	9.1	768	1.04	70.5	270	110	4.0	1280	7.1	26

DATE	INSTAN- TANEOUS DIS- CHARGE (CFS)	DIS- SOLVED NITRATE (N) (MG/L)	DIS- SOLVED NITRATE (NO3) (MG/L)	DIS- SOLVED NITRITE (N) (MG/L)	DIS- SOLVED NITRITE (NO2) (MG/L)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)
OCT.										
24...	28	.41	1.8	.50	1.6	.90	7.7	1180	7.6	19.0
NOV.										
27...	63	.23	1.0	.04	.13	.27	.20	3100	7.8	7.0
DEC.										
14...	39	.43	1.9	.19	.62	.62	6.0	1507	7.7	7.0
JAN.										
30...	20	.00	.00	.17	.56	.05	7.7	1430	--	10.0
FEB.										
27...	45	.61	2.7	.17	.56	.78	.00	1500	7.7	8.0
MAR.										
20...	49	.52	2.3	.36	1.2	.88	7.1	1210	8.1	10.0
APR.										
23...	43	1.0	4.6	.47	1.5	1.5	5.1	1300	7.4	15.0
MAY										
30...	100	--	--	--	--	--	--	1450	7.8	22.0
JUNE										
26...	41	.29	1.3	1.2	3.9	1.5	.01	1600	--	26.0
JULY										
29...	24	.41	1.8	1.0	3.3	1.4	--	1500	7.6	28.0
AUG.										
24...	113	.47	2.1	.05	.16	.52	--	180	7.4	21.5
SEP.										
17...	42	.43	1.9	.52	1.7	.95	4.6	950	7.8	21.0

ARKANSAS RIVER BASIN

07242350 DEEP FORK NEAR ARCADIA, OKLA.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	CHEM- ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	CHEM- ICAL OXYGEN DEMAND (HIGH LEVEL) (MG/L)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)	PHENOLS (UG/L)	TOTAL IRON (FE) (UG/L)	DIS- SOLVED IRON (FE) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)
OCT. 24...	8.4	97	43	--	18	5	--	80	--	590
NOV. 27...	11.5	103	68	--	25	20	--	50	--	550
DEC. 14...	10.0	88	--	10	--	3	650	90	670	630
JAN. 30...	10.0	96	51	--	15	9	420	250	500	500
FEB. 27...	10.8	97	--	40	11	7	3600	80	990	490
MAR. 20...	9.6	93	--	30	14	4	--	--	--	--
APR. 23...	9.2	97	49	--	8.4	9	1600	--	630	--
MAY 30...	7.7	95	--	--	21	3	1900	50	8000	600
JUNE 26...	8.6	112	44	--	7.8	6	2300	30	860	1000
JULY 29...	8.2	110	37	--	4.8	2	--	--	--	--
AUG. 24...	7.4	88	120	--	4.0	3	--	110	--	140
SEP. 17...	7.9	93	38	--	5.5	10	--	80	--	430

DATE	TOTAL CAD- MIUM (CD) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)
OCT. 24...	--	1	--	0	--	30	--	3	--	70
NOV. 27...	--	0	--	0	--	14	--	4	--	20
DEC. 14...	<10	0	0	0	20	3	<100	3	30	20
JAN. 30...	10	3	0	0	20	25	<100	19	50	150
FEB. 27...	<10	1	0	0	10	13	<100	10	60	40
MAR. 20...	--	--	--	--	--	--	--	--	--	--
APR. 23...	<10	--	0	--	20	--	<100	--	60	--
MAY 30...	<10	1	10	0	40	13	<100	3	30	30
JUNE 26...	<100	1	0	0	<10	2	<100	6	40	10
JULY 29...	--	--	--	--	--	--	--	--	--	--
AUG. 24...	--	<1	--	0	--	9	--	2	--	20
SEP. 17...	--	1	--	0	--	4	--	8	--	20

ARKANSAS RIVER BASIN

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07242350 DEEP FORK NEAR ARCADIA, OKLA.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	INSTAN- TANEOUS DIS- CHARGE (CFS)	ALDRIN (UG/L)	CHLOR- DANE (UG/L)	DDD (UG/L)	DDE (UG/L)	DDT (UG/L)	DI- AZINON (UG/L)	DI- ELDRIN (UG/L)	ENDRIN (UG/L)	ETHION (UG/L)	HEPTA- CHLOR (UG/L)
OCT.											
24...	28	.00	.0	.00	.00	.00	.19	.03	.00	--	.00
NOV.											
27...	63	.00	.0	.00	.00	.00	.33	.02	.00	--	.00
DEC.											
14...	36	.00	.1	.00	.00	.00	.23	.02	.00	--	.00
JAN.											
30...	20	.00	.1	.00	.00	.00	.35	.01	.00	--	.00
FEB.											
15...	69	.00	.0	.00	.00	.00	1.2	.01	.00	--	.00
15...	90	.00	.2	.00	.00	.00	.54	.04	.00	--	.00
15...	75	.00	.4	.00	.00	.00	.27	.08	.00	--	.00
21...	109	.00	.1	.00	.00	.00	.05	.03	.00	--	.00
21...	966	.00	.2	.00	.00	.00	.03	.04	.00	--	.00
21...	511	.00	.3	.00	.00	.00	.07	.06	.00	--	.00
21...	244	.00	.1	.00	.00	.00	.05	.02	.00	--	.00
27...	45	.00	.0	.00	.00	.00	.19	.01	.00	--	.00
MAR.											
20...	49	.00	.0	.00	.00	.00	.19	.02	.00	--	.00
APR.											
23...	43	.00	.1	.00	.00	.00	.13	.01	.00	.00	.00
MAY											
21...	--	.00	.8	--	.01	.05	.07	.08	.00	.00	.00
21...	2270	.00	1.7	.03	.00	.03	.09	.13	.00	.00	.00
22...	3190	.00	.7	--	.00	.06	.05	.06	.00	.00	.02
22...	181	.06	1.7	.00	.00	.00	.07	.09	.00	.00	.08
30...	100	.00	.1	.00	.00	.00	.30	.02	.00	.00	.00
JUNE											
26...	41	.00	.0	.00	.00	.00	.05	.01	.00	--	.00
JULY											
29...	24	.00	.0	.00	.00	.00	.24	.00	.00	--	.00
AUG.											
24...	113	.03	.4	.07	.00	.02	.04	.07	.00	--	.00

DATE	HEPTA- CHLOR EPOXIDE (UG/L)	LINDANE (UG/L)	MALA- THION (UG/L)	METHYL PARA- THION (UG/L)	PARA- THION (UG/L)	PCB (UG/L)	TOX- APHENE (UG/L)	TRI- THION (UG/L)	2,4-D (UG/L)	2,4,5-T (UG/L)	SILVEX (UG/L)
OCT.											
24...	.00	.05	.00	.00	.00	.0	--	--	.04	.00	.00
NOV.											
27...	.00	.01	.00	.00	.00	.0	--	--	.05	.00	.00
DEC.											
14...	.00	.00	.00	.00	.00	.0	--	--	.00	.00	.00
JAN.											
30...	.00	.02	.00	.00	.00	.0	--	--	.00	.01	.00
FEB.											
15...	.00	.00	.09	.00	.00	.0	--	--	.00	.02	.00
15...	.00	.00	.02	.00	.00	.0	--	--	.65	.51	.00
15...	.00	.00	.00	.00	.00	.0	--	--	.25	.09	.17
21...	.00	.00	.00	.00	.00	.0	--	--	.04	.00	.00
21...	.00	.00	.00	.00	.00	.0	--	--	.49	.02	.24
21...	.00	.00	.02	.00	.00	.0	--	--	.38	.05	.30
21...	.00	.00	.02	.00	.00	.0	--	--	.35	.06	.29
27...	.00	.01	.00	.00	.00	.0	--	--	.20	.01	.06
MAR.											
20...	.00	.01	.00	.02	.01	.0	--	--	.08	.00	.04
APR.											
23...	.00	.00	.00	.00	.00	.0	0	.00	--	--	--
MAY											
21...	.00	.00	.00	.00	.00	.0	0	.00	.36	.09	.09
21...	.00	.00	.00	.00	.00	.0	0	.00	.39	.06	.06
22...	.00	.00	.00	.00	.00	.0	0	.00	.42	.12	.21
22...	.00	.00	.04	.00	.00	.0	0	.00	.66	.18	.24
30...	.00	.00	.10	.00	.00	.0	0	.00	.10	.03	.03
JUNE											
26...	.00	.00	.00	.00	.00	.0	0	--	.00	.00	.00
JULY											
29...	.00	.00	.00	.00	.00	.0	0	--	.04	.01	.00
AUG.											
24...	.00	.00	.00	.00	.00	.1	0	--	.00	.00	.00

ARKANSAS RIVER BASIN

07242350 DEEP FORK NEAR ARCADIA, OKLA.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1200	1340	1230	1400	1340	1360	1330	807	604	1380	1440	1250
2	1220	1240	1280	1390	1320	1290	1270	588	1020	1430	1490	574
3	1180	1260	1200	1280	1360	1410	1360	992	1270	1460	1340	758
4	1160	1210	524	1380	1310	1380	1380	1180	451	1390	1280	1160
5	851	1350	902	1290	1350	1380	1300	1280	699	1380	1430	1280
6	1120	1300	1080	1380	1360	1370	1350	1330	1100	1370	1440	1330
7	962	1300	1190	1420	1340	1360	1440	1300	1030	1390	1450	1330
8	1210	1350	1230	1370	1350	1350	1420	1360	198	1380	1250	1330
9	1240	1280	1330	1370	1320	482	1220	1260	433	1440	1750	1390
10	1260	1310	1320	1370	1250	834	1330	1360	941	1420	442	1400
11	563	1370	1310	1350	1320	455	611	1300	1150	1440	803	1360
12	713	1320	1300	1370	1270	1210	867	1360	1200	1480	1180	1370
13	600	1360	1330	1420	1340	1160	1250	1530	1170	1400	1330	1390
14	962	1280	1420	1380	1680	866	1320	1380	1230	1430	1420	1410
15	1160	1310	1460	1380	1320	1260	1340	1280	1280	1420	1480	1480
16	1200	1250	1440	1320	1410	1300	1380	1430	1350	1400	1260	460
17	1240	1250	1440	1380	1340	1430	1370	1420	1390	1430	1000	868
18	1230	1300	1410	1320	1360	1460	1300	1420	1400	1400	1340	1160
19	1240	1310	1400	1370	888	1360	1420	1440	1380	1400	1390	1270
20	1200	577	1400	1330	1310	1440	1360	1440	1400	1420	1480	749
21	1240	910	1380	1370	448	1140	603	1360	1460	1360	1450	974
22	1200	1220	1370	1390	600	1210	1150	477	1440	1420	1250	1120
23	1290	1190	1350	1370	931	1270	1220	655	1420	1420	226	1350
24	1250	1280	1430	1390	1170	1370	1110	348	1470	1290	690	1300
25	1230	459	1340	1400	1270	1330	1260	510	1460	1320	973	395
26	1240	828	1310	1420	1390	1320	1360	618	1420	1310	1100	828
27	1260	1070	1350	1340	1320	1350	1350	1020	1400	1420	1260	1140
28	1120	944	1320	1370	1320	1380	1370	1230	1430	1360	722	1260
29	1350	1120	1330	1340	---	1380	919	1220	1420	1410	1140	1350
30	1290	1180	1320	1350	---	1360	361	1350	1430	1440	1200	1420
31	1270	---	1350	1360	---	1340	---	325	---	1450	1280	---
MONTH	1140	1180	1290	1370	1250	1250	1210	1120	1170	1400	1200	1150

TEMPERATURE (DEG. C) OF WATER , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
(ONCE-DAILY)

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

ARKANSAS RIVER BASIN

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07243500 DEEP FORK NEAR BEGGS, OKLA.

LOCATION.--Lat 35°40'15", long 96°04'08", on line between secs. 19 and 20, T.14 N., R.12 E., Okmulgee County, at gaging station at bridge on county road, 3.0 mi (4.8 km) downstream from Adams Creek, 4.0 mi (6.4 km) south of Beggs, 8.0 mi (12.9 km) from Flat Rock (Checkerboard) Creek, and at mile 85.0 (136.8 km).

DRAINAGE AREA.--2,018 mi² (5,227 km²).

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

EXTREMES, Current year.--Specific conductance: Maximum daily, 2,900 micromhos/cm Aug. 7; minimum daily, 83 micromhos/cm June 10.
Water temperatures: Maximum, 35.0°C July 13; minimum, 2.0°C Jan. 1.

Period of record.--Specific conductance: Maximum daily, 10,500 micromhos/cm Jan. 12, 1955; minimum daily, 83 micromhos/cm June 10, 1974.
Water temperatures: Maximum, 38.5°C Aug. 8, 1970; minimum (1951-69, 1971-74), freezing point on many days during winter months.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

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)	ALKA- LINITY AS CACO3 (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED NITRATE (N) (MG/L)	DIS- SOLVED NITRATE (NO3) (MG/L)	DIS- SOLVED NITRITE (N) (MG/L)
OCT.												
05...	1390	23	10	23	113	0	93	16	35	.64	2.8	.00
13...	3120	14	5.3	23	53	0	43	10	--	.32	1.4	.04
30...	212	53	25	73	232	0	190	35	120	.49	2.2	.03
NOV.												
05...	143	58	28	80	243	7	211	36	140	.49	2.2	.03
15...	198	64	33	100	272	9	238	--	180	.42	1.9	.00
25...	5780	8.5	2.9	11	34	0	28	6.8	18	.25	1.1	.00
DEC.												
05...	2620	28	13	34	114	0	94	17	64	.60	2.7	.00
15...	527	47	23	63	186	4	159	28	120	.73	3.2	.02
25...	552	51	25	79	187	3	158	30	150	.79	3.5	.00
JAN.												
05...	217	74	37	110	284	0	233	49	220	1.2	5.3	.00
15...	209	79	42	150	285	0	234	51	300	1.2	5.3	.01
25...	229	74	37	150	272	0	223	47	260	.79	3.5	.01
FEB.												
05...	187	--	38	150	247	4	209	47	300	.37	1.6	.00
15...	174	73	43	160	296	0	243	51	310	.28	1.2	.00
25...	1360	38	20	62	147	1	122	26	110	.63	2.8	.03
MAR.												
05...	600	51	26	76	210	0	172	36	140	.00	.00	.57
15...	1980	26	12	35	105	0	86	17	61	.60	2.7	.00
25...	730	53	27	69	217	0	178	37	130	.53	2.3	.02
APR.												
05...	314	--	39	100	310	0	254	54	200	--	--	--
15...	274	65	37	--	257	0	211	51	230	--	--	--
26...	292	53	30	84	225	0	185	36	160	--	--	--
MAY												
05...	2540	23	12	31	111	0	91	15	52	--	--	--
15...	1270	28	13	37	114	0	94	19	65	--	--	--
25...	489	69	31	150	215	0	176	34	290	--	--	--
JUNE												
10...	29500	6.2	1.9	4.4	26	0	21	5.9	7.3	1.5	6.6	.00
16...	13280	17	6.5	12	80	0	66	8.1	19	--	--	--
24...	1980	36	16	39	156	2	131	17	68	--	--	--
JULY												
05...	234	--	33	110	276	0	226	43	220	--	--	--
15...	96	69	36	120	280	0	230	45	--	--	--	--
25...	41	84	--	240	280	0	230	52	460	--	--	--
AUG.												
05...	29	100	55	330	324	0	266	55	600	--	--	--
15...	119	58	30	160	198	0	162	43	290	--	--	--
25...	146	56	23	--	184	0	151	28	240	--	--	--
SEP.												
04...	3010	10	2.8	16	38	0	31	7.3	--	--	--	--
15...	683	29	14	37	130	0	107	18	61	--	--	--
26...	1070	31	15	49	124	0	102	20	87	--	--	--

ARKANSAS RIVER BASIN

07243500 DEEP FORK NEAR BEGGS, OKLA.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	DIS- SOLVED NITRITE (NO ₂) (MG/L)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TUNS PER AC-FT)	DIS- SOLVED SOLIDS (TUNS 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)	CARBON DIOXIDE (CO ₂) (MG/L)
OCT.											
05...	.00	.64	188	.26	706	99	6	1.0	319	8.2	1.1
13...	.13	.36	162	.22	1370	57	13	1.3	239	7.2	5.4
30...	.10	.52	467	.64	267	240	45	2.1	811	8.0	3.7
NOV.											
05...	.10	.52	488	.66	188	260	49	2.2	886	8.5	1.3
15...	.00	.42	575	.78	307	300	58	2.5	1060	8.7	.9
25...	.00	.25	86	.12	1340	33	5	.8	134	7.8	.9
DEC.											
05...	.00	.60	247	.34	1750	120	30	1.3	420	8.1	1.4
15...	.07	.75	402	.55	572	210	53	1.9	723	8.4	1.2
25...	.00	.79	450	.61	671	230	72	2.3	825	8.7	.6
JAN.											
05...	.00	1.2	645	.88	378	340	100	2.6	1170	8.0	4.5
15...	.03	1.2	784	1.07	442	370	140	3.4	1460	7.7	9.1
25...	.03	.80	696	.95	430	340	110	3.6	1320	8.0	4.4
FEB.											
05...	.00	.37	744	1.01	376	--	--	--	1410	8.5	1.3
15...	.00	.28	809	1.10	380	360	120	3.7	1530	8.1	3.8
25...	.10	.66	352	.48	1290	180	55	2.0	664	8.4	1.0
MAR.											
05...	1.9	.57	457	.62	740	230	62	2.2	872	7.8	5.3
15...	.00	.60	228	.31	1220	110	28	1.4	400	7.5	5.3
25...	.07	.55	451	.61	889	240	66	1.9	791	8.2	2.2
APR.											
05...	--	.54	639	.87	542	--	--	--	1190	8.2	3.1
15...	--	.56	--	--	--	310	100	--	1210	7.7	8.2
26...	--	.44	--	--	--	260	71	2.3	928	8.3	1.8
MAY											
05...	--	.54	228	.31	1560	110	16	1.3	394	7.3	8.9
15...	--	.92	253	.34	868	120	30	1.5	443	7.7	3.6
25...	--	.79	720	.98	951	300	120	3.8	1340	7.5	11
JUNE											
10...	.00	1.5	--	--	--	23	2	.4	83	7.4	1.7
16...	--	1.2	120	.16	4300	69	4	.6	198	8.2	.8
24...	--	.71	280	.38	1500	160	24	1.4	494	8.5	.8
JULY											
05...	--	.66	662	.90	418	--	--	--	1120	8.0	4.4
15...	--	.37	732	1.00	190	320	91	2.9	1230	7.9	5.6
25...	--	.43	--	--	--	--	--	--	1870	8.0	4.5
AUG.											
05...	--	.25	1390	1.89	109	480	210	6.6	2400	8.1	4.1
15...	--	.66	731	.99	235	270	110	4.3	1290	8.3	1.6
25...	--	.72	--	--	--	230	84	--	1110	7.6	7.4
SEP.											
04...	--	.69	110	.15	894	37	5	1.2	174	7.6	1.5
15...	--	1.2	249	.34	459	130	23	1.4	441	7.7	4.2
26...	--	.75	294	.40	849	140	37	1.8	552	7.6	5.0

ARKANSAS RIVER BASIN

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07243500 DEEP FORK NEAR BEGGS, OKLA.--Continued

SPECIFIC CONDUCTANCE (MICROMHUS/CM AT 25 DEG. C) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
(UNCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	257	808	283	1060	1210	660	1050	355	451	733	2050	538
2	297	813	308	1060	1280	695	1080	370	453	790	2100	468
3	312	887	539	1130	1340	734	1120	417	497	778	2180	144
4	336	890	382	1170	1300	790	1130	367	501	918	2270	174
5	317	870	422	1150	1370	857	1160	385	397	1120	2400	165
6	367	---	436	1220	1390	892	1190	352	309	1180	2560	158
7	367	928	486	1250	1420	941	1230	326	276	1260	2900	160
8	422	1020	507	1340	1460	983	1230	332	177	1140	2290	177
9	452	1040	507	---	1460	1420	1280	348	138	1200	1030	194
10	490	1020	567	1360	1520	1040	1340	384	83	1200	635	212
11	360	1010	595	1330	1500	743	1300	442	---	1220	1100	238
12	250	1010	608	1330	1520	466	1250	508	110	1320	1370	269
13	238	1140	629	1320	1540	465	1140	616	142	1270	1220	307
14	224	1030	664	1330	1550	400	1200	705	158	1210	---	371
15	223	1030	703	1410	1490	397	1180	434	177	1230	1290	441
16	---	1040	744	1390	1280	450	1260	480	198	1230	1170	506
17	---	1070	803	1400	1030	450	1020	588	231	1240	1300	518
18	---	1090	816	1390	1130	462	1180	746	267	1280	1070	554
19	---	1160	878	1360	853	---	1200	820	305	1320	997	615
20	---	300	549	---	672	545	1180	881	342	1380	1100	683
21	---	242	545	1250	---	611	1180	914	379	1530	1200	723
22	---	272	606	1200	542	657	1220	965	421	1600	1180	709
23	---	---	---	1250	441	696	1140	---	454	1690	1190	774
24	---	134	754	1270	552	734	1190	1120	494	1690	1150	832
25	---	133	802	1260	654	778	1160	1320	536	1870	1110	768
26	---	130	818	1240	626	850	917	772	574	2070	958	522
27	---	167	856	1290	619	898	---	551	587	2130	1290	595
28	---	188	889	1190	635	929	1060	693	587	2240	1050	536
29	---	233	923	1200	---	949	1080	558	607	2240	819	604
30	803	256	960	1140	---	986	546	493	674	2070	1140	624
31	752	---	989	1150	---	1040	---	---	---	---	828	---
MONTH	---	711	639	1260	1130	751	1150	595	363	1400	1430	453

TEMPERATURE (DEG. C) OF WATER , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
(UNCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23.0	17.0	13.0	2.0	13.0	14.0	22.0	19.0	26.0	29.0	31.0	22.0
2	24.0	19.0	15.0	3.0	11.0	17.0	24.0	22.0	27.0	30.0	32.0	21.0
3	24.0	19.0	16.0	4.0	9.0	17.0	18.0	21.0	23.0	29.0	33.0	22.0
4	24.0	15.0	12.0	3.0	12.0	18.0	17.0	20.0	23.0	31.0	30.0	19.0
5	24.0	17.0	12.0	6.0	11.0	20.0	19.0	23.0	26.0	32.0	28.0	21.0
6	23.0	---	9.0	3.0	9.0	22.0	19.0	23.0	23.0	32.0	33.0	22.0
7	23.0	20.0	9.0	7.0	7.0	23.0	21.0	22.0	24.0	32.0	29.0	23.0
8	26.0	16.0	11.0	4.0	7.0	19.0	19.0	24.0	25.0	33.0	27.0	23.0
9	24.0	15.0	9.0	---	7.0	21.0	19.0	26.0	24.0	32.0	25.0	23.0
10	27.0	15.0	9.0	4.0	9.0	18.0	16.0	25.0	29.0	32.0	27.0	26.0
11	23.0	13.0	12.0	3.0	10.0	18.0	19.0	24.0	29.0	33.0	28.0	26.0
12	24.0	16.0	12.0	3.0	12.0	17.0	20.0	25.0	28.0	34.0	30.0	23.0
13	22.0	19.0	10.0	5.0	14.0	16.0	21.0	26.0	22.0	35.0	29.0	22.0
14	22.0	20.0	7.0	5.0	19.0	15.0	23.0	24.0	29.0	34.0	---	23.0
15	22.0	19.0	9.0	6.0	10.0	14.0	19.0	24.0	29.0	32.0	28.0	23.0
16	---	18.0	7.0	11.0	11.0	16.0	20.0	26.0	26.0	23.0	31.0	21.0
17	---	18.0	9.0	14.0	11.0	15.0	19.0	26.0	26.0	33.0	32.0	22.0
18	---	17.0	11.0	9.0	11.0	17.0	20.0	29.0	27.0	34.0	31.0	23.0
19	---	20.0	5.0	7.0	11.0	---	21.0	28.0	28.0	32.0	32.0	23.0
20	---	16.0	4.0	---	14.0	12.0	22.0	28.0	30.0	34.0	31.0	22.0
21	---	16.0	5.0	11.0	---	13.0	22.0	27.0	31.0	34.0	32.0	23.0
22	---	16.0	7.0	9.0	9.0	12.0	23.0	28.0	29.0	35.0	31.0	23.0
23	---	---	---	10.0	11.0	9.0	23.0	---	27.0	33.0	30.0	20.0
24	---	17.0	---	11.0	10.0	11.0	23.0	27.0	26.0	33.0	30.0	18.0
25	---	15.0	8.0	12.0	9.0	10.0	22.0	23.0	26.0	33.0	28.0	19.0
26	---	15.0	8.0	13.0	10.0	14.0	24.0	23.0	27.0	32.0	27.0	20.0
27	---	15.0	8.0	11.0	10.0	15.0	---	25.0	26.0	34.0	28.0	23.0
28	---	13.0	9.0	11.0	13.0	17.0	24.0	26.0	26.0	32.0	24.0	18.0
29	---	16.0	7.0	10.0	---	18.0	22.0	26.0	28.0	33.0	25.0	21.0
30	19.0	16.0	7.0	12.0	---	22.0	21.0	27.0	29.0	33.0	26.0	21.0
31	20.0	---	3.0	13.0	---	21.0	---	---	---	---	29.0	---
MONTH	---	16.5	9.0	7.5	10.5	16.5	21.0	24.5	26.5	32.5	29.0	22.0

ARKANSAS RIVER BASIN

07245000 CANADIAN RIVER NEAR WHITEFIELD, OKLA.
(Irrigation Network Station)

LOCATION.--Lat 35°15'45", long 95°14'19", in SE 1/4 SE 1/4 sec.12, T.9 N., R.19 E., Haskell County, at gaging station at bridge on State Highway 2, 0.8 mi (1.3 km) north of Whitefield, 5.5 mi (8.8 km) upstream from Taleka (Snake) Creek, 8.2 mi (13.2 km) downstream from Eufaula Dam, and at mile 18.8 (30.2 km).

DRAINAGE AREA.--47,576 mi² (123,222 km²), of which 9,700 mi² (25,123 km²) is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: September 1944 to February 1945, September 1946 to September 1964, October 1966 to current year.

Water temperatures: September 1944 to February 1945, September 1946 to September 1964, October 1966 to current year.

EXTREMES, Current year.--Specific conductance: Maximum, 610 micromhos/cm Oct. 2; minimum, 66 micromhos/cm Nov. 26.

Water temperatures: Maximum, 28.0°C on several days during July and August; minimum, 3.5°C Jan. 6, 13.

Period of record.--Specific conductance: Maximum daily, 22,900 micromhos/cm Nov. 11, 1956; minimum, 66 micromhos/cm Nov. 26, 1973.

Water temperatures: Maximum, 31.0°C Sept. 4, 1944, Aug. 11, 19, 1973; minimum, freezing point on many days during winter months.

REMARKS.--Continuous monitor records for specific conductance and water temperature are collected for this station. Records of maximum and minimum specific conductance and water temperature values are available in district office in Oklahoma City, Okla.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	INSTANTANEOUS DIS- CHARGE (CFS)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED NITRATE (N) (MG/L)	DIS- SOLVED NITRATE (NO3) (MG/L)	DIS- SOLVED NITRITE (N) (MG/L)
OCT.												
05...	401	29	8.8	--	104	0	85	24	53	.24	1.1	.01
15...	3750	28	9.0	34	102	0	84	24	55	.38	1.7	.00
25...	578	28	9.1	33	101	0	83	23	54	.30	1.3	.00
NOV.												
05...	740	29	9.6	37	105	0	86	24	60	.33	1.5	.01
15...	540	29	9.3	--	106	0	87	24	58	.30	1.3	.00
25...	2680	9.8	1.7	3.3	40	0	33	5.2	2.0	.22	.97	.01
DEC.												
05...	20200	30	9.9	--	109	0	89	22	60	.39	1.7	.02
15...	19000	27	9.0	33	102	0	84	19	56	.24	1.1	.03
25...	18800	26	8.5	32	95	0	78	18	55	.47	2.1	.01
JAN.												
05...	882	26	8.4	30	96	0	79	17	51	.38	1.7	.01
15...	356	27	7.9	27	96	0	79	17	46	.36	1.6	.02
25...	438	24	7.7	30	86	0	71	17	--	.47	2.1	.00
FEB.												
05...	167	25	8.1	28	95	0	78	16	49	.34	1.5	.15
15...	6370	31	8.9	26	--	0	--	16	44	.15	.66	.44
25...	152	25	8.9	39	82	0	67	--	59	.32	1.4	.02
MAR.												
05...	4360	21	6.8	23	--	0	--	19	33	2.0	8.8	.02
15...	705	23	7.0	26	82	0	67	17	39	.05	.22	.09
25...	14700	32	8.6	26	120	0	98	18	40	.05	.22	.01
APR.												
05...	1050	27	8.2	29	95	0	78	19	50	.44	1.9	.02
15...	596	26	8.7	30	97	0	80	19	52	--	--	--
30...	5900	--	2.0	4.7	37	0	30	7.6	5.3	--	--	--
MAY												
05...	26200	27	9.8	34	97	0	80	21	58	.44	1.9	.00
15...	14400	30	10	38	102	0	84	27	63	.38	1.7	.00
25...	984	30	10	37	105	0	86	27	62	.35	1.6	.00
JUNE												
05...	1020	30	11	37	109	0	89	--	--	.26	1.2	.02
15...	21600	29	10	42	105	0	86	32	66	--	--	--
25...	14300	31	11	43	109	0	89	34	72	--	--	--
JULY												
05...	1310	32	10	--	111	0	91	34	71	--	--	--
15...	733	32	10	--	112	0	92	34	71	--	--	--
25...	1020	30	9.8	--	105	0	86	32	68	--	--	--
AUG.												
05...	167	47	13	38	177	0	145	27	58	--	--	--
15...	590	27	11	39	104	0	85	27	60	--	--	--
25...	140	47	12	36	175	0	144	24	54	--	--	--
SEP.												
02...	727	12	2.6	3.8	43	0	35	8.4	3.1	--	--	--
15...	143	42	10	27	143	0	117	20	42	--	--	--
25...	559	15	3.0	14	60	0	49	13	19	--	--	--

ARKANSAS RIVER BASIN

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07245000 CANADIAN RIVER NEAR WHITEFIELD, OKLA.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	DIS- SOLVED NITRITE (NO2) (MG/L)	DIS- SOLVED NITRATE (N) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT: 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	CARBON DIOXIDE (CO2) (MG/L)
OCT.											
05...	.03	.25	222	.30	240	110	23	--	388	8.1	1.3
15...	.00	.38	222	.30	2250	110	23	1.4	390	8.0	1.6
25...	.00	.30	223	.30	348	110	25	1.4	395	8.1	1.3
NOV.											
05...	.03	.34	245	.33	490	110	26	1.5	401	8.2	1.1
15...	.00	.30	237	.32	346	110	24	--	413	8.2	1.1
25...	.03	.23	57	.08	412	31	0	.3	83	8.0	.6
DEC.											
05...	.07	.41	232	.32	12700	120	26	--	439	8.0	1.7
15...	.10	.27	212	.29	10900	100	21	1.4	367	8.1	1.3
25...	.03	.48	208	.28	10600	100	22	1.4	372	8.0	1.5
JAN.											
05...	.03	.39	198	.27	472	100	21	1.3	349	8.1	1.2
15...	.07	.38	197	.27	189	100	21	1.2	349	7.8	2.4
25...	.00	.47	210	.29	248	92	21	1.4	337	8.0	1.4
FEB.											
05...	.49	.49	185	.25	83.4	96	18	1.2	341	8.1	1.2
15...	1.4	.59	201	.27	3460	110	--	1.1	372	8.0	--
25...	.07	.34	241	.33	98.9	99	32	1.7	376	7.8	2.1
MAR.											
05...	.07	2.0	162	.22	1910	80	--	1.1	296	7.6	--
15...	.30	.14	175	.24	333	86	19	1.2	312	7.8	2.1
25...	.03	.06	206	.28	8180	120	17	1.1	335	7.9	2.4
APR.											
05...	.07	.46	203	.28	576	100	23	1.3	359	7.9	1.9
15...	--	.45	210	.29	338	100	21	1.3	370	7.9	2.0
30...	--	.45	78	.11	1240	--	--	--	93	7.3	3.0
MAY											
05...	.00	.44	218	.30	15400	110	28	1.4	394	8.1	1.2
15...	.00	.38	230	.31	8940	120	32	1.5	422	8.1	1.3
25...	.00	.35	241	.33	640	120	30	1.5	426	7.9	2.1
JUNE											
05...	.07	.28	235	.32	647	120	31	1.5	430	8.0	1.7
15...	--	.57	251	.34	14600	110	27	1.7	438	8.3	.8
25...	--	.41	266	.36	10300	120	33	1.7	470	8.3	.9
JULY											
05...	--	.41	264	.36	934	120	30	--	468	7.9	2.2
15...	--	.43	264	.36	522	120	29	--	461	7.9	2.3
25...	--	.38	250	.34	688	120	29	--	442	7.8	2.7
AUG.											
05...	--	.29	289	.39	130	170	26	1.3	503	8.1	2.2
15...	--	.46	236	.32	376	110	27	1.6	418	8.1	1.3
25...	--	.35	290	.39	110	170	23	1.2	492	8.1	2.2
SEP.											
02...	--	1.2	72	.10	141	41	5	.3	93	7.4	2.7
15...	--	.25	228	.31	88.0	150	29	1.0	398	8.0	2.3
25...	--	.75	118	.16	178	50	1	.9	188	7.4	3.8

DATE	INSTAN- TANEOUS DIS- CHARGE (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	CHEM- ICAL OXYGEN DEMAND (LUM LEVEL) (MG/L)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)
OCT.							
30...	281	400	21.0	9.1	107	0	.2
NOV.							
13...	6120	390	18.5	8.7	--	12	.5
JAN.							
16...	5670	400	6.0	11.2	95	--	1.7
MAR.							
29...	14300	330	12.0	10.7	106	16	1.0
APR.							
25...	881	--	15.0	--	--	14	.4
MAY							
22...	6680	400	20.0	8.2	95	16	.8
JUNE							
28...	11700	570	26.0	7.0	90	7	.7

ARKANSAS RIVER BASIN

07245000 CANADIAN RIVER NEAR WHITEFIELD, OKLA.--Continued

SULFATE (MG/L AS SO₄) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	18	26	17	15	16	15	19	26	35	28	32
2	56	21	23	17	17	16	16	21	27	35	28	7.9
3	28	22	25	17	23	16	16	22	28	35	28	11
4	36	28	25	17	27	16	16	22	22	34	40	15
5	16	23	26	17	17	15	16	22	23	34	40	23
6	28	22	26	15	15	16	16	25	23	34	29	22
7	25	22	25	23	19	16	17	23	16	34	28	34
8	27	23	25	15	15	15	16	24	31	34	28	34
9	33	22	24	16	18	17	16	23	30	34	27	37
10	21	27	23	16	17	15	16	24	29	34	24	21
11	20	25	22	15	23	13	16	24	29	34	27	13
12	13	27	22	14	16	16	16	23	29	33	27	17
13	10	23	22	14	16	16	16	26	29	33	27	16
14	11	24	21	16	17	16	17	29	28	33	27	16
15	21	23	21	17	15	16	16	27	29	33	26	23
16	20	24	20	16	16	16	16	23	18	32	26	17
17	20	25	19	16	28	19	16	22	29	32	26	16
18	20	26	19	15	23	17	16	22	30	32	24	17
19	19	24	19	15	16	16	16	23	32	32	26	19
20	20	20	18	15	17	16	17	28	32	32	26	12
21	21	17	18	15	16	15	20	28	35	32	25	17
22	27	23	28	16	15	15	17	29	35	32	25	17
23	20	22	28	15	15	16	16	27	36	31	25	17
24	27	8.9	18	15	25	16	18	28	35	30	38	19
25	22	7.4	17	16	16	15	19	28	34	30	38	11
26	21	6.9	17	16	15	15	18	28	34	30	26	15
27	18	24	17	14	15	15	21	28	33	31	25	17
28	24	22	17	12	16	15	32	28	24	30	22	18
29	25	21	17	16	---	16	23	28	35	30	26	20
30	25	41	17	15	---	16	14	27	35	29	24	27
31	20	---	17	17	---	16	---	25	---	27	24	---
MONTH	23	22	21	16	18	16	17	25	29	32	28	19

DISSOLVED SO₄ DISCHARGE (TONS/DAY) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	115	2530	642	59	117	580	713	492	808	475	30
2	101	252	2330	493	13	89	312	847	483	818	279	21
3	180	81	2540	484	13	98	227	1340	597	796	101	6.0
4	171	52	2030	344	138	124	242	1890	463	772	22	4.9
5	68	152	1550	107	18	182	317	1250	488	765	113	42
6	89	189	1860	45	5.0	101	236	967	534	757	102	20
7	8.7	249	1790	288	66	52	232	864	399	740	97	8.7
8	68	188	1740	170	262	122	243	875	1130	766	246	7.3
9	197	185	1690	273	62	42	234	852	1130	728	254	193
10	133	185	1610	340	6.2	51	223	880	1090	524	111	178
11	59	93	1470	289	11	158	236	857	1080	743	46	146
12	6.3	126	1280	178	41	606	229	840	1180	681	250	237
13	7.8	220	1130	44	34	422	150	986	1120	451	313	41
14	4.3	168	1090	65	31	128	121	1120	1230	222	307	7.8
15	306	487	1090	48	266	188	150	999	1690	471	268	8.8
16	182	200	1050	84	66	47	222	518	1010	511	229	37
17	238	99	993	95	9.5	16	117	533	2290	518	225	29
18	243	116	985	414	73	210	186	531	3020	660	108	142
19	271	214	963	228	75	184	144	550	2500	644	271	190
20	86	174	917	108	60	308	30	621	2530	481	316	89
21	34	114	927	156	160	559	20	848	2730	420	322	75
22	190	85	1420	127	304	585	313	527	2730	553	255	36
23	194	209	1430	115	178	593	168	602	2410	615	63	109
24	274	247	917	205	18	595	277	632	1730	814	22	33
25	256	66	883	90	299	613	153	590	1320	494	88	44
26	225	135	789	29	223	602	166	586	1280	602	321	125
27	56	978	670	9.6	139	602	38	582	812	541	245	217
28	44	1770	667	33	107	595	9.3	584	583	383	78	95
29	162	2090	653	43	---	617	211	632	839	585	212	24
30	122	4070	653	45	---	612	325	590	845	631	140	308
31	144	---	641	11	---	609	---	504	---	532	51	---
MONTH	133	444	1300	181	98	317	204	797	1320	614	191	83

ARKANSAS RIVER BASIN

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07245000 CANADIAN RIVER NEAR WHITEFIELD, OKLA.--Continued

CHLORIDE (MG/L AS CL) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	50	51	60	48	34	43	35	52	61	72	63	68
2	98	54	57	47	48	38	39	55	61	72	63	5.5
3	63	56	59	46	56	40	44	56	62	71	63	17
4	73	63	60	46	61	37	43	56	56	71	78	34
5	39	57	60	48	46	36	39	56	57	71	77	57
6	63	56	60	33	34	38	44	60	57	70	64	56
7	60	56	59	57	52	42	45	57	37	71	63	71
8	61	57	59	35	33	36	43	58	67	70	63	70
9	69	55	58	38	50	50	37	57	65	70	61	74
10	54	61	57	38	50	32	42	58	65	71	57	54
11	53	59	56	31	57	25	39	57	64	70	61	25
12	24	62	56	28	38	38	37	57	65	69	62	46
13	15	57	55	27	44	38	44	61	65	70	62	43
14	17	57	54	42	48	39	46	64	64	69	62	42
15	54	57	54	47	36	37	44	61	65	69	61	57
16	53	58	53	41	44	43	39	57	50	68	61	48
17	54	59	52	39	63	52	43	56	65	69	61	38
18	53	60	52	33	56	46	40	56	65	68	59	50
19	52	58	51	32	43	38	42	57	67	68	61	52
20	53	53	51	32	45	38	49	63	68	67	60	22
21	54	50	51	34	40	32	53	63	71	68	59	47
22	62	57	63	38	33	35	46	65	71	68	60	47
23	53	55	63	35	35	38	43	61	73	67	59	49
24	62	9.3	50	32	59	38	50	63	71	65	75	52
25	55	3.8	49	38	43	36	52	63	71	66	75	18
26	54	1.9	49	39	35	34	51	63	71	66	60	31
27	51	58	49	28	36	35	54	63	70	67	59	46
28	58	56	49	22	42	34	68	63	58	65	56	50
29	60	54	48	37	---	42	57	63	72	65	61	53
30	60	79	48	31	---	40	30	62	72	64	58	61
31	53	---	47	48	---	40	---	59	---	62	58	---
MONTH	54	52	54	38	45	38	45	59	64	68	63	46

DISSOLVED CL DISCHARGE (TONS/DAY) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	45	324	5940	1800	131	311	1310	1960	1140	1650	1070	63
2	177	659	5720	1370	37	215	777	2180	1110	1680	628	15
3	402	204	6040	1330	33	246	611	3370	1350	1630	226	9.4
4	347	118	4790	943	317	294	640	4770	1160	1590	44	11
5	168	377	3620	299	49	427	789	3130	1200	1580	221	105
6	199	477	4370	98	11	243	634	2280	1320	1570	226	51
7	21	629	4250	708	179	136	631	2120	943	1530	217	18
8	155	466	4160	391	567	286	644	2120	2430	1590	553	15
9	414	471	4090	656	177	121	553	2100	2470	1510	583	388
10	349	427	3980	833	18	109	582	2120	2410	1080	270	460
11	155	222	3690	614	28	305	583	2100	2400	1540	106	278
12	12	290	3200	360	101	1460	542	2070	2600	1430	571	650
13	11	541	2900	86	91	1020	402	2280	2460	942	715	109
14	6.6	410	2850	171	85	315	330	2480	2750	464	702	21
15	795	1210	2830	132	617	444	404	2300	3730	986	619	22
16	491	487	2770	217	177	126	553	1290	2870	1080	530	104
17	624	234	2680	237	21	43	312	1350	5050	1090	520	71
18	652	274	2670	900	181	580	474	1330	6630	1400	260	405
19	746	520	2660	490	200	447	380	1350	5350	1370	625	517
20	231	460	2580	232	163	753	85	1400	5380	1030	741	160
21	89	326	2590	349	401	1200	52	1900	5620	892	763	208
22	432	209	3200	306	668	1330	863	1160	5610	1180	602	101
23	512	531	3220	263	410	1430	449	1390	4890	1320	150	310
24	626	260	2620	439	43	1440	792	1420	3560	1780	44	91
25	650	34	2510	219	794	1420	419	1330	2720	1070	174	71
26	580	37	2230	72	513	1330	461	1320	2640	1310	754	266
27	156	2360	1900	20	325	1370	100	1300	1690	1160	585	596
28	107	4440	1890	59	280	1330	20	1320	1400	840	196	270
29	383	5410	1820	102	---	1620	518	1430	1720	1290	492	63
30	287	7830	1820	94	---	1560	676	1340	1730	1400	339	708
31	383	---	1770	31	---	1530	---	1190	---	1210	123	---
MONTH	329	1010	3270	446	236	756	520	1910	2880	1300	440	205

ARKANSAS RIVER BASIN

07245000 CANADIAN RIVER NEAR WHITEFIELD, OKLA.--Continued

DISSOLVED SOLIDS (RESIDUE ON EVAPORATION, MG/L AT 180 DEG. C) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	197	199	231	189	164	175	165	202	235	274	242	258
2	364	210	222	186	188	168	170	213	237	272	242	72
3	244	217	229	183	219	170	178	217	240	272	244	110
4	277	243	230	182	237	167	174	216	217	270	293	164
5	169	219	232	189	182	167	170	217	222	269	292	220
6	244	216	231	163	164	168	177	230	221	268	246	217
7	230	216	229	221	204	174	180	222	167	270	243	269
8	237	220	227	166	162	167	174	224	255	268	242	268
9	264	215	225	168	197	195	167	221	250	268	237	280
10	210	236	221	169	196	161	173	225	248	270	223	212
11	208	229	217	158	221	138	169	223	247	268	236	136
12	135	237	217	147	169	168	167	221	248	264	238	182
13	103	221	214	143	178	169	178	235	248	265	238	174
14	108	223	211	173	188	169	182	246	244	264	238	174
15	211	220	211	186	166	167	178	236	248	264	235	222
16	205	223	209	172	178	175	170	219	197	261	235	189
17	209	229	205	170	242	202	176	216	248	262	235	169
18	206	231	204	163	219	184	171	217	249	260	227	195
19	202	224	201	160	176	169	173	222	258	258	235	203
20	205	208	199	160	181	169	194	242	259	258	232	128
21	211	195	200	164	170	160	207	244	271	260	229	185
22	239	222	242	168	164	165	184	248	272	258	230	187
23	209	215	241	165	166	168	176	236	277	256	229	195
24	238	84	197	159	229	169	197	244	271	250	284	203
25	215	66	195	169	175	166	203	242	270	252	285	115
26	212	60	193	169	166	164	201	242	270	251	231	158
27	200	225	194	147	167	165	211	244	266	256	228	183
28	224	217	193	125	173	164	260	242	226	250	218	197
29	230	212	188	167	---	173	222	241	273	249	235	207
30	231	300	188	155	---	171	153	239	274	247	225	236
31	207	---	185	191	---	170	---	229	---	239	225	---
MONTH	214	208	212	169	187	170	183	230	247	261	241	190

DISSOLVED SOLIDS DISCHARGE (TONS/DAY) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	176	1270	22940	7110	633	1270	6230	7690	4380	6260	4110	241
2	658	2570	22190	5420	146	962	3370	8500	4270	6370	2410	196
3	1550	793	23350	5280	127	1060	2460	13110	5210	6210	868	61
4	1320	452	18520	3750	1220	1340	2620	18550	4510	6050	165	53
5	736	1460	13980	1180	196	1960	3430	12150	4640	6020	837	406
6	763	1860	16870	488	54	1090	2570	8820	5110	5970	868	200
7	80	2440	16420	2740	700	559	2530	8220	4300	5810	833	68
8	598	1810	16090	1830	2810	1310	2640	8230	9290	6050	2130	58
9	1580	1830	15830	2940	696	475	2520	8130	9460	5740	2240	1470
10	1360	1650	15440	3670	69	543	2410	8220	9220	4110	1050	1790
11	607	859	14320	3090	108	1660	2550	8120	9200	5870	409	1520
12	66	1120	12450	1880	446	6530	2470	8010	9980	5440	2200	2580
13	77	2100	11270	459	368	4550	1620	8770	9450	3590	2750	447
14	43	1590	11100	705	338	1380	1310	9500	10550	1770	2700	85
15	3100	4680	11020	522	2860	2020	1630	8860	14300	3760	2380	83
16	1920	1890	10820	913	714	514	2400	5000	11300	4130	2040	412
17	2440	905	10500	1030	82	170	1270	5240	19380	4170	2000	312
18	2550	1060	10470	4450	703	2300	2010	5180	25400	5350	1000	1590
19	2920	2020	10440	2440	813	1990	1560	5220	20440	5240	2410	2030
20	904	1800	10140	1160	650	3320	335	5370	20550	3930	2860	916
21	346	1280	10150	1680	1730	5990	204	7300	21360	3410	2950	823
22	1660	810	12290	1370	3270	6300	3420	4460	21340	4500	2320	398
23	2000	2060	12390	1240	1920	6400	1830	5340	18540	5040	581	1220
24	2410	2350	10300	2200	166	6420	3110	5440	13530	6820	166	355
25	2530	586	9880	974	3240	6600	1640	5100	10360	4120	660	442
26	2260	1170	8790	313	2400	6470	1810	5070	10040	5030	2910	1340
27	610	9130	7490	102	1490	6470	388	5000	6450	4430	2260	2370
28	414	17260	7440	342	1150	6390	76	5050	5430	3220	760	1060
29	1480	21070	7210	465	---	6680	2010	5480	6520	4930	1900	245
30	1110	29530	7210	479	---	6610	3460	5160	6560	5350	1310	2730
31	1500	---	7030	122	---	6580	---	4620	---	4670	478	---
MONTH	1280	3980	12720	1950	1040	3420	2200	7390	11040	4950	1700	850

ARKANSAS RIVER BASIN

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07245000 CANADIAN RIVER NEAR WHITEFIELD, OKLA.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	360	363	412	349	298	323	300	368	418	476	428	452
2	610	380	398	344	347	307	311	384	420	473	428	93
3	430	391	408	339	393	312	329	390	425	472	430	177
4	480	429	410	337	420	305	321	389	391	470	504	298
5	310	394	413	348	337	304	311	391	398	468	503	395
6	430	389	412	295	298	307	327	410	396	467	433	390
7	410	389	409	397	371	320	333	398	305	469	429	468
8	420	395	406	302	294	304	321	401	447	466	428	467
9	460	387	403	307	360	358	305	397	440	467	420	484
10	380	419	396	309	359	291	317	403	436	470	399	383
11	377	408	391	284	396	240	310	399	435	466	419	236
12	233	421	391	260	309	307	305	397	437	461	422	338
13	162	397	386	251	329	308	328	418	437	462	422	321
14	174	399	381	318	347	310	337	434	431	461	422	320
15	382	395	382	344	303	305	329	419	436	461	418	398
16	373	400	378	315	328	322	311	394	361	456	418	348
17	379	409	372	311	428	368	325	389	436	457	418	309
18	374	412	371	296	393	341	314	391	438	454	405	358
19	368	401	367	290	325	308	319	398	451	452	418	370
20	373	377	363	289	336	309	356	428	453	451	413	217
21	381	358	365	299	312	288	376	430	471	454	409	342
22	424	398	428	307	297	301	341	436	472	452	410	346
23	378	388	427	301	302	307	325	419	480	449	409	357
24	422	121	360	287	408	308	360	430	471	440	490	369
25	388	80	357	308	323	303	369	428	470	442	492	188
26	383	66	354	310	302	298	366	428	469	441	412	284
27	365	403	356	261	304	301	382	430	463	449	407	339
28	401	391	354	212	318	299	454	428	404	439	392	361
29	410	383	347	305	---	318	398	427	474	438	417	376
30	411	514	347	279	---	314	273	424	475	435	402	419
31	376	---	342	352	---	312	---	409	---	423	403	---
MONTH	381	369	383	307	341	310	335	409	435	456	426	340

TEMPERATURE (DEG. C) OF WATER , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

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

ARKANSAS RIVER BASIN

07246400 ROBERT S. KERR LOCK AND DAM (ARKANSAS RIVER) NEAR SALLISAW, OKLA.

LOCATION.--Lat 35°21'57", long 94°46'43", in SE 1/4 SW 1/4 sec.8, T.10 N., R.24 E., Sequoyah County, from lock wall at dam, 0.4 mi (0.6 km) upstream from gage on bridge on U.S. Highway 59, 3.5 mi (5.6 km) downstream from Sans Bois Creek, 7.5 mi (12.1 km) south of Sallisaw, and at mile 395.4 (636.2 km).

DRAINAGE AREA.--147,750 mi² (382,672 km²), of which 22,241 mi² (57,604 km²) is probably noncontributing.

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED NITRATE (N) (MG/L)
OCT. 30...	38	8.0	98	107	0	88	47	150	.59
NOV. 13...	42	8.0	54	122	0	100	44	84	.39
DEC. 12...	33	8.2	40	115	0	94	29	--	.50
JAN. 15...	--	--	--	--	--	--	--	--	.65
MAR. 29...	38	6.7	34	109	0	89	38	48	.75
APR. 24...	39	8.3	59	115	0	94	46	87	.69
MAY 22...	44	11	90	124	0	102	56	140	--
JUNE 28...	37	7.6	31	114	0	94	24	37	3.8
SEP. 10...	40	9.2	82	113	0	93	44	130	--

DATE	DIS- SOLVED NITRATE (NO3) (MG/L)	DIS- SOLVED NITRITE (N) (MG/L)	DIS- SOLVED NITRITE (NO2) (MG/L)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	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)
OCT. 30...	2.6	.03	.10	.62	--	423	.58	130	40
NOV. 13...	1.7	.04	.13	.43	.14	317	.43	140	38
DEC. 12...	2.2	.01	.03	.51	--	251	.34	120	22
JAN. 15...	2.9	.00	.00	.65	.12	--	--	--	--
MAR. 29...	3.3	.07	.23	.82	.16	247	.34	120	33
APR. 24...	3.1	.01	.03	.70	.13	318	.43	130	37
MAY 22...	--	--	--	.58	--	434	.59	160	58
JUNE 28...	17	.08	.26	3.9	--	197	.27	120	30
SEP. 10...	--	--	--	.94	.22	380	.52	140	45

DATE	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	CHEM- ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)	CARBON DIOXIDE (CO2) (MG/L)
OCT. 30...	3.8	770	7.7	17.0	10.9	120	3	.2	3.4
NOV. 13...	2.0	535	8.1	12.5	10.2	100	18	.5	1.6
DEC. 12...	1.6	400	7.5	12.0	11.0	107	21	1.0	5.8
JAN. 15...	--	580	8.2	6.0	11.6	97	20	1.0	--
MAR. 29...	1.3	380	7.9	12.0	11.0	109	16	1.8	2.2
APR. 24...	2.2	540	7.9	21.0	--	--	11	1.8	2.3
MAY 22...	3.1	800	7.6	25.0	8.2	104	30	6.1	5.0
JUNE 28...	1.2	480	8.2	24.0	8.5	106	10	3.6	1.2
SEP. 10...	3.0	680	7.8	27.0	7.6	99	16	1.6	2.9

RED RIVER BASIN

205

07301500 NORTH FORK RED RIVER NEAR CARTER, OKLA.

LOCATION.--Lat 35°10'05", long 99°30'25", in NW 1/4 SE 1/4 sec.15, T.8 N., R.22 W., Beckham County, at gaging station at bridge on State Highway 34, 3.0 mi (4.8 km) south of Carter, 10.8 mi (17.4 km) downstream from Timber Creek, and at mile 110.5 (177.8 km).

DRAINAGE AREA.--2,337 mi² (6,053 km²), of which 399 mi² (1,033 km²) is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: Water years 1951 and 1958-60 (partial-record station), November 1961 to September 1962, July 1968 to current year.
Water temperatures: July 1968 to current year.

EXTREMES, Current year.--Specific conductance: Maximum, 3,420 micromhos/cm Jan. 5; minimum, 586 micromhos/cm Sept. 23.

Water temperatures: Maximum, 32.0°C June 14, 16-17; minimum, freezing point on several days during January.

Period of record.--Specific conductance: Maximum, 4,440 micromhos/cm Dec. 11, 1972; minimum, 420 micromhos/cm Sept. 6, 1973.

Water temperatures: Maximum, 34.0°C July 1, 1972; minimum, -0.5°C Feb. 2-3, 1972.

REMARKS.--Continuous monitor records for specific conductance and water temperature are collected for this station. Records of maximum and minimum specific conductance and water temperature values are available in district office in Oklahoma City, Okla. No flow June 29-Sept. 18.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

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)	ALKA- LINITY AS CACU3 (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...	27	180	52	190	170	0	139	--	270	.42	1.9	.01
11...	1880	72	16	54	119	0	98	160	71	.73	3.2	.01
25...	21	260	88	330	217	0	178	910	470	.24	1.1	.02
NOV.												
05...	19	250	90	310	228	0	187	870	420	.19	.84	.00
15...	30	260	90	320	205	0	168	910	460	.28	1.2	.00
25...	40	260	86	300	245	0	201	870	420	.42	1.9	.01
DEC.												
05...	70	280	88	330	260	0	213	960	440	.74	3.3	.01
15...	33	270	86	330	230	0	189	840	440	.82	3.6	.01
25...	40	270	87	290	256	0	210	870	420	1.1	4.8	.01
JAN.												
07...	42	270	89	290	286	0	235	830	410	1.3	5.7	.01
17...	100	240	78	240	262	8	228	680	340	2.0	8.9	.00
25...	56	240	76	290	220	0	180	770	--	.97	4.3	.00
FEB.												
05...	48	200	65	240	158	0	130	590	390	.69	3.1	.01
15...	46	250	86	300	195	0	160	790	440	.37	1.6	.00
25...	44	280	88	310	214	0	176	860	450	.37	1.6	.01
MAR.												
05...	37	250	90	330	189	0	155	830	--	.09	.40	.02
15...	85	210	66	240	261	0	214	600	320	.40	1.8	.02
25...	40	270	85	310	265	0	217	830	420	.57	2.5	.08
APR.												
05...	12	250	90	290	216	0	177	860	370	--	--	--
15...	15	230	94	300	232	0	190	820	380	--	--	--
25...	11	220	86	270	192	0	157	790	330	--	--	--
MAY												
05...	94	170	70	220	212	0	174	560	300	--	--	--
15...	9.5	220	82	280	207	0	170	750	380	--	--	--
25...	82	150	44	130	176	0	144	410	160	--	--	--
JUNE												
05...	24	220	85	260	172	0	141	780	350	--	--	--
15...	7.4	230	95	230	162	0	133	820	320	--	--	--
24...	1.4	340	120	210	137	0	112	--	410	--	--	--
SEP.												
23...	21	71	14	32	123	0	101	150	37	--	--	--
29...	16	87	18	50	130	0	107	200	61	--	--	--

RED RIVER BASIN

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	DIS- SOLVED NITRITE (NO2) (MG/L)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	CARBON DIOXIDE (CO2) (MG/L)
OCT.											
05...	.03	.43	1400	1.90	102	660	520	3.2	2020	8.0	2.7
11...	.03	.74	456	.62	2320	250	150	1.5	743	8.1	1.5
25...	.07	.26	2240	3.05	127	1000	830	4.5	3000	8.2	2.2
NOV.											
05...	.00	.19	2150	2.92	110	1000	810	4.3	3030	8.1	2.9
15...	.00	.28	2190	2.98	177	1000	850	4.4	3080	8.2	2.1
25...	.03	.43	2130	2.90	230	1000	800	4.1	3000	8.2	2.5
DEC.											
05...	.03	.75	2250	3.06	425	1100	850	4.4	2960	8.1	3.3
15...	.03	.83	2170	2.95	193	1000	840	4.5	3020	8.2	2.3
25...	.03	1.1	2150	2.92	232	1000	820	3.9	2840	7.8	6.5
JAN.											
07...	.03	1.3	2160	2.94	245	1000	810	3.9	2840	7.8	7.3
17...	.00	2.0	1840	2.50	497	920	690	3.4	2480	8.4	1.8
25...	.00	.97	1970	2.68	298	910	730	4.2	2730	8.1	2.8
FEB.											
05...	.03	.70	1650	2.24	214	770	640	3.8	2410	7.9	3.2
15...	.00	.37	2110	2.87	262	980	820	4.2	3000	7.9	3.9
25...	.03	.38	2250	3.06	267	1100	890	4.1	3140	8.0	3.4
MAR.											
05...	.07	.11	2240	3.05	224	1000	840	4.6	3100	8.2	1.9
15...	.07	.42	1710	2.33	392	800	580	3.7	2450	8.1	3.3
25...	.26	.65	2120	2.88	229	1000	810	4.2	2990	8.1	3.4
APR.											
05...	--	.18	2120	2.88	68.7	1000	820	4.0	2930	7.9	4.4
15...	--	.24	2090	2.84	84.6	960	770	4.2	2900	8.1	2.9
25...	--	.08	1930	2.62	57.3	900	750	3.9	2710	8.1	2.4
MAY											
05...	--	.55	1550	2.11	393	710	540	3.6	2240	8.0	3.4
15...	--	.26	1990	2.71	51.0	890	720	4.1	2710	8.0	3.3
25...	--	.72	1060	1.44	235	560	410	2.4	1510	7.3	14
JUNE											
05...	--	.31	1980	2.69	128	900	760	3.8	2630	7.6	6.9
15...	--	.23	1950	2.65	39.0	970	830	3.2	2560	7.7	5.2
24...	--	.48	2590	3.52	10.3	1300	1200	2.5	3040	8.3	1.1
SEP.											
23...	--	.36	399	.54	22.6	240	130	.9	586	7.7	3.9
29...	--	.35	520	.71	22.5	290	180	1.3	777	7.6	5.2

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

SULFATE (MG/L AS SO4) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	570	870	820	---	830	870	830	300	610	---	---	---
2	620	770	820	---	850	820	930	320	640	---	---	---
3	670	830	790	---	820	840	740	560	700	---	---	---
4	530	830	790	---	830	880	860	570	690	---	---	---
5	510	830	870	1000	850	860	760	600	810	---	---	---
6	580	840	810	1000	860	980	810	550	830	---	---	---
7	580	760	780	1000	850	870	850	650	780	---	---	---
8	670	850	820	980	850	830	860	670	700	---	---	---
9	750	900	810	910	840	730	840	660	750	---	---	---
10	810	850	810	870	840	420	840	710	580	---	---	---
11	180	850	830	840	740	580	700	720	520	---	---	---
12	---	820	850	890	810	650	700	670	560	---	---	---
13	---	820	840	830	870	560	480	750	670	---	---	---
14	540	810	850	680	810	590	770	750	620	---	---	---
15	330	840	850	620	850	730	820	720	700	---	---	---
16	710	860	860	590	820	700	850	760	780	---	---	---
17	790	840	620	690	880	730	840	790	820	---	---	---
18	850	790	840	670	940	740	820	580	680	---	---	---
19	480	810	750	560	910	770	830	830	670	---	---	---
20	900	740	820	620	860	710	820	770	870	---	---	---
21	840	790	890	590	880	790	580	650	620	---	---	---
22	860	840	---	710	870	770	760	820	800	---	---	---
23	950	880	840	720	900	800	790	820	970	---	---	140
24	640	840	910	740	930	850	480	820	920	---	---	310
25	880	820	800	780	890	840	730	390	950	---	---	760
26	980	870	770	760	880	780	710	650	860	---	---	560
27	810	860	790	780	820	600	820	530	910	---	---	970
28	840	860	860	740	630	760	720	610	---	---	---	980
29	930	860	840	770	---	830	430	580	---	---	---	190
30	670	840	950	700	---	840	320	600	---	---	---	990
31	820	---	880	790	---	810	---	660	---	---	---	---
MONTH	700	830	830	770	850	760	740	650	740	---	---	---

DISSOLVED SO4 DISCHARGE (TONS/DAY) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	54	42	93	---	124	112	38	586	59	---	---	---
2	42	36	97	---	124	101	38	576	59	---	---	---
3	27	36	96	---	116	96	28	293	49	---	---	---
4	36	38	101	---	115	99	30	230	51	---	---	---
5	43	40	152	73	112	93	25	166	55	---	---	---
6	152	47	107	98	111	98	24	112	52	---	---	---
7	94	43	99	115	103	85	23	96	42	---	---	---
8	61	51	96	135	101	85	22	74	45	---	---	---
9	43	56	88	110	95	150	21	55	269	---	---	---
10	44	53	79	85	100	515	23	44	127	---	---	---
11	539	55	78	91	89	972	147	35	48	---	---	---
12	---	58	85	111	96	957	186	27	26	---	---	---
13	---	62	79	123	103	273	63	26	20	---	---	---
14	190	66	76	130	114	194	60	24	15	---	---	---
15	86	66	76	166	133	168	45	20	14	---	---	---
16	143	65	77	183	151	128	32	19	11	---	---	---
17	119	66	54	187	209	110	29	17	9.5	---	---	---
18	110	64	73	355	240	100	29	11	7.7	---	---	---
19	54	70	52	195	232	87	27	14	5.2	---	---	---
20	92	72	40	182	191	85	36	12	5.2	---	---	---
21	75	83	65	128	185	98	33	30	3.5	---	---	---
22	65	84	---	138	160	96	29	33	3.5	---	---	---
23	64	95	91	127	150	96	28	27	3.2	---	---	9.4
24	38	91	109	117	151	96	18	21	2.5	---	---	24
25	45	89	84	120	135	105	22	248	2.2	---	---	117
26	50	91	81	114	124	93	19	674	1.2	---	---	77
27	39	89	100	118	107	58	21	185	1.1	---	---	138
28	41	117	119	110	85	64	17	152	---	---	---	79
29	43	86	108	120	---	63	106	94	---	---	---	7.7
30	31	93	128	108	---	52	208	76	---	---	---	27
31	40	---	79	117	---	44	---	68	---	---	---	---
MONTH	85	67	89	135	134	173	47	131	37	---	---	---

RED RIVER BASIN

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

CHLORIDE (MG/L AS CL) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	280	430	400	---	410	430	410	130	300	---	---	---
2	300	380	400	---	420	400	460	140	310	---	---	---
3	320	410	390	---	400	410	360	270	340	---	---	---
4	260	410	390	---	410	430	420	280	340	---	---	---
5	250	410	430	510	420	420	370	290	400	---	---	---
6	290	410	400	510	420	480	400	270	410	---	---	---
7	290	370	380	500	420	430	420	310	380	---	---	---
8	320	420	400	480	420	410	420	320	340	---	---	---
9	370	440	400	450	410	360	410	320	360	---	---	---
10	400	420	400	430	410	190	410	350	290	---	---	---
11	59	420	410	410	360	290	340	350	250	---	---	---
12	---	400	420	440	400	310	340	330	280	---	---	---
13	---	400	410	410	430	270	230	370	330	---	---	---
14	270	400	420	330	400	290	380	370	300	---	---	---
15	150	410	420	300	420	360	400	350	340	---	---	---
16	340	420	420	290	400	340	420	370	380	---	---	---
17	380	410	300	340	430	350	410	390	400	---	---	---
18	420	390	410	330	470	360	400	290	330	---	---	---
19	230	400	360	270	450	380	410	410	330	---	---	---
20	440	360	400	300	420	350	400	380	430	---	---	---
21	410	390	440	290	430	380	280	320	300	---	---	---
22	420	410	---	350	430	380	370	400	390	---	---	---
23	470	430	410	350	440	390	380	400	480	---	---	37
24	310	410	450	360	460	420	230	400	450	---	---	130
25	430	400	390	380	440	410	360	180	470	---	---	370
26	480	430	370	370	430	380	350	310	420	---	---	280
27	390	420	380	380	400	290	400	260	450	---	---	480
28	410	420	420	360	310	370	350	300	---	---	---	480
29	460	420	410	370	---	410	200	290	---	---	---	66
30	330	410	470	340	---	410	140	290	---	---	---	490
31	400	---	430	390	---	400	---	320	---	---	---	---
MONTH	340	410	400	380	420	370	360	310	360	---	---	---

DISSOLVED CL DISCHARGE (TONS/DAY) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	27	21	46	---	61	55	19	251	29	---	---	---
2	21	17	48	---	61	50	18	251	28	---	---	---
3	13	18	47	---	57	47	14	144	24	---	---	---
4	17	19	49	---	56	49	15	113	25	---	---	---
5	21	20	75	36	55	46	12	82	27	---	---	---
6	75	23	52	48	55	48	12	55	25	---	---	---
7	47	21	48	57	51	42	11	47	21	---	---	---
8	30	25	47	66	49	42	11	36	22	---	---	---
9	21	27	43	54	47	73	10	27	131	---	---	---
10	21	26	38	42	49	241	11	22	63	---	---	---
11	180	27	38	44	44	480	71	17	23	---	---	---
12	---	28	41	54	47	463	91	13	13	---	---	---
13	---	30	39	60	51	134	30	13	9.6	---	---	---
14	93	32	37	63	56	96	29	12	7.5	---	---	---
15	38	32	37	81	65	82	22	9.5	6.8	---	---	---
16	69	32	38	90	74	62	16	9.1	5.5	---	---	---
17	58	32	26	91	102	54	14	8.5	4.6	---	---	---
18	54	31	36	172	118	49	14	5.6	3.7	---	---	---
19	26	34	26	96	114	43	13	7.0	2.5	---	---	---
20	45	35	20	89	94	41	17	5.8	2.5	---	---	---
21	37	41	32	63	91	48	16	14	1.7	---	---	---
22	32	41	---	67	78	47	14	16	1.7	---	---	---
23	32	47	44	62	74	47	13	13	1.6	---	---	2.5
24	18	44	53	57	74	47	8.8	10	1.2	---	---	10
25	22	43	41	58	66	51	11	114	1.1	---	---	57
26	25	45	39	56	61	45	9.3	326	0.58	---	---	38
27	19	43	49	58	52	29	10	90	0.53	---	---	68
28	20	57	58	53	41	31	8.2	74	---	---	---	39
29	21	42	53	59	---	31	50	47	---	---	---	2.7
30	15	46	63	53	---	25	91	37	---	---	---	13
31	20	---	39	57	---	21	---	33	---	---	---	---
MONTH	38	33	43	66	66	84	23	61	18	---	---	---

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

DISSOLVED SOLIDS (RESIDUE ON EVAPORATION, MG/L AT 180 DEG. C) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1590	2170	2090	---	2100	2170	2100	846	1680	---	---	---
2	1700	1990	2080	---	2130	2070	2290	891	1730	---	---	---
3	1780	2100	2030	---	2090	2130	1930	1550	1850	---	---	---
4	1470	2100	2030	---	2100	2190	2150	1580	1840	---	---	---
5	1420	2100	2170	2500	2140	2160	1970	1650	2070	---	---	---
6	1620	2110	2060	2500	2150	2390	2070	1550	2110	---	---	---
7	1620	1970	2010	2460	2140	2180	2140	1750	2000	---	---	---
8	1780	2140	2090	2390	2130	2100	2150	1780	1850	---	---	---
9	1950	2230	2070	2240	2120	1900	2120	1780	1930	---	---	---
10	2070	2130	2060	2180	2130	1170	2120	1870	1620	---	---	---
11	504	2140	2100	2110	1920	1610	1840	1890	1450	---	---	---
12	---	2080	2130	2220	2060	1750	1840	1800	1570	---	---	---
13	---	2080	2110	2100	2180	1550	1350	1950	1790	---	---	---
14	1520	2070	2130	1810	2070	1630	1980	1950	1690	---	---	---
15	936	2120	2140	1690	2130	1910	2090	1890	1850	---	---	---
16	1860	2150	2160	1630	2090	1840	2130	1970	2000	---	---	---
17	2010	2130	1690	1840	2190	1900	2120	2020	2070	---	---	---
18	2140	2030	2130	1800	2320	1930	2090	1610	1800	---	---	---
19	1350	2050	1940	1550	2260	1980	2100	2100	1790	---	---	---
20	2230	1930	2080	1690	2160	1880	2090	1990	2180	---	---	---
21	2120	2020	2220	1630	2190	2010	1600	1750	1690	---	---	---
22	2150	2120	---	1870	2180	1980	1970	2080	2050	---	---	---
23	2330	2200	2120	1890	2230	2050	2010	2090	2370	---	---	398
24	1730	2120	2260	1920	2300	2130	1350	2080	2270	---	---	869
25	2190	2080	2040	2000	2220	2130	1910	1080	2330	---	---	1960
26	2380	2170	1980	1950	2200	2010	1870	1750	2150	---	---	1570
27	2050	2160	2010	2010	2090	1650	2070	1490	2260	---	---	2360
28	2110	2160	2160	1920	1710	1960	1880	1680	---	---	---	2380
29	2300	2160	2110	1980	---	2100	1200	1620	---	---	---	540
30	1790	2120	2330	1850	---	2110	896	1650	---	---	---	2410
31	2080	---	2200	2020	---	2070	---	1770	---	---	---	---
MONTH	1820	2100	2090	1990	2130	1960	1910	1720	1930	---	---	---

DISSOLVED SOLIDS DISCHARGE (TONS/DAY) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	150	105	237	---	312	281	97	1650	163	---	---	---
2	115	91	247	---	311	257	93	1620	159	---	---	---
3	72	91	246	---	293	241	73	818	130	---	---	---
4	99	96	257	---	290	248	76	643	134	---	---	---
5	119	102	381	176	283	234	64	459	139	---	---	---
6	424	120	272	236	279	238	61	313	131	---	---	---
7	262	112	255	279	260	212	58	260	108	---	---	---
8	164	127	242	328	253	216	55	197	120	---	---	---
9	110	138	223	273	240	391	53	149	700	---	---	---
10	112	132	200	212	252	1440	57	116	354	---	---	---
11	1540	139	198	228	233	2710	388	92	133	---	---	---
12	---	146	213	275	245	2580	493	73	72	---	---	---
13	---	157	199	312	259	763	175	68	53	---	---	---
14	532	167	190	346	290	538	155	63	42	---	---	---
15	243	166	191	456	334	438	113	51	37	---	---	---
16	376	163	193	508	383	338	81	48	29	---	---	---
17	304	166	146	496	521	288	74	45	24	---	---	---
18	277	164	184	947	588	261	73	31	20	---	---	---
19	150	177	136	545	573	224	68	36	14	---	---	---
20	229	188	101	499	479	223	90	31	13	---	---	---
21	189	213	162	356	462	250	91	80	9.6	---	---	---
22	162	212	---	363	400	246	74	84	8.9	---	---	---
23	157	238	229	333	373	243	71	68	7.7	---	---	27
24	103	229	268	305	372	241	51	53	6.1	---	---	68
25	112	225	215	308	336	264	57	694	5.3	---	---	302
26	122	229	208	295	309	238	50	1820	3.0	---	---	216
27	100	222	256	303	271	160	52	518	2.7	---	---	338
28	103	292	298	286	231	164	44	417	---	---	---	193
29	105	216	273	310	---	158	297	262	---	---	---	22
30	82	234	314	285	---	131	586	209	---	---	---	65
31	101	---	196	300	---	112	---	182	---	---	---	---
MONTH	228	169	224	354	337	463	126	360	97	---	---	---

RED RIVER BASIN

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

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2190	2970	2860	---	2880	2970	2880	1190	2310	---	---	---
2	2340	2730	2850	---	2920	2840	3130	1250	2380	---	---	---
3	2450	2880	2780	---	2860	2910	2650	2140	2540	---	---	---
4	2030	2870	2780	---	2880	2990	2950	2170	2520	---	---	---
5	1960	2880	2970	3420	2930	2960	2700	2270	2830	---	---	---
6	2230	2890	2820	3410	2950	3260	2830	2130	2880	---	---	---
7	2230	2700	2750	3360	2930	2990	2930	2400	2740	---	---	---
8	2450	2930	2860	3260	2920	2880	2940	2450	2530	---	---	---
9	2670	3050	2830	3070	2900	2610	2900	2440	2650	---	---	---
10	2830	2920	2820	2990	2910	1620	2900	2570	2230	---	---	---
11	728	2930	2870	2900	2630	2220	2530	2590	2000	---	---	---
12	---	2850	2920	3040	2820	2400	2530	2470	2160	---	---	---
13	---	2850	2890	2870	2980	2140	1870	2670	2460	---	---	---
14	2090	2830	2920	2480	2830	2250	2720	2670	2330	---	---	---
15	1310	2900	2930	2320	2920	2620	2860	2600	2540	---	---	---
16	2550	2950	2960	2250	2860	2530	2920	2700	2740	---	---	---
17	2760	2910	2330	2520	3000	2610	2900	2770	2840	---	---	---
18	2920	2780	2910	2470	3170	2650	2860	2220	2480	---	---	---
19	1870	2810	2660	2140	3090	2710	2870	2870	2460	---	---	---
20	3050	2650	2850	2330	2960	2580	2860	2720	2990	---	---	---
21	2900	2770	3040	2240	3000	2760	2210	2410	2330	---	---	---
22	2940	2910	---	2560	2980	2720	2700	2850	2810	---	---	---
23	3180	3010	2900	2600	3050	2810	2760	2860	3250	---	---	586
24	2370	2900	3090	2630	3140	2920	1870	2850	3110	---	---	1220
25	2990	2850	2800	2740	3040	2910	2620	1510	3190	---	---	2690
26	3250	2970	2710	2680	3010	2750	2560	2400	2940	---	---	2160
27	2810	2960	2760	2750	2860	2270	2840	2050	3090	---	---	3230
28	2890	2960	2960	2640	2350	2690	2580	2310	---	---	---	3250
29	3140	2960	2890	2710	---	2870	1660	2230	---	---	---	777
30	2460	2900	3180	2550	---	2890	1260	2270	---	---	---	3290
31	2850	---	3010	2770	---	2830	---	2440	---	---	---	---
MONTH	2500	2880	2860	2730	2920	2680	2630	2370	2640	---	---	---

TEMPERATURE (DEG. C) OF WATER , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

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

RED RIVER BASIN

211

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

LOCATION.--Lat 35°01'15", long 99°56'58", in NE 1/4 SW 1/4 sec.3, T.6 N., R.26 W., Harmon County, 0.1 mi (0.2 km) upstream from fiord at saltworks, 2.6 mi (4.2 km) upstream from Carl gage, and at mile 56.6 (91.9 km).

DRAINAGE AREA.--411 mi² (1,023 km²).

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

Water temperatures: April 1973 to current year.

EXTREMES, Current year.--Specific conductance: Maximum, 80,700 micromhos/cm Aug. 2; minimum, 1,330 micromhos/cm May 21.

Water temperatures: Maximum, 33.0°C June 5; minimum, freezing point on several days during December and January.

Period of record.--Specific conductance: Maximum, 80,700 micromhos/cm Aug. 2, 1974; minimum, 1,330 micromhos/cm May 21, 1974.

Water temperatures: Maximum, 34.5°C June 7, 1973; minimum, freezing point on several days during December 1973 and January 1974.

REMARKS.--Continuous monitor records for specific conductance and water temperature are collected for this station. Records of maximum and minimum specific conductance and water temperature values are available in district office in Oklahoma City, Okla.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	INSTANTANEOUS DIS-CHARGE (CFS)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNE-SIUM (MG)	DIS-SOLVED SODIUM (NA) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CaCO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	DIS-SOLVED NITRATE (NO3) (MG/L)	DIS-SOLVED NITRITE (N) (MG/L)
OCT.												
02...	21	600	91	--	108	0	89	1800	1100	.65	2.9	.00
11...	740	--	28	34	95	0	78	880	61	.55	2.4	.00
24...	21	610	100	860	109	0	89	1800	1400	.73	3.2	.02
NOV.												
01...	18	600	110	820	131	0	107	1700	1400	1.1	4.9	.00
08...	19	570	98	780	157	0	129	1500	1200	1.4	6.1	.02
26...	18	590	100	690	152	0	125	--	1100	1.6	7.1	.00
DEC.												
07...	16	560	110	--	150	0	123	1700	1100	1.7	7.5	.01
19...	13	730	140	1600	208	0	171	2100	2600	2.6	11	.01
21...	10	500	98	440	108	0	89	1500	710	1.9	8.4	.00
JAN.												
09...	15	590	120	--	169	0	139	1800	2000	2.4	11	.02
15...	24	--	82	420	156	0	128	1300	770	1.9	8.4	.01
22...	20	560	100	--	156	0	128	1600	1200	2.0	8.9	.00
FEB.												
05...	16	570	110	750	156	0	128	--	1200	1.9	8.4	.01
08...	18	590	110	910	162	0	133	1500	1500	1.8	7.9	.01
27...	19	580	110	850	148	0	121	1500	1400	1.7	7.5	.01
MAR.												
08...	16	630	160	3700	124	0	102	1700	6000	1.5	6.6	.01
11...	295	350	38	100	109	0	89	900	170	1.1	4.8	.02
23...	22	600	100	670	163	0	134	1600	1100	1.2	5.3	.01
APR.												
04...	10	610	110	770	118	0	97	1700	1300	1.0	4.4	.00
25...	13	650	120	950	99	0	81	1900	1500	.55	2.4	.01
28...	31	360	36	57	91	0	75	910	91	.78	3.5	.01
MAY												
01...	881	360	27	40	94	0	77	910	61	.34	1.5	.06
07...	22	590	90	820	139	0	114	1500	1300	.42	1.9	.01
14...	7.6	690	20	--	125	0	103	1700	3600	.23	1.0	.19
JUNE												
05...	31	640	100	920	109	0	89	1600	1600	--	--	--
14...	12	--	110	1400	100	0	82	1700	2200	--	--	--
21...	4.0	750	140	2300	94	0	77	2000	3600	--	--	--
JULY												
05...	6.7	780	190	4200	104	0	85	2000	6900	--	--	--
20...	15	850	240	4800	90	0	74	2200	7600	--	--	--
31...	.52	1400	630	22000	141	0	116	2900	37000	--	--	--
AUG.												
10...	3.9	800	220	5500	81	0	66	1900	8800	--	--	--
21...	.99	1600	640	--	100	0	82	3100	42000	--	--	--
25...	.72	540	78	560	93	0	--	1500	870	--	--	--
SEP.												
01...	.52	--	120	2100	113	0	93	1700	3600	--	--	--
11...	1.2	700	140	3100	89	0	73	2000	5000	--	--	--
21...	.401	--	23	110	78	0	64	730	190	--	--	--

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	DIS- SOLVED NITRITE (NO2) (MG/L)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	CARBON DIOXIDE (CO2) (MG/L)
OCT.											
02...	.00	.65	4580	6.23	260	1900	1800	--	5320	8.3	.9
11...	.00	.55	1490	2.03	2980	--	--	--	1710	7.6	3.8
24...	.07	.75	5060	6.88	287	1900	1800	8.5	6030	8.1	1.4
NOV.											
01...	.00	1.1	4840	6.58	235	2000	1800	8.1	6310	8.0	2.1
08...	.07	1.4	4560	6.20	234	1800	1700	7.9	5480	8.0	2.5
26...	.00	1.6	4320	5.88	210	1900	1800	6.9	5670	7.9	3.1
DEC.											
07...	.03	1.7	4260	5.79	184	1900	1700	--	5370	7.7	4.8
19...	.03	2.6	7270	9.89	255	2400	2200	14	10500	7.4	13
21...	.00	1.9	3470	4.72	93.7	1700	1600	4.7	4200	7.9	2.2
JAN.											
09...	.07	2.4	5810	7.90	235	2000	1800	--	--	7.9	3.4
15...	.03	1.9	3110	4.23	202	--	--	--	4200	7.8	4.0
22...	.00	2.0	4220	5.74	228	1800	1700	--	5990	7.8	4.0
FEB.											
05...	.03	1.9	4550	6.19	197	1900	1700	7.5	6280	7.8	4.0
08...	.03	1.8	5020	6.83	244	1900	1800	9.0	7050	7.8	4.1
27...	.03	1.7	4830	6.57	248	1900	1800	8.5	6780	7.8	3.8
MAR.											
08...	.03	1.5	12400	16.9	536	2200	2100	34	19400	7.9	2.5
11...	.07	1.1	1740	2.37	1390	1000	940	1.4	2140	7.4	6.9
23...	.03	1.2	4340	5.90	258	1900	1800	6.7	5920	7.8	4.1
APR.											
04...	.00	1.0	4820	6.56	130	2000	1900	7.5	6210	7.8	3.0
25...	.03	.56	5330	7.25	187	2100	2000	9.0	7210	7.9	2.0
28...	.03	.79	--	--	--	1000	970	.8	1920	7.7	2.9
MAY											
01...	.20	.40	1570	2.14	3740	1000	930	.5	1750	7.5	4.8
07...	.03	.43	4660	6.34	277	1800	1700	8.3	6250	8.0	2.2
14...	.62	.42	8610	11.7	177	1800	1700	--	12200	8.0	2.0
JUNE											
05...	--	.79	5080	6.91	425	2000	1900	8.9	6790	7.8	2.8
14...	--	.59	6410	8.72	208	--	--	--	8740	8.0	1.6
21...	--	.43	8980	12.2	97.0	2500	2400	20	12400	8.1	1.2
JULY											
05...	--	.49	14700	20.0	266	2700	2600	35	--	7.9	2.1
20...	--	.34	16800	22.8	680	3100	3000	37	22100	8.1	1.1
31...	--	1.2	68700	93.4	96.5	6100	6000	123	73600	7.4	9.0
AUG.											
10...	--	.57	17800	24.2	187	2900	2800	44	24400	7.4	5.2
21...	--	.12	74400	101	199	6600	6500	--	77800	7.6	4.0
25...	--	.75	4000	5.44	7.78	1700	1600	6.0	5310	8.1	1.2
SEP.											
01...	--	.76	8890	12.1	12.5	--	--	--	12400	7.6	4.5
11...	--	.27	11200	15.2	36.3	2300	2200	28	15700	8.1	1.1
21...	--	.53	1490	2.03	1610	--	--	--	1930	7.6	3.1

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

SULFATE (MG/L AS SO₄) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	1600	1600	---	1600	1600	1600	1400	1600	---	3100	1900
2	1600	---	1600	1600	---	1700	1600	1500	1600	1900	3200	1900
3	1600	1600	1500	1600	---	1700	1600	1400	1600	---	3100	1900
4	1300	---	1500	1600	---	1700	1600	1500	1700	---	2700	1900
5	960	1600	1500	---	1600	1700	1600	1500	1700	1900	2500	1900
6	---	1600	1500	1600	1600	1700	1600	1600	1600	---	2000	1900
7	1400	1600	1500	1500	1600	1700	1600	1600	1700	---	2000	1900
8	---	1600	---	1500	1600	1700	1600	1700	1700	---	2000	1900
9	1500	---	1500	1700	1600	1600	1600	1800	1700	2000	2100	2000
10	---	1600	1600	1500	1600	1400	1700	1900	1700	2000	2000	2000
11	790	---	1500	---	1600	1100	1500	1900	1700	---	2000	2000
12	1300	1600	1500	1600	1600	1300	1400	1900	1700	2000	2000	2000
13	---	1600	1500	1500	1600	1400	1500	1900	1800	2000	2000	1900
14	1400	---	1600	1500	1600	1500	1600	1900	1800	2000	2000	1900
15	1500	---	1600	1400	1500	1500	1700	1800	1900	2000	2100	2000
16	1500	---	1500	1400	1500	1500	1700	1800	1900	2000	2400	1900
17	1500	---	1600	1500	1600	1500	1600	1800	1900	1900	2200	1900
18	1500	---	1500	1500	1600	1500	1700	1800	1900	2000	2000	1900
19	1500	---	1900	1600	1600	1500	1700	1900	1900	2000	2200	1600
20	1600	---	---	1600	1600	1500	1700	1900	---	2000	2500	1400
21	1600	---	1500	1600	1600	1500	1700	530	1900	2000	3000	1000
22	1600	---	1500	1600	1600	1600	1700	1500	---	2100	2800	1400
23	1600	---	---	1500	1600	1600	1800	1500	---	2200	2400	1500
24	1600	1600	---	1500	1600	1600	1800	1500	1900	2300	1900	1500
25	1600	1600	---	1600	1600	1600	1800	1300	---	2500	1500	1500
26	1600	1600	1500	1600	1600	1500	1700	1400	1900	2700	2000	1500
27	1600	1600	1600	1600	1600	1600	1600	1400	1900	2700	2000	1500
28	1600	---	1500	1600	1600	1600	1500	1500	1900	2900	2000	1600
29	1600	1600	1600	1600	---	1600	1300	1100	---	3000	2000	1600
30	1600	1600	1600	1600	---	1600	1400	1600	---	3100	1900	1600
31	1600	---	1600	1600	---	1600	---	1600	---	3000	1900	---
MONTH	1500	---	1600	1500	1600	1600	1600	1600	1800	---	2200	1800

DISSOLVED SO₄ DISCHARGE (TONS/DAY) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	78	69	---	73	80	48	3220	96	---	4.4	94
2	88	---	69	29	---	81	43	1240	106	38	4.7	68
3	81	73	66	30	---	77	44	411	253	---	4.8	44
4	513	---	67	35	---	81	43	253	260	---	5.1	34
5	468	73	68	---	69	72	43	166	138	35	158	21
6	---	77	70	67	73	69	38	131	95	---	92	13
7	147	76	67	81	72	69	38	97	88	---	13	11
8	---	81	---	92	76	72	36	83	92	---	10	10.0
9	84	---	63	68	85	101	35	70	82	29	11	7.9
10	---	77	59	50	81	2400	45	56	78	26	21	7.9
11	1580	---	58	---	88	915	347	51	73	---	11	6.3
12	1060	77	57	31	100	364	160	45	70	25	10	12
13	---	78	59	44	91	233	121	44	62	22	9.1	10.0
14	196	---	54	71	91	189	113	40	59	22	7.5	8.9
15	151	---	55	92	104	152	114	32	52	145	8.1	13
16	121	---	50	116	117	136	103	27	44	80	12	20
17	107	---	50	113	97	116	79	25	40	25	10	12
18	99	---	50	96	99	104	74	21	41	8.4	9.2	15
19	96	---	66	92	94	92	71	18	34	108	8.3	2600
20	93	---	---	92	95	104	96	29	---	82	8.0	4040
21	89	---	39	92	87	112	71	1240	21	70	8.1	1130
22	89	---	53	84	83	105	60	465	---	64	275	600
23	87	---	---	79	84	92	63	195	---	5.9	70	379
24	87	71	---	74	79	92	62	129	23	5.6	373	322
25	83	76	---	72	83	93	62	1860	---	4.8	656	331
26	82	75	54	72	84	74	65	558	20	5.0	318	154
27	86	72	57	72	84	73	67	272	36	4.3	269	100
28	82	---	50	72	84	65	127	177	46	4.0	279	79
29	83	67	50	72	---	57	954	86	---	4.2	214	62
30	81	68	51	68	---	52	2510	109	---	4.5	157	49
31	81	---	44	72	---	48	---	104	---	4.2	120	---
MONTH	224	---	57	72	87	205	191	363	80	---	102	342

RED RIVER BASIN

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

CHLORIDE (MG/L AS CL) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	1300	1300	---	1300	1500	1300	430	1400	---	42800	4100
2	1100	---	1300	1100	---	1500	1300	810	1400	4000	43800	3700
3	1300	1300	1100	1200	---	1600	1400	540	1400	---	42300	3400
4	210	---	780	1300	---	1600	1300	830	1600	---	30300	3000
5	90	1300	880	---	1300	1600	1200	950	1500	3700	25000	3100
6	---	1300	1000	1200	1300	1700	1300	1200	1300	---	8200	3300
7	570	1200	1100	980	1200	1700	1300	1400	1700	---	5800	3200
8	---	1200	---	880	1200	1600	1400	1700	1700	---	7000	4300
9	890	---	1100	1600	1200	1400	1400	2300	1600	5800	11900	4400
10	---	1200	1200	1100	1200	470	1600	2500	1600	5700	9800	4600
11	30	---	1000	---	1400	160	870	2600	1700	---	6300	4700
12	270	1300	970	1200	1300	410	750	2700	1800	7600	5300	5200
13	---	1300	1100	880	1300	650	1100	3100	1900	6300	5500	4300
14	670	---	1100	840	1300	790	1300	3400	2100	6600	6400	4400
15	840	---	1100	680	1100	900	1600	2000	2700	6500	12700	4500
16	920	---	1100	690	1100	1100	1800	1900	2900	6100	20500	3100
17	1000	---	1100	920	1200	1100	1400	2000	2900	4300	15100	2400
18	1000	---	1100	1100	1300	1100	1700	1900	3700	4600	7500	2700
19	1100	---	2500	1100	1300	1100	1500	2300	2700	6900	14200	1300
20	1200	---	---	1100	1300	1100	1700	3700	---	9200	23300	500
21	1200	---	780	1200	1300	1100	1800	23	3600	7500	40100	120
22	1200	---	940	1200	1300	1200	1700	1000	---	13000	31500	470
23	1300	---	---	1100	1400	1200	2100	960	---	14700	19600	920
24	1400	1100	---	1000	1400	1200	1900	790	2300	18800	4100	1100
25	1400	1100	---	1200	1400	1200	1900	290	---	22800	1000	1000
26	1300	1100	1100	1200	1400	1000	1700	450	2900	28700	4900	950
27	1300	1200	1400	1200	1400	1300	1500	740	3200	29100	4700	1100
28	1300	---	1100	1200	1400	1300	1000	1100	3100	35100	4500	1400
29	1400	1200	1100	1200	---	1400	380	130	---	39400	5800	1400
30	1200	1200	1300	1200	---	1300	740	1400	---	40700	3600	1400
31	1300	---	1400	1200	---	1300	---	1300	---	38900	3200	---
MONTH	980	---	1200	1100	1300	1200	1400	1500	2200	---	15100	2700

DISSOLVED CL DISCHARGE (TONS/DAY) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	65	54	---	57	71	40	1010	83	---	60	197
2	64	---	55	22	---	74	34	689	92	79	65	130
3	65	59	46	23	---	73	37	160	212	---	65	78
4	84	---	36	28	---	75	36	143	252	---	56	53
5	44	58	40	---	54	67	34	105	124	67	1550	34
6	---	61	48	50	59	67	30	101	77	---	377	21
7	60	57	48	53	54	67	30	84	88	---	39	18
8	---	63	---	55	57	67	31	84	90	---	36	22
9	50	---	45	66	65	86	30	85	77	84	61	18
10	---	61	44	35	63	830	42	75	75	74	103	18
11	59	---	39	---	75	129	204	70	72	---	36	15
12	221	62	37	24	82	112	83	64	71	95	27	31
13	---	64	42	26	74	106	88	70	66	70	25	22
14	93	---	40	41	76	103	94	70	69	73	24	20
15	87	---	40	44	72	92	111	36	72	474	48	29
16	75	---	34	56	84	94	105	29	66	245	105	32
17	72	---	37	70	75	80	70	27	60	56	69	15
18	68	---	36	70	81	73	73	23	78	20	34	22
19	68	---	86	67	75	67	64	22	48	374	54	2120
20	69	---	---	68	78	76	95	56	---	374	75	1460
21	67	---	21	68	71	79	73	55	39	263	107	133
22	69	---	33	62	69	78	59	306	---	387	3150	205
23	72	---	---	57	74	69	73	124	---	40	584	234
24	74	53	---	49	68	69	65	70	28	45	783	234
25	70	56	---	55	70	69	65	413	---	44	441	219
26	68	55	39	54	72	49	66	186	31	53	749	98
27	70	54	47	54	73	58	59	139	59	46	649	71
28	67	---	36	54	73	54	84	122	74	49	645	67
29	70	51	37	56	---	48	268	11	---	55	622	54
30	62	52	41	52	---	44	1290	92	---	59	291	42
31	65	---	37	56	---	40	---	86	---	55	202	---
MONTH	74	---	42	50	70	99	115	149	84	---	361	191

RED RIVER BASIN

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

DISSOLVED SOLIDS (RESIDUE ON EVAPORATION, MG/L AT 180 DEG. C) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	4750	4570	---	4540	5030	4770	2570	4880	---	75860	9790
2	4270	---	4590	4280	---	5210	4600	3500	4950	9780	77500	9080
3	4580	4640	4100	4440	---	5370	4820	2840	4790	---	74850	8590
4	2050	---	3420	4590	---	5270	4750	3540	5470	---	54180	7940
5	1770	4580	3650	---	4570	5290	4530	3820	5110	9090	44960	8140
6	---	4570	4030	4340	4640	5540	4620	4430	4650	---	16400	8350
7	2910	4380	4210	3910	4390	5520	4620	4920	5640	---	13340	8240
8	---	4490	---	3670	4380	5260	4900	5680	5520	---	14850	10340
9	3670	---	4230	5460	4430	4850	4820	6760	5360	13340	22440	10520
10	---	4540	4340	4130	4490	2680	5280	7180	5480	13270	18710	10840
11	1610	---	4030	---	4880	1940	3630	7310	5550	---	14100	11160
12	2210	4580	3880	4400	4710	2540	3350	7500	5760	15670	12350	12240
13	---	4690	4240	3660	4700	3100	4230	8060	6040	14030	12870	10270
14	3170	---	4280	3550	4750	3450	4770	8590	6570	14370	14140	10400
15	3570	---	4300	3170	4120	3700	5490	6410	7430	14300	23700	10610
16	3760	---	4070	3200	4200	4080	5790	5990	7760	13750	37210	8150
17	4000	---	4290	3750	4430	4100	4990	6240	7720	10330	27950	7030
18	4050	---	4180	4250	4660	4140	5610	6200	9050	11000	15500	7550
19	4190	---	7090	4270	4590	4230	5120	6860	7480	14820	26340	4680
20	4320	---	---	4270	4710	4230	5540	9110	---	17790	42020	2740
21	4390	---	3410	4310	4720	4160	5890	1370	8960	15510	71080	1850
22	4470	---	3800	4310	4770	4310	5590	3930	---	24350	56280	2670
23	4720	---	---	4200	4980	4320	6470	3840	---	27280	35780	3760
24	4840	4300	---	3960	4890	4320	5990	3430	6820	34230	9850	4240
25	4820	4300	---	4430	4820	4320	5990	2250	---	41300	4000	3950
26	4730	4260	4210	4370	4930	3980	5710	2640	7790	51390	11600	3830
27	4670	4370	4780	4360	4970	4590	5050	3310	8200	52070	11150	4190
28	4670	---	4200	4380	4950	4720	3940	4070	8130	62430	10730	4860
29	4800	4360	4260	4470	---	4830	2450	1860	---	69830	13300	4980
30	4470	4420	4570	4430	---	4780	3330	4800	---	72170	8890	4980
31	4580	---	4870	4480	---	4780	---	4740	---	68980	8340	---
MONTH	3900	---	4290	4180	4650	4340	4890	4960	6460	---	28400	7200

DISSOLVED SOLIDS DISCHARGE (TONS/DAY) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	231	197	---	209	245	142	6110	290	---	107	476
2	242	---	198	81	---	253	124	2970	321	190	115	319
3	235	213	177	84	---	246	130	845	751	---	115	197
4	830	---	157	100	---	256	128	611	842	---	101	139
5	859	210	168	---	197	229	122	423	428	165	2790	88
6	---	222	185	187	213	224	110	371	276	---	753	54
7	307	213	182	211	201	224	110	292	289	---	90	47
8	---	230	---	228	213	227	107	276	298	---	76	53
9	208	---	171	221	239	301	105	255	261	195	115	43
10	---	220	164	134	230	4710	143	213	251	172	197	44
11	3220	---	152	---	263	1550	853	197	240	---	80	36
12	1790	223	147	88	293	686	371	176	233	195	63	73
13	---	228	160	109	266	510	331	185	212	155	59	53
14	436	---	150	173	269	447	335	176	213	159	53	48
15	366	---	151	206	278	380	370	112	201	1040	90	69
16	305	---	132	259	318	363	344	92	178	557	191	84
17	280	---	139	284	275	310	242	86	163	134	128	44
18	262	---	135	264	290	279	242	72	191	48	71	59
19	260	---	249	254	273	251	221	65	133	800	100	7600
20	257	---	---	254	280	286	314	138	---	720	136	8070
21	249	---	92	256	255	303	239	3200	97	544	190	2000
22	253	---	134	233	245	291	196	1210	---	723	5620	1170
23	255	---	---	215	256	256	227	497	---	74	1060	954
24	261	197	---	193	238	256	210	306	85	82	1890	882
25	248	209	---	203	247	257	210	3180	---	80	1730	864
26	243	207	148	201	253	194	216	1080	82	96	1880	393
27	252	200	168	200	255	211	204	626	153	83	1540	271
28	239	---	136	201	254	191	330	473	193	88	1540	236
29	246	188	138	205	---	169	1750	151	---	98	1440	188
30	229	191	148	192	---	155	5800	324	---	105	720	148
31	235	---	132	205	---	142	---	307	---	97	518	---
MONTH	483	---	158	194	252	465	474	807	266	---	760	824

RED RIVER BASIN

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

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	6260	6000	---	5960	6670	6290	3080	6460	---	79170	13610
2	5560	---	6030	5580	---	6930	6040	4430	6550	13600	80700	12580
3	6020	6100	5310	5810	---	7160	6360	3480	6330	---	78220	11860
4	2320	---	4320	6030	---	7010	6270	4490	7310	---	58940	10910
5	1910	6010	4660	---	6000	7050	5940	4900	6790	12600	50340	11210
6	---	6000	5210	5660	6100	7410	6070	5800	6110	---	23260	11510
7	3580	5720	5480	5030	5730	7390	6070	6510	7560	---	18800	11350
8	---	5880	---	4680	5720	7010	6480	7620	7390	---	21000	14420
9	4690	---	5500	7290	5790	6410	6360	9190	7160	18800	29340	14680
10	---	5950	5660	5350	5880	3240	7040	9800	7320	18700	25860	15140
11	1680	---	5210	---	6450	2160	4630	9990	7430	---	19900	15620
12	2550	6020	4990	5750	6200	3040	4220	10280	7730	22200	17350	17190
13	---	6170	5520	4670	6180	3850	5510	11090	8150	19800	18110	14310
14	3950	---	5570	4510	6260	4360	6290	11860	8920	20300	19960	14510
15	4540	---	5600	3960	5340	4740	7340	8680	10170	20200	30520	14820
16	4820	---	5270	4000	5470	5280	7780	8070	10660	19400	43120	11220
17	5160	---	5590	4810	5790	5310	6610	8440	10600	14400	34480	9590
18	5240	---	5430	5530	6130	5370	7510	8370	12540	15380	21940	10340
19	5440	---	9670	5560	6030	5510	6800	9340	10240	20960	32980	6160
20	5640	---	---	5560	6210	5510	7420	12620	---	25000	47600	3330
21	5740	---	4310	5610	6220	5400	7930	1330	12400	21960	74700	2020
22	5850	---	4880	5620	6300	5620	7480	5070	---	31120	60900	3220
23	6220	---	---	5450	6600	5630	8770	4930	---	33860	41780	4810
24	6390	5600	---	5110	6460	5630	8070	4340	9280	40340	13700	5520
25	6370	5600	---	5790	6360	5640	8070	2610	---	46930	5160	5090
26	6230	5550	5480	5710	6520	5140	7660	3180	10700	56340	16260	4920
27	6140	5700	6310	5690	6590	6030	6700	4160	11300	56970	15600	5440
28	6140	---	5460	5720	6550	6220	5080	5270	11200	66630	14990	6420
29	6330	5690	5540	5850	---	6370	2910	2050	---	73540	18740	6590
30	5850	5780	6000	5800	---	6300	4200	6330	---	75720	12300	6590
31	6010	---	6440	5860	---	6300	---	6250	---	72740	11500	---
MONTH	5010	---	5590	5430	6110	5670	6460	6570	8760	---	33460	9830

TEMPERATURE (DEG. C) OF WATER , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

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

RED RIVER BASIN

217

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

LOCATION.--Lat 36°00'42", long 99°54'12", in SW 1/4 NW 1/4 sec.12, T.6 N., R.26 W., Harmon County, at gaging station at bridge on State Highway 30, 4.0 mi (6.4 km) northeast of Carl, and at mile 54.0 (86.9 km).

DRAINAGE AREA.--416 mi² (1,077 km²).

PERIOD OF RECORD.--Chemical analyses: Water years 1960-61 (partial-record station), November 1961 to September 1962, July 1968 to current year.
Water temperatures: July 1968 to current year.

EXTREMES, Current year.--Specific conductance: Maximum, 154,000 micromhos/cm Aug. 1; minimum, 2,490 micromhos/cm May 25.

Water temperatures: Maximum, 35.0°C on several days during July and August; minimum, freezing point on Dec. 19, Jan. 1-2, 9.

Period of record.--Specific conductance: Maximum, 224,000 micromhos/cm Sept. 15, 1971; minimum, 2,190 micromhos/cm June 2, 1973.

Water temperatures: Maximum, 39.0°C June 22, 1969, Aug. 17, 1970; minimum, freezing point on several days during winter months.

REMARKS.--Continuous monitor records for specific conductance and water temperature are collected for this station. Records of maximum and minimum specific conductance and water temperature values are available in district office in Oklahoma City, Okla.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

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)	ALKA- LINITY AS CACO3 (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED NITRATE (N) (MG/L)	DIS- SOLVED NITRATE (NO3) (MG/L)	DIS- SOLVED NITRITE (N) (MG/L)
OCT.												
05...	402	340	41	600	102	0	84	870	950	.94	4.2	.01
11...	667	330	29	220	96	0	79	800	350	.70	3.1	.01
25...	48	660	150	3800	124	0	102	1700	6200	.75	3.3	.16
NOV.												
05...	51	630	150	3600	127	0	104	1700	5900	1.3	5.7	.02
15...	125	620	150	3500	133	0	109	1700	5800	1.5	6.6	.01
25...	125	620	160	--	141	0	116	1700	7100	1.7	7.5	.00
DEC.												
05...	133	610	160	3900	155	0	127	1800	6100	1.7	7.5	.01
14...	114	650	160	4300	160	0	131	1800	6800	1.9	8.4	.01
26...	18	610	150	3500	164	0	135	1700	5400	2.0	8.8	.12
JAN.												
04...	55	660	190	5100	151	0	124	1900	--	2.6	12	.00
15...	23	500	120	2800	116	0	95	1400	4500	2.7	12	.00
24...	20	610	160	4000	165	0	135	1700	6500	2.7	12	.00
FEB.												
05...	19	--	160	3600	151	0	124	1700	5500	.05	.22	.00
15...	30	590	140	3000	144	0	118	1600	4800	1.9	8.4	.01
24...	20	640	170	4300	154	0	126	1700	7000	1.7	7.5	.01
MAR.												
05...	18	660	190	5100	119	0	98	1800	8000	1.7	7.5	.00
17...	30	550	99	750	157	0	129	1600	1200	1.1	4.6	.05
25...	23	620	150	3900	152	0	125	1700	6000	.64	2.8	.01
APR.												
04...	11	660	170	4500	121	0	99	1900	7100	--	--	--
11...	114	570	110	1500	132	0	108	1700	2400	--	--	--
30...	346	340	39	500	114	0	94	820	790	1.1	4.7	.03
MAY												
05...	39	580	110	2800	144	0	118	1400	4500	.42	1.9	.01
15...	8.4	690	170	5000	104	0	85	1700	7800	.56	2.5	.09
25...	320	410	32	140	94	0	77	980	220	.91	4.0	.02
JUNE												
05...	28	650	160	4800	94	0	77	1700	7500	--	--	--
15...	9.0	790	210	6900	93	0	76	1800	11000	--	--	--
24...	6.5	800	250	10000	73	0	60	2100	16000	--	--	--
JULY												
05...	7.7	900	440	--	64	0	53	2300	34000	--	--	--
15...	12	1200	650	--	96	0	79	2500	53000	--	--	--
25...	.72	1600	850	62000	112	0	92	3300	100000	--	--	--
AUG.												
05...	9.0	1700	1400	--	94	0	77	3400	110000	--	--	--
15...	2.3	1400	880	--	65	0	53	2300	72000	--	--	--
25...	88	640	120	3000	92	0	75	1600	4800	--	--	--
SEP.												
05...	6.5	710	260	16000	98	0	80	2000	25000	--	--	--
14...	1.2	930	370	--	57	0	47	2200	34000	--	--	--
23...	91	540	99	--	105	0	86	1300	6100	--	--	--

RED RIVER BASIN

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	DIS- SOLVED NITRITE (NO2) (MG/L)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	CARBON DIOXIDE (CO2) (MG/L)
OCT.											
05...	.03	.95	--	--	--	1000	930	8.2	4230	7.6	4.1
11...	.03	.71	1890	2.57	3400	940	860	3.1	2520	7.6	3.9
25...	.53	.91	12700	17.3	1650	2300	2200	35	19100	8.1	1.6
NOV.											
05...	.07	1.3	12100	16.5	1670	2200	2100	33	19300	8.0	2.0
15...	.03	1.5	11900	16.2	4020	2200	2100	33	18800	8.1	1.7
25...	.00	1.7	14100	19.2	4760	2200	2100	--	22500	7.9	2.8
DEC.											
05...	.03	1.7	12600	17.1	4530	2200	2100	36	19400	7.8	3.9
14...	.03	1.9	13600	18.5	4190	2300	2200	39	20700	7.9	3.2
26...	.39	2.1	11300	15.4	549	2100	2000	33	17500	7.8	4.2
JAN.											
04...	.00	2.6	16600	22.6	2460	2400	2300	45	24900	7.8	3.8
15...	.00	2.7	9340	12.7	580	1700	1600	29	15000	8.0	1.9
24...	.00	2.7	13000	17.7	702	2200	2000	37	20400	8.0	2.6
FEB.											
05...	.00	.05	11800	16.0	605	--	--	--	18800	7.9	3.0
15...	.03	1.9	10100	13.7	818	2100	1900	29	16200	7.9	2.9
24...	.03	1.7	14000	19.0	756	2300	2200	39	22200	7.9	3.1
MAR.											
05...	.00	1.7	16000	21.8	778	2400	2300	45	25400	7.9	2.4
17...	.16	1.1	4300	5.85	348	1800	1700	7.7	5680	8.1	2.0
25...	.03	.65	12600	17.1	782	2200	2000	36	20000	8.1	1.9
APR.											
04...	--	.78	14600	19.9	434	2300	2200	40	22600	7.9	2.4
11...	--	.59	6280	8.54	1930	1900	1800	15	9550	7.3	1.1
30...	.10	1.1	--	--	--	1000	920	6.8	3760	7.5	5.8
MAY											
05...	.03	.43	9590	13.0	1010	1900	1800	28	14000	8.0	2.3
15...	.30	.65	16100	21.9	365	2400	2300	44	22400	7.9	2.1
25...	.07	.93	2080	2.83	1800	1200	1100	1.8	2490	7.6	3.8
JUNE											
05...	--	.90	15200	20.7	1150	2300	2200	44	21300	8.0	1.5
15...	--	.85	22300	30.3	542	2800	2800	56	30200	8.1	1.2
24...	--	.75	30800	41.9	541	3000	3000	79	41300	8.0	1.2
JULY											
05...	--	.31	58300	79.3	1210	4100	4000	--	--	7.7	2.0
15...	--	.19	89100	121	2890	5700	5600	--	--	7.3	7.7
25...	--	.18	148000	201	288	7500	7400	312	--	7.6	4.5
AUG.											
05...	--	.29	194000	264	4710	10000	9900	--	--	7.7	3.0
15...	--	.14	127000	14.7	789	7100	7000	--	--	8.2	.7
25...	--	.91	10800	14.7	2570	2100	2000	29	15500	7.5	4.7
SEP.											
05...	--	.65	48800	66.4	856	2800	2700	131	56600	7.5	5.0
14...	--	.67	58600	79.7	190	3800	3800	--	65700	7.9	1.1
23...	--	.56	12800	17.4	3150	1800	1700	--	18300	7.8	2.7

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

SULFATE (MG/L AS SO₄) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	1600	1700	1800	1700	1600	1700	800	1700	2100	3600	2000
2	1700	---	1700	1800	---	1700	1800	990	1700	2100	3600	2200
3	1800	1700	---	1700	---	1800	1700	1200	1700	2200	3600	2200
4	930	---	1600	1700	---	1700	1700	---	1800	2200	3500	2100
5	900	1700	1700	1700	1700	1800	1700	1500	1700	2200	3400	2100
6	---	1600	1700	1700	1700	1700	1700	1500	1800	2200	2500	2100
7	1300	1600	1700	1700	1800	1700	1700	1700	1800	2300	2400	2200
8	---	1700	---	1700	1700	1700	1700	1600	1800	2300	2400	2300
9	1700	---	1600	1800	1700	1800	1700	1700	1800	2400	2700	2300
10	---	1700	1700	1800	1700	---	1800	1700	1800	2500	2400	2200
11	800	---	1700	1700	1800	970	1300	1700	1800	2500	2500	2200
12	1100	1700	1700	1700	1700	1200	1500	1700	1800	2600	2400	2300
13	---	1700	1700	1700	1700	1400	1600	1700	1800	2600	2600	2300
14	1400	---	1700	1700	1700	1400	1700	1800	1800	2600	---	2300
15	1400	1600	---	1400	1500	1500	1700	1700	1800	2500	2900	2100
16	1400	1700	1700	1300	1500	1500	1700	1700	1900	2200	3200	2100
17	1500	1700	1700	1400	1700	1600	1700	1800	1900	2300	---	2100
18	1600	1700	1600	1400	1700	1600	1700	1800	1900	2500	2500	2200
19	1600	1700	1700	1600	1700	1600	1800	1800	2000	2500	2800	---
20	1700	---	1900	1600	1700	1600	1800	1800	2000	2700	3300	---
21	1700	1700	1700	1700	1700	1600	1800	1000	2000	2700	3600	960
22	1700	---	1500	1700	1700	1600	1800	1200	2000	2800	3600	1400
23	1700	1700	1600	1700	1800	1600	1800	1600	2000	3000	2000	1700
24	1600	1700	1600	1700	1700	1600	1800	---	2000	3100	1900	1500
25	1700	1700	1700	1700	1700	1700	1800	800	2000	3300	1300	1400
26	1700	1700	1600	1700	1700	1600	1800	1100	2000	3400	1500	1600
27	1700	1700	1700	1700	1700	1700	1800	---	2000	3500	2100	1700
28	1700	---	1600	1700	1600	1600	1800	1500	2000	3500	1700	1700
29	1700	1700	1700	1700	---	1700	1300	1600	2000	3600	1900	1800
30	1700	1600	1700	1700	---	1700	870	1600	2100	3600	2000	1800
31	1600	---	1800	---	---	1700	---	1700	---	3600	2000	---
MONTH	1500	---	1700	1700	1700	1600	1700	1500	1900	2700	2600	2000

DISSOLVED SO₄ DISCHARGE (TONS/DAY) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	84	77	42	85	84	56	1910	106	49	5.1	105
2	99	---	77	39	---	89	52	839	116	48	5.4	84
3	85	83	---	38	---	86	51	365	272	49	5.5	57
4	376	---	76	44	---	89	51	---	277	49	6.5	42
5	436	80	81	60	76	82	51	166	150	47	220	30
6	---	84	83	79	85	75	47	133	110	44	123	21
7	145	81	79	97	85	75	45	104	96	45	24	20
8	---	91	---	109	90	80	42	82	101	42	20	19
9	102	---	68	77	97	115	43	67	91	43	23	16
10	---	88	70	62	93	---	52	55	86	40	33	16
11	1590	---	70	46	100	776	319	51	81	40	22	14
12	910	88	70	40	113	324	172	47	76	41	20	14
13	---	88	69	56	103	226	132	46	67	37	20	12
14	191	---	65	88	99	184	126	42	63	38	---	10
15	150	79	---	96	109	153	122	36	54	189	18	20
16	118	79	60	110	118	142	108	33	49	97	17	28
17	106	79	58	109	108	124	89	30	46	38	---	26
18	106	76	56	93	112	114	79	27	46	19	11	24
19	106	83	66	97	107	102	81	23	42	144	11	---
20	104	---	83	102	107	114	104	34	35	115	11	---
21	101	87	51	106	99	121	76	2410	28	103	9.6	1040
22	100	---	57	97	94	112	69	381	26	90	366	618
23	96	83	71	92	95	100	67	214	27	8.1	66	438
24	92	93	74	88	88	102	67	---	31	7.6	369	315
25	91	88	70	83	92	104	67	1130	30	6.3	566	301
26	92	87	61	83	92	83	71	447	28	6.3	243	167
27	97	83	63	84	92	83	76	---	43	5.5	288	113
28	92	---	58	84	87	69	155	176	54	4.9	254	90
29	93	79	60	84	---	63	914	135	50	5.0	208	72
30	92	75	60	79	---	60	1510	115	49	5.2	165	57
31	88	---	53	---	---	56	---	114	---	5.0	131	---
MONTH	218	---	67	79	97	133	163	329	78	47	112	135

RED RIVER BASIN

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

CHLORIDE (MG/L AS CL) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	5800	6100	11200	8100	5800	7000	210	6700	19700	114100	19400
2	7800	---	6100	9100	---	7500	8800	1100	7300	22300	112900	24400
3	8200	7000	---	7800	---	9000	7500	2900	6600	24000	109100	23200
4	660	---	5300	7900	---	7800	7200	---	8900	23900	106600	20800
5	410	6000	6100	7100	6100	9300	6700	4600	7700	23800	99100	21800
6	---	5900	6300	7500	8100	7900	7600	5100	8700	24300	35500	22600
7	3700	5400	6800	7000	8200	7500	6100	6100	9400	26200	31400	23900
8	---	6200	---	6100	8100	7600	6100	5600	9300	28400	31200	26200
9	6700	---	5300	9900	6700	9100	7300	6000	9000	30300	53000	25900
10	---	6700	7200	8500	7000	---	8300	6400	8900	32000	29500	25100
11	200	---	7000	7000	9000	980	3700	7300	8700	31500	34100	24800
12	2100	6700	7000	7400	7900	2700	5000	8000	8400	42600	29600	27000
13	---	6700	6500	7700	7500	3700	5800	8000	9500	44800	43400	27100
14	3800	---	6700	6700	6100	4000	7300	8400	9900	48300	---	26100
15	4300	5800	---	4300	5200	4500	7600	7900	11400	33100	64200	21100
16	4200	7000	7100	3500	4900	5200	7700	8000	13000	25400	86700	19600
17	4600	6800	6100	4100	6000	5400	7800	8600	14300	28400	---	21300
18	5400	6100	5500	4400	7400	5700	7400	9900	13900	32400	33000	23900
19	5900	6700	8100	5300	7400	5900	8600	10800	18000	37900	61700	---
20	6100	---	14300	5900	7200	5700	8200	11600	18600	49200	92900	---
21	6400	6200	6700	6400	7900	5500	8300	1400	16300	53000	111600	870
22	6200	---	4900	6600	7600	5600	11200	2900	16500	58000	110400	4100
23	6400	6800	5300	6700	8200	5700	9000	5700	16400	71700	19500	6600
24	5800	7100	5600	6600	6800	5900	9400	---	16300	81700	13800	4800
25	6100	7000	7200	6800	6500	6100	9100	200	17000	89200	3400	3600
26	6600	6400	5600	6900	6500	5700	8400	1800	18700	96600	4700	5500
27	6700	6800	6100	7400	6600	6400	8500	---	15900	102900	19700	6100
28	6800	---	5900	7100	5700	5600	9800	4700	17200	106600	7900	8100
29	7400	6800	6800	7300	---	6000	3300	5700	18600	109100	13000	8900
30	6700	5900	6600	6700	---	6400	300	5900	19600	111600	16700	9000
31	5800	---	9500	---	---	6800	---	6200	---	110400	18500	---
MONTH	5200	---	6700	6900	7100	6000	7300	5700	12700	52200	52000	17200

DISSOLVED CL DISCHARGE (TONS/DAY) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	300	282	257	394	297	225	499	415	467	160	995
2	440	---	280	201	---	383	262	931	491	505	168	922
3	400	340	---	172	---	438	223	847	1050	532	168	607
4	266	---	257	197	---	398	214	---	1390	530	199	421
5	201	290	298	250	278	427	200	521	663	507	6420	306
6	---	302	307	345	392	341	205	444	541	486	1730	220
7	400	278	313	394	400	322	165	380	509	517	313	213
8	---	334	---	398	418	347	152	286	529	514	261	220
9	400	---	230	426	380	592	182	242	461	540	443	189
10	---	341	290	300	378	---	247	208	430	518	406	183
11	403	---	285	190	508	783	878	216	398	511	304	160
12	1680	341	283	171	514	716	565	213	361	666	247	161
13	---	341	264	248	443	627	471	210	358	641	339	139
14	537	---	253	345	360	535	535	199	346	691	---	120
15	453	280	---	287	365	472	530	165	339	2500	399	205
16	353	321	248	293	380	475	477	149	341	1100	445	264
17	332	313	212	317	389	424	400	147	347	460	---	259
18	362	278	191	285	482	400	339	146	338	245	151	265
19	381	323	308	331	458	368	394	137	379	2150	233	---
20	379	---	618	368	448	401	488	212	325	2130	301	---
21	377	319	199	394	445	419	358	3320	229	2000	298	939
22	370	---	187	375	408	392	423	902	219	1880	11320	1820
23	360	330	241	359	445	354	340	754	226	194	633	1680
24	329	382	257	337	348	364	355	---	256	196	2680	1010
25	331	359	293	330	353	381	345	282	258	173	1490	848
26	355	328	213	336	351	295	340	749	257	180	771	579
27	377	332	229	359	359	309	365	---	349	164	2770	411
28	366	---	208	344	308	241	849	562	464	150	1140	418
29	398	311	238	352	---	227	2320	474	461	153	1440	359
30	359	270	232	309	---	225	526	412	466	163	1390	293
31	313	---	283	---	---	222	---	421	---	155	1200	---
MONTH	420	---	268	309	400	406	446	501	440	697	1300	508

RED RIVER BASIN

221

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

DISSOLVED SOLIDS (RESIDUE ON EVAPORATION, MG/L AT 180 DEG. C) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	11390	11890	20340	15180	11310	13250	1160	12810	38410	216810	37680
2	14610	---	11810	16830	---	14110	16400	3450	13790	47680	214850	55520
3	15400	13320	---	14610	---	16680	14180	6390	12690	54120	208940	51000
4	2710	---	10450	14750	---	14610	13680	---	16430	53860	205010	42320
5	2310	11600	11890	13530	11740	17190	12890	9310	14460	53170	193200	45870
6	---	11460	12170	14180	15110	14820	14320	10220	16200	55310	92850	48920
7	7800	10670	13030	13250	15400	14110	11810	11870	17400	62240	81070	53570
8	---	11960	---	11890	15250	14250	11740	10960	17240	70240	80330	62240
9	12890	---	10530	18120	12820	16900	13750	11600	16660	77230	120400	61020
10	---	12750	13600	15900	13320	---	15540	12340	16430	83250	74220	58090
11	1090	---	13390	13400	16610	3260	7800	13800	16130	81720	90690	56870
12	5090	12750	13320	13920	14890	6050	9950	14970	15610	103980	74470	65180
13	---	12750	12530	14430	14110	7880	11350	15040	17470	107490	105250	65540
14	8020	---	12820	12870	11740	8380	13890	15610	18120	113010	---	61630
15	8810	11240	---	8730	10310	9120	14250	14890	20690	89120	138110	43420
16	8660	13320	13460	7470	9740	10280	14460	15040	23410	59070	173530	38170
17	9240	13030	11740	8390	11670	10680	14680	16040	25490	70080	---	44090
18	10600	11740	10740	8990	14070	11160	13960	18120	24920	85380	88720	53690
19	11460	12750	15250	10530	13960	11540	15970	19620	33640	96590	134170	---
20	11810	---	25560	11530	13680	11170	15360	20980	35910	114500	183360	---
21	12240	12030	12820	12240	14750	10900	15470	3990	28860	120400	212880	3060
22	12030	---	9880	12670	14250	10970	20340	6520	29530	128270	210910	8550
23	12240	12960	10400	12750	15400	11140	16650	11160	29200	149910	38040	12600
24	11310	13460	10990	12600	12960	11420	17330	---	28930	165660	24690	9670
25	11890	13320	13730	12960	12550	11880	16900	1070	30960	177460	7380	8020
26	12600	12320	11030	13180	12500	11230	15680	4670	35600	189270	9450	10810
27	12750	13030	11740	13960	12730	12240	15760	---	28280	199110	38660	11810
28	12960	---	11530	13460	11170	10960	18070	9520	31320	205010	14750	15250
29	13960	12960	12960	13750	---	11670	7050	11080	35260	208940	23410	16470
30	12750	11460	12670	12890	---	12360	1990	11430	38340	212880	29860	16760
31	11310	---	17540	---	---	13060	---	12050	---	210910	34990	---
MONTH	10250	---	12840	13140	13440	11710	13820	11170	23390	112400	107620	37780

DISSOLVED SOLIDS DISCHARGE (TONS/DAY) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	584	546	467	738	580	429	2760	795	913	304	1930
2	828	---	542	373	---	724	487	2930	931	1080	319	2100
3	748	647	---	323	---	811	421	1900	2020	1200	322	1340
4	1100	---	508	370	---	749	406	---	2570	1190	382	857
5	1120	564	578	475	539	789	383	1060	1250	1130	12520	644
6	---	588	592	651	734	640	387	883	1010	1110	4510	476
7	843	547	598	751	748	609	319	737	940	1230	810	477
8	---	646	---	770	782	654	295	562	978	1270	672	521
9	766	---	455	783	727	1100	345	470	854	1380	1010	445
10	---	654	551	558	719	---	461	400	798	1350	1020	423
11	2170	---	542	362	942	2600	1850	410	740	1320	808	368
12	4120	654	539	323	965	1630	1130	400	674	1630	623	387
13	---	654	508	468	838	1320	919	394	660	1540	824	336
14	1130	---	484	660	698	1110	1010	371	636	1620	---	283
15	927	546	---	589	724	961	1000	310	615	6740	858	422
16	725	611	473	625	763	943	898	280	613	2550	890	515
17	673	598	412	657	756	836	753	273	619	1140	---	536
18	715	539	377	582	912	783	641	269	606	645	407	594
19	742	619	577	654	867	717	733	249	709	5480	507	---
20	734	---	1100	716	849	784	912	385	620	4950	594	---
21	727	617	381	760	836	824	668	9310	405	4550	569	3320
22	715	---	374	719	769	770	769	2010	391	4160	21640	3760
23	694	630	477	688	831	692	629	1480	402	405	1230	3230
24	641	727	505	647	665	709	655	---	453	398	4800	2040
25	642	683	556	630	678	738	639	1510	468	345	3190	1780
26	681	632	417	640	675	576	635	1920	490	353	1560	1140
27	723	633	444	679	687	595	681	---	619	317	5430	798
28	700	---	405	654	603	473	1560	1130	846	288	2150	782
29	754	595	455	668	---	441	5030	928	876	293	2590	667
30	688	526	445	592	---	434	3460	802	911	310	2500	543
31	611	---	521	---	---	423	---	814	---	296	2270	---
MONTH	959	---	513	594	762	834	950	1250	817	1650	2600	1100

RED RIVER BASIN

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

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	16900	17600	29400	22200	16800	19500	2620	18890	49200	154000	48600
2	21400	---	17500	24500	---	20700	23900	5820	20260	56780	153000	63200
3	22500	19600	---	21400	---	24300	20800	9920	18720	62050	150000	59500
4	4790	---	15600	21600	---	21400	20100	---	23950	61840	148000	52400
5	4220	17200	17600	19900	17400	25000	19000	14000	21200	61280	142000	55300
6	---	17000	18000	20800	22100	21700	21000	15270	23630	63030	91000	57800
7	11900	15900	19200	19500	22500	20700	17500	17570	25300	68700	84100	61600
8	---	17700	---	17600	22300	20900	17400	16300	25080	75240	83500	68700
9	19000	---	15700	26300	18900	24600	20200	17200	24260	80960	105000	67700
10	---	18800	20000	23200	19600	---	22700	18230	23940	85890	78500	65300
11	2520	---	19700	19720	24200	5550	11890	20270	23520	84630	89900	64300
12	8110	18800	19600	20440	21800	9450	14900	21900	22800	96650	78700	71100
13	---	18800	18500	21150	20700	12000	16850	22000	25400	98440	97300	71400
14	12200	---	18900	18970	17400	12700	20400	22800	26300	101240	---	68200
15	13300	16700	---	13190	15400	13740	20900	21800	29900	89100	114000	53300
16	13100	19600	19800	11430	14600	15350	21200	22000	33700	66100	132000	49000
17	13900	19200	17400	12720	17300	15910	21500	23400	36600	75110	---	53850
18	15800	17400	16000	13550	20650	16580	20500	26300	35800	87200	88900	61700
19	17000	18800	22300	15710	20500	17120	23300	28400	45300	92900	112000	---
20	17500	---	36700	17100	20100	16610	22450	30300	47150	102000	137000	---
21	18100	17800	18900	18100	21600	16220	22600	6570	41300	105000	152000	5280
22	17800	---	14800	18700	20900	16320	29400	10100	41930	109000	151000	12940
23	18100	19100	15530	18800	22500	16560	24250	16580	41670	120000	48900	18600
24	16800	19800	16350	18600	19100	16950	25200	---	41400	128000	35480	14500
25	17600	19600	20180	19100	18530	17590	24600	2490	43100	134000	11300	12200
26	18600	18200	16400	19400	18450	16680	22900	7520	46900	140000	14200	16100
27	18800	19200	17400	20500	18780	18100	23020	---	40500	145000	49400	17500
28	19100	---	17100	19800	16600	16300	26230	14300	43400	148000	21600	22300
29	20500	19100	19100	20200	---	17300	10850	16480	46630	150000	33700	24000
30	18800	17000	18700	19000	---	18270	3780	16960	49140	152000	42200	24400
31	16800	---	25500	---	---	19230	---	17830	---	151000	46400	---
MONTH	15320	---	18930	19350	19760	17350	20290	16600	32920	98080	91210	45030

TEMPERATURE (DEG. C) OF WATER , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

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

RED RIVER BASIN

223

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 mi² (2,170 km²).

PERIOD OF RECORD.--Chemical analyses: Water year 1960 (partial-record station), November 1961 to August 1963, July 1968 to current year.

Water temperatures: July 1968 to current year.

EXTREMES, Current year.--Specific conductance: Maximum, 29,800 micromhos/cm Sept. 12; minimum, 1,580 micromhos/cm May 1.

Water temperatures: Maximum, 35.5°C July 25; minimum, freezing point on Jan. 1-3, 9.

Period of record.--Specific conductance: Maximum, 62,000 micromhos/cm Mar. 19, 1971; minimum, 1,040 micromhos/cm Apr. 15, 1973.

Water temperatures: Maximum, 37.0°C Aug. 11, 1969; minimum, -2.0°C Jan. 7, 9-13, 1973.

REMARKS.--Continuous monitor records for specific conductance and water temperature are collected for this station. Records of maximum and minimum specific conductance and water temperature values are available in district office in Oklahoma City, Okla.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	INSTANTANEOUS 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)	ALKA- LITY AS CACO3 (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED NITRATE (N) (MG/L)	DIS- SOLVED NITRATE (NO3) (MG/L)	DIS- SOLVED NITRITE (N) (MG/L)
OCT.												
05...	220	300	37	850	85	0	70	720	1400	.51	2.3	.04
12...	338	320	27	240	87	0	71	810	370	.52	2.3	.01
25...	32	640	150	--	123	0	101	1700	6600	.40	1.8	.06
NOV.												
05...	28	650	160	4100	120	0	98	1800	6800	.74	3.3	.04
15...	28	640	170	4100	123	0	101	1700	--	.67	3.0	.11
25...	28	610	160	4000	103	0	84	1700	6600	.85	3.8	.04
DEC.												
05...	29	640	160	3900	136	0	112	--	6500	1.1	4.6	.05
15...	21	660	170	4300	149	0	122	1900	--	1.4	6.1	.03
25...	22	630	160	3800	165	0	135	1700	6000	1.7	7.4	.02
JAN.												
05...	19	730	200	4800	189	0	155	1800	8100	2.0	8.8	.01
15...	29	--	160	3800	175	0	144	1600	6500	2.2	9.5	.15
25...	22	610	170	4000	157	0	129	1500	--	1.8	7.9	.02
FEB.												
05...	19	610	170	4300	159	0	130	1800	--	1.5	6.8	.06
15...	19	--	180	4700	145	0	119	1800	8100	1.6	6.9	.04
25...	18	670	190	5000	149	0	122	1700	8100	1.5	6.8	.07
MAR.												
05...	18	640	190	4700	128	0	105	1800	7500	.94	4.2	.06
11...	957	330	35	490	117	0	96	850	730	.32	1.4	.01
APR.												
05...	19	710	190	--	134	0	110	1900	7800	--	--	--
11...	638	110	19	--	122	0	100	260	390	--	--	--
25...	21	720	180	4800	126	0	103	1900	--	--	--	--
MAY												
05...	75	440	64	1000	128	0	105	1100	1700	.28	1.2	.04
15...	22	580	150	3500	134	0	110	1600	5400	.21	.93	.02
21...	3050	320	27	380	125	0	103	750	570	.22	.97	.01
JUNE												
05...	32	510	61	1500	96	0	79	1200	2400	--	--	--
15...	55	720	150	--	123	0	101	1700	7000	--	--	--
25...	12	420	160	5500	113	0	93	1900	8000	--	--	--
JULY												
05...	4.9	800	220	5200	119	0	98	2100	8700	--	--	--
15...	2.1	840	230	5000	129	0	106	2200	--	--	--	--
25...	1.4	780	240	5600	124	0	102	2100	9000	--	--	--
AUG.												
05...	12	--	93	2100	93	0	74	970	3600	--	--	--
15...	2.6	740	190	5400	109	0	89	1900	8500	--	--	--
25...	136	400	50	680	158	0	130	1000	1100	--	--	--
SEP.												
05...	6.8	--	210	5800	138	0	113	1800	10000	--	--	--
15...	4.3	840	250	6200	152	0	125	1900	--	--	--	--
25...	966	190	20	--	71	0	58	470	550	--	--	--

RED RIVER BASIN

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	DIS- SOLVED NITRITE (NO ₂) (MG/L)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	CARBON DIOXIDE (CO ₂) (MG/L)
OCT.											
05...	.13	.55	3420	4.65	2030	900	830	12	5640	7.5	4.3
12...	.03	.53	--	--	--	910	840	3.5	2700	7.6	3.5
25...	.20	.46	13200	18.0	1140	2200	2100	--	20600	8.1	1.6
NOV.											
05...	.13	.78	14100	19.2	1070	2300	2200	37	21900	8.0	1.9
15...	.36	.78	13900	18.9	1050	2300	2200	37	21900	7.9	2.5
25...	.13	.89	13200	18.0	998	2200	2100	37	21000	8.0	1.6
DEC.											
05...	.16	1.1	13000	17.7	1020	2300	2100	36	20000	7.9	2.7
15...	.10	1.4	14100	19.2	799	2300	2200	39	21600	7.9	3.0
25...	.07	1.7	12400	16.9	737	2200	2100	35	18900	7.9	3.3
JAN.											
05...	.03	2.0	15900	21.6	816	2600	2500	41	24600	7.8	4.8
15...	.49	2.3	12700	17.3	994	--	--	--	20000	7.6	7.0
25...	.07	1.8	13300	18.1	790	2200	2100	37	20700	7.9	3.2
FEB.											
05...	.20	1.6	14000	19.0	718	2200	2100	40	23600	8.0	2.5
15...	.13	1.6	15200	20.7	780	--	--	--	24100	8.1	1.8
25...	.23	1.6	16000	21.8	778	2500	2300	44	24600	7.9	3.0
MAR.											
05...	.20	1.0	15500	21.1	753	2400	2300	42	24000	8.0	2.0
11...	.03	.33	2570	3.50	6640	970	870	6.9	3820	7.5	5.9
APR.											
05...	--	.45	15500	21.1	795	2600	2400	--	24000	7.9	2.7
11...	--	.28	1120	1.52	1930	350	250	--	1900	7.5	6.2
25...	--	.19	15700	21.4	890	2500	2400	41	24100	7.9	2.5
MAY											
05...	.13	.32	4500	6.12	911	1400	1300	12	6540	7.9	2.6
15...	.07	.23	11700	15.9	695	2100	2000	34	16600	7.9	2.7
21...	.03	.23	2250	3.06	18500	910	810	5.5	3160	7.4	8.0
JUNE											
05...	--	2.6	5800	7.89	501	1500	1400	17	8500	7.6	3.9
15...	--	.43	14100	19.2	2090	2400	2300	--	19800	7.8	3.1
25...	--	.57	17200	23.4	557	1700	1600	58	23200	7.8	2.9
JULY											
05...	--	.27	17300	23.5	229	2900	2800	42	23600	7.8	3.0
15...	--	.35	17700	24.1	100	3000	2900	39	24000	7.7	4.1
25...	--	.93	19200	26.1	72.6	2900	2800	45	25500	7.6	5.0
AUG.											
05...	--	.80	7660	10.4	248	--	--	--	11400	7.1	12
15...	--	.48	17700	24.1	124	2600	2500	46	23400	7.6	4.4
25...	--	.17	3590	4.88	1320	1200	1100	8.5	5050	7.3	13
SEP.											
05...	--	.44	19200	26.1	353	--	--	--	27600	7.7	4.4
15...	--	.36	20900	28.4	243	3100	3000	48	27500	7.7	4.9
25...	--	2.1	1650	2.24	4300	560	500	--	2590	7.7	2.3

RED RIVER BASIN

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

SULFATE (MG/L AS SO₄) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SE
1	1400	1700	1700	1700	1700	1700	1700	200	1400	1800	1800	1800
2	1500	1700	1700	1600	1700	1800	1700	230	1500	1900	1900	1800
3	1600	1700	1700	1700	1700	1800	1700	780	1500	1800	1800	1900
4	1300	1700	1700	1700	1700	1800	1600	980	1200	1900	1900	2000
5	960	1700	1600	1700	1700	1800	1800	1100	1300	1900	1400	1900
6	840	1700	1600	1800	1700	1800	1800	1200	1400	1800	1600	1900
7	1100	1700	1600	1600	1600	1800	1800	1300	1500	1600	1700	2000
8	1400	1700	1700	1700	1600	1800	1800	1400	1200	1900	1900	2000
9	1400	1600	1700	1700	1700	1800	1800	1400	1500	1800	2000	2000
10	1500	1600	1700	1700	1800	1300	1800	1400	1600	1900	1700	2000
11	770	1600	1700	1700	1700	950	1100	1500	1700	1900	1400	2000
12	550	1600	1600	1800	1800	850	1300	1500	1700	1900	1600	2100
13	870	1700	1700	1800	1800	1100	1300	1500	1700	1900	1700	2100
14	1100	1700	1700	1800	1700	1200	1400	1600	1700	2000	1800	2100
15	1300	1700	1700	1600	1800	1500	1500	1600	1700	1900	1800	2000
16	1400	1700	1700	1600	1800	1400	1600	1600	1700	1900	1900	1500
17	1400	1700	1700	1600	1700	1500	1700	1600	1700	2000	1900	1500
18	1500	1700	1700	1600	1700	1500	1700	1600	1700	2000	1900	1900
19	1500	1700	2000	1500	1700	1500	1800	1600	1800	2000	1900	1700
20	1500	1700	1600	1500	1700	1500	1800	1700	1800	2000	1900	780
21	1600	1600	1600	1600	1700	1600	1600	790	1800	2000	1800	230
22	1600	1700	1700	1600	1700	1600	1500	930	1800	2000	1800	800
23	1600	1700	1700	1600	1800	1600	1600	880	1700	2000	1600	1000
24	1600	1600	1600	1700	1700	1600	1700	1100	1700	2000	1100	800
25	1600	1700	1600	1700	1800	1600	1800	1000	1600	2000	980	620
26	1700	1700	1600	1700	1800	1600	1900	380	1800	1900	1100	860
27	1600	1700	1700	1700	1800	1700	1800	880	1800	1900	840	1200
28	1700	1700	1700	1700	1800	1800	1700	1100	1800	1900	1100	1300
29	1700	1700	1700	1700	---	1700	1500	1300	1800	1900	1600	1100
30	1700	1700	1700	1700	---	1700	850	1300	1900	1900	1600	1500
31	1700	---	1600	1700	---	1700	---	1400	---	1900	1600	---
MONTH	1400	1700	1700	1700	1700	1600	1600	1200	1600	1900	1600	1500

DISSOLVED SO₄ DISCHARGE (TONS/DAY) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SE
1	146	134	114	72	97	87	97	2030	123	32	3.4	5
2	127	128	116	62	97	94	94	2470	122	30	3.6	4
3	120	127	113	64	97	90	94	798	118	28	3.1	4
4	723	127	117	72	96	90	80	343	285	25	3.0	4
5	719	126	123	88	94	86	91	232	161	25	112	1
6	316	127	122	104	89	88	92	187	59	24	263	1
7	190	131	113	79	88	82	92	169	81	18	59	1
8	158	134	112	117	88	87	89	150	96	18	53	2
9	132	133	109	87	89	122	88	139	151	15	40	1
10	122	128	104	74	96	601	90	129	93	14	93	1
11	2190	129	104	87	93	2430	952	118	94	13	134	2
12	1110	129	102	132	97	410	495	109	93	12	37	2
13	330	130	99	117	95	238	163	107	81	12	22	2
14	278	132	96	110	99	182	115	101	82	13	17	2
15	246	127	96	127	96	196	102	94	82	11	14	3
16	220	118	92	100	96	157	95	91	83	11	12	15
17	201	120	92	124	108	146	92	88	83	11	9.6	8
18	182	117	89	123	105	143	92	83	75	10	8.1	6
19	173	123	115	105	94	133	96	80	74	10	6.1	276
20	167	134	107	104	91	129	101	86	69	9.4	4.8	779
21	163	128	71	107	87	135	253	3070	62	10	3.9	149
22	154	126	98	104	85	132	129	1950	58	9.4	3.9	54
23	152	126	118	97	90	128	99	254	54	8.0	12	29
24	145	132	108	99	82	123	100	175	57	8.2	67	50
25	142	129	95	99	89	119	101	1090	51	7.5	204	195
26	138	131	91	100	89	117	100	1150	50	6.2	263	70
27	142	127	94	102	94	122	99	260	41	6.2	1680	46
28	139	123	91	101	92	118	97	167	39	5.0	230	37
29	135	120	90	100	---	102	799	139	34	4.7	147	24
30	136	115	90	99	---	100	7930	131	33	4.1	81	29
31	137	---	93	101	---	95	---	129	---	3.6	67	---
MONTH	304	127	102	99	93	222	431	520	86	13	118	60

RED RIVER BASIN

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

CHLORIDE (MG/L AS CL) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3800	6500	6300	6000	6600	6500	6600	230	3800	7800	7800	7300
2	4700	6400	6600	5800	6600	7700	6900	280	4200	7900	8300	7500
3	5400	6300	6200	6300	6600	6900	6800	540	4600	7600	7600	8800
4	2400	6300	6100	6200	6800	7000	5200	1300	2100	7900	8000	11100
5	1200	6200	5800	6500	6800	7000	7200	1700	2500	7900	3900	9200
6	700	6300	5700	6900	6800	7500	7300	2100	3300	7700	5700	9200
7	1800	6200	5600	5800	5800	7300	7400	2800	4600	6000	6300	9900
8	3300	6000	6000	6800	5900	7400	7600	3200	2300	8300	9200	10000
9	4000	5800	6200	6400	6000	7400	7500	3600	4300	7800	10000	9400
10	4600	5800	6300	6600	7100	3000	7800	4000	5200	8200	6700	10200
11	530	5900	6300	6400	6600	1100	1600	4200	6100	8000	3800	10700
12	440	5900	5900	6900	7300	730	3100	4500	6600	8100	5100	12000
13	820	6100	6200	7500	7000	1600	2400	4700	6100	8100	6200	11700
14	1900	6400	6400	7100	6800	2100	3400	5100	6300	11100	7100	11500
15	2900	6300	6300	5800	7100	4700	4600	5300	6200	8400	7700	9500
16	3500	6300	6400	5600	7200	3800	5600	5600	6500	7900	8100	5000
17	3900	6500	6400	5300	6800	4200	6500	5700	6400	9600	8100	4500
18	4200	6100	6000	5300	6300	4600	6400	5700	6700	9900	8200	9300
19	4500	6300	10800	4500	6000	5000	7200	5900	7600	10200	8100	6100
20	4700	6000	5900	4900	6300	5000	7300	6200	7700	11100	7900	560
21	5000	5900	5900	5300	6400	5200	5900	590	7000	10400	7700	290
22	5400	6100	6000	5500	6100	5300	4500	1100	7300	11300	7600	610
23	5600	6100	6300	5900	7000	5800	5500	840	6100	9700	5800	1500
24	5800	5800	5500	6100	6400	5700	6300	1600	6900	11000	1700	620
25	5900	6000	5500	6200	7700	5900	7100	1400	5200	10100	1300	470
26	6000	6100	5600	6300	7600	5500	8000	370	7700	8500	1900	750
27	5900	6300	6100	6600	7700	6200	7600	830	7000	8400	700	2100
28	6000	6300	6300	6500	7400	6900	6600	1700	7400	8000	1700	2900
29	6100	6500	6100	6300	---	6000	4700	2600	7600	9100	5100	1600
30	6300	6500	6200	6100	---	6200	730	3100	8000	8200	5300	4200
31	6300	---	5800	6500	---	6100	---	3600	---	8500	5900	---
MONTH	4000	6200	6200	6100	6700	5300	5800	2900	5800	8800	6100	6300

DISSOLVED CL DISCHARGE (TONS/DAY) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	395	510	424	260	375	332	374	2330	329	137	15	218
2	394	487	445	220	374	396	372	3000	349	126	16	193
3	405	476	418	237	373	356	367	560	360	114	13	215
4	1390	473	430	268	385	358	266	441	512	104	13	237
5	887	468	439	335	368	340	368	360	317	105	302	169
6	263	476	427	410	347	365	376	332	144	100	924	152
7	312	485	395	281	312	337	377	358	247	66	221	165
8	380	485	406	456	317	358	369	358	179	81	249	149
9	366	473	402	327	323	500	363	359	443	66	200	144
10	370	453	389	284	383	1350	378	359	308	62	363	155
11	1530	463	390	327	358	2920	1440	341	344	56	357	147
12	897	464	367	523	394	351	1130	325	357	52	120	143
13	308	476	367	486	379	360	316	333	296	52	80	136
14	469	498	365	439	385	324	283	329	306	69	67	131
15	540	475	359	451	384	604	313	314	303	48	58	153
16	550	443	348	346	387	423	331	316	318	45	50	482
17	550	454	347	416	420	424	350	309	313	54	42	267
18	522	431	324	412	393	439	346	293	290	51	35	302
19	522	461	611	317	341	429	390	288	307	53	26	10120
20	517	484	384	330	341	415	412	315	291	51	20	5570
21	530	459	255	358	328	449	908	2290	246	53	16	1820
22	521	459	359	358	312	442	391	2220	236	52	16	411
23	527	463	442	348	361	458	339	244	196	39	42	429
24	516	473	370	361	311	432	374	265	223	45	106	387
25	513	469	325	367	375	427	404	1520	170	38	265	1480
26	500	480	315	374	371	404	429	1130	208	27	441	614
27	513	476	345	393	393	455	411	245	163	27	1400	831
28	504	457	338	387	378	466	375	264	159	21	367	823
29	495	456	328	372	---	371	2490	280	144	22	480	371
30	507	439	332	362	---	370	6810	304	142	18	273	860
31	513	---	329	385	---	348	---	333	---	16	239	---
MONTH	555	469	380	361	363	516	728	668	273	60	220	909

RED RIVER BASIN

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

DISSOLVED SOLIDS (RESIDUE ON EVAPORATION, MG/L AT 180 DEG. C) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8670	12940	12680	12380	13070	12900	13040	1090	8600	17660	17700	16500
2	10320	12850	13020	12150	13030	15050	13390	1240	9290	18050	18780	16820
3	11560	12690	12580	12650	13020	13500	13270	2090	10120	17120	17120	19140
4	5920	12650	12500	12580	13250	13560	11220	3720	5400	17940	18210	20360
5	3590	12570	12130	12960	13290	13610	13950	4500	6090	17950	8700	19340
6	2580	12690	11950	13420	13230	14610	14280	5310	7710	17520	12390	19350
7	4820	12580	11920	12110	12090	14280	14300	6600	10060	13050	13910	19680
8	7570	12340	12370	13230	12190	14350	14780	7500	5690	18820	19350	19760
9	8950	12170	12580	12770	12340	14420	14530	8190	9570	17810	19760	19430
10	10050	12100	12660	13000	13780	7050	15160	9020	11250	18720	14980	19890
11	2060	12260	12670	12790	13070	3500	4400	9360	13300	18300	8530	20140
12	1770	12270	12250	13440	14200	2680	7160	9840	14690	18360	11080	20850
13	2880	12440	12560	14600	13650	4390	5980	10390	13400	18360	13520	20680
14	4970	12770	12860	13750	13270	5350	7780	11010	13890	20370	15980	20600
15	6860	12680	12730	12070	13840	10230	10190	11420	13720	18890	17530	19470
16	7910	12710	12850	11870	13920	8630	11850	11860	14530	17990	18360	10810
17	8810	12880	12850	11490	13230	9430	12900	12030	14250	19530	18540	9910
18	9360	12520	12360	11380	12730	10190	12810	12030	14960	19710	18630	19390
19	9910	12720	20180	9950	12360	10810	14070	12280	17120	19890	18540	13410
20	10250	12320	12270	10670	12720	10810	14140	12530	17460	20350	17900	2140
21	10940	12190	12240	11450	12810	11260	12240	2250	15720	19970	17350	1260
22	11560	12430	12400	11810	12440	11420	9980	3340	16370	20470	17260	2290
23	11860	12500	12690	12940	13680	12180	11740	2930	13290	19600	12650	4210
24	12110	12170	11760	12400	12810	12030	12690	4390	15380	20310	4580	2330
25	12280	12340	11740	12570	15030	12190	13850	4010	11340	19800	3760	1870
26	12320	12500	11850	12690	14870	11820	15500	1540	17430	18930	4950	2750
27	12280	12690	12440	13060	14930	12630	14820	2900	15770	18890	2590	5290
28	12380	12660	12650	12940	14350	13430	13060	4600	16590	18210	4650	6870
29	12480	12920	12440	12660	---	12320	10380	6280	17210	19280	11030	4370
30	12650	12940	12530	12470	---	12610	2680	7300	18170	18590	11510	9440
31	12730	---	12120	12900	---	12510	---	8260	---	18940	12900	---
MONTH	8790	12550	12670	12470	13330	11090	11870	6770	12950	18690	13640	12940

DISSOLVED SOLIDS DISCHARGE (TONS/DAY) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	890	1010	856	535	741	662	739	10960	743	310	33	490
2	864	972	879	459	739	772	723	13320	778	287	35	436
3	874	959	849	478	738	692	716	2150	792	259	29	465
4	3420	956	877	543	751	696	575	1310	1300	237	30	434
5	2680	950	917	665	717	662	716	972	773	238	681	355
6	976	959	904	797	679	710	733	845	333	227	2010	319
7	821	985	837	589	653	656	734	855	543	144	488	329
8	879	999	835	893	659	698	718	830	446	183	522	293
9	821	986	815	655	666	974	706	818	982	149	395	299
10	814	948	786	562	744	3180	737	803	668	142	809	301
11	5890	960	787	656	706	8950	3940	758	754	128	806	277
12	3580	961	761	1020	767	1290	2650	717	793	119	260	248
13	1090	974	746	946	737	984	775	730	651	119	175	240
14	1220	1000	729	854	752	823	651	714	675	127	151	234
15	1280	959	722	945	747	1330	688	679	667	107	133	315
16	1260	893	694	737	752	955	704	673	706	102	114	1050
17	1240	904	694	899	821	942	696	650	693	111	95	589
18	1160	879	667	891	790	963	692	617	646	101	80	628
19	1150	927	1140	698	701	934	760	597	693	102	60	22230
20	1140	998	795	720	687	904	802	643	660	93	46	21320
21	1150	955	529	773	657	973	1880	8670	552	102	37	8030
22	1120	940	737	765	638	956	862	7000	530	94	37	1550
23	1120	945	891	724	702	954	729	847	430	79	92	1190
24	1080	985	794	739	623	909	754	723	498	82	284	1460
25	1060	966	697	746	730	889	785	4320	367	75	781	5840
26	1030	979	672	754	723	862	837	4660	470	61	1150	2250
27	1060	959	706	776	766	920	800	861	366	61	5200	2110
28	1040	923	683	768	736	906	741	708	358	49	980	1950
29	1010	907	672	752	---	765	5460	679	325	47	1040	1010
30	1020	873	676	741	---	749	25080	709	324	40	590	1910
31	1030	---	687	766	---	710	---	758	---	36	523	---
MONTH	1410	954	775	737	719	1210	1910	2240	617	129	570	2610

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

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12600	20000	19380	18650	20310	19900	20240	1580	12500	23540	23580	22260
2	15000	19800	20210	18100	20220	23370	21060	1810	13500	23960	24840	22620
3	16800	19400	19130	19300	20190	21200	20800	3040	14700	22940	22940	25700
4	8600	19300	18930	19130	20760	21300	16300	5410	7840	23840	24140	28620
5	5210	19100	18050	20060	20840	21370	21840	6540	8850	23860	12640	26180
6	3750	19400	17610	21100	20700	22760	22300	7710	11200	23380	17760	26200
7	7010	19130	17540	18000	17950	22300	22330	9590	14620	18480	19420	27000
8	11000	18540	18620	20700	18200	22400	23000	10900	8270	24940	26200	27200
9	13000	18150	19140	19600	18540	22500	22640	11900	13900	23700	27200	26400
10	14600	17980	19330	20160	21600	10240	23520	13100	16340	24710	20600	27500
11	2990	18350	19340	19650	20320	5090	6390	13600	18760	24240	12400	28100
12	2570	18380	18330	21130	22190	3890	10400	14300	20280	24300	16100	29800
13	4180	18790	19090	22740	21420	6380	8690	15100	18860	24300	19000	29400
14	7220	19590	19820	21560	20800	7770	11300	16000	19400	28670	21700	29200
15	9970	19380	19490	17910	21680	14870	14800	16600	19220	25100	23400	26500
16	11500	19460	19800	17410	21800	12540	17370	17400	20100	23900	24300	15700
17	12800	19870	19790	16690	20700	13700	19900	17800	19800	26640	24500	14400
18	13600	18990	18600	16530	19490	14810	19700	17800	20580	27070	24600	26300
19	14400	19470	28200	14460	18600	15700	22000	18400	22940	27500	24500	18880
20	14900	18510	18370	15500	19460	15700	22100	19000	23320	28600	23800	3110
21	15900	18190	18300	16640	19700	16360	18300	3260	21410	27700	23200	1830
22	16800	18780	18700	17270	18800	16600	14500	4860	22120	28900	23100	3330
23	17400	18940	19400	18200	21460	18160	17100	4260	18740	26800	18040	6120
24	18000	18130	17160	18800	19700	17800	19400	6380	21040	28500	6650	3380
25	18400	18560	17100	19100	23340	18200	21700	5830	16480	27280	5460	2710
26	18500	18950	17370	19400	23120	17300	24000	2240	23280	25200	7200	3990
27	18400	19400	18810	20300	23210	19240	23050	4210	21460	25100	3770	7690
28	18650	19340	19300	20000	22400	21110	20300	6680	22360	24140	6760	9980
29	18900	19960	18800	19330	---	18510	15080	9130	23040	26040	16020	6350
30	19300	20000	19000	18860	---	19210	3900	10600	24100	24560	16720	13720
31	19500	---	18020	19900	---	18980	---	12000	---	25220	18320	---
MONTH	12950	19060	19060	18910	20630	16750	18130	9900	17970	25260	18670	18010

TEMPERATURE (DEG. C) OF WATER , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
(ONCE-DAILY)

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

07304500 ELK CREEK NEAR HOBART, OKLA.

LOCATION.--Lat 34°54'51", long 99°06'49", in NE 1/4 NE 1/4 sec.17, T.5 N., R.18 W., Kiowa County, at county road bridge, 11 mi (17.7 km) downstream from Little Elk Creek, 11.7 mi (18.8 km) south of Hobart, and 1.2 mi (1.9 km) west of Hobart.

DRAINAGE AREA.--549 mi² (1,422 km²).

PERIOD OF RECORD.--Chemical analyses: October 1949 to September 1951, water years 1957-58 (partial-record station), October 1958 to September 1963, November 1969 to current year.

Water temperatures: October 1949 to September 1951, October 1958 to September 1961, November 1969 to current year.

Sediment records: December 1958 to September 1961.

EXTREMES, Current year.--Dissolved solids: Maximum, 1,480 mg/l Aug. 1-10; minimum, 151 mg/l Oct. 5.

Hardness: Maximum, 760 mg/l Jan. 1-10, 11-18; minimum, 90 mg/l Oct. 5.

Specific conductance: Maximum daily, 2,150 micromhos/cm Aug. 7; minimum daily, 250 micromhos/cm Sept. 24.

Water temperatures: Maximum, 28.0°C Aug. 9; minimum, freezing point on several days during December and January.

Period of record.--Dissolved solids: Maximum, 2,620 mg/l Nov. 26-30, 1958; minimum, 94 mg/l Sept. 5, 1971.

Hardness: Maximum, 1,640 mg/l Nov. 26-30, 1958; minimum, 62 mg/l Sept. 5, 1971.

Specific conductance: Maximum daily, 3,100 micromhos/cm Nov. 27, 1958; minimum, 153 micromhos/cm Sept. 5, 1971.

Water temperatures: Maximum, 35.0°C July 8, 1951; minimum, freezing point on many days during winter months.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

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 (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	ALKA- LITY AS CACO ₃ (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED NITRATE (N) (MG/L)	DIS- SOLVED NITRATE (NO ₃) (MG/L)	DIS- SOLVED NITRITE (N) (MG/L)
OCT.												
01-04	197	88	41	64	287	0	235	180	65	1.4	6.2	.01
05...	222	25	6.6	--	90	0	74	26	15	.85	3.8	.01
06-08	76	61	27	43	198	0	162	120	48	1.1	4.8	.01
09-10	65	87	43	73	299	0	245	200	74	1.4	6.2	.01
11-12	964	34	11	--	124	0	102	43	16	.58	2.6	.01
13-16	69	53	23	34	198	0	162	100	33	1.1	4.8	.01
17-20	41	92	47	66	323	0	265	200	64	1.6	7.0	.01
21-31	30	120	60	96	398	0	326	280	96	1.8	7.8	.04
NOV.												
01-03	23	130	71	100	435	0	357	300	100	1.7	7.5	.00
04-06	23	140	78	110	449	0	368	340	120	1.7	7.5	.01
07-11	22	130	74	99	435	0	357	--	100	1.8	8.0	.00
12-24	26	140	78	110	461	0	378	360	110	1.3	5.8	.00
25-30	33	130	74	100	407	18	364	330	100	1.3	5.8	.00
DEC.												
01-07	26	140	77	110	454	0	372	390	110	1.4	6.2	.01
08-13	21	130	75	110	442	0	363	380	100	1.4	6.2	.01
14-21	24	150	82	120	458	0	376	430	110	1.6	7.0	.01
22-24	19	110	54	78	363	0	298	--	78	1.5	6.6	.00
25-31	20	150	81	110	459	0	376	420	110	2.2	9.7	.10
JAN.												
01-10	18	160	87	130	484	0	397	430	130	2.7	12	.00
11-18	16	160	88	130	493	0	404	440	130	3.1	14	.00
19-31	15	150	81	120	455	0	373	390	110	2.4	11	.00
FEB.												
01-10	12	160	84	120	474	0	389	410	120	1.8	8.0	.00
11-15	14	150	82	120	458	0	376	420	110	1.5	6.6	.00
16-28	18	160	83	110	460	0	377	440	110	1.1	4.8	.01
MAR.												
01-10	27	150	87	130	490	0	402	--	120	1.2	5.2	.02
11-18	211	53	30	40	232	0	190	--	29	1.3	5.6	.03
19-26	33	87	50	64	--	0	--	230	53	1.7	7.4	.02
27-31	18	130	77	95	453	0	372	370	82	2.0	8.8	.02
APR.												
01-12	27	130	82	110	423	0	347	380	98	--	--	--
13-16	36	--	39	52	244	0	200	190	37	--	--	--
17-19	16	97	58	81	353	0	290	270	64	--	--	--
20-21	54	120	71	100	405	0	332	330	86	--	--	--
22-24	21	67	34	48	200	0	164	--	39	--	--	--
25-26	12	110	58	79	312	0	256	300	64	--	--	--
27-29	26	130	72	100	434	0	356	--	89	--	--	--
30...	172	56	19	27	156	0	128	--	29	--	--	--
MAY												
01-03	1443	44	13	20	142	0	116	71	19	--	--	--
04-13	91	73	39	47	267	0	219	170	38	--	--	--
14-24	30	110	65	80	396	0	325	290	68	--	--	--
25-31	264	57	25	33	--	0	--	--	25	--	--	--
JUNE												
01-04	32	85	42	62	312	0	256	200	50	--	--	--
05-11	24	96	67	84	367	0	301	290	76	--	--	--
12-13	23	56	31	45	--	0	--	130	39	--	--	--
14-20	16	92	--	87	357	0	293	240	72	--	--	--
21-30	10	--	73	110	345	0	283	360	110	--	--	--

RED RIVER BASIN

07304500 ELK CREEK NEAR HOBART, OKLA.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

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)	ALKA- LINITY AS CACO3 (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED NITRATE (N) (MG/L)	DIS- SOLVED NITRATE (NO3) (MG/L)	DIS- SOLVED NITRITE (N) (MG/L)
JULY												
01-10	5.8	90	80	120	317	0	260	390	120	--	--	--
11-16	3.0	100	80	150	259	1	214	430	150	--	--	--
17-31	1.6	120	100	180	386	0	317	490	190	--	--	--
AUG.												
01-10	8.0	100	96	220	370	0	303	500	220	--	--	--
11-15	14	--	19	35	158	0	130	110	34	--	--	--
16-31	8.6	79	38	72	234	0	192	220	72	--	--	--
SEP.												
01-02	21	82	35	56	213	0	175	210	50	--	--	--
03-05	18	40	13	24	139	0	114	59	23	--	--	--
06-18	2.9	88	36	70	243	0	199	220	71	--	--	--
19-27	149	34	9.3	17	112	0	92	53	16	--	--	--
28-30	25	67	27	45	196	0	161	160	44	--	--	--
DATE	DIS- SOLVED NITRITE (NO2) (MG/L)	DIS- SOLVED NITRATE (N) (MG/L)	DIS- SOLVED SOLIDS DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS PER AC-FT)	DIS- SOLVED SOLIDS 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)	CARBON DIOXIDE (CO2) (MG/L)	
OCT.												
01-04	.03	1.4	632	.86	336	390	150	1.4	993	8.0	4.6	
05...	.00	.86	151	.21	90.5	90	16	--	259	8.1	1.1	
06-08	.03	1.1	426	.58	87.4	260	100	1.2	710	8.0	3.2	
09-10	.03	1.4	686	.93	120	390	150	1.6	1060	8.1	3.8	
11-12	.03	.59	197	.27	513	130	28	--	338	7.9	2.5	
13-16	.03	1.1	364	.50	67.8	230	65	1.0	609	8.0	3.2	
17-20	.03	1.6	680	.92	75.3	420	160	1.4	1069	8.2	3.3	
21-31	.13	1.8	903	1.23	73.1	550	220	1.8	1359	8.2	4.0	
NOV.												
01-03	.00	1.7	991	1.35	61.5	620	260	1.8	1450	8.2	4.4	
04-06	.03	1.7	1090	1.48	67.7	670	300	1.8	1580	8.2	4.5	
07-11	.00	1.8	1020	1.39	60.6	630	270	1.7	1490	8.2	4.4	
12-24	.00	1.3	1100	1.50	77.2	670	290	1.8	1580	8.3	3.7	
25-30	.00	1.3	1030	1.40	91.8	630	270	1.7	1480	8.6	1.8	
DEC.												
01-07	.03	1.4	1090	1.48	76.5	670	290	1.9	1560	8.2	4.6	
08-13	.03	1.4	1050	1.43	59.5	630	270	1.9	1520	8.2	4.5	
14-21	.03	1.6	1160	1.58	75.2	710	340	2.0	1650	8.2	4.6	
22-24	.00	1.5	771	1.05	39.6	500	200	1.5	1190	8.1	4.6	
25-31	.33	2.3	1150	1.56	62.1	710	330	1.8	1630	8.2	4.6	
JAN.												
01-10	.00	2.7	1220	1.66	61.9	760	360	2.1	1740	8.1	6.2	
11-18	.00	3.1	1250	1.70	57.0	760	360	2.1	1770	8.1	6.3	
19-31	.00	2.4	1140	1.55	44.0	710	330	2.0	1650	8.2	4.6	
FEB.												
01-10	.00	1.8	1200	1.63	41.8	750	360	1.9	1730	7.9	9.5	
11-15	.00	1.5	1170	1.59	45.5	710	340	2.0	1680	8.1	5.8	
16-28	.03	1.1	1200	1.63	58.3	740	360	1.8	1720	8.2	4.6	
MAR.												
01-10	.07	1.2	1300	1.77	95.5	730	330	2.1	1820	8.2	4.9	
11-18	.10	1.3	445	.61	254	260	66	1.1	686	7.8	5.9	
19-26	.07	1.7	694	.94	61.8	420	--	1.4	1060	8.0	--	
27-31	.07	2.0	1030	1.40	50.1	640	270	1.6	1500	8.1	5.8	
APR.												
01-12	--	.63	1080	1.47	78.7	660	320	1.9	1570	8.2	4.3	
13-16	--	1.6	531	.72	51.6	--	--	--	835	7.8	6.2	
17-19	--	1.7	786	1.07	35.4	480	190	1.6	1190	8.0	5.6	
20-21	--	.55	962	1.31	140	590	260	1.8	1420	8.0	6.5	
22-24	--	1.8	522	.71	29.6	310	140	1.2	814	7.7	6.4	
25-26	--	1.7	835	1.14	47.3	510	260	1.5	1240	8.0	5.0	
27-29	--	1.4	1010	1.37	3.27	620	270	1.7	1490	8.2	4.4	
30...	--	.44	350	.48	163	220	90	.8	592	7.5	7.9	
MAY												
01-03	--	.60	253	.34	986	160	47	.7	415	7.8	3.6	
04-13	--	1.5	534	.73	132	340	120	1.1	833	8.1	3.4	
14-24	--	2.7	648	1.15	64.6	540	220	1.5	1270	8.2	4.0	
25-31	--	1.6	393	.53	27.4	250	--	.9	612	7.8	--	

RED RIVER BASIN

07304500 ELK CREEK NEAR HOBART, OKLA.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	DIS- SOLVED NITRITE (NO2) (MG/L)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	CARBON DIOXIDE (CO2) (MG/L)
JUNE											
01-04	--	1.5	634	.86	55.6	390	130	1.4	970	8.3	2.5
05-11	--	.98	820	1.12	54.9	520	210	1.6	1230	7.9	7.4
12-13	--	1.8	441	.60	27.4	270	--	1.2	717	8.1	--
14-20	--	1.2	785	1.07	33.9	--	--	--	1190	8.1	4.5
21-30	--	.48	970	1.32	26.2	--	--	--	1420	8.0	5.5
JULY											
01-10	--	.72	1060	1.44	16.6	550	290	2.2	1540	8.0	5.1
11-16	--	.64	1160	1.58	9.40	580	370	2.7	1690	8.4	1.7
17-31	--	.66	1360	1.85	5.88	710	390	2.9	1930	8.2	3.9
AUG.											
01-10	--	.46	1480	2.01	32.0	650	350	3.8	2070	8.1	4.7
11-15	--	1.0	366	.50	14.5	--	--	--	577	7.7	5.0
16-31	--	.98	664	.90	15.4	350	160	1.7	1000	8.0	3.7
SEP.											
01-02	--	1.7	579	.79	32.8	350	180	1.3	882	8.1	2.7
03-05	--	1.9	262	.36	12.7	150	36	.8	430	7.7	4.4
06-18	--	.85	645	.88	5.05	370	170	1.6	986	8.1	3.1
19-27	--	1.0	210	.29	84.5	120	28	.7	347	7.7	3.6
28-30	--	1.4	487	.66	33.8	280	120	1.2	751	7.8	5.0

RED RIVER BASIN

07304500 ELK CREEK NEAR HOBART, OKLA.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	822	1360	1440	1650	1640	1650	1380	399	862	1470	2060	944
2	962	1420	1510	1690	1710	1670	1440	443	967	1500	2090	811
3	1060	1460	1500	1730	1720	1680	1360	368	972	1480	2110	481
4	954	1510	1490	1760	1720	1760	1460	590	1080	1500	2110	355
5	256	1550	1480	1750	1700	1790	1540	697	1170	1500	2130	454
6	554	1560	1520	1700	1700	1810	1450	734	1210	1540	2050	766
7	727	1440	1610	1720	1690	1830	1440	753	1210	1580	2150	925
8	794	1360	1290	1700	1730	1840	1320	764	1240	1600	2140	980
9	981	1470	1480	1640	1740	1830	1460	802	1260	1640	2080	1000
10	1080	1480	1510	1720	1690	1860	1530	834	1280	1630	1860	1010
11	342	1460	1520	1750	1660	784	1500	892	1300	1680	626	1000
12	321	1530	1530	1750	1640	509	1510	984	679	1670	489	937
13	429	1540	1490	1830	1670	557	661	1090	757	1690	513	896
14	524	1550	1560	1720	1660	601	696	1160	962	1700	585	889
15	658	1530	1620	1710	1610	613	849	1240	1080	1710	657	927
16	795	1530	1620	1730	1700	696	953	1320	1160	1710	732	991
17	922	1570	1560	1670	1730	720	1040	1400	1260	1760	825	1110
18	970	1550	1570	1720	1740	746	1070	1340	1290	1790	876	1330
19	1040	1560	1620	1630	1670	817	1260	1380	1280	1820	964	313
20	1110	1460	1620	1620	1760	882	1300	1440	1310	1820	1070	400
21	1190	1550	1590	1600	1770	848	1410	1440	1360	1850	1110	279
22	1260	1570	1020	1570	1800	1020	855	1120	1380	1880	1120	395
23	1270	1550	1170	1550	1710	1070	691	1110	1480	1930	1110	408
24	1280	1530	1310	1550	1700	1170	800	806	1470	1970	1150	250
25	1300	1420	1580	1600	1510	1220	1160	538	1460	2000	1500	296
26	1320	1490	1570	1660	1510	1120	1020	403	1430	2020	1130	320
27	1310	1450	1580	1620	1610	1330	1360	490	1450	2040	720	457
28	1470	1450	1580	1590	1650	1420	1340	580	1420	2060	547	656
29	1360	1450	1570	1600	---	1480	1420	664	1400	2070	730	742
30	1350	1470	1580	1600	---	1490	530	737	1440	2070	1420	869
31	1310	---	1590	1590	---	1510	---	769	---	2080	872	---
MONTH	959	1490	1510	1670	1680	1240	1190	880	1220	1770	1280	706

TEMPERATURE (DEG. C) OF WATER , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
(ONCE-DAILY)

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

07305000 NORTH FORK RED RIVER NEAR HEADRICK, OKLA.

LOCATION.--Lat 34°38'04", long 99°05'47", in NW 1/4 NE 1/4 sec.21, T.2 N., R.18 W., Tillman County, at gaging station at bridge on U.S. Highway 62, 2.5 mi (4.0 km) east of Headrick, 12.9 mi (20.8 km) upstream from Otter Creek, and at mile 33.0 (53.1 km).

DRAINAGE AREA.--4,244 mi² (10,992 km²), of which 399 mi² (1,033 km²) is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: Water years 1957-59 (partial-record station), October 1959 to September 1963, July 1968 to current year.

Water temperatures: November 1959 to September 1963, July 1968 to current year.

EXTREMES, Current year.--Specific conductance: Maximum, 13,300 micromhos/cm Dec. 28; minimum, 925 micromhos/cm Oct. 5.

Water temperatures: Maximum, 33.0°C Aug. 18; minimum, freezing point on several days during December and January.

Period of record.--Specific conductance: Maximum, 23,300 micromhos/cm June 8, 1971; minimum, 493 micromhos/cm Sept. 24, 1970, Sept. 8, 1973.

Water temperatures: Maximum, 38.0°C July 19, 1969; minimum, freezing point on many days during winter months.

REMARKS.--Continuous monitor records for specific conductance and water temperature are collected for this station. Records of maximum and minimum specific conductance and water temperature values are available in district office in Oklahoma City, Okla.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	INSTANTANEOUS DIS-CHARGE (CFS)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG)	DIS-SOLVED SODIUM (NA) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CaCO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	DIS-SOLVED NITRATE (NO3) (MG/L)	DIS-SOLVED NITRITE (N) (MG/L)
OCT.												
05...	3340	52	11	120	114	0	94	81	190	.65	2.9	.01
15...	292	180	24	250	124	0	102	440	380	.59	2.6	.00
25...	81	320	83	1400	219	0	180	810	2200	.09	.40	.02
NOV.												
05...	67	350	96	1800	250	0	205	940	2800	.40	1.8	.01
15...	72	350	100	1800	194	0	159	950	3000	.06	.27	.11
25...	85	340	100	1700	239	0	196	930	2800	.08	.35	.06
DEC.												
05...	67	370	110	2000	242	0	198	--	3200	.08	.35	.00
15...	69	370	110	2000	240	0	197	--	3300	.09	.40	.07
25...	75	360	100	1800	256	0	210	1000	--	.41	1.8	.02
JAN.												
05...	87	380	120	1900	335	0	275	1100	3100	1.1	4.6	.05
15...	102	390	120	--	289	0	237	1000	3400	1.3	5.8	.00
25...	72	350	110	1800	230	0	189	1100	--	.44	1.9	.00
FEB.												
05...	61	370	120	2200	218	0	179	1100	3500	.07	.31	.08
15...	59	360	120	2200	208	0	171	1000	3500	.00	.00	.10
25...	59	350	120	1800	275	0	226	1000	2900	.13	.58	.01
MAR.												
05...	51	390	130	2300	231	0	189	1100	3700	.03	.13	.20
11...	36	360	120	--	229	0	188	920	3600	.11	.49	.12
25...	123	320	89	--	237	0	194	870	2600	.91	4.0	.01
APR.												
05...	67	370	120	1900	246	0	202	1000	3100	--	--	--
14...	224	130	40	220	154	0	126	--	340	--	--	--
25...	81	340	89	1500	183	0	150	920	2400	--	--	--
MAY												
03...	8020	120	16	64	104	0	85	--	93	--	--	--
15...	77	280	73	1100	207	0	170	650	1900	--	--	--
27...	2140	210	32	360	128	0	105	470	600	--	--	--
JUNE												
05...	154	280	64	1200	160	0	131	760	--	--	--	--
15...	62	310	86	--	163	0	134	800	2300	--	--	--
25...	35	--	100	--	173	0	142	940	2800	--	--	--
JULY												
05...	24	--	98	1800	188	0	154	1000	3000	--	--	--
15...	14	350	110	1700	199	0	163	1000	2800	--	--	--
25...	14	380	120	1900	150	0	123	1000	3100	--	--	--
AUG.												
05...	13	150	77	670	178	0	146	450	1100	--	--	--
15...	26	340	97	1900	118	0	97	950	3000	--	--	--
25...	5.0	200	78	700	299	0	245	450	1100	--	--	--
SEP.												
05...	38	220	55	940	174	0	143	550	1500	--	--	--
15...	12	420	92	2200	145	0	119	1000	3600	--	--	--
25...	1500	89	11	170	78	0	64	190	260	--	--	--

RED RIVER BASIN

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	DIS- SOLVED NITRITE (NO2) (MG/L)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	CARBON DIOXIDE (CO2) (MG/L)
OCT.											
05...	.03	.66	528	.72	4760	180	82	3.9	951	7.8	2.9
15...	.00	.59	1410	1.92	1110	550	450	4.6	2120	7.9	2.5
25...	.07	.11	5090	6.92	1110	1100	960	18	7020	8.1	2.8
NOV.											
05...	.03	.41	6350	8.64	1150	1300	1100	22	8500	8.2	2.5
15...	.36	.17	6500	8.84	1260	1300	1100	22	10000	7.7	6.2
25...	.20	.14	6170	8.39	1420	1300	1100	21	10100	8.1	3.0
DEC.											
05...	.00	.08	6750	9.18	1220	1400	1200	23	10900	8.0	3.9
15...	.23	.16	6910	9.40	1290	1400	1200	23	11200	7.8	6.1
25...	.07	.43	6580	8.95	1330	1300	1100	22	10200	8.0	4.1
JAN.											
05...	.16	1.1	6620	9.00	1560	1400	1200	22	10800	7.9	6.7
15...	.00	1.3	6920	9.41	1910	1500	1200	23	11300	7.9	5.8
25...	.00	.44	6240	8.49	1210	1300	1100	22	10300	8.2	2.3
FEB.											
05...	.26	.15	7350	10.0	1210	1400	1200	25	12000	8.0	3.5
15...	.33	.08	7090	9.64	1130	1400	1200	26	11800	8.2	2.1
25...	.03	.14	6340	8.62	1010	1400	1100	21	10400	8.0	4.4
MAR.											
05...	.66	.23	7850	10.7	1080	1500	1300	26	12900	7.8	5.9
11...	.39	.23	7150	9.72	695	1400	1200	--	11600	7.8	5.8
25...	.03	.92	5370	7.30	1780	1200	970	--	8930	8.0	3.8
APR.											
05...	--	.09	6690	9.10	1210	1400	1200	22	11000	8.0	3.9
14...	--	.95	1250	1.70	756	490	360	4.3	1990	7.7	4.9
25...	--	.26	5510	7.49	1210	1200	1100	19	8910	7.9	3.7
MAY											
03...	--	.58	693	.94	15000	370	280	1.5	1020	7.7	3.3
15...	--	.61	4150	5.64	863	1000	830	15	6420	7.4	13
27...	--	1.0	1900	2.58	11000	660	550	6.1	2900	7.5	6.5
JUNE											
05...	--	.38	4260	5.79	1770	960	830	17	6490	7.5	8.1
15...	--	.51	5320	7.24	893	1100	990	--	8090	7.5	8.2
25...	--	.48	6290	8.55	594	--	--	--	9440	8.1	2.2
JULY											
05...	--	.23	6570	8.94	426	--	--	--	9890	7.8	4.8
15...	--	.84	6080	8.27	230	1300	1200	20	9240	7.6	8.0
25...	--	.26	7260	9.87	282	1400	1300	22	10800	8.3	1.2
AUG.											
05...	--	3.5	2700	3.67	94.8	690	540	11	--	8.0	2.8
15...	--	.46	6500	8.84	456	1200	1100	23	9840	7.5	6.0
25...	--	3.8	2880	3.92	38.9	820	580	11	4520	7.7	9.5
SEP.											
05...	--	.52	3560	4.84	365	780	640	15	5640	7.9	3.5
15...	--	.24	7680	10.4	249	1400	1300	25	11400	7.8	3.7
25...	--	.61	820	1.12	3320	270	210	4.5	1390	7.8	2.0

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

SULFATE (MG/L AS SO₄) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SE
1	500	900	930	1000	1000	1000	980	500	510	970	500	570
2	500	920	960	1000	1000	1000	960	170	510	970	510	660
3	510	930	970	1000	1000	1100	950	120	510	980	510	870
4	510	920	970	1000	1000	1100	980	120	530	970	660	960
5	96	950	980	970	1000	1100	980	330	640	970	660	530
6	430	920	990	930	1000	1100	890	500	730	970	680	760
7	350	930	960	940	1000	1100	510	500	500	980	800	910
8	500	930	950	980	1000	1100	940	500	600	980	1000	950
9	500	930	1000	1000	1000	1000	1000	510	700	990	900	980
10	510	940	980	1000	970	1000	930	510	900	1000	510	1000
11	500	950	970	1000	1000	1000	1000	510	730	970	550	1000
12	110	970	980	1100	1000	500	1100	510	500	1000	510	1000
13	470	950	960	1100	1000	500	510	500	740	980	550	1000
14	340	940	990	910	1000	500	460	570	860	960	1100	1000
15	440	960	980	1000	1000	470	510	650	880	930	960	1000
16	500	960	1000	1000	1000	500	570	680	900	950	990	930
17	500	970	970	1000	1000	510	510	690	920	900	1000	970
18	590	970	950	1100	1000	510	680	730	510	880	950	1000
19	510	960	960	1000	1000	790	710	760	930	640	930	970
20	580	960	970	1000	1100	510	720	510	920	880	560	500
21	630	970	1000	1000	1100	570	920	810	950	550	510	500
22	680	910	880	980	1100	660	930	730	940	560	890	330
23	720	980	940	950	1000	750	840	510	930	1000	730	370
24	760	920	970	940	1000	880	950	500	940	790	740	470
25	810	930	960	950	960	880	710	500	910	1000	510	230
26	830	930	980	930	1000	760	880	410	920	510	840	270
27	860	930	1000	960	1100	880	870	500	940	510	870	390
28	890	910	1200	980	1100	920	890	310	970	500	500	500
29	880	930	990	1000	---	940	500	500	970	510	250	510
30	740	950	980	1000	---	960	480	500	970	830	500	510
31	890	---	1000	1000	---	960	---	510	---	510	510	---
MONTH	570	940	980	1000	1000	830	790	500	780	840	700	730

DISSOLVED SO₄ DISCHARGE (TONS/DAY) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SE
1	316	167	169	158	174	151	201	6470	158	66	8.6	6
2	216	161	171	138	176	153	189	2720	85	66	8.6	6
3	167	163	177	128	172	152	184	2500	72	63	8.6	6
4	270	162	173	166	168	152	185	704	61	63	14	13
5	663	171	177	236	169	149	181	732	61	63	13	5
6	1150	166	182	244	168	149	158	765	370	63	13	6
7	499	174	200	211	166	146	91	580	227	64	17	6
8	399	175	190	169	167	144	166	465	178	63	80	5
9	244	172	191	148	166	144	172	382	183	61	58	5
10	181	178	183	139	158	149	158	313	276	62	41	4
11	877	180	179	152	164	373	195	251	240	58	72	4
12	995	188	185	191	165	1790	208	194	126	54	132	4
13	2750	180	174	206	169	1210	536	160	155	43	79	3
14	670	183	182	211	169	507	258	143	157	39	112	3
15	475	186	183	252	165	335	173	135	146	35	68	4
16	387	182	183	235	168	321	156	132	133	36	48	6
17	301	180	176	225	169	299	130	118	137	32	38	5
18	301	184	178	245	171	263	167	107	73	31	28	6
19	212	181	182	226	169	355	160	101	125	22	24	11
20	204	189	139	224	171	212	171	63	107	29	11	47
21	190	196	192	217	179	243	196	98	105	14	7.2	414
22	183	179	228	195	174	240	331	466	96	13	9.6	360
23	181	199	203	188	167	256	310	1770	93	22	7.1	91
24	175	201	185	187	167	273	245	526	86	11	11	88
25	178	214	194	185	153	285	156	300	81	22	6.4	99
26	172	219	198	180	159	224	183	941	80	11	18	141
27	174	213	201	184	159	232	165	2360	73	9.1	119	91
28	203	190	227	183	156	216	582	491	76	9.1	832	58
29	201	184	192	180	---	213	166	428	70	9.1	199	47
30	150	181	189	178	---	207	456	297	68	15	141	28
31	173	---	183	177	---	203	---	226	---	8.1	89	---
MONTH	428	183	186	192	167	314	221	804	130	37	75	52

RED RIVER BASIN

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

CHLORIDE (MG/L AS CL) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	600	2400	2700	3300	3100	3300	3000	720	1200	2900	750	1600
2	770	2600	2800	3400	3200	3400	2800	160	1400	2900	1200	1800
3	1100	2600	2900	3300	3300	3500	2800	140	1400	3000	1200	2300
4	1200	2600	2900	3300	3200	3600	3000	140	1500	2900	1800	2900
5	120	2800	3000	2900	3300	3600	3000	250	1800	2900	1800	1500
6	310	2600	3000	2700	3300	3600	2400	440	2000	2900	1800	2000
7	270	2700	2900	2700	3300	3600	1400	670	480	3000	2100	2600
8	680	2600	2800	3000	3300	3500	2700	730	1600	3000	3200	2800
9	610	2600	3100	3200	3300	3400	3200	990	1900	3000	2500	3000
10	880	2700	3000	3300	2900	3400	2700	1200	2500	3100	1400	3100
11	450	2800	2900	3400	3200	3200	3100	1400	2000	2900	1500	3200
12	130	2900	3000	3800	3200	550	3500	1300	670	3100	860	3200
13	350	2800	2800	3400	3300	510	1100	640	2000	3000	1500	3300
14	260	2700	3000	2500	3200	510	340	1600	2300	2800	3400	3400
15	320	2800	3000	3100	3200	350	890	1800	2300	2700	2900	3400
16	520	2800	3100	3300	3300	730	1600	1800	2500	2800	3000	2600
17	800	2900	2900	3400	3400	920	1000	1900	2600	2500	3100	2900
18	1600	2900	2800	3800	3300	1100	1800	2000	1100	2400	2800	3200
19	1300	2800	2800	3300	3300	2100	1900	2000	2700	1700	2600	2900
20	1600	2800	2900	3200	3400	1400	1900	1300	2600	2400	1500	720
21	1700	2900	3300	3200	3700	1600	2600	2100	2800	1500	1400	460
22	1800	2500	2400	3000	3500	1800	2700	1900	2700	1500	2400	260
23	1900	3000	2700	2800	3400	2000	2200	880	2700	3200	2000	280
24	2000	2600	2900	2700	3400	2300	2800	510	2700	2100	2000	350
25	2200	2700	2800	2800	2800	2300	1900	440	2500	3200	1100	200
26	2200	2700	3000	2600	3200	2000	2300	300	2600	1200	2200	220
27	2300	2700	3100	2800	3400	2300	2300	580	2700	970	2300	290
28	2400	2600	4000	3000	3400	2600	2400	250	2900	850	760	540
29	2300	2700	3000	3100	---	2700	390	380	2900	960	210	970
30	2000	2800	3000	3100	---	2800	360	650	2900	2200	500	1300
31	2400	---	3100	3100	---	2900	---	900	---	1200	1100	---
MONTH	1200	2700	3000	3100	3300	2300	2100	970	2100	2400	1800	1900

DISSOLVED CL DISCHARGE (TUNS/DAY) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	375	456	484	500	539	484	606	9280	357	197	13	186
2	332	453	503	443	550	493	556	2650	236	197	21	165
3	357	462	528	404	544	498	535	2790	191	191	20	180
4	626	460	519	527	530	507	561	787	172	189	39	393
5	847	498	534	708	535	493	549	570	166	187	34	148
6	841	465	555	698	537	493	426	672	993	187	35	169
7	381	500	596	614	527	483	243	774	218	194	46	179
8	542	498	559	512	532	474	482	674	491	191	252	173
9	295	490	585	464	527	466	536	747	494	188	159	168
10	316	519	557	439	473	479	453	730	763	190	110	148
11	786	530	536	488	511	1170	604	699	643	172	201	155
12	1200	559	558	654	521	1960	686	508	167	167	225	130
13	2050	529	531	670	535	1240	1160	205	416	129	220	125
14	516	530	555	590	528	514	191	395	415	114	363	119
15	345	549	557	775	516	250	305	368	388	101	201	128
16	402	539	561	752	537	464	430	358	365	105	147	186
17	480	536	529	724	543	544	260	320	388	87	119	165
18	829	550	522	833	546	572	452	286	160	83	82	189
19	538	537	538	718	535	943	431	269	358	61	68	337
20	561	556	418	707	553	586	459	159	301	77	30	674
21	519	582	612	679	601	673	549	260	307	38	20	3790
22	496	497	610	590	575	651	947	1250	277	36	26	2800
23	486	605	586	550	539	685	820	3090	266	68	19	689
24	468	567	552	538	539	728	715	535	247	29	28	659
25	472	612	576	541	454	761	419	261	226	70	14	860
26	457	631	598	515	499	598	487	694	225	27	47	1160
27	458	610	623	546	516	619	438	2740	212	18	315	684
28	549	532	790	557	507	612	1580	387	229	15	1250	636
29	533	529	587	552	---	616	130	330	210	17	167	908
30	402	529	573	550	---	610	345	386	205	40	140	749
31	467	---	561	544	---	602	---	405	---	19	197	---
MONTH	578	530	561	593	530	654	545	1080	336	109	149	568

RED RIVER BASIN

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

DISSOLVED SOLIDS (RESIDUE ON EVAPORATION, MG/L AT 180 DEG. C) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1870	5440	5890	6990	6740	7120	6420	2110	2940	6360	2160	3740
2	2210	5700	6170	7180	6870	7250	6160	744	3440	6360	3070	4190
3	2810	5800	6270	6990	6990	7440	6030	648	3340	6420	3030	5150
4	2990	5780	6340	6990	6930	7690	6450	648	3570	6360	4190	6230
5	588	6030	6420	6340	6990	7630	6480	1090	4100	6290	4190	3590
6	1310	5680	6550	5860	7120	7630	5330	1570	4490	6290	4250	4620
7	1140	5900	6250	6010	6990	7630	3350	2010	1650	6480	4810	5640
8	2030	5800	6120	6440	7060	7500	6010	2130	3880	6420	6930	6110
9	1890	5790	6610	6870	6990	7250	6800	2630	4360	6550	5470	6420
10	2420	6010	6480	6990	6360	7180	5860	3010	5540	6610	3340	6610
11	1580	6130	6360	7180	6800	6870	6710	3460	4510	6310	3650	6870
12	610	6270	6420	8140	6930	1780	7530	3290	2000	6680	2380	6930
13	1390	6120	6220	7370	6990	1710	2840	1960	4530	6480	3680	7120
14	1120	5980	6550	5620	6800	1700	1370	3760	5090	6170	7370	7250
15	1320	6170	6480	6610	6870	1390	2430	4130	5190	5870	6260	7250
16	1720	6220	6610	7120	7120	2120	3760	4270	5460	6100	6550	5820
17	2270	6270	6360	7180	7180	2490	2680	4290	5770	5480	6790	6320
18	3870	6340	6120	8070	7120	2850	4270	4500	2880	5260	6050	6870
19	3220	6200	6210	7060	6990	4780	4390	4650	5840	4070	5820	6320
20	3830	6170	6360	6960	7310	3440	4440	3190	5720	5300	3690	2100
21	4030	6270	7060	6870	7880	3760	5690	4850	6060	3670	3500	1600
22	4270	5590	5260	6420	7560	4170	5850	4480	5940	3700	5370	1090
23	4460	6480	5950	6100	7250	4570	5000	2420	5860	6800	4480	1180
24	4650	5720	6270	5910	7250	5240	6040	1700	5920	4790	4530	1390
25	4880	5870	6200	6090	6220	5250	4420	1560	5620	6870	2870	884
26	4960	5900	6420	5830	6870	4640	5240	1270	5750	3080	5010	954
27	5090	5850	6740	6210	7310	5230	5190	1840	5940	2590	5130	1220
28	5330	5660	8450	6480	7310	5750	5380	1060	6360	2350	2170	1770
29	5200	5900	6550	6610	---	5960	1470	1460	6270	2560	928	2590
30	4550	6050	6480	6680	---	6170	1420	1980	6360	4960	1680	3320
31	5360	---	6610	6610	---	6240	---	2460	---	3080	2880	---
MONTH	3000	5970	6410	6700	7030	5170	4830	2550	4810	5360	4270	4370

DISSOLVED SOLIDS DISCHARGE (TONS/DAY) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1180	1010	1060	1080	1160	1040	1320	27130	912	429	37	444
2	950	1000	1100	950	1190	1060	1210	12070	576	429	52	385
3	926	1020	1150	869	1170	1060	1170	13110	469	416	52	403
4	1590	1010	1130	1130	1140	1080	1220	3690	414	412	92	858
5	4080	1090	1160	1540	1150	1050	1190	2440	387	407	80	358
6	3510	1030	1200	1540	1150	1050	949	2390	2280	407	82	386
7	1620	1100	1300	1350	1130	1030	597	2320	747	420	105	396
8	1610	1100	1220	1110	1140	1010	1060	1960	1160	416	543	379
9	918	1080	1270	1000	1130	998	1160	1980	1140	407	354	364
10	867	1140	1210	944	1030	1030	997	1850	1690	411	270	321
11	2770	1160	1170	1050	1100	2520	1310	1700	1470	375	483	334
12	5730	1220	1210	1380	1120	6340	1460	1250	503	360	623	281
13	8190	1160	1160	1430	1150	4120	3010	624	954	280	527	269
14	2200	1160	1200	1300	1140	1720	771	943	934	250	777	254
15	1440	1200	1210	1680	1110	996	835	859	869	222	439	274
16	1330	1180	1210	1610	1150	1350	1030	830	811	231	318	409
17	1350	1170	1150	1550	1160	1470	686	741	856	192	257	358
18	1960	1200	1140	1770	1170	1480	1050	656	412	185	180	408
19	1340	1170	1170	1540	1150	2140	995	615	788	143	151	734
20	1330	1220	910	1520	1180	1430	1060	396	664	172	72	1980
21	1220	1270	1310	1460	1280	1610	1210	589	671	90	49	13240
22	1150	1100	1360	1280	1230	1520	2080	2880	609	86	58	11960
23	1120	1310	1290	1200	1150	1570	1850	8480	586	147	44	2910
24	1070	1250	1200	1180	1150	1630	1570	1790	543	66	65	2620
25	1070	1350	1260	1180	990	1700	966	933	501	150	36	3790
26	1030	1390	1300	1130	1080	1370	1090	2910	497	67	107	5070
27	1030	1340	1350	1190	1110	1380	980	8660	465	47	706	2880
28	1220	1180	1670	1210	1090	1350	3510	1660	498	43	3590	2070
29	1190	1160	1270	1200	---	1350	489	1250	457	46	732	2420
30	920	1160	1240	1190	---	1330	1350	1170	446	90	471	1850
31	1040	---	1210	1180	---	1310	---	1100	---	49	505	---
MONTH	1840	1160	1220	1280	1140	1620	1270	3520	777	240	382	1950

RED RIVER BASIN

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

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2940	8560	9260	11000	10600	11200	10100	3320	4620	10000	3390	5880
2	3480	8970	9700	11300	10800	11400	9690	1170	5410	10000	4830	6590
3	4420	9130	9860	11000	11000	11700	9480	1020	5260	10100	4770	8100
4	4700	9090	9970	11000	10900	12100	10140	1020	5620	10000	6590	9800
5	925	9480	10100	9970	11000	12000	10200	1710	6450	9890	6590	5640
6	2060	8940	10300	9220	11200	12000	8380	2460	7070	9890	6690	7260
7	1800	9280	9830	9450	11000	12000	5270	3170	2590	10200	7560	8870
8	3200	9130	9620	10130	11100	11800	9460	3350	6100	10100	10900	9610
9	2970	9110	10400	10800	11000	11400	10700	4130	6860	10300	8800	10100
10	3800	9460	10200	11000	10000	11300	9220	4730	8720	10400	5250	10400
11	2490	9640	10000	11300	10700	10800	10560	5450	7100	9920	5740	10800
12	960	9860	10100	12800	10900	2800	11840	5180	3150	10500	3740	10900
13	2180	9620	9780	11600	11000	2690	4470	3080	7120	10200	5790	11200
14	1760	9400	10300	8840	10700	2670	2160	5910	8000	9700	11600	11400
15	2080	9700	10200	10400	10800	2190	3830	6500	8170	9240	9840	11400
16	2710	9780	10400	11200	11200	3340	5920	6720	8590	9600	10300	9160
17	3570	9860	10000	11300	11300	3920	4210	6750	9070	8620	10680	9940
18	6090	9970	9630	12700	11200	4480	6720	7080	4530	8280	9520	10800
19	5060	9750	9770	11100	11000	7520	6900	7310	9180	6410	9150	9940
20	6020	9700	10000	10950	11500	5410	6990	5020	9000	8340	5810	3300
21	6340	9860	11100	10800	12400	5920	8950	7630	9540	5780	5500	2520
22	6710	8790	8280	10100	11900	6560	9200	7040	9340	5820	8450	1720
23	7010	10200	9360	9600	11400	7190	7860	3800	9220	10700	7050	1860
24	7320	9000	9870	9300	11400	8250	9500	2670	9310	7530	7120	2190
25	7680	9230	9760	9580	9780	8260	6950	2450	8840	10800	4520	1390
26	7800	9280	10100	9170	10800	7300	8240	1990	9050	4840	7880	1500
27	8000	9200	10600	9770	11500	8230	8160	2900	9340	4070	8070	1920
28	8390	8900	13300	10200	11500	9040	8460	1660	10000	3700	3420	2780
29	8180	9280	10300	10400	---	9370	2320	2290	9860	4030	1460	4070
30	7150	9510	10200	10500	---	9700	2230	3110	10000	7800	2640	5220
31	8430	---	10400	10400	---	9810	---	3870	---	4840	4530	---
MONTH	4720	9390	10090	10540	11060	8140	7600	4020	7570	8440	6710	6880

TEMPERATURE (DEG. C) OF WATER , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
(UNCE-DAILY)

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

RED RIVER BASIN

239

07311000 EAST CACHE CREEK NEAR WALTERS, OKLA.

LOCATION.--Lat 34°21'44", long 98°16'56", on south line of SE 1/4 SE 1/4 sec.19, T.2 S., R.10 W., Cotton County, at gaging station at bridge on State Highway 53, 1.8 mi (2.9 km) east of Walters, 12.2 mi (19.6 km) upstream from West Cache Creek, and at mile 19.7 (31.7 km).

DRAINAGE AREA.--675 mi² (1,748 km²).

PERIOD OF RECORD.--Chemical analyses: October 1951 to September 1953, October 1960 to September 1961, October 1962 to September 1963, October 1969 to current year.

Water temperatures: October 1951 to September 1953, October 1969 to current year.

EXTREMES, Current year.--Specific conductance: Maximum daily, 1,560 micromhos/cm Feb. 21; minimum daily, 148 micromhos/cm Sept. 25.

Water temperatures: Maximum, 36.5°C Aug. 22; minimum, 0.5°C on Jan. 2, 6, 9.

Period of record.--Specific conductance: Maximum daily, 3,860 micromhos/cm Jan. 10, 1971; minimum daily, 101 micromhos/cm Nov. 1, 1972.

Water temperatures: Maximum, 38.5°C July 29, 1970; minimum, freezing point on Jan. 8, 20-24, 1970.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	INSTANTANEOUS DIS-CHARGE (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)	ALKALINITY AS CaCO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	DIS-SOLVED NITRATE (NO3) (MG/L)	DIS-SOLVED NITRITE (N) (MG/L)
OCT.												
05...	14	53	8.9	47	189	0	155	42	42	3.7	16	.01
14...	393	29	5.1	21	130	0	107	15	14	.85	3.8	.00
25...	21	58	11	54	225	0	185	45	48	3.5	15	.01
NOV.												
05...	34	58	11	69	217	0	178	51	65	5.0	22	.02
15...	16	61	12	72	232	0	190	46	66	4.9	22	.01
25...	487	43	8.3	49	176	0	144	32	39	2.3	10	.01
DEC.												
05...	99	65	12	65	241	0	198	48	57	4.5	20	.01
15...	22	66	12	64	230	0	189	48	62	5.5	24	.00
25...	29	55	10	44	192	0	157	43	47	4.1	18	.00
JAN.												
05...	48	73	15	110	234	0	192	65	130	5.4	24	.03
15...	38	67	13	68	236	0	194	52	68	3.9	17	2.3
25...	25	67	13	76	241	0	198	59	80	8.4	37	.02
FEB.												
05...	19	66	13	74	246	0	202	52	71	6.4	28	.03
15...	19	65	12	74	241	0	198	53	71	6.3	28	.01
25...	43	45	8.7	57	169	0	139	47	56	.18	.80	.01
MAR.												
05...	10	68	14	79	251	0	206	54	76	4.8	21	.01
15...	212	58	10	36	187	0	153	50	32	1.6	7.1	.00
25...	158	74	14	52	250	0	205	54	52	3.8	17	.05
APR.												
05...	36	77	13	56	261	0	214	63	63	--	--	--
15...	39	60	11	--	225	0	185	55	50	--	--	--
25...	38	71	14	69	260	0	213	57	67	--	--	--
MAY												
02...	344	56	9.7	20	170	0	139	47	21	--	--	--
15...	53	65	11	40	231	0	189	43	39	--	--	--
25...	464	35	5.2	29	136	0	112	16	36	--	--	--
JUNE												
05...	111	62	10	52	217	3	183	50	46	--	--	--
15...	15	68	12	68	252	0	207	56	70	--	--	--
25...	13	60	11	72	222	5	190	53	71	--	--	--
JULY												
05...	11	51	12	77	226	0	185	50	79	--	--	--
15...	14	--	13	72	217	0	178	48	79	--	--	--
25...	4.0	54	12	80	243	7	211	48	81	--	--	--
AUG.												
05...	8.7	59	13	91	273	0	224	50	88	--	--	--
15...	74	28	4.2	17	117	0	96	11	8.1	--	--	--
25...	8.6	45	7.9	54	177	0	145	44	50	--	--	--
SEP.												
05...	18	38	6.8	29	139	0	114	25	25	--	--	--
15...	6.6	49	11	71	200	0	164	45	63	--	--	--
25...	3030	16	2.1	12	74	0	61	5.3	6.0	--	--	--

RED RIVER BASIN

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	DIS- SOLVED NITRITE (NO ₂) (MG/L)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	HAND- 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)	CARBON DIOXIDE (CO ₂) (MG/L)
OCT.											
05...	.03	3.7	331	.45	12.5	170	14	1.6	554	7.6	7.6
14...	.00	.85	180	.24	191	93	0	.9	283	7.5	6.6
25...	.03	3.5	372	.51	21.1	190	6	1.7	628	7.7	7.2
NOV.											
05...	.07	5.0	424	.58	38.9	190	12	2.2	694	7.9	4.4
15...	.03	4.9	429	.58	18.5	200	11	2.2	705	8.0	3.7
25...	.03	2.3	288	.39	379	140	0	1.8	500	7.5	8.9
DEC.											
05...	.03	4.5	406	.55	109	210	14	1.9	712	7.5	12
15...	.00	5.5	416	.57	24.7	210	26	1.9	741	7.7	7.3
25...	.00	4.1	336	.46	26.3	180	21	1.4	572	7.7	6.1
JAN.											
05...	.10	5.4	480	.65	62.2	240	52	3.1	734	7.3	19
15...	7.6	6.2	437	.59	44.8	220	27	2.0	742	7.3	19
25...	.07	8.4	458	.62	30.9	220	23	2.2	788	7.2	24
FEB.											
05...	.10	6.4	446	.61	22.9	220	17	2.2	778	7.4	16
15...	.03	6.3	447	.61	22.9	210	14	2.2	759	8.2	2.4
25...	.03	.19	322	.44	37.4	150	10	2.0	518	7.2	17
MAR.											
05...	.03	4.8	467	.64	12.6	230	22	2.3	803	7.5	13
15...	.00	1.6	312	.42	179	190	33	1.1	517	7.6	7.5
25...	.16	3.8	423	.58	180	240	37	1.5	709	7.5	13
APR.											
05...	--	3.4	444	.60	43.2	250	32	1.6	760	7.7	8.3
15...	--	1.9	372	.51	39.2	200	11	--	637	7.7	7.2
25...	--	3.0	461	.63	47.3	240	22	2.0	774	8.0	4.2
MAY											
02...	--	.94	266	.36	247	180	40	.7	444	7.7	5.4
15...	--	.14	355	.48	50.8	210	18	1.2	583	7.8	5.9
25...	--	.82	215	.29	269	110	0	1.2	337	7.4	8.7
JUNE											
05...	--	3.3	357	.49	107	200	13	1.6	609	8.5	1.1
15...	--	3.5	439	.60	17.8	220	13	2.0	--	7.8	6.4
25...	--	2.2	414	.56	14.5	200	10	2.2	709	8.5	1.2
JULY											
05...	--	2.2	434	.59	12.9	180	0	2.5	718	8.0	3.6
15...	--	1.7	410	.56	15.5	--	--	--	697	7.7	6.9
25...	--	.67	451	.61	4.87	180	0	2.6	774	8.6	1.0
AUG.											
05...	--	.74	490	.67	11.5	200	0	2.8	795	7.8	6.9
15...	--	1.3	156	.21	51.2	87	0	.8	221	7.6	4.7
25...	--	2.0	328	.45	7.62	150	5	2.0	534	7.8	4.5
SEP.											
05...	--	2.5	229	.31	11.1	120	6	1.1	374	7.7	4.4
15...	--	3.9	392	.53	6.94	170	6	2.4	650	7.7	6.4
25...	--	.45	104	.14	851	49	0	.8	148	7.9	1.5

RED RIVER BASIN

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

SPECIFIC CONDUCTANCE (MICROMHUS/CM AT 25 DEG. C) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	373	687	544	750	761	764	745	418	---	799	769	485
2	426	711	608	742	774	757	709	444	1000	797	778	---
3	442	616	672	747	778	748	635	410	678	762	790	610
4	483	654	674	734	758	791	676	468	692	752	783	541
5	544	675	685	720	775	800	744	459	609	718	795	374
6	494	690	694	712	---	788	722	461	356	768	778	316
7	435	700	575	665	787	738	749	463	422	744	789	351
8	450	710	639	700	843	717	647	491	446	707	789	368
9	483	697	634	741	921	816	610	503	578	754	761	363
10	551	656	685	741	870	386	663	510	588	764	680	442
11	570	690	692	785	776	327	924	518	667	752	683	543
12	504	662	709	769	854	346	627	543	694	722	338	574
13	357	656	699	752	856	398	522	566	920	696	391	646
14	272	680	647	760	763	572	497	583	712	687	335	621
15	323	700	700	738	754	521	623	583	992	697	221	650
16	387	728	693	723	768	545	724	566	681	697	499	532
17	398	708	---	751	787	453	745	638	686	726	478	537
18	473	726	706	761	749	454	726	669	698	724	413	566
19	532	724	712	756	786	501	694	657	709	740	590	324
20	563	725	703	764	796	548	668	615	722	748	501	260
21	587	775	708	768	1560	570	755	525	476	730	443	289
22	617	747	708	770	378	571	792	---	667	720	428	438
23	604	754	735	769	430	562	746	402	653	689	367	543
24	651	595	578	760	554	586	718	550	706	722	441	175
25	608	477	554	770	516	697	708	337	709	774	534	148
26	641	476	628	741	593	514	659	379	708	746	588	236
27	644	364	630	752	629	606	706	353	727	743	429	316
28	644	456	695	768	725	625	---	424	734	806	630	354
29	673	497	713	791	---	662	706	525	743	806	690	406
30	632	556	724	756	---	711	574	499	754	763	648	467
31	677	---	712	754	---	711	---	521	---	775	490	---
MONTH	518	650	672	750	763	607	690	503	680	743	576	430

TEMPERATURE (DEG. C) OF WATER , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19.0	13.0	9.5	1.5	7.0	13.5	19.5	19.0	24.0	23.0	18.5	23.5
2	19.0	13.5	10.5	0.5	8.5	15.0	18.0	19.5	21.5	17.5	20.0	---
3	20.5	13.0	12.5	1.0	6.5	15.5	17.5	---	25.5	15.5	18.5	21.0
4	20.5	13.0	10.5	1.0	8.5	17.5	15.5	19.5	24.5	17.5	17.0	20.5
5	19.0	11.5	11.0	1.0	10.0	15.5	15.0	19.5	25.0	19.5	23.0	20.0
6	19.5	11.0	9.5	0.5	5.0	17.0	13.0	20.0	25.5	21.0	22.0	20.0
7	20.5	11.5	7.5	1.5	5.0	14.0	15.0	20.5	24.0	21.0	24.5	20.5
8	20.0	12.0	7.5	4.5	5.0	17.5	16.5	21.0	25.5	21.0	26.0	15.0
9	21.0	11.0	7.0	0.5	4.0	14.5	16.5	22.5	24.0	21.0	26.5	22.5
10	22.0	11.5	6.0	1.0	3.5	16.5	15.0	22.5	25.0	19.0	24.0	22.5
11	20.5	11.5	7.0	1.0	7.0	14.0	16.0	23.0	25.5	20.5	25.5	23.5
12	20.0	11.5	7.5	1.0	8.0	14.0	17.5	22.5	25.5	20.5	26.0	21.5
13	19.0	13.5	6.0	2.0	9.5	14.0	19.5	23.5	26.0	20.5	27.0	19.5
14	18.5	14.5	7.0	2.0	11.0	15.5	17.0	24.0	27.0	21.0	28.0	19.0
15	18.5	14.5	7.0	4.5	9.0	14.5	17.5	24.0	27.0	17.0	24.0	19.0
16	18.0	12.0	5.5	6.5	11.0	14.5	17.0	25.5	24.0	20.0	27.0	19.5
17	16.5	14.0	6.5	8.0	8.5	14.0	17.0	26.0	23.5	21.0	26.0	19.5
18	16.0	14.5	8.5	7.0	12.0	15.0	18.0	26.0	26.5	22.0	28.0	20.0
19	16.5	14.0	8.5	7.0	11.0	14.0	19.0	26.0	27.0	22.5	27.5	21.0
20	16.5	14.0	3.0	6.0	13.0	12.0	18.0	25.5	26.0	22.5	27.0	21.5
21	17.0	10.5	4.0	10.0	9.0	12.0	19.0	25.5	22.0	22.0	27.0	21.0
22	16.5	11.5	3.5	8.0	10.5	11.5	20.0	---	20.0	22.0	36.5	19.5
23	16.0	13.5	4.5	2.5	9.0	8.0	20.0	25.0	18.5	23.0	24.5	19.0
24	16.5	12.0	4.5	8.0	7.5	7.0	20.0	24.5	17.5	22.0	23.5	12.5
25	17.0	12.0	4.5	7.0	8.0	7.5	20.0	22.5	17.5	22.0	25.5	14.0
26	17.0	11.5	5.0	7.5	9.0	10.0	20.5	22.0	17.0	23.0	24.5	16.0
27	15.0	11.5	4.5	8.5	10.0	14.0	19.0	23.0	17.5	21.5	24.5	18.0
28	13.0	9.5	6.5	8.0	12.0	16.0	---	24.0	18.0	21.0	24.5	17.0
29	13.5	10.5	5.5	8.5	---	17.0	20.5	26.5	18.0	20.5	25.0	18.0
30	13.5	10.5	6.0	8.5	---	17.0	19.0	26.5	15.5	20.5	26.0	18.5
31	13.0	---	3.0	9.0	---	16.0	---	24.0	---	20.0	25.5	---
MONTH	17.5	12.5	7.0	4.5	8.5	14.5	18.0	23.0	23.0	20.5	25.0	19.5

RED RIVER BASIN

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

LOCATION.--Lat 34°37'24", long 98°33'48", in NE 1/4 NE 1/4 sec.28, T.2 N., R.13 W., Comanche County, at gaging station at bridge on U.S. Highway 62, 3,000 ft (914.4 m) upstream from St. Louis-San Francisco Railway Co. bridge, 4.0 mi (6.4 km) east of Cache, and at mile 12.0 (19.3 km).

DRAINAGE AREA.--24.6 mi² (63.7 km²).

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	INSTANTANEOUS 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)	ALKA- LINITY AS CACO3 (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED NITRATE (N) (MG/L)	DIS- SOLVED NITRATE (NO3) (MG/L)	DIS- SOLVED NITRITE (N) (MG/L)
OCT.												
11...	37	19	4.3	--	143	0	117	7.2	10	.12	.53	.02
24...	6.0	14	3.9	12	70	0	57	13	5.3	.11	.49	.00
NOV.												
19...	1.4	16	4.3	14	83	0	68	10	6.5	.11	.49	.00
DEC.												
13...	5.7	13	3.5	12	68	0	56	11	4.4	.08	.35	.00
JAN.												
09...	3.0	14	4.0	13	66	0	54	13	8.4	.04	.18	.01
FEB.												
19...	1.2	16	4.5	14	77	0	63	13	9.0	.05	.20	.00
JUNE												
28...	.14	18	4.9	16	100	0	82	7.9	7.8	.08	.35	.00

DATE	DIS- SOLVED NITRITE (NO2) (MG/L)	DIS- SOLVED NITRITE (N) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	CARBON DIOXIDE (CO2) (MG/L)
OCT.											
11...	.07	.14	187	.25	18.7	65	0	--	274	7.5	7.2
24...	.00	.11	121	.16	1.96	51	0	.7	157	7.6	2.8
NOV.											
19...	.00	.11	129	.18	.49	58	0	.8	174	7.7	2.7
DEC.											
13...	.00	.08	90	.12	1.39	47	0	.8	148	8.0	1.1
JAN.											
09...	.03	.05	103	.14	.83	51	0	.8	156	8.0	1.1
FEB.											
19...	.00	--	111	.15	.36	58	0	.8	181	8.0	1.2
JUNE											
28...	.00	.08	120	.16	.05	65	0	.9	201	7.2	10

RED RIVER BASIN

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07324200 WASHITA RIVER NEAR HAMMON, OKLA.

LOCATION.--Lat 35°39'23", long 99°18'21", on west line of sec.26, T.14 N., R.20 W., Custer County, at gaging station at bridge on county road, 2.2 mi (3.5 km) downstream from Quartermaster Creek, 4.7 mi (7.6 km) northeast of Hammon, and at mile 494.5 (795.7 km).

DRAINAGE AREA.--1,387 mi² (3,592 km²).

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

Water temperatures: October 1969 to current year.

EXTREMES, Current year.--Specific conductance: Maximum, 2,570 micromhos/cm Jan. 12; minimum, 607 micromhos/cm Oct. 11.

Water temperatures: Maximum, 33.5°C June 18; minimum, freezing point on several days during January.

REMARKS.--Continuous monitor records for specific conductance and water temperature are collected for this station. Records are poor. No flow July 3-28, Aug. 13-25, Sept. 28-29.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	INSTANTANEOUS DIS-CHARGE (CFS)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNE-SIUM (MG)	DIS-SOLVED SODIUM (NA) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CaCO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	DIS-SOLVED NITRATE (NO3) (MG/L)	DIS-SOLVED NITRITE (N) (MG/L)
OCT.												
05...	1.1	110	50	16	144	0	118	380	11	.11	.49	.02
13...	108	--	25	14	113	0	93	210	8.9	.15	.66	.02
25...	.80	190	88	44	234	0	192	660	26	.10	.44	.02
NOV.												
15...	3.6	210	92	43	252	0	207	730	24	.12	.53	.01
DEC.												
15...	14	230	110	81	296	0	243	930	39	.08	.35	.01
24...	.46	250	120	87	327	0	268	990	41	.13	.58	.00
JAN.												
08...	14	300	130	110	--	0	--	1000	49	.11	.49	.00
17...	16	260	110	76	365	0	299	--	35	.40	1.8	.00
25...	14	220	100	97	314	0	258	790	59	.13	.58	.00
FEB.												
05...	11	210	98	110	306	0	251	810	56	.05	.22	.00
15...	12	200	98	110	276	0	226	790	52	.03	.13	.00
28...	12	200	97	110	307	0	252	810	56	.07	.31	.00
MAR.												
05...	12	210	100	130	301	0	247	830	70	.16	.71	.00
15...	73	120	52	93	323	0	265	370	52	.25	1.1	.00
APR.												
05...	20	230	120	110	321	0	263	930	63	--	--	--
15...	14	210	100	100	303	0	249	790	50	--	--	--
25...	32	180	64	76	253	0	208	600	43	.25	1.1	.00
MAY												
02...	33	100	45	27	169	0	139	330	14	.85	3.8	.01
15...	25	190	90	100	314	0	258	670	48	.33	1.5	.01
25...	14	220	110	99	274	0	225	900	41	.26	1.2	.00
JUNE												
05...	22	160	70	90	238	0	195	600	46	.27	1.2	.00
13...	5.5	200	90	95	258	0	212	740	41	--	--	--
25...	1.1	210	110	67	--	--	--	780	34	--	--	--
AUG.												
05...	.08	180	62	21	213	0	175	500	14	--	--	--
26...	6.3	76	20	11	108	0	89	180	7.3	--	--	--
SEP.												
05...	.18	160	82	22	142	0	116	640	18	--	--	--
15...	3.6	200	74	19	96	0	79	720	13	--	--	--
25...	.78	290	160	51	154	0	126	1300	34	--	--	--

RED RIVER BASIN

07324200 WASHITA RIVER NEAR HAMMON, OKLA.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	DIS- SOLVED NITRITE (NO2) (MG/L)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	CARBON DIOXIDE (CO2) (MG/L)
OCT.											
05...	.07	.13	712	.97	2.11	480	360	.3	957	8.0	2.3
13...	.07	.17	429	.58	125	--	--	--	628	7.8	2.9
25...	.07	.12	1250	1.70	2.70	840	640	.7	1530	8.3	1.9
NOV.											
15...	.03	.13	1330	1.81	12.9	900	700	.6	1620	7.8	6.4
DEC.											
15...	.03	.09	1630	2.22	61.6	1000	780	1.1	1930	8.1	3.8
24...	.00	.13	1780	2.42	2.21	1100	850	1.1	2060	8.0	5.2
JAN.											
08...	.00	.11	1990	2.71	75.2	1300	--	1.3	2380	7.9	--
17...	.00	.40	1710	2.33	73.9	1100	800	1.0	2020	8.0	5.8
25...	.00	.13	1500	2.04	56.7	960	700	1.4	1920	8.1	4.0
FEB.											
05...	.00	.05	1520	2.07	45.1	930	680	1.6	1930	7.9	6.2
15...	.00	.03	1500	2.04	48.6	900	680	1.6	1900	8.1	3.5
28...	.00	.07	1490	2.03	48.3	900	650	1.6	1900	8.0	4.9
MAR.											
05...	.00	.16	1600	2.18	51.8	940	690	1.9	1950	8.1	3.8
15...	.00	.25	895	1.22	176	510	250	1.8	1290	8.1	4.1
APR.											
05...	--	.07	1770	2.41	95.6	1100	810	1.5	2120	8.1	4.1
15...	--	.08	1550	2.11	58.6	940	690	1.4	1920	8.2	3.1
25...	.00	.25	1270	1.73	110	710	510	1.2	1580	7.8	6.4
MAY											
02...	.03	.86	664	.90	59.2	440	300	.6	898	7.7	5.4
15...	.03	.34	1420	1.93	95.8	850	590	1.5	1740	8.0	5.0
25...	.00	.26	1640	2.23	62.0	1000	780	1.4	1930	7.9	5.5
JUNE											
05...	.00	.27	1210	1.65	71.9	690	490	1.5	1530	7.9	4.8
13...	--	.42	1480	2.01	22.0	870	660	1.4	1760	8.1	3.3
25...	--	.35	1600	2.18	4.75	980	--	.9	1840	8.0	--
AUG.											
05...	--	1.2	--	--	--	700	530	.3	1300	8.2	2.2
26...	--	--	416	.57	7.08	270	180	.3	566	7.5	5.5
SEP.											
05...	--	.23	1100	1.50	.53	740	620	.4	1320	7.8	3.6
15...	--	.26	1190	1.62	11.6	800	720	.3	1380	7.6	3.9
25...	--	.50	2210	3.01	4.65	1400	1300	.6	2300	7.9	3.1

07324200 WASHITA RIVER NEAR HAMMON, OKLA.--Continued

SULFATE (MG/L AS SO4) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	330	670	1100	990	810	790	630	340	750	830	460	530
2	340	670	1000	1000	720	810	650	320	750	780	400	470
3	360	680	860	1100	750	800	650	340	730	---	310	370
4	350	680	840	1100	770	800	620	340	530	---	410	500
5	350	680	810	1100	780	800	860	380	540	---	580	560
6	370	690	890	1100	760	800	920	450	430	---	310	590
7	400	690	700	1100	770	800	910	480	550	---	450	590
8	420	820	630	1100	800	800	910	510	240	---	560	590
9	440	820	720	1100	800	820	890	540	320	---	630	600
10	480	730	760	1100	800	580	870	560	340	---	580	600
11	170	700	790	1200	800	340	500	570	650	---	580	620
12	230	700	820	1200	800	380	540	610	550	---	590	630
13	180	610	850	1200	800	380	710	630	700	---	---	620
14	300	640	870	1200	790	350	670	620	720	---	---	600
15	380	690	860	1100	780	360	730	670	750	---	---	600
16	440	730	890	1000	810	380	770	670	780	---	---	610
17	550	780	910	830	810	520	800	710	780	---	---	1000
18	590	810	930	840	800	430	800	740	770	---	---	1100
19	610	840	970	810	780	480	850	750	760	---	---	980
20	630	860	990	740	770	500	340	800	850	---	---	530
21	640	880	1000	630	750	450	450	800	820	---	---	560
22	650	880	1000	620	730	540	540	830	820	---	---	910
23	650	900	980	720	720	560	510	820	820	---	---	910
24	650	910	940	790	730	580	540	820	840	---	---	1100
25	650	920	930	760	700	590	580	820	850	---	---	1100
26	650	920	930	760	740	590	590	660	840	---	180	1100
27	660	920	940	750	740	610	640	810	820	---	190	1000
28	650	950	940	730	770	600	670	730	810	---	200	---
29	660	1000	930	740	---	620	690	820	840	630	380	---
30	640	1100	920	780	---	610	440	780	840	390	510	890
31	670	---	940	750	---	620	---	760	---	320	510	---
MONTH	490	800	890	940	770	590	670	640	690	---	---	720

DISSOLVED SO4 DISCHARGE (TONS/DAY) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.88	15	28	22	28	26	43	224	13	0.20	0.56	0.02
2	1.0	14	26	19	25	26	42	322	14	0.08	0.56	0.98
3	1.2	12	30	16	26	26	38	200	19	---	0.28	0.84
4	0.94	11	32	14	25	28	37	142	37	---	0.09	0.52
5	0.63	12	48	27	23	26	53	109	34	---	0.04	0.27
6	0.21	15	46	33	25	24	57	83	17	---	0.04	0.28
7	0.18	17	29	33	25	22	54	96	19	---	0.08	1.0
8	0.12	27	20	27	24	22	49	93	23	---	0.06	0.92
9	0.13	24	19	18	24	24	43	95	42	---	0.08	1.0
10	0.15	17	20	12	24	50	40	87	14	---	0.09	1.6
11	145	14	17	17	21	111	108	68	16	---	0.06	2.2
12	236	21	17	25	24	141	94	66	11	---	0.04	3.1
13	85	23	19	30	24	118	105	66	11	---	---	7.4
14	61	17	26	41	23	80	54	59	12	---	---	6.5
15	52	10	22	38	25	70	41	52	9.5	---	---	5.9
16	47	8.6	18	38	31	65	37	42	8.8	---	---	9.4
17	43	8.6	19	36	30	83	34	40	6.7	---	---	18
18	40	5.2	28	46	32	63	32	38	3.7	---	---	20
19	36	4.3	21	52	32	62	25	35	2.9	---	---	29
20	32	4.4	11	48	31	58	246	30	2.1	---	---	23
21	29	7.6	18	34	33	49	261	26	2.0	---	---	17
22	25	15	25	28	29	59	147	27	2.7	---	---	6.1
23	23	9.2	25	29	27	57	99	24	1.7	---	---	2.2
24	21	15	24	30	27	55	66	21	1.9	---	---	3.2
25	21	9.9	23	29	25	53	52	29	1.9	---	---	4.1
26	18	11	22	29	24	51	41	28	1.8	---	3.0	0.69
27	17	27	24	28	24	53	38	35	1.2	---	2.8	0.08
28	16	22	18	28	25	50	34	27	0.41	---	2.8	---
29	15	21	19	28	---	48	44	26	0.36	0.01	5.3	---
30	14	22	19	29	---	44	148	20	0.29	26	0.98	0.04
31	15	---	21	26	---	44	---	15	---	0.94	0.22	---
MONTH	32	15	24	29	26	54	72	72	11	---	---	5.9

RED RIVER BASIN

07324200 WASHITA RIVER NEAR HAMMON, OKLA.--Continued

CHLORIDE (MG/L AS CL) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	19	47	39	55	54	44	19	51	29	13	14
2	11	20	40	42	50	55	45	11	52	26	12	13
3	11	20	31	44	52	54	45	16	50	---	11	12
4	11	20	30	46	53	54	43	21	37	---	12	14
5	11	20	28	47	53	55	58	28	38	---	15	15
6	12	21	33	48	52	55	62	32	31	---	11	15
7	12	21	22	48	53	55	61	34	39	---	13	15
8	12	29	17	46	54	55	61	36	9.6	---	15	15
9	13	29	23	49	54	56	60	38	11	---	17	15
10	13	23	25	49	55	41	59	39	21	---	15	15
11	8.3	22	27	53	54	16	36	40	45	---	15	16
12	9.2	21	29	55	55	28	38	42	39	---	15	17
13	8.3	16	30	54	55	28	49	44	48	---	---	17
14	10	18	32	51	54	24	46	43	49	---	---	15
15	12	21	31	46	53	27	50	46	51	---	---	15
16	13	23	33	41	55	28	52	46	53	---	---	16
17	15	26	34	29	55	37	54	49	53	---	---	42
18	15	28	36	30	55	31	54	51	52	---	---	45
19	16	30	38	28	53	34	58	52	52	---	---	39
20	17	31	39	24	52	36	21	54	31	---	---	14
21	18	33	41	44	52	32	32	55	29	---	---	15
22	18	32	40	43	50	38	38	56	29	---	---	34
23	18	34	39	49	49	39	36	56	29	---	---	34
24	18	35	36	53	50	41	38	56	30	---	---	44
25	18	35	36	52	48	41	41	55	30	---	---	46
26	18	35	35	52	51	41	41	46	30	---	8.4	44
27	19	35	36	51	51	42	44	55	29	---	8.5	42
28	18	37	36	50	52	42	46	50	28	---	8.8	---
29	19	40	36	51	---	43	47	55	30	17	12	---
30	18	46	35	53	---	42	32	53	30	12	14	33
31	19	---	36	52	---	43	---	52	---	11	14	---
MONTH	14	27	33	46	53	41	46	43	37	---	---	24

DISSOLVED CL DISCHARGE (TONS/DAY) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.03	0.42	1.2	0.85	1.9	1.7	3.0	12	0.87	0.00	0.01	0.00
2	0.03	0.40	1.0	0.76	1.7	1.8	2.9	11	0.94	0.00	0.01	0.02
3	0.03	0.36	1.1	0.67	1.8	1.8	2.7	9.8	1.3	---	0.01	0.02
4	0.03	0.32	1.1	0.57	1.7	1.9	2.6	8.8	2.6	---	0.00	0.01
5	0.02	0.36	1.7	1.1	1.6	1.8	3.6	8.1	2.4	---	0.00	0.00
6	0.00	0.45	1.7	1.4	1.7	1.6	3.8	6.0	1.3	---	0.00	0.00
7	0.00	0.50	0.87	1.4	1.7	1.5	3.6	6.9	1.4	---	0.00	0.02
8	0.00	0.93	0.54	1.1	1.6	1.5	3.3	6.6	0.91	---	0.00	0.02
9	0.00	0.86	0.61	0.75	1.6	1.7	2.9	6.7	1.4	---	0.00	0.02
10	0.00	0.54	0.67	0.52	1.6	3.5	2.7	6.1	0.85	---	0.00	0.04
11	7.0	0.44	0.59	0.73	1.5	5.2	7.7	4.7	1.1	---	0.00	0.05
12	9.6	0.63	0.59	1.1	1.6	10	6.6	4.6	0.75	---	0.00	0.08
13	4.1	0.58	0.66	1.3	1.6	8.7	7.2	4.6	0.72	---	---	0.19
14	2.1	0.47	0.94	1.8	1.6	5.6	3.7	4.1	0.82	---	---	0.16
15	1.6	0.30	0.81	1.6	1.7	5.2	2.8	3.6	0.64	---	---	0.15
16	1.3	0.27	0.68	1.5	2.1	4.8	2.5	2.9	0.59	---	---	0.24
17	1.1	0.28	0.70	1.3	2.1	5.9	2.3	2.8	0.45	---	---	0.73
18	1.0	0.18	1.1	1.6	2.2	4.6	2.2	2.6	0.25	---	---	0.83
19	0.94	0.15	0.82	1.8	2.2	4.4	1.7	2.4	0.19	---	---	1.1
20	0.88	0.16	0.42	1.6	2.1	4.1	15	2.0	0.07	---	---	0.61
21	0.80	0.28	0.74	2.4	2.2	3.6	19	1.8	0.07	---	---	0.43
22	0.68	0.54	1.0	2.0	2.0	4.1	10	1.8	0.09	---	---	0.23
23	0.64	0.34	1.0	2.0	1.9	4.0	7.0	1.7	0.05	---	---	0.08
24	0.59	0.57	0.93	2.0	1.9	3.9	4.6	1.4	0.07	---	---	0.13
25	0.59	0.37	0.87	2.0	1.7	3.7	3.6	1.9	0.07	---	---	0.17
26	0.49	0.43	0.83	2.0	1.6	3.6	2.9	2.0	0.06	---	0.14	0.02
27	0.48	1.0	0.90	1.9	1.6	3.7	2.6	2.4	0.04	---	0.13	0.00
28	0.44	0.84	0.68	1.9	1.7	3.5	2.4	1.9	0.01	---	0.12	---
29	0.42	0.82	0.73	1.9	---	3.4	3.1	1.8	0.01	0.00	0.16	---
30	0.39	0.92	0.74	2.0	---	3.1	11	1.4	0.01	0.80	0.02	0.00
31	0.43	---	0.82	1.8	---	3.0	---	1.0	---	0.03	0.00	---
MONTH	1.2	0.49	0.87	1.5	1.8	3.8	5.0	4.4	0.66	---	---	0.19

07324200 WASHITA RIVER NEAR HAMMON, OKLA.--Continued

DISSOLVED SOLIDS (RESIDUE ON EVAPORATION, MG/L AT 180 DEG. C) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	693	1260	2000	1800	1550	1520	1320	821	1470	1540	907	1030
2	720	1270	1820	1880	1440	1550	1340	656	1480	1450	813	932
3	747	1280	1580	1920	1480	1530	1340	775	1450	---	658	772
4	731	1290	1540	1980	1500	1530	1320	871	1190	---	825	987
5	728	1280	1510	2000	1510	1540	1610	1010	1210	---	1120	1090
6	772	1310	1640	2030	1490	1540	1690	1090	1070	---	673	1130
7	813	1300	1330	2030	1500	1540	1670	1130	1220	---	898	1130
8	841	1520	1200	1990	1530	1540	1670	1180	529	---	1090	1130
9	886	1530	1350	2060	1530	1570	1650	1210	651	---	1200	1140
10	950	1370	1420	2060	1540	1260	1630	1240	866	---	1120	1150
11	436	1330	1470	2170	1530	762	1160	1250	1340	---	1110	1180
12	526	1320	1530	2230	1540	1010	1200	1300	1220	---	1140	1210
13	440	1160	1560	2190	1540	1010	1420	1320	1410	---	---	1190
14	649	1220	1600	2120	1520	935	1370	1320	1440	---	---	1150
15	778	1300	1590	1980	1510	978	1450	1370	1470	---	---	1140
16	886	1360	1640	1840	1550	1000	1500	1380	1510	---	---	1170
17	1060	1440	1660	1530	1550	1190	1530	1430	1510	---	---	1880
18	1130	1500	1710	1560	1540	1070	1530	1460	1500	---	---	1960
19	1170	1540	1760	1500	1520	1130	1600	1480	1490	---	---	1780
20	1210	1590	1800	1390	1500	1160	871	1530	1570	---	---	1030
21	1220	1630	1850	1330	1480	1090	1090	1540	1530	---	---	1090
22	1230	1620	1830	1310	1450	1210	1200	1580	1530	---	---	1660
23	1230	1650	1780	1430	1440	1230	1170	1570	1520	---	---	1660
24	1230	1670	1720	1520	1450	1260	1210	1560	1550	---	---	1930
25	1230	1680	1710	1490	1410	1270	1260	1560	1560	---	---	1980
26	1230	1680	1700	1490	1460	1270	1270	1360	1540	---	446	1940
27	1240	1690	1720	1470	1460	1300	1330	1550	1520	---	459	1870
28	1230	1740	1720	1450	1500	1280	1370	1450	1510	---	481	---
29	1250	1830	1710	1460	---	1310	1390	1560	1540	1210	787	---
30	1220	1970	1690	1510	---	1300	1080	1510	1540	793	1010	1640
31	1260	---	1720	1480	---	1310	---	1490	---	678	996	---
MONTH	960	1480	1640	1750	1500	1270	1380	1310	1360	---	---	1360

DISSOLVED SOLIDS DISCHARGE (TONS/DAY) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.9	28	50	39	54	49	89	541	25	0.37	1.1	0.05
2	2.1	26	47	34	51	50	87	654	27	0.15	1.1	2.0
3	2.4	23	55	30	52	50	80	460	37	---	0.62	1.8
4	2.0	21	58	25	49	54	78	360	84	---	0.20	1.0
5	1.3	23	90	49	45	50	100	290	75	---	0.09	0.52
6	0.43	29	84	60	48	46	105	203	43	---	0.09	0.55
7	0.37	32	54	60	49	42	99	227	43	---	0.17	2.0
8	0.25	49	39	48	46	42	90	213	50	---	0.11	1.8
9	0.26	45	37	32	46	47	80	213	86	---	0.16	2.0
10	0.30	32	38	22	46	109	75	191	35	---	0.18	3.0
11	366	27	32	30	41	251	251	148	34	---	0.12	4.1
12	547	39	31	44	46	372	211	140	24	---	0.09	5.9
13	214	44	34	53	46	312	211	140	21	---	---	14
14	131	33	47	75	45	215	111	124	24	---	---	12
15	107	19	41	69	49	193	82	107	19	---	---	11
16	93	16	34	69	59	174	73	86	17	---	---	18
17	83	16	34	66	58	189	66	81	13	---	---	33
18	76	9.7	51	84	62	157	62	75	7.3	---	---	36
19	69	7.9	39	97	61	147	48	68	5.6	---	---	53
20	62	8.2	19	90	61	135	623	58	3.9	---	---	45
21	56	14	33	72	64	121	639	50	3.8	---	---	32
22	47	27	46	60	59	131	331	51	4.9	---	---	11
23	43	17	46	58	54	126	227	47	3.1	---	---	4.0
24	40	28	45	57	55	119	147	40	3.6	---	---	5.7
25	40	18	42	56	50	113	113	55	3.6	---	---	7.5
26	33	21	40	56	47	110	89	59	3.3	---	7.6	1.3
27	32	50	43	56	47	112	79	67	2.1	---	6.9	0.15
28	30	39	33	55	49	107	70	55	0.77	---	6.6	---
29	28	38	35	55	---	102	90	51	0.66	0.03	11	---
30	28	40	36	57	---	95	365	39	0.54	54	1.9	0.08
31	29	---	39	52	---	92	---	29	---	2.0	0.43	---
MONTH	70	27	44	55	51	126	159	159	23	---	---	11

RED RIVER BASIN

07324200 WASHITA RIVER NEAR HAMMON, OKLA.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	888	1510	2320	2100	1920	1890	1660	1080	1830	1810	1120	1260
2	918	1520	2120	2180	1800	1920	1680	888	1840	1720	1020	1150
3	947	1530	1860	2230	1840	1900	1680	1030	1800	---	850	975
4	930	1540	1820	2300	1870	1900	1650	1140	1510	---	1030	1210
5	927	1530	1780	2320	1870	1910	1990	1290	1530	---	1350	1320
6	975	1560	1920	2350	1850	1910	2080	1390	1360	---	866	1370
7	1020	1550	1580	2360	1870	1910	2060	1440	1540	---	1110	1370
8	1050	1790	1440	2310	1900	1910	2060	1490	741	---	1320	1370
9	1100	1800	1610	2380	1900	1940	2040	1530	882	---	1450	1380
10	1170	1630	1680	2380	1910	1590	2010	1560	1130	---	1350	1390
11	607	1580	1740	2500	1900	1010	1470	1570	1680	---	1350	1420
12	706	1570	1800	2570	1910	1300	1520	1630	1540	---	1370	1450
13	611	1400	1840	2530	1910	1300	1770	1660	1760	---	---	1430
14	840	1460	1880	2450	1890	1210	1710	1650	1790	---	---	1390
15	981	1550	1870	2290	1870	1260	1800	1710	1830	---	---	1380
16	1100	1620	1920	2140	1920	1290	1860	1720	1870	---	---	1410
17	1290	1710	1950	1810	1920	1500	1900	1780	1870	---	---	2190
18	1370	1770	2000	1840	1910	1370	1900	1820	1860	---	---	2270
19	1410	1820	2060	1770	1880	1440	1980	1840	1850	---	---	2080
20	1450	1870	2110	1650	1860	1470	1140	1900	1850	---	---	1260
21	1460	1910	2150	1670	1840	1390	1390	1910	1800	---	---	1320
22	1480	1900	2130	1640	1800	1530	1520	1950	1800	---	---	1950
23	1480	1940	2080	1780	1790	1550	1480	1940	1790	---	---	1950
24	1480	1960	2010	1890	1800	1590	1530	1930	1830	---	---	2240
25	1480	1970	2000	1850	1760	1600	1590	1930	1840	---	---	2300
26	1480	1970	1990	1850	1820	1600	1600	1700	1820	---	618	2250
27	1490	1980	2040	1830	1820	1630	1670	1920	1790	---	632	2180
28	1480	2040	2010	1810	1860	1610	1710	1800	1780	---	656	---
29	1500	2130	2000	1820	---	1640	1740	1930	1820	1450	991	---
30	1460	2290	1980	1870	---	1630	1380	1870	1820	998	1230	1920
31	1510	---	2010	1840	---	1650	---	1850	---	872	1220	---
MONTH	1180	1750	1920	2070	1860	1590	1720	1640	1670	---	---	1610

TEMPERATURE (DEG. C) OF WATER , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
(ONCE-DAILY)

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

ARKANSAS RIVER BASIN

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07324300 FOSS RESERVOIR NEAR FOSS, OKLA.

LOCATION.--Lat 35°32'18", long 99°10'40", in S 1/2 sec.2, T.12 N., R.19 W., Custer County, near 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).

DRAINAGE AREA.--1,496 mi² (3,875 km²).

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	RESER- VOIR STORAGE (AC-FT)	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)	ALKA- LINITY AS CACO3 (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED NITRATE (N) (MG/L)	DIS- SOLVED NITRATE (NO3) (MG/L)	DIS- SOLVED NITRITE (N) (MG/L)
OCT. 18...	103500	210	150	100	147	0	121	--	51	.05	.22	.02
NOV. 26...	103300	210	150	110	144	10	135	1100	51	.00	.00	.01
JAN. 24...	103100	210	150	100	158	0	130	--	54	.08	.35	.00
FEB. 28...	103500	220	150	100	161	0	132	1100	59	.07	.31	.01
APR. 12...	103800	220	150	100	171	0	140	1100	50	.06	.27	.00
JUNE 10...	115700	210	140	95	173	0	142	--	48	--	--	--
28...	114100	210	140	97	162	0	133	1100	52	.07	.31	.01
DATE	DIS- SOLVED NITRITE (NO2) (MG/L)	DIS- SOLVED NITRATE (N) (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)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (JTU)	CARBON DIOXIDE (CO2) (MG/L)
OCT. 18...	.07	.07	1900	2.58	1100	1000	1.3	2160	7.9	--	0	3.0
NOV. 26...	.03	.01	1880	2.56	1100	1000	1.4	2150	8.4	11.0	5	1.0
JAN. 24...	.00	.08	1920	2.61	1100	970	1.3	2190	8.3	--	--	1.3
FEB. 28...	.03	.08	1920	2.61	1200	1000	1.3	2180	8.2	5.0	2	1.6
APR. 12...	.00	.06	1900	2.58	1200	1000	1.3	2200	8.2	14.0	3	1.7
JUNE 10...	--	.08	1800	2.45	1100	960	1.2	2110	8.1	--	--	2.2
28...	.03	.08	1840	2.50	1100	970	1.3	2100	8.2	--	--	1.6

RED RIVER BASIN

07324400 WASHITA RIVER NEAR FOSS, OKLA.

LOCATION.--Lat 35°32'20", long 99°10'10", in SW 1/4 SW 1/4 sec.1, T.12 N., R.19 W., Custer County, at gaging station at bridge on county road, 0.4 mi (0.6 km) downstream from Oak Creek, 0.9 mi (1.4 km) downstream from Foss Dam, 2.5 mi (4.0 km) west of Stafford, 6.0 mi (9.7 km) north of Foss, and at mile 473.5 (761.9 km).

DRAINAGE AREA.--1,511 mi² (4,017 km²).

PERIOD OF RECORD.--Chemical analyses: October 1946 to September 1948, water years 1950-51 and 1956 (partial-record station), October 1969 to current year.

Water temperatures: October 1946 to September 1948, October 1969 to current year.

EXTREMES, Current year.--Specific conductance: Maximum daily, 2,840 micromhos/cm Aug. 13; minimum daily, 175 micromhos/cm Aug. 27.

Water temperatures: Maximum, 27.0°C July 18, Aug. 17; minimum, -0.5°C Jan. 9-11.

Period of record.--Specific conductance (1969-74): Maximum daily, 2,840 micromhos/cm Aug. 13, 1974; minimum daily, 164 micromhos/cm Mar. 30, 1973.

Water temperatures: Maximum, 35.0°C Aug. 10-11, 1948; minimum, -0.5°C Jan. 9-11, 1974.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

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 (CU3) (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED NITRATE (N) (MG/L)	DIS- SOLVED NITRATE (NO3) (MG/L)	DIS- SOLVED NITRITE (N) (MG/L)
OCT.												
11...	108	29	13	11	157	0	129	17	6.2	.27	1.2	.01
15...	12	52	32	27	284	1	235	73	11	.54	2.4	.02
25...	4.7	85	53	37	347	10	301	170	13	.62	2.7	.01
NOV.												
05...	4.0	100	60	43	420	0	344	210	19	.68	3.0	.01
15...	3.8	110	62	41	443	0	363	240	14	.32	1.4	.01
25...	4.0	84	68	42	274	41	293	260	14	.45	2.0	.01
DEC.												
05...	3.8	110	67	44	430	0	353	260	14	.38	1.7	.01
15...	3.7	110	70	45	410	0	336	310	13	.35	1.6	.00
25...	4.0	110	71	45	392	0	322	320	14	.55	2.4	.00
JAN.												
05...	1.9	130	75	62	449	0	368	330	40	.85	3.8	.01
15...	7.1	90	59	41	417	0	342	190	15	.63	2.8	.01
25...	6.7	79	45	37	374	0	307	140	21	.70	3.1	.00
FEB.												
15...	4.7	130	81	47	426	0	349	390	17	.68	3.0	.01
24...	3.2	140	88	53	415	0	340	450	15	.49	2.2	.00
MAR.												
05...	2.7	150	92	62	440	0	361	480	17	.34	1.5	.01
11...	82	32	19	--	191	0	157	33	10	.56	2.5	.01
25...	8.3	80	46	54	361	0	296	170	--	1.0	4.6	.07
APR.												
05...	5.8	84	53	36	374	0	307	170	13	--	--	--
11...	170	34	14	16	193	0	158	13	11	--	--	--
25...	4.5	91	55	38	394	0	323	180	13	--	--	--
MAY												
05...	50	36	21	--	206	3	174	44	8.6	--	--	--
15...	14	51	39	31	270	8	235	110	11	--	--	--
25...	60	63	36	27	255	0	209	140	13	--	--	--
JUNE												
05...	11	70	41	31	317	6	270	120	13	--	--	--
15...	11	35	37	33	227	12	206	93	13	--	--	--
25...	4.4	37	50	41	206	3	174	190	12	--	--	--
JULY												
05...	1.7	110	62	42	399	0	327	280	13	--	--	--
15...	11	200	150	100	204	0	167	1100	47	--	--	--
25...	46	200	150	100	160	0	131	1100	49	--	--	--
AUG.												
05...	24	210	120	100	175	0	144	1000	49	--	--	--
15...	.83	200	130	86	343	0	281	880	39	--	--	--
27...	493	24	7.5	3.3	92	0	75	18	1.0	--	--	--
SEP.												
05...	5.2	92	48	28	300	0	246	220	8.9	--	--	--
14...	3.3	110	58	43	389	0	319	--	13	--	--	--
25...	15	57	33	24	245	0	201	120	11	--	--	--

RED RIVER BASIN

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07324400 WASHITA RIVER NEAR FOSS, OKLA.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	DIS- SOLVED NITRITE (NO2) (MG/L)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	CARBON DIOXIDE (CO2) (MG/L)
OCT.											
11...	.03	.28	171	.23	49.9	130	1	.4	288	8.1	2.0
15...	.07	.56	352	.48	11.4	260	25	.7	590	8.4	1.8
25...	.03	.63	607	.83	7.70	430	130	.8	904	8.4	2.3
NOV.											
05...	.03	.69	691	.94	7.46	500	160	.8	1010	8.2	4.2
15...	.03	.33	729	.99	7.48	530	170	.8	1100	7.9	8.9
25...	.03	.46	684	.93	7.39	490	200	.8	1000	8.4	2.3
DEC.											
05...	.03	.39	774	1.05	7.94	550	200	.8	1110	8.2	4.3
15...	.00	.35	786	1.07	7.85	560	220	.8	1120	8.1	5.2
25...	.00	.55	777	1.06	8.39	570	250	.8	1120	8.0	6.3
JAN.											
05...	.03	.86	861	1.17	4.42	630	260	1.1	1230	8.0	7.2
15...	.03	.64	634	.86	12.2	470	130	.8	964	8.2	4.2
25...	.00	.70	549	.75	9.93	380	73	.8	848	8.1	4.8
FEB.											
15...	.03	.69	946	1.29	12.0	660	310	.8	1310	8.0	6.8
24...	.00	.49	1010	1.37	8.73	710	370	.9	1370	8.0	6.6
MAR.											
05...	.03	.35	1070	1.46	7.80	750	390	1.0	1440	8.1	5.6
11...	.03	.57	228	.31	50.5	160	3	--	376	8.1	2.4
25...	.23	1.1	598	.81	13.4	390	94	1.2	--	8.1	4.6
APR.											
05...	--	.23	573	.78	8.97	430	120	.8	899	8.2	3.8
11...	--	.13	210	.29	96.4	140	0	.6	340	7.5	9.8
25...	--	.39	637	.87	7.74	450	130	.8	948	8.2	4.0
MAY											
05...	--	.71	269	.37	36.3	180	6	--	422	8.5	1.1
15...	--	.95	422	.57	16.0	290	55	.8	686	8.6	1.2
25...	--	1.1	450	.61	72.9	310	96	.7	664	7.8	6.5
JUNE											
05...	--	.95	472	.64	14.0	340	70	.7	732	8.4	2.1
15...	--	.88	359	.49	10.7	240	34	.9	--	8.6	1.0
25...	--	.49	464	.63	5.51	300	130	1.0	916	8.4	1.4
JULY											
05...	--	.93	743	1.01	3.41	530	200	.8	--	8.1	5.1
15...	--	.61	1870	2.54	55.5	1100	930	1.3	2130	7.8	5.2
25...	--	.48	1860	2.53	231	1100	970	1.3	2110	7.8	4.1
AUG.											
05...	--	.38	1840	2.50	119	1000	860	1.4	2090	7.9	3.5
15...	--	.03	1700	2.31	3.81	1000	720	1.2	1980	7.6	14
27...	--	.67	112	.15	149	91	16	.2	175	8.0	1.5
SEP.											
05...	--	.65	591	.80	8.30	430	180	.6	1050	7.9	6.0
14...	--	.47	753	1.02	6.71	510	190	.8	1050	8.2	3.9
25...	--	.60	397	.54	16.1	280	79	.6	617	7.9	4.9

RED RIVER BASIN

07324400 WASHITA RIVER NEAR FOSS, OKLA.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	766	997	1110	1190	922	1360	864	353	704	1010	2120	1010
2	798	1000	1110	1230	---	1440	907	359	719	1030	2130	522
3	---	991	1110	1270	857	1430	916	332	718	1060	2080	526
4	803	988	1110	1230	857	1430	898	422	736	1060	2090	742
5	885	988	1060	1190	889	1420	887	422	732	1060	2090	851
6	864	1040	1060	1190	880	1430	1020	422	724	1130	2030	983
7	863	1050	1080	1180	997	1460	1030	501	721	1130	2080	903
8	872	1010	1100	1170	950	1500	1030	629	---	1120	2100	1000
9	882	1010	1090	1250	920	1500	952	632	404	1160	2100	997
10	889	1020	1100	1190	919	437	984	659	457	1180	1670	1120
11	278	1020	1100	1250	916	373	261	659	549	1220	1660	940
12	---	1030	1100	1280	1150	436	393	658	618	1150	1670	1050
13	---	1080	1140	1520	1150	416	394	676	653	1340	2840	1050
14	---	1050	1140	1520	1220	574	612	686	690	2650	1990	1050
15	574	1050	1110	942	1270	673	614	775	690	2130	1980	---
16	635	1100	1110	1340	1290	582	692	---	696	2080	2330	1060
17	700	1080	1110	825	1290	673	770	813	695	2120	2340	1030
18	729	1080	1140	825	1290	689	794	804	699	2060	2600	1590
19	769	1080	1130	843	1300	692	843	749	713	2120	2600	407
20	802	1070	1130	844	1260	700	---	793	733	2100	2780	446
21	901	1060	1130	846	1360	697	804	367	733	2110	2200	532
22	901	1070	1120	846	1360	731	804	710	744	2100	2180	529
23	885	1070	1150	840	1380	834	904	---	872	2110	---	608
24	897	1080	1150	838	1370	830	965	---	865	2110	---	618
25	904	1080	1120	816	---	829	936	664	916	2110	---	617
26	956	1080	1140	821	1330	860	936	696	919	2120	1730	1300
27	956	1090	1140	819	1370	848	968	675	955	2120	175	1300
28	956	1090	1160	843	1380	831	1040	676	958	2110	560	1400
29	953	1100	1160	826	---	844	217	681	1000	2120	759	1400
30	972	1090	1160	1080	---	844	316	690	1000	2120	781	1400
31	986	---	1170	925	---	852	---	683	---	2120	1000	---
MONTH	829	1050	1120	1060	1150	910	785	614	745	1710	1880	930

TEMPERATURE (DEG. C) OF WATER , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
(ONCE-DAILY)

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

07325500 WASHITA RIVER AT CARNEGIE, OKLA.

LOCATION.--Lat 35°07'02", long 98°33'49", in NW 1/4 NW 1/4 sec.3, T.7 N., R.13 W., Caddo County, at gaging station at bridge on State Highway 9, 1,300 ft (362.2 m) upstream from Running Creek, 2.7 mi (4.3 km) east of Carnegie, and at mile 353.9 (569.4 km).

DRAINAGE AREA.--3,129 mi² (8,104 km²) includes that of Running Creek.

PERIOD OF RECORD.--Chemical analyses: Water years 1948-53 (partial-record station), October 1953 to current year.

Water temperatures: October 1953 to current year.

Sediment records: May 1947 to September 1950.

EXTREMES, Current year.--Dissolved solids: Maximum, 2,000 mg/l July 26-31; minimum, 333 mg/l Sept. 4-5.

Hardness: Maximum, 1,200 mg/l Jan. 10-13, 14-18, Mar. 1-11; minimum, 230 mg/l Sept. 4-5.

Specific conductance: Maximum daily, 2,700 micromhos/cm July 27; minimum daily, 452 micromhos/cm Sept. 4.

Water temperatures: Maximum, 35.0°C July 3; minimum, freezing point on Jan. 2-4.

Period of record.--Dissolved solids: Maximum, 2,480 mg/l Feb. 16, 1971; minimum, 86 mg/l Sept. 24-25, 1971.

Hardness: Maximum, 1,480 mg/l May 9-10, 1956; minimum, 102 mg/l Apr. 12, 1967.

Specific conductance: Maximum daily, 3,530 micromhos/cm Aug. 26, 1954; minimum daily, 197 micromhos/cm Sept. 25, 1971.

Water temperatures: Maximum, 35.0°C Sept. 2, 1971, July 3, 1974; minimum, freezing point on many days during winter months.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

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)	ALKA- LITY AS CACO3 (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED NITRATE (N) (MG/L)	DIS- SOLVED NITRATE (NO3) (MG/L)	DIS- SOLVED NITRITE (N) (MG/L)
OCT.												
01-04	261	100	32	41	185	0	152	250	36	.87	3.9	.01
05-07	874	77	19	31	138	0	113	170	30	.75	3.3	.01
08-11	256	120	32	47	201	0	165	300	43	1.9	8.4	.01
12-16	898	89	26	31	163	0	134	200	27	.82	3.6	.00
17-21	216	150	46	61	253	0	208	380	53	1.2	5.3	.00
22-25	142	200	61	82	306	0	251	510	75	1.2	5.3	.01
26-31	123	180	68	100	326	0	267	610	24	1.3	5.6	.03
NOV.												
01-10	113	240	75	100	284	0	233	680	110	1.3	5.6	.03
11-14	108	--	78	110	281	0	230	740	110	1.5	6.6	.01
15-28	117	250	81	100	327	0	268	750	110	.83	3.7	.01
29-30	100	260	94	120	264	0	217	--	120	1.1	4.7	.04
DEC.												
01-11	117	270	82	110	329	0	270	810	110	1.1	4.8	.01
12-22	103	290	88	110	345	0	283	870	110	1.3	5.7	.01
23-31	112	290	98	110	338	0	277	880	110	1.4	6.4	.06
JAN.												
01-09	94	300	97	120	330	0	271	890	130	1.7	7.5	.01
10-13	68	310	96	140	379	0	311	980	140	1.9	8.4	.01
14-18	65	310	96	120	357	0	293	930	120	2.0	8.7	.00
19-31	71	290	90	110	337	0	276	890	110	1.5	6.6	.01
FEB.												
01-18	93	300	97	120	340	0	279	940	120	.78	3.5	.01
19-28	109	280	97	120	307	0	252	940	120	.42	1.9	.02
MAR.												
01-11	149	300	100	120	306	0	251	960	140	.80	3.5	.02
12-15	729	110	37	36	175	0	144	300	25	.98	4.3	.01
16-21	195	180	69	58	258	0	212	560	43	.97	4.3	.03
22-31	126	230	86	77	287	0	235	710	63	.87	3.9	.02
APR.												
01-13	107	250	92	100	282	0	231	--	93	--	--	--
14-16	235	130	44	32	160	0	131	--	24	--	--	--
17-20	122	190	71	55	243	0	199	580	45	--	--	--
21-30	154	240	85	85	266	0	218	780	74	--	--	--
MAY												
01-02	1945	110	31	30	165	0	135	300	26	--	--	--
03-04	2990	75	18	22	128	0	105	170	22	--	--	--
05-13	495	120	47	40	207	0	170	360	34	--	--	--
14-23	185	200	72	60	270	0	221	600	54	--	--	--
24-31	510	130	39	36	165	0	135	370	34	--	--	--
JUNE												
01-08	114	240	70	78	290	0	238	710	72	1.3	5.8	.00
09-14	335	140	31	24	155	0	127	--	18	1.1	4.9	.00
15-18	980	230	54	52	230	0	189	600	47	.79	3.5	.01
19-30	540	240	72	100	228	0	187	770	110	.54	2.4	.00
JULY												
01-14	25	280	82	130	260	0	213	870	160	--	--	--
15-25	9.1	200	50	94	248	0	203	550	110	--	--	--
26-31	22	280	100	140	224	0	184	1000	150	--	--	--

07325500 WASHITA RIVER AT CARNEGIE, OKLA.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

		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)	ALKA- LINITY AS CACO3 (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED NITRATE (N) (MG/L)	DIS- SOLVED NITRATE (NO3) (MG/L)	DIS- SOLVED NITRITE (N) (MG/L)
DATE	DIS- CHARGE (CFS)											
AUG.												
01-10	169	220	91	110	206	0	169	790	99	--	--	--
11-12	1140	75	14	21	113	0	93	170	15	--	--	--
13-16	84	--	44	48	131	0	107	470	45	--	--	--
17-26	43	240	60	100	182	0	149	680	120	--	--	--
27-31	2610	90	14	12	98	0	80	200	9.1	--	--	--
SEP.												
01-03	349	--	31	21	118	0	97	370	14	--	--	--
04-05	738	66	16	8.6	126	0	103	140	5.6	--	--	--
06-09	238	130	33	21	141	0	116	340	15	--	--	--
10-20	178	200	60	44	219	0	180	580	37	--	--	--
21-30	588	110	30	27	156	0	128	290	21	--	--	--
		DIS- SOLVED NITRITE (NO2) (MG/L)	DIS- SOLVED NITRATE PLUS (N) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	CARBON DIOXIDE (CO2) (MG/L)
OCT.												
01-04		.03	.88	603	.82	425	380	230	.9	902	8.0	3.0
05-07		.03	.76	466	.63	1100	270	160	.8	679	7.9	2.8
08-11		.03	1.9	682	.93	471	430	270	1.0	994	7.8	5.1
12-16		.03	.83	492	.67	1190	330	200	.7	752	7.9	3.3
17-21		.00	1.2	894	1.22	521	560	360	1.1	1240	8.2	2.6
22-25		.03	1.2	1180	1.60	452	750	500	1.3	1600	8.2	3.1
26-31		.10	1.3	1400	1.90	465	730	460	1.6	1780	8.2	3.3
NOV.												
01-10		.10	1.3	1490	2.03	455	910	680	1.4	1840	8.2	2.9
11-14		.03	1.5	1590	2.16	464	--	--	--	1950	8.1	3.6
15-28		.03	.84	1530	2.08	483	960	690	1.4	1870	8.3	2.6
29-30		.13	1.1	1730	2.35	--	1000	820	1.6	2100	8.2	2.7
DEC.												
01-11		.03	1.1	1640	2.23	518	1000	740	1.5	2030	8.1	4.2
12-22		.03	1.3	1730	2.35	481	1100	800	1.5	2110	8.2	3.5
23-31		.20	1.5	1750	2.38	529	1100	850	1.4	2110	8.1	4.3
JAN.												
01-09		.03	1.7	1840	2.50	467	1100	880	1.5	2190	8.1	4.2
10-13		.03	1.9	1960	2.67	360	1200	860	1.8	2320	8.1	4.8
14-18		.00	2.0	1880	2.56	330	1200	880	1.5	2200	8.1	4.5
19-31		.03	1.5	1780	2.42	341	1100	820	1.4	2120	8.1	4.3
FEB.												
01-18		.03	.79	1840	2.50	462	1100	870	1.5	2300	8.0	5.4
19-28		.07	.44	1790	2.43	527	1100	850	1.6	2220	8.0	4.9
MAR.												
01-11		.07	.82	1920	2.61	772	1200	910	1.5	2360	8.1	3.9
12-15		.03	.99	639	.87	1260	430	280	.8	914	7.6	7.0
16-21		.10	1.0	1130	1.54	595	730	520	.9	1480	8.0	4.1
22-31		.07	.89	1450	1.97	493	930	690	1.1	1840	8.0	4.6
APR.												
01-13		--	.53	1650	2.24	--	1000	770	1.4	2040	8.1	3.6
14-16		--	1.9	790	1.07	--	510	370	.6	1070	7.8	4.1
17-20		--	.78	1170	1.59	385	770	570	.9	1510	7.9	4.9
21-30		--	.76	1520	2.07	632	950	730	1.2	1880	8.0	4.3
MAY												
01-02		--	.52	627	.85	3290	400	270	.7	888	7.4	11
03-04		--	.82	421	.57	3400	260	160	.6	610	7.8	3.2
05-13		--	.74	798	1.09	1070	490	320	.8	1100	7.9	4.2
14-23		--	.80	1230	1.67	614	800	570	.9	1560	7.9	5.4
24-31		--	.79	752	1.02	1040	490	350	.7	1044	7.3	13
JUNE												
01-08		.00	1.3	1420	1.93	437	890	650	1.1	1740	8.1	3.7
09-14		.00	1.1	766	1.04	--	480	350	.5	992	7.8	3.9
15-18		.03	.80	1160	1.58	3070	800	610	.8	1450	8.1	2.9
19-30		.00	.54	1530	2.08	2230	900	710	1.5	1840	7.9	4.6
JULY												
01-14		--	.62	1800	2.45	121	1000	790	1.8	2210	8.1	3.3
15-25		--	1.0	1230	1.67	30.2	710	510	1.5	1620	7.9	5.0
26-31		--	.97	2000	2.72	119	1100	920	1.8	2380	7.9	4.5

RED RIVER BASIN

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07325500 WASHITA RIVER AT CARNEGIE, OKLA.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	DIS- SOLVED NITRITE (NO2) (MG/L)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	CARBON DIOXIDE (CO2) (MG/L)
AUG.											
01-10	--	.67	1620	2.20	739	920	750	1.6	1960	7.7	6.6
11-12	--	2.8	377	.51	1160	250	160	.6	572	7.7	3.6
13-16	--	.58	925	1.26	210	--	--	--	1230	7.7	4.2
17-26	--	.94	1460	1.99	170	850	700	1.5	1830	7.8	4.6
27-31	--	4.8	406	.55	2860	280	200	.3	588	7.7	3.1
SEP.											
01-03	--	.81	671	.91	632	--	--	--	893	7.6	4.7
04-05	--	.69	333	.45	664	230	130	.2	503	7.7	4.0
06-09	--	.78	669	.91	430	460	340	.4	907	7.9	2.8
10-20	--	1.1	1090	1.48	524	750	570	.7	1370	8.1	2.8
21-30	--	.84	594	.81	943	400	270	.6	836	7.9	3.1

RED RIVER BASIN

07325500 WASHITA RIVER AT CARNEGIE, OKLA.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	728	1800	2110	2090	2200	---	1880	923	1550	2130	2280	864
2	882	1840	2100	2100	2210	2220	1950	786	1550	2200	2400	922
3	878	1820	2020	2090	2200	2210	1950	616	1780	2190	2400	917
4	983	1820	1700	2200	2210	2270	1970	590	1780	2180	2360	452
5	702	1900	1700	2040	2210	2270	1970	818	1790	2170	1820	544
6	525	1830	2020	2240	2200	2340	2620	892	1870	2240	1530	738
7	745	1820	2020	2280	2270	2360	2030	976	1880	2180	1560	858
8	907	1840	2050	2280	2240	2330	1990	982	1790	2280	1950	964
9	1030	1810	2050	2190	2240	2280	2070	1200	1140	2260	2070	1060
10	917	1840	2050	2300	2240	2180	2030	1200	1130	2360	1370	1130
11	1000	1890	2060	2270	2230	2270	1940	1200	739	2370	607	1200
12	648	1980	1980	2320	2210	776	2070	1320	777	2260	517	1270
13	700	1970	1970	2320	2220	848	2030	1320	1010	2060	942	1390
14	739	1970	1990	2230	2210	948	992	1420	1130	2050	1210	1400
15	779	1840	2030	2210	2210	989	1110	1420	1300	1580	1230	1400
16	781	1910	2040	2170	2210	1230	1050	1500	1470	1970	1460	1420
17	1040	1800	2050	2170	2220	1230	1330	1590	1460	1840	---	1500
18	1040	1800	2030	2100	2210	1330	1450	1560	1570	1830	1910	1340
19	1200	1840	2050	2020	2150	1470	1500	1560	1780	1490	1900	1510
20	1300	1790	2130	2000	2130	1580	1610	1560	1790	1500	2070	1540
21	1380	1770	2130	2020	2130	1580	1760	1620	1790	1440	2100	775
22	1470	1830	2140	2140	2120	1680	1930	1660	1820	1420	1800	453
23	1560	1880	2090	2100	2130	1680	1710	1480	1820	1450	1680	673
24	1560	1880	2100	2100	2130	1700	1710	805	1820	1550	1680	738
25	1610	1910	2030	2130	2210	1740	1790	1100	1900	1720	1460	818
26	1680	1870	2030	2160	2210	1770	1860	729	1900	2350	1730	632
27	1680	1980	2030	2160	2210	1800	1930	818	2020	2700	472	---
28	1700	1850	2020	2140	2140	1830	1940	1140	2020	2400	620	1080
29	1700	2120	2040	2180	---	1880	1860	1140	2090	2350	505	1080
30	1830	2120	2060	2180	---	1890	1970	1140	2100	2230	513	1170
31	1830	---	2080	2170	---	1880	---	1280	---	2210	728	---
MONTH	1150	1880	2030	2160	2200	1750	1800	1170	1620	2030	1500	1030

TEMPERATURE (DEG. C) OF WATER , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22.0	14.0	12.5	2.0	7.0	---	20.0	18.0	27.0	27.0	29.0	25.0
2	21.5	13.0	13.0	0.0	9.0	---	18.0	20.0	26.5	30.0	26.0	23.0
3	22.0	15.0	13.5	0.0	10.0	---	18.0	21.0	26.0	35.0	25.0	20.0
4	21.0	13.0	13.0	0.0	9.0	---	14.0	23.0	27.0	27.0	26.0	24.0
5	21.0	12.0	11.0	4.0	10.0	---	12.0	22.0	24.0	30.0	25.0	23.0
6	21.0	12.0	5.0	2.0	9.0	---	14.0	21.0	26.5	28.0	24.0	22.0
7	21.0	10.0	5.0	4.0	9.0	15.0	18.0	24.0	26.0	32.0	25.0	23.0
8	22.0	12.0	5.0	7.0	9.0	17.0	14.0	25.0	28.0	26.0	25.0	24.0
9	23.0	11.0	6.0	4.0	8.0	20.0	13.0	21.0	25.0	26.0	27.0	28.0
10	22.0	9.0	6.5	3.0	7.0	18.0	20.0	22.0	26.0	27.0	25.0	25.0
11	20.0	12.0	6.0	3.0	8.0	15.0	18.0	22.0	23.0	28.0	25.0	26.0
12	21.0	13.0	5.5	3.5	7.0	15.0	18.0	21.0	24.0	26.0	24.0	25.0
13	19.0	13.0	6.0	3.0	6.0	14.0	26.0	28.0	33.0	27.0	25.0	23.0
14	19.0	14.0	8.0	4.0	7.0	14.0	25.0	30.0	28.0	27.0	26.0	22.0
15	20.0	16.0	6.0	2.0	7.0	14.5	20.0	29.0	30.0	26.0	25.0	21.0
16	19.0	14.0	5.0	5.0	6.0	13.0	14.0	28.0	29.0	29.0	30.0	20.0
17	17.0	13.0	7.0	4.0	7.0	14.0	20.0	29.0	30.0	27.0	---	20.0
18	19.0	14.0	6.0	5.0	6.0	16.0	19.0	30.0	31.0	26.0	27.0	21.0
19	20.0	14.0	2.0	5.0	---	16.0	24.0	30.0	26.0	---	27.0	23.0
20	20.0	13.0	2.0	6.0	---	15.0	25.0	28.0	28.0	---	26.0	21.0
21	18.0	13.0	3.0	5.0	---	14.0	27.0	24.0	28.0	32.0	26.0	20.0
22	18.0	12.0	4.0	---	---	14.0	24.0	27.0	27.0	26.0	26.0	22.0
23	18.0	14.0	8.0	7.5	---	6.0	25.0	28.0	23.0	26.0	24.0	20.0
24	17.0	13.0	5.0	5.5	---	8.0	24.0	25.0	27.0	26.0	25.0	20.0
25	17.5	12.0	4.0	5.0	---	10.0	25.0	22.0	22.0	27.0	24.0	11.5
26	17.5	13.0	4.0	8.0	---	13.0	25.0	21.0	22.0	30.0	26.0	12.0
27	16.0	13.0	5.0	8.0	---	16.0	24.0	27.0	24.0	30.0	21.0	27.0
28	12.5	12.0	6.5	6.0	---	---	24.0	---	25.0	30.0	24.0	23.0
29	14.5	12.0	5.5	6.5	---	20.0	20.0	---	26.0	30.0	23.0	23.0
30	12.5	12.0	4.5	7.0	---	18.0	22.0	29.0	29.0	27.0	26.0	20.0
31	12.0	---	1.0	6.5	---	24.0	---	28.0	---	26.0	28.0	---
MONTH	19.0	13.0	6.5	4.5	---	---	20.5	25.0	26.5	28.0	25.5	22.0

RED RIVER BASIN

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07331000 WASHITA RIVER NEAR DURWOOD, OKLA.

LOCATION.--Lat 34°14'03", long 96°58'32", in NW 1/4 SW 1/4 sec.3, T.4 S., R.3 E., Carter County, at gaging station at bridge on U.S. Highway 177, 1.3 mi (2.1 km) downstream from Caddo Creek, 4 mi (6.4 km) north of Durwood, and at mile 63.4 (102.0 km).

DRAINAGE AREA.--7,202 mi² (18,653 km²).

PERIOD OF RECORD.--Chemical analyses: May 1944 to current year.

Water temperatures: April 1947 to current year.

EXTREMES, Current year.--Specific conductance: Maximum daily, 1,490 micromhos/cm Apr. 19; minimum daily, 223 micromhos/cm Nov. 25.

Water temperatures: Maximum, 35.0°C July 14, 21, 23; minimum, freezing point on Jan. 12.

Period of record.--Specific conductance (1944-49, 1950-1974): Maximum daily, 2,120 micromhos/cm Nov. 15, 1963; minimum daily, 94.9 micromhos/cm Nov. 2, 1951.

Water temperatures (1947-74): Maximum, 37.0°C July 8, 1964; minimum, freezing point on many days during winter months.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

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)	ALKA- LINITY AS CACO3 (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED NITRATE (N) (MG/L)	DIS- SOLVED NITRATE (NO3) (MG/L)	DIS- SOLVED NITRITE (N) (MG/L)
OCT.												
01-06	2440	61	17	24	171	0	140	93	32	.62	2.7	.02
07...	3570	48	11	17	160	0	131	--	23	.41	1.8	.02
08-11	2520	68	18	27	192	0	157	100	35	.47	2.1	.01
12...	6540	44	9.9	17	147	0	121	37	26	.45	2.0	.02
13...	16800	36	8.4	11	135	0	111	21	13	.42	1.9	.35
14-16	7770	48	13	18	162	0	133	48	23	.42	1.9	.01
17-20	3100	63	18	26	196	0	161	78	34	.51	2.3	.01
21-24	1380	82	25	37	248	0	203	110	50	.49	2.2	.01
25-27	1030	97	33	46	296	0	243	140	65	.51	2.3	.01
28-31	1620	76	25	36	227	0	186	110	50	.47	2.1	.02
NOV.												
01-04	871	110	37	54	301	10	264	160	73	.51	2.3	.00
05-19	643	110	49	74	293	0	240	230	94	.38	1.7	.00
20-24	6270	64	22	34	189	0	155	110	47	.31	1.4	.02
25-26	35300	32	7.2	10	118	0	97	16	12	.28	1.2	.04
27-30	10700	46	12	18	167	0	137	35	26	.37	1.6	.01
DEC.												
01-06	4550	64	20	29	222	0	182	66	43	.34	1.5	.01
07-20	1350	110	40	--	350	0	287	180	85	.46	2.0	.02
21-31	913	140	48	69	392	0	322	240	100	.54	2.4	.02
JAN.												
01-08	685	120	56	79	343	0	281	260	120	.77	3.4	.00
09-17	638	150	60	81	409	0	335	290	120	.87	3.9	.00
18-28	802	130	58	80	346	0	284	270	110	.58	2.6	.00
29-31	831	120	45	72	325	0	267	220	97	.79	3.5	.00
FEB.												
01-08	644	120	51	72	314	0	258	270	98	.32	1.4	.00
09-20	489	130	65	86	340	0	279	330	120	.22	.97	.03
21-28	1980	99	33	48	250	0	205	180	65	.67	3.0	.00
MAR.												
01-11	973	120	48	69	302	0	248	--	97	1.6	7.3	.16
12-15	3010	74	25	37	191	0	157	150	47	.76	3.4	.03
16-22	1440	120	40	52	252	0	207	270	62	1.3	5.7	.32
23-31	880	130	51	66	331	0	271	270	84	.69	3.1	.07
APR.												
01-21	685	130	59	75	305	0	250	--	100	--	--	--
22-23	1460	--	27	47	188	0	154	160	63	--	--	--
24-29	884	100	41	59	256	0	210	230	77	--	--	--
30...	21400	32	7.4	12	122	0	100	19	13	--	--	--
MAY												
01-04	14900	48	14	26	168	0	138	--	33	--	--	--
05-16	3010	84	26	41	219	0	180	150	52	--	--	--
17-25	665	110	46	62	268	0	220	260	80	--	--	--
26-28	4520	54	18	31	159	0	130	--	40	--	--	--
29-31	2030	92	31	43	196	0	161	200	50	--	--	--
JUNE												
01-15	2180	67	21	33	191	0	157	120	44	--	--	--
16-30	728	110	38	50	255	0	209	240	66	--	--	--
JULY												
06...	430	91	39	57	258	0	212	190	76	--	--	--
17...	154	82	54	78	234	1	194	240	110	--	--	--
21...	120	--	54	93	251	6	216	210	110	--	--	--
AUG.												
03...	162	--	--	89	289	0	237	180	130	--	--	--
12...	2660	34	7.0	15	133	0	109	20	--	--	--	--
23...	240	85	26	41	199	0	163	180	46	--	--	--
SEP.												
07...	721	72	15	20	142	2	120	130	22	--	--	--
19...	657	99	29	49	196	0	161	210	62	--	--	--
26...	13400	42	7.4	13	136	0	112	34	15	--	--	--

RED RIVER BASIN

07331000 WASHITA RIVER NEAR DURWOOD, OKLA.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	DIS- SOLVED NITRITE (NO2) (MG/L)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	CARBON DIOXIDE (CO2) (MG/L)
OCT.											
01-06	.07	.64	344	.47	2270	220	82	.7	556	8.0	2.7
07...	.07	.43	247	.34	2380	170	34	.6	405	8.0	2.6
08-11	.03	.48	379	.52	2580	240	86	.8	619	8.1	2.4
12...	.07	.47	228	.31	4030	150	30	.6	389	8.2	1.5
13...	1.2	.77	181	.25	8210	120	14	.4	301	8.1	1.7
14-16	.03	.43	247	.34	5180	170	41	.6	431	8.0	2.6
17-20	.03	.52	356	.48	2980	230	71	.7	584	8.0	3.1
21-24	.03	.50	470	.64	1750	310	100	.9	760	8.2	2.5
25-27	.03	.52	565	.77	1570	380	140	1.0	911	8.3	2.4
28-31	.07	.49	439	.60	1920	290	110	.9	708	8.0	3.6
NOV.											
01-04	.00	.51	641	.87	1510	430	160	1.1	992	8.5	1.6
05-19	.00	.38	767	1.04	1330	480	240	1.5	1180	8.2	3.0
20-24	.07	.33	399	.54	6760	250	95	.9	646	8.3	1.5
25-26	.13	.32	156	.21	14900	110	13	.4	265	8.3	.9
27-30	.03	.38	237	.32	6850	160	27	.6	415	8.3	1.3
DEC.											
01-06	.03	.35	361	.49	4440	240	60	.8	603	7.9	4.5
07-20	.07	.48	682	.93	2490	440	150	--	1070	8.2	3.5
21-31	.07	.56	814	1.11	2010	550	230	1.3	1240	8.2	4.0
JAN.											
01-08	.00	.77	872	1.19	1610	530	250	1.5	1300	8.1	4.4
09-17	.00	.87	962	1.31	1660	620	290	1.4	1420	8.1	5.2
18-28	.00	.58	890	1.21	1930	560	280	1.5	1340	8.0	5.5
29-31	.00	.79	754	1.03	1690	490	220	1.4	1180	8.0	5.2
FEB.											
01-08	.00	.32	800	1.09	1390	510	250	1.4	1220	7.9	6.3
09-20	.10	.25	957	1.30	1260	590	310	1.5	1420	7.9	6.8
21-28	.00	.67	587	.80	3140	380	180	1.1	926	7.8	6.3
MAR.											
01-11	.53	1.8	801	1.09	2100	500	250	1.3	1210	8.1	3.8
12-15	.10	.79	456	.62	3710	290	130	1.0	715	7.9	3.8
16-22	1.1	1.6	699	.95	2720	460	260	1.1	1060	8.0	4.0
23-31	.23	.76	809	1.10	1920	530	260	1.2	1220	8.2	3.3
APR.											
01-21	--	.46	927	1.26	1710	570	320	1.4	1350	8.0	4.9
22-23	--	.83	483	.66	1900	--	--	--	771	7.7	6.0
24-29	--	.38	667	.91	1590	420	210	1.3	1040	8.0	4.1
30...	--	.95	175	.24	10100	110	10	.5	285	7.7	3.9
MAY											
01-04	--	.47	290	.39	11700	180	40	.9	480	7.9	3.4
05-16	--	.65	500	.68	4060	320	140	1.0	782	8.1	2.8
17-25	--	.37	738	1.00	1330	460	240	1.3	1120	7.9	5.4
26-28	--	.37	343	.47	4190	210	79	.9	543	7.9	3.2
29-31	--	.69	569	.77	3120	360	200	1.0	858	7.9	3.9
JUNE											
01-15	--	.71	404	.55	2380	250	97	.9	654	8.2	1.9
16-30	--	.48	666	.91	1310	430	220	1.0	983	8.2	2.6
JULY											
06...	--	.84	654	.89	759	390	180	1.3	984	8.0	4.1
17...	--	.54	747	1.02	311	430	230	1.6	1170	8.4	1.5
21...	--	.92	741	1.01	240	--	--	--	1120	8.4	1.7
AUG.											
03...	--	.38	715	.97	313	--	--	--	1160	7.7	9.2
12...	--	.17	181	.25	1300	110	1	.6	--	7.7	4.2
23...	--	.82	526	.72	341	320	160	1.0	786	8.0	3.2
SEP.											
07...	--	.94	379	.52	738	240	120	.6	572	8.5	.7
19...	--	.58	598	.81	1060	370	210	1.1	902	8.0	3.1
26...	--	.50	200	.27	7240	140	28	.5	325	7.8	3.4

RED RIVER BASIN

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07331000 WASHITA RIVER NEAR DURWOOD, OKLA.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	INSTANTANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	ALKA- LINITY AS CAC03 (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)
JAN. 25...	625	9.8	140	60	84	3.0	330	0	271	330	120	.5
FEB. 20...	504	7.2	140	64	82	3.4	335	0	275	330	120	.5
MAR. 21...	1170	9.1	110	38	51	5.0	273	0	224	220	70	.5
APR. 17...	555	9.9	120	48	66	4.7	286	0	235	270	89	.4
MAY 23...	567	7.2	110	49	65	4.6	262	0	215	270	87	.3
JUNE 21...	901	9.2	89	29	37	4.5	223	0	183	170	46	.4
JULY 03...	261	12	--	55	69	5.0	294	0	241	270	91	.3
AUG. 07...	146	8.9	66	39	51	4.8	235	0	193	160	57	.3
SEP. 18...	731	--	--	--	--	--	--	--	--	--	--	--
DATE	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (NO3) (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)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)
JAN. 25...	.04	.78	.14	.82	3.6	942	1.28	1590	600	330	1310	7.7
FEB. 20...	.02	.51	.13	.53	2.3	--	--	--	610	340	1420	7.9
MAR. 21...	--	--	--	--	--	671	.91	2120	430	210	1040	8.2
APR. 17...	.62	1.3	.28	1.9	8.5	805	1.09	1210	500	260	1200	8.2
MAY 23...	.01	.76	.17	.77	3.4	770	1.05	1180	480	260	1120	8.2
JUNE 21...	.55	1.8	.45	2.4	10	516	.70	1260	340	160	830	8.1
JULY 03...	.03	.31	.13	.34	1.5	832	1.13	586	--	--	1360	7.8
AUG. 07...	.17	.90	.13	1.1	4.7	526	.72	207	330	130	850	7.7
SEP. 18...	--	--	--	--	--	--	--	--	--	--	900	--
DATE	TEMPER- ATURE (DEG C)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	CARBON DIOXIDE (CO2) (MG/L)	TOTAL PHYTO- PLANK- TON (CELLS PER ML)	CHLORO- PHYLL A (UG/L)	CHLORO- PHYLL B (UG/L)	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)	SUS- PENDE SEDI- MENT (MG/L)	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM
JAN. 25...	6.0	20	12.5	105	11	--	--	--	570	7	171	29
FEB. 20...	10.5	8	10.2	99	6.7	--	--	--	0	810	220	25
MAR. 21...	8.5	100	10.6	95	2.8	--	--	--	1600	650	904	80
APR. 17...	16.0	100	8.9	95	2.9	--	--	--	370	120	414	73
MAY 23...	27.0	30	7.8	105	2.6	--	--	--	--	--	141	69
JUNE 21...	28.0	200	7.1	95	2.8	--	--	--	500	150	160	59
JULY 03...	26.0	20	8.5	109	7.5	--	--	--	420	170	177	43
AUG. 07...	24.5	8	8.2	102	7.5	40000	--	--	--	76	303	52
SEP. 18...	21.0	--	7.9	94	--	7500	33	47	2200	4800	394	96

RED RIVER BASIN

07331000 WASHITA RIVER NEAR DURWOOD, OKLA.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	INSTANTANEOUS DIS- CHARGE (CFS)	TOTAL IRON (FE) (UG/L)	DIS- SOLVED IRON (FE) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	SUS- PENDE MAN- GANESE (MN) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL ARSENIC (AS) (UG/L)	SUS- PENDE ARSENIC (AS) (UG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	TOTAL CAD- MIUM (CD) (UG/L)	SUS- PENDE CAD- MIUM (CD) (UG/L)
APR. 17...	555	7200	30	480	450	30	9.0	5	3	2	10	9
MAY 23...	567	1700	30	210	210	0	7.3	4	2	2	<10	<10
SEP. 18...	731	760	10	40	40	0	9.3	9	6	3	<10	<10

DATE	DIS- SOLVED CAD- MIUM (CD) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	SUS- PENDE CHRO- MIUM (CR) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	TOTAL COBALT (CO) (UG/L)	SUS- PENDE COBALT (CO) (UG/L)	DIS- SOLVED COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)	SUS- PENDE COPPER (CU) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)
APR. 17...	1	10	10	0	<50	--	0	20	10	10	<100
MAY 23...	0	0	0	0	<50	<50	0	10	5	5	<100
SEP. 18...	0	0	0	0	<50	<50	0	10	8	2	<100

DATE	SUS- PENDE LEAD (PB) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	TOTAL MERCURY (HG) (UG/L)	SUS- PENDE MERCURY (HG) (UG/L)	DIS- SOLVED MERCURY (HG) (UG/L)	TOTAL SELE- NIUM (SE) (UG/L)	SUS- PENDE SELE- NIUM (SE) (UG/L)	DIS- SOLVED SELE- NIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	SUS- PENDE ZINC (ZN) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)
APR. 17...	<98	2	.0	.0	.0	1	0	1	60	0	60
MAY 23...	<99	1	.0	.0	.0	1	0	1	80	40	40
SEP. 18...	<100	0	.1	.1	.0	0	0	0	40	30	10

RED RIVER BASIN

07331000 WASHITA RIVER NEAR DURWOOD, OKLA.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
(UNCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	556	883	495	1290	1290	1050	1300	344	793	1190	1110	477
2	563	937	519	1220	1110	1080	1130	466	710	1220	1110	652
3	513	997	550	1280	1100	1050	1120	560	807	1180	1140	564
4	542	1090	583	1280	1120	1080	1140	586	599	1180	888	485
5	---	1100	611	1270	1130	1090	1160	737	600	994	1040	503
6	561	1130	734	1310	1290	1230	1290	635	559	984	1030	549
7	403	1100	962	1290	1360	1240	1380	630	619	1330	834	572
8	531	1160	854	1330	1380	1250	1340	707	411	1170	934	628
9	643	1180	909	1370	---	1270	1340	730	468	1050	929	763
10	720	1190	956	1400	1400	1270	1320	773	657	1010	453	872
11	514	1200	991	1420	1400	1330	1130	844	667	1020	480	888
12	383	1190	1010	1400	1400	615	1340	880	856	1070	275	684
13	298	1110	1080	1430	1410	736	1230	918	703	1100	516	683
14	351	1110	1040	---	1390	621	---	954	790	1080	660	642
15	443	1120	1070	1460	1400	816	1380	979	548	1090	751	743
16	474	1120	1090	1340	1410	997	1290	---	956	1150	752	568
17	547	1200	1140	---	1400	1230	1180	1050	1110	1170	791	734
18	544	1210	1170	1230	1410	970	1360	1070	989	1170	682	859
19	572	1200	1180	1250	1260	943	1490	1110	755	1110	870	902
20	639	521	1090	1230	1380	1020	1480	1110	756	1130	748	---
21	695	444	1200	1240	990	1020	1410	1150	850	1120	694	507
22	752	525	1220	1290	725	---	584	1180	889	1130	826	351
23	768	443	1210	1340	718	1100	898	1190	889	1140	786	614
24	792	372	1230	1350	912	1140	936	1200	997	1150	760	506
25	834	223	1290	1360	847	1140	948	1230	1070	1150	804	326
26	898	279	1290	1380	945	1190	921	548	1110	1140	798	325
27	900	350	1150	1380	960	1210	973	527	1120	1140	419	370
28	663	387	1140	1380	1020	1230	1010	582	1130	---	613	389
29	625	425	1150	1050	---	1260	1030	730	1150	1140	442	442
30	667	446	1160	1150	---	1240	249	1060	1170	1130	707	478
31	825	---	1250	1230	---	---	---	833	---	1120	586	---
MONTH	607	855	1010	1310	1190	1080	1150	844	824	1130	756	589

TEMPERATURE (DEG. C) OF WATER , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
(UNCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21.0	2.0	15.0	2.0	14.0	17.0	23.0	20.0	23.0	32.0	31.0	28.0
2	27.0	2.0	15.0	1.0	16.0	20.0	20.0	22.0	26.0	32.0	30.0	24.0
3	24.0	18.0	16.0	1.0	12.0	21.0	20.0	22.0	24.0	32.0	28.0	24.0
4	23.0	17.0	13.0	4.0	11.0	19.0	17.0	21.0	25.0	31.0	29.0	25.0
5	---	16.0	10.0	4.0	12.0	21.0	19.0	24.0	28.0	32.0	27.0	25.0
6	21.0	14.0	10.0	4.0	9.0	23.0	18.0	23.0	28.0	33.0	27.0	25.0
7	24.0	13.0	13.0	8.0	9.0	23.0	21.0	23.0	26.0	33.0	25.0	25.0
8	26.0	15.0	13.0	7.0	10.0	22.0	19.0	24.0	27.0	33.0	---	25.0
9	27.0	13.0	10.0	3.0	11.0	23.0	19.0	26.0	26.0	32.0	28.0	25.0
10	26.0	13.0	9.0	3.0	11.0	21.0	15.0	26.0	27.0	33.0	24.0	26.0
11	22.0	15.0	14.0	4.0	12.0	21.0	21.0	26.0	29.0	32.0	25.0	28.0
12	22.0	16.0	15.0	0.0	15.0	19.0	24.0	26.0	28.0	33.0	25.0	26.0
13	20.0	17.0	13.0	4.0	14.0	18.0	25.0	26.0	28.0	34.0	28.0	20.0
14	20.0	22.0	11.0	5.0	14.0	17.0	---	26.0	30.0	35.0	29.0	21.0
15	21.0	22.0	14.0	6.0	13.0	15.0	20.0	27.0	29.0	32.0	30.0	22.0
16	22.0	17.0	9.0	10.0	14.0	17.0	21.0	---	29.0	33.0	32.0	22.0
17	21.0	19.0	10.0	---	16.0	17.0	22.0	28.0	25.0	28.0	29.0	22.0
18	21.0	17.0	10.0	12.0	15.0	20.0	23.0	28.0	29.0	28.0	30.0	22.0
19	21.0	19.0	9.0	11.0	13.0	17.0	24.0	30.0	31.0	31.0	30.0	23.0
20	22.0	15.0	3.0	12.0	17.0	16.0	24.0	20.0	31.0	34.0	31.0	---
21	21.0	17.0	11.0	8.0	15.0	14.0	21.0	27.0	34.0	35.0	31.0	24.0
22	22.0	17.0	10.0	10.0	13.0	---	22.0	30.0	28.0	34.0	32.0	21.0
23	22.0	16.0	10.0	9.0	13.0	10.0	25.0	29.0	28.0	35.0	32.0	21.0
24	22.0	17.0	9.0	12.0	10.0	9.0	26.0	27.0	28.0	29.0	30.0	18.0
25	23.0	17.0	7.0	9.0	12.0	15.0	24.0	27.0	29.0	27.0	31.0	18.0
26	23.0	16.0	12.0	10.0	10.0	16.0	24.0	23.0	28.0	34.0	26.0	23.0
27	19.0	15.0	9.0	12.0	13.0	20.0	22.0	24.0	29.0	33.0	26.0	24.0
28	19.0	12.0	11.0	13.0	17.0	21.0	25.0	27.0	29.0	---	26.0	20.0
29	15.0	17.0	10.0	12.0	---	21.0	22.0	32.0	29.0	34.0	25.0	21.0
30	17.0	14.0	12.0	13.0	---	21.0	20.0	32.0	30.0	30.0	26.0	19.0
31	17.0	---	6.0	14.0	---	---	---	27.0	---	31.0	29.0	---
MONTH	21.5	15.5	11.0	7.5	13.0	18.5	21.5	26.0	28.0	32.0	28.5	23.0

RED RIVER BASIN

07332800 CANEY BOGGY CREEK NEAR ASHLAND, OKLA.

LOCATION.--Lat 34°45'11", long 96°08'52", in SW 1/4 SE 1/4 SE 1/4 sec.4, T.3 N., R.11 E., Coal County, at bridge on county road, approximately 2 mi (3.2 km) west of State Highway 31, 2.0 mi (3.2 km) north-east of Parker and 5.0 mi (8.0 km) west of Ashland.

DRAINAGE AREA.--49 mi² (126.9 km²).

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

Water temperatures: February 1972 to current year.

EXTREMES, Current year.--Specific conductance: Maximum daily, 994 micromhos/cm Aug. 1; minimum daily, 56 micromhos/cm June 8.

Water temperatures: Maximum, 33.0°C July 22; minimum, 1.0°C Jan. 11-12.

Period of record.--Specific conductance (1973-74): Maximum daily, 994 micromhos/cm Aug. 1, 1974; minimum daily, 54 micromhos/cm Apr. 16, 1973.

Water temperatures: Maximum, 34.0°C July 13, 1973; minimum, 1.0°C on several days during winter months.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED NITRATE (N) (MG/L)	DIS- SOLVED NITRATE (NO3) (MG/L)	DIS- SOLVED NITRITE (N) (MG/L)	DIS- SOLVED NITRITE (NO2) (MG/L)
OCT.												
05...	16	6.3	10	76	0	62	13	7.5	.09	.40	.01	.03
15...	9.9	3.9	6.7	45	0	37	12	6.8	.14	.62	.03	.10
25...	19	7.6	12	94	0	77	17	9.8	.12	.53	.01	.03
NOV.												
05...	12	5.1	8.4	62	0	51	12	7.1	.06	.27	.00	.00
15...	19	7.7	12	91	0	75	18	11	.19	.84	.00	.00
25...	9.4	3.5	6.5	44	0	36	9.9	6.5	.09	.40	.02	.07
DEC.												
05...	7.9	2.9	5.9	37	0	30	12	5.2	.19	.84	.01	.03
15...	18	7.4	13	83	0	68	23	11	.18	.80	.00	.00
25...	18	7.7	15	68	0	56	31	15	.27	1.2	.01	.03
JAN.												
05...	22	9.6	18	88	0	72	31	15	.44	1.9	.00	.00
15...	29	12	54	104	0	85	42	70	.37	1.6	.00	.00
25...	25	11	20	105	1	88	--	20	.37	1.6	.01	.03
FEB.												
05...	23	11	19	107	0	88	34	17	.03	.13	.00	.00
15...	--	10	20	117	0	96	35	18	.19	.84	.01	.03
25...	12	5.8	13	36	0	30	31	9.8	.08	.35	.02	.07
MAR.												
03...	16	6.9	14	70	0	57	27	10	.02	.09	.00	.00
15...	12	5.4	11	53	0	43	20	6.6	.03	.13	.00	.00
25...	19	7.3	24	50	0	41	51	26	.31	1.4	.02	.07
APR.												
05...	19	8.5	14	88	0	72	--	12	--	--	--	--
11...	10	4.2	7.5	38	0	31	19	6.4	--	--	--	--
25...	22	9.4	16	99	0	81	32	13	--	--	--	--
MAY												
05...	13	5.3	9.0	63	0	52	15	8.4	--	--	--	--
15...	28	12	18	140	0	115	27	13	--	--	--	--
27...	11	3.9	6.9	45	0	37	11	6.0	--	--	--	--
JUNE												
05...	6.8	2.8	5.4	27	0	22	9.9	3.4	--	--	--	--
15...	17	5.9	9.7	78	0	64	16	5.9	--	--	--	--
25...	36	15	20	183	3	155	28	13	--	--	--	--
JULY												
05...	29	13	16	152	0	125	23	11	--	--	--	--
15...	45	20	26	214	10	192	30	19	--	--	--	--
25...	45	24	30	242	9	214	--	24	--	--	--	--
AUG.												
05...	44	23	30	250	2	208	33	21	--	--	--	--
15...	36	14	23	181	1	150	26	18	--	--	--	--
25...	35	16	20	199	--	--	14	16	--	--	--	--
SEP.												
05...	10	4.6	6.3	50	0	41	10	4.1	--	--	--	--
15...	15	6.6	7.4	74	0	61	11	5.1	--	--	--	--
25...	6.8	2.5	5.0	30	0	25	10	3.6	--	--	--	--

RED RIVER BASIN

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	HARD- NESS (CA, MG) (MG/L)	NUN- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	CARBON DIOXIDE (CO2) (MG/L)	DIS- SOLVED BORON (B) (UG/L)
OCT.											
05...	.10	.17	110	.15	66	4	.5	170	7.5	3.8	70
15...	.17	.20	99	.13	41	4	.5	113	7.7	1.4	--
25...	.13	.15	133	.18	79	2	.6	212	8.1	1.2	--
NOV.											
05...	.06	.08	110	.15	51	0	.5	151	7.9	1.2	20
15...	.19	.10	132	.18	79	5	.6	213	8.3	.7	20
25...	.11	.05	80	.11	38	2	.5	114	7.6	1.8	40
DEC.											
05...	.20	.10	79	.11	32	1	.5	98	7.7	1.2	30
15...	.18	.13	133	.18	75	7	.7	215	8.0	1.3	10
25...	.28	.02	135	.18	77	21	.7	207	7.6	2.7	40
JAN.											
05...	.44	.02	162	.22	94	22	.8	248	8.1	1.1	80
15...	.37	.02	242	.33	120	37	2.1	--	8.3	.8	50
25...	.38	.01	167	.23	110	20	.8	292	8.4	.7	40
FEB.											
05...	.03	.03	171	.23	100	15	.8	296	7.6	4.3	40
15...	.20	.02	175	.24	--	--	--	311	7.4	7.5	50
25...	.10	.04	102	.14	54	24	.8	--	7.1	4.6	70
MAR.											
03...	.02	.03	123	.17	68	11	.7	206	7.8	1.8	50
15...	.03	.06	112	.15	52	9	.7	162	7.8	1.3	40
25...	.33	.04	170	.23	78	37	1.2	--	7.3	4.0	--
APR.											
05...	.09	--	151	.21	82	10	.7	243	7.5	4.5	40
11...	.30	--	102	.14	42	11	.5	132	7.1	4.8	70
25...	.16	.04	154	.21	94	12	.7	257	8.2	1.0	50
MAY											
05...	.23	--	120	.16	54	3	.5	158	8.1	.8	60
15...	.06	--	196	.27	120	5	.7	314	8.1	1.8	60
27...	.41	--	89	.12	44	7	.5	116	7.3	3.6	50
JUNE											
05...	.84	.38	57	.08	29	7	.4	78	7.8	.7	120
15...	.35	.08	112	.15	67	3	.5	182	7.6	3.1	70
25...	.55	.15	226	.31	150	0	.7	381	8.5	1.0	80
JULY											
05...	1.2	.28	196	.27	130	5	.6	317	7.9	3.1	100
15...	.39	.10	267	.36	190	3	.8	457	8.7	.7	90
25...	.25	.07	--	--	210	0	.9	525	8.5	1.3	100
AUG.											
05...	.19	.04	311	.42	200	0	.9	534	8.5	1.3	240
15...	.64	.19	241	.33	150	0	.8	386	8.5	.9	370
25...	.38	.07	228	.31	150	--	.7	390	8.4	1.3	240
SEP.											
05...	1.5	.11	83	.11	44	3	.4	119	7.1	6.4	50
15...	1.3	.09	106	.14	65	4	.4	160	7.7	2.4	90
25...	1.5	.19	73	.10	27	2	.4	84	7.3	2.4	110

RED RIVER BASIN

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	DIS- SOLVED NITRATE (N) (MG/L)	DIS- SOLVED NITRATE (NO3) (MG/L)	DIS- SOLVED NITRITE (N) (MG/L)	DIS- SOLVED NITRITE (NO2) (MG/L)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	SUS- PEN- DED SOLIDS (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)
OCT.										
10...	.03	.13	.01	.03	.04	.07	125	.17	22	135
23...	.01	.04	.01	.03	.02	.09	122	.17	19	225
NOV.										
06...	.04	.18	.00	.00	.04	.04	137	.19	24	172
21...	.12	.53	.01	.03	.13	.09	93	.13	72	94
DEC.										
04...	.16	.71	.01	.03	.17	.10	85	.12	103	77
JAN.										
22...	--	--	--	--	.22	.04	--	--	13	280
FEB.										
26...	.04	.18	.08	.26	.12	.06	113	.15	54	150
MAR.										
13...	--	--	--	--	.07	.07	--	--	72	130
26...	.02	.09	.01	.03	.03	.05	101	.14	43	165
APR.										
09...	.08	.35	.00	.00	.08	.04	173	.24	4	280
23...	.24	1.1	.01	.03	.25	.08	148	.20	9	320
MAY										
07...	.13	.58	.00	.00	.13	.07	147	.20	28	220
JUNE										
11...	.07	.31	.01	.03	.08	--	129	.18	67	250
26...	.01	.04	.00	.00	.01	--	254	.35	8	420
JULY										
09...	--	--	--	--	--	.03	298	.41	12	450
23...	.06	.27	.00	.00	.06	.05	--	--	--	280
AUG.										
06...	--	--	--	--	--	--	--	--	--	--
SEP.										
03...	.44	1.9	.02	.07	.46	.30	93	.13	385	0
17...	.10	.44	.00	.00	.10	.16	100	.14	91	120

DATE	PH (UNITS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	CHEM- ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	CHEM- ICAL OXYGEN DEMAND (HIGH LEVEL) (MG/L)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)	OIL AND GREASE (MG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)
OCT.										
10...	--	27.0	7.6	97	74	--	1.2	--	0	90
23...	--	17.0	7.1	77	5	--	1.4	--	0	120
NOV.										
06...	--	--	9.9	102	11	--	1.1	--	0	110
21...	--	18.0	--	--	--	--	--	--	--	--
DEC.										
04...	--	--	10.8	98	29	--	--	--	0	170
JAN.										
22...	8.2	8.0	10.0	92	18	--	1.9	--	--	--
FEB.										
26...	--	--	--	--	--	22	.4	--	0	120
MAR.										
13...	7.3	13.5	8.7	88	--	27	1.5	--	0	0
26...	7.3	8.5	10.5	95	18	--	.8	--	0	0
APR.										
09...	8.1	17.5	8.8	99	19	--	.2	--	0	40
23...	7.8	23.0	7.7	95	20	--	1.2	--	20	20
MAY										
07...	7.9	21.0	8.5	100	19	--	1.6	1	30	30
JUNE										
11...	7.5	22.0	8.1	98	20	--	1.6	--	0	80
26...	7.2	22.0	8.4	100	10	--	1.3	--	0	50
JULY										
09...	7.6	28.0	7.9	105	23	--	1.2	--	0	40
23...	7.6	32.0	7.6	109	29	--	.2	--	--	--
AUG.										
06...	8.1	28.5	7.5	100	--	--	2.1	--	--	--
SEP.										
03...	--	28.5	--	--	26	--	1.8	--	--	--
17...	7.3	22.0	8.5	101	30	--	2.6	--	--	--

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

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
(UNCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	133	84	160	227	283	187	224	87	210	423	994	329
2	155	84	161	254	286	206	225	88	212	413	534	109
3	154	119	182	259	286	210	223	118	236	418	523	108
4	171	120	98	251	288	---	223	118	77	375	534	119
5	169	147	98	246	288	---	236	158	78	314	534	119
6	82	147	154	247	288	225	245	189	109	398	542	119
7	80	168	155	249	288	241	251	210	57	342	542	135
8	80	167	154	288	288	241	258	231	56	405	539	144
9	80	179	177	248	296	255	259	212	124	406	541	177
10	80	180	177	250	298	256	278	257	149	428	261	178
11	---	194	189	287	298	80	131	271	181	429	263	118
12	83	194	189	301	303	80	148	271	180	443	463	117
13	84	199	204	301	311	125	158	294	256	449	387	160
14	84	198	204	275	309	126	189	301	256	451	386	160
15	112	209	212	280	306	161	190	314	182	457	386	160
16	113	218	213	269	305	161	200	297	292	457	329	183
17	154	229	233	273	305	186	200	308	303	454	354	183
18	154	231	229	275	245	187	228	322	298	501	359	214
19	193	232	214	270	244	200	229	332	298	501	374	214
20	192	76	214	275	321	198	235	340	298	520	373	214
21	193	75	214	278	321	100	237	346	337	524	384	85
22	193	62	209	285	188	99	242	351	350	523	384	84
23	197	114	209	284	98	120	246	358	354	534	385	97
24	197	62	210	286	98	120	254	362	370	564	385	84
25	210	114	203	290	120	150	255	362	381	525	390	84
26	212	86	203	283	120	150	257	116	388	526	385	84
27	208	94	211	283	151	163	271	116	387	531	154	107
28	207	113	210	266	164	183	284	154	407	531	153	107
29	208	136	210	265	---	194	290	172	407	541	297	107
30	217	135	218	274	---	215	80	201	407	528	300	137
31	86	---	218	275	---	215	---	215	---	526	329	---
MONTH	149	146	191	271	253	174	225	241	255	466	412	141

TEMPERATURE (DEG. C) OF WATER , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
(UNCE-DAILY)

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

RED RIVER BASIN

07335000 CLEAR BOGGY CREEK NEAR CANEY, OKLA.

LOCATION.--Lat 34°15'09", long 96°12'19", in NW 1/4 SE 1/4 sec.36, T.3 S., R.10 E., Atoka County, at gaging station at bridge on old U.S. Highways 69 and 75, 0.5 mi (0.8 km) downstream from Caney Creek, 1.5 mi (2.4 km) north of Caney, and at mile 24.1 (38.8 km).

DRAINAGE AREA.--720 mi² (1,865 km²).

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.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	INSTANTANEOUS DIS- CHARGE (CFS)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED NITRATE (N) (MG/L)	DIS- SOLVED NITRATE (NO3) (MG/L)	DIS- SOLVED NITRITE (N) (MG/L)
OCT.												
03...	607	--	--	--	--	--	--	--	--	--	--	--
16...	1790	42	6.1	8.7	149	0	122	14	12	.02	.09	.01
29...	581	--	--	--	--	--	--	--	--	--	--	--
31...	1030	--	--	--	--	--	--	--	--	--	--	--
NOV.												
15...	151	87	19	51	311	0	255	28	83	.08	.35	.00
26...	18700	--	--	--	--	--	--	--	--	--	--	--
28...	8110	--	--	--	--	--	--	--	--	--	--	--
DEC.												
05...	3421	28	4.7	11	99	0	81	11	18	.08	.35	.01
JAN.												
16...	175	86	21	40	317	0	260	34	67	.16	.71	.00
30...	192	81	21	55	295	0	242	43	91	.12	.53	.01
FEB.												
11...	113	80	22	43	315	0	258	39	67	.02	.09	.00
MAR.												
04...	223	72	15	29	256	0	210	40	37	.01	.04	.00
18...	231	62	14	37	219	0	180	34	55	.02	.09	.00
26...	243	--	--	--	--	--	--	--	--	--	--	--
APR.												
03...	1820	48	5.0	13	152	0	125	24	17	--	--	--
08...	125	--	--	--	--	--	--	--	--	--	--	--
30...	3494	22	4.2	7.7	82	0	67	18	10	.14	.62	.05
MAY												
01...	5736	22	3.6	10	74	0	61	13	15	1.4	6.3	.38
09...	572	--	--	--	--	--	--	--	--	--	--	--
JUNE												
08...	4709	21	3.1	6.3	74	0	61	11	9.2	.27	1.2	.03
JULY												
09...	52	77	24	51	300	0	246	34	97	.07	.31	.01
22...	30	71	19	48	286	0	235	28	76	--	--	--
AUG.												
12...	188	--	5.4	19	99	0	81	13	28	--	--	--
SEP.												
03...	196	41	12	35	0	--	0	18	62	--	--	--

RED RIVER BASIN

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07335000 CLEAR BOGGY CREEK NEAR CANEY, OKLA.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	DIS- SOLVED NITRITE (NO2) (MG/L)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	CARBON DIOXIDE (CO2) (MG/L)
OCT.											
03...	--	--	--	--	--	--	--	--	310	--	--
16...	.03	.03	173	.24	836	130	8	.3	300	7.7	4.8
29...	--	--	--	--	--	--	--	--	474	--	--
31...	--	--	--	--	--	--	--	--	405	--	--
NOV.											
15...	.00	.08	456	.62	186	300	40	1.3	795	7.9	6.3
26...	--	--	--	--	--	--	--	--	120	--	--
28...	--	--	--	--	--	--	--	--	185	--	--
DEC.											
05...	.03	.09	159	.22	1470	89	8	.5	244	7.5	5.0
JAN.											
16...	.00	.16	425	.58	201	300	41	1.0	743	8.0	5.1
30...	.03	.13	454	.62	235	290	47	1.4	789	8.1	3.8
FEB.											
11...	.00	.02	415	.56	127	290	32	1.1	744	8.1	4.0
MAR.											
04...	.00	.01	324	.44	195	240	32	.8	583	7.9	5.2
18...	.00	.02	320	.44	200	210	33	1.1	580	7.8	5.6
26...	--	--	--	--	--	--	--	--	682	--	--
APR.											
03...	--	.13	212	.29	1040	140	16	.5	341	7.6	6.1
08...	--	--	--	--	--	--	--	--	646	--	--
30...	.16	.19	131	.18	1240	72	5	.4	186	7.3	6.6
MAY											
01...	1.2	1.8	129	.18	2000	70	9	.5	198	7.4	4.7
09...	--	--	--	--	--	--	--	--	396	--	--
JUNE											
08...	.10	.30	110	.15	1400	65	4	.3	166	7.3	5.9
JULY											
09...	.03	.08	470	.64	66.0	290	44	1.3	773	8.1	3.8
22...	--	.03	407	.55	33.0	260	21	1.3	724	8.2	2.9
AUG.											
12...	--	.13	159	.22	80.7	--	--	--	280	7.5	5.0
SEP.											
03...	--	.19	275	.37	146	150	18	1.2	492	--	--

RED RIVER BASIN

07335700 KIAMICHI RIVER NEAR BIG CEDAR, OKLA.
(Hydrologic bench-mark station)

LOCATION.--Lat 34°38'18", long 94°36'45", in SW 1/4 SE 1/4 sec.18, T.2 N., R.26 E., LeFlore County, in Ouachita National Forest, at gaging station at bridge on State Highway 63, 0.2 mi (0.3 km) upstream from Rattlesnake Creek, 1.1 mi (1.8 km) upstream from Big Branch, 2.1 mi (3.4 km) east of Big Cedar, and at mile 157.6 (253.6 km).

DRAINAGE AREA.--40.1 mi² (103.9 km²).

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	INSTAN- TANEOUS DIS- CHARGE (CFS)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED SILICA (SIO ₂) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	ALKA- LINITY AS CACO ₃ (MG/L)
OCT. 24...	17	80	9.0	1.5	.4	3.2	.8	10	0	8
NOV. 13...	32	100	8.8	--	.6	2.5	.8	8	0	7
DEC. 12...	56	70	8.1	1.8	.5	2.4	.7	7	0	6
JAN. 15...	61	150	7.0	1.2	.7	1.8	.6	7	0	6
FEB. 20...	20	90	7.5	1.8	.7	2.1	.7	5	0	4
MAR. 19...	59	60	7.7	.9	.7	2.2	.7	6	0	5
APR. 16...	62	80	8.3	--	.5	2.0	.7	5	0	4
MAY 28...	10	110	8.0	1.4	.8	3.0	.8	9	0	7
JUNE 25...	3.8	140	8.8	1.1	.9	2.5	.9	11	0	9
JULY 17...	1.3	210	6.6	2.3	2.1	1.9	1.3	18	0	15
AUG. 13...	1.5	300	3.6	2.7	1.1	4.3	1.0	16	0	16
SEP. 11...	1010	80	7.1	1.1	1.0	1.9	.8	6	0	6

DATE	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED NITRATE (N) (MG/L)	DIS- SOLVED NITRATE (NO ₃) (MG/L)	DIS- SOLVED NITRITE (N) (MG/L)	DIS- SOLVED NITRITE (NO ₂) (MG/L)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)
OCT. 24...	3.4	1.8	.0	.01	.04	.01	.03	.02	.06	--
NOV. 13...	4.5	2.1	.1	.02	.09	.01	.03	.03	.32	26
DEC. 12...	3.2	2.5	.3	.04	.18	.02	.07	.06	.04	30
JAN. 15...	2.8	3.2	.0	.06	.27	.01	.03	.07	.08	27
FEB. 20...	3.2	2.4	.4	.03	.13	.00	.00	.03	.02	26
MAR. 19...	2.1	1.8	.2	.08	.35	.00	.00	.08	.08	24
APR. 16...	3.0	1.7	.2	.08	.35	.00	.00	.08	1.5	29
MAY 28...	2.8	2.6	.0	.04	.18	.00	.00	.04	.03	18
JUNE 25...	2.9	2.0	.0	.01	.04	.00	.00	.01	.02	27
JULY 17...	1.8	2.2	.0	.04	.18	.00	.00	.04	.02	35
AUG. 13...	3.5	3.1	.0	--	--	--	--	.03	.04	28
SEP. 11...	4.0	2.3	.1	--	--	--	--	.06	.03	18

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

[illegible]

RED RIVER BASIN

07335700 KIAMICHI RIVER NEAR BIG CEDAR, OKLA.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	DDT IN BOTTOM DE- POSIT (UG/KG)	DI- AZINON (UG/L)	DI- ELDRIN (UG/L)	DI- ELDRIN IN BOTTOM DE- POSIT (UG/KG)	ENRIN (UG/L)	ENDRIN IN BOTTOM DE- POSIT (UG/KG)	HEPTA- CHLOR (UG/L)	HEPTA- CHLOR IN BOTTOM DE- POSIT (UG/KG)	HEPTA- CHLOR EPOXIDE (UG/L)	
NOV. 13...	.0	.00	.00	.0	.00	.0	.00	.0	.00	
FEB. 20...	--	--	--	--	--	--	--	--	--	
DATE	HEPTA- CHLOR EPOXIDE IN BOT- TOM DE- POSIT (UG/KG)	LINDANE (UG/L)	LINDANE IN BOTTOM DE- POSIT (UG/KG)	MALA- THION (UG/L)	METHYL PARA- THION (UG/L)	PARA- THION (UG/L)	PCB (UG/L)	PCB IN BOTTOM DE- POSIT (UG/KG)	2,4-D (UG/L)	
NOV. 13...	.0	.00	.0	.00	.00	.00	.0	0	.00	
FEB. 20...	--	--	--	--	--	--	--	--	--	
DATE	2,4,5-T (UG/L)	SILVEX (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CAD- MIUM (CD) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MERCURY (MG) (UG/L)	TOTAL ZINC (ZN) (UG/L)	
NOV. 13...	.00	.00	--	--	--	--	--	--	--	
FEB. 20...	--	--	0	20	0	10	<100	2.2	20	
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- PENDE GROSS ALPHA AS U-NAT. (UG/L)	SUS- PENDE GROSS BETA AS SR90 /Y90 (PC/L)	SUS- PENDE GROSS BETA AS CS-137 (PC/L)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)
NOV. 13...	.08	.03	.7	1.2	1.4	21	<.4	<.4	.4	5
DATE	INSTAN- TANEOUS DIS- CHARGE (CFS)	SUS- PENDE SEDIMENT CHARGE (MG/L)	SUS- PENDE SEDIMENT CHARGE (T/DAY)							
OCT. 24...	17	12	.55							
NOV. 13...	32	5	.43							
DEC. 12...	56	9	1.4							
JAN. 15...	61	5	.82							
MAR. 19...	59	14	2.2							
APR. 16...	62	5	.84							
JULY 17...	1.3	6	.02							
AUG. 13...	1.5	11	.04							
SEP. 11...	1010	12	33							

RED RIVER BASIN

271

07336730 RED RIVER NEAR VALLIANT, OKLA.

LOCATION.--Lat 33°55'20", long 95°04'56", McCurtain County, 5.8 mi (9.2 km) south of Valliant, 0.1 mi (0.2 km) upstream from Garland Creek, approximately 8.8 mi (14.2 km) upstream from Highway 37 bridge.

DRAINAGE AREA.--46,730 mi² (121,030 km²).

PERIOD OF RECORD.--Chemical analyses: July 1970 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	DIS- SOLVED CHLOR- IDE (CL) (MG/L)	DIS- SOLVED NITRATE (N) (MG/L)	DIS- SOLVED NITRATE (NO3) (MG/L)	DIS- SOLVED NITRITE (N) (MG/L)	DIS- SOLVED NITRITE (NO2) (MG/L)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)
OCT.									
03...	120	.03	.13	.00	.00	.03	.16	760	7.8
24...	200	.03	.13	.00	.00	.03	.06	1140	7.9
31...	110	.45	2.0	.06	.20	.51	.27	690	7.7
NOV.									
14...	150	.14	.62	.02	.07	.16	.94	850	7.4
DEC.									
12...	140	1.6	7.1	.00	.00	1.6	.06	876	7.8
JAN.									
09...	100	.20	.89	.02	.07	.22	.23	740	7.8
09...	--	--	--	--	--	--	--	740	--
09...	--	--	--	--	--	--	--	740	--
16...	110	.23	1.0	.01	.03	.24	.03	840	7.8
30...	30	.07	.31	.03	.10	.10	.10	400	7.4
FEB.									
13...	140	.12	.53	.01	.03	.13	.03	891	7.8
13...	25	.15	.66	.10	.33	.25	.30	1640	7.2
13...	110	.71	3.1	.04	.13	.75	.15	1080	7.3
27...	89	.20	.89	.02	.07	.22	.15	660	7.8
MAR.									
06...	53	.02	.09	.00	.00	.02	.10	540	8.0
27...	120	.08	.35	.01	.03	.09	.06	802	7.9
APR.									
17...	23	.11	.49	.00	.00	.11	.20	288	7.6
24...	24	.25	1.1	.04	.13	.29	.21	240	7.8
MAY									
15...	190	.35	1.6	.01	.03	.36	--	920	8.0
22...	170	.05	.22	.00	.00	.05	.04	1020	8.0
29...	32	.17	.75	.01	.03	.18	.15	330	7.7
JUNE									
05...	130	.09	.40	.02	.07	.11	--	780	7.9
JULY									
10...	140	.02	.09	.00	.00	.02	.03	900	8.0
AUG.									
07...	220	.01	.04	.00	.00	.01	.04	1200	7.8
21...	220	.03	.13	.00	.00	.03	.08	1100	--

RED RIVER BASIN

07336730 RED RIVER NEAR VALLIANT, OKLA.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TEMPER- ATURE (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	CHEM- ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	CHEM- ICAL OXYGEN DEMAND (HIGH LEVEL) (MG/L)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)	PHENOLS (UG/L)
OCT.									
03...	23.0	50	70	7.2	87	22	--	1.5	1
24...	21.0	50	30	9.6	112	22	--	.9	2
31...	16.5	90	70	9.8	105	7	--	3.0	3
NOV.									
14...	15.0	20	30	10.8	111	19	--	1.6	2
DEC.									
12...	11.0	5	20	10.3	98	12	--	.8	0
JAN.									
09...	5.0	30	20	13.2	109	8	--	1.1	1
09...	5.0	--	--	13.2	109	--	--	--	--
09...	5.0	--	--	13.2	109	--	--	--	--
16...	5.0	20	3	12.0	97	13	--	1.5	24
30...	9.0	70	40	11.2	103	25	--	1.0	4
FEB.									
13...	14.0	20	20	--	--	--	12	1.3	0
13...	19.0	1600	40	--	--	--	570	--	77
13...	--	400	30	--	--	--	12	--	20
27...	7.0	100	100	10.4	89	--	35	1.2	2
MAR.									
06...	18.0	20	20	8.6	96	--	18	2.6	3
27...	11.0	30	40	10.8	102	12	--	1.4	1
APR.									
17...	18.0	70	40	8.9	98	20	--	2.8	8
24...	19.5	100	200	7.6	85	27	--	1.4	6
MAY									
15...	23.0	10	30	8.0	98	13	--	.9	2
22...	29.0	8	8	--	--	19	--	1.2	0
29...	25.0	70	70	7.1	89	25	--	1.5	0
JUNE									
05...	25.0	30	20	7.5	94	13	--	1.5	2
JULY									
10...	29.0	7	2	7.9	104	20	--	3.2	5
AUG.									
07...	27.5	5	2	7.8	103	23	--	1.3	2
21...	29.0	20	20	8.4	110	17	--	2.2	3

RED RIVER BASIN

273

07336760 RED RIVER NEAR MILLERTON, OKLA.

LOCATION.--Lat 35°51'42", long 95°01'51", McCurtain County, at State Highway 37 bridge, 8.2 mi (13.2 km) southwest of Millerton, approximately 8.8 mi (14.2 km) downstream from Garland Creek.

DRAINAGE AREA.--46,930 mi² (121,549 km²).

PERIOD OF RECORD.--Chemical analyses: July 1970 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	DIS- SOLVED CHLORIDE (CL) (MG/L)	DIS- SOLVED NITRATE (N) (MG/L)	DIS- SOLVED NITRATE (NO3) (MG/L)	DIS- SOLVED NITRITE (N) (MG/L)	DIS- SOLVED NITRITE (NO2) (MG/L)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L)	TOTAL PHOS- PHURUS (P) (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)
OCT.									
03...	120	.01	.04	.01	.03	.02	.21	688	7.7
10...	150	.06	.27	.01	.03	.07	.08	867	7.9
24...	200	.01	.04	.01	.03	.02	.14	1120	7.9
31...	12	.80	3.5	.09	.30	.89	.33	98	6.8
NOV.									
07...	78	.10	.44	.00	.00	.10	.33	545	7.8
14...	150	.16	.71	.02	.07	.18	.29	897	8.1
28...	38	1.5	6.6	.01	.03	1.5	.37	293	7.7
DEC.									
05...	110	.11	.49	.02	.07	.13	.15	643	7.5
12...	140	.07	.31	.01	.03	.08	.08	833	8.0
JAN.									
09...	75	.03	.13	.13	.43	.16	.08	579	7.5
09...	--	--	--	--	--	--	--	579	--
09...	--	--	--	--	--	--	--	579	--
16...	27	.26	1.2	.00	.00	.26	.06	248	7.4
23...	8.2	.19	.84	.00	.00	.19	.12	112	6.9
30...	40	.00	.00	.30	.99	.24	.05	411	7.6
FEB.									
13...	130	.09	.40	.01	.03	.10	.10	906	7.6
20...	76	.10	.44	.00	.00	.10	.06	611	7.4
27...	85	.21	.93	.02	.07	.23	.18	609	7.7
MAR.									
06...	57	.03	.13	.00	.00	.03	.11	640	7.9
20...	110	.12	.53	.01	.03	.13	.08	694	7.7
27...	120	.12	.53	.01	.03	.13	.08	794	7.9
APR.									
03...	94	.02	.09	.00	.00	.02	.10	717	7.6
10...	60	.05	.22	.01	.03	.06	.09	485	7.7
17...	24	.12	.53	.02	.07	.14	.16	291	7.4
24...	22	.19	.84	.04	.13	.23	.23	256	7.4
30...	75	.16	.71	.01	.03	.17	.14	534	7.7
MAY									
08...	120	.07	.31	.01	.03	.08	.21	754	7.7
15...	190	.14	.62	.02	.07	.16	--	1090	8.1
22...	170	.08	.35	.00	.00	.08	.09	1040	7.9
29...	39	.16	.71	.01	.03	.17	.63	340	7.5
JUNE									
05...	140	.07	.31	.00	.00	.07	--	813	8.0
12...	32	.14	.62	.02	.07	.16	--	266	7.0
26...	120	.03	.13	.00	.00	.03	.07	769	7.4
JULY									
10...	120	.06	.27	.00	.00	.06	.05	880	8.2
24...	220	.10	.44	.00	.00	.10	.08	1400	--
AUG.									
07...	200	.03	.13	.00	.00	.03	.05	1200	7.7
21...	210	.03	.13	.00	.00	.03	.07	1200	--
SEP.									
04...	77	.51	2.3	.00	.00	.51	.28	525	--
18...	20	.08	.35	.02	.07	.10	.36	170	--

RED RIVER BASIN

07336760 RED RIVER NEAR MILLERTON, OKLA.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TEMPER- ATURE (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	CHEM- ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	CHEM- ICAL OXYGEN DEMAND (HIGH LEVEL) (MG/L)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)	PHENOLS (UG/L)
OCT.									
03...	23.0	50	80	7.2	87	25	--	1.7	1
10...	28.0	40	20	8.0	105	52	--	1.8	4
24...	21.0	60	60	9.6	112	25	--	1.2	1
31...	16.0	200	80	9.6	102	36	--	1.6	11
NOV.									
07...	20.0	30	200	8.8	100	20	--	7.2	7
14...	14.5	30	40	9.8	100	25	--	2.0	2
28...	14.0	100	100	7.9	79	30	--	2.0	4
DEC.									
05...	7.0	200	60	11.2	100	21	--	--	2
12...	12.0	7	30	11.1	108	18	--	.7	1
JAN.									
09...	5.0	20	--	11.6	96	18	--	2.6	6
09...	5.0	--	--	11.7	97	--	--	--	--
09...	5.0	--	--	11.7	97	--	--	--	--
16...	5.0	60	20	12.0	97	21	--	2.4	26
23...	9.0	100	50	10.7	99	42	--	--	1
30...	9.0	40	60	11.1	102	12	--	.8	0
FEB.									
13...	--	40	30	--	--	--	19	1.7	2
20...	13.0	30	1	--	--	--	19	3.0	1
27...	7.0	90	100	10.4	90	--	34	2.0	3
MAR.									
06...	18.0	30	20	8.6	96	--	23	2.8	5
20...	16.0	50	20	9.2	98	--	17	1.6	2
27...	11.0	40	40	10.0	94	20	--	2.2	2
APR.									
03...	18.0	20	20	--	--	21	--	2.4	4
10...	18.0	70	30	9.0	96	27	--	1.4	4
17...	18.0	60	30	9.0	99	19	--	2.8	3
24...	19.5	90	200	9.0	100	35	--	3.6	10
30...	20.0	50	30	8.7	100	17	--	2.8	1
MAY									
08...	21.0	50	70	8.1	95	31	--	2.2	1
15...	23.0	20	40	8.7	106	19	--	1.0	1
22...	29.0	8	80	--	--	19	--	1.2	1
29...	25.0	70	90	7.1	89	25	--	1.9	0
JUNE									
05...	25.0	20	10	7.5	94	13	--	1.6	1
12...	27.0	90	80	7.7	99	23	--	1.5	3
26...	25.0	40	10	7.8	98	13	--	1.2	4
JULY									
10...	29.0	30	4	7.9	104	35	--	3.6	4
24...	29.0	20	9	8.2	108	--	--	1.5	2
AUG.									
07...	27.5	20	3	7.9	103	14	--	3.9	4
21...	29.0	20	10	8.5	112	20	--	1.8	14
SEP.									
04...	28.0	70	200	7.9	102	20	--	.4	7
18...	20.5	100	50	8.8	100	29	--	1.5	12

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