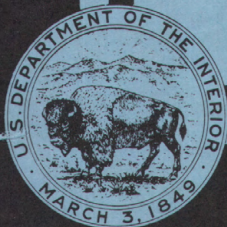
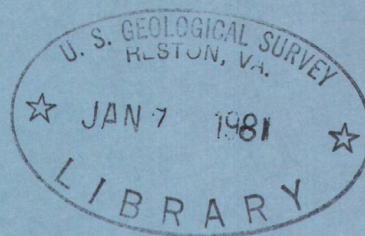


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Water Resources Data for Texas

Part 2. Water Quality Records



UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

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

CALENDAR FOR WATER YEAR 1974

1973

OCTOBER

S	M	T	W	T	F	S
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1974

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SEPTEMBER

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1974

Water Resources Data

for

Texas

Part 2. Water Quality Records



UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

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

Prepared in cooperation with

Texas Water Development Board,
Corps of Engineers, U.S. Army

Water resources records, 1974, for Texas are in
the following reports of the U.S. Geological Survey:

1. Water Resources Data for Texas
Part 1. Surface Water Records
2. Water Resources Data for Texas
Part 2. Water Quality Records

Copies of this report may be obtained from
District Chief, Water Resources Division
U.S. Geological Survey
Federal Building
300 East 8th Street
Austin, Texas 78701

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

[Letters after station name designate type of data: (c) chemical,
(b) biochemical, (p) pesticide, (t) water temperature, (s) sediment]

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WATER RESOURCES DATA FOR TEXAS, 1974

Part 2. Water Quality Records

INTRODUCTION

Water resources data for the 1974 water year for Texas include records of data for the chemical, physical, and biological characteristics of surface water. Data on the quality 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 15-, 30-, or 60-minute intervals. The records were collected by the Water Resources Division of the U. S. Geological Survey under the direction of I. D. Yost, District Chief. These data represent that portion of the National Water Data System collected by the U. S. Geological Survey and cooperating State and Federal agencies in Texas.

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.

WATER QUALITY RECORDS, 1974

COOPERATION

Organizations that assisted in the collection of data through cooperative agreements with the Geological Survey in 1973 are:

Texas Water Development Board:

Harry P. Burleigh, Executive Director;
John H. McCoy, Chairman;
Marvin Shurbet, Vice-Chairman;
W. E. Tinsley, R. B. Gilmore,
Milton T. Potts, and Carl Illig, Members

Sabine River Compact Administration:

William H. Robinson, Federal Representative and Chairman;
Raymond J. Palmer and H. B. Myers for Louisiana;
J. M. Syler and George M. Smith for Texas

City of Houston

E. B. Cape, Director, Department of Public Works.

Assistance in the form of funds or services was furnished by the following Federal Agencies:

Corps of Engineers, U. S. Army

International Boundary and Water Commission.

Agencies furnishing assistance in the form of funds or services were:

Brazos River Authority
Colorado River Municipal Water District
Dow Chemical Company
Guadalupe-Blanco River Authority
Lower Colorado River Authority
Lower Neches Valley Authority
Mitchell Development Corporation of the Southwest
Red Bluff Water Power Control District
Sabine River Authority
San Antonio City Public Service Board
San Jacinto River Authority
Tarrant County Water Control and Improvement District No. 1
Trinity River Authority
Upper Neches River Municipal Water Authority
West Central Texas Municipal Water District
City of Arlington
City of Austin
City of Dallas.

WATER QUALITY RECORDS, 1974

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 and is equivalent to 43,560 cubic feet or about 326,000 gallons.

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 $35^{\circ}\text{C} \pm 1.0^{\circ}\text{C}$ 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 $44.5^{\circ}\text{C} \pm 0.2^{\circ}\text{C}$ 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 $35^{\circ}\text{C} \pm 1.0^{\circ}\text{C}$ on M-enterococcus medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 ml of sample.

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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.

Biomass is the amount of living matter present at any given time, expressed as the weight per unit area or volume of habitat.

Ashweight is the weight or amount of residue present after the residue from the dry weight determination has been ashed in a muffle furnace at a temperature of 500°C for 1 hour. The ash weight values of zooplankton and phytoplankton are expressed in g/m³ (grams per cubic metre), and periphyton and benthic organisms in g/m² (grams per square metre).

Dry weight refers to the weight of residue present after drying in an oven at 60°C for zooplankton and 105°C for periphyton, until the weight remains unchanged. This weight represents the total organic matter, ash and sediment, in the sample. Dry weight values are expressed in the same units as ash weight.

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

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

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, and represents a runoff of approximately 0.0372 inch from 1 square mile.

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

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.

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

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

Instantaneous discharge is the discharge at a particular instant of time.

Diversity index is a numerical rating of the variety of the aquatic organisms. The greater the number of different types of organisms, the greater the diversity. The formula for diversity index is

$$d = -\sum \frac{n_i}{n} \log_2 \frac{n_i}{n},$$

where n_i is the number of individuals per taxon, and n is the total number of individuals.

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

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

Hardness of water is a physical-chemical characteristic attributable to the presence of alkaline earths (principally calcium and magnesium) and is expressed as equivalent calcium carbonate (CaCO_3).

Methylene blue active substance (MBAS) is a measure of apparent detergents. This determination depends on the formation of a blue color when methylene blue dye reacts with synthetic detergent compounds.

Micrograms per litre ($\mu\text{g/l}$, 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.

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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, page 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 multi-celled 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 (m²), acres, or hectares. Periphyton, benthic organisms, and macrophytes are expressed in these terms.

Organism count/volume refers to the number of organisms collected and enumerated in a sample and adjusted to the number per sample volume, usually 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 stream-flow 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) (Guy, 1969).

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

<u>Ion</u>	<u>Multiply by</u>		<u>Multiply by</u>
Aluminum (Al^{+3})*	0.11119	Iodide (I^{-1})	0.00788
Ammonia as N .....	.07139	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 as N .....	.07139
Chromium (Cr^{+6})* .....	.11539	Nitrite as N .....	.07139
Cobalt (Co^{+2})* .....	.03394	Phosphate as P .....	.03228
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 1,000 mg/l</u>	<u>Di- vide by</u>	<u>Range of concentration in 1,000 mg/l</u>	<u>Di- vide by</u>	<u>Range of concentration in 1,000 mg/l</u>	<u>Di- vide by</u>	<u>Range of concentration in 1,000 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	460-472	1.29	668-682	1.42
56.5 - 72	1.04	266-280	1.17	476-489	1.30	684-698	1.43
72.5 - 88	1.05	282-297	1.18	492-506	1.31	700-715	1.44
88.5 -104	1.06	299-313	1.19	508-522	1.32	717-730	1.45
105 -120	1.07	315-329	1.20	524-538	1.33	732-747	1.46
121 -136	1.08	331-345	1.21	540-554	1.34	749-762	1.47
137 -152	1.09	347-361	1.22	556-570	1.35	765-780	1.48
153 -169	1.10	363-378	1.23	572-585	1.36	782-796	1.49
170 -185	1.11	380-393	1.24	587-602	1.37	798-810	1.50
186 -200	1.12	395-409	1.25	604-617	1.38		

*Based on water density of 1.000 g/ml and
a specific gravity of sediment of 2.65.

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

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

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

Percent composition is a unit for expressing the ratio of a particular part of a sample or population to the total sample or population, in terms of types, numbers, weight, or volume.

Periphyton is the assemblage of microorganisms attached to and growing upon solid surfaces. While primarily consisting of algae, they also include bacteria, fungi, protozoa, rotifers, and other small organisms. Periphyton is a useful indicator of water quality.

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-endo-exo-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 O,O-diethyl O-(2-isopropyl-4-methyl-6-pyrimidyl) phosphorothioate.

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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.

α-BHC alpha-1,2,3,4,5,6-hexachlorocyclohexane.

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

Malathion S-[1,2-bis(ethoxycarbonyl) ethyl] 0,0-dimethyl phosphorodithioate.

Parathion 0,0-diethyl 0-p-nitrophenyl phosphorothioate.

Toxaphene chlorinated camphene containing 67 to 69 percent chlorine.

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.

Polychlorinated biphenyls (PCBs) are industrial chemicals that are mixtures of chlorinated biphenyl compounds having various percentages of chlorine. They are similar in structure to organochlorine insecticides.

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

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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 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 ml of sample.

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

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, that is discharged in a given time. It is computed by multiplying discharge times mg/l times 0.0027.

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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, that is discharged during a given time (Colby and Hembree, 1955).

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

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

Sodium adsorption ratio (SAR) is the expression of relative activity of sodium ions in exchange reactions with soil and is an index of sodium or alkali hazard to the soil. This ratio should be known especially for water used for irrigating farmland.

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

Specific conductance is a measure of the ability of a water to conduct an electrical current and is expressed in micromhos per 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). 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 work "streamflow" uniquely described 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 lived.

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

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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.

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.

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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 regime 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: A national stream-quality accounting network has been 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-by-year basis and (2) to detect and assess long-term changes in stream quality.

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

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

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

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

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

Tritium concentrations are reported in terms of tritium units (TU); one TU is equal to 3.2436 picocuries per litre.

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 stations. 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 07227500 which appears just to left of the station name includes the 2-digit part number "07" plus the 6-digit downstream order number "227500." 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) and Part 8 (Western Gulf of Mexico basins). 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.

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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 Texas have been released in the report, "Water Resources Data for Texas, 1974, Part 1. Surface Water Records."

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

Data on the quality of surface water were collected from designated sampling sites at predetermined intervals such as once daily, weekly, monthly, or less frequently.

Water-quality information is presented for chemical, biochemical, 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 biochemical information includes qualitative and quantitative analyses of 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 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 (centigrade, °C). In waters with a density of 1.000 g/ml (grams per millilitre), parts per million and milligrams per litre can be considered equal. In waters with a density greater than 1.000 g/ml, values in parts per million should be multiplied by the density to convert to milligrams per litre. Temperatures reported in degrees Fahrenheit may be converted to degrees Celsius by using the table on page 18.

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In October 1968, the Geological Survey began reporting many of the chemical constituents as well as the minor elements in micrograms per litre instead of milligrams per litre. (See "Definition of Terms," p. 5).

Solutes

The methods of collecting and analyzing water samples for determining the kinds and concentrations of solutes are described by Brown, Skougstad, and Fishman (1970), and by Goerlitz and Brown (1972). One sample can define adequately the water quality at a given time if the mixture of solutes throughout the stream cross section is homogeneous. However, the concentration of solutes at different locations in the cross section may vary widely with different rates of water discharge depending on the source of material and the turbulence and the mixing of the stream. Some must be sampled at several verticals across the channel to determine accurately the solute load.

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 is 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.

For daily stations where streamflow data are available, tables are included showing monthly and annual means of specific conductance, dissolved solids, chloride, sulfate, and hardness and loads of dissolved solids, chloride, and sulfate. The means have been computed by using the daily records of specific conductance and developing regression relationships between each water-quality parameter and specific conductance.

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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	47.0	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

$$^{\circ}\text{C} = 5/9 (^{\circ}\text{F} - 32) \text{ or } ^{\circ}\text{F} = 9/5 (^{\circ}\text{C}) + 32.$$

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 small diurnal temperature change; shallow streams may have a daily range of several degrees and may follow closely the changes in air temperature. Some streams may be affected by waste-heat discharges.

WATER QUALITY RECORDS, 1974

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

At other stations, suspended-sediment samples were collected periodically at many verticals in the stream cross section. Although data collected periodically may represent conditions only at the time of 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 QUALITY RECORDS, 1974

WATER SUPPLY PAPERS

The annual series of water-supply papers that give information on quality of surface waters in Texas are shown in the following table.

Table 4.--Water-supply paper numbers and parts,
water years 1941-70

<u>Year</u>	<u>Parts 1-14</u>	<u>Year</u>	<u>Parts 7-8</u>	<u>Year</u>	<u>Parts 7-8</u>
1941	942	1950	1188	1963	1950
1942	950	1951	1199	1964	1957
1943	970	1952	1252	1965	1964
1944	1022	1953	1292	1966	1994
1945	1030	1954	1352	1967	2014
1946	1050	1955	1402	1968	C2096
1947	1102	1956	1452		D2097
1948	A1133	1957	1522	1969	C2146
1949	A1163	1958	1573		D2147
----	----	1959	1644	1970	BC2156
----	----	1960	1744		BD2157
----	----	1961	1884	1971	BC2166
----	----	1962	1944		BD2167

A Parts 7-14.

B In Press.

C Part 7.

D Part 8.

WATER QUALITY RECORDS, 1974

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WATER QUALITY RECORDS, 1974

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- _____, 1961, The single stage sampler for suspended sediment: Rept. 13.
- _____, 1963, Determinations of fluvial sediment discharge: Rept. 14.

WATER QUALITY RECORDS, 1974

Table 5.--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.

<u>Multiply English units</u>	<u>By</u>	<u>To obtain SI units</u>
<u>Length</u>		
inches (in)	25.4	millimetres (mm)
	.0254	metres (m)
feet (ft)	.3048	metres (m)
miles (mi)	1.609	kilometres (km)
<u>Area</u>		
acres	4047	square metres (m ²)
	.4047	square hectometres (hm ²)
	.004047	square kilometres (km ²)
square miles (mi ²)	2.590	square kilometres (km ²)
<u>Volume</u>		
million gallons (10 ⁶ gal)	3.785X10 ⁻³	cubic hectometres (hm ³)
cubic feet (ft ³)	28.32	cubic decimetres (dm ³)
	.02832	cubic metres (m ³)
acre-feet (acre-ft)	1233	cubic metres (m ³)
	1.233X10 ⁻³	cubic hectometres (hm ³)
	1.233X10 ⁻⁶	cubic kilometres (km ³)
<u>Flow</u>		
cubic feet per second (ft ³ /s)	28.32	cubic decimetres per second (dm ³ /s)
	.02832	cubic metres per second (m ³ /s)
<u>Mass</u>		
ton (short)	.9072	tonne (t)

LOCATION.--Lat 35°31'10", long 102°15'30", Oldham County, at gaging station at bridge on U.S. Highway 385, 0.8 mile (1.3 km) northwest of Tascosa, and 1.0 mile (1.6 km) southwest of Boys Ranch.

DRAINAGE AREA.--18,536 mi² (48,008 km²), of which approximately 3,823 mi² (9,902 km²) is noncontributing.

PERIOD OF RECORD.--Chemical analyses: October 1968 to September 1974.

Biochemical analyses: October 1968 to September 1974.

Water temperatures: October 1968 to September 1974.

EXTREMES.--October 1973 to September 1974:

Specific conductance: Maximum daily, 5,590 micromhos May 3; minimum daily, 376 micromhos Aug. 1.

Water temperatures: Maximum, 32.0°C Sept. 1; minimum, freezing point on many days during winter months.

Period of record:

Specific conductance: Maximum daily, 6,520 micromhos Mar. 3, 1971; minimum daily, 252 micromhos July 21, 1972.

Water temperatures: Maximum, 35.0°C Aug. 5, 1969, June 22, 1972; minimum, freezing point on many days during winter months.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report.

DATE	TIME	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 SODIUM PLUS POTAS- SIUM (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HC03) (MG/L)	CAR- BONATE (C03) (MG/L)
OCT. 24...	1610	3.9	11	88	53	720	--	8.1	236	0
NOV. 27...	1440	4.1	13	84	53	620	--	7.7	256	0
DEC. 06...	1100	8.3	10	92	48	630	--	7.0	244	0
30...	1300	3.3	12	85	62	--	850	--	212	0
JAN. 05...	1115	5.3	17	140	69	800	--	9.0	229	0
16...	1400	58	9.2	88	43	630	--	6.3	232	0
FEB. 14...	1500	9.4	9.8	80	56	740	--	8.7	198	0
MAY 02...	1100	7.4	5.3	92	80	920	--	10	246	0
JUNE 02...	1800	3.9	15	59	20	120	--	6.7	228	0
JULY 04...	1800	15	14	37	10	150	--	4.1	235	0
AUG. 12...	1715	814	18	52	17	67	--	4.5	244	0
SEP. 23...	0900	200	10	39	17	280	--	4.1	208	0

DATE	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO- RIDE (CL) (MG/L)	DIS-SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
OCT. 24...	500	930	.7	--	--	--	--	--	--	2430
NOV. 27...	440	790	--	--	--	--	--	--	--	2130
DEC. 06...	340	870	--	.10	.00	.01	.25	--	.14	2120
30...	480	1200	--	--	--	--	--	--	--	2750
JAN. 05...	550	1100	--	--	--	--	--	--	--	2800
16...	340	880	--	.10	.00	.04	.46	--	.31	2110
FEB. 14...	460	100	--	--	--	--	--	--	--	1550
MAY 02...	720	1200	--	.10	.01	.10	.47	.57	.06	3150
JUNE 02...	120	130	--	--	--	--	--	--	--	583
JULY 04...	100	120	--	--	--	--	--	--	--	551
AUG. 12...	51	57	--	--	--	--	--	--	--	387
SEP. 23...	180	280	--	--	--	--	--	--	--	913

ARKANSAS RIVER BASIN

07227470 CANADIAN RIVER AT TASCOSA, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)
OCT. 24...	440	240	15	4170	7.6	20.5	--	--	--
NOV. 27...	430	220	13	3610	8.0	8.0	--	--	--
DEC. 06...	430	230	13	3690	7.9	2.0	10.7	78	1.0
30...	470	290	17	4760	7.8	2.0	--	--	--
JAN. 05...	630	450	14	4710	8.0	.0	--	--	--
16...	400	210	14	3640	8.1	6.5	12.7	103	1.1
FEB. 14...	430	270	16	4000	8.0	9.0	--	--	--
MAY 02...	560	360	17	5180	8.1	18.5	9.6	103	3.0
JUNE 02...	230	43	3.4	1010	7.8	25.0	--	--	--
JULY 04...	130	0	5.6	974	7.9	30.0	--	--	--
AUG. 12...	200	0	2.1	698	7.5	26.0	--	--	--
SEP. 23...	170	0	9.4	1630	8.1	12.0	--	--	--

DATE	TIME	DIS- SOLVED ALUM- INUM (AL) (UG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	DIS- SOLVED COBALT (CO) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)
JAN. 16...	1400	30	0	250	0	0	0	5
MAY 02...	1100	10	7	--	2	40	1	13

DATE	TIME	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	DIS- SOLVED LITHIUM (LI) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED MERCURY (HG) (UG/L)	DIS- SOLVED NICKEL (NI) (UG/L)	DIS- SOLVED STRON- TIUM (SR) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)
JAN. 16...		30	0	90	13	.0	3	2100	20
MAY 02...		140	30	0	0	.0	4	2900	90

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	ALDRIN (UG/L)	ALDRIN IN BOTTOM DE- POSITS (UG/KG)	DDD (UG/L)	DDD IN BOTTOM DE- POSITS (UG/KG)	DDE (UG/L)	DDE IN BOTTOM DE- POSITS (UG/KG)	DDT (UG/L)	DDT IN BOTTOM DE- POSITS (UG/KG)
JAN. 16...	1400	58	6.5	.00	.0	.00	.0	.00	.0	.00	.0
MAY 02...	1100	7.4	18.5	.00	.0	.00	.0	.00	.0	.00	.0

DATE	DI- ELDRIN (UG/L)	DI- ELDRIN IN BOTTOM DE- POSITS (UG/KG)	ENDRIN (UG/L)	ENDRIN IN BOTTOM DE- POSITS (UG/KG)	HEPTA- CHLOR (UG/L)	HEPTA- CHLOR IN BOTTOM DE- POSITS (UG/KG)	HEPTA- CHLOR EPOXIDE (UG/L)	HEPTA- CHLOR EPOXIDE IN BOT- TOM DE- POSITS (UG/KG)	LINDANE (UG/L)	LINDANE IN BOT- TOM DE- POSITS (UG/KG)	CHLOR- DANE (UG/L)
JAN. 16...	.00	.0	.00	.0	.00	.0	.00	.0	.00	.0	.0
MAY 02...	.00	.0	.00	.0	.00	.0	.00	.0	.00	.0	.0

DATE	CHLOR- DANE IN BOTTOM DE- POSITS (UG/KG)	PCB (UG/L)	PCB IN BOTTOM DE- POSITS (UG/KG)	DI- AZINON (UG/L)	MALA- THION (UG/L)	METHYL PARA- THION (UG/L)	PARA- THION (UG/L)	2,4-D (UG/L)	SILVEX (UG/L)	2,4,5-T (UG/L)
JAN. 16...	0	.0	0	.00	.00	.00	.00	.00	.00	.00
MAY 02...	0	.0	0	.00	.00	.00	.00	.07	.00	.00

07227470 CANADIAN RIVER AT TASCOSA, TEX.--Continued

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

MONTH	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCT- ANCE (MICRO- MHOS)	DIS- SOLVED SOLIDS (MG/L)	DIS- SOLVED SOLIDS (TONS)	DIS- SOLVED CHLORIDE (MG/L)	DIS- SOLVED CHLORIDE (TONS)	DIS- SOLVED SULFATE (MG/L)	DIS- SOLVED SULFATE (TONS)	HARDNESS (CA+MG) (MG/L)
OCT. 1973.....	129.14	3740	2200	767	870	303	410	143	420
NOV. 1973.....	113.13	3510	2000	611	810	247	380	116	400
DEC. 1973.....	256.7	3430	2000	1390	790	548	370	256	390
JAN. 1974.....	305.5	4010	2300	1900	940	775	440	363	440
FEB. 1974.....	194.2	4290	2500	1310	1000	524	470	246	470
MAR. 1974.....	421.23	4050	2400	2730	950	1080	440	500	450
APR. 1974.....	0	--	--	0	--	0	--	0	--
MAY 1974.....	1447.18	2130	1200	4690	430	1680	230	899	270
JUNE 1974.....	133.62	1030	600	216	140	50.5	110	39.7	170
JULY 1974.....	59.11	637	360	57.5	29	4.63	72	11.5	130
AUG. 1974.....	22817.97	866	500	30800	91	5610	97	5980	160
SEPT 1974.....	4913	1340	780	10300	220	2920	150	1990	200
TOTAL	30790.79	**	**	54800	**	13700	**	10500	**
WTD.AVG.	84.36	1140	660	**	170	**	130	**	180

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	---	3750	2850	4800	4090	5460	---	5300	---	---	376	705
2	---	3760	2620	4800	3980	5440	---	5210	1000	---	---	622
3	---	3730	2920	4800	4190	5010	---	5590	1540	---	---	1010
4	---	3630	3350	4600	4320	4550	---	5560	508	974	---	1880
5	---	3530	2130	4500	4760	4600	---	1490	603	1210	---	2090
6	---	3500	3220	4300	4720	4590	---	4800	1010	---	684	2300
7	---	3420	4020	4100	4600	4470	---	4800	1000	---	2420	2730
8	---	3410	3900	3900	4500	4050	---	2530	1390	500	654	2750
9	---	3400	4150	4100	4400	4010	---	2870	1120	436	752	2810
10	---	3400	4120	4200	4340	3380	---	2860	1120	468	930	2940
11	4000	3440	1660	4300	4000	3390	---	3680	---	---	676	3030
12	4170	3450	5200	3700	4020	3860	---	4940	---	---	614	3110
13	3460	3600	4920	3500	4020	3850	---	5150	---	---	811	3170
14	3460	3780	3890	3300	4050	5210	---	---	---	---	1320	3100
15	3460	3790	3800	3210	4070	5190	---	---	---	---	1410	2950
16	3730	3810	2790	3550	4070	4070	---	---	---	---	1850	2770
17	3990	3740	3850	4230	4230	4070	---	---	---	---	2270	2680
18	3900	3480	4080	4270	4230	3860	---	---	---	---	2270	1630
19	3300	3480	4100	4380	4550	4540	---	---	---	---	2410	1520
20	3420	3690	4200	4480	4530	4710	---	---	---	---	2570	1320
21	3560	3620	4300	4470	4670	4550	---	---	---	---	2780	1150
22	3670	3490	4370	4570	4540	4280	---	---	---	---	2830	1450
23	3670	3430	3170	4490	4440	4290	---	---	---	---	901	1630
24	4170	3400	3130	4530	4620	4080	---	1500	---	---	1410	1500
25	4110	3530	3040	4500	4340	4050	---	1170	---	---	1990	1580
26	3920	3530	3880	4300	4300	4040	---	1170	---	---	2100	1690
27	3780	3550	3670	4370	4280	4050	---	2680	---	---	1080	2080
28	3770	3950	3930	4670	4840	4120	---	3130	---	---	1080	2970
29	3690	3490	4100	4210	---	4130	---	2770	---	---	1380	2990
30	3940	3560	4760	3890	---	4020	---	2730	---	---	1380	3010
31	3800	---	4800	4070	---	---	---	---	---	---	1830	---
MONTH	---	3580	3710	4240	4350	4330	---	---	---	---	1510	2170

ARKANSAS RIVER BASIN

07227470 CANADIAN RIVER AT TASCOSA, TEX.--Continued

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	---	11.0	2.0	---	4.0	18.0	---	---	---	---	27.0	32.0
2	---	14.0	6.0	---	1.0	10.0	---	15.0	25.0	---	---	14.0
3	---	7.0	3.0	---	6.0	23.0	---	26.0	20.0	---	---	18.0
4	---	7.0	1.0	---	0.0	10.0	---	10.0	20.0	30.0	---	23.0
5	---	7.0	1.0	---	5.0	7.0	---	19.0	26.0	20.0	---	15.0
6	---	4.0	0.0	---	0.0	5.0	---	19.0	17.0	---	19.0	16.0
7	---	7.0	0.0	---	---	16.0	---	17.0	18.0	---	19.0	15.0
8	---	15.0	0.0	---	---	14.0	---	17.0	19.0	---	20.0	25.0
9	---	7.0	1.0	---	---	15.0	---	25.0	18.0	22.0	19.0	19.0
10	---	8.0	0.0	---	0.0	9.0	---	17.0	---	22.0	20.0	15.0
11	---	11.0	1.0	---	11.0	5.0	---	16.0	---	---	17.0	20.0
12	8.0	6.0	2.0	---	3.0	10.0	---	25.0	---	---	19.0	16.0
13	10.0	10.0	0.0	---	4.0	12.0	---	23.0	---	---	23.0	17.0
14	10.0	9.0	1.0	0.0	9.0	5.0	---	---	---	---	30.0	12.0
15	23.0	8.0	4.0	0.0	1.0	8.0	---	---	---	---	22.0	20.0
16	10.0	5.0	0.0	0.0	1.0	4.0	---	---	---	---	22.0	20.0
17	12.0	4.0	8.0	---	7.0	4.0	---	---	---	---	22.0	18.0
18	21.0	10.0	1.0	5.0	4.0	10.0	---	---	---	---	27.0	17.0
19	25.0	9.0	---	0.0	0.0	17.0	---	---	---	---	20.0	25.0
20	10.0	2.0	---	11.0	11.0	2.0	---	---	---	---	21.0	18.0
21	24.0	0.0	---	5.0	7.0	17.0	---	---	---	---	21.0	13.0
22	23.0	4.0	1.0	2.0	6.0	17.0	---	---	---	---	23.0	16.0
23	12.0	10.0	5.0	0.0	7.0	9.0	---	---	---	---	20.0	12.0
24	20.5	2.0	1.0	0.0	0.0	3.0	---	---	---	---	18.0	12.0
25	11.0	4.0	0.0	0.0	0.0	12.0	---	25.0	---	---	19.0	26.0
26	8.0	11.0	3.0	0.0	6.0	19.0	---	---	---	---	26.0	14.0
27	19.0	2.0	5.0	1.0	4.0	9.0	---	25.0	---	---	20.0	16.0
28	9.0	0.0	4.0	2.0	3.0	10.0	---	28.0	---	---	24.0	12.0
29	10.0	14.0	1.0	0.0	---	9.0	---	20.0	---	---	24.0	19.0
30	10.0	18.0	2.0	5.0	---	8.0	---	30.0	---	---	20.0	24.0
31	19.0	---	---	0.0	---	---	---	---	---	---	21.0	---
MONTH	---	7.5	2.0	---	4.0	10.5	---	---	---	---	21.5	18.0

07227500 CANADIAN RIVER NEAR AMARILLO, TEX.

LOCATION.--Lat 35°28'13", long 101°52'45", Potter County, at gaging station at bridge on U.S. Highways 87 and 287, 1,500 ft (457 m) downstream from Pitcher Creek, 1.4 miles (2.3 km) downstream from East Amarillo Creek, 1.7 miles (2.7 km) downstream from Panhandle and Santa Fe Railway Co. bridge, and 19 miles (31 km) north of Amarillo.

DRAINAGE AREA.--19,445 mi² (50,363 km²), of which 4,069 mi² (10,539 km²) is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: July 1948 to October 1949, February 1950 to September 1974.

Biochemical analyses: January 1969 to September 1974.

Pesticide analyses: October 1968 to September 1974.

Water temperatures: August 1949 to September 1974.

Sediment records: August 1949 to September 1952.

EXTREMES.--October 1973 to September 1974:

Specific conductance: Maximum daily, 4,020 micromhos Feb. 4; minimum daily, 466 micromhos July 9.

Water temperatures: Maximum, 34.0°C July 25; minimum, freezing point on several days during winter months.

Period of record:

Specific conductance: Maximum daily, 4,880 micromhos Mar. 6, 1971; minimum daily, 346 micromhos Oct. 29, 1964.

Water temperatures: Maximum, 39.0°C July 7, 1973, minimum, freezing point on many days during winter months.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

		INSTAN- TANEOUS 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 SODIUM PLUS POTAS- SIUM (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HC03) (MG/L)	CAR- BONATE (C03) (MG/L)	DIS- SOLVED SULFATE (S04) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	
OCT.													
10...	1030	8.2	36	82	32	250	--	13	244	0	260	290	
24...	1130	6.6	27	110	36	250	--	13	262	0	320	290	
NOV.													
27...	1140	8.8	24	81	33	270	--	17	225	0	270	290	
DEC.													
06...	0920	12	26	80	32	280	--	16	228	0	270	320	
31...	1130	10	26	120	42	--	390	--	264	0	400	480	
JAN.													
04...	1430	16	23	76	32	260	--	15	207	0	270	290	
16...	1110	23	21	120	40	380	--	13	210	0	380	470	
24...	1225	19	20	120	48	480	--	13	231	0	460	670	
FEB.													
14...	1130	15	20	130	48	420	--	14	212	0	440	570	
APR.													
30...	1100	12	26	81	33	290	--	16	231	0	260	300	
MAY													
01...	1600	9.6	20	69	31	270	--	16	280	0	260	290	
JUNE													
10...	1645	28	14	61	19	170	--	8.7	175	0	180	210	
JULY													
18...	1430	5.2	23	64	26	200	--	18	235	0	200	230	
AUG.													
12...	1400	4230	18	52	18	88	--	4.3	257	0	70	76	
SEP.													
30...	1030	88	12	84	33	400	--	6.3	226	0	290	480	
		DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITU- TENTS) (MG/L)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)	VOL. NON- FILT- RABLE RESIDUE (MG/L)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)
OCT.													
10...	1.7	4.6	1.2	3.5	.56	--	3.6	1110	17	4	340	140	
24...	1.5	--	--	--	--	--	--	1180	--	--	420	200	
NOV.													
27...	--	--	--	--	--	--	--	1100	--	--	340	150	
DEC.													
06...	--	1.9	1.2	14	1.4	--	6.8	1140	44	13	330	140	
31...	1.7	--	--	--	--	--	--	1570	--	--	460	240	
JAN.													
04...	--	--	--	--	--	--	--	1070	--	--	320	150	
16...	--	1.4	.53	15	1.3	--	4.7	1530	39	15	470	300	
24...	--	--	--	--	--	--	--	1920	--	--	500	310	
FEB.													
14...	--	--	--	--	--	--	--	1750	--	--	520	350	
APR.													
30...	--	--	--	--	--	--	--	1120	--	--	340	150	
MAY													
01...	--	2.4	1.4	12	3.0	15	5.8	1100	14	6	300	72	
JUNE													
10...	--	--	--	--	--	--	--	749	--	--	230	87	
JULY													
18...	--	3.8	.82	.18	1.4	1.6	3.7	877	41	9	270	74	
AUG.													
12...	--	--	--	--	--	--	--	453	--	--	200	0	
SEP.													
30...	--	--	--	--	--	--	--	1420	--	--	350	160	

ARKANSAS RIVER BASIN

07227500 CANADIAN RIVER NEAR AMARILLO, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	PHENOLS (UG/L)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)
OCT. 10...	5.9	1850	8.1	13.0	40	9	9.1	86	8.2	3.5	--	.2
24...	5.4	1960	7.5	14.0	--	--	--	--	--	--	--	--
NOV. 27...	6.4	1880	7.5	4.5	--	--	--	--	--	--	--	--
DEC. 06...	6.7	1970	8.1	.0	30	25	10.2	70	20	12	2	.1
31...	7.9	2710	7.5	1.0	--	--	--	--	--	--	--	--
JAN. 04...	6.3	1820	8.3	.5	--	--	--	--	--	--	--	--
16...	7.7	2650	8.0	4.0	20	20	12.1	93	11	9.0	--	.2
24...	9.4	3370	8.1	1.0	--	--	--	--	--	--	--	--
FEB. 14...	8.0	2910	8.1	5.5	--	--	--	--	--	--	--	--
APR. 30...	6.9	1930	7.8	16.0	--	--	--	--	--	--	--	--
MAY 01...	6.8	1950	8.5	25.0	0	7	18.3	218	7.1	14	--	.0
JUNE 10...	4.9	1290	7.8	26.5	--	--	--	--	--	--	--	--
JULY 18...	5.3	1510	7.8	32.5	5	30	9.8	132	2.8	10	--	.3
AUG. 12...	2.7	845	7.8	22.0	--	--	--	--	--	--	--	--
SEP. 30...	9.4	2540	8.1	15.0	--	--	--	--	--	--	--	--

DATE	TIME	DIS- SOLVED ALUM- INUM (AL) (UG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	DIS- SOLVED COBALT (CO) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)
OCT. 10...	1030	0	2	--	0	0	0	2
JAN. 16...	1110	0	10	420	0	0	0	5
MAY 01...	1600	40	9	590	2	30	0	27

DATE	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	DIS- SOLVED LITHIUM (LI) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED MERCURY (HG) (UG/L)	DIS- SOLVED NICKEL (NI) (UG/L)	DIS- SOLVED STRON- TIUM (SR) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)
OCT. 10...	10	0	70	30	<.2	0	1400	40
JAN. 16...	30	2	60	290	.0	2	2700	20
MAY 01...	380	26	80	70	.2	7	1700	50

ARKANSAS RIVER BASIN

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07227500 CANADIAN RIVER NEAR AMARILLO, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TEMPERATURE (DEG C)	ALDRIN (UG/L)	ALDRIN IN BOTTOM DE-POSITS (UG/KG)	DDD (UG/L)	DDD IN BOTTOM DE-POSITS (UG/KG)	DDE (UG/L)	DDE IN BOTTOM DE-POSITS (UG/KG)	DDT (UG/L)	DDT IN BOTTOM DE-POSITS (UG/KG)
OCT. 10...	1030	8.2	13.0	.00	--	.00	--	.00	--	.00	--
JAN. 16...	1110	23	4.0	.00	.0	.00	.0	.00	.0	.00	.0
MAY 01...	1600	9.6	25.0	.00	.0	.00	.0	.00	.0	.00	.0

DATE	DI-ELDRIN (UG/L)	DI-ELDRIN IN BOTTOM DE-POSITS (UG/KG)	ENDRIN (UG/L)	ENDRIN IN BOTTOM DE-POSITS (UG/KG)	HEPTA-CHLOR (UG/L)	HEPTA-CHLOR IN BOTTOM DE-POSITS (UG/KG)	HEPTA-CHLOR EPOXIDE (UG/L)	HEPTA-CHLOR EPOXIDE IN BOTTOM DE-POSITS (UG/KG)	LINDANE (UG/L)	LINDANE IN BOTTOM DE-POSITS (UG/KG)	CHLOR-DANE (UG/L)
OCT. 10...	.00	--	.00	--	.00	--	.00	--	.00	--	.0
JAN. 16...	.00	.0	.00	.0	.00	.0	.00	.0	.02	.0	.0
MAY 01...	.00	.0	.00	.0	.00	.0	.00	.0	.02	.0	.0

DATE	CHLOR-DANE IN BOTTOM DE-POSITS (UG/KG)	PCB (UG/L)	PCB IN BOTTOM DE-POSITS (UG/KG)	DI-A/INON (UG/L)	MALATHION (UG/L)	METHYL PARATHION (UG/L)	PARATHION (UG/L)	2,4-D (UG/L)	SILVEX (UG/L)	2,4,5-T (UG/L)
OCT. 10...	--	.0	--	.05	.00	.00	.00	.06	.00	.01
JAN. 16...	0	.0	0	.08	.00	.00	.00	.04	.00	.00
MAY 01...	0	.0	0	.07	.00	.00	.00	.33	.10	.08

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

MONTH	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCTANCE (MICRO-MHOS)	DIS-SOLVED SOLIDS (MG/L)	DIS-SOLVED SOLIDS (TONS)	DIS-SOLVED CHLORIDE (MG/L)	DIS-SOLVED CHLORIDE (TONS)	DIS-SOLVED SULFATE (MG/L)	DIS-SOLVED SULFATE (TONS)	HARDNESS (CA+MG) (MG/L)
OCT. 1973.....	265	1830	1100	787	280	280	260	186	310
NOV. 1973.....	230	1920	1100	834	300	227	270	205	320
DEC. 1973.....	420	2460	1400	1590	440	499	350	397	410
JAN. 1974.....	710	3180	1900	3640	620	1190	460	882	520
FEB. 1974.....	441	2990	1700	2020	570	679	430	512	490
MAR. 1974.....	2845	1840	1100	8450	280	2150	260	2000	310
APR. 1974.....	144	1980	1200	469	310	121	280	109	330
MAY 1974.....	3614	1320	770	7510	200	1950	180	1760	220
JUNE 1974.....	2145	937	550	3190	140	811	120	695	160
JULY 1974.....	1271	941	550	1890	140	481	120	412	160
AUG. 1974.....	25094	1050	610	41300	160	10800	140	9490	180
SEPT 1974.....	9557	1670	970	25000	260	6710	230	5930	260
TOTAL	46790	**	**	96700	**	25800	**	22600	**
WTD.AVG.	128	1310	770	**	200	**	180	**	220

ARKANSAS RIVER BASIN

07227500 CANADIAN RIVER NEAR AMARILLO, TEX.--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	1720	1950	1630	2620	3500	2000	2040	1940	1210	1520	1690	1850
2	1760	2000	2000	2590	3430	1950	2000	1960	1610	1670	1210	1140
3	1810	1930	2000	2480	3280	2260	1990	2030	3240	1600	1510	961
4	1920	1910	1870	3360	4020	2040	2030	2060	843	1170	1670	1280
5	1830	1880	1950	1970	3360	2000	1960	686	1010	810	1770	1560
6	2410	1820	1880	2490	3070	1980	2030	1800	1240	921	1460	2000
7	1020	1840	1980	2290	2550	1850	2030	1600	1520	1120	1060	2200
8	1450	1850	1930	2200	2630	1710	1920	3190	649	1510	1050	2290
9	1700	1960	1970	2600	2360	2080	1880	3570	918	466	1320	2490
10	1740	1950	1900	2510	2880	1390	1920	2600	1250	913	1160	2370
11	1730	1970	1920	2600	3090	1510	1920	2330	1370	1230	1000	2410
12	1800	1960	1940	2520	3030	2640	1990	1500	1400	1360	853	2370
13	1860	1920	2270	2450	3150	3330	1990	1500	1450	1490	923	2350
14	1840	1880	3020	2770	2970	3590	2050	1550	1420	1440	1040	2430
15	1920	1920	3000	2360	3230	3650	1950	1600	1440	1450	1340	2350
16	1800	1920	2420	2660	3460	2690	1980	1920	1630	1310	1690	2650
17	1800	1970	3660	2680	3410	3360	1930	1720	1330	1270	1920	2680
18	1920	1970	3140	3140	3300	3410	1900	1690	1160	1480	2330	3970
19	1930	1970	2400	3560	3270	2760	1950	1640	1370	1190	2660	2400
20	1930	1920	2530	3750	3860	2910	2030	1780	1380	1280	2760	1600
21	1910	1900	2650	3930	3430	2950	2040	1660	1420	1340	2590	1290
22	1880	1890	2240	3740	2290	2810	1990	1700	1520	1170	2410	1270
23	1920	1910	2330	3510	2580	2680	2080	1870	1360	1150	1590	1340
24	1960	1950	2410	3250	2450	2430	1940	1590	1500	1410	2120	1580
25	1850	1890	2620	3390	2030	2660	1880	1230	1380	1340	1310	1690
26	1920	1910	2830	3220	2220	2490	2020	929	1420	1410	870	1680
27	1910	1880	2550	3470	2060	2140	2050	1120	1460	1390	1470	1840
28	1950	1900	2710	3930	1990	2030	1980	1640	1480	1530	749	1990
29	1950	1940	2990	3490	---	2010	1960	1810	1500	1540	1190	2310
30	1910	2040	3290	3570	---	2020	1940	1460	1540	1580	1030	2540
31	1850	---	2710	3790	---	2040	---	1310	---	1620	1410	---
MONTH	1840	1920	2410	3000	2960	2430	1980	1770	1400	1310	1520	2030

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	18.0	8.0	1.0	6.0	13.0	16.0	19.0	16.0	22.0	24.0	20.0
2	20.0	6.0	8.0	1.0	4.0	11.0	10.0	14.0	19.0	19.0	26.0	14.0
3	21.0	6.0	4.0	1.0	4.0	12.0	9.0	17.0	20.0	25.0	18.0	13.0
4	12.0	10.0	6.0	1.0	4.0	17.0	1.0	19.0	17.0	23.0	20.0	17.0
5	12.0	5.0	6.0	0.0	3.0	11.0	4.0	9.0	20.0	24.0	21.0	15.0
6	15.0	17.0	3.0	1.0	0.0	12.0	6.0	16.0	19.0	26.0	17.0	18.0
7	18.0	8.0	3.0	2.0	1.0	12.0	14.0	18.0	19.0	20.0	19.0	18.0
8	17.0	12.0	9.0	1.0	0.0	11.0	14.0	21.0	18.0	24.0	18.0	19.0
9	20.0	9.0	5.0	1.0	0.0	13.0	13.0	19.0	17.0	20.0	18.0	20.0
10	12.0	16.0	9.0	0.0	1.0	4.0	15.0	22.0	20.0	22.0	20.0	20.0
11	13.0	19.0	11.0	0.0	4.0	7.0	8.0	16.0	20.0	23.0	19.0	18.0
12	12.0	13.0	9.0	0.0	2.0	9.0	15.0	19.0	20.0	25.0	17.0	12.0
13	13.0	12.0	4.0	1.0	5.0	8.0	15.0	17.0	20.0	24.0	22.0	14.0
14	15.0	13.0	11.0	2.0	6.0	10.0	9.0	20.0	20.0	24.0	21.0	15.0
15	21.0	15.0	5.0	2.0	6.0	8.0	14.0	13.0	22.0	27.0	22.0	17.0
16	12.0	13.0	2.0	1.0	7.0	9.0	19.0	19.0	21.0	24.0	23.0	17.0
17	14.0	13.0	3.0	1.0	10.0	10.0	10.0	21.0	23.0	24.0	22.0	18.0
18	15.0	10.0	5.0	4.0	6.0	16.0	25.0	24.0	26.0	22.0	22.0	19.0
19	20.0	7.0	0.0	0.0	7.0	10.0	21.0	25.0	26.0	26.0	23.0	19.0
20	20.0	5.0	0.0	4.0	13.0	6.0	20.0	20.0	24.0	24.0	20.0	18.0
21	25.0	6.0	2.0	5.0	5.0	5.0	15.0	19.0	24.0	24.0	21.0	15.0
22	16.0	3.0	2.0	3.0	3.0	7.0	16.0	26.0	23.0	25.0	20.0	15.0
23	16.0	10.0	3.0	3.0	5.0	0.0	15.0	20.0	24.0	26.0	19.0	14.0
24	14.0	6.0	1.0	8.0	2.0	6.0	16.0	18.0	19.0	28.0	21.0	11.0
25	20.0	7.0	1.0	1.0	9.0	10.0	26.0	16.0	20.0	34.0	19.0	14.0
26	10.0	6.0	4.0	5.0	6.0	11.0	25.0	19.0	21.0	25.0	20.0	15.0
27	20.0	8.0	3.0	3.0	6.0	14.0	20.0	20.0	19.0	27.0	21.0	18.0
28	14.0	10.0	5.0	3.0	15.0	12.0	22.0	20.0	19.0	25.0	18.0	14.0
29	17.0	9.0	6.0	2.0	---	14.0	19.0	21.0	22.0	23.0	20.0	14.0
30	9.0	11.0	3.0	1.0	---	15.0	16.0	17.0	19.0	22.0	21.0	15.0
31	5.0	---	1.0	1.0	---	13.0	---	15.0	---	24.0	22.0	---
MONTH	15.5	10.0	4.5	2.0	5.0	10.0	15.0	14.5	20.5	24.0	20.5	16.0

07228000 CANADIAN RIVER NEAR CANADIAN, TEX.

LOCATION.--Lat 35°56'01", long 100°22'06", Hemphill County, at gaging station on U.S. Highways 60 and 83 and 1.6 miles (2.6 km) northeast of Canadian.

DRAINAGE AREA.--22,866 mi² (59,223 km²), of which 4,688 mi² (12,142 km²) is probably noncontributing.

PERIOD OF RECORD.--Chemical and biochemical analyses: March 1968 to September 1974.

Pesticide analyses: October 1971 to September 1974.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	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 SODIUM PLUS POTAS- SIUM (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAH- BONATE (CO ₃) (MG/L)
OCT. 09...	1630	1.4	46	70	18	--	83	--	332	0
DEC. 05...	1305	62	21	95	42	370	--	15	284	0
FEB. 13...	0945	55	16	98	48	320	--	17	253	0
APR. 30...	1200	24	23	90	49	350	--	24	226	0
JULY 17...	1200	.37	35	56	19	85	--	3.5	307	0

DATE	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
OCT. 09...	10	100	1.2	.00	.00	.00	.02	--	.13	493
DEC. 05...	170	590	--	.10	.01	.04	.53	--	.02	1440
FEB. 13...	230	510	--	.34	.00	.30	.34	--	.11	1360
APR. 30...	290	550	--	.06	.01	.09	1.1	1.2	.25	1490
JULY 17...	27	100	--	.00	.00	.09	.47	.56	.80	477

DATE	HARD- NESS (CA+MG) (MG/L)	NON- CAH- BONATE HARD- NESS (MG/L)	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	BIO- CHEM- ICAL OXYGEN DEMAND (MG/L)
OCT. 09...	250	0	2.3	827	8.1	26.5	10.3	126	1.0
DEC. 05...	410	180	8.0	2560	8.1	5.0	11.0	87	2.8
FEB. 13...	440	230	6.6	2400	7.9	4.5	11.3	88	2.1
APR. 30...	430	240	7.4	2530	8.0	18.0	9.5	100	12
JULY 17...	220	0	2.5	839	7.2	30.0	11.5	151	1.7

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	ALDRIN (UG/L)	DDD (UG/L)	DDE (UG/L)	DDT (UG/L)	DI- ELDRIN (UG/L)	ENDRIN (UG/L)	HEPTA- CHLOR (UG/L)	HEPTA- CHLOR EPOXIDE (UG/L)
OCT. 09...	1630	1.4	26.5	.00	.00	.00	.00	.00	.00	.00	.00
FEB. 13...	0945	55	4.5	.00	.00	.00	.00	.00	.00	.00	.00
APR. 30...	1200	24	18.0	.00	.00	.00	.00	.00	.00	.00	.00

DATE	LINDANE (UG/L)	CHLOR- DANE (UG/L)	PCB (UG/L)	DI- AZINON (UG/L)	MALA- THION (UG/L)	METHYL PARA- THION (UG/L)	PARA- THION (UG/L)	2,4-D (UG/L)	SILVEX (UG/L)	2,4,5-T (UG/L)
OCT. 09...	.00	.0	.0	.00	.00	.00	.00	.00	.00	.00
FEB. 13...	.00	.0	.0	.00	.00	.00	.00	.00	.00	.00
APR. 30...	.00	.0	.0	.00	.00	.00	.00	.07	--	--

ARKANSAS RIVER BASIN

07233500 PALO DURO CREEK NEAR SPEARMAN, TEX.

LOCATION.--Lat 36°12'08", long 101°18'20", Hansford County, at gaging station at bridge on State Highway 15, 6 miles (10 km) west of Spearman, and 18 miles (29 km) upstream from Horse Creek.

DRAINAGE AREA.--960 mi² (2,490 km²), of which 520 mi² (1,350 km²) is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: January 1967 to September 1974.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	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 SODIUM PLUS POTAS- SIUM (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)
OCT. 18...	0940	1.6	9.8	36	15	--	19	--	172	0
NOV. 21...	0925	6.4	17	52	27	--	24	--	254	0
MAR. 20...	1530	.52	13	39	12	13	--	11	166	0
MAY 01...	0925	3.6	17	38	14	20	--	12	178	0
JUNE 11...	1050	7.1	21	40	9.9	12	--	12	160	0

DATE	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITU- ENTS) (MG/L)	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)
OCT. 18...	32	13	.4	210	150	12	.7	392	7.3	11.0
NOV. 21...	46	25	.5	316	240	34	.7	591	7.7	.0
MAR. 20...	18	12	--	199	150	11	.5	357	7.5	1.0
MAY 01...	40	16	--	245	150	7	.7	433	7.5	14.0
JUNE 11...	27	11	--	212	140	9	.4	370	7.5	19.5

ARKANSAS RIVER BASIN

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MISCELLANEOUS ANALYSES OF STREAMS IN THE ARKANSAS RIVER BASIN IN TEXAS

WATER QUALITY DATA, OCTOBER 1973 TO SEPTEMBER 1974

07227900 LAKE MEREDITH NEAR SANFORD, TEX. (Lat 35°42'38", long 101°33'03")

DATE	TIME	RESER- VOIR STORAGE (AC-FT)	DIS- SOLVED SILICA (SI02) (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)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
OCT.. 1973											
18...	1245	493000	2.9	59	27	260	6.6	212	0	280	280
JAN.. 1974											
04...	1200	470600	3.2	64	27	280	8.1	218	0	280	290
MAY											
01...	1120	447600	2.7	63	28	280	6.6	217	0	270	290
JULY											
18...	0800	421200	3.3	55	28	280	8.1	208	0	280	310

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITU- ENTS) (MG/L)	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)	COLOR (PLAT- INUM- COBALT UNITS)	DIS- SOLVED BORON (B) (UG/L)
OCT.. 1973											
18...	.8	.20	1030	260	84	7.2	1770	8.0	19.0	0	270
JAN.. 1974											
04...	--	--	1060	270	92	7.4	1770	8.2	5.0	--	280
MAY											
01...	--	--	1050	270	95	7.4	1800	8.2	15.0	--	--
JULY											
18...	--	--	1070	250	82	7.7	1840	8.1	25.0	--	--

RED RIVER BASIN

07297910 PRAIRIE DOG TOWN FORK RED RIVER NEAR WAYSIDE, TEX.

LOCATION.--Lat 34°50'15", long 101°24'49", Armstrong County, at gaging station at bridge on Farm Road 284 and 13 miles (21 km) northeast of Wayside.

DRAINAGE AREA.--4,211 mi² (10,906 km²), of which 3,281 mi² (8,498 km²) is noncontributing.

PERIOD OF RECORD.--Chemical analyses: November 1967 to September 1974.

Water temperatures: November 1967 to September 1974.

EXTREMES.--October 1973 to September 1974:

*Specific conductance: Maximum daily, 45,200 micromhos May 23; minimum daily, 558 micromhos Aug. 11.
Water temperatures: Minimum, freezing point on several days during December and January.

Period of record:

Specific conductance (1967-69, 1970-74): Maximum daily, 47,300 micromhos May 5, 1971; minimum daily, 558 micromhos Aug. 11, 1974.
Water temperatures: Maximum, 38.0°C Oct. 14, 1968; minimum, freezing point on many days during winter months.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report. Conductivity is recorded continuously at this station.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	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 SODIUM PLUS POTAS- SIUM (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)
OCT. 11...	0815	14	13	110	26	--	190	--	142	0
NOV. 27...	1110	.39	--	760	210	--	--	--	--	--
DEC. 18...	1015	.43	27	760	210	5300	--	99	92	0
JAN. 28...	1100	.47	25	710	190	4200	--	77	145	0
MAR. 12...	1100	3.5	20	440	93	1300	--	23	121	0
APR. 01...	1150	.18	--	890	240	--	--	--	--	--
MAY 25...	1130	992	18	71	13	75	--	5.4	222	0
JUNE 03...	1345	639	15	48	9.0	71	--	7.8	180	0
AUG. 26...	1035	41	16	210	35	210	--	8.7	130	0
SEP. 23...	1410	33	14	230	44	410	--	9.8	116	0

DATE	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	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)
OCT. 11...	190	340	.5	950	390	270	4.2	1810	7.5	8.0
NOV. 27...	2600	9500	--	--	2800	--	--	29900	--	7.0
DEC. 18...	2400	8200	--	17000	2800	2700	44	26800	7.9	6.5
JAN. 28...	2300	6700	--	14300	2600	2400	36	22100	7.9	2.0
MAR. 12...	1600	1800	--	5340	1500	1400	15	7940	7.9	10.0
APR. 01...	2800	12000	--	--	3200	--	--	35800	--	19.0
MAY 25...	140	50	--	482	230	49	2.1	800	7.9	15.0
JUNE 03...	120	32	--	392	160	9	2.5	645	8.2	22.5
AUG. 26...	690	230	--	1460	670	560	3.5	2080	8.2	24.0
SEP. 23...	710	540	--	2020	760	660	6.5	3080	7.6	14.5

RED RIVER BASIN

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07297910 PRAIRIE DOG TOWN FORK RED RIVER NEAR WAYSIDE, TEX.--Continued

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

MONTH	DISCHARGE (FT ³ /S-DAY)	SPECIFIC CONDUCT- ANCE (MICRO- MHOS)	DIS- SOLVED SOLIDS (MG/L)	DIS- SOLVED SOLIDS (TONS)	DIS- SOLVED CHLORIDE (MG/L)	DIS- SOLVED CHLORIDE (TONS)	DIS- SOLVED SULFATE (MG/L)	DIS- SOLVED SULFATE (TONS)	HARDNESS (CA, MG) (MG/L)
OCT. 1973...	54.71	5100	3160	466	1340	198	560	82	1530
NOV.....	9.66	31500	20500	536	10100	265	2730	71	--
DEC.....	13.31	26900	17500	630	8500	305	2490	89	--
JAN. 1974...	10.12	20800	13500	370	6310	172	2170	59	--
FEB.....	14.25	24200	15700	603	7450	287	2380	92	--
MAR.....	96.88	6050	4020	1050	1500	392	990	259	1580
APR.....	7.55	33200	21600	441	10700	218	2840	58	--
MAY.....	1530.37	2000	1270	5250	400	1670	290	1210	580
JUNE.....	1492.78	785	490	1990	56	226	180	728	230
JULY.....	.01	28500	18800	.5	9270	.3	2570	.07	--
AUG.....	7337.62	1350	880	17500	170	3460	280	5630	390
SEP.....	939.25	2250	1540	3890	320	812	590	1500	650
TOTAL.....	11506.51	--	--	32700	--	8010	--	9780	--
WTD. AVG....	31.5	1620	1050	--	250	--	310	--	470

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	33900	37500	31100	22500	25700	25500	35800	19400	1020	---	---	9950
2	33100	37900	30100	28600	24000	27700	37300	28200	601	---	---	13000
3	33600	37700	27400	24400	26500	29100	36500	42300	646	---	---	13700
4	32400	35900	24200	27900	27300	35300	37500	30000	1740	---	---	12900
5	32600	36100	27100	21600	25400	35200	36100	1080	4480	---	---	13800
6	25700	30160	29700	23400	33400	38600	37800	5680	6040	---	978	18600
7	33800	31200	29700	24100	31000	27500	36900	14900	8130	---	2750	16300
8	37300	32300	26000	16000	22800	22100	36700	20900	11100	---	7410	16900
9	34800	32800	24400	29200	30000	21800	38300	33200	12100	---	6600	18000
10	2530	31200	28100	27500	23700	2170	39800	38900	13300	---	1920	19300
11	1810	28000	25600	24700	26900	4130	39100	40400	15500	---	558	21600
12	15900	27000	24100	24300	23700	7940	41700	42700	18900	---	832	28800
13	20400	27300	28700	21900	23500	13200	40200	41600	18400	---	3700	26900
14	24000	32700	24000	15100	21500	13300	41000	42100	27900	---	8880	34200
15	24000	37100	26400	15900	18500	15600	39200	41500	---	---	14300	16000
16	25100	36400	29100	18100	21100	17500	39900	44000	---	---	22600	16300
17	25600	33200	23900	19800	21900	19000	37600	42700	20200	---	36300	18700
18	26400	33300	26100	20900	23500	19500	38500	41400	27900	---	40800	18700
19	27200	33100	28400	20400	22400	23100	38500	42400	---	---	42100	7730
20	28100	33000	30200	21400	22300	23000	41700	43200	---	---	42000	1680
21	28700	31300	26900	21600	27200	21900	41500	41600	---	---	8350	2250
22	35000	33200	28000	24500	34500	20700	40100	41700	---	---	1860	5650
23	36100	31400	22100	23000	21100	25600	39900	45200	---	---	582	2580
24	36100	27700	24200	25500	34700	26500	40700	27500	---	---	811	1460
25	35800	26600	33800	25600	31300	23500	40300	899	---	---	1130	1850
26	36900	27400	21100	21100	26100	23500	40700	1960	---	---	2050	3540
27	35600	29300	30300	23100	26900	24300	43200	6390	---	---	4100	4580
28	37700	35600	24600	21800	26900	29200	38700	10400	---	28500	4990	6030
29	38000	33800	25600	21200	---	36600	38500	16100	---	---	6130	6910
30	37400	32600	23400	25100	---	33300	25200	24100	---	---	7300	7120
31	35100	---	34200	25000	---	39100	---	33400	---	---	7980	---
MONTH	29390	32420	27050	22750	25850	23400	38630	29220	---	---	10650	12830

RED RIVER BASIN

07297910 PRAIRIE DOG TOWN FORK RED RIVER NEAR WAYSIDE, TEX.--Continued

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	28.0	18.0	16.0	0.0	11.0	24.0	23.0	23.0	30.0	---	---	33.0
2	29.0	15.0	18.0	0.0	14.0	19.0	15.0	27.0	22.0	---	---	16.0
3	27.0	11.0	9.0	0.0	17.0	17.0	13.0	25.0	22.0	---	---	21.0
4	15.0	15.0	6.0	0.0	14.0	15.0	10.0	22.0	25.0	---	---	19.0
5	16.0	10.0	11.0	2.0	13.0	19.0	18.0	23.0	35.0	---	---	25.0
6	26.0	18.0	9.0	1.0	5.0	17.0	20.0	23.0	21.0	---	24.0	25.0
7	26.0	21.0	13.0	3.0	8.0	20.0	18.0	26.0	29.0	---	25.0	32.0
8	30.0	13.0	18.0	13.0	9.0	23.0	12.0	29.0	24.0	---	29.0	29.0
9	28.0	10.0	13.0	0.0	8.0	11.0	19.0	23.0	27.0	---	31.0	31.0
10	13.0	15.0	13.0	0.0	17.0	10.0	20.0	28.0	23.0	---	33.0	33.0
11	8.0	20.0	8.0	0.0	6.0	25.0	16.0	20.0	32.0	---	20.0	31.0
12	21.0	24.0	15.0	---	23.0	23.0	20.0	30.0	28.0	---	30.0	19.0
13	20.0	21.0	10.0	8.0	19.0	10.0	12.0	32.0	31.0	---	24.0	23.0
14	18.0	20.0	12.0	12.0	16.0	17.0	10.0	28.0	30.0	---	31.0	24.0
15	15.0	19.0	12.0	13.0	15.0	12.0	20.0	30.0	---	---	25.0	19.0
16	13.5	12.0	13.0	12.0	18.0	19.0	20.0	26.0	---	---	33.0	24.0
17	22.0	15.0	15.0	20.0	15.0	21.0	12.0	28.0	27.0	---	31.0	23.0
18	25.0	20.0	10.0	6.0	7.0	22.0	25.0	27.0	31.0	---	33.0	23.0
19	23.0	15.0	---	15.0	15.0	17.0	23.0	27.0	---	---	30.0	27.0
20	28.0	4.0	2.0	15.0	16.0	9.0	20.0	27.0	---	---	25.0	21.0
21	24.0	15.0	11.0	16.0	7.0	13.0	24.0	21.0	---	---	29.0	25.0
22	25.0	17.0	11.0	5.0	10.0	18.0	23.0	13.0	---	---	21.0	18.0
23	20.0	19.0	7.0	8.0	13.0	3.0	23.0	30.0	---	---	20.0	15.0
24	22.0	13.0	5.0	13.0	10.0	5.0	25.0	23.0	---	---	20.0	12.0
25	20.0	15.0	3.0	10.0	18.0	19.0	26.0	15.0	---	---	25.0	25.0
26	22.0	13.0	5.0	15.0	18.0	20.0	27.0	22.0	---	---	30.0	30.0
27	15.0	10.0	8.0	12.0	14.0	25.0	27.0	25.0	---	---	28.0	27.0
28	20.0	11.0	11.0	10.0	20.0	21.0	22.0	21.0	---	---	21.0	24.0
29	20.0	12.0	10.0	14.0	---	23.0	26.0	25.0	---	---	30.0	24.0
30	15.0	18.0	5.0	13.0	---	27.0	16.0	30.0	---	---	29.0	25.0
31	20.0	---	0.0	15.0	---	22.0	---	25.0	---	---	30.0	---
MONTH	21.0	15.5	10.0	8.5	13.5	17.5	19.5	25.0	---	---	27.0	24.0

RED RIVER BASIN

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07298200 TULE CREEK NEAR SILVERTON, TEX.

LOCATION.--Lat 34°32'38", long 101°25'40", Briscoe County, at gaging station at bridge on Farm Road 284, 1.0 mile (1.6 km) downstream from Rock Creek, and 8.6 miles (13.8 km) northwest of Silverton.

DRAINAGE AREA.--1,150 mi² (2,980 km²), of which 960 mi² (2,490 km²) is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: October 1967 to September 1974.
Water temperatures: October 1967 to September 1969.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTAN- TANEOUS 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 SODIUM PLUS POTAS- SIUM (K) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HC03) (MG/L)	CAH- BONATE (C03) (MG/L)
NOV. 28...	1440	.04	10	48	58	--	92	--	462	0
DEC. 18...	1225	.10	46	41	57	83	--	13	297	75
JAN. 28...	1420	.14	37	45	61	97	--	15	482	12
MAR. 12...	1345	.20	25	38	52	80	--	17	354	12
JUNE 03...	1500	40	9.7	30	15	49	--	12	152	0
05...	1540	19	8.6	30	16	72	--	14	151	0

DATE	DIS- SOLVED SULFATE (S04) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	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)
NOV. 28...	120	36	2.5	590	360	0	2.1	1050	8.0	7.5
DEC. 18...	120	35	--	616	340	0	2.0	931	8.6	8.5
JAN. 28...	120	42	--	667	360	0	2.2	1050	8.4	9.5
MAR. 12...	130	34	--	562	310	0	2.0	908	8.5	18.0
JUNE 03...	98	15	--	304	140	12	1.8	515	8.2	22.5
05...	150	20	--	385	140	17	2.6	641	8.3	25.5

07299200 PRAIRIE DOG TOWN FORK RED RIVER NEAR LAKEVIEW, TEX.

LOCATION.--Lat 34°34'23", long 100°44'43", Hall County, at gaging station at bridge on Farm Road 657 and 7.6 miles (12.2 km) southwest of Lakeview.

DRAINAGE AREA.--6,792 mi² (17,591 km²), of which 4,769 mi² (12,352 km²) is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: July 1968 to September 1974.

Water temperatures: July 1968 to September 1974.

EXTREMES.--October 1973 to September 1974:

Specific conductance: Maximum daily, 28,200 micromhos July 9; minimum daily, 1,550 micromhos June 12.

Period of record:

Specific conductance: Maximum daily, 28,200 micromhos July 9, 1974; minimum daily, 1,510 micromhos July 15, 1973.

Water temperatures: Minimum, freezing point Dec. 22, 24, 28, 1968, Mar. 8, 9, 1969.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report. Conductivity is recorded continuously at this station.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO ₂) (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 SODIUM PLUS POTAS- SIUM (K) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)
OCT. 30...	1122	.90	22	620	260	--	4100	--	114	0
NOV. 28...	0955	.40	33	450	150	1100	--	15	187	0
DEC. 19...	1100	.28	34	400	320	5700	--	55	106	0
JAN. 29...	1455	1.1	--	580	210	--	--	--	--	--
FEB. 14...	1750	.75	--	610	230	--	--	--	--	--
MAR. 13...	1545	7.1	--	560	140	--	--	--	--	--
APR. 02...	1015	.74	--	600	230	--	--	--	--	--
MAY 05...	1750	1850	22	540	75	1600	--	20	180	0
JUNE 27...	1500	.75	--	740	270	--	--	--	--	--
JULY 16...	1155	.42	--	790	300	--	--	--	--	--
AUG. 27...	1210	342	13	400	40	560	--	9.0	94	0
SEP. 26...	1355	149	--	380	71	--	--	--	--	--

DATE	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	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)
OCT. 30...	2000	6600	13800	2600	2500	--	21100	7.9	16.0
NOV. 28...	1700	1600	5140	1700	1600	11	7370	7.7	4.0
DEC. 19...	2900	8200	17700	2300	2200	52	25700	7.8	--
JAN. 29...	2100	5500	--	2300	--	--	18000	--	13.0
FEB. 14...	2200	5800	--	2500	--	--	18500	--	15.0
MAR. 13...	1500	4800	--	2000	--	--	15500	--	11.0
APR. 02...	1900	5400	--	2400	--	--	17700	--	12.0
MAY 05...	1400	2500	6250	1700	1500	17	9710	7.3	--
JUNE 27...	2400	8200	--	3000	--	--	24300	--	31.0
JULY 16...	2500	8100	--	3200	--	--	24300	--	31.5
AUG. 27...	940	950	2960	1200	1100	7.1	4360	7.9	24.0
SEP. 26...	950	2900	--	1200	--	--	10200	--	--

RED RIVER BASIN

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07299200 PRAIRIE DOG TOWN FORK RED RIVER NEAR LAKEVIEW, TEX.--Continued

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

MONTH	DISCHARGE (FT ³ /S-DAY)	SPECIFIC CONDUCT- ANCE (MICRO- MHOS)	DIS- SOLVED SOLIDS (MG/L)	DIS- SOLVED SOLIDS (TONS)	DIS- SOLVED CHLORIDE (MG/L)	DIS- SOLVED CHLORIDE (TONS)	DIS- SOLVED SULFATE (MG/L)	DIS- SOLVED SULFATE (TONS)	HARDNESS (CA, MG) (MG/L)
OCT. 1973...	703.91	6480	4610	8760	1460	2770	1450	2750	1510
NOV.....	25.13	18500	12100	821	5810	394	1920	130	--
DEC.....	18.51	17700	11600	581	5630	281	1790	90	--
JAN. 1974...	34.59	17900	11800	1100	5500	514	2100	196	--
FEB.....	22.90	16800	11000	682	5160	319	1970	122	--
MAR.....	778.88	9810	6510	13700	2800	5890	1280	2700	1810
APR.....	749.37	3320	2290	4640	790	1600	620	1260	1230
MAY.....	16623.2	5170	3490	156000	1270	57000	890	39800	1400
JUNE.....	2360.99	4750	3260	20800	1180	7550	840	5330	1360
JULY.....	2.74	25400	16300	121	8430	62	2590	19	--
AUG.....	8457.12	4310	2940	67100	970	22000	900	20500	1320
SEP.....	4696.31	5570	3750	47600	1380	17400	1000	12700	1430
TOTAL.....	34473.65	--	--	322000	--	116000	--	85600	--
WTD. AVG....	94.4	5110	3460	--	1250	--	920	--	1390

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	15700	19400	18600	18000	16000	22700	19100	7490	23600	25400	24000	18100
2	17000	17500	18500	17800	15600	14600	17700	8620	9190	26100	23100	19900
3	18900	19400	18000	17500	18000	17700	18600	14400	4320	26300	22500	21100
4	19100	19300	18300	18000	20300	26100	18300	16500	5400	26100	22200	21300
5	18800	19400	18100	17000	22900	21200	18000	7200	6080	25600	21800	21800
6	18600	19700	18200	16800	11000	17900	16700	8230	8330	24700	7360	22200
7	19000	19800	18300	16500	19200	15000	15000	10100	10000	25100	9950	22400
8	19400	19400	18400	17500	13000	17100	11300	12300	2710	28100	15700	22300
9	19800	19100	16300	17300	11500	12200	17700	14700	5130	28200	24200	22100
10	20000	19100	15500	17100	15600	8100	22200	18600	7920	28000	20700	22100
11	5470	19300	18900	18000	17400	9520	21800	19500	3440	27500	8130	22400
12	6490	19600	18700	18200	18500	13000	21300	19900	1550	27000	5880	---
13	8020	19400	18300	18100	18200	15500	11700	20600	11700	25200	5660	22100
14	11500	19300	18100	17200	18500	18200	16200	21200	15200	25300	6020	21500
15	15600	19100	18000	17800	17700	19800	16000	19500	18800	25400	11400	17300
16	16600	18900	17800	18000	18200	20100	16400	20100	20400	24300	18800	18600
17	18000	22600	17900	18400	18500	20300	17700	20900	22600	25200	22500	20900
18	18700	20800	21200	19100	15000	20100	19600	21200	23300	25000	21700	20800
19	19100	19300	25700	17500	11500	20500	19600	20800	24100	24800	20900	3530
20	19300	18700	20200	17700	17100	20100	20600	13800	24600	24500	20000	2540
21	20200	18700	17100	17900	16000	19800	21000	2470	24000	24300	24300	7180
22	20700	18700	14600	17700	16500	19900	20800	6120	23900	24400	18100	9320
23	20400	19500	15100	17500	16100	20100	17400	11500	24200	24100	3660	10800
24	20900	19800	15700	18400	16700	19300	18700	12700	24000	24400	3300	8710
25	19800	16700	16300	18700	17300	19200	18200	4930	23400	24700	3710	11800
26	19600	13500	16900	18100	17800	19800	15700	6820	23300	25000	4670	10200
27	19300	10000	17400	17900	17000	22400	12900	8760	24300	---	4360	13200
28	20000	7360	17800	17500	16500	26000	20300	13800	24500	---	4930	16200
29	20700	14500	14700	18000	---	21200	19500	18200	24600	---	10500	17700
30	21100	19000	17200	17900	---	16100	2940	19100	24800	---	13600	19300
31	20400	---	18000	17700	---	18800	---	20800	---	---	15500	---
MONTH	17700	18230	17860	17770	16700	18460	17430	14220	16310	25570	14170	16810

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

[illegible]

RED RIVER BASIN

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07299300 LITTLE RED RIVER NEAR TURKEY, TEX.

LOCATION.--Lat 34°32'27", long 100°46'13", Hall County, at gaging station at bridge on Farm Road 657, 10 miles (16 km) upstream from mouth, and 14.5 miles (23.3 km) northeast of Turkey.

DRAINAGE AREA.--139 mi² (360 km²).

PERIOD OF RECORD.--Chemical analyses: July 1968 to September 1974.
Water temperatures: July 1968 to September 1974.

EXTREMES.--October 1973 to September 1974:

Specific conductance: Maximum daily, 56,800 micromhos Sept. 17; minimum daily, 6,500 micromhos June 11.

Period of record:

Specific conductance: Maximum daily, 118,000 micromhos Apr. 1, 1970; minimum daily, 6,270 micromhos June 14, 1972.

Water temperatures (1968-69): Maximum, 36.0°C July 23, 1969; minimum, freezing point on several days during December 1968, January and March 1969.

REMARKS.--Conductivity is recorded continuously at this station.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	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 SODIUM PLUS POTAS- SIUM (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)
OCT. 04...	1625	13	14	690	140	--	2600	--	130	0
NOV. 28...	1300	.16	--	1300	330	--	--	--	--	--
DEC. 19...	1330	.10	24	1300	330	9900	--	61	107	0
JAN. 29...	1255	.18	--	1300	340	--	--	--	--	--
MAR. 13...	1305	1.1	--	1200	250	--	--	--	--	--
APR. 02...	1330	.14	--	1400	350	--	--	--	--	--
MAY 21...	1030	554	--	670	66	--	--	--	--	--
JUNE 06...	1300	14	--	1000	120	--	--	--	--	--
JULY 16...	1520	.09	--	1500	330	--	--	--	--	--
AUG. 27...	1440	19	--	700	66	--	--	--	--	--
SEP. 25...	0935	67	--	870	120	--	--	--	--	--

DATE	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	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)
OCT. 04...	1500	4500	9480	2300	2200	--	15500	7.5	20.0
NOV. 28...	3400	16000	--	4600	--	--	46000	--	12.0
DEC. 19...	3400	16000	31100	4600	4500	64	45900	7.8	3.5
JAN. 29...	3400	17000	--	4600	--	--	48000	--	5.0
MAR. 13...	3000	12800	--	4000	--	--	37100	--	11.5
APR. 02...	3100	18000	--	4900	--	--	49900	--	14.0
MAY 21...	1600	3600	--	1900	--	--	12400	--	17.0
JUNE 06...	2200	6300	--	3000	--	--	20300	--	26.5
JULY 16...	3800	18000	--	5100	--	--	50500	--	35.5
AUG. 27...	1700	3000	--	2000	--	--	11800	--	25.5
SEP. 25...	2000	7900	--	2700	--	--	24500	--	13.0

RED RIVER BASIN

07299300 LITTLE RED RIVER NEAR TURKEY, TEX.--Continued

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

MONTH	DISCHARGE (FT ³ /S-DAY)	SPECIFIC CONDUCT- ANCE (MICRO- MHOS)	DIS- SOLVED SOLIDS (MG/L)	DIS- SOLVED SOLIDS (TONS)	DIS- SOLVED CHLORIDE (MG/L)	DIS- SOLVED CHLORIDE (TONS)	DIS- SOLVED SULFATE (MG/L)	DIS- SOLVED SULFATE (TONS)	HARDNESS (CA, MG) (MG/L)
OCT. 1973...	61.32	29500	19700	3260	9770	1620	2540	420	--
NOV.....	5.00	47500	32200	435	16600	224	3480	47	--
DEC.....	3.34	47600	32300	291	16600	150	3480	31	--
JAN. 1974...	4.36	47900	32500	382	17100	201	3300	39	--
FEB.....	6.95	49100	33300	625	17500	329	3370	63	--
MAR.....	451.19	17300	11600	14100	5580	6800	1800	2200	--
APR.....	8.12	52900	35800	785	19000	416	3380	74	--
MAY.....	2121.98	11300	7470	42800	3320	19000	1430	8190	--
JUNE.....	1174.19	8320	5460	17300	2260	7160	1210	3850	1710
JULY.....	4.36	50900	35000	412	18500	218	3420	40	--
AUG.....	315.68	11600	7380	6290	3190	2720	1460	1240	--
SEP.....	934.0	18100	11900	30100	5770	14600	1730	4370	--
TOTAL.....	5090.49	--	--	117000	--	53400	--	20600	--
WTD. AVG....	13.9	12900	8490	--	3890	--	1490	--	--

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	40500	47600	47700	48400	48500	50700	50000	32600	10700	49300	51900	42400
2	42500	48100	47800	47000	48400	49900	49900	25700	12100	49600	51800	44700
3	44200	47700	47700	47300	48800	51000	50100	44000	7570	50000	50100	46100
4	12300	47300	47500	47700	49500	52000	49800	47400	7870	49800	48300	46700
5	20000	47400	47600	47500	49900	52500	49000	14300	13000	49200	46600	47200
6	37900	47200	47500	47300	49100	52600	49000	17900	20300	49200	46600	47400
7	42500	47300	47400	47200	48300	50900	49500	29900	25700	49900	47900	48000
8	47300	47200	47300	47400	48900	50400	50100	35800	29900	50600	48600	48300
9	47900	47300	47200	47100	48700	7250	50000	39500	37900	51000	49500	48600
10	47300	47200	47400	47300	48800	19800	50400	43300	44200	51200	49000	48400
11	30500	47300	47800	47500	49000	21200	50200	45000	6500	51500	49300	49200
12	39200	47400	47500	47000	49000	28300	50100	46300	7950	51700	19100	49500
13	36300	47100	47600	46300	48800	37100	50700	48100	16000	51700	20800	49300
14	31200	47500	47800	45900	49300	39800	50500	49300	21200	51600	27000	49500
15	26400	47400	47700	46800	48700	41300	50600	49500	25200	51700	25300	49900
16	24900	47500	47500	47900	48100	42300	49800	49700	30600	50500	33400	54700
17	25500	47400	47600	48300	48300	43000	49400	49500	35900	51900	39700	56800
18	27200	47700	47400	47900	48500	43600	49500	49800	37600	52300	41400	54000
19	34300	48100	45900	48400	48800	45900	50000	49000	40000	52000	43700	8600
20	42800	48500	47100	48700	49100	45200	49500	48500	42800	52100	45400	8850
21	44600	48300	47200	48900	49000	44100	49700	13400	43800	52300	46700	16300
22	46400	47700	47300	48500	49100	45300	49900	12900	45100	52400	47000	35200
23	47100	47500	47400	48400	50000	46300	50600	20900	45700	52500	8180	49300
24	47600	47300	47700	48300	49800	46600	50600	17000	46100	52400	11100	28400
25	47500	47400	47600	48300	50000	47000	50000	7870	46600	52500	23400	24500
26	47000	47600	47900	48400	50300	47700	50500	15000	46400	52400	28800	38400
27	46600	47500	48300	48500	50400	48500	50600	20900	47500	52200	11800	45100
28	46400	46000	48600	48500	50100	49300	50300	27900	48000	52400	16900	47000
29	45300	47800	48100	48000	---	49100	52700	32600	48300	52600	28700	45000
30	47600	47600	47900	48400	---	48800	54400	33000	48700	51700	35600	44900
31	47400	---	47700	48600	---	49400	---	9700	---	51900	40100	---
MONTH	39170	47500	47570	47800	49130	43450	50250	33110	31310	51360	36570	42410

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

[illegible]

RED RIVER BASIN

07299500 PRAIRIE DOG TOWN FORK RED RIVER NEAR ESTELLINE, TEX.

LOCATION.--Lat 34°34'20", long 100°26'10", Hall County, at bridge on U.S. Highway 287 and 1.8 miles (2.9 km) north of Estelline.

DRAINAGE AREA.--7,293 mi² (18,889 km²), of which 4,679 mi² (12,119 km²) is noncontributing.

PERIOD OF RECORD.--Chemical analyses: June to September 1974.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	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)
JUNE 17...	1100	5.8	--	960	190	--	--	--	--
AUG. 07...	0825	167	--	800	110	--	--	--	--
27...	1700	274	15	320	44	830	15	108	0

DATE	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	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)
JUNE 17...	2400	5700	--	3200	--	--	18400	--	23.5
AUG. 07...	1900	3600	--	2500	--	--	13100	--	20.0
27...	820	1400	3500	980	890	12	5760	7.4	27.0

RED RIVER BASIN

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07299505 PRAIRIE DOG TOWN FORK RED RIVER BELOW MOUNTAIN CREEK, NEAR ESTELLINE, TEX.

LOCATION.--Lat 34°32'50", long 100°22'50", Childress County, downstream from Mountain Creek and 3.2 miles (5.1 km) east of Estelline.

DRAINAGE AREA.--7,341 mi² (19,013 km²), of which 4,769 mi² (12,352 km²) is noncontributing.

PERIOD OF RECORD.--Chemical analyses: June to September 1974.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SI02) (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)
JUNE 17...	1630	4.0	--	980	190	--	--	--	--
AUG. 07...	0935	.21	--	1500	370	--	--	--	--
27...	1750	180	15	460	54	1000	16	48	0

DATE	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	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)
JUNE 17...	2500	6300	--	3200	--	--	20400	--	31.5
AUG. 07...	4100	28000	--	5300	--	--	69800	--	22.0
27...	1200	1600	4370	1400	1300	12	6850	7.2	27.5

RED RIVER BASIN

07299510 PRAIRIE DOG TOWN FORK RED RIVER ABOVE JONAH CREEK, NEAR ESTELLINE, TEX.

LOCATION.--Lat 34°33'55", long 100°18'25", Childress County, just above mouth of Jonah Creek and 7.6 miles (12.2 km) northeast of Estelline.

DRAINAGE AREA.--7,533 mi² (19,510 km²), of which 4,769 mi² (12,352 km²) is noncontributing.

PERIOD OF RECORD.--Chemical analyses: June to September 1974.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO ₂) (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 (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)
JUNE 17...	1530	4.4	--	770	180	--	--	--	--
AUG. 28...	1505	183	17	350	41	800	14	108	0

DATE	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITU- ENTS) (MG/L)	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)
JUNE 17...	2600	6800	--	2700	--	--	21700	--	32.5
AUG. 28...	880	1200	3360	1000	950	11	5450	7.3	25.5

RED RIVER BASIN

47

07299512 JONAH CREEK AT WEIR, NEAR ESTELLINE, TEX.

LOCATION.--Lat 34°34'20", long 100°20'00", Childress County, 4.0 miles (6.4 km) upstream from mouth and 6.5 miles (10.5 km) northeast of Estelline.

PERIOD OF RECORD.--Chemical analyses: May to September 1974.

REMARKS.--Specific conductance is recorded continuously at this station.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SI02) (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)
JAN. 09...	1330	2.0	--	--	--	--	--	--	--
MAY 21...	0940	3.5	7.2	280	57	2300	14	82	0
23...	0915	.58	--	1100	210	--	--	--	--
JUNE 05...	1200	.68	--	1500	360	--	--	--	--
JULY 17...	0915	.15	--	1900	490	--	--	--	--
AUG. 07...	1500	.27	--	1700	390	--	--	--	--
28...	0900	.08	--	1200	260	--	--	--	--

DATE	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	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)
JAN. 09...	5000	39000	--	6000	--	--	97700	--	2.0
MAY 21...	720	3400	6820	930	870	33	11200	7.3	21.0
23...	2700	23000	--	3600	--	--	60200	--	20.5
JUNE 05...	4800	33000	--	5200	--	--	85700	--	25.0
JULY 17...	5500	48000	--	6800	--	--	118000	--	25.5
AUG. 07...	4500	44000	--	5900	--	--	104000	--	28.5
28...	3100	25000	--	4100	--	--	67500	--	21.5

RED RIVER BASIN

07299514 JONAH CREEK BELOW WEIR, NEAR ESTELLINE, TEX.

LOCATION.--Lat 34°33'33", long 100°20'21", Childress County, 2.0 miles (3.2 km) upstream from mouth and 6.0 miles (9.7 km) northeast of Estelline.

PERIOD OF RECORD.--Chemical analyses: May to September 1974.

REMARKS.--Specific conductance is recorded continuously at this station.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	HARD- NESS (CA+MG) (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)
JAN. 09...	1400	2.2	--	--	4400	33000	5400	85500	.0
MAY 23...	1230	1.3	950	220	2800	16000	3300	47000	26.0
JUNE 18...	1310	1.1	1400	300	3800	22000	4700	62200	28.0
AUG. 07...	1425	.82	150	280	3600	22000	1500	61800	26.0
21...	1005	--	1400	280	3700	23000	4700	62200	24.0
28...	1200	.86	1400	290	3600	23000	4700	61600	22.0

RED RIVER BASIN

49

07299516 JONAH CREEK AT MOUTH, NEAR ESTELLINE, TEX.

LOCATION.--Lat 34°33'55", long 100°18'40", Childress County, 7.5 miles (12.1 km) northeast of Estelline.

DRAINAGE AREA.--76 mi² (197 km²).

PERIOD OF RECORD.--Chemical analyses: July to September 1974.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	HARD- NESS (CA, MG) (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)
JULY 17...	1400	1.3	1500	340	3800	25000	5100	68300	37.5
AUG. 07...	1210	1.6	1500	760	3700	25000	6900	66900	29.0
28...	1450	1.7	1400	290	3900	28000	4700	70100	28.0

RED RIVER BASIN

07299530 SALT CREEK NEAR ESTELLINE, TEX.

LOCATION.--Lat 34°35'26", long 100°15'08", Childress County, 3.0 miles (4.8 km) upstream from mouth and 11.5 miles (18.5 km) northeast of Estelline.

PERIOD OF RECORD.--Chemical analyses: June to September 1974.

REMARKS.--Specific conductance is recorded continuously at this station.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	HARD- NESS (CA,MG) (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)
JAN. 09...	1545	--	--	--	3900	23000	5000	62900	3.0
MAY 24...	1015	4.3	700	130	1700	8000	2300	24500	23.0
JUNE 05...	1605	2.1	1200	260	3000	18000	4100	51200	32.5
JULY 17...	1700	.80	1300	360	4300	26000	4700	70400	32.0
AUG. 09...	1315	.72	1500	310	3600	27000	5000	69000	29.0
21...	1025	--	1600	340	4100	27000	5400	75500	26.5
28...	1710	1.4	830	160	2200	12000	2700	35100	28.5

RED RIVER BASIN

51

07299540 PRAIRIE DOG TOWN FORK RED RIVER NEAR CHILDRESS, TEX.

LOCATION.--Lat 34°34'09", long 100°11'37", Childress County, at gaging station at bridge on U.S. Highways 62 and 83, 3.1 miles (5.0 km) downstream from Salt Creek, and 10.0 miles (16.1 km) north of Childress.

DRAINAGE AREA.--7,725 mi² (20,008 km²), of which 4,769 mi² (12,352 km²) is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: July 1968 to September 1974.

Water temperatures: July 1968 to September 1974.

EXTREMES.--October 1973 to September 1974:

Specific conductance: Maximum daily, 92,900 micromhos July 12; minimum daily, 6,250 micromhos June 12.

Water temperatures: Maximum, 38.0°C June 19, 21, 22.

Period of record:

Specific conductance: Maximum daily, 98,100 micromhos June 18, July 28, and Aug. 9, 1970; minimum daily, 3,000 micromhos Aug. 13, 1971.

Water temperatures: Maximum, 38.0°C Aug. 20, 1969, June 19, 21, 22, 1974; minimum, freezing point on many days during winter months.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part I of this report. Conductivity is recorded continuously at this station.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO ₂) (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 SODIUM PLUS POTAS- SIUM (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)
OCT. 07...	0900	38	12	940	310	--	7800	--	113	0
NOV. 30...	0935	3.4	--	1500	360	--	--	--	--	--
DEC. 20...	0945	2.0	13	2000	450	23000	--	77	126	0
JAN. 30...	0925	5.3	--	1600	350	--	19000	--	114	0
MAR. 14...	1230	28	--	920	180	--	--	--	--	--
APR. 22...	1600	1.3	--	1600	360	--	--	--	--	--
MAY 29...	0930	215	--	710	130	--	--	--	--	--
JUNE 12...	1400	1390	20	510	75	1600	--	17	154	0
JULY 19...	0915	.73	--	1800	390	--	--	--	--	--
AUG. 09...	0900	9.1	--	1100	190	--	--	--	--	--
SEP. 25...	1635	606	--	620	110	--	--	--	--	--

DATE	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITU- ENTS) (MG/L)	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)
OCT. 07...	2200	13000	24200	3600	3500	--	37800	7.6	20.0
NOV. 30...	4200	24000	--	5200	--	--	76900	--	5.0
DEC. 20...	5200	37000	67800	6800	6700	121	89400	7.6	.0
JAN. 30...	4500	30000	55000	5400	5300	--	78300	7.4	.0
MAR. 14...	2500	11000	--	3000	--	--	34700	--	14.0
APR. 22...	4000	33000	--	5500	--	--	79300	--	27.0
MAY 29...	1700	5600	--	2300	--	--	17600	--	21.5
JUNE 12...	1500	2300	6100	1600	1500	18	9670	7.8	25.0
JULY 19...	4700	37000	--	6100	--	--	90000	--	24.0
AUG. 09...	2500	12000	--	3500	--	--	37200	--	23.0
SEP. 25...	1300	5800	--	2000	--	--	18500	--	24.0

RED RIVER BASIN

07299540 PRAIRIE DOG TOWN FORK RED RIVER NEAR CHILDRESS, TEX.--Continued

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

MONTH	DISCHARGE (FT ³ /S-DAY)	SPECIFIC CONDUCT- ANCE (MICRO- MHOS)	DIS- SOLVED SOLIDS (MG/L)	DIS- SOLVED SOLIDS (TONS)	DIS- SOLVED CHLORIDE (MG/L)	DIS- SOLVED CHLORIDE (TONS)	DIS- SOLVED SULFATE (MG/L)	DIS- SOLVED SULFATE (TONS)	HARDNESS (CA, MG) (MG/L)
OCT. 1973...	1289.74	24000	15600	54300	8010	27900	1720	5980	--
NOV.....	128.78	77100	53600	18600	29400	10200	4060	1410	--
DEC.....	158.5	78100	55000	23500	30200	12900	4130	1770	--
JAN. 1974...	234.9	78500	55200	35000	29700	18900	4510	2860	--
FEB.....	55.97	81200	58400	8830	31800	4800	4450	673	--
MAR.....	919.70	20900	14000	34800	7270	18000	1560	3870	--
APR.....	670.4	28400	19200	34700	10000	18100	1990	3600	--
MAY.....	26511.7	9310	5880	421000	2670	191000	1020	72700	1500
JUNE.....	2985.95	12600	8150	65700	3880	31300	1220	9870	--
JULY.....	20.59	81300	60200	3350	32900	1830	4330	241	--
AUG.....	6933.06	9900	6260	117000	2510	46900	1400	26200	1540
SEP.....	4685.75	13400	8600	109000	3580	45200	1790	22700	--
TOTAL.....	44595.04	--	--	926000	--	427000	--	152000	--
WTD. AVG....	122	11900	7690	--	3550	--	1260	--	--

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	32400	77300	77600	77100	81500	83100	78000	10700	23800	87500	89300	62200
2	41400	78400	78100	90900	82900	84500	82600	15400	20100	88200	80600	62000
3	55600	78400	76700	88100	81200	81500	78800	33100	8980	87100	89700	42900
4	17100	76700	79300	88000	81900	84500	82900	44400	8760	84000	81200	63600
5	27500	77900	79400	87200	83900	83800	77000	10500	10700	85700	29200	72300
6	25200	76700	76000	86700	82200	84900	80600	10600	12400	85700	38100	74600
7	37800	75400	77700	86000	81200	80200	78800	16800	15700	88600	74300	76600
8	42700	76700	77900	85700	81500	79200	83200	24500	22700	91300	25000	76600
9	49200	76400	77400	86400	82200	72100	82200	47500	7420	89400	37200	76600
10	57300	76600	76800	87000	81500	18500	82000	64600	12100	90500	35600	76900
11	19800	75900	77000	86000	81200	10900	42400	70300	23200	92500	78800	76900
12	11000	75700	79900	83500	80900	19500	45100	72100	6250	92900	13900	81800
13	12200	75700	82400	78000	81900	25500	61200	77500	10700	90900	12400	83800
14	25000	76800	80200	71200	82500	34700	66000	77000	16400	90900	12400	82500
15	36500	77700	77600	72000	78700	48000	72200	79300	28800	89300	24400	49300
16	43800	79400	78700	72700	78100	54700	73100	83100	36100	89300	46800	34900
17	50000	78800	77300	74000	77800	61600	75800	82500	49100	88900	68000	52800
18	55500	78500	77300	74600	80900	66400	76700	80900	55900	90100	80600	56100
19	61700	78200	77600	75100	81500	71100	78800	81200	64900	90000	87000	11200
20	66900	78700	89400	74800	79900	63700	82200	83400	68900	88200	86700	12200
21	70700	80800	76400	75000	79300	64700	78300	7880	70400	90500	90000	10100
22	72000	77900	76400	75900	83900	70100	79300	11700	71600	90100	45200	9140
23	72500	76800	76400	76800	80600	69400	80400	14200	74200	90100	6470	14900
24	74600	76800	77300	77300	82500	72400	80300	19700	72900	89700	7950	12100
25	74800	76800	79300	76900	80200	72100	79700	7070	74200	70100	8170	12000
26	74300	75400	78700	76000	79900	74000	83500	9590	75800	54700	8990	14600
27	71500	77900	80200	76300	80900	74300	45700	12500	78700	87400	9230	16800
28	75600	80900	77000	77100	80600	76500	12700	14400	79600	90500	10000	20500
29	75400	77900	78500	77700	---	78900	49500	17600	82800	90100	10100	25900
30	74600	76900	77700	78300	---	78000	18100	22300	82200	87900	16900	33900
31	77300	---	78000	78600	---	78300	---	25400	---	87900	25800	---
MONTH	51030	77470	78390	79710	81120	65070	69570	39600	42180	87420	42900	46520

RED RIVER BASIN

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07299540 PRAIRIE DOG TOWN FORK RED RIVER NEAR CHILDRESS, TEX.--Continued

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	10.0	10.0	10.0	0.0	13.0	22.0	26.0	22.0	27.0	27.0	20.0	20.0
2	20.0	10.0	18.0	0.5	13.0	21.0	15.0	27.0	27.0	31.0	20.0	15.0
3	30.0	8.0	10.0	0.5	16.0	19.0	15.0	22.0	27.0	31.0	18.0	12.0
4	15.0	11.0	4.0	0.5	14.0	19.0	14.0	28.0	27.0	34.0	22.0	12.0
5	15.0	9.0	9.0	---	16.0	18.0	25.0	24.0	30.0	31.0	27.0	15.0
6	15.0	8.0	9.0	---	4.0	22.0	22.0	25.0	27.0	24.0	20.0	15.0
7	20.0	12.0	11.0	---	1.0	20.0	21.0	28.0	27.0	25.0	20.0	17.0
8	20.0	11.0	8.0	---	9.0	22.0	24.0	32.0	25.0	20.0	25.0	15.0
9	20.0	8.0	6.0	---	13.0	19.0	18.0	32.0	24.0	28.0	25.0	18.0
10	23.0	6.0	0.0	---	15.0	11.0	23.0	30.0	27.0	20.0	20.0	20.0
11	10.0	12.0	0.0	---	16.0	20.0	19.0	28.0	30.0	24.0	23.0	20.0
12	12.0	12.0	5.0	---	18.0	20.0	23.0	30.0	27.0	24.0	20.0	14.0
13	---	15.0	13.0	---	20.0	11.0	15.0	25.0	31.0	22.0	24.0	20.0
14	---	15.0	4.0	---	18.0	20.0	21.0	26.0	32.0	24.0	30.0	15.0
15	---	11.0	1.0	---	16.0	15.0	25.0	27.0	25.0	23.0	25.0	20.0
16	---	14.0	5.0	---	17.0	21.0	24.0	29.0	30.0	23.0	23.0	20.0
17	---	18.0	1.0	---	18.0	24.0	24.0	27.0	30.0	25.0	23.0	19.0
18	9.0	18.0	0.0	---	12.0	30.0	28.0	27.0	33.0	23.0	24.0	20.0
19	15.0	16.0	4.0	---	12.0	20.0	25.0	31.0	38.0	23.0	21.0	20.0
20	12.0	5.0	2.0	---	22.0	5.0	22.0	25.0	31.0	21.0	21.0	21.0
21	20.0	10.0	13.0	---	12.0	16.0	20.0	26.0	38.0	21.0	20.0	15.0
22	10.0	11.0	10.0	---	17.0	20.0	26.0	34.0	38.0	21.0	21.0	15.0
23	9.0	14.0	4.0	---	14.0	3.0	25.0	30.0	30.0	21.0	21.0	15.0
24	14.0	12.0	4.0	---	11.0	9.0	27.0	25.0	30.0	23.0	22.0	13.0
25	15.0	9.0	2.0	---	17.0	18.0	26.0	24.0	30.0	24.0	23.0	13.0
26	14.0	11.0	10.0	---	17.0	22.0	24.0	27.0	32.0	24.0	24.0	15.0
27	11.0	10.0	9.0	---	23.0	26.0	24.0	28.0	31.0	22.0	23.0	17.0
28	10.0	5.0	3.0	---	20.0	23.0	25.0	28.0	30.0	24.0	20.0	13.0
29	8.0	4.0	2.0	---	---	22.0	28.0	32.0	20.0	22.0	20.0	15.0
30	11.0	10.0	0.0	---	---	25.0	18.0	31.0	33.0	22.0	23.0	15.0
31	16.0	---	---	---	---	25.0	---	23.0	---	20.0	22.0	---
MONTH	15.0	11.0	6.0	---	15.0	19.0	22.5	27.5	29.5	24.0	22.5	16.5

RED RIVER BASIN

07300000 SALT FORK RED RIVER NEAR WELLINGTON, TEX.

LOCATION.--Lat 34°57'27", long 100°13'14", Collingsworth County, at gaging station at bridge on U.S. Highway 83, 4 miles (6 km) downstream from Fort Worth and Denver (Burlington) Railway Co. bridge, 4.5 miles (7.2 km) south of Lutie, and 7.2 miles (11.6 km) north of Wellington.

DRAINAGE AREA.--1,222 mi² (3,165 km²) of which 209 mi² (541 km²) is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: October 1967 to September 1974.

Water temperatures: October 1967 to September 1974.

EXTREMES.--October 1973 to September 1974:

Specific conductance: Maximum daily, 3,750 micromhos Sept. 16; minimum daily, 900 micromhos May 21.

Water temperatures: Maximum, 38.0°C July 23-25, 27.

Period of record:

Specific conductance: Maximum daily, 4,190 micromhos May 11, 1970; minimum daily, 807 micromhos Apr. 24, 1973.

Water temperatures: Maximum, 38.0°C July 23-25, 27, 1974; minimum, freezing point on many days during winter months.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED SODIUM PLUS POTAS- SIUM (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)
OCT. 04...	1100	432	11	150	26	--	110	--	133	0
NOV. 21...	1220	18	21	520	94	240	--	5.2	100	0
DEC. 10...	1000	18	18	510	90	--	210	--	154	0
20...	1510	21	21	500	97	190	--	3.9	166	0
JAN. 30...	1410	25	20	410	96	210	--	4.2	146	0
FEB. 25...	0700	13	18	520	88	210	--	5.4	152	0
MAR. 14...	1650	46	23	360	82	230	--	6.5	182	0
APR. 22...	1245	11	7.1	480	88	190	--	4.9	119	0
MAY 31...	1100	2.7	20	460	92	190	--	4.5	104	0
JUNE 12...	1230	13	20	490	83	170	--	5.1	160	0
JULY 16...	1400	4.6	22	530	86	150	--	5.2	127	0
AUG. 21...	1150	2.2	24	550	82	130	--	4.6	136	0
SEP. 30...	1030	20	20	540	74	210	--	4.6	176	0

DATE	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	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)
OCT. 04...	480	75	.3	915	480	370	2.2	1080	7.3	14.0
NOV. 21...	1600	320	--	2850	1700	1600	2.5	3430	7.9	12.0
DEC. 10...	1500	310	--	2680	1600	1500	2.2	3400	7.5	4.0
20...	1500	280	--	2670	1600	1500	2.0	3440	7.6	2.0
JAN. 30...	1300	280	--	2390	1400	1300	2.4	3060	7.6	10.0
FEB. 25...	1500	280	--	2700	1700	1500	2.2	3340	7.7	16.0
MAR. 14...	1100	310	--	2200	1200	1100	2.8	3020	7.7	18.0
APR. 22...	1400	250	--	2480	1600	1500	2.1	3230	7.8	20.5
MAY 31...	1400	280	--	2500	1500	1400	2.1	3150	7.6	20.0
JUNE 12...	1400	240	--	2490	1600	1400	1.9	3120	7.9	26.5
JULY 16...	1500	230	--	2590	1700	1600	1.6	3150	7.5	35.0
AUG. 21...	1500	170	--	2530	1700	1600	1.4	2960	7.7	28.0
SEP. 30...	1400	290	--	2630	1700	1500	2.2	3360	7.9	18.0

RED RIVER BASIN

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07300000 SALT FORK RED RIVER NEAR WELLINGTON, TEX.--Continued

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

MONTH	DISCHARGE (FT ³ /S-DAY)	SPECIFIC CONDUCT- ANCE (MICRO- MHOS)	DIS- SOLVED SOLIDS (MG/L)	DIS- SOLVED SOLIDS (TONS)	DIS- SOLVED CHLORIDE (MG/L)	DIS- SOLVED CHLORIDE (TONS)	DIS- SOLVED SULFATE (MG/L)	DIS- SOLVED SULFATE (TONS)	HARDNESS (CA, MG) (MG/L)
OCT. 1973...	1094	2430	1910	5640	220	650	1040	3070	1160
NOV.....	441	3380	2740	3260	280	333	1530	1820	1630
DEC.....	574	3360	2730	4230	280	434	1530	2370	1620
JAN. 1974...	735	3040	2450	4860	260	516	1360	2700	1460
FEB.....	495	3280	2660	3560	280	374	1480	1980	1580
MAR.....	1679	2370	1850	8390	210	952	1010	4580	1130
APR.....	1428.9	2410	1890	7290	220	849	1030	3970	1150
MAY.....	3654.7	1740	1300	12800	140	1380	680	6710	810
JUNE.....	806.7	2760	2200	4790	250	545	1210	2640	1320
JULY.....	123.0	3180	2570	853	270	90	1430	475	1530
AUG.....	213.2	3120	2520	1450	270	155	1400	806	1500
SEP.....	1715.9	2720	2160	10000	240	1110	1190	5510	1300
TOTAL.....	12960.4	--	--	67100	--	7390	--	36600	--
WTD. AVG....	35.5	2440	1920	--	210	--	1050	--	1160

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	3290	3400	3300	3370	3270	3230	3180	1890	3070	3210	2990	3070
2	3310	3350	3320	3460	3250	3320	3260	2530	3330	3180	3010	3050
3	3250	3320	3340	3400	3290	3290	3200	2910	2870	3210	3080	3030
4	1130	3310	3470	3330	3330	3260	3220	3260	3250	3150	3140	2990
5	2120	3310	3400	3400	3340	3290	3200	3200	2910	3200	3080	3010
6	2640	3360	3400	3320	3310	3250	3270	3120	3160	3260	3190	3020
7	2920	3380	3350	3240	3210	3240	3430	3340	3210	3320	3110	2990
8	3060	3380	3400	3210	3280	3230	3590	3340	2800	3150	3070	3040
9	3150	3370	3440	3540	3310	2500	3200	3290	2320	3220	3060	3010
10	2820	3390	3400	3430	3290	1260	3220	3360	3020	3220	3010	3020
11	2500	3390	3380	3440	3280	2510	3210	3330	3110	3230	3030	3060
12	2910	3390	3380	3450	3260	2830	3190	3290	2460	3220	3070	2990
13	3110	3380	3390	3070	3250	2980	3220	3230	1900	3170	3020	3030
14	3150	3410	3310	3170	3300	3020	3200	3260	2820	3250	3020	3050
15	3170	3410	3350	3270	3390	3010	3170	3200	3040	3200	3170	3300
16	3260	3370	3360	2680	3300	3010	3230	3230	3080	3210	3080	3750
17	3210	3390	3380	2360	3150	3000	3340	3280	3120	3200	3080	3400
18	3240	3400	3390	2750	3260	3000	3240	3250	3160	3210	3060	3280
19	3230	3410	3510	2890	3230	3140	3230	3330	3090	3210	3050	2120
20	3220	3430	3570	2960	3230	3140	3200	3250	3170	3200	3010	1750
21	3240	3400	3210	3010	3240	3210	3250	900	3120	3200	3050	3510
22	3250	3380	3310	3100	3290	3140	3290	1410	3070	3120	3100	3590
23	3290	3360	3420	3170	3260	3060	3280	1330	3110	3160	3420	3480
24	3220	3360	3370	3200	3310	3130	3280	1500	3070	3150	3200	3300
25	3220	3390	3340	3230	3340	3200	3190	1720	3140	3160	3130	3590
26	3210	3420	3300	3190	3320	3230	3260	2160	3190	3170	3050	3450
27	3230	3460	3260	3180	3320	3160	3260	2650	3170	3140	2850	3470
28	3220	3370	3370	3180	3350	3310	2750	3150	3120	3150	3430	3460
29	3210	3380	3290	3200	---	3330	2030	3140	3120	3100	3300	3400
30	3230	3370	3280	3160	---	3260	1750	3230	3180	3120	3260	3360
31	3250	---	3270	3210	---	3220	---	3150	---	3060	3150	---
MONTH	3040	3380	3360	3180	3280	3040	3140	2810	3010	3190	3110	3150

RED RIVER BASIN

07300000 SALT FORK RED RIVER NEAR WELLINGTON, TEX.--Continued

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	20.0	20.0	---	16.0	12.0	12.0	20.0	20.0	32.0	23.0	30.0
2	28.0	9.0	---	0.0	15.0	20.0	10.0	18.0	33.0	28.0	22.0	---
3	30.0	10.0	10.0	---	---	---	10.0	16.0	23.0	34.0	---	28.0
4	14.0	---	10.0	4.0	15.0	20.0	18.0	26.0	20.0	22.0	30.0	29.0
5	20.0	10.0	12.0	0.0	18.0	20.0	20.0	---	33.0	---	30.0	29.0
6	28.0	11.0	10.0	---	5.0	15.0	20.0	18.0	30.0	---	27.0	27.0
7	30.0	15.0	8.0	4.0	4.0	13.0	---	26.0	32.0	---	25.0	30.0
8	28.0	---	---	10.0	10.0	16.0	20.0	30.0	28.0	34.0	28.0	29.0
9	28.0	---	12.0	0.0	10.0	17.0	12.0	32.0	17.0	33.0	34.0	30.0
10	---	8.0	4.0	0.0	20.0	8.0	15.0	28.0	31.0	31.0	28.0	30.0
11	10.0	---	5.0	---	---	10.0	---	---	28.0	33.0	30.0	30.0
12	25.0	14.0	---	10.0	---	13.0	18.0	30.0	29.0	30.0	32.0	18.0
13	25.0	16.0	10.0	5.0	20.0	9.0	15.0	23.0	28.0	34.0	25.0	24.0
14	---	21.0	5.0	12.0	14.0	10.0	---	30.0	35.0	---	30.0	27.0
15	19.0	20.0	10.0	15.0	10.0	15.0	15.0	30.0	36.0	28.0	33.0	---
16	24.0	18.0	---	16.0	18.0	10.0	22.0	25.0	---	32.0	36.0	22.0
17	25.0	20.0	4.0	15.0	18.0	---	24.0	32.0	32.0	33.0	35.0	23.0
18	24.0	---	8.0	10.0	10.0	20.0	28.0	25.0	30.0	32.0	---	24.0
19	26.0	12.0	---	15.0	10.0	20.0	20.0	30.0	27.0	32.0	34.0	22.0
20	25.0	5.0	4.0	---	10.0	10.0	---	25.0	34.0	33.0	28.0	20.0
21	---	15.0	10.0	10.0	---	14.0	---	18.0	---	37.0	31.0	22.0
22	24.0	---	12.0	9.0	4.0	10.0	25.0	23.0	25.0	32.0	32.0	19.0
23	21.0	8.0	---	5.0	8.0	4.0	28.0	26.0	---	38.0	31.0	16.0
24	25.0	11.0	5.0	5.0	---	---	25.0	20.0	32.0	38.0	21.0	---
25	24.0	---	---	10.0	16.0	17.0	22.0	21.0	30.0	38.0	---	14.0
26	25.0	26.0	---	13.0	13.0	20.0	30.0	31.0	28.0	35.0	26.0	28.0
27	13.0	10.0	10.0	---	22.0	25.0	22.0	---	25.0	38.0	23.0	20.0
28	---	15.0	5.0	10.0	20.0	24.0	---	30.0	24.0	36.0	20.0	18.0
29	20.0	15.0	10.0	4.0	---	20.0	20.0	32.0	22.0	25.0	30.0	---
30	15.0	15.0	---	10.0	---	20.0	15.0	36.0	34.0	30.0	33.0	18.0
31	20.0	---	2.0	15.0	---	---	---	20.0	---	28.0	33.0	---
MONTH	23.0	---	---	8.5	13.5	15.5	19.5	26.0	28.5	32.5	29.0	24.0

RED RIVER BASIN

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07301200 McCLELLAN CREEK NEAR McLEAN, TEX.

LOCATION.--Lat 35°19'45", long 100°36'32", Gray County, at bridge on State Highway 273, 5 miles (8 km) upstream from mouth, and 6.6 miles (10.6 km) north of McLean.

DRAINAGE AREA.--759 mi² (1,966 km²), of which 299 mi² (774 km²) is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: October 1964 to September 1974.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	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 SODIUM PLUS POTAS- SIUM (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)
OCT. 16...	0910	2.8	20	65	19	--	120	--	194	0
NOV. 08...	1500	5.7	19	60	19	--	120	--	178	0
30...	1515	8.4	20	59	21	--	120	--	182	0
JAN. 02...	1045	12	27	60	24	150	--	4.0	184	0
FEB. 12...	1015	9.5	21	56	20	120	--	3.4	188	0
MAR. 19...	1005	9.2	20	71	22	120	--	3.6	214	0
APR. 29...	1300	20	20	79	20	140	--	5.7	257	0
JUNE 13...	1120	6.5	23	68	19	130	--	3.8	202	0

DATE	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	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)
OCT. 16...	120	160	.2	596	240	80	3.4	1150	7.2	11.5
NOV. 08...	130	140	.2	580	230	80	3.4	1040	7.2	13.5
30...	130	140	.2	579	230	83	3.3	1030	7.5	14.5
JAN. 02...	150	170	--	676	250	98	4.1	1100	8.0	.0
FEB. 12...	130	140	--	583	220	66	3.5	964	8.0	1.5
MAR. 19...	130	140	--	612	270	92	3.2	1050	8.0	8.0
APR. 29...	130	190	--	711	280	69	3.6	1210	8.0	23.0
JUNE 13...	140	160	--	643	250	82	3.6	1090	8.1	27.0

RED RIVER BASIN

07301300 NORTH FORK RED RIVER NEAR SHAMROCK, TEX.

LOCATION.--Lat 35°15'51", long 100°14'29", Wheeler County, at gaging station at bridge on U.S. Highway 83, 2.5 miles (4.0 km) north of Shamrock, 16 miles (26 km) upstream from Oklahoma-Texas State line, and 23 miles (37 km) downstream from McClellan Creek.

DRAINAGE AREA.--1,082 mi² (2,802 km²), of which 379 mi² (982 km²) is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: October 1964 to September 1974.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SI02) (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNE-SIUM (MG)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED SODIUM PLUS POTAS-SIUM (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)
OCT. 17...	0850	.42	16	400	61	--	94	--	172	0
NOV. 08...	1210	.25	18	390	70	--	130	--	136	0
30...	1325	.27	16	480	89	--	120	--	164	0
JAN. 02...	1405	2.1	20	400	68	250	--	6.1	107	0
FEB. 12...	1410	12	20	280	49	260	--	5.9	70	0
MAR. 19...	1325	12	19	250	54	240	--	7.2	144	0
APR. 29...	1500	33	11	270	34	130	--	7.9	106	0

DATE	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	HARD-NESS (CA+MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MMOS)	PH (UNITS)	TEMPER-ATURE (DEG C)
OCT. 17...	850	310	.1	1820	1300	1100	1.1	2730	7.3	10.5
NOV. 08...	980	290	.1	1940	1300	1200	1.5	2660	7.2	12.0
30...	1200	300	.2	2300	1600	1400	1.3	2960	7.3	15.0
JAN. 02...	1000	450	--	2250	1300	1200	3.0	3140	7.8	.0
FEB. 12...	620	520	--	1790	900	840	3.8	2720	7.7	14.0
MAR. 19...	570	500	--	1710	850	730	3.6	2730	8.0	14.5
APR. 29...	670	220	--	1400	810	730	2.0	2080	8.2	24.0

RED RIVER BASIN

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07301410 SWEETWATER CREEK NEAR KELTON, TEX.

LOCATION.--Lat 35°28'23", long 100°07'14", Wheeler County, at gaging station at bridge on Farm Road 592, 5 miles (8 km) north of Kelton, 8 miles (13 km) upstream from Texas-Oklahoma State line, and 8.5 miles (13.7 km) northeast of Wheeler.

DRAINAGE AREA.--287 mi² (743 km²), of which 20 mi² (52 km²) is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: October 1969 to September 1974.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED SODIUM PLUS POTAS- SIUM (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HC03) (MG/L)	CAR- BONATE (C03) (MG/L)
OCT.										
01...	1020	8.8	30	120	28	--	49	--	326	0
17...	1110	8.1	29	90	27	--	61	--	204	0
NOV.										
21...	1515	12	25	100	24	--	56	--	336	0
JAN.										
02...	1605	13	28	94	22	52	--	3.1	290	0
FEB.										
12...	1620	15	21	39	22	57	--	2.7	147	0
MAR.										
19...	1550	19	27	100	23	56	--	3.3	333	0
APR.										
29...	1625	46	18	53	13	75	--	6.9	260	0
JUNE										
12...	0840	3.7	24	120	34	68	--	2.6	209	0
JULY										
17...	0840	.20	33	190	42	95	--	3.3	235	0

DATE	DIS- SOLVED SULFATE (S04) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	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)
OCT.										
01...	200	38	.2	634	430	160	1.0	1040	7.7	15.5
17...	240	38	.2	583	340	170	1.4	922	7.7	13.5
NOV.										
21...	140	38	.2	547	350	76	1.3	893	7.6	10.0
JAN.										
02...	150	34	--	526	330	92	1.3	774	8.2	.0
FEB.										
12...	150	33	--	397	190	67	1.8	620	8.2	11.0
MAR.										
19...	170	37	--	580	340	71	1.3	911	8.2	15.0
APR.										
29...	76	37	--	407	190	0	2.4	681	8.0	20.0
JUNE										
12...	330	44	--	726	440	270	1.4	1090	7.9	17.0
JULY										
17...	520	71	--	1070	650	450	1.6	1510	7.7	21.0

RED RIVER BASIN

07307600 NORTH PEASE RIVER NEAR CHILDRESS, TEX.

LOCATION.--Lat 34°16'30", long 100°17'05", Cottle County, at gaging station on bridge on U.S. Highways 62 and 83 and 12.2 miles (19.6 km) south of Childress.

DRAINAGE AREA.--1,434 mi² (3,714 km²).

PERIOD OF RECORD.--Chemical analyses: March 1973 to September 1974.

EXTREMES.--October 1973 to September 1974.

Specific conductance: Maximum daily, 35,900 micromhos Mar. 21; minimum daily, 1,560 micromhos June 4.

REMARKS.--Conductivity is recorded continuously at this station.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTAN- TANEOUS 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 SODIUM PLUS POTAS- SIUM (K) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HC03) (MG/L)	CAR- BONATE (C03) (MG/L)
OCT. 16...	0805	1.4	--	800	140	--	5200	--	132	0
NOV. 24...	0740	15	9.6	310	18	--	110	--	126	0
DEC. 08...	0705	.04	14	680	110	--	2100	--	292	0
MAR. 12...	0920	45	12	200	47	760	--	12	139	0
19...	1405	.07	--	690	140	--	--	--	--	--
MAY 28...	1145	23	11	370	66	1200	--	13	110	0
JUNE 05...	1020	1600	15	150	24	220	--	9.0	142	0
AUG. 26...	--	2.1	14	330	55	1800	--	8.9	102	0
SEP. 20...	0730	364	12	150	24	370	--	7.3	146	0

DATE	DIS- SOLVED SULFATE (S04) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	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)
OCT. 16...	2100	8200	--	16400	2600	2400	--	24900	7.4	15.0
NOV. 24...	730	170	.2	1410	860	750	1.6	1920	7.5	6.0
DEC. 08...	1700	3400	--	8210	2200	1900	--	12500	7.5	5.0
MAR. 12...	700	1000	--	2800	690	580	13	4380	8.1	11.0
19...	1700	5700	--	--	2300	--	--	18400	--	22.5
MAY 28...	1000	1900	--	4610	1200	1100	15	7530	7.4	28.0
JUNE 05...	340	330	--	1160	470	360	4.4	1930	7.7	20.0
AUG. 26...	830	2700	--	5790	1100	970	24	6470	7.4	29.5
SEP. 20...	420	530	--	1590	470	350	7.4	2540	7.8	21.0

07307600 NORTH PEASE RIVER NEAR CHILDRESS, TEX.--Continued

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

MONTH	DISCHARGE (FT ³ /S-DAY)	SPECIFIC CONDUCT- ANCE (MICRO- MHOS)	DIS- SOLVED SOLIDS (MG/L)	DIS- SOLVED SOLIDS (TONS)	DIS- SOLVED CHLORIDE (MG/L)	DIS- SOLVED CHLORIDE (TONS)	DIS- SOLVED SULFATE (MG/L)	DIS- SOLVED SULFATE (TONS)	HARDNESS (CA, MG) (MG/L)
OCT. 1973...	414.05	5710	3820	4270	1380	1540	1020	1140	980
NOV.....	5.64	5300	3540	54	1200	18	1020	16	920
DEC.....	.07	12100	7960	1.5	3290	.6	1670	.3	--
JAN. 1974...	0	--	--	0	--	0	--	0	--
FEB.....	0	--	--	0	--	0	--	0	--
MAR.....	466.12	5580	3460	4350	1310	1650	870	1090	960
APR.....	0	--	--	0	--	0	--	0	--
MAY.....	3029.01	3840	2380	19500	770	6260	730	5990	730
JUNE.....	5287.08	2250	1370	19500	430	6120	380	5370	530
JULY.....	.07	15500	10200	1.9	4960	.9	1470	.3	--
AUG.....	81.42	6540	4040	889	1660	364	860	189	1080
SEP.....	2180	2650	1660	9760	570	3340	420	2460	580
TOTAL.....	11463.46	--	--	58300	--	19300	--	16300	--
WTD. AVG....	31.4	3040	1890	--	630	--	530	--	630

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	18900	15200	11700	---	---	---	---	8170	2530	15200	---	---
2	17600	14600	11800	---	---	---	---	7820	3130	---	---	---
3	2720	14600	12000	---	---	---	---	13600	3300	---	---	---
4	3220	14300	12600	---	---	---	---	17200	1560	15700	---	---
5	5210	14300	---	---	---	---	---	3340	1930	---	---	---
6	13400	14200	---	---	---	---	---	3490	2180	---	---	---
7	16000	14000	---	---	---	---	---	4510	3220	---	---	---
8	19200	13900	12500	---	---	---	---	9300	4800	---	---	---
9	21200	---	---	---	---	15000	---	17100	6700	---	---	---
10	21500	14000	---	---	---	9460	---	16700	9950	---	---	---
11	18800	13800	---	---	---	4560	---	16100	13500	---	---	---
12	25300	13800	---	---	---	4980	---	14500	1970	---	---	---
13	24100	13600	---	---	---	5900	---	14100	1850	---	---	---
14	24500	13600	---	---	---	9700	---	13400	2680	---	---	---
15	23200	13800	---	---	---	17600	---	13400	4690	---	---	---
16	25100	13800	---	---	---	19200	---	12700	8570	---	---	---
17	20500	13800	---	---	---	22800	---	12500	11800	---	---	---
18	23500	13800	---	---	---	22000	---	---	14700	---	---	---
19	19000	13700	---	---	---	18400	---	---	15200	---	---	2930
20	17700	14000	---	---	---	16100	---	---	14400	---	---	2540
21	21400	14200	---	---	---	35900	---	---	14100	---	---	1880
22	18700	14100	---	---	---	27000	---	---	13700	---	---	2510
23	16800	13600	---	---	---	---	---	17500	14000	---	---	4240
24	16300	3260	---	---	---	---	---	16900	14200	---	6460	2950
25	15800	6920	---	---	---	---	---	3690	14200	---	4560	1970
26	15400	10300	---	---	---	---	---	2400	14300	---	6470	2690
27	14500	11100	---	---	---	---	---	3010	14500	---	6210	3550
28	14900	11600	---	---	---	---	---	7530	14800	---	7830	4570
29	14900	11700	---	---	---	---	---	10500	14600	---	9280	6920
30	15100	11800	---	---	---	---	---	11400	15000	---	13600	9190
31	15000	---	---	---	---	---	---	15500	---	---	---	---
MONTH	17400	12510	---	---	---	---	---	11010	9070	---	---	---

RED RIVER BASIN

07307600 NORTH PEASE RIVER NEAR CHILDRESS, TEX.--Continued

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	13.0	7.0	---	---	---	---	15.0	17.0	---	---	---
2	18.0	13.0	9.0	---	---	---	---	15.0	20.0	---	---	---
3	20.0	11.0	12.0	---	---	---	---	16.0	20.0	---	---	---
4	16.0	12.0	7.0	---	---	---	---	16.0	19.0	---	---	---
5	15.0	10.0	---	---	---	---	---	22.0	24.0	---	---	---
6	16.0	9.0	---	---	---	---	---	18.0	23.0	---	---	---
7	18.0	11.0	---	---	---	---	---	15.0	21.0	---	---	---
8	20.0	12.0	5.0	---	---	---	---	17.0	22.0	---	---	---
9	20.0	---	---	---	---	---	---	30.0	15.0	---	---	---
10	21.0	9.0	---	---	---	11.0	---	17.0	17.0	---	---	---
11	13.0	13.0	---	---	---	11.0	---	18.0	17.0	---	---	---
12	13.0	12.0	---	---	---	---	---	17.0	19.0	---	---	---
13	18.0	14.0	---	---	---	10.0	---	19.0	22.0	---	---	---
14	24.0	15.0	---	---	---	8.0	---	17.0	22.0	---	---	---
15	18.0	15.0	---	---	---	14.0	---	15.0	22.0	---	---	---
16	15.0	10.0	---	---	---	6.0	---	20.0	22.0	---	---	---
17	13.0	12.0	---	---	---	24.0	---	---	20.0	---	---	---
18	13.0	13.0	---	---	---	10.0	---	---	21.0	---	---	---
19	25.0	12.0	---	---	---	10.0	---	---	21.0	---	---	23.0
20	13.0	11.0	---	---	---	10.0	---	---	20.0	---	---	21.0
21	15.0	---	---	---	---	3.0	---	---	---	---	---	17.0
22	14.0	8.0	---	---	---	5.0	---	---	21.0	---	---	16.0
23	14.0	12.0	---	---	---	---	---	---	21.0	---	---	16.0
24	15.0	6.0	---	---	---	---	---	20.0	20.0	---	---	13.0
25	14.0	14.0	---	---	---	---	---	14.0	17.0	---	26.0	13.0
26	15.0	14.0	---	---	---	---	---	21.0	17.0	---	22.0	15.0
27	14.0	10.0	---	---	---	---	---	20.0	---	---	---	17.0
28	13.0	6.0	---	---	---	---	---	19.0	---	---	17.0	13.0
29	11.0	6.0	---	---	---	---	---	20.0	---	---	20.0	14.0
30	14.0	6.0	---	---	---	---	---	22.0	---	---	20.0	13.0
31	11.0	---	---	---	---	---	---	20.0	---	---	---	---
MONTH	16.0	11.0	---	---	---	---	---	---	20.0	---	---	---

RED RIVER BASIN

63

07307660 NORTH PEASE RIVER NEAR KIRKLAND, TEX.

LOCATION.--Lat 34°16'06", long 100°10'19", Cottle County, at ranch road crossing, 0.6 mile (1.0 km) south of Buckle L Ranch House, and 11.5 miles (18.5 km) southwest of Kirkland.

PERIOD OF RECORD.--Chemical analyses: March 1973 to September 1974.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	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 SODIUM PLUS POTAS- SIUM (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)
OCT. 15...	1905	5.9	8.7	830	190	--	4300	--	134	0
NOV. 06...	1400	2.0	11	1200	260	--	8200	--	118	0
27...	1200	2.0	8.8	1100	260	--	6800	--	132	0
DEC. 19...	1005	1.6	10	1300	270	8300	--	21	102	0
JAN. 30...	1245	1.2	--	1300	270	--	--	--	--	--
MAR. 12...	1330	59	12	270	57	990	--	11	172	0
APR. 23...	1120	.28	--	1300	330	--	--	--	--	--
MAY 13...	1145	2.7	--	1200	250	--	--	--	--	--
JUNE 25...	1335	.41	--	1200	280	--	--	--	--	--
JULY 18...	1130	.01	--	1400	330	--	--	--	--	--
AUG. 27...	0810	4.0	--	700	96	--	--	--	--	--
SEP. 17...	1615	.33	--	1300	300	--	--	--	--	--

DATE	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	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)
OCT. 15...	2000	7100	.5	14500	2800	2700	--	22400	7.8	25.0
NOV. 06...	3100	13000	.6	26100	4200	4100	--	30000	7.6	12.0
27...	3000	11000	.5	22000	3800	3700	--	29100	7.6	12.0
DEC. 19...	3100	14000	--	27100	4400	4300	55	41000	7.9	.5
JAN. 30...	3400	15000	--	--	4400	--	--	43200	--	9.0
MAR. 12...	710	1600	--	3740	910	770	14	6150	7.7	17.0
APR. 23...	3300	15000	--	--	4600	--	--	43900	--	24.0
MAY 13...	2800	13000	--	--	4000	--	--	37900	--	29.0
JUNE 25...	3000	14000	--	--	4200	--	--	41500	--	29.0
JULY 18...	3200	16000	--	--	4900	--	--	48800	--	32.0
AUG. 27...	1700	4300	--	--	2100	--	--	14900	--	23.0
SEP. 17...	3000	15000	--	--	4500	--	--	44500	--	21.0

RED RIVER BASIN

07307750 MIDDLE PEASE RIVER NEAR PADUCAH, TEX.

LOCATION.--Lat 34°12'31", Long 100°18'03", Cottle County, at gaging station at bridge on U.S. Highways 62 and 83 and 11.8 miles (19.0 km) north of Paducah.

DRAINAGE AREA.--1,086 mi² (2,813 km²), of which 65 mi² (168 km²) is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: May 1973 to September 1974.

EXTREMES.--October 1973 to September 1974:

Specific conductance: Maximum daily, 4,140 micromhos May 9; minimum daily, 940 micromhos June 4.

REMARKS.--Conductivity is recorded continuously at this station.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	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 SODIUM PLUS POTAS- SIUM (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)
OCT. 06...	0830	1.2	14	320	54	--	250	--	152	0
MAY 02...	0805	2.9	11	330	70	260	--	7.1	110	0
JUNE 04...	1730	4120	11	82	13	74	--	6.6	126	0

DATE	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	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)
OCT. 06...	660	530	.4	1900	1000	890	3.5	3170	8.0	16.0
MAY 02...	880	470	--	2080	1100	1000	3.4	3010	7.4	12.0
JUNE 04...	160	100	--	509	260	160	2.0	883	7.9	23.5

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

MONTH	DISCHARGE (FT ³ /S-DAY)	SPECIFIC CONDUCT- ANCE (MICRO- MHOS)	DIS- SOLVED SOLIDS (MG/L)	DIS- SOLVED SOLIDS (TONS)	DIS- SOLVED CHLORIDE (MG/L)	DIS- SOLVED CHLORIDE (TONS)	DIS- SOLVED SULFATE (MG/L)	DIS- SOLVED SULFATE (TONS)	HARDNESS (CA, MG) (MG/L)
OCT. 1973...	17.09	2240	1560	72	420	20	560	26	760
NOV.....	0	--	--	0	--	0	--	0	--
DEC.....	0	--	--	0	--	0	--	0	--
JAN. 1974...	0	--	--	0	--	0	--	0	--
FEB.....	0	--	--	0	--	0	--	0	--
MAR.....	0	--	--	0	--	0	--	0	--
APR.....	0	--	--	0	--	0	--	0	--
MAY.....	425.58	2410	1600	1840	320	364	720	831	800
JUNE.....	4680.69	1180	730	9240	170	2190	250	3110	490
JULY.....	0	--	--	0	--	0	--	0	--
AUG.....	0	--	--	0	--	0	--	0	--
SEP.....	570.81	1770	1140	1760	380	579	350	541	640
TOTAL.....	5694.17	--	--	12900	--	3150	--	4510	--
WTD. AVG....	15.6	1330	840	--	200	--	300	--	530

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

[illegible]

RED RIVER BASIN

07307780 MIDDLE PEASE RIVER NEAR KIRKLAND, TEX.

LOCATION.--Lat 34°14'17", Long 100°07'46", Cottle County, 0.3 mile (0.5 km) upstream from mouth and 10.5 miles (16.9 km) southwest of Kirkland.

PERIOD OF RECORD.--Chemical analyses: March 1973 to September 1974.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	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 SODIUM PLUS POTAS- SIUM (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HC03) (MG/L)	CAR- BONATE (C03) (MG/L)
NOV.										
06...	0930	4.8	10	1200	260	--	9300	--	144	0
26...	1805	5.9	10	1200	430	--	8900	--	122	0
DEC.										
18...	1640	4.6	11	1300	250	9100	--	25	133	0
JAN.										
29...	1645	4.8	--	1200	260	--	--	--	--	--
MAR.										
12...	1450	5.7	--	1200	220	--	--	--	--	--
APR.										
02...	1350	3.0	--	1300	270	--	--	--	--	--
23...	1330	2.5	--	1200	280	--	--	--	--	--
MAY										
14...	1205	4.7	--	1200	240	--	--	--	--	--
JULY										
18...	1400	.88	--	1200	260	--	--	--	--	--
AUG.										
08...	1625	1.3	--	1400	290	--	--	--	--	--
27...	0955	3.0	--	1200	260	--	--	--	--	--
SEP.										
18...	0905	4.2	--	1200	260	--	--	--	--	--

DATE	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	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)
NOV.										
06...	2700	15000	.5	28800	4200	4100	--	42600	7.6	10.0
26...	3200	15000	.5	28600	4900	4800	--	42800	7.7	17.0
DEC.										
18...	3300	15000	--	29100	4300	4200	61	43100	7.8	13.0
JAN.										
29...	3200	16000	--	--	4100	--	--	44200	--	11.0
MAR.										
12...	3100	15000	--	--	3900	--	--	43500	--	22.0
APR.										
02...	3400	16000	--	--	4400	--	--	48800	--	15.0
23...	3600	16000	--	--	4200	--	--	45300	--	29.0
MAY										
14...	3300	15000	--	--	4000	--	--	43600	--	21.0
JULY										
18...	3200	15000	--	--	4100	--	--	44700	--	34.5
AUG.										
08...	3300	17000	--	--	4700	--	--	46700	--	33.0
27...	3200	15000	--	--	4100	--	--	43500	--	23.0
SEP.										
18...	3100	15000	--	--	4100	--	--	45900	--	20.5

RED RIVER BASIN

67

07307800 PEASE RIVER NEAR CHILDRESS, TEX.

LOCATION.--Lat 34°13'39", long 100°04'24", Cottle County, at gaging station at bridge on Farm Road 104, 0.8 mile (1.3 km) upstream from Catfish Creek, 4.4 miles (7.1 km) downstream from confluence of North and Middle Forks, and 17 miles (27 km) southeast of Childress.

DRAINAGE AREA.--2,754 mi² (7,133 km²), of which 559 mi² (1,448 km²) is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: July 1968 to September 1974.

Water temperatures: July 1968 to September 1974.

EXTREMES.--October 1973 to September 1974:

Specific conductance: Maximum daily, 43,800 micromhos Apr. 11; minimum daily, 1,820 micromhos June 4.

Water temperatures: Maximum, 36.0°C July 5; minimum, freezing point Jan. 1-3, 9.

Period of record:

Specific conductance: Maximum daily, 43,800 micromhos Apr. 11, 1974; minimum daily, 1,820 micromhos June 4, 1974.

Water temperatures: Maximum, 37.0°C Aug. 10, 12, 14, 15, 1969; minimum, freezing point on several days during January and February of 1971, 1973-74.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report. Conductivity is recorded continuously at this station.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO ₂) (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 SODIUM PLUS POTAS- SIUM (K) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)
OCT. 31...	1700	9.9	12	610	710	--	7100	--	86	0
NOV. 26...	0800	9.5	--	1100	210	--	--	--	--	--
DEC. 18...	1400	6.5	11	1200	230	7400	--	22	36	0
JAN. 29...	1350	6.0	9.6	1100	230	8000	--	28	146	0
MAR. 12...	1550	73	--	400	75	--	--	--	--	--
APR. 02...	1500	3.9	--	1300	250	--	--	--	--	--
MAY 01...	1845	795	6.5	260	21	490	--	5.7	78	0
JUNE 05...	1500	2620	12	160	23	290	--	8.8	126	0
JULY 18...	1610	.48	--	1200	230	--	--	--	--	--
AUG. 27...	1200	8.6	--	830	120	--	--	--	--	--
SEP. 25...	1300	3000	11	180	30	600	--	7.0	130	0

DATE	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	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)
OCT. 31...	2900	12000	23200	4400	4400	--	36200	7.6	20.0
NOV. 26...	2800	11000	--	3600	--	--	33600	--	17.0
DEC. 18...	3300	12000	24200	3900	3900	51	37500	7.8	14.5
JAN. 29...	3200	13000	25600	3700	3600	57	38300	7.9	11.0
MAR. 12...	1000	3000	--	1300	--	--	10600	--	17.5
APR. 02...	3100	13000	--	4300	--	--	40700	--	16.0
MAY 01...	600	730	2150	740	670	7.9	3440	7.5	17.5
JUNE 05...	380	460	1400	490	390	5.7	2370	8.0	20.0
JULY 18...	2900	11000	--	3900	--	--	34400	--	34.0
AUG. 27...	2000	6100	--	2600	--	--	20000	--	24.0
SEP. 25...	420	890	2200	570	470	11	3730	7.9	17.0

RED RIVER BASIN

07307800 PEASE RIVER NEAR CHILDRESS, TEX.--Continued

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

MONTH	DISCHARGE (FT ³ /S-DAY)	SPECIFIC CONDUCT- ANCE (MICRO- MHOS)	DIS- SOLVED SOLIDS (MG/L)	DIS- SOLVED SOLIDS (TONS)	DIS- SOLVED CHLORIDE (MG/L)	DIS- SOLVED CHLORIDE (TONS)	DIS- SOLVED SULFATE (MG/L)	DIS- SOLVED SULFATE (TONS)	HARDNESS (CA, MG) (MG/L)
OCT. 1973...	1662.50	8040	5080	22800	2220	9980	970	4340	1170
NOV.....	229.3	31800	20000	12400	10100	6240	2610	1620	--
DEC.....	186.2	32400	19900	10000	10000	5030	2610	1310	--
JAN. 1974...	142.2	33500	21400	8220	10700	4100	2870	1100	--
FEB.....	140.6	34400	22000	8350	11000	4180	2910	1100	--
MAR.....	551.3	19300	12400	18500	5790	8620	2020	3000	--
APR.....	99.6	33000	21200	5700	10500	2830	2860	768	--
MAY.....	5865.1	6360	4070	64400	1590	25100	960	15200	990
JUNE.....	9432.3	2970	1800	45700	630	16100	460	11700	630
JULY.....	19.42	30200	19400	1020	9570	502	2720	143	--
AUG.....	190.05	15100	9740	5000	4430	2270	1710	876	--
SEP.....	8245.18	4270	2590	57600	1070	23700	520	11500	770
TOTAL.....	26763.75	--	--	260000	--	109000	--	52700	--
WTD. AVG....	73.3	5760	3600	--	1510	--	730	--	920

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	26000	27800	30900	31700	33100	32600	32500	4860	6610	35000	16700	30700
2	32800	36000	31300	31100	33000	33000	40700	11900	6500	35300	33700	31000
3	5340	35900	31300	20400	32700	41100	32800	21000	4200	35400	15900	19000
4	2820	35100	31300	33800	32900	32800	30700	24600	1820	26800	33300	19000
5	7600	35100	30900	39000	39700	32800	32000	7450	2370	36300	29000	33700
6	14300	31100	30800	33500	33300	40100	42400	5100	3020	36200	32100	33400
7	20500	31200	31300	33500	39500	40000	42600	9760	5880	35500	18500	33400
8	24900	31600	38300	33400	33300	40000	28000	12400	8470	35700	29600	33800
9	28700	31600	31000	33400	35200	39400	31000	18500	13500	33200	34200	33700
10	16000	36800	32100	33600	34700	21300	32300	25500	13500	33200	30200	17500
11	3280	36700	31600	23700	33100	7510	43800	27500	14900	33100	34600	17400
12	10100	36700	31500	27400	33100	10600	34300	28200	3930	20300	34600	33000
13	24200	30900	31300	34000	33100	13800	31600	27500	4710	33200	17600	33000
14	27100	30900	32000	33100	33000	17200	30400	36100	7500	33800	35400	33400
15	29200	30900	31900	33200	33000	22200	30300	37700	11900	19700	35500	25400
16	28000	27900	31900	33100	33000	26300	30800	31500	14500	19700	32200	29300
17	31200	32800	32100	33000	33100	35100	30800	34200	18400	33000	34700	38500
18	29300	27900	38400	33300	33700	31100	34300	39400	22600	34400	34700	38700
19	28700	30700	28300	33500	40200	32100	32100	35400	24800	19100	16500	4750
20	34300	30600	28300	33700	33300	32200	16400	31800	27200	21400	16300	2040
21	31000	30600	32600	35200	33600	33700	25100	31400	25400	35100	16300	1950
22	34800	32900	32600	35100	32600	34700	30700	33100	25900	32800	15500	4580
23	27700	31400	31800	33100	32800	33900	28000	41000	25700	32700	18200	7040
24	27600	31300	32000	33100	32600	39400	28000	25100	33800	35100	14000	3690
25	27600	31300	31900	33000	32800	33200	30400	2780	26200	32300	19100	3690
26	27900	34600	39000	39700	40600	33200	30700	6230	26400	32900	7990	3800
27	27600	27200	39000	39700	40500	16800	39200	8360	25800	35500	20000	9570
28	28700	29300	39000	33400	32800	32900	39500	12900	33600	35700	18200	9620
29	28700	28800	32500	39200	---	32700	36000	9950	36400	33400	16200	14100
30	28600	28700	32600	32900	---	34800	35900	18600	34200	32400	27200	17000
31	36200	---	31400	32900	---	40200	---	25200	---	16800	28200	---
MONTH	24220	31810	32610	33180	34440	30540	32780	22100	16990	31130	24720	20520

RED RIVER BASIN

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07307800 PEASE RIVER NEAR CHILDRESS, TEX.--Continued

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	26.0	15.0	8.0	0.0	17.0	9.0	26.0	19.0	26.0	30.0	23.0	25.0
2	27.0	14.0	11.0	0.0	17.0	14.0	12.0	22.0	29.0	28.0	34.0	18.0
3	21.0	13.0	12.0	0.0	6.0	21.0	11.0	25.0	24.0	27.0	20.0	18.0
4	19.0	13.0	10.0	4.0	8.0	14.0	11.0	22.0	24.0	35.0	26.0	16.0
5	22.0	11.0	12.0	8.0	8.0	12.0	23.0	24.0	27.0	36.0	22.0	26.0
6	20.0	12.0	7.0	6.0	3.0	10.0	20.0	22.0	29.0	32.0	22.0	30.0
7	19.0	14.0	7.0	7.0	4.0	22.0	21.0	23.0	27.0	33.0	25.0	30.0
8	20.0	12.0	7.0	9.0	2.0	21.0	16.0	26.0	25.0	30.0	23.0	25.0
9	20.0	11.0	7.0	0.0	4.0	18.0	15.0	29.0	27.0	23.0	32.0	26.0
10	22.0	12.0	11.0	1.0	4.0	13.0	25.0	24.0	27.0	20.0	21.0	26.0
11	---	13.0	11.0	1.0	5.0	10.0	17.0	25.0	---	25.0	21.0	20.0
12	18.0	22.0	11.0	6.0	6.0	---	26.0	26.0	25.0	26.0	33.0	18.0
13	18.0	13.0	11.0	15.0	11.0	10.0	14.0	26.0	31.0	31.0	34.0	24.0
14	18.0	15.0	12.0	15.0	9.0	14.0	14.0	27.0	29.0	30.0	34.0	25.0
15	19.0	14.0	4.0	15.0	18.0	15.0	26.0	28.0	31.0	28.0	27.0	22.0
16	17.0	11.0	10.0	---	15.0	11.0	20.0	30.0	31.0	26.0	22.0	21.0
17	23.0	13.0	5.0	---	8.0	21.0	15.0	26.0	31.0	31.0	32.0	21.0
18	23.0	22.0	---	---	17.0	13.0	21.0	30.0	28.0	25.0	32.0	21.0
19	15.0	15.0	3.0	---	9.0	9.0	16.0	29.0	28.0	32.0	23.0	24.0
20	23.0	13.0	1.0	15.0	20.0	10.0	15.0	27.0	28.0	34.0	23.0	23.0
21	23.0	7.0	11.0	9.0	11.0	8.0	25.0	29.0	27.0	32.0	34.0	21.0
22	24.0	10.0	12.0	15.0	4.0	8.0	22.0	26.0	28.0	32.0	26.0	19.0
23	15.0	11.0	5.0	3.0	7.0	4.0	18.0	31.0	31.0	32.0	30.0	16.0
24	15.0	12.0	7.0	8.0	3.0	4.0	21.0	29.0	24.0	29.0	29.0	16.0
25	14.0	11.0	9.0	10.0	12.0	9.0	26.0	15.0	24.0	32.0	29.0	17.0
26	15.0	10.0	9.0	5.0	14.0	10.0	26.0	20.0	29.0	30.0	25.0	21.0
27	15.0	9.0	9.0	10.0	18.0	14.0	23.0	25.0	29.0	32.0	25.0	---
28	13.0	5.0	10.0	11.0	14.0	15.0	19.0	23.0	32.0	28.0	22.0	---
29	10.0	8.0	11.0	12.0	---	21.0	26.0	21.0	31.0	28.0	28.0	---
30	15.0	12.0	6.0	12.0	---	24.0	18.0	24.0	22.0	22.0	29.0	---
31	20.0	---	2.0	---	---	15.0	---	24.0	---	24.0	30.0	---
MONTH	19.0	12.5	8.5	7.5	10.0	13.5	19.5	25.0	27.5	29.0	27.0	22.0
YEAR	MAX	36.0	MIN	0.0	MEAN	18.5						

RED RIVER BASIN

07308200 PEASE RIVER NEAR VERNON, TEX.

LOCATION.--Lat 34°10'44", long 99°16'40", Wilbarger County, at gaging station at bridge on U.S. Highway 283, 1.9 miles (3.1 km) north of Vernon, and 10 miles (16 km) upstream from mouth.

DRAINAGE AREA.--3,448 mi² (8,930 km²), of which 559 mi² (1,448 km²) is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: November 1967 to September 1974.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED SODIUM PLUS POTAS- SIUM (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HC03) (MG/L)	CAR- BONATE (C03) (MG/L)
OCT. 15...	1015	84	8.8	420	56	--	1000	--	120	0
NOV. 21...	0945	587	8.1	390	86	--	1200	--	128	0
DEC. 18...	0900	13	11	720	160	2700	--	11	163	0
JAN. 29...	0835	12	--	710	180	--	--	--	--	--
MAR. 11...	1220	29	7.5	670	140	2200	--	13	144	0
APR. 22...	1230	1.8	9.4	690	170	2400	--	14	161	0
JUNE 04...	1130	4460	11	190	26	400	--	9.5	122	0
26...	1605	18	14	630	130	2200	--	19	137	0
AUG. 20...	1005	5.2	10	440	75	750	--	11	98	0
SEP. 23...	1025	418	11	230	28	470	--	7.0	100	0
25...	1625	7890	8.5	160	16	210	--	5.3	96	0

DATE	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	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)
OCT. 15...	1000	1600	.0	4180	1300	1200	12	6520	7.2	18.5
NOV. 21...	1000	2000	.0	4730	1300	1200	14	7450	6.9	9.5
DEC. 18...	1900	4200	--	9780	2500	2300	24	14900	7.7	4.0
JAN. 29...	1900	4600	--	--	2500	--	--	16000	--	3.0
MAR. 11...	1700	3600	--	8400	2300	2100	20	12800	7.7	4.5
APR. 22...	1900	3900	--	9160	2400	2300	21	13800	7.6	23.0
JUNE 04...	430	660	--	1790	580	480	7.2	3090	7.4	21.0
26...	1600	3600	--	8260	2100	2000	21	13400	7.6	31.0
AUG. 20...	1300	1200	--	3830	1400	1300	8.7	5910	7.3	25.0
SEP. 23...	530	710	--	2040	690	610	7.8	3370	7.9	16.5
25...	330	320	--	1100	470	390	4.2	1860	7.9	17.0

RED RIVER BASIN

71

07308400 CHINA CREEK NEAR ELECTRA, TEX.

LOCATION.--Lat 34°06'20", long 98°53'58", Wichita County, at bridge on county black-top road and 5.3 miles (8.5 km) northeast of Electra.

DRAINAGE AREA.--37 mi² (96 km²).

PERIOD OF RECORD.--Chemical analyses: January 1968 to September 1974.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	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 SODIUM PLUS POTAS- SIUM (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)
OCT. 15...	0820	1.8	4.5	140	150	--	440	--	135	0
NOV. 27...	1555	.50	4.7	200	66	--	940	--	324	0
JAN. 30...	1025	.10	8.1	160	110	800	--	3.2	831	0
MAR. 13...	1520	3.9	6.7	130	61	400	--	7.0	173	0
APR. 22...	1050	.08	8.1	110	120	1000	--	5.1	496	0
JUNE 03...	1415	11	7.4	390	240	2000	--	12	111	0

DATE	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITU- ENTS) (MG/L)	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)
OCT. 15...	48	1200	.0	2100	970	860	6.1	3840	7.7	18.0
NOV. 27...	83	1700	.0	3190	760	500	15	5570	7.8	13.0
JAN. 30...	130	1200	--	2820	850	170	12	4910	7.7	10.0
MAR. 13...	54	930	--	1670	580	430	7.3	3140	8.2	12.0
APR. 22...	110	1800	--	3400	770	360	16	6170	8.1	16.5
JUNE 03...	130	4400	--	7230	2000	1900	20	12700	7.8	24.0

RED RIVER BASIN

07308500 RED RIVER NEAR BURKBURNETT, TEX.

LOCATION.--Lat 34°06'30", long 98°32'00", Wichita County, at gaging station at bridge on U.S. Highways 277 and 281 and 2 miles (3.2 km) northeast of Burkburnett.

DRAINAGE AREA.--20,570 mi² (53,280 km²), of which 5,936 mi² (15,374 km²) is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: July 1968 to September 1974.

Water temperatures: July 1968 to September 1974.

EXTREMES.--October 1973 to September 1974:

Specific conductance: Maximum daily, 12,300 micromhos Mar. 14; minimum daily, 1,400 micromhos Aug. 13.

Water temperatures: Maximum, 34.0°C July 20, 23.

Period of record:

Specific conductance (1968-70, 1971-74): Maximum daily, 17,400 micromhos July 30, 1972; minimum daily, 889 micromhos Sept. 24, 1970.

Water temperatures: Maximum, 35.0°C July 10, 1969; minimum, freezing point on several days during winter months.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report. Conductivity is recorded continuously at this station.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED SODIUM PLUS POTAS- SIUM (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)
OCT.										
07...	1730	42	11	120	24	--	280	--	125	0
NOV.										
28...	1000	.03	8.2	310	92	1100	--	16	195	0
DEC.										
17...	1045	182	5.0	450	130	1500	--	13	195	0
JAN.										
28...	1110	158	1.9	410	140	1600	--	12	196	0
FEB.										
14...	1200	143	.5	320	140	1600	--	14	199	0
MAR.										
14...	0925	2160	--	530	120	--	--	--	--	--
21...	1400	350	10	350	82	1100	--	14	203	0
APR.										
01...	1045	162	--	390	120	--	--	--	--	--
MAY										
03...	1045	11000	11	180	33	520	--	8.3	115	0
JUNE										
06...	1140	9170	12	180	31	470	--	9.5	124	0
JULY										
19...	1200	57	11	310	110	1000	--	14	125	0
AUG.										
29...	0840	1990	16	380	62	1200	--	10	162	0
SEP.										
26...	1550	22500	8.1	100	14	210	--	7.1	116	0

DATE	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	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)
OCT.										
07...	200	500	.3	1210	410	310	6.1	2220	8.0	24.0
NOV.										
28...	830	1700	--	4150	1200	990	14	6870	7.8	--
DEC.										
17...	1200	2500	--	5890	1700	1500	16	9110	8.0	6.0
JAN.										
28...	1200	2500	--	5960	1600	1400	17	9370	8.1	5.0
FEB.										
14...	1200	2500	--	5870	1400	1200	19	9530	7.0	14.5
MAR.										
14...	1400	3400	--	--	1800	--	--	12300	--	18.0
21...	910	1800	--	4370	1200	1000	14	7060	7.6	17.0
APR.										
01...	1100	2300	--	--	1500	--	--	89	8.3	14.5
MAY										
03...	420	850	--	2080	590	490	9.4	3430	7.9	19.0
JUNE										
06...	460	740	--	1960	580	480	8.5	3350	7.6	25.5
JULY										
19...	990	1600	--	4100	1200	1100	12	6520	6.9	25.5
AUG.										
29...	970	1900	--	4620	1200	1100	15	7560	7.5	24.0
SEP.										
26...	200	320	--	916	310	210	5.2	1600	7.5	18.0

07308500 RED RIVER NEAR BURKBURNETT, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	ALDRIN (UG/L)	DDD (UG/L)	DDE (UG/L)	DDT (UG/L)	DI- ELDRIN (UG/L)	ENDRIN (UG/L)	HEPTA- CHLOR (UG/L)	HEPTA- CHLOR EPOXIDE (UG/L)	LINDANE (UG/L)
OCT. 09...	1030	.00	.00	.01	.00	.00	.00	.00	.00	.00
JAN. 29...	1225	.00	.00	.00	.00	.00	.00	.00	.00	.00

DATE	CHLOR- DANE (UG/L)	PCB (UG/L)	DI- AZINON (UG/L)	MALA- THION (UG/L)	METHYL PARA- THION (UG/L)	PARA- THION (UG/L)	2,4-D (UG/L)	SILVEX (UG/L)	2,4,5-T (UG/L)
OCT. 09...	.0	.0	.00	.00	.00	.00	.00	.00	.00
JAN. 29...	.0	.0	.00	.00	.00	.00	.00	.00	.00

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

MONTH	DISCHARGE (FT ³ /S-DAY)	SPECIFIC CONDUCT- ANCE (MICRO- MHOS)	DIS- SOLVED SOLIDS (MG/L)	DIS- SOLVED SOLIDS (TONS)	DIS- SOLVED CHLORIDE (MG/L)	DIS- SOLVED CHLORIDE (TONS)	DIS- SOLVED SULFATE (MG/L)	DIS- SOLVED SULFATE (TONS)	HARDNESS (CA, MG) (MG/L)
OCT. 1973...	39958	3960	2310	249000	930	101000	430	46300	700
NOV.....	7825	7680	4660	98400	1930	40800	930	19700	1260
DEC.....	5794	8380	5380	84100	2250	35200	1080	16800	1370
JAN. 1974...	4745	8700	5540	71000	2330	29800	1150	14800	1420
FEB.....	4091	9420	5800	64100	2440	27000	1210	13400	1530
MAR.....	15113	7000	4300	176000	1810	73700	880	36000	1160
APR.....	6852	5450	3340	61800	1370	25400	690	12800	920
MAY.....	110985	3760	2290	686000	930	279000	460	139000	670
JUNE.....	38664	4680	2800	292000	1110	116000	610	63800	810
JULY.....	1696	9210	5700	26100	2360	10800	1220	5570	1490
AUG.....	9752	5330	3230	84900	1300	34200	690	18100	910
SEP.....	117333	1740	950	301000	300	94600	260	83300	360
TOTAL.....	362808	--	--	2190000	--	868000	--	470000	--
WTD. AVG....	994	3750	2240	--	890	--	480	--	670

RED RIVER BASIN

07308500 RED RIVER NEAR BURKBURNETT, TEX.--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	4260	8150	7410	8920	9190	9690	8900	2680	6250	10300	7690	3400
2	4930	8270	7630	8870	9400	9710	9560	2000	7020	10000	7650	3830
3	5000	8170	7890	8660	9450	9430	9810	3430	7280	10100	7600	4270
4	5100	7860	8070	8430	9490	9540	9840	1780	7100	10100	7520	4560
5	5700	8140	8240	6280	9580	9710	9890	1500	2100	10200	7020	4980
6	5830	8210	8560	6170	9620	9850	9950	2180	2700	10300	6300	5660
7	2220	8280	8830	6120	9670	9950	10000	2780	4200	10100	5740	5990
8	2650	8350	8120	6210	9760	9920	9950	7740	4740	10200	6840	6260
9	3330	8400	7440	6540	9740	8880	10000	6520	5550	10300	6500	6520
10	3620	8440	7730	7710	9760	5460	10000	5590	6920	10100	6270	7250
11	4820	8410	8640	8330	9670	2740	8730	5720	7310	10400	5490	7570
12	3950	8480	7410	9040	9580	1990	9000	5910	7570	10100	1720	6840
13	2590	8550	8720	9240	9490	5710	9230	6090	7990	9950	1400	6760
14	1830	8590	9190	8520	9530	12300	9710	6230	9190	10000	1520	7060
15	2800	8620	8640	8590	9530	7170	10200	6370	9310	9060	2090	6920
16	3450	8740	8840	8700	9360	6270	9310	6620	9350	8130	2750	6490
17	4040	8870	9040	9120	9400	6250	6150	6860	7690	8820	4080	6290
18	4700	8920	8870	9720	9580	6510	4140	7130	7920	6460	9440	6320
19	5330	8840	8990	9370	9710	6710	4640	7250	8150	6520	8940	6350
20	5980	8840	9070	9360	9810	6800	6340	7460	8760	6710	8320	2870
21	6440	8840	8920	9670	8570	7060	6860	7590	9310	7000	8190	1700
22	6750	8840	8910	9040	7980	7190	4230	7570	9580	7330	8090	1500
23	6940	8960	7940	9580	9150	7720	4190	7920	9730	7550	8060	2200
24	7260	7230	9150	9360	9490	7870	4870	10400	9900	8120	7780	2700
25	7450	4650	8330	9350	9520	8060	6520	6840	10000	8310	7750	1390
26	7540	5350	8340	9330	9600	8050	7670	3460	9950	8490	4670	1100
27	7560	5600	8350	9320	9630	8240	8710	4000	10200	8640	10400	1200
28	7530	6870	8360	9370	9670	8470	7240	4770	10200	8790	9310	2380
29	7730	7620	8460	9160	---	8580	5010	5020	10200	8980	7560	3410
30	7860	7980	8600	9120	---	9050	2360	5060	9710	8760	2700	3780
31	7980	---	8900	9280	---	8840	---	5630	---	8080	2960	---
MONTH	5260	8040	8440	8600	9460	7860	7770	5490	7860	8900	6200	4590

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	24.0	---	8.0	---	6.0	---	23.0	20.0	22.0	30.0	25.0	---
2	25.0	15.0	---	---	10.0	15.0	---	23.0	24.0	29.0	---	---
3	---	15.0	---	---	8.0	20.0	15.0	---	27.0	27.0	25.0	20.0
4	---	14.0	---	---	13.0	---	---	---	27.0	23.0	22.0	17.0
5	21.0	11.0	---	2.0	6.0	---	---	---	22.0	---	25.0	17.0
6	18.0	---	---	---	4.0	18.0	17.0	---	24.0	---	23.0	17.0
7	24.0	---	9.0	---	0.0	21.0	16.0	21.0	23.0	---	31.0	23.0
8	---	---	---	---	0.0	---	18.0	22.0	24.0	27.0	29.0	19.0
9	24.0	---	8.0	---	---	21.0	17.0	21.0	21.0	23.0	---	20.0
10	22.0	12.0	6.0	---	8.0	---	17.0	22.0	28.0	22.0	28.0	22.0
11	19.0	12.0	5.0	---	13.0	12.0	---	---	---	21.0	28.0	21.0
12	19.0	---	6.0	0.0	15.0	14.0	23.0	---	27.0	31.0	---	21.0
13	21.0	---	6.0	1.0	16.0	13.0	13.0	---	---	28.0	---	15.0
14	18.0	---	6.0	4.0	---	14.0	10.0	---	28.0	25.0	30.0	15.0
15	---	---	9.0	10.0	13.0	15.0	16.0	---	31.0	26.0	30.0	---
16	---	---	7.0	4.0	15.0	17.0	14.0	---	27.0	---	32.0	22.0
17	15.5	---	---	7.0	16.0	19.0	14.0	26.0	28.0	---	32.0	22.0
18	---	18.0	---	10.0	---	---	18.0	24.0	---	31.0	32.0	---
19	---	15.0	---	7.0	6.0	16.0	19.0	23.0	28.0	33.0	30.0	24.0
20	22.0	13.0	---	11.0	7.0	---	11.5	24.0	28.0	34.0	30.0	23.0
21	21.0	7.0	---	13.0	8.0	---	---	28.0	28.0	---	28.0	21.0
22	17.0	14.0	2.0	9.0	12.0	16.0	15.0	30.0	32.0	---	28.0	20.0
23	16.0	20.0	8.0	7.0	12.0	5.0	17.0	25.0	---	34.0	26.0	17.0
24	15.0	12.0	5.0	10.0	8.0	17.0	17.0	25.0	22.0	32.0	26.0	16.0
25	17.0	11.0	7.0	---	---	4.0	23.0	25.0	18.0	---	---	14.0
26	17.0	12.0	---	---	---	8.0	---	24.0	23.0	28.0	25.0	15.0
27	18.0	11.0	---	12.0	---	14.0	18.0	22.0	21.0	32.0	24.0	20.0
28	17.0	6.0	10.0	9.0	---	16.0	23.0	25.0	23.0	30.0	24.0	17.0
29	17.0	7.0	8.0	5.0	---	14.0	---	24.0	26.0	30.0	---	18.0
30	---	6.0	8.0	5.0	---	17.0	20.0	24.0	26.0	29.0	24.0	17.0
31	---	---	1.0	5.0	---	21.0	---	24.0	---	30.0	25.0	---
MONTH	---	---	---	---	---	---	---	---	25.5	---	27.5	19.0

07311600 NORTH FORK WICHITA RIVER NEAR PADUCAH, TEX.

LOCATION.--Lat 33°57'02", long 100°03'52", Cottle County, at gaging station at county bridge, 4 miles (6 km) downstream from Cottonwood Creek, 7 miles (11 km) downstream from Salt Creek, 12 miles (19 km) upstream from Middle Fork, and 14 miles (23 km) southeast of Paducah.

DRAINAGE AREA.--540 mi² (1,400 km²).

PERIOD OF RECORD.--Chemical analyses: October 1967 to September 1974.
Water temperatures: October 1967 to September 1974.

EXTREMES.--October 1973 to September 1974:

Specific conductance: Maximum daily, 28,400 micromhos Aug. 29; minimum daily, 418 micromhos Sept. 25.
Water temperatures: Maximum, 33.0°C July 28; minimum, freezing point Jan. 4, 11, 12, Feb. 8.

Period of record:

Specific conductance: Maximum daily, 37,500 micromhos Sept. 22, 1968; minimum daily, 418 micromhos Sept. 25, 1974.
Water temperatures: Maximum, 34.0°C July 4, Aug. 10, 1973; minimum, freezing point on several days during winter months.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report. Conductivity is recorded continuously at this station.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SiO ₂) (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNE-SIUM (MG)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED SODIUM PLUS POTAS-SIUM (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO ₃) (MG/L)	CAR-BONATE (CO ₃) (MG/L)
OCT. 14...	1900	16	2.0	650	180	--	3300	--	116	0
NOV. 13...	0810	16	--	750	170	--	--	--	--	--
DEC. 18...	1540	12	9.6	830	180	4300	--	21	195	0
JAN. 29...	1610	12	--	790	180	--	--	--	--	--
MAR. 12...	1515	12	--	730	150	--	--	--	--	--
APR. 02...	1420	16	--	870	200	--	--	--	--	--
MAY 14...	1340	11	--	550	150	--	--	--	--	--
JUNE 07...	0955	47	11	310	66	1400	--	13	144	0
JULY 16...	1500	6.3	--	860	190	--	--	--	--	--
AUG. 27...	1530	8.0	--	530	110	--	--	--	--	--
SEP. 17...	1005	9.4	--	900	180	--	--	--	--	--

DATE	DIS-SOLVED SULFATE (SO ₄) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	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)
OCT. 14...	1500	5600	11200	2400	2300	--	18600	7.6	25.0
NOV. 13...	2300	6700	--	2600	--	--	22100	--	17.0
DEC. 18...	2400	7100	14900	2800	2700	35	22600	7.7	12.5
JAN. 29...	2400	7200	--	2700	--	--	22500	--	10.0
MAR. 12...	1900	6300	--	2400	--	--	20200	--	17.0
APR. 02...	2400	7600	--	3000	--	--	23500	--	16.5
MAY 14...	2100	6400	--	2000	--	--	20100	--	25.0
JUNE 07...	780	2300	4950	1000	930	19	8310	7.7	22.5
JULY 16...	2500	8000	--	2900	--	--	24200	--	30.0
AUG. 27...	1400	4600	--	1800	--	--	15100	--	28.0
SEP. 17...	2400	9000	--	3000	--	--	26300	--	21.0

RED RIVER BASIN

07311600 NORTH FORK WICHITA RIVER NEAR PADUCAH, TEX.--Continued

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

MONTH	DISCHARGE (FT ³ /S-DAY)	SPECIFIC CONDUCT- ANCE (MICRO- MHOS)	DIS- SOLVED SOLIDS (MG/L)	DIS- SOLVED SOLIDS (TONS)	DIS- SOLVED CHLORIDE (MG/L)	DIS- SOLVED CHLORIDE (TONS)	DIS- SOLVED SULFATE (MG/L)	DIS- SOLVED SULFATE (TONS)	HARDNESS (CA, MG) (MG/L)
OCT. 1973...	521	19300	12200	17200	5840	8220	1960	2750	--
NOV.....	453	21800	14300	17500	6840	8370	2320	2830	--
DEC.....	409	21800	14900	16400	7110	7850	2400	2650	--
JAN. 1974...	352	21400	14600	13900	6980	6630	2360	2240	--
FEB.....	336	22000	14800	13500	7080	6420	2060	1870	--
MAR.....	414	22400	15100	16900	7210	8060	2110	2350	--
APR.....	393.6	22700	15300	16300	7320	7780	2310	2450	--
MAY.....	1567	8710	5480	23200	2590	10900	890	3760	1050
JUNE.....	2880.0	6520	4140	32200	1900	14800	700	5450	820
JULY.....	220.3	24400	16600	9890	8060	4800	2520	1500	--
AUG.....	278.0	24800	16900	12700	8210	6160	2430	1820	--
SEP.....	4223.5	2380	1550	17700	690	7840	270	3090	370
TOTAL.....	12047.4	--	--	207000	--	97800	--	32800	--
WTD. AVG....	33.0	9690	6370	--	3010	--	1010	--	--

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	19700	22000	21200	19500	21300	22200	23800	4130	21800	22900	26400	27000
2	20000	22200	21800	21300	22000	22300	23500	7350	20500	23100	26300	26200
3	20400	21800	21600	21600	22000	22100	23700	7590	16900	23200	25700	26000
4	20900	21900	22000	21900	22300	22300	23600	12500	3880	23000	26200	25800
5	20700	22000	21800	21500	22100	22000	23500	6880	3760	22900	26200	25500
6	20800	21800	21700	21500	22200	22700	23700	8300	3970	23500	25400	25700
7	21600	22000	21600	21400	22200	22700	23700	8400	8310	23500	25200	25600
8	21400	21700	21500	19000	22300	22500	24200	12100	11300	23300	25200	25500
9	21400	21600	21700	19900	21900	22500	24100	16000	15700	24100	25800	25400
10	22000	21900	21900	20700	21800	21900	24500	17700	15700	24100	25500	25300
11	12500	21800	21700	21600	22200	22000	24200	18300	16900	24100	24900	26300
12	11000	21700	21600	21600	21900	20200	24300	19500	17400	24600	25500	26200
13	12400	21500	21700	21500	22100	22000	24600	19300	18400	24100	25700	26600
14	18600	21700	21900	21300	22000	22400	24600	20100	18700	24000	26200	26800
15	18600	22000	22200	21700	22100	22300	24400	20100	19200	24300	27300	26800
16	19600	21800	22000	21600	22300	22500	25000	21100	19800	24200	27000	25900
17	19600	21900	21700	21600	22000	22500	24600	21600	20400	25100	27100	26300
18	20000	21700	21700	21500	22200	22700	24100	21400	20400	24800	26900	26500
19	20100	21700	19700	21500	21900	22800	24200	22400	20700	24700	26800	2310
20	20300	22000	22100	21300	21700	23000	23300	22300	21300	24900	27100	2990
21	20600	21800	22400	21500	21800	22800	25600	22400	21200	25100	27200	743
22	20500	21800	21700	21900	22000	22300	20100	22500	21600	24900	27300	11800
23	20900	21700	22000	21500	21900	22600	19600	23200	21900	25200	26000	13500
24	21400	21600	22200	21800	22100	20200	22700	17500	21900	25300	25400	1410
25	21800	21600	21800	21600	22300	22500	23800	16500	22500	25600	18200	418
26	21800	21800	22100	21700	22400	22800	24300	16700	22200	25600	14400	3240
27	21600	21500	21800	21500	22200	22800	24300	19000	22600	25800	15100	9590
28	21900	21700	22100	21700	22100	22800	24300	19200	22600	25600	23300	13200
29	22000	21500	21900	22000	---	23100	23000	20300	22600	26000	28400	17300
30	22100	22500	22000	21600	---	23300	15500	21100	23100	25800	27000	17500
31	22400	---	21500	23100	---	23700	---	21800	---	25700	27400	---
MONTH	19950	21810	21760	21400	22050	22400	23490	17010	17910	24480	25230	18780

RED RIVER BASIN

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07311600 NORTH FORK WICHITA RIVER NEAR PADUCAH, TEX.--Continued

TEMPERATURE (DFG. 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	25.0	11.0	10.0	2.0	8.0	---	24.0	---	22.0	25.0	21.0	---
2	24.0	16.0	15.0	3.0	9.0	---	15.0	20.0	---	28.0	22.0	---
3	25.0	14.0	12.0	1.0	7.0	17.0	15.0	18.0	---	25.0	28.0	---
4	20.0	16.0	9.0	0.0	---	18.0	17.0	20.0	---	---	26.0	---
5	19.0	10.0	10.0	4.0	---	19.0	20.0	---	28.0	---	23.0	---
6	17.0	11.0	5.0	2.0	---	15.0	18.0	24.0	26.0	29.0	24.0	---
7	22.0	19.0	7.0	2.0	2.0	16.0	14.0	23.0	27.0	30.0	23.0	---
8	22.0	14.0	6.0	9.0	0.0	16.0	18.0	20.0	22.0	24.0	25.0	---
9	20.0	12.0	10.0	---	9.0	18.0	19.0	25.0	21.0	29.0	23.0	25.0
10	28.0	12.0	5.0	---	9.0	---	15.0	25.0	25.0	30.0	30.0	22.0
11	20.0	11.0	12.0	0.0	5.0	12.0	18.0	26.0	22.0	29.0	24.0	20.0
12	25.0	---	12.0	0.0	12.0	15.0	15.0	20.0	21.0	28.0	27.0	22.0
13	16.0	20.0	14.0	3.0	14.0	12.0	19.0	25.0	30.0	24.0	30.0	24.0
14	25.0	17.0	8.0	5.0	17.0	15.0	15.0	23.0	28.0	25.0	31.0	15.0
15	24.0	16.0	5.0	4.0	---	16.0	15.0	26.0	25.0	29.0	29.0	14.0
16	20.0	12.0	9.0	11.0	---	11.0	21.0	22.0	25.0	29.0	26.0	---
17	21.0	18.0	6.0	14.0	---	12.0	22.0	25.0	24.0	30.0	30.0	---
18	23.0	18.0	6.0	9.0	---	16.0	25.0	25.0	24.0	28.0	26.0	---
19	21.0	14.0	5.0	9.0	---	19.0	18.0	25.0	25.0	28.0	27.0	---
20	17.0	11.0	4.0	11.0	---	---	22.0	22.0	30.0	15.0	26.0	---
21	17.0	12.0	4.0	8.0	---	10.0	17.0	25.0	26.0	30.0	27.0	---
22	23.0	18.0	4.0	9.0	---	13.0	25.0	23.0	27.0	25.0	31.0	---
23	---	14.0	16.0	7.0	---	9.0	16.0	29.0	27.0	28.0	23.0	---
24	17.5	---	5.0	7.0	---	10.0	17.0	28.0	22.0	30.0	28.0	---
25	24.0	12.0	4.0	9.0	---	6.0	12.0	23.0	28.0	32.0	---	---
26	22.0	15.0	9.0	6.0	---	12.0	15.0	21.0	22.0	30.0	26.0	---
27	---	12.0	4.0	11.0	---	17.0	27.0	28.0	24.0	27.0	---	21.0
28	20.0	9.0	8.0	8.0	---	22.0	20.0	25.0	24.0	33.0	---	17.0
29	15.0	15.0	5.0	11.0	---	19.0	---	28.0	23.0	29.0	26.0	22.0
30	16.0	12.0	7.0	12.0	---	15.0	---	25.0	25.0	26.0	---	19.0
31	15.0	---	4.0	7.0	---	23.0	---	23.0	---	25.0	---	---
MONTH	21.0	14.0	8.0	6.5	---	15.0	18.5	24.0	25.0	27.5	26.0	---

RED RIVER BASIN

07311622 NORTH FORK WICHITA RIVER NEAR CROWELL, TEX.

LOCATION.--Lat 33°52'12", long 99°56'48", Ford County, at gaging station at ranch road, 2.0 miles (3.2 km) upstream from Middle Fork and 15.0 miles (24.1 km) southwest of Crowell.

DRAINAGE AREA.--591 mi² (1,531 km²).

PERIOD OF RECORD.--Chemical analyses: August 1970 to September 1974.

EXTREMES.--October 1973 to September 1974:

Specific conductance: Maximum daily, 29,700 micromhos Aug. 22; minimum daily, 730 micromhos Sept. 25.

Period of record:

Specific conductance: Maximum daily, 35,300 micromhos May 3, 1971; minimum daily, 730 micromhos Sept. 25, 1974.

REMARKS.--Conductivity is recorded continuously at this station.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SiO ₂) (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNE-SIUM (MG)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED POTAS-SIUM (K) (MG/L)	BICARBONATE (HCO ₃) (MG/L)	CARBONATE (CO ₃) (MG/L)
OCT. 25...	0925	11	--	730	180	--	--	--	--
NOV. 13...	1655	12	--	770	190	--	--	--	--
DEC. 05...	1020	10	4.1	830	190	4300	16	146	0
19...	1340	12	6.0	830	180	4400	16	151	0
JAN. 30...	1200	10	--	820	190	--	--	--	--
MAR. 13...	0925	11	--	670	150	--	--	--	--
APR. 24...	1000	7.2	--	910	230	--	--	--	--
MAY 14...	1610	11	--	670	150	--	--	--	--
JUNE 10...	1220	21	--	430	90	--	--	--	--
JULY 17...	0935	5.8	--	1000	250	--	--	--	--
AUG. 28...	1300	15	--	920	200	--	--	--	--
SEP. 23...	1500	29	7.0	290	59	1200	8.0	108	0

DATE	DIS-SOLVED SULFATE (SO ₄) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	HARDNESS (CA+MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)
OCT. 25...	2300	6200	--	2600	--	--	20700	--	15.0
NOV. 13...	2400	6500	--	2700	--	--	21700	--	19.0
DEC. 05...	2600	7000	15000	2900	2700	35	21700	7.9	5.5
19...	2400	7000	14900	2800	2700	36	22700	7.8	1.0
JAN. 30...	2500	6900	--	2800	--	--	21600	--	6.5
MAR. 13...	2100	5100	--	2300	--	--	17300	--	10.0
APR. 24...	2600	7700	--	3200	--	--	24500	--	17.0
MAY 14...	1900	5600	--	2300	--	--	17800	--	25.0
JUNE 10...	1200	3300	--	1400	--	--	11000	--	26.0
JULY 17...	2900	8900	--	3500	--	--	25900	--	25.5
AUG. 28...	2600	8000	--	3100	--	--	25300	--	27.0
SEP. 23...	720	1900	4240	970	880	17	7090	7.9	19.0

07311622 NORTH FORK WICHITA RIVER NEAR CROWELL, TEX.--Continued

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

MONTH	DISCHARGE (FT ³ /S-DAY)	SPECIFIC CONDUCT- ANCE (MICRO- MHOS)	DIS- SOLVED SOLIDS (MG/L)	DIS- SOLVED SOLIDS (TONS)	DIS- SOLVED CHLORIDE (MG/L)	DIS- SOLVED CHLORIDE (TONS)	DIS- SOLVED SULFATE (MG/L)	DIS- SOLVED SULFATE (TONS)	HARDNESS (CA, MG) (MG/L)
OCT. 1973...	426.9	19000	12100	14000	5570	6420	2100	2410	--
NOV.....	383	21700	14300	14700	6530	6750	2470	2560	--
DEC.....	371.1	22500	14900	14900	6940	6960	2460	2460	--
JAN. 1974...	309.2	21500	14100	11800	6680	5580	2480	2070	--
FEB.....	299	21200	13800	11200	6560	5300	2500	2020	--
MAR.....	343.5	20400	13200	12200	6250	5790	2480	2300	--
APR.....	297.7	22900	15200	12200	7210	5800	2670	2150	--
MAY.....	1184.6	7970	4950	15800	2310	7380	940	3010	1110
JUNE.....	2464.4	4050	2490	16600	1040	6950	450	3000	660
JULY.....	161.5	25600	17300	7530	8070	3520	2900	1260	--
AUG.....	329.5	20100	13200	11800	6150	5470	2150	1910	--
SEP.....	4094.8	3640	2250	24900	930	10300	420	4660	610
TOTAL.....	10665.2	--	--	168000	--	76200	--	29800	--
WTD. AVG....	29.2	9060	5820	--	2650	--	1030	--	--

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	13700	24200	22300	21800	21100	21000	22600	8880	19700	23400	26200	20700
2	15300	23200	21700	22400	21100	21100	23500	4160	14700	23700	23800	21900
3	16600	21900	21500	24500	21100	20900	24200	5230	4410	23900	24200	22900
4	18100	21700	22300	24200	21100	21000	24400	6490	2350	23700	24800	24200
5	18600	21600	22700	22400	21200	21200	23800	4960	1280	23500	25700	25700
6	20000	22000	21800	21600	21900	21400	26600	3500	2010	23900	25700	26200
7	20400	21900	22400	21200	21700	22000	25400	5000	5200	24100	25900	24200
8	20500	21800	22700	21000	21700	21500	25600	7000	7740	24500	26100	23300
9	20500	21800	24600	21400	21800	20900	25000	8790	9620	24700	26500	23200
10	20500	21700	24400	21000	21800	15500	24800	10900	11000	25000	26600	23400
11	15700	21800	22400	21400	21600	14300	23500	12900	12800	25800	26800	23800
12	21700	21600	23000	24400	21500	16900	23900	14600	14000	26000	26600	24700
13	22300	21700	22100	20900	21400	17300	24700	16200	14900	26000	26700	26000
14	21100	21100	21600	21100	21500	20500	24600	17800	15700	26100	26900	26700
15	16700	21300	23000	20900	21400	21000	24600	18300	16500	26000	27100	26800
16	14200	21800	23000	21100	21200	21300	25500	19100	17400	26200	28100	25800
17	14100	21600	22800	21200	21200	21800	25100	19800	17800	25900	28700	25500
18	15100	21600	22000	21300	21400	21900	25500	20100	18600	26000	29000	25400
19	16700	21500	22700	20700	21100	22100	23500	20600	19200	25900	29000	5080
20	17800	21900	23300	20800	21000	22000	18600	21200	20000	25900	29300	5520
21	19300	22200	22400	20400	21100	22600	23200	21600	21500	26300	29600	4000
22	19400	22200	22200	21100	21100	21700	23200	21800	21700	26500	29700	5950
23	20100	21500	22400	21100	20600	21500	22700	22100	21800	26500	15000	7090
24	20300	19300	22100	21300	21200	21500	24500	21800	21800	26600	6880	2560
25	20700	20100	22700	21400	20800	21900	24900	21500	21800	26800	14600	730
26	21100	21700	22400	21300	20700	22800	25300	22100	21900	27000	20500	1590
27	17800	21400	22400	21500	20700	21300	25500	22300	21900	27100	22900	3630
28	20600	21400	22400	21300	20000	21600	25200	22700	22100	27100	25300	5540
29	20700	23500	22200	21400	---	21300	22000	21500	22500	27000	23500	7120
30	20700	22400	22100	21600	---	21200	15600	20200	22800	26800	13000	8460
31	23300	---	21800	21400	---	21500	---	19700	---	26500	18000	---
MONTH	18840	21790	22500	21600	21210	20790	23920	15570	15490	25630	24280	16590

07311648 MIDDLE FORK WICHITA RIVER NEAR TRUSCOTT, TEX.

LOCATION.--Lat 33°51'12", long 99°57'44", Foard County, at gaging station at ranch road, 3.0 miles (4.8 km) upstream from mouth, and 11.1 miles (17.9 km) northwest of Truscott.

DRAINAGE AREA.--161 mi² (417 km²).

PERIOD OF RECORD.--Chemical analyses: August 1970 to September 1974.

EXTREMES.--October 1973 to September 1974:

Specific conductance: Maximum daily, 20,100 micromhos July 18; minimum daily, 2,340 micromhos Aug. 24.

Period of record:

Specific conductance: Maximum daily, 20,100 micromhos July 18, 1974; minimum daily, 880 micromhos Sept. 4, 1972.

REMARKS.--Conductivity is recorded continuously at this station.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	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 (HC03) (MG/L)	CAR- BONATE (C03) (MG/L)
OCT. 25...	1220	6.5	--	820	190	--	--	--	--
NOV. 14...	1520	6.8	--	800	180	--	--	--	--
DEC. 19...	1040	6.3	4.8	830	180	2800	15	113	0
JAN. 30...	1550	4.1	--	790	170	--	--	--	--
MAR. 13...	1250	3.8	--	860	180	--	--	--	--
APR. 24...	1355	3.8	--	900	220	--	--	--	--
MAY 15...	0950	5.8	--	690	140	--	--	--	--
JUNE 10...	1455	4.5	5.5	430	71	850	5.9	64	0
JULY 17...	1335	4.8	--	1100	260	--	--	--	--
AUG. 04...	1130	3.6	--	670	160	--	--	--	--
SEP. 23...	1220	3.4	2.1	580	100	1500	6.3	99	0

DATE	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	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)
OCT. 25...	2500	4400	--	2800	--	--	16000	--	18.5
NOV. 14...	2500	4300	--	2700	--	--	15800	--	19.5
DEC. 19...	2600	4300	10800	2800	2700	23	15800	8.1	1.0
JAN. 30...	2400	4400	--	2700	--	--	15300	--	9.5
MAR. 13...	2500	4500	--	2900	--	--	15700	--	12.0
APR. 24...	2600	4800	--	3200	--	--	17100	--	21.0
MAY 15...	2000	3500	--	2300	--	--	12100	--	23.0
JUNE 10...	1200	1400	3990	1400	1300	10	6090	7.1	28.0
JULY 17...	3200	6100	--	3800	--	--	19900	--	29.0
AUG. 04...	2100	4000	--	2300	--	--	14500	--	21.0
SEP. 23...	1500	2500	6240	1900	1800	15	9620	7.7	19.0

07311648 MIDDLE FORK WICHITA RIVER NEAR TRUSCOTT, TEX.--Continued

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

MONTH	DISCHARGE (FT ³ /S-DAY)	SPECIFIC CONDUCT- ANCE (MICRO- MHOS)	DIS- SOLVED SOLIDS (MG/L)	DIS- SOLVED SOLIDS (TONS)	DIS- SOLVED CHLORIDE (MG/L)	DIS- SOLVED CHLORIDE (TONS)	DIS- SOLVED SULFATE (MG/L)	DIS- SOLVED SULFATE (TONS)	HARDNESS (CA, MG) (MG/L)
OCT. 1973...	210.7	15600	10800	6140	4200	2390	2440	1390	--
NOV.....	187.3	15500	10700	5420	4270	2160	2610	1320	--
DEC.....	167.4	15600	10800	4880	4300	1940	2630	1190	--
JAN. 1974...	140.1	16100	11100	4190	4550	1720	2540	961	--
FEB.....	98.6	15900	10900	2910	4480	1190	2500	666	--
MAR.....	121.5	15700	10700	3530	4420	1450	2470	809	--
APR.....	109.9	16700	11500	3410	4720	1400	2630	781	--
MAY.....	361.5	11600	7880	7690	3280	3200	1900	1850	--
JUNE.....	704.2	5190	3460	6580	1240	2370	1000	1900	1080
JULY.....	115.4	18700	13000	4040	5340	1660	3010	937	--
AUG.....	487.3	6600	4450	5850	1740	2280	1110	1460	1340
SEP.....	1155.3	5560	3680	11500	1420	4430	930	2910	1150
TOTAL.....	3859.2	--	--	66100	--	26200	--	16200	--
WTD. AVG....	10.6	9330	6350	--	2510	--	1550	--	1840

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	14200	16000	15300	15800	15700	15500	16500	15700	16600	18700	15100	14200
2	14600	16200	15300	16000	15800	15500	16300	15100	9660	18800	14800	14400
3	15300	16200	15400	16400	15900	15500	16600	15200	5480	18900	14700	14400
4	15500	16200	15300	16500	15900	15600	16800	15700	2440	18700	14500	14500
5	15600	16000	15300	16400	15800	15500	16600	7630	2490	18400	15800	14700
6	15600	16000	16000	16400	16500	15800	16700	7520	3850	18300	17000	14900
7	15500	14800	15900	16500	16600	15800	17000	8260	4480	18000	18700	15200
8	15700	15500	15800	16400	16700	15900	17100	9200	4920	18600	18700	15400
9	15900	15400	15800	16800	16400	15900	17300	10100	5180	18700	18700	15300
10	15000	15300	15700	16600	16400	15600	17000	10700	6090	19000	18600	15600
11	15700	15300	15700	16500	16600	15900	15800	11300	6770	19100	18700	15800
12	15200	15400	15700	16500	16200	16100	16100	11200	7790	19300	18400	16100
13	14800	15400	15700	16500	16100	15700	16300	11600	8370	19500	18500	16400
14	14700	15400	15700	16500	16000	15200	16700	11400	9220	19300	18500	16700
15	14700	15500	15600	16500	16000	15200	16600	12100	10300	19700	18600	16800
16	15200	15400	15800	16400	16200	15400	16800	12500	12100	19600	18900	16400
17	15500	15400	15700	16400	16000	15500	16700	13000	13000	19900	19000	15900
18	15500	15300	15700	16200	15900	15300	16600	13700	13900	20100	19000	16200
19	15400	15200	15600	15600	15800	15200	16900	14300	14600	20000	19100	10800
20	15600	15200	16100	15700	15600	15200	16900	15000	15300	19800	19300	11000
21	16200	15400	16100	15800	15900	15100	16700	15400	16100	19700	19800	6150
22	16400	15300	16000	16000	15700	15200	16900	15700	16600	19500	19800	8750
23	16400	15300	15700	15900	15400	15500	17000	16100	17000	19100	4630	9390
24	16400	15200	15400	15700	15200	15700	17100	16100	17100	18600	2340	2860
25	16400	15000	15400	15700	15000	15900	17300	16000	17200	18400	12600	4180
26	16500	15100	15200	15500	15200	15800	17100	16100	17200	17500	13300	6210
27	16200	15200	15300	15600	15100	16100	17100	15800	17800	17200	13400	7690
28	15800	15200	15100	15600	15200	16000	17200	15400	18000	16800	13500	9020
29	15500	15100	15100	15600	---	16100	16700	16100	18400	16300	13900	9770
30	15600	15300	15200	15300	---	16400	16000	16100	18700	16000	14200	9960
31	15900	---	15500	15400	---	16300	---	16400	---	15900	14000	---
MONTH	15560	15470	15580	16080	15890	15660	16750	13460	11550	18630	16000	12490

RED RIVER BASIN

07311700 NORTH FORK WICHITA RIVER NEAR TRUSCOTT, TEX.

LOCATION.--Lat 33°49'14", long 99°47'10", Knox County, at gaging station at bridge on State Highway 283 and 4.5 miles (7.2 km) north of Truscott.

DRAINAGE AREA.--937 mi² (2,427 km²).

PERIOD OF RECORD.--Chemical analyses: July 1968 to September 1974.
Water temperatures: July 1968 to September 1974.

EXTREMES.--October 1973 to September 1974:

Specific conductance: Maximum daily, 29,300 micromhos Aug. 20; minimum daily, 920 micromhos Sept. 25.

Period of record:

Specific conductance: Maximum daily, 33,800 micromhos Aug. 19, 1970; minimum daily, 840 micromhos Sept. 23, 1969.

Water temperatures (1968-73): Maximum daily, 39.0°C Aug. 21, 23, 1969, Aug. 22, 1973; minimum daily, freezing point on several days during winter months.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report. Conductivity is recorded continuously at this station.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	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 SODIUM PLUS POTAS- SIUM (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)
OCT.										
27...	1630	85	6.3	430	93	--	1200	--	96	0
NOV.										
14...	1150	18	--	780	200	--	--	--	--	--
DEC.										
05...	1650	16	2.1	830	190	3800	--	16	138	0
19...	1520	20	4.1	830	190	3900	--	15	148	0
29...	1630	19	--	790	200	--	--	--	--	--
JAN.										
31...	0950	16	4.5	870	190	3800	--	19	110	0
FEB.										
06...	1515	14	1.5	840	200	--	4000	--	161	0
MAR.										
13...	1535	19	--	800	170	--	--	--	--	--
APR.										
24...	1600	11	2.0	960	220	4700	--	23	122	0
MAY										
15...	1315	15	--	640	130	--	--	--	--	--
JUNE										
04...	1035	2900	9.4	230	29	340	--	9.6	103	0
JULY										
17...	1550	5.5	--	1100	270	--	--	--	--	--
AUG.										
28...	0925	34	6.2	330	64	1300	--	17	69	0
SEP.										
19...	1310	105	7.9	290	52	1100	--	10	94	0

DATE	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITU- ENTS) (MG/L)	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)
OCT.									
27...	980	2100	4930	1400	1400	14	8270	7.3	19.0
NOV.									
14...	2500	5800	--	2800	--	--	19400	--	17.0
DEC.									
05...	2600	6000	13500	2900	2700	31	19700	7.9	9.0
19...	2500	6000	13500	2900	2700	32	20100	7.7	1.0
29...	2400	5900	--	2800	--	--	20100	--	12.0
JAN.									
31...	2500	6200	13600	3000	2900	30	20400	7.9	5.5
FEB.									
06...	2600	6200	13900	2900	2800	--	20300	7.7	8.0
MAR.									
13...	2400	5400	--	2700	--	--	17900	--	14.0
APR.									
24...	3000	7500	16500	3300	3200	36	23200	7.7	25.0
MAY									
15...	1900	4600	--	2100	--	--	14700	--	26.0
JUNE									
04...	630	530	1830	690	610	5.6	2920	7.9	21.0
JULY									
17...	3000	8500	--	3900	--	--	25200	--	30.0
AUG.									
28...	890	2200	4840	1100	1000	17	7800	7.2	23.5
SEP.									
19...	790	1700	4000	940	860	16	6460	7.5	21.0

RED RIVER BASIN

83

07131700 NORTH FORK WICHITA RIVER NEAR TRUSCOTT, TEX.--Continued

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

MONTH	DISCHARGE (FT ³ /S-DAY)	SPECIFIC CONDUCT- ANCE (MICRO- MHOS)	DIS- SOLVED SOLIDS (MG/L)	DIS- SOLVED SOLIDS (TONS)	DIS- SOLVED CHLORIDE (MG/L)	DIS- SOLVED CHLORIDE (TONS)	DIS- SOLVED SULFATE (MG/L)	DIS- SOLVED SULFATE (TONS)	HARDNESS (CA, MG) (MG/L)
OCT. 1973...	752	14500	9390	19100	4140	8400	1830	3720	--
NOV.....	898	14700	9690	23500	4290	10400	1870	4540	--
DEC.....	568	19800	13500	20700	6020	9230	2550	3900	--
JAN. 1974...	483	19300	13200	17200	5920	7720	2490	3240	--
FEB.....	421	20300	14000	15900	6200	7050	2700	3070	--
MAR.....	493	20000	13800	18300	6090	8110	2660	3540	--
APR.....	662.0	17000	11900	21300	5380	9620	2200	3930	--
MAY.....	2465.8	4950	3210	21300	1370	9150	650	4350	890
JUNE.....	5259.9	3020	1940	27600	670	9480	580	8180	620
JULY.....	143.2	25500	18100	7010	8400	3250	3180	1230	--
AUG.....	1007.26	9300	6130	16700	2790	7580	1130	3060	1490
SEP.....	11702.4	2070	1310	41300	540	17100	290	9230	490
TOTAL.....	24855.56	--	--	250000	--	107000	--	52000	--
WTD. AVG....	68.1	5620	3730	--	1600	--	770	--	980

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	12300	18200	18900	20200	19700	21100	22600	6740	22600	22400	28800	14800
2	12000	18900	19400	20900	20000	21200	23100	1430	6150	23100	28300	14100
3	13000	18900	19600	21100	20100	21400	23400	2800	4720	23700	28200	15100
4	14000	19100	19600	21800	20000	21500	23100	6410	2490	23100	28300	16700
5	14600	19200	19800	20300	20200	21500	23100	2700	1040	22900	27700	17800
6	15300	19200	19900	18200	20300	21400	23300	4600	1680	23400	27200	19800
7	16100	19100	19900	19700	20000	21700	23800	4640	2630	24300	26800	21600
8	16800	19000	20000	19200	20300	21300	24000	4720	4470	24100	26900	22000
9	16700	19100	19800	19800	19600	20900	23900	7260	6550	25300	26500	23400
10	17200	19200	19800	18900	20000	20600	24200	8100	8050	25400	27100	23100
11	13600	19000	19800	19000	20100	16100	12400	9800	9310	25500	27500	22900
12	12300	19200	19800	18800	20300	18200	13200	11300	10500	25100	27100	22500
13	18500	19000	20000	18000	20200	17900	16300	12100	11100	26200	27300	22600
14	18300	19200	19900	18100	20300	15800	19700	13300	12000	26000	27700	22700
15	18200	19300	20000	18600	20300	17000	21400	14700	12900	25900	28200	22700
16	17700	19500	19900	18900	20200	19500	22800	16200	13900	25500	27600	20800
17	16400	19500	19800	19200	20200	19600	23100	17600	14500	25200	28200	20600
18	15000	19500	19300	19100	20400	19900	23800	18100	15300	26000	28100	20400
19	14200	16000	19700	18700	20300	20200	23600	18400	16000	26000	28000	6310
20	14700	15000	20600	18700	20500	20400	18400	18500	16900	26700	29300	1950
21	15400	17000	20400	18700	20600	20500	19100	19100	17200	27600	29000	1100
22	16300	18000	19800	19100	20400	20600	20100	19700	18300	26800	28800	1360
23	17100	19500	20000	19200	20500	20900	21700	20200	18900	27800	9270	3670
24	17800	7170	19800	19300	20800	20900	23200	20700	18900	28100	4980	1170
25	17900	10400	19700	19300	20900	20800	22400	20900	19400	28200	4700	920
26	18300	11200	19900	19600	20800	20600	22600	19000	19600	27600	9070	1380
27	7860	19200	19800	19600	20900	21200	23800	21100	20000	27600	10000	3110
28	11800	16900	19800	19600	21000	21400	23700	22300	20800	28400	7800	6050
29	12700	17900	19800	19600	---	21400	10700	22500	21200	28100	13200	7220
30	15800	18400	19900	19700	---	21900	10600	22400	21500	28600	19600	8520
31	17000	---	19400	19800	---	22200	---	22700	---	29000	15100	---
MONTH	15320	17690	19800	19380	20320	20310	20900	13870	12950	25920	22780	13550

RED RIVER BASIN

07311700 NORTH FORK WICHITA RIVER NEAR TRUSCOTT, TEX.--Continued

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	---	0.0	6.0	12.0	16.0	18.5	---	---	---	---
2	30.0	10.0	---	---	6.0	---	---	16.5	---	---	---	---
3	30.0	18.0	14.0	-2.0	---	---	---	18.5	---	---	---	---
4	20.0	18.0	7.0	-2.0	15.0	16.0	9.0	19.0	---	---	---	---
5	18.0	10.0	3.0	---	15.0	25.0	8.0	---	---	---	---	---
6	---	11.0	7.0	10.0	15.0	20.0	---	---	---	---	---	---
7	---	---	---	-1.0	0.0	16.0	---	---	---	---	---	---
8	25.0	11.0	---	10.0	1.0	16.0	---	---	---	---	---	---
9	29.0	---	---	---	10.0	21.0	---	---	---	---	---	---
10	28.0	18.0	4.0	---	15.0	20.0	---	---	---	---	---	---
11	22.0	13.0	15.0	---	4.0	15.0	---	---	---	---	---	---
12	18.0	---	5.0	---	18.0	21.0	---	---	---	---	---	---
13	25.0	16.0	5.0	---	---	---	---	---	---	---	---	---
14	25.0	---	8.0	---	10.0	15.0	---	---	---	---	---	---
15	20.0	13.0	---	---	10.0	17.0	---	---	---	---	---	---
16	25.0	12.0	7.0	---	15.0	20.0	21.0	---	---	---	---	---
17	25.0	18.0	5.0	7.0	10.0	---	---	---	---	---	---	---
18	14.0	18.0	5.0	8.0	12.0	18.0	---	---	---	---	---	---
19	16.0	7.0	---	7.0	---	---	---	---	---	---	---	---
20	16.0	---	1.0	7.0	---	---	---	---	---	---	---	---
21	24.0	---	2.0	8.0	6.0	6.0	---	---	---	---	---	---
22	18.0	---	10.0	10.0	---	9.0	15.0	---	---	---	---	---
23	---	25.0	---	---	6.0	5.0	---	---	---	---	---	---
24	16.0	12.0	---	4.0	5.0	10.0	---	---	---	---	---	---
25	18.0	15.0	---	4.0	3.0	6.0	---	---	---	---	---	---
26	25.0	12.0	---	13.0	20.0	20.0	---	---	---	---	---	---
27	19.0	13.0	8.0	---	---	---	25.0	---	---	---	---	---
28	18.0	4.0	6.0	5.0	20.0	22.0	22.0	---	---	---	---	---
29	15.0	8.0	12.0	10.0	---	6.0	---	---	---	---	---	---
30	17.0	7.0	---	---	---	18.0	---	---	---	---	---	---
31	12.0	---	1.0	5.0	---	20.0	---	---	---	32.0	---	---
MONTH	21.0	---	---	---	10.0	---	---	---	---	---	---	---

RED RIVER BASIN

85

07311780 SOUTH FORK WICHITA RIVER NEAR GUTHRIE, TEX.

LOCATION.--Lat 33°37'29", long 100°13'04", King County, at gaging station at ranch road, 3.9 miles (6.3 km) upstream from Willow Creek, and 6.1 miles (9.8 km) east of Guthrie.

DRAINAGE AREA.--239 mi² (619 km²).

PERIOD OF RECORD.--Chemical analyses: August 1970 to September 1974.

EXTREMES.--October 1973 to September 1974:

Specific conductance: Maximum daily, 46,600 micromhos Sept. 23; minimum daily, 8,870 micromhos June 3.

Period of record:

Specific conductance: Maximum daily, 47,300 micromhos Aug. 11, 1971; minimum daily, 2,230 micromhos Aug. 25, 1971.

REMARKS.--Conductivity is recorded continuously at this station.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	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)
OCT.									
24...	0950	5.9	--	1000	270	--	--	--	--
NOV.									
13...	0955	3.6	--	1100	230	--	--	--	--
DEC.									
04...	1310	4.6	8.6	1200	270	8400	34	155	0
18...	0950	4.1	9.2	1200	270	8200	35	166	0
JAN.									
29...	1100	4.4	--	1100	270	--	--	--	--
MAR.									
12...	1010	4.6	--	840	220	--	--	--	--
APR.									
23...	0920	4.7	--	1200	280	--	--	--	--
MAY									
14...	0930	4.5	--	1200	280	--	--	--	--
JUNE									
06...	1015	8.2	--	560	140	--	--	--	--
JULY									
16...	0940	3.5	--	1200	300	--	--	--	--
AUG.									
27...	1005	3.2	--	1200	300	--	--	--	--
SEP.									
19...	1735	4.4	--	1000	260	--	--	--	--

DATE	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	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)
OCT.									
24...	3000	14000	--	3600	--	--	39300	--	15.5
NOV.									
13...	3000	13000	--	3700	--	--	38200	--	16.0
DEC.									
04...	3300	14000	27300	4100	4000	57	39300	7.7	11.0
18...	3100	13000	25900	4100	4000	56	38500	7.7	8.0
JAN.									
29...	3100	13000	--	3900	--	--	40700	--	7.0
MAR.									
12...	2500	12000	--	3000	--	--	34500	--	13.0
APR.									
23...	2900	14000	--	4200	--	--	43200	--	16.0
MAY									
14...	2800	14000	--	4200	--	--	41700	--	22.0
JUNE									
06...	1600	6400	--	2000	--	--	19600	--	23.0
JULY									
16...	3100	16000	--	4200	--	--	45100	--	24.0
AUG.									
27...	2900	14000	--	4200	--	--	44700	--	24.0
SEP.									
19...	2400	13000	--	3600	--	--	38400	--	22.0

RED RIVER BASIN

07311780 SOUTH FORK WICHITA RIVER NEAR GUTHRIE, TEX.--Continued

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

MONTH	DISCHARGE (FT ³ /S-DAY)	SPECIFIC CONDUCT- ANCE (MICRO- MHOS)	DIS- SOLVED SOLIDS (MG/L)	DIS- SOLVED SOLIDS (TONS)	DIS- SOLVED CHLORIDE (MG/L)	DIS- SOLVED CHLORIDE (TONS)	DIS- SOLVED SULFATE (MG/L)	DIS- SOLVED SULFATE (TONS)	HARDNESS (CA, MG) (MG/L)
OCT. 1973...	180.3	38400	25100	12200	12900	6290	3240	1580	--
NOV.....	122.1	37700	24600	8110	12600	4160	3190	1050	--
DEC.....	130.1	37900	25400	8930	13100	4590	2870	1010	--
JAN. 1974...	133.2	39800	26000	9340	13300	4800	3060	1100	--
FEB.....	115.8	40300	26300	8230	13700	4290	2880	902	--
MAR.....	139.6	41000	26500	9990	13800	5200	2780	1050	--
APR.....	134.5	42600	27400	9970	14300	5180	2870	1040	--
MAY.....	151.8	40200	25700	10500	13400	5480	2700	1110	--
JUNE.....	305.0	21000	13500	11100	6780	5590	1620	1340	--
JULY.....	104.8	43700	28500	8060	14700	4170	3090	873	--
AUG.....	97.9	43200	28100	7420	14500	3830	3050	805	--
SEP.....	156.1	32200	20800	8750	10600	4470	2380	1000	--
TOTAL.....	1771.2	--	--	113000	--	58000	--	12900	--
WTD. AVG....	4.85	36300	23600	--	12100	--	2690	--	--

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	36800	38900	39100	37800	39000	40800	43100	38100	42800	43300	44200	43900
2	38400	39000	38600	37100	39300	40900	42500	39400	24100	43200	44200	43300
3	37200	38800	38800	37600	39600	40800	42800	39600	8870	43200	44600	43500
4	37900	38200	39300	37900	39900	42400	42600	40400	9600	42400	44100	43400
5	37700	38200	39000	37900	40900	41600	42300	34800	14000	42000	43700	42200
6	38900	37900	38000	38800	39300	42200	42700	34700	19600	43200	43400	42000
7	38600	37200	37200	37600	39700	41500	42700	36200	25200	43300	44300	42400
8	38000	37500	37700	38600	39600	40600	42700	38300	29800	43600	43700	42700
9	37700	37200	37600	36900	39200	41400	42600	39900	32300	43500	43000	42800
10	37700	36800	37100	40100	39100	39600	42100	40900	33900	43600	43200	41900
11	37300	36900	38500	40100	39400	34800	42700	40800	34300	44500	43200	42100
12	38500	36700	37000	39300	39700	34500	42600	41200	35200	43500	43100	41500
13	38800	38200	37600	40100	40000	38600	42600	40600	35100	43100	42700	41300
14	38200	36900	37500	39400	40800	39700	42200	41700	35300	43900	42900	41900
15	37600	36800	37600	38400	40600	42400	43100	40000	35500	44000	43200	40800
16	37900	38000	38400	39200	41200	41500	43200	40700	35900	45100	42800	41000
17	38300	37600	37300	39500	40900	41300	42600	40100	36300	44300	43000	40900
18	38100	36900	38500	40400	41600	42300	42000	40500	36200	44100	43200	40900
19	38200	37400	36200	40800	40700	43900	41100	39400	37100	43700	43500	38400
20	38200	37700	37300	40700	40500	42600	42700	39900	38300	43500	43300	38600
21	39300	38200	38300	40500	40600	41800	42900	41000	39600	43900	43100	34600
22	39100	37900	37600	41500	41800	41800	42500	41600	40200	43800	42900	41400
23	39400	37600	38100	42100	41100	41400	43200	41800	41100	43700	38600	46600
24	40100	37500	37100	41900	41100	41900	42600	42100	41900	44000	39500	32000
25	39600	37200	37200	40500	41000	41500	44000	41600	42300	44200	41700	10400
26	39400	37700	38100	41500	40800	41100	42900	42300	42000	44700	43200	17900
27	39600	38300	37500	40800	40400	41800	43300	42900	42000	44000	44700	20700
28	39200	37600	38700	41600	40200	43000	42900	42000	42400	44200	43500	23200
29	38900	37100	38400	40700	---	42400	41000	42300	42200	45100	44000	25100
30	38700	38400	38900	39600	---	42300	41400	42100	42400	44000	44100	27600
31	38600	---	---	39000	---	42200	---	42900	---	43500	43800	---
MONTH	38450	37680	37920	39610	40290	41120	42590	40320	33850	43750	43170	37170

RED RIVER BASIN

87

07311790 SOUTH FORK WICHITA RIVER AT ROSS RANCH, NEAR BENJAMIN, TEX.

LOCATION (revised).--Lat 33°39'18", long 100°00'49", King County, at gaging station at ranch road, 1.6 miles (2.6 km) downstream from Ox Yoke Creek, and 13.7 miles (22.0 km) northwest of Benjamin.

DRAINAGE AREA.--499 mi² (1,292 km²).

PERIOD OF RECORD.--Chemical analyses: August 1970 to September 1974.

EXTREMES.--October 1973 to September 1974:

Specific conductance: Maximum daily, 50,900 micromhos July 16; minimum daily, 3,500 micromhos Sept. 25.

Period of record:

Specific conductance: Maximum daily, 50,900 micromhos July 16, 1974; minimum daily, 2,300 micromhos Aug. 27, 1971.

REMARKS.--Conductivity is recorded continuously at this station.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO ₂) (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 (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)
OCT. 23...	1630	4.3	--	1100	330	--	--	--	--
NOV. 12...	1615	6.6	--	1200	290	--	--	--	--
DEC. 04...	0950	6.0	1.2	1200	300	6400	32	109	0
17...	1520	5.5	4.3	1200	310	5500	33	123	0
JAN. 28...	1620	5.7	--	1000	290	--	--	--	--
MAR. 11...	1650	20	--	1200	340	--	--	--	--
APR. 22...	1430	3.5	--	1400	390	--	--	--	--
MAY 13...	1150	5.1	--	1100	290	--	--	--	--
JUNE 06...	1405	42	7.7	470	93	1600	17	100	0
JULY 15...	--	.07	--	1300	540	--	--	--	--
AUG. 26...	1245	4.0	--	1400	420	--	--	--	--
SEP. 19...	1230	512	7.7	220	36	600	10	89	0

DATE	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	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)
OCT. 23...	3200	11000	--	4100	--	--	33500	--	23.0
NOV. 12...	2700	9700	--	4200	--	--	32800	--	19.0
DEC. 04...	3100	11000	22100	4200	4100	43	32100	7.8	7.0
17...	3100	11000	22200	4300	4200	43	32600	8.1	10.0
JAN. 28...	2900	11000	--	3700	--	--	34500	--	7.0
MAR. 11...	3000	11000	--	4400	--	--	36200	--	22.0
APR. 22...	3300	13000	--	5100	--	--	40800	--	23.0
MAY 13...	2700	11000	--	3900	--	--	32100	--	25.0
JUNE 06...	1100	2800	6140	1600	1500	18	9710	7.5	30.0
JULY 15...	4000	17000	--	5500	--	--	48000	--	33.0
AUG. 26...	3300	14000	--	5200	--	--	45100	--	--
SEP. 19...	650	910	2480	700	620	9.9	3850	7.7	21.0

RED RIVER BASIN

07311790 SOUTH FORK WICHITA RIVER AT ROSS RANCH, NEAR BENJAMIN, TEX.--Continued

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

MONTH	DISCHARGE (FT ³ /S-DAY)	SPECIFIC CONDUCT- ANCE (MICRO- MHOS)	DIS- SOLVED SOLIDS (MG/L)	DIS- SOLVED SOLIDS (TONS)	DIS- SOLVED CHLORIDE (MG/L)	DIS- SOLVED CHLORIDE (TONS)	DIS- SOLVED SULFATE (MG/L)	DIS- SOLVED SULFATE (TONS)	HARDNESS (CA, MG) (MG/L)
OCT. 1973...	161.4	32400	21700	9450	10500	4580	2930	1280	--
NOV.....	243.1	29800	19900	13100	9580	6290	2740	1800	--
DEC.....	182.4	34100	22900	11300	11100	5490	3150	1550	--
JAN. 1974...	176.7	34800	23300	11100	11400	5430	2970	1420	--
FEB.....	135.0	36200	24200	8820	11400	4140	3030	1110	--
MAR.....	139.4	36500	24400	9190	11400	4310	3020	1140	--
APR.....	104.3	40600	27200	7660	13000	3660	3240	911	--
MAY.....	174.9	24500	16200	7670	8060	3800	2190	1040	--
JUNE.....	912.8	13000	8400	20700	3990	9830	1340	3300	--
JULY.....	36.26	43500	29200	2860	14100	1380	3640	356	--
AUG.....	171.14	28300	18800	8690	8850	4090	2550	1180	--
SEP.....	844.8	9440	6160	14100	2750	6280	1070	2450	1680
TOTAL.....	3282.20	--	--	125000	--	59300	--	17500	--
WTD. AVG....	8.99	21200	14100	--	6690	--	1980	--	--

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	29900	33100	30400	35700	35300	36800	39800	33500	44900	38000	44700	46200
2	30300	33300	31800	34900	35600	37200	40200	32500	42400	38600	44300	47100
3	31200	33200	32400	34200	35400	37200	40400	33000	12900	39700	44500	46900
4	31700	33000	33100	34400	35500	37500	40700	33500	10600	40100	44400	46500
5	31300	31800	33600	34700	35700	37700	40200	9290	6570	40600	44700	47400
6	31300	31900	33800	34500	36200	37800	39600	14100	9710	41300	44600	47900
7	32000	31500	33400	34900	36000	37800	40400	20800	13100	41500	44500	47700
8	32400	30700	33200	34600	36100	36900	40700	24600	16000	41800	45100	47800
9	32500	30600	33000	34300	35700	36500	40500	26400	18500	41700	45400	47600
10	32700	30400	33300	34400	35900	36200	40600	27600	20600	42000	46300	47500
11	29600	30300	34000	34700	35900	37200	49200	29200	22500	43800	42800	47000
12	31600	30200	33100	35000	35700	37400	46300	30400	24400	44600	41000	47300
13	32100	30000	33400	35100	35700	37100	44600	32100	26100	45300	41000	47500
14	32000	31200	33700	34900	36100	35200	42900	33700	27900	47000	41200	47800
15	32100	32400	33500	34800	36200	33700	41500	34600	29700	48000	41500	47100
16	33400	34100	33300	34700	36300	32200	40800	36200	31700	50900	41400	45800
17	33600	35200	33200	35000	36300	32500	40700	37300	32800	50700	41500	43900
18	33500	36000	35200	35200	36700	34100	40800	38000	34100	49100	42400	42100
19	33500	35300	34700	35100	36500	35900	40900	38200	35500	47300	42800	12600
20	33600	35100	35300	34900	36400	36000	41000	39000	36900	46700	43300	13200
21	34200	37400	35000	34700	36700	34700	41500	39800	37900	45800	44000	6240
22	34600	38700	35100	34700	36400	35200	40800	40300	38700	46100	26700	7760
23	34100	40200	35300	34900	36500	35900	40400	41100	38900	46000	12900	10100
24	33500	25100	35100	35200	37000	36800	38900	42300	37600	46300	16700	3790
25	33500	23300	35700	35000	36700	35900	37600	42700	37100	45500	30400	3500
26	33500	24000	35500	34600	36300	36100	38700	43500	36400	45300	45100	5100
27	33200	25100	35800	34800	36900	35400	37900	43900	36000	45000	45700	7200
28	32800	26600	35600	34500	37000	36800	38000	44600	36600	45200	46200	10000
29	33100	28000	35700	35400	---	39000	35800	45400	36800	45300	46100	11300
30	33300	28900	35600	35200	---	39200	34700	45600	37400	45000	45700	14800
31	33000	---	35900	35300	---	39200	---	45100	---	45100	45900	---
MONTH	32550	31550	34120	34850	36170	36360	40540	34780	29010	44490	41060	31560

RED RIVER BASIN

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07311800 SOUTH FORK WICHITA RIVER NEAR BENJAMIN, TEX.

LOCATION.--Lat 33°38'39", long 99°48'02", Knox County, at gaging station at bridge on State Highway 283, 4 miles (6.4 km) north of Benjamin.

DRAINAGE AREA.--584 mi² (1,513 km²).

PERIOD OF RECORD.--Chemical analyses: October 1967 to September 1974.

Water temperatures: October 1967 to September 1974.

EXTREMES.--October 1973 to September 1974:

Specific conductance: Maximum daily, 42,600 micromhos Apr. 27, 28; minimum daily, 1,120 micromhos Sept. 24.

Water temperatures: Maximum, 36.5°C June 2; minimum, freezing point on several days during December and January.

Period of record:

Specific conductance: Maximum daily, 48,900 micromhos May 13, 1971; minimum daily, 901 micromhos Sept. 6, 1973.

Water temperatures: Maximum, 38.0°C Sept. 7, 1969; minimum, freezing point on many days during winter months.

REMARKS.--Conductivity is recorded continuously at this station.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	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 SODIUM PLUS POTAS- SIUM (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)
OCT.										
19...	0800	3.9	1.5	1100	350	--	5400	--	131	0
NOV.										
12...	1215	5.6	--	1100	350	--	--	--	--	--
DEC.										
03...	1515	6.4	4.0	1000	330	4400	--	33	133	0
17...	1145	6.1	3.7	1280	350	6000	--	38	156	0
JAN.										
28...	1210	5.1	3.0	1100	360	6000	--	39	166	0
FEB.										
06...	0825	5.1	1.7	1200	370	--	6700	--	162	0
MAR.										
11...	1320	5.6	--	830	370	--	--	--	--	--
APR.										
01...	1200	3.6	--	900	400	--	--	--	--	--
MAY										
13...	1520	5.8	--	1100	270	--	--	--	--	--
JUNE										
03...	1600	2200	8.6	180	26	180	--	8.6	92	0
JULY										
02...	0745	.05	--	1200	370	--	--	--	--	--
AUG.										
26...	1620	.10	8.2	560	96	860	--	23	82	0

DATE	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	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)
OCT.									
19...	2500	9400	18800	4200	4100	--	28300	7.3	15.5
NOV.									
12...	2900	9600	--	4200	--	--	31100	--	19.0
DEC.									
03...	2500	7900	16200	3900	3700	31	24100	7.9	15.0
17...	2900	10000	20500	4600	4500	38	30400	7.6	8.0
JAN.									
28...	3100	10000	20700	4200	4100	40	31900	7.8	7.0
FEB.									
06...	3300	11000	22700	4500	4400	--	33900	7.7	5.0
MAR.									
11...	2700	12000	--	3600	--	--	35600	--	28.0
APR.									
01...	3100	14000	--	3900	--	--	38200	--	20.0
MAY									
13...	2400	7900	--	3900	--	--	23900	--	21.0
JUNE									
03...	460	260	1170	560	480	3.3	1840	7.6	22.0
JULY									
02...	3000	10000	--	4500	--	--	26200	--	--
AUG.									
26...	1400	1500	4490	1800	1700	8.8	6690	7.4	28.0

RED RIVER BASIN

07311800 SOUTH FORK WICHITA RIVER NEAR BENJAMIN, TEX.--Continued

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

MONTH	DISCHARGE (FT ³ /S-DAY)	SPECIFIC CONDUCT- ANCE (MICRO- MHOS)	DIS- SOLVED SOLIDS (MG/L)	DIS- SOLVED SOLIDS (TONS)	DIS- SOLVED CHLORIDE (MG/L)	DIS- SOLVED CHLORIDE (TONS)	DIS- SOLVED SULFATE (MG/L)	DIS- SOLVED SULFATE (TONS)	HARDNESS (CA, MG) (MG/L)
OCT. 1973...	229.5	21100	14000	8690	6780	4200	2010	1250	--
NOV.....	606.6	13300	8910	14600	3830	6270	1760	2880	--
DEC.....	184.3	29000	19200	9580	9390	4670	2970	1480	--
JAN. 1974...	145.5	31300	20300	7990	9860	3870	3010	1180	--
FEB.....	130.1	34600	23100	8120	11200	3940	3230	1140	--
MAR.....	150.4	35800	23900	9720	11600	4730	3320	1350	--
APR.....	458.9	10900	7490	9280	3470	4300	1230	1530	--
MAY.....	947.40	8020	5570	14200	2370	6060	1130	2880	1610
JUNE.....	2351.50	4560	3010	19100	1080	6830	790	5010	1080
JULY.....	11.57	19900	13400	419	6070	190	2310	72	--
AUG.....	65.80	5430	3570	634	1400	249	810	144	1220
SEP.....	3633.73	3300	2150	21100	650	6410	680	6710	890
TOTAL.....	8915.30	--	--	123000	--	51700	--	25600	--
WTD. AVG....	24.4	7690	5130	--	2150	--	1060	--	1560

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	23300	32700	18300	24700	33200	35900	38200	6260	35500	26000	21600	33400
2	23400	33100	21500	29600	33600	36100	38200	6240	39200	31300	---	34600
3	24200	33100	24100	33200	33600	36200	38600	12100	2420	---	---	26200
4	25900	33300	24300	33200	33700	36400	39200	23900	3360	---	---	---
5	26500	33000	25600	30900	33900	36800	39400	4420	5910	---	---	---
6	26100	32700	26400	27900	34000	36700	39100	7460	5500	---	---	---
7	26800	32900	27100	29900	34100	37100	40500	8200	7230	---	---	---
8	27100	32900	27400	28700	34100	36900	40800	12100	9190	---	---	---
9	28000	32600	27900	29900	34400	35200	40300	16400	12100	---	---	---
10	28400	32800	28200	29700	34300	35800	40500	18600	13400	---	---	---
11	13100	32600	28200	29100	34200	35600	33800	20200	14900	---	---	---
12	7540	31100	28600	33100	34400	36200	41100	21800	16400	---	---	---
13	13300	32500	28900	31400	34400	36900	33700	23900	17400	---	---	---
14	19800	32400	28800	32200	34200	36600	25100	24700	18800	---	---	---
15	23800	33000	29300	31700	34500	36100	34000	25900	20100	---	---	---
16	26300	33300	29400	31700	34500	36100	37100	26900	21400	21500	---	18100
17	27300	33100	29300	32000	34500	36000	40800	28000	22200	18600	---	40000
18	27900	33200	29400	31900	34800	35700	40800	28800	22900	19000	---	35000
19	28300	33200	29900	30600	35100	35600	40700	29500	23900	19400	---	4820
20	28700	32900	32800	31400	34900	35000	41300	29900	24500	20000	---	9710
21	29200	33500	32500	31100	34700	33600	41800	33000	25200	---	---	2860
22	29500	33700	32000	31700	35200	33700	41200	33300	25900	---	---	8900
23	31200	33300	32000	31900	35300	34200	41400	33900	26200	---	---	9480
24	31600	7350	32200	31900	35700	34700	41800	34400	25900	---	4290	1120
25	31700	6130	32100	32400	35600	34900	42400	35000	25700	---	3860	2260
26	31800	13900	32000	32400	35600	34600	42100	35600	25400	20200	6690	5390
27	31300	14000	32400	32800	35800	34900	42600	35100	25500	---	8690	8450
28	31900	14100	32400	31900	35900	35500	42600	35100	25400	---	13000	9660
29	32100	14000	32600	32800	---	36100	3910	35900	25700	---	7050	11100
30	32100	15900	32800	33000	---	36900	6050	35900	26400	---	20200	12100
31	32100	---	32800	33100	---	37300	---	36800	---	---	27800	---
MONTH	26460	28080	29070	31220	34580	35780	36970	24490	19790	---	---	---

RED RIVER BASIN

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07311800 SOUTH FORK WICHITA RIVER NEAR BENJAMIN, TEX.--Continued

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	18.5	14.5	6.5	3.0	6.0	12.0	15.5	18.5	20.0	21.0	---	26.0
2	21.0	11.5	16.0	0.0	6.0	11.0	13.5	17.0	36.5	22.0	---	21.0
3	22.0	10.5	13.5	0.0	11.5	21.0	11.5	18.5	14.0	---	---	13.0
4	20.0	20.0	7.0	0.0	5.0	15.0	9.0	19.0	20.0	---	---	---
5	16.5	10.0	4.5	0.0	5.5	11.0	9.0	20.5	21.5	---	---	---
6	16.5	9.5	4.0	4.0	5.0	10.5	11.0	16.5	24.5	---	---	---
7	25.5	13.0	3.0	1.5	1.0	14.5	21.0	18.5	23.5	---	---	---
8	21.5	14.0	4.0	5.0	1.0	15.5	10.0	19.5	24.0	---	---	---
9	22.0	11.0	10.5	0.5	1.5	17.0	11.0	20.5	28.0	---	---	---
10	22.0	10.0	1.5	0.0	12.0	13.5	13.5	20.5	21.0	---	---	---
11	19.0	15.0	4.5	0.0	3.5	9.0	14.5	20.0	21.5	---	---	---
12	19.5	14.5	5.0	0.0	5.5	9.0	9.5	---	22.0	---	---	---
13	19.0	14.5	5.0	0.5	8.0	11.5	10.5	20.5	23.5	---	---	---
14	21.0	15.5	5.0	3.0	12.0	11.0	12.0	20.5	24.0	---	---	---
15	18.5	15.0	3.5	3.0	10.5	11.5	10.0	19.0	24.0	---	---	---
16	16.5	8.0	3.5	4.5	8.0	10.5	11.5	23.5	25.5	---	---	---
17	14.5	---	2.0	6.5	11.5	22.0	23.0	23.5	24.0	---	---	20.5
18	14.5	16.5	5.0	6.5	12.0	16.0	15.5	23.5	23.0	---	---	20.5
19	15.5	14.0	1.5	7.0	6.0	10.5	18.5	31.0	24.0	---	---	21.0
20	16.0	11.0	0.0	8.0	8.5	9.5	21.0	21.5	24.0	---	---	23.0
21	21.5	5.5	0.0	7.0	8.5	4.5	19.0	21.0	23.0	---	---	19.0
22	14.0	16.5	0.5	8.0	3.5	6.5	14.5	23.0	24.0	---	---	19.0
23	15.0	14.5	7.0	5.5	5.5	6.5	14.5	23.0	30.0	---	---	16.5
24	14.5	14.5	0.0	5.0	9.0	4.5	15.5	21.0	21.5	---	21.5	13.5
25	15.5	11.5	---	4.5	1.5	5.5	18.5	22.0	19.0	---	25.5	13.0
26	15.5	9.0	3.0	4.5	4.5	10.0	18.5	31.0	18.5	---	24.0	15.5
27	15.0	10.0	0.0	8.0	6.5	10.0	20.0	19.5	19.0	---	22.0	18.5
28	20.0	5.0	3.5	5.0	9.0	16.0	21.5	20.0	19.0	---	22.0	16.0
29	9.5	5.0	4.5	4.0	---	13.5	18.0	20.0	18.5	---	23.5	22.0
30	14.5	5.5	9.0	5.5	---	13.0	18.5	22.0	28.5	---	24.0	14.5
31	10.0	---	0.5	4.5	---	21.0	---	21.5	---	---	24.0	---
MONTH	17.5	12.0	4.5	3.5	6.5	12.0	15.0	21.0	23.0	---	---	---

RED RIVER BASIN

07311900 WICHITA RIVER NEAR SEYMOUR, TEX.

LOCATION.--Lat 33°42'01", long 99°23'18", Baylor County, at gaging station at bridge on Ranch Road 1919, 6 miles (10 km) upstream from head of Lake Kemp, 10 miles (16 km) downstream from confluence of North and South Forks, and 10.5 miles (16.9 km) northwest of Seymour.

DRAINAGE AREA.--1,874 mi² (4,854 km²).

PERIOD OF RECORD.--Chemical analyses: October 1967 to September 1974.
Water temperatures: October 1967 to September 1974.

EXTREMES.--October 1973 to September 1974:

Specific conductance: Maximum daily, 22,500 micromhos Apr. 3; minimum daily, 1,020 micromhos Sept. 25.

Period of record:

Specific conductance: Maximum daily, 30,800 micromhos Feb. 12, 1969; minimum daily, 735 micromhos Sept. 22, 1969.
Water temperatures (1967-72): Maximum, 37.0°C Aug. 11, 1969; minimum, freezing point Dec. 29, 1969, Jan. 5, 1971.

REMARKS.--Conductivity is recorded continuously at this station.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTAN- TANEOUS 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 SODIUM PLUS POTAS- SIUM (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HC03) (MG/L)	CAR- BONATE (C03) (MG/L)
OCT.										
26...	0940	17	--	640	180	--	--	--	--	--
NOV.										
15...	0950	17	--	760	200	--	--	--	--	--
DEC.										
19...	1435	21	5.0	860	210	3300	--	20	106	0
JAN.										
31...	1250	20	--	870	220	--	--	--	--	--
FEB.										
07...	1655	17	1.7	840	250	--	3800	--	154	0
MAR.										
14...	1005	29	--	780	190	--	--	--	--	--
APR.										
04...	1000	9.2	5.8	990	260	4200	--	22	150	0
MAY										
16...	0905	1850	--	540	120	--	--	--	--	--
JUNE										
04...	1510	6300	9.7	110	17	170	--	7.0	145	0
JULY										
18...	0920	.84	--	720	180	--	--	--	--	--
AUG.										
29...	0930	62	7.5	320	50	870	--	15	72	0
SEP.										
20...	1400	1930	9.7	430	77	1600	--	13	155	0

DATE	DIS- SOLVED SULFATE (S04) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITU- ENTS) (MG/L)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPF- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)
OCT.									
26...	1900	4300	--	2300	--	--	15100	--	17.0
NOV.									
15...	2400	5600	--	2700	--	--	18100	--	15.0
DEC.									
19...	2300	5700	12400	3000	2900	26	18600	7.8	1.0
JAN.									
31...	2600	6500	--	3100	--	--	20300	--	10.0
FEB.									
07...	2500	6200	13700	3100	3000	--	20200	7.8	6.0
MAR.									
14...	2000	5100	--	2700	--	--	17900	--	10.0
APR.									
04...	2800	6400	14800	3500	3400	31	22200	7.8	9.0
MAY									
16...	1400	3300	--	1800	--	--	11000	--	15.0
JUNE									
04...	240	230	855	340	230	4.0	1460	7.5	25.0
JULY									
18...	1900	4700	--	2500	--	--	15000	--	25.5
AUG.									
29...	800	1400	3500	1000	950	12	5830	7.0	23.5
SEP.									
20...	1100	2500	5810	1400	1300	19	9230	7.3	20.0

RED RIVER BASIN

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07311900 WICHITA RIVER NEAR SEYMOUR, TEX.--Continued

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

MONTH	DISCHARGE (FT ³ /S-DAY)	SPECIFIC CONDUCT- ANCE (MICRO- MHOS)	DIS- SOLVED SOLIDS (MG/L)	DIS- SOLVED SOLIDS (TONS)	DIS- SOLVED CHLORIDE (MG/L)	DIS- SOLVED CHLORIDE (TONS)	DIS- SOLVED SULFATE (MG/L)	DIS- SOLVED SULFATE (TONS)	HARDNESS (CA, MG) (MG/L)
OCT. 1973...	1211	11200	7000	22900	3030	9910	1440	4710	--
NOV.....	1660	8140	5260	23600	2220	9940	1140	5120	1360
DEC.....	683	16800	11200	20700	5010	9240	2150	3960	--
JAN. 1974...	645	18900	13300	23100	5970	10400	2510	4380	--
FEB.....	473	20400	13700	17600	6200	7920	2590	3310	--
MAR.....	1299	10300	6720	23600	2920	10200	1290	4540	--
APR.....	2026.1	6330	4040	22100	1710	9340	710	3880	1100
MAY.....	5242.1	3740	2300	32500	930	13200	410	5870	710
JUNE.....	13953.2	2240	1350	50800	470	17700	300	11100	490
JULY.....	67.86	14200	9350	1710	4370	801	1800	329	--
AUG.....	725	4310	2620	5120	1040	2030	480	934	800
SEP.....	16971.4	1860	1100	50500	340	15500	290	13200	430
TOTAL.....	44956.66	--	--	294000	--	116000	--	61300	--
WTD. AVG....	123	3850	2420	--	960	--	510	--	730

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	9860	14200	10500	18800	19800	21200	22300	6450	17900	14000	---	10700
2	8990	13900	12400	19200	20100	21200	22300	6030	7500	14100	---	10900
3	10300	14000	13900	19100	19900	21300	22500	1980	2710	14500	---	11200
4	10900	14100	15100	18400	20100	21400	22200	3560	1470	14100	---	12500
5	11500	15900	15500	19100	20100	21400	21800	1420	2290	11400	---	---
6	11900	15900	15500	18000	20300	21500	22100	4390	1680	13900	---	---
7	12000	15900	15500	18100	20200	21300	22000	4390	2280	14400	---	---
8	12400	16100	15700	18500	20100	9290	22300	4370	2390	14500	---	---
9	12900	16600	16000	19700	20300	6330	22100	5710	3600	14600	---	---
10	13400	16800	16300	19500	20300	1660	22300	5800	4670	14900	---	---
11	6630	17200	16600	19000	20100	3240	10600	6760	5530	15000	---	---
12	9840	17300	17200	18400	20300	9710	11400	12000	6350	15200	---	---
13	11700	17400	17400	18200	20400	13200	14200	8780	7070	15100	---	---
14	13000	17500	17400	18500	20400	17900	19900	9810	7590	15000	---	---
15	13200	18100	17500	18900	20400	17900	16100	10600	8230	15100	---	14000
16	11500	17600	17700	18900	20200	20400	15900	11000	8950	14900	---	4130
17	13200	17800	17800	19300	20200	20500	16300	12100	9360	15000	---	4370
18	14300	17500	17900	19300	20600	20300	16700	12600	9860	15000	---	4830
19	14300	17500	18600	17900	20700	20300	16800	13200	10400	15100	---	8280
20	14700	17600	18500	18600	20700	19100	3070	13700	10800	15300	---	5330
21	15100	18100	18000	18700	20600	19100	2870	13800	11400	15500	---	1920
22	15300	18500	18200	19200	20500	19900	5230	14100	11600	15800	---	2100
23	15600	18000	17900	19200	20500	20600	14900	14900	12200	---	---	1820
24	15600	6300	18400	19200	21100	20700	19500	15000	11800	---	5790	1360
25	15200	5060	18600	19000	20900	20900	16500	15100	12300	---	4170	1020
26	15100	3790	18900	19000	21100	20900	19400	15500	12300	---	6340	1300
27	11600	4590	19300	19000	21200	20900	19600	15800	12300	---	3690	2390
28	9270	6330	19300	19200	21100	21500	20100	17300	12300	---	1830	3010
29	9070	6930	19200	19400	---	21800	4250	18400	13100	---	5830	4050
30	11700	9680	19100	19600	---	21400	3850	18200	13500	---	5610	5230
31	10900	---	19100	20300	---	22000	---	18200	---	---	7200	---
MONTH	12290	14200	17060	18940	20440	18030	16300	10680	8450	---	---	---

RED RIVER BASIN

07311900 WICHITA RIVER NEAR SEYMOUR, TEX.--Continued

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	42.0	21.0	15.0	3.0	18.0	21.0	23.0	27.0	30.0	31.0	---	34.0
2	44.0	21.0	19.0	7.0	15.0	14.0	21.0	31.0	---	32.0	---	19.0
3	45.0	12.0	16.0	5.0	18.0	---	18.0	21.0	25.0	28.0	---	25.0
4	34.0	16.0	13.0	7.0	17.0	---	20.0	27.0	20.0	29.0	---	27.0
5	36.0	12.0	16.0	3.0	15.0	22.0	24.0	19.0	22.0	36.0	---	---
6	39.0	15.0	11.0	7.0	13.0	24.0	22.0	35.0	27.0	31.0	---	---
7	42.0	23.0	13.0	10.0	7.0	22.0	21.0	21.0	26.0	33.0	---	---
8	45.0	16.0	12.0	16.0	10.0	23.0	21.0	27.0	27.0	32.0	---	---
9	44.0	14.0	13.0	4.0	11.0	21.0	26.0	28.0	27.0	32.0	---	---
10	41.0	13.0	9.0	4.0	15.0	16.0	26.0	26.0	30.0	33.0	---	---
11	38.0	16.0	8.0	3.0	15.0	21.0	22.0	27.0	29.0	31.0	---	---
12	34.0	21.0	13.0	7.0	18.0	18.0	22.0	31.0	29.0	---	---	---
13	37.0	24.0	14.0	11.0	20.0	---	23.0	28.0	31.0	35.0	---	---
14	37.0	23.0	14.0	11.0	21.0	20.0	21.0	26.0	34.0	35.0	---	---
15	42.0	19.0	10.0	15.0	18.0	24.0	25.0	30.0	35.0	27.0	---	25.0
16	23.0	17.0	10.0	17.0	10.0	21.0	24.0	30.0	31.0	31.0	---	23.0
17	25.0	21.0	16.0	15.0	17.0	23.0	23.0	31.0	27.0	31.0	---	21.0
18	26.0	19.0	10.0	14.0	17.0	23.0	25.0	35.0	31.0	31.0	---	22.0
19	26.0	21.0	---	10.0	19.0	20.0	26.0	28.0	33.0	32.0	---	26.0
20	25.0	14.0	6.0	15.0	18.0	13.0	22.0	27.0	33.0	33.0	---	22.0
21	23.0	14.0	9.0	17.0	13.0	14.0	21.0	32.0	33.0	34.0	---	21.0
22	27.0	19.0	13.0	12.0	19.0	21.0	23.0	35.0	35.0	33.0	---	19.0
23	24.0	20.0	11.0	10.0	20.0	7.0	26.0	28.0	27.0	---	---	18.0
24	23.0	14.0	10.0	14.0	11.0	12.0	26.0	30.0	28.0	---	34.0	15.0
25	26.0	15.0	24.0	12.0	14.0	15.0	27.0	30.0	34.0	---	28.0	14.0
26	17.0	17.0	11.0	10.0	17.0	16.0	25.0	---	35.0	---	27.0	20.0
27	17.0	15.0	12.0	16.0	17.0	26.0	---	30.0	33.0	---	35.0	22.0
28	18.0	14.0	15.0	15.0	21.0	22.0	---	33.0	35.0	---	37.0	35.0
29	21.0	16.0	12.0	15.0	---	22.0	25.0	30.0	28.0	---	29.0	35.0
30	16.0	15.0	10.0	15.0	---	27.0	18.0	29.0	35.0	---	32.0	23.0
31	21.0	---	21.0	17.0	---	23.0	---	25.0	---	---	35.0	---
MONTH	31.0	17.0	13.0	11.0	16.0	19.5	23.0	28.5	30.0	---	---	---

RED RIVER BASIN

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07312100 WICHITA RIVER NEAR MABELLE, TEX.

LOCATION.--Lat 33°45'36", long 99°08'33", Baylor County, at gaging station at bridge on U.S. Highways 183 and 283, 0.3 mile (0.5 km) downstream from Lake Kemp Dam, 6 miles (10 km) north of Mabelle, and 13 miles (21 km) northeast of Seymour.

DRAINAGE AREA.--2,086 mi² (5,403 km²), all of which is above Lake Kemp Dam.

PERIOD OF RECORD.--Chemical analyses: October 1966 to September 1974.

Water temperatures: October 1966 to September 1974.

EXTREMES.--October 1973 to September 1974:

Specific conductance: Maximum daily, 5,260 micromhos Apr. 14, 15; minimum daily, 709 micromhos Sept. 25.

Water temperatures: Maximum, 30.0°C July 21; minimum, freezing point Dec. 20.

Period of record:

Specific conductance (1968-74): Maximum daily, 6,190 micromhos May 25, 1971; minimum daily, 709 micromhos Sept. 25, 1974.

Water temperatures (1968-74): Maximum, 32.0°C Sept. 4, 1972, minimum, freezing point Dec. 20, 1973.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report. Conductivity is recorded continuously at this station.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED SODIUM PLUS POTAS- SIUM (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)
OCT.										
16...	1355	2.0	7.1	230	61	690	--	8.3	129	0
NOV.										
20...	1005	.40	7.6	240	76	690	--	6.7	118	0
DEC.										
31...	2000	.43	--	240	83	--	680	--	186	0
JAN.										
02...	1315	.58	8.9	230	79	650	--	7.6	155	0
FEB.										
05...	1340	1.1	7.6	220	76	680	--	7.6	199	0
MAR.										
13...	1055	.61	10	220	68	610	--	7.2	214	0
APR.										
03...	1415	2600	5.7	260	64	780	--	9.4	114	0
MAY										
31...	0830	646	4.6	260	64	780	--	7.7	108	0
JUNE										
11...	0935	.52	9.2	240	73	710	--	8.1	210	0
JULY										
18...	1100	105	5.1	240	59	710	--	8.0	99	0
AUG.										
28...	0940	4.6	6.6	230	62	760	--	8.6	106	0
SEP.										
12...	0815	.96	8.3	230	73	700	--	7.9	180	0

DATE	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	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)
OCT.									
16...	640	1100	2800	830	720	10	4540	8.0	24.0
NOV.									
20...	660	1200	2940	910	820	9.9	4640	8.0	12.5
DEC.									
31...	660	1100	2870	930	780	9.8	4750	7.5	3.0
JAN.									
02...	650	1100	2800	900	770	9.4	4770	7.8	1.0
FEB.									
05...	690	1100	2880	860	700	10	4750	7.7	10.0
MAR.									
13...	600	930	2550	830	650	9.2	4170	7.9	12.0
APR.									
03...	690	1200	3070	910	820	11	5230	8.2	13.5
MAY									
31...	690	1200	3060	910	820	11	5210	7.7	24.0
JUNE									
11...	620	1200	2960	900	730	10	4770	7.9	23.0
JULY									
18...	660	1200	2930	840	760	11	4820	7.2	28.0
AUG.									
28...	650	1200	2970	830	740	11	5000	8.2	26.0
SEP.									
12...	620	1100	2830	880	730	10	4750	8.0	23.0

RED RIVER BASIN

07312100 WICHITA RIVER NEAR MABELLE, TEX.--Continued

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

MONTH	DISCHARGE (FT ³ /S-DAY)	SPECIFIC CONDUCT- ANCE (MICRO- MHOS)	DIS- SOLVED SOLIDS (MG/L)	DIS- SOLVED SOLIDS (TONS)	DIS- SOLVED CHLORIDE (MG/L)	DIS- SOLVED CHLORIDE (TONS)	DIS- SOLVED SULFATE (MG/L)	DIS- SOLVED SULFATE (TONS)	HARDNESS (CA, MG) (MG/L)
OCT. 1973...	3903.64	4290	2540	26800	990	10400	590	6220	810
NOV.....	11.66	4200	2480	78	970	31	580	18	790
DEC.....	12.97	4670	2780	97	1080	38	650	23	880
JAN. 1974...	23.52	4660	2780	177	1080	69	650	41	880
FEB.....	35.05	4660	2780	263	1080	102	650	62	880
MAR.....	1231.42	5090	3060	10200	1200	3990	700	2330	870
APR.....	17798.9	5210	3140	151000	1230	59100	720	34600	900
MAY.....	3892.84	5150	3100	32600	1220	12800	710	7460	890
JUNE.....	6597.98	4840	2900	51700	1140	20300	660	11800	910
JULY.....	10480	4840	2900	82100	1140	32300	660	18700	910
AUG.....	4454.25	4850	2900	34900	1140	13700	660	7940	920
SEP.....	49.81	2050	1200	161	450	61	290	39	380
TOTAL.....	48492.04	--	--	390000	--	153000	--	89200	--
WTD. AVG....	133	4960	2980	--	1170	--	680	--	900

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	4280	4660	4520	4670	4750	4700	5190	3670	5220	4790	4800	4690
2	4310	4670	4550	4710	4670	4730	5210	3930	5220	4850	4810	1680
3	4300	4690	4570	4770	4660	4750	5230	4150	5220	4850	4810	3510
4	4300	4710	4590	4610	4700	4800	5210	4370	4410	4800	4810	4230
5	4310	4640	4600	4720	4730	4850	5190	1530	2800	4820	4820	4430
6	4330	4610	4600	4640	4710	5100	5190	4130	4530	4810	3750	4530
7	4350	4650	4620	4710	4670	3340	5190	3930	4570	4810	4110	4590
8	4320	4590	4650	4740	4710	3900	5210	3790	4750	4830	4310	4660
9	4320	4650	4650	4680	4720	4420	5230	3930	4750	4830	4470	4690
10	4290	4630	4620	4590	4850	2310	5230	4260	4750	4830	4450	4680
11	4150	4680	4680	4570	4690	2770	5230	4240	4770	4830	4460	4740
12	3870	4660	4650	4650	4670	3810	5220	4310	4730	4830	4590	4750
13	4230	4690	4640	4620	4680	4170	5230	4310	4750	4830	4610	4670
14	4270	4670	4630	4650	4680	4320	5260	4390	4840	4830	4940	4710
15	4270	4710	4620	4600	4710	4070	5260	4520	4790	4830	4930	2690
16	4300	4660	4660	4700	4830	4390	4740	4570	4740	4820	4940	900
17	4280	4670	4660	4630	4700	4530	5230	4570	4730	4810	4850	3590
18	4260	4640	4670	4630	4830	4390	5100	4620	4780	4820	4850	1820
19	4380	4650	4800	4540	4770	4500	4910	4630	4760	4830	4860	3150
20	4410	4680	4770	4690	4320	4530	4790	4630	4750	4830	4870	1480
21	4450	4700	4820	4670	3920	4540	4670	5220	4770	4830	4870	1840
22	4480	4650	4710	4650	4530	4540	4630	5190	4760	4850	4870	3890
23	4470	4630	4690	4670	4660	4560	4680	5180	4770	4860	4870	3770
24	4480	2270	4700	4700	4660	4570	4700	5020	4740	4860	4880	862
25	4460	4220	4690	4690	4680	4660	4720	5180	4740	4860	4880	709
26	4450	4130	4680	4670	4810	5100	4710	5000	4750	4860	4880	2360
27	4360	4240	4650	4670	4810	5090	4740	4700	4760	4860	4880	3800
28	4480	4320	4750	4610	4810	5130	4780	5200	4780	4870	5000	3900
29	4470	4390	4680	4650	---	5130	2710	5190	4790	4860	4750	4230
30	4460	4480	4680	4690	---	5140	3410	5200	4780	4870	4750	3980
31	4460	---	4750	4600	---	5140	---	5200	---	4870	4750	---
MONTH	4340	4510	4660	4660	4680	4450	4890	4480	4720	4840	4720	3450

RED RIVER BASIN

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07312100 WICHITA RIVER NEAR MABELLE, TEX.--Continued

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	23.0	13.0	15.0	4.0	14.0	15.0	15.0	---	24.0	26.0	27.0	27.0
2	24.0	---	16.0	1.0	8.0	---	14.0	24.0	25.0	25.0	27.0	24.0
3	23.0	17.0	15.0	5.0	8.0	22.0	13.0	---	23.0	24.0	26.0	16.0
4	23.0	16.0	8.0	3.0	---	16.0	13.0	24.0	22.0	26.0	28.0	18.0
5	22.0	11.0	---	10.0	13.0	13.0	14.0	21.0	20.0	25.0	26.0	19.0
6	---	13.0	7.0	9.0	7.0	11.0	14.0	23.0	25.0	26.0	22.0	19.0
7	25.0	17.0	9.0	4.0	5.0	22.0	14.0	17.0	26.0	26.0	22.0	20.0
8	21.0	15.0	11.0	14.0	11.0	---	13.0	20.0	24.0	25.0	24.0	21.0
9	21.0	15.0	12.0	4.0	12.0	20.0	15.0	20.0	25.0	25.0	24.0	21.0
10	25.0	14.0	6.0	5.0	12.0	14.0	16.0	19.0	22.0	25.0	23.0	23.0
11	24.0	15.0	7.0	9.0	15.0	11.0	16.0	25.0	21.0	25.0	24.0	22.0
12	21.0	16.0	7.0	2.0	9.0	16.0	16.0	23.0	21.0	25.0	24.0	23.0
13	21.0	20.0	9.0	13.0	13.0	20.0	15.0	21.0	22.0	25.0	25.0	17.0
14	20.0	17.0	11.0	13.0	12.0	21.0	14.0	22.0	24.0	27.0	26.0	17.0
15	21.0	15.0	6.0	7.0	10.0	15.0	16.0	27.0	27.0	26.0	26.0	21.0
16	24.0	11.0	11.0	14.0	16.0	22.0	18.0	23.0	25.0	25.0	26.0	20.0
17	21.0	18.0	6.0	14.0	13.0	22.0	18.0	27.0	24.0	26.0	27.0	21.0
18	20.0	19.0	8.0	12.0	15.0	15.0	21.0	27.0	25.0	---	27.0	20.0
19	24.0	17.0	5.0	9.0	16.0	13.0	21.0	26.0	24.0	---	27.0	21.0
20	10.0	---	0.0	14.0	11.0	12.0	---	21.0	25.0	29.0	26.0	22.0
21	---	11.0	2.0	---	9.0	16.0	19.0	24.0	25.0	30.0	26.0	21.0
22	16.0	12.0	5.0	10.0	14.0	18.0	15.0	23.0	27.0	26.0	27.0	20.0
23	16.0	17.0	10.0	10.0	17.0	8.0	19.0	25.0	26.0	27.0	26.0	---
24	22.0	13.0	5.0	12.0	11.0	10.0	24.0	26.0	25.0	27.0	26.0	---
25	17.0	14.0	8.0	10.0	7.0	13.0	21.0	26.0	24.0	27.0	27.0	---
26	17.0	11.0	5.0	8.0	14.0	13.0	22.0	25.0	24.0	27.0	26.0	---
27	16.0	12.0	4.0	9.0	8.0	11.0	19.0	27.0	24.0	27.0	25.0	---
28	20.0	12.0	6.0	15.0	18.0	14.0	23.0	24.0	24.0	27.0	26.0	---
29	18.0	8.0	7.0	8.0	---	13.0	21.0	24.0	25.0	28.0	24.0	---
30	15.0	8.0	8.0	13.0	---	14.0	20.0	24.0	24.0	27.0	25.0	---
31	17.0	---	3.0	16.0	---	14.0	---	24.0	---	27.0	25.0	---
MONTH	20.0	14.0	7.5	9.0	12.0	15.5	17.0	23.5	24.0	26.0	25.5	---

RED RIVER BASIN

07312700 WICHITA RIVER NEAR CHARLIE, TEX.

LOCATION.--Lat 34°03'11", long 98°17'47", Clay County, at gaging station at bridge on Farm Road 810, 3.0 miles (4.8 km) southeast of Charlie, and 5.7 miles (9.2 km) northwest of Petrolia.

DRAINAGE AREA.--3,439 mi² (8,907 km²), of which 2,086 mi² (5,403 km²) is above Lake Kemp Dam and 143 mi² (370 km²) is above Lake Wichita Dam.

PERIOD OF RECORD.--Chemical analyses: October 1967 to September 1974.

Chemical and biochemical analyses: October 1968 to September 1974.

Water temperatures: October 1967 to September 1974.

EXTREMES.--October 1973 to September 1974:

Specific conductance: Maximum daily, 6,420 micromhos Apr. 17; minimum daily, 610 micromhos May 1.

Water temperatures: Maximum, 32.0°C July 19; minimum, freezing point Jan. 3, 4.

Period of record:

Specific conductance: Maximum daily, 10,000 micromhos Apr. 25, 1972; minimum daily, 384 micromhos Aug. 16, 1971.

Water temperatures: Maximum, 33.0°C July 31, 1970; minimum, freezing point on many days during winter months.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED SODIUM PLUS POTAS- SIUM (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)
OCT. 21...	1900	900	7.8	190	65	--	470	--	109	0
NOV. 25...	1515	700	5.2	75	28	--	130	--	134	0
DEC. 04...	1520	135	9.0	190	74	530	--	9.6	218	0
07...	1646	135	7.3	240	88	--	630	--	238	0
JAN. 03...	1500	54	4.8	200	88	600	--	7.6	226	9
29...	1100	31	2.5	240	100	690	--	12	250	0
FEB. 06...	0925	50	4.3	240	100	700	--	11	214	0
MAR. 12...	1745	500	6.2	150	66	480	--	8.6	150	0
18...	1450	66	9.6	120	48	360	--	8.1	173	0
APR. 15...	1145	92	5.7	210	83	650	--	11	211	0
MAY 30...	1135	114	6.8	230	90	700	--	9.2	191	0
JUNE 18...	1045	120	5.4	210	79	690	--	9.4	164	0
JULY 10...	0955	159	7.9	260	80	750	--	9.6	141	0
AUG. 06...	1215	240	5.1	230	75	760	--	8.9	126	0
SEP. 23...	1000	229	8.4	160	53	520	--	5.1	138	0

[illegible]

RED RIVER BASIN

99

07312700 WICHITA RIVER NEAR CHARLIE, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	HARD- NESS (CA+MG) (MG/L)	NON- CAH- BONATE HARD- NESS (MG/L)	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	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)
OCT. 21...	750	660	7.5	3800	7.5	20.0	--	--	--
NOV. 25...	300	190	3.3	1320	7.2	13.0	--	--	--
DEC. 04...	780	600	8.3	3870	7.5	12.0	8.7	81	3.2
07...	960	760	8.9	4650	7.6	7.0	--	--	--
JAN. 03...	860	660	8.9	4510	8.4	.0	--	--	--
29...	1000	810	9.4	4950	8.0	8.0	12.5	107	11
FEB. 06...	1000	840	9.6	5200	6.8	8.0	--	--	--
MAR. 12...	650	520	8.2	3760	6.8	17.5	3.7	39	16
18...	500	360	7.0	2700	8.2	20.0	--	--	--
APR. 15...	870	690	9.6	4540	7.8	17.0	--	--	--
MAY 30...	950	790	9.9	4830	7.4	--	--	--	--
JUNE 18...	850	720	10	4580	8.3	26.0	10.3	126	14
JULY 10...	980	860	10	5250	7.2	27.5	--	--	--
AUG. 06...	860	780	11	4970	7.5	25.0	--	--	--
SEP. 23...	620	500	9.1	3520	7.6	19.0	--	--	--

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

MONTH	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCT- ANCE (MICRO- MHOS)	DIS- SOLVED SOLIDS (MG/L)	DIS- SOLVED SOLIDS (TONS)	DIS- SOLVED CHLORIDE (MG/L)	DIS- SOLVED CHLORIDE (TONS)	DIS- SOLVED SULFATE (MG/L)	DIS- SOLVED SULFATE (TONS)	HARDNESS (CA+MG) (MG/L)
OCT. 1973.....	24056	3630	2100	136000	910	59100	320	20800	710
NOV. 1973.....	6772	3420	1900	34700	860	15700	290	5300	670
DEC. 1973.....	3671	3840	2200	21800	970	9610	340	3370	760
JAN. 1974.....	* 1428	4350	2500	9640	1100	4240	400	1540	860
FEB. 1974.....	1933	4150	2400	12500	1100	5740	380	1980	820
MAR. 1974.....	3411	3030	1700	15700	750	6910	250	2300	600
APR. 1974.....	6189	2590	1400	23400	630	10500	200	3340	510
MAY 1974.....	10286	1810	940	26100	410	11400	110	3050	360
JUNE 1974.....	4410	4400	2600	31000	1100	13100	400	4760	870
JULY 1974.....	4385	5150	3000	35500	1300	15400	490	5800	1000
AUG. 1974.....	6573	4040	2300	40800	1000	17700	360	6390	800
SEPT 1974.....	11704	2150	1200	37900	510	16100	150	4740	420
TOTAL	84818	**	**	425000	**	185000	**	63400	**
WTD.AVG.	232	3270	1900	**	810	**	280	**	640

RED RIVER BASIN

07312700 WICHITA RIVER NEAR CHARLIE, TEX.--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	3420	3900	2500	4100	5180	5930	4810	610	4880	5120	5350	4320
2	3470	3900	3020	3840	5340	5650	4750	747	4560	5260	5350	4460
3	3470	4040	3220	3550	5070	5500	4930	1060	4750	5270	4320	4480
4	3660	4090	3720	3350	5120	5470	4930	1460	3980	5300	4870	4870
5	3670	3900	3520	2530	5110	5420	4930	1820	3950	5310	4980	4920
6	3910	3880	3610	4230	5150	5240	4910	2180	4190	5200	4990	4940
7	3920	3860	4650	3950	5090	5200	4950	3660	3150	5260	4180	4970
8	4000	3860	4270	4000	5040	5120	4930	2000	3280	5190	5000	5270
9	3990	3850	4100	2540	4830	5290	4940	1600	3590	5260	4050	5180
10	4000	4060	3210	3690	4920	5000	5390	1970	3800	5230	3230	5300
11	3540	4280	3560	4000	5000	2010	5910	2200	4330	5280	1430	5140
12	3100	4410	4020	4310	4960	3340	4720	2570	4250	5310	2500	5120
13	2890	4410	4110	4250	4990	1490	3040	2940	4550	5240	4090	5260
14	3560	4510	4060	4250	5120	2090	4740	3740	4590	5200	4030	5480
15	3450	4510	4000	4280	5120	2070	4570	4130	4600	5150	4590	5000
16	3600	4550	4140	4270	5220	2090	5610	4120	4880	5020	4740	4460
17	3620	4550	3360	4500	5020	2350	6420	4040	4710	4640	4890	2320
18	3650	4500	4170	5390	5010	2730	5820	4300	4740	5090	5390	4080
19	3630	4410	4160	5340	5110	3100	5450	4340	4650	5190	5420	3570
20	3630	4540	3710	5190	5110	3450	4030	4620	4880	5200	5520	3320
21	3800	4510	3920	5240	4430	3780	2120	4720	4920	5140	5390	2550
22	3780	4430	4130	5160	1270	3950	2840	4700	5230	5090	5460	3050
23	3750	4360	4050	5350	2300	4110	2670	4580	5110	5230	5350	3920
24	3720	3230	4050	5380	3350	3920	3010	4620	5050	5260	5140	2640
25	3710	1320	3900	5320	5640	4240	3100	4410	5060	5230	5280	900
26	3720	2330	4170	5380	6190	4330	3590	4730	5010	5230	4550	1060
27	3640	2380	4100	5200	6310	4440	4330	4930	4910	5240	3610	953
28	3420	2320	4130	5350	6310	4530	4070	4970	4900	5270	4250	1460
29	3460	2350	3890	5190	---	4640	1950	4850	5080	5260	4310	2000
30	4110	2620	4180	4890	---	4710	880	4980	5190	5260	1870	2350
31	3750	---	4110	5180	---	4730	---	4910	---	4260	2370	---
MONTH	3650	3800	3860	4490	4900	4060	4280	3440	4560	5170	4420	3780

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	23.5	16.0	13.0	2.0	10.5	16.5	21.5	18.5	26.5	29.5	28.0	29.5
2	22.0	15.5	13.5	5.0	10.5	16.5	18.5	21.0	28.5	29.5	29.0	23.5
3	25.5	14.5	14.0	0.0	10.5	19.0	15.5	21.0	28.0	29.5	26.0	20.5
4	21.5	15.0	11.0	0.0	10.0	18.5	---	23.5	26.5	---	26.0	23.0
5	21.0	14.5	10.0	1.5	10.5	18.5	16.0	22.0	28.0	30.0	26.0	23.5
6	21.0	13.0	8.0	1.5	7.0	19.0	17.0	22.0	27.0	30.5	24.5	24.0
7	21.0	14.5	7.0	3.5	4.5	19.5	18.0	23.0	26.5	29.5	25.5	25.0
8	23.5	14.0	8.0	7.0	4.5	19.5	18.0	---	29.0	29.5	26.5	24.5
9	24.0	13.0	7.0	3.0	6.0	19.5	18.5	26.5	28.5	29.5	29.0	24.5
10	24.5	13.0	7.0	1.0	7.0	---	17.0	26.5	28.5	30.0	26.0	25.0
11	23.5	13.5	8.5	---	9.5	16.0	18.0	25.0	29.0	29.5	26.5	25.5
12	21.0	14.0	10.5	1.0	11.0	16.0	21.0	25.5	29.0	29.0	---	24.0
13	20.5	18.5	9.0	2.0	12.0	14.5	21.0	25.5	29.0	29.5	29.5	21.5
14	20.0	19.5	---	4.5	14.0	16.5	18.5	26.5	29.0	26.0	30.0	21.5
15	20.0	18.0	9.0	7.0	11.0	15.5	16.0	26.5	31.0	26.0	30.0	---
16	20.0	14.0	7.0	8.0	13.0	15.5	18.5	28.5	28.5	25.0	30.5	21.0
17	20.0	15.5	7.0	10.0	14.0	18.5	18.5	29.0	25.5	27.0	30.0	21.0
18	20.0	16.5	8.5	8.0	13.0	21.0	21.0	28.0	29.5	27.0	31.0	21.0
19	21.0	18.5	4.5	7.0	13.0	16.0	23.0	28.0	29.5	32.0	31.0	24.0
20	20.0	13.5	2.0	8.0	14.0	11.5	20.0	26.5	30.0	27.0	30.5	23.5
21	20.0	13.0	3.5	10.0	9.5	10.5	18.5	26.5	30.5	28.0	30.0	21.5
22	20.0	---	5.0	8.5	10.0	14.0	20.0	29.5	30.0	27.0	29.0	20.0
23	20.0	18.5	6.5	7.0	10.0	8.0	21.0	28.5	29.0	28.0	28.0	18.5
24	20.0	14.5	6.0	8.0	7.0	7.0	22.0	28.0	26.0	27.0	28.0	15.5
25	20.5	13.0	5.5	7.0	9.0	8.5	23.0	26.0	26.0	27.0	28.5	14.5
26	21.0	13.5	5.5	9.5	10.0	13.0	24.0	26.5	26.5	29.0	26.0	15.0
27	19.5	12.0	5.5	9.5	12.0	16.5	23.0	28.0	26.5	28.0	26.5	18.5
28	20.0	11.0	7.0	9.5	15.5	19.5	24.5	26.5	26.5	31.0	26.5	18.5
29	16.5	11.0	7.0	10.0	---	19.5	21.0	29.0	28.0	---	26.0	---
30	16.5	11.0	7.0	10.0	---	20.0	19.0	29.0	28.5	30.5	26.5	21.0
31	17.0	---	---	10.0	---	24.0	---	26.0	---	30.5	28.0	---
MONTH	21.0	14.5	7.5	6.0	10.5	16.5	19.5	26.0	28.0	28.5	28.0	22.0

RED RIVER BASIN

101

07315000 LITTLE WICHITA RIVER NEAR HENRIETTA, TEX.

LOCATION.--Lat 33°50'02", long 98°12'31", Clay County, at gaging station at bridge on State Highway 148, 1.5 miles (2.4 km) northwest of Henrietta, 4 miles (6 km) upstream from Turkey Creek, and 5 miles (8 km) upstream from Dry Fork Little Wichita River.

DRAINAGE AREA.--1,037 mi² (2,686 km²).

PERIOD OF RECORD.--Chemical analyses: December 1952 to January 1956, March 1959 to September 1966, January 1968 to September 1974.
Water temperatures: December 1952 to January 1956, March 1959 to September 1966.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO ₂) (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 SODIUM PLUS POTAS- SIUM (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)
OCT. 18...	1400	3.7	9.6	15	3.1	--	8.5	--	60	0
MAR. 18...	1320	1.6	7.2	20	6.1	30	--	6.4	104	0
SEP. 26...	1110 1400		9.4	8.7	2.7	7.7	--	4.1	43	0

DATE	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	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)
OCT. 18...	2.4	12	.0	81	50	1	.5	158	6.9	21.5
MAR. 18...	13	39	--	173	75	0	1.5	318	8.0	19.5
SEP. 26...	5.6	11	--	70	33	0	.6	112	7.5	16.0

RED RIVER BASIN

07315200 EAST FORK LITTLE WICHITA RIVER NEAR HENRIETTA, TEX.

LOCATION.--Lat 33°48'46", long 98°05'05", Clay County, at gaging station at bridge on U.S. Highway 82, 5.8 miles (9.3 km) upstream from Little Wichita River, 6.4 miles (10.3 km) east of Henrietta, and 8.9 miles (14.3 km) west of Ringgold.

DRAINAGE AREA.--178 mi² (461 km²).

PERIOD OF RECORD.--Chemical analyses: October 1965 to September 1968, October 1969 to September 1974.
Sediment records: October 1965 to September 1974.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED SODIUM PLUS POTAS- SIUM (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HC03) (MG/L)	CAR- BONATE (C03) (MG/L)
OCT. 18...	1255	2.2	11	20	5.4	--	23	--	88	0
NOV. 19...	1200	.18	18	110	38	--	180	--	536	0
JAN. 03...	1205	.48	16	120	54	310	--	7.4	384	0
FEB. 04...	1540	.23	13	130	55	340	--	4.9	526	0
APR. 15...	1445	.18	6.9	100	49	300	--	7.1	536	0
MAY 30...	1345	.04	17	86	29	160	--	4.9	534	0
JULY 10...	1230	.01	15	62	36	160	--	2.6	602	0
AUG. 14...	1340	.01	13	63	38	160	--	2.6	634	0
SEP. 23...	1310	1.1	8.1	14	4.1	15	--	4.1	62	0

DATE	DIS- SOLVED SULFATE (S04) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	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)
OCT. 18...	8.4	30	.0	141	72	0	1.2	272	6.6	15.5
NOV. 19...	52	230	.1	889	430	0	3.8	1580	7.8	16.0
JAN. 03...	73	550	--	1320	520	210	5.9	2370	7.9	1.0
FEB. 04...	94	510	--	1410	550	120	6.3	2500	7.7	26.5
APR. 15...	89	410	--	1230	450	12	6.1	2180	8.1	18.0
MAY 30...	47	140	--	747	330	0	3.8	1320	7.7	25.0
JULY 10...	45	77	--	694	300	0	4.0	1190	8.2	26.0
AUG. 14...	45	67	--	701	310	0	3.9	1180	8.0	24.5
SEP. 23...	11	19	--	106	52	1	.9	189	7.7	17.5

RED RIVER BASIN

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07315500 RED RIVER NEAR TERRAL, OKLA.

LOCATION.--Lat 33°52'43", long 97°56'03", Jefferson County, at gaging station at bridge on U.S. Highway 81, 0.5 mile (0.8 km) downstream from Chicago, Rock Island, and Pacific Railroad Co. bridge, 1.2 miles (1.9 km) south of Terral, and 3.6 miles (5.8 km) downstream from Little Wichita River.

DRAINAGE AREA.--28,723 mi² (74,393 km²), of which 5,936 mi² (15,374 km²) is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: October 1967 to September 1974.
Water temperatures: October 1967 to September 1974.

EXTREMES.--October 1973 to September 1974:

Specific conductance: Maximum daily, 9,400 micromhos May 26; minimum daily, 695 micromhos Nov. 25.
Water temperatures: Maximum, 32.0°C July 19; minimum, freezing point Jan. 1, 11.

Period of record:

Specific conductance: Maximum daily, 10,700 micromhos Apr. 23, 1970; minimum daily, 500 micromhos Nov. 2, 1972.
Water temperatures: Maximum, 32.0°C July 19, 1974; minimum, freezing point on many days during winter months.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	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 SODIUM PLUS POTAS- SIUM (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)
OCT. 13...	1000	10800	7.3	98	22	240	--	5.7	128	0
NOV. 25...	0900	9090	6.5	40	12	--	67	--	91	0
DEC. 31...	0930	367	6.4	280	91	--	860	--	302	0
JAN. 03...	0950	360	8.1	290	94	830	--	9.6	285	16
FEB. 04...	1200	328	2.4	290	100	930	--	13	257	0
MAR. 18...	1000	1210	11	200	47	650	--	9.8	150	0
MAY 22...	0945	548	10	260	72	840	--	9.4	210	0
JUNE 07...	1115	6390	12	150	32	460	--	9.4	136	0
JULY 03...	0947	210	9.4	340	100	1200	--	13	177	0
AUG. 08...	1010	245	9.6	260	84	800	--	9.8	146	3
SEP. 27...	1340	33900	9.0	72	8.9	130	--	5.1	116	0

DATE	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	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)
OCT. 13...	210	380	.2	1030	340	230	5.8	1780	7.2	19.0
NOV. 25...	43	120	--	338	150	76	2.4	695	7.5	14.0
DEC. 31...	660	1400	--	3470	1100	820	11	5730	7.5	2.0
JAN. 03...	700	1400	--	3490	1100	850	11	5910	8.6	.0
FEB. 04...	740	1500	--	3700	1100	930	12	6220	7.5	8.0
MAR. 18...	510	990	--	2490	690	570	11	4210	7.7	15.5
MAY 22...	690	1300	--	3290	950	770	12	5480	7.8	24.0
JUNE 07...	410	700	--	1840	510	390	8.9	3180	7.7	26.0
JULY 03...	890	2000	--	4640	1300	1100	15	7400	7.6	24.5
AUG. 08...	670	1400	--	3310	1000	870	11	5400	8.4	25.0
SEP. 27...	120	190	--	592	220	120	3.8	1070	7.8	18.0

RED RIVER BASIN

07315500 RED RIVER NEAR TERRAL, OKLA.--Continued

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

MONTH	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCT- ANCE (MICRO- MHOS)	DIS- SOLVED SOLIDS (MG/L)	DIS- SOLVED SOLIDS (TONS)	DIS- SOLVED CHLORIDE (MG/L)	DIS- SOLVED CHLORIDE (TONS)	DIS- SOLVED SULFATE (MG/L)	DIS- SOLVED SULFATE (TONS)	HARDNESS (CA+MG) (MG/L)
OCT. 1973.....	87451	2900	1700	401000	660	156000	320	75600	520
NOV. 1973.....	46666	2250	1300	164000	500	63000	240	30200	410
DEC. 1973.....	15089	4930	2900	118000	1200	48900	570	23200	870
JAN. 1974.....	10492	5880	3500	99100	1400	39700	690	19500	1000
FEB. 1974.....	11844	5020	3000	95900	1200	38400	580	18500	880
MAR. 1974.....	54045	2260	1300	190000	500	73000	240	35000	410
APR. 1974.....	18767	3480	2100	106000	810	41000	390	19800	620
MAY 1974.....	140532	3190	1900	721000	740	281000	360	137000	570
JUNE 1974.....	38687	4740	2800	292000	1100	115000	550	57500	840
JULY 1974.....	6016	6390	3800	61700	1500	24400	750	12200	1100
AUG. 1974.....	13462	4570	2700	98100	1100	40000	530	19300	810
SEPT 1974.....	128046	1750	1000	346000	370	128000	180	62200	330
TOTAL	571097	**	**	2690000	**	1050000	**	510000	**
WTD.AVG.	1564.65	2970	1700	**	680	**	330	**	530

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	2360	4940	3320	5790	6320	4850	5100	1500	4600	7580	5790	2880
2	2500	5250	3730	5850	6250	6220	5220	1400	4980	7500	5890	3300
3	3430	5200	4030	5910	6170	5290	5370	1330	5300	7390	5920	2490
4	3760	5260	4380	5760	6150	5500	5310	2460	5460	7230	5790	3150
5	4250	5320	4650	5610	6210	5590	5340	2600	6010	6480	5710	3960
6	4140	5340	5250	4670	6280	5590	5520	2800	4220	6960	5820	4170
7	4280	5160	4270	5600	6320	5470	5690	3000	3220	6980	5010	4120
8	3880	5170	3940	5720	6320	5470	4840	3550	3550	6700	5450	4520
9	2800	5200	4370	5820	6300	5690	6270	6040	4000	6700	5540	4840
10	2970	5300	4790	5610	6340	5750	5520	5830	4290	6610	4420	5170
11	3300	5290	4980	4390	6300	1330	5170	5100	4770	6680	4210	5260
12	3050	5490	5200	5300	6350	1020	5440	4390	5610	6680	4650	5470
13	1780	5580	5340	5680	6350	1040	5500	4360	5910	6560	1580	5480
14	2050	5580	5320	5380	6280	865	4560	4680	5740	6560	2980	5430
15	1850	5700	5390	5360	6280	1760	4830	4220	5170	6540	2110	5850
16	1920	5810	5460	5630	6310	8020	4090	4310	7270	6560	2170	3730
17	2400	5860	5450	5100	6330	5000	4280	4680	7320	6390	2240	1150
18	3220	5860	5520	5160	6240	4210	5410	4940	8280	5940	2540	1880
19	3570	5910	5570	5630	6300	2300	6600	5190	7980	5860	2750	3510
20	3600	5120	5550	5920	6420	1880	7050	5260	6380	5980	3120	3600
21	3820	5700	5510	6100	5700	2270	4440	5380	6240	5370	3560	1590
22	4060	5170	5370	6370	4760	3480	2000	5470	6440	5510	4150	2200
23	4330	4470	5300	6370	4030	3960	2280	5580	6740	5660	6060	2280
24	4460	2000	5560	6740	2470	3960	3140	5640	6700	5910	6010	2690
25	4560	695	5660	6710	2470	3870	4600	6900	7000	5890	5820	2500
26	4620	891	5020	6460	3420	4180	3430	9400	7190	5680	2820	1500
27	4600	1020	5480	6540	3820	4570	3540	3160	7320	5790	4020	1100
28	4710	1930	5710	6500	4450	4210	3600	5580	7260	5910	5570	1330
29	4930	2060	5670	6440	---	4460	4010	5270	7340	5980	6690	1640
30	4890	2730	5800	6360	---	4600	2000	4720	7280	5810	5670	2390
31	4890	---	5730	6370	---	4900	---	4620	---	5800	6190	---
MONTH	3580	4500	5070	5830	5610	4110	4670	4500	5990	6360	4520	3310

RED RIVER BASIN

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07315500 RED RIVER NEAR TERRAL, OKLA.--Continued

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	0.0	10.0	14.0	16.0	18.0	23.0	23.0	28.0	26.0
2	23.0	14.0	12.0	---	---	10.0	15.0	18.0	23.0	24.0	26.0	24.0
3	23.0	13.0	15.0	---	8.0	17.0	15.0	20.0	24.0	24.0	25.0	16.0
4	23.0	---	10.0	---	8.0	17.0	12.0	20.0	24.0	23.0	24.0	19.0
5	19.0	12.0	8.0	2.0	8.0	17.0	10.0	21.0	25.0	25.0	23.0	19.0
6	20.0	12.0	8.0	3.0	7.0	16.0	12.0	19.0	25.0	26.0	25.0	20.0
7	21.0	12.0	6.0	1.0	6.0	19.0	13.0	20.0	28.0	29.0	23.0	20.0
8	22.0	13.0	8.0	3.0	5.0	18.0	11.0	22.0	25.0	25.0	25.0	22.0
9	23.0	11.0	8.0	2.0	5.0	18.0	13.0	22.0	23.0	25.0	25.0	21.0
10	24.0	17.0	6.0	1.0	6.0	19.0	13.0	23.0	23.0	25.0	25.0	23.0
11	22.0	15.0	7.0	0.0	6.0	16.0	15.0	22.0	24.0	23.0	23.0	22.0
12	---	14.0	9.0	---	8.0	15.0	15.0	22.0	27.0	25.0	26.0	24.0
13	19.0	16.0	9.0	3.0	9.0	14.0	16.0	23.0	25.0	25.0	26.0	17.0
14	19.0	17.0	8.0	5.0	12.0	14.0	17.0	23.0	25.0	26.0	27.0	23.0
15	19.0	16.0	8.0	6.0	12.0	15.0	14.0	23.0	26.0	26.0	28.0	20.0
16	19.0	13.0	7.0	6.0	11.0	13.0	14.0	25.0	25.0	25.0	27.0	21.0
17	18.0	14.0	6.0	10.0	10.0	---	14.0	25.0	23.0	27.0	30.0	20.0
18	18.0	16.0	8.0	9.0	13.0	15.0	16.0	25.0	24.0	27.0	25.0	21.0
19	18.0	17.0	4.0	8.0	9.0	15.0	19.0	24.0	25.0	32.0	29.0	21.0
20	18.0	15.0	---	7.0	10.0	18.0	19.0	24.0	25.0	27.0	28.0	23.0
21	18.0	10.0	2.0	6.0	11.0	6.0	20.0	23.0	26.0	28.0	25.0	21.0
22	22.0	13.0	5.0	9.0	5.0	8.0	17.0	23.5	25.0	27.0	30.0	20.0
23	18.0	17.0	6.0	9.0	5.0	7.0	18.0	24.0	22.0	28.0	30.0	18.0
24	17.0	17.0	6.0	6.0	5.0	4.0	18.0	25.0	24.0	27.0	25.0	17.0
25	14.0	14.0	4.0	6.0	5.0	5.0	18.0	25.0	26.0	27.0	25.0	14.0
26	19.0	12.0	5.0	8.0	7.0	9.0	19.0	23.0	22.0	29.0	25.0	15.0
27	19.0	13.0	6.0	7.0	8.0	12.0	20.0	23.0	22.0	28.0	24.0	17.0
28	18.0	10.0	8.0	7.0	11.0	16.0	20.0	23.0	22.0	28.0	25.0	19.0
29	14.0	9.0	6.0	8.0	---	15.0	20.0	24.0	22.0	28.0	25.0	17.0
30	14.0	10.0	7.0	8.0	---	14.0	19.0	24.0	23.0	27.0	25.0	18.0
31	14.0	---	2.0	8.0	---	18.0	---	24.0	---	29.0	25.0	---
MONTH	14.5	13.5	7.0	5.5	8.0	14.0	16.0	22.5	24.0	26.5	26.0	20.0

RED RIVER BASIN

07316000 RED RIVER NEAR GAINESVILLE, TEX.

LOCATION.--Lat 33°43'40", long 97°09'35", Cook County, at gaging station at bridge on U.S. Highway 77, 5 miles (8 km) downstream from Fish Creek, and 7 miles (11 km) north of Gainesville.

DRAINAGE AREA.--30,782 mi² (79,725 km²), of which 5,936 mi² (15,374 km²) is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: May 1944 to April 1946, October 1952 to September 1963, October 1966 to September 1974.
Pesticide analyses: April 1968 to September 1974.
Water temperatures: October 1952 to September 1963, October 1966 to September 1974.

EXTREMES.--October 1973 to September 1974:

Specific conductance: Maximum daily, 7,580 micromhos June 21; minimum daily, 453 micromhos Nov. 24.

Period of record:

Specific conductance: Maximum daily, 11,100 micromhos July 16, 1972; minimum daily, 176 micromhos Nov. 4, 1958.
Water temperatures: Maximum, 35.0°C July 13, 1954; minimum, freezing point on many days during winter months.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part I of this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS- CHANGE (CFS)	DIS- SOLVED SILICA (SiO ₂) (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 SODIUM PLUS POTAS- SIUM (K) (MG/L)	DIS- SOLVED PO- TAS- SIUM (MG/L)	BICAR- BONATE (CO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)
OCT. 13...	1900	9000	8.6	92	18	--	160	--	146	0
NOV. 27...	0930	25000	6.9	38	7.9	49	--	5.4	112	0
DEC. 04...	1705	1400	11	120	32	--	250	--	222	0
JAN. 09...	1130	480	9.2	220	77	630	--	6.7	349	0
FEB. 20...	0940	340	4.4	240	83	800	--	10	270	0
MAR. 12...	1920	500	6.2	200	71	600	--	7.0	270	0
APR. 02...	0920	625	7.8	180	58	580	--	7.8	222	0
MAY 17...	0830	1400	12	230	49	620	--	8.6	195	0
JUNE 30...	2015	400	12	280	76	970	--	15	184	0
JULY 02...	1100	330	12	300	93	1000	--	11	175	0
AUG. 13...	1250	430	7.0	240	75	730	--	9.8	152	0
SEP. 30...	1930	7500	9.8	78	14	170	--	4.9	106	0

DATE	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTIT- TUENTS) (MG/L)	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)
OCT. 13...	95	310	.2	758	300	190	4.0	1440	7.7	20.5
NOV. 27...	35	78	--	275	130	36	1.9	510	7.7	14.0
DEC. 04...	190	420	.2	1130	420	240	5.4	2040	7.7	12.0
JAN. 09...	430	1100	--	2650	870	580	9.3	4560	7.9	3.0
FEB. 20...	580	1300	--	3150	940	720	11	5150	7.4	10.5
MAR. 12...	400	1000	--	2420	790	570	9.3	4200	7.7	22.0
APR. 02...	430	920	--	2290	690	510	9.6	3920	7.5	17.0
MAY 17...	520	980	--	2520	780	620	9.7	4170	8.0	26.0
JUNE 30...	710	1600	--	3750	1000	860	13	6160	7.7	27.0
JULY 02...	780	1700	--	3980	1100	990	13	6540	7.2	--
AUG. 13...	590	1200	--	2930	910	780	11	4780	8.3	27.0
SEP. 30...	140	260	--	729	250	170	4.7	1330	7.9	21.0

RED RIVER BASIN

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07316000 RED RIVER NEAR GAINESVILLE, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	TEMPER- ATURE (DEG C)	ALDRIN (UG/L)	DDD (UG/L)	DDE (UG/L)	DDT (UG/L)	DI- ELDRIN (UG/L)	ENDRIN (UG/L)	HEPTA- CHLOR (UG/L)	HEPTA- CHLOR EPOXIDE (UG/L)
OCT. 26...	1515	22.0	.00	.00	.00	.00	.00	.00	.00	.00
MAR. 13...	1030	15.0	.00	.00	.00	.00	.00	.00	.00	.00
MAY 07...	1030	--	.00	.01	.01	.01	.01	.00	.00	.00
SEP. 26...	1445	--	.00	.00	.00	.00	.00	.00	.00	.00

DATE	LINDANE (UG/L)	CHLOR- DANE (UG/L)	PCB (UG/L)	DI- AZINON (UG/L)	MALA- THION (UG/L)	METHYL PARA- THION (UG/L)	PARA- THION (UG/L)	2,4-D (UG/L)	SILVEX (UG/L)	2,4,5-T (UG/L)
OCT. 26...	.00	.0	.0	.00	.00	.00	.00	.00	.00	.00
MAR. 13...	.00	.0	.0	.00	.00	.00	.00	.00	.00	.00
MAY 07...	.00	.0	.0	.00	.00	.00	.00	.00	.00	.00
SEP. 26...	.00	.0	.0	.00	.00	.00	.00	.00	.00	.01

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

MONTH	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCT- ANCE (MICRO- MHOS)	DIS- SOLVED SOLIDS (MG/L)	DIS- SOLVED SOLIDS (TONS)	DIS- SOLVED CHLORIDE (MG/L)	DIS- SOLVED CHLORIDE (TONS)	DIS- SOLVED SULFATE (MG/L)	DIS- SOLVED SULFATE (TONS)	HARDNESS (CA+MG) (MG/L)
OCT. 1973.....	124765	2280	1300	438000	490	165000	210	70700	450
NOV. 1973.....	121134	1120	600	196000	220	72000	97	31700	250
DEC. 1973.....	27719	2910	1700	127000	640	47900	290	21700	560
JAN. 1974.....	15970	4630	2800	121000	1100	47400	510	22000	850
FEB. 1974.....	15264	4490	2700	111000	1100	45300	490	20200	830
MAR. 1974.....	54254	2350	1300	190000	510	74700	220	32200	460
APR. 1974.....	19018	3720	2200	113000	860	44200	390	20000	690
MAY 1974.....	194903	2640	1500	789000	580	305000	250	132000	510
JUNE 1974.....	64898	4370	2600	456000	1100	193000	480	84100	810
JULY 1974.....	8005	5980	3600	77800	1500	32400	690	14900	1000
AUG. 1974.....	13037	3870	2300	81000	900	31700	410	14400	720
SEPT 1974.....	188230	1380	730	371000	280	142000	120	61000	290
TOTAL	847197	**	**	3070000	**	1200000	**	525000	**
WTD.AVG.	2321.09	2360	1300	**	530	**	230	**	460

RED RIVER BASIN

07316000 RED RIVER NEAR GAINESVILLE, TEX.--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	2700	4000	770	4550	5350	3220	3820	3500	4840	6400	5500	4000
2	2230	4420	878	4560	5300	5200	3980	1100	4640	6540	5400	2380
3	2360	4300	715	4560	5280	3000	4000	1200	4420	6520	5300	2970
4	2340	4200	2040	4570	5240	3200	4260	1800	4470	6300	5400	3000
5	2600	4090	2380	4490	5180	3400	4400	1930	4470	6020	5300	3050
6	3020	4400	2690	4480	5240	3770	4540	1570	4700	6050	5200	3780
7	1980	4320	2890	4430	5240	3970	4690	1500	5250	6090	5100	2720
8	2000	4130	2970	4620	5210	4130	3450	1410	3280	5240	5000	2750
9	3790	4370	3040	4500	5170	4200	4000	2000	3300	5490	4900	2800
10	3600	4400	3110	4300	5200	4280	4620	3500	3400	5890	4800	3960
11	3230	4460	3190	4220	5220	4000	4420	5000	3500	5840	4600	3980
12	2490	4480	3150	4540	5280	4200	4480	5600	3280	5900	4400	3700
13	1440	4360	3610	4730	5240	1760	4500	4840	4070	5950	4300	4000
14	1590	4390	3350	4680	5200	1100	4550	4400	4360	6010	4740	3800
15	1510	4480	3550	4600	5200	940	4660	4070	4900	6020	4580	3610
16	1650	4540	3820	4510	5220	1000	4740	4060	5420	6020	4200	2970
17	1420	4600	3890	4540	5200	1360	4930	4290	5370	6020	3970	1850
18	1510	4630	3920	4560	5100	5410	5000	4200	4740	5800	2520	1220
19	2080	4720	3950	4420	5200	3030	5100	4200	5860	5540	2310	855
20	2500	1930	3980	4360	3180	4000	5200	4060	6500	5840	2320	1500
21	3100	1540	4000	4310	923	2910	3750	4290	7580	6080	2400	1330
22	3160	1690	4030	4260	2810	2400	4000	4430	7480	6090	2550	1740
23	3280	1840	4070	4350	2440	1980	4440	4520	6700	6090	2640	2070
24	3490	453	4100	4610	3950	2180	2000	4570	6030	5900	2740	2400
25	3690	974	4150	4840	4000	2870	2000	4600	5720	6000	2920	1600
26	3850	534	4240	4440	5170	3370	2080	4380	5820	6100	2500	1110
27	3780	508	4370	4990	5270	3520	2600	4840	6030	6000	1360	821
28	3990	532	4500	5340	5230	3750	3310	3940	6150	5900	3160	1070
29	3960	550	4640	5360	---	4040	3500	4780	6090	5800	3340	1220
30	3900	660	4400	5380	---	3820	4000	5480	6280	5600	2000	1330
31	3880	---	4190	5270	---	3820	---	5160	---	5520	6250	---
MONTH	2780	3150	3370	4620	4650	3290	4030	3720	5160	5950	3930	2450

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	23.0	---	---	1.0	14.0	20.0	20.0	20.5	25.5	---	---	---
2	23.0	17.0	12.0	---	---	20.0	19.0	22.0	26.0	27.0	---	---
3	26.0	---	12.5	---	---	20.0	17.0	---	26.0	27.0	---	---
4	23.5	---	12.0	1.0	15.0	---	15.0	---	26.0	---	---	---
5	---	15.5	10.5	1.5	14.0	---	---	22.0	26.5	26.5	---	---
6	25.0	15.0	10.0	3.0	8.0	21.5	16.0	22.0	26.0	---	---	---
7	24.0	17.0	9.0	5.0	5.5	---	18.5	---	25.0	26.5	---	---
8	25.0	15.0	---	8.0	5.5	21.0	19.0	24.0	25.5	28.0	---	---
9	25.0	17.0	---	---	7.0	---	---	---	---	28.0	---	---
10	25.0	---	---	---	9.0	21.5	17.5	---	---	28.0	---	---
11	23.0	17.0	12.0	1.0	11.0	21.5	19.0	24.0	26.0	28.5	---	---
12	21.0	16.0	11.5	2.0	12.0	22.0	---	24.0	26.0	---	---	---
13	20.5	18.0	10.5	5.0	11.0	22.0	---	25.0	26.0	---	---	---
14	20.0	20.0	10.0	8.0	14.0	15.0	---	---	26.0	---	---	---
15	20.0	17.5	---	---	---	16.0	20.5	26.0	---	28.5	---	---
16	22.0	---	8.0	10.0	14.0	---	20.0	27.0	26.0	---	---	---
17	23.0	16.0	11.0	---	---	17.0	20.0	25.0	26.5	28.5	---	---
18	23.0	18.5	12.5	12.0	13.5	22.0	---	---	26.5	---	---	---
19	24.0	19.0	---	14.0	---	---	---	---	26.5	28.5	---	---
20	---	15.5	---	13.0	11.0	---	---	26.0	---	28.5	---	---
21	22.0	24.0	---	---	8.0	12.0	18.0	25.5	26.5	29.0	---	---
22	24.0	---	---	12.0	8.0	---	---	27.0	26.5	---	---	---
23	24.0	19.5	---	8.0	10.0	10.0	18.0	26.0	---	29.0	---	---
24	23.5	15.5	---	9.5	9.0	7.0	---	26.0	26.5	---	---	---
25	22.5	16.0	---	9.0	---	8.5	---	---	26.5	---	---	18.0
26	21.0	15.0	8.0	12.0	12.0	11.0	24.0	25.0	26.5	---	---	18.0
27	22.0	---	---	---	14.0	10.5	---	25.0	26.5	---	---	20.0
28	23.0	12.5	---	12.0	17.0	---	19.0	25.0	26.5	---	---	20.5
29	19.0	13.0	11.0	---	---	17.0	---	26.0	26.5	---	---	---
30	19.5	---	---	13.0	---	19.5	---	26.0	27.0	---	---	21.0
31	22.0	---	3.0	13.5	---	---	---	26.0	---	29.0	---	---
MONTH	22.5	---	---	---	11.0	---	---	---	26.0	---	---	---

RED RIVER BASIN

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07316200 MINERAL CREEK NEAR SADLER, TEX.

LOCATION.--Lat 33°42'08", long 96°50'51", Grayson County, at gaging station at bridge on Farm Road 901, 1.4 miles (2.3 km) north of Sadler, and 2.0 miles (3.2 km) upstream from Mustang Creek.

DRAINAGE AREA.--26.0 mi² (67.3 km²).

PERIOD OF RECORD.--Chemical analyses: January 1968 to September 1974.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTAN- TANEOUS 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 SODIUM PLUS POTAS- SIUM (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HC03) (MG/L)	CAR- BONATE (C03) (MG/L)
OCT. 24...	1520	2.2	17	98	28	--	89	--	259	0
NOV. 27...	1400	12	13	47	12	--	34	--	122	0
JAN. 09...	1430	2.0	13	120	27	110	--	3.7	337	0
FEB. 20...	1405	1.9	6.2	100	26	130	--	3.1	266	0
APR. 07...	1120	1.4	8.5	110	28	120	--	4.4	248	24
MAY 17...	1200	1.1	12	96	22	100	--	5.6	305	0

DATE	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	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)
OCT. 24...	140	140	.4	635	360	150	2.0	1100	8.0	20.0
NOV. 27...	55	58	.3	279	160	65	1.1	523	7.4	15.5
JAN. 09...	160	150	--	750	410	130	2.4	1160	--	2.5
FEB. 20...	170	160	--	725	360	140	3.0	1240	8.1	15.5
APR. 07...	160	160	--	737	390	150	2.6	1260	8.8	17.5
MAY 17...	140	120	--	646	330	80	2.4	1100	7.7	26.5

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	SUS- PENDE SEDI- MENT (MG/L)	SUS- PENDE SEDI- MENT DIS- CHARGE (T/DAY)	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM	SUS. SED. SIEVE DIAM. % FINER THAN .250 MM	SUS. SED. SIEVE DIAM. % FINER THAN .500 MM
OCT. 24...	1520	2.2	20.0	76	.45	--	--	--	--
NOV. 27...	1400	12	15.5	25	.81	--	--	--	--
FEB. 20...	1405	1.9	15.5	4	.02	--	--	--	--
APR. 02...	1120	1.4	17.5	4	.02	--	--	--	--
MAY 17...	1235	1.1	26.5	9	.03	--	--	--	--
JUNE 12...	1615	91	--	1260	310	--	--	--	--
AUG. 13...	1405	.05	--	23	.00	--	--	--	--
SEP. 17...	1235	42	22.0	358	41	52	62	98	100
24...	1425	2.2	16.0	6	.04	--	--	--	--

RED RIVER BASIN

07316230 SANDY CREEK NEAR SADLER, TEX.

LOCATION.--Lat 33°44'14", long 96°51'04", Grayson County, at bridge on Farm Road 901 and 3.9 miles (6.3 km) north of Sadler.

DRAINAGE AREA.--24 mi² (62 km²).

PERIOD OF RECORD.--Chemical analyses: December 1967 to September 1974.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	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 SODIUM PLUS POTAS- SIUM (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)
OCT. 24...	1055	1.3	16	120	45	--	130	--	124	0
NOV. 27...	1205	12	13	40	14	--	33	--	70	0
JAN. 09...	1550	1.1	12	160	55	190	--	3.9	142	0
FEB. 20...	1210	.92	11	160	54	190	--	4.1	142	0
APR. 02...	1245	.76	8.4	390	100	950	--	9.4	131	0
MAY 17...	1400	.97	12	160	55	210	--	5.5	171	0
JUNE 12...	2300	122	6.5	10	2.7	7.2	--	3.0	35	0
SEP. 17...	1430	46	7.0	14	4.9	11	--	3.0	37	0

DATE	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITU- ENTS) (MG/L)	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)
OCT. 24...	110	400	.3	891	490	390	2.6	1660	7.7	16.5
NOV. 27...	40	92	.3	266	160	100	1.1	534	7.2	14.0
JAN. 09...	160	530	--	1180	630	510	3.3	2140	8.2	3.0
FEB. 20...	180	530	--	1200	620	510	3.3	2200	7.6	13.0
APR. 02...	170	2100	--	3790	1400	1300	11	7150	7.8	20.5
MAY 17...	130	600	--	1260	630	490	3.7	2270	7.7	--
JUNE 12...	9.7	11	--	67	36	7	.5	123	7.4	23.0
SEP. 17...	16	22	--	96	55	25	.6	180	6.9	--

RED RIVER BASIN

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07331600 RED RIVER AT DENISON DAM, NEAR DENISON, TEX.

LOCATION.--Lat 33°49'08", long 96°33'47", Grayson County, at gaging station, 1,800 ft (549 m) downstream from Denison Dam powerhouse, 0.4 mile (0.6 km) upstream from Shawnee Creek, and 4.5 miles (7.2 km) north of Denison.

DRAINAGE AREA.--39,720 mi² (102,880 km²), of which 5,936 mi² (15,374 km²) is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: May 1944 to September 1974.

Water temperatures: October 1945 to September 1974.

EXTREMES.--October 1973 to September 1974:

Specific conductance: Maximum daily, 1,610 micromhos Aug. 12; minimum daily, 1,180 micromhos on several days during March and April.

Period of record:

Specific conductance (1944-69, 1972-74): Maximum daily, 3,520 micromhos Aug. 14, 1944; minimum daily, 656 micromhos Oct. 16, 1945.

Water temperatures (1945-69): Maximum, 31.0°C July 17, 1969; minimum, 3.0°C Feb. 2-4, 7, 1966.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	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 SODIUM PLUS POTAS- SIUM (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)
OCT.										
23...	0900	10500	5.4	74	23	--	130	--	133	0
NOV.										
30...	0845	32700	5.8	73	22	--	140	--	134	0
DEC.										
27...	0845	5310	5.7	74	20	--	140	--	148	0
JAN.										
28...	0845	1200	5.4	78	21	150	--	5.6	143	0
FEB.										
28...	0830	79	5.4	74	20	150	--	4.8	142	0
MAR.										
29...	0830	4340	5.4	88	20	130	--	5.5	174	0
APR.										
26...	0830	2960	5.0	76	21	140	--	4.8	160	0
MAY										
24...	0830	3210	5.4	81	23	150	--	5.4	174	0
JUNE										
27...	0830	2490	5.0	88	24	160	--	5.9	176	0
JULY										
17...	0830	3190	4.1	85	26	190	--	6.9	175	0
AUG.										
23...	0830	4260	4.2	89	23	190	--	5.8	161	0
SEP.										
20...	0900	4660	1.9	83	26	180	--	4.2	143	0

DATE	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SULFIDS (SUM OF CONSTITUENTS) (MG/L)	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)
OCT.										
23...	88	260	.2	652	280	170	3.5	1300	8.1	21.0
NOV.										
30...	110	250	.2	661	270	160	3.6	1300	7.7	15.5
DEC.										
27...	130	220	.2	674	270	150	3.8	1230	7.7	10.0
JAN.										
28...	140	240	--	711	280	160	3.9	1230	7.5	5.5
FEB.										
28...	140	220	--	684	270	150	4.0	1220	7.8	6.5
MAR.										
29...	120	230	--	685	300	160	3.3	1190	7.8	12.0
APR.										
26...	160	210	--	696	280	150	3.7	1200	7.4	15.5
MAY										
24...	140	230	--	721	300	150	3.8	1280	8.1	19.0
JUNE										
27...	150	270	--	790	320	170	3.9	1420	7.9	21.5
JULY										
17...	160	300	--	858	320	180	4.6	1520	7.4	26.0
AUG.										
23...	170	310	--	871	320	180	4.6	1550	8.1	25.5
SEP.										
20...	160	290	--	816	310	200	4.4	1480	8.3	23.5

RED RIVER BASIN

07331600 RED RIVER AT DENISON DAM, NEAR DENISON, TEX.--Continued

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

MONTH	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCT- ANCE (MICRO- MHOS)	DIS- SOLVED SOLIDS (MG/L)	DIS- SOLVED SOLIDS (TONS)	DIS- SOLVED CHLORIDE (MG/L)	DIS- SOLVED CHLORIDE (TONS)	DIS- SOLVED SULFATE (MG/L)	DIS- SOLVED SULFATE (TONS)	HARDNESS (CA+MG) (MG/L)
OCT. 1973.....	316730	1290	730	624000	240	205000	140	120000	280
NOV. 1973.....	185371	1300	730	365000	250	125000	140	70100	280
DEC. 1973.....	322273	1260	710	618000	240	209000	130	113000	280
JAN. 1974.....	81808	1230	690	152000	230	50800	130	28700	270
FEB. 1974.....	40585	1220	690	75600	230	25200	130	14200	270
MAR. 1974.....	96018	1190	670	174000	220	57000	130	33700	270
APR. 1974.....	52030	1190	670	94100	220	30900	130	18300	270
MAY 1974.....	316825	1230	690	590000	230	197000	130	111000	270
JUNE 1974.....	180088	1290	730	355000	240	117000	140	68100	280
JULY 1974.....	72013	1480	830	161000	290	56400	160	31100	310
AUG. 1974.....	86456	1560	880	205000	310	72400	170	39700	320
SEPT 1974.....	132456	1500	840	300000	300	107000	160	57200	310
TOTAL	1882653	**	**	3710000	**	1250000	**	705000	**
WTD.AVG.	5157	1300	730	**	250	**	140	**	280

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	1270	1330	1300	1210	1240	1220	1180	1210	1260	1480	1530	1500
2	1270	1320	1300	1210	1240	1220	1190	1200	1250	1510	1530	1480
3	1270	1310	1300	1220	1240	1200	1190	1200	1250	1510	1530	1460
4	1270	1300	1300	1220	1240	1200	1190	1200	1270	1510	1530	1460
5	1270	1290	1270	1220	1240	1200	1180	1210	1270	1530	1530	1450
6	1270	1290	1250	1210	1240	1200	1180	1210	1270	1540	1550	1470
7	1280	1290	1230	1210	1240	1200	1180	1210	1260	1550	1560	1470
8	1280	1290	1230	1230	1240	1200	1190	1250	1260	1570	1570	1470
9	1280	1300	1220	1230	1240	1200	1180	1250	1250	1360	1580	1470
10	1290	1300	1220	1220	1240	1200	1180	1240	1250	1470	1590	1470
11	1320	1300	1230	1220	1240	1190	1180	1240	1270	1570	1600	1490
12	1310	1300	1230	1220	1240	1190	1180	1240	1270	1380	1610	1500
13	1300	1290	1230	1230	1240	1190	1180	1240	1280	1380	1560	1490
14	1290	1290	1240	1230	1240	1190	1190	1270	1280	1370	1560	1490
15	1290	1300	1240	1230	1220	1190	1190	1240	1280	1370	1560	1490
16	1300	1300	1240	1230	1220	1190	1180	1250	1280	1550	1560	1490
17	1290	1300	1240	1220	1220	1190	1180	1250	1280	1550	1560	1480
18	1290	1300	1240	1290	1220	1190	1190	1260	1280	1550	1560	1480
19	1300	1300	1230	1270	1220	1200	1190	1270	1300	1550	1560	1480
20	1300	1300	1230	1250	1220	1190	1190	1280	1380	1550	1560	1480
21	1300	1300	1240	1240	1210	1190	1190	1280	1330	1550	1560	1490
22	1300	1300	1240	1240	1210	1180	1190	1280	1370	1340	1560	1500
23	1300	1300	1240	1240	1210	1180	1190	1280	1400	1540	1560	1500
24	1300	1290	1230	1250	1210	1180	1190	1280	1460	1520	1560	1510
25	1310	1290	1230	1250	1210	1190	1190	1280	1420	1520	1550	1500
26	1310	1290	1230	1250	1200	1190	1190	1280	1420	1470	1550	1500
27	1310	1300	1230	1240	1200	1190	1210	1280	1420	1480	1550	1500
28	1310	1300	1230	1240	1210	1190	1210	1280	1430	1500	1530	1500
29	1310	1300	1230	1230	---	1190	1210	1270	1450	1510	1530	1500
30	1310	1300	1220	1240	---	1190	1210	1270	1460	1380	1530	1500
31	1300	---	1220	1240	---	1190	---	1260	---	1490	1530	---
MONTH	1290	1300	1240	1230	1230	1190	1190	1250	1320	1490	1550	1490

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

[illegible]

RED RIVER BASIN

07336750 LITTLE PINE CREEK NEAR KANAWHA, TEX.

LOCATION.--Lat 33°50'26", long 95°15'55", Red River County, at bridge on Farm Road 410, 1.6 miles (2.6 km) south of Kanawha, and 2.5 miles (4.0 km) upstream from mouth.

DRAINAGE AREA.--75.4 mi² (195.3 km²).

PERIOD OF RECORD.--Chemical analyses: October 1968 to September 1974.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO ₂) (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 SODIUM PLUS POTAS- SIUM (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)
OCT. 10...	1525	1.3	16	21	4.8	--	14	--	56	0
NOV. 15...	0825	8.0	13	24	3.9	--	19	--	41	0
DEC. 18...	0810	16	15	27	6.0	22	--	2.9	43	0
JAN. 29...	1520	92	5.6	12	2.4	9.5	--	3.5	26	0
MAR. 16...	1335	3.4	8.8	34	6.8	32	--	2.8	61	0
APR. 27...	1345	3.3	10	21	4.2	16	--	3.4	45	0
SEP. 10...	1125	127	4.6	7.1	2.1	6.4	--	3.0	14	0

DATE	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	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)
OCT. 10...	35	14	.2	133	72	26	.7	231	6.9	23.0
NOV. 15...	56	18	.1	154	76	42	.9	269	6.8	16.5
DEC. 18...	68	20	--	182	92	57	1.0	298	7.0	5.0
JAN. 29...	26	10	--	82	40	19	.7	142	6.7	10.0
MAR. 16...	86	33	--	233	110	63	1.3	400	7.6	15.0
APR. 27...	42	18	--	137	70	33	.8	237	6.9	18.5
SEP. 10...	20	7.0	--	57	26	15	.5	98	6.6	21.0

RED RIVER BASIN

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07336800 PECAN BAYOU NEAR CLARKSVILLE, TEX.

LOCATION.--Lat 33°41'07", long 94°59'41", Red River County, at gaging station at bridge on Farm Road 1159, 0.2 mile (0.3 km) downstream from Tanyard Bayou, 4.3 miles (6.9 km) upstream from Little White Oak Creek, and 6.0 miles (9.7 km) northeast of Clarksville.

DRAINAGE AREA.--100 mi² (259 km²).

PERIOD OF RECORD.--Chemical analyses: November 1967 to September 1974.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	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 SODIUM PLUS POTAS- SIUM (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	RICAP- MONATE (HCO ₃) (MG/L)	CAH- MONATE (CO ₃) (MG/L)
OCT. 11...	1520	3.4	9.4	12	3.2	--	7.7	--	47	0
NOV. 14...	1356	14	12	9.5	2.3	--	9.6	--	22	0
DEC. 18...	1710	8.3	10	10	2.3	11	--	2.3	25	0
JAN. 30...	1610	98	8.3	7.6	1.7	8.2	--	2.5	17	0
MAR. 16...	1150	2.9	1.9	17	3.3	18	--	2.6	60	0
APR. 27...	1115	8.4	4.9	14	3.3	16	--	3.2	38	0
JUNE 01...	1520	36	6.8	15	1.2	5.8	--	4.3	44	0
SEP. 10...	1500	104	7.3	8.5	1.8	5.5	--	3.3	25	0

DATE	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	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)
OCT. 11...	6.8	10	.1	72	43	4	.5	143	7.4	21.5
NOV. 14...	21	10	.0	75	33	15	.7	126	6.5	18.0
DEC. 18...	23	11	--	82	34	14	.8	140	6.8	8.5
JAN. 30...	16	8.1	--	58	24	11	.7	97	6.7	11.5
MAR. 16...	16	20	--	108	56	7	1.0	200	6.8	14.5
APR. 27...	34	17	--	111	49	17	1.0	193	6.8	20.5
JUNE 01...	16	5.5	--	76	42	6	.4	133	7.1	22.0
SEP. 10...	12	7.5	--	58	29	8	.4	100	6.4	21.5

07336820 RED RIVER NEAR DEKALB, TEX.

LOCATION.--Lat 33°41'15", long 94°41'39", Bowie County, at gaging station at bridge on U.S. Highway 259 and 13 miles (21 km) north of DeKalb.

DRAINAGE AREA.--47,348 mi² (122,631 km²), of which 5,936 mi² (15,374 km²) is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: January 1968 to September 1974.

Chemical and biochemical analyses: January 1968 to September 1974.

Pesticide analyses: October 1970 to September 1974.

Water temperatures: January 1968 to September 1974.

EXTREMES.--October 1973 to September 1974:

Specific conductance: Maximum daily, 1,440 micromhos Aug. 5; minimum daily, 183 micromhos Sept. 13.

Water temperatures: Maximum, 32.0°C July 23; minimum, 2.5°C Jan. 13.

Period of record:

Specific conductance: Maximum daily, 1,740 micromhos Oct. 16-19, 1972; minimum daily, 132 micromhos Mar. 25, 1968.

Water temperatures: Maximum, 34.0°C on several days during July and August 1969 and 1970; minimum, 1.0°C Jan. 8, 9, 1968.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

		INSTAN- TANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO2) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED SODIUM PLUS POTAS- SIUM (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	
OCT.													
14...	0900	46900	7.5	56	11	--	46	--	146	0	38	89	
30...	1315	19900	8.2	70	18	--	130	--	132	0	120	200	
DEC.													
11...	1020	22700	7.4	53	12	71	--	4.6	126	0	66	110	
17...	1330	13700	7.1	70	17	100	--	5.1	147	0	110	170	
JAN.													
31...	1110	10600	7.9	40	9.5	34	--	5.5	138	0	40	45	
FEB.													
13...	1530	3440	6.3	74	18	110	--	4.9	202	0	100	160	
19...	0935	3540	7.9	75	18	72	--	3.5	240	0	71	99	
MAR.													
15...	1550	22600	7.2	29	5.0	20	--	2.4	88	0	27	26	
APR.													
17...	1600	4890	7.2	28	6.6	21	--	3.2	106	0	25	25	
JUNE													
11...	1420	48600	3.0	31	6.2	31	--	3.0	82	0	33	46	
JULY													
24...	1040	3640	.2	76	23	150	--	6.2	172	0	150	240	
AUG.													
20...	1440	6490	1.2	56	16	110	--	4.4	110	0	100	180	
SEP.													
11...	1425	16200	6.2	27	3.6	14	--	2.9	98	0	14	14	
		DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)	VOL. NON- FILT- RABLE RESIDUE (MG/L)	HARD- NESS (CA+MG) (MG/L)
OCT.													
14...	.2	--	--	--	--	--	--	--	320	--	--	--	180
30...	.3	.10	.00	.00	.00	.14	--	.26	618	264	34	250	
DEC.													
11...	--	.20	.00	.00	.00	.34	--	.09	386	210	50	180	
17...	--	--	--	--	--	--	--	--	552	--	--	240	
JAN.													
31...	--	--	--	--	--	--	--	--	250	--	--	140	
FEB.													
13...	--	.13	.01	.17	.33	--	.10	--	574	27	1	260	
19...	--	--	--	--	--	--	--	--	465	--	--	260	
MAR.													
15...	--	--	--	--	--	--	--	--	160	--	--	93	
APR.													
17...	--	.08	.00	.11	.51	.62	.13	98	169	14	--	97	
JUNE													
11...	--	.11	.02	.57	.63	1.2	.22	--	194	552	68	100	
JULY													
24...	--	--	--	--	--	--	--	--	730	--	--	280	
AUG.													
20...	--	.01	.00	.07	.89	.96	.12	--	523	60	5	210	
SEP.													
11...	--	--	--	--	--	--	--	--	130	--	--	82	

RED RIVER BASIN

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07336820 RED RIVER NEAR DEKALB, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	NON-CARBONATE HARDNESS (MG/L)	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	TURBIDITY (JTU)	DIS-SOLVED OXYGEN (MG/L)	PERCENT SATURATION	BIO-CHEMICAL OXYGEN DEMAND (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT. 14...	64	1.5	608	8.1	21.5	--	--	--	--	--	--
30...	140	3.5	1140	7.5	19.0	150	100	9.2	98	.7	8.5
DEC. 11...	78	2.3	718	7.4	9.0	20	80	11.8	102	.2	9.5
17...	120	2.8	992	8.1	8.0	--	--	--	--	--	--
JAN. 31...	26	1.3	451	7.5	11.0	--	--	--	--	--	--
FEB. 13...	94	3.0	1030	7.5	15.0	10	20	10.6	104	2.1	2.5
19...	65	1.9	851	7.6	11.5	--	--	--	--	--	--
MAR. 15...	21	.9	292	7.2	17.0	--	--	--	--	--	--
APR. 17...	10	.9	291	7.3	19.5	70	50	9.2	99	1.7	--
JUNE 11...	36	1.3	378	7.2	26.0	80	150	7.0	85	1.7	5.3
JULY 24...	140	3.9	1360	7.4	31.5	--	--	--	--	--	--
AUG. 20...	120	3.3	1010	7.9	31.5	5	20	9.7	131	3.5	6.8
SEP. 11...	2	.7	258	7.1	20.0	--	--	--	--	--	--

DATE	TIME	DIS-SOLVED ALUMINUM (AL) (UG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	DIS-SOLVED BORON (B) (UG/L)	DIS-SOLVED CADMIUM (CD) (UG/L)	DIS-SOLVED CHROMIUM (CR) (UG/L)	DIS-SOLVED COBALT (CO) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)
OCT. 30...	1315	30	0	--	0	0	0	7
FEB. 13...	1530	10	0	110	1	0	0	6
APR. 17...	1600	140	0	60	0	0	0	4
AUG. 20...	1440	20	1	--	<1	0	0	1

DATE	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	DIS-SOLVED LITHIUM (LI) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)	DIS-SOLVED MERCURY (HG) (UG/L)	DIS-SOLVED NICKEL (NI) (UG/L)	DIS-SOLVED STRONTIUM (SR) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)
OCT. 30...	60	0	0	13	.1	2	730	40
FEB. 13...	100	3	0	70	.0	6	710	20
APR. 17...	330	2	10	90	.1	1	190	0
AUG. 20...	30	0	0	0	.0	1	620	20

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	TEMPER- ATURE (DEG C)	ALDRIN (UG/L)	ALDRIN IN BOTTOM DE- POSITS (UG/KG)	DDD (UG/L)	DDD IN BOTTOM DE- POSITS (UG/KG)	DDE (UG/L)	DDE IN BOTTOM DE- POSITS (UG/KG)	DDT (UG/L)	DDT IN BOTTOM DE- POSITS (UG/KG)	DI- ELDRIN (UG/L)
OCT. 30...	1315	19.0	.00	.0	.00	.0	.00	1.7	.00	.0	.00
FEB. 13...	1530	15.0	.00	.0	.00	.0	.00	.0	.00	.0	.00
APR. 17...	1600	19.5	.00	.0	.00	.4	.00	1.3	.00	.0	.00
AUG. 20...	1440	31.5	.00	.0	.00	.0	.00	.0	.00	.0	.00

DATE	DI- ELDRIN IN BOTTOM DE- POSITS (UG/KG)	ENDRIN (UG/L)	ENDRIN IN BOTTOM DE- POSITS (UG/KG)	HEPTA- CHLOR (UG/L)	HEPTA- CHLOR IN BOTTOM DE- POSITS (UG/KG)	HEPTA- CHLOR EPOXIDE (UG/L)	HEPTA- CHLOR EPOXIDE IN BOT- TOM DE- POSITS (UG/KG)	LINDANE (UG/L)	LINDANE IN BOTTOM DE- POSITS (UG/KG)	CHLOR- DANE (UG/L)
OCT. 30...	.0	.00	.0	.00	.0	.00	.0	.00	.0	.0
FEB. 13...	.0	.00	.0	.00	.0	.00	.0	.00	.0	.0
APR. 17...	.0	.00	.0	.00	.0	.00	.0	.00	.0	.0
AUG. 20...	.0	.00	.0	.00	.0	.00	.0	.00	.0	.0

DATE	CHLOR- DANE IN BOTTOM DE- POSITS (UG/KG)	PCB (UG/L)	PCB IN BOTTOM DE- POSITS (UG/KG)	DI- AZINON (UG/L)	MALA- THION (UG/L)	METHYL PARA- THION (UG/L)	PARA- THION (UG/L)	2,4-D (UG/L)	SILVEX (UG/L)	2,4,5-T (UG/L)
OCT. 30...	0	.0	0	.00	.00	.00	.00	.00	.00	.00
FEB. 13...	0	.0	0	.00	.00	.00	.00	.00	.00	.00
APR. 17...	0	.0	0	.00	.00	.00	.00	.01	.00	.00
AUG. 20...	0	.0	0	.00	.00	.00	.00	.00	.00	.01

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

MONTH	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCT- ANCE (MICRO- MHOS)	DIS- SOLVED SOLIDS (MG/L)	DIS- SOLVED SOLIDS (TONS)	DIS- SOLVED CHLORIDE (MG/L)	DIS- SOLVED CHLORIDE (TONS)	DIS- SOLVED SULFATE (MG/L)	DIS- SOLVED SULFATE (TONS)	HARDNESS (CA+MG) (MG/L)
OCT. 1973.....	761900	742	410	843000	120	247000	62	128000	190
NOV. 1973.....	744580	437	240	482000	54	109000	38	76400	120
DEC. 1973.....	963500	665	360	937000	100	260000	56	146000	170
JAN. 1974.....	257840	670	370	258000	100	69600	57	39700	170
FEB. 1974.....	137780	707	390	145000	110	40900	60	22300	180
MAR. 1974.....	241330	608	330	215000	88	57300	51	33200	160
APR. 1974.....	222760	459	250	150000	58	34900	39	23500	130
MAY 1974.....	667760	734	400	721000	110	198000	62	112000	190
JUNE 1974.....	748340	492	270	546000	65	131000	42	84900	140
JULY 1974.....	106890	1240	670	193000	220	63500	130	37500	290
AUG. 1974.....	138430	1070	580	217000	180	67300	110	41100	260
SEPT 1974.....	720370	338	190	370000	34	66100	30	58300	100
TOTAL	5711480	**	**	5080000	**	1340000	**	803000	**
WTD.AVG.	15647	601	330	**	87	**	52	**	160

RED RIVER BASIN

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07336820 RED RIVER NEAR DEKALB, TEX.--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	470	722	492	714	322	728	808	564	309	1100	1380	1170
2	525	543	671	628	393	712	802	500	525	1150	1400	972
3	659	371	730	700	647	669	766	376	786	1150	1400	958
4	705	372	737	773	809	655	834	354	762	1110	1410	601
5	762	382	769	851	748	647	791	581	777	1100	1440	518
6	931	434	543	950	809	637	711	683	808	1170	1390	376
7	1040	563	465	970	821	641	441	679	620	1260	1330	272
8	1000	449	497	887	731	659	464	781	518	1190	1340	280
9	841	482	584	823	722	637	470	855	542	1070	1240	363
10	849	558	663	745	810	630	450	924	556	1060	1220	338
11	885	702	730	596	815	752	440	920	414	1000	1220	258
12	971	749	807	603	969	952	417	959	358	953	1340	293
13	990	773	870	582	1040	550	452	1050	371	927	1390	183
14	608	857	912	683	944	257	523	1070	406	966	800	240
15	447	870	942	803	884	284	505	1100	451	1290	530	277
16	416	931	979	792	831	293	406	1070	429	1320	344	297
17	438	902	996	706	853	422	311	742	462	1380	495	233
18	499	931	1020	661	853	498	297	900	349	1360	860	224
19	818	970	1000	738	844	701	311	990	324	1280	1030	220
20	820	978	934	434	965	657	432	1020	301	1230	1030	233
21	824	886	830	442	961	696	500	1040	372	1320	1100	229
22	855	644	666	446	801	712	660	1120	322	1390	1180	418
23	967	593	756	410	686	729	360	1100	611	1350	1230	403
24	1040	426	756	489	742	944	333	967	736	1360	1390	451
25	1080	299	550	504	646	865	293	908	649	1320	1410	285
26	1110	310	443	760	561	770	320	838	717	1250	1390	207
27	1130	288	375	803	583	779	400	812	864	1390	1350	270
28	1130	326	415	794	605	810	474	912	860	1410	1400	259
29	1160	303	512	733	---	816	518	600	1090	1320	1280	490
30	1170	313	611	579	---	835	417	363	1100	1280	1200	537
31	807	---	686	472	---	813	---	352	---	1370	1180	---
MONTH	837	598	708	680	764	669	507	811	580	1220	1180	395

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	22.5	10.5	14.0	5.5	11.0	12.0	18.5	20.5	24.0	29.0	29.0	25.0
2	23.0	17.0	14.0	4.5	12.0	14.0	18.0	20.5	25.0	28.0	---	25.0
3	23.5	16.5	14.0	---	13.0	16.0	18.5	21.0	25.5	28.0	---	23.0
4	24.5	16.5	14.0	4.0	11.5	18.0	15.5	21.5	25.0	28.5	29.0	22.0
5	24.0	16.0	13.0	3.5	11.0	18.0	15.0	21.0	24.5	28.0	27.5	21.5
6	24.5	14.5	11.5	4.0	12.5	19.0	15.0	20.0	25.0	29.0	27.0	22.0
7	24.0	14.0	11.0	4.0	10.0	19.5	15.5	20.5	24.5	29.5	27.0	22.5
8	24.5	14.5	10.0	5.0	7.5	20.0	15.5	21.0	24.0	29.5	27.5	23.0
9	24.0	14.0	10.0	5.5	6.5	20.5	---	22.0	24.0	29.0	26.5	23.0
10	24.5	12.5	10.0	5.0	7.0	21.0	---	22.0	24.0	29.5	27.0	23.0
11	24.0	12.0	---	3.5	8.0	21.0	---	22.5	24.0	29.5	25.5	22.0
12	23.0	13.0	10.5	3.0	8.5	20.0	17.5	23.5	24.5	30.0	26.0	23.5
13	22.5	14.0	11.0	2.5	10.5	18.0	18.0	23.5	24.5	30.5	26.0	23.0
14	21.5	15.0	10.0	3.0	13.0	16.5	18.5	23.5	25.0	30.5	25.0	22.0
15	21.5	17.0	10.0	4.0	13.0	16.5	18.0	23.5	25.5	30.0	26.5	22.0
16	20.5	15.5	9.0	6.0	12.0	15.5	18.0	24.0	25.5	30.5	27.0	22.5
17	20.0	15.0	8.5	8.5	12.0	15.0	17.5	24.5	25.0	31.0	27.5	21.0
18	20.0	15.5	8.0	10.0	12.5	16.0	18.0	24.5	25.0	31.0	28.0	21.0
19	20.5	16.5	9.0	11.5	11.5	17.5	19.0	25.0	25.0	31.5	28.5	21.5
20	---	17.5	7.0	11.5	11.5	17.0	20.0	25.5	26.0	31.5	28.5	22.0
21	21.0	15.0	6.0	10.5	13.0	14.0	20.5	25.5	26.5	31.5	29.0	22.5
22	22.5	15.0	5.5	11.5	10.0	13.0	20.0	25.0	27.0	31.5	29.0	21.5
23	21.0	16.5	7.0	10.0	10.0	14.0	19.5	25.0	28.0	32.0	29.0	21.5
24	20.5	17.0	9.0	9.5	9.0	10.5	19.5	26.0	27.0	31.5	29.0	20.0
25	21.0	17.0	9.0	8.5	8.0	9.5	19.5	26.0	26.0	29.0	29.0	19.0
26	21.0	17.0	8.0	9.0	8.0	10.0	---	25.0	26.0	29.5	28.0	18.0
27	21.0	17.0	7.5	11.0	8.5	11.5	---	24.0	25.5	30.0	27.0	18.0
28	19.5	15.0	7.5	11.0	10.0	13.0	22.5	25.0	26.0	30.0	27.0	18.5
29	18.0	14.0	9.0	10.5	---	14.0	21.0	25.0	26.5	30.5	27.5	19.0
30	17.5	14.0	8.5	10.0	---	15.0	21.5	25.5	---	29.0	26.5	19.0
31	17.0	---	8.0	10.0	---	16.5	---	26.0	---	28.0	26.0	---
MONTH	22.0	15.0	9.5	7.0	10.5	16.0	18.5	23.5	25.5	30.0	27.5	21.5

RED RIVER BASIN

07342500 SOUTH SULPHUR RIVER NEAR COOPER, TEX.

LOCATION.--Lat 33°21'20", long 95°35'39", Delta County, at gaging station at bridge on State Highways 19 and 154, 1.0 mile (1.6 km) downstream from Big Creek, 1.0 mile (1.6 km) upstream from Brushy Creek, and 5.6 miles (9.0 km) southeast of Cooper.

DRAINAGE AREA.--527 mi² (1,365 km²).

PERIOD OF RECORD.--Chemical analyses: October 1958 to September 1966, October 1967 to September 1974.
Water temperatures: October 1958 to September 1966, October 1967 to September 1974.

EXTREMES.--October 1973 to September 1974:

Specific conductance: Maximum daily, 961 micromhos Apr. 20; minimum daily, 113 micromhos Nov. 1.
Water temperatures: Maximum, 29.0°C July 7; minimum, 1.0°C Jan. 11, 12.

Period of record:

Specific conductance: Maximum daily, 4,710 micromhos Aug. 14, 1973; minimum daily, 92 micromhos Dec. 11, 1960.
Water temperatures: Maximum, 36.0°C Aug. 6, 1960, Aug. 10, 1962; minimum, freezing point on Jan. 31, 1966, Jan. 11-13, 1973.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO ₂) (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 (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)
OCT.										
05...	0725	17	11	35	3.9	15	5.0	136	0	19
NOV.										
16...	0900	20	14	61	6.7	28	5.1	222	0	36
DEC.										
19...	1600	194	10	74	6.2	62	6.0	217	0	42
JAN.										
26...	1500	385	7.6	41	4.1	18	3.6	127	0	31
FEB.										
24...	0835	204	7.3	50	5.3	25	3.4	154	0	46
MAR.										
17...	1225	27	8.9	51	5.8	24	4.4	174	0	38
APR.										
28...	1250	51	9.9	40	4.3	14	4.2	144	0	23
MAY										
31...	1235	11	7.5	35	3.6	27	4.0	131	0	31
JUNE										
10...	1730	17400	8.9	16	1.2	7.4	3.1	54	0	7.2
JULY										
31...	0720	.21	9.9	82	8.9	36	5.5	294	0	43
AUG.										
31...	0800	56	9.6	36	4.8	62	4.5	158	0	72
SEP.										
09...	1310	6.3	7.7	27	2.3	14	2.9	95	0	14

DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	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)
OCT.									
05...	12	.2	168	100	0	.6	280	7.1	23.0
NOV.									
16...	20	--	280	180	0	.9	485	7.7	15.0
DEC.									
19...	88	--	395	210	32	1.9	708	7.3	7.0
JAN.									
26...	10	--	178	120	15	.7	305	7.4	14.0
FEB.									
24...	17	--	230	150	20	.9	426	7.2	9.0
MAR.									
17...	17	--	235	150	9	.9	412	7.5	15.5
APR.									
28...	9.2	--	176	120	2	.6	296	7.1	21.0
MAY									
31...	16	--	189	100	0	1.2	334	7.7	23.0
JUNE									
10...	5.1	--	76	45	1	.5	133	6.8	27.0
JULY									
31...	36	--	366	240	0	1.0	641	6.4	25.0
AUG.									
31...	38	--	305	110	0	2.6	537	7.1	25.0
SEP.									
09...	7.7	--	122	77	0	.7	225	7.0	21.0

RED RIVER BASIN

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07342500 SOUTH SULPHUR RIVER NEAR COOPER, TEX.--Continued

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

MONTH	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCT- ANCE (MICRO- MHOS)	DIS- SOLVED SOLIDS (MG/L)	DIS- SOLVED SOLIDS (TONS)	DIS- SOLVED CHLORIDE (MG/L)	DIS- SOLVED CHLORIDE (TONS)	DIS- SOLVED SULFATE (MG/L)	DIS- SOLVED SULFATE (TONS)	HARDNESS (CA+MG) (MG/L)
OCT. 1973.....	39468	186	110	11700	6.1	650	12	1280	64
NOV. 1973.....	49695	167	97	13000	5.3	711	10	1340	57
DEC. 1973.....	18726	214	120	6070	7.3	369	16	809	75
JAN. 1974.....	38601	199	120	12500	6.7	698	14	1460	69
FEB. 1974.....	2007	612	350	1900	41	222	43	233	230
MAR. 1974.....	4690	303	170	2150	11	139	26	329	110
APR. 1974.....	43382	170	99	11600	5.4	633	10	1170	58
MAY 1974.....	7329	310	180	3560	11	218	27	534	110
JUNE 1974.....	56905	168	97	14900	5.4	814	10	1540	57
JULY 1974.....	60	484	280	45	20	3.3	41	6.7	140
AUG. 1974.....	283	594	340	260	38	29	42	32	220
SEPT 1974.....	37328	215	120	12100	7.4	746	16	1610	75
TOTAL	298477	**	**	89800	**	5230	**	10300	**
WTU.AVG.	817	192	110	**	6.5	**	13	**	66

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	192	113	301	445	393	476	745	332	160	409	627	294
2	220	145	337	475	443	488	766	272	185	415	607	400
3	244	167	250	509	491	519	785	300	206	425	603	203
4	266	165	191	536	518	542	799	376	224	435	628	238
5	280	132	178	569	557	555	808	427	240	444	644	209
6	291	176	199	610	593	572	820	427	249	449	615	203
7	304	192	253	633	630	596	832	448	281	459	617	207
8	342	231	290	687	661	611	848	470	213	465	626	216
9	363	264	320	710	685	634	861	488	159	473	632	220
10	356	312	352	180	710	651	878	505	133	477	618	229
11	337	349	388	151	743	212	888	524	147	487	594	436
12	250	378	419	153	753	222	865	548	179	490	431	255
13	191	404	455	185	775	389	885	566	199	495	638	143
14	200	434	488	295	791	319	918	580	212	501	761	247
15	177	454	520	342	815	345	922	591	264	498	785	247
16	200	480	534	362	830	373	900	609	268	490	807	270
17	257	512	567	370	870	404	918	620	275	481	824	324
18	249	527	592	402	873	433	933	629	256	489	859	182
19	285	542	500	187	902	462	941	639	234	489	882	181
20	313	559	418	163	913	491	961	651	231	532	878	209
21	335	270	576	217	924	519	600	649	266	559	851	337
22	356	292	631	275	728	537	178	663	297	576	820	218
23	376	310	411	314	587	558	148	674	309	590	794	229
24	392	328	176	361	421	596	169	681	326	601	766	276
25	407	182	187	419	407	621	206	690	342	603	743	277
26	423	176	224	446	410	637	186	373	354	613	725	188
27	280	189	235	377	430	653	221	259	367	622	690	186
28	164	188	288	304	444	677	289	347	381	628	573	208
29	174	222	327	317	---	692	331	301	394	632	466	256
30	205	274	372	336	---	712	361	317	402	619	581	277
31	118	---	409	359	---	723	---	334	---	641	537	---
MONTH	276	299	367	377	653	523	665	493	258	519	685	246

RED RIVER BASIN

07342500 SOUTH SULPHUR RIVER NEAR COOPER, TEX.--Continued

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	16.0	12.0	5.0	11.0	15.0	20.0	20.0	21.0	25.0	25.0	25.0
2	22.0	17.0	12.0	4.0	13.0	15.0	19.0	20.0	22.0	25.0	25.0	25.0
3	23.0	16.0	14.0	4.0	13.0	19.0	20.0	21.0	23.0	26.0	26.0	21.0
4	23.0	17.0	14.0	2.0	11.0	19.0	18.0	23.0	24.0	26.0	25.0	21.0
5	23.0	16.0	10.0	3.0	12.0	20.0	15.0	22.0	24.0	25.0	24.0	20.0
6	23.0	14.0	10.0	5.0	12.0	21.0	15.0	21.0	25.0	26.0	25.0	19.0
7	23.0	14.0	8.0	3.0	10.0	21.0	17.0	20.0	25.0	29.0	24.0	19.0
8	23.0	14.0	7.0	5.0	8.0	21.0	17.0	21.0	23.0	26.0	25.0	20.0
9	23.0	14.0	8.0	5.0	9.0	21.0	16.0	22.0	24.0	27.0	25.0	21.0
10	24.0	13.0	6.0	3.0	9.0	22.0	16.0	23.0	27.0	26.0	25.0	22.0
11	23.0	12.0	6.0	1.0	9.0	19.0	17.0	23.0	24.0	26.0	24.0	22.0
12	21.0	12.0	8.0	1.0	8.0	19.0	16.0	23.0	25.0	26.0	24.0	23.0
13	21.0	14.0	9.0	2.0	11.0	19.0	19.0	23.0	24.0	26.0	25.0	23.0
14	21.0	15.0	8.0	4.0	13.0	17.0	19.0	24.0	24.0	27.0	24.0	21.0
15	21.0	17.0	9.0	5.0	13.0	18.0	18.0	25.0	25.0	26.0	25.0	21.0
16	20.0	15.0	8.0	7.0	12.0	16.0	17.0	25.0	26.0	27.0	26.0	21.0
17	19.0	14.0	6.0	9.0	14.0	15.0	16.0	25.0	24.0	26.0	26.0	21.0
18	18.0	16.0	7.0	12.0	13.0	17.0	17.0	25.0	25.0	27.0	26.0	21.0
19	17.0	17.0	9.0	11.0	13.0	19.0	19.0	25.0	25.0	27.0	26.0	21.0
20	17.0	17.0	6.0	11.0	15.0	17.0	20.0	25.0	26.0	27.0	27.0	22.0
21	17.0	15.0	4.0	10.0	14.0	14.0	21.0	25.0	27.0	27.0	26.0	23.0
22	17.0	15.0	4.0	11.0	12.0	13.0	18.0	25.0	27.0	27.0	26.0	22.0
23	17.0	16.0	6.0	10.0	11.0	15.0	18.0	24.0	27.0	28.0	25.0	20.0
24	17.0	18.0	10.0	10.0	9.0	11.0	20.0	25.0	25.0	28.0	25.0	19.0
25	18.0	17.0	8.0	9.0	8.0	10.0	20.0	25.0	24.0	26.0	25.0	15.0
26	19.0	17.0	7.0	9.0	9.0	10.0	20.0	21.0	23.0	27.0	25.0	16.0
27	19.0	17.0	7.0	11.0	11.0	13.0	21.0	21.0	22.0	27.0	25.0	17.0
28	16.0	13.0	7.0	11.0	13.0	14.0	21.0	22.0	22.0	26.0	26.0	20.0
29	15.0	12.0	8.0	10.0	---	14.0	21.0	23.0	23.0	25.0	25.0	19.0
30	15.0	12.0	8.0	10.0	---	15.0	21.0	25.0	24.0	26.0	25.0	18.0
31	16.0	---	8.0	12.0	---	17.0	---	23.0	---	25.0	25.0	---
MONTH	20.0	15.0	8.0	7.0	11.5	16.5	18.5	23.0	24.5	26.5	25.0	20.5

RED RIVER BASIN

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07343000 NORTH SULPHUR RIVER NEAR COOPER, TEX.

LOCATION.--Lat 33°28'25", long 95°35'15", Delta County, at gaging station at bridge on State Highways 19 and 24, 2.3 miles (3.7 km) upstream from Auds Creek, and 8.7 miles (14.0 km) northeast of Cooper.

DRAINAGE AREA.--276 mi² (715 km²).

PERIOD OF RECORD.--Chemical analyses: October 1967 to September 1974.

Water temperatures: October 1968 to September 1974.

EXTREMES.--October 1973 to September 1974:

Specific conductance: Maximum daily, 1,590 micromhos Aug. 6, 7; minimum daily, 230 micromhos Oct. 31.

Water temperatures: Maximum, 33.0°C Aug. 15; minimum, freezing point on several days during December and January.

Period of record:

Specific conductance (1968-74): Maximum daily, 2,290 micromhos Sept. 17, 1969; minimum daily, 191 micromhos Oct. 12, Dec. 10, 1971.

Water temperatures: Maximum, 35.0°C June 22, 1970; minimum, freezing point on several days during winter months.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	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)	DIS- SOLVED SULFATE (SO4) (MG/L)
OCT. 16...	0900	1470	12	60	4.2	20	3.4	188	0	43
NOV. 16...	1410	35	12	99	8.7	58	3.1	249	0	140
DEC. 19...	1300	2410	8.1	76	6.5	35	4.0	222	0	100
JAN. 28...	1821	210	7.4	62	5.7	30	2.9	179	0	80
FEB. 02...	0815	43	7.6	100	9.1	50	2.7	245	0	130
MAR. 17...	1025	12	4.8	100	11	74	2.8	258	0	150
APR. 28...	1025	16	6.5	81	7.7	51	3.3	186	0	130
MAY 31...	1540	4120	7.4	45	1.2	8.9	2.1	132	0	16
JUNE 10...	1650	249	9.3	52	3.6	18	2.9	146	0	47
JULY 31...	0830	.03	4.9	110	16	180	4.1	149	0	340
AUG. 31...	0715	23	4.5	120	14	130	4.3	110	0	360
SEP. 09...	1525	4.5	7.0	60	5.4	47	2.1	127	0	110

DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	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)
OCT. 16...	13	.4	248	170	13	.7	390	7.5	--
NOV. 16...	42	--	486	280	79	1.5	786	8.0	18.0
DEC. 19...	22	--	361	220	34	1.0	592	7.4	7.0
JAN. 28...	14	--	290	180	31	1.0	484	8.0	10.0
FEB. 02...	40	--	460	290	86	1.3	756	7.7	14.0
MAR. 17...	56	--	526	300	83	1.9	913	7.9	12.0
APR. 28...	37	--	408	230	77	1.5	684	8.1	22.0
MAY 31...	6.1	--	152	120	9	.4	270	7.6	20.0
JUNE 10...	10	--	215	140	25	.7	375	7.5	28.0
JULY 31...	180	--	908	340	220	4.2	1450	7.6	24.0
AUG. 31...	110	--	797	360	270	3.0	1270	7.4	24.0
SEP. 09...	35	--	329	170	68	1.6	576	7.8	21.0

RED RIVER BASIN

07343000 NORTH SULPHUR RIVER NEAR COOPER, TEX.--Continued

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

MONTH	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCT- ANCE (MICRO- MHOS)	DIS- SOLVED SOLIDS (MG/L)	DIS- SOLVED SOLIDS (TONS)	DIS- SOLVED CHLORIDE (MG/L)	DIS- SOLVED CHLORIDE (TONS)	DIS- SOLVED SULFATE (MG/L)	DIS- SOLVED SULFATE (TONS)	HARDNESS (CA+MG) (MG/L)
OCT. 1973.....	38254	282	160	16500	6.1	630	21	2170	120
NOV. 1973.....	26679	327	190	13700	9.5	684	33	2380	140
DEC. 1973.....	8736	356	210	4950	12	243	40	943	140
JAN. 1974.....	10049	421	250	6780	17	461	56	1520	160
FEB. 1974.....	1371	593	360	1330	29	107	100	370	210
MAR. 1974.....	753	796	490	996	45	91	150	305	270
APR. 1974.....	8407	453	270	6130	19	431	64	1450	170
MAY 1974.....	5285	446	270	3850	18	257	63	899	170
JUNE 1974.....	25012	358	210	14200	12	410	40	2700	150
JULY 1974.....	50	1090	670	90	67	9.1	230	31	350
AUG. 1974.....	200	1060	660	357	65	35	220	119	350
SEPT 1974.....	11908	366	220	7070	12	386	42	1350	150
TOTAL	136705	**	**	76000	**	4140	**	14200	**
WTD.AVG.	374	351	210	**	11	**	33	**	140

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	663	357	722	824	808	827	986	400	374	890	1470	455
2	592	480	730	872	794	781	934	363	375	924	1340	365
3	625	569	300	886	794	856	991	447	445	912	1280	400
4	647	276	284	958	769	879	973	549	499	986	1530	458
5	688	332	413	911	802	869	991	590	331	1020	1580	500
6	730	461	527	919	811	907	1060	656	348	1040	1590	526
7	757	555	628	886	797	938	1080	660	295	1060	1590	546
8	733	625	698	893	845	953	1090	656	379	1050	1550	549
9	752	666	746	893	806	930	1080	697	393	1070	1580	577
10	771	681	724	338	812	930	1130	701	337	1100	1560	591
11	762	710	801	361	842	645	1140	715	453	1120	878	557
12	339	713	841	460	862	672	919	741	531	1140	756	717
13	293	736	838	585	886	674	907	761	538	1160	763	399
14	369	735	819	646	915	755	903	785	580	1180	787	441
15	468	786	832	610	914	818	927	814	591	1210	798	506
16	390	755	847	649	892	872	968	826	637	1240	815	571
17	459	759	863	703	907	882	1130	854	467	1260	836	393
18	537	770	850	742	896	938	1030	878	535	1260	868	404
19	604	783	464	288	918	966	1080	910	367	1290	---	491
20	651	331	415	404	922	957	1140	937	431	1330	---	538
21	689	342	495	551	300	949	450	965	505	1360	---	415
22	714	475	587	643	527	893	331	987	542	1360	---	430
23	721	567	300	708	597	900	425	1010	611	1360	---	499
24	724	407	301	755	683	938	499	1040	657	1330	---	557
25	732	332	398	743	749	949	577	1060	705	1360	---	300
26	755	336	519	713	809	962	646	363	757	1390	1040	329
27	269	390	611	454	865	978	677	377	801	1410	1060	428
28	413	498	686	481	885	1010	685	436	847	1420	979	495
29	314	605	713	578	---	1020	689	496	884	1440	1040	546
30	519	683	782	683	---	983	695	552	909	1430	1110	595
31	230	---	813	752	---	974	---	593	---	1460	1260	---
MONTH	578	559	631	675	800	890	871	704	537	1210	1160	486

RED RIVER BASIN

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07343000 NORTH SULPHUR RIVER NEAR COOPER, TEX.--Continued

TEMPERATURE (DFG. 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	13.0	10.0	0.0	13.0	14.0	19.0	19.0	20.0	24.0	24.0	22.0
2	22.6	15.0	12.0	0.0	14.0	16.0	16.0	18.0	24.0	24.0	30.0	23.0
3	23.0	15.0	15.0	0.0	8.0	17.0	18.0	22.0	23.0	25.0	27.0	---
4	24.0	16.0	11.0	0.0	9.0	18.0	12.0	28.0	23.0	25.0	25.0	19.0
5	21.0	14.0	7.0	7.0	9.0	18.0	10.0	23.0	20.0	25.0	29.0	18.0
6	22.0	11.0	6.0	8.0	9.0	18.0	12.0	18.0	25.0	26.0	24.0	19.0
7	23.0	11.0	5.0	3.0	6.0	19.0	18.0	20.0	20.0	25.0	24.0	21.0
8	23.0	14.0	4.0	5.0	3.0	18.0	17.0	21.0	22.0	26.0	25.0	21.0
9	22.0	13.0	6.0	5.0	8.0	18.0	11.0	22.0	21.0	26.0	25.0	23.0
10	23.0	10.0	5.0	2.0	4.0	20.0	12.0	23.0	25.0	25.0	24.0	22.0
11	22.0	10.0	5.0	0.0	5.0	18.0	16.0	23.0	24.0	25.0	22.0	27.0
12	22.0	11.0	9.0	0.0	8.0	17.0	15.0	22.0	24.0	28.0	24.0	20.0
13	20.0	14.0	9.0	6.0	13.0	14.0	19.0	22.0	28.0	26.0	31.0	21.0
14	19.0	18.0	8.0	4.0	16.0	13.0	15.0	23.0	25.0	29.0	30.0	19.0
15	20.0	18.0	6.0	6.0	14.0	14.0	15.0	24.0	27.0	25.0	33.0	20.0
16	---	18.0	5.0	9.0	10.0	14.0	15.0	25.0	26.0	26.0	26.0	22.0
17	16.0	12.0	3.0	11.0	10.0	12.0	18.0	24.0	24.0	25.0	26.0	20.0
18	15.0	16.0	5.0	15.0	11.0	17.0	15.0	25.0	22.0	27.0	23.0	20.0
19	17.0	18.0	6.0	10.0	9.0	19.0	16.0	24.0	25.0	27.0	---	21.0
20	---	16.0	0.0	9.0	9.0	14.0	17.0	24.0	27.0	25.0	---	24.0
21	17.0	11.0	1.0	13.0	12.0	9.0	20.0	23.0	27.0	27.0	---	21.0
22	17.0	12.0	3.0	12.0	5.0	10.0	17.0	28.0	26.0	27.0	---	18.0
23	18.0	18.0	7.0	8.0	7.0	12.0	18.0	22.0	27.0	27.0	---	17.0
24	18.0	21.0	9.0	7.0	5.0	6.0	19.0	23.0	24.0	25.0	---	16.0
25	18.0	15.0	6.0	7.0	5.0	5.0	18.0	23.0	23.0	25.0	---	15.0
26	20.0	15.0	5.0	7.0	5.0	7.0	19.0	20.0	23.0	26.0	24.0	16.0
27	17.0	15.0	6.0	9.0	8.0	12.0	19.0	20.0	22.0	25.0	24.0	18.0
28	12.0	9.0	6.0	10.0	10.0	15.0	21.0	22.0	23.0	25.0	26.0	21.0
29	15.0	9.0	9.0	12.0	---	14.0	20.0	23.0	24.0	24.0	25.0	18.0
30	13.0	9.0	8.0	7.0	---	12.0	20.0	25.0	23.0	23.0	25.0	17.0
31	15.0	---	7.0	9.0	---	17.0	---	24.0	---	24.0	24.0	---
MONTH	19.0	14.0	6.5	6.5	9.0	14.5	16.5	22.5	24.0	25.5	---	20.0

07343200 SULPHUR RIVER NEAR TALCO, TEX.

LOCATION.--Lat 33°23'11", long 95°07'57", Titus County, at gaging station at bridge on U.S. Highway 271, 2.2 miles (3.5 km) northwest of Talco, and 3.2 miles (5.1 km) downstream from Mustang Creek.

DRAINAGE AREA.--1,365 mi² (3,535 km²).

PERIOD OF RECORD.--Chemical analyses: October 1966 to September 1974.

Chemical and biochemical analyses: October 1967 to September 1974.

Pesticide analyses: January 1969 to September 1974.

Water temperatures: October 1966 to September 1974.

EXTREMES.--October 1973 to September 1974:

Specific conductance: Maximum daily, 1,160 micromhos Aug. 13; minimum daily, 100 micromhos Sept. 11.

Water temperatures: Maximum, 29.5°C July 24; minimum, 3.0°C Jan. 11-14.

Period of record:

Specific conductance: Maximum daily, 1,230 micromhos Aug. 18, 1972; minimum daily, 100 micromhos Sept. 11, 1974.

Water temperatures: Maximum, 34.0°C July 14, 15, 1969; minimum, freezing point Jan. 7, 8, 10, 12, 13, 1970.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SI02) (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNE-SIUM (MG)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED SODIUM PLUS POTAS-SIUM (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HC03) (MG/L)	CAR-BONATE (C03) (MG/L)	DIS-SOLVED SULFATE (S04) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)
OCT.												
17...	1905	11900	12	29	2.6	7.5	--	4.4	105	0	13	5.1
30...	1500	6020	9.2	30	1.7	--	10	--	94	0	16	6.8
NOV.												
15...	1405	135	10	75	5.8	30	--	4.0	220	0	65	22
DEC.												
11...	1200	171	9.4	66	4.8	25	--	3.5	198	0	48	19
16...	1110	76	10	88	6.4	44	--	4.3	263	0	85	30
JAN.												
26...	0940	341	8.1	64	5.7	25	--	3.4	202	0	54	17
FEB.												
02...	1505	219	8.2	70	9.8	29	--	3.5	199	0	57	21
13...	1800	76	7.2	100	9.5	62	--	3.6	288	0	110	48
MAR.												
12...	1255	628	6.5	90	9.4	66	--	3.5	232	0	140	53
APR.												
17...	1830	41	6.3	100	11	79	--	3.8	280	0	150	65
MAY												
17...	0740	23	8.8	84	7.8	47	--	4.0	236	0	96	36
JUNE												
11...	1245	15200	8.0	27	1.7	6.3	--	3.8	86	0	10	3.8
JULY												
05...	0730	7.3	12	83	6.7	46	--	5.4	243	0	73	33
AUG.												
20...	1130	5.3	7.1	79	7.7	62	--	4.4	200	0	110	54
SEP.												
13...	1425	2640	--	24	1.5	6.5	--	2.5	77	0	14	4.2

	DIS- SOLVED FLUO- RIDE (F)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	TOTAL NON-FILT- TABLE RESIDUE (MG/L)	VOL. NON-FILT- TABLE RESIDUE (MG/L)	HARD- NESS (CA MG/L)
OCT.				--	--	--	--	126	--	--	83
17...	.2	.07	--	--	--	--	--	120	--	--	82
30...	.3	.07	.00	.02	.34	--	.50		300	56	
NOV.				--	--	--	--	320	--	--	210
15...	--	--	--	--	--	--	--		--	--	
DEC.				--	--	--	--	397	--	--	250
11...	--	.20	.00	.12	.30	--	.14	274	108	23	190
16...	--	--	--	--	--	--	--		--	--	
JAN.				--	--	--	--	276	--	--	180
26...	.2	--	--	--	--	--	--		--	--	
FEB.				--	--	--	--	297	--	--	220
02...	--	--	--	--	--	--	--	484	46	4	290
13...	--	.02	.00	.09	.04	--	.12				
MAR.				--	--	--	--	483	--	--	260
12...	--	--	--	--	--	--	--		--	--	
APR.				--	--	--	--	555	86	10	300
17...	--	.00	.00	.06	.51	.57	.08				
MAY				--	--	--	--	400	--	--	240
17...	--	--	--	--	--	--	--		--	--	
JUNE				--	--	--	--	103	426	78	74
11...	--	.32	.02	.09	1.3	1.4	.43				
JULY				--	--	--	--	379	--	--	240
05...	--	--	--	--	--	--	--		--	--	
AUG.				--	--	--	--	423	56	3	230
20...	--	.00	.00	.07	1.0	1.1	.11				
SEP.				--	--	--	--	--	--	--	60
13...	--	--	--	--	--	--	--		--	--	

RED RIVER BASIN

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07343200 SULPHUR RIVER NEAR TALCO, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	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)	COLOR (PLAT- INUM- COBALT UNITS)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT.											
17...	0	.4	204	7.4	18.0	--	--	--	--	--	--
30...	5	.5	240	6.9	16.0	120	90	9.0	90	3.3	19
NOV.											
15...	31	.9	539	8.2	17.0	--	--	--	--	--	--
DEC.											
11...	23	.8	474	7.0	7.5	20	60	14.8	123	.8	10
16...	30	1.2	665	7.7	7.0	--	--	--	--	--	--
JAN.											
26...	18	.8	464	8.1	9.5	--	--	--	--	--	--
FEB.											
02...	52	.9	499	8.0	13.0	--	--	--	--	--	--
13...	54	1.6	821	7.6	13.0	20	25	10.5	99	2.2	.5
MAR.											
12...	73	1.8	807	8.2	19.5	--	--	--	--	--	--
APR.											
17...	67	2.0	917	7.5	20.5	20	15	4.2	90	1.1	3.5
MAY											
17...	48	1.3	676	7.8	26.0	--	--	--	--	--	--
JUNE											
11...	4	.3	189	6.5	24.0	100	200	6.9	81	2.3	6.9
JULY											
05...	36	1.3	624	8.1	26.0	--	--	--	--	--	--
AUG.											
20...	65	1.8	746	7.1	29.0	5	25	6.0	77	1.3	6.3
SEP.											
13...	3	.3	181	6.7	18.5	--	--	--	--	--	--

DATE	TIME	DIS- SOLVED ALUM- INUM (AL) (UG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED CAU- MIUM (CD) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	DIS- SOLVED COBALT (CO) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)
DEC.								
11...	1200	10	10	80	1	0	1	10
FEB.								
13...	1800	40	2	90	1	0	0	9
APR.								
17...	1830	40	2	90	0	10	0	4

DATE	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	DIS- SOLVED LITHIUM (LI) (UG/L)	DIS- SOLVED MANG- ANESE (MN) (UG/L)	DIS- SOLVED MERCURY (HG) (UG/L)	DIS- SOLVED NICKEL (NI) (UG/L)	DIS- SOLVED STRON- TIUM (SR) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)
DEC.								
11...	170	5	0	50	.0	0	650	40
FEB.								
13...	80	4	10	130	.1	10	1100	20
APR.								
17...	50	3	20	50	.0	1	1300	0

RED RIVER BASIN

07343200 SULPHUR RIVER NEAR TALCO, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	TEMPER- ATURE (DEG C)	ALDRIN (UG/L)	ALDRIN IN BOTTOM DE- POSITS (UG/KG)	DDD (UG/L)	DDD IN BOTTOM DE- POSITS (UG/KG)	DDE (UG/L)	DDE IN BOTTOM DE- POSITS (UG/KG)	DDT (UG/L)	DDT IN BOTTOM DE- POSITS (UG/KG)	DI- ELDRIN (UG/L)
OCT. 30...	1500	16.0	.00	.0	.00	8.6	.00	14	.00	1.6	.00
FEB. 13...	1800	13.0	.00	.0	.00	.0	.00	1.1	.00	.0	.00
APR. 17...	1830	20.5	.00	.0	.00	6.6	.00	12	.00	4.3	.00
AUG. 20...	1130	29.0	.00	.0	.00	8.8	.00	24	.00	8.3	.00

DATE	DI- ELDRIN IN BOTTOM DE- POSITS (UG/KG)	ENDRIN (UG/L)	ENDRIN IN BOTTOM DE- POSITS (UG/KG)	HEPTA- CHLOR (UG/L)	HEPTA- CHLOR IN BOTTOM DE- POSITS (UG/KG)	HEPTA- CHLOR EPOXIDE (UG/L)	HEPTA- CHLOR EPOXIDE IN BOT- TOM DE- POSITS (UG/KG)	LINDANE (UG/L)	LINDANE IN BOTTOM DE- POSITS (UG/KG)	CHLOR- DANE (UG/L)
OCT. 30...	.0	.00	.0	.00	.0	.00	.0	.00	.0	.0
FEB. 13...	.0	.00	.0	.00	.0	.00	.0	.00	.0	.0
APR. 17...	.0	.00	.0	.00	.0	.00	.0	.00	.0	.0
AUG. 20...	.3	.00	.0	.00	.0	.00	.0	.00	.0	.0

DATE	CHLOR- DANE IN BOTTOM DE- POSITS (UG/KG)	PCB (UG/L)	PCB IN BOTTOM DE- POSITS (UG/KG)	DI- AZINON (UG/L)	MALA- THION (UG/L)	METHYL PARA- THION (UG/L)	PARA- THION (UG/L)	2,4-D (UG/L)	SILVEX (UG/L)	2,4,5-T (UG/L)
OCT. 30...	0	.0	0	.00	.00	.00	.00	.00	.00	.00
FEB. 13...	0	.0	0	.00	.00	.00	.00	.00	.00	.00
APR. 17...	0	.0	0	.00	.00	.00	.00	.00	.00	.00
AUG. 20...	0	.0	0	.00	.00	.00	.00	.00	.00	.00

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

MONTH	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCT- ANCE (MICRO- MHOS)	DIS- SOLVED SOLIDS (MG/L)	DIS- SOLVED SOLIDS (TONS)	DIS- SOLVED CHLORIDE (MG/L)	DIS- SOLVED CHLORIDE (TONS)	DIS- SOLVED SULFATE (MG/L)	DIS- SOLVED SULFATE (TONS)	HARDNESS (CA+MG) (MG/L)
OCT. 1973.....	127187	262	160	54900	7.0	2400	23	7900	100
NOV. 1973.....	192821	219	130	67700	5.6	2920	17	8850	87
DEC. 1973.....	70232	266	160	30300	7.2	1370	24	4550	110
JAN. 1974.....	87664	249	150	35500	6.6	1560	22	5210	99
FEB. 1974.....	6258	598	360	6080	30	507	71	1200	230
MAR. 1974.....	5681	492	290	4450	18	276	55	844	190
APR. 1974.....	55862	261	160	24100	7.0	1060	23	3470	100
MAY 1974.....	15252.69	391	230	9470	11	453	41	1690	150
JUNE 1974.....	144888	205	120	46900	5.1	2000	16	6260	82
JULY 1974.....	165.18	642	380	169	34	15.2	82	36.6	240
AUG. 1974.....	472.84	873	520	664	59	75.3	140	179	270
SEPT 1974.....	88385	212	130	31000	5.3	1260	16	3820	85
TOTAL	794868.48	**	**	311000	**	13900	**	44000	**
WTD.AVG.	2177.72	242	150	**	6.5	**	21	**	95

RED RIVER BASIN

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07343200 SULPHUR RIVER NEAR TALCO, TEX.--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	204	234	290	502	436	573	888	477	272	565	817	1150
2	232	150	322	539	486	602	899	389	242	597	811	312
3	284	155	411	575	541	643	960	388	224	238	750	285
4	308	172	344	609	589	673	1000	334	279	616	693	237
5	327	221	223	621	622	701	1030	351	288	627	770	261
6	399	150	202	643	647	735	1030	394	293	634	683	293
7	390	192	223	674	680	753	1010	471	269	678	733	286
8	410	215	280	717	705	776	614	478	180	664	765	313
9	415	275	346	743	729	792	977	503	178	695	814	328
10	442	289	413	728	746	804	991	540	223	727	844	359
11	471	316	459	246	771	801	1000	559	187	731	823	100
12	411	403	508	157	785	879	900	583	180	745	946	147
13	344	458	551	162	809	313	943	593	199	726	1160	221
14	278	500	590	180	824	287	1020	614	219	731	898	203
15	223	529	627	295	848	408	1070	642	238	750	1030	216
16	215	578	659	359	854	480	1050	659	265	779	835	245
17	204	608	701	385	881	483	973	676	278	787	750	266
18	249	654	680	435	884	513	896	689	376	760	719	286
19	301	626	550	366	891	557	863	667	395	784	717	234
20	295	550	362	238	902	586	915	705	293	771	717	214
21	339	365	257	204	891	607	939	718	247	822	738	224
22	403	314	308	211	690	657	442	700	324	750	750	341
23	439	330	379	247	413	716	288	723	354	765	740	271
24	482	350	316	331	601	775	190	742	384	768	750	257
25	508	349	210	411	468	889	187	720	404	748	735	302
26	536	252	197	464	529	907	209	403	435	804	735	102
27	535	265	231	429	519	903	233	330	465	799	776	216
28	332	192	262	356	530	893	276	276	481	790	789	218
29	229	190	317	345	---	827	302	321	508	863	770	227
30	208	230	394	346	---	862	358	350	536	623	733	263
31	266	---	459	375	---	875	---	371	---	680	802	---
MONTH	344	337	389	416	688	686	748	528	307	710	793	279

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

RED RIVER BASIN

07343480 WHITE OAK CREEK NEAR MOUNT VERNON, TEX.

LOCATION.--Lat 33°16'25", long 95°14'20", Franklin County, at bridge on State Highway 37 and 6.0 miles (9.7 km) north of Mount Vernon.

DRAINAGE AREA.--434 mi² (1,124 km²).

PERIOD OF RECORD.--Chemical analyses: October 1968 to September 1974.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISE- CHANGE (CFS)	DISE- SOLVED SILICA (SiO ₂) (MG/L)	DISE- SOLVED CAL- CIUM (CA) (MG/L)	DISE- SOLVED MAG- NE- SIUM (MG) (MG/L)	DISE- SOLVED SODIUM (NA) (MG/L)	DISE- SOLVED SODIUM PLUS POTAS- SIUM (K) (MG/L)	DISE- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)
OCT. 17...	1210	2230	11	8.0	1.7	--	4.7	--	22	0
NOV. 12...	1430	73	14	18	6.8	--	24	--	42	0
DEC. 15...	1255	60	15	22	11	36	--	6.3	58	0
FEB. 02...	1235	157	8.4	18	6.6	22	--	4.6	39	0
MAR. 12...	1035	510	6.6	13	5.6	18	--	6.2	35	0
APR. 23...	1700	5170	4.2	5.9	2.0	4.5	--	4.3	18	0
JUNE 04...	0945	50	6.8	12	3.9	17	--	6.5	44	0
SEP. 13...	1625	939	8.9	5.9	2.8	11	--	4.1	21	0

DATE	DISE- SOLVED SULFATE (SO ₄) (MG/L)	DISE- SOLVED CHLO- RIDE (CL) (MG/L)	DISE- SOLVED FLUO- RIDE (F) (MG/L)	DISE- SOLVED SOLIDS (SUM OF CONSTITU- ENTS) (MG/L)	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)
OCT. 17...	10	6.0	.1	52	27	9	.4	92	6.4	18.5
NOV. 12...	52	26	.2	162	73	39	1.2	283	6.7	13.5
DEC. 15...	77	37	--	233	100	53	1.6	384	7.1	7.0
FEB. 02...	50	23	--	152	72	40	1.1	264	7.1	11.0
MAR. 12...	38	21	--	125	56	27	1.1	229	6.4	18.0
APR. 23...	14	6.9	--	51	23	8	.4	84	6.6	19.5
JUNE 04...	29	16	--	113	46	10	1.1	201	6.9	22.0
SEP. 13...	12	10	--	71	26	9	.9	125	6.6	18.0

RED RIVER BASIN

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07343500 WHITE OAK CREEK NEAR TALCO, TEX.

LOCATION.--Lat 33°19'20", long 95°05'33", Titus County, at gaging station on U.S. Highway 271, 2.4 miles (3.9 km) upstream from Ripley Creek, and 2.7 miles (4.3 km) south of Talco.

DRAINAGE AREA.--494 mi² (1,279 km²).

PERIOD OF RECORD.--Chemical analyses: October 1967 to September 1974.
Water temperatures: October 1967 to September 1974.

EXTREMES.--October 1973 to September 1974:

Specific conductance: Maximum daily, 957 micromhos Apr. 12; minimum daily, 57 micromhos Nov. 2, June 11.
Water temperatures: Maximum, 29.0°C July 22-24; minimum, 2.5°C Jan. 11, 12.

Period of record:

Specific conductance: Maximum daily, 1,220 micromhos June 15, 1972; minimum daily, 33 micromhos May 16, 1969.
Water temperatures: Maximum, 34.0°C July 15, 1969; minimum, freezing point on Jan. 8, 1968, Jan. 10, 13, 14, 1970.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	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 SODIUM PLUS POTAS- SIUM (K) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)
OCT. 17...	1850	2730	7.5	6.0	2.4	4.4	--	4.6	24	0
NOV. 13...	0745	111	12	14	5.8	--	22	--	42	0
DEC. 16...	0920	77	14	20	8.5	29	--	6.0	53	0
JAN. 10...	1015	171	13	21	10	38	--	4.3	48	0
FEB. 02...	1750	206	7.8	15	5.4	19	--	4.5	37	0
MAR. 13...	1825	760	6.7	13	5.5	18	--	5.3	36	0
APR. 23...	1740	10000	3.8	5.2	2.1	4.8	--	3.4	17	0
MAY 31...	0750	86	7.9	11	4.3	16	--	6.3	34	0
JUNE 04...	1520	95	7.2	9.8	4.1	13	--	5.6	53	0
JULY 31...	0745	27	3.1	10	3.6	42	--	4.3	31	0
AUG. 31...	0810	9.4	7.6	17	5.3	82	--	4.8	59	0
SEP. 13...	1045	1350	6.7	4.2	1.6	4.9	--	3.6	16	0

DATE	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	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)
OCT. 17...	7.2	5.8	.1	50	25	5	.4	79	6.4	18.0
NOV. 13...	37	24	.1	136	59	24	1.2	225	7.0	13.5
DEC. 16...	62	32	--	198	85	41	1.4	334	7.1	7.5
JAN. 10...	75	47	.1	232	94	54	1.7	397	7.2	.0
FEB. 02...	40	22	--	132	60	29	1.1	226	6.9	11.5
MAR. 13...	34	22	--	122	55	26	1.1	225	6.7	--
APR. 23...	13	6.4	--	47	22	8	.4	77	6.1	18.5
MAY 31...	34	20	--	116	45	17	1.0	191	7.3	25.0
JUNE 04...	22	12	--	100	41	0	.9	168	6.8	24.0
JULY 31...	26	61	--	165	40	14	2.9	322	6.4	21.0
AUG. 31...	41	110	--	297	64	16	4.5	566	6.5	25.0
SEP. 13...	8.1	6.5	--	43	17	4	.5	77	5.9	18.0

RED RIVER BASIN

07343500 WHITE OAK CREEK NEAR TALCO, TEX.--Continued

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

MONTH	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCT- ANCE (MICRO- MHOS)	DIS- SOLVED SOLIDS (MG/L)	DIS- SOLVED SOLIDS (TONS)	DIS- SOLVED CHLORIDE (MG/L)	DIS- SOLVED CHLORIDE (TONS)	DIS- SOLVED SULFATE (MG/L)	DIS- SOLVED SULFATE (TONS)	HARDNESS (CA+MG) (MG/L)
OCT. 1973.....	22119	93	58	3460	7.1	424	12	717	27
NOV. 1973.....	76852	80	50	10400	5.6	1160	9.2	1910	24
DEC. 1973.....	36430	114	70	6890	9.6	944	16	1570	32
JAN. 1974.....	50743	102	63	8630	8.2	1120	13	1780	29
FEB. 1974.....	4955	281	170	2270	30	401	49	656	70
MAR. 1974.....	5464	249	150	2210	26	384	42	620	63
APR. 1974.....	32515	100	62	5440	7.9	694	13	1140	29
MAY 1974.....	3266	258	150	1320	27	238	44	388	65
JUNE 1974.....	35772	79	50	4830	5.4	522	9.0	869	24
JULY 1974.....	264	312	180	128	33	23	56	39	78
AUG. 1974.....	570	330	200	308	35	54	60	92	82
SEPT 1974.....	25998	105	65	4560	8.5	597	14	983	30
TOTAL	294949	**	**	50400	**	6560	**	10800	**
WTD.AVG.	808	102	63	**	8.2	**	14	**	29

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	74	74	90	227	192	270	552	212	236	234	328	329
2	75	57	94	260	218	296	576	220	200	551	294	280
3	95	62	113	282	238	319	582	283	222	244	255	181
4	115	68	121	293	263	353	567	297	216	247	252	158
5	121	65	130	311	283	377	587	281	138	256	279	186
6	130	69	119	336	291	403	604	274	147	263	276	167
7	141	71	103	356	304	405	606	269	150	269	272	172
8	186	72	108	371	322	415	885	263	61	267	360	188
9	162	84	111	388	335	430	637	272	62	278	481	179
10	168	110	129	200	343	433	641	293	62	293	581	175
11	175	161	168	88	351	353	645	305	57	298	524	100
12	184	197	204	73	359	242	957	312	70	299	596	59
13	130	225	231	70	370	236	516	319	76	303	481	68
14	103	248	263	66	384	176	532	332	87	299	329	93
15	87	267	301	75	395	157	467	340	104	304	450	100
16	80	287	335	97	411	169	449	345	126	311	100	82
17	79	305	353	126	433	198	465	352	160	315	168	90
18	83	326	370	170	458	236	470	362	173	320	192	77
19	92	340	200	215	458	275	477	382	187	324	210	92
20	98	350	142	129	453	312	480	391	175	328	210	96
21	109	313	124	106	410	346	475	399	218	334	206	93
22	135	260	121	92	310	383	101	410	162	343	206	90
23	152	211	126	99	292	421	87	426	164	343	210	101
24	168	160	127	108	229	437	76	419	179	347	214	120
25	180	139	98	131	219	480	73	413	191	342	217	115
26	193	127	90	182	217	472	85	754	202	377	221	226
27	204	98	94	193	227	474	100	280	210	412	224	108
28	145	81	104	224	247	490	123	329	214	406	223	103
29	146	84	109	173	---	509	154	112	218	401	228	105
30	104	87	127	169	---	518	201	171	224	319	247	119
31	74	---	181	176	---	542	---	191	---	284	569	---
MONTH	129	167	161	187	322	359	439	323	156	320	303	135

RED RIVER BASIN

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07343500 WHITE OAK CREEK NEAR TALCO, TEX.--Continued

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

RED RIVER BASIN

07343850 WHITE OAK CREEK NEAR OMAHA, TEX.

LOCATION.--Lat 33°16'30", long 94°44'30", Morris County, at bridge on U.S. Highway 259 and 6.2 miles (10.0 km) north of Omaha.

DRAINAGE AREA.--773 mi² (2,002 km²).

PERIOD OF RECORD.--Chemical analyses: October 1968 to September 1974.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	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 SODIUM PLUS POTAS- SIUM (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)
OCT.										
16...	1140	742	6.5	8.5	2.4	--	15	--	25	0
NOV.										
13...	1110	1770	6.2	7.5	2.3	--	7.6	--	23	0
DEC.										
16...	1520	152	12	15	6.9	24	--	5.1	39	0
JAN.										
31...	1735	1380	6.4	11	4.6	17	--	4.6	29	0
MAR.										
15...	0935	641	6.3	15	5.9	24	--	5.4	36	0
APR.										
26...	1230	9800	4.5	5.1	1.8	4.8	--	4.3	19	0
JUNE										
02...	1545	186	8.1	12	5.1	20	--	6.3	34	0
SEP.										
11...	1630	430	6.6	5.6	2.6	16	--	3.5	18	0

DATE	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITU- ENTS) (MG/L)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARU- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)
OCT.										
16...	16	18	.2	79	31	10	1.2	156	6.5	20.5
NOV.										
13...	13	8.5	.1	56	28	9	.6	100	6.4	13.0
DEC.										
16...	39	31	--	152	66	34	1.3	265	6.8	8.0
JAN.										
31...	30	18	--	106	46	23	1.1	185	6.8	12.0
MAR.										
15...	42	31	--	137	62	32	1.3	270	6.6	17.0
APR.										
26...	11	6.3	--	47	20	5	.5	79	6.4	19.0
JUNE										
02...	37	25	--	130	51	23	1.2	223	6.8	24.0
SEP.										
11...	17	21	--	81	25	10	1.4	147	6.7	21.0

07344500 BIG CYPRESS CREEK NEAR PITTSBURG, TEX.

LOCATION.--Lat 33°01'15", Long 94°52'55", Camp County, at gaging station at bridge on State Highway 11, 0.5 mile (0.8 km) upstream from Louisiana and Arkansas Railway Co. bridge, and 5.2 miles (8.4 km) east of Pittsburg.

DRAINAGE AREA.--366 mi² (948 km²).

PERIOD OF RECORD.--Chemical analyses: October 1967 to September 1974.
Water temperatures: October 1967 to September 1974.

EXTREMES.--October 1973 to September 1974:

Specific conductance: Maximum daily, 572 micromhos July 21; minimum daily, 84 micromhos Nov. 1.
Water temperatures: Maximum, 29.0°C July 20-23, 29; minimum, 5.0°C on several days during January.

Period of record:

Specific conductance (1968-69, 1971-74): Maximum daily, 941 micromhos Sept. 1, 1972; minimum daily, 69 micromhos July 30, 1969.
Water temperatures: Maximum, 32.0°C Aug. 20, 1969; minimum, 3.0°C Jan. 12, 1973.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	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)	DIS- SOLVED SULFATE (SO4) (MG/L)
OCT.										
18...	1130	836	9.1	8.0	3.4	9.0	5.6	24	0	16
NOV.										
13...	1110	245	14	13	6.0	17	4.3	39	0	24
DEC.										
13...	1220	245	13	13	6.0	19	4.4	39	0	29
JAN.										
31...	1035	990	6.0	10	4.5	13	3.6	29	0	22
FEB.										
01...	1335	851	5.8	9.4	4.3	14	3.0	32	0	24
MAR.										
14...	1250	115	12	16	7.3	30	3.9	38	0	43
APR.										
25...	1230	1900	5.3	8.8	4.0	9.7	4.1	26	0	19
MAY										
31...	1945	39	13	13	5.8	24	5.4	26	0	41
JUNE										
03...	1250	33	15	15	6.4	33	6.2	44	0	37
JULY										
31...	1940	21	11	20	6.8	55	9.1	62	0	45
AUG.										
31...	1100	340	6.2	6.2	1.5	12	3.9	12	0	17
SEP.										
12...	1400	1220	7.5	7.1	3.0	8.9	3.9	23	0	17

DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPF- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)
OCT.									
18...	17	.2	80	34	14	.7	123	6.9	18.0
NOV.									
13...	27	--	125	57	25	1.0	223	7.2	14.0
DEC.									
13...	27	--	131	57	25	1.1	223	6.9	10.0
JAN.									
31...	24	.1	97	43	20	.9	166	6.8	11.0
FEB.									
01...	16	--	92	41	15	1.0	163	7.9	14.5
MAR.									
14...	42	--	173	70	39	1.6	302	7.3	--
APR.									
25...	14	--	78	38	17	.7	142	6.4	18.0
MAY									
31...	37	--	152	56	35	1.4	265	6.7	26.5
JUNE									
03...	49	--	183	64	28	1.8	327	6.8	23.0
JULY									
31...	71	--	248	78	27	2.7	489	6.7	28.0
AUG.									
31...	14	--	67	22	12	1.1	129	6.4	24.0
SEP.									
12...	13	--	72	30	11	.7	131	6.1	19.5

07344500 BIG CYPRESS CREEK NEAR PITTSBURG, TEX.--Continued

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

MONTH	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCT- ANCE (MICRO- MHOS)	DIS- SOLVED SOLIDS (MG/L)	DIS- SOLVED SOLIDS (TONS)	DIS- SOLVED CHLORIDE (MG/L)	DIS- SOLVED CHLORIDE (TONS)	DIS- SOLVED SULFATE (MG/L)	DIS- SOLVED SULFATE (TONS)	HARDNESS (CA+MG) (MG/L)
OCT. 1973.....	6933	156	90	1680	20	374	21	393	39
NOV. 1973.....	31592	133	77	6570	17	1450	14	1540	35
DEC. 1973.....	21101	181	100	5700	23	1310	24	1370	43
JAN. 1974.....	23327	185	110	6930	23	1450	25	1570	44
FEB. 1974.....	7945	231	130	2790	29	622	31	665	52
MAR. 1974.....	2381	298	170	1090	42	270	40	257	64
APR. 1974.....	29402	135	78	6190	17	1350	14	1430	35
MAY 1974.....	5247	240	140	1980	30	425	32	453	54
JUNE 1974.....	14156	164	94	3590	21	203	22	841	40
JULY 1974.....	314	428	250	212	67	56	43	36	75
AUG. 1974.....	670	247	140	253	32	57	33	59	55
SEPT 1974.....	31942	135	78	6730	17	1470	14	1550	35
TOTAL	175009	**	**	43700	**	9540	**	10200	**
WTD.AVG.	479	161	93	**	20	**	22	**	40

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	401	84	154	220	169	282	327	208	285	329	443	108
2	328	86	163	225	185	287	333	228	306	342	406	101
3	300	102	173	230	200	287	333	247	325	346	413	108
4	276	123	162	235	216	283	342	229	296	350	457	130
5	316	87	175	240	216	283	347	246	208	365	503	163
6	341	100	169	254	218	299	328	262	291	375	500	180
7	402	148	186	264	229	300	326	230	300	411	475	198
8	297	172	186	250	234	288	354	229	147	432	450	209
9	279	148	194	249	236	293	353	218	137	409	438	219
10	263	180	205	220	237	290	343	221	132	409	439	240
11	235	213	223	195	242	278	331	225	144	417	511	160
12	269	215	218	142	245	354	364	230	155	424	516	140
13	238	226	228	169	261	304	340	234	156	438	536	132
14	168	229	242	177	257	295	520	238	170	449	495	150
15	164	239	244	184	270	275	317	242	190	480	455	140
16	161	245	248	204	293	271	325	249	195	512	425	130
17	146	268	238	213	291	267	336	255	200	531	409	122
18	123	247	244	221	272	266	342	259	206	510	369	110
19	149	220	231	180	276	269	333	263	228	519	380	127
20	163	217	200	162	304	299	340	267	216	519	388	142
21	176	226	175	155	275	291	330	256	243	572	384	98
22	196	235	180	174	257	309	122	250	232	512	383	136
23	211	139	171	182	264	307	96	321	233	503	393	138
24	233	145	158	190	252	305	137	339	233	513	417	148
25	246	151	160	199	231	304	142	337	231	489	440	131
26	262	129	168	194	238	291	157	260	255	357	455	131
27	257	129	176	227	258	324	171	278	257	396	472	149
28	235	123	172	169	273	322	185	355	286	469	486	165
29	207	192	185	158	---	332	191	341	301	542	470	172
30	190	147	200	167	---	333	199	240	305	518	170	179
31	88	---	213	166	---	335	---	265	---	487	127	---
MONTH	236	172	195	200	246	298	289	259	229	449	426	149

RED RIVER BASIN

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073445000 BIG CYPRESS CREEK NEAR PITTSBURG, TEX.--Continued

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	26.0	16.0	15.0	6.0	12.0	15.0	20.0	22.0	25.0	27.0	27.0	25.0
2	25.0	16.0	15.0	---	13.0	15.0	20.0	22.0	25.5	27.0	28.0	25.0
3	28.0	---	15.0	---	---	14.0	20.0	23.0	26.0	27.0	26.0	23.0
4	25.0	16.0	14.0	---	12.0	15.5	19.0	24.0	26.0	---	27.0	21.0
5	25.0	16.0	13.0	8.0	12.0	16.0	20.0	---	26.0	28.0	28.0	20.0
6	25.0	---	12.0	7.0	11.0	20.0	17.0	25.0	26.0	28.0	27.0	---
7	25.0	16.0	10.0	6.0	10.0	21.0	17.0	25.0	---	28.0	---	23.0
8	25.0	16.0	10.0	---	8.5	21.0	18.0	25.0	25.0	28.0	27.0	22.0
9	25.0	16.0	10.0	5.0	8.0	21.0	16.0	25.0	---	28.0	27.0	22.0
10	25.0	---	10.0	5.0	8.0	21.0	17.0	25.0	25.0	28.0	27.0	23.0
11	23.0	15.0	---	5.0	9.0	22.0	17.0	25.0	25.0	---	27.0	22.0
12	23.0	15.0	11.0	5.0	10.0	20.0	18.0	25.0	25.0	28.5	27.0	---
13	23.0	15.0	11.0	5.0	10.0	19.0	20.0	25.0	25.0	28.5	27.0	22.0
14	23.0	15.0	11.0	5.0	10.0	18.0	20.0	---	26.0	28.0	27.0	22.0
15	---	16.0	11.0	6.0	15.0	18.0	18.5	25.0	28.0	---	---	---
16	22.0	16.0	10.0	10.0	15.0	---	---	26.0	28.0	28.0	27.0	---
17	22.0	15.0	9.0	11.0	15.0	16.0	18.0	26.0	---	28.0	27.0	21.5
18	18.0	16.0	9.0	14.0	14.0	19.0	19.0	26.0	25.0	28.0	27.0	21.0
19	18.0	16.0	9.0	14.0	13.0	20.0	20.0	---	27.0	28.0	28.0	21.0
20	---	15.0	---	12.0	13.0	18.0	---	26.0	28.0	29.0	28.0	20.0
21	18.0	---	9.0	12.0	---	18.0	---	26.0	28.0	29.0	28.0	18.0
22	18.0	15.0	9.0	12.0	10.0	18.0	19.0	26.0	28.0	29.0	28.0	19.0
23	18.0	15.0	9.0	10.0	9.0	18.0	19.5	26.0	27.5	29.0	28.0	20.0
24	18.0	---	10.0	10.0	9.0	---	19.0	26.0	27.0	28.0	28.0	18.0
25	19.0	15.0	---	10.0	8.0	15.0	20.0	26.5	27.0	28.0	28.0	18.0
26	19.0	15.0	10.0	10.0	8.0	12.0	20.0	25.0	27.0	28.0	28.0	17.0
27	18.0	16.0	9.0	9.0	9.0	14.0	21.0	25.0	28.0	28.0	28.0	18.0
28	18.0	15.0	9.0	11.0	12.0	15.0	21.5	26.0	27.0	28.0	28.0	20.0
29	17.0	15.0	10.0	11.0	---	17.0	22.0	26.0	27.0	29.0	---	---
30	---	15.0	10.0	12.0	---	---	22.0	26.0	27.0	28.0	24.0	19.0
31	16.0	---	9.0	11.0	---	17.0	---	26.5	---	28.0	24.0	---
MONTH	21.5	15.5	10.5	9.0	11.0	17.5	19.0	25.0	26.5	28.0	27.0	21.0

RED RIVER BASIN

07346045 BLACK CYPRESS BAYOU AT JEFFERSON, TEX.

LOCATION.--Lat 32°46'40", long 94°21'26", Marion County, at gaging station on U.S. Highway 59, 1.1 miles (1.8 km) north of Jefferson, and 2.0 miles (3.2 km) upstream from Texas and Pacific Railway Co. bridge.

DRAINAGE AREA.--365 mi² (945 km²).

PERIOD OF RECORD.--Chemical analyses: October 1967 to September 1974.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	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 SODIUM PLUS POTAS- SIUM (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)
OCT. 02...	1130	78	20	4.0	2.9	--	.5	--	10	0
NOV. 06...	1230	401	16	2.5	1.4	--	4.2	--	7	0
DEC. 05...	1245	2450	8.3	2.4	.9	1.7	--	2.2	7	0
JAN. 15...	1500	672	16	2.5	1.1	4.6	--	1.7	7	0
FEB. 27...	1230	620	12	3.2	1.0	4.8	--	1.6	8	0
APR. 07...	1250	190	15	4.0	1.8	4.5	--	1.7	17	0
MAY 22...	1535	80	20	3.8	1.4	4.8	--	1.9	17	0
JULY 19...	1130	43	17	3.6	1.6	4.0	--	1.6	17	0
AUG. 29...	1130	21	16	4.4	1.4	5.1	--	1.9	15	0

DATE	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	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)
OCT. 02...	5.4	6.5	.0	44	22	14	.0	62	5.5	21.0
NOV. 06...	6.0	6.5	.0	40	12	6	.5	50	6.0	14.5
DEC. 05...	4.6	1.9	--	25	10	4	.2	29	6.1	13.0
JAN. 15...	5.9	5.9	--	41	11	5	.6	46	6.5	9.0
FEB. 27...	6.9	5.9	--	39	12	6	.6	48	6.1	8.0
APR. 07...	3.7	6.6	--	46	17	3	.5	61	6.6	15.0
MAY 22...	7.4	7.4	--	55	15	1	.5	62	6.4	23.0
JULY 19...	4.9	6.4	--	47	16	2	.4	58	6.4	26.0
AUG. 29...	5.3	6.8	--	48	17	4	.5	63	6.3	26.0

07346070 LITTLE CYPRESS CREEK NEAR JEFFERSON, TEX.

LOCATION.--Lat 32°42'46", long 94°20'44", Marion County, at gaging station at bridge on U.S. Highway 59, 0.3 mile (0.5 km) downstream from Texas and Pacific Railway Co. bridge, and 3.5 miles (5.6 km) south of Jefferson.

DRAINAGE AREA.--675 mi² (1,748 km²).

PERIOD OF RECORD.--Chemical analyses: October 1967 to September 1974.

Chemical and biochemical analyses: October 1967 to September 1974.

Pesticide analyses: January 1968 to September 1974.

Water temperatures: October 1967 to September 1974.

EXTREMES.--October 1973 to September 1974.

Specific conductance: Maximum daily, 880 micromhos Aug. 8; minimum daily, 43 micromhos June 11.

Water temperatures: Maximum, 28.0°C on several days during July and August; minimum, 3.5°C Jan. 6, 7.

Period of record:

Specific conductance: Maximum daily, 1,350 micromhos Nov. 9, 1969; minimum daily, 39 micromhos Apr. 20, 1973.

Water temperatures: Maximum, 30.5°C Aug. 6, 8, 1970; minimum, 1.5°C Jan. 9, 10, 1970.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTAN- TANEOUS 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 SODIUM PLUS POTAS- SIUM (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
OCT.												
04...	0500	258	6.5	7.0	2.8	22	--	3.9	18	0	16	37
30...	1035	500	23	7.5	1.8	--	20	--	14	0	17	28
NOV.												
07...	1440	1130	16	3.5	1.6	11	--	4.5	11	0	12	16
DEC.												
06...	1600	5350	7.5	2.6	1.1	4.7	--	3.1	9	0	6.3	5.7
11...	0815	1900	11	3.5	1.4	6.4	--	2.7	10	0	7.2	10
JAN.												
16...	1640	1070	18	6.4	2.0	14	--	2.6	10	0	19	22
FEB.												
13...	1240	753	17	6.0	3.4	18	--	2.3	14	0	17	25
27...	1500	908	15	7.8	2.1	13	--	2.5	11	0	19	20
MAR.												
20...	1030	946	13	6.5	2.2	14	--	3.2	18	0	15	23
APR.												
17...	1315	501	17	6.9	2.3	21	--	2.2	14	0	22	29
MAY												
22...	1835	128	25	8.3	3.3	27	--	3.3	18	0	22	40
JUNE												
11...	1650	8740	4.3	2.3	.8	3.2	--	2.0	6	0	5.4	5.5
JULY												
19...	1700	19	22	8.1	2.6	38	--	3.6	20	0	12	63
AUG.												
21...	0830	18	18	13	3.8	75	--	5.3	20	0	18	130
SEP.												
19...	1645	1520	13	4.2	1.2	12	--	1.9	4	0	10	18
DATE		DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)	VOL. NON- FILT- RABLE RESIDUE (MG/L)	HARD- NESS (CA+MG) (MG/L)
OCT.												
04...		.1	--	--	--	--	--	--	104	--	--	29
30...		.1	.07	.00	.00	.23	--	.11	105	37	1	26
NOV.												
07...		--	--	--	--	--	--	--	70	--	--	15
DEC.												
06...		--	--	--	--	--	--	--	35	--	--	11
11...		--	.10	.00	.13	.28	--	.07	47	48	18	15
JAN.												
16...		--	--	--	--	--	--	--	89	--	--	24
FEB.												
13...		--	.14	.00	.09	.06	--	.09	97	25	9	29
27...		--	--	--	--	--	--	--	85	--	--	28
MAR.												
20...		--	--	--	--	--	--	--	86	--	--	25
APR.												
17...		--	.28	.00	.15	.57	.72	.23	108	38	5	27
MAY												
22...		--	--	--	--	--	--	--	138	--	--	34
JUNE												
11...		--	.08	.00	.09	.79	.88	.09	26	60	14	9
JULY												
19...		--	--	--	--	--	--	--	159	--	--	31
AUG.												
21...		--	.08	.00	.07	.57	.64	.09	273	58	4	48
SEP.												
19...		--	--	--	--	--	--	--	62	--	--	15

RED RIVER BASIN

07346070 LITTLE CYPRESS CREEK NEAR JEFFERSON, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	NON-CARBONATE HARDNESS (MG/L)	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	BIO-CHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT. 04...	14	1.8	183	6.8	23.0	--	--	--	--	--	--
30...	15	1.7	172	6.0	16.0	140	35	8.5	85	2.0	16
NOV. 07...	6	1.2	108	6.3	14.5	--	--	--	--	--	--
DEC. 06...	4	.6	54	6.2	13.0	--	--	--	--	--	--
11...	6	.7	74	6.1	6.0	120	35	7.4	59	1.5	14
JAN. 16...	16	1.2	139	6.1	8.5	--	--	--	--	--	--
FEB. 13...	18	1.5	154	6.6	12.0	100	25	9.1	84	1.1	7.0
27...	19	1.1	128	6.1	8.5	--	--	--	--	--	--
MAR. 20...	11	1.2	134	6.3	17.0	--	--	--	--	--	--
APR. 17...	15	1.8	178	6.3	17.0	90	30	7.4	76	.8	9.0
MAY 22...	20	2.0	218	6.4	24.0	--	--	--	--	--	--
JUNE 11...	4	.5	46	5.3	24.0	120	40	6.5	76	1.9	9.3
JULY 19...	15	3.0	308	6.2	28.0	--	--	--	--	--	--
AUG. 21...	32	4.7	538	6.4	26.0	40	20	5.4	66	.8	5.3
SEP. 19...	12	1.3	105	5.9	22.5	--	--	--	--	--	--

DATE	TIME	DISSOLVED ALUMINUM (AL) (UG/L)	DISSOLVED ARSENIC (AS) (UG/L)	DISSOLVED BORON (B) (UG/L)	DISSOLVED CADMIUM (CD) (UG/L)	DISSOLVED CHROMIUM (CR) (UG/L)	DISSOLVED COBALT (CO) (UG/L)	DISSOLVED COPPER (CU) (UG/L)
OCT. 30...	1035	120	0	--	0	0	1	8
FEB. 13...	1240	40	0	40	1	0	0	12
APR. 17...	1315	120	0	60	0	20	1	4

DATE	DISSOLVED IRON (FE) (UG/L)	DISSOLVED LEAD (PB) (UG/L)	DISSOLVED LITHIUM (LI) (UG/L)	DISSOLVED MANGANESE (MN) (UG/L)	DISSOLVED MERCURY (HG) (UG/L)	DISSOLVED NICKEL (NI) (UG/L)	DISSOLVED STRONTIUM (SR) (UG/L)	DISSOLVED ZINC (ZN) (UG/L)
OCT. 30...	1800	1	0	80	.0	14	170	40
FEB. 13...	590	11	10	110	.0	7	140	70
APR. 17...	230	2	10	30	.0	0	210	0

07346070 LITTLE CYPRESS CREEK NEAR JEFFERSON, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	TEMPER- ATURE (DEG C)	ALDRIN (UG/L)	ALDRIN IN BOTTOM DE- POSITS (UG/KG)	DDD (UG/L)	DDD IN BOTTOM DE- POSITS (UG/KG)	DDE (UG/L)	DDE IN BOTTOM DE- POSITS (UG/KG)	DDT (UG/L)	DDT IN BOTTOM DE- POSITS (UG/KG)	DI- ELDRIN (UG/L)
OCT. 30...	1035	16.0	.00	.0	.00	3.5	.00	1.4	.00	3.7	.00
FEB. 13...	1240	12.0	.00	.0	.00	2.8	.00	2.1	.00	3.7	.00
APR. 17...	1315	17.0	.00	.0	.00	.4	.00	.0	.00	.0	.00
AUG. 21...	0830	26.0	.00	.0	.00	.0	.00	.0	.00	.0	.00

DATE	DI- ELDRIN IN BOTTOM DE- POSITS (UG/KG)	ENDRIN (UG/L)	ENDRIN IN BOTTOM DE- POSITS (UG/KG)	HEPTA- CHLOR (UG/L)	HEPTA- CHLOR IN BOTTOM DE- POSITS (UG/KG)	HEPTA- CHLOR EPOXIDE (UG/L)	HEPTA- CHLOR EPOXIDE IN BOT- TOM DE- POSITS (UG/KG)	LINDANE (UG/L)	LINDANE IN BOTTOM DE- POSITS (UG/KG)	CHLOR- DANE (UG/L)
OCT. 30...	1.6	.00	.0	.00	.0	.00	.0	.00	.0	.0
FEB. 13...	.0	.00	.0	.00	.0	.00	.0	.00	.0	.0
APR. 17...	.0	.00	.0	.00	.0	.00	.0	.00	.0	.0
AUG. 21...	.0	.00	.0	.00	.0	.00	.0	.00	.0	.0

DATE	CHLOR- DANE IN BOTTOM DE- POSITS (UG/KG)	PCB (UG/L)	PCB IN BOTTOM DE- POSITS (UG/KG)	DI- AZINON (UG/L)	MALA- THION (UG/L)	METHYL PARA- THION (UG/L)	PARA- THION (UG/L)	2,4-D (UG/L)	SILVEX (UG/L)	2,4,5-T (UG/L)
OCT. 30...	4	.0	0	.00	.00	.00	.00	.00	.00	.00
FEB. 13...	2	.0	0	.00	.00	.00	.00	.00	.00	.00
APR. 17...	0	.0	0	.00	.00	.00	.00	.00	.00	.00
AUG. 21...	0	.0	0	.00	.00	.00	.00	.00	.00	.00

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

MONTH	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCT- ANCE (MICRO- MHOS)	DIS- SOLVED SULFIDS (MG/L)	DIS- SOLVED SULFIDS (TONS)	DIS- SOLVED CHLORIDE (MG/L)	DIS- SOLVED CHLORIDE (TONS)	DIS- SOLVED SULFATE (MG/L)	DIS- SOLVED SULFATE (TONS)	DIS- SOLVED SULFATE (TONS)	HARDNESS (CA+MG) (MG/L)
OCT. 1973.....	26757	104	68	4710	16	1160	11	795	20	
NOV. 1973.....	35744	111	72	6950	17	1640	12	1160	22	
DEC. 1973.....	68285	88	57	10500	13	2400	9.6	1770	17	
JAN. 1974.....	47355	118	76	9720	19	2430	13	1660	23	
FEB. 1974.....	30063	124	80	6490	19	1540	13	1060	24	
MAR. 1974.....	23294	145	91	5720	24	1510	16	1010	24	
APR. 1974.....	23226	122	79	4950	19	1190	13	815	24	
MAY 1974.....	18574	151	95	4250	26	1160	16	716	29	
JUNE 1974.....	61567	74	47	7810	10	1660	4.0	1330	14	
JULY 1974.....	1551	303	180	754	62	260	20	83	38	
AUG. 1974.....	802	491	280	607	110	238	20	43	44	
SEPT 1974.....	26608	135	86	6180	22	1580	15	1080	26	
TOTAL	361826	**	**	68800	**	16800	**	11500	**	
WTD.AVG.	991	110	70	**	17	**	12	**	21	

RED RIVER BASIN

07346070 LITTLE CYPRESS CREEK NEAR JEFFERSON, TEX.--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	158	162	80	118	100	130	177	105	184	261	263	278
2	200	151	78	119	102	130	178	116	177	278	311	167
3	177	141	75	118	105	139	171	124	171	324	370	160
4	183	133	68	118	109	143	170	142	175	324	392	189
5	169	118	64	125	108	148	174	160	114	321	400	176
6	160	108	54	125	114	150	178	157	98	300	460	186
7	162	108	67	131	118	155	181	150	97	319	631	220
8	177	100	73	146	121	157	204	150	51	321	880	245
9	185	101	75	150	127	159	203	164	59	331	810	176
10	209	104	81	153	135	160	202	174	55	305	649	150
11	180	107	89	150	143	121	194	164	43	293	557	163
12	155	112	98	135	149	104	160	166	54	340	495	179
13	101	124	108	127	152	113	171	165	62	304	454	250
14	89	134	120	123	159	125	166	182	67	309	352	169
15	82	147	127	136	154	134	183	183	74	313	325	165
16	71	156	133	140	152	157	184	189	83	278	392	136
17	78	162	135	139	152	154	174	187	90	283	456	135
18	80	166	139	138	149	150	172	184	97	295	400	110
19	82	171	140	141	152	133	167	187	103	308	421	105
20	87	170	121	130	153	134	172	192	118	311	505	108
21	98	170	129	131	138	139	175	204	148	301	542	112
22	103	164	135	125	109	145	126	218	175	283	571	100
23	107	165	141	106	112	159	91	233	192	270	592	107
24	113	158	120	98	124	165	88	233	209	258	646	111
25	120	135	120	98	122	186	88	235	226	267	743	116
26	128	108	104	102	128	168	96	167	240	326	788	120
27	137	84	92	100	128	156	96	174	260	400	813	125
28	145	71	96	100	131	156	86	152	260	330	792	129
29	154	90	106	102	---	158	83	160	262	260	637	145
30	162	86	115	105	---	162	90	195	256	222	528	164
31	158	---	116	102	---	169	---	193	---	237	408	---
MONTH	136	130	103	124	130	147	153	174	140	299	535	157

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	24.0	14.5	13.0	7.0	11.0	9.5	17.0	19.0	23.0	23.0	26.0	---
2	23.0	14.5	13.0	6.0	11.0	9.5	17.0	20.0	---	23.0	26.0	24.0
3	22.5	16.0	---	4.0	10.5	10.0	18.0	20.5	23.5	24.0	26.0	23.0
4	23.0	17.0	13.0	4.0	11.0	12.0	17.5	21.0	---	25.0	26.0	21.0
5	22.0	16.0	13.0	4.0	11.0	15.0	17.0	21.5	23.0	26.0	25.0	20.0
6	22.0	15.0	12.5	3.5	11.0	17.0	17.5	23.0	23.0	26.0	25.0	19.0
7	22.5	14.0	10.0	3.5	---	18.5	18.0	23.5	---	26.0	24.5	19.0
8	23.0	14.5	9.0	4.0	9.5	---	17.0	23.0	22.5	25.0	25.0	20.0
9	22.5	15.0	8.0	---	8.0	18.0	---	22.5	24.0	25.0	25.0	21.0
10	20.0	14.5	7.5	5.0	8.5	18.5	16.5	22.0	22.0	25.0	24.0	22.5
11	---	12.5	6.0	5.0	9.0	20.0	16.0	21.0	23.0	25.0	25.0	22.5
12	23.0	12.5	6.5	5.0	9.0	20.0	16.0	22.0	23.0	26.0	---	22.0
13	26.5	13.0	---	5.0	10.0	19.0	16.5	22.0	23.0	26.0	26.0	22.5
14	20.0	14.0	9.0	4.0	10.0	17.5	18.0	22.0	23.0	---	26.0	22.0
15	25.0	14.0	9.0	5.0	12.0	17.0	18.0	23.0	23.0	27.0	26.0	22.0
16	20.0	14.5	8.5	6.0	11.5	17.0	17.0	23.0	23.0	27.0	27.0	22.0
17	19.0	14.0	7.5	8.5	11.5	---	17.0	24.0	---	27.0	28.0	21.5
18	18.0	14.5	7.0	9.5	12.0	17.5	17.5	24.0	---	27.0	27.0	22.0
19	19.5	15.5	---	11.0	12.0	18.0	18.0	24.0	23.5	27.5	27.0	22.5
20	16.5	---	6.5	13.0	11.5	17.0	17.5	24.0	24.0	27.5	27.0	23.0
21	16.5	15.0	5.5	12.0	11.5	16.5	---	24.0	25.0	28.0	27.0	23.0
22	17.0	14.5	5.0	12.0	11.0	16.0	17.0	23.5	25.0	28.0	27.5	---
23	17.0	15.5	5.5	11.5	11.0	16.0	16.0	24.0	26.0	---	27.5	20.0
24	17.5	16.5	5.5	10.5	10.0	---	16.5	24.0	26.0	28.0	27.0	19.0
25	18.0	---	6.0	10.0	9.0	11.5	17.5	---	25.0	28.0	27.0	17.5
26	18.5	17.5	7.5	9.5	9.0	10.0	17.5	23.5	25.0	28.0	27.0	---
27	18.5	17.5	7.5	10.0	8.5	12.0	17.5	22.5	24.0	28.0	27.0	19.0
28	17.0	17.0	7.5	11.0	8.5	12.5	17.5	22.0	23.0	---	27.0	19.0
29	16.0	15.0	7.5	11.0	---	12.5	18.0	22.5	23.0	27.0	26.0	19.0
30	15.0	14.0	---	10.5	---	---	18.5	23.0	23.0	26.5	25.0	18.0
31	15.0	---	8.0	11.0	---	16.5	---	22.5	---	26.0	---	---
MONTH	20.0	15.0	8.5	7.5	10.5	15.5	17.5	22.5	23.5	26.5	26.0	21.0

MISCELLANEOUS ANALYSES OF STREAMS IN THE RED RIVER BASIN IN TEXAS

WATER QUALITY DATA, OCTOBER 1973 TO SEPTEMBER 1974

07299840 GREENBELT RESERVOIR NEAR CLARENDON, TEX. (Lat 35°00'02", long 100°53'40")

DATE	TIME	RESER- VOIR STORAGE (AC-FT)	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)	DIS- SOLVED SULFATE (SO4) (MG/L)
DEC., 1973										
20...	1700	26540	11	40	17	37	6.0	165	0	75
JULY, 1974										
16...	1000	24450	11	43	20	43	6.6	178	0	79

DATE	TIME	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	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)	DIS- SOLVED BORON (B) (UG/L)
DEC., 1973										
20...	39		306	170	35	1.2	515	8.3	5.0	60
JULY, 1974										
16...	44		334	190	44	1.4	584	7.9	25.0	--

07312200 BEAVER CREEK NEAR ELECTRA, TEX. (Lat 33°54'21", long 98°54'17")

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	SUS- PENDE SEDIM- ENT (MG/L)	SUS- PENDE SEDIM- MENT (T/DAY)	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM	SUS. SED. SIEVE DIAM. % FINER THAN .250 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM
SEP. 25...	1035	1960	13.5	5350	28300	96	99	100	74	91	94

07312500 WICHITA RIVER AT WICHITA FALLS, TEX. (Lat 33°54'34", long 98°32'00")

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	SUS- PENDE SEDIM- ENT (MG/L)	SUS- PENDE SEDIM- MENT (T/DAY)	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM	SUS. SED. SIEVE DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM
MAY 01...	0835	2220	19.0	4170	25000	99	100	54	67	82	93	99
SEP. 18...	1030	189	21.5	1300	663	99	100	60	82	85	97	99

07312600 LAKE WICHITA AT WICHITA FALLS, TEX. (Lat 33°50'38", long 98°32'20")

DATE	TIME	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)	DIS- SOLVED SULFATE (SO4) (MG/L)
JUNE, 1974									
14...	0730	3.1	81	25	210	9.4	77	0	160
AUG. 29...	1400	4.6	33	10	99	7.1	42	0	73

DATE	TIME	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	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)
JUNE, 1974									
14...	390		916	310	240	5.2	1720	7.2	21.0
AUG. 29...	170		417	120	89	3.9	797	6.6	32.0

RED RIVER BASIN

MISCELLANEOUS ANALYSES OF STREAMS IN THE RED RIVER BASIN IN TEXAS--Continued

WATER QUALITY DATA, OCTOBER 1973 TO SEPTEMBER 1974

07314000 LAKE KICKAPOO NEAR ARCHER CITY, TEX. (Lat 33°39'47", long 98°46'43")

DATE	TIME	RESER- VOIR STORAGE (AC-FT)	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 (HC03) (MG/L)	CAR- BONATE (C03) (MG/L)
APR., 1974 17...	1550	87700	6.8	35	11	44	5.2	180	4

DATE	TIME	DIS- SOLVED SULFATE (S04) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	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)
APR., 1974 17...	15	49	259	130	0	1.7	467	8.4	17.0	

07314500 LITTLE WICHITA RIVER NEAR ARCHER CITY, TEX. (Lat 33°39'45", long 98°36'46")

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	SUS- PEN- DED SEDI- MENT (MG/L)	SUS- PEN- DED SEDI- MENT (T/DAY)	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM
SEP. 18...	1230	680	21.0	1040	1910	99	100	90	95	96	97	98

07314800 LAKE ARROWHEAD NEAR HENRIETTA, TEX. (Lat 33°45'51", long 98°22'17")

DATE	TIME	RESER- VOIR STORAGE (AC-FT)	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 (HC03) (MG/L)	CAR- BONATE (C03) (MG/L)
APR., 1974 15...	1630	156600	1.5	44	14	78	8.4	162	0

DATE	TIME	DIS- SOLVED SULFATE (S04) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	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)
APR., 1974 15...	11	150	387	170	35	2.6	757	7.8	18.5	

07315600 FARMERS CREEK RESERVOIR NEAR NACONA, TEX. (Lat 33°52'57", long 97°39'09")

DATE	TIME	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 (HC03) (MG/L)	CAR- BONATE (C03) (MG/L)	DIS- SOLVED SULFATE (S04) (MG/L)
JULY, 1974 02...	1820	2.5	42	17	61	7.0	138	0	43

DATE	TIME	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	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)
JULY, 1974 02...	110	351	170	62	2.0	671	7.9	26.5	

RED RIVER BASIN

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MISCELLANEOUS ANALYSES OF STREAMS IN THE RED RIVER BASIN IN TEXAS--Continued

WATER QUALITY DATA, OCTOBER 1973 TO SEPTEMBER 1974

07315950 MOSS LAKE NEAR GAINESVILLE, TEX. (Lat 33°47'26", long 97°12'52")

DATE	TIME	RESER- VOIR STORAGE (AC-FT)	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)
JULY, 1974 02...	1000	22570	5.8	46	4.3	13	3.6	154	0

DATE	TIME	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	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)
JULY, 1974 02...	16	18	183	130	6	.5	333	7.4	22.0	

07335390 PAT MAYSE LAKE NEAR CHICOTA, TEX. (Lat 33°51'10", long 95°32'38")

DATE	TIME	RESER- VOIR STORAGE (AC-FT)	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)	DIS- SOLVED SULFATE (SO4) (MG/L)
MAR., 1974 16...	1510	127400	.1	23	2.2	7.0	3.0	72	0	14

DATE	TIME	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	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)	DIS- SOLVED BORON (B) (UG/L)
MAR., 1974 16...	5.4	90	67	7	.4	121	7.2	17.0	30	

07344200 WRIGHT PATMAN LAKE NEAR TEXARKANA, TEX. (Lat 33°18'16", long 94°09'38")

DATE	TIME	RESER- VOIR STORAGE (AC-FT)	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)
APR., 1974 06...	0850	177400	3.9	26	3.6	16	3.2	74	0

DATE	TIME	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	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)
APR., 1974 06...	31	19	139	80	19	.8	249	6.7	14.5	

RED RIVER BASIN

MISCELLANEOUS ANALYSES OF STREAMS IN THE RED RIVER BASIN IN TEXAS--Continued

WATER QUALITY DATA, OCTOBER 1973 TO SEPTEMBER 1974

07345500 ELLISON CREEK RESERVOIR NEAR LONE STAR, TEX. (Lat 32°55'16", long 94°43'17")

DATE	TIME	DIS- SOLVED SILICA (SiO2) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)
FEB., 1974 26...	1540	6.7	26	4.6	11	5.6	30	0	57
DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	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)	DIS- SOLVED BORON (B) (UG/L)
FEB., 1974 26...	22	148	84	59	.5	257	6.7	13.0	70

07345900 LAKE O' THE PINES NEAR JEFFERSON, TEX. (Lat 32°45'04", long 94°29'59")

DATE	TIME	RESER- VOIR STORAGE (AC-FT)	DIS- SOLVED SILICA (SI ₀₂) (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 (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)
APR., 1974 06...	1650	258100	9.5	8.5	3.3	9.2	3.3	20	0
DATE	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	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)
APR., 1974 06...	19	13	76	35	18	.7	132	6.5	17.0

MISCELLANEOUS ANALYSES OF STREAMS IN THE RED RIVER BASIN IN TEXAS--Continued

WATER QUALITY DATA, OCTOBER 1973 TO SEPTEMBER 1974

WICHITA RIVER LOW-FLOW INVESTIGATION

REACH.--From gaging stations on North and South Forks Wichita River, 47.6 and 41.0 miles respectively, upstream from confluence, to a point 12 miles downstream from confluence, and 4 miles upstream from head of Lake Kemp.

PURPOSE.--Salt-pollution abatement studies by the Corps of Engineers require accurate definition of the low-flow regimen in the Wichita River and its tributaries upstream from Lake Kemp.

SUMMARY.--This investigation was performed during a period when evapotranspiration was negligible. The losses of streamflow indicated in the accompanying table are concluded to be to the adjacent alluvium into which the channels are cut.

DATE	STREAM	LOCATION	RIVER MILE (1/)	DIS- CHARGE (CFS)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEM- PER- ATURE (°C)
1974 Feb. 6	North Fork Wichita River	Lat 33°49'14", long 99°47'10", at stream-gaging station 07311700.	188.4	14.5	2,600	6,200	20,300	8.0
6	-----do-----	Lat 33°48'13", long 99°43'52", on Halsell Ranch, 6 miles northeast of Truscott.	174.8	14.8	2,600	6,200	20,100	9.0
6	-----do-----	Lat 33°49'22", long 99°40'33", on Halsell Ranch, 10 miles northeast of Truscott.	167.1	14.3	2,600	6,100	20,100	7.5
6	-----do-----	Lat 33°47'16", long 99°45'46", at State Highway 267, 11 miles north of Vera.	159.4	14.4	2,600	6,000	20,100	6.5
7	-----do-----	-----do-----	-do--	15.7	2,600	6,000	20,000	1.5
7	-----do-----	Lat 33°46'07", long 99°31'12", at Waggoner Ranch, 10 miles north of Vera.	150.4	14.4	2,600	6,000	19,800	2.0
7	-----do-----	Lat 33°43'08", long 99°29'27", at confluence with South Fork Wichita River, 7 miles northeast of Vera.	140.8	13.2	2,500	6,000	19,600	4.0
6	South Fork Wichita River	Lat 33°38'39", long 99°48'02", at stream-gaging station 07311800.	41.0	5.13	3,300	10,800	33,900	5.0
6	-----do-----	Lat 33°38'59", long 99°46'01", 5 miles northeast of Benjamin.	37.2	5.17	3,300	10,700	33,700	4.5
6	-----do-----	Lat 33°38'44", long 99°39'57", at State Highway 267, 6 miles west of Vera.	21.8	5.08	3,200	10,000	31,700	7.0
6	-----do-----	Lat 33°41'04", long 99°35'05", at county road, 4 miles north of Vera.	10.3	4.62	3,200	9,700	31,100	7.0
7	-----do-----	-----do-----	-do--	4.84	3,100	9,700	31,000	1.0
6	Unnamed trib- utary of South Fork Wichita River	Lat 33°42'44", long 99°37'02", at county road, 6 miles north of Vera.	-----	.05	--	--	1,800	8.0
7	South Fork Wichita River	Lat 33°43'05", long 99°29'28", at confluence with North Fork Wichita River, 7 miles northeast of Vera.	0	4.38	2,900	8,500	25,900	6.0
7	Wichita River	Lat 33°42'01", long 99°23'18", at stream-gaging station 07311900.	130.5	14.0	2,500	6,200	20,200	6.0
7	-----do-----	Lat 33°42'57", long 99°22'16", 11 miles northwest of Seymour.	128.4	16.4	2,500	6,200	20,200	8.0

Note: Salt precipitate observed along each bank at each site.

1/ River mile shown for North Fork Wichita River is that for Wichita River extended, river mile shown for South Fork Wichita River is distance upstream from its mouth.

SABINE RIVER BASIN

08017410 SABINE RIVER NEAR WILLS POINT, TEX.

LOCATION.--Lat 32°48'34", long 95°54'46", Van Zandt County, at gaging station at bridge on Farm Road 47, 750 ft (229 m) downstream from Iron Bridge Dam which forms Lake Tawakoni, 3.0 miles (4.8 km) upstream from McBee Creek, and 9.0 miles (14.5 km) northeast of Wills Point.

DRAINAGE AREA.--756 mi² (1,958 km²).

PERIOD OF RECORD.--Chemical and biochemical analyses: July to September 1974.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTAN- TANEOUS 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 (HC03) (MG/L)	CAR- BONATE (C03) (MG/L)	DIS- SOLVED SULFATE (S04) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	TOTAL NITRATE (N) (MG/L)
JULY 16...	1905	84	2.5	25	2.5	8.0	3.3	91	0	13	6.6	.01
AUG. 08...	1620	.02	2.0	24	2.4	9.6	3.4	48	19	14	6.9	.03
SEP. 25...	1600	2020	1.3	23	2.9	8.3	3.3	90	0	12	5.1	.07

DATE	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)	VOL- NON- FILT- RABLE RESIDUE (MG/L)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO
JULY 16...	.00	.23	.55	.78	.14	106	--	--	73	0	.4
AUG. 08...	.01	.12	.98	1.1	.16	105	--	--	70	0	.5
SEP. 25...	.01	.11	.80	.91	.08	100	7	6	69	0	.4

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	BIO- CHEM- ICAL OXYGEN DEMAND (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	PHENOLS (UG/L)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)
JULY 16...	192	6.7	26.5	--	--	--	--	--	6.6	2	.0
AUG. 08...	182	9.3	29.0	--	--	--	--	--	6.5	1	.0
SEP. 25...	190	7.7	21.0	15	3	8.7	97	.9	6.2	2	.0

DATE	TIME	DIS- SOLVED ALUM- INUM (AL) (UG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	DIS- SOLVED COBALT (CO) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)
JULY 16...	1905	10	4	40	0	0	0	3

DATE	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	DIS- SOLVED LITHIUM (LI) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED MERCURY (HG) (UG/L)	DIS- SOLVED NICKEL (NI) (UG/L)	DIS- SOLVED STRON- TIUM (SR) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)
JULY 16...	260	1	0	20	.1	0	190	0

SABINE RIVER BASIN

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08018200 GRAND SALINE CREEK NEAR GRAND SALINE, TEX.

LOCATION.--Lat 32°40'20", long 95°36'36", Van Zandt County, at gaging station at bridge on U.S. Highway 80 and 5.5 miles (8.8 km) east of Grand Saline.

DRAINAGE AREA.--91.4 mi² (236.7 km²).

PERIOD OF RECORD.--Chemical analyses: February 1968 to September 1974.
Water temperatures: February 1968 to September 1974.

EXTREMES.--Period of record:

Specific conductance (1968-73): Maximum daily, 50,200 micromhos Aug. 23, 1970; minimum daily, 78 micromhos Dec. 10, 1971.

Water temperatures (1968-73): Maximum, 35.0°C Aug. 18, 19, 26, 1968, July 11, 1970; minimum, 2.0°C on several days during January 1970 and January 1973.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO ₂) (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 (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)
DEC. 14...	1440	16	21	45	20	140	4.2	41	0
FEB. 03...	1645	3.1	12	37	18	90	4.5	34	0
25...	1305	31	12	35	16	94	5.1	27	0
MAR. 03...	1705	20	12	50	25	160	5.4	41	0
APR. 04...	1220	7.0	18	50	22	180	5.2	54	0
MAY 20...	1305	5.8	20	56	25	240	4.7	78	0
JULY 15...	1240	6.1	14	98	42	310	7.1	124	0
SEP. 02...	1230	2.5	6.4	110	22	2600	9.3	50	0

DATE	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	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)
DEC. 14...	160	230	640	190	160	4.4	1110	7.0	11.0
FEB. 03...	140	140	458	170	140	3.0	814	6.8	12.0
25...	140	150	465	150	130	3.3	826	6.3	8.0
MAR. 03...	180	260	713	230	190	4.6	1280	6.9	20.5
APR. 04...	170	270	742	220	170	5.3	1330	7.2	16.0
MAY 20...	170	380	934	240	180	6.7	169	6.8	17.0
JULY 15...	310	480	1320	420	320	6.6	2340	7.0	29.0
SEP. 02...	230	4100	7100	370	330	59	12200	7.0	26.5

08018500 SABINE RIVER NEAR MINEOLA, TEX.

LOCATION.--Lat 32°36'46", long 95°29'08", Wood County, at gaging station at bridge on U.S. Highway 69, 3.5 miles (5.6 km) south of Mineola, 4.5 miles (7.2 km) upstream from Missouri Pacific Railway Lines bridge, and 16.2 miles (26.1 km) upstream from Lake Fork Creek.

DRAINAGE AREA.--1,357 mi² (3,515 km²).

PERIOD OF RECORD.--Chemical analyses: October 1967 to September 1974.
Water temperatures: October 1967 to September 1974.

EXTREMES.--October 1973 to September 1974:

Specific conductance: Maximum daily, 2,790 micromhos Aug. 15; minimum daily, 112 micromhos Jan. 14.
Water temperatures: Maximum, 29.0°C July 23, 24; minimum, 4.0°C Jan. 12.

Period of record:

Specific conductance: Maximum daily, 11,400 micromhos June 3, 1971; minimum daily, 70 micromhos Dec. 12, 1971.

Water temperatures: Maximum, 29.0°C on several days during summer months; minimum, 2.0°C Jan. 7, 10, 1968, Jan. 9, 1970, Jan. 12, 1973.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

			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 SODIUM PLUS POTAS- SIUM (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	
OCT.														
04...	1440	1500		4.6	22	3.2	10	--	4.0	81	0	13	8.3	
29...	1515	1800		4.6	24	2.9	--	13	--	86	0	15	10	
NOV.														
30...	0700	2780		6.8	17	3.7	--	18	--	58	0	19	20	
DEC.														
10...	1245	2000		4.6	22	3.1	12	--	3.7	74	0	18	11	
14...	1310	1050		4.9	22	4.0	14	--	4.0	80	0	23	14	
JAN.														
23...	1340	5570		4.7	15	2.7	11	--	3.9	44	0	16	20	
FEB.														
12...	1700	667		3.8	25	4.8	19	--	3.4	8	0	32	23	
25...	1600	822		5.6	28	6.5	27	--	4.3	61	0	54	37	
MAR.														
18...	0700	709		3.3	29	4.4	17	--	4.1	80	0	27	19	
APR.														
16...	1525	207		2.2	55	18	75	--	5.8	54	0	170	110	
MAY														
20...	1630	460		3.3	25	3.3	15	--	3.3	84	0	23	16	
JUNE														
11...	1030	3090		5.8	10	2.7	16	--	4.5	25	0	29	18	
JULY														
16...	1700	55		5.2	28	4.3	21	--	3.9	92	0	32	25	
AUG.														
08...	1830	16		7.5	43	9.5	280	--	5.1	64	0	78	460	
SEP.														
25...	1400	1300		3.9	21	2.5	9.1	--	3.8	80	0	14	7.2	
			DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)	VOL. NON- FILT- RABLE RESIDUE (MG/L)	HARD- NESS (CA,MG) (MG/L)	NON-CAR- BONATE HARD- NESS (MG/L)
OCT.														
04...		.2	--	--	--	--	--	--	--	105	--	--	68	2
29...		.3	.01	.00	.00	.14	--	.10	.10	112	--	--	72	1
NOV.														
30...		.1	--	--	--	--	--	--	--	114	--	--	58	10
DEC.														
10...		--	.10	.00	.16	.30	--	.05	.05	111	--	--	68	7
14...		--	--	--	--	--	--	--	--	125	--	--	71	6
JAN.														
23...		--	--	--	--	--	--	--	--	95	--	--	49	12
FEB.														
12...		--	.05	.00	.20	.38	--	.12	.12	115	--	--	82	75
25...		--	--	--	--	--	--	--	--	192	--	--	97	47
MAR.														
18...		--	--	--	--	--	--	--	--	143	--	--	91	25
APR.														
16...		--	.25	.01	.17	.68	.85	.11	.11	463	--	--	210	170
MAY														
20...		--	--	--	--	--	--	--	--	130	--	--	76	7
JUNE														
11...		--	.17	.00	.12	.98	1.1	.17	.17	98	--	--	36	16
JULY														
16...		--	.00	.00	.11	.67	.78	.10	.10	165	58	9	88	12
AUG.														
08...		--	.03	.01	.20	1.3	1.5	.14	.14	915	87	4	150	94
SEP.														
25...		--	.00	.00	.07	.64	.71	.09	.09	101	72	7	63	0

08018500 SABINE RIVER NEAR MINEOLA, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	BIO- CHEM- ICAL OXYGEN DEMAND (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	PHENOLS (UG/L)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)
OCT.												
04...	.5	189	7.2	23.5	--	--	--	--	--	--	--	--
29...	.7	211	6.6	20.0	--	--	7.4	80	1.3	--	--	--
NOV.												
30...	1.0	187	6.7	13.0	--	--	--	--	--	--	--	--
DEC.												
10...	.6	204	6.7	9.0	--	--	12.4	107	.6	--	--	--
14...	.7	229	7.3	11.0	--	--	--	--	--	--	--	--
JAN.												
23...	.7	165	6.9	10.0	--	--	--	--	--	--	--	--
FEB.												
12...	.9	275	7.0	--	--	--	--	--	2.0	--	--	--
25...	1.2	348	6.7	9.5	--	--	--	--	--	--	--	--
MAR.												
18...	.8	249	7.0	18.0	--	--	--	--	--	--	--	--
APR.												
16...	2.2	824	6.9	19.5	--	--	7.7	83	1.4	--	--	--
MAY												
20...	.7	234	7.1	25.0	--	--	--	--	--	--	--	--
JUNE												
11...	1.2	183	6.2	24.0	--	--	5.4	64	1.8	--	--	--
JULY												
16...	1.0	293	6.9	30.0	5	30	7.0	92	2.3	8.8	--	.0
AUG.												
08...	10	1770	7.0	26.0	20	40	7.6	93	3.2	8.0	18	.0
SEP.												
25...	.5	189	6.5	19.0	5	25	7.6	81	1.4	8.3	3	.0

DATE	TIME	DIS- SOLVED ALUM- INUM (AL) (UG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED CAU- MIUM (CD) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	DIS- SOLVED COBALT (CO) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)
JULY 16...	1700	10	0	110	1	0	0	1

DATE	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	DIS- SOLVED LITHIUM (LI) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED MERCURY (HG) (UG/L)	DIS- SOLVED NICKEL (NI) (UG/L)	DIS- SOLVED STRON- TIUM (SR) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)
JULY 16...	80	1	0	0	.5	0	240	0

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

MONTH	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCT- ANCE (MICRO- MHOS)	DIS- SOLVED SOLIDS (MG/L)	DIS- SOLVED SOLIDS (TONS)	DIS- SOLVED CHLORIDE (MG/L)	DIS- SOLVED CHLORIDE (TONS)	DIS- SOLVED SULFATE (MG/L)	DIS- SOLVED SULFATE (TONS)	HARDNESS (CA+MG) (MG/L)
OCT. 1973.....	66890	189	100	18100	11	1990	18	3250	57
NOV. 1973.....	87500	192	100	23600	12	2830	19	4490	58
DEC. 1973.....	55171	215	120	17900	13	1940	22	3280	67
JAN. 1974.....	83911	196	110	24900	12	2720	19	4300	60
FEB. 1974.....	25315	269	150	10300	21	1440	32	2190	81
MAR. 1974.....	10677	331	180	5190	32	922	46	1330	93
APR. 1974.....	30252	235	130	10600	15	1230	24	1960	74
MAY 1974.....	59098	221	120	19100	13	2070	22	3510	69
JUNE 1974.....	56635	199	110	16800	12	1830	20	3060	61
JULY 1974.....	2297	290	160	992	25	155	36	223	85
AUG. 1974.....	609	829	460	756	120	197	160	263	140
SEPT 1974.....	18481	231	130	6490	14	699	24	1200	73
TOTAL	496836	**	**	155000	**	18000	**	29100	**
WTD.AVG.	1361	211	120	**	13	**	22	**	65

SABINE RIVER BASIN

08018500 SABINE RIVER NEAR MINEOLA, TEX.--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	138	192	194	229	217	364	537	191	255	217	900	511
2	169	217	193	232	214	421	652	233	256	220	509	514
3	187	156	193	217	219	506	1100	254	216	224	490	910
4	189	136	193	244	225	508	773	219	238	228	490	1160
5	188	156	208	248	231	512	568	214	243	232	480	618
6	190	171	222	249	234	525	357	200	238	238	480	379
7	192	178	212	288	243	477	225	220	242	236	470	353
8	195	183	197	321	250	483	291	229	204	232	470	349
9	198	188	201	342	223	481	428	217	350	239	460	339
10	200	193	200	342	232	473	429	209	205	259	460	348
11	200	198	204	358	247	385	307	207	188	271	460	336
12	202	192	210	202	260	344	349	207	167	273	459	488
13	305	201	211	126	287	520	1210	207	173	291	591	278
14	180	201	227	112	298	368	758	217	182	303	2720	1120
15	196	203	242	144	315	260	647	224	185	304	2790	250
16	183	205	243	179	343	246	771	235	187	289	2150	183
17	154	209	246	180	364	252	620	230	188	342	952	279
18	160	210	222	198	317	249	380	230	191	470	939	279
19	174	213	220	209	320	252	401	233	197	404	881	150
20	179	218	236	212	363	275	420	230	195	845	858	126
21	185	231	267	230	315	269	431	234	196	489	852	174
22	190	307	249	193	393	249	150	238	200	481	852	188
23	195	277	218	163	565	335	206	241	200	442	852	190
24	202	259	222	177	381	335	276	245	203	444	837	191
25	205	264	245	191	329	335	192	239	203	451	826	192
26	204	247	243	199	348	239	176	227	205	472	787	193
27	204	243	210	208	249	327	181	389	206	496	441	195
28	202	245	208	225	328	400	188	264	216	496	707	198
29	205	215	216	229	---	452	192	208	218	498	453	198
30	213	187	219	236	---	503	196	249	216	513	441	206
31	186	---	227	228	---	772	---	258	---	530	515	---
MONTH	193	210	219	223	297	391	447	232	212	369	825	363

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	16.0	14.0	7.0	12.0	14.0	21.0	22.0	25.0	---	---	26.0
2	23.0	17.0	14.0	7.0	13.0	16.0	24.0	20.0	26.0	---	27.0	27.0
3	23.0	18.0	15.0	5.0	10.0	17.0	21.0	21.0	23.0	---	---	22.0
4	23.5	19.0	14.0	5.0	10.0	20.0	21.0	22.0	24.0	---	---	20.0
5	23.0	18.0	11.0	5.0	10.0	21.0	15.0	23.0	25.0	---	---	19.0
6	24.0	15.0	10.0	6.0	14.0	20.0	18.0	21.0	25.0	24.0	---	18.0
7	24.0	16.0	10.0	5.0	10.0	20.0	17.0	25.0	26.0	27.0	---	21.0
8	24.0	17.0	9.0	8.0	8.0	20.0	16.0	21.0	26.0	26.0	---	21.0
9	24.0	17.0	9.0	7.0	8.0	21.0	17.0	22.0	25.0	27.0	---	22.0
10	25.0	15.0	8.0	7.0	7.0	21.0	18.0	23.0	22.0	26.0	---	23.0
11	25.0	15.0	11.0	6.0	8.0	21.0	18.0	23.0	23.0	27.0	---	17.0
12	23.0	14.0	11.0	4.0	9.0	21.0	17.0	23.0	25.0	26.0	25.0	23.0
13	23.0	15.0	11.0	5.0	12.0	19.0	19.0	22.0	24.0	27.0	26.0	23.0
14	24.0	17.0	10.0	9.0	14.0	17.0	18.0	24.0	24.0	27.0	26.0	21.0
15	22.0	18.0	11.0	9.0	15.0	17.0	17.0	25.0	26.0	27.0	26.0	21.0
16	22.0	16.0	9.0	9.0	13.0	18.0	17.0	20.0	25.0	27.0	27.0	22.0
17	20.0	17.0	9.0	10.0	11.0	19.0	17.0	24.0	26.0	28.0	27.0	22.0
18	18.0	17.0	9.0	10.0	12.0	18.0	17.0	24.0	25.0	27.0	26.0	25.0
19	19.0	18.0	8.0	10.0	11.0	19.0	19.0	25.0	25.0	27.0	27.0	22.0
20	18.0	17.0	6.0	11.0	13.0	17.0	20.0	24.0	26.0	27.0	27.0	22.0
21	19.0	16.0	6.0	10.0	15.0	15.0	21.0	25.0	26.0	28.0	27.0	22.0
22	19.0	17.0	6.0	14.0	11.0	14.0	19.0	24.0	27.0	27.0	27.0	21.0
23	19.0	17.0	7.0	12.0	12.0	11.0	16.0	23.0	26.0	29.0	26.0	---
24	20.0	18.0	9.0	11.0	10.0	12.0	19.0	24.0	26.0	29.0	27.0	---
25	20.0	18.0	10.0	10.0	8.0	13.0	19.0	25.0	24.0	27.0	27.0	---
26	20.0	18.0	9.0	10.0	8.0	10.0	20.0	25.0	24.0	27.0	25.0	20.0
27	21.0	16.0	8.0	10.0	9.0	15.0	21.0	24.0	23.0	26.0	25.0	19.0
28	19.0	15.0	9.0	10.0	12.0	25.0	21.0	22.0	23.0	28.0	26.0	21.0
29	18.0	14.0	10.0	9.0	---	14.0	21.0	24.0	24.0	26.0	25.0	19.0
30	18.0	13.0	10.0	9.0	---	17.0	21.0	25.0	24.0	28.0	25.0	19.0
31	17.0	---	10.0	10.0	---	21.0	---	25.0	---	27.0	25.0	---
MONTH	21.5	16.5	10.0	8.5	11.0	17.5	19.0	23.0	25.0	27.0	---	21.5

SABINE RIVER BASIN

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08018950 DRY CREEK NEAR QUITMAN, TEX.

LOCATION.--Lat 32°47'52", long 95°27'50", Wood County, on State Highways 154 and 182, 0.8 mile (1.3 km) west of Quitman, and 2.5 miles (4.0 km) upstream from mouth.

DRAINAGE AREA.--63.6 mi² (164.7 km²).

PERIOD OF RECORD.--Chemical analyses: October 1967 to September 1974.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SiO ₂) (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED SODIUM PLUS POTAS-SIUM (MG/L)	DIS-SOLVED POTAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO ₃) (MG/L)	CAR-BONATE (CO ₃) (MG/L)
OCT. 03...	1545	1.2	10	21	8.9	--	88	--	48	0
NOV. 14...	1340	10	18	30	11	--	110	--	18	0
DEC. 13...	1540	17	18	31	13	110	--	5.4	12	0
FEB. 03...	1320	43	11	25	9.6	69	--	3.7	10	0
MAR. 11...	1345	13	17	32	13	100	--	4.5	10	0
APR. 24...	1700	471	2.5	15	5.7	33	--	4.9	15	0
JUNE 06...	0830	2.6	13	24	9.2	73	--	5.1	30	0
SEP. 14...	1415	359	9.6	13	5.7	36	--	4.3	14	0

DATE	DIS-SOLVED SULFATE (SO ₄) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	HARDNESS (CA+MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)
OCT. 03...	34	140	.0	331	89	50	4.1	659	6.6	26.0
NOV. 14...	58	200	.2	435	120	110	4.3	825	6.4	18.0
DEC. 13...	70	200	--	453	130	120	4.2	853	6.4	11.5
FEB. 03...	65	130	--	318	100	94	3.0	606	6.4	11.0
MAR. 11...	81	190	--	442	130	130	3.8	843	6.3	22.0
APR. 24...	40	59	--	168	61	49	1.8	324	6.5	20.0
JUNE 06...	57	130	--	326	98	73	3.2	608	6.6	24.5
SEP. 14...	31	66	--	173	56	44	2.1	300	6.5	16.5

SABINE RIVER BASIN

08019000 LAKE FORK CREEK NEAR QUITMAN, TEX.

LOCATION.--Lat 32°45'45", long 95°27'48", Wood County, at gaging station on State Highway 37, 0.3 mile (0.5 km) downstream from Dry Creek, and 2.4 miles (3.9 km) south of Quitman.

DRAINAGE AREA.--585 mi² (1,515 km²).

PERIOD OF RECORD.--Chemical analyses: December 1961 to June 1965, November 1967 to September 1974.
Water temperatures: December 1967 to September 1974.

EXTREMES.--October 1973 to September 1974:

Specific conductance: Maximum daily, 1,260 micromhos Apr. 12; minimum daily, 72 micromhos Nov. 3.
Water temperatures: Maximum, 28.0°C July 21, 22, 24.

Period of record:

Specific conductance (1967-74): Maximum daily, 2,800 micromhos Oct. 5, 1972; minimum daily, 37 micromhos Dec. 11, 1971.
Water temperatures: Maximum, 29.0°C on several days during summer months in 1969, July 29, 1972; minimum, 2.0°C Jan. 10, 1970.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTAN- TANEOUS 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 (HC03) (MG/L)	CAR- BONATE (C03) (MG/L)	DIS- SOLVED SULFATE (S04) (MG/L)
OCT.										
03...	0800	1310	9.3	8.0	3.0	5.8	5.2	32	0	11
NOV.										
14...	1205	131	16	19	8.1	30	5.0	31	0	49
DEC.										
14...	0945	138	17	24	11	46	5.3	36	0	78
JAN.										
11...	0830	488	12	27	12	59	4.3	16	0	79
FEB.										
03...	1215	318	12	24	9.1	43	4.5	31	0	71
MAR.										
11...	1450	75	15	38	17	74	4.2	48	0	120
APR.										
24...	1340	10300	3.9	6.3	2.4	6.5	4.4	16	0	18
MAY										
31...	0800	64	12	23	11	39	5.1	40	0	70
JUNE										
05...	1615	40	13	23	10	37	6.5	41	0	74
JULY										
31...	0800	2.1	8.1	25	9.7	67	7.4	71	0	46
AUG.										
31...	0800	270	7.3	14	4.7	35	4.8	29	0	26
SEP.										
14...	1700	1100	8.5	11	4.2	27	4.2	16	0	21

DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	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)
OCT.									
03...	9.4	.2	68	32	6	.4	103	6.6	--
NOV.									
14...	50	--	192	81	55	1.5	351	7.1	15.5
DEC.									
14...	77	--	276	110	76	2.0	486	7.0	9.0
JAN.									
11...	110	.1	308	120	100	2.4	568	6.8	--
FEB.									
03...	72	--	251	97	72	1.9	457	6.7	10.5
MAR.									
11...	120	--	412	160	130	2.5	737	7.1	22.0
APR.									
24...	9.5	--	59	26	12	.6	100	6.1	20.0
MAY									
31...	61	--	241	100	70	1.7	439	7.5	25.0
JUNE									
05...	56	--	240	99	65	1.6	434	6.7	24.5
JULY									
31...	110	--	308	100	44	2.9	577	7.0	26.0
AUG.									
31...	60	--	166	54	31	2.1	325	6.8	24.0
SEP.									
14...	51	--	135	45	32	1.8	262	5.8	17.0

08019000 LAKE FORK CREEK NEAR QUITMAN, TEX.--Continued

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

MONTH	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCT- ANCE (MICRO- MHOS)	DIS- SOLVED SOLIDS (MG/L)	DIS- SOLVED SOLIDS (TONS)	DIS- SOLVED CHLORIDE (MG/L)	DIS- SOLVED CHLORIDE (TONS)	DIS- SOLVED SULFATE (MG/L)	DIS- SOLVED SULFATE (TONS)	HARDNESS (CA+MG) (MG/L)
OCT. 1973.....	15652	174	99	4180	21	887	26	1100	43
NOV. 1973.....	45503	154	88	10800	18	2210	23	2830	39
DEC. 1973.....	29395	238	130	10300	33	2620	37	2940	57
JAN. 1974.....	50202	180	100	13600	22	2980	27	3660	45
FEB. 1974.....	7066	535	290	5530	85	1620	77	1470	110
MAR. 1974.....	8013	392	210	4540	60	1300	62	1340	89
APR. 1974.....	33880	209	120	11000	28	2560	32	2930	51
MAY 1974.....	6583	385	210	3730	58	1030	61	1080	87
JUNE 1974.....	24550	165	94	6230	20	1330	25	1660	41
JULY 1974.....	149.7	587	320	129	94	38.0	79	31.9	120
AUG. 1974.....	466.2	439	240	302	68	85.6	70	88.1	99
SEPT 1974.....	22643	162	92	5620	19	1160	24	1470	41
TOTAL	244102.72	**	**	76000	**	17800	**	20600	**
WTD.AVG.	668.77	206	120	**	27	**	31	**	50

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	96	132	132	398	320	554	796	408	436	483	577	248
2	102	86	160	431	376	556	692	398	433	496	516	258
3	103	72	204	476	447	575	696	393	437	503	468	270
4	118	83	292	518	477	604	694	278	414	513	462	237
5	141	115	324	582	500	604	694	281	431	513	472	182
6	139	136	261	580	530	668	683	327	452	515	481	181
7	148	188	217	596	558	668	671	393	451	516	464	206
8	165	192	243	678	579	687	671	316	405	514	453	234
9	181	181	275	682	604	707	692	360	275	515	433	234
10	198	193	277	662	605	719	689	417	258	517	508	247
11	209	225	338	568	650	734	700	471	112	521	465	369
12	276	259	390	101	676	735	1260	523	111	525	686	371
13	258	306	440	81	653	411	747	525	106	522	780	313
14	322	343	487	80	653	294	712	531	117	511	736	246
15	187	391	555	104	723	230	642	544	142	499	684	196
16	155	465	555	140	726	237	578	558	159	896	686	161
17	152	466	592	187	723	310	575	587	167	559	622	170
18	171	485	603	188	723	369	584	604	205	548	622	217
19	181	517	338	309	752	420	605	607	256	653	627	116
20	233	556	352	287	759	518	595	609	273	752	627	117
21	231	876	266	144	719	518	612	619	292	788	607	88
22	231	532	225	131	642	564	481	626	339	833	614	108
23	232	476	225	135	653	584	347	634	358	845	592	136
24	265	448	290	182	653	647	95	643	389	845	560	136
25	291	523	294	248	414	647	90	650	389	730	551	141
26	327	342	229	314	404	650	106	494	398	649	523	293
27	334	268	164	425	420	691	160	525	419	651	419	294
28	661	164	154	397	457	714	160	528	440	622	384	224
29	366	130	204	304	---	670	187	411	454	605	563	222
30	197	118	269	304	---	731	216	421	467	582	595	235
31	177	---	335	276	---	734	---	439	---	578	325	---
MONTH	221	309	313	339	586	573	548	488	320	606	552	215

SABINE RIVER BASIN

08019000 LAKE FORK CREEK NEAR QUITMAN, TEX.--Continued

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	---	---	---	---	---	---	---	25.0	25.0	26.0	27.0	25.0
2	---	---	---	---	---	---	---	25.0	24.0	25.0	26.0	24.0
3	---	---	---	---	11.0	---	---	25.0	25.0	26.0	26.0	23.0
4	---	---	---	---	11.0	---	---	25.0	25.0	25.0	27.0	24.0
5	---	---	---	---	11.0	---	---	25.0	25.0	26.0	26.0	24.0
6	---	---	---	---	11.0	---	---	25.0	25.0	26.0	25.0	25.0
7	---	---	---	---	10.0	---	---	25.0	25.0	24.0	24.0	24.0
8	---	---	---	---	7.0	---	---	25.0	25.0	26.0	24.0	24.0
9	---	---	---	---	8.0	---	---	25.0	25.0	26.0	24.0	24.0
10	---	---	---	---	---	---	---	25.0	25.0	26.0	24.0	24.0
11	---	---	---	---	9.0	---	---	25.0	26.0	26.0	24.0	23.0
12	---	---	---	---	---	---	---	24.0	25.0	26.0	26.0	23.0
13	---	---	---	---	---	---	---	24.0	25.0	26.0	26.0	24.0
14	---	---	---	---	---	---	---	24.0	26.0	26.0	26.0	23.0
15	---	---	---	---	---	---	---	24.0	26.0	25.0	25.0	23.0
16	---	---	---	---	---	---	---	24.0	25.0	26.0	25.0	23.0
17	---	---	---	---	---	---	---	24.0	25.0	26.0	26.0	22.0
18	---	---	---	---	---	---	---	24.0	25.0	26.0	25.0	23.0
19	---	---	---	---	---	---	---	26.0	26.0	26.0	26.0	24.0
20	---	---	---	---	12.0	---	---	26.0	26.0	26.0	26.0	23.0
21	---	---	---	---	11.0	---	---	26.0	26.0	28.0	26.0	22.0
22	---	---	---	---	9.0	---	---	26.0	26.0	28.0	26.0	22.0
23	---	---	---	---	12.0	---	---	26.0	26.0	27.0	25.0	22.0
24	---	---	---	---	---	---	---	26.0	26.0	28.0	26.0	22.0
25	---	---	---	---	8.0	---	---	26.0	26.0	25.0	26.0	22.0
26	---	---	---	---	---	---	---	26.0	25.0	27.0	25.0	22.0
27	---	---	---	---	---	---	---	25.0	24.0	27.0	25.0	22.0
28	---	---	---	---	---	---	---	26.0	25.0	27.0	25.0	22.0
29	---	---	---	---	---	---	---	26.0	25.0	27.0	25.0	22.0
30	---	---	---	---	---	---	---	26.0	25.0	26.0	25.0	22.0
31	---	---	---	---	---	---	---	25.0	---	26.0	24.0	---
MONTH	---	---	---	---	---	---	---	25.0	25.5	26.0	25.5	23.0

SABINE RIVER BASIN

157

08019500 BIG SANDY CREEK NEAR BIG SANDY, TEX.

LOCATION.--Lat 32°36'12", long 95°05'32", Upshur County, at gaging station at bridge on State Highway 155, 0.5 mile (0.8 km) upstream from St. Louis Southwestern Railway Lines bridge, 1.6 miles (2.6 km) northeast of Big Sandy, and 6.5 miles (10.5 km) upstream from mouth.

DRAINAGE AREA.--231 mi² (598 km²).

PERIOD OF RECORD.--Chemical analyses: October 1969 to September 1974.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISE- CHARGE (CFS)	DIS- SOLVED SILICA (SIU2) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED SODIUM PLUS POTAS- SIUM (K) (MG/L)	DIS- SOLVED PU- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)
NOV. 12...	1235	174	15	7.8	3.8	--	14	--	14	0
DEC. 12...	1250	196	17	8.0	3.7	22	--	3.7	20	0
JAN. 22...	1605	410	13	4.5	3.9	18	--	4.0	9	0
MAR. 13...	1340	157	9.2	8.6	3.7	17	--	2.8	16	0
APR. 19...	1755	68	15	7.3	3.7	19	--	2.8	18	0
MAY 26...	1335	173	13	4.9	2.0	10	--	2.8	15	0
JULY 22...	1755	34	15	6.7	2.7	14	--	3.1	13	0
SEP. 01...	1640	102	16	6.4	2.6	20	--	2.6	10	0

DATE	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	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)
NOV. 12...	17	25	1	91	35	24	1.0	177	6.4	12.0
DEC. 12...	21	33	--	118	35	19	1.6	196	7.0	10.0
JAN. 22...	28	29	--	110	40	32	1.2	187	6.4	12.0
MAR. 13...	23	25	--	100	37	24	1.2	180	6.5	17.0
APR. 19...	15	32	--	104	33	19	1.4	173	6.7	16.0
MAY 26...	9.4	14	--	60	20	8	1.0	111	6.2	24.0
JULY 22...	14	23	--	85	28	17	1.2	150	6.6	27.0
SEP. 01...	10	35	--	99	27	18	1.7	170	6.1	25.0

SABINE RIVER BASIN

08020000 SABINE RIVER NEAR GLADEWATER, TEX.

LOCATION.--Lat 32°31'37", long 94°57'36", Gregg County, at gaging station at bridge on U.S. Highway 271, 0.4 mile (0.6 km) downstream from Glade Creek, and 1.2 miles (1.9 km) southwest of Gladewater.

DRAINAGE AREA.--2,791 mi² (7,229 km²).

PERIOD OF RECORD.--Chemical and biochemical analyses: October 1967 to September 1974.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	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 SODIUM PLUS POTAS- SIUM (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)
OCT. 29...	1630	4520	8.0	19	3.5	--	14	--	70	0	15
DEC. 10...	1415	6070	8.8	15	3.6	14	--	4.2	46	0	21
FEB. 12...	1830	2040	8.3	18	4.4	15	--	3.4	55	0	26
APR. 16...	1925	980	14	21	7.7	42	--	3.6	33	0	56
JUNE 11...	0915	5600	7.3	6.3	2.0	10	--	3.2	14	0	13
AUG. 20...	0850	128	13	14	4.3	49	--	2.4	22	0	29

DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)	VOL. NON- FILT- RABLE RESIDUE (MG/L)
OCT. 29...	13	.3	.09	.00	.00	.22	--	.11	107	--	--
DEC. 10...	21	--	.20	.00	.30	.78	--	.06	110	--	--
FEB. 12...	25	--	.11	.01	.10	.06	--	.14	127	57	1
APR. 16...	70	--	.18	.00	.16	.60	.76	.15	231	70	5
JUNE 11...	16	--	.15	.00	.11	.99	1.1	.11	65	--	--
AUG. 20...	81	--	.00	.00	.05	.89	.94	.08	204	--	--

DATE	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SONP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	BIO- CHEM- ICAL OXYGEN DEMAND (MG/L)
OCT. 29...	62	4	.8	194	7.1	20.0	--	--	7.6	83	1.5
DEC. 10...	52	15	.8	195	6.7	11.0	--	--	10.6	95	1.3
FEB. 12...	63	18	.8	236	6.9	9.5	20	30	10.6	93	1.8
APR. 16...	84	57	2.0	416	6.8	19.0	45	35	8.2	87	1.0
JUNE 11...	24	12	.9	122	6.3	23.5	--	--	6.1	71	2.1
AUG. 20...	53	35	2.9	401	6.1	28.0	--	--	7.1	90	1.2

SABINE RIVER BASIN

159

08020200 PRAIRIE CREEK NEAR GLADEWATER, TEX.

LOCATION.--Lat 32°28'45", long 94°57'14", Gregg County, at gaging station on State Highway 135, 0.7 miles (1.1 km) upstream from Little Caney Creek, 3.5 miles (5.6 km) upstream from mouth, and 4.0 miles (6.4 km) south of Gladewater.

DRAINAGE AREA.--48.9 mi² (126.7 km²).

PERIOD OF RECORD.--Chemical analyses: February 1968 to September 1974.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO ₂) (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 SODIUM PLUS POTAS- SIUM (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAH- BONATE (CO ₃) (MG/L)
OCT. 02...	1520	16	22	8.0	3.4	--	16	--	20	0
NOV. 09...	1735	31	22	8.0	3.2	--	15	--	21	0
DEC. 10...	1750	53	22	5.6	2.6	9.2	--	1.8	16	0
JAN. 21...	1410	171	15	5.5	1.9	8.4	--	3.1	12	0
MAR. 02...	1135	43	21	5.7	2.6	11	--	1.9	18	0
APR. 09...	1015	18	23	6.9	2.9	12	--	2.2	18	0
MAY 25...	1237	10	26	7.6	2.9	16	--	1.9	19	0
JUNE 10...	1330	326	9.3	3.8	.8	4.3	--	2.8	10	0
JULY 22...	1032	3.3	20	6.7	2.9	9.3	--	2.4	24	0
AUG. 27...	1705	10	19	5.5	2.0	6.2	--	2.4	18	0

DATE	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	HARD- NESS (CA+MG) (MG/L)	NON- CAH- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)
OCT. 02...	10	30	.0	99	34	16	1.2	158	6.0	24.0
NOV. 09...	9.6	27	.1	95	33	16	1.1	166	7.0	16.5
DEC. 10...	11	15	--	75	25	12	.8	111	6.9	9.0
JAN. 21...	9.2	14	--	63	22	12	.8	92	7.1	11.5
MAR. 02...	10	18	--	79	25	10	1.0	119	6.5	16.0
APR. 09...	8.6	23	--	87	29	14	1.0	133	6.4	14.5
MAY 25...	10	31	--	105	31	15	1.3	163	6.7	23.0
JUNE 10...	10	7.2	--	43	13	5	.5	68	6.3	23.5
JULY 22...	5.5	19	--	78	29	9	.8	128	6.6	26.5
AUG. 27...	6.5	9.5	--	60	22	7	.6	78	6.6	27.0

SABINE RIVER BASIN

08020700 RABBIT CREEK AT KILGORE, TEX.

LOCATION.--Lat 32°23'17", long 94°54'11", Gregg County, at gaging station on State Highway 31, at Kilgore, 0.4 mile (0.6 km) upstream from Big Caney Creek, 4.4 miles (7.1 km) upstream from Peavine Creek, and 14 miles (23 km) upstream from mouth.

DRAINAGE AREA.--75.8 mi² (196.3 km²).

PERIOD OF RECORD.--Chemical analyses: March 1965 to September 1974.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	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 SODIUM PLUS POTAS- SIUM (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)
OCT. 01...	1355	26	20	18	7.5	--	91	--	16	0
NOV. 05...	1610	59	24	14	12	--	75	--	16	0
DEC. 04...	1510	1540	7.4	5.4	1.7	22	--	4.1	11	0
JAN. 18...	1735	79	25	17	8.2	140	--	3.4	9	0
MAR. 01...	1625	80	25	15	7.2	120	--	2.9	12	0
APR. 08...	1640	33	28	20	8.8	210	--	3.5	12	0
JULY 21...	1805	4.1	20	20	8.2	230	--	4.5	71	0
AUG. 31...	1340	21	21	12	4.1	88	--	4.5	16	0

DATE	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	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)
OCT. 01...	16	170	.0	334	76	63	4.5	669	5.9	21.5
NOV. 05...	14	160	.2	303	84	71	3.6	585	6.5	19.0
DEC. 04...	6.5	36	--	89	20	11	2.1	158	6.3	14.0
JAN. 18...	44	240	--	482	76	69	7.0	877	6.4	16.0
MAR. 01...	16	220	--	417	67	57	6.4	803	6.2	16.0
APR. 08...	16	380	--	672	86	76	9.8	1290	6.2	18.5
JULY 21...	23	360	--	701	84	25	11	1370	7.0	28.0
AUG. 31...	18	150	--	305	47	34	5.6	597	6.3	25.0

08022000 SABINE RIVER NEAR TATUM, TEX.

LOCATION.--Lat 32°22'11", long 94°27'28", Panola County, at gaging station at bridge on State Highway 43, 5.1 miles (8.2 km) northeast of Tatum, 5.2 miles (8.4 km) upstream from Potters Creek, and 5.6 miles (9.0 km) downstream from Cherokee Bayou.

DRAINAGE AREA.--3,493 mi² (9,047 km²).

PERIOD OF RECORD.--Chemical analyses: February 1952 to September 1974.

Chemical and biochemical analyses: January 1968 to September 1974.

Pesticide analyses: March 1968 to September 1974.

Water temperatures: February 1952 to September 1974.

EXTREMES.--October 1973 to September 1974:

Specific conductance: Maximum daily, 697 micromhos Aug. 2; minimum daily, 98 micromhos June 10.

Water temperatures: Maximum, 32.0°C on several days during July and August.

Period of record:

Specific conductance: Maximum daily, 3,040 micromhos Jan. 13, 1966; minimum daily, 82 micromhos Dec. 24, 1971.

Water temperatures (1952-62, 1964-74): Maximum, 38.0°C July 8, 1969; minimum, 2.0°C Jan. 12, 13, 1962.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	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 SODIUM PLUS POTAS- SIUM (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
OCT. 30...	0815	5270	9.5	18	2.7	--	18	--	61	0	16	20
NOV. 08...	0950	5450	9.8	9.6	2.6	13	--	4.1	25	0	15	21
DEC. 07...	1800	12400	9.3	7.8	2.5	15	--	4.1	25	0	12	21
10...	1530	10400	9.5	13	2.8	14	--	4.0	34	0	14	22
JAN. 18...	1455	4700	7.7	11	3.4	16	--	4.3	16	0	22	24
FEB. 06...	0800	10300	8.0	15	3.6	18	--	3.3	39	0	25	27
13...	1100	4490	10	17	4.4	26	--	3.3	44	0	28	40
MAR. 01...	1240	3020	12	19	6.9	35	--	3.2	35	0	48	55
APR. 17...	1115	1490	13	13	4.4	29	--	3.2	33	0	29	43
MAY 23...	0940	1200	11	20	4.4	30	--	3.4	64	0	27	39
JUNE 11...	1800	10100	5.8	4.8	1.6	11	--	2.6	11	0	9.2	19
JULY 21...	1400	264	12	21	6.6	76	--	4.1	66	0	23	120
AUG. 21...	1000	166	11	20	5.2	56	--	4.0	48	0	31	81
SEP. 19...	0800	6240	12	8.0	2.3	20	--	3.0	14	0	14	31

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)	VOL. NON- FILT- RABLE RESIDUE (MG/L)	HARD- NESS (CA, MG) (MG/L)
OCT. 30...	.2	.02	.00	.00	.18	--	.16	114	80	12	56
NOV. 08...	--	--	--	--	--	--	--	87	--	--	35
DEC. 07...	--	--	--	--	--	--	--	84	--	--	30
10...	--	.10	.00	.10	.28	--	.09	96	34	8	44
JAN. 18...	--	--	--	--	--	--	--	96	--	--	41
FEB. 06...	--	--	--	--	--	--	--	119	--	--	52
13...	--	.10	.01	.19	.36	--	.16	151	57	12	61
MAR. 01...	--	--	--	--	--	--	--	196	--	--	76
APR. 17...	--	.18	.00	.18	.57	.75	.13	151	56	12	51
MAY 23...	--	--	--	--	--	--	--	166	--	--	68
JUNE 11...	--	.14	.01	.12	.87	.99	.13	59	112	12	19
JULY 21...	--	--	--	--	--	--	--	295	--	--	80
AUG. 21...	--	.00	.01	.41	.99	1.4	.20	232	21	4	72
SEP. 19...	--	--	--	--	--	--	--	97	--	--	29

SABINE RIVER BASIN

08022000 SABINE RIVER NEAR TATUM, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	NON-CARBONATE HARDNESS (MG/L)	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	BIO-CHEMICAL OXYGEN DEMAND (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT. 30...	6	1.0	202	6.4	17.0	70	30	7.8	80	1.8	14
NOV. 08...	14	1.0	157	7.3	17.0	--	--	--	--	--	--
DEC. 07...	9	1.2	147	6.7	11.5	--	--	--	--	--	--
10...	16	.9	167	6.8	10.0	50	25	9.5	84	.6	9.5
JAN. 18...	28	1.1	169	6.6	8.5	--	--	--	--	--	--
FEB. 06...	20	1.1	229	7.1	9.0	--	--	--	--	--	--
13...	25	1.5	268	6.8	11.0	20	25	9.8	88	2.0	8.0
MAR. 01...	47	1.7	365	6.9	11.5	--	--	--	--	--	--
APR. 17...	24	1.8	272	6.6	18.5	40	25	7.0	74	1.2	7.5
MAY 23...	16	1.6	305	6.9	25.0	--	--	--	--	--	--
JUNE 11...	10	1.1	115	6.1	24.5	140	70	5.4	64	1.9	9.6
JULY 21...	25	3.7	589	6.3	31.5	--	--	--	--	--	--
AUG. 21...	32	2.9	447	6.1	29.5	10	5	3.9	51	2.6	7.2
SEP. 19...	18	1.6	186	6.5	26.0	--	--	--	--	--	--

DATE	TIME	DISSOLVED ALUMINUM (AL) (UG/L)	DISSOLVED ARSENIC (AS) (UG/L)	DISSOLVED BORON (B) (UG/L)	DISSOLVED CADMIUM (CD) (UG/L)	DISSOLVED CHROMIUM (CR) (UG/L)	DISSOLVED COBALT (CO) (UG/L)	DISSOLVED COPPER (CU) (UG/L)
OCT. 30...	0815	30	2	--	6	0	0	5
FEB. 13...	1100	90	0	50	1	0	1	16
APR. 17...	1115	40	0	60	0	20	0	5
AUG. 21...	1000	30	0	--	0	0	0	0

DATE	DISSOLVED IRON (FE) (UG/L)	DISSOLVED LEAD (PB) (UG/L)	DISSOLVED LITHIUM (LI) (UG/L)	DISSOLVED MANGANESE (MN) (UG/L)	DISSOLVED MERCURY (HG) (UG/L)	DISSOLVED NICKEL (NI) (UG/L)	DISSOLVED STRONTIUM (SR) (UG/L)	DISSOLVED ZINC (ZN) (UG/L)
OCT. 30...	260	0	0	0	.0	11	180	20
FEB. 13...	190	5	0	110	.1	5	230	10
APR. 17...	110	1	10	20	.0	1	230	0
AUG. 21...	60	0	0	0	.0	2	400	30

08022000 SABINE RIVER NEAR TATUM, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TEMPERATURE (DEG C)	ALDRIN (UG/L)	ALDRIN IN BOTTOM DE-POSITS (UG/KG)	DDD (UG/L)	DDD IN BOTTOM DE-POSITS (UG/KG)	DDE (UG/L)	DDE IN BOTTOM DE-POSITS (UG/KG)	DDT (UG/L)	DDT IN BOTTOM DE-POSITS (UG/KG)
OCT. 30...	0815	5270	17.0	.00	.0	.00	1.2	.00	.0	.00	.0
FEB. 13...	1100	4490	11.0	.00	.0	.00	.0	.00	.0	.00	.0
APR. 17...	1115	1490	18.5	.00	.0	.00	1.1	.00	1.1	.00	.3
AUG. 21...	1000	166	29.5	.00	.0	.00	.0	.00	.0	.00	.0

DATE	DI-ELDRIN (UG/L)	DI-ELDRIN IN BOTTOM DE-POSITS (UG/KG)	ENDRIN (UG/L)	ENDRIN IN BOTTOM DE-POSITS (UG/KG)	HEPTA-CHLOR (UG/L)	HEPTA-CHLOR IN BOTTOM DE-POSITS (UG/KG)	HEPTA-CHLOR EPOXIDE (UG/L)	HEPTA-CHLOR EPOXIDE IN BOTTOM DE-POSITS (UG/KG)	LINDANE (UG/L)	LINDANE IN BOTTOM DE-POSITS (UG/KG)	CHLOR-DANE (UG/L)
OCT. 30...	.00	.0	.00	.0	.00	.0	.00	.0	.00	.0	.0
FEB. 13...	.00	.0	.00	.0	.00	.0	.00	.0	.00	.0	.0
APR. 17...	.00	1.2	.00	.0	.00	.0	.00	.0	.00	.0	.0
AUG. 21...	.00	.0	.00	.0	.00	.0	.00	.0	.00	.0	.0

DATE	CHLOR-DANE IN BOTTOM DE-POSITS (UG/KG)	PCB (UG/L)	PCB IN BOTTOM DE-POSITS (UG/KG)	DI-AZINON (UG/L)	MALA-THION (UG/L)	METHYL PARA-THION (UG/L)	PARA-THION (UG/L)	2,4-D (UG/L)	SILVEX (UG/L)	2,4,5-T (UG/L)
OCT. 30...	4	.0	0	.00	.00	.00	.00	.03	.00	.01
FEB. 13...	0	.0	0	.00	.00	.00	.00	.00	.00	.01
APR. 17...	7	.0	0	.00	.00	.00	.00	--	--	--
AUG. 21...	0	.0	0	.01	.00	.00	.00	.00	.02	.00

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

MONTH	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCTANCE (MICRO-MHOS)	DIS-SOLVED SOLIDS (MG/L)	DIS-SOLVED SOLIDS (TONS)	DIS-SOLVED CHLORIDE (MG/L)	DIS-SOLVED CHLORIDE (TONS)	DIS-SOLVED SULFATE (MG/L)	DIS-SOLVED SULFATE (TONS)	HARDNESS (CA+MG) (MG/L)
OCT. 1973.....	134062	179	100	36200	23	8330	18	6520	42
NOV. 1973.....	201060	170	96	52100	22	11900	17	9230	40
DEC. 1973.....	234140	186	100	63200	24	15200	19	12000	43
JAN. 1974.....	213670	198	110	63500	24	13800	20	11500	46
FEB. 1974.....	176520	240	130	62000	30	14300	25	11900	56
MAR. 1974.....	76410	275	150	30900	39	8050	29	5980	64
APR. 1974.....	60089	264	150	24300	36	5840	28	4540	61
MAY 1974.....	154440	220	120	50000	26	10800	23	9590	51
JUNE 1974.....	167590	167	94	42500	22	9950	16	7240	39
JULY 1974.....	15105	355	190	7750	59	2410	30	1220	68
AUG. 1974.....	6902	488	260	4850	93	1730	30	559	75
SEPT 1974.....	103027	202	110	30600	25	6950	20	5560	47
TOTAL	1543015	**	**	468000	**	109000	**	85800	**
WTD.AVG.	4227	204	110	**	26	**	21	**	47

08022000 SABINE RIVER NEAR TATUM, TEX.--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	273	211	139	239	179	331	297	169	283	233	599	222
2	231	188	173	221	178	320	318	175	365	251	697	246
3	245	188	132	148	182	310	352	190	291	263	696	243
4	233	188	148	285	211	305	355	175	325	284	493	235
5	188	179	174	250	204	302	357	176	317	300	509	243
6	165	163	143	211	232	309	383	172	313	327	402	281
7	169	152	143	205	224	312	406	190	347	327	543	297
8	182	150	146	200	217	315	423	204	137	353	537	338
9	172	144	161	228	244	322	477	213	130	368	639	146
10	172	179	155	224	220	326	460	216	98	382	605	221
11	190	142	175	161	297	332	447	212	103	430	575	274
12	133	202	204	253	300	225	421	215	126	480	469	412
13	209	191	215	279	257	250	363	233	132	513	478	275
14	194	173	232	158	260	233	269	230	165	491	423	381
15	129	183	215	246	265	204	244	234	174	508	474	175
16	132	210	278	324	270	224	266	236	175	476	590	127
17	144	159	188	220	272	236	307	235	172	546	557	193
18	175	171	201	168	238	297	343	241	169	579	461	187
19	184	149	201	153	290	327	273	253	168	603	534	186
20	188	195	201	154	199	267	533	264	166	541	523	183
21	202	157	250	159	333	240	492	279	169	510	431	195
22	193	166	273	153	230	268	447	290	173	430	557	144
23	177	163	220	154	213	263	305	310	180	432	504	160
24	177	158	225	281	375	250	225	331	184	549	502	183
25	211	154	212	285	337	266	161	359	177	511	400	185
26	185	163	234	175	335	272	184	355	199	525	326	168
27	205	151	189	174	324	291	173	314	193	462	486	187
28	205	157	203	143	299	277	201	467	203	511	628	174
29	175	157	205	166	---	276	164	294	208	448	440	171
30	186	167	208	176	---	294	160	252	215	437	314	283
31	192	---	205	177	---	344	---	258	---	479	440	---
MONTH	188	170	195	205	257	283	327	250	202	437	510	224

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	---	---	---	8.0	7.0	9.0	22.0	21.0	27.0	28.0	---	30.0
2	---	---	---	7.0	7.0	---	22.0	21.0	27.0	30.0	---	29.0
3	---	---	---	7.0	8.0	---	19.0	22.0	27.0	30.0	---	28.0
4	---	---	---	7.0	9.0	---	---	22.0	26.0	29.0	31.0	28.0
5	---	---	---	9.0	7.0	10.0	19.0	22.0	27.0	---	30.0	28.0
6	---	---	---	8.0	9.0	11.0	20.0	23.0	27.0	30.0	31.0	27.0
7	---	---	---	---	8.0	9.0	20.0	22.0	26.0	30.0	30.0	29.0
8	---	---	---	6.0	7.0	10.0	19.0	---	26.0	30.0	32.0	29.0
9	---	---	---	7.0	7.0	11.0	19.0	23.0	25.0	30.0	29.0	28.0
10	---	---	---	7.0	9.0	11.0	19.0	23.0	26.0	30.0	32.0	27.0
11	---	---	---	6.0	9.0	8.0	19.0	23.0	25.0	31.0	31.0	29.0
12	---	---	---	6.0	10.0	9.0	22.0	23.0	25.0	---	30.0	26.0
13	---	---	---	6.0	11.0	20.0	22.0	25.0	27.0	31.0	---	27.0
14	---	---	---	8.0	---	18.5	19.0	25.0	27.0	---	29.0	28.0
15	---	---	---	8.0	---	21.0	20.0	25.0	27.0	32.0	31.0	28.0
16	---	---	---	9.0	---	18.5	19.0	---	26.0	30.0	30.0	27.0
17	---	---	---	9.0	8.0	20.0	22.0	25.0	25.0	31.0	30.0	27.0
18	---	---	---	9.0	8.0	18.5	22.0	26.0	27.0	31.0	32.0	26.0
19	---	---	---	10.0	7.0	20.0	19.0	26.0	28.0	29.0	32.0	26.0
20	---	---	---	9.0	9.0	18.5	20.0	25.0	27.0	30.0	30.0	25.0
21	---	---	---	7.0	9.0	18.0	23.0	25.0	---	30.0	29.0	25.0
22	---	---	---	7.0	8.0	16.5	21.0	---	25.0	---	32.0	26.0
23	---	---	---	9.0	7.0	16.5	21.0	25.0	---	30.0	30.0	25.0
24	---	---	---	10.0	8.0	15.0	21.0	27.0	29.0	30.0	30.0	25.0
25	---	---	---	10.0	8.0	14.0	21.0	27.0	29.0	31.0	---	23.0
26	---	---	---	10.0	9.0	15.0	21.0	26.0	26.0	31.0	31.0	22.0
27	---	---	---	8.0	9.0	20.0	21.0	27.0	26.0	29.0	30.0	25.0
28	---	---	10.0	9.0	10.0	20.0	22.0	27.0	28.0	32.0	30.0	23.0
29	---	---	10.0	8.0	---	19.0	21.0	27.0	27.0	31.0	28.0	23.0
30	---	---	10.0	7.0	---	18.0	21.0	26.0	---	31.0	30.0	24.0
31	---	---	10.0	8.0	---	19.0	---	---	---	29.0	29.0	---
MONTH	---	---	---	8.0	8.5	15.5	20.5	24.5	26.5	30.0	30.5	26.5

SABINE RIVER BASIN

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08025307 MILL CREEK NEAR BURKEVILLE, TEX.

LOCATION.--Lat 30°09'23", long 93°40'35", Newton County, 500 ft (152 m) downstream from Mitchell Creek, 3.5 miles (5.6 km) east of State Highway 87, and 11 miles (18 km) north of Burkeville.

PERIOD OF RECORD.--Chemical and biochemical analyses: May to September 1974.
Pesticide analyses: August to September 1974.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	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)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	TOTAL NITRATE (N) (MG/L)
APR. 04...	1030	16	18	2.1	.6	4.5	1.1	12	0	3.3	5.0	.14
MAY 30...	0955	11	17	1.8	.5	3.3	1.1	8	0	5.3	4.8	.17
JUNE 14...	1430	9.6	15	3.9	1.4	3.2	1.2	8	0	3.1	5.9	.18
AUG. 06...	1415	7.0	15	1.8	.5	3.3	.9	8	0	2.6	4.8	.28
SEP. 25...	1145	11	15	2.7	.6	2.9	.8	4	0	2.5	4.8	.23

DATE	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITU- ENTS) (MG/L)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)	VOL- NON- FILT- RABLE RESIDUE (MG/L)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO
APR. 04...	.00	.00	.08	--	.01	41	17	3	8	0	.7
MAY 30...	.00	.02	.63	.65	.03	38	18	16	7	0	.6
JUNE 14...	.00	.07	1.3	1.4	.05	38	15	14	16	9	.4
AUG. 06...	.00	.07	.42	.49	.04	33	9	0	7	0	.6
SEP. 25...	.00	.05	.32	.37	.00	31	23	6	9	6	.4

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	PHENOLS (UG/L)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)
APR. 04...	48	7.1	15.0	40	15	9.9	97	2.0	--	0	--
MAY 30...	38	7.6	22.5	30	15	8.2	93	2.1	3.3	0	.0
JUNE 14...	41	6.2	--	40	12	--	--	.6	5.0	4	--
AUG. 06...	34	6.6	23.5	30	8	9.2	107	.5	3.0	1	.0
SEP. 25...	35	6.8	24.0	30	10	7.0	82	1.3	4.0	1	.0

SABINE RIVER BASIN

08025307 MILL CREEK NEAR BURKEVILLE, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

		DIS- SOLVED ALUM- INUM (AL) (UG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	DIS- SOLVED COBALT (CO) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)
DATE	TIME							
APR. 04...	1030	90	0	20	0	10	0	2
MAY 30...	0955	20	0	30	0	0	0	10
JUNE 14...	1430	20	2	20	0	0	0	1
AUG. 06...	1415	0	0	30	0	0	0	3
SEP. 25...	1145	30	0	40	0	0	0	1

		DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	DIS- SOLVED LITHIUM (LI) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED MERCURY (HG) (UG/L)	DIS- SOLVED NICKEL (NI) (UG/L)	DIS- SOLVED STRON- TIUM (SR) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)
DATE	TIME								
APR. 04...	120	1	0	0	.3	0	40	120	
MAY 30...	90	10	0	0	.1	2	40	60	
JUNE 14...	70	3	0	10	.1	1	20	0	
AUG. 06...	50	3	0	0	.0	0	30	0	
SEP. 25...	50	1	0	0	.0	2	30	10	

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	ALDRIN (UG/L)	ALDRIN IN BOTTOM DE- POSITS (UG/KG)	DDD (UG/L)	DDD IN BOTTOM DE- POSITS (UG/KG)	DDE (UG/L)	DDE IN BOTTOM DE- POSITS (UG/KG)	DDT (UG/L)	DDT IN BOTTOM DE- POSITS (UG/KG)
MAY 30...	0955	11	22.5	.00	--	.00	--	.00	--	.00	--
JUNE 14...	1430	9.6	--	.00	.0	.00	.9	.00	.9	.00	.0
AUG. 06...	1415	7.0	23.5	.00	.0	.00	.0	.00	.0	.00	.0
SEP. 25...	1145	11	24.0	.00	.0	.00	.0	.00	.0	.00	.0

DATE	DI- ELDRIN (UG/L)	DI- ELDRIN IN BOTTOM DE- POSITS (UG/KG)	ENDRIN (UG/L)	ENDRIN IN BOTTOM DE- POSITS (UG/KG)	HEPTA- CHLOR (UG/L)	HEPTA- CHLOR IN BOTTOM DE- POSITS (UG/KG)	HEPTA- CHLOR EPOXIDE (UG/L)	HEPTA- CHLOR EPOXIDE IN BOT- TOM DE- POSITS (UG/KG)	LINDANE (UG/L)	LINDANE IN BOTTOM DE- POSITS (UG/KG)	CHLOR- DANE (UG/L)
MAY 30...	.00	--	.00	--	.00	--	.00	--	.00	--	.0
JUNE 14...	.00	.0	.00	.0	.00	.0	.00	.0	.00	.0	.0
AUG. 06...	.00	.0	.00	.0	.00	.0	.00	.0	.00	.0	.0
SEP. 25...	.00	.0	.00	.0	.00	.0	.00	.0	.00	.0	.0

DATE	CHLOR- DANE IN BOTTOM DE- POSITS (UG/KG)	PCB (UG/L)	PCB IN BOTTOM DE- POSITS (UG/KG)	DI- AZINON (UG/L)	MALA- THION (UG/L)	METHYL PARA- THION (UG/L)	PARA- THION (UG/L)	2,4-D (UG/L)	SILVEX (UG/L)	2,4,5-T (UG/L)
MAY 30...	--	.0	--	.00	.00	.00	.00	--	--	--
JUNE 14...	0	.0	0	.00	.00	.00	.00	.00	.00	.00
AUG. 06...	0	.0	0	.00	.00	.00	.00	.00	.00	.00
SEP. 25...	0	.0	0	.00	.00	.00	.00	.00	.00	.00

SABINE RIVER BASIN

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08025360 SABINE RIVER AT TOLEDO BEND DAM, NEAR BURKEVILLE, TEX.

LOCATION.--Lat 31°10'25", long 93°33'57", Newton County, immediately below Toledo Bend Dam and 15 miles (24 km) northeast of Burkeville.

DRAINAGE AREA.--7,178 mi² (18,591 km²).

PERIOD OF RECORD.--Chemical and biochemical analyses: October 1967 to September 1974.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	DIS- SOLVED SILICA (SiO ₂) (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 SODIUM PLUS POTAS- SIUM (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)
OCT. 25...	1530	6.6	10	5.6	--	20	--	41	0
DEC. 18...	1500	4.3	9.8	3.8	--	16	--	39	0
FEB. 20...	1500	5.2	10	2.7	--	13	--	28	0
APR. 25...	1445	7.1	7.7	2.6	12	--	2.9	22	0
JUNE 13...	1015	8.9	7.7	2.7	14	--	3.2	32	0
AUG. 06...	1000	8.6	7.9	2.7	14	--	3.4	30	0

DATE	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
OCT. 25...	17	28	>.1	.21	.01	.15	--	.00	--
DEC. 18...	11	22	.0	.21	.00	.18	.30	.02	87
FEB. 20...	13	19	.1	.20	.00	.00	.30	.00	78
APR. 25...	14	19	--	.44	.00	.03	.14	.01	76
JUNE 13...	14	17	--	.60	.00	.09	.09	.03	83
AUG. 06...	15	21	--	.66	.00	.06	.00	.02	87

DATE	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	BIO- CHEM- ICAL OXYGEN DEMAND (MG/L)
OCT. 25...	48	14	--	207	6.4	18.5	6.2	66	1.8
DEC. 18...	40	8	1.1	174	6.4	15.0	8.0	78	.4
FEB. 20...	36	13	.9	158	6.5	13.5	10.2	97	1.3
APR. 25...	30	12	1.0	143	6.3	20.5	9.4	103	1.0
JUNE 13...	30	4	1.1	151	6.2	17.5	3.0	31	1.1
AUG. 06...	31	6	1.1	168	6.3	19.0	4.6	49	2.8

SABINE RIVER BASIN

08026000 SABINE RIVER BELOW TOLEDO BEND, NEAR BURKEVILLE, TEX.

LOCATION.--Lat 31°03'50", Long 93°31'10", Newton County, at gaging station at bridge on State Highway 63, 10 miles (16 km) northeast of Burkeville, and 17 miles (27 km) downstream from Toledo Bend Dam.

DRAINAGE AREA.--7,482 mi² (19,378 km²).

PERIOD OF RECORD.--Chemical analyses: May 1968 to September 1974.

Chemical and biochemical analyses: May 1968 to September 1974.

Pesticide analyses: October 1972 to September 1974.

Water Temperatures: May 1968 to September 1974.

EXTREMES.--October 1973 to September 1974:

Specific conductance: Maximum daily, 177 micromhos Nov. 24; minimum daily, 60 micromhos Apr. 12.

Water temperatures: Minimum, 11.0°C Jan. 3, 25, Feb. 1.

Period of record:

Specific conductance (1969-74): Maximum daily, 352 micromhos Mar. 15, 16, 1973; minimum daily, 35 micromhos Dec. 30, 1969.

Water temperatures: Maximum, 31.0°C July 19, Aug. 9, Sept. 7, 1970; minimum, 5.0°C Jan. 8, 10, 1970.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

[illegible]

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

[illegible]

SABINE RIVER BASIN

08026000 SABINE RIVER BELOW TOLEDO BEND, NEAR BURKEVILLE, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	NON-CARBONATE HARDNESS (MG/L)	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	BIO-CHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT.											
05...	14	1.0	156	6.2	28.0	45	--	--	--	--	--
14...	--	--	121	--	23.0	120	--	--	--	--	--
23...	--	--	141	--	22.0	100	--	--	--	--	--
25...	7	--	141	6.5	22.0	60	10	8.8	100	1.3	11
31...	--	--	107	--	18.0	70	--	--	--	--	--
NOV.											
07...	13	1.1	165	6.7	23.0	40	--	--	--	--	--
16...	--	--	165	--	20.0	40	--	--	--	--	--
23...	--	--	172	--	20.0	60	--	--	--	--	--
30...	--	--	171	--	18.0	60	--	--	--	--	--
DEC.											
03...	12	1.1	171	7.3	19.0	40	--	--	--	--	--
11...	--	--	174	--	15.0	50	--	--	--	--	--
18...	11	1.0	172	6.7	16.0	60	7	8.0	80	.8	12
22...	--	--	169	--	14.0	60	--	--	--	--	--
31...	--	--	166	--	13.0	70	--	--	--	--	--
JAN.											
07...	11	.9	163	7.0	12.0	70	--	--	--	--	--
14...	--	--	163	--	14.0	60	--	--	--	--	--
21...	--	--	158	--	15.0	30	--	--	--	--	--
28...	--	--	141	--	13.0	40	--	--	--	--	--
FEB.											
07...	22	--	149	6.8	13.0	40	--	--	--	--	--
16...	--	--	150	--	15.0	40	--	--	--	--	--
20...	15	.8	152	6.5	15.0	30	20	10.1	99	1.3	9.0
23...	--	--	15	--	15.0	50	--	--	--	--	--
28...	--	--	154	--	15.0	40	--	--	--	--	--
MAR.											
07...	10	1.0	150	--	18.0	--	--	--	--	--	--
14...	--	--	144	--	20.0	80	--	--	--	--	--
21...	--	--	121	--	19.0	50	--	--	--	--	--
24...	--	--	142	--	18.0	50	--	--	--	--	--
APR.											
04...	11	1.0	141	7.1	18.0	40	--	--	--	--	--
12...	--	--	24	--	22.0	140	--	--	--	--	--
22...	--	--	142	--	21.0	50	--	--	--	--	--
25...	0	--	142	6.3	21.0	--	--	--	--	--	--
30...	--	--	142	--	23.0	60	--	--	--	--	--
MAY											
07...	12	1.0	141	6.5	22.0	--	--	--	--	--	--
16...	--	--	150	--	23.0	50	--	--	--	--	--
23...	--	--	149	--	25.0	50	--	--	--	--	--
31...	--	--	143	--	25.0	60	--	--	--	--	--
JUNE											
01...	12	1.0	141	6.8	25.0	60	--	--	--	--	--
13...	10	1.0	138	6.4	26.0	20	5	7.7	94	1.0	8.2
28...	--	--	140	--	25.0	40	--	--	--	--	--
29...	--	--	141	--	28.0	40	--	--	--	--	--
30...	--	--	141	--	25.0	40	--	--	--	--	--
JULY											
01...	12	.9	146	6.9	27.0	50	--	--	--	--	--
08...	--	--	136	--	25.0	40	--	--	--	--	--
17...	--	--	141	--	26.0	30	--	--	--	--	--
31...	--	--	138	--	26.0	30	--	--	--	--	--
AUG.											
01...	15	.9	133	6.4	27.0	30	--	--	--	--	--
06...	15	.9	138	6.5	26.5	10	6	6.9	84	.8	5.9
15...	--	--	136	--	28.0	20	--	--	--	--	--
22...	--	--	143	--	27.0	20	--	--	--	--	--
25...	--	--	142	--	27.0	25	--	--	--	--	--
SEP.											
01...	12	1.0	139	7.2	23.0	30	--	--	--	--	--
03...	--	--	140	--	31.0	35	--	--	--	--	--
05...	--	--	141	--	29.0	30	--	--	--	--	--
08...	--	--	140	--	21.0	30	--	--	--	--	--

SABINE RIVER BASIN

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08026000 SABINE RIVER BELOW TOLEDO BEND, NEAR BURKEVILLE, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

		DIS-SOLVED ALUMINUM (AL) (UG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	DIS-SOLVED BORON (B) (UG/L)	DIS-SOLVED CADMIUM (CD) (UG/L)	DIS-SOLVED CHROMIUM (CR) (UG/L)	DIS-SOLVED COBALT (CO) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)			
DATE	TIME										
OCT. 25...	1615	80	1	--	0	0	0	2			
FEB. 20...	1625	410	1	--	0	0	0	22			
APR. 25...	1600	10	0	40	0	20	0	9			
AUG. 06...	1100	0	0	40	0	0	0	2			
DATE	TIME	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	DIS-SOLVED LITHIUM (LI) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)	DIS-SOLVED MERCURY (HG) (UG/L)	DIS-SOLVED NICKEL (NI) (UG/L)	DIS-SOLVED THALLIUM (TH) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)		
OCT. 25...	840	0	0	1000	.3	0	70	20			
FEB. 20...	300	1	0	50	.0	4	100	--			
APR. 25...	230	6	0	0	.0	0	150	30			
AUG. 06...	40	2	0	0	.0	0	100	0			
DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TEMPERATURE (DEG C)	ALDRIN (UG/L)	ALDRIN IN BOTTOM DEPOSITS (UG/KG)	DDD (UG/L)	DDD IN BOTTOM DEPOSITS (UG/KG)	DDE (UG/L)	DDE IN BOTTOM DEPOSITS (UG/KG)	DDT (UG/L)	DDT IN BOTTOM DEPOSITS (UG/KG)
OCT. 25...	1615	237	22.0	.00	.0	.00	.0	.00	.0	.00	.0
FEB. 20...	1625	14500	15.0	.00	.0	.00	.0	.00	.0	.00	.0
APR. 25...	1600	8600	21.0	.00	.0	.00	.0	.00	.0	.00	.0
AUG. 06...	1100	2300	26.5	.00	.0	.00	.0	.00	.0	.00	.0
DATE	DI-ELDRIN (UG/L)	DI-ELDRIN IN BOTTOM DEPOSITS (UG/KG)	ENDRIN (UG/L)	ENDRIN IN BOTTOM DEPOSITS (UG/KG)	HEPTACHLOR (UG/L)	HEPTACHLOR IN BOTTOM DEPOSITS (UG/KG)	HEPTACHLOR EPOXIDE (UG/L)	HEPTACHLOR EPOXIDE IN BOTTOM DEPOSITS (UG/KG)	LINDANE (UG/L)	LINDANE IN BOTTOM DEPOSITS (UG/KG)	CHLORDANE (UG/L)
OCT. 25...	.00	.0	.00	.0	.00	.0	.00	.0	.00	.0	.0
FEB. 20...	.00	.0	.00	.0	.00	.0	.00	.0	.00	.0	.0
APR. 25...	.00	.0	.00	.0	.00	.0	.00	.0	.00	.0	.0
AUG. 06...	.00	.0	.00	.0	.00	.0	.00	.0	.00	.0	.0
DATE	CHLORDANE IN BOTTOM DEPOSITS (UG/KG)	PCB (UG/L)	PCB IN BOTTOM DEPOSITS (UG/KG)	DI-AZINON (UG/L)	MALATHION (UG/L)	METHYL PARATHION (UG/L)	PARATHION (UG/L)	2,4-D (UG/L)	SILVEX (UG/L)	2,4,5-T (UG/L)	
OCT. 25...	0	.0	0	.00	.00	.00	.00	.00	.00	.00	
FEB. 20...	0	.0	0	.00	.00	.00	.00	.00	.00	.00	
APR. 25...	0	.0	0	.00	.00	.00	.00	.00	.00	.00	
AUG. 06...	0	.0	0	.00	.00	.00	.00	.00	.00	.00	

SABINE RIVER BASIN

08026000 SABINE RIVER BELOW TOLEDO BEND, NEAR BURKEVILLE, TEX.--Continued

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

MONTH	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCT- ANCE (MICRO- MHOS)	DIS- SOLVED SOLIDS (MG/L)	DIS- SOLVED SOLIDS (TONS)	DIS- SOLVED CHLORIDE (MG/L)	DIS- SOLVED CHLORIDE (TONS)	DIS- SOLVED SULFATE (MG/L)	DIS- SOLVED SULFATE (TONS)	HARDNESS (CA+MG) (MG/L)
OCT. 1973.....	54657	151	79	11700	19	2800	11	1620	34
NOV. 1973.....	202097	167	87	47500	21	11500	13	7090	39
DEC. 1973.....	483740	170	88	115000	21	27400	13	17000	40
JAN. 1974.....	883900	151	79	189000	19	45300	11	26300	34
FEB. 1974.....	468120	152	79	99800	19	24000	12	15200	34
MAR. 1974.....	185065	147	77	38500	19	9490	11	5500	32
APR. 1974.....	189809	130	69	35400	17	8710	9.9	5070	27
MAY 1974.....	225890	145	76	46400	18	11000	11	6710	32
JUNE 1974.....	146580	140	74	29300	18	7120	11	4350	30
JULY 1974.....	147900	141	74	29600	18	7190	11	4390	30
AUG. 1974.....	147770	140	74	29500	18	7190	11	4390	30
SEPT 1974.....	121763	140	74	24300	18	5920	11	3620	30
TOTAL	3257391	**	**	696000	**	168000	**	101000	**
WTD.AVG.	8924	151	79	**	19	**	12	**	34

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	154	119	171	166	152	154	139	142	141	146	133	139
2	156	127	168	166	151	154	143	143	140	145	132	140
3	157	134	171	164	150	147	142	143	140	142	136	140
4	156	161	167	161	152	145	141	141	140	142	139	144
5	156	163	168	164	152	149	132	144	140	143	149	141
6	153	164	171	162	153	150	135	142	140	139	140	140
7	156	165	171	163	149	150	139	141	140	137	139	140
8	158	164	171	157	153	150	130	141	140	136	142	140
9	157	164	169	156	154	149	129	141	140	138	144	140
10	158	165	172	146	155	149	135	142	140	138	141	140
11	155	163	174	146	154	149	136	143	140	139	141	140
12	124	166	173	159	154	127	60	149	140	140	141	140
13	99	165	172	172	153	127	97	155	140	145	141	140
14	121	168	172	163	155	144	100	149	140	139	140	140
15	102	165	174	162	151	121	141	150	140	140	138	140
16	106	165	169	162	150	120	137	150	140	141	140	140
17	111	168	172	162	153	116	137	148	140	141	141	140
18	115	167	170	162	153	120	142	148	140	140	142	140
19	115	168	171	155	153	121	142	149	140	140	142	140
20	132	166	172	147	153	122	144	149	140	140	143	140
21	132	169	172	158	152	121	141	150	140	142	143	140
22	134	154	169	155	154	147	142	150	140	142	143	140
23	141	172	171	158	152	146	142	149	140	142	141	140
24	141	177	165	153	153	144	141	148	140	142	139	140
25	143	170	161	131	154	144	141	146	140	142	142	140
26	144	171	167	133	146	142	143	140	140	142	140	140
27	149	170	167	145	146	142	142	141	140	142	140	140
28	147	163	169	141	154	142	143	143	140	142	143	140
29	146	170	168	148	---	142	144	142	141	143	143	140
30	145	171	166	152	---	142	142	142	141	137	141	140
31	107	---	166	149	---	139	---	143	---	138	135	---
MONTH	138	162	170	155	152	139	134	145	140	141	140	140

SABINE RIVER BASIN

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08026000 SABINE RIVER BELOW TOLEDO BEND, NEAR BURKEVILLE, TEX.--Continued

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	19.0	18.0	13.0	11.0	14.0	19.0	21.0	25.0	27.0	27.0	23.0
2	27.0	20.0	18.0	13.0	17.0	15.0	19.0	22.0	---	25.0	26.0	25.0
3	27.0	22.0	19.0	11.0	15.0	15.0	19.0	23.0	---	27.0	27.0	31.0
4	27.0	19.0	18.0	12.0	15.0	15.0	18.0	23.0	---	27.0	26.0	28.0
5	28.0	20.0	18.0	12.0	15.0	18.0	17.0	23.0	---	29.0	29.0	29.0
6	27.0	---	18.0	14.0	15.0	15.0	---	23.0	---	25.0	28.0	31.0
7	27.0	23.0	17.0	12.0	13.0	18.0	19.0	22.0	---	---	27.0	31.0
8	28.0	22.0	16.0	12.0	12.0	16.0	20.0	24.0	---	25.0	28.0	21.0
9	28.0	20.0	15.0	14.0	14.0	19.0	20.0	---	---	---	27.0	---
10	26.0	20.0	16.0	16.0	13.0	15.0	18.0	23.0	---	---	28.0	---
11	24.0	20.0	15.0	14.0	14.0	18.0	20.0	22.0	---	28.0	26.0	---
12	24.0	20.0	---	12.0	13.0	20.0	22.0	---	---	29.0	27.0	---
13	23.0	20.0	18.0	12.0	14.0	18.0	19.0	23.0	---	30.0	29.0	---
14	23.0	22.0	24.0	14.0	15.0	20.0	22.0	23.0	---	31.0	28.0	---
15	23.0	20.0	16.0	13.0	15.0	19.0	21.0	24.0	---	27.0	28.0	---
16	---	20.0	25.0	17.0	15.0	20.0	18.0	23.0	---	26.0	27.0	---
17	---	19.0	25.0	14.0	16.0	20.0	19.0	23.0	---	26.0	29.0	---
18	23.0	22.0	15.0	18.0	15.0	21.0	20.0	24.0	---	29.0	27.0	---
19	20.0	20.0	14.0	---	15.0	23.0	22.0	24.0	---	25.0	27.0	---
20	22.0	20.0	12.0	15.0	15.0	22.0	21.0	23.0	---	27.0	26.0	---
21	23.0	---	17.0	15.0	13.0	19.0	19.0	23.0	---	28.0	29.0	---
22	22.0	19.0	14.0	14.0	14.0	17.0	21.0	25.0	---	---	27.0	---
23	22.0	20.0	15.0	13.0	15.0	19.0	20.0	25.0	---	---	28.0	---
24	23.0	20.0	15.0	14.0	13.0	14.0	19.0	23.0	---	---	---	---
25	23.0	20.0	14.0	11.0	13.0	15.0	20.0	24.0	---	---	27.0	---
26	23.0	---	14.0	13.0	14.0	17.0	21.0	24.0	---	---	26.0	---
27	22.0	20.0	13.0	15.0	15.0	18.0	23.0	24.0	---	---	28.0	---
28	22.0	19.0	15.0	13.0	15.0	18.0	---	24.0	25.0	---	27.0	---
29	19.0	20.0	14.0	18.0	---	18.0	23.0	25.0	28.0	27.0	25.0	---
30	19.0	18.0	15.0	17.0	---	18.0	23.0	25.0	25.0	28.0	29.0	---
31	18.0	---	13.0	15.0	---	19.0	---	25.0	---	26.0	29.0	---
MONTH	24.0	20.0	16.5	14.0	14.5	18.0	20.0	23.5	---	---	27.5	---

COLOR (PLATINUM-COBALT UNITS) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	40	100	60	70	40	40	40	60	40	50	30	30
2	40	100	40	70	40	40	40	60	---	50	30	30
3	40	120	40	70	40	40	40	60	---	50	30	35
4	40	50	50	60	40	40	40	60	---	40	40	25
5	45	60	50	70	40	40	60	50	---	50	40	30
6	60	50	50	70	40	40	---	60	---	40	30	30
7	60	40	50	70	40	40	40	55	---	---	30	35
8	70	60	50	70	40	50	50	60	---	40	40	30
9	70	40	50	70	40	50	50	---	---	---	40	---
10	80	40	50	90	40	60	50	60	---	---	50	---
11	80	40	50	90	40	60	60	60	---	40	40	---
12	100	40	---	70	40	70	140	---	---	40	20	---
13	140	50	50	70	30	80	140	60	---	40	20	---
14	120	50	50	60	40	80	100	60	---	30	20	---
15	120	40	50	60	40	90	60	50	---	40	20	---
16	---	40	60	60	40	80	60	50	---	40	20	---
17	---	50	60	60	40	60	50	60	---	30	20	---
18	120	60	60	60	40	70	50	60	---	30	50	---
19	140	60	60	---	50	60	50	50	---	40	30	---
20	140	60	60	40	40	50	50	50	---	40	30	---
21	90	60	70	30	40	50	60	50	---	30	30	---
22	100	50	60	30	50	50	50	50	---	---	20	---
23	100	60	70	30	50	40	50	50	---	---	20	---
24	80	60	70	30	40	40	50	50	---	---	20	---
25	80	60	70	40	40	40	50	50	---	---	25	---
26	80	60	70	40	50	40	50	50	---	---	20	---
27	80	60	80	40	50	40	50	50	---	---	25	---
28	70	60	70	40	40	50	---	60	40	---	30	---
29	70	60	70	40	---	40	60	50	40	40	30	---
30	50	60	70	40	---	40	60	50	40	30	25	---
31	70	---	70	40	---	40	---	60	---	30	20	---
MONTH	80	60	60	55	41	50	60	55	---	---	28	---

08028500 SABINE RIVER NEAR BON WEIR, TEX.

LOCATION.--Lat 30°44'49", long 93°36'30", Newton County, at gaging station at bridge on U.S. Highway 190, 0.7 mile (1.1 km) upstream from Quicksand Creek, 0.8 mile (1.3 km) upstream from Gulf, Colorado, and Santa Fe Railway Co. bridge, and 2.0 miles (3.2 km) east of Bon Weir.

DRAINAGE AREA.--8,229 mi² (21,313 km²).

PERIOD OF RECORD.--Chemical analyses: January 1970 to September 1974.

EXTREMES.--October 1973 to September 1974:

Specific conductance: Maximum daily, 179 micromhos Oct. 29; minimum daily, 38 micromhos Apr. 13.

Water temperatures: Minimum, 11.0°C Jan. 4, 5.

Period of record:

Specific conductance (1972-74): Maximum daily, 353 micromhos Mar. 21-23, 1973; minimum daily, 36 micromhos May 1, 1973.

Water temperatures: Maximum, 30.0°C July 23, Sept. 14, 1973; minimum, 6.0°C Jan. 11-13, 1973.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)
OCT.							
05...	1845	9400	12	20	163	26.0	50
10...	2100	900	20	18	178	26.0	80
17...	1807	2750	11	11	107	23.5	140
26...	1650	760	18	16	171	22.5	110
NOV.							
06...	1915	8100	12	18	141	19.5	70
13...	1945	8100	12	21	166	19.0	50
21...	1610	9500	12	21	157	18.0	60
28...	1738	9700	12	20	163	18.0	70
DEC.							
04...	1910	8200	8.8	16	135	25.5	80
14...	1745	17600	9.6	22	171	--	60
21...	1450	16900	9.6	20	162	14.0	70
30...	1245	18000	10	20	160	17.0	80
JAN.							
07...	1632	17800	7.2	18	148	13.0	70
14...	1540	20600	8.2	17	146	12.0	70
21...	1835	33000	9.2	16	139	13.5	120
28...	1730	73000	8.8	16	138	13.5	70
FEB.							
03...	1540	41000	9.2	18	147	14.5	50
11...	1750	17500	13	18	150	13.0	40
21...	1437	17500	13	18	149	15.0	50
28...	1730	14000	14	18	148	13.0	40
MAR.							
07...	1900	9480	16	18	149	17.0	40
14...	1905	2710	6.8	12	112	19.5	100
21...	1915	1400	10	12	109	20.0	40
30...	1135	8860	16	16	134	18.5	70
APR.							
07...	1900	6700	14	20	142	18.0	40
13...	1200	14600	12	7.0	38	20.0	200
21...	1455	8900	14	18	139	20.0	60
28...	1910	7500	12	18	144	21.0	60
MAY							
06...	1450	8870	15	18	128	21.0	70
15...	1830	7570	4.0	16	132	24.0	60
22...	1730	8390	16	18	150	24.0	50
30...	1828	5920	16	17	141	27.0	60
JUNE							
07...	1628	6700	15	18	143	27.0	25
13...	1930	6400	10	18	140	27.0	35
23...	1715	7100	16	19	152	29.0	40
30...	1715	6800	16	18	140	27.5	40
JULY							
07...	1200	6800	14	19	138	27.0	40
13...	2027	6000	12	19	146	--	40
23...	1700	7000	14	19	144	--	40
31...	1750	7100	16	18	139	--	40
AUG.							
07...	1930	6600	15	18	141	--	40
14...	1845	7500	92	18	134	--	30
20...	1820	6600	17	18	154	--	50
29...	1720	7600	14	18	144	--	10
SEP.							
01...	1210	2800	13	21	134	--	20
09...	0820	5600	6.4	16	112	24.0	30
21...	1115	6800	14	20	138	27.0	30
30...	1700	1500	12	21	142	24.5	30

SABINE RIVER BASIN

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08028500 SABINE RIVER NEAR BON WEIR, TEX.--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	164	177	163	163	146	148	141	146	139	154	140	134
2	161	150	167	163	147	152	141	149	141	145	139	135
3	163	161	168	162	147	153	130	145	150	146	142	124
4	163	161	135	146	148	151	142	141	142	142	142	134
5	163	144	146	145	147	144	159	139	142	147	155	137
6	160	141	153	148	147	149	154	128	162	141	144	139
7	162	152	145	148	147	149	142	132	143	138	141	139
8	173	158	163	153	143	149	144	133	144	138	139	136
9	173	159	162	143	144	148	158	139	143	140	140	112
10	178	158	166	136	147	142	166	142	---	142	139	125
11	176	158	165	140	150	149	170	140	137	142	130	133
12	164	162	171	133	150	128	166	127	139	143	138	133
13	100	166	168	149	149	118	38	133	140	146	137	134
14	100	167	171	146	149	112	64	134	141	139	134	135
15	120	168	171	152	149	112	83	132	142	149	134	137
16	120	167	168	156	148	112	114	142	149	145	129	135
17	107	165	168	154	144	154	115	143	142	132	125	138
18	104	162	165	155	147	153	104	144	144	147	137	139
19	116	166	170	151	147	153	130	148	140	147	130	139
20	123	160	172	123	147	113	125	151	140	150	154	139
21	132	157	162	139	149	109	139	149	140	143	148	138
22	142	166	163	143	142	153	142	150	141	145	143	140
23	150	159	---	142	146	136	143	149	152	144	151	130
24	158	158	168	146	146	145	141	144	150	144	152	143
25	165	164	159	138	149	144	142	144	145	---	139	140
26	171	151	154	136	152	136	142	141	142	144	143	140
27	176	160	154	135	153	112	138	142	142	144	143	139
28	173	163	157	138	148	120	144	139	141	141	---	138
29	179	164	158	142	---	134	143	141	144	151	144	138
30	177	167	160	145	---	134	---	141	140	143	141	142
31	175	---	162	144	---	139	---	142	---	139	139	---
MONTH	151	160	162	146	147	137	133	141	143	144	140	136

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	18.0	---	15.0	14.0	14.0	20.0	21.0	25.0	29.0	---	---
2	26.5	20.0	17.5	13.0	14.0	14.0	19.0	21.5	24.5	27.0	---	---
3	26.5	20.0	20.0	13.0	14.5	15.0	21.5	23.0	27.0	27.0	---	---
4	26.0	21.0	25.5	11.0	14.0	15.5	19.5	23.0	28.0	27.5	---	---
5	26.0	17.0	25.0	11.0	13.5	12.0	19.5	22.0	28.0	29.0	---	25.0
6	26.0	19.5	15.5	13.0	14.0	17.0	18.5	21.0	27.5	28.5	---	26.0
7	27.5	20.0	15.0	13.0	13.5	17.0	18.0	23.0	27.0	27.0	---	26.0
8	27.0	21.0	14.5	14.0	13.0	17.0	19.5	23.0	25.0	26.0	---	24.0
9	27.0	20.0	14.5	16.0	12.5	16.0	20.5	24.0	26.0	27.5	---	24.0
10	26.0	19.0	12.0	18.0	12.5	17.0	20.0	23.5	---	---	---	25.0
11	24.5	18.0	---	15.0	13.0	16.0	23.0	23.0	24.5	---	---	26.0
12	24.5	20.0	---	15.0	13.0	18.0	20.5	22.5	26.0	---	---	25.0
13	---	19.0	---	13.0	14.0	19.5	20.0	24.5	27.0	---	---	26.0
14	23.5	20.0	---	12.0	14.0	19.5	19.0	24.5	28.5	---	---	25.0
15	23.5	20.0	---	13.0	13.5	19.0	19.5	24.0	28.0	---	---	25.0
16	23.0	19.0	---	14.0	13.5	18.5	20.0	23.0	29.0	---	---	25.0
17	23.5	18.5	14.5	14.0	13.5	21.5	20.0	23.0	29.0	---	---	27.0
18	21.0	19.0	---	14.0	14.0	19.0	21.0	23.0	29.0	---	---	27.0
19	22.0	20.0	---	13.0	13.5	22.0	21.0	23.5	29.5	---	---	28.0
20	19.5	---	14.0	14.0	14.0	23.0	20.0	23.0	29.0	---	---	27.0
21	22.0	18.0	14.0	13.5	15.0	20.0	20.0	23.0	28.5	---	---	27.0
22	22.0	18.5	14.0	13.5	14.0	18.0	19.0	24.0	28.0	---	---	26.0
23	25.0	20.0	---	13.0	14.0	18.5	19.0	25.5	29.0	---	---	24.0
24	22.0	20.0	17.0	12.5	14.0	16.5	20.0	26.0	28.0	---	---	25.0
25	22.0	19.5	15.0	12.5	12.0	15.0	21.0	26.0	27.5	---	---	25.0
26	22.5	---	16.0	12.5	12.0	14.5	21.0	25.0	28.0	---	---	23.0
27	21.0	20.0	15.0	13.0	12.0	16.0	21.0	25.5	27.5	---	27.5	25.0
28	20.0	18.0	15.0	13.5	13.0	17.0	21.0	26.5	28.0	---	---	25.0
29	22.0	17.0	17.0	13.5	---	18.0	21.0	26.0	27.0	---	27.0	23.5
30	---	17.5	17.0	13.5	---	18.5	---	27.0	27.5	---	27.0	24.5
31	19.0	---	13.0	13.5	---	19.0	---	25.0	---	---	---	---
MONTH	23.5	19.0	---	13.5	13.5	17.5	20.0	24.0	27.5	---	---	25.5

SABINE RIVER BASIN

08028500 SABINE RIVER NEAR BON WEIR, TEX.--Continued

COLOR (PLATINUM-COBALT UNITS) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	50	120	70	70	50	50	50	60	60	40	50	20
2	40	120	40	70	60	40	60	60	40	40	40	30
3	40	110	40	70	50	40	60	60	30	50	40	50
4	50	100	80	80	50	30	50	60	40	40	40	40
5	50	130	60	100	50	50	60	60	25	40	40	30
6	50	70	60	70	50	50	60	70	30	50	40	30
7	50	60	50	70	50	40	40	70	25	40	40	20
8	60	50	40	70	50	50	40	60	30	40	40	20
9	70	50	50	70	50	50	50	60	30	40	40	30
10	80	50	50	120	40	60	70	60	---	40	50	40
11	100	60	70	100	40	60	70	60	25	40	30	40
12	120	60	60	120	40	60	80	60	30	40	50	40
13	140	50	60	80	40	80	200	60	35	40	40	40
14	140	60	60	70	40	100	120	70	40	40	30	40
15	140	60	60	80	40	80	100	60	30	40	30	40
16	140	60	70	70	40	80	60	70	40	50	40	40
17	140	60	70	70	50	70	60	60	40	60	30	50
18	140	60	70	70	50	70	80	70	40	40	30	30
19	140	50	70	80	50	70	60	60	40	50	30	40
20	140	50	70	140	50	40	60	60	40	40	50	40
21	140	60	70	120	50	40	60	50	40	30	40	30
22	140	60	80	140	60	70	60	50	40	40	40	40
23	140	70	---	120	50	60	60	50	40	40	40	30
24	140	80	70	120	50	60	60	60	40	40	40	20
25	120	70	70	120	50	50	60	50	50	---	20	20
26	110	80	80	130	40	60	50	50	40	40	20	30
27	120	80	80	60	40	80	50	60	40	40	30	30
28	120	70	80	70	40	100	60	50	40	40	---	20
29	100	70	70	60	---	70	60	50	40	30	10	20
30	80	70	80	60	---	70	---	60	40	40	20	30
31	80	---	70	60	---	50	---	60	---	40	20	---
MONTH	100	70	65	90	47	60	65	60	37	41	35	32

LOCATION.--Lat 30°18'13", long 93°44'37", Newton County, at gaging station at bridge on State Highway 12, 2.4 miles (3.9 km) north of Ruliff, and 4.5 miles (7.2 km) downstream from Cypress Creek.

Water temperatures: October 1947 to September 1974.

Water temperatures: Maximum, 32.0°C Aug 3; minimum, 9.0°C Dec. 22, Jan. 5.

Water temperatures (1947-70, 1971-74): Maximum, 36.0°C Aug. 14, 1962; minimum, 1.0°C Jan. 28, 1948.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

		INSTAN- TANED DIS- CHARGE	DIS- SOLVED SILICA (S102) (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 SODIUM PLUS POTAS- SIUM (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
DATE	TIME											
OCT.												
04...	0545	10900	5.0	7.5	3.0	--	10	--	23	0	10	17
14...	0545	11400	--	--	--	--	--	--	--	--	5.2	6.5
21...	0640	9200	--	--	--	--	--	--	--	--	5.2	6.5
26...	0815	2100	14	7.5	2.3	--	11	--	28	0	11	12
29...	0600	1700	--	--	--	--	--	--	--	--	14	13
NOV.												
07...	0542	5800	9.0	3.5	1.5	--	6.1	--	12	0	6.0	8.5
08...	0540	7800	--	--	--	--	--	--	--	--	10	15
17...	0600	9900	--	--	--	--	--	--	--	--	12	20
28...	0548	10500	--	--	--	--	--	--	--	--	11	18
DEC.												
06...	0600	13700	5.4	6.5	3.6	--	7.1	--	22	0	8.4	14
15...	0640	17300	--	--	--	--	--	--	--	--	12	20
19...	0730	18300	5.0	10	3.2	--	15	--	34	0	10	22
24...	0637	19200	--	--	--	--	--	--	--	--	10	20
31...	0607	23200	--	--	--	--	--	--	--	--	9.6	18
JAN.												
07...	0655	19200	5.7	8.0	2.9	--	10	--	28	0	6.8	17
14...	0640	23100	--	--	--	--	--	--	--	--	8.4	14
21...	0647	32000	--	--	--	--	--	--	--	--	5.2	10
28...	0635	58000	--	--	--	--	--	--	--	--	7.6	12
FEB.												
01...	0638	88000	4.6	7.0	2.6	--	9.1	--	22	0	8.4	15
11...	0624	18700	--	--	--	--	--	--	--	--	12	16
21...	0800	17300	6.5	8.0	3.9	--	9.3	--	25	0	12	16
24...	0700	17800	--	--	--	--	--	--	--	--	13	17
28...	0700	17100	--	--	--	--	--	--	--	--	12	16
MAR.												
06...	0645	14900	5.6	8.3	2.5	14	--	2.9	28	0	12	17
15...	0640	14800	--	--	--	--	--	--	--	--	12	15
21...	1430	2950	14	7.5	2.7	--	21	--	36	0	12	23
24...	0615	3800	--	--	--	--	--	--	--	--	6.0	12
31...	1750	10800	--	--	--	--	--	--	--	--	15	14
APR.												
08...	0640	5100	11	7.9	2.3	14	--	2.5	28	0	14	16
15...	0640	9000	--	--	--	--	--	--	--	--	6.8	7.5
23...	0644	10500	--	--	--	--	--	--	--	--	10	16
25...	1845	10700	8.2	8.1	2.1	12	--	2.7	20	0	14	17
30...	0630	9300	--	--	--	--	--	--	--	--	15	16
MAY												
07...	0640	8720	9.2	7.2	2.4	12	--	2.8	22	0	14	16
14...	0640	10300	--	--	--	--	--	--	--	--	10	15
22...	0635	8770	--	--	--	--	--	--	--	--	11	18
24...	0830	8780	7.5	7.2	2.4	12	--	3.1	20	0	15	17
30...	0645	8800	--	--	--	--	--	--	--	--	17	18
JUNE												
06...	0700	5600	10	7.8	2.5	16	--	2.7	26	0	18	18
13...	1645	6050	9.6	6.9	2.4	12	--	2.8	22	0	17	16
14...	0700	6050	--	--	--	--	--	--	--	--	14	17
21...	0652	5000	--	--	--	--	--	--	--	--	12	18
28...	0700	5200	--	--	--	--	--	--	--	--	12	18
JULY												
07...	0604	4300	8.3	7.9	1.9	12	--	2.7	22	0	15	21
10...	2000	5100	8.4	7.3	2.0	12	--	2.6	22	0	16	16
18...	0700	5100	--	--	--	--	--	--	--	--	16	18
25...	0655	6100	--	--	--	--	--	--	--	--	11	18
31...	0700	4200	--	--	--	--	--	--	--	--	16	18
AUG.												
06...	1715	6200	7.6	6.8	3.0	13	--	3.0	22	0	16	17
08...	0700	4600	8.8	7.9	2.2	15	--	2.7	24	0	18	17
14...	1235	3700	--	--	--	--	--	--	--	--	--	--
15...	0700	4600	--	--	--	--	--	--	--	--	13	16
22...	0700	5000	--	--	--	--	--	--	--	--	11	16
31...	0605	6500	--	--	--	--	--	--	--	--	14	17
SEP.												
07...	0615	5400	7.0	7.0	2.5	11	--	2.7	18	0	12	16
14...	0610	8500	--	--	--	--	--	--	--	--	12	18
21...	0607	6200	--	--	--	--	--	--	--	--	12	18
22...	0700	6250	--	--	--	--	--	--	--	--	--	--
25...	1530	4040	8.3	7.4	3.0	12	--	2.4	22	0	12	16
29...	0607	4020	--	--	--	--	--	--	--	--	10	19

SABINE RIVER BASIN

08030500 SABINE RIVER NEAR RULIFF, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

[illegible]

SABINE RIVER BASIN

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08030500 SABINE RIVER NEAR RULIFF, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	NON-CARBONATE HARDNESS (MG/L)	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	BIO-CHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT.											
08...	12	.8	133	6.3	26.0	70	--	--	--	--	--
19...	--	--	57	--	20.0	120	--	--	--	--	--
21...	--	--	60	--	19.0	140	--	--	--	--	--
26...	5	--	117	6.1	17.5	100	25	7.6	79	1.1	18
28...	--	--	131	--	21.0	120	--	--	--	--	--
NOV.											
07...	5	.7	77	6.0	19.0	140	--	--	--	--	--
08...	--	--	113	--	20.0	120	--	--	--	--	--
17...	--	--	158	--	18.0	60	--	--	--	--	--
28...	--	--	136	--	19.0	130	--	--	--	--	--
DEC.											
06...	13	.6	119	6.3	15.0	100	--	--	--	--	--
15...	--	--	160	--	15.0	60	--	--	--	--	--
19...	10	1.1	163	7.0	13.5	50	15	9.0	86	.6	11
24...	--	--	153	--	12.0	90	--	--	--	--	--
31...	--	--	147	--	14.0	120	--	--	--	--	--
JAN.											
07...	9	.8	139	6.4	11.0	100	--	--	--	--	--
14...	--	--	122	--	12.0	120	--	--	--	--	--
21...	--	--	86	--	15.0	80	--	--	--	--	--
24...	--	--	104	--	14.0	80	--	--	--	--	--
FEB.											
01...	10	--	118	6.3	14.0	100	--	--	--	--	--
11...	--	--	135	--	11.0	60	--	--	--	--	--
21...	16	.7	140	7.0	15.0	40	120	10.2	100	1.4	9.0
24...	--	--	142	--	12.0	60	--	--	--	--	--
28...	--	--	138	--	12.0	60	--	--	--	--	--
MAR.											
06...	8	1.1	146	--	18.0	--	--	--	--	--	--
15...	--	--	129	--	19.0	70	--	--	--	--	--
21...	1	--	133	7.0	18.5	60	30	8.2	87	.9	8.5
24...	--	--	102	--	18.0	70	--	--	--	--	--
31...	--	--	120	--	18.0	70	--	--	--	--	--
APR.											
08...	6	1.1	143	6.9	19.0	70	--	--	--	--	--
15...	--	--	72	--	19.0	200	--	--	--	--	--
23...	--	--	128	--	21.0	40	--	--	--	--	--
25...	13	1.0	132	5.7	20.5	--	--	--	--	--	--
30...	--	--	134	--	22.0	70	--	--	--	--	--
MAY											
07...	10	1.0	137	6.2	--	--	--	--	--	--	--
14...	--	--	116	--	23.0	60	--	--	--	--	--
22...	--	--	145	--	24.0	60	--	--	--	--	--
24...	11	1.0	141	6.5	24.5	--	--	--	--	--	14
30...	--	--	135	--	26.0	60	--	--	--	--	--
JUNE											
06...	8	1.3	157	6.7	27.0	50	--	--	--	--	--
13...	9	1.0	134	6.3	26.0	30	25	8.0	98	1.1	5.8
14...	--	--	131	--	27.0	50	--	--	--	--	--
21...	--	--	139	--	28.0	50	--	--	--	--	--
28...	--	--	139	--	26.0	40	--	--	--	--	--
JULY											
07...	10	1.0	140	6.4	28.0	40	--	--	--	--	--
10...	8	1.0	135	6.5	28.0	40	30	--	--	1.7	7.3
18...	--	--	151	--	27.0	40	--	--	--	--	--
25...	--	--	139	--	29.0	40	--	--	--	--	--
31...	--	--	142	--	28.0	50	--	--	--	--	--
AUG.											
06...	11	1.0	140	6.3	28.0	30	15	7.2	91	1.2	6.2
08...	9	1.2	154	6.5	27.0	40	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	130	--	28.0	40	--	--	--	--	--
22...	--	--	136	--	--	--	--	--	--	--	--
31...	--	--	134	--	27.0	40	--	--	--	--	--
SEPT.											
07...	13	.9	131	6.6	23.0	40	--	--	--	--	--
14...	--	--	123	--	27.0	40	--	--	--	--	--
21...	--	--	134	--	28.0	30	--	--	--	--	--
22...	--	--	--	--	29.0	40	--	--	--	--	--
25...	13	.9	133	6.6	24.5	30	10	6.9	82	1.0	6.0
29...	--	--	144	--	25.0	30	--	--	--	--	--

SABINE RIVER BASIN

08030500 SABINE RIVER NEAR RULIFF, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

		DIS- SOLVED ALUM- INUM (AL) (UG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	DIS- SOLVED COBALT (CO) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)			
DATE	TIME										
OCT. 26...	0815	180	1	--	0	0	0	2			
FEB. 21...	0800	130	0	--	0	0	0	--			
APR. 25...	1845	60	0	50	0	10	0	6			
AUG. 06...	1715	0	0	40	0	0	0	2			
		DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	DIS- SOLVED LITHIUM (LI) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED MERCURY (HG) (UG/L)	DIS- SOLVED NICKEL (NI) (UG/L)	DIS- SOLVED STRON- TIUM (SR) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)		
DATE	TIME										
OCT. 26...	830	0	0	400	<.2	0	70	20			
FEB. 21...	340	--	0	70	.0	5	90	--			
APR. 25...	250	6	0	0	.1	1	150	60			
AUG. 06...	70	2	0	0	.1	0	100	0			
		INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	ALDRIN (UG/L)	ALDRIN IN BOTTOM DE- POSITS (UG/KG)	DDD (UG/L)	DDD IN BOTTOM DE- POSITS (UG/KG)	DDE (UG/L)	DDE IN BOTTOM DE- POSITS (UG/KG)	DDT (UG/L)	DDT IN BOTTOM DE- POSITS (UG/KG)
OCT. 26...	0815	2100	17.5	.00	.0	.00	.0	.00	.0	.00	.0
FEB. 21...	0800	16000	15.0	.00	.0	.00	.0	.00	.0	.00	.0
APR. 25...	1845	10700	20.5	.00	1.4	.00	.0	.00	.0	.00	.0
MAY 24...	0830	8780	24.0	--	--	--	--	--	--	--	--
AUG. 06...	1715	7000	28.0	.00	.0	.00	.0	.00	.0	.00	.0
		DI- ELDRIN IN BOTTOM DE- POSITS (UG/KG)	ENDRIN (UG/L)	ENDRIN IN BOTTOM DE- POSITS (UG/KG)	HEPTA- CHLOR (UG/L)	HEPTA- CHLOR IN BOTTOM DE- POSITS (UG/KG)	HEPTA- CHLOR EPOXIDE (UG/L)	HEPTA- CHLOR EPOXIDE IN BOT- TOM DE- POSITS (UG/KG)	LINDANE (UG/L)	LINDANE IN BOTTOM DE- POSITS (UG/KG)	CHLOR- DANE (UG/L)
OCT. 26...	.00	.0	.00	.0	.00	.0	.00	.0	.00	.0	.0
FEB. 21...	.00	8.6	.00	.0	.00	.0	.00	.0	.00	.0	.0
APR. 25...	.00	45	.00	.0	.00	.0	.00	.0	.00	.0	.0
MAY 24...	--	--	--	--	--	--	--	--	--	--	--
AUG. 06...	.00	4.2	.00	.0	.00	.0	.00	.0	.00	.0	.0
		CHLOR- DANE IN BOTTOM DE- POSITS (UG/KG)	PCB (UG/L)	PCB IN BOTTOM DE- POSITS (UG/KG)	DI- AZINON (UG/L)	MALA- THION (UG/L)	METHYL PARA- THION (UG/L)	PARA- THION (UG/L)	2,4-D (UG/L)	SILVEX (UG/L)	2,4,5-T (UG/L)
OCT. 26...	0	.0	0	.00	.00	.00	.00	.00	.00	.00	.00
FEB. 21...	0	.0	0	.00	.00	.00	.00	.00	.00	.00	.00
APR. 25...	0	.0	0	.00	.00	.00	.00	.00	--	--	--
MAY 24...	--	--	--	--	--	--	--	--	.00	.00	.00
AUG. 06...	0	.0	0	.00	.00	.00	.00	.00	.00	.00	.00

08030500 SABINE RIVER NEAR RULIFF, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	DIS- SOLVED GROSS ALPHA AS U-NAT. (UG/L)	SUS- PENDED GROSS ALPHA AS U-NAT. (UG/L)	DIS- SOLVED GROSS BETA AS CS-137 (PC/L)	SUS- PENDED GROSS BETA AS CS-137 (PC/L)	DIS- SOLVED GROSS BETA AS SR90 /Y90 (PC/L)	SUS- PENDED GROSS BETA AS SR90 /Y90 (PC/L)	DIS- SOLVED RA-226 (RADON METHOD) (PC/L)	DIS- SOLVED URANIUM (U) (UG/L)
AUG. 14...	1235	3700	2.3	1.6	5.1	1.8	4.0	1.5	.05	.02

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

MONTH	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCT- ANCE (MICRO- MHOS)	DIS- SOLVED SOLIDS (MG/L)	DIS- SOLVED SOLIDS (TONS)	DIS- SOLVED CHLORIDE (MG/L)	DIS- SOLVED CHLORIDE (TONS)	DIS- SOLVED SULFATE (MG/L)	DIS- SOLVED SULFATE (TONS)	HARDNESS (CA+MG) (MG/L)
OCT. 1973.....	207020	106	56	31300	12	6710	8.6	4810	21
NOV. 1973.....	261740	140	74	52300	17	12000	12	8480	29
DEC. 1973.....	543600	149	79	116000	18	26400	13	19100	32
JAN. 1974.....	1016700	114	60	165000	13	35700	9.4	25800	23
FEB. 1974.....	783800	132	70	148000	16	33900	11	23300	28
MAR. 1974.....	323600	135	72	62900	16	14000	11	9610	28
APR. 1974.....	285560	113	60	46300	13	10000	9.3	7170	23
MAY 1974.....	285020	133	70	53900	16	12300	11	8470	28
JUNE 1974.....	179910	139	74	35900	16	7770	12	5830	29
JULY 1974.....	176410	140	74	35200	17	8100	12	5720	29
AUG. 1974.....	180810	138	73	35600	16	7810	12	5860	29
SEPT 1974.....	171820	129	68	31500	15	6960	11	5100	27
TOTAL	4415990	**	**	814000	**	182000	**	129000	**
WTD.AVG.	12098	129	68	**	15	**	11	**	27

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	141	124	141	150	118	143	123	136	136	139	156	131
2	143	115	145	152	121	142	127	146	138	139	137	134
3	141	110	149	153	124	137	131	138	139	142	130	124
4	143	106	151	151	128	142	128	138	137	152	132	122
5	146	111	145	150	131	146	130	136	135	139	136	134
6	146	96	119	142	134	146	132	135	157	136	137	118
7	138	77	117	139	134	143	122	137	141	140	141	131
8	133	113	120	138	134	141	143	128	140	144	154	136
9	125	123	129	137	137	144	138	126	142	135	136	134
10	117	127	138	137	136	145	134	130	139	135	137	130
11	128	131	146	132	135	146	130	130	139	135	137	100
12	144	142	150	125	138	145	141	129	139	135	138	116
13	129	144	155	119	140	142	146	129	136	136	142	121
14	94	146	159	122	143	136	100	116	131	137	132	123
15	69	150	160	128	143	129	72	119	136	138	130	121
16	65	153	160	131	143	124	68	122	138	137	156	127
17	64	158	163	133	141	121	69	122	137	139	134	130
18	58	157	163	136	141	116	81	133	138	151	147	125
19	57	156	163	139	139	152	90	138	137	139	130	131
20	56	154	160	109	140	113	92	142	148	144	135	134
21	60	154	161	86	140	136	112	144	139	144	131	134
22	68	153	157	79	139	135	121	145	136	142	136	139
23	81	145	152	75	138	133	128	142	137	141	142	137
24	97	145	153	88	142	102	128	140	137	141	137	137
25	109	153	154	100	136	125	129	139	137	139	138	134
26	116	155	156	102	139	137	128	135	139	141	136	137
27	122	149	151	109	139	129	128	138	155	140	134	136
28	127	136	149	104	138	116	129	138	139	139	130	140
29	131	143	148	98	---	104	131	137	138	138	140	144
30	135	138	146	102	---	107	134	135	137	139	134	135
31	135	---	147	109	---	120	---	136	---	142	134	---
MONTH	110	135	149	122	136	132	119	134	139	140	138	130

SABINE RIVER BASIN

08030500 SABINE RIVER NEAR RULIFF, TEX.--Continued

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	16.0	12.0	14.0	12.0	20.0	22.0	27.0	---	27.0	27.0
2	26.0	18.0	16.0	11.0	15.0	12.0	20.0	21.0	26.0	28.0	28.0	27.0
3	26.0	19.0	17.0	12.0	15.0	---	19.0	21.0	25.0	27.0	32.0	27.0
4	26.0	20.0	17.0	12.0	14.0	17.0	20.0	23.0	25.0	28.0	28.0	25.0
5	26.0	21.0	16.0	9.0	14.0	16.0	18.0	21.0	26.0	29.0	27.0	23.0
6	26.0	20.0	15.0	10.0	14.0	18.0	18.0	21.0	27.0	28.0	27.0	23.0
7	26.0	19.0	15.0	11.0	14.0	18.0	19.0	20.0	28.0	28.0	27.0	23.0
8	26.0	20.0	12.0	11.0	13.0	19.0	19.0	20.0	27.0	27.0	27.0	26.0
9	---	21.0	12.0	13.0	11.0	19.0	18.0	22.0	27.0	26.0	27.0	26.0
10	26.0	19.0	12.0	15.0	11.0	18.0	18.0	23.0	27.0	27.0	28.0	26.0
11	26.0	16.0	12.0	12.0	11.0	19.0	19.0	23.0	25.0	28.0	28.0	26.0
12	25.0	18.0	12.0	12.0	12.0	19.0	20.0	25.0	24.0	28.0	28.0	26.0
13	24.0	18.0	14.0	15.0	13.0	18.0	20.0	23.0	27.0	28.0	28.0	26.0
14	24.0	19.0	14.0	12.0	13.0	18.0	21.0	23.0	27.0	28.0	28.0	27.0
15	24.0	18.0	15.0	13.0	16.0	19.0	19.0	24.0	27.0	28.0	28.0	27.0
16	23.0	19.0	14.0	14.0	14.0	18.0	19.0	23.0	27.0	28.0	28.0	26.0
17	22.0	18.0	12.0	17.0	14.0	18.0	18.0	24.0	28.0	27.0	29.0	26.0
18	21.0	19.0	12.0	16.0	14.0	19.0	19.0	24.0	28.0	27.0	29.0	27.0
19	20.0	19.0	13.0	17.0	13.0	20.0	19.0	24.0	28.0	28.0	29.0	27.0
20	19.0	20.0	11.0	15.0	13.0	21.0	20.0	24.0	29.0	28.0	29.0	27.0
21	19.0	19.0	10.0	15.0	16.0	19.0	21.0	24.0	28.0	29.0	29.0	28.0
22	19.0	19.0	9.0	15.0	14.0	18.0	21.0	24.0	29.0	29.0	29.0	28.0
23	20.0	20.0	11.0	15.0	13.0	19.0	21.0	24.0	28.0	29.0	29.0	26.0
24	21.0	20.0	12.0	13.0	12.0	18.0	20.0	24.0	28.0	30.0	29.0	25.0
25	21.0	20.0	12.0	13.0	12.0	16.0	19.0	25.0	27.0	29.0	29.0	26.0
26	21.0	21.0	12.0	16.0	11.0	14.0	19.0	24.0	---	29.0	28.0	26.0
27	21.0	22.0	12.0	16.0	11.0	14.0	21.0	26.0	25.0	29.0	28.0	23.0
28	21.0	19.0	11.0	14.0	12.0	15.0	21.0	26.0	26.0	29.0	28.0	25.0
29	21.0	18.0	13.0	13.0	---	16.0	22.0	26.0	27.0	29.0	---	24.0
30	20.0	17.0	13.0	13.0	---	17.0	22.0	26.0	27.0	29.0	---	---
31	19.0	---	14.0	13.0	---	18.0	---	26.0	---	28.0	27.0	---
MONTH	22.5	19.0	13.0	13.5	13.0	17.5	19.5	23.5	27.0	28.0	28.0	26.0

COLOR (PLATINUM-COBALT UNITS) * WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	65	120	120	80	100	60	60	70	70	50	50	30
2	70	130	70	100	100	60	50	70	40	50	100	40
3	80	120	70	120	70	50	50	70	40	50	60	50
4	70	140	70	100	70	50	60	70	40	40	40	60
5	70	140	70	100	60	50	60	60	40	50	40	50
6	70	140	100	120	60	50	60	60	50	40	40	60
7	70	140	120	100	60	40	70	60	40	40	40	40
8	70	120	120	100	60	50	70	70	40	40	40	40
9	70	120	80	110	60	50	60	70	40	40	40	40
10	80	110	70	120	60	50	60	60	50	40	40	40
11	120	100	60	120	60	60	65	70	45	40	30	70
12	140	70	60	120	60	60	70	70	40	40	40	60
13	140	70	60	120	60	60	70	60	40	40	40	50
14	140	60	60	120	60	70	120	60	40	30	50	40
15	140	70	60	120	60	70	200	60	50	30	40	60
16	140	60	60	120	60	70	140	70	60	40	40	50
17	240	60	60	110	60	80	120	60	40	40	30	40
18	160	70	60	120	60	80	120	60	50	40	40	50
19	120	60	70	90	60	80	80	60	60	40	35	50
20	200	60	70	90	70	70	100	60	60	50	40	40
21	140	60	70	80	60	70	80	60	50	40	40	30
22	200	60	70	120	70	60	80	60	50	40	40	30
23	160	70	90	120	70	60	140	70	30	40	40	30
24	140	70	90	120	60	70	70	70	50	50	30	30
25	140	120	100	100	60	80	80	60	40	40	30	40
26	120	120	80	100	60	70	100	60	50	50	40	40
27	120	120	100	100	60	70	70	60	50	40	30	---
28	140	130	110	80	60	70	80	60	40	30	30	---
29	120	130	110	80	---	120	80	60	40	30	40	30
30	120	110	120	100	---	100	70	60	50	40	30	30
31	120	---	120	100	---	70	---	60	---	50	40	---
MONTH	120	100	80	110	65	65	85	65	46	41	40	43

SABINE RIVER BASIN

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MISCELLANEOUS ANALYSES OF STREAMS IN THE SABINE RIVER BASIN IN TEXAS

WATER QUALITY DATA, OCTOBER 1973 TO SEPTEMBER 1974

08017400 LAKE TAWAKONI NEAR WILLS POINT, TEX. (Lat 32°48'40", long 95°54'56")

DATE	TIME	RESER- VOIR STORAGE (AC-FT)	DIS- SOLVED SILICA (SI02) (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)	DIS- SOLVED SULFATE (SO4) (MG/L)
MAR., 1974 12...	1230	954700	.1	25	2.3	8.0	3.5	86	0	13

DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	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)	DIS- SOLVED BORON (B) (UG/L)
MAR., 1974 12...	4.2	90	72	1	.4	183	7.4	16.0	40

08021500 LAKE CHEROKEE NEAR LONGVIEW, TEX. (Lat 32°22'36", long 94°38'30")

DATE	TIME	RESER- VOIR STORAGE (AC-FT)	DIS- SOLVED SILICA (SI02) (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)
APR., 1974 08...	1445	46700	9.3	7.0	2.9	12	1.9	10	0

DATE	TIME	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	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)
APR., 1974 08...	16	23	77	29	21	1.0	135	6.3	19.0

08022200 MURVAUL LAKE NEAR GARY, TEX. (Lat 32°02'04", long 94°25'15")

DATE	TIME	RESER- VOIR STORAGE (AC-FT)	DIS- SOLVED SILICA (SI02) (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)
APR., 1974 08...	1235	46640	1.1	8.6	5.0	15	2.9	.27	0

DATE	TIME	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	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)
APR., 1974 08...	26	21	93	42	20	1.0	174	6.8	18.5

NECHES RIVER BASIN

08032000 NECHES RIVER NEAR NECHES, TEX.

LOCATION.--Lat 31°53'32", long 95°25'50", Anderson County, at gaging station on U.S. Highway 79, 1.0 mile (1.6 km) downstream from Missouri Pacific Railroad Co. bridge, and 4.4 miles (7.1 km) northeast of Neches.

DRAINAGE AREA.--1,145 mi² (2,966 km²).

PERIOD OF RECORD.--Chemical analyses: December 1969 to September 1974.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)
OCT.					
03...	1925	1070	20	153	--
11...	0930	750	28	185	24.5
26...	1100	1530	14	139	22.0
NOV.					
29...	1100	3580	15	134	15.5
DEC.					
22...	1030	1420	18	142	8.0
JAN.					
17...	1030	1030	20	150	10.5
FEB.					
08...	1100	1650	16	141	9.0
28...	1030	1890	16	134	12.5
MAR.					
19...	1715	1100	20	156	20.0
APR.					
10...	1130	420	25	163	16.5
MAY					
01...	1630	745	34	206	20.5
23...	1130	568	28	179	24.5
JUNE					
12...	1545	970	26	178	26.0
JULY					
04...	1130	90	48	249	28.0
23...	1330	90	46	229	30.0
AUG.					
15...	1130	96	80	345	27.0
SEP.					
03...	1445	130	83	428	25.0

08032000 NECHES RIVER NEAR NECHES, TEX.--Continued

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

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	153	138	159	141	137	133	134	130	135	132	137	134
2	167	138	151	144	137	132	135	131	137	134	139	136
3	167	150	149	143	137	133	134	128	136	134	149	139
4	163	156	148	143	139	121	138	131	137	133	177	140
5	165	156	148	143	125	117	141	134	138	135	149	140
6	185	159	149	142	126	118	145	141	141	136	148	145
7	164	150	153	144	132	117	148	144	141	136	149	147
8	158	139	168	150	135	113	149	147	148	138	154	149
9	179	160	155	147	135	125	150	148	147	138	165	149
10	182	178	152	146	135	124	150	147	149	137	165	152
11	230	180	154	150	136	128	150	147	147	137	183	155
12	303	156	161	152	144	134	149	143	143	140	187	152
13	156	144	161	156	142	133	150	137	149	142	190	153
14	146	137	163	160	139	129	157	150	157	147	170	151
15	143	130	162	156	140	137	157	152	151	143	167	152
16	155	141	157	149	144	132	153	149	141	137	162	152
17	159	151	157	147	142	139	151	147	148	137	162	151
18	156	148	160	156	146	140	156	147	152	143	157	151
19	155	147	163	159	162	139	173	147	174	141	197	154
20	160	149	216	160	167	140	162	143	151	139	161	156
21	154	148	217	149	144	135	144	132	178	141	194	156
22	154	146	156	141	146	139	141	134	159	121	178	161
23	150	143	154	144	145	139	137	132	133	119	203	162
24	149	144	156	129	147	141	140	132	136	130	207	160
25	146	141	129	122	143	129	134	128	140	129	194	160
26	149	138	144	129	139	131	134	127	143	129	183	165
27	144	140	144	132	141	136	128	125	133	131	185	163
28	145	138	137	133	139	137	129	127	136	133	181	163
29	148	136	137	128	137	133	131	127	---	---	193	164
30	151	142	137	132	136	132	139	129	---	---	188	155
31	162	144	---	---	134	132	134	131	---	---	176	157
MONTH	303	130	217	122	167	113	173	125	178	119	207	134

DAY	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	166	160	273	168	211	178	---	---	220	204	227	190
2	176	152	193	170	185	175	---	---	223	207	228	191
3	176	155	172	166	193	178	---	---	217	203	570	198
4	175	147	172	167	192	183	258	251	213	201	256	178
5	162	147	172	167	199	188	301	242	213	200	207	177
6	184	146	204	170	203	197	364	230	211	199	208	190
7	172	158	174	168	214	196	407	266	211	203	205	194
8	184	154	171	163	209	192	311	269	223	202	213	197
9	186	148	168	163	218	191	269	256	245	204	623	197
10	182	155	169	163	330	156	263	242	250	210	223	178
11	293	171	166	161	176	162	326	242	242	192	244	190
12	507	153	170	164	184	173	283	245	232	191	231	183
13	165	146	174	169	193	178	252	237	217	202	525	136
14	170	153	177	169	218	180	354	237	291	207	136	106
15	174	154	181	173	197	183	339	260	393	217	149	119
16	179	160	183	174	195	188	359	246	663	260	167	152
17	169	161	187	179	201	185	320	228	264	236	182	168
18	170	159	179	170	188	182	484	224	241	221	185	179
19	168	155	175	168	189	181	319	231	230	215	190	179
20	165	157	177	168	191	183	244	230	227	213	191	184
21	176	167	181	169	191	184	244	230	256	213	199	190
22	179	169	190	173	195	188	243	231	254	223	197	191
23	218	165	186	171	196	189	230	214	230	212	197	186
24	169	160	181	170	198	185	215	199	223	209	187	184
25	168	159	186	174	196	186	217	198	221	207	194	186
26	170	163	401	175	210	191	225	206	234	208	203	195
27	174	164	179	155	214	204	221	213	224	205	210	202
28	167	161	175	162	219	---	223	211	236	215	215	206
29	160	157	195	172	---	---	223	208	264	216	217	203
30	160	158	191	183	---	---	221	208	706	269	211	207
31	---	---	188	182	---	---	220	206	332	229	---	---
MONTH	507	146	401	155	330	156	484	198	706	191	623	106

NECHES RIVER BASIN

08032500 NECHES RIVER NEAR ALTO, TEX.

LOCATION.--Lat 31°34'45", Long 95°09'55", Cherokee County, at gaging station at bridge on State Highway 21, 600 ft (183 m) downstream from Bowles Creek, and 7.5 miles (12.1 km) southwest of Alto.

DRAINAGE AREA.--1,945 mi² (5,038 km²).

PERIOD OF RECORD.--Chemical analyses: October 1959 to September 1969.

Chemical and biochemical analyses: October 1967 to September 1974.

Water temperatures: October 1959 to September 1969.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SiO ₂) (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNE-SIUM (MG)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED SODIUM PLUS POTAS-SIUM (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO ₃) (MG/L)	CAR-BONATE (CO ₃) (MG/L)
OCT. 24...	1200	4000	10	8.8	3.9	--	10	--	30	0
DEC. 17...	1200	2400	10	9.5	3.0	--	13	--	26	0
FEB. 19...	1210	1720	12	9.5	3.2	--	15	--	24	0
APR. 24...	1230	960	13	8.9	3.9	16	--	3.2	26	0
JUNE 10...	1645	480	12	10	4.3	17	--	3.6	33	0
AUG. 19...	1450	80	11	11	3.8	22	--	4.2	36	0

DATE	DIS-SOLVED SULFATE (SO ₄) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	ORGANIC NITROGEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
OCT. 24...	12	16	.0	.19	.01	.10	.10	.04	76
DEC. 17...	14	19	.0	.27	.00	.05	.30	.03	83
FEB. 19...	17	22	.0	.26	.00	.04	.20	.04	92
APR. 24...	19	25	--	.50	.01	.08	.22	.09	102
JUNE 10...	16	26	--	.68	.00	.13	.30	.06	105
AUG. 19...	18	35	--	.81	.00	.05	.12	.08	123

DATE	HARDNESS (CA+MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	DIS-SOLVED OXYGEN (MG/L)	PERCENT SATURATION	BIO-CHEMICAL OXYGEN DEMAND (MG/L)
OCT. 24...	38	13	.7	139	6.7	17.5	9.2	96	1.9
DEC. 17...	36	15	.9	153	6.2	11.0	10.8	97	.8
FEB. 19...	37	17	1.1	171	6.4	14.0	9.2	88	1.4
APR. 24...	38	17	1.1	184	6.4	20.0	8.0	87	2.5
JUNE 10...	43	16	1.1	197	6.1	25.0	7.2	86	1.3
AUG. 19...	43	14	1.5	237	6.0	29.5	8.4	109	.8

08033000 NECHES RIVER NEAR DIBOLL, TEX.

LOCATION.--Lat 31°07'59", long 94°48'35", Angelina County, at gaging station at bridge on U.S. Highway 59, 700 ft (213 m) downstream from Texas and New Orleans Railroad Co. bridge, 2.9 miles (4.7 km) downstream from Alabama Creek, and 3.8 miles (6.1 km) south of Diboll.

DRAINAGE AREA.--2,724 mi² (7,055 km²).

PERIOD OF RECORD.--Chemical analyses: October 1969 to September 1974.

Chemical and biochemical analyses: October 1969 to September 1974.

Water temperatures: October 1969 to September 1974.

EXTREMES.--October 1973 to September 1974:

Specific conductance: Maximum daily, 380 micromhos Aug. 2; minimum daily, 85 micromhos Jan. 27.

Water temperatures: Maximum, 33.0°C July 29, 30; minimum, 6.0°C on several days during January.

Period of record:

Specific conductance: Maximum daily, 614 micromhos May 2, 1971; minimum daily, 85 micromhos Jan. 27, 1974.

Water temperatures: Maximum, 38.0°C Aug. 31, Sept. 6, 1970; minimum, 3.0°C Jan. 21, 1970.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	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 SODIUM PLUS POTAS- SIUM (K) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)
OCT.										
24...	1655	6400	12	7.0	2.3	--	12	--	20	0
25...	1115	6040	13	7.0	3.0	9.8	--	3.7	22	0
NOV.										
30...	1703	3290	12	9.0	3.8	--	17	--	26	0
DEC.										
17...	1655	4500	10	6.5	4.3	--	9.8	--	22	0
29...	1720	3230	11	7.4	3.4	14	--	4.6	22	0
JAN.										
30...	1415	12800	8.9	9.8	1.6	7.8	--	2.8	16	0
FEB.										
19...	1710	2930	9.1	9.0	5.2	--	11	--	24	0
26...	1905	2680	9.6	9.1	3.5	14	--	3.0	23	0
MAR.										
24...	1810	1890	9.3	11	4.4	19	--	3.9	33	0
APR.										
24...	1720	1220	11	10	4.3	19	--	3.4	29	0
MAY										
29...	1445	905	12	11	4.5	18	--	3.4	34	0
JUNE										
10...	1300	750	11	10	4.2	17	--	3.6	32	0
JULY										
15...	1730	167	12	13	5.3	28	--	4.4	57	0
AUG.										
21...	1345	113	11	11	4.3	25	--	4.2	46	0
SEP.										
22...	1730	1750	15	7.2	2.7	14	--	2.9	12	0

DATE	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITU- ENTS) (MG/L)
OCT.										
24...	13	16	.0	.20	.01	.11	.24	--	.07	73
25...	11	15	.1	--	--	--	--	--	--	74
NOV.										
30...	18	24	.1	--	--	--	--	--	--	97
DEC.										
17...	14	16	.0	.09	.00	.04	.30	--	.04	72
29...	18	19	--	--	--	--	--	--	--	88
JAN.										
30...	12	10	--	--	--	--	--	--	--	61
FEB.										
19...	18	21	.0	.07	.01	.04	.15	--	.07	86
26...	22	20	--	--	--	--	--	--	--	93
MAR.										
24...	28	26	--	--	--	--	--	--	--	118
APR.										
24...	21	28	--	.20	.01	.62	.26	.88	.08	111
MAY										
29...	20	25	--	--	--	--	--	--	--	111
JUNE										
10...	17	26	--	.28	.00	.10	1.1	1.2	.12	105
JULY										
15...	18	38	--	--	--	--	--	--	--	147
AUG.										
21...	17	32	--	.13	.00	.24	1.4	1.6	.19	127
SEP.										
22...	21	19	--	--	--	--	--	--	--	88

08033000 NECHES RIVER NEAR DIBOLL, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	BIO- CHEM- ICAL OXYGEN DEMAND (MG/L)
OCT.									
24...	27	11	1.0	121	6.6	19.0	9.0	9	1.5
25...	30	12	.8	117	6.4	20.0	--	--	--
NOV.									
30...	38	17	1.2	157	7.2	16.0	--	--	--
DEC.									
17...	34	16	.7	135	6.0	12.0	10.8	100	.5
29...	32	14	1.1	153	7.1	9.0	--	--	--
JAN.									
30...	31	18	.6	97	6.3	13.0	--	--	--
FEB.									
19...	44	24	.7	171	6.3	15.5	9.0	89	1.7
26...	37	18	1.0	167	6.8	13.0	--	--	--
MAR.									
24...	46	19	1.2	207	6.8	16.0	--	--	--
APR.									
24...	43	19	1.3	201	6.4	23.0	7.5	86	1.4
MAY									
29...	46	18	1.2	200	7.0	27.0	--	--	--
JUNE									
10...	42	16	1.1	197	6.2	26.0	7.4	90	1.4
JULY									
15...	54	8	1.7	267	7.1	31.0	--	--	--
AUG.									
21...	45	7	1.6	239	6.9	30.0	6.9	91	1.5
SEP.									
22...	29	19	1.1	152	6.2	24.0	--	--	--

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

MONTH	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCT- ANCE (MICRO- MHOS)	DIS- SOLVED SOLIDS (MG/L)	DIS- SOLVED SOLIDS (TONS)	DIS- SOLVED CHLORIDE (MG/L)	DIS- SOLVED CHLORIDE (TONS)	DIS- SOLVED SULFATE (MG/L)	DIS- SOLVED SULFATE (TONS)	HARDNESS (CA+MG) (MG/L)
OCT. 1973.....	127240	122	73	25100	14	4810	14	4810	32
NOV. 1973.....	99300	151	87	23300	18	4830	17	4560	36
DEC. 1973.....	153610	134	79	32800	16	6640	15	6220	34
JAN. 1974.....	201400	117	70	38100	13	7070	13	7070	31
FEB. 1974.....	129260	143	83	29000	17	5930	16	5580	35
MAR. 1974.....	71190	175	99	19000	22	4230	20	3840	39
APR. 1974.....	38655	203	110	11500	27	2820	23	2400	43
MAY 1974.....	37639	196	110	11200	25	2540	22	2240	42
JUNE 1974.....	25336	204	110	7520	27	1850	23	1570	43
JULY 1974.....	6109	254	140	2310	35	577	18	297	50
AUG. 1974.....	4167	294	160	1800	41	461	18	203	55
SEPT 1974.....	35566	175	99	9510	22	2110	20	1920	39
TOTAL	929472	**	**	211000	**	43900	**	40700	**
WTD.AVG.	2546	145	84	**	17	**	16	**	35

NECHES RIVER BASIN

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08033000 NECHES RIVER NEAR DIBOLL, TEX.--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	135	141	154	154	111	159	191	201	238	301	376	322
2	144	150	153	151	110	156	195	197	195	219	380	273
3	164	127	152	148	120	154	196	208	226	212	377	275
4	183	128	146	149	119	153	196	204	200	210	294	273
5	181	117	116	149	130	154	196	207	189	212	299	291
6	169	117	109	152	130	160	193	204	199	216	294	291
7	171	118	113	152	138	159	193	207	199	216	294	289
8	160	113	119	159	138	157	196	205	200	212	292	289
9	161	154	120	158	152	165	196	203	213	217	311	270
10	172	155	119	160	151	166	193	203	212	232	312	269
11	173	155	123	110	145	165	231	192	210	229	299	289
12	174	165	129	171	145	173	237	192	211	231	275	268
13	160	168	128	169	155	174	231	186	214	264	275	158
14	150	167	128	163	155	177	231	183	211	267	274	155
15	129	169	132	172	161	180	212	183	210	267	273	157
16	106	169	132	167	161	181	210	183	201	270	242	155
17	91	165	132	160	169	182	217	184	194	274	242	157
18	89	172	153	152	167	177	214	189	198	264	242	156
19	94	173	153	157	167	181	220	184	192	259	241	156
20	107	200	155	155	170	180	200	187	198	300	242	155
21	106	200	161	86	198	179	200	208	201	262	190	152
22	109	182	150	86	185	196	200	206	201	274	254	152
23	112	177	125	94	186	206	197	204	200	282	290	153
24	111	178	127	93	186	207	200	204	199	274	252	154
25	117	178	126	90	175	209	200	201	198	278	253	166
26	119	188	145	90	167	207	196	201	198	282	252	165
27	127	188	145	85	165	187	196	202	201	281	241	184
28	128	165	156	93	166	187	198	200	207	284	321	185
29	132	167	155	86	---	186	196	199	207	274	323	185
30	145	157	152	99	---	188	197	187	203	300	344	185
31	137	---	152	104	---	190	---	188	---	301	324	---
MONTH	137	160	137	133	154	177	204	197	204	259	286	211

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	25.0	18.0	---	9.0	13.0	15.0	22.0	21.0	27.0	27.0	32.0	30.0
2	25.0	18.0	---	---	14.0	---	20.0	25.0	28.0	28.0	31.0	30.0
3	26.0	28.0	16.0	6.0	15.0	19.0	22.0	26.0	28.0	29.0	31.0	29.0
4	26.0	17.0	17.0	6.0	15.0	19.0	21.0	26.0	26.0	29.0	32.0	29.0
5	26.0	17.0	14.0	6.0	15.0	20.0	22.0	26.0	29.0	29.0	32.0	30.0
6	26.0	17.0	14.0	6.0	13.0	25.0	20.0	27.0	29.0	28.0	32.0	30.0
7	25.0	18.0	13.0	7.0	13.0	25.0	19.0	27.0	27.0	29.0	31.0	29.0
8	25.0	18.0	15.0	7.0	10.0	20.0	19.0	28.0	---	29.0	30.0	29.0
9	26.0	18.0	11.0	7.0	10.0	20.0	18.0	28.0	28.0	29.0	29.0	29.0
10	26.0	18.0	11.0	7.0	10.0	20.0	17.0	28.0	28.0	28.0	29.0	29.0
11	25.0	15.0	10.0	6.0	10.0	20.0	18.0	26.0	29.0	28.0	29.0	29.0
12	24.0	15.0	15.0	6.0	11.0	24.0	19.0	26.0	28.0	30.0	31.0	28.0
13	24.0	16.0	12.0	7.0	13.0	24.0	19.0	26.0	27.0	30.0	32.0	28.0
14	23.0	16.0	15.0	7.0	15.0	24.0	19.0	26.0	27.0	31.0	31.0	28.0
15	23.0	16.0	15.0	7.0	16.0	24.0	19.0	27.0	---	31.0	32.0	28.0
16	22.0	15.0	13.0	10.0	19.0	24.0	19.0	27.0	27.0	31.0	32.0	28.0
17	22.0	16.0	13.0	14.0	16.0	24.0	19.0	27.0	28.0	30.0	32.0	29.0
18	20.0	17.0	10.0	14.0	16.0	22.0	20.0	27.0	28.0	31.0	32.0	29.0
19	21.0	18.0	10.0	14.0	17.0	22.0	20.0	27.0	28.0	30.0	32.0	30.0
20	21.0	18.0	10.0	14.0	17.0	21.0	21.0	27.0	28.0	31.0	32.0	29.0
21	21.0	18.0	10.0	14.0	17.0	21.0	21.0	26.0	29.0	32.0	31.0	29.0
22	22.0	19.0	10.0	12.0	15.0	17.0	21.0	27.0	29.0	31.0	32.0	24.0
23	20.0	19.0	10.0	10.0	14.0	16.0	21.0	27.0	29.0	31.0	32.0	23.0
24	20.0	20.0	10.0	10.0	14.0	16.0	21.0	26.0	29.0	32.0	32.0	22.0
25	20.0	19.0	10.0	10.0	13.0	16.0	21.0	26.0	28.0	32.0	32.0	23.0
26	24.0	19.0	10.0	11.0	13.0	14.0	21.0	28.0	26.0	31.0	31.0	20.0
27	24.0	19.0	9.0	11.0	13.0	14.0	21.0	28.0	28.0	31.0	30.0	20.0
28	20.0	17.0	9.0	11.0	14.0	14.0	22.0	28.0	27.0	32.0	30.0	20.0
29	19.0	16.0	9.0	11.0	---	15.0	22.0	29.0	27.0	33.0	30.0	21.0
30	19.0	16.0	10.0	12.0	---	15.0	21.0	29.0	27.0	33.0	29.0	21.0
31	18.0	---	9.0	12.0	---	16.0	---	27.0	---	32.0	30.0	---
MONTH	23.0	17.5	11.5	9.5	14.0	19.5	20.0	26.5	28.0	30.5	31.0	27.0

08033500 NECHES RIVER NEAR ROCKLAND, TEX.

LOCATION.--Lat 31°01'29", Long 94°23'55", Tyler County, at gaging station at bridge on U.S. Highway 69, 0.8 mile (1.3 km) upstream from Texas and New Orleans Railroad Co. bridge, 1.2 miles (1.9 km) north of Rockland, and 3.2 miles (5.1 km) downstream from Billams Creek.

DRAINAGE AREA.--3,636 mi² (9,417 km²).

PERIOD OF RECORD.--Chemical analyses: October 1945 to September 1947, December 1967 to September 1970.

Chemical and biochemical analyses: October 1967 to September 1974.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	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 SODIUM PLUS POTAS- SIUM (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
OCT. 25...	1130	7800	12	7.0	3.1	--	5.9	--	16	0	14	12
DEC. 18...	1130	5400	11	7.5	3.5	--	10	--	21	0	15	16
FEB. 20...	1115	4050	11	9.0	4.0	--	13	--	22	0	18	21
APR. 25...	1100	1400	12	10	4.1	19	--	3.2	27	0	24	29
JUNE 12...	1800	720	12	10	4.2	18	--	3.7	33	0	13	32
JULY 10...	1500	200	12	14	3.9	22	--	3.5	44	0	20	35
SEP. 24...	1745	1750	15	8.0	2.4	14	--	3.3	12	0	23	20

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITU- ENTS) (MG/L)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)	VOL. NON- FILT- RABLE RESIDUE (MG/L)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)
OCT. 25...	.0	.08	.01	.52	.28	--	.04	63	158	0	30	17
DEC. 18...	.0	.20	.00	.10	.47	--	.08	74	51	7	33	16
FEB. 20...	.0	.05	.01	.08	.43	--	.10	87	71	21	39	21
APR. 25...	--	.26	.01	.12	.48	.60	.11	115	76	22	42	20
JUNE 12...	--	.30	.00	.08	.28	.36	.10	109	83	13	42	15
JULY 10...	--	.17	.00	.00	.62	.62	.05	132	35	25	51	15
SEP. 24...	--	.09	.00	.05	.65	.70	.07	92	65	22	30	20

DATE	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	BIO- CHEM- ICAL OXYGEN DEMAND (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	PHENOLS (UG/L)
OCT. 25...	.5	108	6.3	18.0	240	45	8.2	86	1.1	24	0
DEC. 18...	.8	135	6.2	11.0	140	35	10.3	93	.7	--	--
FEB. 20...	.9	171	6.5	15.0	80	250	9.2	90	1.4	12	0
APR. 25...	1.3	204	6.6	20.0	100	45	10.3	112	1.6	14	3
JUNE 12...	1.2	202	6.5	27.0	100	50	7.3	90	1.4	10	2
JULY 10...	1.3	238	6.8	28.5	70	40	--	--	1.5	7.3	4
SEP. 24...	1.1	153	6.5	24.0	120	45	7.6	89	1.4	10	0

NECHES RIVER BASIN

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08033500 NECHES RIVER NEAR ROCKLAND, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	DIS- SOLVED ALUM- INUM (AL) (UG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	DIS- SOLVED COBALT (CO) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)
OCT. 25...	1130	280	1	--	0	0	0	2
FEB. 20...	1115	100	0	--	0	0	0	8
APR. 25...	1100	20	0	40	0	20	0	8
JULY 10...	1500	10	0	50	0	0	0	3
SEP. 24...	1745	60	1	70	0	0	0	3

DATE	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	DIS- SOLVED LITHIUM (LI) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED MERCURY (HG) (UG/L)	DIS- SOLVED NICKEL (NI) (UG/L)	DIS- SOLVED STRON- TIUM (SR) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)
OCT. 25...	780	0	0	100	<.2	0	70	20
FEB. 20...	360	1	0	13	.0	2	90	--
APR. 25...	480	4	0	20	.0	2	190	20
JULY 10...	80	4	0	0	.0	3	190	10
SEP. 24...	140	1	0	0	.0	6	110	50

NECHES RIVER BASIN

08033600 BOWLES CREEK NEAR SELMAN CITY, TEX.

LOCATION.--Lat 32°11'41", long 94°58'36", Rusk County, at State Highway 64 and 1.5 miles (2.4 km) west of Selman City.

DRAINAGE AREA.--14.5 mi² (37.6 km²).

PERIOD OF RECORD.--Chemical analyses: November 1967 to September 1974.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SIOP) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED SODIUM PLUS POTAS- SIUM (K) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)
OCT. 10...	1200	3.0	25	24	9.2	--	270	--	2	0	10
NOV. 14...	1200	5.1	31	23	9.8	25	--	5.6	0	0	17
DEC. 21...	1315	7.3	29	20	8.2	200	--	4.6	0	0	21
JAN. 17...	1845	12	29	24	9.5	280	--	5.3	0	0	28
FEB. 27...	1630	9.2	30	20	9.6	180	--	4.2	0	0	25
APR. 12...	1320	16	19	13	5.8	93	--	4.5	4	0	20
JUNE 12...	1920	25	19	19	6.5	170	--	5.2	2	0	20
JULY 05...	1520	1.7	31	24	10	300	--	5.2	0	0	12
AUG. 14...	1630	3.2	23	41	16	540	--	7.2	0	0	13

DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	DIS- SOLVED SULFOS (SUM OF CONSTITUENTS) (MG/L)	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	ACIDITY (H+) (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)
OCT. 10...	460	.1	.07	814	98	96	--	12	1610	5.3	24.0
NOV. 14...	460	--	--	571	98	98	--	1.1	1600	4.5	21.0
DEC. 21...	360	--	--	643	84	84	.1	9.5	1270	4.3	5.5
JAN. 17...	510	--	--	886	99	99	.3	12	1750	4.3	17.5
FEB. 27...	340	--	--	609	89	89	.4	8.3	1180	4.0	13.5
APR. 12...	180	--	--	337	56	53	--	5.4	667	5.6	20.0
JUNE 12...	310	--	--	551	74	73	--	8.6	1080	5.4	--
JULY 05...	550	--	--	932	100	100	--	13	1830	4.2	30.5
AUG. 14...	970	--	--	1610	170	170	--	18	3240	4.3	25.5

08037000 ANGELINA RIVER NEAR LUFKIN, TEX.

LOCATION.--Lat 31°27'26", long 94°43'34", Angelina County, at gaging station at bridge on U.S. Highway 59, 200 ft (61 m) upstream from Procella Creek, 1.5 miles (2.4 km) downstream from Bayou Loco, 1.5 miles (2.4 km) upstream from Southern Pacific Lines bridges, and 8 miles (13 km) north of Lufkin.

DRAINAGE AREA.--1,600 mi² (4,144 km²).

PERIOD OF RECORD.--Chemical analyses: October 1954 to September 1974.

Chemical and biochemical analyses: October 1967 to September 1974.

Water temperatures: October 1954 to September 1974.

EXTREMES.--October 1973 to September 1974:

Specific conductance: Maximum daily, 288 micromhos June 17; minimum daily, 84 micromhos Oct. 16.

Water temperatures: Maximum, 28.5°C July 27; minimum, 4.0°C Jan. 4.

Period of record:

Specific conductance: Maximum daily, 1,090 micromhos Nov. 10, 11, 1963; minimum daily, 38 micromhos Sept. 21, 1958, May 2, 1962.

Water temperatures: Maximum, 32.0°C on several days during July 1966; minimum, freezing point Jan. 11, 12, 1962.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	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 SODIUM PLUS POTAS- SIUM (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HC03) (MG/L)	CAR- BONATE (C03) (MG/L)	DIS- SOLVED SULFATE (S04) (MG/L)
OCT.											
09...	--	751	18	8.8	4.6	15	--	3.4	30	0	20
24...	1430	5800	12	7.8	3.3	--	16	--	17	0	24
NOV.											
12...	1550	1890	17	7.8	4.7	16	--	4.2	25	0	25
28...	1145	2350	12	8.0	4.4	--	13	--	22	0	22
DEC.											
17...	1330	3100	13	12	5.4	--	25	--	24	0	42
20...	1310	2480	14	6.2	3.6	13	--	3.2	21	0	21
JAN.											
08...	1220	2650	11	18	5.1	--	19	--	22	0	47
30...	1800	13000	11	7.0	3.0	11	--	2.9	14	0	21
FEB.											
04...	1730	7590	10	10	2.5	12	--	2.7	14	0	18
19...	1420	1500	14	7.5	5.2	--	11	--	20	0	18
MAR.											
20...	1315	1500	12	9.5	5.4	--	17	--	27	0	18
APR.											
24...	1445	750	14	10	5.3	21	--	2.8	26	0	28
MAY											
22...	1700	428	18	10	4.9	21	--	3.0	38	0	20
JUNE											
10...	1345	250	18	9.2	5.1	18	--	2.8	33	0	20
JULY											
10...	0830	74	18	13	5.3	22	--	2.5	42	0	17
AUG.											
05...	1045	41	16	9.3	4.6	22	--	4.1	39	0	24
SEP.											
24...	1000	1550	17	8.0	4.5	22	--	3.0	4	0	30

DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITU- ENTS) (MG/L)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)
OCT.										
09...	21	.1	--	--	--	--	--	106	41	16
24...	20	.0	.64	.01	.12	.08	.08	92	33	19
NOV.										
12...	22	--	--	--	--	--	--	109	39	18
28...	18	.0	.28	.01	.00	.08	.10	89	38	20
DEC.										
17...	30	.0	.23	.00	.06	.10	.06	140	52	32
20...	16	--	--	--	--	--	--	87	30	13
JAN.										
08...	28	.0	.15	.00	.04	.10	.10	140	66	48
30...	17	--	--	--	--	--	--	80	30	18
FEB.										
04...	17	--	--	--	--	--	--	79	35	24
19...	20	.0	.24	.01	.04	.20	.10	87	40	24
MAR.										
20...	30	.1	.13	.02	.03	.10	.21	106	46	24
APR.										
24...	29	--	.59	.01	.11	.17	.08	123	47	25
MAY										
22...	26	--	1.0	.00	.07	.38	.08	123	45	14
JUNE										
10...	23	--	.98	.01	.12	.37	.16	112	44	17
JULY										
10...	25	--	.79	.00	.09	.40	.12	124	54	20
AUG.										
05...	24	--	1.1	.00	.07	.34	.15	123	42	10
SEP.										
24...	36	--	.67	.00	.03	.02	.04	123	39	35

NECHES RIVER BASIN

08037000 ANGELINA RIVER NEAR LUFKIN, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

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	BIO- CHEM- ICAL OXYGEN DEMAND (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)
OCT.										
09...	1.0	168	6.7	25.0	--	--	--	--	--	--
24...	1.2	153	6.5	17.5	7.3	76	--	--	--	--
NOV.										
12...	1.1	179	7.2	15.5	--	--	--	--	--	--
28...	.9	158	6.2	12.5	7.6	72	1.4	--	850	0
DEC.										
17...	1.5	248	6.0	10.0	11.0	97	--	--	--	--
20...	1.0	144	6.6	7.0	--	--	--	--	--	--
JAN.										
08...	1.0	264	5.7	11.5	11.0	100	1.2	--	0	5
30...	.9	142	6.2	14.0	--	--	--	--	--	--
FEB.										
04...	.9	133	6.4	14.5	--	--	--	--	--	--
19...	.8	174	6.4	14.0	9.8	94	--	--	--	--
MAR.										
20...	--	209	6.0	20.0	10.0	109	1.7	--	300	5
APR.										
24...	1.3	218	6.2	21.5	7.4	83	--	--	--	--
MAY										
22...	1.4	243	--	25.5	5.8	70	1.7	--	420	440
JUNE										
10...	1.2	201	6.9	25.5	6.2	75	--	2.7	--	--
JULY										
10...	1.3	202	6.2	28.0	7.2	91	.6	--	650	40
AUG.										
05...	1.5	210	6.6	27.5	8.6	108	--	--	--	--
SEP.										
24...	1.5	221	6.8	21.0	7.4	82	1.2	--	360	160

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

MONTH	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCT- ANCE (MICRO- MHOS)	DIS- SOLVED SULFUR (MG/L)	DIS- SOLVED SOLIDS (TONS)	DIS- SOLVED CHLORIDE (MG/L)	DIS- SOLVED CHLORIDE (TONS)	DIS- SOLVED SULFATE (MG/L)	DIS- SOLVED SULFATE (TONS)	HARDNESS (CA+MG) (MG/L)
OCT. 1973.....	95045	131	76	19500	15	3850	21	5390	30
NOV. 1973.....	54750	176	100	14800	22	3250	25	3700	39
DEC. 1973.....	115200	149	86	26700	18	5600	23	7150	34
JAN. 1974.....	137550	147	85	31600	18	6680	23	8540	33
FEB. 1974.....	110830	147	85	25400	18	5390	23	6880	33
MAR. 1974.....	56370	181	100	15200	23	3500	25	3800	40
APR. 1974.....	25818	219	130	9060	28	1950	28	1950	47
MAY 1974.....	22041	217	120	7140	28	1670	28	1670	47
JUNE 1974.....	11342	195	110	3370	25	766	26	796	42
JULY 1974.....	2465	191	110	732	24	160	26	173	42
AUG. 1974.....	1553	187	110	461	24	101	26	109	41
SEPT 1974.....	23157	184	110	6880	23	1440	26	1630	40
TOTAL	656121	**	**	161000	**	34400	**	41800	**
WTD.AVG.	1797	158	91	**	19	**	24	**	35

NECHES RIVER BASIN

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08037000 ANGELINA RIVER NEAR LUFKIN, TEX.--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	133	168	186	179	135	160	186	211	175	196	183	180
2	137	174	199	177	134	164	212	203	179	197	180	180
3	171	175	189	170	128	166	206	191	185	198	193	155
4	197	179	152	169	132	165	204	186	188	198	201	200
5	204	116	148	152	130	168	206	184	184	201	205	186
6	192	151	136	163	132	170	204	187	179	198	207	186
7	183	166	138	174	136	172	203	172	177	204	203	197
8	175	170	140	184	139	171	196	191	185	205	191	195
9	166	175	156	192	144	170	194	227	190	205	189	199
10	122	177	152	191	150	172	192	227	199	200	185	166
11	158	177	141	192	152	174	212	221	200	200	185	185
12	164	180	142	192	152	173	203	222	198	196	183	226
13	134	185	153	180	160	173	180	223	193	194	184	193
14	106	189	152	192	166	172	199	233	176	193	185	185
15	94	192	148	196	168	172	236	244	148	191	191	110
16	84	196	140	208	170	184	247	256	242	192	194	86
17	91	201	144	216	172	214	246	254	288	190	192	160
18	104	199	146	223	168	223	231	249	281	188	187	205
19	109	206	148	207	170	218	222	254	230	182	189	245
20	119	202	147	208	181	214	229	246	179	182	188	232
21	122	205	116	197	190	181	251	227	169	181	180	222
22	138	182	92	188	179	194	254	216	167	178	186	211
23	142	177	95	195	193	178	250	203	171	181	195	214
24	138	179	148	157	180	171	229	198	179	181	198	217
25	145	191	170	122	168	176	210	198	184	183	185	183
26	143	209	166	103	175	196	194	186	200	181	179	180
27	143	194	167	109	156	182	203	176	194	180	175	166
28	141	159	168	134	154	204	243	177	189	177	185	159
29	143	163	161	126	---	213	241	173	191	178	189	152
30	148	169	140	121	---	220	231	178	195	178	188	173
31	164	---	173	117	---	222	---	175	---	180	168	---
MONTH	142	180	150	172	158	185	217	209	194	190	188	185

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	15.0	11.0	6.0	14.0	15.0	18.0	21.5	25.0	26.0	26.0	25.0
2	22.5	17.0	14.0	6.0	15.0	16.0	18.0	22.0	25.0	25.0	26.0	27.0
3	23.0	18.0	15.0	5.0	14.5	19.0	21.0	24.0	24.0	26.0	26.0	25.0
4	22.5	20.0	13.0	4.0	13.0	19.0	17.0	25.0	24.0	25.5	25.0	24.0
5	23.0	19.5	11.0	7.0	12.0	20.0	16.0	22.0	25.0	25.0	26.0	21.0
6	23.0	16.0	10.0	7.0	15.0	21.0	15.0	20.0	27.0	26.0	25.0	21.0
7	24.0	16.0	9.0	6.0	11.0	21.0	19.0	20.0	26.0	25.0	24.0	22.0
8	23.0	19.0	8.0	7.0	8.0	22.0	17.0	21.0	27.0	27.0	26.0	23.0
9	25.0	19.0	10.0	10.0	8.0	22.0	15.0	22.0	27.0	27.0	25.0	23.0
10	23.0	13.0	8.0	8.0	9.0	22.0	17.0	22.0	24.0	27.0	25.0	23.5
11	24.0	13.0	9.0	10.5	9.0	22.0	20.0	22.5	24.0	26.5	27.0	24.0
12	23.0	13.0	11.0	5.0	11.0	22.0	20.0	22.5	25.0	26.0	27.0	24.0
13	20.0	16.0	12.0	5.0	14.0	18.5	21.0	21.0	23.5	26.5	26.0	23.0
14	22.0	16.0	10.0	7.5	15.0	18.0	19.0	24.0	23.5	27.0	27.0	23.0
15	20.0	19.0	10.0	10.0	16.0	19.0	18.0	22.5	25.0	27.0	26.0	23.0
16	21.0	14.0	9.5	9.5	13.0	18.0	16.0	25.0	25.0	26.5	25.0	24.0
17	18.0	14.5	7.0	13.0	13.0	16.5	16.0	25.0	26.0	25.0	27.0	24.0
18	16.0	16.0	9.0	15.0	15.0	19.0	17.0	26.0	27.0	26.0	28.0	24.0
19	16.0	18.0	10.0	14.0	13.0	21.5	19.0	25.0	26.5	25.0	28.0	24.0
20	16.0	16.0	5.0	13.0	13.0	19.0	20.0	25.0	27.0	26.0	28.0	24.0
21	16.0	16.0	5.0	12.0	17.0	19.0	20.0	25.0	27.0	27.0	27.5	25.0
22	16.0	15.0	5.0	14.5	11.0	14.5	21.0	25.0	27.0	28.0	25.0	23.0
23	17.0	20.0	9.0	12.5	11.0	16.5	21.0	24.0	25.0	27.0	26.5	21.0
24	17.0	21.0	10.0	10.0	11.0	10.5	20.0	26.0	27.0	27.0	28.0	20.5
25	18.0	19.0	9.0	10.0	8.0	10.0	19.0	26.0	25.0	27.5	28.0	20.0
26	18.0	19.0	8.5	10.0	8.0	12.0	19.0	24.0	25.0	27.0	27.0	20.0
27	18.0	20.0	9.0	10.0	10.0	16.0	20.0	24.0	24.5	28.5	27.0	20.0
28	17.0	13.0	8.0	13.0	13.0	19.0	23.0	24.0	25.0	28.0	27.0	22.0
29	16.0	12.0	15.0	10.5	---	15.5	22.0	25.0	26.0	28.0	27.0	20.0
30	15.0	12.0	12.0	10.5	---	14.0	22.5	26.0	26.0	28.0	26.0	19.0
31	16.0	---	10.0	13.0	---	18.0	---	24.0	---	27.0	26.0	---
MONTH	19.5	16.5	9.5	9.5	12.0	18.0	19.0	23.5	25.5	26.5	26.5	22.5

NECHES RIVER BASIN

08037080 BAYOU LANANA NEAR NACOGDOCHES, TEX.

LOCATION.--Lat 31°31'10", long 94°39'21", Nacogdoches County, at bridge on county road, 2.6 miles (4.2 km) upstream from Southern Pacific Lines bridge, 5 miles (8 km) upstream from Black Bayou, and 6 miles (10 km) south of Nacogdoches.

PERIOD OF RECORD.--Chemical analyses: June 1964 to September 1967.
Chemical and biochemical analyses: October 1967 to September 1974.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	DIS- SOLVED SILICA (SiO2) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED SODIUM PLUS POTAS- SIUM (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)
OCT. 24...	1345	14	13	5.7	--	23	--	52	0	34
NOV. 28...	1245	14	9.5	5.2	--	14	--	32	0	29
DEC. 17...	1430	15	10	5.8	--	15	--	38	0	29
JAN. 08...	1300	14	10	7.1	--	14	--	32	0	32
FEB. 19...	1345	13	10	5.6	--	8.8	--	35	0	23
MAR. 20...	1400	14	10	5.6	--	16	--	42	0	26
APR. 24...	1415	16	9.7	4.4	32	--	4.3	56	0	40
MAY 22...	1730	12	8.1	2.6	29	--	4.6	43	0	25
JUNE 10...	1435	11	8.8	3.3	19	--	4.1	36	0	24
JULY 10...	0915	15	12	3.8	59	--	6.3	91	0	62
AUG. 05...	1145	17	11	4.1	75	--	9.3	114	0	80
SEP. 24...	1130	14	14	7.3	36	--	5.4	41	0	67

DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)
OCT. 24...	15	.2	.80	.42	1.1	2.2	1.6	143	56	13
NOV. 28...	12	.1	.33	.01	.34	.70	.54	103	45	19
DEC. 17...	12	.0	.33	.12	.75	1.8	.44	115	49	18
JAN. 08...	16	.0	.08	.05	.30	1.2	.32	115	54	28
FEB. 19...	11	.2	.43	.07	1.3	.80	.73	94	48	19
MAR. 20...	14	.3	.12	.21	2.8	3.0	.60	124	48	14
APR. 24...	17	--	.00	.08	6.3	.57	1.6	151	42	0
MAY 22...	14	--	3.8	.37	2.2	.73	1.3	117	31	0
JUNE 10...	11	--	.90	.27	1.1	1.2	1.1	99	36	6
JULY 10...	23	--	2.1	.50	2.0	1.7	2.2	226	46	0
AUG. 05...	28	--	2.5	.48	1.1	1.6	2.9	281	44	0
SEP. 24...	20	--	.80	.42	1.0	2.3	1.1	184	65	31

NECHES RIVER BASIN

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08037080 BAYOU LaNANA NEAR NACOGDOCHES, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

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	BIO- CHEM- ICAL OXYGEN DEMAND (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)
OCT. 24...	1.3	249	6.8	18.0	8.6	91	--	--	--
NOV. 28...	.9	166	6.3	18.0	8.6	91	2.8	440	0
DEC. 17...	.9	200	6.0	10.0	11.5	102	--	--	--
JAN. 08...	.8	202	5.6	13.0	10.0	94	1.7	0	5
FEB. 19...	.6	180	6.5	14.5	8.3	81	--	--	--
MAR. 20...	--	230	6.8	21.5	8.3	93	5.3	100	0
APR. 24...	2.1	280	6.3	22.5	7.8	89	--	--	--
MAY 22...	2.3	217	7.6	24.5	4.8	57	7.9	--	100
JUNE 10...	1.4	188	6.3	24.0	5.1	60	--	--	--
JULY 10...	3.8	407	6.4	26.5	3.8	46	.8	60	0
AUG. 05...	4.9	484	6.7	24.5	4.4	52	--	--	--
SEP. 24...	1.9	338	6.7	21.0	7.2	80	7.2	60	0

NECHES RIVER BASIN

08037200 PAPER MILL CREEK NEAR HERTY, TEX.

LOCATION.--Lat 31°23'32", Long 94°39'46", Angelina County, at bridge on county road, 2.0 miles (3.2 km) upstream from Mill Creek, and 2.3 miles (3.7 km) northeast of Herty.

PERIOD OF RECORD.--Chemical analyses: June 1964 to September 1967.
Chemical and biochemical analyses: October 1967 to September 1974.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	DIS-SOLVED SILICA (SI02) (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED SODIUM PLUS POTASSIUM (MG/L)	DIS-SOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HC03) (MG/L)	CARBONATE (C03) (MG/L)	DIS-SOLVED SULFATE (S04) (MG/L)
OCT. 24...	1500	13	75	6.8	--	370	--	260	0	210
NOV. 28...	1350	13	41	6.7	--	270	--	203	0	210
DEC. 17...	1510	13	87	3.9	--	270	--	264	0	190
JAN. 08...	1400	13	60	5.5	--	230	--	286	0	160
FEB. 19...	1625	17	34	7.1	--	270	--	218	0	150
MAR. 20...	1445	15	33	4.3	--	330	--	294	0	130
APR. 24...	1530	15	38	3.8	290	--	7.9	152	0	210
MAY 22...	1000	15	62	3.9	300	--	10	310	0	170
JUNE 12...	1100	16	61	3.4	320	--	9.1	264	0	210
JULY 10...	1030	14	51	4.7	260	--	6.9	168	0	200
AUG. 05...	1230	14	75	4.0	270	--	8.6	234	0	200
SEP. 24...	1215	13	77	4.3	280	--	7.6	205	0	190

DATE	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	ORGANIC NITROGEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	HARDNESS (CA+MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)
OCT. 24...	420	.3	1.2	.02	1.1	.00	.31	1220	220	2
NOV. 28...	240	.2	1.1	.00	.80	.00	.40	889	130	0
DEC. 17...	280	.0	.73	.00	.36	.20	.33	974	230	16
JAN. 08...	190	.0	.56	.00	1.8	.00	.58	802	170	0
FEB. 19...	270	.2	1.0	.00	.35	.00	.57	854	110	0
MAR. 20...	310	.2	2.2	.00	.37	.00	.37	975	100	0
APR. 24...	300	--	1.4	.07	.16	.00	.13	940	110	0
MAY 22...	260	--	4.5	.02	.06	.01	.77	975	170	0
JUNE 12...	290	--	2.3	.13	.46	.06	.32	1040	170	0
JULY 10...	270	--	2.6	.01	.49	.01	.22	891	150	9
AUG. 05...	290	--	3.8	.00	.43	.01	.71	977	200	12
SEP. 24...	260	--	2.1	.04	.29	.00	.11	935	210	42

NECHES RIVER BASIN

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08037200 PAPER MILL CREEK NEAR HERTY, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

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	BIO- CHEM- ICAL OXYGEN DEMAND (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)
OCT. 24...	11	2120	7.4	33.5	5.8	81	--	--	--
NOV. 28...	10	1550	7.0	26.5	5.6	68	20	500	0
DEC. 17...	7.6	1630	6.8	29.5	2.8	36	--	--	--
JAN. 08...	7.5	1340	6.6	28.0	4.4	56	59	1000	0
FEB. 19...	11	1560	6.9	33.0	4.8	66	--	--	--
MAR. 20...	--	1680	7.0	35.5	6.0	86	68	500	0
APR. 24...	12	1570	6.7	36.5	4.6	6	--	--	--
MAY 22...	10	1800	7.6	36.0	2.7	39	19	--	800
JUNE 12...	11	1800	7.5	38.0	3.8	56	--	--	--
JULY 10...	9.3	1530	6.9	39.5	4.2	64	25	850	850
AUG. 05...	8.2	1690	7.5	38.5	6.2	91	--	--	--
SEP. 24...	8.4	1620	6.5	35.0	5.6	79	13	720	850

08037250 ANGELINA RIVER BELOW PAPER MILL CREEK, NEAR HERTY, TEX.

LOCATION.--Lat 31°26'22", Long 94°37'11", Angelina County, at end of county road, 1.5 miles (2.4 km) downstream from Paper Mill Creek, and 7 miles (11 km) northeast of Herty.

PERIOD OF RECORD.--Chemical analyses: June 1954 to September 1967.
Chemical and biochemical analyses: October 1967 to September 1974.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	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 SODIUM PLUS POTAS- SIUM (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)
OCT. 24...	1530	12	48	8.5	--	200	--	187	0	150
NOV. 28...	1430	10	12	5.1	--	37	--	46	0	40
DEC. 17...	1545	14	55	4.4	--	140	--	160	0	110
JAN. 08...	1440	9.9	11	3.1	--	30	--	35	0	32
FEB. 19...	1525	14	18	4.9	--	53	--	62	0	43
MAR. 20...	1530	12	12	6.3	--	34	--	41	0	30
APR. 24...	1610	13	14	5.2	52	--	3.5	40	0	49
JUNE 12...	1200	16	17	4.8	66	--	4.8	72	0	54
AUG. 05...	1315	14	31	4.1	120	--	6.1	112	0	90
SEP. 24...	1300	.1	13	3.6	38	--	3.6	20	0	41

DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)
OCT. 24...	200	.2	.52	.07	.39	.08	.13	708	160	2
NOV. 28...	37	.0	.45	.00	.05	.09	.18	165	51	13
DEC. 17...	140	.0	.44	.12	.89	.10	.20	546	160	24
JAN. 08...	31	.0	.18	.02	.12	.10	.10	135	40	11
FEB. 19...	60	.1	.31	.00	.15	.04	.16	223	65	14
MAR. 20...	46	.1	.11	.01	.04	.07	.21	161	56	22
APR. 24...	62	--	.79	.02	.12	.26	.13	218	56	24
JUNE 12...	64	--	1.1	.02	.33	.48	.24	262	62	3
AUG. 05...	130	--	1.5	.06	.58	.35	.51	450	94	2
SEP. 24...	52	--	.81	.01	.05	.03	.08	162	47	31

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	BIO- CHEM- ICAL OXYGEN DEMAND (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)
OCT. 24...	6.9	1270	6.9	21.0	6.4	71	--	--	--
NOV. 28...	2.3	311	6.3	12.0	8.6	80	3.2	700	0
DEC. 17...	4.7	980	6.5	12.5	8.5	79	--	--	--
JAN. 08...	2.1	252	5.5	15.0	8.5	83	2.4	600	0
FEB. 19...	2.9	435	6.5	14.0	7.6	73	--	--	--
MAR. 20...	--	337	6.4	22.5	10.2	116	6.4	800	0
APR. 24...	3.0	415	6.2	22.0	7.3	80	--	--	--
JUNE 12...	3.6	486	6.6	25.0	4.8	57	--	--	--
AUG. 05...	5.4	804	6.7	30.0	7.0	92	--	--	--
SEP. 24...	2.4	334	6.5	23.0	8.0	92	1.5	470	190

NECHES RIVER BASIN

201

08037330 ANGELINA RIVER NEAR ETOILE, TEX.

LOCATION.--Lat 31°22'24", long 94°28'27", Nacogdoches County, at bridge on State Highway 103 and 2.3 miles (3.7 km) west of Etoile.

PERIOD OF RECORD.--Chemical analyses: June 1964 to September 1967.

Chemical and biochemical analyses: October 1967 to September 1974.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	DIS-SOLVED SILICA (SiO ₂) (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED SODIUM PLUS POTAS-SIUM (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO ₃) (MG/L)	CAR-BONATE (CO ₃) (MG/L)	DIS-SOLVED SULFATE (SO ₄) (MG/L)
OCT. 24...	1755	11	6.0	3.2	--	13	--	12	0	18
NOV. 28...	1655	14	10	5.1	--	22	--	30	0	29
DEC. 18...	0745	11	5.5	4.4	--	14	--	14	0	19
JAN. 09...	0830	12	8.5	6.3	--	14	--	17	0	26
FEB. 19...	1830	11	6.5	3.4	--	13	--	16	0	21
MAR. 20...	1745	11	8.8	5.6	--	13	--	29	0	18
APR. 24...	1845	11	11	5.3	25	--	2.4	36	0	28
MAY 22...	1900	12	10	4.7	31	--	3.4	40	0	29
JUNE 12...	1515	12	11	5.2	31	--	3.1	41	0	25
JULY 10...	1145	14	12	5.2	37	--	2.6	56	0	28
AUG. 05...	1450	15	13	5.3	44	--	3.3	64	0	29
SEP. 24...	1430	17	11	4.0	30	--	3.3	8	0	45

DATE	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	ORGANIC NITROGEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	HARDNESS (CA+MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)
OCT. 24...	20	.0	.51	.01	.07	.10	.17	78	28	18
NOV. 28...	28	.0	.22	.00	.00	.07	.13	123	46	21
DEC. 18...	22	.0	.32	.00	.11	.07	.09	83	32	21
JAN. 09...	26	.0	.10	.00	.02	.07	.06	101	47	33
FEB. 19...	17	.0	.22	.00	.19	.09	.07	81	30	17
MAR. 20...	22	.1	.12	.01	.05	.03	.08	93	45	21
APR. 24...	32	--	.39	.01	.11	.00	.06	132	49	20
MAY 22...	37	--	1.1	.00	.05	.04	.05	147	44	12
JUNE 12...	39	--	.77	.00	.07	.01	.04	147	49	15
JULY 10...	41	--	.64	.00	.11	.02	.29	168	51	5
AUG. 05...	51	--	1.0	.00	.06	.00	.12	192	54	2
SEP. 24...	39	--	.63	.00	.06	.04	.06	154	44	37

NECHES RIVER BASIN

08037330 ANGELINA RIVER NEAR ETOILE, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

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	BIO- CHEM- ICAL OXYGEN DEMAND (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)
OCT. 24...	1.1	140	6.4	16.0	7.0	70	--	--	--
NOV. 28...	1.4	223	6.4	11.5	--	--	1.1	990	0
DEC. 18...	1.1	156	6.1	10.5	8.8	79	--	--	--
JAN. 09...	.9	195	7.0	9.0	8.8	76	1.4	100	0
FEB. 19...	1.0	143	6.4	14.0	8.0	77	--	--	--
MAR. 20...	--	188	6.0	21.0	6.8	76	1.1	400	40
APR. 24...	1.6	245	6.1	21.5	6.0	67	--	--	--
MAY 22...	2.0	275	7.4	27.0	7.0	86	2.9	--	210
JUNE 12...	1.9	277	6.4	26.0	6.0	73	--	--	--
JULY 10...	2.2	305	6.5	28.5	5.1	65	1.2	300	0
AUG. 05...	2.6	350	6.8	27.5	6.4	80	--	--	--
SEP. 24...	2.0	283	7.1	23.0	4.4	51	1.1	380	150

NECHES RIVER BASIN

203

08038100 ATTOYAC BAYOU NEAR ETOILE, TEX.

LOCATION.--Lat 31°23'02", long 94°19'20", Nacogdoches County, at State Highway 103 bridge, 6.5 miles (10.5 km) east of Etoile, and 8 miles (13 km) south of Chireno.

PERIOD OF RECORD.--Chemical analyses: October 1965 to September 1967.
Chemical and biochemical analyses: October 1967 to September 1974.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED SODIUM PLUS POTAS- SIUM (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HC03) (MG/L)	CAR- BONATE (C03) (MG/L)	DIS- SOLVED SULFATE (S04) (MG/L)
OCT.										
25...	0830	--	--	--	--	--	--	20	0	--
NOV.										
29...	1030	--	--	--	--	--	--	36	0	--
DEC.										
18...	0900	--	--	--	--	--	--	22	0	--
JAN.										
09...	1000	--	--	--	--	--	--	18	0	--
FEB.										
20...	0815	13	7.0	6.2	--	5.4	--	24	0	21
MAR.										
21...	0830	--	--	--	--	--	--	35	0	17
APR.										
25...	0815	--	--	--	--	--	--	30	0	--
MAY										
23...	0830	--	8.3	4.2	--	--	--	32	0	--
JUNE										
12...	1600	--	--	--	--	--	--	153	0	--
JULY										
10...	1225	14	6.1	3.3	11	--	1.8	32	0	13
AUG.										
05...	1555	--	--	--	--	--	--	27	0	--
SEP.										
24...	1515	--	--	--	--	--	--	13	0	--

DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITU- ENTS) (MG/L)	HARD- NESS (CA+MG) (MG/L)
OCT.									
25...	12	--	--	.01	.10	.07	.23	--	30
NOV.									
29...	14	--	--	.01	.04	.06	.11	--	52
DEC.									
18...	10	--	--	.00	.06	.20	.14	--	34
JAN.									
09...	9.5	--	--	.00	.24	.20	1.6	--	32
FEB.									
20...	9.5	.0	--	.00	.15	.09	.14	75	43
MAR.									
21...	12	--	--	.01	.04	.12	.14	--	30
APR.									
25...	11	--	.26	.01	.33	.15	.05	--	--
MAY									
23...	--	--	1.1	.00	.07	.09	.08	--	38
JUNE									
12...	17	--	.95	.00	.15	.12	.10	--	--
JULY									
10...	9.0	--	.61	.00	.12	.13	1.2	74	29
AUG.									
05...	8.5	--	1.2	.00	.09	.18	.12	--	--
SEP.									
24...	16	--	.62	.00	.15	.15	.07	--	--

NECHES RIVER BASIN

08038100 ATTOYAC BAYOU NEAR ETOILE, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	NON-CARBONATE HARDNESS (MG/L)	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	DISSOLVED IRON (FE) (UG/L)	DISSOLVED MANGANESE (MN) (UG/L)
OCT. 25...	14	--	127	6.2	15.5	5.7	56	--	--
NOV. 29...	22	--	180	6.3	17.0	--	--	900	10
DEC. 18...	16	--	132	6.0	10.5	7.5	67	--	--
JAN. 09...	17	--	132	5.8	10.0	8.5	75	0	5
FEB. 20...	23	.4	131	6.1	12.0	6.1	50	--	--
MAR. 21...	1	--	149	7.0	18.0	4.4	46	400	20
APR. 25...	--	--	153	6.2	19.5	5.6	60	--	--
MAY 23...	12	--	160	7.5	24.5	4.5	54	--	610
JUNE 12...	--	--	153	6.5	27.0	7.6	94	--	--
JULY 10...	3	.9	117	6.5	28.5	6.6	85	230	0
AUG. 05...	--	--	103	6.3	29.5	7.2	94	--	--
SEP. 24...	--	--	142	6.6	23.5	7.1	83	760	40

NECHES RIVER BASIN

205

08038490 SAM RAYBURN RESERVOIR NEAR ZAVALLA, TEX.

LOCATION.--Lat 31°13'26", long 94°19'29", Angelina County, at bridge on State Highway 147 and approximately 8 miles (13 km) northeast of Zavalla.

PERIOD OF RECORD.--Chemical and biochemical analyses: November 1967 to September 1974.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	DIS- SOLVED SILICA (SiO ₂) (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 SODIUM PLUS POTAS- SIUM (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)
OCT. 25...	0955	--	--	--	--	--	--	31	0	--
NOV. 29...	1125	--	--	--	--	--	--	29	0	--
DEC. 18...	1015	--	--	--	--	--	--	24	0	--
JAN. 09...	1130	--	--	--	--	--	--	18	0	--
FEB. 20...	0945	11	6.5	4.8	--	11	--	15	0	23
MAR. 21...	1015	--	--	--	--	--	--	20	0	18
APR. 25...	0945	--	--	--	--	--	--	20	0	--
MAY 23...	1000	--	7.0	3.1	--	--	--	23	0	--
JUNE 12...	1700	--	--	--	--	--	--	31	0	--
JULY 10...	1330	9.5	8.8	3.9	15	--	2.8	36	0	17
AUG. 05...	1700	--	--	--	--	--	--	28	0	--
SEP. 24...	1645	--	--	--	--	--	--	28	0	--

DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	HARD- NESS (CA+MG) (MG/L)
OCT. 25...	19	--	--	.00	.09	.00	.00	--	36
NOV. 29...	19	--	--	.00	.00	.20	.02	--	38
DEC. 18...	18	--	--	.00	.06	.50	.22	--	32
JAN. 09...	17	--	--	.00	.00	.20	.06	--	35
FEB. 20...	16	.0	--	.00	.13	.20	.19	80	36
MAR. 21...	14	--	--	.00	.03	.14	.04	--	31
APR. 25...	15	--	.40	.01	.08	.03	.05	--	--
MAY 23...	--	--	.84	.00	.05	.03	.02	--	30
JUNE 12...	20	--	.80	.00	.40	.03	.05	--	--
JULY 10...	18	--	.70	.00	.40	.00	.06	95	38
AUG. 05...	20	--	.76	.00	.06	.01	.06	--	--
SEP. 24...	25	--	.42	.00	.32	.02	.00	--	--

NECHES RIVER BASIN

08038490 SAM RAYBURN RESERVOIR NEAR ZAVALLA, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	NON-CARBONATE HARDNESS (MG/L)	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	DISSOLVED IRON (UG/L)	DISSOLVED MANGANESE (UG/L)
OCT. 25...	11	--	162	6.3	19.5	4.2	45	--	--
NOV. 29...	14	--	167	6.5	17.5	--	--	180	5
DEC. 18...	12	--	155	6.1	13.5	9.0	86	--	--
JAN. 09...	20	--	146	4.8	11.0	10.8	97	100	0
FEB. 20...	24	.8	141	6.4	12.5	6.4	88	--	--
MAR. 21...	15	--	130	6.3	17.0	7.8	80	200	0
APR. 25...	--	--	139	6.3	19.5	6.0	65	--	--
MAY 23...	11	--	146	7.1	26.0	7.2	88	--	170
JUNE 12...	--	--	161	6.7	26.5	6.1	74	--	--
JULY 10...	8	1.1	166	6.6	27.0	4.6	57	1700	90
AUG. 05...	--	--	156	6.3	28.5	7.8	100	--	--
SEP. 24...	--	--	165	6.8	24.5	6.8	81	50	10

NECHES RIVER BASIN

207

08039300 SAM RAYBURN RESERVOIR NEAR JASPER, TEX.

LOCATION.--Lat 31°03'38", long 94°06'21", Jasper County, at Sam Rayburn Dam on the Angelina River and 10 miles (16 km) northwest of Jasper.

DRAINAGE AREA.--3,449 mi² (8,933 km²).

PERIOD OF RECORD.--Chemical analyses: October 1964 to September 1967.

Chemical and biochemical analyses: November 1967 to September 1974.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	DIS- SOLVED SILICA (SiO ₂) (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 SODIUM PLUS POTAS- SIUM (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)
OCT. 25...	1400	--	--	--	--	--	--	30	0	--
NOV. 29...	1220	--	--	--	--	--	--	31	0	--
DEC. 18...	1340	--	--	--	--	--	--	31	0	--
JAN. 09...	1345	--	--	--	--	--	--	27	0	--
FEB. 20...	1330	6.4	7.0	5.0	--	11	--	24	0	17
MAR. 21...	1135	--	--	--	--	--	--	24	0	16
APR. 25...	1315	--	--	--	--	--	--	20	0	--
MAY 23...	1130	--	10	2.8	--	--	--	19	0	--
JUNE 12...	2000	--	--	--	--	--	--	22	0	--
JULY 10...	1730	7.7	7.7	3.1	13	--	2.6	24	0	19
AUG. 05...	1800	--	--	--	--	--	--	19	0	--
SEP. 25...	0730	--	--	--	--	--	--	28	0	--

DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITU- ENTS) (MG/L)	HARD- NESS (CA+MG) (MG/L)
OCT. 25...	19	--	--	.00	.04	.01	.00	--	37
NOV. 29...	18	--	--	.00	.04	.20	.01	--	36
DEC. 18...	18	--	--	.00	.03	.20	.01	--	34
JAN. 09...	18	--	--	.00	.00	.20	.01	--	38
FEB. 20...	17	.0	--	.00	.18	.20	.02	77	38
MAR. 21...	16	--	--	.01	.01	.21	.02	--	41
APR. 25...	15	--	.44	.01	.06	.07	.04	--	--
MAY 23...	--	--	.10	.00	1.2	.07	.03	--	37
JUNE 12...	18	--	.54	.00	.10	.08	.22	--	--
JULY 10...	15	--	.77	.00	.02	.02	.52	80	32
AUG. 05...	17	--	1.1	.00	.11	.00	.02	--	--
SEP. 25...	22	--	.43	.02	.13	.03	.00	--	--

NECHES RIVER BASIN

08039300 SAM RAYBURN RESERVOIR NEAR JASPER, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	NON-CARBONATE HARDNESS (MG/L)	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	DISSOLVED IRON (FE) (UG/L)	DISSOLVED MANGANESE (MN) (UG/L)
OCT. 25...	12	--	167	6.7	23.0	7.5	86	--	--
NOV. 29...	11	--	166	6.5	19.0	--	--	40	0
DEC. 18...	9	--	163	6.2	15.0	7.5	74	--	--
JAN. 09...	16	--	158	7.2	14.5	10.8	105	100	0
FEB. 20...	18	.8	147	6.5	14.5	10.2	99	--	--
MAR. 21...	21	--	137	6.9	15.5	9.0	89	100	0
APR. 25...	--	--	136	7.1	22.0	10.4	118	--	--
MAY 23...	21	--	136	7.4	26.0	8.6	105	--	40
JUNE 12...	--	--	136	6.5	27.0	8.0	99	--	--
JULY 10...	12	1.0	144	6.5	28.0	--	--	130	0
AUG. 05...	--	--	142	6.4	28.5	7.2	92	--	--
SEP. 25...	--	--	158	6.7	23.5	8.1	94	20	0

NECHES RIVER BASIN

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08039400 ANGELINA RIVER BELOW SAM RAYBURN DAM, NEAR JASPER, TEX.

LOCATION.--Lat 31°03'30", long 94°06'20", Jasper County, immediately below Sam Rayburn Dam, 7.6 miles (12.2 km) upstream from gaging station at Horger, and 10 miles (16 km) northwest of Jasper.

DRAINAGE AREA.--3,449 mi² (8,933 km²).

PERIOD OF RECORD.--Chemical analyses: October 1963 to January 1974.

Chemical and biochemical analyses: October 1967 to September 1974.

Water temperatures: October 1963 to September 1974.

EXTREMES.--October 1973 to September 1974:

Specific conductance: Maximum daily, 255 micromhos Dec. 7; minimum daily, 132 micromhos June 30.

Water temperatures: Maximum, 28.0°C Aug. 10; minimum, 6.0°C Jan. 1.

Period of record:

Specific conductance: Maximum daily, 350 micromhos Sept. 21, 1969; minimum daily, 60 micromhos June 21, 1973.

Water temperatures: Maximum, 30.0°C Sept. 28, 1972; minimum, 6.0°C Jan. 1, 1974.

REMARKS.--Discharge records are not available for most of year because of backwater from Dam B. Reservoir.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	DIS- SOLVED SILICA (SiO ₂) (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 SODIUM PLUS POTAS- SIUM (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)
OCT.												
25...	1330	8.7	11	5.5	--	25	--	58	0	16	29	.1
NOV.												
29...	1200	5.5	8.5	3.6	--	15	--	30	0	16	19	.0
DEC.												
18...	1330	6.2	9.5	3.0	--	15	--	31	0	17	18	.0
JAN.												
09...	1315	6.3	8.0	4.1	--	14	--	27	0	18	18	.0
FEB.												
20...	1315	6.4	7.5	4.7	--	10	--	24	0	16	17	.0
MAR.												
21...	1145	7.0	7.5	4.0	--	11	--	24	0	16	16	.0
APR.												
25...	1330	7.1	6.7	2.8	12	--	2.5	20	0	16	16	--
MAY												
23...	1200	8.8	8.7	2.9	23	--	2.9	33	0	21	24	--
JUNE												
12...	1830	7.5	6.7	3.0	12	--	2.6	20	0	16	16	--
JULY												
10...	1700	7.9	7.5	2.5	12	--	2.6	20	0	20	16	--
AUG.												
06...	0800	8.5	8.5	2.1	18	--	2.8	36	0	16	18	--
SEP.												
25...	0800	8.7	7.0	3.2	16	--	2.5	27	0	16	18	--

DATE	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITU- ENTS) (MG/L)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)	VOL. NON- FILT- RABLE RESIDUE (MG/L)	HARD- NESS (CA+MG) (MG/L)
OCT.											
25...	.00	.00	.34	.36	--	.03	--	125	--	--	50
NOV.											
29...	.20	.00	.00	.25	--	.01	15	84	10	--	36
DEC.											
18...	.30	.00	.04	.16	--	.00	--	85	--	--	36
JAN.											
09...	.20	.00	.01	.08	--	.01	--	82	28	24	37
FEB.											
20...	.20	.00	.04	.26	--	.03	--	75	--	--	38
MAR.											
21...	.18	.01	.00	.07	--	.02	--	74	8	0	35
APR.											
25...	.10	.00	.08	.45	.53	.04	--	74	--	--	28
MAY											
23...	.17	.00	.04	.96	1.0	.02	--	108	18	17	34
JUNE											
12...	.08	.00	.07	.93	1.0	.05	--	74	25	4	29
JULY											
10...	.03	.00	.01	.52	.53	.02	--	79	18	11	29
AUG.											
06...	.00	.00	.35	.85	1.2	.04	--	92	6	4	30
SEP.											
25...	.01	.02	.09	.54	.63	.01	--	85	12	4	31

NECHES RIVER BASIN

08039400 ANGELINA RIVER BELOW SAM RAYBURN DAM, NEAR JASPER, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	NON-CARBONATE HARDNESS (MG/L)	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	BIOCHEMICAL OXYGEN DEMAND (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT. 25...	2	1.5	245	6.5	18.0	--	--	5.0	53	--	--
NOV. 29...	12	1.1	165	6.2	19.0	40	5	--	--	1.1	10
DEC. 18...	11	1.1	163	6.1	15.0	--	--	7.4	73	--	--
JAN. 09...	15	1.0	158	6.7	13.0	40	5	10.6	100	1.0	8.0
FEB. 20...	18	.7	147	6.5	14.0	--	--	10.2	98	--	--
MAR. 21...	15	--	138	7.0	16.0	60	15	8.6	86	1.4	8.5
APR. 25...	12	1.0	136	6.7	20.5	--	--	9.2	101	--	--
MAY 23...	7	1.7	193	6.9	19.5	30	8	5.0	54	.9	5.8
JUNE 12...	13	1.0	137	6.3	25.5	30	10	6.9	83	--	6.3
JULY 10...	13	1.0	140	6.4	26.5	40	6	--	--	.5	5.7
AUG. 06...	0	1.4	168	7.2	20.0	60	10	2.8	30	--	--
SEP. 25...	9	1.3	159	6.8	23.5	5	2	8.0	93	.8	--

DATE	TIME	DISSOLVED ALUMINUM (AL) (UG/L)	DISSOLVED ARSENIC (AS) (UG/L)	DISSOLVED BORON (B) (UG/L)	DISSOLVED CADMIUM (CD) (UG/L)	DISSOLVED CHROMIUM (CR) (UG/L)	DISSOLVED COBALT (CO) (UG/L)	DISSOLVED COPPER (CU) (UG/L)
NOV. 29...	1200	20	1	--	0	0	0	0
JAN. 09...	1315	0	1	--	0	0	0	2
MAR. 21...	1145	30	0	--	0	0	0	2
APR. 25...	1330	120	1	50	0	20	0	9
MAY 23...	1200	--	--	--	--	--	--	--
JULY 10...	1700	0	1	50	0	0	0	4
SEP. 25...	0800	--	0	80	--	--	--	--

DATE	DISSOLVED IRON (FE) (UG/L)	DISSOLVED LEAD (PB) (UG/L)	DISSOLVED LITHIUM (LI) (UG/L)	DISSOLVED MANGANESE (MN) (UG/L)	DISSOLVED MERCURY (HG) (UG/L)	DISSOLVED NICKEL (NI) (UG/L)	DISSOLVED STRONTIUM (SR) (UG/L)	DISSOLVED ZINC (ZN) (UG/L)
NOV. 29...	90	0	0	240	.6	0	70	10
JAN. 09...	90	0	0	0	.7	0	70	10
MAR. 21...	190	0	10	0	.2	0	60	0
APR. 25...	800	5	0	50	.0	0	100	20
MAY 23...	--	--	--	270	--	--	--	--
JULY 10...	80	3	0	0	.1	1	110	10
SEP. 25...	--	--	--	--	--	--	--	--

NECHES RIVER BASIN

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08039400 ANGELINA RIVER BELOW SAM RAYBURN DAM, NEAR JASPER, TEX.--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	191	191	171	154	156	144	134	145	148	148	155	153
2	191	188	179	154	138	143	149	146	150	149	148	142
3	193	188	179	154	166	143	147	142	154	149	152	150
4	193	188	182	155	173	142	148	---	145	---	150	164
5	183	188	197	153	147	139	145	---	150	156	151	159
6	---	181	221	---	146	139	---	153	149	---	152	158
7	180	180	255	154	146	139	---	148	152	151	153	152
8	210	183	157	153	147	139	152	150	157	161	155	---
9	191	172	---	154	147	139	155	156	156	157	158	162
10	198	178	158	155	147	139	153	156	156	149	136	154
11	196	177	159	155	146	139	146	152	151	147	157	154
12	210	181	159	154	146	136	152	155	145	149	151	156
13	214	160	159	157	144	135	---	155	145	---	149	161
14	210	160	159	156	144	137	---	146	147	---	150	157
15	223	---	158	153	143	137	161	150	146	149	152	166
16	200	---	159	153	142	133	135	149	136	150	154	173
17	191	161	159	154	144	135	135	146	147	150	156	155
18	188	161	159	151	145	138	134	146	156	156	151	153
19	196	161	158	151	144	140	146	147	151	152	150	153
20	202	173	159	---	144	133	148	147	153	137	155	152
21	211	161	181	163	145	137	149	145	153	155	156	156
22	212	176	159	162	143	138	135	150	135	156	155	158
23	211	160	---	168	143	136	151	151	---	149	155	169
24	205	174	---	172	144	156	147	148	151	152	157	158
25	211	177	---	154	143	134	144	154	149	148	155	153
26	206	160	167	165	143	136	145	152	148	149	155	159
27	204	174	155	187	143	136	133	171	146	138	155	158
28	199	170	166	164	144	150	---	168	149	150	153	141
29	189	159	155	156	---	152	144	134	149	152	152	163
30	192	160	167	157	---	136	145	147	132	155	156	166
31	202	---	---	155	---	134	---	147	---	140	156	---
MONTH	200	173	171	158	147	139	145	150	148	150	153	157

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	21.0	18.5	6.0	12.0	11.0	15.5	18.5	19.5	19.0	21.0	20.5
2	22.0	21.5	19.5	8.0	13.0	15.5	15.5	18.5	20.0	19.0	19.5	20.5
3	23.0	21.0	19.0	9.0	11.0	12.0	15.5	18.5	18.5	19.0	20.0	20.0
4	23.0	22.0	19.0	8.0	12.0	12.0	15.5	---	18.5	---	19.5	20.5
5	24.0	21.5	18.5	10.0	12.0	13.0	15.0	---	19.5	19.0	19.5	21.5
6	---	20.5	18.0	---	12.0	13.0	---	18.5	20.0	---	20.0	22.0
7	21.0	21.0	18.0	---	9.0	13.5	---	18.5	20.0	19.0	20.0	22.0
8	21.0	21.5	15.0	10.5	11.0	13.5	15.5	19.0	20.5	19.0	20.0	---
9	21.5	21.0	---	10.5	11.0	19.0	16.0	19.0	20.5	19.5	20.0	23.5
10	21.5	16.5	16.5	10.5	11.5	14.5	16.5	19.0	18.0	19.5	28.0	23.5
11	21.5	20.0	16.0	10.5	11.0	14.5	16.5	19.0	19.0	19.5	16.5	23.0
12	20.0	20.5	16.0	10.5	11.0	15.0	17.0	20.0	19.0	19.5	20.0	23.0
13	20.0	20.0	16.0	9.5	11.5	16.0	---	18.5	19.0	---	20.0	23.5
14	21.0	20.0	16.0	10.5	11.5	15.5	---	19.0	19.0	---	19.5	23.5
15	20.0	---	15.0	10.5	12.0	15.5	18.0	19.0	19.0	19.0	21.5	24.5
16	20.0	---	15.0	11.0	12.0	15.5	18.0	21.0	18.5	21.0	21.0	22.0
17	22.0	20.0	11.0	10.0	12.0	15.5	18.0	19.0	19.0	20.5	20.5	23.5
18	20.0	20.0	15.0	10.0	11.0	15.5	18.0	19.0	19.5	20.5	20.0	23.5
19	20.0	20.0	15.0	12.0	11.5	15.5	18.0	19.0	19.5	19.5	20.0	23.5
20	20.0	20.0	13.5	---	11.5	16.0	16.5	18.5	19.5	19.0	22.0	23.0
21	21.0	19.0	13.5	11.0	12.0	16.0	17.0	19.0	19.5	19.5	21.0	23.0
22	20.5	19.5	13.0	11.0	11.5	15.5	18.0	19.5	25.0	19.5	20.5	22.0
23	20.0	19.5	---	11.0	10.0	15.5	18.0	19.5	---	19.5	20.0	23.0
24	20.0	20.0	---	11.0	11.5	14.5	18.0	19.0	18.5	19.5	21.0	22.0
25	20.5	19.5	---	11.0	11.0	15.0	18.0	19.0	19.5	19.5	20.0	22.0
26	20.5	19.5	14.5	11.0	11.0	15.0	18.5	19.5	19.0	19.5	19.5	20.0
27	20.0	20.5	13.5	12.0	10.5	15.0	20.5	18.5	19.0	19.0	20.5	21.0
28	21.0	19.5	13.5	11.5	11.0	15.5	---	21.0	19.0	20.5	20.0	21.0
29	22.0	19.0	15.0	11.0	---	18.0	18.0	22.0	19.0	19.5	20.0	21.0
30	22.0	19.0	13.0	11.0	---	15.5	18.5	21.0	21.0	19.5	20.0	21.5
31	20.0	---	---	11.0	---	16.0	---	21.0	---	26.5	21.0	---
MONTH	21.0	20.0	15.5	10.5	11.5	15.0	17.0	19.5	19.5	20.0	20.5	22.0

08041000 NECHES RIVER AT EVADALE, TEX.

LOCATION.--Lat 30°21'22", long 94°05'36", Jasper County, at gaging station at bridge on U.S. Highway 96 at Evadale, 0.8 mile (1.3 km) upstream from Mill Creek, and 16 miles (26 km) upstream from Village Creek.

DRAINAGE AREA.--7,951 mi² (20,593 km²).

PERIOD OF RECORD.--Chemical analyses: October 1947 to September 1974.

Chemical and biochemical analyses: January 1968 to September 1974.

Pesticide analyses: January 1968 to September 1974.

Water temperatures: October 1947 to September 1974.

EXTREMES.--October 1973 to September 1974:

Specific conductance: Maximum daily, 171 micromhos Apr. 6; minimum daily, 67 micromhos Jan. 29.

Water temperatures: Maximum, 29.0°C on many days during summer months; minimum, 8.0°C Dec. 21, 22, Jan. 4, 5.

Period of record:

Specific conductance: Maximum daily, 422 micromhos Jan. 25, 1957; minimum daily, 23 micromhos Sept. 19, 1963.

Water temperatures: Maximum, 34.0°C June 29, 1953; minimum, 3.0°C Jan. 30, 31, 1948, Jan. 31, 1949, Jan. 24, 1963.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DIS-SOLVED SILICA (SiO ₂) (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED SODIUM PLUS POTASSIUM (MG/L)	DIS-SOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO ₃) (MG/L)	CARBONATE (CO ₃) (MG/L)	DIS-SOLVED SULFATE (SO ₄) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)
OCT.												
11...	0930	5500	9.4	9.0	3.4	14	--	3.1	33	0	14	19
26...	1030	8760	11	6.8	2.2	--	8.3	--	17	0	14	11
NOV.												
13...	1400	15800	12	5.3	1.6	7.2	--	2.9	15	0	7.6	10
DEC.												
19...	0925	17000	9.4	7.5	3.0	--	13	--	26	0	14	16
20...	0900	17800	9.0	7.0	2.7	13	--	3.3	24	0	14	17
JAN.												
27...	0830	23600	7.1	4.6	1.1	6.8	--	1.8	13	0	7.5	6.7
FEB.												
06...	0830	24000	7.8	4.9	1.1	5.9	--	2.0	14	0	9.9	7.8
21...	1040	21500	6.7	6.5	3.4	--	10	--	21	0	12	16
MAR.												
14...	0830	21600	6.7	6.8	2.8	13	--	2.8	28	0	15	18
21...	1545	18500	7.5	8.5	2.6	--	14	--	26	0	15	18
APR.												
26...	0845	8050	9.2	8.3	2.9	14	--	2.6	21	0	19	21
MAY												
24...	1100	4840	8.2	8.1	2.8	14	--	3.0	26	0	17	20
JUNE												
14...	0830	4000	9.2	8.2	3.1	14	--	2.9	24	0	15	20
JULY												
11...	1045	4000	9.2	8.3	3.1	13	--	2.9	25	0	18	17
AUG.												
06...	1910	3400	8.8	7.5	3.3	13	--	2.7	28	0	14	17
SEP.												
09...	1315	2950	9.5	8.8	3.0	15	--	2.8	29	0	14	18
25...	1610	6800	11	7.5	2.8	13	--	2.7	19	0	18	16

DATE	DIS-SOLVED FLUORIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	TOTAL NON-FILTERABLE RESIDUE (MG/L)	VOL. NON-FILTERABLE RESIDUE (MG/L)	HARDNESS (CA+MG) (MG/L)
OCT.											
11...	.1	--	--	--	--	--	--	88	--	--	36
26...	.0	.07	.02	.10	.44	--	.08	62	65	13	26
NOV.											
13...	--	--	--	--	--	--	--	54	--	--	20
DEC.											
19...	.0	.20	.00	.07	.20	--	.03	77	32	1	31
20...	--	--	--	--	--	--	--	78	--	--	29
JAN.											
27...	--	--	--	--	--	--	--	42	--	--	16
FEB.											
06...	--	--	--	--	--	--	--	46	--	--	17
21...	.0	.09	.01	.07	.21	--	.03	65	36	15	30
MAR.											
14...	--	--	--	--	--	--	--	79	--	--	29
21...	.0	.12	.01	.01	.49	--	.07	79	56	4	32
APR.											
26...	--	.08	.01	.06	.59	.65	.08	88	104	34	33
MAY											
24...	--	.11	.00	.06	1.0	1.1	.04	86	110	39	32
JUNE											
14...	--	.11	.00	.06	.78	.84	.07	84	114	14	33
JULY											
11...	--	.00	.00	.08	.60	.68	.11	84	57	24	34
AUG.											
06...	--	.01	.00	.02	.67	.69	.04	80	38	1	32
SEP.											
09...	--	--	--	--	--	--	--	85	--	--	34
25...	--	.03	.01	.03	.65	.68	.03	80	37	27	30

NECHES RIVER BASIN

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08041000 NECHES RIVER AT EVADALE, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	NON-CARBONATE HARDNESS (MG/L)	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	BIOCHEMICAL OXYGEN DEMAND (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT.											
11...	9	1.0	150	7.1	--	--	--	--	--	--	--
26...	12	.7	104	6.3	18.5	160	35	8.1	86	1.1	20
NOV.											
13...	8	.7	86	7.1	18.0	--	--	--	--	--	--
DEC.											
19...	10	1.0	144	6.4	14.0	100	25	9.4	90	.7	12
20...	9	1.1	129	6.7	10.0	--	--	--	--	--	--
JAN.											
27...	5	.7	67	6.5	15.0	--	--	--	--	--	--
FEB.											
06...	5	.6	76	6.5	16.0	--	--	--	--	--	--
21...	13	.8	141	6.4	15.5	60	150	10.3	102	1.2	8.0
MAR.											
14...	6	1.1	140	6.5	--	--	--	--	--	--	--
21...	11	--	143	6.9	18.0	65	35	7.5	79	1.3	10
APR.											
26...	16	1.1	147	6.3	20.0	100	50	8.0	87	1.1	12
MAY											
24...	10	1.1	163	7.2	27.0	50	40	7.4	91	1.7	7.5
JUNE											
14...	14	1.1	155	6.4	27.0	80	50	7.2	89	1.3	8.2
JULY											
11...	13	1.0	153	6.4	29.0	60	30	--	--	.6	8.7
AUG.											
06...	9	1.0	146	6.6	27.5	30	20	7.0	88	.9	6.6
SEP.											
09...	11	1.1	147	--	26.0	--	--	--	--	--	--
25...	15	1.0	144	6.5	24.5	100	30	7.0	83	.8	--

DATE	TIME	DISSOLVED ALUMINUM (AL) (UG/L)	DISSOLVED ARSENIC (AS) (UG/L)	DISSOLVED BORON (B) (UG/L)	DISSOLVED CADMIUM (CD) (UG/L)	DISSOLVED CHROMIUM (CR) (UG/L)	DISSOLVED COBALT (CO) (UG/L)	DISSOLVED COPPER (CU) (UG/L)
OCT.								
26...	1030	200	1	--	0	0	0	2
FEB.								
21...	1040	210	2	--	0	0	0	6
APR.								
26...	0845	30	0	50	1	10	0	9
AUG.								
06...	1910	0	0	40	0	0	0	2

DATE	DISSOLVED IRON (FE) (UG/L)	DISSOLVED LEAD (PB) (UG/L)	DISSOLVED LITHIUM (LI) (UG/L)	DISSOLVED MANGANESE (MN) (UG/L)	DISSOLVED MERCURY (HG) (UG/L)	DISSOLVED NICKEL (NI) (UG/L)	DISSOLVED STRONTIUM (SR) (UG/L)	DISSOLVED ZINC (ZN) (UG/L)
OCT.								
26...	640	0	0	170	<.2	0	70	0
FEB.								
21...	220	3	0	60	.0	4	70	70
APR.								
26...	320	--	0	60	.1	2	150	40
AUG.								
06...	70	2	0	0	.0	0	100	0

08041000 NECHES RIVER AT EVADALE, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TEMPERATURE (DEG C)	ALDRIN (UG/L)	ALDRIN IN BOTTOM DE-POSITS (UG/KG)	DDD (UG/L)	DDD IN BOTTOM DE-POSITS (UG/KG)	DDE (UG/L)	DDE IN BOTTOM DE-POSITS (UG/KG)	DDT (UG/L)	DDT IN BOTTOM DE-POSITS (UG/KG)
OCT. 26...	1030	8600	18.5	.00	.0	.00	.0	.00	.0	.00	.0
FEB. 21...	1040	21500	15.5	.00	.0	.00	.0	.00	.0	.00	.0
APR. 26...	0845	9000	20.0	.00	.0	.00	.0	.00	.0	.00	.0
MAY 24...	1100	4840	27.0	.00	--	.00	--	.00	--	.00	--
AUG. 06...	1910	3300	27.5	.00	.0	.00	.0	.00	.0	.00	.0

DATE	DI-ELDRIN (UG/L)	DI-ELDRIN IN BOTTOM DE-POSITS (UG/KG)	ENDRIN (UG/L)	ENDRIN IN BOTTOM DE-POSITS (UG/KG)	HEPTA-CHLOR (UG/L)	HEPTA-CHLOR IN BOTTOM DE-POSITS (UG/KG)	HEPTA-CHLOR EPOXIDE (UG/L)	HEPTA-CHLOR EPOXIDE IN BOTTOM DE-POSITS (UG/KG)	LINDANE (UG/L)	LINDANE IN BOTTOM DE-POSITS (UG/KG)	CHLOR-DANE (UG/L)
OCT. 26...	.00	.0	.00	.0	.00	.0	.00	.0	.00	.0	.0
FEB. 21...	.00	.0	.00	.0	.00	.0	.00	.0	.00	.0	.0
APR. 26...	.00	.0	.00	.0	.00	.0	.00	.0	.00	.0	.0
MAY 24...	.00	--	.00	--	.00	--	.00	--	.00	--	.0
AUG. 06...	.00	.0	.00	.0	.00	.0	.00	.0	.00	.0	.0

DATE	CHLOR-DANE IN BOTTOM DE-POSITS (UG/KG)	PCB (UG/L)	PCB IN BOTTOM DE-POSITS (UG/KG)	DI-AZINON (UG/L)	MALATHION (UG/L)	METHYL PARA-THION (UG/L)	PARA-THION (UG/L)	2,4-D (UG/L)	SILVEX (UG/L)	2,4,5-T (UG/L)
OCT. 26...	0	.0	0	.00	.00	.00	.00	.00	.00	.00
FEB. 21...	0	.0	0	.00	.00	.00	.00	.00	.01	.00
APR. 26...	0	.0	0	.00	.00	.00	.00	--	.77	--
MAY 24...	--	.0	--	.00	.00	.00	--	.01	.07	.00
AUG. 06...	0	.0	0	.00	.00	.00	.00	.00	.00	.00

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

MONTH	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCTANCE (MICRO-MHOS)	DIS-SOLVED SOLIDS (MG/L)	DIS-SOLVED SOLIDS (TONS)	DIS-SOLVED CHLORIDE (MG/L)	DIS-SOLVED CHLORIDE (TONS)	DIS-SOLVED SULFATE (MG/L)	DIS-SOLVED SULFATE (TONS)	HARDNESS (CA+MG) (MG/L)
OCT. 1973.....	250020	124	71	47900	14	9450	14	9450	27
NOV. 1973.....	353470	111	65	62100	12	11500	12	11500	25
DEC. 1973.....	472560	122	70	89300	14	17900	13	16600	27
JAN. 1974.....	672900	107	63	114000	12	21800	12	21800	24
FEB. 1974.....	607000	109	64	105000	12	19700	12	19700	24
MAR. 1974.....	559300	142	80	121000	17	25700	15	22700	31
APR. 1974.....	218860	142	80	47300	17	10000	15	8860	31
MAY 1974.....	165970	154	86	38500	19	8510	16	7170	33
JUNE 1974.....	130920	153	85	30000	19	6720	16	5660	33
JULY 1974.....	119270	149	83	26700	18	5800	16	5150	32
AUG. 1974.....	106790	145	81	23400	18	5190	15	4320	31
SEPT 1974.....	136940	146	82	30300	18	6660	16	5920	32
TOTAL	3794520	**	**	735000	**	149000	**	139000	**
WTD.AVG.	10395	125	72	**	15	**	14	**	28

NECHES RIVER BASIN

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08041000 NECHES RIVER AT EVADALE, TEX.--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	148	109	156	101	72	144	157	149	158	151	144	142
2	150	120	158	107	74	144	160	150	157	153	145	144
3	152	107	158	110	75	145	160	152	155	152	146	145
4	154	111	153	115	75	147	158	152	155	152	145	146
5	152	108	140	121	75	147	159	150	154	154	147	148
6	151	92	131	127	75	146	171	152	155	153	145	153
7	153	97	126	131	78	144	163	151	160	155	145	154
8	151	91	125	130	80	143	162	148	158	154	146	153
9	151	89	116	132	86	141	160	151	157	155	146	152
10	150	89	110	134	95	142	159	154	155	153	147	149
11	150	83	103	133	103	141	162	153	155	151	146	151
12	152	82	105	130	108	141	167	152	153	151	146	139
13	140	79	110	130	114	140	169	152	151	150	145	143
14	129	81	115	131	121	140	109	153	156	152	144	145
15	127	85	117	134	126	140	98	155	153	150	143	145
16	131	92	121	136	132	139	108	156	150	147	144	147
17	111	100	124	137	131	139	98	156	147	147	145	149
18	99	117	128	140	135	140	100	159	146	145	145	151
19	98	130	131	127	132	140	107	159	147	145	145	151
20	100	136	130	125	134	140	121	159	149	146	145	149
21	106	138	129	98	134	139	132	156	150	147	144	147
22	105	143	132	84	132	141	135	156	147	143	144	146
23	121	144	133	83	134	141	137	157	146	145	145	146
24	109	147	127	79	134	142	143	161	150	146	146	145
25	105	147	123	77	137	139	143	160	150	145	147	144
26	102	148	119	70	139	144	152	159	151	149	145	143
27	105	144	117	68	139	137	154	157	156	146	145	143
28	100	146	113	66	111	136	154	154	161	145	144	143
29	101	154	106	67	---	141	154	154	157	143	142	143
30	104	155	98	71	---	141	153	155	156	144	141	143
31	105	---	98	70	---	146	---	157	---	145	142	---
MONTH	126	115	124	109	110	142	144	154	153	149	145	147

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	26.0	18.0	19.0	10.5	15.5	---	21.0	23.0	27.0	26.0	28.0	28.0
2	26.0	18.5	20.0	9.5	15.5	---	19.0	23.0	27.0	27.0	28.0	27.0
3	26.5	18.5	18.0	9.5	15.0	16.5	20.0	23.0	27.0	27.0	27.0	27.0
4	26.5	21.0	16.0	8.0	14.0	---	20.0	24.0	27.0	28.0	28.0	25.0
5	26.0	20.5	15.5	8.0	14.0	---	19.0	---	28.0	28.0	28.0	24.0
6	26.0	20.0	14.0	9.5	16.0	---	18.5	23.0	28.0	28.0	27.0	24.0
7	25.5	19.0	12.0	9.5	15.5	---	20.0	23.0	27.0	28.0	27.0	24.0
8	26.0	20.0	10.0	9.5	12.0	---	19.0	23.0	---	28.0	27.0	24.0
9	26.0	20.5	10.0	13.5	11.0	---	19.0	24.0	28.0	---	28.0	24.0
10	26.0	---	10.0	15.5	10.0	---	18.0	23.0	27.0	28.0	---	25.0
11	---	16.5	10.0	14.5	10.5	---	19.0	23.0	27.0	27.0	28.0	24.0
12	25.5	16.0	9.0	10.0	11.5	---	20.0	24.0	27.0	27.0	28.0	---
13	25.5	16.5	13.5	12.0	12.0	---	20.0	25.0	---	---	28.0	25.0
14	24.5	18.5	13.0	13.0	13.0	---	21.0	25.0	27.0	27.0	28.0	25.0
15	24.0	19.5	---	13.0	17.0	---	19.0	26.0	---	28.0	28.0	25.0
16	24.0	18.5	10.0	13.0	15.5	---	19.0	26.0	27.0	---	28.0	26.0
17	21.0	16.5	10.0	15.5	17.0	15.0	18.0	26.0	27.0	27.0	29.0	26.0
18	20.0	18.0	11.0	16.5	13.0	---	19.0	27.0	28.0	27.0	29.0	26.0
19	---	19.0	12.0	16.5	14.0	---	---	---	28.0	28.0	---	26.0
20	---	20.5	9.5	20.5	14.0	---	20.0	27.0	28.0	27.0	29.0	26.0
21	20.0	---	8.0	15.0	14.5	---	21.0	---	28.0	29.0	29.0	26.0
22	20.5	18.5	8.0	15.5	14.5	---	22.0	26.0	---	29.0	29.0	---
23	20.5	18.5	10.5	15.0	16.5	---	21.0	26.0	29.0	29.0	29.0	23.0
24	20.0	18.5	10.0	14.0	15.5	---	21.0	26.0	29.0	29.0	29.0	23.0
25	20.5	---	11.0	13.0	---	---	---	26.0	28.0	29.0	29.0	24.0
26	20.5	21.5	10.5	13.5	---	---	21.0	26.0	---	29.0	28.0	24.0
27	---	21.5	10.0	15.0	---	---	22.0	---	24.0	29.0	28.0	24.0
28	20.5	19.0	10.0	15.0	---	---	21.0	26.0	25.0	29.0	---	24.0
29	18.5	17.0	---	15.0	---	---	22.0	26.0	26.0	29.0	28.0	26.0
30	18.5	16.5	10.5	14.0	---	---	23.0	26.0	26.0	28.0	27.0	22.0
31	18.5	---	14.0	10.0	---	20.0	---	27.0	---	29.0	27.0	---
MONTH	23.0	19.0	12.0	13.0	14.0	---	20.0	25.0	27.0	28.0	28.0	25.0

NECHES RIVER BASIN

08041500 VILLAGE CREEK NEAR KOUNTZE, TEX.

LOCATION.--Lat 30°23'52", long 94°15'48", Hardin County, at gaging station at bridge on Farm Road 418, 1.6 miles (2.6 km) upstream from Gulf, Colorado, and Santa Fe Railway Co. bridge, and 3.4 miles (5.5 km) northeast of Kountze.

DRAINAGE AREA.--860 mi² (2,227 km²).

PERIOD OF RECORD.--Chemical analyses: November 1967 to September 1974.

Water temperatures: November 1967 to September 1970.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO ₂) (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 SODIUM PLUS POTAS- SIUM (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)
OCT. 10...	1430	462	12	4.2	1.3	--	6.9	--	2	0
NOV. 15...	1200	815	13	5.0	1.3	--	9.1	--	11	0
DEC. 20...	1700	1400	8.6	3.2	.8	9.2	--	1.1	6	0
FEB. 08...	1130	1590	12	3.6	1.0	8.7	--	.8	8	0
MAR. 20...	1330	600	12	4.5	1.1	7.8	--	1.1	10	0
MAY 02...	1430	500	12	4.0	1.3	9.5	--	.9	10	0
JUNE 12...	1430	401	13	4.2	1.1	8.3	--	.9	10	0
JULY 24...	1320	130	13	4.5	.5	7.8	--	1.0	14	0

DATE	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	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)
OCT. 10...	2.4	19	.0	47	16	14	.8	93	5.0	24.0
NOV. 15...	3.2	18	.0	55	18	9	.9	94	5.8	17.5
DEC. 20...	3.9	19	--	49	11	6	1.2	88	5.9	10.0
FEB. 08...	3.2	16	--	49	13	7	1.0	87	6.2	12.5
MAR. 20...	3.2	16	--	51	16	8	.9	85	5.9	21.5
MAY 02...	2.9	18	--	54	15	7	1.1	89	6.1	22.5
JUNE 12...	3.0	15	--	50	15	7	.9	86	6.1	27.5
JULY 24...	2.9	15	--	52	13	2	.9	87	6.4	27.5

NECHES RIVER BASIN

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08041700 PINE ISLAND BAYOU NEAR SOUR LAKE, TEX.

LOCATION.--Lat 30°06'21", long 94°20'04", Hardin County, at gaging station at bridge on county road and 5.1 miles (8.2 km) southeast of Sour Lake.

DRAINAGE AREA.--336 mi² (870 km²).

PERIOD OF RECORD.--Chemical analyses: February 1968 to September 1974.
Water temperatures: February 1968 to September 1974.

EXTREMES.--October 1973 to September 1974:

Specific conductance: Maximum, 887 micromhos Mar. 13; minimum daily, 47 micromhos Jan. 21-24.
Water temperatures: Maximum, 34.0°C Aug. 22.

Period of record:

Specific conductance: Maximum daily, 11,600 micromhos Mar. 23, 1968; minimum daily, 40 micromhos Apr. 19, 1973.
Water temperatures: Maximum, 37.0°C Sept. 15, 1972; minimum, 2.0°C Jan. 11, 1973.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	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 SODIUM PLUS POTAS- SIUM (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)
OCT.										
18...	1600	4360	6.1	5.0	1.1	5.6	--	2.7	14	0
NOV.										
12...	1630	1610	4.9	5.2	.9	7.0	--	2.4	18	0
DEC.										
17...	1600	73	5.5	15	2.8	31	--	3.0	33	0
JAN.										
31...	1830	2420	3.7	6.4	1.1	8.4	--	1.1	20	0
FEB.										
22...	1430	140	4.7	21	4.2	--	58	--	38	0
MAR.										
21...	0930	40	6.2	20	2.9	45	--	2.6	46	0
APR.										
21...	1530	658	4.2	8.9	1.4	17	--	2.3	20	0
MAY										
03...	1630	113	6.3	16	2.4	37	--	2.2	30	0
JUNE										
11...	1815	67	5.8	14	2.2	28	--	1.6	30	0
JULY										
23...	1000	68	7.6	16	2.9	22	--	1.7	52	0
AUG.										
07...	1700	117	8.0	15	3.5	24	--	3.0	50	0
SEP.										
05...	1600	82	9.5	19	3.2	58	--	3.0	44	0

DATE	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SULFUS (SUM OF CONSTITUENTS) (MG/L)	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)
OCT.										
18...	.6	9.0	.1	37	17	6	.6	63	6.2	21.0
NOV.										
12...	4.1	6.7	--	42	17	2	.7	71	6.8	17.0
DEC.										
17...	5.5	59	--	138	49	22	1.9	268	6.8	11.0
JAN.										
31...	5.1	10	--	46	21	4	.8	75	6.4	16.0
FEB.										
22...	5.2	110	.1	224	70	38	3.0	441	6.7	--
MAR.										
21...	12	85	--	200	62	24	2.7	400	6.9	18.5
APR.										
21...	9.2	32	--	85	28	12	1.4	163	6.2	21.0
MAY										
03...	18	63	--	160	50	25	2.3	316	6.6	27.0
JUNE										
11...	12	48	--	126	44	19	1.8	260	6.7	32.0
JULY										
23...	13	31	--	120	52	9	1.3	235	6.5	27.5
AUG.										
07...	13	33	--	124	52	11	1.5	247	6.5	28.0
SEP.										
05...	13	94	--	221	61	25	3.2	451	7.2	26.0

NECHES RIVER BASIN

08041700 PINE ISLAND BAYOU NEAR SOUR LAKE, TEX.--Continued

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

MONTH	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCT- ANCE (MICRO- MHOS)	DIS- SOLVED SOLIDS (MG/L)	DIS- SOLVED SOLIDS (TONS)	DIS- SOLVED CHLORIDE (MG/L)	DIS- SOLVED CHLORIDE (TONS)	DIS- SOLVED SULFATE (MG/L)	DIS- SOLVED SULFATE (TONS)	HARDNESS (CA+MG) (MG/L)
OCT. 1973.....	36086	79	45	4380	9.5	926	4.9	477	18
NOV. 1973.....	26315	93	52	3690	12	853	5.7	405	21
DEC. 1973.....	18808	124	67	3400	19	965	7.7	391	26
JAN. 1974.....	68379	72	41	7570	8	1480	4.4	812	17
FEB. 1974.....	11852	144	77	2460	23	736	8.9	285	30
MAR. 1974.....	5754	207	110	1710	36	559	13	202	41
APR. 1974.....	13777	142	76	2830	23	856	8.8	327	30
MAY 1974.....	6208	224	120	2010	40	670	14	235	44
JUNE 1974.....	4671	197	100	1260	34	429	12	151	39
JULY 1974.....	2274	255	130	798	46	282	11	67	50
AUG. 1974.....	2408	247	130	845	45	293	15	97	49
SEPT 1974.....	4143	250	130	1450	45	503	15	168	49
TOTAL	200675	**	**	32400	**	8550	**	3620	**
WTD.AVG.	549	109	60	**	16	**	6.7	**	24

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	140	93	169	126	78	309	126	288	227	247	236	257
2	165	91	158	145	85	365	148	318	200	247	238	259
3	184	97	150	190	104	412	206	316	185	235	247	253
4	253	92	115	247	110	475	230	316	151	240	247	457
5	138	86	107	249	120	521	270	321	129	244	253	451
6	221	70	83	242	130	556	309	340	151	252	247	435
7	251	63	101	405	140	600	334	320	181	255	247	387
8	309	66	90	271	153	650	419	367	207	281	247	379
9	349	64	79	194	143	709	376	442	245	290	254	336
10	396	65	93	192	169	747	327	258	267	355	223	342
11	300	66	95	160	194	796	372	361	260	336	218	387
12	143	71	116	176	248	846	400	394	259	290	211	372
13	120	77	128	125	275	867	360	273	299	256	207	351
14	104	96	180	114	302	873	329	356	333	266	238	501
15	107	84	211	136	250	821	210	325	333	269	262	248
16	121	125	252	124	198	731	80	356	327	228	243	251
17	92	155	267	110	221	769	79	387	301	217	281	190
18	63	173	302	117	261	476	105	413	295	234	243	152
19	55	191	192	96	218	471	123	413	264	340	263	156
20	50	218	480	62	263	403	142	400	278	244	259	193
21	55	247	250	47	311	400	158	281	286	233	249	217
22	60	316	162	47	441	395	189	173	300	235	233	241
23	65	300	167	47	208	554	206	137	325	235	276	258
24	70	285	155	47	260	500	121	132	356	244	229	267
25	77	282	160	53	324	345	112	143	333	228	221	271
26	90	280	132	60	283	222	120	145	290	228	210	276
27	127	277	142	66	337	194	135	173	290	232	252	280
28	132	270	120	73	281	160	145	195	288	227	358	357
29	133	196	111	74	---	147	162	220	260	227	240	223
30	124	176	105	70	---	135	---	268	260	225	246	231
31	94	---	99	72	---	123	---	315	---	247	252	---
MONTH	148	156	160	133	218	503	217	295	263	254	246	299

NECHES RIVER BASIN

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08041700 PINE ISLAND LAYOU NEAR SOUR LAKE, TEX.--Continued

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	---	---	---	13.0	18.0	15.0	23.0	22.0	---	27.0	28.0	27.0
2	26.0	18.0	20.0	10.5	19.0	---	24.0	24.0	---	31.0	28.5	28.0
3	26.0	20.0	---	---	---	21.5	---	27.0	25.0	28.0	28.0	25.0
4	26.0	21.0	---	8.0	---	21.0	---	23.0	26.0	---	28.0	25.0
5	25.0	21.5	16.0	9.0	---	21.5	---	25.0	27.0	30.0	28.5	26.0
6	26.5	---	16.0	11.0	---	21.0	20.0	23.0	25.0	30.0	28.0	26.0
7	25.0	21.0	14.0	14.0	---	---	21.0	23.0	26.0	28.0	28.0	25.0
8	26.0	20.0	---	14.0	12.0	---	21.0	27.0	26.0	28.0	28.0	23.0
9	27.0	20.0	10.0	17.0	15.5	23.0	21.5	---	25.0	29.0	29.0	25.0
10	28.0	---	10.0	17.0	14.0	24.0	19.0	26.0	25.0	29.0	28.5	29.0
11	26.0	17.0	10.0	15.0	12.5	24.0	21.0	25.0	32.0	27.0	---	28.0
12	24.0	17.0	---	12.0	15.0	25.0	---	26.0	32.0	29.0	29.0	---
13	---	19.0	13.0	12.0	---	22.5	---	25.0	28.0	31.0	28.0	25.0
14	24.0	19.0	---	12.0	16.0	20.5	21.0	25.0	30.0	29.0	25.0	25.0
15	24.0	19.0	15.0	16.0	---	20.5	21.0	25.0	25.0	26.5	29.0	25.0
16	23.0	20.0	13.0	17.0	17.0	18.0	19.0	---	31.5	27.0	28.5	26.0
17	22.0	20.0	---	17.0	17.0	20.0	20.0	28.0	31.0	26.0	26.0	25.5
18	21.0	---	12.0	18.0	17.0	21.0	20.0	28.0	32.0	31.0	27.0	26.5
19	---	---	13.0	18.0	17.0	23.0	21.0	31.0	32.0	29.0	29.5	26.5
20	---	20.0	9.0	---	17.0	24.0	21.0	26.0	31.0	29.0	32.0	25.0
21	---	20.0	---	18.0	18.0	18.5	21.0	25.0	30.0	29.0	28.0	---
22	---	20.0	8.0	---	---	19.0	21.0	28.0	30.0	29.5	34.0	26.0
23	---	21.5	12.0	---	16.0	24.0	22.0	25.0	---	27.0	29.0	24.0
24	---	22.5	12.0	---	---	---	22.5	30.0	31.0	29.0	32.0	25.0
25	20.5	22.0	12.0	---	15.0	12.0	23.0	26.0	27.0	29.5	---	---
26	20.5	---	11.0	17.0	16.0	12.0	---	25.0	29.5	32.0	30.0	23.0
27	22.0	22.0	11.0	---	12.0	17.0	---	26.0	29.0	32.0	31.0	---
28	22.0	20.0	13.0	17.0	14.5	17.5	---	---	29.0	32.5	29.0	25.5
29	20.0	17.0	14.0	16.0	---	22.0	23.0	---	29.0	32.0	28.0	24.0
30	19.5	17.0	---	16.0	---	---	---	27.0	29.0	32.0	---	24.0
31	19.5	---	14.0	16.0	---	22.0	---	26.0	---	28.0	28.0	---
MONTH	---	20.0	---	---	---	20.5	---	26.0	28.5	29.0	29.0	25.5

NECHES RIVER BASIN

MISCELLANEOUS ANALYSES OF STREAMS IN THE NECHES RIVER BASIN IN TEXAS

WATER QUALITY DATA, OCTOBER 1973 TO SEPTEMBER 1974

08033800 STRIKER CREEK RESERVOIR NEAR NEW SALEM, TEX. (Lat 31°56'05", long 94°58'40")

DATE	TIME	DIS- SOLVED SILICA (SI02) (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 (HC03) (MG/L)	CAR- BONATE (C03) (MG/L)	DIS- SOLVED SULFATE (S04) (MG/L)
JULY, 1974 23...	1545	13	12	6.3	71	3.5	13	0	28

DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	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)
JULY, 1974 23...	130	270	56	45	4.1	544	6.3	35.0

TRINITY RIVER BASIN

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08044000 BIG SANDY CREEK NEAR BRIDGEPORT, TEX.

LOCATION.--Lat 33°13'54", long 97°41'40", Wise County, at gaging station at bridge on U.S. Highway 380, 1.9 miles (3.1 km) upstream from Greathouse Branch, 4.0 miles (6.4 km) east of Bridgeport, and 4.4 miles (7.1 km) upstream from mouth.

DRAINAGE AREA.--333 mi² (862 km²).

PERIOD OF RECORD.--Specific conductance: May 1968 to September 1974.

Water temperatures: May 1968 to September 1974.

Sediment records: May 1968 to September 1974.

EXTREMES.--October 1973 to September 1974:

Specific conductance: Maximum daily, 1,020 micromhos Mar. 6; minimum daily, 147 micromhos Aug. 30.

Water temperatures: Maximum, 26.0°C May 16, 17, June 8, Sept. 2; minimum, freezing point Jan. 3, 4, 12.

Sediment concentrations: Maximum daily, 1,520 mg/l Aug. 28; minimum daily, no flow on many days.

Sediment loads: Maximum daily, 1,630 tons Apr. 22; minimum daily, 0 tons on many days.

Period of record:

Specific conductance: Maximum daily, 1,050 micromhos Jan. 20, 1972; minimum daily, 101 micromhos Dec. 29, 1969.

Water temperatures: Maximum, 31.0°C June 13, 1968; minimum, freezing point on several days during January 1973 and January 1974.

Sediment concentrations: Maximum daily, 3,480 mg/l July 29, 1971; minimum daily, no flow on many days.

Sediment loads: Maximum daily, 14,000 tons May 7, 1969; minimum daily, 0 tons on many days.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report.

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	600	732	498	726	721	944	754	536	705	---	---	193
2	648	758	551	819	760	915	842	335	816	---	---	245
3	669	938	603	800	727	944	813	414	766	---	---	288
4	689	917	687	800	894	927	1010	562	823	---	---	345
5	680	778	748	940	916	995	813	618	726	---	---	384
6	648	734	724	830	756	1020	890	626	820	---	---	419
7	326	770	729	785	855	995	941	637	571	---	---	458
8	324	870	829	862	845	780	878	616	311	---	---	480
9	338	787	820	574	865	813	741	592	205	---	---	490
10	379	898	773	573	771	753	764	767	439	---	---	553
11	417	826	846	570	812	738	764	664	561	---	---	534
12	475	775	718	622	768	761	726	672	664	---	---	573
13	182	787	895	851	800	852	729	672	681	---	---	560
14	149	926	917	876	819	795	766	728	624	---	---	492
15	196	801	929	815	734	772	851	767	681	---	---	532
16	241	1000	844	883	851	822	751	685	708	---	---	498
17	281	1010	888	883	825	801	761	705	731	---	---	288
18	361	1000	929	822	821	759	769	725	761	---	---	278
19	422	464	895	723	835	789	832	747	782	---	---	298
20	488	460	692	686	876	801	736	742	---	---	---	326
21	547	353	774	747	887	746	746	854	---	---	---	382
22	602	453	682	739	556	700	266	742	---	---	---	333
23	658	521	759	729	658	736	275	730	---	---	---	417
24	705	613	712	823	739	759	405	758	---	---	---	466
25	750	335	761	879	869	810	541	807	---	---	---	489
26	798	353	683	858	915	868	616	828	---	---	---	243
27	752	362	725	829	851	770	652	437	---	---	---	294
28	868	337	696	807	879	762	648	565	---	---	253	361
29	708	370	701	790	---	762	668	629	---	---	256	423
30	860	429	697	739	---	799	858	675	---	---	147	471
31	867	---	769	729	---	770	---	730	---	---	153	---
MONTH	536	679	757	778	807	821	727	663	---	---	---	404

TRINITY RIVER BASIN

08044000 BIG SANDY CREEK NEAR BRIDGEPORT, TEX.--Continued

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	14.0	10.0	2.0	9.0	15.0	20.0	20.0	22.0	---	---	25.0
2	22.0	15.0	12.0	1.0	9.0	17.0	17.0	19.0	23.0	---	---	26.0
3	23.0	14.0	15.0	0.0	8.0	18.0	18.0	23.0	23.0	---	---	19.0
4	23.0	15.0	12.0	0.0	8.0	18.0	13.0	22.0	23.0	---	---	19.0
5	20.0	14.0	9.0	1.0	9.0	17.0	13.0	22.0	25.0	---	---	20.0
6	20.0	13.0	7.0	3.0	8.0	18.0	13.0	19.0	25.0	---	---	19.0
7	21.0	13.0	6.0	3.0	5.0	20.0	16.0	20.0	24.0	---	---	20.0
8	22.0	15.0	6.0	6.0	3.0	19.0	15.0	20.0	26.0	---	---	21.0
9	23.0	13.0	6.0	4.0	5.0	20.0	13.0	23.0	22.0	---	---	22.0
10	24.0	13.0	6.0	3.0	5.0	20.0	15.0	23.0	23.0	---	---	22.0
11	22.0	12.0	6.0	1.0	6.0	17.0	16.0	22.0	24.0	---	---	23.0
12	21.0	13.0	7.0	0.0	8.0	16.0	17.0	23.0	25.0	---	---	25.0
13	20.0	15.0	9.0	2.0	9.0	15.0	19.0	23.0	23.0	---	---	20.0
14	23.0	17.0	8.0	5.0	13.0	15.0	16.0	24.0	24.0	---	---	19.0
15	19.0	17.0	7.0	7.0	13.0	16.0	15.0	25.0	25.0	---	---	20.0
16	19.0	13.0	6.0	7.0	10.0	16.0	15.0	26.0	25.0	---	---	21.0
17	18.0	13.0	5.0	10.0	10.0	15.0	15.0	26.0	24.0	---	---	21.0
18	18.0	16.0	7.0	13.0	13.0	18.0	19.0	25.0	24.0	---	---	21.0
19	19.0	18.0	6.0	9.0	10.0	18.0	19.0	25.0	25.0	---	---	22.0
20	18.0	15.0	1.0	8.0	12.0	14.0	20.0	24.0	---	---	---	23.0
21	17.0	11.0	2.0	6.0	10.0	9.0	20.0	25.0	---	---	---	23.0
22	17.0	13.0	3.0	9.0	6.0	9.0	17.0	23.0	---	---	---	20.0
23	17.0	17.0	6.0	8.0	6.0	10.0	18.0	24.0	---	---	---	19.0
24	17.0	20.0	6.0	7.0	7.0	6.0	18.0	25.0	---	---	---	17.0
25	18.0	16.0	5.0	7.0	5.0	6.0	21.0	---	---	---	---	15.0
26	18.0	14.0	5.0	7.0	6.0	9.0	20.0	---	---	---	---	15.0
27	19.0	14.0	5.0	7.0	8.0	12.0	20.0	---	---	---	---	17.0
28	15.0	10.0	6.0	8.0	12.0	16.0	20.0	---	---	---	25.0	20.0
29	15.0	10.0	7.0	8.0	---	17.0	21.0	---	---	---	24.0	17.0
30	15.0	10.0	7.0	7.0	---	15.0	20.0	---	---	---	25.0	17.0
31	14.0	---	5.0	8.0	---	19.0	---	---	---	---	24.0	---
MONTH	19.5	14.0	6.5	5.5	8.5	15.0	17.5	---	---	---	---	20.5

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	SUS- PENDE SEDI- MENT (MG/L)	SUS- PENDE SEDI- MENT DIS- CHARGE (T/DAY)	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM	SUS. SED. SIEVE DIAM. % FINER THAN .250 MM
OCT.								
07...	1730	123	23.0	360	120	99	100	--
NOV.								
20...	0800	195	15.0	974	513	93	96	99
25...	0830	262	16.0	751	531	97	98	100
FEB.								
22...	0900	203	6.0	691	379	98	99	100
APR.								
22...	1130	526	18.0	1150	1630	98	99	100
23...	1100	756	19.0	498	1020	99	100	--
MAY								
02...	1830	529	24.0	496	708	96	97	99
AUG.								
29...	0900	6.4	24.0	769	13	97	97	98
DATE		SUS. SED. SIEVE DIAM. % FINER THAN .500 MM	SUS. SED. SIEVE DIAM. % FINER THAN 1.00 MM	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM
OCT.								
07...	--	--	77	86	88	96	97	
NOV.								
20...	100	--	83	86	89	92	92	
25...	--	--	79	82	83	85	95	
FEB.								
22...	--	--	81	95	96	97	98	
APR.								
22...	--	--	90	92	93	95	97	
23...	--	--	92	93	95	97	98	
MAY								
02...	100	--	89	92	93	94	95	
AUG.								
29...	99	100	94	95	96	97	97	

08044000 BIG SANDY CREEK NEAR BRIDGEPORT, TEX.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCTOBER			NOVEMBER			DECEMBER		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	3.8	40	.41	18	50	2.4	56	50	7.6
2	2.6	40	.28	16	50	2.2	44	50	5.9
3	2.4	40	.26	14	30	1.1	38	50	5.1
4	2.4	10	.06	14	50	1.9	33	60	5.3
5	2.6	40	.28	13	40	1.4	28	50	3.8
6	130	949	531	13	50	1.8	23	30	1.9
7	169	598	309	14	60	2.3	18	30	1.5
8	48	280	36	15	50	2.0	18	10	.49
9	21	170	9.6	15	50	2.0	15	20	.81
10	13	100	3.5	14	30	1.1	14	50	1.9
11	13	120	4.2	13	30	1.1	14	70	2.6
12	49	594	154	12	30	.97	14	100	3.8
13	933	738	1470	13	40	1.4	13	100	3.5
14	1850	200	999	13	40	1.4	12	70	2.3
15	1010	70	191	13	30	1.1	12	20	.65
16	507	70	96	12	30	.97	10	40	1.1
17	272	70	51	11	20	.59	9.9	110	2.9
18	157	100	42	12	10	.32	11	100	3.0
19	104	100	28	14	50	1.9	12	120	3.9
20	73	70	14	220	803	490	9.7	150	3.9
21	55	50	7.4	301	350	284	9.1	170	4.2
22	43	50	5.8	120	170	55	10	170	4.6
23	36	50	4.9	58	120	19	11	150	4.5
24	29	50	3.9	66	465	127	11	150	4.5
25	25	50	3.4	252	621	404	11	170	5.0
26	22	40	2.4	238	250	161	10	170	4.6
27	20	40	2.2	193	120	63	9.4	170	4.3
28	18	50	2.4	176	70	33	9.4	200	5.1
29	16	70	3.0	132	70	25	9.4	170	4.3
30	16	40	1.7	82	70	15	9.4	150	3.8
31	18	50	2.4	--	--	--	9.1	150	3.7
TOTAL	5660.8	--	3979.09	2097	--	1703.95	513.4	--	110.55

DAY	JANUARY			FEBRUARY			MARCH		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	8.2	170	3.8	12	30	.97	23	50	3.1
2	7.4	150	3.0	12	70	2.3	23	40	2.5
3	7.0	150	2.8	12	40	1.3	22	42	2.5
4	7.2	150	2.9	11	20	.59	21	61	3.5
5	7.4	120	2.4	11	10	.30	20	58	3.1
6	8.6	150	3.5	12	50	1.6	19	70	3.6
7	12	120	3.9	11	30	.89	19	61	3.1
8	14	120	4.5	10	30	.81	18	150	7.3
9	14	120	4.5	9.9	40	1.1	18	120	5.8
10	14	120	4.5	9.7	30	.79	19	150	7.7
11	13	120	4.2	9.9	40	1.1	24	220	14
12	12	70	2.3	12	60	1.9	20	150	8.1
13	11	44	1.3	12	60	1.9	17	110	5.0
14	13	13	.46	12	40	1.3	16	110	4.8
15	14	40	1.5	12	70	2.3	16	100	4.3
16	14	30	1.1	12	60	1.9	16	100	4.3
17	14	30	1.1	11	50	1.5	15	110	4.5
18	14	50	1.9	11	70	2.1	15	70	2.8
19	24	70	4.5	12	70	2.3	15	70	2.8
20	30	70	5.7	12	60	1.9	15	50	2.0
21	25	50	3.4	98	555	143	22	70	4.2
22	20	50	2.7	190	370	190	24	70	4.5
23	16	22	.95	110	200	59	20	40	2.2
24	15	17	.69	54	100	15	16	44	1.9
25	14	50	1.9	34	50	4.6	15	30	1.2
26	14	30	1.1	27	20	1.5	14	26	.98
27	14	20	.76	25	43	2.9	14	35	1.3
28	14	30	1.1	24	43	2.8	15	57	2.3
29	13	30	1.1	--	--	--	14	49	1.9
30	12	70	2.3	--	--	--	13	56	2.0
31	12	30	.97	--	--	--	12	60	1.9
TOTAL	427.8	--	76.83	788.5	--	447.65	550	--	119.18

TRINITY RIVER BASIN

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08048000 WEST FORK TRINITY RIVER AT FORT WORTH, TEX.

LOCATION.--Lat 32°45'39", long 97°19'56", Tarrant County, at gaging station, 125 ft (38 m) upstream from Texas Electric Service Co.'s concrete dam, and 980 ft (299 m) downstream from centerline of Paddock Viaduct at Fort Worth.

DRAINAGE AREA.--2,615 mi² (6,773 km²).

PERIOD OF RECORD.--Chemical analyses: October 1967 to September 1970.

Chemical and biochemical analyses: October 1968 to September 1974.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED SODIUM PLUS POTAS- SIUM (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)
OCT. 26...	1340	170	6.5	49	3.3	--	20	--	152	0
NOV. 14...	1630	27	6.8	60	5.4	--	23	--	188	0
DEC. 09...	1137	28	6.4	56	5.7	20	--	4.7	178	0
JAN. 29...	0905	156	5.5	54	5.8	18	--	4.2	172	0
FEB. 11...	1410	22	1.7	55	6.3	21	--	4.4	175	0
MAR. 13...	1500	27	3.5	67	6.5	24	--	4.7	226	0
APR. 18...	0945	12	4.1	71	8.4	35	--	4.3	225	0
MAY 06...	1730	65	5.2	39	2.9	10	--	3.7	116	0
JUNE 19...	1045	40	9.0	45	3.5	13	--	4.4	145	0
JULY 18...	1445	7.5	6.1	53	6.9	27	--	4.6	172	0
AUG. 06...	1600	163	6.2	46	5.3	21	--	4.3	150	0
SEP. 28...	1000	50	11	68	5.4	13	--	3.5	204	0

DATE	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIUUS (SUM OF CONSTI- TUENTS) (MG/L)
OCT. 26...	26	19	.3	.01	.00	.02	.05	--	.10	199
NOV. 14...	33	23	.3	.20	.02	.14	.18	--	.11	245
DEC. 09...	31	25	--	.20	.01	.24	.25	--	.04	237
JAN. 29...	30	23	--	.00	.01	.56	.20	--	.10	225
FEB. 11...	32	26	--	.10	.01	.60	.52	--	.23	233
MAR. 13...	38	30	--	.11	.00	.40	.70	1.1	.13	285
APR. 18...	50	41	--	.01	.01	.22	.98	1.2	.13	325
MAY 06...	21	11	--	.69	.03	.31	.69	1.0	.21	150
JUNE 19...	24	15	--	.07	.01	.49	1.1	1.6	.33	185
JULY 18...	41	34	--	.00	.00	.70	1.0	1.7	.29	257
AUG. 06...	30	32	--	.03	.00	.09	1.2	1.3	.12	219
SEP. 28...	34	14	--	.42	.02	.23	.56	.79	.12	249

TRINITY RIVER BASIN

08048000 WEST FORK TRINITY RIVER AT FORT WORTH, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	BIO- CHEM- ICAL OXYGEN DEMAND (MG/L)
OCT. 26...	140	11	.7	347	6.8	23.0	9.9	114	1.6
NOV. 14...	170	18	.8	431	7.3	20.0	10.0	109	2.9
DEC. 09...	160	17	.7	429	7.4	11.5	11.4	104	1.3
JAN. 29...	160	18	.6	406	7.1	8.0	11.0	92	2.9
FEB. 11...	160	16	.7	427	6.9	9.5	12.8	112	4.0
MAR. 13...	190	9	.8	487	7.2	18.5	4.8	51	6.0
APR. 18...	210	27	1.0	570	7.4	19.5	7.2	77	4.5
MAY 06...	110	14	.4	269	6.9	20.5	5.8	64	5.0
JUNE 19...	130	8	.5	321	7.5	26.5	7.4	90	5.7
JULY 18...	160	20	.9	449	8.0	32.0	10.8	146	6.0
AUG. 06...	140	14	.8	379	7.7	27.0	6.5	80	5.6
SEP. 28...	190	25	.4	429	6.8	20.0	6.8	74	1.4

08049500 WEST FORK TRINITY RIVER AT GRAND PRAIRIE, TEX.

LOCATION.--Lat 32°45'46", long 96°59'42", Dallas County, at gaging station at bridge on Belt Line Road, 1.3 miles (2.1 km) northeast of Grand Prairie, 3.7 miles (6.0 km) upstream from Bear Creek, and 6.5 miles (10.5 km) upstream from Mountain Creek.

DRAINAGE AREA.--3,065 mi² (7,938 km²).

PERIOD OF RECORD.--Chemical analyses: October 1956 to September 1974.

Chemical and biochemical analyses: January 1968 to September 1974.

Water temperatures: October 1966 to September 1974.

EXTREMES.--October 1973 to September 1974:

Specific conductance: Maximum daily, 1,050 micromhos Mar. 25, Apr. 2; minimum daily, 317 micromhos Aug. 27.

Water temperatures: Maximum, 34.0°C Aug. 2; minimum, 6.0°C Jan. 12.

Period of record:

Specific conductance (1966-68, 1969-74): Maximum daily, 1,540 micromhos Dec. 26, 1970; minimum daily, 248 micromhos Mar. 20, 1968.

Water temperatures: Maximum, 34.0°C Aug. 9, 1970, Aug. 2, 1974; minimum, 3.0°C Jan. 9, 1973.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part I of this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTAN- TANEOUS 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 SODIUM PLUS POTAS- SIUM (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HC03) (MG/L)	CAR- BONATE (C03) (MG/L)	DIS- SOLVED SULFATE (S04) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
OCT.												
29...	0730	252	9.5	56	6.4	--	62	--	184	0	61	53
NOV.												
14...	0810	149	12	55	13	--	100	--	228	0	110	70
30...	1725	308	11	64	11	--	46	--	207	0	56	54
DEC.												
07...	1620	167	10	60	7.7	94	--	13	212	0	120	76
10...	0800	146	12	68	8.1	120	--	14	220	0	139	81
JAN.												
29...	1010	353	7.9	80	7.4	59	--	8.2	232	0	78	50
FEB.												
01...	1300	338	7.6	65	7.1	62	--	8.2	188	0	76	52
11...	1600	155	8.3	67	8.6	104	--	9.8	208	0	110	79
MAR.												
12...	1730	199	7.8	68	9.5	100	--	11	264	0	94	86
APR.												
18...	1240	129	10	63	9.4	120	--	11	250	0	120	92
MAY												
07...	1500	408	8.8	56	5.2	42	--	8.9	174	0	72	33
JUNE												
19...	1300	161	11	57	7.7	85	--	9.2	220	0	79	75
JULY												
18...	1225	118	9.4	49	7.6	110	--	15	222	0	96	99
AUG.												
07...	1000	93	9.3	41	6.3	91	--	9.3	182	0	79	73
SEP.												
27...	1000	415	11	69	6.1	44	--	12	202	0	68	37

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITU- ENTS) (MG/L)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)	VOL. NON- FILT- RABLE RESIDUE (MG/L)	HARD- NESS (CA+MG) (MG/L)
OCT.											
29...	.5	3.1	1.1	1.2	.26	--	3.3	358	--	--	170
NOV.											
14...	.6	5.2	1.4	1.6	.37	--	2.2	501	--	--	190
30...	.5	--	--	--	--	--	--	345	--	--	210
DEC.											
07...	--	--	--	--	--	--	--	485	--	--	180
10...	--	5.2	.92	3.1	.64	--	4.0	550	--	--	200
JAN.											
29...	--	2.2	.62	2.2	.28	--	3.2	406	45	16	230
FEB.											
01...	--	--	--	--	--	--	--	371	--	--	190
11...	--	3.4	1.5	2.0	1.1	--	3.7	489	10	0	200
MAR.											
12...	--	4.3	.08	.03	6.2	6.2	4.8	506	29	4	210
APR.											
18...	--	3.1	.69	4.7	1.8	6.5	9.3	550	21	4	200
MAY											
07...	--	1.5	.18	2.0	1.5	3.5	1.4	312	250	37	160
JUNE											
19...	--	1.8	.79	4.9	.90	5.8	7.6	433	50	11	170
JULY											
18...	--	4.4	.95	3.9	2.5	6.4	7.8	495	19	8	150
AUG.											
07...	--	3.6	.50	3.7	2.7	6.4	4.7	399	240	22	130
SEP.											
27...	--	2.0	.48	.82	1.2	2.0	1.5	347	104	22	200

TRINITY RIVER BASIN

08049500 WEST FORK TRINITY RIVER AT GRAND PRAIRIE, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	NON-CARBONATE HARDNESS (MG/L)	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	BIO-CHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT. 29...	15	2.1	609	6.7	16.5	--	--	5.3	54	9.9	--
NOV. 14...	4	2.4	854	7.1	19.0	--	--	4.7	50	12	--
30...	36	1.4	695	8.2	15.5	--	--	--	--	--	--
DEC. 07...	8	3.0	857	7.3	13.5	--	--	--	--	--	--
10...	23	3.7	979	6.9	10.0	--	--	7.0	62	11	--
JAN. 29...	41	1.7	877	7.3	10.5	20	20	8.0	71	19	5.5
FEB. 01...	37	2.0	678	7.2	14.5	--	--	--	--	--	--
11...	29	3.2	882	7.1	12.0	30	10	7.9	73	7.7	9.0
MAR. 12...	0	3.0	907	7.3	22.0	25	10	4.8	55	16	9.5
APR. 18...	0	3.7	969	7.3	21.0	70	10	4.2	47	3.0	12
MAY 07...	19	1.4	533	7.1	22.5	10	80	5.8	66	13	20
JUNE 19...	0	2.8	819	7.4	29.0	10	25	4.0	51	15	11
JULY 18...	0	3.9	904	7.6	30.0	10	15	6.4	84	16	11
AUG. 07...	0	3.5	726	7.7	26.0	10	90	.6	7	38	18
SEP. 27...	32	1.4	604	6.9	20.0	20	5	6.0	65	7.6	26

DATE	TIME	DISSOLVED ALUMINUM (AL) (UG/L)	DISSOLVED ARSENIC (AS) (UG/L)	DISSOLVED BORON (B) (UG/L)	DISSOLVED CADMIUM (CD) (UG/L)	DISSOLVED CHROMIUM (CR) (UG/L)	DISSOLVED COBALT (CO) (UG/L)	DISSOLVED COPPER (CU) (UG/L)
JAN. 29...	1010	20	3	--	1	0	0	10
APR. 18...	1240	110	4	410	3	40	0	7
JUNE 19...	1300	10	2	380	2	0	0	5
AUG. 07...	1000	90	3	310	1	0	0	6

DATE	DISSOLVED IRON (FE) (UG/L)	DISSOLVED LEAD (PB) (UG/L)	DISSOLVED LITHIUM (LI) (UG/L)	DISSOLVED MANGANESE (MN) (UG/L)	DISSOLVED MERCURY (HG) (UG/L)	DISSOLVED NICKEL (NI) (UG/L)	DISSOLVED STRONTIUM (SR) (UG/L)	DISSOLVED ZINC (ZN) (UG/L)
JAN. 29...	680	6	0	70	.3	20	510	50
APR. 18...	180	6	20	20	.0	18	470	0
JUNE 19...	20	6	10	0	.0	16	400	30
AUG. 07...	50	4	0	80	.0	13	300	10

TRINITY RIVER BASIN

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08049500 WEST FORK TRINITY RIVER AT GRAND PRAIRIE, TEX.--Continued

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

MONTH	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCT- ANCE (MICRO- MHOS)	DIS- SOLVED SOLIDS (MG/L)	DIS- SOLVED SOLIDS (TONS)	DIS- SOLVED CHLORIDE (MG/L)	DIS- SOLVED CHLORIDE (TONS)	DIS- SOLVED SULFATE (MG/L)	DIS- SOLVED SULFATE (TONS)	HARDNESS (CA+MG) (MG/L)
OCT. 1973.....	25162	475	270	18300	24	1630	46	3130	150
NOV. 1973.....	8210	718	400	8870	57	1260	81	1800	190
DEC. 1973.....	5982	819	460	7430	71	1150	96	1550	200
JAN. 1974.....	7166	845	470	9090	75	1450	99	1920	200
FEB. 1974.....	8117	773	430	9420	65	1420	89	1950	190
MAR. 1974.....	5327	935	520	7480	87	1250	110	1580	200
APR. 1974.....	6086	792	440	7230	67	1100	92	1510	190
MAY 1974.....	12798	563	320	11100	36	1240	58	2000	170
JUNE 1974.....	11972	550	310	10000	34	1100	57	1840	160
JULY 1974.....	6159	729	410	6820	59	981	82	1360	190
AUG. 1974.....	10977	522	300	8890	30	889	53	1570	160
SEPT 1974.....	13697	521	300	11100	30	1110	52	1920	160
TOTAL	121653	**	**	116000	**	14600	**	22100	**
WTD.AVG.	333.3	625	350	**	44	**	67	**	170

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	773	624	676	882	727	739	1000	814	945	953	656	589
2	835	710	687	853	720	698	1050	719	996	910	583	607
3	878	712	673	891	727	827	1020	652	1000	881	624	675
4	906	639	588	915	741	855	1040	688	996	906	503	753
5	878	634	623	966	672	855	974	319	1000	881	742	796
6	828	627	735	991	716	929	991	382	925	881	651	867
7	914	664	847	1010	702	961	1010	566	441	888	747	874
8	886	737	888	1000	680	974	1010	690	472	888	569	888
9	882	816	933	958	725	991	1010	748	423	742	685	925
10	882	873	921	893	861	961	978	772	415	790	683	819
11	523	897	914	904	888	933	933	842	529	871	419	877
12	406	891	903	942	962	892	949	896	595	888	464	508
13	321	891	907	935	966	911	685	953	336	888	545	612
14	403	890	949	909	946	903	816	910	560	945	698	471
15	534	870	978	979	954	949	854	802	643	929	772	565
16	629	904	961	974	987	1000	854	785	735	957	766	573
17	658	930	982	966	1000	1020	900	878	734	921	864	411
18	468	927	996	987	966	970	974	875	743	881	907	489
19	479	866	978	858	954	957	991	885	817	875	854	616
20	489	782	877	642	979	1020	965	941	826	918	854	654
21	574	551	844	690	830	1000	600	808	906	929	864	384
22	614	614	819	760	614	937	476	945	910	918	929	521
23	629	739	864	829	720	1020	569	945	906	609	917	632
24	658	799	853	895	842	1040	661	929	910	587	906	677
25	647	676	921	912	688	1050	763	996	874	576	910	404
26	667	627	953	927	727	949	844	914	877	603	544	489
27	678	690	871	931	705	1000	871	953	858	599	317	630
28	662	690	851	727	739	953	902	925	878	590	475	738
29	631	654	851	732	---	978	953	896	878	579	578	816
30	483	695	770	695	---	991	847	861	961	526	640	771
31	402	---	843	724	---	995	---	907	---	603	673	---
MONTH	652	754	853	880	812	944	883	813	770	804	688	654

TRINITY RIVER BASIN

08049500 WEST FORK TRINITY RIVER AT GRAND PRAIRIE, TEX.--Continued

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	26.0	18.5	16.0	8.5	16.0	18.0	23.0	24.0	28.0	31.0	30.0	29.0
2	27.0	19.0	16.5	7.0	16.0	20.0	22.5	25.0	29.0	31.0	34.0	28.0
3	27.0	19.0	17.5	6.5	15.0	21.5	22.0	26.0	29.0	32.0	29.5	25.0
4	26.0	20.0	16.0	7.5	14.0	21.5	20.0	27.0	30.0	29.5	30.0	25.0
5	25.0	18.0	15.0	8.0	14.0	22.0	19.0	20.0	30.0	31.0	29.0	25.0
6	25.0	17.0	13.5	9.0	13.0	22.5	18.0	21.5	30.0	31.0	26.0	25.0
7	26.0	17.5	13.0	10.0	11.0	24.0	22.0	23.0	26.0	31.0	28.0	25.5
8	26.0	19.0	12.5	12.0	11.0	23.0	21.0	25.0	28.0	32.0	27.0	26.0
9	26.0	17.0	13.0	10.0	10.0	23.0	21.0	27.0	26.0	30.0	28.5	26.0
10	27.0	17.0	12.0	6.5	13.0	22.5	19.0	26.0	29.0	31.0	27.0	26.0
11	28.0	17.0	13.0	8.0	12.0	23.0	20.5	27.0	29.0	30.0	26.5	28.0
12	22.0	18.0	14.5	6.0	14.0	22.0	22.5	25.0	27.0	31.0	28.0	26.0
13	21.0	19.0	14.5	7.0	13.0	21.0	24.0	27.0	25.5	31.5	30.0	25.0
14	18.0	20.5	14.5	10.0	16.0	22.5	21.0	28.0	29.0	31.5	30.0	23.0
15	22.0	19.0	13.5	12.0	16.0	21.0	22.0	29.0	30.0	31.5	32.0	24.0
16	22.5	18.0	12.0	13.0	15.0	20.5	22.0	28.0	30.0	31.0	31.0	25.0
17	22.0	18.0	12.0	15.0	16.0	22.0	---	27.0	29.0	31.0	32.0	24.0
18	22.0	20.0	14.0	17.0	16.5	23.0	22.0	28.0	30.0	32.0	32.0	24.0
19	22.0	20.0	9.0	14.0	17.0	22.0	24.0	28.0	31.0	30.0	32.0	25.0
20	21.0	19.0	9.0	12.5	17.0	18.5	23.0	29.0	31.0	31.5	31.5	26.0
21	22.0	18.0	9.0	13.0	15.0	16.5	23.0	29.0	31.0	33.0	31.0	23.0
22	22.5	18.0	10.0	13.0	14.0	18.5	21.0	29.0	32.0	33.0	30.0	24.0
23	22.0	20.0	12.0	12.0	14.0	12.0	23.0	28.0	30.0	33.0	30.0	23.0
24	22.0	20.0	12.0	12.5	13.0	12.0	24.0	29.0	28.0	31.0	31.0	21.0
25	23.0	20.0	11.0	12.0	13.0	13.5	24.0	29.0	28.0	32.0	29.5	18.0
26	23.0	19.5	11.5	13.5	13.0	16.0	25.0	27.0	28.0	32.0	27.0	21.0
27	22.0	17.0	11.0	13.0	14.0	18.0	23.0	28.0	29.0	32.0	25.0	24.0
28	21.0	17.0	12.5	13.5	17.0	20.0	24.0	28.5	29.0	32.0	27.0	23.0
29	20.0	15.0	12.0	13.0	---	20.0	24.0	30.0	26.0	32.0	27.0	23.0
30	18.0	15.5	12.5	13.0	---	21.0	24.0	29.5	30.0	27.0	27.0	23.5
31	18.0	---	10.0	14.0	---	---	---	28.0	---	30.0	28.0	---
MONTH	23.0	18.5	12.5	11.0	14.0	20.0	22.0	27.0	29.0	31.0	29.0	24.5

TRINITY RIVER BASIN

231

08049600 MOUNTAIN CREEK NEAR CEDAR HILL, TEX.

LOCATION.--Lat 32°35'03", long 97°01'23", Dallas County, at gaging station on county road bridge, 3.5 miles (5.6 km) downstream from Texas and New Orleans Railroad Co. bridge, 4.5 miles (7.2 km) southwest of Cedar Hill, and 12 miles (19 km) upstream from Mountain Creek Lake Dam.

DRAINAGE AREA.--119 mi² (308 km²).

PERIOD OF RECORD.--Chemical and biochemical analyses: September 1974.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTAN-	DIS-	DIS-	DIS-	DIS-	DIS-	BICAR-	CAR-	DIS-	DIS-	TOTAL
		TANE- OUS DIS- CHARGE (CFS)	SOLVED SILICA (SI02) (MG/L)	SOLVED CAL- CIUM (CA) (MG/L)	SOLVED MAG- NE- SIUM (MG) (MG/L)	SOLVED SODIUM (NA) (MG/L)	SOLVED PO- TAS- SIUM (K) (MG/L)			SOLVED SULFATE (S04) (MG/L)	SOLVED CHLO- RIDE (CL) (MG/L)	
SEP. 27...	1600	2.6	11	90	5.4	58	8.4	142	0	210	27	.25
DATE	TOTAL	AMMONIA	ORGANIC	TOTAL	TOTAL	DIS-	TOTAL	VOL.	HARD-	NON-	SODIUM	
	NITRITE (N) (MG/L)	NITRO- GEN (N) (MG/L)	NITRO- GEN (N) (MG/L)	KJEL- DAHL NITRO- GEN (N) (MG/L)	PHOS- PHORUS (P) (MG/L)	SOLVED SOLIDS (SUM OF CONSTITU- ENTS) (MG/L)	NON- FILT- RABLE RESIDUE (MG/L)	NON- FILT- RABLE RESIDUE (MG/L)		NESS (CA+MG) (MG/L)	CAR- BONATE HARD- NESS (MG/L)	AD- SORP- TION RATIO
SEP. 27...	.01	.07	.81	.88	.35	480	64	8	250	130	1.6	
DATE	SPE-	PH	TEMPER-	COLOR	TUR-	DIS-	PER-	BIO-	TOTAL	PHENOLS	METHY-	
	CIFIC CON- DUCT- ANCE (MICRO- MHOS)							CHEM- ICAL OXYGEN DEMAND (MG/L)				ORGANIC CARBON (C) (MG/L)
SEP. 27...	748	7.1	21.0	20	45	7.4	82	1.6	9.6	4	.0	

TRINITY RIVER BASIN

08049900 MOUNTAIN CREEK NEAR DUNCANVILLE, TEX.

LOCATION.--Lat 32°39'43", long 96°58'56", Dallas County, at gaging station on Farm Road 1382, 2.3 miles (3.7 km) downstream from Walnut Creek, 4.5 miles (7.2 km) west of Duncanville, and 5.5 miles (8.8 km) upstream from Mountain Creek Lake Dam.

DRAINAGE AREA.--225 mi² (583 km²).

PERIOD OF RECORD.--Chemical and biochemical analyses: July to September 1974.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	DIS- SOLVED SILICA (SiO ₂) (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 (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	TOTAL NITRATE (N) (MG/L)
JULY 17...	1400	9.1	120	11	96	12	194	0	310	62	.00
AUG. 07...	1130	8.9	120	13	100	11	185	0	330	65	.05
SEP. 27...	1750	11	56	4.9	33	8.5	127	0	100	23	.34

DATE	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)	VOL. NON- FILT- RABLE RESIDUE (MG/L)	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO
JULY 17...	.00	.13	.87	1.0	.10	717	79	15	350	190	2.3
AUG. 07...	.00	.12	1.4	1.5	.17	741	73	0	350	200	2.3
SEP. 27...	.04	.56	1.2	1.8	.38	299	91	11	160	56	1.1

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	BIO- CHEM- ICAL OXYGEN DEMAND (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	PHENOLS (UG/L)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)
JULY 17...	1100	7.5	31.0	10	55	6.1	81	2.8	7.5	2	.0
AUG. 07...	1140	7.6	24.5	0	45	3.8	45	4.5	10	2	.0
SEP. 27...	498	6.7	21.0	25	65	6.8	76	3.8	15	2	.0

DATE	TIME	DIS- SOLVED ALUM- INUM (AL) (UG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	DIS- SOLVED COBALT (CO) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)
JULY 17...	1400	0	0	260	1	0	0	6
AUG. 07...	1130	10	0	320	0	0	0	0

DATE	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	DIS- SOLVED LITHIUM (LI) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED MERCURY (HG) (UG/L)	DIS- SOLVED NICKEL (NI) (UG/L)	DIS- SOLVED STRON- TIUM (SR) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)
JULY 17...	20	1	30	0	.0	2	1300	0
AUG. 07...	20	2	10	170	.0	3	1400	0

TRINITY RIVER BASIN

233

08050500 ELM FORK TRINITY RIVER NEAR SANGER, TEX.

LOCATION.--Lat 33°23'11", Long 97°05'05", Denton County, at gaging station at bridge on Farm Road 455, 4.1 miles (6.6 km) downstream from Spring Creek, 5.0 miles (8.0 km) upstream from Isle du Bois Creek, and 5.4 miles (8.7 km) northeast of Sanger.

DRAINAGE AREA.--381 mi² (987 km²).

PERIOD OF RECORD.--Chemical and biochemical analyses: October 1969 to September 1974.
Sediment records: January 1966 to September 1974.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SiO ₂) (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNE-SIUM (MG)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED SODIUM PLUS POTAS-SIUM (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO ₃) (MG/L)	CAR-BONATE (CO ₃) (MG/L)	DIS-SOLVED SULFATE (SO ₄) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)
OCT.												
26...	1600	39	13	97	5.3	--	48	--	304	0	39	50
NOV.												
28...	1230	293	14	61	4.8	--	27	--	183	0	25	39
DEC.												
09...	1005	86	12	88	6.1	37	--	3.8	276	0	37	46
JAN.												
08...	1030	33	5.3	110	9.2	--	58	--	344	0	53	70
MAR.												
13...	0900	13	4.8	90	7.8	65	--	3.9	310	0	49	80
MAY												
07...	1210	41	10	81	6.4	43	--	4.2	234	8	41	53
JULY												
17...	0900	1.6	7.4	85	7.7	91	--	4.9	430	0	52	43
SEP.												
26...	1600	874	13	48	2.8	18	--	3.8	148	0	18	23

DATE	DIS-SOLVED FLUO-RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO-GEN (N) (MG/L)	ORGANIC NITRO-GEN (N) (MG/L)	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	TOTAL NON-FILT-RABLE RESIDUE (MG/L)	VOL. NON-FILT-RABLE RESIDUE (MG/L)	HARD-NESS (CA+MG) (MG/L)
OCT.											
26...	.3	1.9	.01	.02	.06	--	.28	410	11	0	270
NOV.											
28...	.2	--	--	--	--	--	--	261	--	--	170
DEC.											
09...	--	1.1	.02	.22	.25	--	.14	366	--	--	240
JAN.											
08...	.3	--	--	--	--	--	--	474	--	--	310
MAR.											
13...	--	1.4	.00	.03	.87	.90	.39	454	30	2	260
MAY											
07...	--	.76	.02	.08	1.0	1.1	.29	363	71	11	230
JULY											
17...	--	.53	.00	.23	.65	.88	.42	504	27	6	240
SEP.											
26...	--	.73	.02	.19	1.3	1.5	.28	200	279	29	130

DATE	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)	COLOR (PLAT-INUM-COBALT UNITS)	TUR-BID-ITY (JTU)	DIS-SOLVED OXYGEN (MG/L)	PER-CENT SATUR-ATION	BIO-CHEM-ICAL OXYGEN DEMAND (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT.											
26...	15	1.3	689	7.2	21.0	25	8	9.4	104	1.8	--
NOV.											
28...	22	.9	481	7.5	12.5	--	--	--	--	--	--
DEC.											
09...	18	1.0	642	7.2	7.5	--	--	10.0	83	.5	--
JAN.											
08...	28	1.4	914	7.6	5.5	--	--	--	--	--	--
MAR.											
13...	3	1.8	809	7.6	16.0	15	10	6.9	69	3.6	3.0
MAY											
07...	24	1.2	603	7.4	22.0	5	35	8.0	91	3.1	15
JULY											
17...	0	2.5	862	7.9	27.0	15	20	6.2	77	2.0	5.5
SEP.											
26...	10	.7	354	7.0	17.5	10	80	8.9	93	1.7	--

TRINITY RIVER BASIN

08050500 ELM FORK TRINITY RIVER NEAR SANGER, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	DIS-SOLVED ALUM-INUM (AL) (UG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	DIS-SOLVED BORON (B) (UG/L)	DIS-SOLVED CADMIUM (CD) (UG/L)	DIS-SOLVED CHROMIUM (CR) (UG/L)	DIS-SOLVED COBALT (CO) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)
OCT. 26...	1600	10	0	--	0	0	1	7
MAR. 13...	0900	40	1	120	0	0	0	5
MAY 07...	1210	30	7	90	1	20	0	13
JULY 17...	0900	30	5	240	0	0	0	3

	DIS- SOLVED IRON (FE)	DIS- SOLVED LEAD (PB)	DIS- SOLVED LITHIUM (LI)	DIS- SOLVED MAN- GANESE (MN)	DIS- SOLVED MERCURY (HG)	DIS- SOLVED NICKEL (NI)	DIS- SOLVED STRON- TIUM (SR)	DIS- SOLVED ZINC (ZN)
DATE	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)
OCT. 26...	80	0	0	13	.1	5	490	40
MAR. 13...	30	3	10	0	.0	5	600	10
MAY 07...	30	4	0	0	.0	5	460	30
JULY 17...	70	2	10	0	.0	0	520	0

DATE	TIME	INSTANTANEOUS DIS-CHARGE (CFS)	TEMPERATURE (DEG C)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT CHARGE (T/DAY)	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM
OCT. 25...	1430	48	18.5	90	12	--	--
NOV. 28...	1230	293	12.5	60	47	--	--
JAN. 08...	1100	33	5.5	7	.62	--	--
FEB. 21...	1425	499	12.0	1180	1590	--	--
APR. 03...	1120	18	17.0	118	5.7	--	--
MAY 15...	1835	18	27.0	90	4.4	--	--
JUNE 12...	1335	42	--	270	31	98	99
JULY 03...	1140	3.6	26.0	104	1.0	--	--
AUG. 14...	1200	4.2	28.0	38	.43	--	--
SEP. 25...	1600	4450	--	536	6440	96	99

DATE	SUS. SED. SIEVE DIAM. % FINER THAN .250 MM	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM
OCT. 25...	--	--	--	--	--	--
NOV. 28...	--	--	--	--	--	--
JAN. 08...	--	--	--	--	--	--
FEB. 21...	--	--	--	--	--	--
APR. 03...	--	--	--	--	--	--
MAY 15...	--	--	--	--	--	--
JUNE 12...	100	76	86	88	90	91
JULY 03...	--	--	--	--	--	--
AUG. 14...	--	--	--	--	--	--
SEP. 25...	100	58	64	71	81	90

TRINITY RIVER BASIN

235

08051500 CLEAR CREEK NEAR SANGER, TEX.

LOCATION.--Lat 33°20'09", long 97°10'44", Denton County, at gaging station at bridge on county road (formerly U.S. Highway 77), 1,000 ft (305 m) downstream from Interstate Highway 35 and U.S. Highway 77, 1,350 ft (411 m) downstream from Duck Creek, and 1.8 miles (2.9 km) south of Sanger.

DRAINAGE AREA.--295 mi² (764 km²).

PERIOD OF RECORD.--Specific conductance: May 1968 to September 1974.

Water temperatures: May 1968 to September 1974.

Sediment records: May 1968 to September 1974.

EXTREMES.--October 1973 to September 1974:

Specific conductance: Maximum daily, 1,510 micromhos June 27; minimum daily, 223 micromhos Aug. 31.

Water temperatures: Maximum, 33.0°C July 7; minimum, 4.0°C Jan. 3.

Sediment concentrations: Maximum daily, 2,650 mg/l Apr. 23; minimum daily, no flow on many days.

Sediment loads: Maximum, 10,500 tons Oct. 13; minimum daily, 0 tons on many days.

Period of record:

Specific conductance (1972-74): Maximum daily, 1,680 micromhos Sept. 4, 1973; minimum daily, 182 micromhos July 29, 1973.

Water temperatures (1968-70, 1972-74): Maximum, 39.0°C June 28, 1969; minimum, freezing point Jan. 9, 1970.

Sediment concentrations: Maximum daily, 7,370 mg/l May 12, 1972; minimum daily, no flow on many days.

Sediment loads: Maximum daily, 79,000 tons May 7, 1969; minimum daily, 0 tons on many days.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report.

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	711	---	591	932	763	634	828	335	1310	---	---	255
2	721	682	562	913	748	645	822	383	1460	---	---	378
3	567	682	520	913	709	627	831	440	1460	---	---	281
4	911	681	457	894	719	645	844	419	1390	---	---	344
5	413	717	519	853	743	630	854	438	1330	---	---	349
6	400	673	578	866	732	615	825	535	---	---	---	421
7	401	688	629	895	717	663	870	502	436	1370	---	494
8	402	624	577	934	782	741	831	708	621	1390	---	690
9	431	641	630	695	765	697	819	701	622	1370	---	679
10	378	633	612	695	814	710	874	724	1280	---	---	911
11	382	671	626	695	777	697	822	765	359	---	---	970
12	385	725	614	697	769	698	835	725	481	---	---	941
13	302	716	672	700	766	703	909	713	349	---	---	---
14	300	690	676	672	777	697	906	970	561	---	---	---
15	369	677	686	657	798	734	965	965	597	---	---	---
16	368	744	668	655	768	736	871	996	621	---	---	---
17	426	760	774	639	766	726	870	965	1160	---	---	226
18	406	755	696	604	763	734	858	978	1150	---	---	224
19	390	---	741	555	768	759	871	945	1160	---	---	314
20	493	285	680	598	768	767	861	996	1150	---	---	310
21	518	269	731	682	589	760	382	1100	1000	---	---	267
22	509	---	659	699	419	744	297	1110	1440	---	---	281
23	553	---	665	709	440	737	306	1290	1450	---	---	313
24	543	297	688	676	426	784	---	1280	1450	---	---	353
25	580	362	---	678	625	812	---	1270	1450	---	---	272
26	597	416	752	694	617	757	---	1260	1470	---	---	355
27	630	390	783	694	608	778	---	1210	1510	---	---	359
28	570	429	879	721	618	844	---	1160	1400	---	---	346
29	564	537	853	724	---	730	---	1140	---	---	---	412
30	689	551	905	716	---	735	437	1140	---	---	248	569
31	---	---	887	719	---	740	---	1170	---	---	223	---
MONTH	497	588	677	735	698	719	775	882	1060	---	---	435

TRINITY RIVER BASIN

08051500 CLEAR CREEK NEAR SANGER, TEX.--Continued

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	25.0	---	17.0	11.0	15.0	11.0	20.0	23.0	26.0	---	---	28.0
2	24.0	18.0	15.0	10.0	13.0	12.0	25.0	25.0	29.0	---	---	23.0
3	24.0	14.0	16.0	4.0	13.0	13.0	18.0	18.0	30.0	---	---	22.0
4	23.0	17.0	14.0	7.0	12.0	11.0	20.0	20.0	30.0	---	---	26.0
5	25.0	15.0	13.0	6.0	10.0	12.0	21.0	21.0	29.0	---	---	26.0
6	23.0	14.0	13.0	10.0	6.0	14.0	23.0	23.0	---	---	---	23.0
7	24.0	16.0	11.0	8.0	8.0	14.0	29.0	29.0	28.0	33.0	---	24.0
8	25.0	17.0	15.0	8.0	7.0	16.0	20.0	20.0	27.0	30.0	---	27.0
9	24.0	15.0	10.0	9.0	9.0	13.0	19.0	19.0	29.0	29.0	---	24.0
10	25.0	17.0	11.0	7.0	6.0	15.0	20.0	19.0	26.0	---	---	26.0
11	23.0	14.0	12.0	9.0	8.0	16.0	15.0	26.0	30.0	---	---	25.0
12	23.0	17.0	12.0	10.0	8.0	14.0	14.0	29.0	31.0	---	---	24.0
13	22.0	15.0	10.0	7.0	10.0	15.0	16.0	27.0	28.0	---	---	---
14	21.0	16.0	14.0	8.0	11.0	14.0	18.0	26.0	27.0	---	---	---
15	21.0	14.0	13.0	10.0	7.0	10.0	18.0	29.0	27.0	---	---	---
16	22.0	17.0	11.0	12.0	6.0	12.0	17.0	23.0	29.0	---	---	---
17	21.0	19.0	10.0	12.0	9.0	9.0	19.0	25.0	32.0	---	---	20.0
18	19.0	20.0	12.0	11.0	9.0	11.0	21.0	26.0	31.0	---	---	22.0
19	20.0	---	11.0	9.0	7.0	8.0	21.0	29.0	28.0	---	---	24.0
20	---	15.0	12.0	11.0	6.0	14.0	16.0	28.0	27.0	---	---	25.0
21	---	17.0	5.0	10.0	11.0	17.0	19.0	27.0	27.0	---	---	23.0
22	21.0	---	8.0	13.0	11.0	20.0	20.0	29.0	30.0	---	---	22.0
23	20.0	---	9.0	10.0	9.0	16.0	21.0	30.0	30.0	---	---	20.0
24	22.0	16.0	12.0	12.0	10.0	16.0	---	28.0	30.0	---	---	18.0
25	18.5	17.0	---	14.0	10.0	18.0	---	27.0	29.0	---	---	18.0
26	20.0	14.0	10.0	13.0	12.0	17.0	---	25.0	29.0	---	---	20.0
27	20.0	16.0	12.0	13.0	9.0	10.0	---	27.0	29.0	---	---	22.0
28	19.0	16.0	9.0	11.0	10.0	12.0	---	26.0	27.0	---	---	21.0
29	20.0	14.0	10.0	11.0	---	10.0	---	28.0	---	---	---	21.0
30	19.0	15.0	5.0	14.0	---	14.0	21.0	25.0	---	---	25.0	22.0
31	---	---	9.0	14.0	---	19.0	---	26.0	---	---	26.0	---
MONTH	22.0	16.0	11.5	10.0	9.5	13.5	19.5	25.5	28.5	---	---	23.0

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	SUS- PENDE SEDIM- ENT (MG/L)	SUS- PENDE SEDIM- ENT (T/DAY)	SUS- PENDE SED. SIEVE DIAM. % FINER THAN .062 MM	SUS- PENDE SED. SIEVE DIAM. % FINER THAN .125 MM
NOV.							
20...	1800	555	15.0	2930	4390	97	99
SEP.							
17...	1855	142	20.0	1520	583	97	98
20...	1655	148	25.0	1710	683	95	98
25...	1410	1250	17.0	1810	6110	72	78
25...	1725	1130	18.0	1280	3910	95	98
DATE							
NOV.							
20...	100	--	81	82	87	91	94
SEP.							
17...	99	100	63	78	81	93	95
20...	100	--	51	59	63	79	89
25...	90	100	32	41	41	52	61
25...	99	100	57	65	67	76	88

08051500 CLEAR CREEK NEAR SANGER, TEX.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCTOBER			NOVEMBER			DECEMBER		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	11	12	.36	38	20	2.1	81	34	7.4
2	9.4	21	.53	32	8	.69	77	33	6.9
3	8.7	26	.61	28	16	1.2	218	531	582
4	7.9	18	.38	27	12	.87	154	355	171
5	8.1	50	1.1	26	30	2.1	89	60	14
6	30	150	12	25	21	1.4	65	36	6.3
7	77	220	46	26	27	1.9	56	18	2.7
8	39	100	11	28	9	.68	53	28	4.0
9	25	70	4.7	27	12	.87	53	28	4.0
10	19	250	13	26	16	1.1	51	38	5.2
11	149	878	469	25	13	.88	49	31	4.1
12	200	556	798	24	17	1.1	50	35	4.7
13	2130	1510	10500	25	7	.47	47	29	3.7
14	785	620	1310	25	18	1.2	44	30	3.6
15	424	550	630	25	14	.95	41	30	3.3
16	229	370	229	23	14	.87	38	31	3.2
17	141	150	57	22	18	1.1	37	22	2.2
18	94	70	18	23	12	.75	38	42	4.3
19	70	150	28	25	19	1.3	44	44	5.2
20	58	100	16	565	1950	4100	41	26	2.9
21	50	50	6.8	252	2350	1600	37	48	4.8
22	44	50	5.9	149	1950	784	38	34	3.5
23	40	50	5.4	112	1770	535	38	27	2.8
24	37	70	7.0	320	1990	1870	38	21	2.2
25	33	60	5.3	438	1610	2340	36	20	1.9
26	32	29	2.5	300	370	313	35	13	1.2
27	31	31	2.6	226	120	73	34	9	.83
28	32	29	2.5	141	150	57	33	10	.89
29	31	25	2.1	107	49	14	33	36	3.2
30	30	37	3.0	90	50	12	32	19	1.6
31	41	100	11	--	--	--	31	34	2.8
TOTAL	4916.1	--	14198.78	3200	--	11719.53	1711	--	866.42

DAY	JANUARY			FEBRUARY			MARCH		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	26	31	2.2	25	11	.74	42	26	2.9
2	24	13	.84	25	23	1.6	41	29	3.2
3	26	28	2.0	24	30	1.9	41	25	2.8
4	27	16	1.2	23	23	1.4	38	23	2.4
5	29	35	2.7	23	22	1.4	37	19	1.9
6	35	13	1.2	24	37	2.4	36	27	2.6
7	30	7	.57	23	18	1.1	36	25	2.4
8	29	7	.55	22	11	.65	33	14	1.2
9	29	21	1.6	21	13	.74	33	33	2.9
10	28	24	1.8	22	7	.42	32	27	2.3
11	26	28	2.0	21	11	.62	31	70	5.9
12	22	32	1.9	22	12	.71	32	57	4.9
13	28	28	2.1	22	10	.59	31	21	1.8
14	28	45	3.4	22	9	.53	28	34	2.6
15	28	16	1.2	22	4	.24	26	38	2.7
16	28	27	2.0	22	14	.83	26	28	2.0
17	28	49	3.7	22	13	.77	24	21	1.4
18	29	43	3.4	22	10	.59	24	37	2.4
19	37	41	4.1	23	11	.68	22	8	.48
20	41	31	3.4	23	4	.25	21	25	1.4
21	36	29	2.8	74	200	61	21	7	.40
22	33	21	1.9	119	420	135	20	10	.54
23	30	16	1.3	79	50	11	18	4	.19
24	28	21	1.6	55	70	10	23	13	.81
25	27	25	1.8	48	15	1.9	25	11	.74
26	27	25	1.8	47	12	1.5	21	3	.17
27	28	17	1.3	45	17	2.1	20	9	.49
28	27	6	.44	44	28	3.3	21	9	.51
29	26	4	.28	--	--	--	18	21	1.0
30	25	14	.95	--	--	--	17	25	1.1
31	25	9	.61	--	--	--	16	10	.43
TOTAL	890	--	56.64	964	--	243.96	854	--	56.56

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	APRIL			MAY			JUNE		
	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	15	22	.89	281	1420	1370	5.1	36	.50
2	16	28	1.2	916	884	2960	4.1	37	.41
3	14	31	1.2	313	100	85	3.7	40	.40
4	14	33	1.2	143	70	27	8.0	49	1.1
5	13	25	.88	88	80	19	11	49	1.5
6	13	23	.81	64	80	14	8.3	60	1.3
7	13	25	.88	46	60	7.5	132	526	383
8	13	40	1.4	38	50	5.1	53	300	43
9	13	26	.91	30	40	3.2	44	420	50
10	13	30	1.1	24	43	2.8	23	150	9.3
11	17	27	1.2	22	39	2.3	10	160	4.3
12	23	41	2.5	21	42	2.4	35	452	54
13	18	17	.83	20	33	1.8	61	522	104
14	14	20	.76	18	36	1.7	22	350	21
15	12	17	.55	17	32	1.5	13	200	7.0
16	12	9	.29	15	29	1.2	8.3	250	5.6
17	12	14	.45	14	31	1.2	6.3	150	2.6
18	12	39	1.3	13	31	1.1	5.4	47	.69
19	13	33	1.2	12	37	1.2	4.6	41	.51
20	13	47	1.6	11	33	.98	4.1	50	.55
21	133	1140	676	10	26	.70	3.3	50	.45
22	1130	2130	6510	9.9	22	.59	2.6	11	.08
23	306	2650	2190	9.5	25	.64	2.4	14	.09
24	205	770	426	9.1	15	.37	2.0	16	.09
25	131	350	124	8.3	13	.29	1.6	40	.17
26	75	220	45	9.1	22	.54	1.1	51	.15
27	54	100	15	8.7	18	.42	.73	29	.06
28	51	60	8.3	8.3	51	1.1	.37	50	.05
29	48	30	3.9	7.6	58	1.2	0	--	--
30	182	908	818	6.6	41	.73	0	--	--
31	--	--	--	6.3	39	.66	--	--	--
TOTAL	2598	--	10837.35	2199.4	--	4516.22	476.00	--	691.90

DAY	JULY			AUGUST			SEPTEMBER		
	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	0	--	--	0	--	--	38	170	17
2	0	--	--	0	--	--	37	200	20
3	0	--	--	0	--	--	46	200	25
4	.73	137	.34	0	--	--	26	150	11
5	2.4	120	.78	0	--	--	12	150	4.9
6	4.0	263	3.3	0	--	--	5.7	70	1.1
7	2.9	80	.63	0	--	--	3.1	14	.12
8	1.3	60	.21	0	--	--	2.9	49	.38
9	.37	60	.06	0	--	--	3.3	40	.36
10	0	--	--	0	--	--	3.3	25	.22
11	0	--	--	0	--	--	3.3	31	.28
12	0	--	--	0	--	--	3.5	41	.39
13	0	--	--	0	--	--	186	602	575
14	0	--	--	0	--	--	41	50	5.5
15	0	--	--	0	--	--	35	50	4.7
16	0	--	--	0	--	--	46	214	61
17	0	--	--	0	--	--	241	2110	1500
18	0	--	--	0	--	--	196	1780	999
19	0	--	--	0	--	--	90	620	151
20	0	--	--	0	--	--	90	713	274
21	0	--	--	0	--	--	495	1930	2660
22	0	--	--	0	--	--	215	520	302
23	0	--	--	0	--	--	89	120	29
24	0	--	--	0	--	--	55	120	18
25	0	--	--	0	--	--	822	1830	4960
26	0	--	--	.07	40	.01	506	400	546
27	0	--	--	1.4	70	.26	202	250	136
28	0	--	--	.43	50	.06	101	200	55
29	0	--	--	35	91	76	56	100	15
30	0	--	--	763	1790	4660	37	40	4.0
31	0	--	--	138	500	186	--	--	--
TOTAL	11.70	--	5.32	937.90	--	4922.33	3687.1	--	12375.95

TOTAL DISCHARGE FOR YEAR (CFS-DAYS)

TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS)

22445.20

60490.96

239

LOCATION.--Lat 33°21'55", long 96°49'25", Collin County, at gaging station at bridge on Farm Road 455, 3.6 miles (5.8 km) northwest of Celina, and 10 miles (16 km) upstream from Mustang Creek.

PERIOD OF RECORD.--Specific conductance: October 1966 to September 1974.
Water temperatures: February 1966 to September 1974.
Sediment records: February 1966 to September 1974.

Sediment concentrations: Maximum daily, 2,100 mg/l Sept. 13; minimum daily, no flow on many days.
Sediment loads: Maximum daily, 4,650 tons, June 7; minimum daily, 0 tons on many days.

Water temperatures (February 1966 to September 1969): Maximum, 31.0°C June 20, 1969; minimum, freezing point Jan. 1, 1969.
Sediment concentrations: Maximum daily, 2,450 mg/l Feb. 8, 1973; minimum daily, no flow on many days.
Sediment loads: Maximum daily, 15,200 tons Apr. 28, 1966; minimum daily, 0 tons on many days.

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

[illegible]

TRINITY RIVER BASIN

08052650 LITTLE ELM CREEK NEAR CELINA, TEX.--Continued

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	10.0	---	---	22.0	15.0	---	---	---	25.0
2	---	17.0	11.0	---	10.0	---	---	17.0	---	---	---	25.0
3	---	17.0	11.0	---	---	---	---	17.0	---	---	---	25.0
4	---	17.0	11.0	---	---	17.0	---	19.0	---	---	---	25.0
5	---	16.0	9.0	---	---	---	---	20.0	---	---	---	25.0
6	---	16.0	8.0	---	---	---	---	21.0	---	---	---	25.0
7	---	15.0	7.0	3.0	---	---	---	22.0	21.0	---	---	25.0
8	---	15.0	7.0	---	---	---	---	23.0	21.0	---	---	---
9	---	14.0	---	---	---	---	---	23.0	21.0	---	---	---
10	---	13.0	---	---	---	---	---	24.0	21.0	---	---	---
11	---	14.0	---	---	---	17.0	---	24.0	21.0	---	---	---
12	---	14.0	---	---	---	17.0	---	24.0	21.0	---	---	23.0
13	---	15.0	---	---	---	17.0	---	24.0	22.0	---	---	21.0
14	---	14.0	---	---	---	---	---	---	22.0	---	---	21.0
15	---	15.0	---	---	---	---	---	24.0	25.0	---	---	22.0
16	---	15.0	---	---	---	---	---	24.0	25.0	---	---	22.0
17	---	15.0	---	---	12.0	---	---	24.0	25.0	---	---	22.0
18	---	---	---	---	---	---	---	24.0	25.0	---	---	22.0
19	---	---	---	---	11.0	---	---	25.0	26.0	---	---	22.0
20	---	14.0	---	---	---	---	---	25.0	26.0	---	---	22.0
21	---	14.0	---	---	12.0	17.0	17.0	25.0	27.0	---	---	22.0
22	---	14.0	---	---	11.0	---	17.0	25.0	27.0	---	---	20.0
23	---	15.0	---	---	10.0	---	18.0	---	27.0	---	---	19.0
24	---	13.0	---	---	6.0	---	18.0	---	26.0	---	---	15.0
25	---	12.0	---	---	7.0	---	18.0	---	25.0	---	---	14.0
26	19.0	12.0	---	---	10.0	---	19.0	---	25.0	---	---	16.0
27	16.0	11.0	---	---	12.0	---	19.0	---	25.0	---	24.0	17.0
28	17.0	11.0	---	10.0	13.0	---	19.0	---	25.0	---	24.0	18.0
29	18.0	12.0	---	10.0	---	---	---	---	---	---	25.0	19.0
30	18.0	13.0	---	10.0	---	---	15.0	---	---	---	25.0	19.0
31	16.0	---	---	10.0	---	---	---	---	---	---	25.0	---
MONTH	---	14.5	---	---	---	---	---	---	---	---	---	21.0

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	SUS- PENDE SEDIM- ENT (MG/L)	SUS- PENDE SEDIM- ENT DIS- CHARGE (T/DAY)	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM
OCT.							
13...	1100	830	20.0	391	876	94	94
NOV.							
24...	1600	486	13.0	4250	5580	91	96
25...	1300	256	12.0	447	309	97	97
JUNE							
07...	0930	4440	21.0	2070	24800	99	99
12...	1000	558	21.0	625	942	98	99
DATE							
		SUS. SED. SIEVE DIAM. % FINER THAN .250 MM	SUS. SED. SIEVE DIAM. % FINER THAN .500 MM	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM
OCT.							
13...	99	100	81	86	89	92	93
NOV.							
24...	98	100	63	70	75	79	85
25...	99	100	76	85	90	92	93
JUNE							
07...	99	100	70	83	90	95	96
12...	100	--	69	84	89	95	96

08052650 LITTLE ELM CREEK NEAR CELINA, TEX.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCTOBER			NOVEMBER			DECEMBER		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	196	120	64	246	420	279	12	120	3.9
2	108	150	44	156	550	232	8.9	150	3.6
3	57	110	17	83	150	34	8.3	150	3.4
4	32	140	12	327	120	106	9.2	150	3.7
5	21	210	12	122	120	40	6.5	100	1.8
6	299	770	760	60	100	16	4.9	100	1.3
7	143	270	104	34	70	6.4	4.0	100	1.1
8	69	170	32	23	70	4.3	3.4	70	.64
9	37	200	20	17	70	3.2	2.8	70	.53
10	20	220	12	12	70	2.3	2.4	70	.45
11	833	924	2540	9.0	50	1.2	2.0	70	.38
12	532	587	880	6.8	50	.92	1.8	70	.34
13	1090	418	1660	5.9	50	.80	1.6	50	.22
14	334	200	180	5.3	50	.72	1.5	50	.20
15	309	120	100	4.6	50	.62	1.4	50	.19
16	249	70	47	3.5	50	.47	1.1	50	.15
17	152	70	29	2.5	50	.34	.96	50	.13
18	81	120	26	2.0	50	.27	.85	50	.11
19	48	170	22	2.0	70	.38	32	527	63
20	28	100	7.6	252	740	581	9.9	170	4.5
21	19	120	6.2	105	300	85	5.7	150	2.3
22	13	50	1.8	62	150	25	4.6	120	1.5
23	8.7	50	1.2	40	170	18	3.8	120	1.2
24	5.8	50	.78	346	1210	2320	3.5	120	1.1
25	4.4	50	.59	321	470	407	2.9	120	.94
26	3.4	270	2.5	149	220	89	2.4	100	.65
27	89	475	102	80	170	37	2.0	100	.54
28	84	170	39	45	150	18	1.7	100	.46
29	48	170	22	25	150	10	1.5	100	.41
30	229	170	105	17	150	6.9	1.5	100	.41
31	638	100	172	--	--	--	1.2	70	.23
TOTAL	5780.3	--	7021.67	2563.6	--	4325.82	146.31	--	99.38
DAY	JANUARY			FEBRUARY			MARCH		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	.96	40	.10	2.7	40	.29	3.9	50	.53
2	.50	40	.05	2.2	40	.24	3.2	50	.43
3	.38	40	.04	1.8	40	.19	2.6	20	.14
4	.38	40	.04	1.3	40	.14	2.0	100	.54
5	.38	40	.04	.85	20	.05	1.7	20	.09
6	.38	40	.04	.74	20	.04	1.7	20	.09
7	.38	40	.04	.74	20	.04	1.5	20	.08
8	.62	40	.07	.38	20	.02	1.2	20	.06
9	.62	40	.07	.14	20	.01	.85	20	.05
10	.74	40	.08	.14	20	.01	.74	40	.08
11	.62	40	.07	.10	20	.01	6.4	262	5.5
12	.38	40	.04	.07	20	0	2.9	150	1.2
13	.38	40	.04	.05	20	0	1.8	70	.34
14	.50	40	.05	.05	20	0	1.4	70	.26
15	.50	20	.03	.05	20	0	.96	70	.18
16	.50	20	.03	.05	20	0	.62	70	.12
17	.50	20	.03	.05	20	0	.50	40	.05
18	.62	40	.07	.07	20	0	.78	40	.03
19	6.9	170	3.2	.05	20	0	.20	40	.02
20	4.7	40	.51	.07	100	.02	.14	40	.02
21	3.6	40	.39	131	1360	609	.28	40	.03
22	2.9	40	.31	88	550	131	.38	40	.04
23	2.3	40	.25	41	220	24	.14	40	.02
24	1.8	40	.19	22	150	8.9	.05	40	.01
25	1.5	40	.16	14	70	2.6	.02	40	0
26	1.8	40	.19	9.5	50	1.3	.01	40	0
27	7.1	123	6.7	6.5	50	.88	.01	40	0
28	20	397	23	5.0	50	.68	.01	40	0
29	7.6	250	5.1	--	--	--	.01	40	0
30	5.1	300	4.1	--	--	--	.01	20	0
31	3.6	70	.68	--	--	--	.01	20	0
TOTAL	78.24	--	45.71	328.60	--	779.42	35.52	--	9.91

TRINITY RIVER BASIN

08052650 LITTLE ELM CREEK NEAR CELINA, TEX.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	APRIL			MAY			JUNE		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	.01	20	0	155	479	205	0	--	--
2	0	--	--	288	1310	1020	.99	100	.27
3	0	--	--	247	420	280	.90	50	.12
4	0	--	--	196	270	143	.82	50	.11
5	0	--	--	102	170	47	1.5	50	.20
6	0	--	--	61	150	25	3.2	50	.43
7	0	--	--	39	150	16	1400	799	4650
8	0	--	--	27	170	12	514	360	500
9	0	--	--	17	150	6.9	751	441	1030
10	0	--	--	9.6	120	3.1	426	150	173
11	0	--	--	5.6	150	2.3	383	150	155
12	0	--	--	3.4	100	.92	538	297	452
13	.07	20	0	2.2	100	.59	379	170	174
14	.03	20	0	14	256	45	308	100	83
15	.01	20	0	64	789	206	206	100	56
16	0	--	--	23	470	29	140	120	45
17	0	--	--	17	400	18	97	120	31
18	0	--	--	11	250	7.4	53	150	21
19	0	--	--	6.6	220	3.9	31	100	8.4
20	0	--	--	3.9	170	1.8	18	100	4.9
21	204	600	1260	2.7	120	.87	10	100	2.7
22	405	1240	1650	1.9	70	.36	6.4	100	1.7
23	142	400	153	1.3	50	.18	3.6	70	.68
24	73	320	63	.72	50	.10	2.0	50	.27
25	38	300	31	.30	50	.04	1.0	50	.14
26	20	200	11	.09	50	.01	.28	70	.05
27	11	120	3.6	.03	50	0	.05	50	.01
28	6.8	120	2.2	.01	50	0	.01	50	0
29	4.5	120	1.5	0	--	--	0	--	--
30	427	1340	2700	0	--	--	0	--	--
31	--	--	--	0	--	--	--	--	--
TOTAL	1331.42	--	5875.3	1299.35	--	2074.47	5274.75	--	7389.98

DAY	JULY			AUGUST			SEPTEMBER		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1				0	--	--	9.6	170	4.4
2				0	--	--	7.5	120	2.4
3				0	--	--	4.6	170	2.1
4				0	--	--	2.1	170	.96
5				0	--	--	.96	100	.26
6				0	--	--	.14	70	.03
7				0	--	--	.01	50	0
8				0	--	--	0	--	--
9				0	--	--	0	--	--
10				0	--	--	0	--	--
11				0	--	--	0	--	--
12				0	--	--	37	1610	530
13				0	--	--	97	2100	550
14				0	--	--	27	800	58
15				0	--	--	13	200	7.0
16				0	--	--	65	1010	506
17				0	--	--	131	1000	354
18				0	--	--	66	350	62
19				0	--	--	33	550	49
20				0	--	--	35	831	141
21				0	--	--	82	495	151
22				0	--	--	19	400	21
23				0	--	--	9.8	300	7.9
24				0	--	--	33	100	8.9
25				0	--	--	860	694	1640
26				0	--	--	270	350	255
27				27	294	30	173	270	126
28				6.9	120	2.2	94	150	38
29				20	226	40	50	170	23
30				84	348	118	27	150	11
31				22	170	10	--	--	--
TOTAL	0	--	0	159.9	--	200.2	2146.71	--	4548.95

TOTAL DISCHARGE FOR YEAR (CFS-DAYS)

TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS)

19144.70
32370.81

TRINITY RIVER BASIN

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08052700 LITTLE ELM CREEK NEAR AUBREY, TEX.

LOCATION.--Lat 33°17'00", long 96°53'33", Denton County, at gaging station at bridge on Farm Road 1385, 1.5 miles (2.4 km) upstream from Mustang Creek, 5.5 miles (8.8 km) east of Aubrey, and 18 miles (29 km) upstream from Lewisville Dam.

DRAINAGE AREA.--75.5 mi² (196 km²).

PERIOD OF RECORD.--Chemical analyses: January 1968.

Specific conductance: December 1966 to September 1974.

Water temperatures: February 1966 to September 1974.

Sediment records: February 1966 to September 1974.

EXTREMES.--October 1973 to September 1974:

Specific conductance: Maximum daily, 865 micromhos Apr. 4; minimum daily, 210 micromhos June 11.

Water temperatures: Maximum, 30.0°C May 12; minimum, 2.0°C Jan. 9.

Sediment concentrations: Maximum daily, 1,850 mg/l Aug. 28; minimum daily, no flow on many days.

Sediment loads: Maximum daily 3,440 tons June 7; minimum daily, 0 tons on many days.

Period of record:

Specific conductance (December 1966 to September 1968, October 1971 to September 1972, October 1973 to September 1974): Maximum daily, 1,380 micromhos Jan. 24, Feb. 25, 1967; minimum daily, 195 micromhos June 4, 1968.

Water temperatures (February 1966 to September 1968, October 1971 to September 1972, October 1973 to September 1974): Maximum, 33.0°C June 16, 1968; minimum, freezing point Feb. 22, 1968.

Sediment concentrations: Maximum daily, 4,750 mg/l Aug. 13, 1966; minimum daily, no flow on many days.

Sediment loads: Maximum daily, 17,900 tons May 31, 1967; minimum daily, 0 tons on many days.

REMARKS.--For information on diversions on return flows, see REMARKS paragraph in Part 1 of this report.

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	336	263	361	---	567	549	821	401	---	---	---	303
2	249	251	367	---	574	555	836	400	---	---	---	324
3	244	259	383	---	571	569	836	280	---	---	---	307
4	241	306	423	---	580	597	865	---	---	---	---	328
5	241	280	502	---	603	611	---	281	497	---	---	311
6	324	282	441	---	625	581	---	292	538	---	---	---
7	223	293	425	639	649	613	---	298	325	---	---	294
8	248	316	431	589	649	631	---	312	244	---	---	320
9	250	335	436	598	667	643	---	308	266	---	---	290
10	255	346	444	618	---	670	---	---	222	---	---	282
11	224	346	450	---	---	659	---	327	210	---	---	---
12	255	356	458	---	---	718	804	144	---	---	---	---
13	250	361	463	---	697	740	---	354	243	---	---	339
14	240	395	467	648	726	824	---	350	---	---	---	333
15	236	408	481	650	728	830	---	351	238	---	---	330
16	271	---	486	657	741	723	---	342	234	---	---	331
17	251	419	471	663	748	694	---	---	247	---	---	412
18	254	426	484	---	761	656	---	346	247	---	---	351
19	259	491	586	713	774	661	---	295	247	---	---	335
20	262	---	474	672	802	653	---	302	---	---	---	341
21	273	343	444	780	715	663	434	397	259	---	---	384
22	286	316	457	663	483	666	370	316	269	---	---	368
23	288	313	457	655	486	673	346	321	289	---	---	347
24	301	---	473	627	491	702	357	325	296	---	---	344
25	299	---	457	614	489	723	379	---	290	---	---	407
26	301	313	495	596	501	---	405	374	282	---	---	299
27	463	314	502	592	515	763	373	386	340	---	248	277
28	315	320	507	664	---	772	402	---	---	---	348	275
29	---	330	519	631	---	804	405	---	---	---	289	276
30	336	344	---	675	---	---	341	---	---	---	294	---
31	266	---	---	568	---	821	---	---	---	---	---	---
MONTH	275	336	460	---	631	682	---	---	---	---	---	327

TRINITY RIVER BASIN

08052700 LITTLE ELM CREEK NEAR AUBREY, TEX.--Continued

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	SUS- PENDE SED- IMENT SED- IMENT (MG/L)	SUS- PENDE SED- IMENT DIS- CHARGE (T/DAY)	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM	
OCT.								
06...	1830	366	22.5	1290	1280	97	98	
11...	1212	672	21.0	1390	2520	98	99	
13...	0925	2420	19.5	660	4310	98	99	
29...	0700	64	13.5	496	86	96	98	
NOV.								
04...	1000	593	16.0	1050	1680	95	96	
04...	1645	839	15.5	1100	2490	97	98	
05...	0645	304	14.5	298	245	99	100	
05...	1830	189	13.5	270	138	99	100	
APR.								
21...	1710	42	19.0	2450	278	99	100	
21...	2010	485	18.0	2460	3220	99	100	
DATE		SUS. SED. SIEVE DIAM. % FINER THAN .250 MM	SUS. SED. SIEVE DIAM. % FINER THAN .500 MM	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM
OCT.								
06...	98	100	80	82	92	92	97	
11...	99	100	85	89	93	93	97	
13...	100	--	88	89	90	93	97	
29...	99	100	81	84	85	90	89	
NOV.								
04...	97	98	82	85	91	92	93	
04...	98	100	86	89	89	93	94	
05...	--	--	88	96	97	98	99	
05...	--	--	80	90	91	96	97	
APR.								
21...	--	--	63	74	78	94	99	
21...	--	--	66	83	88	95	99	

08052700 LITTLE ELM CREEK NEAR AUBREY, TEX.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCTOBER			NOVEMBER			DECEMBER		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	319	250	215	368	350	348	14	120	4.5
2	202	250	136	213	270	155	11	100	3.0
3	102	270	74	107	220	64	10	120	3.2
4	55	250	37	502	1090	1580	12	100	3.9
5	33	200	18	279	370	279	10	100	2.7
6	175	1080	653	124	250	84	8.4	100	2.3
7	308	450	374	67	200	36	7.3	100	2.0
8	102	270	74	34	170	16	6.4	100	1.7
9	54	150	22	21	150	8.5	5.8	70	1.1
10	28	100	7.6	14	120	4.5	5.2	70	.98
11	720	796	1370	11	120	3.6	4.7	170	2.2
12	1100	450	1030	8.7	120	2.8	4.4	150	1.8
13	1860	550	2760	7.4	120	2.4	4.1	100	1.1
14	629	150	255	6.9	120	2.2	4.0	50	.54
15	398	150	161	6.3	70	1.2	3.8	70	.72
16	379	120	123	5.3	50	.72	3.8	50	.51
17	243	150	98	4.4	50	.59	4.0	50	.54
18	148	150	60	4.4	50	.59	3.7	50	.50
19	86	120	28	4.7	70	.89	52	547	84
20	40	100	11	267	910	613	15	300	12
21	23	50	3.1	154	370	154	8.7	200	4.7
22	15	50	2.0	76	220	45	7.1	150	2.9
23	11	70	2.1	48	170	22	6.1	70	1.2
24	9.1	100	2.5	149	892	637	5.3	70	1.0
25	7.6	250	5.1	671	770	1400	4.7	70	.89
26	6.6	300	5.3	229	270	167	4.1	70	.77
27	61	450	74	116	200	63	3.7	50	.50
28	123	420	139	64	170	29	3.3	20	.18
29	60	370	60	34	170	16	3.0	20	.16
30	102	596	303	20	150	8.1	2.7	20	.15
31	969	715	1620	--	--	--	2.7	50	.36
TOTAL	8368.3	--	9722.7	3616.1	--	5744.09	241.0	--	142.10
DAY	JANUARY			FEBRUARY			MARCH		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	1.9	50	.26	4.9	50	.66	6.6	200	3.6
2	2.0	50	.27	4.2	70	.79	5.7	120	1.8
3	.80	20	.04	3.6	50	.49	5.0	120	1.6
4	.70	20	.04	3.0	50	.41	4.3	240	2.8
5	1.0	20	.05	2.3	50	.31	3.6	400	3.9
6	1.2	20	.06	2.2	50	.30	3.2	270	2.3
7	1.2	50	.16	1.6	20	.09	3.1	70	.59
8	1.3	50	.18	1.3	50	.18	3.0	70	.57
9	1.4	20	.08	1.0	50	.14	2.5	70	.47
10	1.4	50	.19	.70	50	.09	2.2	70	.42
11	1.3	50	.18	.56	50	.08	4.2	200	2.3
12	1.0	20	.05	.40	50	.05	6.6	170	3.0
13	.78	20	.04	.35	50	.05	4.1	170	1.9
14	.86	20	.05	.35	50	.05	3.2	100	.86
15	.95	50	.13	.35	50	.05	2.8	70	.53
16	.86	50	.12	.35	220	.21	2.5	70	.47
17	.95	50	.13	.35	70	.07	1.9	50	.26
18	1.0	50	.14	.35	50	.05	1.7	50	.23
19	15	269	13	.35	70	.07	1.3	50	.18
20	10	100	2.7	.26	50	.04	1.3	50	.18
21	6.4	50	.86	129	987	445	1.6	50	.22
22	4.9	50	.66	162	645	314	1.2	50	.16
23	3.9	50	.53	62	400	67	1.3	50	.18
24	3.4	50	.46	31	270	23	.95	50	.13
25	2.5	20	.14	17	200	9.2	.70	50	.09
26	2.7	20	.15	11	170	5.0	.63	20	.03
27	5.7	64	1.6	9.3	120	3.0	.50	100	.14
28	45	350	51	7.7	120	2.5	.56	70	.11
29	12	70	2.3	--	--	--	.50	50	.07
30	8.1	70	1.5	--	--	--	.35	50	.05
31	6.3	50	.85	--	--	--	.30	50	.04
TOTAL	146.50	--	77.92	457.47	--	872.88	77.39	--	29.18

TRINITY RIVER BASIN

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LOCATION.--Lat 32°42'27", long 96°44'08", Dallas County, at gaging station at bridge on South Loop Highway 12, 1.0 mile (1.6 km) downstream from White Rock Creek, 1.5 miles (2.4 km) upstream from Fivemile Creek, and 6.4 miles (10.3 km) southeast of Dallas County Courthouse in Dallas.

DRAINAGE AREA.--6,278 mi² (16,260 km²).

PERIOD OF RECORD.--Chemical analyses: October 1967 to September 1974.

Chemical and biochemical analyses: January 1968 to September 1974.

Pesticide analyses: October 1971 to September 1974.

Water temperatures: October 1967 to September 1974.

EXTREMES.--October 1973 to September 1974:

Specific conductance: Maximum daily, 1,050 micromhos Apr. 10; minimum daily, 348 micromhos Oct. 15.

Water temperatures: Maximum, 30.0°C on several days during July and August; minimum, 5.5°C Jan. 11.

Period of record:

Specific conductance (1967-68, 1972-74): Maximum daily, 1,070 micromhos Dec. 13, 1967; minimum daily, 335 micromhos June 5, 1973.

Water temperatures (1967-68, 1973-74): Maximum, 30.0°C on several days during July and August 1974; minimum, 4.0°C Jan. 10, 1968.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED SODIUM PLUS POTAS- SIUM (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HC03) (MG/L)	CAR- BONATE (C03) (MG/L)	DIS- SOLVED SULFATE (S04) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
OCT.												
23...	1000	6640	6.4	47	4.1	--	14	--	127	0	28	21
29...	0845	3580	7.7	46	3.7	--	26	--	140	0	38	22
NOV.												
12...	1315	804	12	61	5.2	62	--	9.3	171	0	80	48
14...	0915	733	12	58	5.7	--	78	--	212	0	87	56
DEC.												
10...	0940	1100	9.1	57	5.0	49	--	7.5	170	0	64	40
27...	1215	750	11	50	5.1	71	--	12	180	0	75	48
JAN.												
29...	1130	784	9.3	70	6.3	73	--	9.5	214	0	110	54
FEB.												
01...	1100	884	8.4	77	12	65	--	7.9	185	0	120	46
11...	1815	474	15	66	6.3	110	--	11	292	0	120	76
MAR.												
07...	1045	464	15	68	6.1	94	--	12	192	0	130	70
12...	1550	723	12	66	6.3	89	--	9.7	145	0	140	64
APR.												
18...	1420	398	17	58	7.0	100	--	11	188	0	120	74
MAY												
07...	1630	9150	6.7	58	4.2	31	--	6.4	146	0	80	23
JUNE												
18...	1525	3080	8.3	49	4.6	35	--	4.8	160	0	53	34
JULY												
18...	1115	327	15	47	6.3	120	--	15	240	0	110	93
AUG.												
07...	1350	823	9.9	42	5.2	78	--	9.2	170	0	97	60
SEP.												
27...	1130	1260	10	68	4.7	40	--	11	184	0	77	30

TRINITY RIVER BASIN

08057410 TRINITY RIVER BELOW DALLAS, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)	VOL. NON- FILT- RABLE RESIDUE (MG/L)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)
OCT.												
23...	.3	--	--	--	--	--	--	183	--	--	130	30
29...	.4	.60	.01	.57	.14	--	1.9	216	380	28	130	16
NOV.												
12...	--	--	--	--	--	--	--	362	--	--	170	33
14...	.8	1.7	.32	3.8	.34	--	1.7	415	48	12	170	0
DEC.												
10...	--	1.4	.18	2.6	.35	--	1.7	315	49	20	160	23
27...	--	--	--	--	--	--	--	361	--	--	150	0
JAN.												
29...	--	1.3	.30	5.4	.32	--	3.6	439	71	29	200	26
FEB.												
01...	--	--	--	--	--	--	--	427	--	--	240	90
11...	--	.38	.07	8.3	1.6	--	4.6	548	34	19	190	0
MAR.												
07...	--	--	--	--	--	--	--	490	--	--	200	37
12...	--	.78	.07	12	3.0	15	4.4	458	52	13	190	72
APR.												
18...	--	2.2	.32	7.6	4.4	12	6.1	481	54	0	170	20
MAY												
07...	--	.41	.03	.99	1.2	2.2	.59	281	95	8	160	42
JUNE												
18...	--	.38	.09	1.5	1.2	2.7	1.2	268	172	22	140	10
JULY												
18...	--	.34	.55	6.2	.20	6.4	9.0	525	16	14	140	0
AUG.												
07...	--	1.4	.27	4.6	3.3	7.9	4.2	386	86	8	130	0
SEP.												
27...	--	1.1	.15	1.8	.70	2.5	1.8	331	147	17	190	38
DATE	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	BIO- CHEM- ICAL OXYGEN DEMAND (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	PHENOLS (UG/L)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)
OCT.												
23...	.5	368	7.3	21.0	--	--	--	--	--	--	--	--
29...	1.0	376	7.0	18.5	30	80	7.6	81	5.1	9.0	0	.6
NOV.												
12...	2.0	635	7.3	18.0	--	--	--	--	--	--	--	--
14...	2.6	703	6.9	19.0	45	25	5.4	57	12	8.0	7	1.3
DEC.												
10...	1.7	563	7.2	11.0	20	35	8.5	77	6.6	8.0	0	.6
27...	2.6	648	7.0	9.5	--	--	--	--	--	--	--	--
JAN.												
29...	2.2	772	7.0	11.5	40	20	5.4	49	25	9.0	10	.1
FEB.												
01...	1.8	734	7.3	13.5	--	--	--	--	--	--	--	--
11...	3.5	962	6.9	14.5	40	10	1.0	10	23	15	1	.2
MAR.												
07...	2.9	863	7.0	21.0	--	--	--	--	--	--	--	--
12...	2.8	878	7.0	21.0	30	10	1.6	18	20	15	0	.2
APR.												
18...	3.3	880	7.1	22.0	40	15	3.6	41	10	--	20	.0
MAY												
07...	1.1	475	6.9	23.0	5	55	2.2	25	9.0	15	6	.2
JUNE												
18...	1.3	476	7.0	27.0	10	75	6.0	74	12	11	6	.0
JULY												
18...	4.4	936	7.0	29.0	20	2	.4	5	20	23	13	1.0
AUG.												
07...	3.0	686	7.1	26.5	10	30	1.8	22	16	--	5	1.6
SEP.												
27...	1.3	571	7.0	20.0	10	65	4.6	50	12	16	4	.3

TRINITY RIVER BASIN

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WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	DIS- SOLVED ALUM- INUM (AL) (UG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	DIS- SOLVED COBALT (CO) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)
OCT. 29...	0845	30	1	--	0	0	1	9
JAN. 29...	1130	20	2	250	1	0	1	16
APR. 18...	1420	100	7	380	3	10	2	26
JUNE 18...	1525	20	1	130	1	0	0	9
AUG. 07...	1350	80	8	280	1	0	1	15

DATE	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	DIS- SOLVED LITHIUM (LI) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED MERCURY (HG) (UG/L)	DIS- SOLVED NICKEL (NI) (UG/L)	DIS- SOLVED STRON- TIUM (SR) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)
OCT. 29...	60	0	0	130	.1	2	290	50
JAN. 29...	450	5	0	170	.2	38	610	50
APR. 18...	360	8	20	100	.2	46	500	20
JUNE 18...	20	8	10	0	.0	5	330	30
AUG. 07...	70	6	0	90	.0	27	340	0

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

MONTH	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCT- ANCE (MICRO- MHOS)	DIS- SOLVED SOLIDS (MG/L)	DIS- SOLVED SOLIDS (TONS)	DIS- SOLVED CHLORIDE (MG/L)	DIS- SOLVED CHLORIDE (TONS)	DIS- SOLVED SULFATE (MG/L)	DIS- SOLVED SULFATE (TONS)	HARDNESS (CA+MG) (MG/L)
OCT. 1973.....	146451	400	230	90900	23	9090	55	21700	140
NOV. 1973.....	72609	483	280	54900	31	6080	67	13100	150
DEC. 1973.....	32246	596	340	29600	42	3660	83	7230	170
JAN. 1974.....	34472	648	370	34400	47	4370	91	8470	170
FEB. 1974.....	21259	788	450	25800	61	3500	110	6310	190
MAR. 1974.....	16935	865	490	22400	69	3150	120	5490	200
APR. 1974.....	31515	632	360	30600	46	3910	88	7490	170
MAY 1974.....	62314	565	320	53800	39	6560	79	13300	160
JUNE 1974.....	51823	538	310	43400	37	5180	75	10500	160
JULY 1974.....	14636	817	460	18200	64	2530	120	4740	200
AUG. 1974.....	25973	628	360	25200	45	3160	88	6170	170
SEPT 1974.....	56514	482	280	42700	31	4730	67	10200	150
TOTAL	566747	**	**	472000	**	55900	**	115000	**
WTD.AVG.	1552.73	538	310	**	37	**	75	**	160

TRINITY RIVER BASIN

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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	418	402	500	621	758	765	896	518	940	803	703	597
2	389	436	564	629	760	770	974	537	891	903	741	661
3	404	526	570	638	762	720	911	507	860	922	703	685
4	408	472	577	645	763	678	917	441	961	889	710	779
5	532	417	578	662	787	734	923	500	906	842	717	835
6	599	417	554	665	787	878	929	571	874	885	789	857
7	585	399	575	668	787	881	889	479	350	875	665	867
8	564	404	723	701	784	921	899	540	485	870	797	854
9	471	395	574	688	830	900	970	543	460	868	800	841
10	500	422	570	600	880	875	1050	518	455	918	802	838
11	462	644	575	581	945	727	602	570	582	889	550	746
12	424	692	585	450	813	792	770	634	505	868	507	672
13	387	728	570	600	987	812	767	647	500	907	392	591
14	350	720	568	754	1010	848	770	699	576	850	507	550
15	348	734	598	848	996	892	800	647	500	812	608	600
16	430	727	628	856	950	884	852	608	480	904	762	629
17	474	711	657	900	940	860	900	710	469	914	778	371
18	423	683	686	636	929	871	845	745	479	933	768	375
19	405	752	620	561	913	957	885	720	470	949	762	470
20	385	685	600	520	910	982	987	726	497	911	858	588
21	363	641	662	645	519	949	941	843	704	910	888	356
22	371	603	671	764	691	926	536	827	737	797	896	389
23	368	634	648	785	750	930	523	758	720	933	693	531
24	550	546	579	754	800	940	538	859	752	911	814	611
25	469	509	592	882	822	950	501	862	800	778	848	560
26	391	531	605	757	847	961	483	700	853	727	794	449
27	385	486	676	765	744	970	489	686	800	700	645	601
28	401	456	650	774	732	982	510	723	840	690	496	550
29	391	476	649	783	---	1010	546	804	876	687	759	480
30	384	415	648	816	---	953	554	804	840	599	608	507
31	368	---	647	810	---	868	---	833	---	707	535	---
MONTH	432	555	610	702	828	877	772	663	672	844	706	615

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	24.0	17.0	16.0	7.5	14.5	16.5	22.5	20.5	26.0	27.0	28.0	27.0
2	24.5	17.5	15.0	---	---	---	21.0	20.0	26.5	28.0	28.0	28.0
3	24.5	17.5	17.0	6.0	---	---	21.0	22.0	26.5	28.0	28.5	25.0
4	24.5	---	---	6.0	14.0	17.5	---	20.5	26.0	28.0	---	25.0
5	23.5	18.0	15.0	6.5	13.5	19.5	---	---	28.0	27.0	27.0	25.5
6	23.5	17.0	13.5	---	13.5	20.0	18.0	20.5	27.0	28.5	28.0	26.0
7	24.0	17.0	12.5	8.0	11.5	20.5	19.0	20.5	27.5	---	25.5	24.5
8	24.5	18.0	12.5	9.5	9.0	20.5	19.5	23.0	25.5	---	26.0	25.0
9	25.5	17.5	12.0	8.5	---	---	20.0	22.5	---	28.5	---	24.5
10	25.0	16.5	13.0	---	---	21.0	18.5	22.0	24.5	28.5	28.0	24.5
11	---	16.5	12.5	5.5	14.5	20.5	18.5	---	27.0	28.0	---	26.0
12	22.5	15.5	13.5	---	13.0	20.0	20.0	25.0	24.5	28.0	26.0	25.5
13	---	15.5	14.0	---	15.0	17.5	21.0	24.0	23.5	29.0	24.0	23.5
14	21.0	20.0	12.5	8.5	16.0	18.0	19.5	24.5	27.5	---	26.5	---
15	21.5	19.5	---	11.0	16.0	19.0	---	25.0	25.5	29.0	28.0	---
16	21.0	18.5	---	11.5	---	18.5	19.5	25.5	---	29.0	30.0	24.5
17	21.0	17.0	10.5	13.5	---	18.0	19.5	25.0	25.5	30.0	29.0	23.0
18	20.0	19.0	12.0	11.0	15.0	19.5	21.0	25.0	25.0	29.0	---	23.0
19	21.5	20.0	11.5	12.5	13.5	21.0	22.5	---	25.0	29.0	29.5	24.0
20	21.5	18.0	---	---	14.0	19.5	22.0	26.5	25.5	29.5	29.5	25.5
21	21.5	17.5	9.0	12.0	14.5	15.0	21.5	26.0	28.0	---	29.0	---
22	21.5	17.5	9.0	14.5	12.0	14.5	20.5	25.5	28.0	29.5	29.0	---
23	21.0	20.5	10.0	11.5	---	---	28.0	27.0	26.5	30.0	28.0	---
24	20.5	---	10.5	11.0	---	---	21.0	26.5	25.5	30.0	28.0	---
25	21.0	18.0	---	12.0	11.0	---	20.0	26.5	---	29.0	28.0	20.0
26	21.5	19.0	10.0	11.5	12.0	13.5	19.0	---	27.5	30.0	28.0	19.5
27	21.5	17.0	11.0	---	12.5	16.0	19.0	25.0	25.5	---	26.0	23.0
28	21.0	15.5	10.0	12.0	14.0	18.5	---	26.0	25.5	---	26.5	---
29	20.0	15.5	---	12.0	---	20.0	20.0	27.5	26.5	30.0	27.0	23.0
30	19.5	15.0	---	13.5	---	18.0	20.0	27.5	---	28.0	25.0	23.5
31	18.0	---	9.5	13.5	---	20.0	---	26.5	---	29.5	26.0	---
MONTH	22.0	17.5	---	---	---	18.5	20.5	24.5	26.0	29.0	27.5	---

TRINITY RIVER BASIN

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08057410 TRINITY RIVER BELOW DALLAS, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	STREAM WIDTH (FT)	STREAM VELOC- ITY (FPS)	MEAN DEPTH (FT)	NUMBER OF SAM- PLING POINTS	SUS- PENDE SEDIM- ENT (MG/L)	SUS- PENDE SEDIM- ENT CHARGE (T/DAY)	TOTAL SEDIM- ENT DIS- CHARGE (T/DAY)
APR. 22...	1515	4360	23.0	--	2.8	--	--	775	9120	9120
MAY 06...	1420	10100	22.0	--	3.2	9.6	5	430	11700	12600
JUNE 13...	1200	4140	24.5	123	2.8	11	5	1080	12100	12500

DATE	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM	SUS. SED. SIEVE DIAM. % FINER THAN .250 MM	SUS. SED. SIEVE DIAM. % FINER THAN .500 MM	SUS. SED. SIEVE DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM
APR. 22...	97	99	100	--	53	66	74	80	83
MAY 06...	91	94	99	100	67	72	76	78	80
JUNE 13...	98	99	100	--	58	66	73	75	77

DATE	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM
APR. 22...	--	--	--	--	--	--	--	--	--
MAY 06...	7	12	29	50	62	71	82	90	100
JUNE 13...	--	--	28	64	76	82	89	94	100

08062000 EAST FORK TRINITY RIVER NEAR CRANDALL, TEX.

LOCATION.--Lat 32°38'18", long 96°29'05", .aufman County, at gaging station at bridge on U.S. Highway 175, 0.7 mile (1.1 km) downstream from Mustang Creek, 1.8 miles (2.9 km) northwest of Crandall, and 4.0 miles (6.4 km) upstream from Buffalo Creek.

DRAINAGE AREA.--1,256 mi² (3,253 km²).

PERIOD OF RECORD.--Chemical analyses: October 1967 to September 1974.

Chemical and biochemical analyses: October 1967 to September 1974.

Water temperatures: October 1967 to September 1974.

EXTREMES.--October 1973 to September 1974:

Specific conductance: Maximum daily, 762 micromhos Feb. 17; minimum daily, 220 micromhos Oct. 31.

Water temperatures: Maximum, 33.0°C July 22, 23; minimum, 2.0°C Jan. 12.

Period of record:

Specific conductance: Maximum daily, 1,010 micromhos Nov. 23, 1968; minimum daily, 201 micromhos Oct. 20, 1971.

Water temperatures: Maximum, 33.0°C on several days during summer months of 1969 and 1974; minimum, 1.5°C Jan. 11, 1973.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

		INSTAN- TANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO2) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED SODIUM PLUS POTAS- SIUM (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	
OCT.													
11...	1705	2460	7.1	44	1.0	--	2.1	--	100	0	10	18	
29...	1030	4460	3.9	45	2.4	--	13	--	142	0	24	6.7	
NOV.													
12...	1545	3700	5.4	45	2.8	11	--	4.0	140	0	22	6.9	
14...	1020	3650	4.0	46	3.2	--	12	--	144	0	24	6.8	
DEC.													
10...	1040	1240	4.9	46	2.4	10	--	3.8	142	0	25	8.4	
27...	1615	1530	4.4	43	2.8	11	--	4.8	146	0	23	7.3	
JAN.													
29...	1310	2020	3.3	51	2.7	12	--	4.3	152	0	24	7.9	
31...	1715	468	4.6	52	3.1	19	--	5.2	161	0	31	14	
FEB.													
07...	1330	382	4.4	55	3.1	19	--	4.2	153	0	35	13	
12...	1115	71	7.9	68	4.6	57	--	7.3	229	0	67	46	
MAR.													
12...	1420	924	1.5	52	2.7	14	--	4.1	156	0	33	9.7	
APR.													
18...	1600	133	3.0	57	3.4	30	--	5.7	198	0	44	22	
MAY													
07...	1745	2020	4.4	53	2.7	13	--	4.0	172	0	28	9.0	
JUNE													
18...	1630	2990	4.8	48	2.6	11	--	4.0	154	0	25	9.0	
JULY													
17...	1800	50	10	42	3.8	57	--	10	204	0	49	38	
AUG.													
07...	1600	76	11	39	3.4	47	--	8.7	193	0	55	35	
SEP.													
27...	1220	231	8.4	59	3.2	24	--	4.5	180	0	42	18	
DATE	TIME	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)	VOL. NON- FILT- RABLE RESIDUE (MG/L)	HARD- NESS (CA+MG) (MG/L)	NON-CAR- BONATE HARD- NESS (MG/L)
OCT.													
11...	.3	--	--	--	--	--	--	--	132	--	--	110	32
29...	.4	.10	.00	.30	.15	--	.15	166	22	13	120	6	
NOV.													
12...	--	--	--	--	--	--	--	166	--	--	120	9	
14...	.4	.10	.00	.03	.13	--	.07	168	21	6	130	10	
DEC.													
10...	--	.20	.02	.16	.38	--	.11	171	77	20	120	8	
27...	--	--	--	--	--	--	--	168	--	--	120	0	
JAN.													
29...	--	.00	.02	.19	.18	--	.18	180	39	12	140	14	
31...	--	--	--	--	--	--	--	208	--	--	140	11	
FEB.													
07...	--	--	--	--	--	--	--	209	--	--	150	25	
12...	--	.02	.02	5.6	1.3	--	5.1	371	20	13	190	2	
MAR.													
12...	--	.18	.82	.11	.44	.55	.36	194	149	10	140	13	
APR.													
18...	--	.05	.03	4.0	1.7	5.7	3.4	263	9	4	160	0	
MAY													
07...	--	.20	.12	.21	.56	.77	.34	199	120	22	140	2	
JUNE													
18...	--	.14	.00	.11	.99	1.1	.24	180	127	13	130	4	
JULY													
17...	--	.07	.01	9.6	6.4	16	9.1	310	10	8	120	0	
AUG.													
07...	--	.00	.01	11	6.0	17	7.7	294	17	2	110	0	
SEP.													
27...	--	.21	.08	1.1	.80	1.9	1.4	248	62	7	160	13	

TRINITY RIVER BASIN

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08062000 EAST FORK TRINITY RIVER NEAR CRANDALL, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	BIO- CHEM- ICAL OXYGEN DEMAND (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	PHENOLS (UG/L)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)
OCT.												
11...	.1	274	7.8	22.0	--	--	--	--	--	--	--	--
29...	.5	292	6.9	17.0	20	10	7.5	77	1.5	8.5	0	.7
NOV.												
12...	.4	302	7.3	17.5	--	--	--	--	--	--	--	--
14...	.5	296	6.7	18.0	15	15	7.5	79	1.8	5.5	0	.0
DEC.												
10...	.4	301	7.0	11.5	10	40	12.4	113	1.4	12	0	.0
27...	.4	269	7.5	8.5	--	--	--	--	--	--	--	--
JAN.												
29...	.4	325	7.2	8.0	10	25	12.4	104	10	9.5	2	.0
31...	.7	375	7.7	10.5	--	--	--	--	--	--	--	--
FEB.												
07...	.7	374	7.4	8.0	--	--	--	--	--	--	--	--
12...	1.8	684	7.0	13.0	30	7	1.8	17	12	13	0	.2
MAR.												
12...	.5	342	7.5	18.0	7	65	7.4	78	6.6	4.0	0	.0
APR.												
18...	1.0	474	7.3	21.0	20	6	2.7	30	7.1	20	6	.0
MAY												
07...	.5	343	7.2	23.0	5	65	6.4	74	3.5	--	2	.0
JUNE												
18...	.4	311	7.3	26.5	5	70	6.8	83	2.4	7.4	4	.0
JULY												
17...	2.3	565	7.5	32.0	20	15	5.4	73	25	16	14	9.0
AUG.												
07...	1.9	549	7.3	27.5	40	6	3.0	38	20	16	4	.6
SEP.												
27...	.8	428	7.0	21.0	10	30	3.8	42	5.6	21	9	.0

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

MONTH	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCT- ANCE (MICRO- MHOS)	DIS- SOLVED SOLIDS (MG/L)	DIS- SOLVED SOLIDS (TONS)	DIS- SOLVED CHLORIDE (MG/L)	DIS- SOLVED CHLORIDE (TONS)	DIS- SOLVED SULFATE (MG/L)	DIS- SOLVED SULFATE (TONS)	HARDNESS (CA+MG) (MG/L)
OCT. 1973.....	127603	294	170	58600	6.9	2380	21	7240	130
NOV. 1973.....	71625	300	170	32900	7.5	1450	22	4250	130
DEC. 1973.....	35599	320	180	17300	9.5	913	25	2400	130
JAN. 1974.....	30562	323	180	14900	9.8	809	25	2060	130
FEB. 1974.....	7418	426	240	4810	20	401	39	781	150
MAR. 1974.....	6188	433	240	4010	21	351	40	668	150
APR. 1974.....	23161	356	200	12500	13	813	29	1810	140
MAY 1974.....	34251	348	200	18500	12	1110	28	2590	140
JUNE 1974.....	37240	342	190	19100	12	1210	28	2820	140
JULY 1974.....	1887	519	280	1430	29	148	51	260	150
AUG. 1974.....	2567	456	250	1730	23	159	43	298	150
SEPT 1974.....	41403	305	170	19000	8.0	894	23	2570	130
TOTAL	419504	**	**	205000	**	10600	**	27700	**
WTD.AVG.	1149.33	319	180	**	9.4	**	25	**	130

TRINITY RIVER BASIN

08062000 EAST FORK TRINITY RIVER NEAR CRANDALL, TEX.--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	341	270	302	415	380	488	630	327	504	446	419	352
2	326	300	304	433	386	615	621	331	565	407	474	413
3	313	295	300	434	388	659	558	344	632	393	540	338
4	308	311	350	445	371	673	578	342	587	417	580	310
5	305	326	314	458	371	712	619	322	603	440	589	307
6	307	316	312	479	378	616	459	303	620	518	564	311
7	303	319	311	663	375	736	446	333	509	536	509	328
8	301	299	385	726	376	736	565	399	331	523	507	387
9	300	301	428	643	380	694	455	329	375	565	541	376
10	303	317	299	372	507	500	524	346	308	551	511	369
11	274	297	304	248	602	385	554	360	346	518	424	414
12	291	292	304	296	691	362	418	377	337	531	362	364
13	286	293	298	308	708	352	405	348	366	566	388	394
14	284	293	304	311	695	402	447	348	332	566	395	336
15	293	293	361	340	749	407	438	427	355	553	448	388
16	311	292	356	343	754	399	427	493	388	542	477	384
17	319	300	349	351	762	400	464	498	365	512	529	307
18	340	344	313	358	729	406	460	481	348	527	563	280
19	315	332	310	290	725	402	457	471	345	546	550	289
20	309	324	314	305	673	396	464	450	340	546	530	325
21	303	330	365	317	555	401	488	452	318	568	513	272
22	297	276	385	323	378	436	402	468	318	562	533	276
23	297	337	487	330	347	431	314	444	335	568	525	317
24	294	304	444	353	417	437	333	493	326	506	574	384
25	291	333	333	363	427	486	359	500	344	495	552	418
26	304	303	320	341	442	627	402	429	378	531	554	428
27	290	319	306	327	464	649	332	408	421	598	525	426
28	294	317	309	320	465	688	344	407	439	536	564	314
29	291	302	310	321	---	712	349	421	457	571	413	316
30	290	308	309	358	---	663	346	448	423	616	460	314
31	220	---	398	381	---	759	---	554	---	647	322	---
MONTH	300	308	338	386	518	536	455	408	411	529	498	348

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	24.0	17.0	15.5	6.0	12.0	15.0	22.0	19.0	25.0	26.0	29.0	26.0
2	24.0	18.0	15.0	4.0	12.0	18.0	21.0	22.0	27.0	26.0	28.0	28.0
3	24.0	17.0	16.0	4.5	11.0	19.0	22.0	23.0	26.0	27.0	28.0	24.0
4	25.0	17.0	14.0	5.0	10.0	19.0	20.0	21.0	27.0	27.0	27.0	24.0
5	23.0	16.0	13.0	5.0	11.0	19.0	18.0	20.0	27.0	27.0	28.0	24.0
6	24.0	15.0	13.0	7.0	10.0	21.0	16.0	20.0	27.0	28.0	26.0	24.0
7	23.0	15.0	12.0	7.5	8.0	21.0	18.0	21.0	27.0	28.0	25.0	24.0
8	25.0	17.0	11.0	9.0	8.0	22.0	17.0	23.0	25.0	28.0	26.0	24.0
9	24.0	15.0	12.0	9.0	8.0	21.0	18.0	21.0	23.0	29.0	26.0	24.0
10	24.0	14.0	11.0	3.0	9.0	21.0	17.0	22.0	23.0	29.0	27.0	23.0
11	22.0	13.0	10.0	2.5	9.0	17.0	16.0	21.0	25.0	29.0	25.0	24.0
12	23.0	14.0	12.0	2.0	12.0	16.0	18.0	23.0	25.0	28.0	26.0	25.0
13	22.0	16.0	13.0	4.0	14.0	16.5	19.0	23.0	23.0	29.0	26.0	23.0
14	22.0	17.0	13.0	6.0	15.0	17.0	19.0	22.0	26.0	31.0	27.0	22.0
15	22.0	17.0	12.0	7.0	16.0	18.0	18.0	24.0	29.0	30.0	30.0	22.0
16	21.0	15.0	11.0	8.0	13.0	17.0	18.0	25.0	27.0	31.0	30.0	24.0
17	20.0	14.0	11.0	11.0	14.0	17.0	19.0	25.0	25.0	31.0	30.0	23.0
18	20.0	17.0	11.0	13.0	14.5	19.0	20.0	25.0	26.0	31.0	30.0	22.0
19	20.0	17.0	11.0	11.0	14.0	20.0	20.0	26.0	26.0	29.0	31.0	24.0
20	21.0	16.0	7.0	10.0	14.0	17.0	20.0	26.0	27.0	30.0	29.0	24.0
21	21.0	17.0	7.0	11.0	14.0	14.0	21.0	25.0	27.0	32.0	29.0	22.0
22	22.0	16.0	9.0	12.0	10.0	13.0	20.0	25.0	29.0	33.0	30.0	22.0
23	22.0	16.0	11.0	11.0	10.0	15.0	20.0	24.0	27.0	33.0	29.0	20.0
24	23.0	18.0	11.0	10.0	10.0	12.0	20.0	27.0	27.0	31.0	29.0	19.0
25	23.0	18.0	9.0	10.0	9.0	11.0	21.0	27.0	26.0	30.0	28.0	18.0
26	24.0	17.0	8.5	11.0	9.0	12.0	20.0	26.0	27.0	30.0	28.0	19.0
27	20.0	17.0	8.5	11.0	11.0	13.0	19.0	24.0	25.0	32.0	27.0	20.0
28	18.0	16.0	11.0	10.0	14.0	16.0	20.0	25.0	25.0	30.0	27.0	21.0
29	17.0	15.0	10.0	8.0	---	18.0	20.0	26.0	26.0	32.0	26.0	19.0
30	17.0	15.0	10.0	8.0	---	18.0	19.0	27.0	27.0	30.0	26.0	20.0
31	16.0	---	8.0	10.0	---	21.0	---	26.0	---	28.0	25.5	---
MONTH	22.0	16.0	11.0	8.0	11.5	17.0	19.0	23.5	26.0	29.5	27.5	22.5

TRINITY RIVER BASIN

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08062500 TRINITY RIVER NEAR ROSSER, TEX.

LOCATION.--Lat 32°25'36", long 96°27'44", Kaufman County, at gaging station at bridge on State Highway 34, 2.5 miles (4.0 km) south of Rosser, and 8.5 miles (13.7 km) downstream from East Fork Trinity River.

DRAINAGE AREA.--8,146 mi² (21,098 km²).

PERIOD OF RECORD.--Chemical analyses: October 1954 to September 1974.

Chemical and biochemical analyses: January 1968 to September 1974.

Pesticide analyses: January 1968 to September 1974.

Water temperatures: October 1954 to September 1974.

EXTREMES.--October 1973 to September 1974:

Specific conductance: Maximum daily, 938 micromhos July 26; minimum daily, 289 micromhos Oct. 12, Sept. 20.

Water temperatures: Maximum, 31.5°C July 24; minimum, 4.0°C Jan. 13.

Period of record:

Specific conductance: Maximum daily, 2,990 micromhos Oct. 13, 1956; minimum daily, 200 micromhos July 30, 1962.

Water temperatures: Maximum, 36.0°C July 1, 1955; minimum, 1.0°C on several days during December and January of most years.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SIU2) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED SODIUM PLUS POTAS- SIUM (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
OCT. 29...	1115	7750	6.1	47	3.1	--	19	--	144	0	32	14
NOV. 14...	1115	4180	1.0	54	5.7	--	21	--	172	0	36	16
30...	0845	6330	7.1	54	5.7	--	20	--	172	0	33	18
DEC. 06...	1535	2670	7.6	55	3.9	28	--	5.8	169	0	50	24
08...	1345	1990	8.8	58	3.6	32	--	5.4	176	0	46	25
JAN. 14...	1630	3160	6.2	60	3.4	25	--	5.9	168	0	47	19
29...	1400	3270	6.1	62	4.0	35	--	5.5	186	0	48	27
FEB. 12...	1330	762	8.4	72	5.7	71	--	7.6	218	0	89	51
25...	1415	1190	8.5	69	5.0	50	--	7.1	189	0	75	39
MAR. 08...	1115	725	13	70	6.0	100	--	10	221	0	110	61
12...	1200	1620	5.3	62	4.7	51	--	6.9	206	0	61	38
APR. 18...	1800	606	9.9	58	5.3	78	--	9.1	174	0	100	58
MAY 08...	0830	13000	6.3	53	3.9	24	--	5.5	144	0	61	18
JUNE 18...	1725	4850	6.3	48	3.9	27	--	4.3	174	0	42	24
JULY 17...	1645	358	14	48	5.9	100	--	12	250	0	84	76
AUG. 08...	1200	857	16	41	5.1	96	--	11	216	0	100	70
SEP. 27...	1330	4290	7.7	63	4.6	38	--	8.6	152	0	89	26

TRINITY RIVER BASIN

08062500 TRINITY RIVER NEAR ROSSER, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)	VOL. NON- FILT- RABLE RESIDUE (MG/L)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)
OCT.												
29...	.4	.20	.01	.22	.06	--	.80	194	--	--	130	12
NOV.												
14...	.5	.80	.07	.72	.19	--	.76	224	186	29	160	17
30...	.4	--	--	--	--	--	--	223	--	--	160	17
DEC.												
06...	--	--	--	--	--	--	--	258	--	--	150	15
08...	--	.90	.11	1.6	.40	--	1.1	266	153	36	160	15
JAN.												
14...	--	--	--	--	--	--	--	249	--	--	160	26
29...	--	.90	.10	1.8	.20	--	1.4	283	190	39	170	19
FEB.												
12...	--	1.2	.20	4.4	.94	--	3.0	412	28	8	200	24
25...	--	--	--	--	--	--	--	347	--	--	190	38
MAR.												
08...	--	--	--	--	--	--	--	479	--	--	200	18
12...	--	.23	.03	2.5	1.5	4.0	2.6	330	193	16	170	5
APR.												
18...	--	.27	--	--	1.9	--	--	405	71	10	170	25
MAY												
08...	--	.62	.05	.64	1.2	1.8	.57	243	250	33	150	30
JUNE												
18...	--	.67	.18	1.0	.80	1.8	1.1	242	361	52	140	0
JULY												
17...	--	.11	.06	8.9	6.1	15	7.1	463	19	11	140	0
AUG.												
08...	--	.02	.01	8.9	.90	9.8	5.6	447	22	0	120	0
SEP.												
27...	--	.55	.14	1.2	1.4	2.6	.83	312	337	36	180	52
DATE	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	PHENOLS (UG/L)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)
OCT.												
29...	.7	342	7.1	19.0	--	--	7.2	77	4.5	9.5	0	.3
NOV.												
14...	.7	393	6.8	18.5	100	80	6.7	71	3.0	6.5	2	.0
30...	.7	415	7.6	14.0	--	--	--	--	--	--	--	--
DEC.												
06...	1.0	465	7.6	12.5	--	--	--	--	--	--	--	--
08...	1.1	474	6.9	11.0	20	70	10.0	90	2.4	--	9	.2
JAN.												
14...	.9	441	7.3	8.0	--	--	--	--	--	--	--	--
29...	1.2	510	7.1	11.0	20	75	9.0	81	14	10	4	.0
FEB.												
12...	2.2	744	7.1	13.5	30	20	5.5	52	15	7.5	0	.1
25...	1.6	622	7.1	10.5	--	--	--	--	--	--	--	--
MAR.												
08...	3.1	852	7.1	21.0	--	--	--	--	--	--	--	--
12...	1.7	596	7.1	19.5	8	70	3.8	41	19	7.5	0	.7
APR.												
18...	2.6	759	7.2	22.0	35	30	2.7	31	14	11	--	.3
MAY												
08...	.9	418	6.8	22.0	5	65	3.6	41	5.6	12	2	.1
JUNE												
18...	1.0	416	7.2	27.0	5	85	4.0	49	10	14	3	.0
JULY												
17...	3.6	818	7.5	31.5	10	7	5.8	78	19	20	8	.4
AUG.												
08...	--	785	7.1	27.0	30	6	.8	10	16	14	15	1.1
SEP.												
27...	1.2	525	6.4	21.5	25	130	4.2	47	5.7	14	0	.0

TRINITY RIVER BASIN

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08062500 TRINITY RIVER NEAR ROSSEY, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

		DIS-SOLVED ALUMINUM (AL) (UG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	DIS-SOLVED BORON (B) (UG/L)	DIS-SOLVED CADMIUM (CD) (UG/L)	DIS-SOLVED CHROMIUM (CR) (UG/L)	DIS-SOLVED COBALT (CO) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)
DATE	TIME							
OCT. 29...	1115	90	5	--	0	0	0	5
JAN. 29...	1400	30	5	130	1	0	0	9
APR. 18...	1800	30	--	350	0	10	0	5
JUNE 18...	1725	60	1	110	1	0	0	6
AUG. 08...	1200	50	2	370	0	0	1	6

		DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	DIS-SOLVED LITHIUM (LI) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)	DIS-SOLVED MERCURY (HG) (UG/L)	DIS-SOLVED NICKEL (NI) (UG/L)	DIS-SOLVED STRONTIUM (SR) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)
DATE	TIME								
OCT. 29...	80	2	0	0	.0	10	420	20	
JAN. 29...	2300	4	0	70	.1	17	620	40	
APR. 18...	170	3	10	20	.2	42	600	10	
JUNE 18...	40	5	0	0	.0	8	420	30	
AUG. 08...	140	4	0	170	.0	42	340	0	

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TEMPERATURE (DEG C)	ALDRIN (UG/L)	ALDRIN IN BOTTOM DE-POSITS (UG/KG)	DDD (UG/L)	DDD IN BOTTOM DE-POSITS (UG/KG)	DDE (UG/L)	DDE IN BOTTOM DE-POSITS (UG/KG)	DDT (UG/L)	DDT IN BOTTOM DE-POSITS (UG/KG)
OCT. 29...	1115	7750	19.0	.00	--	.00	--	.00	--	.00	--
JAN. 29...	1400	3270	11.0	--	.0	--	1.2	--	2.4	--	3.8
FEB. 12...	1330	762	13.5	.00	.0	.00	1.8	.00	2.4	.00	2.4
APR. 18...	1800	606	22.0	.01	--	.00	--	.00	--	.01	--
AUG. 08...	1200	857	27.0	.00	.0	.00	4.8	.00	7.1	.00	5.3

DATE	DI-ELDRIN (UG/L)	DI-ELDRIN IN BOTTOM DE-POSITS (UG/KG)	ENDRIN (UG/L)	ENDRIN IN BOTTOM DE-POSITS (UG/KG)	HEPTA-CHLOR (UG/L)	HEPTA-CHLOR IN BOTTOM DE-POSITS (UG/KG)	HEPTA-CHLOR EPOXIDE (UG/L)	HEPTA-CHLOR EPOXIDE IN BOTTOM DE-POSITS (UG/KG)	LINDANE (UG/L)	LINDANE IN BOTTOM DE-POSITS (UG/KG)	CHLOR-DANE (UG/L)
OCT. 29...	.01	--	.00	--	.00	--	.00	--	.00	--	.0
JAN. 29...	--	2.6	--	.0	--	.0	--	.0	--	.0	--
FEB. 12...	.04	8.8	.00	.0	.00	.0	.00	.0	.02	.0	.0
APR. 18...	.14	--	.00	--	.00	--	.00	--	.00	--	.3
AUG. 08...	.01	5.4	.00	.0	.00	.0	.00	.0	.00	.0	--

DATE	CHLOR-DANE IN BOTTOM DE-POSITS (UG/KG)	PCB (UG/L)	PCB IN BOTTOM DE-POSITS (UG/KG)	DI-AZINON (UG/L)	MALATHION (UG/L)	METHYL PARA-THION (UG/L)	PARA-THION (UG/L)	2,4-D (UG/L)	SILVEX (UG/L)	2,4,5-T (UG/L)
OCT. 29...	--	.0	--	.02	.00	.00	.00	.02	.00	.00
JAN. 29...	13	--	0	--	--	--	--	--	--	--
FEB. 12...	26	.0	0	.22	.00	.00	.00	.02	.00	.01
APR. 18...	--	.0	--	.06	.00	.00	.00	--	--	--
AUG. 08...	130	.0	97	.83	.00	.00	.00	.13	.00	.05

TRINITY RIVER BASIN

08062500 TRINITY RIVER NEAR ROSSER, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	STREAM VELOC- ITY (FPS)	MEAN DEPTH (FT)	NUMBER OF SAM- PLING POINTS	SUS- PEN- DED SEDI- MENT DIS- CHARGE (MG/L)	SUS- PEN- DED SEDI- MENT DIS- CHARGE (T/DAY)	TOTAL SEDI- MENT DIS- CHARGE (T/DAY)
APR. 24...	1430	6670	21.5	2.5	16	5	708	12800	13300
MAY 08...	1346	13000	23.5	3.4	20	5	231	8110	8310
JUNE 14...	1310	5730	25.0	2.4	14	5	833	12900	13000
DATE		SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM	SUS. SED. SIEVE DIAM. % FINER THAN .250 MM	SUS. SED. SIEVE DIAM. % FINER THAN .500 MM	SUS. SED. SIEVE DIAM. % FINER THAN .002 MM	SUS. SED. SIEVE DIAM. % FINER THAN .004 MM	SUS. SED. SIEVE DIAM. % FINER THAN .008 MM	SUS. SED. SIEVE DIAM. % FINER THAN .031 MM
APR. 24...	72	78	97	100	54	56	61	62	64
MAY 08...	84	91	97	100	50	62	63	72	82
JUNE 14...	94	96	99	100	62	69	80	87	92
DATE		BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM
APR. 24...	22	32	59	72	77	83	90	98	100
MAY 08...	1	6	25	45	54	63	75	90	100
JUNE 14...	1	7	34	58	71	81	90	98	100

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

MONTH	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCT- ANCE (MICRO- MHOS)	DIS- SOLVED SOLIDS (MG/L)	DIS- SOLVED SOLIDS (TONS)	DIS- SOLVED CHLORIDE (MG/L)	DIS- SOLVED CHLORIDE (TONS)	DIS- SOLVED SULFATE (MG/L)	DIS- SOLVED SULFATE (TONS)	HARDNESS (CA+MG) (MG/L)
OCT. 1973.....	268720	351	200	145000	10	7260	29	21000	130
NOV. 1973.....	159310	391	220	94600	14	6020	35	15100	140
DEC. 1973.....	79650	471	260	55900	23	4950	47	10100	160
JAN. 1974.....	88230	500	280	66700	27	6430	52	12400	170
FEB. 1974.....	35263	672	380	36200	46	4380	79	7520	180
MAR. 1974.....	27932	725	410	30900	52	3920	87	6560	190
APR. 1974.....	53631	535	300	43400	30	4340	57	8250	180
MAY 1974.....	108309	469	260	76000	23	6730	47	13700	160
JUNE 1974.....	92720	441	250	62600	20	5010	43	10800	150
JULY 1974.....	15979	817	460	19800	62	2670	100	4310	190
AUG. 1974.....	29975	587	330	26700	36	2910	65	5260	180
SEPT 1974.....	88391	424	240	57300	18	4300	40	9550	150
TOTAL	1048110	**	**	715000	**	58900	**	125000	**
WTD.AVG.	2871.53	449	250	**	21	**	44	**	150

TRINITY RIVER BASIN

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08062500 TRINITY RIVER NEAR ROSSER, TEX.--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	369	358	375	526	661	692	905	489	742	704	553	444
2	374	315	387	580	591	712	810	477	723	731	592	521
3	345	325	435	590	632	735	816	408	748	734	661	589
4	388	366	437	610	636	723	816	439	830	821	724	575
5	368	433	448	620	629	688	886	390	845	852	696	478
6	396	380	470	630	651	674	879	379	827	856	726	501
7	397	389	471	640	463	728	842	450	753	843	677	506
8	382	379	461	650	647	865	820	421	500	869	731	539
9	362	386	510	660	640	812	832	450	439	869	669	685
10	416	363	680	600	669	852	838	521	412	831	706	718
11	386	360	472	450	746	798	829	443	344	801	600	683
12	289	370	434	432	736	603	650	437	419	856	538	654
13	337	383	439	435	775	542	589	488	416	889	529	623
14	324	380	477	419	853	549	661	494	475	872	394	400
15	305	397	443	460	818	570	708	542	409	852	420	645
16	320	380	476	533	880	696	712	653	499	886	514	579
17	336	378	560	584	846	723	692	597	438	843	593	467
18	406	399	566	592	873	725	694	620	408	809	707	358
19	375	491	523	654	821	704	768	656	401	875	736	337
20	362	550	544	421	837	694	765	687	418	889	769	289
21	352	617	522	519	824	733	781	685	376	882	769	372
22	341	483	552	442	649	789	650	675	375	893	753	406
23	341	519	618	483	596	781	508	742	407	911	833	356
24	352	534	589	514	515	806	422	767	423	836	880	347
25	378	534	492	554	587	827	449	723	425	926	627	429
26	400	421	489	574	665	840	408	779	448	938	797	536
27	338	396	483	560	733	781	444	705	546	760	853	493
28	342	431	471	477	698	856	438	524	665	723	500	531
29	342	394	459	493	---	846	438	616	715	781	402	540
30	348	415	466	492	---	907	440	648	717	694	488	424
31	336	---	461	530	---	930	---	750	---	678	664	---
MONTH	358	418	491	539	703	748	683	570	538	829	648	501

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	24.0	17.0	14.0	7.0	13.0	15.0	22.5	21.0	26.0	28.0	28.0	27.0
2	24.0	18.0	15.0	7.0	14.0	16.0	20.5	20.5	27.0	28.0	28.0	28.0
3	25.0	17.5	16.5	---	13.0	18.0	23.0	23.0	27.0	29.0	29.0	25.0
4	26.0	18.5	15.0	---	12.0	19.5	22.0	23.0	27.0	28.0	28.0	23.0
5	25.0	18.0	13.0	---	12.0	19.5	18.0	22.0	28.0	28.0	28.0	23.0
6	24.0	17.0	12.0	---	14.0	20.5	18.0	20.0	28.0	28.0	28.0	22.0
7	24.0	17.0	10.0	---	12.0	21.0	18.5	20.0	28.0	26.5	26.5	23.0
8	24.0	17.5	10.5	---	10.0	21.0	19.0	22.0	27.0	27.0	27.0	24.0
9	25.0	18.0	11.0	---	10.0	21.5	17.0	22.5	25.0	28.0	28.0	24.0
10	25.0	16.0	11.5	---	9.0	22.0	18.0	24.0	24.0	28.0	28.0	24.0
11	24.0	16.0	11.0	---	11.5	21.5	---	22.0	24.0	29.0	28.0	24.0
12	21.5	15.0	12.0	5.0	11.0	20.0	19.0	23.0	26.0	29.0	26.0	25.0
13	27.0	16.0	13.0	4.0	14.0	18.0	20.0	24.0	24.0	29.0	26.0	25.0
14	23.0	18.5	12.0	5.0	15.0	17.0	20.0	24.0	25.0	30.0	25.0	23.0
15	22.0	19.0	11.5	9.0	15.0	18.0	20.0	25.0	26.0	30.0	27.0	23.0
16	27.0	17.0	11.0	10.0	15.0	19.0	20.0	26.0	27.0	30.5	28.0	23.0
17	21.0	16.0	10.0	11.0	13.5	18.0	19.5	26.0	26.5	30.5	29.0	23.0
18	21.5	17.5	11.0	14.0	15.0	19.5	20.0	26.0	26.0	30.0	30.0	23.0
19	21.5	18.5	10.0	14.0	14.0	21.0	21.0	27.0	26.0	30.5	30.0	22.0
20	20.5	18.0	8.5	11.0	14.5	20.0	22.0	26.5	27.0	30.0	30.5	24.0
21	20.5	17.0	7.0	11.0	15.0	16.0	22.0	27.0	27.5	30.0	30.0	24.0
22	20.0	17.0	7.5	12.5	13.0	17.0	22.0	26.0	28.0	31.0	30.0	23.0
23	21.0	18.0	10.0	10.5	12.0	16.0	20.0	26.0	28.0	31.0	29.0	21.0
24	20.5	20.0	11.0	9.5	11.0	13.0	20.0	27.0	27.0	31.5	29.0	20.0
25	20.0	18.5	10.0	10.0	10.0	12.0	21.0	27.0	25.0	30.0	29.0	19.0
26	22.0	18.0	9.0	10.5	10.0	13.0	21.0	27.0	25.0	31.0	28.0	19.0
27	22.0	22.0	9.0	11.0	11.0	15.0	20.0	26.0	25.0	30.5	28.0	18.5
28	20.0	16.0	12.0	10.0	12.0	16.0	21.0	25.0	25.5	31.0	27.0	21.0
29	19.0	14.0	11.0	10.0	---	17.0	21.0	27.0	27.0	31.0	26.0	20.0
30	19.0	14.0	10.0	10.0	---	17.0	22.0	28.0	27.0	30.0	25.5	20.0
31	18.0	---	9.0	11.0	---	20.0	---	27.0	---	29.0	26.0	---
MONTH	22.5	17.5	11.0	---	12.5	18.0	20.5	24.5	26.5	29.5	28.0	23.0

TRINITY RIVER BASIN

08062700 TRINITY RIVER AT TRINIDAD, TEX.

LOCATION.--Lat 32°08'05", long 96°06'20", Henderson County, at pumping station of Texas Power and Light Co., near southwest boundary of Trinidad, 0.5 mile (0.8 km) downstream from St. Louis Southwestern Railway Lines bridge, and 0.9 mile (1.4 km) downstream from bridge on State Highway 31.

DRAINAGE AREA.--8,538 mi² (22,113 km²).

PERIOD OF RECORD.--Chemical analyses: April 1967 to September 1970.
Chemical and biochemical analyses: January 1968 to September 1974.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

		INSTAN- TANEOUS 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 SODIUM PLUS POTAS- SIUM (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	
OCT.											
29...	1315	7710	6.0	48	4.4	--	20	--	148	0	
NOV.											
14...	1330	4310	6.2	53	4.8	--	21	--	164	0	
DEC.											
08...	1300	2440	7.7	57	3.9	30	--	5.4	172	0	
JAN.											
29...	1630	4860	--	56	3.4	25	--	5.0	168	0	
FEB.											
14...	1200	795	9.4	75	5.9	69	--	7.8	225	0	
MAR.											
12...	0915	2860	3.0	39	4.2	37	--	5.8	124	0	
APR.											
16...	1030	813	7.7	58	4.9	63	--	7.7	173	0	
MAY											
08...	1045	15100	5.5	43	3.2	18	--	4.5	120	0	
JUNE											
19...	0930	5090	6.2	48	3.9	25	--	4.8	154	0	
JULY											
16...	1330	444	13	53	5.5	110	--	13	226	0	
AUG.											
08...	1400	678	13	48	5.4	87	--	10	207	0	
SEP.											
25...	1145	9370	6.5	46	3.3	16	--	5.5	140	0	
DATE		DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITU- TENTS) (MG/L)
OCT.											
29...	31	15	.4	1.8	.01	.10	.10	--	.80	206	
NOV.											
14...	36	16	.5	1.0	.10	.27	.24	--	.77	224	
DEC.											
08...	46	24	--	1.7	.17	.79	.34	--	.85	259	
JAN.											
29...	--	--	--	.80	.08	1.9	.21	--	.73	--	
FEB.											
14...	83	53	--	3.1	.02	2.9	.72	--	3.8	413	
MAR.											
12...	47	31	--	2.0	.01	1.2	.90	2.1	1.7	228	
APR.											
16...	83	50	--	1.4	.41	4.0	1.2	5.2	2.8	360	
MAY											
08...	43	15	--	1.5	.13	.25	.75	1.0	.32	191	
JUNE											
19...	41	23	--	1.2	.23	.12	.88	1.0	1.4	228	
JULY											
16...	100	84	--	1.6	1.2	3.2	2.8	6.0	7.3	490	
AUG.											
08...	88	70	--	.38	.31	7.0	.30	7.3	5.7	423	
SEP.											
25...	41	11	--	.40	.08	.52	1.1	1.6	.48	198	

TRINITY RIVER BASIN

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08062700 TRINITY RIVER AT TRINIDAD, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	BIO- CHEM- ICAL OXYGEN DEMAND (MG/L)
OCT. 29...	140	17	.7	348	6.8	20.5	7.2	79	1.2
NOV. 14...	150	18	.7	383	6.9	18.0	7.2	76	1.8
DEC. 08...	160	17	1.0	465	6.9	12.0	9.2	85	4.2
JAN. 29...	150	16	.9	436	7.1	11.0	10.3	93	14
FEB. 14...	210	27	2.1	739	7.1	13.5	6.3	60	18
MAR. 12...	110	13	1.5	422	7.2	18.0	7.2	76	12
APR. 16...	170	23	2.1	644	7.2	20.0	4.6	50	23
MAY 08...	120	22	.7	334	6.9	22.5	5.1	58	3.1
JUNE 19...	140	10	.9	400	7.1	28.0	3.7	47	3.6
JULY 16...	160	0	3.8	850	7.4	31.0	2.1	28	13
AUG. 08...	140	0	3.2	759	7.3	28.0	3.0	38	14
SEP. 25...	130	14	.6	343	6.7	20.5	5.2	57	11

TRINITY RIVER BASIN

08063500 RICHLAND CREEK NEAR RICHLAND, TEX.

LOCATION.--Lat 31°57'00", long 96°25'17", Navarro County, at gaging station at bridge on U.S. Highway 75, 1 mile (2 km) north of Richland, and 3.5 miles (5.6 km) downstream from Pin Oak Creek.

DRAINAGE AREA.--734 mi² (1,901 km²).

PERIOD OF RECORD.--Chemical analyses: October 1967 to September 1974 (discontinued).
Water temperatures: October 1967 to September 1970.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM PLUS POTAS- SIUM (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)
NOV. 08...	1230	998	6.3	44	3.2	9.0	126	0	24
DEC. 06...	1225	42	8.2	47	5.5	17	132	0	44

DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	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)
NOV. 08...	9.5	.3	158	120	20	.4	320	7.2	18.0
DEC. 06...	16	.3	203	140	32	.6	363	7.1	13.0

TRINITY RIVER BASIN

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08064500 CHAMBERS CREEK NEAR CORSICANA, TEX.

LOCATION.--Lat 32°06'29", long 96°22'14", Navarro County, at gaging station at bridge on State Highway 31, 6,000 ft (1,800 m) upstream from city of Corsicana diversion dam, 5.3 miles (8.5 km) east of Corsicana, and 17 miles (27 km) upstream from Richland Creek.

DRAINAGE AREA.--963 mi² (2,494 km²).

PERIOD OF RECORD.--Chemical analyses: September 1961 to September 1974.
Water temperatures: September 1961 to September 1970.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	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 SODIUM PLUS POTAS- SIUM (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)
OCT. 12...	1425	2350	8.5	51	3.6	--	9.5	--	142	0
NOV. 06...	1355	733	5.2	50	4.0	--	6.6	--	141	0
DEC. 04...	1120	12	7.4	87	8.0	--	23	--	214	0
JAN. 17...	1140	310	4.7	64	4.4	23	--	4.3	171	0
FEB. 26...	1030	189	4.4	84	4.9	32	--	3.9	184	0
MAY 23...	1100	7.8	3.6	58	3.6	22	--	3.6	165	0
JULY 09...	0925	1.3	7.4	100	6.4	60	--	4.9	204	0
AUG. 20...	1000	1.2	8.8	38	2.2	18	--	5.1	121	0

DATE	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	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)
OCT. 12...	33	8.5	.0	184	140	26	.3	353	7.0	21.5
NOV. 06...	24	10	.3	169	140	25	.2	337	7.5	9.5
DEC. 04...	85	24	.4	340	250	74	.6	599	7.9	14.5
JAN. 17...	57	19	--	261	180	38	.8	448	7.6	8.0
FEB. 26...	98	25	--	343	230	79	.9	565	7.5	10.5
MAY 23...	43	20	--	235	160	24	.8	408	7.7	26.0
JULY 09...	160	52	--	491	280	110	1.6	802	7.3	--
AUG. 20...	19	16	--	167	100	5	.8	296	7.1	29.0

08064600 RICHLAND CREEK NEAR FAIRFIELD, TEX.

LOCATION.--Lat 31°57'05", long 96°05'52", Freestone County, at gaging station at bridge on Farm Road 488, 5.8 miles (9.3 km) upstream from mouth, 9.0 miles (14.5 km) downstream from Chambers Creek, and 16 miles (26 km) north of Fairfield.

DRAINAGE AREA.--1,957 mi² (5,069 km²).

PERIOD OF RECORD.--Chemical analyses: April 1956 to September 1966, March 1972 to September 1974.
Water temperatures: April 1956 to September 1966, March 1972 to September 1974.

EXTREMES.--October 1973 to September 1974:

Specific conductance: Maximum daily, 1,390 micromhos July 14; minimum daily, 194 micromhos Sept. 17.
Water temperatures: Maximum, 33.5°C July 23; minimum, 4.5°C Jan. 13.

Period of record:

Specific conductance: Maximum daily, 22,000 micromhos Aug. 22, 1956; minimum daily, 157 micromhos Apr. 25, 1957.
Water temperatures: Maximum, 37.0°C Aug. 14, 1961; minimum, freezing point Jan. 3, 4, 1959.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	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)	DIS- SOLVED SULFATE (SO ₄) (MG/L)
OCT. 27...	2000	1670	5.7	43	3.3	14	4.3	132	0	32
NOV. 07...	1245	1730	8.7	50	3.3	15	4.2	146	0	33
DEC. 05...	1120	732	9.4	49	4.8	28	5.9	144	0	34
JAN. 15...	1310	280	5.7	72	5.7	36	5.1	151	0	110
FEB. 27...	1620	472	5.0	62	4.8	28	3.9	166	0	64
MAR. 10...	2230	76	4.0	90	7.2	65	5.4	230	0	120
APR. 09...	1670	31	4.0	99	9.9	76	5.3	215	0	160
MAY 24...	1615	125	4.7	57	3.7	27	4.2	163	0	45
JUNE 30...	1100	10	4.5	66	7.2	85	5.6	104	0	150
JULY 09...	1525	5.8	5.7	91	9.8	100	7.0	182	0	180
AUG. 20...	1550	9.4	7.6	56	4.9	34	5.8	140	0	64
SEP. 30...	1815	371	7.1	45	4.4	21	4.5	132	0	46

DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	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)
OCT. 27...	14	.3	182	120	13	.6	295	7.6	20.5
NOV. 07...	13	--	199	140	19	.6	351	7.9	28.0
DEC. 05...	28	--	230	140	24	1.0	382	7.5	13.0
JAN. 15...	33	--	342	200	79	1.1	588	7.4	9.0
FEB. 27...	26	--	276	170	38	.9	478	7.5	10.0
MAR. 10...	58	--	463	250	66	1.8	794	7.6	23.0
APR. 09...	80	--	540	290	110	1.9	906	7.4	22.0
MAY 24...	29	--	251	160	24	.9	453	8.0	30.0
JUNE 30...	100	--	470	190	110	2.7	833	7.5	27.0
JULY 09...	110	--	593	270	120	2.7	1000	7.5	33.0
AUG. 20...	34	--	275	160	45	1.2	508	7.4	33.0
SEP. 30...	18	--	211	130	22	.8	375	8.2	21.5

TRINITY RIVER BASIN

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08064600 RICHLAND CREEK NEAR FAIRFIELD, TEX.--Continued

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

MONTH	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCT- ANCE (MICRO- MHOS)	DIS- SOLVED SOLIDS (MG/L)	DIS- SOLVED SOLIDS (TONS)	DIS- SOLVED CHLORIDE (MG/L)	DIS- SOLVED CHLORIDE (TONS)	DIS- SOLVED SULFATE (MG/L)	DIS- SOLVED SULFATE (TONS)	HARDNESS (CA+MG) (MG/L)
OCT. 1973.....	69578	308	180	33800	14	2630	30	5640	130
NOV. 1973.....	25517	397	230	15800	21	1450	40	2760	150
DEC. 1973.....	13217	406	240	8560	22	785	42	1500	150
JAN. 1974.....	24611	408	240	15900	22	1460	42	2790	150
FEB. 1974.....	11231	499	290	8790	29	879	64	1940	180
MAR. 1974.....	6588	514	300	5340	30	534	67	1190	180
APR. 1974.....	1850	852	490	2450	73	365	150	749	270
MAY 1974.....	17604	471	280	13300	26	1240	56	2660	170
JUNE 1974.....	1383.8	775	450	1680	54	202	130	486	250
JULY 1974.....	402.4	952	550	598	98	106	180	196	290
AUG. 1974.....	2119.6	363	210	1200	18	103	36	206	140
SEPT 1974.....	37712	276	170	17300	12	1220	26	2650	120
TOTAL	211813.6	**	**	125000	**	11000	**	22800	**
WTD.AVG.	580.31	370	220	**	19	**	40	**	140

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	411	427	463	497	447	536	826	860	627	864	795	286
2	404	469	538	693	463	545	826	910	814	907	780	368
3	327	371	556	706	475	540	849	435	961	937	808	345
4	342	365	430	728	479	541	883	500	970	961	955	421
5	367	389	453	740	464	556	887	572	785	987	636	405
6	276	413	475	738	469	586	883	448	814	987	530	435
7	272	313	448	743	488	614	873	446	868	1040	582	478
8	328	311	477	760	503	739	898	442	851	1030	568	547
9	350	318	576	768	554	783	916	536	845	1000	618	582
10	353	361	592	770	690	794	948	430	882	1040	643	613
11	418	362	625	817	719	797	905	377	987	1120	700	664
12	273	363	667	462	722	797	940	417	814	1120	726	381
13	273	359	707	792	752	349	1070	505	832	1080	416	398
14	277	361	462	601	762	385	1120	470	712	1390	517	256
15	297	358	459	590	773	448	883	474	817	1290	409	197
16	302	359	459	571	770	498	973	492	774	925	581	210
17	333	360	462	589	796	508	995	494	628	868	439	194
18	334	362	482	588	773	478	965	481	606	903	479	223
19	352	364	462	486	738	461	986	450	611	885	495	290
20	331	333	310	319	764	448	944	470	654	864	498	317
21	300	394	349	333	348	457	986	448	724	847	501	335
22	301	423	465	374	400	469	982	441	829	801	532	226
23	310	422	515	392	449	511	1080	485	814	793	576	282
24	292	501	295	431	552	671	508	470	764	796	588	310
25	295	503	309	433	527	631	532	459	729	793	659	328
26	293	473	357	353	518	687	956	448	729	807	637	333
27	295	423	405	327	493	742	960	454	736	819	586	342
28	344	483	436	339	509	772	1080	502	748	844	589	351
29	399	533	424	365	---	792	1040	529	791	867	631	372
30	398	462	412	409	---	786	916	584	832	733	357	375
31	255	---	466	444	---	814	---	640	---	795	231	---
MONTH	326	398	469	553	586	604	920	505	785	938	583	362

TRINITY RIVER BASIN

08064600 RICHLAND CREEK NEAR FAIRFIELD, TEX.--Continued

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	24.0	18.0	15.5	8.0	14.0	17.0	24.5	23.5	26.0	28.5	31.0	26.5
2	25.0	18.0	15.5	7.0	15.0	18.0	24.0	26.5	28.0	30.0	31.0	25.0
3	25.0	19.0	17.0	5.0	13.5	19.5	24.0	24.5	28.0	32.0	29.0	23.5
4	25.5	18.0	14.5	6.0	14.0	20.5	19.5	---	29.5	30.5	27.0	23.5
5	25.5	18.0	14.0	7.5	14.0	21.5	20.5	23.5	28.5	30.0	28.0	24.0
6	23.5	18.0	12.5	7.5	12.5	22.0	21.5	22.0	28.5	31.5	26.5	25.0
7	23.0	18.5	11.5	8.5	11.5	22.5	23.0	21.5	28.5	28.5	28.0	25.0
8	25.0	19.0	11.5	10.0	11.0	23.0	21.0	22.5	29.0	28.0	28.0	23.5
9	26.0	18.0	10.0	8.0	10.0	22.5	21.0	24.0	26.0	31.0	30.0	23.5
10	26.0	18.0	10.5	7.0	11.5	23.0	18.5	24.0	28.0	29.5	29.0	23.0
11	25.0	16.5	12.0	7.0	12.0	24.0	19.5	24.0	29.0	29.0	30.5	25.0
12	23.0	17.0	13.0	6.0	15.5	22.0	20.5	24.5	26.0	31.5	29.5	25.0
13	22.5	18.5	12.5	4.5	16.0	20.5	22.0	25.5	31.0	31.0	32.0	23.0
14	21.5	19.0	13.0	6.0	16.0	20.0	21.0	26.0	28.5	30.5	31.0	21.5
15	21.5	18.5	13.0	7.5	17.0	19.5	23.0	28.0	29.0	31.0	28.5	21.0
16	21.5	17.5	10.5	9.0	16.0	19.0	21.0	27.5	26.0	30.5	31.0	23.0
17	20.5	---	10.5	14.0	15.5	18.5	23.0	28.0	29.5	31.0	30.5	24.0
18	20.0	20.0	12.0	14.5	16.0	21.5	24.0	29.0	30.0	31.5	30.0	24.0
19	20.0	19.0	9.0	13.5	15.5	22.0	25.0	27.0	30.0	32.0	33.0	25.0
20	18.5	18.0	7.5	15.0	17.5	20.0	22.0	28.0	31.0	30.0	33.0	25.5
21	21.0	17.0	7.0	13.5	13.0	18.0	23.5	26.5	31.5	33.0	33.0	24.0
22	21.0	18.5	7.0	13.0	13.0	17.5	24.5	27.5	32.0	31.5	31.5	22.0
23	20.5	18.0	9.0	12.5	12.5	16.0	25.0	28.0	30.0	33.5	31.0	20.5
24	21.0	18.5	13.5	11.0	12.0	12.5	23.5	28.5	28.5	31.0	31.0	20.5
25	22.0	19.0	12.0	10.0	11.0	12.5	24.0	---	28.0	31.5	29.5	20.0
26	22.0	19.5	10.5	12.0	11.5	14.5	24.0	27.0	28.0	33.0	28.5	20.5
27	20.5	18.0	10.0	13.0	12.0	17.5	24.0	28.5	28.0	32.0	30.0	22.0
28	20.0	16.0	11.0	12.5	15.0	19.0	24.5	30.0	29.0	30.5	31.0	21.0
29	19.5	15.0	---	13.5	---	20.5	26.0	31.0	28.5	33.0	27.0	21.0
30	20.0	15.5	11.0	13.0	---	21.5	24.0	30.0	27.0	28.0	25.0	21.5
31	18.0	---	9.0	13.5	---	23.5	---	30.0	---	31.0	26.0	---
MONTH	22.0	18.0	11.5	10.0	13.5	19.5	22.5	26.5	28.5	31.0	29.5	23.0
YEAR	MAX	33.5	MIN	4.5	MEAN	21.5						

TRINITY RIVER BASIN

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08064700 TEHUACANA CREEK NEAR STREETMAN, TEX.

LOCATION.--Lat 31°50'54", long 96°17'23", Freestone County, at gaging station at U.S. Highway 75, 2.8 miles (4.5 km) southeast of Streetman, and 3.8 miles (6.1 km) upstream from Caney Creek.

DRAINAGE AREA.--142 mi² (368 km²).

PERIOD OF RECORD.--Chemical analyses: February 1968 to September 1974.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	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 SODIUM PLUS POTAS- SIUM (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)
OCT. 10...	1250	7.0	10	25	8.9	--	40	--	92	0
DEC. 05...	1350	33	8.4	19	6.2	--	30	--	67	0
JAN. 15...	1605	4.4	12	61	24	140	--	7.3	194	0
APR. 10...	1040	1.0	14	87	52	200	--	5.6	248	0
MAY 22...	1100	.54	13	77	32	180	--	5.8	238	0

DATE	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	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)
OCT. 10...	31	56	.0	216	99	24	1.7	421	6.6	25.5
DEC. 05...	28	38	.2	163	73	18	1.5	316	6.7	13.0
JAN. 15...	130	170	--	640	250	92	3.8	1100	7.5	7.5
APR. 10...	210	320	--	1010	430	230	4.2	1760	8.2	18.5
MAY 22...	150	250	--	825	320	130	4.4	1460	7.4	27.0

TRINITY RIVER BASIN

08065200 UPPER KEECHI CREEK NEAR OAKWOOD, TEX.

LOCATION.--Lat 31°34'11", Long 96°53'17", Leon County, at gaging station at bridge on U.S. Highway 79, 1.9 miles (3.1 km) upstream from Missouri Pacific Railroad Co. bridge, 2 miles (3 km) southwest of Oakwood, 11 miles (18 km) upstream from Buffalo Creek, and 21 miles (34 km) upstream from mouth.

DRAINAGE AREA.--150 mi² (388 km²).

PERIOD OF RECORD.--Chemical analyses: June 1962 to April 1964, November 1967 to September 1974.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	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 SODIUM PLUS POTAS- SIUM (K) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAK- HONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)
OCT. 29...	1420	27	20	22	11	--	28	--	20	0	78
JAN. 15...	1030	45	23	31	14	41	--	4.3	32	0	100
FEB. 26...	1630	63	15	19	8.2	24	--	3.4	24	/	62
JULY 02...	2030	.90	23	21	9.1	27	--	4.4	32	0	63
AUG. 13...	1530	.66	19	20	7.8	25	--	4.5	38	0	60

DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	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)
OCT. 29...	45	.1	.00	214	100	84	1.2	366	6.0	24.0
JAN. 15...	70	--	--	299	140	110	1.5	528	7.0	9.0
FEB. 26...	38	--	--	181	81	62	1.2	327	6.6	10.5
JULY 02...	41	--	--	204	90	64	1.2	354	6.5	30.5
AUG. 13...	37	--	--	192	82	51	1.2	348	6.5	36.0

08065350 TRINITY RIVER NEAR CROCKETT, TEX.

LOCATION.--Lat 31°20'08", long 95°39'27", Houston County, at gaging station at bridge on State Highway 7, 7.1 miles (11.4 km) downstream from Upper Keechi Creek, and 11.9 miles (19.1 km) west of Crockett.

DRAINAGE AREA.--13,911 mi² (36,029 km²).

PERIOD OF RECORD.--Chemical analyses: February 1964 to September 1974.

Chemical and biochemical analyses: October 1967 to September 1974.

Pesticide analyses: October 1971 to September 1974.

Water temperatures: February 1964 to September 1971.

Sediment records: October 1967 to September 1968.

EXTREMES.--October 1973 to September 1974:

Specific conductance: Maximum daily, 856 micromhos July 21; minimum daily, 214 micromhos Jan. 27.

Period of record:

Specific conductance: Maximum daily, 2,370 micromhos Sept. 22, 1964; minimum daily, 148 micromhos Apr. 27, 1966.

Water temperatures (1964-71): Maximum, 37.0°C July 4, 1970; minimum, 4.0°C Jan. 30, 1966.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

		INSTAN- TANEOUS 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 SODIUM PLUS POTAS- SIUM (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)		
OCT.														
24...	1015	22500	10	48	4.0	--	16	--	140	0	35	13		
30...	1500	16500	8.5	44	3.9	21	--	6.3	146	0	34	19		
NOV.														
13...	0700	8900	8.7	55	4.6	--	12	--	140	0	38	19		
24...	0930	10500	8.9	34	5.1	--	24	--	92	0	38	27		
DEC.														
16...	--	4000	11	60	5.8	--	49	--	176	0	72	43		
17...	1030	3800	8.6	52	5.9	--	33	--	150	0	49	32		
JAN.														
08...	1045	2320	7.6	54	6.6	--	32	--	139	0	52	42		
15...	1230	10700	5.5	43	2.9	17	--	4.2	136	0	27	17		
FEB.														
10...	0800	2800	10	58	5.9	44	--	5.0	150	0	65	39		
19...	1020	1940	12	55	8.0	--	54	--	146	0	69	58		
MAR.														
20...	0945	2100	9.1	50	7.1	--	41	--	144	0	49	44		
APR.														
24...	1030	1280	11	53	6.9	48	--	5.5	128	0	71	58		
MAY														
21...	1300	1880	9.1	57	4.5	37	--	5.6	164	0	50	36		
JUNE														
20...	1145	3900	8.5	49	4.1	34	--	4.8	146	0	49	33		
JULY														
15...	1740	680	3.0	60	6.0	90	--	9.3	138	33	77	91		
AUG.														
09...	1300	720	13	48	5.5	81	--	8.3	180	0	73	74		
SEP.														
25...	0820	16000	9.1	39	2.8	1.5	--	4.9	112	0	31	12		
DATE			DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)	VOL. NON- FILT- RABLE RESIDUE (MG/L)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)
OCT.														
24...		.3	.20	.02	.12	.20	--	.36	196	134	9	140	22	
30...		--	--	--	--	--	--	--	209	--	--	130	6	
NOV.														
13...		.4	--	--	--	--	--	--	207	--	--	160	41	
24...		.2	1.2	.03	.00	.38	--	.65	188	227	30	110	31	
DEC.														
16...		.5	--	--	--	--	--	--	328	--	--	170	30	
17...		.0	2.0	.12	.13	.45	--	1.0	264	172	33	150	31	
JAN.														
08...		.0	1.4	.09	.49	.41	--	.75	269	73	10	160	48	
15...		--	--	--	--	--	--	--	184	--	--	120	8	
FEB.														
10...		--	--	--	--	--	--	--	301	--	--	170	46	
19...		.5	3.3	.22	.32	.54	--	1.2	345	64	23	170	51	
MAR.														
20...		.4	2.8	.01	.00	.37	--	.36	284	69	8	150	36	
APR.														
24...		--	2.0	.02	.03	.64	.67	.76	322	60	15	160	56	
MAY														
21...		--	1.3	.00	.00	1.1	1.1	.77	280	135	35	160	26	
JUNE														
20...		--	1.2	.01	.07	1.2	1.3	1.2	255	358	46	140	19	
JULY														
15...		--	.93	.17	.31	2.6	2.9	1.2	437	39	12	170	6	
AUG.														
09...		--	4.1	.07	.15	1.7	1.8	3.7	392	38	0	140	0	
SEP.														
25...		--	.77	.00	.13	1.4	1.5	.52	155	483	62	110	17	

TRINITY RIVER BASIN

08065350 TRINITY RIVER NEAR CROCKETT, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	BIO- CHEM- ICAL OXYGEN DEMAND (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	PHENOLS (UG/L)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)
OCT. 24...	.6	353	7.3	19.0	40	55	7.4	79	1.4	160	0	--
30...	.8	374	7.9	19.5	--	--	--	--	--	--	--	--
NOV. 13...	.4	427	7.4	20.0	--	--	--	--	--	--	--	--
28...	1.0	339	6.8	12.0	140	95	9.4	87	1.5	14	0	--
DEC. 16...	1.6	578	7.7	--	30	70	--	--	--	--	--	--
17...	1.2	465	7.0	10.5	30	70	9.3	83	2.1	6.5	0	.0
JAN. 08...	1.1	500	5.2	8.5	40	40	11.6	98	2.7	.0	0	.0
15...	.7	347	7.5	6.0	--	--	--	--	--	--	--	--
FEB. 10...	1.5	534	8.1	13.0	--	--	--	--	--	--	--	--
19...	1.8	595	7.0	14.5	10	30	8.6	83	3.8	5.0	0	--
MAR. 20...	--	495	7.4	20.0	20	35	9.8	107	1.8	7.5	0	.0
APR. 24...	1.6	555	6.7	24.0	100	40	7.6	89	1.8	--	3	.1
MAY 21...	1.3	523	7.3	27.0	5	50	6.8	84	1.5	3.5	0	.0
JUNE 20...	1.3	456	7.1	29.0	15	85	5.0	64	1.2	6.4	5	.0
JULY 15...	3.0	748	8.9	31.0	20	20	13.4	179	13	17	3	--
AUG. 09...	3.0	695	7.7	29.0	5	20	6.7	86	3.6	7.0	4	.1
SEP. 25...	.1	298	6.4	21.0	30	300	4.5	50	12	14	1	--

DATE	TIME	DIS- SOLVED ALUM- INUM (AL) (UG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	DIS- SOLVED COBALT (CO) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)
OCT. 24...	1015	40	2	--	0	0	0	5
FEB. 19...	1020	20	1	--	0	0	0	9
APR. 24...	1030	210	7	140	3	30	0	38
JUNE 20...	1145	60	1	130	--	0	--	--
AUG. 09...	1300	10	6	300	0	0	0	3

DATE	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	DIS- SOLVED LITHIUM (LI) (UG/L)	DIS- SOLVED MANGANESE (MN) (UG/L)	DIS- SOLVED MERCURY (HG) (UG/L)	DIS- SOLVED NICKEL (NI) (UG/L)	DIS- SOLVED STRON- TIUM (SR) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)
OCT. 24...	60	0	0	40	.2	0	240	20
FEB. 19...	20	1	0	70	.2	12	530	--
APR. 24...	4700	--	10	120	.0	13	580	60
JUNE 20...	10	--	10	0	.0	--	--	30
AUG. 09...	20	1	0	0	.0	19	420	0

08065350 TRINITY RIVER NEAR CROCKETT, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TEMPERATURE (DEG C)	ALDRIN (UG/L)	ALDRIN IN BOTTOM DE-POSITS (UG/KG)	DDD (UG/L)	DDD IN BOTTOM DE-POSITS (UG/KG)	DDE (UG/L)	DDE IN BOTTOM DE-POSITS (UG/KG)	DDT (UG/L)	DDT IN BOTTOM DE-POSITS (UG/KG)
OCT. 29...	0845	3580	18.5	.00	.0	.00	15	.00	.0	.00	12
FEB. 11...	1815	474	14.5	.00	.0	.00	4.8	.00	.0	.01	.0
APR. 18...	1420	398	22.0	.01	.0	.00	16	.00	8.0	.03	18
AUG. 07...	1350	823	26.5	.00	.0	.00	2.7	.00	1.4	.00	2.5

DATE	DI-ELDRIN (UG/L)	DI-ELDRIN IN BOTTOM DE-POSITS (UG/KG)	ENDRIN (UG/L)	ENDRIN IN BOTTOM DE-POSITS (UG/KG)	HEPTA-CHLOR (UG/L)	HEPTA-CHLOR IN BOTTOM DE-POSITS (UG/KG)	HEPTA-CHLOR EPOXIDE (UG/L)	HEPTA-CHLOR EPOXIDE IN BOTTOM DE-POSITS (UG/KG)	LINDANE (UG/L)	LINDANE IN BOTTOM DE-POSITS (UG/KG)	CHLOR-DANE (UG/L)
OCT. 29...	.01	18	.00	.0	.00	.0	.00	.0	.00	.0	.0
FEB. 11...	.14	21	.00	.0	.00	.0	.00	.0	.05	.0	.1
APR. 18...	.09	110	.00	.0	.00	.0	.00	.0	.00	.0	.3
AUG. 07...	.04	1.5	.00	.0	.00	.0	.00	.0	.00	.0	--

DATE	CHLOR-DANE IN BOTTOM DE-POSITS (UG/KG)	PCB (UG/L)	PCB IN BOTTOM DE-POSITS (UG/KG)	DI-AZINON (UG/L)	MALATHION (UG/L)	METHYL PARATHION (UG/L)	PARATHION (UG/L)	2,4-D (UG/L)	SILVEX (UG/L)	2,4,5-T (UG/L)
OCT. 29...	88	.0	0	.05	.00	.00	.00	.04	.00	.01
FEB. 11...	110	.0	90	.40	.00	.00	.00	.05	.00	.00
APR. 18...	480	.0	220	.27	.00	.00	.00	--	--	--
AUG. 07...	39	.0	0	.58	.04	.00	.00	.08	.00	.05

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

MONTH	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCTANCE (MICRO-MHOS)	DISSOLVED SOLIDS (MG/L)	DISSOLVED SOLIDS (TONS)	DISSOLVED CHLORIDE (MG/L)	DISSOLVED CHLORIDE (TONS)	DISSOLVED SULFATE (MG/L)	DISSOLVED SULFATE (TONS)	HARDNESS (CA+MG) (MG/L)
OCT. 1973.....	521980	328	180	254000	15	21100	30	42300	120
NOV. 1973.....	317050	361	200	171000	20	17100	34	29100	130
DEC. 1973.....	235950	370	200	127000	21	13400	35	22300	130
JAN. 1974.....	339940	320	170	156000	14	12800	29	26600	120
FEB. 1974.....	127630	452	250	86200	34	11700	45	15500	150
MAR. 1974.....	83910	520	300	68000	45	10200	53	12000	160
APR. 1974.....	82570	552	310	69100	50	11100	57	12700	160
MAY 1974.....	228270	404	230	142000	27	16600	39	24000	150
JUNE 1974.....	122188	427	240	79200	30	9900	42	13900	150
JULY 1974.....	23027	687	400	24900	70	4350	73	4540	170
AUG. 1974.....	37290	599	340	34200	57	5740	63	6340	160
SEPT 1974.....	207960	332	180	101000	15	8420	31	17400	120
TOTAL	2327765	**	**	1310000	**	142000	**	227000	**
WTD.AVG.	6377	378	210	**	23	**	36	**	130

TRINITY RIVER BASIN

08065350 TRINITY RIVER NEAR CROCKETT, TEX.--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	375	365	394	450	362	513	634	454	450	451	831	766
2	355	353	405	445	414	494	651	444	596	473	835	632
3	392	320	382	443	429	481	657	469	608	485	851	379
4	369	321	374	447	440	534	657	400	625	498	854	384
5	376	301	304	454	453	592	683	328	601	515	854	413
6	370	290	346	464	491	669	683	385	549	523	816	441
7	383	327	263	478	534	607	679	379	526	543	715	453
8	388	335	293	490	547	601	709	382	532	581	706	575
9	341	354	381	525	524	592	732	307	593	622	701	432
10	387	366	419	556	533	614	732	300	503	675	677	463
11	390	374	438	564	559	623	760	372	652	738	723	504
12	364	400	443	500	583	611	697	374	550	735	650	558
13	329	427	455	426	446	606	678	415	408	717	587	394
14	280	389	462	438	452	520	589	429	356	731	614	231
15	248	387	472	343	586	423	629	414	315	782	697	305
16	246	387	578	336	586	364	605	440	321	755	741	299
17	235	399	461	349	586	393	622	474	430	753	668	262
18	249	400	443	372	577	509	670	478	431	755	465	253
19	270	412	467	392	592	500	622	492	472	779	434	251
20	284	408	443	320	608	503	657	505	402	824	484	249
21	297	427	395	280	550	502	546	519	493	856	502	340
22	318	410	460	302	450	511	534	537	435	830	392	321
23	343	428	302	308	408	495	567	571	370	801	394	335
24	358	468	321	276	315	524	572	582	408	836	424	319
25	361	370	360	226	370	544	648	610	401	830	437	310
26	353	383	382	236	485	594	489	574	396	809	432	308
27	352	275	310	214	498	594	438	589	389	818	470	330
28	356	328	325	254	498	583	438	557	448	849	479	339
29	356	398	341	329	---	583	399	596	432	846	435	353
30	374	372	345	309	---	599	434	363	416	824	327	399
31	362	---	450	330	---	625	---	349	---	833	557	---
MONTH	337	372	394	382	496	545	614	454	470	712	605	387

TRINITY RIVER BASIN

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08065350 TRINITY RIVER NEAR CROCKETT, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TEMPERATURE (DEG C)	STREAM WIDTH (FT)	STREAM VELOCITY (FPS)	MEAN DEPTH (FT)	NUMBER OF SAMPLING POINTS	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)	TOTAL SEDIMENT DISCHARGE (T/DAY)
OCT. 24...	1320	22400	22.5	--	3.2	21	7	138	8350	8580
JAN. 08...	1700	2320	23.0	--	2.1	7.1	4	91	570	627
MAR. 05...	1710	2190	21.5	146	2.0	7.3	5	73	432	463
20...	0945	2100	20.0	--	--	--	--	88	499	--
APR. 23...	1500	1310	24.5	--	1.8	5.4	4	39	138	162
SEP. 19...	0930	10400	24.0	255	2.9	13	5	333	9350	9460

DATE	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM	SUS. SED. SIEVE DIAM. % FINER THAN .250 MM	SUS. SED. SIEVE DIAM. % FINER THAN .500 MM	SUS. SED. SIEVE DIAM. % FINER THAN 1.00 MM	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM
OCT. 24...	93	96	99	100	--	60	67	71	83	88
JAN. 08...	92	94	95	100	--	60	74	79	85	89
MAR. 05...	92	94	97	100	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--	--
APR. 23...	96	98	99	100	--	46	64	66	83	89
SEP. 19...	91	93	97	99	100	65	70	76	87	89

DATE	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM
OCT. 24...	--	16	35	82	99	100	--	--	--
JAN. 08...	--	--	9	93	100	--	--	--	--
MAR. 05...	--	--	17	69	84	87	91	96	100
20...	--	--	--	--	--	--	--	--	--
APR. 23...	4	30	50	65	73	80	87	94	100
SEP. 19...	1	30	29	68	86	93	96	99	100

TRINITY RIVER BASIN

08065500 TRINITY RIVER NEAR MIDWAY, TEX.

LOCATION.--Lat 31°04'38", long 95°41'57", Madison County, at bridge on State Highway 21, 5.0 miles (8.0 km) northeast of Midway, and 8.0 miles (12.9 km) downstream from Boggy Creek.

DRAINAGE AREA.--14,450 mi² (37,430 km²).

PERIOD OF RECORD.--Chemical and biochemical analyses: October 1970 to September 1974.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	DIS- SOLVED SILICA (SiO ₂) (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 SODIUM PLUS POTAS- SIUM (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
OCT. 30...	0720	7.9	47	4.1	--	19	--	142	0	32	16
DEC. 05...	0945	8.7	38	4.7	--	21	--	102	0	37	24
FEB. 12...	0900	10	59	7.5	--	37	--	156	0	60	45
APR. 09...	1000	10	62	7.6	63	--	5.6	174	0	81	69
JULY 23...	1100	8.7	60	6.1	90	--	9.2	199	0	81	85
SEP. 11...	0940	12	38	3.1	37	--	7.5	102	0	47	39

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO
OCT. 30...	.3	.40	.05	.05	.36	--	.39	198	130	18	.7
DEC. 05...	.0	.80	.00	.00	.02	--	.58	187	110	30	.9
FEB. 12...	.4	1.0	.17	.32	.42	--	1.2	301	180	50	1.2
APR. 09...	--	4.5	1.0	.17	.41	--	1.3	384	190	43	2.0
JULY 23...	--	.93	.05	.50	1.2	1.7	1.1	438	180	12	3.0
SEP. 11...	--	3.2	.01	.06	1.3	1.4	.70	234	110	24	1.6

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	* PER- CENT SATUR- ATION	BIO- CHEM- ICAL OXYGEN DEMAND (MG/L)	IMME- DIATE COLI- FORM (COL. PER 100 ML)	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT. 30...	363	6.8	16.0	6.2	62	2.2	95000	280	220	1.5
DEC. 05...	342	6.9	15.0	8.4	82	2.3	95000	4600	8500	--
FEB. 12...	560	7.5	10.0	9.6	85	4.1	3600	55	180	--
APR. 09...	685	6.7	18.5	8.9	95	1.7	14000	28	8	26
JULY 23...	790	8.4	31.5	11.3	153	6.3	18	12	10	--
SEP. 11...	438	7.2	26.0	6.8	83	1.4	2300	280	310	--

TRINITY RIVER BASIN

275

08065800 BEDIAS CREEK NEAR MADISONVILLE, TEX.

LOCATION.--Lat 30°53'03", long 95°46'39", Madison County, at gaging station on U.S. Highways 75 and 190, 0.5 mile (0.8 km) upstream from Interstate Highway 45, 1.5 miles (2.4 km) downstream from Caney Creek, and 9.5 miles (15.3 km) southeast of Madisonville.

DRAINAGE AREA.--321 mi² (831 km²).

PERIOD OF RECORD.--Chemical and biochemical analyses: October 1962 to April 1964, January 1968 to September 1974.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report.

WATER QUALITY DATA: WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	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 SODIUM PLUS POTAS- SIUM (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)
OCT.											
30...	0720	23	24	30	10	--	41	--	54	0	77
DEC.											
05...	0845	720	10	11	3.8	--	9.7	--	24	0	21
FEB.											
12...	0800	29	22	40	14	--	43	--	50	0	100
APR.											
09...	0830	3.3	21	66	21	92	--	5.8	80	0	180
JULY											
23...	0940	.14	13	52	18	86	--	8.2	118	0	120
SEP.											
11...	0820	14	23	22	4.7	27	--	6.5	32	0	54

DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)
OCT.											
30...	56	.1	.20	.02	.07	.33	--	.15	266	120	72
DEC.											
05...	16	.0	.20	.00	.18	.05	--	.23	85	43	23
FEB.											
12...	74	.1	.40	.04	.14	.21	--	.12	320	160	120
APR.											
09...	140	--	.50	.01	.04	.26	--	.15	565	250	190
JULY											
23...	130	--	.13	.00	.11	.70	.81	.14	485	200	110
SEP.											
11...	42	--	.18	.01	.08	.81	.89	.05	195	74	48

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	BIO- CHEM- ICAL OXYGEN DEMAND (MG/L)	IMME- DIATE COLI- FORM (COL. PER 100 ML)	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT.											
30...	1.7	451	7.3	16.0	6.6	66	1.7	72000	110	920	14
DEC.											
05...	.6	157	6.5	10.5	8.6	77	3.5	100000	5900	13000	--
FEB.											
12...	1.5	590	7.0	9.5	10.4	91	1.1	2600	190	230	--
APR.											
09...	2.5	976	6.8	14.5	7.2	70	4.4	9000	280	270	10
JULY											
23...	2.6	873	6.6	27.0	4.3	53	1.6	2000	160	920	--
SEP.											
11...	1.4	345	6.5	24.0	6.0	71	1.8	2500	360	880	--

08065950 NELSON CREEK NEAR RIVERSIDE, TEX.

LOCATION.--Lat 30°53'40", long 95°30'51", Walker County, at low-water crossing on county road, 3.1 miles (5.0 km) north of Farm Road 980, 6.0 miles (9.7 km) upstream from mouth at Lake Livingston, and 7.4 miles (11.9 km) northwest of Riverside.

PERIOD OF RECORD.--Chemical and biochemical analyses: October 1970 to September 1974.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SiO ₂) (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED SODIUM PLUS POTASSIUM (MG/L)	DIS-SOLVED PHOSPHORUS (K) (MG/L)	BICARBONATE (HCO ₃) (MG/L)	CARBONATE (CO ₃) (MG/L)	DIS-SOLVED SULFATE (SO ₄) (MG/L)
OCT. 30...	1100	11	40	26	4.9	--	29	--	32	0	60
DEC. 05...	1145	63	14	11	2.6	--	9.1	--	19	0	19
FEB. 12...	1230	11	30	32	5.4	--	30	--	41	0	52
APR. 09...	1200	4.5	37	32	5.8	41	--	5.1	42	0	76
JULY 23...	1115	.60	48	32	5.3	54	--	7.9	44	0	79
SEP. 11...	1140	26	28	16	1.7	17	--	5.4	25	0	31

DATE	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	ORGANIC NITROGEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	HARDNESS (CA+MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	SODIUM ADSORPTION RATIO
OCT. 30...	42	.0	.42	.01	.05	.04	.06	218	85	59	1.4
DEC. 05...	16	.0	.01	.00	.18	.20	.22	82	38	22	.6
FEB. 12...	56	.1	.18	.00	.12	.02	.09	226	100	68	1.3
APR. 09...	64	--	.22	.00	.02	.02	.10	282	100	69	1.8
JULY 23...	75	--	.25	.00	.29	.00	.12	323	100	66	2.3
SEP. 11...	27	--	1.7	.01	.23	.07	.22	138	47	26	1.1

DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	DIS-SOLVED OXYGEN (MG/L)	PERCENT SATURATION	BIO-CHEMICAL OXYGEN DEMAND (MG/L)	IMMEDIATE COLIFORM (COL. PER 100 ML)	FECAL COLIFORM (COL. PER 100 ML)	STREPTOCOCCI (COLONIES PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT. 30...	342	6.5	16.0	9.2	92	2.1	13000	24	190	29
DEC. 05...	145	6.8	13.0	10.7	101	2.7	98000	5700	5600	--
FEB. 12...	425	7.1	12.0	11.0	102	1.0	500	46	30	--
APR. 09...	462	6.7	18.0	9.1	96	1.7	6700	210	60	8.0
JULY 23...	509	6.7	30.0	7.7	101	2.0	1700	42	140	--
SEP. 11...	216	6.4	26.5	7.4	90	1.7	1700	360	780	--

TRINITY RIVER BASIN

277

08065975 HARMON CREEK NEAR HUNTSVILLE, TEX.

LOCATION.--Lat 30°49'12", long 95°29'09", Walker County, at end of county road, 2.2 miles (3.5 km) east of Farm Road 980, 7.6 miles (12.2 km) northeast of Huntsville, and 9 miles (14 km) southwest of Riverside.

DRAINAGE AREA.--89.2 mi² (231.0 km²).

PERIOD OF RECORD.--Chemical and biochemical analyses: October 1970 to September 1974.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	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 SODIUM PLUS POTAS- SIUM (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)
OCT. 30...	1050	12	38	59	9.0	--	59	--	206	0	29
DEC. 05...	1130	32	17	34	3.7	--	17	--	104	0	15
FEB. 12...	1100	15	30	64	9.6	--	43	--	212	0	20
APR. 09...	1230	5.7	40	65	3.5	83	--	8.9	242	0	35
JULY 23...	1240	4.1	55	41	2.5	130	--	14	219	0	49
SEP. 11...	1115	12	30	44	1.5	39	--	7.5	144	0	24

DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITU- ENTS) (MG/L)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)
OCT. 30...	74	.3	2.0	.87	.66	.43	--	2.0	382	180	15
DEC. 05...	25	.0	.60	.19	.70	.00	--	.50	167	100	15
FEB. 12...	71	.4	.50	.26	2.0	.20	--	1.8	348	200	26
APR. 09...	94	--	.50	1.0	1.7	.46	--	3.5	449	180	0
JULY 23...	120	--	.53	.32	.33	1.2	1.5	4.0	519	110	0
SEP. 11...	46	--	--	--	--	--	--	--	263	120	0

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	BIO- CHEM- ICAL OXYGEN DEMAND (MG/L)	IMME- DIATE COLI- FORM (COL. PER 100 ML)	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT. 30...	1.9	663	7.1	18.0	8.7	92	4.4	26000	40	140	13
DEC. 05...	.7	305	7.0	13.5	10.4	99	7.0	320000	17000	9800	--
FEB. 12...	1.3	653	7.9	12.5	11.2	105	1.9	5600	16	310	--
APR. 09...	2.7	774	8.0	18.5	10.0	106	1.8	9700	34	16	13
JULY 23...	5.3	881	8.6	34.0	14.8	206	5.0	2100	130	140	--
SEP. 11...	1.6	450	7.5	28.0	7.6	96	5.8	6800	720	310	--

TRINITY RIVER BASIN

08066000 TRINITY RIVER AT RIVERSIDE, TEX.

LOCATION.--Lat 30°51'35", Long 95°23'54", Walker County, at gaging station at bridge on State Highway 19 and 0.5 mile (0.8 km) north of Riverside.

DRAINAGE AREA.--15,589 mi² (40,376 km²).

PERIOD OF RECORD.--Chemical and biochemical analyses: October 1970 to September 1974.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM PLUS SODIUM (NA) (MG/L)	DIS- SOLVED SODIUM PLUS POTAS- SIUM (K) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
OCT. 30...	1000	7.6	45	5.8	--	15	--	135	0	32	16
DEC. 05...	1040	10	40	3.5	--	19	--	104	0	37	21
FEB. 12...	1225	9.0	50	6.1	--	25	--	131	0	47	32
APR. 09...	1125	6.3	49	6.8	45	--	5.4	142	0	65	53
JULY 23...	1020	4.2	53	3.9	29	--	5.3	164	0	41	25
SEP. 11...	1015	13	34	2.8	57	--	9.6	104	0	61	48

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRA- TE (N) (MG/L)	TOTAL NITRI- TE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO
OCT. 30...	.3	.40	.05	.27	.32	.55	190	140	25	.6
DEC. 05...	.0	.80	.00	.05	.04	.64	185	110	29	.8
FEB. 12...	.3	.80	.04	.17	.23	.42	237	150	43	.9
APR. 09...	--	.83	.03	.13	.55	.65	301	150	34	1.6
JULY 23...	--	.05	.00	.21	.70	.30	242	150	14	1.0
SEP. 11...	--	--	--	--	--	--	277	96	11	2.5

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	BIO- CHEM- ICAL OXYGEN DEMAND (MG/L)	IMME- DIATE COLI- FORM (COL. PER 100 ML)	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT. 30...	353	6.8	17.5	7.0	73	1.4	32000	120	140	7.0
DEC. 05...	341	6.5	15.5	7.8	77	2.5	29000	2500	3900	--
FEB. 12...	446	6.7	15.0	8.4	82	.8	580	33	28	--
APR. 09...	549	6.9	19.5	9.8	105	5.8	440	12	4	8.0
JULY 23...	441	7.2	29.0	8.0	103	3.1	16	10	6	--
SEP. 11...	513	6.5	27.0	6.8	84	5.8	520	74	50	--

TRINITY RIVER BASIN

279

08066147 WHITE ROCK CREEK AT FARM ROAD 356, NEAR TRINITY, TEX.

LOCATION.--Lat 30°54'48", long 95°16'14", Trinity County, at bridge on Farm Road 356, 0.8 mile (1.3 km) upstream from mouth at old Trinity River Channel, 1.0 mile (1.6 km) downstream from Caney Creek, and 6.6 miles (10.6 km) southeast of Trinity.

PERIOD OF RECORD.--Chemical and biochemical analyses: October 1970 to September 1974.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	DIS-SOLVED SILICA (SI02) (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED SODIUM PLUS POTASSIUM (MG/L)	DIS-SOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HC03) (MG/L)	CARBONATE (C03) (MG/L)	DIS-SOLVED SULFATE (S04) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)
OCT. 30...	0915	10	24	3.9	--	8.8	--	66	0	23	12
DEC. 05...	0945	10	18	3.2	--	17	--	36	0	35	21
FEB. 12...	1120	8.1	17	5.5	--	3.7	--	40	0	19	14
APR. 09...	1120	3.4	35	5.5	34	--	4.9	98	0	55	40
JULY 23...	0915	1.6	46	4.2	34	--	5.6	142	0	46	32
SEP. 11...	0845	5.1	25	3.3	23	--	4.6	74	0	31	25

DATE	DIS-SOLVED FLUORIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	HARDNESS (CA+MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	SODIUM ADSORPTION RATIO
OCT. 30...	.2	.20	.03	.33	.31	--	.19	115	76	22	.4
DEC. 05...	.0	.20	.00	.30	.04	--	2.8	123	58	28	1.0
FEB. 12...	.2	.20	.00	.15	.25	--	.17	89	65	32	.2
APR. 09...	--	.04	.01	.10	.40	--	.20	226	110	30	1.4
JULY 23...	--	.03	.00	.23	.67	.90	.32	239	130	16	1.3
SEP. 11...	--	.20	.01	.24	.86	1.1	1.1	153	76	15	1.1

DATE	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	TEMPERATURE (DEG C)	DIS-SOLVED OXYGEN (MG/L)	PERCENT SATURATION	BIOCHEMICAL OXYGEN DEMAND (MG/L)	IMMEDIATE COLIFORM (COL. PER 100 ML)	FECAL COLIFORM (COL. PER 100 ML)	STREPTOCOCCI (COLONIES PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT. 30...	209	5.8	17.0	6.9	71	2.7	7600	18	31	20
DEC. 05...	225	5.9	15.5	8.7	86	2.4	5500	260	800	--
FEB. 12...	183	6.3	13.5	9.4	90	.9	520	31	28	--
APR. 09...	420	6.4	19.0	9.4	100	5.0	650	1	1	7.0
JULY 23...	439	7.0	30.0	7.6	100	3.6	120	10	24	--
SEP. 11...	286	6.2	25.0	6.8	81	4.4	380	33	10	--

TRINITY RIVER BASIN

08066170 KICKAPOO CREEK NEAR ONALASKA, TEX.

LOCATION.--Lat 30°54'25", long 95°05'18", Polk County, at gaging station 114 ft (35 m) downstream from old bridge site, 1.2 miles (1.9 km) downstream from Magnolia Creek, 6.2 miles (10.0 km) upstream from Rocky Creek, and 7.3 miles (11.7 km) northeast of Onalaska.

DRAINAGE AREA.--57.0 mi² (147.6 km²).

PERIOD OF RECORD.--Chemical analyses: December 1963 to September 1969.
Chemical and biochemical analyses: October 1969 to September 1974.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DIS-SOLVED SILICA (SI02) (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED SODIUM PLUS POTASSIUM (MG/L)	DIS-SOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)
OCT. 30...	0800	10	30	18	5.1	--	32	--	19	0	67
DEC. 05...	0830	100	10	8.5	2.4	--	15	--	18	0	25
FEB. 12...	1015	12	29	21	6.5	--	31	--	15	0	73
APR. 09...	1015	2.8	37	22	5.9	44	--	4.3	28	0	95
JULY 23...	0810	1.0	48	27	6.4	62	--	6.8	38	0	120
SEP. 11...	0715	5.0	32	13	3.4	29	--	3.9	14	0	53

DATE	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	HARDNESS (CA+MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)
OCT. 30...	36	.0	.07	.01	.08	.26	--	.06	198	66	50
DEC. 05...	16	.0	.10	.00	.14	.01	--	.21	86	31	16
FEB. 12...	42	.1	.03	.00	.16	.20	--	.06	210	79	67
APR. 09...	48	--	.06	.00	.05	.31	--	.08	270	79	56
JULY 23...	59	--	.00	.00	.10	.69	.79	.13	348	94	63
SEP. 11...	31	--	.00	.00	.08	.69	.77	.12	172	46	35

DATE	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	DIS-SOLVED OXYGEN (MG/L)	PERCENT SATURATION	BIOCHEMICAL OXYGEN DEMAND (MG/L)	IMMEDIATE COLIFORM (COL. PER 100 ML)	FECAL COLIFORM (COL. PER 100 ML)	STREPTOCOCCI (COLONIES PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT. 30...	1.7	321	6.5	14.5	10.0	97	1.2	19000	74	210	26
DEC. 05...	1.2	153	5.0	13.0	10.6	100	3.6	79000	3400	4200	--
FEB. 12...	1.5	372	6.3	12.5	10.4	97	.5	440	32	32	--
APR. 09...	2.2	424	6.4	17.5	8.8	92	1.2	16000	48	31	12
JULY 23...	2.8	536	6.7	28.0	6.6	84	2.0	12	2	82	--
SEP. 11...	1.9	264	6.6	24.5	7.3	87	4.1	1900	330	170	--

TRINITY RIVER BASIN

281

08066192 TRINITY RIVER BELOW LIVINGSTON DAM, NEAR GOODRICH, TEX.

LOCATION.--Lat 30°37'55", long 95°01'11", Polk County, 100 ft (30 m) below outlet structure and 4.8 miles (7.7 km) northwest of Goodrich.

DRAINAGE AREA.--16,583 mi² (42,950 km²).

PERIOD OF RECORD.--Chemical and biochemical analyses: October 1969 to September 1974.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	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 SODIUM PLUS POTAS- SIUM (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
OCT. 31...	1040	6.8	33	3.3	--	17	--	98	0	26	16
DEC. 06...	--	7.2	38	2.7	--	16	--	109	0	28	15
FEB. 13...	1000	7.3	34	2.5	--	18	--	87	0	30	20
APR. 09...	1000	5.4	32	3.4	18	--	4.3	98	0	31	21

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO
OCT. 31...	.2	.50	.01	.05	.38	.17	153	96	16	.8
DEC. 06...	.0	.30	.00	.00	.00	.11	162	110	17	.7
FEB. 13...	.2	.60	.00	.05	.15	.20	158	95	24	.8
APR. 09...	--	.42	.01	.04	.38	.12	163	94	14	.8

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	BIO- CHEM- ICAL OXYGEN DEMAND (MG/L)	IMME- DIATE COLI- FORM (COL. PER 100 ML)	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT. 31...	281	7.4	20.5	8.4	92	1.0	3100	6	32	--
DEC. 06...	295	7.3	14.5	10.7	104	1.5	340	12	36	--
FEB. 13...	303	7.4	12.0	11.1	103	.6	48	4	100	--
APR. 09...	298	7.4	17.5	9.2	96	1.5	500	2	4	7.0

TRINITY RIVER BASIN

08066200 LONG KING CREEK AT LIVINGSTON, TEX.

LOCATION.--Lat 30°42'58", long 94°57'31", Polk County, at gaging station at bridge on U.S. Highway 190, 2 miles (3 km) west of Livingston, 2 miles (3 km) upstream from Choates Creek, and 14.8 miles (23.8 km) from mouth.

DRAINAGE AREA.--141 mi² (365 km²).

PERIOD OF RECORD.--Chemical analyses: January 1963 to September 1974.
Water temperatures: January 1963 to September 1974.

EXTREMES.--Period of record:

Specific conductance (1963-72): Maximum daily, 669 micromhos May 23, 1965; minimum daily, 71 micromhos May 7, 1969.
Water temperatures (1963-72): Maximum, 34.0°C Aug. 9, 1964, July 14, 15, 29, 1969; minimum, 2.0°C Dec. 23, 1963.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

		INSTAN- TANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO2) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED SODIUM PLUS POTAS- SIUM (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	
OCT. 30...	0700	24	25	55	4.6	--	21	--	159	0	12	
DEC. 06...	0815	100	13	26	2.0	--	6.2	--	70	0	7.8	
FEB. 13...	0800	40	19	47	6.0	--	10	--	132	0	10	
APR. 10...	0800	20	24	58	3.4	24	--	2.4	171	0	13	
JULY 24...	0800	1.8	25	56	3.6	28	--	3.0	150	0	13	
SEP. 12...	0815	9.4	22	58	4.0	32	--	3.1	144	0	15	
		DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITU- ENTS) (MG/L)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)
OCT. 30...	42	.1	.04	.00	.05	.20	--	.02	238	160	26	
DEC. 06...	15	.0	.08	.00	.09	.00	--	.08	105	73	16	
FEB. 13...	32	.1	.20	.00	.05	.18	--	.02	190	140	34	
APR. 10...	46	--	.04	.00	.03	.33	--	.02	255	160	19	
JULY 24...	53	--	.01	E.00	.05	E.32	.37	.05	256	150	32	
SEP. 12...	67	--	.00	.01	.14	1.4	1.5	.05	272	160	43	
		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	BIO- CHEM- ICAL OXYGEN DEMAND (MG/L)	IMME- DIATE COLI- FORM (COL. PER 100 ML)	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT. 30...	.7	427	7.3	15.0	9.6	94	1.7	16000	110	460	7.0	
DEC. 06...	.3	192	6.5	9.5	10.6	93	2.0	18000	4000	1900	--	
FEB. 13...	.4	354	7.3	15.0	9.6	94	.5	1700	170	190	--	
APR. 10...	.8	442	7.1	19.0	8.3	88	1.3	2300	110	100	7.0	
JULY 24...	1.0	454	6.8	29.5	6.3	82	1.4	500	34	600	--	
SEP. 12...	1.1	496	7.2	26.5	6.4	78	2.0	2100	160	120	--	

TRINITY RIVER BASIN

283

08066205 TEMPE CREEK NEAR GOODRICH, TEX.

LOCATION.--Lat 30°39'32", Long 94°58'38", Polk County, at bridge on Farm Road 1988, 0.8 mile (1.3 km) upstream from mouth, 2.2 miles (3.5 km) northeast of Trinity River Authority office at Livingston Reservoir, and 4.1 miles (6.6 km) northwest of Goodrich.

PERIOD OF RECORD.--Chemical and biochemical analyses: October 1973 to September 1974.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	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 SODIUM PLUS POTAS- SIUM (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)
OCT. 31...	0940	119	9.2	12	1.2	--	4.8	--	32	0	5.6
DEC. 06...	1110	134	8.0	10	1.7	--	2.3	--	23	0	4.4
FEB. 13...	0900	5.4	6.0	22	4.2	--	7.3	--	57	0	4.4
APR. 10...	0830	2.6	4.9	22	2.4	14	--	1.6	74	0	5.6

DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SURP- TION RATIO
OCT. 31...	9.5	.0	.06	.03	.10	.24	.20	59	35	9	.4
DEC. 06...	9.5	.0	.08	.00	.06	.00	.07	47	32	13	.2
FEB. 13...	26	.0	.20	.00	.17	.25	.06	99	72	25	.4
APR. 10...	25	--	.03	.01	.04	.46	.04	112	65	4	.8

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	BIO- CHEM- ICAL OXYGEN DEMAND (MG/L)	IMME- DIATE COLI- FORM (COL. PER 100 ML)	FECAL CULI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT. 31...	106	6.6	17.0	6.6	68	5.1	80000	3000	7300	28
DEC. 06...	90	6.3	14.0	8.5	82	2.4	11000	550	1900	--
FEB. 13...	203	7.0	13.0	9.1	86	.8	2000	190	340	--
APR. 10...	209	6.5	15.5	7.8	77	1.1	4000	270	170	70

TRINITY RIVER BASIN

08066210 LONG KING CREEK NEAR GOODRICH, TEX.

LOCATION.--Lat 30°36'16", long 94°57'26", Polk County, at bridge on Farm Road 1988, 0.7 mile (1.1 km) west of Goodrich, and 4.5 miles (7.2 km) upstream from mouth.

DRAINAGE AREA.--220 mi² (570 km²).

PERIOD OF RECORD.--Chemical and biochemical analyses: October 1972 to September 1974.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	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 SODIUM PLUS POTAS- SIUM (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)
OCT. 31...	1245	6400	7.3	14	.7	--	1.8	--	36	0	4.0
DEC. 06...	1325	347	10	18	2.0	--	5.1	--	50	0	6.2
FEB. 13...	1100	100	16	38	2.7	--	14	--	111	0	9.2
APR. 10...	1130	41	18	40	2.8	19	--	2.1	130	0	9.7
JULY 24...	0940	9.3	22	38	2.7	27	--	3.0	130	0	6.5
SEP. 12...	0910	27	17	34	3.2	18	--	2.5	102	0	9.6

DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO
OCT. 31...	5.5	.0	.56	.00	.11	.20	.32	52	38	14	.1
DEC. 06...	12	.0	.04	.00	.16	.10	.09	79	53	12	.3
FEB. 13...	25	.1	.14	.01	.10	.20	.10	161	110	15	.6
APR. 10...	31	--	.27	.02	.06	.07	.07	187	110	5	.8
JULY 24...	34	--	.40	.00	.36	.03	.25	197	110	0	1.1
SEP. 12...	31	--	1.1	.04	.20	.19	.26	166	98	14	.8

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	BIO- CHEM- ICAL OXYGEN DEMAND (MG/L)	IMME- DIATE COLI- FORM (COL. PER 100 ML)	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT. 31...	92	7.4	18.0	7.0	74	3.2	26000	7300	10000	33
DEC. 06...	147	6.3	14.5	9.2	89	2.2	14000	3400	2200	--
FEB. 13...	297	7.4	15.0	9.8	96	.6	99000	9700	2100	--
APR. 10...	325	7.2	17.0	9.6	99	1.2	49000	3500	110	5.5
JULY 24...	347	7.5	27.0	6.8	84	2.4	500	56	420	--
SEP. 12...	293	7.4	24.5	7.2	86	3.0	1800	400	440	--

TRINITY RIVER BASIN

285

08066300 MENARD CREEK NEAR RYE, TEX.

LOCATION.--Lat 30°28'52", long 94°46'46", Liberty County, at gaging station at bridge on State Highway 146, 2.3 miles (3.7 km) northwest of Rye, and about 6 miles (10 km) upstream from mouth.

DRAINAGE AREA.--152 mi² (394 km²).

PERIOD OF RECORD.--Chemical analyses: April 1966 to September 1974.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	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 SODIUM PLUS POTAS- SIUM (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)
OCT. 29...	1500	72	13	4.0	3.4	--	3.2	--	12	0	2.4
NOV. 29...	0955	59	15	4.9	1.1	6.0	--	1.4	10	0	4.5
JAN. 19...	1545	1000	7.2	3.7	.5	6.3	--	1.3	8	0	4.1
MAR. 01...	1000	107	13	5.9	1.6	14	--	.9	12	0	3.4
APR. 12...	1000	2350	4.2	6.0	.7	10	--	1.2	6	0	3.8
MAY 24...	1015	140	11	6.4	1.0	19	--	1.3	8	0	3.9
JULY 05...	1300	17	15	6.0	1.3	9.0	--	.9	13	0	3.2
AUG. 15...	1320	32	11	15	2.6	53	--	1.8	6	0	2.3
SEP. 27...	1315	60	12	7.5	2.3	22	--	2.9	11	0	8.5

DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	HARD- NESS (CA+MG) (MG/L)	NON- CAK- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)
OCT. 29...	13	.0	.06	45	24	14	.3	81	5.9	18.5
NOV. 29...	16	--	--	54	17	9	.6	82	6.5	--
JAN. 19...	12	--	--	39	11	5	.8	71	6.1	17.5
MAR. 01...	29	--	--	74	21	11	1.3	134	6.4	14.5
APR. 12...	23	--	--	52	18	13	1.0	95	5.6	20.0
MAY 24...	37	--	--	84	20	14	1.8	163	5.9	24.5
JULY 05...	18	--	--	60	20	10	.9	99	6.4	29.0
AUG. 15...	110	--	--	199	48	43	3.3	380	6.3	29.5
SEP. 27...	38	--	--	99	28	19	1.8	156	5.9	22.0

TRINITY RIVER BASIN

08066400 BIG CREEK NEAR SHEPHERD, TEX.

LOCATION.--Lat 30°30'59", long 94°59'06", San Jacinto County, at gaging station at bridge on U.S. Highway 59 and 1.5 miles (2.4 km) north-east of Shepherd.

DRAINAGE AREA.--38.8 mi² (100.5 km²).

PERIOD OF RECORD.--Chemical analyses: December 1963 to September 1974.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NESIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED SODIUM PLUS POTAS- SIUM (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)
OCT. 25...	1735	24	15	5.0	3.3	--	1.4	--	10	0	4.4
NOV. 29...	0845	18	15	4.5	2.1	--	7.8	--	18	0	3.6
JAN. 17...	1700	127	11	5.6	1.7	5.2	--	1.2	9	0	6.4
MAR. 01...	0900	33	15	3.4	1.4	6.7	--	.9	12	0	4.4
APR. 10...	1350	18	16	3.5	1.3	7.4	--	.8	10	0	4.0
MAY 22...	1810	17	14	3.3	1.3	6.6	--	1.0	10	0	3.3
JULY 05...	0830	7.5	17	3.5	1.4	8.6	--	.9	13	0	3.0
AUG. 13...	2015	8.3	16	3.6	1.3	8.0	--	1.0	13	0	3.5

DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	HARD- NESS (CA+MG) (MG/L)	NON- CAL- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)
OCT. 25...	11	.0	.20	46	26	18	.1	79	6.1	20.0
NOV. 29...	13	.0	--	55	20	5	.8	82	5.5	12.5
JAN. 17...	14	--	--	50	21	14	.5	66	6.1	17.5
MAR. 01...	11	--	--	49	14	4	.8	74	6.1	15.0
APR. 10...	13	--	--	51	14	6	.9	82	6.2	16.0
MAY 22...	11	--	--	45	14	5	.8	71	6.7	23.5
JULY 05...	12	--	--	53	15	4	1.0	75	5.8	24.5
AUG. 13...	14	--	--	54	14	4	.9	78	6.3	27.5

TRINITY RIVER BASIN

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08066500 TRINITY RIVER AT ROMAYOR, TEX.
(National stream-quality accounting network)

LOCATION.--Lat 30°25'30", long 94°51'02", Liberty County, at gaging station at bridge on State Highway 105, 1.9 miles (3.1 km) south of Romayor, and 3.7 miles (6.0 km) downstream from Big Creek.

DRAINAGE AREA.--17,186 mi² (44,512 km²).

PERIOD OF RECORD.--Chemical analyses: October 1945 to November 1949, February 1950 to September 1951, April 1953 to September 1974.
Chemical and biochemical analyses: February 1968 to September 1974.
Pesticide analyses: February 1968 to September 1974.
Water temperatures: February 1950 to September 1951, April 1953 to January 1959, March 1961 to September 1974.
Sediment records: April 1968 to September 1971.

EXTREMES.--October 1973 to September 1974:

Specific conductance: Maximum daily, 400 micromhos Sept. 23; minimum daily, 154 micromhos Apr. 13.

Period of record:

Specific conductance (1945-50, 1953-74): Maximum daily, 3,800 micromhos Oct. 30, 1956; minimum daily, 103 micromhos Nov. 9, 1946.
Water temperatures (1953-58, 1961-74): Maximum, 37.0°C July 18, 27, 1953; minimum, 3.0°C Jan. 18, 1956, Jan. 15, 16, 1968.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED SODIUM PLUS POTAS- SIUM (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAN- BONATE (CO3) (MG/L)
OCT. 29...	1615	21700	7.4	33	3.1	17	--	4.7	106	0
NOV. 06...	1240	23900	6.7	28	2.7	--	18	--	93	0
DEC. 04...	1645	17500	7.7	33	2.6	--	14	--	94	0
31...	0910	17700	8.0	38	3.7	--	20	--	114	0
JAN. 09...	1640	7400	7.9	35	3.3	17	--	4.5	107	0
30...	0925	49000	6.4	32	3.0	16	--	4.6	103	0
FEB. 08...	1000	3450	7.9	33	3.4	19	--	4.2	91	0
12...	0730	3000	8.3	33	3.3	16	--	4.1	90	0
MAR. 21...	1750	4300	7.5	30	3.3	16	--	3.8	86	0
APR. 09...	0800	1680	6.3	35	3.4	20	--	3.9	104	0
MAY 24...	1330	2940	2.8	33	3.5	21	--	4.9	101	0
JUNE 14...	1030	3250	3.3	37	4.0	24	--	4.7	106	0
JULY 11...	1300	2020	3.7	40	3.5	26	--	4.5	118	0
AUG. 22...	0955	1240	--	--	--	--	--	--	--	--
SEP. 25...	1815	11200	4.6	41	4.7	28	--	5.0	122	0
DATE	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)
OCT. 29...	24	17	.2	--	--	--	--	--	--	--
NOV. 06...	20	16	.2	--	--	--	--	--	--	--
DEC. 04...	23	15	.0	.30	.00	.03	.04	--	.18	--
31...	28	21	.2	--	--	--	--	--	--	--
JAN. 09...	27	19	--	.40	.00	.02	.27	--	.11	180
30...	28	18	--	--	--	--	--	--	--	--
FEB. 08...	32	22	--	--	--	--	--	--	--	--
12...	26	22	--	.50	.00	.10	.30	--	.19	170
MAR. 21...	25	23	--	.61	.00	.03	.20	--	.17	195
APR. 09...	27	25	--	.07	.00	.08	.24	.32	.13	174
MAY 24...	30	27	--	.03	.00	.08	1.0	1.1	.11	190
JUNE 14...	34	29	--	.03	.00	.06	1.0	1.1	.17	--
JULY 11...	39	31	--	.00	.00	.00	.64	.64	.12	212
AUG. 22...	--	--	--	.00	.00	.05	.89	.94	.19	--
SEP. 25...	37	30	--	.11	.01	.12	.77	.89	.14	327

TRINITY RIVER BASIN

08066500 TRINITY RIVER AT ROMAYOR, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)	VOL. NON- FILT- RABLE RESIDUE (MG/L)	HARD- NESS (CA+MG) (MG/L)	NON- CAH- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)
OCT.										
29...	159	--	--	95	8	.8	275	7.2	22.0	--
NOV.										
06...	138	--	--	81	5	.9	235	7.5	20.0	--
DEC.										
04...	143	187	40	93	16	.6	264	7.0	18.5	60
31...	175	--	--	110	17	.8	304	7.9	11.0	--
JAN.										
09...	166	36	2	100	12	.7	299	7.3	15.0	40
30...	161	--	--	92	8	.8	289	7.3	11.0	--
FEB.										
08...	166	--	--	96	22	.8	305	7.2	8.0	--
12...	159	50	28	96	22	.8	286	7.3	12.0	40
MAR.										
21...	153	41	1	89	18	.8	281	7.1	17.0	30
APR.										
09...	172	31	7	100	16	.9	308	6.5	18.0	30
MAY										
24...	172	--	--	97	14	.9	335	7.6	27.0	--
JUNE										
14...	188	64	8	110	22	1.0	352	7.7	27.0	10
JULY										
11...	206	16	13	110	18	1.1	375	7.4	28.0	20
AUG.										
22...	--	34	27	--	--	--	--	--	29.5	10
SEP.										
25...	211	30	8	120	22	1.1	393	6.5	23.0	10
DATE	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)	TOTAL PHYTO- PLANK- TON (CELLS PER ML)	IMME- DIATE COLI- FORM (COL. PER 100 ML)	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)
OCT.										
29...	--	--	--	--	--	--	--	--	--	--
NOV.										
06...	--	--	--	--	--	--	--	--	--	--
DEC.										
04...	80	9.0	96	2.1	--	--	--	--	12	--
31...	--	--	--	--	--	--	--	--	--	--
JAN.										
09...	20	10.4	102	1.3	--	250	1	51	6.0	.0
30...	--	--	--	--	--	--	--	--	--	--
FEB.										
08...	--	--	--	--	--	--	--	--	--	--
12...	30	9.6	89	1.7	--	780	46	18	6.5	--
MAR.										
21...	15	9.0	93	.9	--	3500	210	130	10	--
APR.										
09...	15	10.3	108	2.1	--	2300	24	18	4.5	.0
MAY										
24...	--	--	--	--	68000	--	--	--	6.6	--
JUNE										
14...	20	8.8	109	2.2	71000	3700	59	68	6.2	--
JULY										
11...	10	--	--	1.6	110000	120	49	51	5.7	--
AUG.										
22...	15	8.6	112	2.6	120000	1000	20	93	--	--
SEP.										
25...	10	7.8	90	1.4	--	850	65	1600	6.0	--

TRINITY RIVER BASIN

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08066500 TRINITY RIVER AT ROMAYOR, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTMBER 1974

DATE	TIME	TOTAL ALUM- INUM (AL) (UG/L)	DIS- SOLVED ALUM- INUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	TOTAL BORON (B) (UG/L)	DIS- SOLVED BORON (B) (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 COBALT (CU) (UG/L)
OCT. 29...	1615	--	40	--	2	--	--	0	--	0	0	--
FEB. 12...	0730	380	40	0	0	40	0	0	0	0	0	0
APR. 09...	0800	--	40	3	2	60	<10	0	0	10	10	<50
JULY 11...	1300	--	0	7	7	80	<10	<1	<10	0	0	<50
SEP. 25...	1815	--	10	5	6	360	<10	0	0	0	0	<50

DATE	DIS- SOLVED COBALT (CU) (UG/L)	TOTAL COPPER (CU) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)	TOTAL IRON (FE) (UG/L)	DIS- SOLVED IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	TOTAL LITHIUM (LI) (UG/L)	DIS- SOLVED LITHIUM (LI) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)
OCT. 29...	0	--	2	--	70	--	0	--	0	--	40
FEB. 12...	0	2	2	700	90	0	0	10	10	70	20
APR. 09...	0	30	1	1200	60	<100	0	--	20	170	0
JULY 11...	0	<10	2	560	50	<100	1	--	10	70	0
SEP. 25...	0	<10	2	560	280	<100	2	--	0	120	0

DATE	TOTAL MERCURY (HG) (UG/L)	DIS- SOLVED MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	DIS- SOLVED NICKEL (NI) (UG/L)	TOTAL SELE- NIUM (SE) (UG/L)	DIS- SOLVED SELE- NIUM (SE) (UG/L)	TOTAL STRON- TIUM (SR) (UG/L)	DIS- SOLVED STRON- TIUM (SR) (UG/L)	TOTAL ZINC (ZN) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)
OCT. 29...	--	<.2	--	0	--	--	--	110	--	10
FEB. 12...	<.2	<.2	0	0	--	--	200	200	20	20
APR. 09...	.1	.0	--	2	1	1	--	250	170	70
JULY 11...	.1	.2	--	1	1	0	--	320	230	0
SEP. 25...	.5	.5	--	4	1	0	--	330	470	0

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	ALDRIN (UG/L)	ALDRIN IN BOTTOM DE- POSITS (UG/KG)	DDD (UG/L)	DDD IN BOTTOM DE- POSITS (UG/KG)	DDE (UG/L)	DDE IN BOTTOM DE- POSITS (UG/KG)	DDT (UG/L)	DDT IN BOTTOM DE- POSITS (UG/KG)
OCT. 29...	1615	22000	22.0	.00	--	.00	--	.00	--	.00	--
FEB. 12...	0730	3000	12.0	.00	.0	.00	.0	.00	.0	.00	.0
APR. 09...	0800	1680	18.0	.00	.0	.00	.0	.00	.0	.00	.0
SEP. 25...	1815	11200	23.0	.00	.0	.00	.0	.00	.1	.00	.4

DATE	DI- ELDRIN (UG/L)	DI- ELDRIN IN BOTTOM DE- POSITS (UG/G)	ENDRIN (UG/L)	ENDRIN IN BOTTOM DE- POSITS (UG/KG)	HEPTA- CHLOR (UG/L)	HEPTA- CHLOR IN BOTTOM DE- POSITS (UG/KG)	HEPTA- CHLOR EPOXIDE (UG/L)	HEPTA- CHLOR EPOXIDE IN BOT- TOM DE- POSITS (UG/KG)	LINDANE (UG/L)	LINDANE IN BOTTOM DE- POSITS (UG/KG)	CHLOR- DANE (UG/L)
OCT. 29...	.00	--	.00	--	.00	--	.00	--	.00	--	.0
FEB. 12...	.00	.0	.00	.0	.00	.0	.00	.0	.00	.0	.0
APR. 09...	.00	.0	.00	.0	.00	.0	.00	.0	.00	.0	.0
SEP. 25...	.00	.0	.00	.0	.00	.0	.00	.0	.00	.0	.0

TRINITY RIVER BASIN

08066500 TRINITY RIVER AT ROMAYOR, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	CHLOR- DANE IN BOTTOM DE- POSITITS (UG/KG)	PCB (UG/L)	PCB IN BOTTOM DE- POSITITS (UG/KG)	DI- AZINON (UG/L)	MALA- THION (UG/L)	METHYL PARA- THION (UG/L)	PARA- THION (UG/L)	2,4-D (UG/L)	SILVEX (UG/L)	2,4,5-T (UG/L)
OCT. 29...	--	.0	--	.01	.00	.00	.00	.09	.00	.01
FEB. 12...	0	.0	0	.01	.00	.00	.00	.00	.00	.00
APR. 09...	0	.0	0	.00	.00	.00	.00	.05	.00	.00
SEP. 25...	1	.0	2	.00	.00	.00	.00	.05	.00	.01

May 24, 1974 Time - 1330

Phytoplankton Total count = 68000 cells/ml

Codominants	Percent
-------------	---------

Agmenellum	30
Lyngbya	30
Anacystis	16

Other organisms identified

Cyclotella	7
Scenedesmus	7
Oscillatoria	4
Micractinium	3
Pediastrum	3
Ankistrodesmus	1
Nitzschia	0
Kirchneriella	0
Chlamydomonas	0

June 14, 1974 Time - 1030

Phytoplankton Total count = 71000 cells/ml

Codominants	Percent
-------------	---------

Agmenellum	55
Lyngbya	19

Other organisms identified

Anacystis	6
Cyclotella	4
Scenedesmus	3
Coelastrum	3
Oscillatoria	3
Amphithrix	2
Pediastrum	2
Oocystis	1
Ankistrodesmus	1
Tetrastrum	1
Stephanodiscus	1
Melosira	1
Westella	0
Chlamydomonas	0
Synedra	0
Trachelomonas	0
Tetraedron	0
Unknown	0

July 11, 1974 Time - 1300

Phytoplankton Total count = 110000 cells/ml

Codominants	Percent
-------------	---------

Agmenellum	50
Lyngbya	39

Other Organisms identified

Anacystis	4
Cyclotella	2
Unknown	2
Ankistrodesmus	1
Nitzschia	1
Spirulina	0
Melosira	0
Cosmarium	0
Scenedesmus	0
Staurastrum	0
Tetraedron	0

August 22, 1974 Time - 1045

Phytoplankton Total count = 120000 cells/ml

Codominants	Percent
-------------	---------

Lyngbya	41
Agmenellum	30
Nostoc	15

Other organisms identified

Cyclotella	3
Melosira	3
Nitzschia	2
Ankistrodesmus	2
Scenedesmus	2
Oocystis	1
Chlamydomonas	1
Kirchneriella	0
Tetraedron	0

TRINITY RIVER BASIN

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08066500 TRINITY RIVER AT ROMAYOR, TEX.--Continued

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

MONTH	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCT- ANCE (MICRO- MHOS)	DIS- SOLVED SOLIDS (MG/L)	DIS- SOLVED SOLIDS (TONS)	DIS- SOLVED CHLORIDE (MG/L)	DIS- SOLVED CHLORIDE (TONS)	DIS- SOLVED SULFATE (MG/L)	DIS- SOLVED SULFATE (TONS)	HARDNESS (CA+MG) (MG/L)
OCT. 1973.....	786840	313	170	361000	23	48900	30	63700	100
NOV. 1973.....	446580	268	150	181000	18	21700	25	30100	87
DEC. 1973.....	414150	281	150	168000	19	21200	26	29100	91
JAN. 1974.....	684590	285	160	296000	20	37000	27	49900	92
FEB. 1974.....	185470	298	160	80100	21	10500	28	14000	96
MAR. 1974.....	127000	280	150	51400	19	6520	26	8920	91
APR. 1974.....	85790	282	150	34700	19	4400	27	6250	91
MAY 1974.....	252150	315	170	116000	23	15700	30	20400	100
JUNE 1974.....	109600	355	200	59200	27	7990	33	9770	110
JULY 1974.....	55470	378	210	31500	30	4490	36	5390	120
AUG. 1974.....	45880	381	210	26000	30	3720	36	4460	120
SEPT 1974.....	445550	389	220	265000	31	37300	37	44500	120
TOTAL	3639070	**	**	1670000	**	219000	**	286000	**
WTD.AVG.	9970	308	170	**	22	**	29	**	98

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	306	230	293	304	306	283	289	298	332	382	382	367
2	308	253	290	304	302	285	291	304	325	372	369	385
3	313	267	290	305	303	286	293	304	319	371	384	384
4	312	280	276	287	309	288	295	304	341	373	384	384
5	313	235	264	288	305	289	302	305	345	372	385	383
6	318	235	274	285	303	289	306	305	357	370	385	385
7	316	262	288	280	304	291	308	303	359	369	386	395
8	314	267	293	285	305	291	310	306	353	368	382	389
9	316	270	298	296	304	295	311	309	352	370	381	383
10	326	275	300	298	300	290	310	311	352	373	379	390
11	321	276	303	301	290	288	311	305	351	372	381	397
12	316	277	303	294	286	272	190	311	350	372	384	395
13	314	278	304	284	286	275	154	317	357	379	386	360
14	315	278	305	287	291	277	200	314	352	380	387	390
15	321	281	308	290	293	286	264	322	353	380	368	390
16	323	281	310	252	305	297	281	321	352	379	384	390
17	320	283	311	265	290	295	286	321	351	380	384	390
18	324	285	317	275	278	292	291	323	354	385	385	394
19	324	286	300	294	282	284	294	324	354	386	386	395
20	323	287	270	237	295	283	297	324	354	386	385	395
21	324	286	251	272	296	281	297	326	357	385	388	397
22	325	285	282	275	297	283	297	327	359	384	389	398
23	330	280	250	289	290	284	297	327	358	387	390	400
24	325	284	230	279	300	280	298	332	356	386	388	395
25	306	286	215	281	296	278	297	336	358	386	382	389
26	297	288	276	293	286	269	296	339	358	386	376	397
27	277	286	270	290	281	233	304	342	361	385	379	378
28	275	287	285	295	277	254	305	346	364	385	387	375
29	274	290	294	291	---	260	307	348	370	384	386	372
30	275	294	300	292	---	268	301	347	377	386	321	368
31	269	---	304	299	---	275	---	340	---	387	385	---
MONTH	310	275	286	286	295	281	286	321	353	379	381	387

TRINITY RIVER BASIN

08066500 TRINITY RIVER AT ROMAYOR, TEX.--Continued

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	25.0	18.0	17.0	---	13.0	15.0	21.0	21.0	24.0	27.0	28.0	19.0
2	26.0	19.0	---	9.0	15.0	---	19.0	20.0	---	27.0	25.0	28.0
3	26.0	21.0	19.0	8.0	---	---	20.0	21.0	26.0	27.0	26.0	23.0
4	25.0	---	15.0	7.0	13.0	16.0	19.0	---	25.0	28.0	---	25.0
5	26.0	21.0	15.0	8.0	---	16.0	16.0	---	26.0	28.0	---	24.0
6	25.0	20.0	---	---	14.0	17.0	16.0	20.0	26.0	25.0	26.0	23.0
7	---	20.0	15.0	9.0	---	18.0	---	20.0	27.0	---	26.0	24.0
8	25.0	21.0	14.0	11.0	8.0	18.0	---	---	27.0	27.0	26.0	---
9	25.0	---	---	14.0	10.0	21.0	18.0	23.0	---	27.0	26.0	23.0
10	25.0	20.0	---	11.0	---	---	18.0	22.0	25.0	26.0	27.0	24.0
11	---	---	15.0	8.0	10.0	19.0	19.0	21.0	---	---	---	26.0
12	25.0	19.0	16.0	7.0	11.0	18.0	19.0	---	27.0	27.0	28.0	25.0
13	25.0	19.0	---	12.0	14.0	---	20.0	22.0	27.0	27.0	---	24.0
14	24.0	20.0	15.0	---	15.0	16.0	---	23.0	26.0	---	28.0	25.0
15	24.0	20.0	14.0	12.0	16.0	17.0	18.0	24.0	26.0	27.0	28.0	24.0
16	25.0	18.0	---	12.0	14.0	17.0	18.0	23.0	---	27.0	28.0	25.0
17	22.0	18.0	12.0	13.0	---	---	---	25.0	27.0	27.0	29.0	25.0
18	21.0	---	14.0	14.0	15.0	18.0	19.0	24.0	27.0	27.0	---	25.0
19	22.0	20.0	---	14.0	12.0	19.0	---	---	29.0	27.0	29.0	25.0
20	23.0	---	---	14.0	15.0	19.0	20.0	24.0	26.0	27.0	29.0	25.0
21	---	16.0	8.0	12.0	---	14.0	---	24.0	---	---	28.0	---
22	24.0	---	10.0	14.0	10.0	15.0	20.0	---	28.0	28.0	---	---
23	22.0	22.0	---	10.0	12.0	17.0	---	24.0	---	28.0	29.0	22.0
24	22.0	21.0	---	10.0	---	---	20.0	---	25.0	29.0	28.0	22.0
25	23.0	---	11.0	10.0	10.0	12.0	19.0	25.0	25.0	29.0	---	25.0
26	23.0	21.0	12.0	11.0	10.0	14.0	19.0	---	25.0	29.0	27.0	24.0
27	21.0	22.0	10.0	12.0	11.0	14.0	18.0	---	25.0	28.0	28.0	22.0
28	---	16.0	12.0	11.0	14.0	17.0	---	25.0	25.0	---	28.0	---
29	22.0	---	14.0	11.0	---	---	21.0	26.0	---	29.0	28.0	---
30	20.0	17.0	---	11.0	---	16.0	21.0	26.0	---	---	27.0	19.0
31	18.0	---	11.0	11.0	---	---	---	---	---	27.0	27.0	---
MONTH	23.5	---	---	11.0	---	---	---	---	---	27.5	---	24.0

08066500 TRINITY RIVER AT ROMAYOR, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

[illegible]

TRINITY RIVER BASIN

MISCELLANEOUS ANALYSES OF STREAMS IN THE TRINITY RIVER BASIN IN TEXAS

WATER QUALITY DATA, OCTOBER 1973 TO SEPTEMBER 1974

08043000 BRIDGEPORT RESERVOIR ABOVE BRIDGEPORT, TEX. (Lat 33°13'22", long 97°49'54")

DATE	TIME	RESER- VOIR STORAGE (AC-FT)	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 (HC03) (MG/L)	CAR- BONATE (C03) (MG/L)
JULY, 1974									
01...	1600	190600	5.7	42	6.5	18	4.9	142	0

DATE	TIME	DIS- SOLVED SULFATE (S04) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	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)
JULY, 1974									
01...	16	29	192	130	15	.7	353	7.2	

08043700 LAKE AMON G. CARTER NEAR BOWIE, TEX. (Lat 33°28'08", long 97°51'56")

DATE	TIME	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 (HC03) (MG/L)	CAR- BONATE (C03) (MG/L)
JULY, 1974								
01...	1840	2.3	23	6.8	16	7.1	96	0

DATE	TIME	DIS- SOLVED SULFATE (S04) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	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)
JULY, 1974									
01...	8.6	29	140	85	7	.8	276	7.0	

08045400 LAKE WORTH ABOVE FORT WORTH, TEX. (Lat 32°47'29", long 97°24'54")

DATE	TIME	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 (HC03) (MG/L)	CAR- BONATE (C03) (MG/L)
JULY, 1974								
15...	1355	4.5	44	8.8	27	5.8	161	0

DATE	TIME	DIS- SOLVED SULFATE (S04) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	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)
JULY, 1974									
15...	25	40	234	150	14	1.0	436	7.6	

TRINITY RIVER BASIN

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MISCELLANEOUS ANALYSES OF STREAMS IN THE TRINITY RIVER BASIN IN TEXAS--Continued

WATER QUALITY DATA, OCTOBER 1973 TO SEPTEMBER 1974

08046500 BENBROOK LAKE NEAR BENBROOK, TEX. (Lat 32°39'02", long 97°26'54")

DATE	TIME	RESER- VOIR STORAGE (AC-FT)	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)
JULY, 1974									
15...	1440	85720	6.0	37	6.2	17	3.9	128	0

DATE	TIME	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	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	TEMPER- ATURE (DEG C)
JULY, 1974										
15...	24	22		179	120	13	.7	329	7.5	31.0

08050050 MOUNTAIN CREEK LAKE NEAR GRAND PRAIRIE, TEX. (Lat 32°43'55", long 96°56'35")

DATE	TIME	RESER- VOIR STORAGE (AC-FT)	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)	DIS- SOLVED SULFATE (SO ₄) (MG/L)
MAR., 1974										
01...	1200	20470	4.7	96	7.7	48	2.0	164	0	190

DATE	TIME	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	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	TEMPER- ATURE (DEG C)	DIS- SOLVED BORON (B) (UG/L)
MAR., 1974										
01...	29	457	270	140	1.3	728	7.6	18.0	80	

TRINITY RIVER BASIN

MISCELLANEOUS ANALYSES OF STREAMS IN THE TRINITY RIVER BASIN IN TEXAS--Continued

WATER QUALITY DATA, OCTOBER 1973 TO SEPTEMBER 1974

08051000 ISLE DU BOIS CREEK NEAR PILOT POINT, TEX. (Lat 33°24'23", long 97°00'45")

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	SUS- PENDE SEDIM- ENT (MG/L)	SUS- PENDE SEDIM- ENT (T/DAY)	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM	SUS. SED. SIEVE DIAM. % FINER THAN .250 MM
OCT. 24...	1900	10	17.0	24	.65	--	--	--
NOV. 28...	0935	98	12.0	65	17	--	--	--
JAN. 08...	1300	9.5	5.5	10	.26	--	--	--
FEB. 20...	1650	6.4	13.5	17	.29	--	--	--
APR. 02...	1525	5.9	18.5	75	1.2	--	--	--
MAY 16...	1415	89	25.6	1240	298	--	--	--
JUNE 12...	1355	2380	--	904	5810	--	--	--
AUG. 14...	1310	.97	28.0	34	.09	--	--	--
SEP. 17...	1200	1070	--	891	2570	80	86	96
26...	1025	2120	14.0	333	1910	--	--	--

DATE	SUS. SED. SIEVE DIAM. % FINER THAN .500 MM	SUS. SED. SIEVE DIAM. % FINER THAN 1.00 MM	SUS. SED. SIEVE DIAM. % FINER THAN .002 MM	SUS. SED. SIEVE DIAM. % FINER THAN .004 MM	SUS. SED. SIEVE DIAM. % FINER THAN .008 MM	SUS. SED. SIEVE DIAM. % FINER THAN .016 MM	SUS. SED. SIEVE DIAM. % FINER THAN .031 MM
OCT. 24...	--	--	--	--	--	--	--
NOV. 28...	--	--	--	--	--	--	--
JAN. 08...	--	--	--	--	--	--	--
FEB. 20...	--	--	--	--	--	--	--
APR. 02...	--	--	--	--	--	--	--
MAY 16...	--	--	--	--	--	--	--
JUNE 12...	--	--	--	--	--	--	--
AUG. 14...	--	--	--	--	--	--	--
SEP. 17...	99	100	58	67	68	74	76
26...	--	--	--	--	--	--	--

08052800 LEWISVILLE LAKE NEAR LEWISVILLE, TEX. (Lat 33°04'09", long 96°57'51")

DATE	TIME	RESER- VOIR STORAGE (AC-FT)	DIS- SOLVED SILICA (SIO2) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	
APR., 1974 08...	2010	454000	5.1	46	4.1	18	4.2	139	0	
DATE	TIME	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	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	TEMPER- ATURE (DEG C)
APR., 1974 08...	34	22	202	130	18	.7	360	7.2	15.0	

TRINITY RIVER BASIN

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MISCELLANEOUS ANALYSES OF STREAMS IN THE TRINITY RIVER BASIN IN TEXAS--Continued

WATER QUALITY DATA, OCTOBER 1973 TO SEPTEMBER 1974

08053500 DENTON CREEK NEAR JUSTIN, TEX. (Lat 33°07'08", long 97°17'25")

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	SUS- PENDE SEDI- MENT (MG/L)	SUS- PENDE SEDI- MENT DIS- CHARGE (T/DAY)
OCT. 25...	1730	24	18.5	58	3.8
NOV. 29...	1030	66	9.0	99	18
JAN. 07...	1210	30	3.0	29	2.3
FEB. 21...	1720	82	11.5	315	70
APR. 04...	1330	14	15.5	61	2.3
AUG. 14...	1420	.25	--	16	.01

08054500 GRAPEVINE LAKE NEAR GRAPEVINE, TEX. (Lat 32°58'21", long 97°03'22")

DATE	TIME	RESER- VOIR STORAGE (AC-FT)	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 (HC03) (MG/L)	CAR- BONATE (C03) (MG/L)
APR., 1974 03...	1405	178900	11	55	6.5	18	4.2	169	0
DATE	DIS- SOLVED SULFATE (S04) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	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)
APR., 1974 03...	30	25	233	160	25	.6	425	7.9	16.0

08060500 LAVON LAKE NEAR LAVON, TEX. (Lat 33°01'54", long 96°28'56")

DATE	TIME	RESER- VOIR STORAGE (AC-FT)	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)	
JULY, 1974 11...	0950	182300	7.9	50	2.6	9.8	3.6	152	0	
DATE	TIME	DIS- SOLVED SULFATE (S04) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	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	TEMPER- ATURE (DEG C)
JULY, 1974 11...	28	7.6	184	140	11	.4	326	7.6	28.0	

TRINITY RIVER BASIN

MISCELLANEOUS ANALYSES OF STREAMS IN THE TRINITY RIVER BASIN IN TEXAS--Continued

WATER QUALITY DATA, OCTOBER 1973 TO SEPTEMBER 1974

08061550 LAKE RAY HUBBARD NEAR FORNEY, TEX. (Lat 32°48'00", long 96°29'45")

DATE	TIME	RESER- VOIR STORAGE (AC-FT)	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 (HC03) (MG/L)	CAR- BONATE (C03) (MG/L)
MAR., 1974 11...	1500	472900	1.3	52	2.7	10	3.6	158	0

DATE	TIME	DIS- SOLVED SULFATE (S04) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	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	DIS- SOLVED BORON (B) (UG/L)
MAR., 1974 11...	22		5.6	174	140	11	.4	308	7.8	60

08063010 CEDAR CREEK RESERVOIR NEAR TRINIDAD, TEX. (Lat 32°14'34", long 96°08'28")

DATE	TIME	RESER- VOIR STORAGE (AC-FT)	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 (HC03) (MG/L)	CAR- BONATE (C03) (MG/L)	DIS- SOLVED SULFATE (S04) (MG/L)
MAR., 1974 13...	1300	677600	1.7	17	3.4	12	4.0	54	0	19

DATE	TIME	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	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	TEMPER- ATURE (DEG C)	DIS- SOLVED BORON (B) (UG/L)
MAR., 1974 13...	14		97	56	12	.7	183	7.1	20.0	50

08063050 NAVARRO MILLS LAKE NEAR DAWSON, TEX. (Lat 31°57'27", long 96°41'21")

DATE	TIME	RESER- VOIR STORAGE (AC-FT)	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 (HC03) (MG/L)	CAR- BONATE (C03) (MG/L)	DIS- SOLVED SULFATE (S04) (MG/L)
FEB., 1974 28...	1505	63350	4.4	52	3.6	16	4.3	152	0	36

DATE	TIME	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	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	TEMPER- ATURE (DEG C)	DIS- SOLVED BORON (B) (UG/L)
FEB., 1974 28...	12		202	140	20	.6	364	7.7	19.0	90

TRINITY RIVER BASIN

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MISCELLANEOUS ANALYSES OF STREAMS IN THE TRINITY RIVER BASIN IN TEXAS--Continued

WATER QUALITY DATA, OCTOBER 1973 TO SEPTEMBER 1974

08063700 BARDWELL LAKE NEAR ENNIS, TEX. (Lat 32°15'00", long 96°38'49")

DATE	TIME	RESER- VOIR STORAGE (AC-FT)	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)	DIS- SOLVED SULFATE (SO4) (MG/L)
FEB., 1974 28...	1620	55080	2.9	55	2.6	13	3.3	170	0	21

DATE	TIME	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	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)	DIS- SOLVED BORON (B) (UG/L)
FEB., 1974 28...	11		192	150	9	.5	347	7.6	19.0	90

08065330 HOUSTON COUNTY LAKE NEAR CROCKETT, TEX. (Lat 31°24'24", long 95°36'06")

DATE	TIME	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)	DIS- SOLVED SULFATE (SO4) (MG/L)
SEP., 1974 30...	1800	12	7.3	2.3	7.9	2.3	26	0	5.0

DATE	TIME	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	DIS- SOLVED BORON (B) (UG/L)
SEP., 1974 30...	11		61	28	6	.7	111	6.7	60

08067500 CEDAR BAYOU NEAR CROSBY, TEX.

LOCATION.--Lat 29°58'21", long 94°59'08", Harris County, at gaging station at bridge on U.S. Highway 90 and about 6.6 miles (10.6 km) northeast of Crosby.

DRAINAGE AREA.--64.9 mi² (168.1 km²).

PERIOD OF RECORD.--Chemical and biochemical analyses: May 1971 to September 1974.
Pesticide analyses: May 1971 to September 1974.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	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 SODIUM PLUS POTAS- SIUM (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)
JAN. 21...	1230	450	5.6	18	1.7	--	14	--	60	0
FEB. 05...	1200	1.2	--	--	--	--	--	--	--	--
MAR. 06...	0930	3.0	5.7	120	13	--	140	--	268	0
26...	0930	26	--	--	--	--	--	--	--	--
APR. 29...	1030	20	13	50	5.3	58	--	2.5	130	0
MAY 06...	0930	230	--	--	--	--	--	--	--	--
JUNE 19...	1005	4.4	--	--	--	--	--	--	--	--
JULY 29...	0930	1.4	14	45	5.4	67	--	2.8	159	0
AUG. 13...	0945	45	--	--	--	--	--	--	--	--
SEP. 26...	1320	25	--	--	--	--	--	--	--	--

DATE	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITU- ENTS) (MG/L)
JAN. 21...	4.8	20	.0	.10	.00	.11	.55	--	.16	95
FEB. 05...	--	--	--	.30	.04	.04	.60	--	.13	--
MAR. 06...	24	290	.4	.01	.01	.16	.15	--	.15	717
26...	--	--	--	1.1	.02	.31	.51	--	.16	--
APR. 29...	28	93	--	1.5	.10	.19	.91	1.1	.14	314
MAY 06...	--	--	--	1.6	.05	.22	.88	1.1	.14	--
JUNE 19...	--	--	--	.30	.05	.64	2.9	3.5	.21	--
JULY 29...	13	95	--	.00	.00	.06	.90	.96	.25	321
AUG. 13...	--	--	--	.18	.01	.16	.94	1.1	.13	--
SEP. 26...	--	--	--	.07	.00	.18	1.1	1.3	.18	--

DATE	TOTAL NON- FILT- RABLE RESIDUE (MG/L)	VOL. NON- FILT- RABLE RESIDUE (MG/L)	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCTI- VANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	TUR- BID- ITY (JTU)
JAN. 21...	332	42	52	3	.8	190	6.8	16.0	120	120
FEB. 05...	124	30	--	--	--	858	6.9	16.0	20	55
MAR. 06...	37	2	360	140	3.1	1300	7.5	21.0	10	25
26...	143	31	--	--	--	--	--	11.0	50	65
APR. 29...	250	43	150	40	2.1	609	7.6	24.0	50	120
MAY 06...	796	136	--	--	--	--	--	20.0	120	300
JUNE 19...	144	27	--	--	--	--	--	30.0	100	75
JULY 29...	121	20	130	4	2.5	614	7.4	28.5	50	65
AUG. 13...	133	22	--	--	--	492	6.9	27.0	40	60
SEP. 26...	127	44	--	--	--	419	7.4	23.0	50	60

CEDAR BAYOU BASIN

301

08067500 CEDAR BAYOU NEAR CROSBY, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	BIO- CHEM- ICAL OXYGEN DEMAND (MG/L)	IMME- DIATE COLI- FORM (COL. PER 100 ML)	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)	PHENOLS (UG/L)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)
JAN. 21...	8.7	87	2.2	41000	5500	5100	23	--	.0
FEB. 05...	9.3	93	2.3	15000	380	150	8.0	0	.0
MAR. 06...	6.9	77	3.2	9300	110	110	5.5	--	.0
26...	10.2	92	2.4	62000	9000	9200	22	--	.0
APR. 29...	7.1	84	4.3	89000	2200	330	17	0	.0
MAY 06...	7.6	83	5.3	240000	14000	9900	40	8	.0
JUNE 19...	5.4	71	3.8	1500	150	140	6.1	--	.0
JULY 29...	5.1	65	1.7	1400	190	130	9.6	--	.0
AUG. 13...	6.0	74	3.0	52000	11000	4400	13	--	.0
SEP. 26...	7.3	84	1.5	4600	500	880	14	--	.0

DATE	TIME	DIS- SOLVED ALUM- INUM (AL) (UG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	DIS- SOLVED COBALT (CO) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)
MAR. 26...	0930	170	0	--	0	30	0	4
APR. 29...	1030	60	1	90	1	0	0	8
JULY 29...	0930	--	--	110	--	--	--	--

DATE	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	DIS- SOLVED LITHIUM (LI) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED MERCURY (HG) (UG/L)	DIS- SOLVED NICKEL (NI) (UG/L)	DIS- SOLVED STRON- TIUM (SR) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)
MAR. 26...	200	0	0	0	.1	0	250	70
APR. 29...	70	3	10	0	.0	9	280	50
JULY 29...	--	--	--	--	--	--	--	--

CEDAR BAYOU BASIN

08067500 CEDAR BAYOU NEAR CROSBY, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TEMPERATURE (DEG C)	ALDRIN (UG/L)	ALDRIN IN BOTTOM DE-POSITS (UG/KG)	DDD (UG/L)	DDD IN BOTTOM DE-POSITS (UG/KG)	DDE (UG/L)	DDE IN BOTTOM DE-POSITS (UG/KG)	DDT (UG/L)	DDT IN BOTTOM DE-POSITS (UG/KG)
JAN. 21...	1230	450	16.0	--	.0	--	.7	--	.0	--	3.3
FEB. 05...	1200	1.2	16.0	.00	--	.00	--	.00	--	.00	--
MAR. 06...	0930	3.0	21.0	--	.0	--	.4	--	.0	--	.0
MAR. 26...	0930	26	11.0	.00	--	.00	--	.00	--	.00	--
APR. 29...	1030	20	24.0	--	.0	--	1.0	--	1.0	--	32
MAY 29...	1030	--	--	.00	--	.00	--	.00	--	.00	--

DATE	DI-ELDRIN (UG/L)	DI-ELDRIN IN BOTTOM DE-POSITS (UG/KG)	ENDRIN (UG/L)	ENDRIN IN BOTTOM DE-POSITS (UG/KG)	HEPTA-CHLOR (UG/L)	HEPTA-CHLOR IN BOTTOM DE-POSITS (UG/KG)	HEPTA-CHLOR EPOXIDE (UG/L)	HEPTA-CHLOR EPOXIDE IN BOTTOM DE-POSITS (UG/KG)	LINDANE (UG/L)	LINDANE IN BOTTOM DE-POSITS (UG/KG)	CHLOR-DANE (UG/L)
JAN. 21...	--	3.3	--	.0	--	.0	--	.0	--	.0	--
FEB. 05...	.00	--	.00	--	.00	--	.00	--	.00	--	.0
MAR. 06...	--	1.0	--	.0	--	.0	--	.0	--	.0	--
MAR. 26...	.01	--	.00	--	.00	--	.00	--	.00	--	.0
APR. 29...	--	.0	--	.0	--	.0	--	.0	--	.0	--
MAY 29...	.01	--	.00	--	.00	--	.00	--	.00	--	.0

DATE	CHLOR-DANE IN BOTTOM DE-POSITS (UG/KG)	PCB (UG/L)	PCB IN BOTTOM DE-POSITS (UG/KG)	DI-AZINON (UG/L)	MALATHION (UG/L)	METHYL PARATHION (UG/L)	PARATHION (UG/L)	2,4-D (UG/L)	SILVEX (UG/L)	2,4,5-T (UG/L)
JAN. 21...	0	--	0	--	--	--	--	--	--	--
FEB. 05...	--	.0	--	.00	.00	.00	.00	.06	.00	.00
MAR. 06...	0	--	0	--	--	--	--	--	--	--
MAR. 26...	--	.0	--	.00	.00	.00	.00	.00	.00	.00
APR. 29...	0	--	0	--	--	--	--	--	--	--
MAY 29...	--	.0	--	.00	.00	.00	.00	.00	.00	.00

SAN JACINTO RIVER BASIN

303

08067650 WEST FORK SAN JACINTO RIVER BELOW LAKE CONROE, NEAR CONROE, TEX.

LOCATION.--Lat 30°20'31", long 95°32'34", Montgomery County, on downstream side of bridge on State Highway 105, 2.4 miles (3.9 km) downstream from dam at Lake Conroe, and 5.9 miles (9.4 km) west of Conroe.

DRAINAGE AREA.--451 mi² (1,168 km²).

PERIOD OF RECORD.--Chemical and biochemical analyses: October 1972 to September 1974.

Pesticide analyses: October 1972 to September 1974.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DIS-SOLVED SILICA (SiO ₂) (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNE-SIUM (MG)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED SODIUM PLUS POTAS-SIUM (MG/L)	DIS-SOLVED POTAS-SIUM (K) (MG/L)	BICARBONATE (HCO ₃) (MG/L)	CARBONATE (CO ₃) (MG/L)	DIS-SOLVED SULFATE (SO ₄) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)
OCT. 29...	1745	580	5.4	28	1.7	--	7.2	--	84	0	3.4	14
DEC. 04...	1710	52	10	29	2.8	--	9.5	--	85	0	6.4	20
FEB. 11...	1730	995	3.0	26	2.7	--	5.9	--	78	0	5.6	13
APR. 08...	1615	1.3	19	67	5.3	28	--	3.9	202	0	7.2	55
JUNE 10...	1015	15	12	30	2.6	14	--	2.0	87	0	10	26
AUG. 19...	1115	1.1	17	48	4.7	25	--	6.8	158	0	6.7	47

DATE	DIS-SOLVED FLUORIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	ORGANIC NITROGEN (N) (MG/L)	TOTAL KJEL-DAHL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	TOTAL NON-FILTERABLE RESIDUE (MG/L)	VOL. NON-FILTERABLE RESIDUE (MG/L)	HARDNESS (CA+MG) (MG/L)
OCT. 29...	.1	.04	.01	.04	.23	--	.02	101	58	0	77
DEC. 04...	.0	.10	.00	.10	.00	--	.09	120	131	31	84
FEB. 11...	.1	.30	.01	.19	.25	--	.02	96	11	4	76
APR. 08...	--	.04	.01	.00	.15	--	.04	286	20	6	190
JUNE 10...	--	.09	.00	.06	.94	1.0	.08	140	116	26	86
AUG. 19...	--	.00	.00	.07	.61	.68	.03	233	39	32	140

DATE	NON-CARBONATE HARDNESS (MG/L)	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	TURBIDITY (JTU)	DIS-SOLVED OXYGEN (MG/L)	PERCENT SATURATION	BIO-CHEMICAL OXYGEN DEMAND (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT. 29...	8	.4	200	7.5	22.0	30	20	8.5	97	1.4	16
DEC. 04...	14	.5	231	6.5	17.5	140	75	8.1	84	2.3	--
FEB. 11...	12	.3	205	7.5	13.0	15	8	10.6	100	1.3	8.0
APR. 08...	24	.9	512	6.7	20.0	10	20	8.8	96	1.9	5.0
JUNE 10...	14	.7	251	6.3	24.0	50	65	6.0	71	1.9	9.4
AUG. 19...	10	.9	432	6.5	27.5	10	20	7.3	91	.8	4.4

SAN JACINTO RIVER BASIN

08067650 WEST FORK SAN JACINTO RIVER BELOW LAKE CONROE, NEAR CONROE, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	DIS-SOLVED ALUMINUM (AL) (UG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	DIS-SOLVED BORON (B) (UG/L)	DIS-SOLVED CADMIUM (CU) (UG/L)	DIS-SOLVED CHROMIUM (CR) (UG/L)	DIS-SOLVED COBALT (CO) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)
OCT. 29...	1745	20	1	--	0	0	0	2
FEB. 11...	1730	30	2	--	1	0	0	3
APR. 08...	1615	70	0	30	0	10	0	3
AUG. 19...	1115	2	1	--	<1	0	0	1

DATE	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	DIS-SOLVED LITHIUM (LI) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)	DIS-SOLVED MERCURY (HG) (UG/L)	DIS-SOLVED NICKEL (NI) (UG/L)	DIS-SOLVED STRONTIUM (SR) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)
OCT. 29...	20	0	0	60	.2	0	110	10
FEB. 11...	50	2	0	0	.0	4	60	40
APR. 08...	30	2	0	70	.3	0	230	190
AUG. 19...	20	1	0	0	--	1	240	30

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TEMPERATURE (DEG C)	ALDRIN (UG/L)	DDD (UG/L)	DDE (UG/L)	DDT (UG/L)	DI-ELDRIN (UG/L)	ENDRIN (UG/L)	HEPTACHLOR (UG/L)	HEPTACHLOR EPOXIDE (UG/L)
OCT. 29...	1745	580	22.0	.00	.00	.00	.00	.00	.00	.00	.00
FEB. 11...	1730	995	13.0	.00	.00	.00	.00	.00	.00	.00	.00
APR. 08...	1615	1.3	20.0	.00	.00	.00	.00	.00	.00	.00	.00
AUG. 19...	1115	1.1	27.5	.00	.00	.00	.00	.00	.00	.00	.00

DATE	LINDANE (UG/L)	CHLORDANE (UG/L)	PCB (UG/L)	DI-AZINON (UG/L)	MALATHION (UG/L)	METHYL PARATHION (UG/L)	PARATHION (UG/L)	2,4-D (UG/L)	SILVEX (UG/L)	2,4,5-T (UG/L)
OCT. 29...	.00	.0	.0	.00	.00	.00	.00	.03	.00	.01
FEB. 11...	.00	.0	.0	.00	.00	.00	.00	.00	.00	.00
APR. 08...	.00	.0	.0	.00	.00	.00	.00	.00	.00	.00
AUG. 19...	.00	.0	.0	.00	.00	.00	.00	.00	.00	.00

SAN JACINTO RIVER BASIN

305

08067900 LAKE CREEK NEAR CONROE, TEX.

LOCATION.--Lat 30°15'12", Long 95°34'43", Montgomery County, at bridge on county road and 8.3 miles (13.4 km) southwest of Conroe.

DRAINAGE AREA.--291 mi² (754 km²).

PERIOD OF RECORD.--Chemical analyses: October 1968 to September 1974.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	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 SODIUM PLUS POTAS- SIUM (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)
OCT. 30...	1250	50	19	48	5.9	--	26	--	125	0	10
FEB. 22...	1130	347	14	50	4.3	30	--	2.9	123	0	11
MAR. 15...	1420	70	17	43	4.0	33	--	4.4	92	0	13
APR. 04...	1125	34	17	46	4.4	35	--	3.1	110	0	9.6
JUNE 25...	1745	5.4	20	30	3.3	25	--	3.3	76	0	5.9
AUG. 07...	1320	10	14	36	4.5	35	--	3.5	71	0	7.0
SEP. 24...	0845	34	23	30	2.7	18	--	3.2	80	0	9.0

DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	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)
OCT. 30...	62	.1	.04	232	140	42	.9	436	6.7	19.5
FEB. 22...	68	--	--	241	140	42	1.1	465	7.3	15.5
MAR. 15...	79	--	--	239	120	48	1.3	447	7.6	26.5
APR. 04...	76	--	--	245	130	43	1.3	475	7.4	20.5
JUNE 25...	53	--	--	178	89	26	1.2	323	7.3	27.0
AUG. 07...	82	--	--	217	110	50	1.5	438	6.7	25.5
SEP. 24...	36	--	--	161	86	20	.8	289	5.8	22.0

SAN JACINTO RIVER BASIN

08068000 WEST FORK SAN JACINTO RIVER NEAR CONROE, TEX.

LOCATION.--Lat 30°14'41", long 95°27'26", Montgomery County, at gaging station at bridge on Interstate Highway 45 and U.S. Highway 75, 281 ft (86 m) upstream from Missouri Pacific Railroad Co. bridge, 3.5 miles (5.6 km) downstream from Lake Creek, and 4.2 miles (6.8 km) south of Conroe.

DRAINAGE AREA.--809 mi² (2,095 km²).

PERIOD OF RECORD.--Chemical analyses: October 1961 to September 1974.

Chemical and biochemical analyses: January 1968 to September 1974.

Water temperatures: October 1961 to September 1974.

Sediment records: October 1966 to September 1974.

EXTREMES.--October 1973 to September 1974:

Specific conductance: Maximum daily, 501 micromhos Apr. 18; minimum, daily, 76 micromhos Oct. 12.

Water temperatures: Maximum, 33.0°C Aug. 17; minimum, 9.0°C Jan. 12.

Period of record:

Specific conductance: Maximum daily, 763 micromhos Apr. 20, 1971, minimum daily, 52 micromhos May 12, 1972.

Water temperatures (1961-72, 1973-74): Maximum, 36.0°C Aug. 6, 1964, July 9, 1967; minimum, freezing point Dec. 22, 1963, Jan. 31, 1968.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	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 SODIUM PLUS POTAS- SIUM (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
OCT.												
14...	0935	9000	8.2	11	1.2	4.3	--	3.5	34	0	4	8.3
29...	1320	535	8.8	27	2.3	--	9.4	--	80	0	5.6	18
NOV.												
20...	0830	1230	6.4	26	2.2	8.9	--	4.7	87	0	4.3	15
DEC.												
04...	1530	900	10	20	2.5	--	13	--	48	0	7.2	30
27...	1535	2200	8.4	24	2.8	--	15	--	65	0	6.8	31
JAN.												
09...	1705	750	7.7	26	2.4	13	--	3.5	79	0	6.0	23
29...	0900	5770	6.1	19	1.6	6.8	--	3.1	61	0	4.4	11
FEB.												
08...	1130	1950	3.2	26	2.3	9.9	--	3.4	82	0	5.6	16
11...	1630	1260	4.2	27	5.0	--	4.1	--	80	0	7.6	16
MAR.												
12...	1100	79	18	36	3.6	29	--	3.1	101	0	8.1	55
21...	1925	88	15	38	4.2	--	33	--	97	0	8.4	68
APR.												
08...	1530	50	19	33	3.2	28	--	2.3	92	0	8.4	57
MAY												
21...	1000	40	20	27	2.8	25	--	2.8	74	0	8.1	49
JUNE												
10...	0930	640	6.5	20	2.3	19	--	2.6	69	0	7.4	28
JULY												
09...	1115	21	21	22	2.6	27	--	2.7	68	0	8.3	44
AUG.												
19...	1020	18	21	21	3.6	28	--	3.0	70	0	8.6	48
SEP.												
25...	2000	590	6.6	29	2.8	11	--	3.3	84	0	5.3	19

SAN JACINTO RIVER BASIN

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08068000 WEST FORK SAN JACINTO RIVER NEAR CONROE, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)	VOL. NON- FILT- RABLE RESIDUE (MG/L)	HARD- NESS (CA+MG) (MG/L)
OCT.											
14...	.1	--	--	--	--	--	--	54	--	--	32
29...	.1	.07	.02	.06	.21	--	.06	111	--	--	77
NOV.											
20...	--	--	--	--	--	--	--	110	--	--	74
DEC.											
04...	.0	.10	.00	.05	.00	--	.18	107	--	--	60
27...	.1	--	--	--	--	--	--	120	--	--	71
JAN.											
04...	--	--	--	--	--	--	--	121	--	--	75
29...	--	--	--	--	--	--	--	82	--	--	54
FEB.											
08...	--	--	--	--	--	--	--	107	--	--	74
11...	.1	.30	.01	.12	.23	--	.04	105	--	--	88
MAR.											
12...	--	--	--	--	--	--	--	203	--	--	100
21...	.1	.13	.01	.03	.20	--	.10	215	60	4	110
APR.											
08...	--	.05	.01	.01	.18	--	.10	196	--	--	96
MAY											
21...	--	.17	.00	.04	.84	.88	.21	171	156	55	79
JUNE											
10...	--	.18	.00	.09	.91	1.0	.12	120	203	35	59
JULY											
09...	--	.23	.00	.08	.29	.37	.55	161	26	14	66
AUG.											
14...	--	.18	.00	.09	.62	.71	.62	168	33	--	67
SEP.											
25...	--	.14	.01	.17	.65	.82	.05	118	34	14	84
DATE	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)	COLOR (PLAT- INJM- COALT UNITS)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	RIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT.											
14...	5	.3	91	6.8	21.5	--	--	--	--	--	--
29...	11	--	212	7.2	21.0	--	--	8.2	91	2.2	--
NOV.											
20...	3	.5	203	7.3	15.0	--	--	--	--	--	--
DEC.											
04...	21	.7	208	7.4	17.5	--	--	8.3	86	3.6	--
27...	18	.8	213	7.2	12.5	--	--	--	--	--	--
JAN.											
09...	10	.7	230	7.2	13.5	--	--	--	--	--	--
29...	4	.4	149	7.1	12.5	--	--	--	--	--	--
FEB.											
08...	7	.5	204	7.2	11.0	--	--	--	--	--	--
11...	22	.2	212	7.1	14.0	--	--	11.1	107	1.3	--
MAR.											
12...	22	1.2	365	7.1	22.5	--	--	--	--	--	--
21...	32	--	396	7.2	19.0	30	30	8.6	91	1.1	10
APR.											
08...	20	1.2	355	6.7	23.0	--	--	10.2	117	1.6	--
MAY											
21...	18	1.2	327	7.1	25.0	20	40	7.6	90	1.5	5.6
JUNE											
10...	3	1.1	193	6.2	23.5	100	100	6.7	78	3.1	11
JULY											
09...	10	1.5	286	6.9	29.0	20	20	--	--	.8	--
AUG.											
14...	10	1.5	306	6.1	28.0	--	--	9.5	120	--	4.1
SEP.											
25...	15	.5	234	6.7	24.0	5	15	7.2	85	1.3	8.0

SAN JACINTO RIVER BASIN

08068000 WEST FORK SAN JACINTO RIVER NEAR CONROE, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	SUS- PENDE SEDI- MENT (MG/L)	SUS- PENDE SEDI- MENT DIS- CHARGE (T/DAY)
OCT. 29...	1510	535	21.0	37	53
NOV. 29...	1500	541	19.0	57	83
JAN. 09...	1710	750	13.5	29	59
29...	1145	5770	12.5	76	1180
FEB. 21...	1100	534	15.5	106	153
APR. 03...	1030	81	23.8	50	11
MAY 16...	0925	92	25.5	69	17
JUNE 25...	1245	21	28.0	29	1.6
AUG. 07...	1525	46	28.5	63	7.9
SEP. 18...	0930	3930	25.0	48	509

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

MONTH	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCT- ANCE (MICRO- MHOS)	DIS- SOLVED SOLIDS (MG/L)	DIS- SOLVED SOLIDS (TONS)	DIS- SOLVED CHLORIDE (MG/L)	DIS- SOLVED CHLORIDE (TONS)	DIS- SOLVED SULFATE (MG/L)	DIS- SOLVED SULFATE (TONS)	HARDNESS (CA+MG) (MG/L)
OCT. 1973.....	44827	129	71	8590	12	1450	3.6	436	45
NOV. 1973.....	41479	198	110	12300	26	2910	5.0	560	67
DEC. 1973.....	24299	225	120	7870	31	2030	5.6	367	72
JAN. 1974.....	74705	165	91	18400	19	3830	4.3	867	57
FEB. 1974.....	34101	214	120	11000	29	2670	5.3	488	71
MAR. 1974.....	3984	370	200	2150	60	645	8.5	91	92
APR. 1974.....	1691	380	210	959	62	283	8.7	39	93
MAY 1974.....	3491	319	180	1700	50	471	7.5	70	85
JUNE 1974.....	2089	239	130	733	34	192	5.9	33	74
JULY 1974.....	655	270	150	265	40	70	6.5	11	78
AUG. 1974.....	1330	239	130	467	34	122	5.9	21	74
SEPT 1974.....	44478	176	97	11600	21	2520	4.6	552	60
TOTAL	277129	**	**	76000	**	17200	**	3500	**
WTD.AVG.	759	185	100	**	23	**	4.7	**	61

SAN JACINTO RIVER BASIN

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08068000 WEST FORK SAN JACINTO RIVER NEAR CONROE, TEX.--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	240	141	392	213	192	286	358	273	269	277	298	214
2	264	146	430	211	195	308	356	234	288	282	231	195
3	251	154	401	210	198	309	373	500	307	273	184	296
4	225	187	202	213	208	318	369	412	312	281	206	259
5	234	196	270	207	208	329	359	391	308	284	244	249
6	237	199	240	232	204	359	350	347	301	288	203	239
7	250	213	238	267	206	365	375	339	317	288	210	245
8	264	218	236	224	204	370	359	340	320	265	216	252
9	283	206	227	232	202	362	352	338	248	287	245	248
10	279	209	235	237	206	360	354	309	193	317	292	248
11	170	207	220	232	208	369	367	208	185	302	302	278
12	76	208	220	231	208	365	331	235	284	294	278	257
13	98	204	211	280	211	372	336	333	241	293	279	170
14	91	208	211	293	207	384	377	380	244	295	274	145
15	105	206	240	240	253	384	372	408	247	272	191	144
16	118	206	238	238	270	382	379	383	255	282	266	149
17	110	203	213	270	269	399	445	357	260	163	275	171
18	146	204	216	313	269	397	501	347	268	265	301	194
19	173	205	220	136	243	390	491	349	276	274	302	208
20	175	203	221	165	232	414	449	331	280	281	307	221
21	180	206	239	233	226	387	436	315	277	289	304	227
22	192	231	459	230	241	399	400	299	279	281	300	233
23	201	245	437	207	244	411	384	299	283	281	302	251
24	216	232	196	126	240	407	382	314	282	287	297	231
25	210	212	200	144	240	307	365	316	287	291	294	231
26	208	206	190	115	235	316	383	303	290	301	276	233
27	204	204	213	126	252	365	358	326	287	309	273	233
28	204	210	222	135	286	475	376	319	284	291	255	233
29	206	211	213	150	---	392	359	290	286	298	237	239
30	207	342	211	173	---	367	356	289	286	304	190	248
31	189	---	213	187	---	368	---	279	---	307	245	---
MONTH	194	207	254	209	227	368	382	328	275	284	261	225

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	23.5	18.0	15.5	10.0	14.0	18.0	22.0	22.0	24.5	27.0	30.0	28.0
2	23.0	20.0	---	10.0	16.0	21.0	19.5	23.0	---	28.5	25.0	29.0
3	23.5	20.5	18.0	---	15.0	20.5	21.0	26.5	30.0	30.5	27.0	25.0
4	24.0	22.5	17.0	9.5	14.5	21.0	20.5	25.0	26.0	32.5	30.0	26.0
5	26.0	21.5	15.0	10.5	13.0	20.0	21.5	23.0	26.0	29.0	24.5	---
6	24.5	20.0	12.0	11.5	14.5	20.5	15.0	22.0	26.0	26.0	25.0	27.0
7	23.0	20.0	13.0	12.0	13.0	21.5	17.5	20.0	27.0	26.0	27.0	24.0
8	23.5	21.0	11.0	13.5	11.0	22.0	18.0	25.5	---	25.0	25.5	24.0
9	23.0	21.0	11.0	13.0	12.5	22.0	17.0	26.0	26.0	25.0	26.0	23.0
10	25.5	19.5	10.5	12.0	13.0	22.5	17.0	21.0	24.0	25.0	28.0	24.0
11	24.0	18.0	12.0	10.0	13.5	22.0	19.0	20.0	23.0	25.0	26.0	24.0
12	21.5	18.0	18.0	9.0	14.5	22.5	20.0	21.0	24.0	32.0	31.5	25.0
13	22.0	21.0	15.5	10.0	16.0	20.0	22.0	25.0	24.0	25.0	31.5	---
14	21.5	20.0	14.5	11.0	15.5	18.0	22.0	23.0	24.5	26.0	31.0	23.0
15	22.0	20.5	15.5	12.5	15.0	18.5	19.0	24.5	25.0	28.5	30.0	24.0
16	22.0	19.5	12.0	13.0	15.0	22.0	18.0	25.0	25.5	29.5	31.0	24.5
17	21.0	19.0	12.0	15.5	15.5	22.5	18.5	25.0	25.0	25.0	33.0	25.0
18	20.0	20.5	13.5	18.5	15.5	23.0	18.5	28.5	27.0	30.0	26.0	25.5
19	20.0	21.0	13.0	16.5	14.5	25.0	19.5	24.5	25.5	27.0	26.0	24.5
20	21.0	19.0	11.0	15.0	15.0	24.5	22.0	24.5	25.5	25.5	32.0	24.5
21	22.0	17.5	11.0	14.0	15.5	20.0	25.0	24.0	30.0	25.5	32.5	---
22	22.0	19.0	11.5	16.0	13.5	18.0	23.5	24.5	30.0	26.5	31.0	23.5
23	23.0	20.5	10.0	14.0	15.0	19.5	25.5	25.0	26.0	27.0	28.0	22.0
24	22.0	21.5	15.0	11.5	---	15.5	27.0	25.5	26.0	32.0	25.0	24.0
25	24.0	21.0	---	11.5	---	12.5	26.5	29.0	26.0	29.0	25.0	24.0
26	22.0	21.5	---	12.0	13.0	13.0	24.0	30.5	22.0	27.0	25.0	23.0
27	22.0	21.0	12.5	14.0	13.5	14.5	24.0	30.0	25.5	27.0	27.5	24.5
28	22.0	19.0	12.0	14.0	17.5	16.0	24.5	30.0	25.0	28.5	27.0	25.0
29	19.0	18.5	15.0	13.5	---	20.0	24.5	31.0	29.5	27.0	26.0	24.0
30	21.0	17.5	13.0	14.5	---	17.0	22.0	30.0	30.0	28.5	27.0	24.0
31	19.0	---	12.5	14.5	---	20.0	---	25.0	---	29.0	26.5	---
MONTH	22.5	20.0	13.5	13.0	14.5	20.0	21.0	25.0	26.0	27.5	28.0	24.5

08068400 PANTHER BRANCH NEAR CONROE, TEX.

LOCATION.--Lat 30°11'34", long 95°29'09", Montgomery County, 100 ft (30 m) downstream from pipeline right-of-way, 400 ft (122 m) downstream from mouth of Bear Creek, and 8.0 miles (12.9 km) southwest of Conroe.

DRAINAGE AREA.--12 mi² (31 km²).

PERIOD OF RECORD.--Chemical and biochemical analyses: March to September 1974.
Pesticide analyses: August to September 1974.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	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- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)
MAR. 20...	1300	.54	8.8	12	4.5	41	2.0	14	0	6.4
APR. 17...	1230	.20	11	8.3	3.0	28	1.5	18	0	6.5
MAY 01...	1400	.09	10	8.1	3.0	27	1.5	22	0	5.0
AUG. 14...	1015	.02	6.6	7.7	2.5	18	1.8	16	0	8.4
SEP. 13...	1630	450	2.2	2.1	.0	5.2	1.3	2	0	3.0

DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL- NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)
MAR. 20...	89	.02	.01	.20	.32	--	.04	172	16
APR. 17...	55	.05	.03	.21	.28	--	.05	124	214
MAY 01...	45	.10	.02	.35	.65	1.0	.22	113	47
AUG. 14...	32	.05	.00	.25	1.3	1.5	.07	86	56
SEP. 13...	9.2	.01	.00	.08	.80	.88	.04	25	90

DATE	VOL. NON- FILT- RABLE RESIDUE (MG/L)	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)	COLOR (PLAT- INUM- COBALT UNITS)	TUR- BID- ITY (JTU)
MAR. 20...	1	49	37	2.6	350	6.3	21.5	200	6
APR. 17...	56	33	18	2.1	240	6.2	18.0	240	85
MAY 01...	10	33	15	2.1	219	7.2	20.0	12	10
AUG. 14...	5	30	16	1.4	169	5.9	26.0	140	15
SEP. 13...	33	5	4	1.0	49	5.6	23.5	160	50

DATE	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATU- RATION	BIO- CHEM- ICAL OXYGEN DEMAND (MG/L)	IMME- DIATE COLI- FORM (COL. PER 100 ML)	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)	PHENOLS (UG/L)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)
MAR. 20...	5.9	66	1.3	13000	73	80	33	0	.0
APR. 17...	9.2	97	2.3	12000	92	120	21	0	.1
MAY 01...	7.8	85	4.2	16000	84	920	21	2	.0
AUG. 14...	1.6	20	3.2	2900	340	230	28	6	.1
SEP. 13...	7.8	91	2.5	450	4600	7400	.6	5	.0

SAN JACINTO RIVER BASIN

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08068400 PANTHER BRANCH NEAR CONROE, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	DIS-SOLVED ALUM- INUM (AL) (UG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	DIS-SOLVED BORON (B) (UG/L)	DIS-SOLVED CAD- MIUM (CD) (UG/L)	DIS-SOLVED CHRO- MIUM (CR) (UG/L)	DIS-SOLVED COBALT (CO) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)
MAR. 20...	1300	80	0	100	0	0	0	3
APR. 17...	1230	110	0	80	0	20	0	8
MAY 01...	1400	130	0	90	0	0	3	6
AUG. 14...	1015	120	1	100	<1	0	0	5
SEP. 13...	1630	150	0	80	0	0	1	6

DATE	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	DIS-SOLVED LITHIUM (LI) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)	DIS-SOLVED MERCURY (HG) (UG/L)	DIS-SOLVED NICKEL (NI) (UG/L)	DIS-SOLVED STRON- TIUM (SR) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)
MAR. 20...	800	2	0	430	.2	0	60	10
APR. 17...	900	3	0	400	.1	4	100	100
MAY 01...	1100	5	0	1500	.0	9	40	70
AUG. 14...	650	2	0	0	.0	5	50	30
SEP. 13...	390	3	0	120	.0	6	30	0

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	ALDRIN (UG/L)	DDD (UG/L)	DDE (UG/L)	DDT (UG/L)	DI- ELDRIN (UG/L)	ENDRIN (UG/L)	HEPTA- CHLOR (UG/L)	HEPTA- CHLOR EPOXIDE (UG/L)
MAR. 20...	1300	.54	21.5	.00	.00	.00	.00	.00	.00	.00	.00
MAY 01...	1400	.09	20.0	.00	.00	.00	.00	.00	.00	.00	.00
AUG. 14...	1015	.02	26.0	.00	.00	.00	.00	.00	.00	.00	.00
SEP. 13...	1630	450	23.5	.00	.00	.00	.00	.00	.00	.00	.00

DATE	LINDANE (UG/L)	CHLOR- DANE (UG/L)	PCB (UG/L)	DI- AZINON (UG/L)	MALA- THION (UG/L)	METHYL PARA- THION (UG/L)	PARA- THION (UG/L)	2,4-D (UG/L)	SILVEX (UG/L)	2,4,5-T (UG/L)
MAR. 20...	.00	.0	.0	.00	.00	.00	.00	.00	.00	.00
MAY 01...	.00	.0	.0	.00	.00	.00	.00	.00	.00	.00
AUG. 14...	.00	.0	.0	.00	.00	.00	.00	.00	.00	.00
SEP. 13...	.00	.0	.0	.00	.00	.00	.00	.00	.00	.00

SAN JACINTO RIVER BASIN

08068450 PANTHER BRANCH NEAR SPRING, TEX.

LOCATION.--Lat 30°08'04", long 95°28'38", Montgomery County, 300 ft (91 m) upstream from Sawdust Road, 3.0 miles (4.8 km) upstream from mouth, and 5.1 miles (8.2 km) northwest of Spring.

DRAINAGE AREA.--34.5 mi² (89.4 km²).

PERIOD OF RECORD.--Chemical and biochemical analyses: May 1972 to September 1974.
Pesticide analyses: May 1972 to September 1974.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SiO ₂) (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNE-SIUM (MG)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED SODIUM PLUS POTAS-SIUM (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO ₃) (MG/L)	CAR-BONATE (CO ₃) (MG/L)
OCT. 16...	0930	133	6.2	5.0	1.8	--	.7	--	8	0
JAN. 08...	0930	71	7.4	8.2	3.5	--	9.0	--	8	0
15...	0930	177	4.0	7.5	1.0	--	1.7	--	10	0
FEB. 25...	1100	1.6	10	10	6.6	--	29	--	14	0
MAR. 11...	0930	1.4	13	12	3.9	--	30	--	25	0
20...	0930	1.1	11	11	4.3	31	--	2.0	18	0
APR. 17...	0930	3.5	13	11	3.9	27	--	2.0	23	0
MAY 01...	1100	.18	11	12	4.5	31	--	2.1	26	0
SEP. 13...	1800	--	6.1	8.1	1.4	16	--	2.7	49	0

DATE	DIS-SOLVED SULFATE (SO ₄) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO-GEN (N) (MG/L)	ORGANIC NITRO-GEN (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	TOTAL NON-FILT-RABLE RESIDUE (MG/L)
OCT. 16...	1.2	10	.0	.03	.00	.17	.71	.10	29	622
JAN. 08...	9.2	27	.0	.20	.00	.17	.75	.07	69	134
15...	4.0	10	.0	.07	.00	.09	.48	.00	34	288
FEB. 25...	7.6	68	.0	.02	.00	.22	.52	.04	139	99
MAR. 11...	7.6	59	.0	.04	.03	.46	.31	.07	138	12
20...	6.6	63	--	.04	.04	.37	.36	.07	138	100
APR. 17...	8.1	56	--	.05	.00	.27	.31	.06	132	49
MAY 01...	8.5	57	--	--	--	--	--	--	142	252
SEP. 13...	8.1	12	--	.14	.01	.20	3.1	.15	83	--

DATE	VOL. NON-FILT-RABLE RESIDUE (MG/L)	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)	COLOR (PLAT-INUM-COBALT UNITS)	TUR-BID-ITY (JTU)
OCT. 16...	30	20	13	.1	57	6.7	22.0	240	150
JAN. 08...	60	35	28	.7	137	6.6	11.5	280	180
15...	48	23	15	.2	79	5.7	13.0	200	90
FEB. 25...	23	52	41	1.7	262	5.8	8.0	100	55
MAR. 11...	10	46	26	1.9	256	6.5	22.0	120	30
20...	25	45	30	2.0	291	5.9	--	240	55
APR. 17...	7	44	25	1.8	264	6.1	18.0	200	40
MAY 01...	49	49	27	1.9	331	6.4	21.0	140	150
SEP. 13...	--	26	0	1.5	146	7.1	24.5	--	--

SAN JACINTO RIVER BASIN

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08068450 PANTHER BRANCH NEAR SPRING, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	BIO- CHEM- ICAL OXYGEN DEMAND (MG/L)	IMME- DIATE COLI- FORM (COL. PER 100 ML)	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)	PHENOLS (UG/L)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)
OCT. 16...	7.4	84	2.0	4200	1200	9800	49	0	.0
JAN. 08...	10.1	92	2.3	38000	580	1400	28	0	.0
15...	9.2	87	1.9	17000	1500	2200	29	0	.0
FEB. 25...	8.4	71	1.5	6600	400	2200	21	0	.0
MAR. 11...	2.6	31	2.0	12000	310	300	34	0	.0
20...	2.4	27	1.3	16000	420	200	28	0	.0
APR. 17...	6.2	65	3.1	9300	120	120	21	--	.1
MAY 01...	1.5	17	3.3	7300	73	220	25	--	--
SEP. 13...	--	--	--	--	--	--	15	2	.0

DATE	TIME	DIS- SOLVED ALUM- INUM (AL) (UG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED CAD- MIUM (CU) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	DIS- SOLVED COBALT (CO) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)
OCT. 16...	0930	2000	2	--	0	0	0	4
JAN. 08...	0930	70	3	--	0	0	0	3
15...	0930	60	2	--	0	0	0	3
FEB. 25...	1100	350	2	--	0	0	1	6
MAR. 11...	0930	140	1	--	0	0	5	6
MAY 01...	1100	180	0	90	1	0	6	10

DATE	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	DIS- SOLVED LITHIUM (LI) (UG/L)	DIS- SOLVED MANGANESE (MN) (UG/L)	DIS- SOLVED MERCURY (HG) (UG/L)	DIS- SOLVED NICKEL (NI) (UG/L)	DIS- SOLVED STRON- TIUM (SR) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)
OCT. 16...	1800	7	0	0	<.2	0	0	10
JAN. 08...	160	0	0	70	.2	0	0	10
15...	240	0	0	0	<.2	0	0	20
FEB. 25...	310	4	0	470	.0	4	50	--
MAR. 11...	710	3	0	1600	.4	2	60	20
MAY 01...	370	20	0	1800	.1	12	70	60

SAN JACINTO RIVER BASIN

08068450 PANTHER BRANCH NEAR SPRING, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	ALDRIN (UG/L)	DDD (UG/L)	DDE (UG/L)	DDT (UG/L)	DI- ELDRIN (UG/L)	ENDRIN (UG/L)	HEPTA- CHLOR (UG/L)	HEPTA- CHLOR EPOXIDE (UG/L)
OCT. 16...	0930	133	22.0	.00	.00	.00	.00	.00	.00	.00	.00
JAN. 08...	0930	71	11.5	.00	.00	.00	.00	.00	.00	.00	.00
15...	0930	177	--	.00	.00	.00	.00	.00	.00	.00	.00
FEB. 25...	1100	1.4	--	.00	.00	.00	.00	.00	.00	.00	.00
MAR. 11...	0930	1.4	22.0	.00	.00	.00	.00	.00	.00	.00	.00
20...	0930	1.1	21.0	.00	.00	.00	.00	.00	.00	.00	.00
APR. 17...	0930	3.5	18.0	.00	.00	.00	.00	.00	.00	.00	.00

DATE	LINDANE (UG/L)	CHLOR- DANE (UG/L)	PCB (UG/L)	DI- AZINON (UG/L)	MALA- THION (UG/L)	METHYL PARA- THION (UG/L)	PARA- THION (UG/L)	2,4-D (UG/L)	SILVEX (UG/L)	2,4,5-T (UG/L)
OCT. 16...	.00	.0	.0	.00	.00	.00	.00	.00	.00	.00
JAN. 08...	.00	.0	.0	.00	.00	.00	.00	.00	.00	.00
15...	.00	.0	.0	.00	.00	.00	.00	.00	.00	.00
FEB. 25...	.00	.0	.0	.00	.00	.00	.00	.00	.00	.00
MAR. 11...	.00	.0	.0	.00	.00	.00	.00	.00	.01	.00
20...	.00	.0	.0	.00	.00	.00	.00	.00	.01	.00
APR. 17...	.00	.0	.0	.00	.00	.00	.00	.00	.00	.00

DATE	TIME	DIS- CHARGE (CFS)	SUS- PENDE SEDIM- MENT (MG/L)	SUS- PENDE SEDIM- MENT DIS- CHARGE (T/DAY)	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM
OCT. 29...	--	1.2	300	.97	--	--	--	--
30...	--	1.5	325	1.3	--	--	--	--
31...	--	74	560	105	--	--	--	--
31...	0711	76	1350	277	78	91	98	100
NOV. 01...	--	75	130	26	--	--	--	--
JAN. 09...	--	154	404	210	--	--	--	--
10...	--	95	125	32	--	--	--	--
11...	--	61	130	21	--	--	--	--
12...	--	189	160	82	--	--	--	--
21...	--	137	70	26	--	--	--	--
22...	--	42	40	4.5	--	--	--	--
25...	--	527	125	178	--	--	--	--
26...	--	642	175	266	--	--	--	--
27...	--	365	100	99	--	--	--	--
28...	--	174	100	47	--	--	--	--
29...	--	142	50	19	--	--	--	--
30...	--	52	30	4.2	--	--	--	--
FEB. 07...	--	29	200	16	--	--	--	--
08...	--	18	175	8.5	--	--	--	--
09...	--	4.5	100	2.6	--	--	--	--
10...	--	7.1	60	1.2	--	--	--	--
13...	--	4.2	90	1.0	--	--	--	--
22...	--	25	175	12	--	--	--	--
23...	--	10	120	3.2	--	--	--	--
24...	--	5.6	90	1.4	--	--	--	--
25...	--	3.5	120	1.1	--	--	--	--
26...	--	3.0	100	.81	--	--	--	--
MAR. 25...	--	35	325	31	--	--	--	--
26...	--	61	350	58	--	--	--	--
27...	--	62	100	17	--	--	--	--
28...	--	28	160	12	--	--	--	--
29...	--	13	175	6.1	--	--	--	--
30...	--	7.7	60	1.2	--	--	--	--

SAN JACINTO RIVER BASIN

315

08068750 CYPRESS CREEK NEAR CYPRESS, TEX.

LOCATION.--Lat 29°57'23", long 95°40'41", Harris County, at bridge on U.S. Highway 290 and 1.5 miles (2.4 km) southeast of Cypress.

DRAINAGE AREA.--138 mi² (357 km²).

PERIOD OF RECORD.--Chemical and biochemical analyses: October 1970 to September 1974.

Pesticide analyses: October 1970 to September 1974.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SiO ₂) (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED SODIUM PLUS POTAS-SIUM (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO ₃) (MG/L)	CAR-BONATE (CO ₃) (MG/L)	DIS-SOLVED SULFATE (SO ₄) (MG/L)
NOV. 01...	1230	260	8.7	7.5	2.7	--	7.0	--	23	0	8.4
FEB. 15...	1000	6.7	8.5	27	5.5	--	54	--	65	0	26
MAY 02...	0930	1.6	5.7	40	6.2	130	--	5.9	130	0	46

DATE	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO-GEN (N) (MG/L)	ORGANIC NITRO-GEN (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	TOTAL NON-FILT-RABLE RESIDUE (MG/L)	VOL. NON-FILT-RABLE RESIDUE (MG/L)	HARD-NESS (CA+MG) (MG/L)
NOV. 01...	12	.1	.20	.03	.15	.45	.29	59	218	12	30
FEB. 15...	90	.2	.30	.00	.14	.55	.37	245	229	44	90
MAY 02...	180	--	.01	.02	.27	1.2	.12	479	141	26	130

DATE	NON-CAR-BONATE HARD-NESS (MG/L)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-A-TURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	TUR-BID-ITY (JTU)	DIS-SOLVED OXYGEN (MG/L)	PER-CENT SATUR-ATION	BIO-CHEM-ICAL OXYGEN DEMAND (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
NOV. 01...	11	.6	109	6.4	15.0	160	95	7.6	75	4.1	20
FEB. 15...	37	2.5	486	7.1	17.5	200	120	8.6	90	2.4	--
MAY 02...	19	5.1	915	7.6	22.0	80	75	7.7	88	6.0	--

DATE	TIME	DIS-SOLVED ALUM-INUM (AL) (UG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	DIS-SOLVED BORON (B) (UG/L)	DIS-SOLVED CAD-MIUM (CD) (UG/L)	DIS-SOLVED CHRO-MIUM (CR) (UG/L)	DIS-SOLVED COBALT (CO) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)
NOV. 01...	1230	420	1	--	0	0	0	4
FEB. 15...	1000	160	0	--	0	0	0	9
MAY 02...	0930	120	1	230	1	0	1	12

DATE	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	DIS-SOLVED LITHIUM (LI) (UG/L)	DIS-SOLVED MAN-GANESE (MN) (UG/L)	DIS-SOLVED MERCURY (HG) (UG/L)	DIS-SOLVED NICKEL (NI) (UG/L)	DIS-SOLVED STRON-TIUM (SR) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)
NOV. 01...	500	0	0	0	.2	0	0	20
FEB. 15...	120	1	0	50	.0	1	110	--
MAY 02...	80	10	20	0	.1	12	230	40

SAN JACINTO RIVER BASIN

08068750 CYPRESS CREEK NEAR CYPRESS, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	ALDRIN (UG/L)	DDD (UG/L)	DDE (UG/L)	DDT (UG/L)	DI- ELDRIN (UG/L)	ENDRIN (UG/L)	HEPTA- CHLOR (UG/L)	HEPTA- CHLOR EPOXIDE (UG/L)
NOV. 01...	1230	260	15.0	.00	.00	.00	.00	.00	.00	.00	.00
FEB. 15...	1000	6.7	17.5	.00	.00	.00	.00	.01	.00	.00	.00
MAY 02...	0930	1.6	22.0	.00	.00	.00	.00	.00	.00	.00	.00

DATE	LINDANE (UG/L)	CHLOR- DANE (UG/L)	PCB (UG/L)	DI- AZINON (UG/L)	MALA- THION (UG/L)	METHYL PARA- THION (UG/L)	PARA- THION (UG/L)	2,4-D (UG/L)	SILVEX (UG/L)	2,4,5-T (UG/L)
NOV. 01...	.00	.0	.0	.00	.00	.00	.00	.00	.00	.00
FEB. 15...	.00	.0	.0	.00	.00	.00	.00	.00	.00	.00
MAY 02...	.00	.0	.0	.00	.00	.00	.00	--	--	--

SAN JACINTO RIVER BASIN

317

08069200 CYPRESS CREEK NEAR HUMBLE, TEX.

LOCATION.--Lat 30°01'49", long 95°19'47", Harris County, 500 ft (152 m) north of end of dirt extension of Tetlar Road, about 2 miles (3 km) upstream from mouth, and 4.7 miles (7.6 km) northwest of Humble.

DRAINAGE AREA.--319 mi² (826 km²).

PERIOD OF RECORD.--Chemical and biochemical analyses: October 1970 to September 1974.
Pesticide analyses: October 1970 to September 1974.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SI02) (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNE-SIUM (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED SODIUM PLUS POTAS-SIUM (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)
NOV. 01...	0900	--	8.8	10	1.7	--	9.2	--	32	0	8.2	12
FEB. 15...	1300	29	14	30	5.4	--	38	--	100	0	18	54
MAY 02...	1300	9.1	13	39	6.5	90	--	6.7	180	0	33	89

DATE	DIS-SOLVED FLUO-RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO-GEN (N) (MG/L)	ORGANIC NITRO-GEN (N) (MG/L)	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	TOTAL NON-FILT-RABLE RESIDUE (MG/L)	VOL. NON-FILT-RABLE RESIDUE (MG/L)	HARD-NESS (CA,MG) (MG/L)
NOV. 01...	.1	.20	.00	.21	.38	--	.33	67	236	21	32
FEB. 15...	.2	.80	.32	.75	.43	--	1.6	214	122	40	97
MAY 02...	--	3.0	.40	.39	1.0	1.4	3.1	367	52	16	120

DATE	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)	COLOR (PLAT-INUM-COBALT UNITS)	TUR-BID-ITY (JTU)	DIS-SOLVED OXYGEN (MG/L)	PER-CENT SATUR-ATION	BIO-CHEM-ICAL OXYGEN DEMAND (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
NOV. 01...	6	.7	115	6.6	14.0	200	180	8.0	77	4.1	22
FEB. 15...	15	1.7	425	6.9	18.0	60	70	7.0	74	2.9	--
MAY 02...	0	3.5	699	7.6	24.0	40	20	6.7	79	7.5	--

DATE	TIME	DIS-SOLVED ALUM-INUM (AL) (UG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	DIS-SOLVED BORON (B) (UG/L)	DIS-SOLVED CAD-MIUM (CD) (UG/L)	DIS-SOLVED CHRO-MIUM (CR) (UG/L)	DIS-SOLVED COBALT (CO) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)
NOV. 01...	0900	460	1	--	0	0	0	5
FEB. 15...	1300	130	4	--	0	0	0	6
MAY 02...	1300	80	4	330	1	0	5	8

DATE	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	DIS-SOLVED LITHIUM (LI) (UG/L)	DIS-SOLVED MAN-GANESE (MN) (UG/L)	DIS-SOLVED MERCURY (HG) (UG/L)	DIS-SOLVED NICKEL (NI) (UG/L)	DIS-SOLVED STRON-TIUM (SR) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)
NOV. 01...	400	0	0	0	<.2	0	60	20
FEB. 15...	60	3	0	0	.0	6	110	80
MAY 02...	70	20	10	60	.1	12	240	60

SAN JACINTO RIVER BASIN

08069200 CYPRESS CREEK NEAR HUMBLE, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	ALDRIN (UG/L)	DDD (UG/L)	DDE (UG/L)	DDT (UG/L)	DI- ELDRIN (UG/L)	ENDRIN (UG/L)	HEPTA- CHLOR (UG/L)	HEPTA- CHLOR EPOXIDE (UG/L)
NOV. 01...	0900	--	14.0	.00	.00	.00	.00	.00	.00	.00	.00
FEB. 15...	1300	29	18.0	.00	.00	.00	.00	.01	.00	.00	.00
MAY 02...	1300	9.1	24.0	.00	.00	.00	.00	.01	.00	.00	.00

DATE	LINDANE (UG/L)	CHLOR- DANE (UG/L)	PCB (UG/L)	DI- AZINON (UG/L)	MALA- THION (UG/L)	METHYL PARA- THION (UG/L)	PARA- THION (UG/L)	2,4-D (UG/L)	SILVEX (UG/L)	2,4,5-T (UG/L)
NOV. 01...	.03	.0	.0	.01	.00	.00	.00	.00	.00	.02
FEB. 15...	.03	.0	.0	.04	.00	.00	.00	.00	.00	.00
MAY 02...	.00	.1	.0	.11	.00	.00	.00	.00	.00	.01

SAN JACINTO RIVER BASIN

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08070000 EAST FORK SAN JACINTO RIVER NEAR CLEVELAND, TEX.

LOCATION.--Lat 30°20'11", long 95°06'14", Liberty County, at gaging station at bridge on State Highway 105, 1.2 miles (1.9 km) west of Cleveland, and 4.3 miles (6.9 km) downstream from Winter Creek.

DRAINAGE AREA.--325 mi² (842 km²).

PERIOD OF RECORD.--Chemical analyses: January 1968 to September 1974.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISE- CHARGE (CFS)	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 SODIUM PLUS POTAS- SIUM (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)
NOV.											
01...	1205	1110	5.0	13	2.8	--	1.5	--	30	0	4.8
24...	1030	170	13	26	3.4	--	22	--	60	0	7.2
JAN.											
07...	1310	619	4.4	13	1.3	15	--	1.8	30	0	7.0
FEB.											
20...	1400	230	11	24	2.6	19	--	1.8	60	0	7.0
APR.											
02...	1130	97	13	23	2.4	21	--	1.7	52	0	7.7
MAY											
14...	1240	60	12	19	3.0	30	--	1.8	38	0	5.9
JUNE											
24...	1910	21	10	18	2.7	27	--	1.8	37	0	3.7
AUG.											
05...	1000	64	12	19	2.8	26	--	2.7	40	0	7.1
SEP.											
14...	1310	204	14	18	1.7	12	--	2.5	48	0	7.5

DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITU- ENTS) (MG/L)	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)
NOV.										
01...	12	.0	.20	55	44	19	.1	119	6.4	23.0
29...	50	.0	--	152	79	30	1.1	296	6.9	15.0
JAN.										
07...	29	--	--	91	38	13	1.1	175	6.9	10.5
FEB.										
20...	39	--	--	134	71	21	1.0	265	6.9	15.5
APR.										
02...	44	--	--	138	67	25	1.1	266	7.0	21.0
MAY										
14...	65	--	--	155	60	29	1.7	303	7.0	25.0
JUNE										
24...	58	--	--	139	56	26	1.6	276	6.7	28.5
AUG.										
06...	55	--	--	144	59	26	1.5	280	6.4	26.5
SEP.										
19...	24	--	--	103	52	13	.7	187	6.5	--

SAN JACINTO RIVER BASIN

08072020 LAKE HOUSTON PLANT INTAKE AT GALENA PARK, TEX.

LOCATION.--Lat 29°44'01", long 95°12'58", Harris County, at city of Houston municipal water plant intake from Lake Houston West Canal and 1 mile (2 km) east of Galena Park.

DRAINAGE AREA.--2,828 mi² (7,325 km²).

PERIOD OF RECORD.--Chemical analyses: May 1972 to September 1974.

Pesticide analyses: May 1968 to September 1974.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTERRER 1974

		DIS-SOLVED ALUMINUM (AL) (UG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	DIS-SOLVED BORON (B) (UG/L)	DIS-SOLVED CADMIUM (CD) (UG/L)	DIS-SOLVED CHROMIUM (CR) (UG/L)	DIS-SOLVED COBALT (CO) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)		
DATE	TIME									
OCT. 26...	1145	230	0	--	0	0	0	160		
JAN. 14...	1045	70	2	--	1	0	0	25		
AUG. 30...	0845	20	0	80	<1	0	0	36		
		DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	DIS-SOLVED LITHIUM (LI) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)	DIS-SOLVED MERCURY (HG) (UG/L)	DIS-SOLVED NICKEL (NI) (UG/L)	DIS-SOLVED STRONTIUM (SR) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)	
DATE										
OCT. 26...	380	0	0	0	<.2	0	0	0	20	
JAN. 14...	130	0	0	0	.7	2	60	0		
AUG. 30...	40	0	0	0	.0	1	90	20		
DATE	TIME	TEMPERATURE (DEG C)	ALDRIN (UG/L)	DDD (UG/L)	DDE (UG/L)	DDT (UG/L)	DI-ELDRIN (UG/L)	ENDRIN (UG/L)	HEPTACHLOR (UG/L)	HEPTACHLOR EPOXIDE (UG/L)
OCT. 26...	1145	24.0	.00	.00	.00	.00	.00	.00	.00	.00
JAN. 14...	1045	15.0	.00	.00	.00	.00	.00	.00	.00	.00
AUG. 30...	0845	--	.00	.00	.00	.00	.00	.00	.00	.00
DATE	LINDANE (UG/L)	CHLORDANE (UG/L)	PCB (UG/L)	DI-AZINON (UG/L)	MALATHION (UG/L)	METHYL PARATHION (UG/L)	PARATHION (UG/L)	2,4-D (UG/L)	SILVEX (UG/L)	2,4,5-T (UG/L)
OCT. 26...	.00	.0	.0	.00	.00	.00	.00	.00	.00	.00
JAN. 14...	.00	.0	.0	.00	.00	.00	.00	.00	.00	.00
AUG. 30...	.00	.0	.0	.00	.00	.00	.00	.00	.00	.01

SAN JACINTO RIVER BASIN

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08073500 BUFFALO BAYOU NEAR ADDICKS, TEX.

LOCATION.--Lat 29°45'42", Long 95°36'20", Harris County, at gaging station at bridge on Dairy-Ashford Road over rectified channel, 1.8 miles (2.9 km) downstream from South Mayde Creek, and 2.6 miles (4.2 km) southeast of Addicks.

DRAINAGE AREA.--293 mi² (759 km²).

PERIOD OF RECORD.--Chemical and biochemical analyses: August 1970 to September 1974.
Pesticide analyses: August 1970 to September 1974.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part I of this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTMBER 1974

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED SODIUM PLUS POTAS- SIUM (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)
NOV.										
12...	1130	62	14	29	4.8	--	29	--	106	0
JAN.										
07...	0930	250	6.0	16	1.7	--	19	--	44	0
FEB.										
04...	0930	410	--	--	--	--	--	--	--	--
MAR.										
05...	1100	16	13	73	17	--	110	--	253	0
19...	0930	280	--	--	--	--	--	--	--	--
25...	1030	195	--	--	--	--	--	--	--	--
APR.										
15...	0930	21	--	--	--	--	--	--	--	--
30...	1400	13	--	--	--	--	--	--	--	--
MAY										
08...	0930	32	14	53	10	68	--	5.1	160	0
JUNE										
12...	1115	32	18	56	8.1	54	--	4.4	204	0
JULY										
10...	1405	48	23	54	7.3	53	--	3.1	218	0
31...	1245	45	25	46	7.1	49	--	6.9	178	0
SEP.										
23...	1015	1250	--	--	--	--	--	--	--	--

DATE	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL- NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
NOV.										
12...	13	38	.2	.30	.05	.44	.38	--	1.4	182
JAN.										
07...	12	29	.0	.10	.00	.29	.53	--	.46	106
FEB.										
04...	--	--	--	.09	.00	.15	.42	--	.19	--
MAR.										
05...	40	180	.4	.40	.18	1.1	.71	--	.90	564
19...	--	--	--	.82	.08	.45	.35	--	.33	--
25...	--	--	--	.63	.01	.76	.46	--	.55	--
APR.										
15...	--	--	--	.38	.17	.80	.35	--	.75	--
30...	--	--	--	.45	.29	1.2	.90	2.1	1.8	--
MAY										
08...	43	100	--	.53	.12	.67	1.3	2.0	.56	372
JUNE										
12...	28	66	--	.31	.14	2.5	.00	1.4	.62	335
JULY										
10...	14	65	--	.13	.05	.45	.75	1.2	.59	327
31...	19	63	--	.20	.05	.28	1.1	1.4	.58	304
SEP.										
23...	--	--	--	.01	.00	.22	.88	1.1	.23	--

SAN JACINTO RIVER BASIN
08073500 BUFFALO BAYOU NEAR ADDICKS, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TOTAL NON- FILT- RABLE RESIDUE (MG/L)	VOL. NON- FILT- RABLE RESIDUE (MG/L)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCTI- VANCE (MICHO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	TUR- BID- ITY (JTU)
NOV.										
12...	289	42	92	5	1.3	340	7.4	17.5	200	120
JAN.										
07...	202	36	47	11	1.2	210	6.1	9.0	240	120
FEB.										
04...	216	58	--	--	--	123	6.7	15.0	160	80
MAR.										
05...	57	11	250	44	3.1	985	7.6	21.0	20	25
19...	177	24	--	--	--	290	6.8	21.0	120	195
25...	529	84	--	--	--	418	7.2	9.0	70	250
APR.										
15...	99	12	--	--	--	510	7.3	17.5	60	60
30...	63	13	--	--	--	--	7.7	26.0	40	30
MAY										
08...	246	39	170	42	2.2	722	7.1	22.5	50	110
JUNE										
12...	163	34	170	6	1.8	611	6.8	28.5	30	80
JULY										
10...	146	37	170	0	1.8	588	7.7	31.0	40	75
31...	132	21	140	0	1.8	552	7.6	28.5	100	60
SEP.										
23...	12	11	--	--	--	135	6.4	25.0	80	10

DATE	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	BIO- CHEM- ICAL OXYGEN DEMAND (MG/L)	IMME- DIATE COLI- FORM (COL. PER 100 ML)	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)	PHENOLS (UG/L)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)
NOV.									
12...	8.0	83	3.6	45000	1	680	20	0	.0
JAN.									
07...	10.2	88	2.3	330000	6700	9800	14	--	.0
FEB.									
04...	10.1	99	2.0	15000	780	470	18	0	.0
MAR.									
05...	7.3	81	10	190000	31000	6100	7.0	--	.0
19...	8.3	92	3.1	32000	1400	540	13	--	.0
25...	10.6	91	5.1	280000	35000	28000	22	--	.0
APR.									
15...	7.2	75	4.7	140000	20000	7200	12	--	.1
30...	6.2	76	5.5	360000	4400	1800	10	--	.0
MAY									
08...	7.0	80	8.2	240000	28000	4600	31	3	.0
JUNE									
12...	6.7	86	6.6	25000	8000	610	9.9	--	--
JULY									
10...	9.1	121	4.4	11000	7300	150	7.2	2	.1
31...	6.8	87	2.8	90000	38000	1700	10	--	.1
SEP.									
23...	3.3	39	2.0	16000	2700	210	13	--	.0

DATE	TIME	DIS- SOLVED ALUM- INUM (AL) (UG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	DIS- SOLVED COBALT (CO) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)
NOV.								
12...	1130	--	2	--	0	0	0	7
MAY								
08...	0930	--	--	110	--	--	--	--
JULY								
10...	1405	10	5	110	0	0	0	4
31...	1245	--	--	110	--	--	--	--

DATE	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	DIS- SOLVED LITHIUM (LI) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED MERCURY (HG) (UG/L)	DIS- SOLVED NICKEL (NI) (UG/L)	DIS- SOLVED STRON- TIUM (SR) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)
NOV.								
12...	340	0	--	90	<.2	3	--	380
MAY								
08...	--	--	--	--	--	--	--	--
JULY								
10...	50	2	10	0	.1	0	260	0
31...	--	--	--	--	--	--	--	--

SAN JACINTO RIVER BASIN

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08073500 BUFFALO BAYOU NEAR ADDICKS, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	ALDRIN (UG/L)	ALDRIN IN BOTTOM DE- POSITS (UG/KG)	DDD (UG/L)	DDD IN BOTTOM DE- POSITS (UG/KG)	DDE (UG/L)	DDE IN BOTTOM DE- POSITS (UG/KG)	DDT (UG/L)	DDT IN BOTTOM DE- POSITS (UG/KG)
NOV. 12...	1130	62	17.5	.00	--	.00	--	.00	--	.00	--
JAN. 07...	0930	250	9.0	--	.0	--	.0	--	.0	--	.0
FEB. 04...	0930	410	15.0	.00	--	.00	--	.00	--	.00	--
APR. 15...	0930	21	17.5	--	.0	--	1.1	--	.3	--	.6
MAY 08...	0930	32	22.5	.00	.0	.00	8.5	.00	2.5	.00	1.8

DATE	DI- ELDRIN (UG/L)	DI- ELDRIN IN BOTTOM DE- POSITS (UG/KG)	ENDRIN (UG/L)	ENDRIN IN BOTTOM DE- POSITS (UG/KG)	HEPTA- CHLOR (UG/L)	HEPTA- CHLOR IN BOTTOM DE- POSITS (UG/KG)	HEPTA- CHLOR EPOXIDE (UG/L)	HEPTA- CHLOR EPOXIDE IN BOT- TOM DE- POSITS (UG/KG)	LINDANE (UG/L)	LINDANE IN BOTTOM DE- POSITS (UG/KG)	CHLOR- DANE (UG/L)
NOV. 12...	.02	--	.00	--	.00	--	.00	--	.00	--	.1
JAN. 07...	--	.0	--	.0	--	.0	--	.0	--	.0	--
FEB. 04...	.00	--	.00	--	.00	--	.00	--	.00	--	.0
APR. 15...	--	1.1	--	.0	--	.0	--	.0	--	.0	--
MAY 08...	.02	7.5	.00	.0	.00	.0	.00	.0	.00	.0	.0

DATE	CHLOR- DANE IN BOTTOM DE- POSITS (UG/KG)	PCB (UG/L)	PCB IN BOTTOM DE- POSITS (UG/KG)	DI- AZINON (UG/L)	MALA- THION (UG/L)	METHYL PARA- THION (UG/L)	PARA- THION (UG/L)	2,4-D (UG/L)	SILVEX (UG/L)	2,4,5-T (UG/L)
NOV. 12...	--	.0	--	.02	.00	.00	.00	.00	.00	.00
JAN. 07...	4	--	0	--	--	--	--	--	--	--
FEB. 04...	--	.0	--	.00	.00	.00	.00	.04	.00	.00
APR. 15...	22	--	0	--	--	--	--	--	--	--
MAY 08...	110	.0	0	.01	.00	.00	.00	--	--	--

SAN JACINTO RIVER BASIN

08073700 BUFFALO BAYOU AT PINEY POINT, TEX.

LOCATION.--Lat 29°44'48", long 95°31'24", Harris County, at gaging station at bridge on Piney Point Road, village of Piney Point, 3.7 miles (6.0 km) downstream from Rummel Creek, 7.2 miles (17.4 km) downstream from gage, Buffalo Bayou near Addicks, and 12.5 miles (20.1 km) downstream from gage, Buffalo Bayou at Houston.

DRAINAGE AREA.--317 mi² (821 km²).

PERIOD OF RECORD.--Chemical and biochemical analyses: October 1970 to September 1974.
Pesticide analyses: October 1970 to September 1974.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO ₂) (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 SODIUM PLUS POTAS- SIUM (K) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	RICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)
NOV.										
12...	1245	150	15	35	6.5	--	33	--	143	0
JAN.										
07...	1100	35	6.5	16	3.2	--	23	--	52	0
FEB.										
04...	1030	460	--	--	--	--	--	--	--	--
MAR.										
05...	1130	34	19	58	12	--	45	--	269	0
19...	1030	330	--	--	--	--	--	--	--	--
25...	1100	250	--	--	--	--	--	--	--	--
APR.										
15...	1030	72	--	--	--	--	--	--	--	--
MAY										
08...	1030	51	20	47	8.4	85	--	6.8	210	0
JUNE										
12...	1025	50	22	50	8.2	89	--	7.0	230	0
18...	1305	50	21	50	8.5	82	--	6.9	214	0
JULY										
10...	1300	115	23	53	8.5	67	--	4.4	225	0
31...	1400	120	23	45	7.0	65	--	6.9	189	0
SEP.										
23...	1100	1300	--	--	--	--	--	--	--	--

DATE	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITU- ENTS) (MG/L)
NOV.										
12...	14	41	.2	.40	.31	1.9	.34	--	2.0	220
JAN.										
07...	12	35	.0	.20	.01	.56	.50	--	.88	123
FEB.										
04...	--	--	--	.10	.05	.28	.70	--	.36	--
MAR.										
05...	32	110	.5	.63	.82	3.5	.37	--	5.6	466
19...	--	--	--	.57	.04	.60	.34	--	.75	--
25...	--	--	--	1.3	.11	.64	.60	--	1.0	--
APR.										
15...	--	--	--	.57	.77	1.9	.80	--	2.3	--
MAY										
08...	36	84	--	.60	.70	4.2	1.2	5.4	5.1	392
JUNE										
12...	33	80	--	--	1.2	3.6	1.6	5.2	5.6	403
18...	39	87	--	.20	1.1	3.8	.70	4.5	2.6	400
JULY										
10...	24	70	--	.28	.82	1.3	.70	2.0	2.6	361
31...	21	70	--	.31	6.9	1.8	4.2	6.0	2.8	331
SEP.										
23...	--	--	--	.00	.01	.32	.68	1.0	.34	--

SAN JACINTO RIVER BASIN

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08073700 BUFFALO BAYOU AT PINEY POINT, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TOTAL NON- FILT- RABLE RESIDUE (MG/L)	VOL. NON- FILT- RABLE RESIDUE (MG/L)	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)	COLOR (PLAT- INUM- COBALT UNITS)	TUR- BID- ITY (JTU)
NOV. 12...	261	40	110	0	1.3	430	7.5	19.5	100	100
JAN. 07...	195	41	53	10	1.4	249	6.8	10.0	200	110
FEB. 04...	174	100	--	--	--	146	6.9	15.0	140	75
MAR. 05...	174	154	200	0	3.0	845	7.3	22.0	10	10
MAR. 19...	222	49	--	--	--	318	7.1	21.5	120	100
MAR. 25...	338	54	--	--	--	368	7.4	10.5	80	150
APR. 15...	137	26	--	--	--	438	7.1	18.0	60	65
MAY 08...	115	23	150	0	3.0	727	7.0	24.5	40	35
JUNE 12...	31	13	160	0	3.1	722	7.0	29.5	20	20
JUNE 18...	31	4	160	0	2.8	734	7.2	30.5	30	30
JULY 10...	68	21	170	0	2.3	659	7.4	29.0	30	40
JULY 31...	64	11	140	0	2.4	611	7.3	30.0	60	30
SEP. 23...	57	27	--	--	--	147	6.5	26.0	70	7

DATE	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)	IMME- DIATE COLI- FORM (COL. PER 100 ML)	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)	PHENOLS (UG/L)	METHY- LENE BLUF ACTIVE SUB- STANCE (MG/L)
NOV. 12...	7.2	77	4.5	3100	1	120	16	0	.0
JAN. 07...	9.8	87	2.5	400000	1100	1200	12	--	.0
FEB. 04...	9.7	95	2.6	14000	110	46	18	--	.0
MAR. 05...	4.6	52	16	79000	380	160	12	0	.2
MAR. 19...	7.3	82	4.8	100000	19000	1600	15	--	.0
MAR. 25...	10.0	89	5.1	14000	950	4000	16	--	.0
APR. 15...	6.0	63	9.9	36000	1500	1400	12	--	.1
MAY 08...	4.1	49	7.5	79000	1100	820	15	6	.0
JUNE 12...	4.0	52	10	8700	1100	56	8.7	--	.2
JUNE 18...	3.3	43	9.9	10000	520	190	8.6	8	.1
JULY 10...	5.6	72	6.5	2600	420	150	7.8	3	.2
JULY 31...	4.0	53	7.7	12000	2500	360	8.6	--	.2
SEP. 23...	4.0	49	2.4	17000	400	82	13	--	.0

DATE	TIME	DIS- SOLVED ALUM- INUM (AL) (UG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	DIS- SOLVED COBALT (CO) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)
NOV. 12...	1245	--	2	--	0	0	0	7
MAY 08...	1030	20	5	300	1	0	1	7
JULY 10...	1300	0	7	200	0	0	0	6
JULY 31...	1400	--	--	200	--	--	--	--

DATE	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	DIS- SOLVED LITHIUM (LI) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED MERCURY (HG) (UG/L)	DIS- SOLVED NICKEL (NI) (UG/L)	DIS- SOLVED STRON- TIUM (SR) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)
NOV. 12...	80	0	--	130	.2	6	--	30
MAY 08...	20	2	20	0	.0	11	430	60
JULY 10...	30	1	0	0	.0	0	320	10
JULY 31...	--	--	--	--	--	--	--	--

SAN JACINTO RIVER BASIN

08073700 BUFFALO BAYOU AT PINEY POINT, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	ALDRIN (UG/L)	ALDRIN IN BOTTOM DE- POSITS (UG/KG)	DDD (UG/L)	DDD IN BOTTOM DE- POSITS (UG/KG)	DDE (UG/L)	DDE IN BOTTOM DE- POSITS (UG/KG)	DDT (UG/L)	DDT IN BOTTOM DE- POSITS (UG/KG)
NOV. 12...	1245	150	19.5	.00	--	.00	--	.00	--	.00	--
JAN. 07...	1100	35	10.0	--	.0	--	1.8	--	1.2	--	2.5
FEB. 04...	1030	460	15.0	.00	--	.00	--	.00	--	.00	--
MAY 08...	1030	51	24.5	.01	.0	.00	.0	.00	.0	.00	.0

DATE	DI- ELDRIN (UG/L)	DI- ELDRIN IN BOTTOM DE- POSITS (UG/KG)	ENDRIN (UG/L)	ENDRIN IN BOTTOM DE- POSITS (UG/KG)	HEPTA- CHLOR (UG/L)	HEPTA- CHLOR IN BOTTOM DE- POSITS (UG/KG)	HEPTA- CHLOR EPOXIDE (UG/L)	HEPTA- CHLOR EPOXIDE IN BOT- TOM DE- POSITS (UG/KG)	LINDANE (UG/L)	LINDANE IN BOTTOM DE- POSITS (UG/KG)	CHLOR- DANE (UG/L)
NOV. 12...	.02	--	.00	--	.00	--	.00	--	.00	--	.1
JAN. 07...	--	3.4	--	.0	--	.0	--	.0	--	.0	--
FEB. 04...	.00	--	.00	--	.00	--	.00	--	.00	--	.0
MAY 08...	.02	.5	.00	.0	.00	.0	.00	.0	.02	.0	.0

DATE	CHLOR- DANE IN BOTTOM DE- POSITS (UG/KG)	PCB (UG/L)	PCB IN BOTTOM DE- POSITS (UG/KG)	DI- AZINON (UG/L)	MALA- THION (UG/L)	METHYL PARA- THION (UG/L)	PARA- THION (UG/L)	2,4-D (UG/L)	SILVEX (UG/L)	2,4,5-T (UG/L)
NOV. 12...	--	.0	--	.17	.00	.00	.00	.00	.00	.00
JAN. 07...	34	--	0	--	--	--	--	--	--	--
FEB. 04...	--	.0	--	.01	.00	.00	.00	.04	.00	.00
MAY 08...	8	.0	0	.44	.00	.00	.00	--	--	--

SAN JACINTO RIVER BASIN

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08074000 BUFFALO BAYOU AT HOUSTON, TEX.

LOCATION.--Lat 29°45'36", long 95°24'30", Harris County, at gaging station at bridge on Shepherd Drive in Houston and 0.8 mile (1.3 km) upstream from Waugh Drive.

DRAINAGE AREA.--358 mi² (927 km²), unadjusted for basin boundary changes.

PERIOD OF RECORD.--Chemical and biochemical analyses: October 1968 to September 1974.
Pesticide analyses: October 1968 to September 1974.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	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 SODIUM PLUS POTAS- SIUM (K) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)
NOV. 12...	1000	235	13	31	4.8	--	26	--	118	0
JAN. 07...	1230	340	7.7	19	4.3	--	24	--	71	0
FEB. 04...	1130	490	--	--	--	--	--	--	--	--
MAR. 05...	1230	52	13	48	10	--	53	--	206	0
19...	1130	340	--	--	--	--	--	--	--	--
25...	1300	500	--	--	--	--	--	--	--	--
APR. 15...	1230	120	--	--	--	--	--	--	--	--
24...	1230	158	--	--	--	--	--	--	--	--
MAY 08...	1230	125	18	51	8.4	85	--	4.8	220	0
JUNE 12...	0935	60	20	55	9.0	83	--	6.4	241	0
JULY 10...	1115	70	22	52	8.1	88	--	4.7	242	0
AUG. 12...	1020	160	--	--	--	--	--	--	--	--
SEP. 23...	1330	1550	--	--	--	--	--	--	--	--

DATE	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
NOV. 12...	13	30	.2	.40	.12	.30	.30	--	.60	179
JAN. 07...	15	32	.0	.50	.03	1.2	.65	--	1.2	141
FEB. 04...	--	--	--	.40	.02	.52	.44	--	.70	--
MAR. 05...	18	62	.3	.83	.40	1.2	.43	--	.98	312
19...	--	--	--	1.2	.98	1.2	.56	--	2.0	--
25...	--	--	--	.96	.36	.90	.42	--	1.2	--
APR. 15...	--	--	--	1.4	.55	1.3	.33	--	1.5	--
24...	--	--	--	.49	--	--	1.1	4.0	4.0	--
MAY 08...	31	91	--	.73	--	2.2	.90	3.1	1.6	399
JUNE 12...	30	78	--	.74	.56	2.0	2.2	4.2	2.5	400
JULY 10...	28	82	--	.74	.46	1.9	1.0	2.9	1.6	405
AUG. 12...	--	--	--	.99	.61	.70	1.1	1.8	2.7	--
SEP. 23...	--	--	--	.07	.06	.42	.78	1.2	.57	--

SAN JACINTO RIVER BASIN

08074000 BUFFALO BAYOU AT HOUSTON, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TOTAL NON- FILT- RABLE RESIDUE (MG/L)	VOL. NON- FILT- RABLE RESIDUE (MG/L)	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)	COLOR (PLAT- INUM- COBALT UNITS)	TUR- BID- ITY (JTU)
NOV. 12...	221	57	97	0	1.1	329	7.3	18.0	140	100
JAN. 07...	186	44	65	7	1.3	281	6.7	10.0	120	95
FEB. 04...	216	46	--	--	--	205	6.9	15.5	120	80
MAR. 05...	37	1	160	0	1.8	561	7.4	22.0	20	20
19...	364	55	--	--	--	614	7.3	22.5	40	150
25...	273	41	--	--	--	268	7.3	11.0	40	110
APR. 15...	88	9	--	--	--	498	7.1	19.5	40	40
24...	27	6	--	--	--	--	7.1	23.0	30	20
MAY 08...	45	18	160	0	2.9	739	7.4	24.0	50	30
JUNE 12...	22	16	170	0	2.7	722	7.1	27.0	30	15
JULY 10...	41	20	160	0	3.0	738	7.6	28.0	30	20
AUG. 12...	121	22	--	--	--	452	7.0	28.5	60	60
SEP. 23...	113	46	--	--	--	173	6.8	26.0	100	40

DATE	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	BIO- CHEM- ICAL OXYGEN DEMAND (MG/L)	IMME- DIATE COLI- FORM (COL. PER 100 ML)	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)	PHENOLS (UG/L)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)
NOV. 12...	6.6	69	4.2	100000	390	2400	18	0	.0
JAN. 07...	8.9	79	3.8	1200000	59000	5100	12	--	.0
FEB. 04...	8.8	87	3.2	320000	8700	3200	18	--	.0
MAR. 05...	4.2	48	8.7	59000	3000	720	7.0	--	.0
19...	5.1	58	17	1500000	73000	2100	15	--	.0
25...	9.0	81	11	370000	46000	41000	14	--	.0
APR. 15...	5.3	57	7.3	260000	9300	6900	10	--	.1
24...	2.5	29	13	240000	3400	210	4.0	--	.0
MAY 08...	3.9	46	6.6	1600000	200000	9000	24	5	.0
JUNE 12...	3.0	37	7.6	54000	8000	1500	8.5	--	.1
JULY 10...	6.3	80	5.2	100000	14000	270	7.3	6	.1
AUG. 12...	4.1	53	6.5	50000	10000	400	14	--	.0
SEP. 23...	3.6	44	3.4	19000	1800	390	15	--	.0

DATE	TIME	DIS- SOLVED ALUM- INUM (AL) (UG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	DIS- SOLVED COBALT (CO) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)
NOV. 12...	1000	--	1	--	0	0	0	6
MAY 08...	1230	--	120	200	1	30	1	5
JULY 10...	1115	0	8	250	0	0	0	3

DATE	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	DIS- SOLVED LITHIUM (LI) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED MERCURY (HG) (UG/L)	DIS- SOLVED NICKEL (NI) (UG/L)	DIS- SOLVED STRON- TIUM (SR) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)
NOV. 12...	480	0	--	40	.2	0	--	20
MAY 08...	20	1	20	190	.0	9	410	50
JULY 10...	30	1	0	20	.0	1	350	10

SAN JACINTO RIVER BASIN

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08074000 BUFFALO BAYOU AT HOUSTON, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TEMPERATURE (DEG C)	ALDRIN (UG/L)	ALDRIN IN BOTTOM DE-POSITS (UG/KG)	DDD (UG/L)	DDD IN BOTTOM DE-POSITS (UG/KG)	DDE (UG/L)	DDE IN BOTTOM DE-POSITS (UG/KG)	DDT (UG/L)	DDT IN BOTTOM DE-POSITS (UG/KG)
NOV. 12...	1000	235	18.0	.00	--	.00	--	.00	--	.00	--
JAN. 07...	1230	340	10.0	--	.0	--	7.4	--	1.7	--	6.1
FEB. 04...	1130	490	15.5	.00	--	.00	--	.00	--	.00	--
MAR. 25...	1300	500	11.0	.00	--	.00	--	.00	--	.00	--
APR. 15...	1230	120	19.5	.00	.0	.00	1.6	.00	.2	.00	2.3
MAY 08...	1230	125	24.0	.01	--	.01	--	.00	--	.02	--

DATE	DI-ELDRIN (UG/L)	DI-ELDRIN IN BOTTOM DE-POSITS (UG/KG)	ENDRIN (UG/L)	ENDRIN IN BOTTOM DE-POSITS (UG/KG)	HEPTA-CHLOR (UG/L)	HEPTA-CHLOR IN BOTTOM DE-POSITS (UG/KG)	HEPTA-CHLOR EPOXIDE (UG/L)	HEPTA-CHLOR EPOXIDE IN BOTTOM DE-POSITS (UG/KG)	LINDANE (UG/L)	LINDANE IN BOTTOM DE-POSITS (UG/KG)	CHLOR-DANE (UG/L)
NOV. 12...	.01	--	.00	--	.00	--	.00	--	.00	--	.0
JAN. 07...	--	6.0	--	.0	--	.0	--	.0	--	.0	--
FEB. 04...	.01	--	.00	--	.00	--	.00	--	.01	--	.0
MAR. 25...	.04	--	.00	--	.00	--	.00	--	.00	--	.3
APR. 15...	.02	.7	.00	.0	.00	.0	.00	.0	.01	.0	.2
MAY 08...	.03	--	.00	--	.00	--	.00	--	.04	--	.2

DATE	CHLOR-DANE IN BOTTOM DE-POSITS (UG/KG)	PCB (UG/L)	PCB IN BOTTOM DE-POSITS (UG/KG)	DI-AZINON (UG/L)	MALATHION (UG/L)	METHYL PARATHION (UG/L)	PARATHION (UG/L)	2,4-D (UG/L)	SILVEX (UG/L)	2,4,5-T (UG/L)
NOV. 12...	--	.0	--	.09	.00	.00	.00	.04	.00	.03
JAN. 07...	38	--	0	--	--	--	--	--	--	--
FEB. 04...	--	.0	--	.02	.00	.00	.00	.03	.00	.00
MAR. 25...	--	.0	--	.57	.05	.00	.00	.46	.01	.43
APR. 15...	11	.0	0	.18	.00	.00	.00	.03	.20	.15
MAY 08...	--	.0	--	.17	.00	.00	.00	.15	.15	.31

SAN JACINTO RIVER BASIN

08074250 BRICKHOUSE GULLY AT COSTA RICA STREET, HOUSTON, TEX.

LOCATION.--Lat 29°49'40", long 95°28'09", Harris County, at gaging station at bridge at Costa Rica Street in northwest Houston and 1.0 mile (1.6 km) upstream from Whiteoak Bayou.

DRAINAGE AREA.--11.3 mi² (29.3 km²).

PERIOD OF RECORD.--Chemical and biochemical analyses: October 1970 to September 1974.

Pesticide analyses: October 1970 to September 1974.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	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 SODIUM PLUS POTAS- SIUM (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)
OCT. 16...	1250	880	--	--	--	--	--	--	--	--
NOV. 13...	1300	3.2	33	360	54	--	130	--	744	0
DEC. 19...	0950	240	6.3	26	4.7	--	18	--	96	0
JAN. 08...	1330	5.4	14	62	11	--	110	--	274	0
FEB. 06...	1200	5.4	--	--	--	--	--	--	--	--
MAR. 11...	1100	5.2	--	--	--	--	--	--	--	--
25...	1200	12	--	--	--	--	--	--	--	--
APR. 15...	1130	5.7	--	--	--	--	--	--	--	--
MAY 08...	1130	3.5	16	57	13	110	--	1.9	300	0
JULY 16...	1310	2.3	14	35	10	89	--	2.1	228	0
AUG. 12...	0930	3.7	--	--	--	--	--	--	--	--
SEP. 25...	1045	2.2	--	--	--	--	--	--	--	--

DATE	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
OCT. 16...	--	--	--	.10	.01	.30	.51	--	.45	--
NOV. 13...	660	84	.4	.00	.00	.80	.47	--	.20	1690
DEC. 19...	15	20	.0	.60	.03	.23	.55	--	.80	140
JAN. 08...	22	130	.1	.40	.05	.32	.20	--	.20	486
FEB. 06...	--	--	--	.30	.04	.78	.21	--	.42	--
MAR. 11...	--	--	--	.00	.02	.35	.42	--	1.0	--
25...	--	--	--	.38	.03	.40	.30	--	.40	--
APR. 15...	--	--	--	.09	.02	.03	.75	--	.58	--
MAY 08...	23	110	--	.05	.02	.25	.62	.87	.37	480
JULY 16...	22	81	--	.03	.00	.06	.65	.71	.14	366
AUG. 12...	--	--	--	.07	.00	.06	.28	.34	.13	--
SEP. 25...	--	--	--	.09	.01	.06	.74	.80	.12	--

SAN JACINTO RIVER BASIN

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08074250 BRICKHOUSE GULLY AT COSTA RICA STREET, HOUSTON, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTMBER 1974

DATE	TOTAL NON- FILT- RABLE RESIDUE (MG/L)	VOL. NON- FILT- RABLE RESIDUE (MG/L)	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)	COLOR (PLAT- INUM- COBALT UNITS)	TUR- BID- ITY (JTU)
OCT. 16...	1490	124	--	--	--	153	--	22.0	240	350
NOV. 13...	15	9	1100	520	1.7	2330	8.3	24.0	200	6
DEC. 19...	825	114	84	5	.9	280	7.7	12.5	100	300
JAN. 08...	207	60	200	0	3.3	901	8.4	19.0	40	30
FEB. 06...	38	7	--	--	--	829	8.9	20.5	5	20
MAR. 11...	21	14	--	--	--	891	8.2	25.0	10	9
25...	146	16	--	--	--	327	7.7	10.0	50	100
APR. 15...	105	14	--	--	--	624	8.1	16.0	20	45
MAY 08...	12	3	200	0	3.4	848	8.3	29.5	30	8
JULY 16...	22	18	130	0	3.4	677	8.5	--	40	25
AUG. 12...	9	4	--	--	--	732	7.9	28.5	5	4
SEPT. 25...	26	20	--	--	--	753	7.9	24.0	30	20

DATE	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	BIO- CHEM- ICAL OXYGEN DEMAND (MG/L)	IMME- DIATE COLI- FORM (COL. PER 100 ML)	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)	TOTAL ORGANIC CARRON (C) (MG/L)	PHENOLS (UG/L)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)
OCT. 16...	7.2	82	3.6	1100000	32000	120000	--	--	.0
NOV. 13...	9.2	108	20	34000	580	2100	66	3	.5
DEC. 19...	10.4	97	14	640000	40000	35000	30	--	.0
JAN. 08...	14.8	157	3.9	380000	2200	1700	6.0	--	.0
FEB. 06...	16.6	182	3.8	1600000	19000	17000	3.0	--	.1
MAR. 11...	12.6	150	20	30000	2900	360	5.0	--	.1
25...	11.2	99	3.4	370000	19000	21000	14	--	.0
APR. 15...	10.4	104	5.4	170000	11000	3900	16	--	.0
MAY 08...	16.6	216	3.3	120000	6400	1900	7.0	2	.0
JULY 16...	12.6	--	4.5	22000	5500	5800	9.5	3	.1
AUG. 12...	9.5	122	2.0	9700	1300	880	4.4	--	.0
SEPT. 25...	2.5	29	2.9	60000	11000	5400	11	--	.0

DATE	TIME	DIS- SOLVED ALUM- INUM (AL) (UG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED CAU- MIUM (CU) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	DIS- SOLVED COBALT (CO) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)
NOV. 13...	1300	--	5	--	0	0	0	2
MAY 08...	1130	70	9	300	2	0	1	11
JULY 16...	1310	10	8	250	0	0	0	3

DATE	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	DIS- SOLVED LITHIUM (LI) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED MERCURY (HG) (UG/L)	DIS- SOLVED NICKEL (NI) (UG/L)	DIS- SOLVED STRON- TIUM (SR) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)
NOV. 13...	250	0	--	450	<.2	0	--	30
MAY 08...	20	4	20	0	.1	10	400	50
JULY 16...	40	2	0	0	1.1	1	300	40

SAN JACINTO RIVER BASIN

08074250 BRICKHOUSE GULLY AT COSTA RICA STREET, HOUSTON, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TEMPERATURE (DEG C)	ALDRIN (UG/L)	ALDRIN IN BOTTOM DE-POSITS (UG/KG)	DDD (UG/L)	DDD IN BOTTOM DE-POSITS (UG/KG)	DDE (UG/L)	DDE IN BOTTOM DE-POSITS (UG/KG)	DDT (UG/L)	DDT IN BOTTOM DE-POSITS (UG/KG)
OCT. 16...	1250	880	22.0	.00	--	.00	--	.00	--	.00	--
NOV. 13...	1300	3.2	24.0	.00	--	.00	--	.00	--	.00	--
DEC. 19...	0950	240	12.5	.00	--	.00	--	.00	--	.02	--
JAN. 16...	1020	--	--	--	.0	--	32	--	10	--	33
FEB. 06...	1200	5.4	20.5	--	.0	--	32	--	11	--	36
MAR. 11...	1100	5.2	25.0	--	.0	--	83	--	45	--	61
25...	1200	12	10.0	--	.0	--	23	--	7.6	--	6.9
APR. 15...	1130	5.7	16.0	--	.0	--	14	--	.0	--	1.0
MAY 08...	1130	3.5	29.5	.01	.0	.00	61	.00	21	.00	64

DATE	DI-ELDRIN (UG/L)	DI-ELDRIN IN BOTTOM DE-POSITS (UG/KG)	ENDRIN (UG/L)	ENDRIN IN BOTTOM DE-POSITS (UG/KG)	HEPTA-CHLOR (UG/L)	HEPTA-CHLOR IN BOTTOM DE-POSITS (UG/KG)	HEPTA-CHLOR EPOXIDE (UG/L)	HEPTA-CHLOR EPOXIDE IN BOTTOM DE-POSITS (UG/KG)	LINDANE (UG/L)	LINDANE IN BOTTOM DE-POSITS (UG/KG)	CHLOR-DANE (UG/L)
OCT. 16...	.03	--	.00	--	.00	--	.02	--	.00	--	.0
NOV. 13...	.05	--	.00	--	.00	--	.00	--	.00	--	.0
DEC. 19...	.06	--	.00	--	.00	--	.00	--	.00	--	.7
JAN. 16...	--	120	--	.0	--	.0	--	.0	--	.0	--
FEB. 06...	--	40	--	.0	--	.0	--	.0	--	.0	--
MAR. 11...	--	94	--	.0	--	.0	--	.0	--	.0	--
25...	--	77	--	.0	--	.0	--	.0	--	.0	--
APR. 15...	--	18	--	.0	--	.0	--	.0	--	.0	--
MAY 08...	.01	6.0	.00	.0	.00	.0	.00	.0	.11	.0	.0

DATE	CHLOR-DANE IN BOTTOM DE-POSITS (UG/KG)	PCB (UG/L)	PCB IN BOTTOM DE-POSITS (UG/KG)	DI-AZINON (UG/L)	MALA-THION (UG/L)	METHYL PARA-THION (UG/L)	PARA-THION (UG/L)	2,4-D (UG/L)	SILVEX (UG/L)	2,4,5-T (UG/L)
OCT. 16...	--	.0	--	.04	.00	.00	.00	.00	.00	.03
NOV. 13...	--	.0	--	.02	.00	.00	.00	.00	.00	.00
DEC. 19...	--	.0	--	.14	.00	.00	.00	.03	.00	.05
JAN. 16...	270	--	0	--	--	--	--	--	--	--
FEB. 06...	150	--	0	--	--	--	--	--	--	--
MAR. 11...	1200	--	200	--	--	--	--	--	--	--
25...	360	--	0	--	--	--	--	--	--	--
APR. 15...	330	--	70	--	--	--	--	--	--	--
MAY 08...	290	.0	0	.10	.00	.00	.00	.00	.00	.25

SAN JACINTO RIVER BASIN

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08074500 WHITEOAK BAYOU AT HOUSTON, TEX.

LOCATION.--Lat 29°46'30", long 95°23'49", Harris County, at gaging station on Heights Boulevard in Houston and 2.4 miles (3.9 km) upstream from Little Whiteoak Bayou.

DRAINAGE AREA.--84.7 mi² (219.3 km²), unadjusted for basin boundary changes. During extreme floods when capacity of drainage ditches is exceeded, the drainage area is defined by natural ridges and is 92.0 mi² (238.3 km²).

PERIOD OF RECORD.--Chemical and biochemical analyses: October 1968 to September 1974.
Pesticide analyses: October 1968 to September 1974.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SiO ₂) (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNE-SIUM (MG)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED SODIUM PLUS POTAS-SIUM (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO ₃) (MG/L)	CAR-BONATE (CO ₃) (MG/L)
OCT. 16...	1205	4400	--	--	--	--	--	--	--	--
NOV. 13...	0930	25	22	130	24	--	110	--	418	0
DEC. 19...	1100	780	5.4	32	4.7	--	12	--	104	0
JAN. 09...	1300	34	13	55	11	--	71	--	220	0
FEB. 04...	1230	42	--	--	--	--	--	--	--	--
MAR. 06...	1330	27	--	--	--	--	--	--	--	--
15...	0930	880	--	--	--	--	--	--	--	--
APR. 15...	1330	100	--	--	--	--	--	--	--	--
MAY 08...	1330	2.8	--	--	--	--	--	--	--	--
JUNE 12...	0815	18	24	76	15	180	--	9.4	305	0
JULY 10...	1015	14	23	65	16	130	--	8.7	352	0
AUG. 12...	1115	10	--	--	--	--	--	--	--	--
SEP. 25...	1235	30	--	--	--	--	--	--	--	--

DATE	DIS-SOLVED SULFATE (SO ₄) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO-GEN (N) (MG/L)	ORGANIC NITRO-GEN (N) (MG/L)	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
OCT. 16...	--	--	--	.10	.01	.50	.36	--	.68	--
NOV. 13...	150	120	.4	.90	.72	1.2	.27	--	.80	775
DEC. 19...	15	18	.0	.60	.02	.90	.47	--	1.1	142
JAN. 09...	23	92	.0	1.3	.09	.63	.36	--	1.2	380
FEB. 04...	--	--	--	.80	.32	1.3	.81	--	.88	--
MAR. 06...	--	--	--	.36	.38	2.1	.50	--	3.4	--
15...	--	--	--	.35	.02	1.5	2.8	--	2.5	--
APR. 15...	--	--	--	1.5	.38	3.5	.46	--	1.5	--
MAY 08...	--	--	--	.97	.23	1.7	.90	2.6	.91	--
JUNE 12...	37	230	--	.48	.39	9.9	2.1	12	9.5	722
JULY 10...	39	140	--	.32	.11	4.7	1.5	6.2	14	596
AUG. 12...	--	--	--	.50	.14	2.0	2.8	4.8	3.8	--
SEP. 25...	--	--	--	.61	.18	2.7	1.1	3.8	.88	--

SAN JACINTO RIVER BASIN
08074500 WHITEOAK BAYOU AT HOUSTON, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTMBER 1974

DATE	TOTAL NON- FILT- RABLE RESIDUE (MG/L)	VOL. NON- FILT- RABLE RESIDUE (MG/L)	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)	COLOR (PLAT- INUM- COBALT UNITS)	TUR- BID- ITY (JTU)
OCT. 16...	912	76	--	--	--	189	7.7	22.0	80	240
NOV. 13...	25	14	430	86	2.4	1300	7.7	20.0	50	15
DEC. 19...	484	66	99	14	.5	278	7.2	12.5	60	150
JAN. 09...	116	29	180	4	2.3	711	7.6	21.0	60	60
FEB. 04...	82	40	--	--	--	949	7.9	15.5	20	45
MAR. 06...	18	1	--	--	--	1160	8.3	27.0	10	8
15...	569	105	--	--	--	270	7.3	17.0	30	150
APR. 15...	164	34	--	--	--	515	7.9	17.0	70	75
MAY 08...	35	20	--	--	--	--	8.0	29.5	40	20
JUNE 12...	23	18	250	1	4.9	1340	7.4	26.0	20	10
JULY 10...	29	26	230	0	3.7	1100	7.7	28.0	30	15
AUG. 12...	22	8	--	--	--	1040	7.6	29.5	20	20
SEP. 25...	73	40	--	--	--	796	7.2	26.0	30	45

DATE	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	BIO- CHEM- ICAL OXYGEN DEMAND (MG/L)	IMME- DIATE COLI- FORM (COL. PER 100 ML)	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)	PHENOLS (UG/L)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)
OCT. 16...	8.2	93	6.6	1700000	61000	260000	--	--	.0
NOV. 13...	8.0	87	4.0	36000	1500	400	12	1	.2
DEC. 19...	10.1	94	28	1600000	220000	69000	34	--	.0
JAN. 09...	10.8	120	4.0	1100000	7000	1600	9.0	--	.0
FEB. 04...	10.2	101	.7	7000	1500	520	2.0	--	.1
MAR. 06...	18.4	227	9.9	79000	3600	400	9.0	--	.2
15...	9.7	96	60	840000	84000	160000	22	--	.0
APR. 15...	9.1	94	9.9	500000	42000	24000	12	--	.1
MAY 08...	9.5	123	1.9	5000	150	14000	120	--	.1
JUNE 12...	8.4	102	4.5	7700	500	15	12	--	.7
JULY 10...	14.0	177	1.0	14000	11000	14	10	8	.4
AUG. 12...	8.7	113	.5	100	36	16	11	--	.3
SEP. 25...	5.2	63	13	400000	120000	14000	22	--	.4

SAN JACINTO RIVER BASIN

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08074500 WHITEOAK BAYOU AT HOUSTON, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	DIS- SOLVED ALUM- INUM (AL) (UG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	DIS- SOLVED COBALT (CO) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)
NOV. 13...	0930	--	10	--	0	0	0	5
MAR. 15...	0930	40	4	--	0	0	0	5
JULY 10...	1015	0	43	450	0	0	0	6

DATE	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	DIS- SOLVED LITHIUM (LI) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED MERCURY (HG) (UG/L)	DIS- SOLVED NICKEL (NI) (UG/L)	DIS- SOLVED STRON- TIUM (SR) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)
NOV. 13...	50	0	--	170	.4	0	--	250
MAR. 15...	50	7	10	50	.3	2	50	170
JULY 10...	20	3	10	130	.0	2	520	30

SAN JACINTO RIVER BASIN

08074500 WHITEOAK BAYOU AT HOUSTON, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TEMPERATURE (DEG C)	ALDRIN (UG/L)	ALDRIN IN BOTTOM DE-POSITS (UG/KG)	DDD (UG/L)	DDD IN BOTTOM DE-POSITS (UG/KG)	DDE (UG/L)	DDE IN BOTTOM DE-POSITS (UG/KG)	DDT (UG/L)	DDT IN BOTTOM DE-POSITS (UG/KG)
OCT. 16...	1205	4400	22.0	.00	--	.00	--	.00	--	.03	--
NOV. 13...	0930	25	20.0	.00	--	.00	--	.00	--	.00	--
DEC. 19...	1100	780	12.5	.00	--	.00	--	.00	--	.03	--
JAN. 09...	1300	34	21.0	--	.0	--	.0	--	.0	--	.0
FEB. 04...	1230	42	15.5	--	2.9	--	3.0	--	2.1	--	2.6
APR. 15...	1330	100	17.0	.00	--	.00	--	.00	--	.00	--

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	DI-ELDRIN (UG/L)	DI-ELDRIN IN BOTTOM DE-POSITS (UG/KG)	ENDRIN (UG/L)	ENDRIN IN BOTTOM DE-POSITS (UG/KG)	HEPTA-CHLOR (UG/L)	HEPTA-CHLOR IN BOTTOM DE-POSITS (UG/KG)	HEPTA-CHLOR EPOXIDE (UG/L)	HEPTA-CHLOR EPOXIDE IN BOTTOM DE-POSITS (UG/KG)	LINDANE (UG/L)	LINDANE IN BOTTOM DE-POSITS (UG/KG)	CHLOR-DANE (UG/L)
OCT. 16...	.04	--	.00	--	.00	--	.00	--	.02	--	.1
NOV. 13...	.03	--	.00	--	.00	--	.00	--	.00	--	.1
DEC. 19...	.04	--	.00	--	.00	--	.00	--	.00	--	.5
JAN. 09...	--	.0	--	.0	--	.0	--	.0	--	.0	--
FEB. 04...	--	3.4	--	.0	--	.0	--	.0	--	.0	--
APR. 15...	.03	--	.00	--	.00	--	.00	--	.00	--	.1

DATE	CHLOR-DANE IN BOTTOM DE-POSITS (UG/KG)	PCB (UG/L)	PCB IN BOTTOM DE-POSITS (UG/KG)	DI-AZINON (UG/L)	MALA-THION (UG/L)	METHYL PARA-THION (UG/L)	PARA-THION (UG/L)	2,4-D (UG/L)	SILVEX (UG/L)	2,4,5-T (UG/L)
OCT. 16...	--	.0	--	.08	.00	.00	.00	.00	.00	.05
NOV. 13...	--	.0	--	.11	.00	.00	.00	.00	.00	.00
DEC. 19...	--	.0	--	.10	.00	.00	.00	.39	.00	.04
JAN. 09...	0	--	0	--	--	--	--	--	--	--
FEB. 04...	63	--	0	--	--	--	--	--	--	--
APR. 15...	--	.0	--	.15	.02	.00	.00	.34	.00	.08

SAN JACINTO RIVER BASIN

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08074550 LITTLE WHITEOAK BAYOU AT HOUSTON, TEX.

LOCATION.--Lat 29°47'05", long 95°21'56", Harris County, at bridge on north Main Street, 0.8 mile (1.3 km) upstream from mouth, and 1.7 miles (2.7 km) north of Harris County courthouse.

DRAINAGE AREA.--20.9 mi² (54.1 km²).

PERIOD OF RECORD.--Chemical and biochemical analyses: May 1971 to September 1974.
Pesticide analyses: May 1971 to September 1974.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED SODIUM PLUS POTAS- SIUM (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)
OCT.										
16...	1130	950	--	--	--	--	--	--	--	--
NOV.										
13...	1030	--	16	76	19	--	120	--	396	0
DEC.										
19...	1200	600	5.8	35	3.8	--	20	--	115	0
JAN.										
15...	1300	560	.0	38	3.9	--	11	--	125	0
FEB.										
06...	1330	7.6	--	--	--	--	--	--	--	--
MAR.										
11...	1300	5.6	--	--	--	--	--	--	--	--
19...	1200	3.0	--	--	--	--	--	--	--	--
APR.										
24...	1100	6.1	--	--	--	--	--	--	--	--
JUNE										
17...	1130	3.2	23	61	19	140	--	4.0	404	0
JULY										
15...	1100	13	6.6	25	4.1	29	--	2.5	103	0
AUG.										
12...	1200	2.9	--	--	--	--	--	--	--	--
SEP.										
25...	1140	2.5	--	--	--	--	--	--	--	--

DATE	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)
OCT.										
16...	--	--	--	.20	.03	.31	.40	--	.60	--
NOV.										
13...	47	100	.7	.20	.28	.66	.17	--	.80	577
DEC.										
19...	14	27	.0	.50	.02	.36	.69	--	.88	165
JAN.										
15...	12	15	.0	.40	.01	1.0	.63	--	1.0	144
FEB.										
06...	--	--	--	.70	.13	.78	.37	--	.63	--
MAR.										
11...	--	--	--	.13	.16	.97	.28	--	1.2	--
19...	--	--	--	.55	.20	1.6	.34	--	1.4	--
APR.										
24...	--	--	--	.31	.12	.81	.79	1.6	.89	--
JUNE										
17...	39	120	--	.04	.00	.11	.70	.81	.16	605
JULY										
15...	15	23	--	.27	.04	1.4	.40	1.8	.76	156
AUG.										
12...	--	--	--	.02	.01	.32	.88	1.2	1.2	--
SEP.										
25...	--	--	--	.02	.00	1.9	1.2	3.1	1.6	--

SAN JACINTO RIVER BASIN

08074550 LITTLE WHITEOAK BAYOU AT HOUSTON, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TOTAL NON- FILT- RABLE RESIDUE (MG/L)	VOL. NON- FILT- RABLE RESIDUE (MG/L)	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCTI- VANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	TUR- BID- ITY (JTU)
OCT. 16...	784	78	--	--	--	238	7.5	22.5	40	180
NOV. 13...	19	18	270	0	3.1	1030	7.8	20.5	30	2
DEC. 19...	758	98	100	9	.9	325	7.0	12.5	70	150
JAN. 15...	302	30	110	9	.5	303	7.5	17.0	70	120
FEB. 06...	25	18	--	--	--	1150	8.2	19.0	10	5
MAR. 11...	8	0	--	--	--	--	--	24.0	5	2
APR. 19...	28	7	--	--	--	--	--	23.0	60	20
MAY 24...	39	15	--	--	--	--	--	22.5	50	30
JUNE 17...	161	140	230	0	4.0	1070	7.2	31.0	50	4
JULY 15...	64	46	80	0	1.4	297	6.7	26.5	50	45
AUG. 12...	13	12	--	--	--	762	7.7	29.5	30	2
SEP. 25...	12	11	--	--	--	1010	7.2	25.0	5	4

DATE	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	BIO- CHEM- ICAL OXYGEN DEMAND (MG/L)	IMME- DIATE COLI- FORM (COL. PER 100 ML)	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)	PHENOLS (UG/L)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)
OCT. 16...	7.2	82	6.0	2800000	100000	260000	--	--	.0
NOV. 13...	8.0	88	3.5	3100000	230000	22000	.0	0	.1
DEC. 19...	7.6	71	17	1500000	190000	64000	34	--	.0
JAN. 15...	7.6	78	6.9	1800000	140000	240000	18	--	.0
FEB. 06...	5.4	57	2.4	660000	35000	2900	7.0	--	.1
MAR. 11...	7.7	91	6.3	110000	16000	5800	8.5	--	.2
APR. 19...	4.5	52	14	2300000	100000	2800	5.0	--	.6
MAY 24...	4.9	56	26	280000	13000	680	7.0	--	.2
JUNE 17...	3.1	4	7.0	1100000	150000	900	12	--	.5
JULY 15...	3.6	44	7.4	560000	520000	51000	14	5	.3
AUG. 12...	6.8	88	4.4	100000	15000	42	18	--	.2
SEP. 25...	2.0	24	9.9	2200000	1200000	16000	12	--	.2

DATE	TIME	DIS- SOLVED ALUM- INUM (AL) (UG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	DIS- SOLVED COBALT (CO) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)
NOV. 13...	1030	--	4	--	0	0	0	4
JUNE 17...	1130	20	15	230	0	0	0	2
JULY 15...	1100	0	5	90	0	0	0	5

DATE	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	DIS- SOLVED LITHIUM (LI) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED MERCURY (HG) (UG/L)	DIS- SOLVED NICKEL (NI) (UG/L)	DIS- SOLVED STRON- TIUM (SR) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)
NOV. 13...	20	0	--	90	.6	0	--	50
JUNE 17...	30	2	10	10	.0	1	510	20
JULY 15...	20	1	0	0	5.0	1	170	30

SAN JACINTO RIVER BASIN

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08074550 LITTLE WHITEOAK BAYOU AT HOUSTON, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	ALDRIN (UG/L)	ALDRIN IN BOTTOM DE- POSITS (UG/KG)	DDD (UG/L)	DDD IN BOTTOM DE- POSITS (UG/KG)	DDE (UG/L)	DDE IN BOTTOM DE- POSITS (UG/KG)	DDT (UG/L)	DDT IN BOTTOM DE- POSITS (UG/KG)
OCT. 16...	1130	950	22.5	.00	--	.00	--	.02	--	.89	--
NOV. 13...	1030	--	20.5	.00	.0	.00	34	.00	20	.00	1200
DEC. 19...	1200	600	12.5	.00	--	.02	--	.00	--	.16	--
JAN. 15...	1300	560	17.0	--	.0	--	3.1	--	1.7	--	10
JUNE 17...	1130	3.2	31.0	.00	.0	.00	.0	.00	.5	.00	.0

DATE	DI- ELURIN (UG/L)	DI- ELDRIN IN BOTTOM DE- POSITS (UG/KG)	ENDRIN (UG/L)	ENDRIN IN BOTTOM DE- POSITS (UG/KG)	HEPTA- CHLOR (UG/L)	HEPTA- CHLOR IN BOTTOM DE- POSITS (UG/KG)	HEPTA- CHLOR EPOXIDE (UG/L)	HEPTA- CHLOR EPOXIDE IN BOT- TOM DE- POSITS (UG/KG)	LINDANE (UG/L)	LINDANE IN BOTTOM DE- POSITS (UG/KG)	CHLOR- DANE (UG/L)
OCT. 16...	.03	--	.00	--	.00	--	.00	--	.00	--	.5
NOV. 13...	.01	10	.00	.0	.00	.0	.00	.0	.00	.0	.0
DEC. 19...	.02	--	.00	--	.00	--	.00	--	.00	--	.3
JAN. 15...	--	2.6	--	.0	--	.0	--	.0	--	.0	--
JUNE 17...	.01	.6	.00	.0	.00	.0	.00	.0	.00	.0	.0

DATE	CHLOR- DANE IN BOTTOM DE- POSITS (UG/KG)	PCH (UG/L)	PCB IN BOTTOM DE- POSITS (UG/KG)	DI- AZINON (UG/L)	MALA- THION (UG/L)	METHYL PARA- THION (UG/L)	PARA- THION (UG/L)	2,4-D (UG/L)	SILVEX (UG/L)	2,4,5-T (UG/L)
OCT. 16...	--	.0	--	.04	.00	.00	.00	.00	.00	.05
NOV. 13...	63	.0	0	.12	.00	.00	.00	.00	.00	.00
DEC. 19...	--	.1	--	.07	.00	.00	.00	.04	.00	.00
JAN. 15...	24	--	0	--	--	--	--	--	--	--
JUNE 17...	22	.0	10	.08	.00	.00	.00	.00	.00	.00

SAN JACINTO RIVER BASIN

08074800 KEEGANS BAYOU AT ROARK ROAD, NEAR HOUSTON, TEX.

LOCATION.--Lat 29°39'23", long 95°33'43", Harris County, at gaging station at bridge on Roark Road and about 2 miles (3 km) southwest of city limits of Houston.

DRAINAGE AREA.--9.64 mi² (24.97 km²).

PERIOD OF RECORD.--Chemical and biochemical analyses: October 1968 to September 1974.

Pesticide analyses: October 1968 to September 1974.

Sediment analyses: October 1970 to September 1971.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	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 SODIUM PLUS POTAS- SIUM (K) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)
OCT.										
17...	0840	110	--	--	--	--	--	--	--	--
NOV.										
15...	0945	1.5	22	64	17	--	65	--	298	0
JAN.										
09...	0900	.96	15	64	16	--	37	--	266	0
FEB.										
27...	1300	2.0	22	72	19	--	60	--	318	0
MAR.										
05...	1000	2.9	--	--	--	--	--	--	--	--
18...	1400	2.2	--	--	--	--	--	--	--	--
25...	0930	33	--	--	--	--	--	--	--	--
APR.										
23...	1400	3.0	--	--	--	--	--	--	--	--
30...	1300	1.7	--	--	--	--	--	--	--	--
JUNE										
12...	1215	6.0	24	66	14	74	--	7.4	285	0
18...	1220	7.2	25	70	16	75	--	6.9	302	0
JULY										
17...	1350	330	6.3	19	3.3	12	--	3.4	70	0
31...	1200	13	11	24	5.2	27	--	4.9	100	0
SEPT.										
23...	1215	2.7	--	--	--	--	--	--	--	--

DATE	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)
OCT.										
17...	--	--	--	.05	.02	.50	.33	--	.31	186
NOV.										
15...	32	75	.4	.40	1.1	5.6	.27	--	5.0	--
JAN.										
09...	30	42	.0	.80	.25	1.6	.29	--	1.9	--
FEB.										
27...	20	76	.4	1.5	.60	2.8	.75	--	4.4	--
MAR.										
05...	--	--	--	2.0	.57	1.6	.69	--	5.7	--
18...	--	--	--	2.4	.39	2.8	.56	--	3.7	--
25...	--	--	--	3.4	2.1	.78	.70	--	.90	--
APR.										
23...	--	--	--	.33	.28	3.1	.00	3.1	5.5	--
30...	--	--	--	.45	.30	2.9	.60	3.5	8.3	--
JUNE										
12...	34	64	--	.24	.25	6.5	1.6	8.1	4.6	--
18...	41	66	--	.26	.19	.09	1.2	1.3	5.4	--
JULY										
17...	14	9.4	--	.47	.04	.58	1.9	2.5	1.1	--
31...	24	25	--	.29	.07	1.5	1.8	3.3	3.0	--
SEPT.										
23...	--	--	--	.61	.49	7.4	1.1	8.5	5.3	--

08074800 KEEGANS BAYOU AT ROARK ROAD, NEAR HOUSTON, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	DIS- SOLVED SOLIDS (SUM OF CONSTITU- TENTS) (MG/L)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)	VOL. NON- FILT- RABLE RESIDUE (MG/L)	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)	COLOR (PLAT- INUM- COBALT UNITS)
OCT. 17...	--	12	--	--	--	--	204	7.6	20.0	120
NOV. 15...	435	21	6	230	0	1.9	833	7.7	22.5	30
JAN. 09...	341	90	15	230	8	1.1	643	8.0	18.0	50
FEB. 27...	438	6	3	260	0	1.6	811	7.8	18.0	5
MAR. 05...	--	38	2	--	--	--	7940	7.7	21.0	10
18...	--	67	8	--	--	--	704	7.5	265	30
25...	--	376	61	--	--	--	249	7.9	26.5	60
APR. 23...	--	19	9	--	--	--	759	7.8	28.5	20
30...	--	39	12	--	--	--	--	7.6	27.0	40
JUNE 12...	424	22	16	220	0	2.2	773	6.8	32.0	20
18...	450	12	3	240	0	2.1	807	7.6	32.0	30
JULY 17...	102	708	518	61	4	.7	198	6.8	23.0	240
31...	171	199	40	81	0	1.3	327	6.9	28.0	120
SEP. 23...	--	96	44	--	--	--	830	7.3	26.0	20

DATE	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)	IMME- DIATE COLI- FORM (COL. PER 100 ML)	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)	PHENOLS (UG/L)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)
OCT. 17...	80	6.4	70	2.6	120000	2500	2400	16	--	.0
NOV. 15...	15	6.6	75	3.7	350000	1000	1100	20	0	.1
JAN. 09...	45	8.0	84	4.5	160000	7300	1500	.0	--	.0
FEB. 27...	8	8.2	86	1.5	1700	2	1	3.5	--	.1
MAR. 05...	20	7.5	83	13	18000	380	170	4.0	--	.1
18...	35	7.4	90	3.1	2100	1	42	12	--	.1
25...	175	10.4	90	25	1600000	16000	9200	18	--	.0
APR. 23...	2	4.9	63	3.8	9700	32	130	--	--	.1
30...	10	3.8	47	3.7	29000	150	230	--	--	.0
JUNE 12...	25	6.9	93	8.4	7300	1800	2500	8.0	--	.2
18...	7	5.2	70	10	21000	290	2300	11	5	.1
JULY 17...	280	7.2	83	7.3	860000	17000	19000	9.3	9	.0
31...	95	2.3	29	8.1	410000	74000	10000	6.8	6	1.0
SEP. 23...	45	3.4	41	20	26000	1300	650	23	--	.1

DATE	TIME	DIS- SOLVED ALUM- INUM (AL) (UG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	DIS- SOLVED COBALT (CO) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)
------	------	---	---	--	--	---	--	--

NOV. 15...	0945	--	4	--	0	0	0	5
JUNE 18...	1220	20	10	370	1	0	0	3
JULY 17...	1350	10	2	70	0	0	0	5
31...	1200	--	--	120	--	--	--	--

DATE	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	DIS- SOLVED LITHIUM (LI) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED MERCURY (HG) (UG/L)	DIS- SOLVED NICKEL (NI) (UG/L)	DIS- SOLVED STRON- TIUM (SR) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)
------	--	--	---	--	---	--	--	--

NOV. 15...	0	0	--	150	.4	0	--	40
JUNE 18...	30	2	0	0	.0	3	560	10
JULY 17...	60	1	0	0	.5	<1	100	40
31...	--	--	--	--	--	--	--	--

SAN JACINTO RIVER BASIN

08074800 KEEGANS BAYOU AT ROARK ROAD, NEAR HOUSTON, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TEMPERATURE (DEG C)	ALDRIN (UG/L)	ALDRIN IN BOTTOM DE-POSITS (UG/KG)	DDD (UG/L)	DDD IN BOTTOM DE-POSITS (UG/KG)	DDE (UG/L)	DDE IN BOTTOM DE-POSITS (UG/KG)	DDT (UG/L)	DDT IN BOTTOM DE-POSITS (UG/KG)
OCT. 17...	0840	110	20.0	.00	--	.00	--	.00	--	.00	--
NOV. 15...	0945	1.5	22.5	.00	.0	.00	.0	.00	.0	.00	.0
JAN. 09...	0900	.96	18.0	--	.0	--	.0	--	.6	--	1.0
FEB. 27...	1300	2.0	18.0	.00	--	.00	--	.00	--	.00	--
JUNE 18...	1220	7.2	32.0	.00	.0	.00	1.9	.00	.0	.00	.0
JULY 31...	1200	13	28.0	.00	.0	.00	.0	.00	.0	.00	.0

DATE	DI-ELDRIN (UG/L)	DI-ELDRIN IN BOTTOM DE-POSITS (UG/KG)	ENDRIN (UG/L)	ENDRIN IN BOTTOM DE-POSITS (UG/KG)	HEPTA-CHLOR (UG/L)	HEPTA-CHLOR IN BOTTOM DE-POSITS (UG/KG)	HEPTA-CHLOR EPOXIDE (UG/L)	HEPTA-CHLOR EPOXIDE IN BOTTOM DE-POSITS (UG/KG)	LINDANE (UG/L)	LINDANE IN BOTTOM DE-POSITS (UG/KG)	CHLOR-DANE (UG/L)
OCT. 17...	.00	--	.00	--	.00	--	.00	--	.00	--	.0
NOV. 15...	.02	.6	.00	.0	.00	.0	.00	.0	.04	.0	.1
JAN. 09...	--	.6	--	.0	--	.0	--	.0	--	.0	--
FEB. 27...	.02	--	.00	--	.00	--	.00	--	.00	--	.1
JUNE 18...	.03	9.3	.00	.0	.00	.0	.00	.0	.02	.0	.0
JULY 31...	.03	1.1	.00	.0	.00	.0	.00	.0	.12	.0	.2

DATE	CHLOR-DANE IN BOTTOM DE-POSITS (UG/KG)	PCB (UG/L)	PCB IN BOTTOM DE-POSITS (UG/KG)	DI-AZINON (UG/L)	MALATHION (UG/L)	METHYL PARATHION (UG/L)	PARATHION (UG/L)	2,4-D (UG/L)	SILVEX (UG/L)	2,4,5-T (UG/L)
OCT. 17...	--	.0	--	.01	.00	.00	.00	.00	.00	.02
NOV. 15...	13	.0	0	.13	.00	.00	.00	.00	.00	.00
JAN. 09...	21	--	0	--	--	--	--	--	--	--
FEB. 27...	--	.0	--	.35	.00	.00	.00	.00	.00	.00
JUNE 18...	87	.0	10	.19	.00	.00	.00	.00	.00	.00
JULY 31...	10	.0	0	.01	.02	.00	.00	.09	.01	1.2

08075000 BRAYS BAYOU AT HOUSTON, TEX.

LOCATION.--Lat 29°41'49", long 95°24'43", Harris County, at gaging station at Main Street bridge in southwest Houston, 1.6 miles (2.6 km) upstream from Harris Gully, and 11.6 miles (18.7 km) upstream from Buffalo Bayou.

DRAINAGE AREA.--88.4 mi² (229.0 km²).

PERIOD OF RECORD.--Chemical and biochemical analyses: October 1968 to September 1974.
Pesticide analyses: October 1968 to September 1974.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part I of this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	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 SODIUM PLUS POTAS- SIUM (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)
OCT.										
15...	0915	600	--	--	--	--	--	--	--	--
NOV.										
15...	1115	56	20	47	11	--	98	--	277	0
JAN.										
09...	1130	230	19	44	15	--	85	--	276	0
FEB.										
27...	1200	54	--	--	--	--	--	--	--	--
MAR.										
15...	1100	810	--	--	--	--	--	--	--	--
18...	1200	70	--	--	--	--	--	--	--	--
APR.										
23...	1130	.61	--	--	--	--	--	--	--	--
JUNE										
18...	1100	68	26	44	11	120	--	7.9	275	0
JULY										
17...	1215	2800	5.2	17	2.0	14	--	1.8	54	0
31...	0930	260	11	24	5.1	36	--	4.7	116	0
SEP.										
24...	1245	66	--	--	--	--	--	--	--	--

DATE	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
OCT.										
15...	--	--	--	.20	.05	.24	.43	--	.80	--
NOV.										
15...	39	78	.6	1.2	.82	3.2	.28	--	3.0	442
JAN.										
09...	42	74	.2	.80	.50	6.5	.51	--	4.1	429
FEB.										
27...	--	--	--	.94	.61	5.5	.50	--	3.2	--
MAR.										
15...	--	--	--	.43	.17	1.3	1.2	--	3.8	--
18...	--	--	--	.47	.33	8.0	.45	--	3.0	--
APR.										
23...	--	--	--	.63	.37	5.8	1.2	7.0	2.5	--
JUNE										
18...	43	84	--	1.1	.40	3.7	1.8	5.5	4.0	472
JULY										
17...	12	9.8	--	.60	.04	.60	.60	1.2	.68	89
31...	23	28	--	.47	.11	1.6	1.4	3.0	1.9	189
SEP.										
24...	--	--	--	3.5	.30	2.1	1.3	3.4	4.7	--

DATE	TOTAL NON- FILT- RABLE RESIDUE (MG/L)	VOL. NON- FILT- RABLE RESIDUE (MG/L)	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)	COLOR (PLAT- INUM- COBALT UNITS)	TUR- BID- ITY (JTU)
OCT.										
15...	366	41	--	--	--	305	9.0	23.5	80	120
NOV.										
15...	15	9	160	0	3.3	819	7.8	26.5	30	6
JAN.										
09...	45	12	170	0	2.8	789	7.7	23.0	40	20
FEB.										
27...	12	5	--	--	--	808	7.6	19.5	10	7
MAR.										
15...	392	70	--	--	--	259	7.2	17.0	30	100
18...	51	9	--	--	--	796	7.4	25.0	20	25
APR.										
23...	14	8	--	--	--	783	7.7	25.5	30	10
JUNE										
18...	20	17	160	0	4.2	885	7.8	30.0	30	6
JULY										
17...	292	50	51	7	.9	166	6.7	24.0	70	95
31...	194	48	81	0	1.7	355	7.2	28.0	120	90
SEP.										
24...	12	10	--	--	--	826	7.6	28.5	20	10

SAN JACINTO RIVER BASIN

08075000 BRAYS BAYOU AT HOUSTON, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	BIO- CHEM- ICAL OXYGEN DEMAND (MG/L)	IMME- DIATE COLI- FORM (COL. PER 100 ML)	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)	TOTAL ORGANIC CARBON (C)	PHENOLS (UG/L)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)
OCT. 15...	7.1	83	2.7	390000	7300	16000	--	--	.0
NOV. 15...	10.0	122	5.1	1	1	2	12	2	.3
JAN. 09...	10.0	88	.8	170	2	21	7.0	--	.2
FEB. 27...	12.2	131	5.6	3500	7	1700	4.5	--	.2
MAR. 15...	8.2	85	36	740000	39000	17000	--	--	.0
18...	9.3	111	1.8	850	78	18	9.0	--	.3
APR. 23...	5.6	67	7.8	1000	150	41	8.0	--	.3
JUNE 18...	13.6	179	3.4	460	150	48	11	6	.3
JULY 17...	9.1	107	6.9	16000	14000	8200	12	1	.0
31...	5.8	73	4.6	580	190	450	9.9	11	1.0
SEP. 24...	8.0	103	3.9	7300	170	190	11	--	.2

DATE	TIME	DIS- SOLVED ALUM- INUM (AL) (UG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	DIS- SOLVED COBALT (CO) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)
NOV. 15...	1115	--	5	--	0	10	0	8
JUNE 18...	1100	10	13	480	0	0	0	5
JULY 17...	1215	0	3	80	0	0	0	5
31...	0930	0	8	140	2	0	0	7

DATE	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	DIS- SOLVED LITHIUM (LI) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED MERCURY (HG) (UG/L)	DIS- SOLVED NICKEL (NI) (UG/L)	DIS- SOLVED STRON- TIUM (SR) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)
NOV. 15...	10	0	--	10	.2	0	--	40
JUNE 18...	10	3	10	0	.0	4	390	10
JULY 17...	30	3	0	0	.5	2	110	40
31...	30	21	0	0	.2	1	170	0

SAN JACINTO RIVER BASIN

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08075000 BRAYS BAYOU AT HOUSTON, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	ALDRIN (UG/L)	ALDRIN IN BOTTOM DE- POSITS (UG/KG)	DDD (UG/L)	DDD IN BOTTOM DE- POSITS (UG/KG)	DDE (UG/L)	DDE IN BOTTOM DE- POSITS (UG/KG)	DDT (UG/L)	DDT IN BOTTOM DE- POSITS (UG/KG)
OCT.											
15...	0915	600	23.5	--	--	--	--	--	--	--	--
NOV.											
15...	1115	56	26.5	.00	--	.00	--	.00	--	.00	--
JAN.											
09...	1130	230	23.0	--	.0	--	18	--	15	--	17
FEB.											
27...	1200	54	19.5	.00	--	.00	--	.00	--	.01	--
MAR.											
15...	1100	810	17.0	.16	--	.00	--	.00	--	.00	--
18...	1200	70	25.0	--	.0	--	42	--	11	--	1.4
JUNE											
18...	1100	68	30.0	.00	--	.00	--	.00	--	.00	--
JULY											
31...	0930	260	28.0	.00	.0	.00	50	.00	21	.00	.0

DATE	DI- ELDRIN (UG/L)	DI- ELDRIN IN BOTTOM DE- POSITS (UG/KG)	ENDRIN (UG/L)	ENDRIN IN BOTTOM DE- POSITS (UG/KG)	HEPTA- CHLOR (UG/L)	HEPTA- CHLOR IN BOTTOM DE- POSITS (UG/KG)	HEPTA- CHLOR EPOXIDE (UG/L)	HEPTA- CHLOR EPOXIDE IN BOT- TOM DE- POSITS (UG/KG)	LINDANE (UG/L)	LINDANE IN BOTTOM DE- POSITS (UG/KG)	CHLOR- DANE (UG/L)
OCT.											
15...	--	--	--	--	--	--	--	--	--	--	--
NOV.											
15...	.03	--	.00	--	.00	--	.00	--	.04	--	.2
JAN.											
09...	--	37	--	.0	--	.0	--	.0	--	.0	--
FEB.											
27...	.01	--	.00	--	.00	--	.00	--	.00	--	.0
MAR.											
15...	.07	--	.00	--	.00	--	.00	--	.00	--	.9
18...	--	82	--	.0	--	.0	--	.0	--	.0	--
JUNE											
18...	.02	--	.00	--	.00	--	.00	--	.00	--	.1
JULY											
31...	.03	31	.00	.0	.00	.0	.00	.0	.41	.0	.1

DATE	CHLOR- DANE IN BOTTOM DE- POSITS (UG/KG)	PCB (UG/L)	PCB IN BOTTOM DE- POSITS (UG/KG)	DI- AZINON (UG/L)	MALA- THION (UG/L)	METHYL PARA- THION (UG/L)	PARA- THION (UG/L)	2,4-D (UG/L)	SILVEX (UG/L)	2,4,5-T (UG/L)
OCT.										
15...	--	--	--	.23	.00	.00	.00	.00	.05	.11
NOV.										
15...	--	.0	--	.15	.00	.00	.00	.00	.00	.00
JAN.										
09...	400	--	0	--	--	--	--	--	--	--
FEB.										
27...	--	.0	--	.00	.00	.00	.00	.00	.00	.00
MAR.										
15...	--	.0	--	.00	.00	.00	.00	.08	.01	.19
18...	470	--	330	--	--	--	--	--	--	--
JUNE										
18...	--	.0	--	.48	.00	.00	.00	--	--	--
JULY										
31...	670	.0	0	.72	.06	.00	.00	.06	.00	.50

SAN JACINTO RIVER BASIN

08075100 BRAYS BAYOU AT SCOTT STREET, AT HOUSTON, TEX.

LOCATION.--Lat 29°42'35", long 95°21'23", Harris County, at bridge on Scott Street in Houston.

DRAINAGE AREA.--106 mi² (275 km²).PERIOD OF RECORD.--Chemical and biochemical analyses: May 1971 to September 1974.
Pesticide analyses: May 1971 to September 1974.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	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 SODIUM PLUS POTAS- SIUM (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)
OCT.										
15...	1030	900	--	--	--	--	--	--	--	--
NOV.										
15...	1315	--	29	48	15	--	150	--	355	0
DEC.										
17...	1300	52	25	68	23	--	200	--	278	0
JAN.										
23...	1130	130	13	38	9.5	--	60	--	186	0
FEB.										
27...	0900	67	18	46	21	--	94	--	279	0
MAR.										
18...	0930	66	--	--	--	--	--	--	--	--
APR.										
23...	0900	55	--	--	--	--	--	--	--	--
30...	1030	53	22	51	14	120	--	6.1	270	0
JUNE										
18...	0930	49	24	45	12	120	--	7.6	274	0
JULY										
30...	0915	60	24	45	10	100	--	6.6	256	0
AUG.										
21...	0850	58	--	--	--	--	--	--	--	--
SEP.										
24...	1240	--	--	--	--	--	--	--	--	--

DATE	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
OCT.										
15...	--	--	--	.40	.05	.43	.49	--	1.2	--
NOV.										
15...	16	160	1.2	.00	.00	6.4	1.8	--	5.8	604
DEC.										
17...	47	310	.3	1.1	1.0	5.0	.65	--	4.8	828
JAN.										
23...	37	54	.1	.50	.52	1.9	.69	--	2.0	309
FEB.										
27...	39	89	.6	.77	3.2	1.0	.64	--	5.7	460
MAR.										
18...	--	--	--	.51	.41	4.2	.40	--	5.5	--
APR.										
23...	--	--	--	.66	.54	4.4	.90	5.3	6.0	--
30...	49	110	--	.53	.77	3.4	1.1	4.5	6.1	506
JUNE										
18...	52	94	--	.58	.62	3.1	.30	3.4	5.1	491
JULY										
30...	47	81	--	.33	.45	3.6	.60	4.2	5.5	440
AUG.										
21...	--	--	--	.43	.41	.05	3.1	3.1	6.4	--
SEP.										
24...	--	--	--	2.1	.43	3.1	1.2	4.3	4.6	--

08075100 BRAYS BAYOU AT SCOTT STREET, AT HOUSTON, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TOTAL NON- FILT- RABLE RESIDUE (MG/L)	VOL. NON- FILT- RABLE RESIDUE (MG/L)	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUC- TANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	TUR- BID- ITY (JTU)
OCT. 15...	300	25	--	--	--	346	8.4	24.0	80	120
NOV. 15...	124	66	180	0	4.9	1090	7.6	27.0	50	25
DEC. 17...	59	42	270	38	5.4	1550	7.8	21.0	30	30
JAN. 23...	194	40	130	0	2.3	587	7.6	15.5	40	75
FEB. 27...	19	2	200	0	2.9	828	7.4	17.0	10	25
MAR. 18...	98	17	--	--	--	790	7.4	21.5	30	35
APR. 23...	20	11	--	--	--	813	7.3	22.0	30	15
30...	21	8	190	0	3.8	919	7.8	25.0	40	8
JUNE 18...	13	10	160	0	4.1	841	7.6	28.5	30	7
JULY 30...	23	6	150	0	3.5	802	7.6	29.0	30	10
AUG. 21...	16	4	--	--	--	915	7.5	29.0	20	9
SEP. 24...	26	22	--	--	--	1370	7.7	28.0	20	10

DATE	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	BIO- CHEM- ICAL OXYGEN DEMAND (MG/L)	IMME- DIATE COLI- FORM (COL. PER 100 ML)	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)	PHENOLS (UG/L)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)
OCT. 15...	4.9	58	12	1800000	120000	54000	--	--	.0
NOV. 15...	6.0	74	<82	6100000	300000	150000	28	42	.9
DEC. 17...	11.2	124	19	2200000	1800	76000	14	--	.0
JAN. 23...	8.3	82	19	2500000	220000	65000	12	--	.0
FEB. 27...	5.2	54	37	1900000	180000	9700	3.5	--	.0
MAR. 18...	7.5	84	17	25000	4900	1	12	--	.3
APR. 23...	5.1	58	52	91000	8000	290	9.0	--	.0
30...	8.7	104	18	200000	950	2700	14	4	.2
JUNE 18...	8.9	114	9.0	300000	21000	700	8.1	--	1.3
JULY 30...	7.9	101	3.2	5000	550	62	6.0	--	.2
AUG. 21...	6.8	87	12	30000	1700	110	5.3	--	.4
SEP. 24...	5.9	75	31	2600000	580000	52000	54	--	.5

DATE	TIME	DIS- SOLVED ALUM- INUM (AL) (UG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	DIS- SOLVED COBALT (CO) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)
NOV. 15...	1315	--	6	--	1	20	0	13
APR. 30...	1030	30	4	320	2	40	2	16
JUNE 18...	0930	20	14	460	0	30	0	8
JULY 30...	0915	--	--	340	--	--	--	--

DATE	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	DIS- SOLVED LITHIUM (LI) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED MERCURY (HG) (UG/L)	DIS- SOLVED NICKEL (NI) (UG/L)	DIS- SOLVED STRON- TIUM (SR) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)
NOV. 15...	70	4	--	40	<.2	0	--	120
APR. 30...	70	11	20	0	.1	16	500	70
JUNE 18...	40	4	10	0	.0	3	400	20
JULY 30...	--	--	--	--	--	--	--	--

SAN JACINTO RIVER BASIN

08075100 BRAYS BAYOU AT SCOTT STREET, AT HOUSTON, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	ALDRIN (UG/L)	ALDRIN IN BOTTOM DE- POSITS (UG/KG)	DDD (UG/L)	DDD IN BOTTOM DE- POSITS (UG/KG)	DDE (UG/L)	DDE IN BOTTOM DE- POSITS (UG/KG)	DDT (UG/L)	DDT IN BOTTOM DE- POSITS (UG/KG)
OCT. 15...	1030	900	24.0	.00	--	.00	--	.00	--	.00	--
NOV. 15...	1315	--	27.0	.00	.0	.00	16	.00	11	.00	18
JAN. 23...	1130	130	15.5	.00	--	.00	--	.00	--	.03	--
MAR. 18...	0930	66	21.5	--	.0	--	4.1	--	2.3	--	2.4
APR. 30...	1030	53	25.0	.00	--	.00	--	.00	--	.00	--

DATE	DI- ELDRIN (UG/L)	DI- ELDRIN IN BOTTOM DE- POSITS (UG/KG)	ENDRIN (UG/L)	ENDRIN IN BOTTOM DE- POSITS (UG/KG)	HEPTA- CHLOR (UG/L)	HEPTA- CHLOR IN BOTTOM DE- POSITS (UG/KG)	HEPTA- CHLOR EPOXIDE (UG/L)	HEPTA- CHLOR EPOXIDE IN BOT- TOM DE- POSITS (UG/KG)	LINDANE (UG/L)	LINDANE IN BOTTOM DE- POSITS (UG/KG)	CHLOR- DANE (UG/L)
OCT. 15...	.03	--	.00	--	.00	--	.00	--	.00	--	.1
NOV. 15...	.07	28	.00	.0	.00	.0	.00	.0	.00	.0	.3
JAN. 23...	.07	--	.00	--	.00	--	.00	--	.00	--	.4
MAR. 18...	--	23	--	.0	--	.0	--	.0	--	.0	--
APR. 30...	.03	--	.00	--	.00	--	.00	--	.00	--	.1

DATE	CHLOR- DANE IN BOTTOM DE- POSITS (UG/KG)	PCB (UG/L)	PCB IN BOTTOM DE- POSITS (UG/KG)	DI- AZINON (UG/L)	MALA- THION (UG/L)	METHYL PARA- THION (UG/L)	PARA- THION (UG/L)	2,4-D (UG/L)	SILVEX (UG/L)	2,4,5-T (UG/L)
OCT. 15...	--	.0	--	.14	.00	.00	.00	.00	.08	.09
NOV. 15...	280	.0	0	.22	.00	.00	.00	.00	.00	.00
JAN. 23...	--	.0	--	.08	.00	.00	.00	.00	.00	.00
MAR. 18...	170	--	30	--	--	--	--	--	--	--
APR. 30...	--	.0	--	.00	.00	.00	.00	.06	.00	.02

SAN JACINTO RIVER BASIN

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08075400 SIMS BAYOU AT HIRAM CLARKE STREET, HOUSTON, TEX.

LOCATION.--Lat 29°37'07", long 95°26'45", Harris County, at gaging station at bridge on Hiram Clarke Street in southwest Houston, 12.7 miles (20.4 km) upstream from gage, Sims Bayou at Houston, and 19.7 miles (31.7 km) upstream from mouth.

DRAINAGE AREA.--20.2 mi² (52.3 km²).

PERIOD OF RECORD.--Chemical and biochemical analyses: October 1970 to September 1974.

Pesticide analyses: October 1970 to September 1974.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

		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 SODIUM PLUS POTAS- SIUM (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	
OCT. 17...	0925	220	--	--	--	--	--	--	--	--	
NOV. 16...	0900	6.8	20	48	15	--	120	--	264	0	
JAN. 09...	1000	9.4	16	51	18	--	98	--	260	0	
MAR. 05...	0900	5.0	20	52	19	--	120	--	264	0	
	1300	7.5	--	--	--	--	--	--	--	--	
	1800	5.5	--	--	--	--	--	--	--	--	
APR. 23...	1300	10	--	--	--	--	--	--	--	--	
	3000	6.4	22	61	14	570	--	45	240	0	
JUNE 11...	1250	7.5	21	48	11	100	--	9.3	224	0	
	1800	3.3	23	52	11	140	--	11	242	0	
JULY 17...	1315	350	3.8	17	2.9	15	--	2.5	58	0	
	3100	7.6	21	42	9.5	110	--	8.0	235	0	
AUG. 21...	1220	6.0	--	--	--	--	--	--	--	--	
		DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITU- ENTS) (MG/L)
OCT. 17...	--	--	--	--	.10	.03	.27	.34	--	.51	--
NOV. 16...	59	96	.5	7.0	.01	.11	.44	--	6.0	519	
JAN. 09...	46	100	.1	4.7	.22	1.9	.43	--	6.3	481	
MAR. 05...	29	160	.4	2.9	.31	3.5	.62	--	8.8	549	
	--	--	--	4.4	.14	2.1	.59	--	6.2	--	
	--	--	--	2.0	.38	2.5	.51	--	8.8	--	
APR. 23...	--	--	--	1.6	.16	.62	.98	1.6	5.0	--	
	83	850	--	1.8	.08	1.3	1.1	2.4	16	1760	
JUNE 11...	44	100	--	1.6	.18	1.8	1.9	3.7	7.8	444	
	68	120	--	4.1	.33	4.5	.30	4.8	10	544	
JULY 17...	11	12	--	.72	.02	.61	1.2	1.8	1.2	93	
	54	100	--	.71	.05	1.9	2.6	4.5	7.5	460	
AUG. 21...	--	--	--	2.5	.12	.89	.91	1.8	8.6	--	

SAN JACINTO RIVER BASIN

08075400 SIMS BAYOU AT HIRAM CLARKE STREET, HOUSTON, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTMBER 1974

DATE	TOTAL NON- FILT- RABLE RESIDUE (MG/L)	VOL. NON- FILT- RABLE RESIDUE (MG/L)	HARD- NESS (CA,MG) (MG/L)	NON- CAH- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	COLOR (PLAT- NUM- COBALT UNITS)	TUR- BID- ITY (JTU)
OCT. 17...	117	13	--	--	--	260	7.4	20.0	140	50
NOV. 16...	94	35	180	0	3.8	907	7.2	18.0	30	35
JAN. 09...	41	15	200	0	3.0	660	7.5	21.0	30	25
MAR. 05...	146	24	210	0	3.6	1050	7.4	21.0	10	50
13...	18	5	--	--	--	1190	8.0	21.0	20	10
18...	22	6	--	--	--	1050	7.7	25.0	20	10
APR. 23...	77	21	--	--	--	728	7.5	27.0	20	45
30...	16	5	210	14	17	3190	7.9	26.5	30	9
JUNE 11...	26	13	170	0	3.4	824	7.0	31.0	20	10
18...	135	128	180	0	4.6	985	7.6	30.0	80	80
JULY 17...	500	70	55	7	.9	179	7.3	23.5	120	120
31...	107	27	140	0	4.0	849	7.4	29.5	40	50
AUG. 21...	26	0	--	--	--	960	7.5	32.0	10	15

DATE	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	BIO- CHEM- ICAL OXYGEN DEMAND (MG/L)	IMME- DIATE COLI- FORM (COL. PER 100 ML)	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)	PHENOLS (UG/L)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)
OCT. 17...	5.9	64	4.8	700000	2100	4500	--	--	.0
NOV. 16...	8.8	93	2.4	25000	1400	1500	10	0	.1
JAN. 09...	9.0	100	1.8	5200	100	100	3.5	--	.2
MAR. 05...	6.4	71	30	13000	280	120	14	0	.6
13...	13.6	151	3.9	100000	1200	460	--	--	.3
18...	12.5	149	1.9	1700	82	74	10	--	.4
APR. 23...	9.2	114	3.6	220000	19000	62	11	--	.1
30...	9.9	121	12	39000	330	190	13	4	.4
JUNE 11...	11.0	147	2.4	--	--	--	10	--	--
18...	6.4	84	1.7	5500	1400	150	10	--	.2
JULY 17...	7.0	81	7.6	660000	19000	21000	11	8	.0
31...	5.9	77	.1	170	16	270	15	--	.7
AUG. 21...	9.1	123	1.6	2000	1200	650	8.1	--	.1

DATE	TIME	DIS- SOLVED ALUM- INUM (AL) (UG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	DIS- SOLVED COBALT (CO) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)
NOV. 16...	0900	--	2	--	0	0	0	6
APR. 30...	1200	20	4	390	0	0	1	6
JULY 17...	1315	0	6	60	0	0	0	5

DATE	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	DIS- SOLVED LITHIUM (LI) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED MERCURY (HG) (UG/L)	DIS- SOLVED NICKEL (NI) (UG/L)	DIS- SOLVED STRON- TIUM (SR) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)
NOV. 16...	10	0	--	10	.4	2	--	30
APR. 30...	50	3	20	0	.1	7	460	60
JULY 17...	30	1	0	0	.3	1	100	40

SAN JACINTO RIVER BASIN

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08075400 SIMS BAYOU AT HIRAM CLARKE STREET, HOUSTON, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TEMPERATURE (DEG C)	ALDRIN (UG/L)	ALDRIN IN BOTTOM DEPOSITS (UG/KG)	DDD (UG/L)	DDD IN BOTTOM DEPOSITS (UG/KG)	DDE (UG/L)	DDE IN BOTTOM DEPOSITS (UG/KG)	DDT (UG/L)	DDT IN BOTTOM DEPOSITS (UG/KG)
OCT. 17...	0925	220	20.0	.00	--	.00	--	.00	--	.00	--
NOV. 16...	0900	6.8	18.0	.00	.0	.00	.0	.00	.0	.00	.0
JAN. 09...	1000	9.4	21.0	--	.0	--	1.9	--	2.2	--	6.7
MAR. 13...	1400	7.5	21.0	--	--	--	--	--	--	--	--
APR. 30...	1200	6.4	26.5	.00	.0	.00	.0	.00	.0	.00	.0

DATE	DI-ELDRIN (UG/L)	DI-ELDRIN IN BOTTOM DEPOSITS (UG/KG)	ENDWIN (UG/L)	ENDWIN IN BOTTOM DEPOSITS (UG/KG)	HEPTA-CHLOR (UG/L)	HEPTA-CHLOR IN BOTTOM DEPOSITS (UG/KG)	HEPTA-CHLOR EPOXIDE (UG/L)	HEPTA-CHLOR EPOXIDE IN BOTTOM DEPOSITS (UG/KG)	LINDANE (UG/L)	LINDANE IN BOTTOM DEPOSITS (UG/KG)	CHLOR-DANE (UG/L)
OCT. 17...	.01	--	.00	--	.00	--	.00	--	.01	--	.0
NOV. 16...	.03	4.8	.00	.0	.00	.0	.00	.0	.02	.0	.1
JAN. 09...	--	7.9	--	.0	--	.0	--	.0	--	.0	--
MAR. 13...	--	--	--	--	--	--	--	--	--	--	--
APR. 30...	.03	4.4	.00	.0	.00	.0	.00	.0	.00	.0	.1

DATE	CHLOR-DANE IN BOTTOM DEPOSITS (UG/KG)	PCB (UG/L)	PCB IN BOTTOM DEPOSITS (UG/KG)	DI-AZINON (UG/L)	MALATHION (UG/L)	METHYL PARATHION (UG/L)	PARATHION (UG/L)	2,4-D (UG/L)	SILVEX (UG/L)	2,4,5-T (UG/L)
OCT. 17...	--	.0	--	.02	.00	.00	.00	.00	.00	.04
NOV. 16...	50	.0	90	.00	.00	.00	.00	.00	.00	.00
JAN. 09...	48	--	0	--	--	--	--	--	--	--
MAR. 13...	--	--	--	--	--	--	--	.00	.00	.00
APR. 30...	200	.0	0	.07	.00	.00	.00	.00	.00	.00

SAN JACINTO RIVER BASIN

08075500 SIMS BAYOU AT HOUSTON, TEX.

LOCATION.--Lat 29°40'27", long 95°17'21", Harris County, at gaging station at bridge on State Highway 35 in southeast Houston and 7.0 miles (11.8 km) upstream from mouth.

DRAINAGE AREA.--64.0 mi² (165.8 km²).

PERIOD OF RECORD.--Chemical and biochemical analyses: October 1968 to September 1974.
Pesticide analyses: October 1968 to September 1974.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	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 SODIUM PLUS POTAS- SIUM (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)
OCT.										
17...	1020	800	--	--	--	--	--	--	--	--
NOV.										
16...	1045	21	15	64	20	--	160	--	268	0
JAN.										
16...	1200	292	11	35	9.8	--	69	--	128	0
MAR.										
04...	0900	22	15	60	22	--	190	--	280	0
13...	1130	42	--	--	--	--	--	--	--	--
15...	1200	120	--	--	--	--	--	--	--	--
APR.										
16...	1130	120	--	--	--	--	--	--	--	--
MAY										
07...	1200	24	16	53	14	220	--	12	250	0
JUNE										
11...	1150	25	19	53	13	150	--	7.9	227	0
18...	0830	17	19	51	13	180	--	8.8	336	0
AUG.										
19...	1250	17	--	--	--	--	--	--	--	--
SEP.										
24...	1045	21	--	--	--	--	--	--	--	--

DATE	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
OCT.										
17...	--	--	--	.20	.03	.30	.35	--	.57	--
NOV.										
16...	68	220	.5	.50	.25	5.0	.28	--	3.0	680
JAN.										
16...	80	64	.0	.30	.13	.76	.64	--	2.0	335
MAR.										
04...	54	270	.5	.28	.30	8.5	.86	--	6.2	763
13...	--	--	--	.32	.10	4.4	.41	--	2.5	--
15...	--	--	--	.45	.19	6.5	.54	--	5.5	--
APR.										
16...	--	--	--	.40	.04	1.4	.40	--	1.4	--
MAY										
07...	54	290	--	.02	.01	6.2	1.4	7.6	5.1	783
JUNE										
11...	37	180	--	.11	.05	7.6	.20	7.8	4.4	572
18...	76	180	--	.04	.01	.07	1.2	1.3	5.8	693
AUG.										
19...	--	--	--	.10	.00	9.5	.00	9.4	6.1	--
SEP.										
24...	--	--	--	.08	.21	7.6	1.4	9.0	5.0	--

SAN JACINTO RIVER BASIN

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08075500 SIMS BAYOU AT HOUSTON, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TOTAL NON- FILT- RABLE RESIDUE (MG/L)	VOL. NON- FILT- RABLE RESIDUE (MG/L)	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)	COLOR (PLAT- INUM- COBALT UNITS)	TUR- BID- ITY (JTU)
OCT. 17...	275	20	--	--	--	324	7.4	20.5	140	75
NOV. 16...	18	8	240	22	4.4	1300	7.6	20.0	30	15
JAN. 16...	300	46	130	23	2.6	601	7.0	18.0	120	130
MAR. 04...	34	7	240	12	5.2	1460	7.3	21.0	10	10
13...	41	15	--	--	--	819	7.1	19.0	30	30
15...	266	40	--	--	--	1090	7.3	17.5	30	75
APR. 16...	160	21	--	--	--	945	7.4	17.0	100	80
MAY 07...	19	7	190	0	6.9	1500	7.1	24.5	50	9
JUNE 11...	24	16	190	0	4.8	1100	7.0	28.0	30	7
18...	11	9	180	0	5.8	1270	7.3	28.0	40	8
AUG. 19...	16	7	--	--	--	2330	7.2	31.0	10	4
SEP. 24...	17	13	--	--	--	2460	6.9	23.0	30	2

DATE	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	BIO- CHEM- ICAL OXYGEN DEMAND (MG/L)	IMME- DIATE COLI- FORM (COL. PER 100 ML)	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)	PHENOLS (UG/L)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)
OCT. 17...	5.9	65	2.9	1400000	8000	8000	--	--	.0
NOV. 16...	7.8	85	5.5	900000	1500	400	20	0	.5
JAN. 16...	7.0	74	5.2	380000	9000	2800	31	--	.0
MAR. 04...	1.5	17	18	3400000	46000	2200	27	--	1.0
13...	1.2	13	16	4400000	800000	33000	27	--	1.0
15...	5.2	54	14	1300000	150000	32000	16	--	.9
APR. 16...	6.2	64	13	760000	63000	5800	16	--	.1
MAY 07...	.6	7	13	3400000	980000	20000	20	23	1.5
JUNE 11...	3.8	48	11	480000	46000	4400	11	--	--
18...	.6	8	16	2000000	26000	2100	14	--	.1
AUG. 19...	.6	8	7.2	4200000	310000	28000	19	--	1.7
SEP. 24...	.6	7	4.4	1500000	75000	5800	16	--	.8

DATE	TIME	DIS- SOLVED ALUM- INUM (AL) (UG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	DIS- SOLVED COBALT (CO) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)
NOV. 16...	1045	--	2	--	0	0	0	3
MAR. 15...	1200	30	2	--	1	0	4	5
MAY 07...	1200	20	6	310	2	0	2	12

DATE	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	DIS- SOLVED LITHIUM (LI) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED MERCURY (HG) (UG/L)	DIS- SOLVED NICKEL (NI) (UG/L)	DIS- SOLVED STRON- TIUM (SR) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)
NOV. 16...	30	0	--	190	.2	0	--	320
MAR. 15...	70	4	20	160	.4	40	400	100
MAY 07...	140	4	20	0	.0	15	550	60

SAN JACINTO RIVER BASIN

08075500 SIMS BAYOU AT HOUSTON, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS OIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	ALDRIN (UG/L)	ALDRIN IN BOTTOM DE- POSITS (UG/KG)	DDD (UG/L)	DDD IN BOTTOM DE- POSITS (UG/KG)	DDE (UG/L)	DDE IN BOTTOM DE- POSITS (UG/KG)	DDT (UG/L)	DDT IN BOTTOM DE- POSITS (UG/KG)
OCT. 17...	1020	800	20.5	.00	--	.00	--	.00	--	.00	--
NOV. 16...	1045	21	20.0	.00	.0	.00	2.8	.00	2.2	.00	9.6
JAN. 16...	1200	292	18.0	--	.0	--	9.3	--	4.9	--	27
MAR. 13...	1130	42	19.0	.00	--	.00	--	.00	--	.00	--
MAY 07...	1200	24	24.5	.00	.0	.00	120	.00	78	.00	.0

DATE	DI- ELDRIN (UG/L)	DI- ELDRIN IN BOTTOM DE- POSITS (UG/KG)	ENDRIN (UG/L)	ENDRIN IN BOTTOM DE- POSITS (UG/KG)	HEPTA- CHLOR (UG/L)	HEPTA- CHLOR IN BOTTOM DE- POSITS (UG/KG)	HEPTA- CHLOR EPOXIDE (UG/L)	HEPTA- CHLOR EPOXIDE IN BOT- TOM DE- POSITS (UG/KG)	LINDANE (UG/L)	LINDANE IN BOTTOM DE- POSITS (UG/KG)	CHLOR- DANE (UG/L)
OCT. 17...	.01	--	.00	--	.00	--	.00	--	.01	--	.0
NOV. 16...	.02	9.8	.00	.0	.00	.0	.00	.0	.00	.0	.0
JAN. 16...	--	28	--	.0	--	.0	--	.0	--	.0	--
MAR. 13...	.00	--	.00	--	.00	--	.00	--	.00	--	.0
MAY 07...	.03	110	.00	.0	.00	.0	.00	.0	.00	.0	.2

DATE	CHLOR- DANE IN BOTTOM DE- POSITS (UG/KG)	PCB (UG/L)	PCB IN BOTTOM DE- POSITS (UG/KG)	DI- AZINON (UG/L)	MALA- THION (UG/L)	METHYL PARA- THION (UG/L)	PARA- THION (UG/L)	2,4-D (UG/L)	SILVEX (UG/L)	2,4,5-T (UG/L)
OCT. 17...	--	.0	--	.03	.00	.00	.00	.00	.00	.04
NOV. 16...	77	.0	0	.14	.00	.00	.00	--	--	--
JAN. 16...	120	--	0	--	--	--	--	--	--	--
MAR. 13...	--	.7	--	.00	.00	.00	.00	44	.00	23
MAY 07...	890	.0	200	.63	.00	.00	.00	--	--	--

SAN JACINTO RIVER BASIN

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08075650 BERRY BAYOU AT FOREST OAKS STREET, HOUSTON, TEX.

LOCATION.--Lat 29°40'35", long 95°14'37", Harris County, at gaging station at Forest Oaks Street bridge in southeast Houston, 0.8 mile (1.3 km) upstream from auxiliary gage at mouth of Berry Creek, and 1.7 miles (2.7 km) upstream from Sims Bayou.

DRAINAGE AREA.--11.1 mi² (28.7 km²).

PERIOD OF RECORD.--Chemical and biochemical analyses: October 1968 to September 1974.

Pesticide analyses: October 1968 to September 1974.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO ₂) (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 SODIUM PLUS POTAS- SIUM (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)
OCT. 15...	1130	70	--	--	--	--	--	--	--	--
NOV. 16...	1215	--	14	44	19	--	220	--	288	0
DEC. 17...	1105	6.1	16	42	11	--	180	--	234	0
JAN. 22...	1100	12	11	80	24	--	390	--	238	0
MAR. 04...	1230	7.1	13	44	19	--	180	--	294	0
13...	1030	7.4	--	--	--	--	--	--	--	--
APR. 16...	0930	33	--	--	--	--	--	--	--	--
MAY 07...	0930	5.3	15	42	11	130	--	5.6	250	0
JUNE 17...	1300	5.8	15	38	10	220	--	9.8	295	0
JULY 29...	1245	6.5	18	31	6.8	180	--	7.9	267	0
AUG. 20...	1000	4.1	--	--	--	--	--	--	--	--
SEP. 24...	0810	9.1	--	--	--	--	--	--	--	--

DATE	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL- NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
OCT. 15...	--	--	--	.20	.17	1.4	.40	--	2.5	--
NOV. 16...	59	230	1.2	9.5	1.2	1.4	.43	--	6.5	770
DEC. 17...	46	210	.3	1.8	.80	4.0	.55	--	6.0	632
JAN. 22...	38	650	.2	1.1	.32	1.9	.59	--	5.1	1320
MAR. 04...	32	220	1.0	.32	.88	4.2	.58	--	6.8	669
13...	--	--	--	.25	.57	3.2	.92	--	3.8	--
APR. 16...	--	--	--	.43	.18	.75	.44	--	1.0	--
MAY 07...	49	120	--	.38	.61	2.8	1.2	4.0	5.1	497
JUNE 17...	43	210	--	1.3	.68	3.8	2.0	5.8	3.6	691
JULY 29...	47	140	--	.24	.28	6.1	.40	6.5	6.2	563
AUG. 20...	--	--	--	.14	.34	6.7	1.9	8.6	6.1	--
SEP. 24...	--	--	--	.91	.39	1.7	1.3	3.0	3.6	--

SAN JACINTO RIVER BASIN

08075650 BERRY BAYOU AT FOREST OAKS STREET, HOUSTON, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TOTAL NON- FILT- RABLE RESIDUE (MG/L)	VOL. NON- FILT- RABLE RESIDUE (MG/L)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUC- TANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	TUR- BID- ITY (JTU)
OCT. 15...	50	0	--	--	--	567	7.5	24.5	70	30
NOV. 16...	54	27	190	0	6.8	1380	7.6	21.5	40	25
DEC. 17...	13	1	150	0	6.2	1160	7.4	15.0	30	9
JAN. 22...	54	12	300	100	9.8	2480	7.4	19.0	50	30
MAR. 04...	17	1	190	0	5.7	1270	7.7	24.0	20	9
13...	71	19	--	--	--	906	7.2	19.0	30	30
APR. 16...	93	14	--	--	--	535	7.5	16.0	100	45
MAY 07...	78	31	150	0	4.6	911	7.2	21.0	60	25
JUNE 17...	46	45	140	0	8.2	1260	7.3	31.0	30	35
JULY 29...	52	20	110	0	7.6	1030	7.4	32.0	40	25
AUG. 20...	22	11	--	--	--	1140	7.3	29.0	30	5
SEP. 24...	31	21	--	--	--	699	7.1	22.5	50	15

DATE	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	BIO- CHEM- ICAL OXYGEN DEMAND (MG/L)	IMME- DIATE COLI- FORM (COL. PER 100 ML)	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)	PHENOLS (UG/L)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)
OCT. 15...	5.0	60	6.9	4000000	9700	2500	--	--	.2
NOV. 16...	6.8	76	9.0	1100000	1500	4600	14	0	.2
DEC. 17...	14.8	145	2.4	1600	1	30	--	--	.6
JAN. 22...	7.2	77	3.3	2200	300	78	14	--	.4
MAR. 04...	11.8	139	6.4	550	1	56	18	--	.5
13...	5.7	61	21	580000	64000	3700	19	--	.3
APR. 16...	6.8	68	8.7	240000	75000	8000	16	--	.2
MAY 07...	2.9	32	14	14000	480	540	16	4	.2
JUNE 17...	6.1	81	7.8	8700	550	3300	9.6	--	.2
JULY 29...	5.3	72	17	400000	74000	8400	10	--	.3
AUG. 20...	1.8	23	7.4	1300000	300000	3000	7.3	--	.2
SEP. 24...	4.2	48	6.5	11000	140	68	16	--	.3

DATE	TIME	DIS- SOLVED ALUM- INUM (AL) (UG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	DIS- SOLVED COBALT (CO) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)
NOV. 16...	1215	--	2	--	0	0	0	6
MAY 07...	0930	50	6	380	1	0	0	17
JULY 29...	1245	--	--	520	--	--	--	--

DATE	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	DIS- SOLVED LITHIUM (LI) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED MERCURY (HG) (UG/L)	DIS- SOLVED NICKEL (NI) (UG/L)	DIS- SOLVED STRON- TIUM (SR) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)
NOV. 16...	20	0	--	40	.5	80	--	50
MAY 07...	80	4	10	0	.0	28	350	60
JULY 29...	--	--	--	--	--	--	--	--

SAN JACINTO RIVER BASIN

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08075650 BERRY BAYOU AT FOREST OAKS STREET, HOUSTON, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	ALDRIN (UG/L)	ALDRIN IN BOTTOM DE- POSITS (UG/KG)	DDD (UG/L)	DDD IN BOTTOM DE- POSITS (UG/KG)	DDE (UG/L)	DDE IN BOTTOM DE- POSITS (UG/KG)	DDT (UG/L)	DDT IN BOTTOM DE- POSITS (UG/KG)
OCT. 15...	1130	70	24.5	.00	--	.00	--	.00	--	.00	--
NOV. 16...	1215	--	21.5	.00	.0	.00	2.4	.00	3.1	.00	3.2
JAN. 22...	1100	12	19.0	--	.0	--	15	--	4.9	--	12
MAR. 13...	1030	7.4	19.0	.00	.0	.00	8.4	.00	3.3	.00	5.8
MAY 07...	0930	5.3	21.0	.01	.0	.00	.0	.00	3.2	.00	.0

DATE	DI- ELDRIN (UG/L)	DI- ELDRIN IN BOTTOM DE- POSITS (UG/KG)	ENDRIN (UG/L)	ENDRIN IN BOTTOM DE- POSITS (UG/KG)	HEPTA- CHLOR (UG/L)	HEPTA- CHLOR IN BOTTOM DE- POSITS (UG/KG)	HEPTA- CHLOR EPOXIDE (UG/L)	HEPTA- CHLOR EPOXIDE IN BOT- TOM DE- POSITS (UG/KG)	LINDANE (UG/L)	LINDANE IN BOTTOM DE- POSITS (UG/KG)	CHLOR- DANE (UG/L)
OCT. 15...	.02	--	.00	--	.00	--	.00	--	.02	--	.3
NOV. 16...	.02	7.4	.00	.0	.00	.0	.00	.0	.00	.0	.1
JAN. 22...	--	21	--	.0	--	.0	--	.0	--	.0	--
MAR. 13...	.02	16	.00	.0	.00	.0	.00	.0	.00	.0	.0
MAY 07...	.02	9.5	.00	.0	.00	.0	.00	.0	.02	.0	.2

DATE	CHLOR- DANE IN BOTTOM DE- POSITS (UG/KG)	PCB (UG/L)	PCB IN BOTTOM DE- POSITS (UG/KG)	DI- AZINON (UG/L)	MALA- THION (UG/L)	METHYL PARA- THION (UG/L)	PARA- THION (UG/L)	2,4-D (UG/L)	SILVEX (UG/L)	2,4,5-T (UG/L)
OCT. 15...	--	.0	--	.11	.00	.00	.00	.00	.00	.04
NOV. 16...	73	.0	0	.19	.00	.00	.00	.00	.00	.00
JAN. 22...	120	--	0	--	--	--	--	--	--	--
MAR. 13...	70	.0	50	.45	.00	.00	.00	.02	.01	.03
MAY 07...	180	.0	0	.25	.00	.00	.00	--	--	--

08075760 HUNTING BAYOU AT FALLS STREET, HOUSTON, TEX.

LOCATION.--Lat 29°48'22", Long 95°19'50", Harris County, at bridge on Falls Street in northeast Houston.

DRAINAGE AREA.--3.5 mi² (9.1 km²).

PERIOD OF RECORD.--Chemical and biochemical analyses: October 1970 to September 1974.

Pesticide analyses: October 1970 to September 1971.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	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 SODIUM PLUS POTAS- SIUM (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)
NOV.										
13...	1145	--	18	80	20	--	130	--	427	0
DEC.										
19...	1300	69	5.4	30	3.4	--	15	--	90	0
JAN.										
22...	1400	3.2	15	94	21	--	130	--	448	0
FEB.										
06...	0900	1.8	--	--	--	--	--	--	--	--
MAR.										
06...	1200	1.3	--	--	--	--	--	--	--	--
15...	1330	75	--	--	--	--	--	--	--	--
APR.										
24...	0900	1.3	--	--	--	--	--	--	--	--
JUNE										
17...	1000	.46	14	88	19	130	--	3.4	430	0
JULY										
15...	1410	--	8.8	30	5.0	49	--	3.1	148	0
AUG.										
19...	1030	1.8	--	--	--	--	--	--	--	--
SEP.										
25...	0830	1.5	--	--	--	--	--	--	--	--

DATE	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
NOV.										
13...	53	110	.9	.30	.08	.25	.10	--	.60	627
DEC.										
19...	18	20	.0	.80	.03	.79	.38	--	.55	140
JAN.										
22...	71	130	.2	.01	.00	7.5	.60	--	.62	692
FEB.										
06...	--	--	--	.43	.10	3.2	.50	--	.40	--
MAR.										
06...	--	--	--	.25	.14	.50	.67	--	.41	--
15...	--	--	--	.25	.00	1.2	.37	--	1.0	--
APR.										
24...	--	--	--	.15	.08	2.4	.70	3.1	.52	--
JUNE										
17...	45	130	--	.19	.07	.65	5.5	6.1	.70	642
JULY										
15...	30	46	--	.14	.09	1.8	1.1	2.9	.70	245
AUG.										
19...	--	--	--	.13	.05	1.2	.80	2.0	1.0	--
SEP.										
25...	--	--	--	.17	.10	1.9	1.0	2.9	1.7	--

DATE	TOTAL NON- FILT- RABLE RESIDUE (MG/L)	VOL. NON- FILT- RABLE RESIDUE (MG/L)	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)	COLOR (PLAT- INUM- COBALT UNITS)	TUR- BID- ITY (JTU)
NOV.										
13...	15	11	280	0	3.4	1110	8.1	22.0	20	8
DEC.										
19...	205	40	89	15	.7	255	7.9	11.5	60	90
JAN.										
22...	23	8	320	0	3.1	1260	7.1	21.0	40	8
FEB.										
06...	59	22	--	--	--	1240	7.6	18.0	5	35
MAR.										
06...	19	5	--	--	--	975	7.7	24.0	10	10
15...	339	72	--	--	--	278	7.5	17.5	40	150
APR.										
24...	13	6	--	--	--	--	7.6	21.0	10	15
JUNE										
17...	156	37	300	0	3.3	1230	7.8	28.0	30	55
JULY										
15...	85	51	96	0	2.2	424	7.1	29.0	40	30
AUG.										
19...	87	6	--	--	--	555	7.2	28.5	30	45
SEP.										
25...	24	17	--	--	--	1010	7.3	25.0	20	15

SAN JACINTO RIVER BASIN

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08075760 HUNTING BAYOU AT FALLS STREET, HOUSTON, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	BIO- CHEM- ICAL OXYGEN DEMAND (MG/L)	IMME- DIATE COLI- FORM (COL. PER 100 ML)	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)	PHENOLS (UG/L)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)
NOV. 13...	7.9	90	2.9	90000	460	1900	2.5	0	.1
DEC. 19...	8.8	80	17	460000	48000	91000	22	--	.0
JAN. 22...	2.1	23	12	1200000	74000	76000	20	--	.2
FEB. 06...	4.4	46	2.6	100000	800	2300	2.0	--	.2
MAR. 06...	12.2	144	8.7	160000	1500	420	12	--	.0
APR. 15...	7.6	79	16	860000	250000	120000	25	--	.0
JUNE 24...	3.9	43	22	180000	8300	3100	14	--	.1
JULY 17...	3.7	47	5.0	11000	900	10000	5.8	--	.1
AUG. 15...	4.0	51	7.1	29000	17000	10000	13	5	.2
SEP. 19...	3.9	50	5.1	70000	15000	4000	12	--	.1
SEP. 25...	2.3	27	5.4	22000	4100	1400	13	--	.1

DATE	TIME	DIS- SOLVED ALUM- INUM (AL) (UG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	DIS- SOLVED COBALT (CO) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)
NOV. 13...	1145	--	3	--	0	0	0	2
JUNE 17...	1000	20	14	200	1	0	0	5
JULY 15...	1410	20	10	150	0	0	0	5

DATE	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	DIS- SOLVED LITHIUM (LI) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED MERCURY (HG) (UG/L)	DIS- SOLVED NICKEL (NI) (UG/L)	DIS- SOLVED STRON- TIUM (SR) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)
NOV. 13...	10	0	--	140	.4	14	--	40
JUNE 17...	30	4	10	0	.0	5	500	40
JULY 15...	20	1	0	0	1.2	3	250	40

SAN JACINTO RIVER BASIN

08075760 HUNTING BAYOU AT FALLS STREET, HOUSTON, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	ALDRIN (UG/L)	ALDRIN IN BOTTOM DE- POSITS (UG/KG)	DDD (UG/L)	DDD IN BOTTOM DE- POSITS (UG/KG)	DDE (UG/L)	DDE IN BOTTOM DE- POSITS (UG/KG)	DDT (UG/L)	DDT IN BOTTOM DE- POSITS (UG/KG)
NOV. 13...	1145	--	22.0	.00	.0	.00	34	.00	13	.00	45
DEC. 19...	1300	69	11.5	.00	--	.01	--	.01	--	.08	--
JAN. 22...	1400	3.2	21.0	--	.0	--	51	--	21	--	23
FEB. 06...	0900	1.8	18.0	.00	--	.00	--	.00	--	.00	--
MAR. 15...	1330	75	17.5	.00	--	.00	--	.00	--	.00	--
JUNE 17...	1000	.46	28.0	.00	.0	.00	38	.00	2.4	.00	2.7

DATE	DI- ELDRIN (UG/L)	DI- ELDRIN IN BOTTOM DE- POSITS (UG/KG)	ENDRIN (UG/L)	ENDRIN IN BOTTOM DE- POSITS (UG/KG)	HEPTA- CHLOR (UG/L)	HEPTA- CHLOR IN BOTTOM DE- POSITS (UG/KG)	HEPTA- CHLOR EPOXIDE (UG/L)	HEPTA- CHLOR EPOXIDE IN BOT- TOM DE- POSITS (UG/KG)	LINDANE (UG/L)	LINDANE IN BOTTOM DE- POSITS (UG/KG)	CHLOR- DANE (UG/L)
NOV. 13...	.01	22	.00	.0	.00	.0	.00	.0	.00	.0	.0
DEC. 19...	.02	--	.00	--	.00	--	.00	--	.00	--	.1
JAN. 22...	--	34	--	.0	--	.0	--	.0	--	.0	--
FEB. 06...	.00	--	.00	--	.00	--	.00	--	.00	--	.0
MAR. 15...	.00	--	.00	--	.00	--	.00	--	.00	--	.5
JUNE 17...	.01	6.2	.00	.0	.00	.0	.00	.0	.00	.0	.0

DATE	CHLOR- DANE IN BOTTOM DE- POSITS (UG/KG)	PCB (UG/L)	PCB IN BOTTOM DE- POSITS (UG/KG)	DI- AZINON (UG/L)	MALA- THION (UG/L)	METHYL PARA- THION (UG/L)	PARA- THION (UG/L)	2,4-D (UG/L)	SILVEX (UG/L)	2,4,5-T (UG/L)
NOV. 13...	120	.0	0	.02	.00	.00	.00	.06	.00	.01
DEC. 19...	--	.0	--	.08	.00	.00	.00	1.3	.00	.10
JAN. 22...	170	--	0	--	--	--	--	--	--	--
FEB. 06...	--	.2	--	.03	.02	.00	.00	.43	.00	.00
MAR. 15...	--	.0	--	.00	.00	.00	.00	.05	.00	.01
JUNE 17...	170	.3	210	.02	.00	.00	.00	--	--	--

SAN JACINTO RIVER BASIN

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08075770 HUNTING BAYOU AT INTERSTATE HIGHWAY 610, AT HOUSTON, TEX.

LOCATION.--Lat 29°47'35", long 95°16'04", Harris County, at gaging station near bridge on Interstate Highway 610 in northeast Houston and 8.9 miles (14.3 km) upstream from mouth.

DRAINAGE AREA.--14.6 mi² (37.8 km²).

PERIOD OF RECORD.--Chemical and biochemical analyses: October 1968 to September 1974.

Pesticide analyses: October 1968 to September 1974. Prior to October 1972, published as "at U.S. Highway 90-A, Houston."

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part I of this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO2) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED SODIUM PLUS POTAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)		
OCT. 17...	1140	100	--	--	--	--	--	--	--		
NOV. 14...	1130	9.2	16	72	23	--	110	--	372		
JAN. 14...	1200	34	12	76	16	--	85	--	312		
FEB. 05...	1330	11	--	--	--	--	--	--	--		
25...	1300	7.0	15	70	19	--	98	--	342		
MAR. 06...	1100	7.5	--	--	--	--	--	--	--		
19...	1300	7.0	--	--	--	--	--	--	--		
APR. 22...	1300	4.6	--	--	--	--	--	--	--		
29...	0900	4.5	18	59	15	130	--	4.0	330		
JUNE 18...	1410	2.2	16	60	14	130	--	7.0	326		
JULY 16...	0950	7.0	12	46	8.2	58	--	6.2	180		
AUG. 19...	0900	5.6	--	--	--	--	--	--	--		
SEP. 13...	2215	410	11	31	5.2	19	--	3.6	108		
DATE		DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITU- ENTS) (MG/L)
OCT. 17...	--	--	--	--	.23	.08	2.8	.35	--	.95	--
NOV. 14...	79	95	.7	.50	.50	.50	3.4	.20	--	2.8	588
JAN. 14...	68	79	.2	.03	.25	.05	.67	--	1.4	490	
FEB. 05...	--	--	--	--	.30	.18	5.5	.54	--	2.0	--
25...	58	100	.6	.31	.26	.26	5.5	.35	--	1.9	538
MAR. 06...	--	--	--	--	.03	.13	5.0	.44	--	2.8	--
19...	--	--	--	--	.43	.16	6.0	.35	--	2.0	--
APR. 22...	--	--	--	--	.31	.43	5.4	1.0	6.4	2.7	--
29...	54	100	--	--	.27	.34	4.6	1.1	5.7	1.6	544
JUNE 18...	55	110	--	--	.20	.58	3.5	.40	3.9	2.5	553
JULY 16...	60	47	--	--	1.6	.30	4.3	.60	4.9	2.3	327
AUG. 19...	--	--	--	--	.48	.20	7.8	1.3	9.1	2.8	--
SEP. 13...	24	16	--	--	.43	.05	1.2	.80	2.0	.75	163

08075770 HUNTING BAYOU AT INTERSTATE HIGHWAY 610, AT HOUSTON, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TOTAL NON- FILT- RABLE RESIDUE (MG/L)	VOL. NON- FILT- RABLE RESIDUE (MG/L)	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)	COLOR (PLAT- INUM- COBALT UNITS)	TUR- BID- ITY (JTU)
OCT. 17...	69	2	--	--	--	438	7.4	21.0	70	28
NOV. 14...	42	27	280	0	2.9	1040	7.3	22.5	30	10
JAN. 14...	27	9	260	0	2.3	894	7.6	16.0	20	10
FEB. 05...	46	20	--	--	--	1120	7.2	16.0	5	15
25...	15	4	250	0	2.7	985	7.2	12.0	10	8
MAR. 06...	38	4	--	--	--	1020	7.3	22.0	20	10
19...	70	13	--	--	--	1080	7.4	24.0	20	30
APR. 22...	74	15	--	--	--	1020	7.4	26.0	20	40
29...	161	37	210	0	3.9	985	7.2	22.5	30	55
JUNE 18...	176	55	210	0	3.9	990	8.2	31.5	40	60
JULY 16...	39	21	150	1	2.1	609	7.2	27.0	60	30
AUG. 19...	41	1	--	--	--	769	7.1	28.5	30	15
SEP. 13...	166	46	99	10	.8	292	6.9	25.5	70	65

DATE	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	810- CHEM- ICAL OXYGEN DEMAND (MG/L)	IMME- DIATE COLI- FORM (COL. PER 100 ML)	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)	PHENOLS (UG/L)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)
OCT. 17...	3.2	36	3.9	1300000	13000	6500	--	--	.2
NOV. 14...	6.6	75	3.7	21000	110	32	7.0	1	.3
JAN. 14...	5.4	54	17	26000	30	620	21	--	.6
FEB. 05...	5.3	53	29	2000000	100000	21000	3.0	--	.4
25...	8.3	77	4.5	22000	100	28	13	--	.1
MAR. 06...	1.7	19	24	620000	6700	320	22	--	.3
19...	4.4	52	22	5600	1400	610	.5	--	.2
APR. 22...	3.4	41	20	32000	520	400	4.0	--	.2
29...	2.5	28	14	180000	4900	1000	11	5	.1
JUNE 18...	18.4	249	15	22000	620	3100	12	--	.2
JULY 16...	3.3	41	7.5	560000	52000	53000	20	6	.5
AUG. 19...	2.8	36	6.4	30000	3300	600	13	--	.4
SEP. 13...	4.4	53	6.3	760000	74000	30000	17	15	.1

DATE	TIME	DIS- SOLVED ALUM- INUM (AL) (UG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	DIS- SOLVED COBALT (CO) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)
NOV. 14...	1130	--	3	--	0	0	0	6
APR. 29...	0900	40	4	300	1	0	1	5
JULY 16...	0950	20	10	270	0	0	0	5
SEP. 13...	2215	--	--	130	--	--	--	--

DATE	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	DIS- SOLVED LITHIUM (LI) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED MERCURY (MG) (UG/L)	DIS- SOLVED NICKEL (NI) (UG/L)	DIS- SOLVED STRON- TIUM (SR) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)
NOV. 14...	0	0	--	220	.4	24	--	150
APR. 29...	60	2	20	0	.1	20	480	70
JULY 16...	20	1	0	0	1.2	3	250	40
SEP. 13...	--	--	--	--	--	--	--	--

SAN JACINTO RIVER BASIN

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08075770 HUNTING BAYOU AT INTERSTATE HIGHWAY 610, AT HOUSTON, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TEMPERATURE (DEG C)	ALDRIN (UG/L)	ALDRIN IN BOTTOM DE-POSITS (UG/KG)	DDD (UG/L)	DDD IN BOTTOM DE-POSITS (UG/KG)	DDE (UG/L)	DDE IN BOTTOM DE-POSITS (UG/KG)	DDT (UG/L)	DDT IN BOTTOM DE-POSITS (UG/KG)
OCT. 17...	1140	100	21.0	.00	--	.00	--	.00	--	.00	--
NOV. 14...	1130	9.2	22.5	.00	.0	.00	150	.00	15	.00	43
JAN. 14...	1200	34	16.0	--	.0	--	77	--	9.4	--	43
FEB. 05...	1330	11	16.0	.00	--	.00	--	.00	--	.00	--
APR. 29...	0900	4.5	22.5	.00	.0	.00	86	.00	.0	.00	43
SEP. 13...	2215	410	25.5	.00	--	.02	--	.00	--	.07	--

DATE	DI-ELDRIN (UG/L)	DI-ELDRIN IN BOTTOM DE-POSITS (UG/KG)	ENDRIN (UG/L)	ENDRIN IN BOTTOM DE-POSITS (UG/KG)	HEPTA-CHLOR (UG/L)	HEPTA-CHLOR IN BOTTOM DE-POSITS (UG/KG)	HEPTA-CHLOR EPOXIDE (UG/L)	HEPTA-CHLOR EPOXIDE IN BOTTOM DE-POSITS (UG/KG)	LINDANE (UG/L)	LINDANE IN BOTTOM DE-POSITS (UG/KG)	CHLOR-DANE (UG/L)
OCT. 17...	.01	--	.00	--	.00	--	.00	--	.01	--	.0
NOV. 14...	.01	27	.00	.0	.00	.0	.00	.0	.00	.0	.0
JAN. 14...	--	11	--	.0	--	.0	--	.0	--	.0	--
FEB. 05...	.01	--	.00	--	.00	--	.00	--	.02	--	.0
APR. 29...	.02	12	.00	.0	.00	.0	.00	.0	.01	.0	.1
SEP. 13...	.01	--	.00	--	.00	--	.00	--	.00	--	.0

DATE	CHLOR-DANE IN BOTTOM DE-POSITS (UG/KG)	PCB (UG/L)	PCB IN BOTTOM DE-POSITS (UG/KG)	DI-AZINON (UG/L)	MALATHION (UG/L)	METHYL PARATHION (UG/L)	PARATHION (UG/L)	2,4-D (UG/L)	SILVEX (UG/L)	2,4,5-T (UG/L)
OCT. 17...	--	.0	--	.05	.00	.00	.00	.07	.00	.05
NOV. 14...	73	.0	0	.12	.00	.00	.00	.02	.00	.00
JAN. 14...	120	--	200	--	--	--	--	--	--	--
FEB. 05...	--	.0	--	.13	.00	.00	.00	1.6	.00	.00
APR. 29...	180	.0	260	.00	.00	.00	.00	.09	.00	.01
SEP. 13...	--	.0	--	.04	.00	.00	.00	.00	.00	.01

SAN JACINTO RIVER BASIN

08076000 GREENS BAYOU NEAR HOUSTON, TEX.

LOCATION.--Lat 29°55'05", long 95°18'24", Harris County, at gaging station at bridge on U.S. Highway 59, 10.5 miles (16.9 km) northeast of Houston, 12.0 miles (19.3 km) upstream from Harris Bayou, and 23.4 miles (37.7 km) upstream from mouth.

DRAINAGE AREA.--72.7 mi² (188.3 km²), unadjusted for basin boundary changes.

PERIOD OF RECORD.--Chemical and biochemical analyses: October 1968 to September 1974.

Pesticide analyses: October 1968 to September 1974.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part I of this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	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 SODIUM PLUS POTAS- SIUM (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)
NOV. 14...	0945	12	18	70	13	--	97	--	292	0
DEC. 18...	0920	8.0	16	72	16	--	200	--	339	0
JAN. 14...	1030	49	12	51	10	--	57	--	196	0
FEB. 06...	1100	22	--	--	--	--	--	--	--	--
25...	1200	10	--	--	--	--	--	--	--	--
MAR. 12...	1330	9.8	--	--	--	--	--	--	--	--
26...	1230	200	--	--	--	--	--	--	--	--
APR. 22...	1200	9.0	--	--	--	--	--	--	--	--
JUNE 11...	1025	20	35	74	11	130	--	6.5	229	0
JULY 16...	1040	16	21	42	5.6	46	--	4.1	134	0
AUG. 19...	1140	42	--	--	--	--	--	--	--	--
SEP. 13...	2000	800	9.4	20	1.6	24	--	4.0	78	0

DATE	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
NOV. 14...	22	120	.4	1.9	.37	.50	.19	--	2.2	494
DEC. 18...	24	270	.2	1.6	.40	3.0	.53	--	3.9	778
JAN. 14...	24	78	.0	.60	.01	1.3	.59	--	.50	332
FEB. 06...	--	--	--	1.1	.30	1.2	.51	--	1.2	--
25...	--	--	--	1.0	.25	1.1	.45	--	2.2	--
MAR. 12...	--	--	--	.83	.61	1.9	.44	--	3.5	--
26...	--	--	--	.36	.02	.41	.54	--	.62	--
APR. 22...	--	--	--	1.0	.39	1.3	.60	1.9	2.7	--
JUNE 11...	59	170	--	.76	.34	2.9	1.2	4.1	3.7	598
JULY 16...	40	53	--	.84	.26	.95	.75	1.7	1.9	278
AUG. 19...	--	--	--	1.7	.43	.58	1.2	1.8	3.2	--
SEP. 13...	12	28	--	.27	.04	.40	1.6	2.0	.77	138

08076000 GREENS BAYOU NEAR HOUSTON, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TOTAL NON- FILT- RABLE RESIDUE (MG/L)	VOL. NON- FILT- RABLE RESIDUE (MG/L)	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)	COLOR (PLAT- INUM- COBALT UNITS)	TUR- BID- ITY (JTU)
NOV.										
14...	152	36	230	0	2.8	911	7.5	22.0	40	80
DEC.										
18...	42	4	250	0	5.5	1400	7.7	11.0	40	2
JAN.										
14...	113	24	170	8	1.9	644	7.9	12.0	50	60
FEB.										
06...	39	25	--	--	--	829	8.1	17.0	15	35
25...	32	8	--	--	--	966	8.4	10.0	5	20
MAR.										
12...	76	28	--	--	--	976	7.5	24.0	5	35
26...	322	50	--	--	--	336	7.3	11.5	70	110
APR.										
22...	99	22	--	--	--	972	7.5	24.5	20	50
JUNE										
11...	205	23	230	42	3.7	1050	7.3	27.0	20	85
JULY										
16...	482	96	130	18	1.8	501	7.2	28.0	140	220
AUG.										
19...	88	1	--	--	--	835	7.4	30.5	20	50
SEP.										
13...	952	161	57	0	1.4	259	7.2	25.0	80	25

DATE	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	BIO- CHEM- ICAL OXYGEN DEMAND (MG/L)	IMME- DIATE COLI- FORM (COL. PER 100 ML)	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)	PHENOLS (UG/L)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)
NOV.									
14...	7.2	82	3.8	67000	550	520	9.0	0	.0
DEC.									
18...	6.8	61	9.6	220000	3700	220	--	--	.1
JAN.									
14...	8.0	74	5.0	29000	2100	3500	16	--	.0
FEB.									
06...	6.6	68	7.2	220000	4400	310	44	--	.1
25...	10.6	94	4.2	40000	820	150	3.5	--	.0
MAR.									
12...	4.7	55	4.1	38000	4700	100	3.5	--	.0
26...	8.6	78	4.9	270000	24000	31000	22	--	.0
APR.									
22...	5.2	62	5.0	200000	4300	420	2.0	--	.1
JUNE									
11...	5.7	70	15	52000	4900	170	8.4	--	.1
JULY									
16...	4.1	52	7.1	80000	5800	3400	12	3	.0
AUG.									
19...	6.6	87	6.3	15000	3500	2600	5.9	--	.2
SEP.									
13...	5.6	67	8.4	130000	72000	95000	18	5	.0

DATE	TIME	DIS- SOLVED ALUM- INUM (AL) (UG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	DIS- SOLVED COBALT (CO) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)
NOV.								
14...	0945	--	2	--	0	0	0	3
JULY								
16...	1040	0	4	120	0	0	0	4
SEP.								
13...	2000	100	4	90	0	0	0	6

DATE	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	DIS- SOLVED LITHIUM (LI) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED MERCURY (HG) (UG/L)	DIS- SOLVED NICKEL (NI) (UG/L)	DIS- SOLVED STRON- TIUM (SR) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)
NOV.								
14...	20	0	--	200	.3	11	--	30
JULY								
16...	20	3	0	0	.5	2	260	20
SEP.								
13...	70	2	0	0	.0	2	130	10

SAN JACINTO RIVER BASIN

08076000 GREENS BAYOU NEAR HOUSTON, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	ALDRIN (UG/L)	ALDRIN IN BOTTOM DE- POSITS (UG/KG)	DDD (UG/L)	DDD IN BOTTOM DE- POSITS (UG/KG)	DDE (UG/L)	DDE IN BOTTOM DE- POSITS (UG/KG)	DDT (UG/L)	DDT IN BOTTOM DE- POSITS (UG/KG)
NOV. 14...	0945	12	22.0	.00	.0	.00	.0	.00	.0	.00	.0
JAN. 14...	1030	49	12.0	--	.0	--	.0	--	.0	--	.0
FEB. 06...	1100	22	17.0	.00	--	.00	--	.00	--	.00	--
SEP. 13...	2000	800	25.0	.00	--	.00	--	.00	--	.00	--

DATE	DI- ELDRIN (UG/L)	DI- ELDRIN IN BOTTOM DE- POSITS (UG/KG)	ENDRIN (UG/L)	ENDRIN IN BOTTOM DE- POSITS (UG/KG)	HEPTA- CHLOR (UG/L)	HEPTA- CHLOR IN BOTTOM DE- POSITS (UG/KG)	HEPTA- CHLOR EPOXIDE (UG/L)	HEPTA- CHLOR EPOXIDE IN BOT- TOM DE- POSITS (UG/KG)	LINDANE (UG/L)	LINDANE IN BOTTOM DE- POSITS (UG/KG)	CHLOR- DANE (UG/L)
NOV. 14...	.01	.0	.00	.0	.00	.0	.00	.0	.01	.0	.0
JAN. 14...	--	.0	--	.0	--	.0	--	.0	--	.0	--
FEB. 06...	.01	--	.00	--	.00	--	.00	--	.01	--	.0
SEP. 13...	.02	--	.00	--	.00	--	.02	--	.05	--	.1

DATE	CHLOR- DANE IN BOTTOM DE- POSITS (UG/KG)	PCB (UG/L)	PCB IN BOTTOM DE- POSITS (UG/KG)	DI- AZINON (UG/L)	MALA- THION (UG/L)	METHYL PARA- THION (UG/L)	PARA- THION (UG/L)	2,4-D (UG/L)	SILVEX (UG/L)	2,4,5-T (UG/L)
NOV. 14...	0	.0	0	.06	.00	.00	.00	.00	.00	.00
JAN. 14...	0	--	0	--	--	--	--	--	--	--
FEB. 06...	--	.0	--	.05	.00	.00	.00	.00	.00	.00
SEP. 13...	--	.0	--	.18	.00	.00	.00	.00	.00	.19

SAN JACINTO RIVER BASIN

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08076500 HALLS BAYOU AT HOUSTON, TEX.

LOCATION.--Lat 29°51'42", long 95°20'05", Harris County, at gaging station at bridge on Jensen Drive in northeast Houston and 11.0 miles (17.7 km) upstream from mouth.

DRAINAGE AREA.--24.7 mi² (64.0 km²), unadjusted for basin boundary changes.

PERIOD OF RECORD.--Chemical and biochemical analyses: October 1968 to September 1974.
Pesticide analyses: October 1968 to September 1974.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

		INSTAN- TANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO2) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED SODIUM PLUS POTAS- SIUM (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	
NOV. 14...	0845	9.5	22	76	17	--	95	--	326	0	
DEC. 18...	0855	7.5	26	66	20	--	96	--	304	0	
JAN. 14...	0930	37	13	55	17	--	56	--	244	0	
FEB. 06...	1000	14	--	--	--	--	--	--	--	--	
26...	1330	8.3	--	--	--	--	--	--	--	--	
MAR. 15...	1430	720	--	--	--	--	--	--	--	--	
26...	1330	120	--	--	--	--	--	--	--	--	
APR. 22...	1230	7.6	--	--	--	--	--	--	--	--	
MAY 06...	1400	45	--	--	--	--	--	--	--	--	
JUNE 11...	0940	6.8	29	63	11	100	--	9.5	240	0	
JULY 16...	1135	7.4	11	31	5.4	47	--	4.7	124	0	
AUG. 19...	1115	5.1	--	--	--	--	--	--	--	--	
SEP. 13...	2115	170	7.9	18	1.6	16	--	4.0	72	0	
DATE		DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITU- ENTS) (MG/L)
NOV. 14...	37	120	.5	1.7	1.1	4.5	.27	--	5.0	541	
DEC. 18...	36	130	.1	.70	.65	7.0	.47	--	8.6	541	
JAN. 14...	29	72	.1	.70	.60	1.9	.69	--	2.5	370	
FEB. 06...	--	--	--	.80	.46	4.7	.38	--	3.2	--	
26...	--	--	--	.78	.52	7.5	.73	--	6.8	--	
MAR. 15...	--	--	--	.34	.03	1.5	.87	--	.88	--	
26...	--	--	--	.53	.08	1.3	.40	--	1.0	--	
APR. 22...	--	--	--	.53	.46	6.8	.90	7.7	7.8	--	
MAY 06...	--	--	--	.43	.16	1.3	1.3	2.6	1.6	--	
JUNE 11...	40	100	--	.38	.37	8.5	4.5	13	10	471	
JULY 16...	28	49	--	.04	.13	4.5	1.9	6.4	4.8	238	
AUG. 19...	--	--	--	.02	.04	.05	1.1	1.1	12	--	
SEP. 13...	12	17	--	.27	.06	1.4	1.7	3.1	1.2	112	

SAN JACINTO RIVER BASIN
08076500 HALLS BAYOU AT HOUSTON, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TOTAL NON- FILT- RAHLE RESIDUE (MG/L)	VOL. NON- FILT- RABLE RESIDUE (MG/L)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCTI- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	TUR- BID- ITY (JTU)
NOV. 14...	52	23	260	0	2.6	1030	7.6	20.0	30	2
DEC. 18...	19	6	250	0	2.6	557	7.3	13.5	40	15
JAN. 14...	137	17	210	6	1.7	710	7.5	13.0	30	55
FEB. 06...	75	31	--	--	--	1040	8.0	18.0	5	30
26...	30	14	--	--	--	1020	8.1	13.5	10	15
MAR. 15...	849	115	--	--	--	338	7.1	17.0	40	175
26...	262	44	--	--	--	444	7.5	12.0	50	100
APR. 22...	108	31	--	--	--	1000	7.0	25.0	30	50
MAY 06...	254	46	--	--	--	--	--	22.0	100	110
JUNE 11...	52	12	200	6	3.1	886	7.0	26.5	30	35
JULY 16...	160	57	100	0	2.1	468	6.9	29.0	120	75
AUG. 19...	26	3	--	--	--	937	7.5	29.5	40	15
SEP. 13...	571	125	52	0	1.0	219	7.0	25.5	100	200

DATE	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	HIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)	IMME- DIATE COLI- FORM (COL. PER 100 ML)	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)	TOTAL ORGANIC CARBON (C)	PHENOLS (UG/L)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)
NOV. 14...	9.0	98	12	28000	350	920	11	0	.7
DEC. 18...	8.8	84	10	11000	110	110	11	--	.2
JAN. 14...	7.6	72	5.5	210000	400	2900	20	--	.0
FEB. 06...	5.0	53	36	25000	370	390	4.0	--	.6
26...	10.1	96	8.5	180000	3600	320	.0	--	.2
MAR. 15...	6.4	66	22	1100000	260000	250000	19	--	.0
26...	8.5	79	14	640000	59000	46000	26	--	.0
APR. 22...	3.6	43	25	44000	2900	420	10	--	1.0
MAY 06...	5.3	60	7.5	1000000	15000	14000	26	--	.0
JUNE 11...	3.8	46	13	330000	26000	3200	14	--	.7
JULY 16...	3.1	40	6.9	1100000	30000	3200	15	6	.3
AUG. 19...	5.4	70	9.3	480000	6500	6500	19	--	1.4
SEP. 13...	4.0	48	12	1800000	130000	280000	36	7	.0

DATE	TIME	DIS- SOLVED ALUM- INUM (AL) (UG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	DIS- SOLVED COBALT (CO) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)
NOV. 14...	0845	--	3	--	0	0	0	4
JULY 16...	1135	0	4	180	0	0	0	4
SEP. 13...	2115	60	14	90	0	0	0	4

DATE	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	DIS- SOLVED LITHIUM (LI) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED MERCURY (HG) (UG/L)	DIS- SOLVED NICKEL (NI) (UG/L)	DIS- SOLVED STRON- TIUM (SR) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)
NOV. 14...	10	0	--	190	.4	8	--	20
JULY 16...	20	2	0	0	.0	2	250	0
SEP. 13...	70	0	0	20	.0	1	100	10

SAN JACINTO RIVER BASIN

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08076500 HALLS BAYOU AT HOUSTON, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	ALDRIN (UG/L)	ALDRIN IN BOTTOM DE- POSITS (UG/KG)	DDD (UG/L)	DDD IN BOTTOM DE- POSITS (UG/KG)	DDE (UG/L)	DDE IN BOTTOM DE- POSITS (UG/KG)	DDT (UG/L)	DDT IN BOTTOM DE- POSITS (UG/KG)
NOV. 14...	0845	9.5	20.0	.00	.0	.00	.0	.00	.0	.00	.0
JAN. 14...	0930	37	13.0	--	.0	--	1.8	--	1.7	--	3.9
FEB. 06...	1000	14	18.0	.00	--	.00	--	.00	--	.00	--
MAR. 15...	1430	720	17.0	.00	--	.00	--	.00	--	.02	--
SEP. 13...	2115	170	25.5	.00	--	.00	--	.00	--	.01	--

DATE	DI- ELDRIN (UG/L)	DI- ELDRIN IN BOTTOM DE- POSITS (UG/KG)	ENDRIN (UG/L)	ENDRIN IN BOTTOM DE- POSITS (UG/KG)	HEPTA- CHLOR (UG/L)	HEPTA- CHLOR IN BOTTOM DE- POSITS (UG/KG)	HEPTA- CHLOR EPOXIDE (UG/L)	HEPTA- CHLOR EPOXIDE IN BOT- TOM DE- POSITS (UG/KG)	LINDANE (UG/L)	LINDANE IN BOTTOM DE- POSITS (UG/KG)	CHLOR- DANE (UG/L)
NOV. 14...	.03	1.9	.00	.0	.00	.0	.00	.0	.00	.0	.1
JAN. 14...	--	7.2	--	.0	--	.0	--	.0	--	.0	--
FEB. 06...	.02	--	.00	--	.00	--	.00	--	.08	--	.1
MAR. 15...	.06	--	.00	--	.01	--	.00	--	.00	--	.2
SEP. 13...	.05	--	.00	--	.00	--	.00	--	.02	--	.2

DATE	CHLOR- DANE IN BOTTOM DE- POSITS (UG/KG)	PCB (UG/L)	PCB IN BOTTOM DE- POSITS (UG/KG)	DI- AZINON (UG/L)	MALA- THION (UG/L)	METHYL PARA- THION (UG/L)	PARA- THION (UG/L)	2,4-D (UG/L)	SILVEX (UG/L)	2,4,5-T (UG/L)
NOV. 14...	11	.0	0	.44	.00	.00	.00	.00	.00	.00
JAN. 14...	62	--	30	--	--	--	--	--	--	--
FEB. 06...	--	.0	--	.13	.00	.00	.00	.00	.00	.00
MAR. 15...	--	.0	--	.00	.00	.00	.00	.06	.00	.48
SEP. 13...	--	.0	--	.12	.01	.00	.00	.00	.00	.04

SAN JACINTO RIVER BASIN

08076700 GREENS BAYOU AT LEY ROAD, HOUSTON, TEX.

LOCATION.--Lat 29°50'13", long 95°13'59", Harris County, at bridge on Ley Road, 300 ft (91 m) downstream from mouth of Halls Bayou, and in northeast Houston.

DRAINAGE AREA.--213 mi² (552 km²).

PERIOD OF RECORD.--Chemical and biochemical analyses: October 1970 to September 1974.
Pesticide analyses: October 1970 to September 1974.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO ₂) (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 SODIUM PLUS POTAS- SIUM (K) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)
OCT.										
15...	1245	640	--	--	--	--	--	--	--	--
NOV.										
14...	1245	--	13	58	12	--	73	--	182	0
DEC.										
18...	1200	24	18	95	19	--	180	--	340	0
JAN.										
21...	1105	--	.0	39	5.8	--	27	--	122	0
FEB.										
26...	0900	33	15	90	22	--	140	--	314	0
MAR.										
12...	0900	34	--	--	--	--	--	--	--	--
26...	1100	500	--	--	--	--	--	--	--	--
APR.										
22...	0400	30	--	--	--	--	--	--	--	--
MAY										
06...	1030	215	11	42	6.1	47	--	3.6	140	0
JUNE										
19...	1100	26	27	74	13	140	--	7.9	292	0
JULY										
29...	1020	--	33	80	12	170	--	7.4	258	0
AUG.										
13...	1100	53	--	--	--	--	--	--	--	--
SEP.										
26...	0820	25	--	--	--	--	--	--	--	--

DATE	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
OCT.										
15...	--	--	--	.09	.05	.29	.35	--	.60	--
NOV.										
14...	28	100	.3	7.3	.23	.15	.36	--	1.5	410
DEC.										
18...	33	280	.2	1.1	.52	5.2	.49	--	4.6	800
JAN.										
21...	14	46	.0	.20	.01	.34	.78	--	.64	193
FEB.										
26...	41	240	.5	1.0	.46	3.5	.40	--	3.9	711
MAR.										
12...	--	--	--	1.3	.60	4.5	.63	--	5.3	--
26...	--	--	--	.58	.04	.72	.41	--	.82	--
APR.										
22...	--	--	--	.59	.25	5.6	.11	6.7	4.8	--
MAY										
06...	26	60	--	.54	.16	1.0	1.0	2.0	1.4	266
JUNE										
19...	40	180	--	.20	.11	4.8	.30	5.1	5.4	626
JULY										
29...	54	240	--	.80	.20	3.9	.70	4.6	5.1	723
AUG.										
13...	--	--	--	.60	.13	1.7	1.4	3.1	2.2	--
SEP.										
26...	--	--	--	1.7	.21	5.4	1.4	6.8	4.6	--

SAN JACINTO RIVER BASIN

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08076700 GREENS BAYOU AT LEY ROAD, HOUSTON, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TOTAL NON- FILT- RABLE RESIDUE (MG/L)	VOL. NON- FILT- RABLE RESIDUE (MG/L)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCTI- VANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	TUR- BID- ITY (JTU)
OCT. 15...	548	40	--	--	--	362	7.6	24.0	160	200
NOV. 14...	39	17	190	44	2.3	735	7.4	22.5	70	25
DEC. 18...	26	3	320	38	4.3	1490	7.7	14.0	40	15
JAN. 21...	644	76	120	21	1.1	386	7.3	15.5	120	240
FEB. 26...	41	17	320	58	3.5	1310	7.3	10.0	5	20
MAR. 12...	297	47	--	--	--	142	7.4	23.0	10	110
26...	474	60	--	--	--	549	7.4	11.5	60	200
APR. 22...	41	15	--	--	--	1200	7.5	22.5	30	15
MAY 06...	394	64	130	15	1.8	501	7.2	22.0	120	150
JUNE 19...	32	13	240	0	3.9	1160	7.3	29.5	30	20
JULY 29...	--	--	250	38	4.7	1340	7.5	29.5	--	--
AUG. 13...	378	47	--	--	--	1040	7.3	28.0	50	180
SEP. 26...	31	14	--	--	--	1170	7.3	23.0	30	20

DATE	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)	IMME- DIATE COLI- FORM (COL. PER 100 ML)	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)	PHENOLS (UG/L)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)
OCT. 15...	6.8	80	2.5	250000	4000	2200	--	--	.0
NOV. 14...	9.4	107	37	480000	420	460	26	2	.1
DEC. 18...	8.5	82	12	7000	140	120	6.5	--	.3
JAN. 21...	8.9	88	2.5	300000	38000	3200	20	--	.0
FEB. 26...	8.3	73	8.5	200000	23000	420	7.0	0	.1
MAR. 12...	3.2	37	17	200000	20000	570	8.5	--	.2
26...	9.8	89	13	250000	26000	11000	20	--	.0
APR. 22...	4.1	4	14	66000	1500	100	6.0	--	.0
MAY 06...	5.1	58	8.4	1000000	17000	4800	37	--	.0
JUNE 19...	2.5	32	9.6	92000	13000	750	8.6	--	.1
JULY 29...	--	--	--	--	--	--	14	--	.3
AUG. 13...	3.6	46	8.5	980000	760000	6800	21	--	.0
SEP. 26...	3.9	45	7.2	26000	250	210	14	--	.4

SAN JACINTO RIVER BASIN

08076700 GREENS BAYOU AT LEY ROAD, HOUSTON, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

		DIS-SOLVED ALUMINUM (AL) (UG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	DIS-SOLVED BORON (B) (UG/L)	DIS-SOLVED CADMIUM (CD) (UG/L)	DIS-SOLVED CHROMIUM (CR) (UG/L)	DIS-SOLVED COBALT (CO) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)			
DATE	TIME										
NOV. 14...	1245	--	2	--	0	0	0	4			
MAY 06...	1030	230	3	240	3	110	20	33			
		DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	DIS-SOLVED LITHIUM (LI) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)	DIS-SOLVED MERCURY (HG) (UG/L)	DIS-SOLVED NICKEL (NI) (UG/L)	DIS-SOLVED STRONTIUM (SR) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)		
DATE	TIME										
NOV. 14...	50	3	--	40	.2	8	--	20			
MAY 06...	420	30	10	0	.1	25	210	270			
DATE	TIME	INSTANTANEOUS DIS-CHARGE (CFS)	TEMPERATURE (DEG C)	ALDRIN (UG/L)	ALDRIN IN BOTTOM DE-POSITS (UG/KG)	DDD (UG/L)	DDD IN BOTTOM DE-POSITS (UG/KG)	DDE (UG/L)	DDE IN BOTTOM DE-POSITS (UG/KG)	DDT (UG/L)	DDT IN BOTTOM DE-POSITS (UG/KG)
OCT. 15...	1245	640	24.0	.00	--	.00	--	.00	--	.00	--
NOV. 14...	1245	--	22.5	.00	.0	.00	.0	.00	.0	.00	.0
JAN. 21...	1105	--	15.5	--	.0	--	.0	--	.0	--	.0
MAR. 12...	0900	34	23.0	--	.0	--	7.5	--	4.4	--	7.5
MAY 26...	1100	500	11.5	.00	--	.00	--	.00	--	.00	--
MAY 06...	1030	215	22.0	.00	.0	.00	1.4	.00	.3	.00	.4
DATE	DI-ELDRIN (UG/L)	DI-ELDRIN IN BOTTOM DE-POSITS (UG/KG)	ENDRIN (UG/L)	ENDRIN IN BOTTOM DE-POSITS (UG/KG)	HEPTA-CHLOR (UG/L)	HEPTA-CHLOR IN BOTTOM DE-POSITS (UG/KG)	HEPTA-CHLOR EPOXIDE (UG/L)	HEPTA-CHLOR EPOXIDE IN BOTTOM DE-POSITS (UG/KG)	LINDANE (UG/L)	LINDANE IN BOTTOM DE-POSITS (UG/KG)	CHLOR-DANE (UG/L)
OCT. 15...	.00	--	.00	--	.00	--	.00	--	.01	--	.0
NOV. 14...	.01	.0	.00	.0	.00	.0	.00	.0	.00	.0	.0
JAN. 21...	--	.0	--	.0	--	.0	--	.0	--	.0	--
MAR. 12...	--	10	--	.0	--	.0	--	.0	--	.0	--
MAY 26...	.01	--	.00	--	.00	--	.00	--	.01	--	.1
MAY 06...	.02	1.5	.00	.0	.00	.0	.00	.0	.02	.0	.1
DATE	CHLOR-DANE IN BOTTOM DE-POSITS (UG/KG)	PCB (UG/L)	PCB IN BOTTOM DE-POSITS (UG/KG)	DI-AZINON (UG/L)	MALATHION (UG/L)	METHYL PARA-THION (UG/L)	PARA-THION (UG/L)	2,4-D (UG/L)	SILVEX (UG/L)	2,4,5-T (UG/L)	
OCT. 15...	--	.0	--	.03	.00	.00	.00	.00	.00	.02	
NOV. 14...	0	.0	0	.02	.00	.00	.00	.00	.00	.00	
JAN. 21...	1	--	0	--	--	--	--	--	--	--	
MAR. 12...	100	--	30	--	--	--	--	--	--	--	
MAY 26...	--	.0	--	.02	.00	.00	.00	.07	.00	.04	
MAY 06...	4	.0	7	.11	.00	.00	.00	.03	.00	.00	

SAN JACINTO RIVER BASIN

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MISCELLANEOUS ANALYSES OF STREAMS IN THE SAN JACINTO RIVER BASIN IN TEXAS

WATER QUALITY DATA, OCTOBER 1973 TO SEPTEMBER 1974

08068500 SPRING CREEK NEAR SPRING, TEX. (Lat 30°06'37", long 95°26'10")

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	SUS- PENDE SEDI- MENT (MG/L)	SUS- PENDE SEDI- MENT DIS- CHARGE (T/DAY)
NOV. 29...	0910	92	16.0	24	6.0
JAN. 10...	1020	566	15.0	145	222
FEB. 22...	1335	130	15.5	245	86
APR. 05...	1045	56	17.0	51	7.7
MAY 16...	1530	60	--	33	5.3
AUG. 09...	1345	66	26.0	169	30
SEP. 17...	1700	1180	25.0	110	350

08070500 CANEY CREEK NEAR SPLENDORA, TEX. (Lat 30°15'34", long 95°18'08")

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	SUS- PENDE SEDI- MENT (MG/L)	SUS- PENDE SEDI- MENT DIS- CHARGE (T/DAY)
JAN. 07...	1730	209	13.0	74	42
FEB. 19...	1800	130	16.5	98	34
MAY 13...	1450	44	24.0	48	5.7
JUNE 14...	1340	20	27.5	24	1.3
AUG. 05...	1350	23	27.0	44	2.7
SEP. 20...	1150	50	26.0	26	3.5

08072000 LAKE HOUSTON NEAR SHELDON, TEX. (Lat 29°54'58", 95°08'28")

DATE	TIME	RESER- VOIR STORAGE (AC-FT)	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 (HC03) (MG/L)	CAR- BONATE (C03) (MG/L)	DIS- SOLVED SULFATE (S04) (MG/L)
DEC., 1973 18...	--	149600	9.0	17	2.0	11	3.2	50	0	6.4
AUG., 1974 30...	0930	127900	13	17	1.7	17	1.5	42	0	3.9

DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITU- ENTS) (MG/L)	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)	DIS- SOLVED BORON (B) (UG/L)
DEC., 1973 18...	21	94	51	10	.7	180	7.1	--	60
AUG., 1974 30...	34	109	49	15	1.1	233	6.9	22.0	80

08078000 CHOCOLATE BAYOU NEAR ALVIN, TEX.

LOCATION.--Lat 29°22'09", long 95°19'14", Brazoria County, at gaging station on Farm Road 1462, 5.9 miles (9.5 km) southwest of Alvin, and 6.9 miles (11.1 km) upstream from State Highway 35.

DRAINAGE AREA.--87.7 mi² (227.1 km²).

PERIOD OF RECORD.--Chemical and biochemical analyses: May 1971 to September 1974.
Pesticide analyses: May 1971 to September 1974.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SiO2) (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED SODIUM PLUS POTASSIUM (MG/L)	DIS-SOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	
JAN. 16...	1030	84	7.9	25	5.7	--	23	--	73	0	
MAR. 04...	1030	4.5	11	100	30	--	180	--	376	0	
MAR. 13...	1300	4.1	--	--	--	--	--	--	--	--	
APR. 16...	1300	240	--	--	--	--	--	--	--	--	
MAY 07...	1300	105	--	--	--	--	--	--	--	--	
JULY 09...	1235	48	14	72	19	120	--	3.2	224	0	
AUG. 20...	1205	40	--	--	--	--	--	--	--	--	
DATE		DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DIS-SOLVED SILIUS (SUM OF CONSTITUENTS) (MG/L)
JAN. 16...	25	36	.0	.20	.00	.15	.76	--	.14	160	
MAR. 04...	110	250	.9	.00	.00	.06	.10	--	.09	871	
MAR. 13...	--	--	--	.00	.00	.00	.45	--	.10	--	
APR. 16...	--	--	--	.72	.01	.02	.45	--	.21	--	
MAY 07...	--	--	--	1.1	.04	.34	1.1	1.4	.24	--	
JULY 09...	90	170	--	.03	.00	.02	.93	.95	.05	600	
AUG. 20...	--	--	--	.00	.00	.09	1.2	1.3	.08	--	
DATE		TOTAL NON-FILT-RABLE RESIDUE (MG/L)	VOL. NON-FILT-RABLE RESIDUE (MG/L)	HARDNESS (CA+MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	TURBIDITY (JTU)
JAN. 16...	232	60	86	26	1.1	310	6.8	18.0	80	120	
MAR. 04...	31	2	380	68	4.1	1470	8.0	21.0	10	20	
MAR. 13...	89	18	--	--	--	1450	8.0	21.5	5	45	
APR. 16...	226	34	--	--	--	697	7.6	16.0	140	140	
MAY 07...	275	44	--	--	--	--	7.2	25.0	80	100	
JULY 09...	56	12	260	75	3.3	1080	8.3	29.0	30	30	
AUG. 20...	72	12	--	--	--	1020	7.5	31.0	30	35	
DATE		DIS-SOLVED OXYGEN (MG/L)	PERCENT SATURATION	BIO-CHEMICAL OXYGEN DEMAND (MG/L)	IMMEDIATE COLIFORM (COL. PER 100 ML)	FECAL COLIFORM (COL. PER 100 ML)	STREPTOCOCCI (COLONIES PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)	PHENOLS (UG/L)	METHYLENE BLUE ACTIVE SUBSTANCE (MG/L)	
JAN. 16...	5.6	59	3.2	98000	190	9000	20	--	--	.0	
MAR. 04...	9.6	107	1.5	3200	110	160	10	0	--	.0	
MAR. 13...	8.9	100	2.5	10000	290	140	32	--	--	.0	
APR. 16...	9.5	95	4.5	67000	5900	7400	15	--	--	.0	
MAY 07...	7.8	93	3.7	6800	1300	1400	25	--	--	.0	
JULY 09...	--	--	1.2	1800	32	150	7.8	3	--	.0	
AUG. 20...	6.5	87	1.5	8300	250	630	8.5	--	--	.0	

CHOCOLATE BAYOU BASIN

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08078000 CHOCOLATE BAYOU NEAR ALVIN, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

		DIS-SOLVED ALUMINUM (AL) (UG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	DIS-SOLVED BORON (B) (UG/L)	DIS-SOLVED CADMIUM (CD) (UG/L)	DIS-SOLVED CHROMIUM (CR) (UG/L)	DIS-SOLVED COBALT (CO) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)			
DATE	TIME										
JULY 09...	1235	0	4	210	0	0	0	2			
		DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	DIS-SOLVED LITHIUM (LI) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)	DIS-SOLVED MERCURY (HG) (UG/L)	DIS-SOLVED NICKEL (NI) (UG/L)	DIS-SOLVED STRONTIUM (SR) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)		
DATE	TIME										
JULY 09...	20		2	0	10	.2	1	650	10		
DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TEMPERATURE (DEG C)	ALDRIN (UG/L)	ALDRIN IN BOTTOM DEPOSITS (UG/KG)	DDD (UG/L)	DDD IN BOTTOM DEPOSITS (UG/KG)	DDE (UG/L)	DDE IN BOTTOM DEPOSITS (UG/KG)	DDT (UG/L)	DDT IN BOTTOM DEPOSITS (UG/KG)
MAR. 04...	1030	4.5	21.0	.00	.0	.00	.0	.00	.0	.00	.0
DATE	TIME	DI-ELDRIN IN BOTTOM DEPOSITS (UG/KG)	ENDRIN (UG/L)	ENDRIN IN BOTTOM DEPOSITS (UG/KG)	HEPTA-CHLOR (UG/L)	HEPTA-CHLOR IN BOTTOM DEPOSITS (UG/KG)	HEPTA-CHLOR EPOXIDE (UG/L)	HEPTA-CHLOR EPOXIDE IN BOTTOM DEPOSITS (UG/KG)	LINDANE (UG/L)	LINDANE IN BOTTOM DEPOSITS (UG/KG)	CHLOR-DANE (UG/L)
MAR. 04...		.00	.7	.00	.0	.00	.0	.00	.0	.00	.0
DATE	TIME	CHLOR-DANE IN BOTTOM DEPOSITS (UG/KG)	PCB (UG/L)	PCB IN BOTTOM DEPOSITS (UG/KG)	DI-AZINON (UG/L)	MALATHION (UG/L)	METHYL PARATHION (UG/L)	PARATHION (UG/L)	2,4-D (UG/L)	SILVEX (UG/L)	2,4,5-T (UG/L)
MAR. 04...		0	.0	0	.00	.00	.00	.00	.00	.00	.00

BRAZOS RIVER BASIN

08080500 DOUBLE MOUNTAIN FORK BRAZOS RIVER NEAR ASPERMONT, TEX.

LOCATION.--Lat 33°00'29", long 100°10'49", Stonewall County, at gaging station at bridge on U.S. Highway 83, 0.3 mile (0.5 km) downstream from Hitson Creek, and 10 miles (16 km) south of Aspermont.

DRAINAGE AREA.--7,980 mi² (20,670 km²), of which 6,470 mi² (16,760 km²) is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: October 1948 to November 1951, October 1956 to September 1974.
Water temperatures: November 1949 to November 1951, October 1956 to September 1974.
Sediment records: November 1949 to September 1951.

EXTREMES.--October 1973 to September 1974:

Specific conductance: Maximum daily, 12,100 micromhos Apr. 11; minimum daily, 1,220 micromhos Sept. 2,

1957.
Water temperatures: Maximum, 26.0°C Aug. 15, 17; minimum, freezing point on several days during December, January, and February.

Period of record:

Specific conductance (1948-51, 1956-70, 1971-74): Maximum daily, 12,800 micromhos May 30, 1973; minimum daily, 735 micromhos Oct. 24, 1957.

Water temperatures (1949-51, 1956-67, 1969-74): Maximum, 38.0°C July 18, 1966; minimum, freezing point on many days during winter months.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DIS-SOLVED SILICA (SiO ₂) (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED SODIUM PLUS POTASSIUM (MG/L)	DIS-SOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO ₃) (MG/L)	CARBONATE (CO ₃) (MG/L)
OCT. 01...	0855	13	8.6	440	60	520	--	7.4	112	0
NOV. 26...	1335	5.0	6.1	360	61	450	--	19	94	0
DEC. 31...	0855	.24	8.6	970	190	--	1200	--	150	0
JAN. 08...	1300	.29	7.9	820	180	1100	--	15	165	0
MAY 07...	1330	25	9.9	440	50	360	--	7.5	79	0
JUNE 12...	1230	.57	12	730	99	670	--	13	107	0
AUG. 28...	1345	89	18	79	23	260	--	8.7	222	0
SEP. 30...	0855	246	12	140	42	270	--	8.6	200	0

DATE	DIS-SOLVED SULFATE (SO ₄) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	HARDNESS (CA, MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	TEMPERATURE (DEG C)
OCT. 01...	1200	800	3080	1300	1200	6.1	4370	7.3	18.0
NOV. 26...	990	740	2670	1200	1100	5.8	3950	7.1	17.0
DEC. 31...	1900	2600	6920	3200	3100	--	10200	7.4	.0
JAN. 08...	1800	2200	6200	2800	2700	9.1	9120	7.6	15.0
MAY 07...	1200	580	2690	1300	1200	4.3	3620	7.5	26.5
JUNE 12...	1800	1300	4680	2200	2100	6.2	6330	7.8	25.0
AUG. 28...	340	230	1070	290	110	6.6	1690	7.6	24.5
SEP. 30...	410	360	1340	520	360	5.1	2210	8.3	16.0

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

[illegible]

BRAZOS RIVER BASIN

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08080540 MCDONALD CREEK NEAR POST, TEX.

LOCATION.--Lat 33°21'03", long 101°13'36", Garza County, at gaging station at bridge on Farm Road 651, 2.6 miles (4.2 km) downstream from Lake Creek, 4.1 miles (6.6 km) upstream from mouth, and 14.4 miles (23.2 km) northeast of Post.

DRAINAGE AREA.--112 mi² (290 km²), of which 40 mi² (104 km²) is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: October 1965 to September 1974.

Water temperatures: October 1966 to September 1974.

EXTREMES.--October 1973 to September 1974:

Specific conductance: Maximum daily, 50,000 micromhos Aug. 2; minimum daily, 1,320 micromhos Aug. 28.

Period of record:

Specific conductance (1965-66, 1973-74): Maximum daily, 50,000 micromhos Aug. 2, 1974; minimum daily, 975 micromhos Aug. 29, 1966.

Water temperatures (1965-66): Maximum, 29.0°C Sept. 1, 1966; minimum, 10.0°C Apr. 30, 1966.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	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)	
JUNE 12...	1330		.71	9.9	68	21	700	6.8	108	0
JULY 29...	--	8.9	7.2	660	120	9800	25	128	0	0
AUG. 05...	2035	23	11	64	15	700	5.6	156	0	0
SEP. 16...	1845	.42	3.6	220	57	3600	12	76	0	0

DATE	DIS- SOLVED SULFATE (SO ₄) (CL) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	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)
JUNE 12...	130	1100	2090	260	170	19	3790	7.8	27.5
JULY 29...	2800	15000	28500	2100	2000	92	43900	7.5	21.5
AUG. 05...	150	980	2000	220	94	20	3590	7.2	22.0
SEP. 16...	790	5400	10100	780	720	56	16500	7.8	20.0

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

MONTH	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCT- ANCE (MICRO- MHOS)	DIS- SOLVED SOLIDS (MG/L)	DIS- SOLVED SOLIDS (TONS)	DIS- SOLVED CHLORIDE (MG/L)	DIS- SOLVED CHLORIDE (TONS)	DIS- SOLVED SULFATE (MG/L)	DIS- SOLVED SULFATE (TONS)	HARDNESS (CA,MG) (MG/L)
OCT. 1973.....	0	--	--	0	--	0	--	0	--
NOV. 1973.....	0	--	--	0	--	0	--	0	--
DEC. 1973.....	0	--	--	0	--	0	--	0	--
JAN. 1974.....	0	--	--	0	--	0	--	0	--
FEB. 1974.....	0	--	--	0	--	0	--	0	--
MAR. 1974.....	0	--	--	0	--	0	--	0	--
APR. 1974.....	0	--	--	0	--	0	--	0	--
MAY 1974.....	41.6	4480	2500	281	1300	146	190	21.3	220
JUNE 1974.....	8.83	3530	1900	45.3	970	23.1	150	3.58	170
JULY 1974.....	2.7	35000	23000	168	12000	87.5	2100	15.3	1700
AUG. 1974.....	165.95	3640	2000	896	1000	448	150	67.2	180
SEPT 1974.....	166.98	2710	1400	631	710	320	110	49.6	130
TOTAL	386.06	**	**	2020	**	1020	**	157	**
WTD.AVG.	1.06	3550	1900	**	980	**	150	**	170

08080540 MCDONALD CREEK NEAR POST, TEX.--Continued

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

[illegible]

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

[illegible]

BRAZOS RIVER BASIN

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08080916 SALT FORK BRAZOS RIVER AT FARM ROAD 1081, NEAR CLAIREMONT, TEX.

LOCATION.--Lat 33°14'33", long 100°55'40", Kent County, at bridge on Farm Road 1081 and 11.7 miles (18.8 km) northwest of Clairemont.

PERIOD OF RECORD.--Chemical analyses: October 1968 to September 1974.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	HARD- NESS (CA+MG) (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)
JUNE 13...	1045	5.8	76	24	300	1300	290	4640	--
AUG. 29...	1615	23	26	6.4	150	420	91	1790	25.0

BRAZOS RIVER BASIN

08080959 SALT FORK BRAZOS RIVER AT U.S. HIGHWAY 380, NEAR JAYTON, TEX.

LOCATION.--Lat 33°10'06", long 100°37'50", Kent County, at bridge on U.S. Highway 380 and 6.5 miles (10.5 km) southwest of Jayton.

PERIOD OF RECORD.--Chemical analyses: October 1968 to September 1974.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	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 SODIUM PLUS POTAS- SIUM (K) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)
OCT. 24...	1745	.44	12	640	120	--	3700	--	136	0
NOV. 28...	1120	1.9	14	590	200	--	2500	--	189	0
JAN. 09...	1430	1.8	15	540	190	2500	--	14	160	0
FEB. 21...	1410	2.6	--	620	200	--	--	--	--	--
MAR. 27...	1545	3.3	--	620	190	--	--	--	--	--
JUNE 13...	1315	8.1	--	210	53	--	--	--	--	--

DATE	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	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)
OCT. 24...	2000	5700	.7	12200	2100	2000	--	18500	7.5	25.0
NOV. 28...	1800	4000	.9	9250	2300	2100	--	14000	7.6	10.0
JAN. 09...	1900	3800	--	9040	2100	2000	24	13900	7.8	1.0
FEB. 21...	1900	3600	--	--	2400	--	--	13800	--	11.0
MAR. 27...	1900	4700	--	--	2300	--	--	15500	--	23.0
JUNE 13...	570	1000	--	--	740	--	--	4430	--	28.0

08081000 SALT FORK BRAZOS RIVER NEAR PEACOCK, TEX.

LOCATION.--Lat 33°12'43", long 100°25'53", Stonewall County, at gaging station at bridge on U.S. Highway 380, 2.9 miles (4.7 km) northwest of Peacock, 6.2 miles (10.0 km) upstream from Crton Creek, and 13.0 miles (20.9 km) northwest of Aspermont.

DRAINAGE AREA.--4,275 mi² (11,072 km²), of which 2,770 mi² (7,170 km²) is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: December 1949 to September 1951, October 1964 to September 1974.
Water temperatures: December 1949 to September 1951, October 1964 to September 1974.

EXTREMES.--October 1973 to September 1974:

Specific conductance: Maximum daily, 46,800 micromhos Apr. 13; minimum daily, 1,980 micromhos June 13.
Water temperatures: Maximum, 31.0°C June 23; minimum, freezing point on several days during winter months.

Period of record:

Specific conductance: Maximum, 61,100 micromhos July 31, 1966; minimum daily, 900 micromhos Aug. 31, 1966.
Water temperatures (1949-50, 1964-69, 1971-74): Maximum, 39.0°C June 25, 1968; minimum, freezing point on many days during winter months.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report. Conductivity is recorded continuously at this station.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	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 SODIUM PLUS POTAS- SIUM (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)
OCT.										
05...	1315	1.9	12	750	220	5200	--	14	108	0
NOV.										
16...	0825	1.3	--	840	280	--	8100	--	--	--
DEC.										
11...	1630	2.9	7.5	780	280	6900	--	39	134	0
JAN.										
16...	1530	3.8	7.0	670	240	7000	--	23	168	0
FEB.										
27...	1200	2.6	2.4	820	280	7400	--	26	162	0
MAR.										
26...	1315	2.9	2.9	810	270	7800	--	29	162	0
APR.										
17...	1035	.35	6.4	980	320	8200	--	30	191	0
MAY										
09...	1650	6.7	7.9	580	190	5800	--	24	121	0
JUNE										
04...	1220	2970	15	160	21	380	--	13	178	0
AUG.										
08...	1640	42	12	150	32	740	--	8.1	141	0
SEP.										
26...	1330	385	9.1	71	19	560	--	3.5	138	0

DATE	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	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)
OCT.									
05...	2300	8300	16800	2800	2700	43	24700	7.7	18.0
NOV.									
16...	2700	13000	24700	3300	--	--	38400	--	5.0
DEC.									
11...	2300	11000	21400	3100	3000	54	39900	7.5	15.0
JAN.									
16...	2200	11000	21200	2700	2500	59	31400	7.7	20.0
FEB.									
27...	2600	12000	23200	3200	3100	57	36300	7.8	12.0
MAR.									
26...	2400	13000	24400	3100	3000	61	36900	7.8	16.0
APR.									
17...	2600	14000	26200	3800	3600	58	41000	7.8	16.0
MAY									
09...	1800	9000	17500	2200	2100	53	25900	7.6	32.0
JUNE									
04...	350	570	1600	490	340	7.5	2720	7.5	20.0
AUG.									
08...	400	1100	2510	510	390	14	4280	7.5	32.0
SEP.									
26...	210	790	1730	260	140	15	3080	7.9	19.5

BRAZOS RIVER BASIN

08081000 SALT FORK BRAZOS RIVER NEAR PEACOCK, TEX.--Continued

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

MONTH	DISCHARGE (FT ³ /S-DAY)	SPECIFIC CONDUCT- ANCE (MICRO- MHOS)	DIS- SOLVED SOLIDS (MG/L)	DIS- SOLVED SOLIDS (TONS)	DIS- SOLVED CHLORIDE (MG/L)	DIS- SOLVED CHLORIDE (TONS)	DIS- SOLVED SULFATE (MG/L)	DIS- SOLVED SULFATE (TONS)	HARDNESS (CA, MG) (MG/L)
OCT. 1973...	31.81	34100	22300	1920	11900	1020	1930	166	--
NOV.....	41.55	37000	24200	2710	12900	1450	2100	236	--
DEC.....	69.5	35400	23100	4330	12300	2310	2020	379	--
JAN. 1974...	96.1	32100	21000	5450	11200	2910	1820	472	--
FEB.....	82.0	35100	22900	5070	12200	2700	2000	443	--
MAR.....	77.8	38100	24900	5230	13300	2790	2140	450	--
APR.....	265.17	12600	7720	5530	3890	2790	900	644	--
MAY.....	185.55	14900	9130	4570	4660	2330	1000	501	--
JUNE.....	6573.54	4580	2810	49900	1200	21300	430	7630	630
JULY.....	.01	42700	27900	.8	14900	.4	2680	.07	--
AUG.....	2264.51	4290	2630	16100	1100	6730	430	2630	620
SEP.....	4469.29	6000	3680	44400	1680	20300	530	6400	730
TOTAL.....	14156.83	--	--	145000	--	66600	--	20000	--
WTD. AVG....	38.8	6130	3800	--	1740	--	520	--	740

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	32600	38300	37000	31900	34000	36600	43400	6670	---	42700	---	2670
2	35700	37400	39000	32000	34200	38400	43400	13900	36600	---	---	4400
3	35900	38200	36700	32200	37300	38200	43700	20900	24500	---	---	9530
4	30200	37600	37100	32300	34400	38500	43800	27000	4780	---	---	9570
5	24700	37500	36700	31900	34900	38900	42300	11100	2220	---	15500	13200
6	29900	37200	36500	31500	39000	38700	43400	16300	2040	---	3660	16700
7	37100	37400	37600	33100	35400	39100	43800	16300	2840	---	3220	19800
8	37000	38400	35100	23400	35400	38000	41400	16500	3580	---	3810	18200
9	37200	37500	35000	32800	25500	37100	41600	23800	6390	---	5980	24500
10	37800	37500	34400	31600	32800	37100	44200	29200	7820	---	10000	25500
11	28900	36800	34500	36400	33000	34200	44200	34500	9810	---	20800	26700
12	37900	37000	34900	22900	33100	37100	44200	38800	3100	---	20800	28200
13	37200	37700	35500	32500	34200	36900	46800	39000	1980	---	4450	28900
14	37000	37200	36700	32300	34800	38000	40400	40400	7760	---	28500	28900
15	36900	37300	38000	31900	33900	36100	40700	44800	11800	---	28100	19300
16	37600	38400	33600	31800	36200	38100	39600	42700	20000	---	21000	17500
17	37800	38600	32800	33300	35500	38100	44300	43100	24200	---	17200	15600
18	37400	38200	33800	33100	34600	39600	40900	43600	26900	---	---	12800
19	38000	38400	36700	32700	33800	39600	42300	43200	27100	---	---	10900
20	37800	38800	36400	32800	36000	40000	46300	42200	29000	---	---	4270
21	38400	39700	35200	32700	36500	38400	26700	40800	35300	---	---	2340
22	37800	38700	37600	32600	35800	37900	9020	39900	27100	---	---	7500
23	38500	38000	35400	34000	35800	39100	15100	39700	37600	---	---	14600
24	37800	35400	32700	33000	33800	38900	27200	---	39800	---	24000	10000
25	36600	35300	32400	28000	35800	38100	36600	---	39900	---	7680	4000
26	36200	34200	33700	32900	36100	37300	38800	---	24200	---	17400	3220
27	35900	35200	34600	34300	36500	38700	42500	---	5470	---	5760	4190
28	37500	36600	34900	33900	36900	38000	39100	---	41300	---	6120	7040
29	36500	36900	34700	33500	---	40500	6990	---	10200	---	3620	10900
30	37700	37300	34200	34300	---	41200	11000	---	5780	---	2110	15800
31	37800	---	33900	33900	---	40000	---	---	---	---	5470	---
MONTH	35980	37420	35400	32110	34830	38270	37120	---	17900	---	---	13890

BRAZOS RIVER BASIN

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08081000 SALT FORK BRAZOS RIVER NEAR PEACOCK, TEX.--Continued

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	9.0	5.0	5.0	17.0	10.0	11.0	17.0	---	22.0	---	28.0
2	28.0	10.0	18.0	---	12.0	22.0	25.0	16.0	23.0	---	---	18.0
3	20.0	11.0	11.0	---	4.0	22.0	8.0	15.0	28.0	---	---	22.0
4	15.0	16.0	5.0	---	3.0	13.0	5.0	15.0	20.0	---	---	15.0
5	18.0	11.0	10.0	---	4.0	7.0	4.0	23.0	19.0	---	---	15.0
6	20.0	13.0	3.0	0.0	5.0	13.0	11.0	16.0	22.0	---	21.0	16.0
7	24.0	11.0	6.0	0.0	4.0	14.0	13.0	18.0	21.0	---	21.0	16.0
8	20.0	15.0	4.0	7.0	0.0	13.0	13.0	19.0	23.0	---	22.0	16.0
9	20.0	10.0	13.0	0.0	0.0	15.0	10.0	18.0	28.0	---	23.0	27.0
10	21.0	8.0	1.0	0.0	2.0	16.0	15.0	20.0	20.0	---	22.0	18.0
11	13.0	15.0	3.0	0.0	0.0	19.0	10.0	17.0	20.0	---	20.0	19.0
12	16.0	15.0	5.0	0.0	4.0	20.0	8.0	19.0	20.0	---	20.0	20.0
13	18.0	23.0	13.0	2.0	14.0	22.0	9.0	19.0	21.0	---	20.0	13.0
14	16.0	15.0	4.0	3.0	8.0	10.0	8.0	18.0	23.0	---	21.0	14.0
15	15.0	17.0	1.0	7.0	5.0	22.0	8.0	23.0	22.0	---	21.0	22.0
16	14.0	5.0	5.0	2.0	3.0	10.0	8.0	22.0	21.0	---	27.0	22.0
17	12.0	22.0	1.0	8.0	18.0	24.0	18.0	23.0	21.0	---	22.0	19.0
18	12.0	24.0	3.0	6.0	10.0	26.0	13.0	21.0	21.0	---	---	21.0
19	27.0	15.0	2.0	6.0	4.0	10.0	16.0	27.0	22.0	---	---	20.0
20	12.0	12.0	1.0	7.0	6.0	10.0	17.0	19.0	24.0	---	---	20.0
21	24.0	14.0	11.0	5.0	10.0	3.0	16.0	19.0	30.0	---	---	15.0
22	12.0	12.0	0.0	5.0	8.0	21.0	13.0	19.0	30.0	---	---	14.0
23	24.0	12.0	3.0	5.0	4.0	0.0	12.0	20.0	31.0	---	---	15.0
24	25.0	14.0	3.0	11.0	4.0	5.0	13.0	---	25.0	---	30.0	14.0
25	12.0	17.0	3.0	6.0	12.0	5.0	16.0	---	25.0	---	28.0	12.0
26	14.0	7.0	3.0	12.0	11.0	25.0	17.0	---	19.0	---	26.0	22.0
27	12.0	8.0	10.0	12.0	4.0	25.0	17.0	---	20.0	---	27.0	18.0
28	12.0	2.0	11.0	13.0	5.0	25.0	23.0	---	19.0	---	25.0	14.0
29	8.0	3.0	12.0	3.0	---	12.0	18.0	---	18.0	---	27.0	14.0
30	15.0	4.0	12.0	13.0	---	10.0	17.0	---	---	---	23.0	23.0
31	7.0	---	0.0	16.0	---	26.0	---	---	---	---	24.0	---
MONTH	17.0	12.5	6.0	5.5	6.5	15.5	13.0	---	22.5	---	---	18.0

BRAZOS RIVER BASIN

08081200 CROTON CREEK NEAR JAYTON, TEX.

LOCATION.--Lat 33°17'21", long 100°26'00", Stonewall County, at gaging station, 460 ft (140 m) upstream from county road, 1.1 mile (1.8 km) upstream from mouth, and 8.6 miles (13.8 km) northeast of Jayton.

DRAINAGE AREA.--302 mi² (782 km²).

PERIOD OF RECORD.--Chemical analyses: May 1959 to September 1974.
Water temperatures: October 1961 to September 1974.

EXTREMES.--October 1973 to September 1974:

Specific conductance: Maximum daily, 42,000 micromhos Apr. 28; minimum daily, 2,150 micromhos Sept. 25.

Period of record:

Specific conductance (1961-64, 1972-74): Maximum daily, 50,900 micromhos Apr. 18, 1964; minimum daily, 2,150 micromhos Sept. 25, 1974.

REMARKS.--Conductivity is recorded continuously at this station.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	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)
MAY 07...	1615	2.8	2.8	1000	230	5100	21	72	0
JUNE 03...	1900	698	17	530	44	440	9.0	136	0
AUG. 30...	1210	73	12	600	32	280	6.1	82	0
SEP. 17...	1510	3.2	5.0	990	130	5300	11	66	0

DATE		DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	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)
MAY 07...	2900	8000		17300	3400	3400	38	25100	7.6	31.5
JUNE 03...	1500	550		3160	1500	1400	4.9	4360	7.2	21.5
AUG. 30...	1500	420		2890	1600	1600	3.0	3750	7.2	23.5
SEP. 17...	2500	8100		17100	3000	3000	42	25700	7.7	21.0

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

MONTH	DISCHARGE (FT ³ /S-DAY)	SPECIFIC CONDUCT- ANCE (MICRO- MHOS)	DIS- SOLVED SOLIDS (MG/L)	DIS- SOLVED SOLIDS (TONS)	DIS- SOLVED CHLORIDE (MG/L)	DIS- SOLVED CHLORIDE (TONS)	DIS- SOLVED SULFATE (MG/L)	DIS- SOLVED SULFATE (TONS)	HARDNESS (CA, MG)
OCT. 1973...	0.64	23800	16100	28	7640	13	2540	4.4	--
NOV.....	.68	35000	23100	42	11500	21	3100	5.7	--
DEC.....	0	--	--	0	--	0	--	0	--
JAN. 1974...	0	--	--	0	--	0	--	0	--
FEB.....	0	--	--	0	--	0	--	0	--
MAR.....	0	--	--	0	--	0	--	0	--
APR.....	31.9	32200	21100	1820	10400	896	2940	253	--
MAY.....	40.79	29300	19600	2160	9580	1060	2810	310	--
JUNE.....	1911.06	3790	3010	15500	400	2060	1570	8100	1320
JULY.....	0	--	--	0	--	0	--	0	--
AUG.....	468.56	6790	4970	6290	1490	1890	1770	2240	1650
SEP.....	1084.4	5530	4150	12200	1030	3020	1690	4950	1510
TOTAL.....	3538.03	--	--	38000	--	8960	--	15900	--
WTD. AVG....	9.69	5300	3980	--	940	--	1660	--	1490

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

[illegible]

BRAZOS RIVER BASIN

08081400 SALT CROTON CREEK AT WEIR D, NEAR ASPERMONT, TEX.

LOCATION.--Lat 33°24'00", long 100°24'39", Stonewall County, upstream from Haystack Creek, 1,000 ft (305 m) upstream from streamflow station Salt Croton Creek near Aspermont, and 20 miles (32 km) northwest of Aspermont.

PERIOD OF RECORD.--Chemical analyses: October 1956 to September 1974.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO ₂) (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 SODIUM PLUS POTAS- SIUM (K) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)
OCT. 26...	1215	.73	--	2000	1400	--	110000	--	--	--
NOV. 14...	1100	.91	--	2200	1200	--	110000	--	--	--
DEC. 13...	1045	.48	2.5	1900	1300	104000	--	280	30	0
JAN. 17...	1035	.76	--	1800	1300	--	--	--	--	--
FEB. 28...	1030	.65	--	2100	1500	--	--	--	--	--
MAR. 27...	1100	.75	--	2000	1300	--	--	--	--	--
APR. 17...	1115	.60	6.6	2000	1600	120000	--	480	30	0
MAY 08...	1240	.72	--	2300	11100	--	--	--	--	--
JUNE 20...	0930	.06	--	2200	1900	--	--	--	--	--
JULY 11...	1130	.02	--	2200	2000	--	--	--	--	--
AUG. 09...	1225	.62	--	2100	1200	--	--	--	--	--
27...	1020	.71	--	1700	780	--	--	--	--	--

DATE	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	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)	TEMPER- ATURE (DEG C)
OCT. 26...	2100	180000	291000	11000	--	--	233000	--	24.5
NOV. 14...	1200	170000	281000	10000	--	--	231000	--	22.5
DEC. 13...	3700	170000	281000	10000	10000	450	239000	7.1	9.0
JAN. 17...	4400	160000	--	9800	--	--	240000	--	6.0
FEB. 28...	--	180000	--	11000	--	--	242000	--	8.5
MAR. 27...	3100	180000	--	10000	--	--	247000	--	18.0
APR. 17...	3300	190000	317000	12000	12000	485	249000	6.9	18.0
MAY 08...	4400	140000	--	--	--	--	227000	--	32.5
JUNE 20...	3300	190000	--	13000	--	--	249000	--	25.5
JULY 11...	2600	190000	--	14000	--	--	249000	6.8	29.5
AUG. 09...	4200	160000	--	10000	--	--	241000	--	34.0
27...	3300	92000	--	7500	--	--	179000	--	30.0

BRAZOS RIVER BASIN

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08081450 HAYSTACK CREEK AT WEIR E, NEAR ASPERMONT, TEX.

LOCATION.--Lat 33°24'04", long 100°24'41", King County, about 400 ft (120 m) upstream from Salt Croton Creek and 20 miles (32 km) northwest of Aspermont.

PERIOD OF RECORD.--Chemical analyses: October 1956 to September 1974.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	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 SODIUM PLUS POTAS- SIUM (K) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)
OCT.										
26...	1145	.16	--	1800	510	--	36000	--	--	--
NOV.										
14...	1045	.23	--	1700	560	--	34000	--	--	--
DEC.										
13...	1040	.22	4.3	1600	510	35000	--	85	79	0
JAN.										
17...	1030	.23	3.0	1500	510	33000	--	94	--	--
FEB.										
28...	1045	.20	3.9	1800	520	40000	--	96	77	0
MAR.										
27...	1020	.20	--	1700	520	--	--	--	--	--
APR.										
18...	1115	.13	4.5	1800	570	40000	--	150	76	0
MAY										
30...	1155	.09	--	2100	730	--	--	--	--	--
JUNE										
20...	0930	.06	--	2000	730	--	--	--	--	--
JULY										
11...	1120	.07	--	1700	780	--	--	--	65	0
AUG.										
09...	1205	10	--	2000	560	--	--	--	--	--
27...	0950	.17	--	1800	550	--	--	--	--	--

DATE	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITU- ENTS) (MG/L)	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)	TEMPER- ATURE (DEG C)
OCT.									
26...	2700	58000	99700	6500	--	--	130000	--	22.0
NOV.									
14...	2700	55000	93900	6600	--	--	124000	--	20.5
DEC.									
13...	4300	58000	99500	6100	6000	195	131000	7.6	6.0
JAN.									
17...	5900	54000	--	5800	--	188	120000	--	3.0
FEB.									
28...	4400	63000	110000	6600	6600	214	140000	7.6	8.0
MAR.									
27...	3700	59000	--	6400	--	--	127000	--	15.0
APR.									
18...	4400	62000	109000	6800	6800	210	138000	7.2	19.5
MAY									
30...	5000	86000	--	8300	--	--	172000	--	30.0
JUNE									
20...	4500	80000	--	8000	--	--	169000	--	26.0
JULY									
11...	4800	97000	--	7500	7400	--	186000	7.5	30.5
AUG.									
09...	4800	79000	--	7300	--	--	166000	--	32.5
27...	4400	70000	--	6800	--	--	147000	--	30.0

08081500 SALT CROTON CREEK NEAR ASPERMONT, TEX.

LOCATION.--Lat 33°24'03", long 100°24'29", King County, at gaging station, 1.0 mile (0.2 km) downstream from Haystack Creek, 2.4 miles (3.9 km) downstream from Salt Flat Creek, 9.0 miles (14.5 km) upstream from Salt Fork Brazos River, and 21 miles (33.9 km) northwest of Aspermont.

DRAINAGE AREA.--64.3 km² (167 km²).

PERIOD OF RECORD.--Chemical analyses: October 1956 to September 1974.

EXTREMES.--October 1973 to September 1974:

Specific conductance: Maximum daily, 248,000 micromhos June 26, 27; minimum daily, 11,000 micromhos Sept. 28.

Period of record:

Specific conductance (1972-74): Maximum daily, 248,000 micromhos June 26, 27, 1974; minimum daily, 7,570 micromhos Sept. 13, 1973.

Water temperatures (1972-73): Maximum, 39.0°C Sept. 4, 1973; minimum, freezing point on several days during winter months.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report. Conductivity is recorded continuously at this station.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	OIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	OIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED SODIUM PLUS POTAS- SIUM (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAH- BONATE (CO ₃) (MG/L)
OCT.										
11...	1200	2.2	--	1100	190	--	11000	--	--	--
26...	0900	.55	--	--	--	--	--	--	--	--
NOV.										
15...	0900	.85	--	--	--	--	--	--	--	--
DEC.										
13...	1120	.60	3.8	2000	1000	88000	--	340	44	0
JAN.										
17...	1000	.90	4.6	2000	1000	81000	--	220	45	0
FEB.										
28...	1400	.90	5.0	2000	1200	93000	--	250	38	0
MAR.										
27...	1300	.87	4.9	2000	1000	92000	--	290	37	0
APR.										
18...	1310	.51	--	2100	1200	--	--	--	--	--
MAY										
30...	1115	.37	7.3	2100	1300	94000	--	440	50	0
JUNE										
04...	1530	4.0	5.4	1300	220	15000	--	54	59	0
JULY										
11...	1200	.08	6.8	2200	1200	78000	--	250	58	0
AUG.										
28...	0935	22	5.0	710	120	8300	--	29	56	0
SEP.										
18...	1300	9.4	4.6	1100	430	26000	--	42	60	0

DATE	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	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)	TEMPER- ATURE (DEG C)
OCT.									
11...	2700	17000	31500	3500	--	--	48300	--	24.5
26...	--	150000	--	--	--	--	232000	--	16.0
NOV.									
15...	4200	140000	--	--	--	--	229000	--	13.0
DEC.									
13...	5100	140000	236000	9100	9100	401	225000	7.2	8.0
JAN.									
17...	4500	130000	219000	9100	9100	369	220000	7.7	4.5
FEB.									
28...	3200	150000	250000	9900	9900	406	234000	7.0	21.0
MAR.									
27...	3700	150000	249000	9100	9100	419	231000	7.1	26.5
APR.									
18...	4000	160000	--	10000	--	--	230000	--	24.5
MAY									
30...	4100	140000	242000	11000	11000	397	232000	6.9	28.0
JUNE									
04...	2500	23000	42100	4200	4100	101	65700	7.3	35.5
JULY									
11...	4500	130000	216000	10000	10000	332	214000	7.2	30.5
AUG.									
28...	1600	13000	23800	2300	2200	76	37600	7.3	25.0
SEP.									
18...	2500	39000	69100	4500	4500	168	99000	7.5	21.0

BRAZOS RIVER BASIN

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08081500 SALT CROTON CREEK NEAR ASPERMONT, TEX.--Continued

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

MONTH	DISCHARGE (FT ³ /S-DAY)	SPECIFIC CONDUCT- ANCE (MICRO- MHOS)	DIS- SOLVED SOLIDS (MG/L)	DIS- SOLVED SOLIDS (TONS)	DIS- SOLVED CHLORIDE (MG/L)	DIS- SOLVED CHLORIDE (TONS)	DIS- SOLVED SULFATE (MG/L)	DIS- SOLVED SULFATE (TONS)	HARDNESS (CA, MG) (MG/L)
OCT. 1973...	31.77	184000	159000	13600	94700	8120	4000	343	--
NOV.....	27.12	223000	226000	16500	135000	9890	4100	300	--
DEC.....	23.03	229000	241000	15000	144000	8950	4200	261	--
JAN. 1974...	27.09	212000	203000	14800	121000	8850	4100	300	--
FEB.....	24.02	225000	231000	15000	138000	8950	4100	266	--
MAR.....	28.26	212000	203000	15500	121000	9230	4100	313	--
APR.....	83.00	98700	72500	16200	42300	9480	2900	650	--
MAY.....	46.68	130000	98200	12400	57800	7280	3300	416	--
JUNE.....	69.27	68000	47100	8810	27000	5050	2400	449	--
JULY.....	16.66	130000	98700	4440	58100	2610	3300	148	--
AUG.....	102.69	100000	73800	20500	43100	12000	2900	804	--
SEP.....	408.28	42400	27000	29800	14900	16400	2000	2200	--
TOTAL.....	887.87	--	--	183000	--	107000	--	6450	--
WTD. AVG....	2.43	103000	76300	--	44600	--	2690	--	--

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	218000	230000	228000	231000	230000	233000	242000	100000	238000	231000	91000	73600
2	226000	224000	225000	221000	230000	235000	231000	140000	52400	232000	160000	83300
3	230000	200000	230000	212000	230000	160000	243000	180000	27900	232000	180000	98400
4	237000	222000	234000	211000	229000	200000	240000	200000	71800	232000	200000	122000
5	200000	210000	232000	211000	227000	234000	235000	45000	114000	232000	91800	134000
6	150000	205000	226000	212000	230000	170000	200000	72000	120000	234000	202000	140000
7	180000	223000	227000	220000	234000	227000	243000	152000	140000	233000	202000	150000
8	206000	217000	226000	218000	232000	236000	243000	186000	153000	234000	202000	160000
9	211000	211000	229000	151000	230000	218000	200000	219000	194000	235000	200000	170000
10	200000	216000	228000	170000	227000	170000	150000	214000	194000	234000	205000	180000
11	75000	213000	227000	214000	170000	160000	130000	235000	202000	235000	210000	190000
12	130000	228000	239000	220000	232000	181000	222000	243000	206000	235000	220000	200000
13	170000	226000	226000	220000	228000	204000	240000	220000	208000	234000	220000	210000
14	195000	223000	227000	221000	230000	216000	240000	242000	210000	235000	210000	220000
15	205000	229000	227000	222000	234000	217000	240000	245000	215000	234000	200000	230000
16	219000	226000	226000	220000	180000	227000	243000	244000	217000	235000	210000	116000
17	224000	223000	229000	223000	150000	227000	200000	200000	217000	235000	215000	160000
18	223000	225000	227000	222000	238000	241000	223000	242000	217000	234000	200000	125000
19	225000	200000	234000	150000	224000	239000	180000	220000	192000	235000	200000	15700
20	228000	238000	240000	208000	234000	234000	200000	234000	222000	233000	200000	110000
21	170000	231000	229000	207000	234000	233000	231000	240000	222000	234000	200000	16200
22	232000	225000	225000	217000	235000	222000	242000	240000	220000	234000	200000	63500
23	234000	220000	226000	224000	238000	234000	234000	236000	219000	234000	200000	82900
24	150000	222000	225000	224000	241000	231000	231000	223000	221000	235000	70000	13500
25	160000	221000	226000	222000	240000	225000	200000	222000	241000	236000	140000	44800
26	235000	220000	228000	222000	236000	225000	190000	220000	248000	50000	200000	82400
27	219000	238000	231000	222000	236000	229000	43800	220000	248000	200000	62000	90000
28	213000	234000	228000	227000	231000	230000	60000	223000	240000	210000	22500	11000
29	213000	227000	232000	227000	---	244000	44900	233000	240000	220000	42900	170000
30	222000	229000	231000	226000	---	233000	75000	240000	230000	230000	32400	180000
31	223000	---	231000	226000	---	232000	---	240000	---	235000	53200	---
MONTH	200740	221870	229000	213610	225360	218290	196560	205480	191340	225550	162640	121410

BRAZOS RIVER BASIN

08081500 SALT CROTON CREEK NEAR ASPERMONT, TEX.--Continued

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	22.5	14.5	7.5	8.0	8.0	13.5	29.0	---	25.0	40.0	40.0	---
2	25.5	14.0	7.5	7.0	8.0	14.5	13.0	31.0	---	40.0	40.0	---
3	22.0	8.0	14.0	7.5	---	15.5	11.5	39.0	---	40.0	40.0	---
4	21.0	21.0	10.5	6.0	6.5	---	13.5	40.0	---	40.0	40.0	---
5	19.0	---	6.0	7.0	9.0	10.0	9.0	---	31.0	40.0	40.0	---
6	22.0	13.0	6.0	7.5	7.0	12.5	10.0	---	35.0	40.0	40.0	---
7	19.0	15.0	14.5	9.0	4.0	17.0	16.0	---	39.0	40.0	40.0	---
8	28.5	16.0	6.5	10.0	2.0	22.0	25.5	30.0	30.0	40.0	40.0	---
9	23.0	15.0	8.0	---	---	21.0	11.0	25.0	35.0	40.0	40.0	---
10	26.0	19.0	15.5	3.0	5.0	13.5	22.5	30.0	35.0	40.0	40.0	---
11	24.5	16.0	7.5	3.5	8.0	22.5	---	25.0	40.0	40.0	---	---
12	20.5	---	11.0	2.0	8.0	23.5	13.5	28.0	35.0	40.0	---	---
13	21.0	---	5.0	---	8.0	14.0	14.0	25.0	30.0	40.0	---	---
14	16.5	21.0	8.0	12.0	13.5	14.0	13.0	30.0	35.0	40.0	---	---
15	20.5	13.0	---	15.0	11.5	15.5	30.0	25.0	45.0	39.0	---	---
16	19.0	11.5	11.5	7.0	10.0	27.0	12.0	35.0	35.0	40.0	---	---
17	29.0	18.0	15.5	15.0	---	20.0	25.0	35.0	35.0	40.0	---	---
18	22.0	---	7.0	10.5	19.0	30.0	17.0	35.0	30.0	40.0	---	---
19	---	18.0	1.5	8.0	13.5	22.5	19.0	35.0	40.0	40.0	---	---
20	16.0	13.0	7.5	8.0	13.0	19.5	26.0	30.0	36.0	40.0	---	---
21	19.5	9.0	2.5	14.5	11.5	8.5	19.0	35.0	36.0	40.0	---	---
22	16.0	---	0.0	11.5	6.0	9.0	25.5	30.0	40.0	35.0	---	---
23	15.5	---	7.5	10.0	11.0	6.5	20.0	36.0	30.0	40.0	---	---
24	18.5	17.0	3.0	8.5	8.0	12.0	19.0	24.0	35.0	40.0	---	---
25	27.5	12.0	---	11.0	18.0	23.0	18.0	25.0	40.0	40.0	---	---
26	16.0	10.0	8.0	8.0	7.0	12.0	24.0	28.0	40.0	40.0	---	---
27	14.0	11.5	3.0	10.5	9.0	19.0	21.0	30.0	35.0	40.0	---	---
28	15.5	12.5	9.0	7.5	20.0	18.5	18.0	25.0	35.0	40.0	25.0	---
29	13.0	11.5	7.0	10.0	---	15.0	20.0	30.0	35.0	40.0	---	---
30	19.0	8.0	9.0	10.0	---	14.0	18.0	35.0	---	40.0	---	---
31	11.0	---	9.0	7.0	---	15.0	---	32.0	---	40.0	---	---
MONTH	20.0	14.0	8.0	9.0	10.0	16.5	18.5	31.0	35.5	40.0	---	---

08082000 SALT FORK BRAZOS RIVER NEAR ASPERMONT, TEX.

LOCATION.--Lat 33°20'02", long 100°14'24", Stonewall County, at gaging station at bridge on U.S. Highway 83, 5.4 miles (8.7 km) downstream from Salt Croton Creek, 13.2 miles (21.4 km) north of Aspermont, and 27.4 miles (44.1 km) upstream from Double Mountain Fork Brazos River.

DRAINAGE AREA.--4,830 mi² (12,510 km²), of which 2,770 mi² (7,174 km²) is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: October 1948 to September 1951, October 1956 to September 1974.
Water temperatures: October 1948 to September 1951, October 1956 to September 1974.

-EXTREMES.--October 1973 to September 1974:

Specific conductance: Maximum daily, 173,000 micromhos Apr. 12; minimum daily, 2,370 micromhos June 5.
Water temperatures: Maximum, 33.0°C July 22; minimum, freezing point Jan. 2.

Period of record:

Specific conductance: Maximum daily, 173,000 micromhos Apr. 12, 1974; minimum daily, 1,690 micromhos July 8, 1960.
Water temperatures: Maximum, 38.0°C Aug. 2, 1973; minimum, freezing point on many days during winter months.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report. Conductivity is recorded continuously at this station.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED SODIUM PLUS POTAS- SIUM (K) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)
OCT. 05...	1630	12	6.6	600	130	4500	--	20	92	0
NOV. 12...	1650	3.6	--	1200	390	--	20000	--	--	--
DEC. 12...	1150	2.8	6.6	600	390	16400	--	100	166	0
JAN. 17...	1645	6.1	3.3	960	360	18000	--	61	123	0
FEB. 28...	1900	3.5	2.1	1000	390	17000	--	54	110	0
MAR. 26...	1605	3.4	3.4	1100	320	17000	--	69	92	0
APR. 17...	1400	.23	6.4	1500	440	18000	--	73	161	0
MAY 09...	1100	14	7.9	680	170	5100	--	22	138	0
JUNE 04...	1800	2460	17	300	35	760	--	15	204	0
JULY 11...	1410	.02	11	1500	420	19000	--	110	149	0
AUG. 29...	1650	554	14	140	29	840	--	8.5	191	0
SEP. 19...	1440	508	8.5	360	42	1500	--	6.9	116	0

DATE	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	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)
OCT. 05...	1600	7400	14300	2000	2000	43	22100	7.8	18.0
NOV. 12...	3100	31000	55200	4600	--	--	80000	--	22.0
DEC. 12...	3000	25000	45600	3100	3000	128	72800	7.7	12.5
JAN. 17...	2800	27000	49200	3900	3800	126	67500	7.7	18.0
FEB. 28...	3300	27000	48800	4100	4000	116	72700	7.7	19.5
MAR. 26...	2600	28000	49100	4100	4000	116	72700	7.8	24.0
APR. 17...	3300	31000	54400	5600	5400	105	79600	7.7	25.0
MAY 09...	1900	8300	16200	2400	2300	45	24100	7.8	21.0
JUNE 04...	710	1200	3140	890	730	11	4960	7.4	24.5
JULY 11...	3400	31000	55500	5500	5400	112	80800	7.6	35.0
AUG. 29...	410	1200	2740	470	310	17	4890	7.3	27.0
SEP. 19...	830	2300	5110	1100	980	20	8080	7.7	23.0

BRAZOS RIVER BASIN

08082000 SALT FORK BRAZOS RIVER NEAR ASPERMONT, TEX.--Continued

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

MONTH	DISCHARGE (FT ³ /S-DAY)	SPECIFIC CONDUCT- ANCE (MICRO- MHOS)	DIS- SOLVED SOLIDS (MG/L)	DIS- SOLVED SOLIDS (TONS)	DIS- SOLVED CHLORIDE (MG/L)	DIS- SOLVED CHLORIDE (TONS)	DIS- SOLVED SULFATE (MG/L)	DIS- SOLVED SULFATE (TONS)	HARDNESS (CA, MG) (MG/L)
OCT. 1973...	186.1	55300	36900	18500	20300	10200	2500	1260	--
NOV.....	102.68	60900	41000	11400	22600	6270	2740	760	--
DEC.....	80.9	76500	52700	11500	29200	6380	3370	736	--
JAN. 1974...	165.6	75500	51900	23200	28800	12900	3270	1460	--
FEB.....	101.8	74000	50500	13900	28000	7700	3210	882	--
MAR.....	154.9	66900	45300	18900	25000	10500	3000	1250	--
APR.....	347.31	51500	34100	32000	18700	17500	2370	2220	--
MAY.....	444.69	25700	16600	19900	8700	10400	1560	1870	--
JUNE.....	7542.10	5010	3060	62300	1340	27300	550	11200	590
JULY.....	.95	82000	57300	147	31900	82	3510	9.0	--
AUG.....	2641.88	11400	6930	49400	3380	24100	900	6420	--
SEP.....	7334.66	7820	4770	94500	2240	44400	710	14100	840
TOTAL.....	19103.57	--	--	356000	--	178000	--	42200	--
WTD. AVG....	52.3	10900	6900	--	3450	--	820	--	--

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	37800	72800	61700	79600	72600	76300	76300	17200	81600	80900	67900	5940
2	41100	72300	66700	76800	71200	80800	70800	25400	37600	80600	83500	4340
3	43400	70000	72200	78800	69700	83100	71800	23600	4860	80000	90200	5860
4	21000	68400	75000	94600	70700	80800	68200	27600	4790	66300	85100	7980
5	19700	70900	79800	84800	75100	80500	67100	20600	2370	79000	58300	10800
6	23200	72100	81700	77400	73200	84400	69100	22600	3280	81200	146000	14200
7	63100	78700	72900	78200	70000	79200	69300	21800	3250	86000	14300	16700
8	57400	78400	73900	75200	70200	73000	73800	27700	4160	86300	6170	19500
9	55900	81800	76400	77300	77100	75200	72200	23500	5070	82900	7310	22300
10	52800	83000	78900	74200	71300	68300	74100	29600	7560	88900	9370	25300
11	86900	80200	78900	73400	72100	64600	28000	34000	10000	90000	13100	28000
12	85200	80000	77200	82600	73200	63200	173000	38700	11400	86300	16900	34400
13	60500	81900	76400	80500	77400	62000	118000	43100	10100	88100	23100	38900
14	55700	83500	77300	69800	75400	60100	97200	47300	3900	88100	26900	42900
15	50400	80600	73400	72300	74000	62000	84200	51200	6680	88800	38900	43800
16	51700	80300	76400	70600	75600	64400	83500	53300	10500	88800	54100	15800
17	53900	78200	78700	71800	73500	69400	80600	62500	15100	90400	63700	48300
18	54700	75200	76200	72200	78800	68400	78500	64400	18500	89600	70000	26100
19	54300	74400	78400	70800	73200	65200	74300	64400	21300	90800	79100	8850
20	55100	81200	83900	74600	79700	68700	74400	70000	25500	91400	82800	11000
21	56100	80800	97200	92500	79400	65300	76400	71800	26900	92000	83100	8140
22	57800	81000	73700	80900	71800	81700	72900	73100	28800	92000	83500	5990
23	59400	80700	70900	73900	84000	88000	68900	76800	35100	90000	86200	10400
24	60800	31000	78100	68600	75000	75200	45100	79500	37700	90800	77700	6950
25	61200	70600	77200	68400	73100	74900	55300	77700	40400	90000	33000	5160
26	61000	54000	76100	70700	73900	73600	61000	77400	43800	90400	19100	4480
27	60400	57200	75000	72600	70300	75700	65800	77100	45200	87800	18200	5720
28	61800	58600	75800	71600	71600	81100	171000	79200	58100	89700	16400	7300
29	79200	62200	71800	69300	---	83400	47000	80100	65300	91600	7370	9950
30	75700	61700	77400	71700	---	85100	17900	82000	70200	88500	5910	12300
31	72500	---	77600	73900	---	78800	---	80400	---	87000	3330	---
MONTH	55800	72720	76350	75790	74040	73360	76190	52370	24630	86910	47440	16910

BRAZOS RIVER BASIN

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08082000 SALT FORK BRAZOS RIVER NEAR ASPERMONT, TEX.--Continued

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	30.0	21.0	15.0	3.0	16.0	20.0	17.0	24.0	18.0	28.0	29.0	24.0
2	31.0	19.0	18.0	0.0	15.0	21.0	16.0	17.0	20.0	27.0	21.0	20.0
3	32.0	11.0	12.0	4.0	15.0	23.0	12.0	16.0	19.0	28.0	19.0	15.0
4	21.0	20.0	11.0	5.0	15.0	20.0	8.0	17.0	16.0	30.0	24.0	16.0
5	18.0	12.0	12.0	7.0	16.0	19.0	14.0	16.0	18.0	30.0	22.0	16.0
6	25.0	15.0	11.0	7.0	10.0	20.0	9.0	16.0	21.0	28.0	21.0	25.0
7	29.0	23.0	11.0	11.0	7.0	18.0	20.0	17.0	21.0	27.0	21.0	16.0
8	30.0	17.0	14.0	18.0	9.0	20.0	16.0	20.0	25.0	27.0	29.0	---
9	29.0	12.0	12.0	3.0	4.0	21.0	13.0	21.0	19.0	22.0	28.0	23.0
10	27.0	15.0	11.0	3.0	15.0	14.0	20.0	26.0	27.0	29.0	23.0	20.0
11	23.0	15.0	14.0	5.0	16.0	20.0	11.0	26.0	31.0	28.0	23.0	27.0
12	23.0	22.0	15.0	5.0	18.0	21.0	16.0	---	20.0	26.0	21.0	22.0
13	20.0	23.0	12.0	10.0	17.0	19.0	21.0	20.0	22.0	28.0	29.0	18.0
14	---	20.0	11.0	14.0	18.0	11.0	21.0	19.0	22.0	32.0	25.0	16.0
15	21.0	15.0	4.0	15.0	18.0	20.0	25.0	20.0	30.0	31.0	25.0	20.0
16	25.0	12.0	10.0	15.0	19.0	19.0	14.0	26.0	25.0	31.0	31.0	19.0
17	26.0	24.0	12.0	16.0	19.0	25.0	13.0	27.0	30.0	29.0	23.0	20.0
18	26.0	20.0	14.0	13.0	12.0	23.0	16.0	30.0	32.0	32.0	27.0	20.0
19	27.0	19.0	3.0	13.0	10.0	22.0	17.0	23.0	32.0	30.0	23.0	21.0
20	25.0	11.0	8.0	15.0	18.0	14.0	18.0	20.0	30.0	---	24.0	22.0
21	24.0	15.0	10.0	17.0	9.0	12.0	17.0	19.0	32.0	30.0	21.0	17.0
22	25.0	---	10.0	12.0	10.0	13.0	17.0	25.0	31.0	33.0	20.0	16.0
23	26.0	---	10.0	8.0	10.0	9.0	12.0	20.0	25.0	23.0	31.0	15.0
24	25.0	15.0	6.0	12.0	11.0	13.0	16.0	21.0	23.0	25.0	21.0	14.0
25	26.0	12.0	---	14.0	8.0	18.0	17.0	20.0	27.0	25.0	23.0	13.0
26	26.0	15.0	---	14.0	5.0	23.0	16.0	---	30.0	32.0	24.0	21.0
27	21.0	11.0	10.0	15.0	18.0	14.0	19.0	22.0	18.0	25.0	24.0	20.0
28	22.0	14.0	12.0	14.0	21.0	15.0	21.0	21.0	---	26.0	21.0	15.0
29	23.0	15.0	12.0	15.0	---	23.0	18.0	21.0	---	25.0	23.0	19.0
30	19.0	16.0	11.0	15.0	---	11.0	20.0	23.0	25.0	21.0	23.0	16.0
31	22.0	---	5.0	16.0	---	19.0	---	21.0	---	22.0	23.0	---
MONTH	25.0	16.5	11.0	11.0	13.5	18.0	16.5	21.0	24.5	27.5	24.0	19.0

BRAZOS RIVER BASIN

08082100 STINKING CREEK NEAR ASPERMONT, TEX.

LOCATION.--Lat 33°14'00", long 100°12'47", Stonewall County, at gaging station at bridge on Farm Road 1263, 4.9 miles (7.9 km) upstream from Salt Fork Brazos River and 6.8 miles (10.9 km) north of Aspermont.

DRAINAGE AREA.--92.4 mi² (239.3 km²).

PERIOD OF RECORD.--Chemical analyses: October 1965 to September 1974.

Water temperatures: October 1965 to September 1969.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED SODIUM PLUS POTAS- SIUM (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HC03) (MG/L)	CAR- BONATE (C03) (MG/L)
OCT. 25...	1220	.28	.0	660	280	--	750	--	96	0
NOV. 27...	1230	.37	2.1	240	77	--	250	--	104	0
JAN. 10...	1540	.48	2.6	680	300	1200	--	18	155	0
FEB. 20...	1200	.29	.1	580	330	1400	--	19	128	0
MAR. 27...	1530	.15	.1	650	310	1100	--	17	109	0
MAY 09...	0830	.53	4.4	280	97	480	--	9.3	134	0
JUNE 12...	1530	.18	2.8	390	150	870	--	16	78	0
JULY 18...	1015	.02	3.7	770	330	1300	--	20	109	0
AUG. 28...	1025	1.7	5.4	160	30	120	--	6.2	56	0

DATE	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	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)
OCT. 25...	1500	1900	.4	5200	2800	2700	6.2	8660	7.1	19.0
NOV. 27...	590	540	.3	1750	930	840	3.5	2950	7.1	12.0
JAN. 10...	2400	2000	--	6680	2900	2800	9.6	9080	7.8	.0
FEB. 20...	2600	2200	--	7190	2800	2700	12	9520	7.8	11.0
MAR. 27...	2100	2200	--	6430	2900	2800	8.9	8930	7.5	22.0
MAY 09...	790	820	--	2550	1100	990	6.3	4010	7.5	22.5
JUNE 12...	1300	1500	--	4270	1600	1500	9.5	6430	7.0	27.0
JULY 18...	2500	2400	--	7380	3300	3200	9.9	9900	6.9	27.0
AUG. 28...	430	210	--	989	520	480	2.3	1590	6.8	24.0

BRAZOS RIVER BASIN

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08082180 NORTH CROTON CREEK NEAR KNOX CITY, TEX.

LOCATION.--Lat 33°22'59", long 100°04'51", Stonewall County, at gaging station 600 ft (183 m) downstream from Wedington Creek, 9.5 miles (15.3 km) upstream from Brazos River, and 15 miles (24 km) southwest of Knox City.

DRAINAGE AREA.--251 mi² (650 km²).

PERIOD OF RECORD.--Chemical analyses: October 1965 to September 1974.
Water temperatures: October 1965 to September 1974.

EXTREMES.--October 1973 to September 1974:

Specific conductance: Maximum daily, 33,700 micromhos Nov. 27; minimum daily, 1,840 micromhos Sept. 25.
Water temperatures: Minimum, freezing point on several days during December and January.

Period of record:

Specific conductance: Maximum daily, 47,400 micromhos Oct. 23, 1969; minimum daily, 1,060 micromhos Aug. 30, 1966.
Water temperatures: Maximum, 35.0°C June 14, 1972; minimum, freezing point on many days during winter months.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO ₂) (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 SODIUM PLUS POTAS- SIUM (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)
OCT.										
25...	0810	.75	1.6	800	280	3400	--	3.3	158	0
NOV.										
27...	0830	1.5	1.5	870	290	6600	--	42	116	0
DEC.										
31...	1415	.59	2.1	1000	340	--	4900	--	172	0
JAN.										
10...	1315	.67	5.1	970	330	4800	--	35	119	0
FEB.										
20...	0930	.36	.5	1000	360	4900	--	34	164	0
MAR.										
27...	1745	.29	1.1	1100	350	4400	--	35	166	0
APR.										
09...	1100	.19	1.5	1200	480	5000	--	47	164	0
MAY										
07...	1600	6.1	6.9	420	63	760	--	9.4	84	0
JUNE										
14...	0745	.67	3.9	960	260	3700	--	30	137	0
JULY										
05...	1000	.06	1.5	1200	380	4200	--	36	107	0
SEP.										
30...	1630	3.3	8.0	670	140	1600	--	19	140	0

DATE	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	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)
OCT.									
25...	2500	5500	12600	3200	3000	26	18300	7.5	15.0
NOV.									
27...	2300	11000	21200	3400	3300	50	32600	7.5	11.0
DEC.									
31...	2800	8200	17300	3900	3800	--	24800	7.5	3.0
JAN.									
10...	2600	8300	17100	3800	3700	34	25100	7.7	.0
FEB.									
20...	2800	8200	17400	4000	3800	34	25200	8.0	8.0
MAR.									
27...	2500	7800	16300	4200	4100	30	23000	7.8	26.0
APR.									
09...	3300	8800	18900	5000	4800	31	25900	7.5	13.0
MAY									
07...	1100	1300	3700	1300	1200	9.1	5620	7.4	28.5
JUNE									
14...	2600	6200	13800	3500	3400	27	19700	7.6	24.5
JULY									
05...	3100	7400	16400	4600	4500	27	23000	8.0	26.0
SEP.									
30...	1600	2500	6610	2300	2100	15	9900	8.0	23.0

BRAZOS RIVER BASIN

08082180 NORTH CROTON CREEK NEAR KNOX CITY, TEX.--Continued

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

MONTH	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCT- ANCE (MICRO- MHOS)	DIS- SOLVED SOLIDS (MG/L)	DIS- SOLVED SOLIDS (TONS)	DIS- SOLVED CHLORIDE (MG/L)	DIS- SOLVED CHLORIDE (TONS)	DIS- SOLVED SULFATE (MG/L)	DIS- SOLVED SULFATE (TONS)	HARDNESS (CA+MG) (MG/L)
OCT. 1973.....	38	17900	12000	1250	5600	585	2400	251	3200
NOV. 1973.....	39	18200	12000	1270	5700	601	2500	264	3300
DEC. 1973.....	21	21500	15000	858	6900	395	2700	154	3800
JAN. 1974.....	18	25600	17000	856	8500	428	3000	151	4400
FEB. 1974.....	11	25500	17000	526	8400	260	3000	92	4400
MAR. 1974.....	15	21700	15000	647	7000	302	2700	116	3800
APR. 1974.....	57	8700	6000	926	2100	324	1400	216	1800
MAY 1974.....	167	5580	3900	1770	1200	543	1100	498	1300
JUNE 1974.....	1103	5260	3600	10700	1100	3280	1100	3280	1200
JULY 1974.....	0.20	19300	13000	7.0	6100	3.3	2600	1.4	3400
AUG. 1974.....	4.7	21500	15000	190	6900	87	2700	34	3800
SEPT 1974.....	1783	2650	1900	9150	400	1930	790	3810	850
TOTAL	3262.9	**	**	28200	**	8740	**	8870	**
WTD.AVG.	8.9	4610	3200	**	990	**	1000	**	1100

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DE3. C) , WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11900	18500	17500	23900	26900	24500	24100	3470	26000	28000	---	11600
2	13000	19500	17300	25700	26500	24800	24900	5000	24800	28500	---	11900
3	14400	18200	17900	25400	26300	24200	24800	8680	5610	---	---	12500
4	14200	19000	18700	26000	26200	24400	25300	9620	4440	6500	---	---
5	14600	18800	18400	26200	25900	24500	25100	3950	5480	18000	---	---
6	11500	16400	18200	24400	25900	24800	25400	3770	8950	23200	---	---
7	13600	17900	20000	25400	25700	24500	26100	5300	11100	26000	---	---
8	15300	17600	20000	24800	26100	24200	26100	7170	13400	28000	---	---
9	16600	18200	20800	25600	25600	23800	26100	10700	15800	---	---	---
10	17200	18500	20600	24700	25400	23000	26500	13700	15800	---	---	---
11	16000	19000	20900	24100	24600	22600	9560	13600	17100	---	---	---
12	14500	20100	22400	23900	24500	17600	18300	16100	18200	---	---	---
13	32400	22300	22300	24300	25200	18200	18500	16600	19200	---	---	---
14	32600	22200	21500	25600	24700	18600	18000	18300	20000	---	---	---
15	19400	21800	21800	25700	24000	19500	17700	19500	21000	---	---	---
16	16700	22400	22400	26400	25200	21100	18300	20500	20800	---	---	2330
17	16900	23000	22600	26300	25400	21400	18200	21100	21500	---	---	7280
18	17000	22500	22100	25800	25300	22200	18000	21600	21700	---	---	5940
19	17000	22000	23700	26000	25400	23000	17700	22100	22300	---	---	3150
20	17500	22500	24500	26100	25400	23200	17400	22000	23100	---	---	3270
21	17800	22900	23100	26100	25300	22900	17500	22400	23700	---	---	3400
22	18100	22000	22800	26500	25700	22600	17100	23300	23600	---	---	3560
23	17000	21900	23700	26700	25400	22700	16800	23600	24100	---	---	7200
24	17600	10000	23800	26900	25700	22700	16600	24000	24600	---	3500	3100
25	18200	16800	22900	26200	25200	22400	16800	23900	24600	---	---	1840
26	17900	29400	22100	26100	25400	22400	17100	23900	25200	---	---	4210
27	17900	33700	23100	26000	25600	23300	17400	24500	25600	---	2960	5870
28	17500	26700	22900	26200	25000	23200	17700	25100	26600	---	2120	7280
29	17600	21100	24400	26100	---	23600	8000	26500	26600	---	9400	8490
30	18700	18000	24500	26100	---	23400	6000	29000	27500	---	23800	9900
31	18700	---	24800	26300	---	23300	---	27300	---	---	12500	---
MONTH	17400	20760	21670	25660	25480	22660	19240	17300	19610	---	---	---

BRAZOS RIVER BASIN

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08082180 NORTH CROTON CREEK NEAR KNOX CITY, TEX.--Continued

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	12.0	0.0	12.0	13.0	17.0	21.0	---	---	---	27.0
2	28.0	15.0	14.0	0.0	8.0	19.0	17.0	20.0	25.0	---	---	21.0
3	20.0	11.0	12.0	0.0	8.0	17.0	13.0	23.0	21.0	---	---	---
4	19.0	12.0	10.0	0.0	9.0	18.0	13.0	23.0	21.0	26.0	---	---
5	18.0	10.0	4.0	2.0	14.0	11.0	13.0	15.0	29.0	26.0	---	---
6	23.0	11.0	6.0	3.0	6.0	20.0	14.0	17.0	27.0	27.0	---	---
7	26.0	17.0	7.0	5.0	4.0	15.0	14.0	19.0	31.0	---	---	---
8	26.0	14.0	5.0	9.0	1.0	16.0	16.0	20.0	28.0	---	---	---
9	27.0	11.0	4.0	0.0	6.0	17.0	13.0	28.0	18.0	---	---	---
10	26.0	9.0	2.0	0.0	7.0	13.0	19.0	22.0	20.0	---	---	---
11	22.0	14.0	10.0	0.0	10.0	14.0	9.0	20.0	24.0	---	---	---
12	20.0	16.0	12.0	0.0	7.0	---	17.0	28.0	22.0	---	---	---
13	18.0	16.0	9.0	5.0	16.0	11.0	17.0	22.0	32.0	---	---	---
14	18.0	---	7.0	6.0	16.0	20.0	12.0	30.0	32.0	---	---	---
15	23.0	15.0	6.0	8.0	15.0	16.0	22.0	29.0	25.0	---	---	---
16	21.0	10.0	5.0	10.0	7.0	19.0	23.0	29.0	25.0	---	---	22.0
17	20.0	17.0	4.0	11.0	16.0	15.0	25.0	32.0	25.0	---	---	21.0
18	14.0	16.0	5.0	10.0	12.0	22.0	17.0	29.0	26.0	---	---	21.0
19	15.0	15.0	1.0	10.0	10.0	15.0	24.0	25.0	26.0	---	---	20.0
20	17.0	12.0	0.0	11.0	17.0	13.0	21.0	22.0	33.0	---	---	22.0
21	20.0	12.0	1.0	14.0	7.0	9.0	18.0	23.0	32.0	---	---	20.0
22	20.0	13.0	5.0	11.0	12.0	16.0	16.0	29.0	29.0	---	---	19.0
23	16.0	14.0	5.0	7.0	7.0	7.0	23.0	29.0	25.0	---	---	---
24	17.0	12.0	5.0	9.0	10.0	9.0	18.0	29.0	26.0	---	---	---
25	15.0	11.0	---	8.0	3.0	9.0	21.0	36.0	25.0	---	---	15.0
26	17.0	14.0	5.0	10.0	13.0	17.0	21.0	23.0	28.0	---	---	27.0
27	18.0	11.0	3.0	9.0	16.0	24.0	25.0	---	26.0	---	25.0	25.0
28	15.0	10.0	8.0	10.0	10.0	17.0	21.5	24.0	30.0	---	24.0	22.0
29	18.0	6.0	8.0	6.0	---	18.0	20.0	31.0	24.0	---	---	16.0
30	16.0	10.0	6.0	10.0	---	16.0	19.0	32.0	24.0	---	23.0	23.0
31	14.0	---	3.0	7.0	---	16.0	---	23.0	---	---	30.0	---
MONTH	19.5	12.5	6.0	6.0	10.0	15.5	18.0	25.0	26.0	---	---	---

08082500 BRAZOS RIVER AT SEYMOUR, TEX.

LOCATION.--Lat 33°34'51", long 99°16'02", Baylor County, at gaging station at bridge on U.S. Highways 277 and 283, 0.8 mile (1.3 km) upstream from Wichita Valley Railway bridge, and 1.0 mile (1.6 km) southwest of courthouse in Seymour.

DRAINAGE AREA.--14,490 mi² (37,530 km²), of which 9,240 mi² (23,930 km²) is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: August 1959 to September 1974.

Specific conductance: August 1959 to October 1974.

Water temperatures: August 1959 to October 1974.

EXTREMES.--October 1973 to September 1974:

Specific conductance: Maximum daily, 36,000 micromhos Mar. 18; minimum daily, 1,960 micromhos June 4.

Water temperatures: Minimum, 3.0°C Jan. 9, 12.

Period of record:

Specific conductance: Maximum daily, 80,400 micromhos May 24, 1971; minimum daily, 776 micromhos July 20, 1967.

Water temperatures (1959-72, 1973-74): Maximum, 37.0°C Aug. 6, 1959, Sept. 3, 1963; minimum, freezing point on many days during winter months.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED SODIUM PLUS POTAS- SIUM (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HC03) (MG/L)	CAR- BONATE (C03) (MG/L)
OCT. 16...	1210	58	8.4	450	120	2400	--	15	148	0
NOV. 20...	0920	15	6.8	510	150	2400	--	16	121	0
DEC. 31...	1500	7.0	5.7	560	170	--	3100	--	180	0
JAN. 02...	1045	4.8	11	530	170	2700	--	16	79	0
FEB. 05...	0950	16	1.4	580	180	3800	--	19	138	0
MAR. 13...	0910	22	6.4	200	87	930	--	11	178	2
APR. 16...	1020	9.1	.3	570	160	2700	--	17	124	0
MAY 28...	1015	1.8	4.7	650	220	3900	--	22	140	0
JUNE 19...	1600	48	12	510	95	2300	--	26	128	0
JULY 08...	1040	.12	8.6	530	130	2400	--	14	106	0
AUG. 12...	1045	58	11	500	71	2100	--	15	183	0
SEP. 16...	1140	140	5.6	170	34	730	--	5.0	86	0

DATE	DIS- SOLVED SULFATE (S04) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	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)
OCT. 16...	1300	3600	7970	1600	1500	26	12500	7.5	19.5
NOV. 20...	1700	3800	8640	1900	1800	24	13600	7.9	10.0
DEC. 31...	1800	4800	10500	2100	2000	--	16300	7.6	20.0
JAN. 02...	1700	4500	9670	2000	2000	26	16800	7.9	1.0
FEB. 05...	1900	6000	12500	2200	2100	35	19100	7.9	5.5
MAR. 13...	730	1400	3450	860	710	14	5580	8.4	9.0
APR. 16...	1700	4200	9410	2100	2000	26	14300	7.6	12.0
MAY 28...	2300	6000	13200	2500	2400	34	19800	7.6	22.0
JUNE 19...	1300	3600	7910	1700	1600	25	12300	7.6	33.0
JULY 08...	1600	3700	8430	1900	1800	24	12800	7.5	26.0
AUG. 12...	1400	3200	7390	1500	1400	23	12900	8.2	25.0
SEP. 16...	470	1100	2560	560	490	13	4410	7.6	20.0

BRAZOS RIVER BASIN

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08082500 BRAZOS RIVER AT SEYMOUR, TEX.--Continued

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

MONTH	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCT- ANCE (MICRO- MHOS)	DIS- SOLVED SOLIDS (MG/L)	DIS- SOLVED SOLIDS (TONS)	DIS- SOLVED CHLORIDE (MG/L)	DIS- SOLVED CHLORIDE (TONS)	DIS- SOLVED SULFATE (MG/L)	DIS- SOLVED SULFATE (TONS)	HARDNESS (CA+MG) (MG/L)
OCT. 1973.....	1144	13000	8500	26300	3800	11700	1400	4320	1800
NOV. 1973.....	767	10600	6800	14100	3000	6220	1200	2490	1500
DEC. 1973.....	529	14400	9400	13400	4200	6000	1500	2140	1900
JAN. 1974.....	360	17800	12000	11700	5300	5150	1800	1750	2200
FEB. 1974.....	302	19000	13000	10500	5700	4650	1900	1550	2300
MAR. 1974.....	748	12000	7800	15800	3400	6870	1300	2630	1700
APR. 1974.....	694	7420	4700	8810	1800	3370	900	1690	1100
MAY 1974.....	3211	8540	5400	46800	2300	19900	990	8580	1200
JUNE 1974.....	9413	5980	3800	96600	1400	35600	770	19600	1920
JULY 1974.....	10.6	18100	12000	343	5400	155	1800	51	2200
AUG. 1974.....	1378	9930	6400	23800	2800	10400	1100	4090	1400
SEPT 1974.....	22429	4140	2600	157000	950	57400	610	36800	680
TOTAL	40989	**	**	425000	**	167000	**	85700	**
WTD.AVG.	112	6040	3800	**	1500	**	780	**	910

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	10000	14000	9900	16700	20000	19600	21900	3650	20100	21000	---	5450
2	16600	14000	12400	17000	20200	19400	20000	22300	21000	21000	---	5040
3	18700	14100	11500	16500	19800	19200	22000	10600	8000	21000	---	4010
4	16200	13800	13900	16000	19300	19000	23000	7180	1960	19000	---	3590
5	13900	13700	14800	15000	19400	18700	23000	2130	9810	17000	---	3670
6	12800	13400	14900	14700	19400	18900	20000	4990	4670	20000	---	5230
7	11400	13200	14900	15200	19400	18500	22000	5190	3940	21000	---	4800
8	11800	13000	14900	15100	19400	15800	23000	6420	4240	22000	---	5500
9	12300	13000	14900	15600	19000	12000	23000	10700	4070	23000	---	6080
10	13100	12800	14900	15900	19000	6130	22000	13800	4050	---	4830	6820
11	12200	12900	14700	16100	19000	2580	10000	13400	4530	---	16300	7910
12	7270	12800	14900	16400	18900	4180	8000	7790	5270	---	11400	9000
13	10800	13000	14700	17100	18700	6790	7000	9000	6160	---	8860	9400
14	10500	13400	14800	15500	18600	11300	10000	10000	6870	---	6780	9600
15	10800	13600	14900	15200	18600	20900	12000	11000	7590	23000	9060	9810
16	12500	13900	14800	16000	18600	30000	14000	12000	9310	---	10500	3940
17	11800	13700	14800	17400	18900	33200	15000	13000	12500	---	11500	2410
18	15400	13500	14700	18100	18800	36000	16600	14000	14000	---	12000	6870
19	16000	13500	15000	17800	18500	33500	17000	15000	12500	---	13000	5230
20	15800	13500	15100	17800	18400	30000	18000	16000	10200	---	---	4680
21	18000	13600	14900	17400	18100	25000	19000	17000	9670	---	---	5220
22	16000	13600	15200	17600	17900	22100	20000	17500	10000	---	---	3090
23	17500	13300	15500	17900	18600	23300	21000	18000	11000	---	20000	9950
24	17100	8940	15600	18400	19400	23000	22000	18500	12000	---	20000	3460
25	16600	10400	15600	19700	19100	22600	22000	19000	13000	---	---	2400
26	15900	7890	15500	19500	19100	21900	22000	19000	14000	---	---	4760
27	13100	8600	15600	19500	19100	21100	9000	19700	15000	---	20000	2790
28	12700	8860	16000	19500	19000	20500	10000	20300	16000	---	25000	2630
29	14300	8220	16700	19500	---	21100	6330	21500	18000	---	4930	2750
30	14100	9020	17300	19700	---	21500	3920	21400	20000	---	7190	3140
31	14100	---	16300	20200	---	21200	---	20900	---	---	11500	---
MONTH	13920	12370	14830	17240	19010	19970	16760	13580	10310	---	---	5310

BRAZOS RIVER BASIN

08082500 BRAZOS RIVER AT SEYMOUR, TEX.--Continued

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	16.0	5.0	17.0	22.0	25.0	22.0	32.0	---	---	34.0
2	---	19.0	20.0	---	14.0	11.0	---	27.0	---	---	---	20.0
3	---	11.0	18.0	---	17.0	---	---	23.0	29.0	---	---	22.0
4	---	17.0	12.0	---	15.0	---	---	29.0	21.0	---	---	24.0
5	---	13.0	15.0	---	18.0	21.0	---	17.0	23.0	---	---	26.0
6	---	14.0	13.0	6.0	---	23.0	---	34.0	29.0	---	---	25.0
7	---	25.0	14.0	11.0	---	26.0	---	19.0	27.0	---	---	29.0
8	---	15.0	12.0	16.0	11.0	21.0	---	27.0	27.0	---	---	28.0
9	---	14.0	10.0	3.0	---	19.0	---	27.0	27.0	---	---	29.0
10	---	14.0	13.0	---	14.0	14.0	---	27.0	29.0	---	28.0	26.0
11	---	16.0	17.0	---	16.0	22.0	---	29.0	30.0	---	22.0	28.0
12	---	22.0	17.0	3.0	20.0	19.0	---	30.0	29.0	---	32.0	---
13	---	15.0	17.0	12.0	20.0	21.0	---	---	33.0	---	35.0	---
14	---	24.0	13.0	11.0	21.0	24.0	---	---	35.0	---	34.0	---
15	---	20.0	13.0	12.0	17.0	17.0	---	---	34.0	---	35.0	24.0
16	19.5	18.0	11.0	18.0	10.0	---	---	---	31.0	---	35.0	22.0
17	---	22.0	15.0	16.0	15.0	23.0	---	---	27.0	---	35.0	21.0
18	---	20.0	6.0	12.0	---	25.0	---	---	33.0	---	---	21.0
19	---	19.0	---	9.0	18.0	21.0	---	---	33.0	---	---	27.0
20	---	15.0	7.0	14.0	20.0	---	---	---	35.0	---	---	23.0
21	---	15.0	13.0	17.0	---	---	---	---	32.0	---	---	21.0
22	---	18.0	13.0	---	20.0	22.0	---	---	---	---	---	20.0
23	---	22.0	12.0	9.0	19.0	8.0	---	---	---	---	---	17.0
24	---	15.0	23.0	13.0	12.0	11.0	---	---	---	---	---	15.0
25	---	14.0	23.0	11.0	15.0	16.0	---	---	---	---	---	17.0
26	---	16.0	12.0	9.0	---	14.0	---	---	---	---	---	21.0
27	---	13.0	11.0	17.0	18.0	27.0	---	30.0	---	---	---	23.0
28	---	15.0	14.0	16.0	23.0	23.0	---	30.0	---	---	---	34.0
29	---	17.0	16.0	14.0	---	21.0	---	29.0	---	---	27.0	34.0
30	---	17.0	12.0	18.0	---	27.0	25.0	29.0	26.0	---	31.0	22.0
31	---	---	20.0	16.0	---	23.0	---	26.0	---	---	35.0	---
MONTH	---	17.0	14.5	---	17.0	20.0	---	---	---	---	---	24.0

BRAZOS RIVER BASIN

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08083000 BRAZOS RIVER NEAR GRAHAM, TEX.

LOCATION.--Lat 33°04'55", long 98°43'36", Young County, at bridge on Farm Road 209 and about 8 miles (13 km) southwest of Graham.

DRAINAGE AREA.--15,730 mi² (40,740 km²).

PERIOD OF RECORD.--Chemical analyses: October 1968 to September 1974.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTAN- TANEOUS 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 SODIUM PLUS POTAS- SIUM (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)
OCT. 31...	0955	37	6.6	420	120	--	1900	--	164	0
DEC. 04...	1345	48	6.2	390	87	--	1300	--	164	0
JAN. 16...	1030	27	2.6	390	140	2100	--	12	160	0
FEB. 26...	1520	17	2.0	550	180	2000	--	16	157	0
APR. 09...	1000	5.4	9.7	530	160	2600	--	16	226	0
MAY 20...	1710	56	7.9	400	92	1800	--	17	144	0
JULY 02...	0725	11	11	450	110	1900	--	21	124	0
AUG. 06...	1850	1.4	12	310	78	1200	--	11	150	0
SEP. 09...	1830	85	14	210	33	730	--	9.6	122	0

DATE	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	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)
OCT. 31...	1200	3100	.2	6790	1500	1400	--	10600	7.7	13.0
DEC. 04...	1200	2000	.1	5080	1300	1200	16	7860	7.5	12.0
JAN. 16...	1400	3300	--	7420	1600	1400	23	11900	7.8	4.5
FEB. 26...	140	4300	--	2770	2100	2000	19	13000	7.7	14.0
APR. 09...	1200	4600	--	9230	2000	1800	25	14000	7.7	11.0
MAY 20...	1100	3000	--	6490	1400	1300	21	10400	7.1	28.5
JULY 02...	1300	3100	--	6950	1600	1500	21	10700	7.5	23.0
AUG. 06...	860	2000	--	4550	1100	970	16	7290	7.7	26.0
SEP. 09...	510	1100	--	2670	660	560	12	4270	7.9	25.5

BRAZOS RIVER BASIN

08083240 CLEAR FORK BRAZOS RIVER AT HAWLEY, TEX.

LOCATION.--Lat 32°35'53", long 99°48'53", Jones County, at gaging station at bridge on U.S. Highways 83 and 277, 0.8 mile (1.3 km) south of Hawley, and 7.4 miles (11.9 km) upstream from Mulberry Creek.

DRAINAGE AREA.--1,390 mi² (3,600 km²).

PERIOD OF RECORD.--Chemical analyses: October 1967 to September 1974.

Water temperatures: October 1967 to September 1974.

EXTREMES.--October 1973 to September 1974:

Specific conductance: Maximum daily, 7,870 micromhos Apr. 25; minimum daily, 488 micromhos Aug. 6.

Water temperatures: Maximum, 29.0°C June 19, Aug. 14; minimum, freezing point Jan. 3, 4.

Period of record:

Specific conductance (1967-70, 1972-74): Maximum daily, 11,500 micromhos Oct. 5, 1969; minimum daily, 163 micromhos Sept. 11, 1969.

Water temperatures (1967-69, 1972-74): Maximum, 30.0°C June 14, 1968, June 22, 1969; minimum, freezing point Dec. 16, 1967, Jan. 3, 4, 1974.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	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 SODIUM PLUS POTAS- SIUM (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)
OCT. 16...	1435	15	13	340	130	550	--	7.3	152	0
NOV. 28...	0935	18	14	500	180	780	--	8.8	306	0
DEC. 26...	1755	14	10	460	170	--	730	--	246	0
JAN. 07...	1700	15	11	420	180	750	--	5.9	262	0
FEB. 19...	1500	12	4.0	480	170	730	--	7.0	263	0
MAR. 27...	0900	7.0	8.9	420	170	650	--	7.1	192	0
APR. 17...	1830	4.9	11	350	130	500	--	8.1	226	0
MAY 07...	0930	19	14	320	120	530	--	9.1	170	0
JUNE 11...	1530	2.0	14	370	140	370	--	8.7	264	0
JULY 15...	1450	.76	13	410	170	530	--	7.9	252	0
AUG. 06...	1955	1400	8.8	50	9.2	26	--	6.5	115	0
SEP. 30...	1000	50	13	200	89	260	--	6.3	225	0

DATE	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	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)	TEMPER- ATURE (DEG C)
OCT. 16...	1300	750	3200	1400	1300	6.4	4570	7.7	19.5
NOV. 28...	1900	1100	4630	2000	1700	7.6	6280	7.8	9.0
DEC. 26...	1800	980	4280	1900	1700	7.3	5960	7.6	10.0
JAN. 07...	1800	1000	4300	1800	1600	7.7	6050	7.6	9.0
FEB. 19...	1900	940	4360	1900	1700	7.3	5960	7.8	12.0
MAR. 27...	1700	830	3880	1700	1600	6.8	5430	7.9	14.0
APR. 17...	1200	780	3090	1400	1200	5.8	4520	7.5	20.0
MAY 07...	1300	740	3120	1300	1200	6.4	4320	8.0	20.5
JUNE 11...	1300	520	2850	1500	1300	4.2	3830	7.9	26.5
JULY 15...	1500	820	3580	1700	1500	5.6	4890	7.7	27.0
AUG. 06...	74	38	269	160	68	.9	490	7.5	23.0
SEP. 30...	590	350	1620	870	680	3.8	2620	8.1	18.0

BRAZOS RIVER BASIN

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08083240 CLEAR FORK BRAZOS RIVER AT HAWLEY, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TEMPERATURE (DEG C)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM	SUS. SED. SIEVE DIAM. % FINER THAN .250 MM
AUG.								
06...	0645	1120	21.0	1520	4600	97	99	100
06...	2000	1520	23.0	1500	6160	--	--	--
06...	2130	1580	23.0	1680	7170	91	96	99
08...	0925	1130	22.0	812	2480	--	--	--
09...	0830	72	24.0	986	192	100	--	--

DATE	SUS. SED. SIEVE DIAM. % FINER THAN .500 MM	SUS. SED. SIEVE DIAM. % FINER THAN 1.00 MM	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM
AUG.							
06...	--	--	63	74	83	94	95
06...	--	--	--	--	--	--	--
06...	99	100	42	72	78	89	90
08...	--	--	--	--	--	--	--
09...	--	--	62	88	94	97	98

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

MONTH	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCTANCE (MICRO-MHOS)	DIS-SOLVED SOLIDS (MG/L)	DIS-SOLVED SOLIDS (TONS)	DIS-SOLVED CHLORIDE (MG/L)	DIS-SOLVED CHLORIDE (TONS)	DIS-SOLVED SULFATE (MG/L)	DIS-SOLVED SULFATE (TONS)	HARDNESS (CA+MG) (MG/L)
OCT. 1973.....	477	4710	3400	4380	760	979	1400	1800	1500
NOV. 1973.....	419	5690	4100	4640	940	1060	1700	1920	1800
DEC. 1973.....	422	5780	4200	4790	960	1090	1800	2050	1400
JAN. 1974.....	432	5890	4300	5020	980	1140	1800	2100	1800
FEB. 1974.....	338	5790	4200	3830	960	876	1800	1640	1800
MAR. 1974.....	280	5590	4000	3030	920	697	1700	1290	1700
APR. 1974.....	277	5620	4100	3070	930	697	1700	1270	1800
MAY 1974.....	303	4170	3000	2460	660	541	1200	984	1300
JUNE 1974.....	76	3760	2000	540	590	123	1100	229	1200
JULY 1974.....	42	4490	3200	365	720	82	1300	148	1400
AUG. 1974.....	3870	959	580	6060	110	1150	230	2400	330
SEPT 1974.....	8399	879	530	12000	95	2150	200	4540	300
TOTAL	15339	**	**	50200	**	10600	**	20400	**
WTD.AVG.	42	1800	1200	**	260	**	490	**	540

BRAZOS RIVER BASIN

08083240 CLEAR FORK BRAZOS RIVER AT HAWLEY, TEX.--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	3700	4480	6740	5950	5770	5820	5250	4840	3810	4710	4460	3740
2	3870	4680	6520	5950	5870	5790	5290	4660	2820	4710	4450	3950
3	3920	4770	6330	5950	5810	5670	5180	4160	3460	4580	4540	4000
4	4090	4990	6160	5970	5810	5670	5040	3840	3610	4530	4510	4020
5	4120	5100	6010	5940	5840	5670	5060	3190	3580	4400	3280	4040
6	4180	5280	6000	5970	5820	5640	5170	3600	3670	4340	488	3980
7	4960	5240	5990	5970	5840	5640	5000	4700	3780	4320	1160	4130
8	6200	5510	5920	6010	5820	5560	5000	4890	3190	4220	772	4130
9	6850	5520	5960	5850	5870	5580	4820	4480	3440	4310	1180	3730
10	6550	5610	5800	5970	5820	5430	4970	4070	3820	4520	1490	3690
11	6470	5840	5710	6040	5850	5230	5140	4430	3450	4600	1680	3730
12	5990	5610	5700	6010	5890	5060	5620	4730	3600	4680	1830	4300
13	5250	5720	5440	5970	5890	5190	5700	4800	3480	4810	2000	4110
14	4700	5750	5230	5950	5840	5490	6080	3920	3530	4870	2240	3810
15	4850	5790	5190	5950	5830	5750	4220	3980	3910	4870	2610	3420
16	4570	5780	5240	5970	5860	5890	4440	3530	4010	4870	2510	2760
17	4410	5810	5160	5930	5860	5890	4550	3530	4180	4910	2620	3040
18	4160	5800	5050	5810	5880	5790	4460	3530	4390	4780	2730	1430
19	4300	5770	5110	5850	5860	5990	4620	3540	4430	4660	2830	659
20	4190	5820	5370	5810	5870	5710	4450	3600	4440	4740	2930	565
21	4080	5870	5510	5820	5530	5720	5000	3570	4390	4750	3030	646
22	3970	5870	5710	5770	5490	5670	3870	3710	4390	4420	3120	942
23	3830	5830	5800	5770	5490	5770	4910	3780	4400	4080	3250	1170
24	3670	5810	5930	5820	5730	5600	6550	3830	4440	4370	3200	1510
25	3670	5860	5950	5800	5710	5670	7870	3810	4410	4390	3240	850
26	3680	5850	5960	5820	5870	5600	7030	3840	4520	4360	3320	585
27	3930	6120	5980	5820	5730	5420	6520	3870	4280	4330	3230	1870
28	3920	6290	5980	5790	5820	5440	4820	3860	4660	4350	3060	2350
29	4180	6700	6000	5800	---	5400	4600	3850	4680	4370	2470	2270
30	4300	6750	5950	5770	---	5060	4770	3860	4710	4390	1890	2620
31	4450	---	5970	5810	---	5330	---	3870	---	4500	3490	---
MONTH	4550	5660	5790	5890	5800	5590	5200	4000	3980	4540	2700	2730

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	22.5	14.5	11.0	4.0	11.0	14.0	19.0	22.0	23.5	27.0	25.0	26.0
2	25.0	15.5	15.5	2.0	10.0	18.0	19.0	20.0	26.0	27.0	25.5	24.5
3	26.0	17.0	14.0	0.0	10.0	18.0	15.0	22.0	24.0	25.0	24.0	21.5
4	22.5	18.5	11.0	0.0	10.0	18.0	13.5	23.0	25.0	24.0	24.5	20.0
5	19.0	17.5	10.0	1.5	11.0	16.5	17.0	22.0	25.0	27.0	23.0	21.0
6	21.0	13.5	---	2.0	6.5	19.0	19.0	20.0	25.0	27.0	23.0	20.0
7	24.0	14.0	7.5	1.5	4.0	18.5	20.0	23.0	26.0	26.0	24.5	21.5
8	25.0	16.0	18.0	7.0	4.0	18.0	19.0	23.0	27.5	25.0	26.0	20.0
9	24.0	16.0	16.0	5.5	7.5	18.0	20.0	25.0	26.0	26.0	27.0	21.5
10	24.0	16.5	14.0	5.5	8.0	18.0	21.0	22.0	23.0	26.5	25.5	21.5
11	22.0	15.0	12.0	4.0	8.5	19.0	20.0	22.0	27.0	26.0	25.0	21.5
12	20.0	16.0	18.0	1.5	11.0	15.0	20.0	24.0	27.0	25.5	25.0	23.0
13	21.0	16.0	18.0	6.0	12.0	15.0	19.0	22.5	27.0	26.0	---	20.0
14	20.0	17.5	16.0	8.0	13.0	16.5	19.0	25.0	27.0	25.0	29.0	19.5
15	19.0	26.5	15.0	6.5	15.0	20.0	15.0	24.0	27.0	27.0	27.0	---
16	19.5	26.0	15.0	7.0	14.0	17.0	17.0	25.0	28.0	28.0	26.5	---
17	18.0	14.0	9.0	10.0	13.0	17.0	20.0	26.0	28.0	27.0	27.0	22.0
18	19.5	26.0	14.0	9.0	13.5	18.0	19.0	25.0	25.0	26.5	27.0	21.5
19	19.0	24.5	6.5	8.0	14.0	18.0	18.0	26.5	29.0	27.0	27.0	21.5
20	19.0	14.5	3.5	8.0	14.5	16.0	22.0	25.5	28.0	27.0	27.0	22.0
21	19.0	14.0	3.5	12.5	10.5	13.0	18.0	24.0	27.5	28.0	26.5	21.5
22	19.5	17.5	3.5	11.0	10.0	16.0	22.0	27.0	27.0	28.0	25.5	20.5
23	19.0	18.0	6.5	7.0	9.5	15.0	20.0	25.5	26.5	28.0	25.5	19.5
24	19.5	17.0	6.5	9.0	10.0	9.5	18.5	25.0	25.5	28.0	25.5	18.0
25	19.5	13.0	6.5	6.5	10.0	9.0	20.0	25.0	23.0	28.5	24.5	14.5
26	21.0	14.5	10.0	9.0	10.0	13.0	21.5	25.0	22.0	28.0	25.0	14.5
27	20.0	11.5	10.0	10.0	10.0	15.0	22.5	24.0	24.0	27.0	25.0	20.0
28	15.0	12.0	16.0	9.0	14.5	21.0	24.0	25.0	26.0	28.0	24.5	19.5
29	17.0	11.5	8.0	9.5	---	20.0	22.5	25.5	22.0	28.0	24.5	18.0
30	18.0	12.0	8.5	9.5	---	21.0	20.5	25.0	26.0	26.0	25.0	18.0
31	18.0	---	6.0	9.0	---	20.0	---	24.5	---	28.5	25.5	---
MONTH	20.5	16.5	11.0	6.5	10.5	17.0	19.5	24.0	26.0	27.0	25.5	20.5

BRAZOS RIVER BASIN

407

08083245 MULBERRY CREEK NEAR HAWLEY, TEX.

LOCATION.--Lat 32°34'04", long 99°47'32", Jones County, at gaging station on U.S. Highways 83 and 277, 3.3 miles (5.3 km) south of Hawley, and 7.0 miles (11.3 km) upstream from Clear Fork Brazos River.

DRAINAGE AREA.--205 mi² (531 km²).

PERIOD OF RECORD.--Chemical analyses: December 1967 to September 1974.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO ₂) (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 SODIUM PLUS POTAS- SIUM (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)
OCT. 16...	1530	.32	4.7	110	90	--	210	--	160	0
AUG. 07...	0940	90	10	51	18	38	--	5.6	130	0
08...	1030	13	11	46	15	31	--	6.5	116	0
09...	1000	2.5	11	43	17	36	--	7.1	110	0

DATE	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	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)
OCT. 16...	520	300	.0	1310	650	520	3.5	2100	7.6	23.5
AUG. 07...	75	70	--	332	200	95	1.2	632	7.7	24.0
08...	67	65	--	299	180	81	1.0	564	7.6	22.0
09...	71	69	--	308	180	87	1.2	577	7.8	23.0

BRAZOS RIVER BASIN

08084000 CLEAR FORK BRAZOS RIVER AT NUGENT, TEX.

LOCATION.--Lat 32°41'24", long 99°40'09", Jones County, at gaging station at bridge on Farm Road 600 at Nugent, 2 miles (3 km) downstream from Elm Creek, and 4 miles (6 km) upstream from Deadman Creek.

DRAINAGE AREA.--2,220 mi² (5,750 km²).

PERIOD OF RECORD.--Chemical analyses: August 1948 to September 1953.

Chemical and biochemical analyses: February 1968 to September 1974.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	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 SODIUM PLUS POTAS- SIUM (K) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)
OCT. 11...	1205	225	8.3	190	62	--	360	--	128	0
DEC. 07...	0915	13	14	460	170	820	--	8.0	278	0
JAN. 30...	1120	12	7.1	420	160	640	--	7.8	274	0
MAR. 06...	1530	13	4.6	400	160	600	--	8.3	246	0
JULY 22...	1400	.01	22	300	180	570	--	11	302	0
SEP. 10...	1045	2.6	10	220	83	300	--	8.5	223	0

DATE	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
OCT. 11...	700	480	.3	1.3	.00	.00	2.2	--	1.1	1870
DEC. 07...	1800	1100	--	5.4	.01	.03	.34	--	.02	4510
JAN. 30...	1500	870	--	6.0	.04	.03	.24	--	.03	3740
MAR. 06...	1500	810	--	3.3	.02	.19	.56	.75	.06	3610
JULY 22...	820	1200	--	.01	.00	.07	1.3	1.4	.18	3250
SEP. 10...	610	520	--	.00	.00	.14	.62	.76	.10	1860

DATE	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	BIO- CHEM- ICAL OXYGEN DEMAND (MG/L)
OCT. 11...	740	630	5.7	2850	7.7	19.5	7.4	80	3.9
DEC. 07...	1800	1600	8.3	6300	7.1	7.0	9.1	75	1.2
JAN. 30...	1700	1500	6.7	5390	7.3	8.0	11.5	97	3.3
MAR. 06...	1700	1500	6.4	4930	7.6	21.0	12.3	138	2.6
JULY 22...	1500	1200	6.4	4920	6.9	32.0	11.0	149	1.2
SEP. 10...	890	710	4.4	2940	7.8	23.0	12.2	140	2.9

BRAZOS RIVER BASIN

409

08084100 DEADMAN CREEK NEAR NUGENT, TEX.

LOCATION.--Lat 32°40'36", long 99°37'00", Jones County, at low-water crossing on county road, 3.2 miles (5.1 km) east of Nugent, and 4.4 miles (7.1 km) upstream from Clear Fork Brazos River.

DRAINAGE AREA.--168 mi² (435 km²).

PERIOD OF RECORD.--Chemical analyses: October 1967 to September 1970.
Chemical and biochemical analyses: October 1967 to September 1974.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTAN- TANEOUS DIS- CHANGE (CFS)	DIS- SOLVED SILICA (SiO ₂) (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 SODIUM PLUS POTAS- SIUM (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)
OCT. 11...	1230	90	13	39	26	--	190	--	183	0
DEC. 07...	0945	12	14	56	35	220	--	17	198	0
JAN. 30...	1200	14	13	51	33	240	--	20	197	0
MAR. 06...	1430	8.2	4.8	59	42	270	--	19	227	0
JULY 22...	1500	.30	14	49	36	340	--	15	174	41
SEP. 10...	1145	9.5	--	--	--	--	--	--	--	--

DATE	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITU- ENTS) (MG/L)
OCT. 11...	160	210	.5	1.6	.11	.97	1.7	--	7.8	742
DEC. 07...	210	280	--	5.3	.11	1.0	1.8	--	8.4	930
JAN. 30...	210	280	--	2.5	.01	8.2	2.4	--	12	944
MAR. 06...	280	330	--	3.1	.02	9.3	.00	5.7	13	1120
JULY 22...	290	370	--	.11	.04	.71	1.3	2.0	1.4	1240
SEP. 10...	--	--	--	3.5	.29	.85	2.5	3.3	.32	--

DATE	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	BIO- CHEM- ICAL OXYGEN DEMAND (MG/L)
OCT. 11...	200	54	5.8	1310	7.8	22.0	5.2	59	9.9
DEC. 07...	280	120	5.7	1660	6.8	7.0	8.0	66	6.1
JAN. 30...	260	100	6.4	1730	8.1	8.5	11.8	100	17
MAR. 06...	320	130	6.6	1950	7.8	22.0	12.8	147	31
JULY 22...	270	59	9.0	2120	8.8	35.5	9.4	134	>2.7
SEP. 10...	--	--	--	--	6.4	24.0	13.8	162	6.0

BRAZOS RIVER BASIN

08084800 CALIFORNIA CREEK NEAR STAMFORD, TEX.

LOCATION.--Lat 32°55'51", long 99°38'32", Junes County, at gaging station at bridge on Farm Road 142, 9 miles (14 km) east of Stamford, and 17 miles (27 km) upstream from Paint Creek.

DRAINAGE AREA.--465 mi² (1,204 km²).

PERIOD OF RECORD.--Chemical analyses: October 1962 to September 1974.
Water temperatures: October 1962 to September 1974.

EXTREMES.--October 1973 to September 1974:

Specific conductance: Maximum daily, 9,570 micromhos Apr. 15, July 11; minimum daily, 218 micromhos Sept. 20.
Water temperatures: Maximum, 35.0°C July 23, Aug. 15, 20; minimum, 1.0°C Jan. 3.

Period of record:

Specific conductance: Maximum daily, 46,400 micromhos Sept. 16, 1970; minimum daily, 218 micromhos Sept. 20, 1974.
Water temperatures: Maximum, 37.0°C July 4, 6, 16, 1965, July 5, 1968; minimum, freezing point on several days during winter months.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	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 SODIUM PLUS POTAS- SIUM (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)
OCT. 11...	1530	2.7	5.0	260	290	--	460	--	221	0
NOV. 01...	1710	.74	4.4	330	300	790	--	11	238	0
DEC. 05...	1540	1.6	1.4	420	430	850	--	11	312	0
JAN. 16...	1540	1.8	2.3	470	460	930	--	9.1	277	0
FEB. 27...	1440	1.4	1.5	450	470	1000	--	13	278	0
MAR. 20...	1315	.90	7.3	470	470	980	--	9.2	270	0
APR. 16...	1610	2.4	1.5	440	540	1200	--	13	226	0
MAY 28...	1515	.16	5.2	290	340	750	--	14	206	0
JUNE 04...	1430	8.8	6.0	170	130	380	--	8.1	109	0
JULY 08...	1530	.34	3.2	350	440	970	--	14	182	0
AUG. 12...	1520	.18	11	150	290	680	--	6.8	334	0
SEP. 19...	1305	259	8.8	32	8.7	20	--	3.4	90	0

DATE	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	HARU- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARU- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)
OCT. 11...	1400	840	3390	1800	1700	4.7	5170	7.4	25.0
NOV. 01...	2100	1000	4650	2100	1900	7.6	6650	7.6	17.5
DEC. 05...	2600	1200	5670	2800	2600	7.0	7650	7.8	11.0
JAN. 16...	2900	1300	6210	3100	2800	7.3	8030	7.8	9.5
FEB. 27...	3100	1300	6470	3100	2800	7.9	8190	7.7	12.0
MAR. 20...	3000	1300	6370	3100	2900	7.7	8150	7.6	16.0
APR. 16...	3400	1700	7410	3300	3100	9.1	9490	7.6	21.5
MAY 28...	1900	1100	4500	2100	2000	7.1	6330	7.6	29.0
JUNE 04...	820	570	2140	960	870	5.3	3320	7.2	25.0
JULY 08...	2500	1500	5870	2700	2500	8.1	7790	7.8	29.0
AUG. 12...	1300	960	3560	1600	1300	7.5	5440	7.9	31.5
SEP. 19...	46	28	191	120	42	.8	360	7.4	23.0

BRAZOS RIVER BASIN

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08084800 CALIFORNIA CREEK NEAR STAMFORD, TEX.--Continued

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

MONTH	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCT- ANCE (MICRO- MHOS)	DIS- SOLVED SOLIDS (MG/L)	DIS- SOLVED SOLIDS (TONS)	DIS- SOLVED CHLORIDE (MG/L)	DIS- SOLVED CHLORIDE (TONS)	DIS- SOLVED SULFATE (MG/L)	DIS- SOLVED SULFATE (TONS)	HARONNESS (CA+MG) (MG/L)
OCT. 1973.....	43	5570	4000	470	980	115	1600	188	1900
NOV. 1973.....	37	7500	5700	583	1300	133	2500	256	2700
DEC. 1973.....	48	7750	5900	766	1400	182	2600	338	2800
JAN. 1974.....	51	7820	5900	816	1400	194	2700	373	2800
FEB. 1974.....	44	7810	5900	705	1400	167	2600	311	2800
MAR. 1974.....	54	8130	6200	908	1400	205	2800	410	2900
APR. 1974.....	209	3220	2100	1190	570	323	760	430	950
MAY 1974.....	68	3970	2700	501	700	130	960	178	1200
JUNE 1974.....	15	4260	2900	123	750	31	1000	42	1300
JULY 1974.....	3.1	7380	5600	46	1300	10	2400	20	2600
AUG. 1974.....	48	3030	2000	261	540	70	710	92	890
SEPT 1974.....	5047	465	82	1120	82	1120	37	504	110
TOTAL	5671.1	**	**	7490	**	2680	**	3140	**
WTD.AVG.	15	990	490	**	170	**	210	**	290

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	4350	6560	7550	7600	7760	8020	8460	3370	6290	5550	6210	1630
2	4480	6720	7550	7800	7640	8070	8350	3000	6140	5460	6140	2010
3	4590	6960	7470	8130	7620	8120	8310	5220	5710	5440	6110	2180
4	4650	7120	7540	8180	7590	8180	8450	5380	2260	5330	5930	2390
5	4680	7170	7470	8200	7620	8180	8420	2810	6350	5250	5910	2440
6	4880	7260	7600	8010	7620	8110	8420	4410	3330	5240	5640	2540
7	5220	7380	7810	7950	7700	8080	8710	5570	4510	5230	5480	2600
8	5490	7490	7810	8010	7750	8080	8860	4390	5850	7860	5410	2660
9	5440	7630	7660	7850	7790	8080	8860	3780	6110	8670	5480	2760
10	5360	7720	7780	7880	7700	7780	8600	3980	5610	9440	5480	2840
11	5170	7650	7660	7980	7620	8090	8420	4180	5410	9570	5440	2870
12	4400	7690	7680	7900	7650	8020	8820	4410	5500	9480	5430	3030
13	4840	7740	7750	7820	7650	8110	8740	4540	5710	9440	5400	3130
14	4940	7670	7870	7790	7740	8080	9220	4710	5980	9270	5340	3210
15	5780	7610	7840	7680	7740	8050	9570	4980	6160	9100	5310	3290
16	6710	7550	7840	7850	7870	8110	9440	5280	6210	8820	5280	3750
17	7000	7530	7870	7790	7930	8180	9350	5390	6250	8570	5240	1180
18	6860	7580	7870	7850	7890	8150	8940	5600	6250	8320	5230	500
19	7070	7580	7900	7680	7860	8150	8900	5690	6280	8090	5220	350
20	7080	7570	7920	7680	7860	8150	8910	5870	6320	7870	5220	218
21	6690	7590	8100	7650	7860	8180	8870	5980	6290	7690	5190	370
22	5960	7700	7890	7680	7920	8310	3500	6060	6270	7480	5200	672
23	5530	7830	7830	7620	7920	8310	1720	6160	6250	7320	5150	908
24	5310	7520	7920	7620	7920	8280	1870	6210	6140	7190	5120	600
25	5210	7460	7600	7710	7980	8280	2150	6250	6060	7060	5080	380
26	5350	7410	7920	7650	8050	8310	2400	6210	5980	6880	5020	670
27	5430	7630	7860	7680	8080	8240	2540	6330	5860	6660	5020	950
28	5530	7550	7860	7650	7950	8180	2780	6410	5740	6560	5050	1380
29	5790	7490	7850	7650	---	8190	3030	6370	5670	6460	5020	1730
30	6060	7550	7790	7680	---	8420	3220	6350	5570	6340	3500	2180
31	6430	---	7480	7710	---	8220	---	6330	---	6290	2850	---
MONTH	5560	7460	7760	7800	7800	8150	6930	5200	5740	7350	5260	1850

BRAZOS RIVER BASIN

08084800 CALIFORNIA CREEK NEAR STAMFORD, TEX.--Continued

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	25.0	17.0	14.0	4.0	12.0	14.0	21.0	24.0	19.0	32.0	22.0	25.0
2	27.0	16.0	15.0	---	10.0	---	17.0	21.0	25.0	31.0	30.0	25.0
3	23.0	16.0	15.0	1.0	10.0	17.0	18.0	24.0	23.0	30.0	28.0	21.0
4	21.0	16.0	13.0	---	12.0	17.0	13.0	24.0	20.0	25.0	23.0	22.0
5	19.0	12.0	12.0	4.0	10.0	15.0	14.0	21.0	27.0	27.0	24.0	23.0
6	18.0	---	---	4.0	8.0	16.0	16.0	17.0	32.0	---	25.0	21.0
7	23.0	13.0	10.0	5.0	5.0	19.0	19.0	27.0	30.0	31.0	23.0	26.0
8	27.0	20.0	12.0	9.0	---	17.0	17.0	28.0	31.0	28.0	30.0	19.0
9	27.0	13.0	10.0	4.0	8.0	19.0	15.0	28.0	28.0	29.0	31.0	27.0
10	25.0	13.0	5.0	3.0	10.0	16.0	---	---	26.0	31.0	25.0	22.0
11	25.0	14.0	7.0	2.0	8.0	21.0	18.0	22.0	29.0	30.0	23.0	23.0
12	18.0	15.0	10.0	---	15.0	19.0	17.0	27.0	28.0	28.0	32.0	25.0
13	20.0	20.0	11.0	6.0	14.0	16.0	21.0	26.0	26.0	32.0	32.0	18.0
14	22.0	17.0	8.0	10.0	14.0	---	18.0	27.0	29.0	25.0	33.0	16.0
15	23.0	18.0	9.0	7.0	11.0	17.0	15.0	30.0	30.0	27.0	35.0	18.0
16	22.0	15.0	9.0	8.0	12.0	15.0	22.0	31.0	30.0	30.0	---	21.0
17	23.0	17.0	11.0	14.0	16.0	24.0	17.0	30.0	28.0	31.0	25.0	22.0
18	23.0	19.0	10.0	10.0	12.0	16.0	23.0	30.0	31.0	30.0	26.0	21.0
19	18.0	18.0	---	12.0	11.0	20.0	24.0	25.0	28.0	33.0	34.0	25.0
20	20.0	15.0	3.0	7.0	---	16.0	20.0	28.0	32.0	28.0	35.0	24.0
21	21.0	12.0	7.0	15.0	9.0	15.0	20.0	29.0	31.0	32.0	34.0	22.0
22	23.0	---	8.0	9.0	8.0	19.0	23.0	30.0	30.0	34.0	30.0	22.0
23	22.0	19.0	9.0	8.0	12.0	10.0	24.0	28.0	27.0	35.0	28.0	16.0
24	22.0	16.0	7.0	17.0	5.0	7.0	20.0	27.0	28.0	27.0	---	16.0
25	23.0	11.0	9.0	6.0	6.0	8.0	23.0	28.0	22.0	27.0	24.0	15.0
26	23.0	13.0	7.0	7.0	11.0	18.0	25.0	25.0	24.0	27.0	26.0	19.0
27	---	14.0	8.0	11.0	12.0	14.0	22.0	24.0	32.0	32.0	25.0	24.0
28	19.0	11.0	6.0	8.0	11.0	22.0	21.0	30.0	30.0	---	28.0	19.0
29	18.0	9.0	9.0	8.0	---	18.0	21.0	25.0	31.0	27.0	27.0	19.0
30	16.0	10.0	11.0	12.0	---	24.0	21.0	26.0	30.0	24.0	24.0	22.0
31	18.0	---	5.0	10.0	---	20.0	---	24.0	---	25.0	24.0	---
MONTH	22.0	15.0	9.5	8.0	10.5	17.0	19.5	26.0	28.0	29.0	28.0	21.5

BRAZOS RIVER BASIN

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08085500 CLEAR FORK BRAZOS RIVER AT FORT GRIFFIN, TEX.

LOCATION.--Lat 32°56'04", Long 99°13'27", Shackelford County, at gaging station at bridge on old Fort Griffin-Throckmorton Road, 0.5 mile (0.8 km) northeast of Fort Griffin, 5,100 ft (1,550 m) upstream from bridge on U.S. Highway 283, and 1.3 miles (2.1 km) upstream from Mill Creek.

DRAINAGE AREA.--3,974 mi² (10,293 km²).

PERIOD OF RECORD.--Chemical analyses: November 1949 to September 1951, November 1967 to September 1974.

Water temperatures: November 1949 to September 1951, November 1967 to September 1974.

Sediment records: November 1949 to September 1951.

EXTREMES.--October 1973 to September 1974:

Specific conductance: Maximum daily, 5,970 micromhos June 16; minimum daily, 350 micromhos Sept. 22.

Water temperatures: Maximum, 31.0°C June 16; minimum, freezing point on several days during January.

Period of record:

Specific conductance (1949-51, 1967-70, 1971-74): Maximum daily, 6,680 micromhos May 11, 1972; minimum daily, 204 micromhos July 27, 1950.

Water temperatures (1967-70, 1971-74): Maximum, 34.0°C June 14, 1969, June 28, 1972; minimum, freezing point on several days during January 1969 and 1974.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part I of this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED SODIUM PLUS POTAS- SIUM (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)
OCT. 03...	1730	23	8.7	120	49	200	--	9.3	220	0
NOV. 13...	1700	22	6.0	190	95	--	140	--	230	0
DEC. 05...	1120	24	9.6	230	82	320	--	11	249	0
JAN. 14...	1445	17	4.4	240	110	440	--	13	233	0
FEB. 27...	1155	25	.9	250	120	510	--	10	175	0
MAR. 27...	1900	22	1.5	240	120	500	--	13	239	0
APR. 17...	1010	1.9	1.7	300	150	590	--	14	290	0
MAY 29...	0925	.08	1.9	320	200	650	--	15	295	0
AUG. 13...	0945	52	8.9	110	22	100	--	8.1	94	0
SEP. 20...	1205	5740	10	45	7.2	19	--	4.2	144	0

DATE	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	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)
OCT. 03...	350	290	.4	1140	500	320	4.0	1860	8.1	16.5
NOV. 13...	410	400	.4	1350	860	670	2.1	2550	8.1	15.5
DEC. 05...	640	540	--	1960	910	710	4.6	3080	8.2	10.5
JAN. 14...	850	640	--	2410	1100	860	5.9	3680	7.9	4.5
FEB. 27...	1100	740	--	2820	1100	970	6.6	4180	7.9	9.5
MAR. 27...	930	660	--	2580	1100	900	6.6	3910	7.6	26.5
APR. 17...	1200	840	--	3240	1400	1100	6.9	4680	7.9	16.0
MAY 29...	1500	960	--	3790	1600	1400	7.0	7270	7.8	24.0
AUG. 13...	280	150	--	725	370	290	2.3	1220	7.8	28.0
SEP. 20...	39	29	--	224	140	24	.7	398	7.1	21.5

BRAZOS RIVER BASIN

08085500 CLEAR FORK BRAZOS RIVER AT FORT GRIFFIN, TEX.--Continued

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

MONTH	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCTANCE (MICRO- MHOS)	DIS- SOLVED SOLIDS (MG/L)	DIS- SOLVED SOLIDS (TONS)	DIS- SOLVED CHLORIDE (MG/L)	DIS- SOLVED CHLORIDE (TONS)	DIS- SOLVED SULFATE (MG/L)	DIS- SOLVED SULFATE (TONS)	HARDNESS (CA+MG) (MG/L)
OCT. 1973.....	1481	1660	970	3880	270	1080	280	1120	480
NOV. 1973.....	716	2230	1400	2710	380	735	380	735	650
DEC. 1973.....	662	2950	1900	3400	510	912	600	1070	860
JAN. 1974.....	541	3610	2400	3510	640	935	830	1210	1000
FEB. 1974.....	554	4270	2900	4340	760	1140	1100	1650	1200
MAR. 1974.....	717	4290	2900	5610	760	1470	1100	2130	1200
APR. 1974.....	461	4490	3100	3860	800	997	1100	1370	1300
MAY 1974.....	330	4970	3400	3040	890	795	1300	1160	1400
JUNE 1974.....	2.3	5210	3600	22	940	5.9	1400	8.8	1500
JULY 1974.....	0	--	--	0	--	0	--	0	--
AUG. 1974.....	2595	1810	1100	7710	300	2100	300	2100	530
SEPT 1974.....	30753	461	88	7310	42	3490	57	4730	130
TOTAL	38814	**	**	45400	**	13700	**	17300	**
WTD.AVG.	116	928	430	**	130	**	160	**	260

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	644	1840	1980	2000	3990	4120	4210	3850	5500	---	---	1390
2	848	1830	2140	2120	4070	4280	4200	3820	4640	---	---	1440
3	1860	1870	2420	2960	4060	4370	4340	3840	4940	---	---	1480
4	1030	1910	2810	3040	4200	4480	4360	3850	5310	---	---	1530
5	939	2010	3050	3160	4300	4490	4450	3910	5370	---	---	1550
6	787	2160	3240	3140	4430	4560	4450	4290	5370	---	---	1580
7	1140	2260	3380	3100	4470	4560	4450	5800	5370	---	---	1630
8	1160	2370	3400	3270	4510	4580	4580	5780	5380	---	5750	---
9	1090	2460	3400	3320	4520	4630	4570	5620	5440	---	1180	---
10	1350	2480	3410	3360	4540	4620	4620	5310	5540	---	702	---
11	1430	2480	3360	3440	4500	4630	4570	5300	5650	---	1010	---
12	1350	2490	3350	3540	4530	4600	4630	5190	5710	---	1160	---
13	2040	2550	3310	3580	4520	4590	4650	5220	5670	---	1210	---
14	1680	2560	3270	3640	4510	4550	4700	5190	5830	---	1230	---
15	1670	2490	3250	3630	4490	4510	4720	5160	5800	---	1230	---
16	1760	2500	3220	3690	4510	4530	4700	5230	5970	---	1250	1600
17	2040	2430	3180	3720	4500	4380	4720	5230	---	---	1250	1190
18	2090	2420	3130	3750	4490	4280	4720	5230	---	---	1250	1060
19	2090	2390	3100	3750	4460	4180	4720	5230	---	---	1260	600
20	2110	2370	3040	3740	4370	4110	4800	5240	---	---	1270	433
21	2080	2340	3010	3750	4150	4010	4710	5240	---	---	1280	386
22	2040	2290	2950	3810	4140	3960	4780	5260	---	---	1290	350
23	2050	2320	2950	3860	4120	3980	4920	5260	---	---	1290	400
24	2050	2170	2910	3940	4050	3910	4630	5300	---	---	1290	450
25	2050	2110	1910	4000	4050	3900	4450	5260	---	---	1290	500
26	2070	2070	2860	3990	4160	3900	4420	5270	---	---	1300	500
27	2090	1980	2810	3970	4070	3910	4420	5270	---	---	1300	400
28	2020	1840	2790	3950	4060	3960	4320	5330	---	---	1300	500
29	2000	1850	2780	3940	---	3960	4320	5340	---	---	1310	600
30	1930	1850	2770	3930	---	3990	4340	5370	---	---	1320	700
31	1880	---	2770	3970	---	4100	---	5400	---	---	1390	---
MONTH	1660	2220	2970	3520	4310	4280	4550	5050	---	---	---	---

BRAZOS RIVER BASIN

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08085500 CLEAR FORK BRAZOS RIVER AT FORT GRIFFIN, TEX.--Continued

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	23.0	16.5	13.0	3.5	12.0	13.0	21.0	20.5	23.0	---	---	30.0
2	24.0	15.0	13.0	3.5	7.0	14.5	18.0	22.0	28.0	---	---	23.0
3	16.5	14.5	11.5	0.5	8.5	15.5	18.5	20.5	23.5	---	---	20.0
4	23.0	16.0	11.5	0.0	10.5	19.0	16.0	19.0	26.5	---	---	23.5
5	21.0	14.0	---	0.0	10.5	17.0	19.0	21.0	30.5	---	---	---
6	20.0	13.5	9.5	0.0	8.5	18.5	15.5	20.0	30.5	---	---	---
7	20.5	16.0	10.0	1.0	6.5	18.5	13.0	21.5	29.5	---	---	---
8	24.0	15.0	6.5	8.5	7.0	19.0	15.5	23.0	26.5	---	26.0	---
9	24.5	14.0	8.5	3.5	6.5	18.5	15.5	23.0	20.0	---	25.0	---
10	24.5	14.0	6.0	2.0	6.0	18.0	21.0	26.0	20.0	---	24.5	---
11	21.0	14.0	8.5	0.0	11.0	18.0	16.5	21.0	21.0	---	24.0	---
12	20.0	15.0	7.0	0.0	8.0	17.0	16.0	23.5	28.5	---	25.5	---
13	20.5	15.5	10.0	0.0	9.5	15.5	20.5	25.0	23.5	---	25.5	---
14	21.0	19.0	9.0	3.5	13.5	18.0	15.5	24.0	22.0	---	27.0	---
15	20.0	15.5	7.0	4.0	10.0	20.0	23.0	26.5	24.0	---	28.0	---
16	20.0	14.0	7.0	7.0	12.0	15.5	16.0	25.0	31.0	---	28.0	20.5
17	20.5	---	9.0	6.5	11.5	19.5	19.5	27.0	---	---	28.5	20.5
18	20.0	16.5	9.0	7.0	12.0	19.0	15.5	25.0	---	---	28.5	20.5
19	18.0	---	5.0	6.5	13.0	17.0	18.5	25.5	---	---	30.5	21.0
20	20.0	14.5	4.0	6.0	14.0	16.0	19.5	25.0	---	---	28.0	22.0
21	19.5	13.0	4.0	7.0	4.5	15.0	20.0	25.0	---	---	28.0	20.0
22	18.5	14.0	6.0	8.0	6.0	14.0	24.5	24.5	---	---	23.0	---
23	19.5	16.0	6.0	7.0	9.0	10.0	19.0	25.0	---	---	25.5	---
24	19.5	15.0	5.5	9.0	9.0	9.5	22.0	25.5	---	---	26.5	---
25	18.5	14.5	6.0	8.0	8.5	10.0	20.5	24.0	---	---	25.5	---
26	20.5	15.0	6.0	9.5	8.5	11.0	23.0	23.0	---	---	26.5	---
27	17.0	13.0	6.5	10.0	13.0	26.5	22.0	21.0	---	---	25.0	---
28	15.5	13.5	7.0	7.0	11.0	20.0	21.0	23.0	---	---	24.0	---
29	15.5	11.5	6.0	---	---	16.5	24.5	24.0	---	---	24.5	---
30	16.5	12.0	6.5	10.0	---	14.5	21.0	30.0	---	---	24.0	---
31	---	---	4.5	8.5	---	18.5	---	23.5	---	---	25.0	---
MONTH	20.0	14.5	7.5	5.0	9.5	16.5	19.0	23.5	---	---	---	---

BRAZOS RIVER BASIN

08086050 DEEP CREEK AT MORAN, TEX.

LOCATION.--Lat 32°33'33", long 99°10'11", Shackelford County, at gaging station at bridge on U.S. Highway 380, 0.8 mile (1.3 km) north of Moran, 2.3 miles (3.7 km) upstream from Post Oak Creek, and 10.8 miles (17.4 km) upstream from Hubbard Creek.

DRAINAGE AREA.--235 mi² (609 km²).

PERIOD OF RECORD.--Chemical analyses: October 1962 to September 1974.
Water temperatures: October 1962 to September 1974.

EXTREMES.--October 1973 to September 1974:

Specific conductance: Maximum daily, 9,410 micromhos Mar. 29; minimum daily, 215 micromhos Oct. 13.

Water temperatures: Maximum, 30.0°C Aug. 13-15; minimum, 1.0°C Jan. 2, 11.

Period of record:

Specific conductance: Maximum daily, 12,900 micromhos Apr. 15, 1971; minimum daily, 215 micromhos Oct. 13, 1973.

Water temperatures (1964-74): Maximum, 37.0°C June 20, 1972; minimum, freezing point Dec. 26, 1966.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report. Conductivity is recorded continuously at this station.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	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 SODIUM PLUS POTAS- SIUM (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAH- BONATE (CO ₃) (MG/L)
OCT. 17...	1530	.46	7.0	36	7.6	29	--	4.1	100	0
NOV. 04...	1700	.27	6.2	68	18	--	100	--	136	0
DEC. 14...	1745	.06	.0	96	36	--	220	--	72	0
JAN. 15...	2000	.07	.6	330	160	1000	--	6.7	148	0
FEB. 13...	1445	.13	.2	470	200	1200	--	6.4	156	0
MAR. 27...	1845	.07	.1	500	240	1300	--	9.5	132	0
MAY 02...	1430	.22	7.1	79	23	110	--	6.1	143	0
AUG. 31...	1615	12	7.1	32	4.0	18	--	3.9	102	0
SEP. 17...	1240	76	6.8	31	2.9	6.1	--	3.1	102	0

DATE	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	HARD- NESS (CA,MG) (MG/L)	NON- CAH- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)
OCT. 17...	26	55	.3	214	120	39	1.1	399	7.5	22.0
NOV. 04...	58	210	.3	532	240	130	2.9	991	8.2	19.0
DEC. 14...	150	460	.2	1000	390	330	4.9	1890	7.3	10.0
JAN. 15...	780	1900	--	4250	1500	1400	11	7270	7.8	9.0
FEB. 13...	1000	2400	--	5350	2000	1900	12	8690	7.7	12.5
MAR. 27...	1200	2600	--	5920	2200	2100	12	9360	7.5	19.0
MAY 02...	89	240	--	625	290	180	2.8	1160	8.0	30.0
AUG. 31...	13	30	--	158	96	13	.8	304	7.2	28.0
SEP. 17...	7.0	8.1	--	115	89	6	.3	220	7.0	21.0

BRAZOS RIVER BASIN

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08086050 DEEP CREEK AT MORAN, TEX.--Continued

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

MONTH	DISCHARGE (FT ³ /S-DAY)	SPECIFIC CONDUCT- ANCE (MICRO- MHOS)	DIS- SOLVED SOLIDS (MG/L)	DIS- SOLVED SOLIDS (TONS)	DIS- SOLVED CHLORIDE (MG/L)	DIS- SOLVED CHLORIDE (TONS)	DIS- SOLVED SULFATE (MG/L)	DIS- SOLVED SULFATE (TONS)	HARDNESS (CA, MG)
OCT. 1973...	259.40	447	230	164	74	52	36	25	95
NOV.....	13.34	1830	980	35	440	16	130	4.6	420
DEC.....	4.44	3450	1940	23	860	10	330	3.9	810
JAN. 1974...	2.64	6520	3840	27	1720	12	700	5.0	1540
FEB.....	3.54	8540	5250	50	2360	23	980	9.3	2020
MAR.....	.86	9200	5680	13	2550	5.9	1050	2.4	2170
APR.....	856.93	790	420	970	150	357	54	125	180
MAY.....	19.63	1590	860	46	360	19	120	6.5	370
JUNE.....	8.07	4720	2600	57	1140	25	490	11	1110
JULY.....	0	--	--	0	--	0	--	0	--
AUG.....	320.26	423	230	199	66	57	25	22	89
SEP.....	7600.19	311	160	3380	33	682	15	311	63
TOTAL.....	9089.30	--	--	4960	--	1260	--	526	--
WTD. AVG....	24.9	380	200	--	51	--	21	--	80

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	620	722	2400	3960	7920	9150	---	1050	---	---	---	310
2	710	800	3000	6100	7970	9190	---	1160	---	---	---	308
3	690	878	2790	5490	8010	9190	---	1120	2860	---	---	318
4	740	991	3380	4870	8100	9200	---	1150	4990	---	---	317
5	765	1100	3120	4260	8040	9190	---	1550	4880	---	---	331
6	793	1150	2880	3690	8090	9230	---	1580	4880	---	---	---
7	849	1180	3250	3760	8160	9190	---	1720	4890	---	---	---
8	888	1270	3680	3610	8220	9190	---	1780	4890	---	---	---
9	900	1390	3970	4160	8250	9150	---	1850	4930	---	---	---
10	960	1480	3260	3760	8290	9070	---	1880	---	---	---	---
11	1240	1540	3500	6560	8350	9110	---	1920	---	---	689	---
12	869	1640	3040	6780	8460	9110	---	1980	---	---	659	---
13	215	1750	2460	7000	8690	9110	---	2020	---	---	564	---
14	283	1790	1890	7030	8500	9110	---	2050	---	---	602	---
15	326	1850	3130	7270	8540	9150	---	2070	---	---	617	---
16	368	1930	3690	7170	8570	9190	---	2120	---	---	647	506
17	399	1960	3700	7200	8600	9190	---	---	---	---	---	278
18	425	2020	3920	7240	8670	9230	---	---	---	---	---	271
19	447	2070	3090	7270	8700	---	---	---	---	---	---	280
20	460	2170	5550	7390	8780	---	---	---	---	---	---	335
21	478	2250	4500	7460	8600	---	807	---	---	---	---	284
22	487	2330	3530	7460	8970	9320	695	---	---	---	---	321
23	497	2420	4530	7510	8970	9360	540	---	---	---	---	371
24	520	2460	4040	7550	9000	9360	603	---	---	---	---	799
25	529	2690	5110	7590	9040	9360	690	---	---	---	---	428
26	545	2770	5070	7680	9080	9360	766	---	---	---	---	419
27	560	2870	5050	7680	9080	9360	821	---	---	---	---	497
28	573	2990	5040	7730	9120	9400	882	---	---	---	475	569
29	595	3090	2940	7830	---	9410	919	---	---	---	287	693
30	621	3150	5110	7820	---	---	952	---	---	---	260	872
31	703	---	5360	7880	---	---	---	---	---	---	304	---
MONTH	615	1890	3740	6410	8530	9230	---	---	---	---	---	---

BRAZOS RIVER BASIN

08086050 DEEP CREEK AT MORAN, TEX.--Continued

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	13.0	4.0	---	17.0	---	---	---	---	---	---
2	---	---	14.0	1.0	9.0	18.0	---	25.0	---	---	---	23.0
3	---	17.0	13.0	---	11.0	19.0	---	25.0	27.0	---	---	21.0
4	---	19.0	10.0	---	12.0	---	---	26.0	29.0	---	---	23.0
5	---	13.0	9.0	---	12.0	19.0	---	21.0	29.0	---	---	23.0
6	23.0	---	9.0	5.0	8.0	19.0	---	24.0	28.0	---	---	---
7	24.0	17.0	---	7.0	6.0	21.0	---	24.0	28.0	---	---	---
8	24.0	16.0	10.0	9.0	5.0	21.0	---	25.0	28.0	---	---	---
9	---	---	9.0	4.0	6.0	21.0	---	26.0	---	---	---	---
10	---	14.0	8.0	4.0	8.0	19.0	---	25.0	---	---	---	---
11	23.0	15.0	10.0	1.0	9.0	20.0	---	27.0	---	---	25.0	---
12	20.0	17.0	11.0	---	11.0	18.0	---	27.0	---	---	28.0	---
13	20.0	18.0	11.0	7.0	12.0	18.0	---	26.0	---	---	30.0	---
14	20.0	19.0	10.0	9.0	12.0	18.0	---	25.0	---	---	30.0	---
15	22.0	19.0	9.0	9.0	---	---	---	27.0	---	---	30.0	---
16	21.0	18.0	10.0	10.0	13.0	17.0	---	---	---	---	29.0	21.0
17	22.0	17.0	10.0	14.0	13.0	19.0	---	---	---	---	---	22.0
18	---	18.0	11.0	---	14.0	21.0	---	---	---	---	---	21.0
19	23.0	18.0	5.0	10.0	13.0	---	---	---	---	---	---	24.0
20	---	16.0	6.0	11.0	14.0	---	---	---	---	---	---	25.0
21	22.0	---	---	14.0	11.0	---	17.0	---	---	---	---	22.0
22	22.0	15.0	6.0	10.0	13.0	16.0	19.0	---	---	---	---	20.0
23	21.0	18.0	8.0	8.0	12.0	12.0	21.0	---	---	---	---	19.0
24	21.0	16.0	6.0	---	9.0	7.0	23.0	---	---	---	---	16.0
25	21.0	15.0	6.0	9.0	9.0	10.0	23.0	---	---	---	---	15.0
26	21.0	15.0	7.0	9.0	10.0	15.0	23.0	---	---	---	---	18.0
27	---	12.0	---	11.0	13.0	19.0	24.0	---	---	---	---	22.0
28	19.0	10.0	9.0	10.0	16.0	19.0	24.0	---	---	---	23.0	21.0
29	17.0	11.0	8.0	10.0	---	---	23.0	---	---	---	25.0	29.0
30	19.0	11.0	7.0	11.0	---	---	20.0	---	---	---	26.0	20.0
31	17.0	---	5.0	10.0	---	---	---	---	---	---	28.0	---
MONTH	---	16.0	9.0	8.5	11.0	---	---	---	---	---	---	---

BRAZOS RIVER BASIN

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08086100 HUBBARD CREEK NEAR ALBANY, TEX.

LOCATION.--Lat 32°41'21", long 99°09'52", Shackelford County, at gaging station, 348 ft (106 m) upstream from bridge on Farm Road 601, 1.8 miles (2.9 km) downstream from Deep Creek, 5.1 miles (8.2 km) upstream from Salt Prong Hubbard Creek, and 8.1 miles (13.0 km) southeast of Albany.

DRAINAGE AREA.--461 mi² (1,194 km²).

PERIOD OF RECORD.--Chemical analyses: February 1962 to September 1974.

Water temperatures: February 1962 to September 1974.

Sediment records: January 1966 to September 1972.

EXTREMES.--October 1973 to September 1974:

Specific conductance: Maximum daily, 2,170 micromhos Aug. 16; minimum daily, 222 micromhos Sept. 21.

Period of record:

Specific conductance: Maximum daily, 4,410 micromhos Apr. 6, 1962; minimum daily, 204 micromhos Sept. 8, 9, 1967.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SI02) (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)	DIS- SOLVED SULFATE (SO4) (MG/L)
OCT. 17...	1345	2.4	6.5	29	5.6	17	4.2	88	0	24
APR. 28...	2015	.6	6.3	47	8.9	41	5.4	108	0	42
MAY 03...	0830	.99	6.5	47	10	40	5.3	114	0	43
SEP. 04...	1400	.47	7.1	33	5.4	18	4.4	100	0	14

DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPF- IFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)
OCT. 17...	27	.2	156	95	23	.8	285	7.4	21.0
APR. 28...	84	--	288	150	65	1.4	542	7.2	23.5
MAY 03...	82	--	290	160	65	1.4	550	7.7	22.0
SEP. 04...	34	--	165	100	23	.8	313	7.2	29.0

BRAZOS RIVER BASIN

08086100 HUBBARD CREEK NEAR ALBANY, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	SUS- PENDE SEDI- MENT (MG/L)	SUS- PENDE SEDI- MENT DIS- CHARGE (T/DAY)	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM
SEP. 16...	1610	176	20.5	2220	1060	91	99
DATE		SUS. SED. SIEVE DIAM. % FINER THAN .250 MM	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM
SEP. 16...		100	43	60	62	78	85

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

MONTH	DISCHARGE (FT ³ /S-DAY)	SPECIFIC CONDUCT- ANCE (MICRO- MHOS)	DIS- SOLVED SOLIDS (MG/L)	DIS- SOLVED SOLIDS (TONS)	DIS- SOLVED CHLORIDE (MG/L)	DIS- SOLVED CHLORIDE (TONS)	DIS- SOLVED SULFATE (MG/L)	DIS- SOLVED SULFATE (TONS)	HARDNESS (CA, MG) (MG/L)
OCT. 1973...	470.38	276	150	192	23	29	26	33	110
NOV.....	0	--	--	0	--	0	--	0	--
DEC.....	0	--	--	0	--	0	--	0	--
JAN. 1974...	0	--	--	0	--	0	--	0	--
FEB.....	0	--	--	0	--	0	--	0	--
MAR.....	0	--	--	0	--	0	--	0	--
APR.....	3375.16	635	330	3040	110	1010	39	359	180
MAY.....	50.25	658	350	47	110	15	46	6.2	190
JUNE.....	0	--	--	0	--	0	--	0	--
JULY.....	0	--	--	0	--	0	--	0	--
AUG.....	1415.93	578	300	1160	110	417	30	115	170
SEP.....	21006.5	310	160	9320	34	1940	25	1410	110
TOTAL.....	26318.22	--	--	13800	--	3410	--	1920	--
WTD. AVG....	72.1	366	190	--	48	--	27	--	120

BRAZOS RIVER BASIN

08086150 NORTH FORK HUBBARD CREEK NEAR ALBANY, TEX.

LOCATION.--Lat 32°42'27", long 99°16'29", Shackelford County, at gaging station at bridge on U.S. Highway 380, 1.7 miles (2.7 km) southeast of Albany, and 2.0 miles (3.2 km) upstream from Salt Prong Hubbard Creek.

DRAINAGE AREA.--38.4 mi² (99.5 km²).

PERIOD OF RECORD.--Chemical analyses: November 1962 to September 1974.

Water temperatures: November 1962 to September 1974.

Sediment records: October 1967 to September 1969.

EXTREMES.--October 1973 to September 1974:

Specific conductance: Maximum daily, 5,830 micromhos Jan. 7, 11; minimum daily, 408 micromhos Sept. 16.

Period of record:

Specific conductance: Maximum daily, 9,750 micromhos Sept. 28-30, 1968; minimum daily, 408 micromhos Sept. 16, 1974.

Water temperatures (1962-69): Maximum, 33.0°C July 11, 1964; minimum, freezing point Jan. 12, 1963, Jan. 29, 1966.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	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 SODIUM PLUS POTAS- SIUM (K) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)
OCT. 17...	1225	.22	8.8	200	65	390	--	4.0	200	0
NOV. 28...	1510	.14	8.6	270	100	600	--	5.6	211	0
DEC. 16...	1430	.29	2.6	110	36	--	230	--	110	0
JAN. 27...	1700	.33	7.4	270	110	630	--	4.1	175	0
FEB. 13...	1110	.41	6.0	310	110	630	--	4.3	208	0
MAR. 20...	1520	.11	5.1	280	110	630	--	5.3	139	0
APR. 30...	1900	.04	8.0	270	110	600	--	4.7	168	0
MAY 02...	1625	.27	8.5	250	89	500	--	4.8	186	0
JUNE 13...	1000	.02	14	210	93	480	--	5.1	250	0
AUG. 31...	2000	1.5	12	180	54	350	--	5.5	146	0
SEP. 16...	1430	380	8.1	37	4.6	27	--	2.5	95	0

DATE	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	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)
OCT. 17...	90	970	--	1830	770	600	6.1	3400	7.5	21.0
NOV. 28...	140	1500	--	2730	1100	910	7.9	5100	7.7	13.0
DEC. 16...	53	540	.2	1020	420	330	4.8	2030	7.5	11.0
JAN. 27...	140	1600	--	2850	1100	980	8.2	5370	7.6	12.0
FEB. 13...	140	1600	--	2900	1200	1100	7.8	5460	7.5	11.0
MAR. 20...	130	1600	--	2830	1200	1000	8.1	5280	7.7	16.0
APR. 30...	100	1500	--	2680	1100	990	7.8	4770	7.5	20.0
MAY 02...	96	1300	--	2340	990	840	6.9	4330	7.8	26.0
JUNE 13...	96	1100	--	2120	910	700	6.9	4100	7.9	25.0
AUG. 31...	76	880	--	1630	670	550	5.9	3050	7.4	27.0
SEP. 16...	9.3	59	--	194	110	33	1.1	379	7.1	20.0

BRAZOS RIVER BASIN

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08086150 NORTH FORK HUBBARD CREEK NEAR ALBANY, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	SUS- PENDE- D SED- IMENT (MG/L)	SUS- PENDE- D SED- IMENT OIS- CHARGE (T/DAY)	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM
SEP.												
16...	1430	317	20.0	910	779	99	100	63	83	89	96	98
16...	1828	801	21.0	1030	2230	--	--	--	--	--	--	--
18...	1410	2480	20.5	4710	31500	--	--	--	--	--	--	--
18...	1418	2480	20.5	4710	31500	--	--	--	--	--	--	--

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

MONTH	DISCHARGE (FT ³ /S-DAY)	SPECIFIC CONDUCT- ANCE (MICRO- MHOS)	DIS- SOLVED SOLIDS (MG/L)	DIS- SOLVED SOLIDS (TONS)	DIS- SOLVED CHLORIDE (MG/L)	DIS- SOLVED CHLORIDE (TONS)	DIS- SOLVED SULFATE (MG/L)	DIS- SOLVED SULFATE (TONS)	HARDNESS (CA, MG) (MG/L)
OCT. 1973...	10.39	4330	2330	65	1270	36	120	3.2	940
NOV.....	5.51	4270	2310	34	1250	19	100	1.5	920
DEC.....	8.61	4820	2580	60	1440	34	110	2.5	1040
JAN. 1974...	13.40	5560	2960	107	1660	60	140	5.2	1240
FEB.....	9.71	5390	2890	76	1590	42	140	3.7	1190
MAR.....	4.61	5400	2900	36	1640	20	130	1.7	1190
APR.....	5.09	5400	2910	40	1640	23	140	1.9	1190
MAY.....	11.69	3940	2130	67	1150	36	93	2.9	850
JUNE.....	1.94	4200	2270	12	1230	6.5	93	.5	910
JULY.....	0	--	--	0	--	0	--	0	--
AUG.....	16.02	2340	1260	54	680	29	54	2.3	510
SEP.....	2823.36	1010	530	4020	250	1920	26	196	230
TOTAL.....	2910.33	--	--	4570	--	2230	--	221	--
WTD. AVG....	7.97	1110	580	--	280	--	28	--	250

BRAZOS RIVER BASIN

08086150 NORTH FORK HUBBARD CREEK NEAR ALBANY, TEX.--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	3710	3460	5000	5400	5360	5490	5300	4450	4000	---	---	3190
2	3810	3590	5100	5050	5260	5560	5290	4330	4020	---	---	3310
3	3870	3550	4790	5590	5330	5490	5310	4310	4080	---	---	3500
4	4020	3500	3260	5450	5320	5610	5330	4290	4220	---	---	3550
5	3930	3600	4990	5590	5340	5550	5320	3950	4290	---	---	3700
6	4160	3810	5100	5780	5380	5560	5280	3890	4200	---	4400	3720
7	4190	3760	4130	5830	5350	5580	5290	3970	4160	---	5600	3790
8	4280	3950	3610	5710	5280	5530	5280	3960	4100	---	5640	3820
9	4220	3920	3320	5710	5430	5470	5270	3950	4120	---	5560	---
10	4390	3940	4910	5750	5420	5440	5300	3850	4110	---	5470	---
11	4740	4130	3550	5830	5410	5500	5390	3890	4090	---	5370	---
12	5440	4130	5310	5730	5430	5470	5380	3870	4110	---	4040	---
13	3330	4220	4900	5710	5400	5440	5350	3910	4100	---	5200	---
14	3270	4310	5280	5700	5330	5410	5310	3810	4110	---	5530	---
15	3260	4270	3500	5680	5650	5360	5290	3830	---	---	5420	---
16	3530	4320	2030	5670	5390	5340	5300	3750	---	---	---	408
17	3400	4380	5220	5650	5000	5180	5320	3790	---	---	---	890
18	3550	4440	5180	5640	5100	5300	5280	3780	---	---	---	496
19	3600	4450	5250	5430	5320	5270	5300	3840	---	---	---	1310
20	3660	4470	5380	5520	5460	5280	5310	3880	---	---	---	2920
21	3690	4590	5380	5530	5410	5270	5520	3890	---	---	---	1360
22	3660	4720	5390	5480	5600	5190	5300	3840	---	---	---	1850
23	3650	4730	5290	5430	5590	5220	5010	3870	---	---	---	2240
24	3620	4750	5360	5370	5550	5220	4830	3880	---	---	---	1760
25	3590	4760	5400	5470	5520	5220	4750	3920	---	---	---	1250
26	3550	4800	5430	5450	5530	5180	4860	3960	---	---	---	1850
27	3520	4830	5460	5370	5520	5200	4840	3990	---	---	---	2310
28	3550	5100	5470	5420	5510	5200	4870	4010	---	---	1810	2460
29	3550	4900	5490	5390	---	5240	4890	4030	---	---	2330	2990
30	3490	4770	5460	5390	---	5280	4770	4020	---	---	2730	3220
31	3560	---	5480	5310	---	5290	---	3980	---	---	3050	---
MONTH	3800	4270	4820	5550	5400	5370	5190	3960	---	---	---	---

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	24.0	18.0	13.0	4.0	14.0	17.0	19.0	23.0	---	---	---	---
2	24.0	17.0	15.0	4.0	13.0	17.0	18.0	23.0	---	---	---	25.0
3	25.0	---	13.0	0.0	11.0	19.0	---	25.0	---	---	---	21.0
4	22.0	15.0	10.0	3.0	10.0	19.0	---	24.0	---	---	---	22.0
5	20.0	16.0	11.0	---	---	19.0	---	23.0	---	---	---	23.0
6	23.0	15.0	10.0	---	11.0	---	---	25.0	---	---	23.0	21.0
7	24.0	19.0	10.0	4.0	7.0	19.0	---	25.0	---	---	28.0	20.0
8	25.0	17.0	---	12.0	7.0	19.0	---	26.0	---	---	26.0	22.0
9	24.0	---	9.0	4.0	9.0	20.0	---	25.0	---	---	26.0	---
10	24.0	14.0	9.0	6.0	---	17.0	---	24.0	---	---	25.0	---
11	23.0	15.0	10.0	6.0	11.0	18.0	---	22.0	---	---	25.0	---
12	21.0	17.0	9.0	2.0	12.0	---	---	25.0	---	---	27.0	---
13	20.0	---	12.0	9.0	12.0	16.0	---	26.0	25.0	---	26.0	---
14	20.0	16.0	11.0	---	14.0	18.0	---	28.0	27.0	---	29.0	---
15	22.0	17.0	---	---	10.0	21.0	---	27.0	---	---	27.0	---
16	19.0	15.0	11.0	12.0	14.0	20.0	---	28.0	---	---	---	19.0
17	21.0	---	11.0	---	---	20.0	---	27.0	---	---	---	22.0
18	17.0	18.0	10.0	12.0	13.0	21.0	---	28.0	---	---	---	20.0
19	21.0	17.0	---	10.0	14.0	20.0	---	---	---	---	---	25.0
20	20.0	---	5.0	13.0	15.0	---	---	25.0	---	---	---	21.0
21	21.0	13.0	4.0	14.0	16.0	12.0	20.0	25.0	---	---	---	22.0
22	20.0	17.0	9.0	---	12.0	12.0	22.0	27.0	---	---	---	21.0
23	18.0	---	8.0	8.0	10.0	9.0	22.0	---	---	---	---	---
24	20.0	17.0	7.0	9.0	---	9.0	24.0	26.0	---	---	---	---
25	20.0	14.0	8.0	8.0	10.0	12.0	25.0	---	---	---	---	---
26	21.0	15.0	---	10.0	---	12.0	22.0	---	---	---	---	---
27	19.0	12.0	7.0	12.0	---	19.0	24.0	---	---	---	---	---
28	19.0	13.0	---	12.0	16.0	19.0	---	27.0	---	---	24.0	---
29	18.0	12.0	10.0	12.0	---	20.0	23.0	28.0	---	---	27.0	---
30	19.0	12.0	11.0	11.0	---	20.0	20.0	26.0	---	---	26.0	---
31	19.0	---	6.0	12.0	---	---	---	23.0	---	---	27.0	---
MONTH	21.0	15.5	9.5	8.5	12.0	17.0	---	25.5	---	---	---	---

BRAZOS RIVER BASIN

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08086212 HUBBARD CREEK BELOW ALBANY, TEX.

LOCATION.--Lat 32°43'58", long 99°08'25", Shackelford County, at gaging station 2.8 miles (4.5 km) upstream from Newcomb Creek, 4.5 miles (7.2 km) upstream from U.S. Highway 180, and 9.1 miles (14.6 km) east of Albany.

DRAINAGE AREA.--621 mi² (1,608 km²).

PERIOD OF RECORD.--Chemical analyses: October 1966 to September 1974.
Water temperatures: October 1968 to September 1974.

EXTREMES.--October 1973 to September 1974:

Specific conductance: Maximum daily, 4,260 micromhos Apr. 2; minimum daily, 272 micromhos Aug. 30.

Period of record:

Specific conductance (1966-70, 1972-74): Maximum daily, 11,800 micromhos Nov. 27, 1968; minimum daily, 253 micromhos Sept. 8, 1967.
Water temperatures (1968-73): Maximum, 37.0°C July 11, 1969; minimum, freezing point Dec. 11, 1972, Jan. 8, 10, 1973.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part I of this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SI02) (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNE-SIUM (MG)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED POTAS-SIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)
OCT. 24...	1120	.22	5.3	50	11	81	4.2	112	0	22
NOV. 12...	1300	.06	3.9	68	17	150	5.9	120	0	28
DEC. 10...	1400	.04	2.8	110	32	350	8.0	137	0	47
JAN. 10...	1230	.17	1.7	180	46	480	6.8	114	0	50
APR. 29...	1230	2.2	6.1	70	14	100	5.6	116	0	44
MAY 06...	1330	16	6.5	87	20	140	5.5	136	0	49
15...	0930	.40	6.9	82	17	130	6.0	143	0	46
JUNE 05...	1325	.37	6.8	230	57	610	9.4	116	0	58
06...	1145	.10	7.6	88	20	190	6.9	124	0	44
AUG. 13...	0900	13	6.7	200	61	600	5.3	108	0	64
SEP. 17...	1330	1380	--	--	--	--	--	--	--	--
21...	1230	5490	--	--	--	--	--	--	--	--
25...	1000	3650	--	--	--	--	--	--	--	--
30...	1215	95	--	--	--	--	--	--	--	--

DATE	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	HARDNESS (CA+MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)
OCT. 24...	170	.3	399	170	78	2.7	771	7.5	17.5
NOV. 12...	310	--	642	240	140	4.2	1240	7.8	16.0
DEC. 10...	710	--	1330	410	290	7.6	2410	7.9	8.5
JAN. 10...	1100	--	1920	640	550	8.3	3630	8.0	4.0
APR. 29...	220	--	517	230	140	2.9	1020	7.8	23.0
MAY 06...	300	--	675	300	190	3.5	1310	8.3	25.5
15...	270	--	628	270	160	3.4	1270	7.5	26.0
JUNE 05...	1400	--	2430	810	710	9.3	4640	7.6	30.0
06...	390	--	808	300	200	4.8	1570	7.8	28.0
AUG. 13...	1300	--	2290	750	660	9.5	4310	7.7	26.5
SEP. 17...	56	--	--	--	--	--	370	--	21.0
21...	30	--	--	--	--	--	311	--	20.0
25...	54	--	--	--	--	--	411	--	15.0
30...	225	--	--	--	--	--	1100	--	20.0

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

MONTH	DISCHARGE (FT ³ /S-DAY)	SPECIFIC CONDUCT- ANCE (MICRO- MHOS)	DIS- SOLVED SOLIDS (MG/L)	DIS- SOLVED SOLIDS (TONS)	DIS- SOLVED CHLORIDE (MG/L)	DIS- SOLVED CHLORIDE (TONS)	DIS- SOLVED SULFATE (MG/L)	DIS- SOLVED SULFATE (TONS)	HARDNESS (CA, MG) (MG/L)
OCT. 1973...	599.54	644	330	530	130	216	30	49	160
NOV.....	1.54	1300	670	2.8	330	1.4	28	.1	300
DEC.....	1.10	2300	1260	3.8	670	2.0	47	.1	500
JAN. 1974...	2.02	3480	1840	10	1050	5.7	49	.3	730
FEB.....	1.04	3520	1870	5.3	1070	3.0	50	.1	740
MAR.....	.95	3730	2020	5.2	1150	2.9	61	.2	780
APR.....	3477.41	561	290	2710	110	1070	30	282	150
MAY.....	68.03	1210	630	116	290	54	47	8.6	280
JUNE.....	1.71	1360	710	3.3	340	1.6	46	.2	310
JULY.....	0	--	--	0	--	0	--	0	--
AUG.....	1467.67	613	320	1280	120	491	36	142	160
SEP.....	35100.9	356	180	17400	43	4100	41	3850	110
TOTAL.....	40721.91	--	--	22100	--	5950	--	4330	--
WTD. AVG....	112	389	200	--	53	--	40	--	120

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	2050	982	1640	2620	3770	3570	---	1250	---	---	---	404
2	2040	1090	1720	2750	3680	3530	4260	1240	1340	---	---	409
3	2070	1090	1810	2910	3690	3610	---	1460	1260	---	---	463
4	2100	1040	1950	3200	3610	3680	---	1460	1210	---	---	496
5	---	1140	2100	3370	3580	3740	---	1240	1490	---	---	532
6	2140	978	2230	3520	3620	3780	---	1310	1560	---	---	547
7	2120	1010	2360	3440	3640	3690	---	845	1720	---	---	558
8	2130	1210	2320	3570	3610	3730	---	848	1650	---	---	---
9	2160	1200	2390	3620	3700	3700	---	911	1710	---	---	---
10	2150	1200	2410	3630	3600	3600	---	922	---	---	---	---
11	2000	1110	2440	3590	3580	3690	---	922	---	---	---	---
12	1120	1260	2500	3630	3570	3800	---	1350	---	---	3750	---
13	505	1010	2480	3570	3600	3710	---	1370	---	---	3430	---
14	550	1300	2470	3500	3660	3690	---	1290	---	---	2450	---
15	370	1330	2520	3540	3650	3740	---	1290	---	---	2590	---
16	440	1340	2490	3630	3700	3810	---	1250	---	---	2510	312
17	486	1360	2480	3610	3750	3850	---	1270	---	---	2520	331
18	502	1370	2560	3650	3790	3910	---	1300	---	---	2550	285
19	537	1360	2560	3510	---	3930	---	1340	---	---	2570	309
20	538	1380	2540	3530	3910	3960	---	1390	---	---	2620	463
21	663	1400	2510	3590	3500	3940	1120	1270	---	---	---	294
22	661	---	2480	3640	3430	3890	295	1200	---	---	---	336
23	795	---	2490	3700	3410	3950	576	1290	---	---	---	577
24	771	1350	2500	3620	3480	4000	619	---	---	---	---	717
25	797	1380	2470	3640	3520	4050	667	---	---	---	---	544
26	836	1410	2510	3660	3500	4120	747	---	---	---	---	496
27	833	1480	2500	3700	3590	4110	950	---	---	---	---	746
28	902	1510	2520	3730	3650	4070	1010	---	---	---	1780	978
29	1000	1550	2530	3720	---	4130	1020	---	---	---	365	987
30	1010	1590	2500	3750	---	4150	1060	---	---	---	272	1100
31	960	---	2480	3770	---	---	---	---	---	---	291	---
MONTH	1180	1270	2370	3510	3620	3840	---	---	---	---	---	---

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

[illegible]

BRAZOS RIVER BASIN

08086260 PECAN CREEK NEAR EOLIAN, TEX.

LOCATION.--Lat 32°35'01", long 99°01'57", Stephens County, at gaging station at county road crossing, 1.4 miles (2.3 km) east of Farm Road 1853, 3.3 miles (5.3 km) upstream from Battle Creek, and 5.8 miles (9.3 km) south of Eolian.

DRAINAGE AREA.--25.4 mi² (65.8 km²).

PERIOD OF RECORD.--Chemical analyses: October 1966 to September 1974.

Water temperatures: October 1966 to September 1974.

EXTREMES.--October 1973 to September 1974:

Specific conductance: Maximum daily, 6,500 micromhos Feb. 21; minimum daily, 222 micromhos Sept. 17.

Period of record:

Specific conductance: Maximum daily, 34,000 micromhos July 4, 1968; minimum daily, 220 micromhos Oct. 22, 1972.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED SODIUM PLUS POTAS- SIUM (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HC03) (MG/L)	CAR- BONATE (C03) (MG/L)
OCT. 17...	1640	.01	6.0	48	7.4	83	--	3.2	76	0
FEB. 23...	1700	.02	3.2	180	44	550	--	4.2	--	--
APR. 25...	1600	.12	5.7	67	12	120	--	4.3	72	0
MAY 05...	1500	12	--	290	95	--	900	--	44	0
JUNE 04...	0930	42	4.5	420	100	960	--	9.9	60	0
AUG. 11...	0730	62	7.7	50	3.4	19	--	2.8	168	0
SEP. 17...	1050	84	4.5	24	1.5	13	--	1.6	74	0

DATE	DIS- SOLVED SULFATE (S04) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	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)
OCT. 17...	29	170	.4	386	150	88	2.9	748	7.7	22.0
FEB. 23...	45	1200	--	--	630	--	9.5	3980	6.9	19.0
APR. 25...	18	300	--	562	220	160	3.5	1150	6.9	28.0
MAY 05...	56	2100	--	3460	1100	1100	6.6	6400	7.0	27.0
JUNE 04...	58	2500	--	4080	1500	1400	11	7530	7.1	23.0
AUG. 11...	11	22	--	199	140	1	.7	368	7.3	22.0
SEP. 17...	4.7	26	--	112	66	5	.7	222	6.9	21.0

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

MONTH	DISCHARGE (FT ³ /S-DAY)	SPECIFIC CONDUCT- ANCE (MICRO- MHOS)	DIS- SOLVED SOLIDS (MG/L)	DIS- SOLVED SOLIDS (TONS)	DIS- SOLVED CHLORIDE (MG/L)	DIS- SOLVED CHLORIDE (TONS)	DIS- SOLVED SULFATE (MG/L)	DIS- SOLVED SULFATE (TONS)	HARDNESS (CA, MG) (MG/L)
OCT. 1973...	96.33	474	240	61	77	20	19	5.1	54
NOV.....	0	--	--	0	--	0	--	0	--
DEC.....	0	--	--	0	--	0	--	0	--
JAN. 1974...	0	--	--	0	--	0	--	0	--
FEB.....	3.68	4630	2500	25	1510	15	56	.6	890
MAR.....	0	--	--	0	--	0	--	0	--
APR.....	125.08	840	430	145	200	68	22	7.5	130
MAY.....	25.28	4400	2370	162	1430	98	52	3.6	840
JUNE.....	9.64	5220	2810	73	1700	44	59	1.5	1010
JULY.....	0	--	--	0	--	0	--	0	--
AUG.....	59.56	1000	530	85	280	45	17	2.7	160
SEP.....	234.54	350	180	117	72	46	9	5.6	29
TOTAL.....	554.11	--	--	668	--	336	--	27	--
WTD. AVG....	1.52	850	450	--	220	--	18	--	130

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

[illegible]

[illegible]

BRAZOS RIVER BASIN

431

08086300 BIG SANDY CREEK NEAR BRECKENRIDGE, TEX.

LOCATION.--Lat 32°39'52", long 99°00'01", Stephens County, at gaging station at bridge on Farm Road 576, 1.5 miles (2.4 km) downstream from Battle Creek, and 8.2 miles (13.2 km) southwest of Breckenridge.

DRAINAGE AREA.--298 mi² (772 km²).

PERIOD OF RECORD.--Chemical analyses: February 1962 to September 1974.

Water temperatures: February 1962 to September 1974.

Sediment records: October 1967 to September 1974.

EXTREMES.--October 1973 to September 1974:

Specific conductance: Maximum daily, 4,490 micromhos June 5; minimum daily, 162 micromhos Sept. 21.

Period of record:

Specific conductance: Maximum daily, 17,200 micromhos Mar. 27, 1964; minimum daily, 59 micromhos Nov. 21, 1963.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	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)	DIS- SOLVED SULFATE (SO ₄) (MG/L)
OCT.										
12...	1515	10	6.6	58	7.2	64	3.7	134	0	22
NOV.										
12...	1545	.03	4.7	150	37	290	6.6	128	0	130
APR.										
23...	1800	32	7.4	55	7.2	78	4.8	90	0	33
MAY										
07...	1040	3.3	9.1	48	6.7	64	4.8	106	0	32
14...	1530	.08	8.6	110	23	210	6.6	136	0	73
JUNE										
07...	1645	.10	10	230	41	480	8.0	173	0	150
AUG.										
12...	1715	22	7.0	35	4.5	41	3.0	92	0	14
SEP.										
10...	1030	.01	--	--	--	--	--	--	--	--
16...	1330	1.6	5.4	40	6.7	47	2.8	76	0	38
18...	0845	183	--	--	--	--	--	--	--	--
19...	1045	621	--	--	--	--	--	--	--	--
25...	1130	1020	--	--	--	--	--	--	--	--
30...	1130	4.8	--	--	--	--	--	--	--	--

DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	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)
OCT.									
12...	130	.4	356	170	64	2.1	662	7.4	20.0
NOV.									
12...	640	--	1320	530	420	5.5	2450	7.9	18.0
APR.									
23...	160	--	390	170	93	2.6	760	7.6	21.0
MAY									
07...	130	--	347	150	61	2.3	661	7.6	21.0
14...	430	--	928	370	260	4.8	1780	8.0	32.0
JUNE									
07...	990	--	1990	740	600	7.7	3640	7.9	33.0
AUG.									
12...	72	--	222	110	30	1.7	438	7.2	26.5
SEP.									
10...	40	--	--	--	--	--	365	--	23.0
16...	91	--	268	130	65	1.8	517	6.5	21.5
18...	9.2	--	--	--	--	--	235	--	22.0
19...	10	--	--	--	--	--	256	--	22.0
25...	24	--	--	--	--	--	336	--	15.0
30...	94	--	--	--	--	--	559	--	19.0

BRAZOS RIVER BASIN

08086300 BIG SANDY CREEK NEAR BRECKENRIDGE, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	SUS- PENDE SEDI- MENT (MG/L)	SUS- PENDE SEDI- MENT DIS- CHARGE (T/DAY)	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM
AUG. 07...	1430	10	24.0	1050	30	100	--	78	85	87	94	95
SEP. 17...	0847	162	21.5	2440	1070	99	100	54	78	80	94	95

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

MONTH	DISCHARGE (FT ³ /S-DAY)	SPECIFIC CONDUCT- ANCE (MICRO- MHOS)	DIS- SOLVED SOLIDS (MG/L)	DIS- SOLVED SOLIDS (TONS)	DIS- SOLVED CHLORIDE (MG/L)	DIS- SOLVED CHLORIDE (TONS)	DIS- SOLVED SULFATE (MG/L)	DIS- SOLVED SULFATE (TONS)	HARDNESS (CA, MG) (MG/L)
OCT. 1973...	146.23	350	190	74	57	23	20	7.7	120
NOV.....	.86	2670	1470	3.4	740	1.7	130	.3	560
DEC.....	.04	4180	2380	.3	1240	.1	170	.02	850
JAN. 1974...	0	--	--	0	--	0	--	0	--
FEB.....	13.34	2870	1550	56	780	28	130	4.7	600
MAR.....	0	--	--	0	--	0	--	0	--
APR.....	1916.13	597	310	1610	110	568	37	193	160
MAY.....	139.54	703	370	140	140	53	47	18	180
JUNE.....	3.16	3880	2190	19	1140	9.7	160	1.4	790
JULY.....	0	--	--	0	--	0	--	0	--
AUG.....	771.25	290	160	327	35	72	22	45	110
SEP.....	3283.44	236	130	1140	22	194	20	176	95
TOTAL.....	6273.99	--	--	3370	--	950	--	446	--
WTD. AVG....	17.2	374	200	--	56	--	26	--	120

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

[illegible]

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

[illegible]

BRAZOS RIVER BASIN

08086500 HUBBARD CREEK NEAR BRECKENRIDGE, TEX.

LOCATION.--Lat 32°50'13", long 98°56'52", Stephens County, at gaging station at bridge on U.S. Highway 183, 1.4 miles (2.3 km) downstream from Hubbard Creek Reservoir, 6.8 miles (10.9 km) northwest of Breckenridge, 8.2 miles (13.2 km) upstream from Gonzales Creek, and 11.2 miles (18.0 km) upstream from Clear Fork Brazos River.

DRAINAGE AREA.--1,111 mi² (2,877 km²), of which 1,107 mi² (2,867 km²) is above Hubbard Creek Dam.

PERIOD OF RECORD.--Chemical analyses: April 1955 to September 1974.
Water temperatures: April 1955 to September 1974.

EXTREMES.--October 1973 to September 1974:

Specific conductance: Maximum daily, 1,790 micromhos Mar. 24; minimum daily, 209 micromhos Sept. 20.

Period of record:

Specific conductance: Maximum daily, 9,270 micromhos July 4, 1960; minimum daily, 121 micromhos Apr. 27, 1957.

Water temperatures: Maximum, 33.0°C July 15, 1965; minimum, freezing point Jan. 12, 16, 20, 1963.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DIS-SOLVED SILICA (SiO ₂) (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO ₃) (MG/L)	CARBONATE (CO ₃) (MG/L)	DIS-SOLVED SULFATE (SO ₄) (MG/L)
OCT. 18...	0930	1.4	7.5	42	6.9	12	5.2	78	0	69
APR. 23...	1900	2.0	6.2	61	12	41	6.9	81	0	140
MAY 02...	2040	4.2	8.4	86	16	58	6.8	150	0	160
SEP. 22...	1845	.30	11	28	4.6	6.7	4.4	60	0	43

DATE	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	HARDNESS (CA+MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)
OCT. 18...	19	.3	200	130	69	.5	340	7.3	17.5
APR. 23...	59	--	366	200	140	1.3	614	7.3	22.0
MAY 02...	81	--	490	280	160	1.5	843	7.8	25.0
SEP. 22...	12	--	139	89	40	.3	235	7.4	20.0

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

MONTH	DISCHARGE (FT ³ /S-DAY)	SPECIFIC CONDUCTANCE (MICROMHOS)	DIS-SOLVED SOLIDS (MG/L)	DIS-SOLVED SOLIDS (TONS)	DIS-SOLVED CHLORIDE (MG/L)	DIS-SOLVED CHLORIDE (TONS)	DIS-SOLVED SULFATE (MG/L)	DIS-SOLVED SULFATE (TONS)	HARDNESS (CA, MG) (MG/L)
OCT. 1973...	26.65	289	170	12	17	1.2	58	4.2	110
NOV.....	0	--	--	0	--	0	--	0	--
DEC.....	0	--	--	0	--	0	--	0	--
JAN. 1974...	0	--	--	0	--	0	--	0	--
FEB.....	.32	1300	790	.7	180	.2	300	.3	380
MAR.....	.47	1640	1000	1.3	240	.3	360	.5	470
APR.....	22.63	498	280	17	43	2.6	96	5.9	160
MAY.....	.10	816	480	.1	79	.02	160	.04	250
JUNE.....	0	--	--	0	--	0	--	0	--
JULY.....	27.4	1460	750	55	360	27	61	4.5	330
AUG.....	150.20	1460	750	304	360	146	61	25	330
SEP.....	98.93	255	150	41	16	4.4	47	12	96
TOTAL.....	326.70	--	--	431	--	182	--	52	--
WTD. AVG....	.90	930	490	--	210	--	60	--	230

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

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

[illegible]

BRAZOS RIVER BASIN

08087300 CLEAR FORK BRAZOS RIVER AT ELIASVILLE, TEX.

LOCATION.--Lat 32°57'36", long 98°45'59", Young County, at bridge on Farm Road 1974 and 180 ft (55 m) downstream from gaging station at Eliasville.

DRAINAGE AREA.--5,721 mi² (14,817 km²).

PERIOD OF RECORD.--Chemical analyses: October 1961 to September 1974.

Pesticide analyses: January 1968 to September 1974.

Water temperatures: October 1961 to September 1974.

EXTREMES.--October 1973 to September 1974:

Specific conductance: Maximum daily, 4,700 micromhos Apr. 19, 20; minimum daily, 357 micromhos Sept. 23.

Water temperatures: Maximum, 29.0°C June 23, Aug. 18; minimum, 1.5°C Jan. 4.

Period of record:

Specific conductance: Maximum daily, 7,400 micromhos Jan. 9, 1971; minimum daily, 300 micromhos Sept. 10, 1962.

Water temperatures: Maximum, 38.0°C Aug. 6, 1964; minimum, freezing point on several days during January 1963, January 1964, December 1972, and January 1973.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	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 SODIUM PLUS POTAS- SIUM (K) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)
OCT. 31...	1505	40	7.4	110	32	140	--	6.6	144	0
NOV. 30...	0645	32	5.0	130	48	--	150	--	183	0
DEC. 04...	1710	29	7.2	160	56	230	--	9.4	218	0
JAN. 14...	1620	23	4.4	160	63	290	--	8.3	209	11
FEB. 26...	1330	21	5.4	210	83	390	--	11	286	0
MAR. 26...	0712	16	2.0	270	100	510	--	13	228	0
APR. 19...	1440	3.2	1.1	300	130	570	--	13	232	0
MAY 21...	1020	3.0	.8	240	110	500	--	9.7	190	0
JUNE 14...	0706	.69	1.9	180	97	480	--	13	72	0
JULY 02...	1200	.03	3.0	180	100	500	--	12	76	0
AUG. 07...	1125	.73	4.8	180	110	520	--	15	116	0
SEP. 23...	1550	4180	11	44	7.6	22	--	3.9	118	0

DATE	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SUM OF CONSTITUENTS (MG/L)	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)
OCT. 31...	270	220	.2	847	400	280	3.0	1410	7.8	17.5
NOV. 30...	190	340	.3	957	520	370	2.8	1960	7.9	11.5
DEC. 04...	380	380	--	1330	630	450	4.0	2160	8.0	12.0
JAN. 14...	500	430	--	1570	660	470	4.9	2500	8.5	5.5
FEB. 26...	590	600	--	2030	870	630	5.8	3290	8.0	9.5
MAR. 26...	800	800	--	2610	1100	900	6.7	4270	7.7	12.0
APR. 19...	1000	880	--	3010	1300	1100	6.9	4570	7.9	18.5
MAY 21...	890	790	--	2630	1100	900	6.7	4030	7.8	26.5
JUNE 14...	690	810	--	2310	850	790	7.2	3710	7.0	26.5
JULY 02...	750	820	--	2400	860	800	7.4	3930	7.6	29.0
AUG. 07...	730	890	--	2510	900	810	7.5	4040	7.0	26.0
SEP. 23...	41	34	--	222	140	44	.8	407	7.4	20.5

08087300 CLEAR FORK BRAZOS RIVER AT ELIASVILLE, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TEMPERATURE (DEG C)	ALDRIN (UG/L)	ALDRIN IN BOTTOM DEPOSITS (UG/KG)	DDD (UG/L)	DDD IN BOTTOM DEPOSITS (UG/KG)	DDE (UG/L)	DDE IN BOTTOM DEPOSITS (UG/KG)	DDT (UG/L)	DDT IN BOTTOM DEPOSITS (UG/KG)
OCT. 08...	1430	23	25.0	.00	.0	.00	.0	.00	.0	.00	.0
JAN. 29...	1615	19	10.5	.00	.0	.00	.0	.00	.0	.00	.0

DATE	DI-ELDRIN (UG/L)	DI-ELDRIN IN BOTTOM DEPOSITS (UG/KG)	ENDRIN (UG/L)	ENDRIN IN BOTTOM DEPOSITS (UG/KG)	HEPTA-CHLOR (UG/L)	HEPTA-CHLOR IN BOTTOM DEPOSITS (UG/KG)	HEPTA-CHLOR EPOXIDE (UG/L)	HEPTA-CHLOR EPOXIDE IN BOTTOM DEPOSITS (UG/KG)	LINDANE (UG/L)	LINDANE IN BOTTOM DEPOSITS (UG/KG)	CHLOR-DANE (UG/L)
OCT. 08...	.00	.0	.00	.0	.00	.0	.00	.0	.00	.0	.0
JAN. 29...	.00	.0	.00	.0	.00	.0	.00	.0	.00	.0	.0

DATE	CHLOR-DANE IN BOTTOM DEPOSITS (UG/KG)	PCB (UG/L)	PCB IN BOTTOM DEPOSITS (UG/KG)	DI-AZINON (UG/L)	MALATHION (UG/L)	METHYL PARA-THION (UG/L)	PARA-THION (UG/L)	2,4-D (UG/L)	SILVEX (UG/L)	2,4+5-T (UG/L)
OCT. 08...	0	.0	0	.00	.00	.00	.00	.00	.00	.03
JAN. 29...	0	.0	0	.00	.00	.00	.00	.00	.00	.00

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

MONTH	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCTANCE (MICRO-MHOS)	DISSOLVED SOLIDS (MG/L)	DISSOLVED SOLIDS (TONS)	DISSOLVED CHLORIDE (MG/L)	DISSOLVED CHLORIDE (TONS)	DISSOLVED SULFATE (MG/L)	DISSOLVED SULFATE (TONS)	HARDNESS (CA+MG) (MG/L)
OCT. 1973.....	2602	1180	710	4990	170	1190	190	1330	350
NOV. 1973.....	785	1830	1100	2330	320	678	320	678	510
DEC. 1973.....	600	2250	1400	2270	410	664	400	648	610
JAN. 1974.....	555	2630	1600	2400	500	749	480	719	700
FEB. 1974.....	549	3340	2100	3110	660	978	620	919	870
MAR. 1974.....	564	4010	2500	3810	810	1230	750	1140	1000
APR. 1974.....	2337	1160	700	4420	170	1070	180	1140	350
MAY 1974.....	448	2940	1800	2380	570	752	540	713	780
JUNE 1974.....	173	3360	2100	986	660	310	620	291	880
JULY 1974.....	0.29	3990	2500	1.96	800	0.63	750	0.59	1000
AUG. 1974.....	2759	2900	1800	13400	560	4170	530	3950	770
SEPT 1974.....	47564	583	330	42400	39	5010	66	8480	210
TOTAL	58979.29	**	**	82500	**	16800	**	20000	**
WTD.AVG.	161	880	520	**	110	**	130	**	280

BRAZOS RIVER BASIN

08087300 CLEAR FORK BRAZOS RIVER AT ELIASVILLE, TEX.--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	1370	1420	1970	2560	3420	3400	4460	1530	4070	3920	4110	793
2	1370	1450	2040	2620	3490	3450	4500	1740	4050	3920	4150	793
3	1370	1450	2070	2660	3530	3510	4510	1930	4050	3930	4140	804
4	1410	1450	2150	2700	3540	3560	4510	2060	3250	3940	4160	804
5	1390	1460	2190	2700	3540	3620	4510	2150	3620	3960	4170	813
6	1360	1460	2240	2690	3530	3680	4540	2500	3620	3980	4010	813
7	1330	1480	2240	2700	3520	3730	4590	2980	3620	3980	4070	816
8	1260	1510	2260	2680	3480	3740	4600	3200	3650	3990	3740	816
9	1240	1520	2280	2670	3440	3770	4620	3680	3660	4000	3080	819
10	1220	1540	2280	2640	3420	3850	4630	3970	3670	4000	4000	822
11	1210	1590	2280	2610	3380	3890	4160	4100	3660	---	3000	828
12	1170	1650	2290	2580	3350	3990	4620	4100	3670	---	1130	819
13	1240	1730	2290	2560	3330	4000	4630	4090	3720	---	995	825
14	1260	1790	2290	2500	3310	4060	4660	4070	3720	---	969	828
15	876	1850	2290	2440	3280	4090	4660	4070	3700	---	961	854
16	810	1870	2270	2420	3280	4120	4660	4060	3720	---	936	1000
17	801	1960	2270	2400	3230	4150	4660	4060	3750	---	936	700
18	846	1980	2250	2370	3220	4180	4680	4050	3770	---	928	486
19	954	2000	2220	2360	3230	4220	4700	4050	3790	---	891	462
20	1000	2000	2210	2360	3210	4220	4700	4040	3800	---	883	539
21	1000	2040	2190	2350	3160	4230	1500	4040	3820	---	887	516
22	991	2090	2190	2360	3120	4240	910	4040	3810	---	891	529
23	1000	2110	2210	2400	3140	4260	645	4040	3820	---	898	357
24	1030	2090	2260	2470	3180	4270	766	4040	3850	---	894	547
25	1100	2070	2320	2580	3190	4270	854	4040	3850	---	898	498
26	1160	2040	2360	2660	3220	4270	969	4050	3850	---	902	689
27	1240	2000	2400	2920	3260	4290	1040	4050	3850	---	913	1010
28	1260	1980	2430	2920	3310	4310	1210	4060	3880	---	913	589
29	1330	1960	2460	3050	---	4340	1360	4060	3900	4230	901	651
30	1390	1960	2490	3210	---	4360	1440	4060	3900	4090	1020	683
31	1410	---	2520	3320	---	4440	---	4070	---	4140	852	---
MONTH	1180	1780	2260	2620	3330	4020	3410	3580	3770	---	1980	717

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	16.5	11.5	4.5	8.5	13.5	18.0	21.0	24.5	26.5	26.5	26.5
2	23.5	16.5	12.0	4.5	9.0	13.5	17.0	20.0	25.5	27.0	26.0	28.0
3	23.5	15.5	14.0	4.0	8.5	15.0	17.0	22.0	26.0	27.0	26.5	24.0
4	23.5	16.5	12.0	1.5	8.0	17.0	15.5	21.5	24.5	27.0	26.0	23.0
5	22.0	15.5	10.5	2.0	9.5	16.0	15.0	22.0	25.5	26.5	26.5	22.0
6	21.5	14.5	10.0	4.0	9.5	17.0	15.5	20.5	26.0	26.5	25.0	21.5
7	23.0	15.5	9.0	3.5	9.0	19.0	16.0	21.5	26.5	27.0	24.5	21.5
8	23.5	17.0	9.5	4.5	7.0	19.0	16.0	23.0	26.5	27.0	26.5	22.0
9	23.5	15.0	10.0	4.5	7.0	19.0	15.5	24.0	26.5	28.0	26.5	23.0
10	24.0	14.5	5.5	4.5	7.0	19.5	15.5	24.0	25.0	28.0	26.5	23.5
11	22.0	14.5	8.5	3.0	6.5	18.0	16.0	24.5	26.0	---	26.0	23.5
12	22.0	15.0	9.0	2.0	8.5	18.0	18.0	24.0	27.0	---	26.0	24.5
13	20.5	15.5	9.0	4.0	8.5	20.0	19.0	25.5	26.5	---	26.0	23.0
14	19.5	16.5	9.0	4.0	10.0	17.0	18.0	25.5	26.5	---	26.5	21.0
15	20.0	16.0	9.0	5.0	10.0	18.0	16.5	24.5	27.0	---	27.0	21.5
16	20.0	14.5	8.5	5.0	9.5	16.5	17.0	26.5	28.0	---	28.0	21.5
17	19.5	15.5	8.0	6.5	9.5	17.0	16.0	26.5	27.0	---	28.0	21.5
18	19.0	16.0	9.0	8.0	11.5	18.5	18.0	26.5	25.5	---	29.0	21.0
19	19.0	17.0	8.0	8.0	10.0	18.5	16.5	26.5	28.0	---	28.5	21.0
20	19.0	15.5	6.0	7.0	11.0	17.0	20.0	26.5	28.0	---	28.5	21.5
21	18.5	14.5	6.0	7.0	12.0	15.0	20.5	25.5	28.5	---	28.5	21.5
22	18.5	15.5	5.0	9.0	10.0	14.5	17.0	25.5	28.5	---	28.0	21.0
23	18.5	16.5	6.5	9.0	10.5	14.5	18.0	26.0	29.0	---	28.0	20.5
24	18.5	18.0	6.0	8.5	9.0	13.0	18.0	27.0	28.0	---	28.0	20.0
25	18.5	14.5	6.0	7.0	8.5	11.5	19.5	27.0	24.5	---	27.0	18.0
26	19.0	14.5	6.0	8.0	9.0	12.0	20.5	25.0	24.5	---	27.0	15.5
27	19.0	14.5	5.5	7.0	10.0	13.5	20.5	25.0	24.0	---	25.5	17.0
28	18.0	13.0	6.5	8.5	11.5	15.5	21.0	26.5	24.5	---	26.5	16.5
29	16.5	12.0	6.5	8.0	---	15.5	22.0	26.5	26.0	27.0	26.5	17.0
30	18.0	11.5	6.5	8.0	---	15.5	22.0	27.0	26.0	27.0	26.5	17.0
31	17.5	---	6.0	8.5	---	17.0	---	26.5	---	26.5	26.5	---
MONTH	20.5	15.5	8.0	6.0	9.0	16.5	18.0	24.5	26.5	---	27.0	21.5

BRAZOS RIVER BASIN

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08088000 BRAZOS RIVER NEAR SOUTH BEND, TEX.

LOCATION.--Lat 33°01'30", long 98°38'50", Young County, at gaging station on State Highway 67, 1.6 miles (2.6 km) downstream from Clear Fork Brazos River, and 2.0 miles (3.2 km) northeast of South Bend.

DRAINAGE AREA.--21,600 mi² (55,900 km²), approximately, of which 9,240 mi² (23,930 km²) is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: January 1942 to March 1948, October 1968 to September 1969.
Pesticide analyses: March 1968 to September 1974.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	TEMPER- ATURE (DEG C)	ALDRIN (UG/L)	ALDRIN IN BOTTOM DE- POSITS (UG/KG)	DDD (UG/L)	DDD IN BOTTOM DE- POSITS (UG/KG)	DDE (UG/L)	DDE IN BOTTOM DE- POSITS (UG/KG)	DDT (UG/L)	DDT IN BOTTOM DE- POSITS (UG/KG)	DI- ELDRIN (UG/L)
OCT. 08...	1500	28.0	.00	.0	.00	.0	.00	.5	.00	.0	.00
JAN. 29...	1530	13.0	.00	.0	.00	.0	.00	.0	.00	.0	.00

DATE	DI- ELDRIN IN BOTTOM DE- POSITS (UG/KG)	ENDRIN (UG/L)	ENDRIN IN BOTTOM DE- POSITS (UG/KG)	HEPTA- CHLOR (UG/L)	HEPTA- CHLOR IN BOTTOM DE- POSITS (UG/KG)	HEPTA- CHLOR EPOXIDE (UG/L)	HEPTA- CHLOR EPOXIDE IN BOT- TOM DE- POSITS (UG/KG)	LINDANE (UG/L)	LINDANE IN BOTTOM DE- POSITS (UG/KG)	CHLOR- DANE (UG/L)
OCT. 08...	.0	.00	.0	.00	.0	.00	.0	.00	.0	.0
JAN. 29...	.0	.00	.0	.00	.0	.00	.0	.00	.0	.0

DATE	CHLOR- DANE IN BOTTOM DE- POSITS (UG/KG)	PCB (UG/L)	PCB IN BOTTOM DE- POSITS (UG/KG)	DI- AZINON (UG/L)	MALA- THION (UG/L)	METHYL PARA- THION (UG/L)	PARA- THION (UG/L)	2,4-D (UG/L)	SILVEX (UG/L)	2,4,5-T (UG/L)
OCT. 08...	0	.0	0	.00	.00	.00	.00	.00	.00	.00
JAN. 29...	0	.0	0	.00	.00	.00	.00	.00	.00	.00

BRAZOS RIVER BASIN

08088420 BRAZOS RIVER AT FARM ROAD 1287, NEAR GRAHAM, TEX.

LOCATION.--Lat 33°03'20", long 98°34'54", Young County, at Gooseneck Bridge on Farm Road 1287 and about 3.5 miles (5.6 km) south of Graham.

DRAINAGE AREA.--21,955 mi² (56,863 km²), of which 9,240 mi² (23,930 km²) is noncontributing.

PERIOD OF RECORD.--Chemical analyses: October 1969 to September 1974.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO ₂) (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 SODIUM PLUS POTAS- SIUM (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)
OCT. 30...	1135	77	6.2	250	74	--	820	--	110	0
DEC. 04...	1030	72	6.1	330	70	--	1100	--	148	0
JAN. 15...	1015	47	4.5	220	73	880	--	12	22	0
FEB. 25...	1945	49	5.6	240	78	850	--	12	185	0
APR. 09...	0720	10	5.1	420	140	1800	--	16	214	0
JULY 01...	2010	11	12	450	77	2000	--	23	96	0
AUG. 06...	1545	298	4.3	35	4.8	46	--	4.0	72	0
SEP. 09...	1925	106	18	220	35	740	--	11	154	0

DATE	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	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)
OCT. 30...	650	1400	.1	3240	930	840	12	5530	7.0	16.0
DEC. 04...	860	1700	.1	4100	1100	990	14	6600	7.4	11.0
JAN. 15...	680	1400	--	3280	850	830	13	4420	6.1	5.5
FEB. 25...	670	1300	--	3250	920	770	12	5120	7.3	8.5
APR. 09...	1200	3000	--	6690	1600	1500	19	10500	7.6	15.0
JULY 01...	1200	3300	--	7110	1400	1400	23	11500	7.2	31.5
AUG. 06...	43	74	--	247	110	48	1.9	477	7.4	21.0
SEP. 09...	560	1100	--	2760	690	570	12	4380	7.8	24.5

00086600 BRAZOS RIVER AT POSSUM KINGDOM DAM, NEAR GRAFORD, TEX.

LOCATION.--Lat 32°52'00", long 98°26'00", Palo Pinto County, immediately below Possum Kingdom Dam, 2.6 miles (4.2 km) upstream from Loving Creek, 11.3 miles (18.2 km) southwest of Grafard, and 20 miles (32 km) upstream from gaging station near Palo Pinto.

DRAINAGE AREA.--22,550 mi² (58,400 km²), of which 9,240 mi² (23,930 km²) is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: January 1942 to September 1974.

Water temperatures: October 1949 to September 1955, October 1965 to September 1974.

EXTREMES.--October 1973 to September 1974:

Specific conductance: Maximum daily, 4,480 micromhos Nov. 9; minimum daily, 3,790 micromhos Sept. 16.

Water temperatures: Maximum, 25.0°C on several days during October and July; minimum, 10.0°C on several days during January.

Period of record:

Specific conductance: Maximum daily, 6,110 micromhos Feb. 20, 1961; minimum daily, 494 micromhos May 4, 1957.

Water temperatures: Maximum, 26.5°C on several days during September 1971; minimum, 7.0°C on several days in February 1951.

REMARKS.--Discharges reported are computed on the basis of records for the gaging station near Palo Pinto and records of releases from Possum Kingdom Reservoir.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED SODIUM PLUS POTAS- SIUM (K) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)
OCT. 27...	1330	32	7.0	200	63	--	610	--	146	0
NOV. 15...	1450	34	7.6	190	76	--	650	--	148	0
DEC. 31...	1350	170	5.6	180	51	630	--	9.8	126	0
JAN. 31...	1505	21	5.0	190	51	610	--	8.1	126	0
FEB. 28...	1430	32	5.0	180	51	620	--	9.6	118	0
MAR. 28...	1430	31	5.2	180	49	600	--	9.5	126	0
APR. 29...	1000	27	5.2	180	47	620	--	8.2	126	0
MAY 27...	1500	24	5.6	180	51	620	--	8.5	128	0
JUNE 30...	1800	352	5.9	180	46	590	--	11	128	0
JULY 12...	1400	23	5.6	180	49	630	--	10	128	0
AUG. 23...	1505	367	5.9	190	49	620	--	9.1	130	0
SEP. 27...	1545	204	6.1	180	48	610	--	6.5	138	0

DATE	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	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)
OCT. 27...	450	1100	2460	750	630	9.7	4250	7.4	21.0
NOV. 15...	520	1100	2600	790	670	10	4420	7.8	21.0
DEC. 31...	510	960	2410	660	560	11	4110	7.7	13.5
JAN. 31...	500	950	2380	680	580	10	4110	7.4	14.0
FEB. 28...	520	970	2410	660	560	11	4100	7.4	14.5
MAR. 28...	470	1000	2380	650	550	10	4010	7.6	15.5
APR. 29...	470	990	2380	640	540	11	4020	7.4	15.5
MAY 27...	510	980	2420	660	550	11	4030	7.5	18.0
JUNE 30...	450	960	2310	640	530	10	4010	7.6	19.5
JULY 12...	490	980	2410	650	550	11	4030	7.4	24.5
AUG. 23...	480	970	2390	680	570	10	3960	7.9	21.0
SEP. 27...	460	970	2350	650	530	10	3970	8.1	16.5

BRAZOS RIVER BASIN

08088600 BRAZOS RIVER AT POSSUM KINGDOM DAM, NEAR GRAFORD, TEX.--Continued

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

MONTH	DISCHARGE (FT ³ /S-DAY)	SPECIFIC CONDUCT- ANCE (MICRO- MHOS)	DIS- SOLVED SOLIDS (MG/L)	DIS- SOLVED SOLIDS (TONS)	DIS- SOLVED CHLORIDE (MG/L)	DIS- SOLVED CHLORIDE (TONS)	DIS- SOLVED SULFATE (MG/L)	DIS- SOLVED SULFATE (TONS)	HARDNESS (CA, MG) (MG/L)
OCT. 1973...	780	4270	2500	5260	1000	2110	510	1070	700
NOV.....	600	4410	2600	4210	1100	1780	530	860	740
DEC.....	16700	4080	2400	108000	1000	45100	490	22100	660
JAN. 1974...	5020	4060	2400	32500	990	13400	490	6640	650
FEB.....	680	4030	2400	4410	980	1800	490	900	650
MAR.....	2990	4010	2400	19400	980	7910	490	3950	640
APR.....	1310	4020	2400	8490	980	3460	490	1730	640
MAY.....	1410	4020	2400	9140	980	3730	490	1860	640
JUNE.....	4540	4020	2400	29400	980	12000	490	6000	640
JULY.....	12900	4010	2400	83600	980	34100	490	17100	640
AUG.....	10800	4020	2400	70000	980	28600	490	14300	640
SEP.....	5420	3950	2400	35100	960	14000	480	7000	630
TOTAL.....	63160	--	--	410000	--	168000	--	83500	--
WTD. AVG....	173	4050	2400	--	990	--	490	--	650

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	4240	4440	4320	4060	4030	4020	4060	4020	3890	4010	4130	4000
2	4280	4450	4270	4070	4040	4030	4030	4020	3890	4020	4110	3990
3	4280	4440	4230	4070	4040	4040	4030	4020	3890	4040	4090	3990
4	4250	4440	4120	4070	4030	4000	4030	4020	4000	4010	4090	3990
5	4250	4450	4100	4060	4010	4000	4030	4020	3990	4010	4090	3980
6	4250	4450	4070	4060	4040	4020	4030	4020	3990	4020	3860	3990
7	4240	4440	4070	4060	4040	4020	4030	4020	4020	4010	3970	3980
8	4240	4460	4070	4060	4040	4010	4030	4020	4010	4010	3970	3970
9	4240	4460	4070	4080	4040	4010	4030	4020	4030	4020	3980	3970
10	4200	4450	4060	4060	4040	4010	4030	4010	4010	4040	3970	3970
11	4220	4400	4060	4060	4040	4000	4010	4020	4030	4020	3980	3980
12	4280	4430	4070	4050	4030	4010	4010	4020	4030	4010	3980	3960
13	4290	4390	4070	4050	4050	4010	4030	4030	4030	4010	3980	3960
14	4270	4400	4070	4050	4050	4000	4030	4030	4030	4010	3980	3880
15	4220	4420	4070	4050	4050	4010	4030	4030	4030	4010	4020	3830
16	4220	4410	4070	4050	4050	4010	4030	4020	4030	4030	4000	3790
17	4270	4410	4070	4050	4050	4030	4030	4020	4030	4030	4000	3840
18	4270	4430	4070	4050	4040	4010	4030	4030	4030	4020	4000	3830
19	4270	4410	4070	4050	4030	4000	4030	4030	4020	4010	4010	3920
20	4240	4450	4070	4060	4050	4020	4030	4040	4020	4010	4000	3950
21	4240	4330	4070	4060	4030	4010	4010	4030	4020	4010	4010	3950
22	4240	4400	4070	4060	4020	4010	4010	4030	4030	4010	4010	3930
23	4240	4410	4070	4050	4020	4010	4010	4030	4030	4010	4010	3970
24	4250	4400	4070	4050	4020	4010	4010	4030	4030	4010	3930	3950
25	4240	4400	4070	4050	4020	4010	4010	4030	4030	4010	3930	3940
26	4220	4420	4070	4060	4020	4010	4010	4030	4020	4010	3930	3960
27	4250	4350	4070	4060	4020	4010	4010	4030	4010	4010	3950	3960
28	4240	4260	4070	4060	4020	4010	4010	4020	4000	4010	3930	4000
29	4240	4270	4070	4060	---	4030	4010	4020	4010	4010	4000	4000
30	4240	4270	4070	4060	---	4030	4000	4040	4010	4030	4000	4000
31	4280	---	4070	4060	---	4030	---	4020	---	4030	4040	---
MONTH	4250	4410	4090	4060	4030	4010	4020	4020	4010	4020	4000	3950

BRAZOS RIVER BASIN

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08088600 BRAZOS RIVER AT POSSUM KINGDOM DAM, NEAR GRAFORD, TEX.--Continued

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	21.0	17.0	11.5	14.0	13.5	15.5	16.5	18.0	19.5	20.0	21.0
2	21.0	21.0	17.0	11.5	14.0	13.5	15.5	16.5	18.0	24.5	20.0	21.0
3	21.0	21.0	19.5	11.5	14.0	13.5	15.5	16.5	18.0	24.5	20.0	21.0
4	21.0	21.0	19.5	10.0	14.0	13.5	---	16.5	16.5	24.5	20.0	22.0
5	21.0	21.0	18.0	11.5	14.0	14.5	---	16.5	16.5	24.5	20.0	21.0
6	21.0	21.0	18.0	11.5	13.5	14.5	18.0	16.5	16.5	24.5	20.0	21.0
7	21.0	21.0	18.0	10.0	13.5	14.5	18.0	16.5	18.0	24.5	20.0	21.0
8	21.0	21.0	18.0	10.0	13.5	14.5	18.0	16.5	18.0	24.5	20.0	21.0
9	21.0	21.0	18.0	10.0	13.5	14.5	15.5	16.5	18.0	24.5	20.0	21.0
10	20.0	21.0	18.0	10.0	13.5	14.5	15.5	16.5	18.0	24.5	20.0	22.0
11	20.0	21.0	18.0	10.0	---	14.5	15.5	16.5	22.0	24.5	20.0	22.0
12	21.0	21.0	18.0	10.0	---	14.5	15.5	16.5	22.0	24.5	20.0	22.0
13	21.0	21.0	18.0	10.0	13.5	14.5	15.5	16.5	22.0	24.5	20.0	22.0
14	21.0	---	18.0	10.0	13.5	14.0	15.5	17.0	22.0	24.5	20.5	22.0
15	21.0	21.0	18.0	10.0	13.5	14.0	15.5	17.0	22.0	24.5	20.5	22.0
16	21.0	21.0	18.0	14.5	13.5	14.0	15.5	17.0	22.0	25.0	20.5	22.0
17	21.0	21.0	---	14.5	13.5	14.0	15.5	17.0	22.0	25.0	20.5	20.5
18	21.0	21.0	---	14.5	13.5	14.0	15.5	18.0	22.0	25.0	20.5	20.5
19	21.0	21.0	---	14.5	13.5	14.5	15.5	18.0	22.0	25.0	20.5	20.5
20	21.0	21.0	---	14.5	14.5	14.5	15.5	18.0	22.0	25.0	21.0	20.5
21	21.0	19.0	---	14.5	14.5	13.5	15.5	18.0	22.0	25.0	21.0	20.5
22	21.0	19.0	---	14.5	14.5	13.5	15.5	16.5	22.0	25.0	21.0	20.5
23	21.0	19.0	---	15.0	14.5	13.5	15.5	16.5	22.0	25.0	21.0	20.5
24	21.0	19.0	---	14.5	14.5	13.5	15.5	18.0	22.0	20.0	21.0	20.5
25	21.0	19.0	13.5	14.5	14.5	13.5	15.5	18.0	22.0	19.5	21.0	16.5
26	25.0	19.0	13.5	15.0	14.5	13.5	15.5	18.0	19.5	20.0	21.0	16.5
27	21.0	19.0	13.5	15.0	14.5	15.5	---	18.0	19.5	20.0	21.0	16.5
28	21.0	17.0	18.0	14.5	14.5	15.5	---	18.0	19.5	20.0	21.0	16.5
29	21.0	17.0	18.0	14.5	---	14.5	15.5	18.0	19.5	20.0	21.0	16.5
30	21.0	17.0	13.5	14.5	---	14.5	15.5	18.0	19.5	19.5	21.0	16.5
31	21.0	---	13.5	14.0	---	14.5	---	18.0	---	20.0	21.0	---
MONTH	21.0	20.0	---	12.5	14.0	14.0	16.0	17.0	20.0	23.5	20.5	20.0

BRAZOS RIVER BASIN

08090800 BRAZOS RIVER NEAR DENNIS, TEX.

LOCATION.--Lat 32°36'56", long 97°55'32", Parker County, at gaging station at bridge on Farm Road 1543, 0.2 mile (0.3 km) south of Dennis, and 1.0 mile (1.6 km) upstream from Patrick Creek.

DRAINAGE AREA.--24,160 mi² (62,570 km²), of which 9,240 mi² (23,930 km²) is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: October 1970 to September 1974.

Water temperatures: October 1970 to September 1974.

EXTREMES.--October 1973 to September 1974:

Specific conductance: Maximum daily, 4,460 micromhos July 4; minimum daily, 525 micromhos Oct. 16.

Water temperatures: Maximum, 34.0°C July 21, 22; minimum, 0.5°C Jan. 3.

Period of record:

Specific conductance: Maximum daily, 4,720 micromhos Mar. 16, 1973; minimum daily, 400 micromhos Dec. 12, 1973.

Water temperatures: Maximum, 35.5°C Aug. 23, 1971, July 25, 1973; minimum, 0.5°C Jan. 3, 1974.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	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 SODIUM PLUS POTAS- SIUM (K) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)
OCT.										
20...	1220	204	7.8	59	12	93	--	5.5	132	0
29...	1215	52	6.5	88	20	190	--	4.9	156	0
NOV.										
29...	1035	98	4.3	94	23	220	--	6.7	177	0
DEC.										
08...	1300	2100	6.3	210	57	--	700	--	180	0
JAN.										
05...	1230	616	5.0	170	48	650	--	9.7	130	0
FEB.										
19...	0940	14	2.5	170	48	510	--	7.5	178	0
MAR.										
31...	0700	76	1.7	200	48	580	--	9.3	142	0
APR.										
01...	1325	55	2.2	180	49	580	--	8.5	150	0
MAY										
13...	1255	70	3.3	72	16	160	--	4.8	136	0
JUNE										
30...	2000	33	2.8	180	50	630	--	13	110	0
JULY										
31...	1420	1080	5.1	180	49	630	--	8.1	131	0
AUG.										
31...	1240	478	3.9	160	44	540	--	8.5	134	0
SEP.										
24...	1245	540	6.8	48	9.6	86	--	3.0	97	0

DATE	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	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)
OCT.										
20...	86	140	.2	468	200	88	2.9	859	7.8	20.5
29...	170	300	.2	856	300	170	4.8	1540	7.4	18.0
NOV.										
29...	180	320	--	935	330	180	5.3	1640	7.6	12.0
DEC.										
08...	570	1100	--	2710	750	600	11	4440	7.2	11.0
JAN.										
05...	520	960	--	2430	620	520	11	4080	7.8	1.0
FEB.										
19...	440	810	--	2080	620	480	8.9	3560	7.4	9.5
MAR.										
31...	490	960	--	2360	700	580	9.6	3900	7.4	25.0
APR.										
01...	470	940	--	2300	650	530	9.9	3890	7.4	--
MAY										
13...	130	240	--	693	250	130	4.4	1260	7.7	28.0
JUNE										
30...	480	1000	--	2410	660	570	11	4230	7.4	31.0
JULY										
31...	500	980	--	2420	650	540	11	4040	7.7	29.5
AUG.										
31...	420	860	--	3000	580	470	9.8	3520	7.6	28.5
SEP.										
24...	73	130	--	404	160	80	3.0	781	7.4	19.0

BRAZOS RIVER BASIN

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08090800 BRAZOS RIVER NEAR DENNIS, TEX.--Continued

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

MONTH	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCT- ANCE (MICRO- MHOS)	DIS- SOLVED SOLIDS (MG/L)	DIS- SOLVED SOLIDS (TONS)	DIS- SOLVED CHLORIDE (MG/L)	DIS- SOLVED CHLORIDE (TONS)	DIS- SOLVED SULFATE (MG/L)	DIS- SOLVED SULFATE (TONS)	HARDNESS (CA+MG) (MG/L)
OCT. 1973.....	17403	858	480	22600	140	6580	80	3760	200
NOV. 1973.....	2701	1230	690	5030	240	1750	130	948	260
DEC. 1973.....	18346	3840	2300	114000	910	45100	470	23300	660
JAN. 1974.....	8858	3910	2300	55000	930	22200	480	11500	670
FEB. 1974.....	960	3280	1900	4920	770	2000	400	1040	570
MAR. 1974.....	3266	3780	2200	19400	890	7850	460	4060	650
APR. 1974.....	5198	2330	1400	19600	520	7300	270	3790	430
MAY 1974.....	2697	1320	740	5390	260	1890	140	1020	270
JUNE 1974.....	6012	2330	1400	22700	520	8440	270	4380	430
JULY 1974.....	9278.69	4170	2500	62600	1000	25100	510	12800	710
AUG. 1974.....	13476	3790	2200	80000	900	32700	460	16700	650
SEPT 1974.....	11012	1310	730	21700	260	7730	140	4160	270
TOTAL	99207.68	**	**	433000	**	169000	**	87500	**
WTD.AVG.	271.8	2750	1600	**	630	**	330	**	490

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	2810	1550	1480	2580	3610	3240	3900	1580	2320	4180	4020	1740
2	3080	958	1430	3260	3600	3460	3930	1550	2500	4170	3590	1760
3	3240	813	1580	4010	3570	3470	3940	1590	2470	4280	3870	1960
4	3240	895	1690	4050	3570	3460	4020	1690	2030	4460	3980	2170
5	3300	1070	1840	4040	3560	3450	4000	1070	2060	4260	3960	2480
6	2810	1080	3960	4000	3570	3500	4000	1320	2370	4180	3780	2920
7	2950	1410	4080	4000	3560	3580	3970	991	2140	4110	3730	3270
8	2080	1580	4440	4010	3550	3630	4030	851	1680	4100	3750	3420
9	2970	1650	3920	3980	3550	3610	4030	833	1430	4110	3820	3610
10	3270	1530	4030	3860	3570	3500	4030	821	1210	4160	3430	3720
11	2240	1330	4000	3980	3570	3450	3880	1000	877	4130	3020	3760
12	1600	1250	4000	3960	3530	3480	3790	1160	877	4100	3020	3550
13	722	1240	3900	3950	3530	3550	3840	1270	1310	4090	3290	1530
14	750	1250	3970	3930	3510	3620	3970	1410	1910	4100	3610	2100
15	530	1260	3950	3950	3500	3520	3990	1510	1910	4100	3640	1640
16	525	1270	3670	4000	3490	3430	4000	1620	2310	4160	3610	2030
17	573	1270	3740	3930	3490	3480	4020	1690	2470	4300	3850	1130
18	684	1260	3710	3970	3450	3510	3950	1740	2830	4270	3980	2720
19	776	1260	3330	3960	3500	3560	3880	1730	3150	4280	3910	914
20	859	1200	3590	3740	3510	3440	3840	1720	3390	4350	4070	1290
21	971	1140	3370	3630	3160	3440	3760	1830	3570	4390	4070	592
22	1050	1000	3360	3560	3080	3490	3490	1870	3640	4400	4080	703
23	1110	1260	3990	3720	3040	3960	2830	1920	3810	4430	4080	712
24	1200	1060	3970	3680	2460	4010	1250	2010	3940	4320	4060	736
25	1520	1030	3950	3730	2450	4020	1110	2050	3980	4190	4040	785
26	1350	1350	3880	3730	2760	3980	1220	2050	4220	4130	3950	613
27	1400	1470	3880	3730	2900	3950	1350	2060	4230	4100	3890	842
28	1460	1640	4000	3690	3120	3900	1460	2170	4220	4100	3790	740
29	1540	1560	3770	3670	---	3900	1410	2170	4250	4110	3670	666
30	---	1450	3460	3660	---	3910	1540	2260	4210	4070	1180	670
31	1530	---	3400	3650	---	3910	---	2300	---	4020	3530	---
MONTH	1740	1270	3350	3790	3350	3630	3280	1610	2710	4200	3690	1830

BRAZOS RIVER BASIN

08090800 BRAZOS RIVER NEAR DENNIS, TEX.--Continued

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	18.5	13.5	3.0	14.0	19.0	22.0	23.0	26.0	32.0	28.0	31.0
2	28.0	19.5	17.0	2.0	15.0	22.0	22.0	28.0	30.0	30.0	27.0	25.0
3	25.5	16.5	15.5	0.5	14.0	20.0	19.0	29.0	26.5	30.0	29.0	25.0
4	25.0	22.0	13.5	2.0	10.0	---	18.0	29.5	28.0	26.5	28.5	22.0
5	22.0	13.0	10.5	4.0	16.5	23.0	22.0	21.0	27.0	29.0	27.0	25.5
6	22.0	13.0	10.5	6.0	9.0	21.0	19.0	25.0	30.0	29.5	25.0	24.5
7	28.0	16.0	10.0	5.5	7.0	21.5	19.0	27.0	31.5	31.0	28.5	24.5
8	28.5	19.0	11.0	8.0	8.0	22.0	18.5	25.0	32.0	32.0	27.0	28.0
9	27.0	16.5	12.0	5.0	6.5	21.5	14.5	26.5	30.0	32.0	29.5	26.5
10	25.0	17.0	11.0	5.5	12.0	---	18.0	24.0	29.0	31.5	24.5	28.0
11	22.0	16.5	11.0	2.5	6.0	24.0	23.0	24.5	27.5	31.5	29.0	28.5
12	22.5	17.0	---	4.5	9.0	19.0	19.0	30.5	25.0	30.0	30.5	26.0
13	21.0	18.0	15.0	---	11.0	---	20.5	28.5	28.5	28.5	30.0	21.0
14	21.5	21.0	12.0	7.0	13.0	17.0	20.0	28.5	30.0	33.0	31.0	20.0
15	21.5	19.0	11.0	7.5	12.0	18.5	16.5	31.5	30.0	31.0	31.0	23.0
16	23.0	16.0	10.0	11.5	10.0	19.0	21.0	29.5	31.0	33.0	33.0	24.0
17	21.0	15.5	10.5	16.0	16.0	23.0	24.0	28.5	31.0	30.5	31.0	23.0
18	23.0	22.0	12.0	15.5	15.5	25.0	20.5	29.0	31.0	31.5	33.0	23.0
19	20.5	19.5	5.0	---	10.0	22.5	20.0	30.0	29.0	30.0	31.0	24.5
20	20.5	15.0	1.5	9.5	11.5	16.0	20.5	27.5	30.0	31.0	31.0	26.0
21	23.0	14.5	7.0	14.0	10.0	9.5	21.0	27.5	31.0	34.0	31.5	23.0
22	24.0	18.0	7.0	11.5	9.5	12.5	20.5	29.0	33.0	34.0	29.5	24.0
23	20.5	20.5	10.0	8.0	11.0	13.5	21.0	30.5	30.0	32.0	29.0	20.0
24	20.0	18.0	---	12.0	8.0	8.0	24.0	32.0	27.0	32.0	29.5	28.0
25	22.0	16.5	12.0	10.0	14.0	10.0	24.0	27.0	26.0	32.0	27.0	27.0
26	25.0	17.0	8.0	12.0	11.0	11.0	22.5	27.5	27.5	30.5	---	19.5
27	20.0	15.5	7.5	14.5	16.0	17.0	24.0	29.5	26.0	30.0	26.5	21.5
28	21.0	12.0	9.5	14.5	18.0	21.0	25.0	31.0	30.0	31.0	25.5	---
29	15.5	13.0	9.5	10.0	---	20.5	24.0	27.0	29.0	31.5	28.0	22.0
30	---	13.0	10.0	9.5	---	22.0	23.0	27.0	31.0	29.0	24.0	21.5
31	17.0	---	10.0	11.0	---	25.0	---	28.0	---	29.5	28.5	---
MONTH	23.0	17.0	10.5	8.5	11.5	18.5	21.0	28.0	29.0	31.0	29.0	24.5

BRAZOS RIVER BASIN

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08092000 NOLAN RIVER AT BLUM, TEX.

LOCATION.--Lat 32°09'02", long 97°24'10", Hill County, at gaging station at bridge on Farm Road 933, 0.6 miles (1.0 km) northwest of Blum, 2.8 miles (4.5 km) downstream from Mustang Creek, 3.0 miles (4.8 km) downstream from Gulf, Colorado, and Santa Fe Railway Co. bridge.

DRAINAGE AREA.--276 mi² (715 km²).

PERIOD OF RECORD.--Chemical and biochemical analyses: January 1968 to September 1974.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED SODIUM PLUS POTAS- SIUM (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)
OCT. 31...	0930	271	9.0	54	6.1	--	32	--	168	0
DEC. 08...	0845	29	8.8	71	6.1	27	--	4.1	240	0
MAR. 13...	1630	33	7.5	68	6.6	37	--	4.1	218	10
MAY 06...	1510	145	9.7	43	4.0	29	--	5.8	132	0
JULY 19...	1455	.74	11	53	5.8	77	--	5.9	152	46
SEP. 28...	1200	131	10	58	5.2	16	--	3.8	193	0

DATE	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
OCT. 31...	47	29	.3	.50	.01	.23	.14	--	.95	263
DEC. 08...	31	23	--	.80	.00	.29	.44	--	.43	289
MAR. 13...	46	31	--	.62	.02	.10	1.0	1.1	.83	318
MAY 06...	36	32	--	1.4	.07	.30	1.4	1.7	.43	225
JULY 19...	55	54	--	.01	.00	.43	2.3	2.7	1.3	383
SEP. 28...	24	15	--	.69	.02	.06	.56	.62	.39	227

DATE	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	BIO- CHEM- ICAL OXYGEN DEMAND (MG/L)
OCT. 31...	160	22	1.1	454	7.9	16.0	10.6	106	7.8
DEC. 08...	200	6	.8	506	7.2	7.0	11.8	97	.6
MAR. 13...	200	2	1.1	533	8.3	22.0	12.6	143	2.0
MAY 06...	120	16	1.1	395	7.2	21.5	7.2	81	6.9
JULY 19...	160	0	2.7	632	9.0	34.5	18.8	261	5.5
SEP. 28...	170	8	.5	396	7.0	21.5	8.3	93	1.3

BRAZOS RIVER BASIN

08092600 BRAZOS RIVER AT WHITNEY DAM, NEAR WHITNEY, TEX.

LOCATION.--Lat 31°52'00", long 97°22'00", Hill County, immediately below Whitney Dam, 3.4 miles (5.5 km) upstream from gaging station near Whitney, 4.0 miles (6.4 km) upstream from Iron Creek, and 7.4 miles (11.9 km) southwest of Whitney.

DRAINAGE AREA.--26,190 mi² (67,830 km²), of which 9,240 mi² (23,930 km²) is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: October 1947 to May 1948, October 1948 to September 1974.

Water temperatures: October 1947 to May 1948, October 1948 to September 1974.

EXTREMES.--October 1973 to September 1974:

Specific conductance: Maximum daily, 2,040 micromhos on many days during April, May, June, and August; minimum daily, 1,790 micromhos Oct. 11.

Water temperatures: Maximum, 26.5°C on many days during July, August, and September; minimum, 7.0°C Jan. 13, 17, 22.

Period of record:

Specific conductance: Maximum daily, 2,660 micromhos Oct. 1, 1948; minimum daily, 203 micromhos May 23, 1952.

Water temperatures: Maximum, 33.5°C July 3, 1973; minimum, freezing point Jan. 28, 29, 1948.

REMARKS.--Records of discharge are given for gaging station near Whitney. No appreciable inflow between dam and gaging station except during periods of heavy local rains.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	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 SODIUM PLUS POTAS- SIUM (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)
OCT. 28...	0800	390	6.3	94	31	--	230	--	140	0
NOV. 15...	0800	1450	5.1	100	28	--	230	--	140	0
DEC. 29...	0800	29	4.4	100	24	270	--	5.8	143	0
JAN. 28...	0830	53	4.1	110	25	260	--	7.0	143	0
FEB. 27...	0800	2470	4.1	110	24	290	--	5.4	145	0
MAR. 31...	0800	790	4.0	110	21	270	--	6.5	150	0
APR. 26...	0800	487	4.0	110	22	280	--	6.3	155	0
MAY 24...	0800	128	4.2	110	25	260	--	5.9	158	0
JUNE 25...	0800	731	4.5	100	24	280	--	6.9	153	0
JULY 16...	0800	639	4.5	100	24	280	--	7.6	150	0
AUG. 21...	0800	265	4.3	96	24	290	--	7.1	140	0
SEP. 29...	0800	1080	4.5	99	25	280	--	5.0	130	0

DATE	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	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)
OCT. 28...	170	410	.3	1000	360	250	5.2	1900	7.3	23.0
NOV. 15...	150	420	.3	1010	360	250	5.3	1980	7.6	19.0
DEC. 29...	230	440	--	1140	350	230	6.3	2010	7.9	15.0
JAN. 28...	230	450	--	1160	380	260	5.8	1980	8.3	8.5
FEB. 27...	240	430	--	1180	370	250	6.5	2050	7.9	10.0
MAR. 31...	220	440	--	1150	360	240	6.2	2020	7.9	14.5
APR. 26...	220	440	--	1160	370	240	6.4	2020	7.7	18.0
MAY 24...	230	430	--	1140	380	250	5.8	2020	7.9	20.0
JUNE 25...	210	440	--	1140	350	220	6.5	2040	7.7	25.0
JULY 16...	220	450	--	1160	350	230	6.5	2030	7.9	26.0
AUG. 21...	200	430	--	1120	340	220	6.9	2040	7.8	26.5
SEP. 29...	210	440	--	1130	350	240	6.5	2010	8.3	23.5

08092600 BRAZOS RIVER AT WHITNEY DAM, NEAR WHITNEY, TEX.--Continued

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

MONTH	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCT- ANCE (MICRO- MHOS)	DIS- SOLVED SOLIDS (MG/L)	DIS- SOLVED SOLIDS (TONS)	DIS- SOLVED CHLORIDE (MG/L)	DIS- SOLVED CHLORIDE (TONS)	DIS- SOLVED SULFATE (MG/L)	DIS- SOLVED SULFATE (TONS)	HARDNESS (CA+MG) (MG/L)
OCT. 1973.....	20123	1890	1100	59800	410	22300	190	10300	340
NOV. 1973.....	14531	1970	1100	43200	430	16900	210	8240	360
DEC. 1973.....	19364	2000	1100	57500	430	22500	220	11500	360
JAN. 1974.....	15580	2010	1200	50500	430	18100	220	9250	360
FEB. 1974.....	12434	2010	1200	40300	430	14400	220	7390	350
MAR. 1974.....	32171	2020	1200	104000	440	38200	220	19100	370
APR. 1974.....	17925	2020	1200	58100	440	21300	220	10600	370
MAY 1974.....	10377	2030	1200	33600	440	12300	220	6160	370
JUNE 1974.....	19514	2030	1200	63200	440	23200	220	11600	370
JULY 1974.....	28609	2020	1200	92700	440	34000	220	17000	370
AUG. 1974.....	21154	2020	1200	68500	440	25100	220	12600	370
SEPT 1974.....	16943	2010	1200	54900	430	19700	220	10100	360
TOTAL	228725	**	**	726000	**	268000	**	134000	**
WTD.AVG.	626	2000	1200	**	430	**	220	**	360

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	1890	1960	2000	2020	2010	2010	2020	2010	2040	2020	2020	1980
2	1900	1970	2000	2000	2010	2010	2020	2030	2020	2020	2020	2020
3	1900	1960	2000	2000	2010	2010	2020	2030	2020	2020	2010	2020
4	1910	1960	2000	2000	2010	2010	2020	2030	2020	2020	2010	2020
5	1900	1950	2000	2020	2010	2010	2020	2010	2020	2020	2010	2020
6	1910	1970	2000	2020	2010	2010	2020	2030	2020	2020	2010	2020
7	1930	1970	2000	2000	2010	2010	2020	2030	2020	2020	2030	2000
8	1900	1970	2000	2000	2010	2010	2020	2030	2020	2020	2010	2020
9	1900	1960	2000	2000	2010	2020	2020	2040	1980	2020	2010	2020
10	1900	1960	1990	2000	2010	2020	2040	2040	2030	2030	2010	2020
11	1790	1970	2000	2000	2020	2020	1980	2040	2020	2020	2000	2030
12	1900	1970	2000	2000	2010	2020	2030	2040	2030	2020	2020	2030
13	1910	1970	2000	2000	2010	2020	2010	2040	2040	2030	2030	2030
14	1910	1980	2000	2000	2010	2020	2030	2040	2030	2020	2030	1990
15	1870	1980	2000	2000	2010	2020	2030	2030	2010	2020	2030	2010
16	1900	1970	2000	2000	2010	2020	2030	2030	2030	2020	2030	2030
17	1900	1980	2000	2010	2010	2020	2030	2040	2010	2020	2010	1970
18	1900	1980	2000	2010	2010	2020	2030	2040	2020	2020	2010	2030
19	1900	1970	2000	2010	2010	2020	2030	2040	2020	2020	2020	2030
20	1900	1970	2000	2000	2020	2010	2030	2040	2030	2030	2020	2030
21	1900	1990	2000	2000	2000	2020	2030	2020	2020	2020	2040	2030
22	1880	1980	2000	2000	2020	2020	2030	2020	2040	2030	2040	2010
23	1880	1970	2000	2000	2010	2020	2030	2020	2030	2030	2040	2010
24	1860	1980	2000	1980	2010	2020	2030	2020	2040	2030	2000	2010
25	1880	1980	2000	2000	2010	2020	2030	2040	2040	2030	2000	2010
26	1880	1980	2000	2010	2010	2020	2030	2040	2040	2030	2040	2010
27	1900	1980	2000	2000	2010	2020	2030	2040	2040	2010	2040	2010
28	1900	1980	2000	2000	2020	2020	2030	2020	2020	2010	2020	2010
29	1900	1970	2000	2000	---	2020	2030	2020	2020	2030	2020	2010
30	1900	1970	2010	2020	---	2020	2020	2030	2030	2030	2020	1990
31	1890	---	2010	2000	---	2020	---	2030	---	2030	1980	---
MONTH	1890	1970	2000	2000	2010	2020	2020	2030	2030	2020	2020	2010

BRAZOS RIVER BASIN

08092600 BRAZOS RIVER AT WHITNEY DAM, NEAR WHITNEY, TEX.--Continued

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	26.0	21.5	19.0	19.0	9.0	10.5	14.5	18.5	19.5	25.0	26.5	25.5
2	25.0	21.5	18.5	12.0	8.5	14.0	14.5	18.5	19.5	25.5	26.5	26.5
3	26.0	21.5	17.0	10.5	8.5	10.5	14.5	18.5	21.0	25.5	26.0	26.5
4	25.5	21.5	16.5	10.0	9.0	11.0	15.0	18.5	21.5	25.5	26.0	26.5
5	26.0	21.5	16.0	10.5	9.5	11.0	15.0	18.5	21.5	---	26.5	24.5
6	22.0	21.0	16.5	10.5	---	11.5	15.0	19.0	21.0	22.0	26.5	25.5
7	25.0	21.0	16.0	8.5	9.5	11.5	15.0	19.0	20.5	22.0	26.5	23.5
8	25.5	21.0	16.5	8.5	9.5	11.5	16.0	19.0	20.5	25.5	26.5	23.5
9	25.5	21.5	16.5	8.5	8.5	11.5	16.0	19.0	20.5	25.5	26.5	24.5
10	25.5	21.0	15.0	8.5	8.5	11.5	16.0	19.0	23.5	25.5	25.5	25.5
11	25.0	21.0	15.0	8.5	9.5	13.5	16.0	19.0	24.0	25.5	25.5	25.5
12	25.5	21.0	15.0	8.5	9.5	13.5	16.0	19.0	24.0	25.5	26.5	25.5
13	25.5	21.0	15.0	7.0	9.5	13.5	16.0	19.0	24.5	24.5	26.5	25.5
14	25.5	19.0	14.5	8.5	9.5	13.5	16.0	19.0	25.0	24.5	26.5	23.5
15	25.5	19.0	17.0	8.5	9.5	14.5	16.5	19.0	24.5	26.0	26.5	23.5
16	24.5	19.0	15.0	8.5	9.5	13.5	16.5	19.5	24.0	26.0	26.5	25.5
17	24.0	19.0	14.0	7.0	9.5	13.5	16.5	19.5	24.5	26.0	26.5	24.5
18	24.0	19.0	12.0	8.5	9.5	14.5	17.0	19.0	24.5	26.0	26.5	24.5
19	24.0	19.0	14.0	8.5	9.5	14.5	17.0	19.0	24.5	26.0	26.5	24.5
20	24.0	19.0	11.5	8.5	10.0	14.5	16.0	19.5	24.5	25.5	26.5	24.5
21	22.0	19.0	11.5	8.5	10.0	15.5	16.0	19.5	24.5	25.5	26.5	24.5
22	24.0	---	12.0	7.0	10.5	16.0	23.0	20.0	24.5	26.0	---	23.5
23	24.5	19.0	12.0	8.5	10.0	15.5	17.0	20.0	24.5	26.0	26.5	23.5
24	24.5	19.0	---	8.5	10.0	15.5	18.0	20.0	25.0	26.0	25.5	24.0
25	23.0	19.0	---	8.5	10.0	14.5	18.0	20.0	25.0	26.0	25.5	---
26	24.0	19.0	12.0	8.5	10.0	14.5	18.0	19.5	25.0	26.5	26.5	24.0
27	23.0	19.0	12.0	8.5	10.0	14.5	---	19.5	25.0	25.5	26.5	24.0
28	23.0	19.0	12.0	8.5	10.0	14.5	---	19.5	25.0	25.5	26.5	23.5
29	24.0	20.0	15.0	8.5	---	14.5	18.0	19.5	25.0	26.5	---	23.5
30	---	19.0	15.0	8.5	---	14.5	18.0	20.0	25.0	26.5	26.5	---
31	---	---	---	8.5	---	14.5	---	20.0	---	26.5	25.5	---
MONTH	24.5	20.0	14.5	9.0	9.5	13.5	16.5	19.0	23.5	25.5	26.5	24.5

08093500 AQUILLA CREEK NEAR AQUILLA, TEX.

LOCATION.--Lat 31°50'40", long 97°12'06", Hill County, at gaging station at bridge on Farm Road 1304, 1.0 mile (1.6 km) southeast of Aquilla, and 1.2 miles (1.9 km) downstream from Cobb Creek.

DRAINAGE AREA.--306 mi² (793 km²).

PERIOD OF RECORD.--Chemical analyses: May 1965 to June 1966, October 1967 to September 1974.

Chemical and biochemical analyses: January 1968 to September 1974.

Water temperatures: May 1965 to June 1966, October 1967 to September 1974.

EXTREMES.--October 1973 to September 1974:

Specific conductance: Maximum daily, 1,960 micromhos Aug. 20; minimum daily, 294 micromhos Sept. 21.

Water temperatures: Maximum, 30.0°C July 22, 23, 29; minimum, 3.0°C Jan. 1, 3, 11, 12.

Period of record:

Specific conductance (1965-66, 1967-71, 1972-74): Maximum daily, 1,990 micromhos Aug. 30, 1968; minimum daily, 219 micromhos Oct. 9, 1968, May 30, 1971.

Water temperatures: Maximum, 30.0°C on several days during summer months; minimum, 1.0°C Jan. 30, 1966, Jan. 8, 1968, Jan. 9, 1970.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

		INSTAN- TANEOUS 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 SODIUM PLUS POTAS- SIUM (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	
DATE	TIME										
OCT.											
07...	1015	35	12	83	11	--	21	--	199	0	
31...	1045	779	9.8	68	2.5	--	26	--	150	0	
NOV.											
14...	1200	35	9.5	140	10	--	80	--	336	0	
DEC.											
08...	0945	25	11	140	10	83	--	4.1	344	0	
12...	1145	24	9.6	140	10	95	--	4.5	350	0	
JAN.											
24...	1320	27	6.7	140	12	92	--	5.5	292	0	
FEB.											
14...	1020	22	3.5	140	12	97	--	2.9	315	0	
MAR.											
05...	1100	18	4.9	140	11	93	--	4.2	322	0	
14...	0830	15	8.0	140	13	110	--	4.3	328	0	
APR.											
17...	1400	6.6	8.5	150	16	150	--	4.1	318	0	
MAY											
08...	1410	16	11	100	5.3	56	--	4.1	200	0	
JUNE											
12...	1615	88	11	65	2.0	16	--	2.4	156	0	
JULY											
19...	1310	3.2	5.3	110	9.7	190	--	4.3	368	0	
AUG.											
26...	1840	99	12	42	3.4	220	--	6.6	404	0	
SEP.											
28...	1320	15	11	92	3.8	41	--	3.8	238	0	
DATE		DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITU- ENTS) (MG/L)
OCT.											
07...	94	25	.4	--	--	--	--	--	--	--	344
31...	86	13	.4	1.1	.01	.05	.11	--	1.7	--	285
NOV.											
14...	210	44	.5	--	--	--	--	--	--	--	653
DEC.											
08...	210	51	--	1.8	.06	.21	.23	--	.58	--	679
12...	210	51	--	--	--	--	--	--	--	--	693
JAN.											
24...	250	62	--	--	--	--	--	--	--	--	712
FEB.											
14...	260	57	--	--	--	--	--	--	--	--	728
MAR.											
05...	250	62	--	--	--	--	--	--	--	--	724
14...	290	71	--	.89	.01	.13	.87	1.0	1.0	--	798
APR.											
17...	340	98	--	--	--	--	--	--	--	--	923
MAY											
08...	170	36	--	9.7	.30	.29	1.0	1.3	.19	--	481
JUNE											
12...	73	5.7	--	--	--	--	--	--	--	--	252
JULY											
19...	320	67	--	.15	.01	.69	1.1	1.8	.44	--	888
AUG.											
26...	180	58	--	--	--	--	--	--	--	--	721
SEP.											
28...	110	21	--	1.9	.15	.12	.87	.99	.32	--	400

BRAZOS RIVER BASIN

08093500 AQUILLA CREEK NEAR AQUILLA, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	BIO- CHEM- ICAL OXYGEN DEMAND (MG/L)
OCT.									
07...	250	88	.6	650	7.8	24.0	--	--	--
31...	180	57	.8	432	6.7	16.0	9.8	98	4.8
NOV.									
14...	380	100	1.8	1010	8.0	18.0	--	--	--
DEC.									
08...	390	110	1.8	1080	7.3	7.0	12.0	98	1.1
12...	390	100	2.1	1100	8.1	10.0	--	--	--
JAN.									
24...	400	160	2.0	1100	7.8	9.0	--	--	--
FEB.									
14...	400	140	2.1	1140	7.6	13.0	--	--	--
MAR.									
05...	400	130	2.0	1150	7.9	19.5	--	--	--
14...	400	130	2.4	1210	7.6	16.0	6.7	67	3.1
APR.									
17...	440	180	3.1	1410	7.6	23.0	--	--	--
MAY									
08...	270	110	1.5	792	7.2	23.0	6.9	79	3.5
JUNE									
12...	170	43	.5	418	7.4	19.0	--	--	--
JULY									
19...	310	13	4.7	1380	8.0	28.5	10.7	137	5.0
AUG.									
26...	120	0	8.8	1170	7.4	24.5	--	--	--
SEP.									
28...	250	50	1.1	661	7.5	20.5	7.4	81	1.2

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

MONTH	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCT- ANCE (MICRO- MHOS)	DIS- SOLVED SOLIDS (MG/L)	DIS- SOLVED SOLIDS (TONS)	DIS- SOLVED CHLORIDE (MG/L)	DIS- SOLVED CHLORIDE (TONS)	DIS- SOLVED SULFATE (MG/L)	DIS- SOLVED SULFATE (TONS)	HARDNESS (CA+MG) (MG/L)
OCT. 1973.....	15774	451	270	11500	7.6	324	85	3620	180
NOV. 1973.....	1751	854	540	2550	40	189	180	851	310
DEC. 1973.....	770	1110	710	1480	61	127	240	499	400
JAN. 1974.....	1178	1040	660	2100	55	175	220	700	380
FEB. 1974.....	1213	976	620	2030	50	164	210	688	360
MAR. 1974.....	497	1190	760	1020	68	91.2	260	349	410
APR. 1974.....	250.1	1300	840	567	76	51.3	290	196	420
MAY 1974.....	1266.29	579	360	1230	18	61.5	120	410	220
JUNE 1974.....	3075.09	502	310	2570	12	99.6	97	805	200
JULY 1974.....	52.6	1360	880	125	81	11.5	300	42.6	430
AUG. 1974.....	2555.32	444	270	1860	7.0	48.3	83	573	180
SEPT 1974.....	7237.69	434	260	5080	6.2	121	81	1580	170
TOTAL	35620.1	**	**	32100	**	1460	**	10300	**
WTD.AVG.	97.59	545	330	**	15	**	110	**	210

BRAZOS RIVER BASIN

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08093500 AQUILLA CREEK NEAR AQUILLA, TEX.--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	437	643	950	1200	1060	1020	1340	1410	1390	991	1760	700
2	550	672	970	1180	1060	1050	1350	1350	1460	987	1650	752
3	549	701	996	1200	1070	1080	1310	1390	1460	948	1710	762
4	692	760	883	1200	1080	1120	1350	1400	1430	987	1720	754
5	429	823	962	1210	1090	1130	1340	496	1440	1080	1850	772
6	540	827	1030	1180	1100	1150	1340	533	1480	995	1810	789
7	650	861	1060	1230	1110	1160	1380	691	1490	1000	1780	785
8	802	887	1080	1210	1120	1190	1420	815	868	1080	1840	800
9	944	909	1090	1220	1130	1180	1420	865	491	1060	1820	812
10	1070	946	1080	900	1150	1190	1450	933	356	1160	1880	629
11	489	970	1090	782	1170	1190	1360	987	437	1120	1900	700
12	420	991	1100	983	1160	1210	1170	1000	451	1230	1910	750
13	314	994	1120	1030	1160	1210	1200	1080	369	1220	1890	451
14	483	996	1150	1080	1160	1230	1210	1130	505	1210	1910	573
15	484	1010	1140	1090	1170	1180	1230	1170	550	1210	1920	600
16	369	1090	1170	1130	1190	1220	1310	1200	600	1280	1920	656
17	515	1100	1170	1160	1200	1210	850	1240	625	1360	1920	399
18	614	1070	1170	1170	1220	1210	1000	1270	690	1350	1930	506
19	714	1040	1140	1160	1230	1190	1400	1300	734	1390	1940	498
20	771	1030	1140	1150	1230	1190	1410	1330	767	1420	1960	400
21	821	954	1190	1140	849	1210	1310	1330	827	1460	1940	294
22	871	919	1230	1110	859	1240	1220	1330	847	1500	1910	307
23	863	853	1230	1080	889	1290	1130	1350	867	1660	1890	473
24	882	875	1250	1100	930	1270	1350	1370	899	1640	1910	560
25	821	887	1270	1090	980	1250	1410	1390	907	1630	1900	599
26	935	700	1270	1010	1040	1270	1440	1400	925	1760	1840	627
27	931	616	1230	930	1050	1270	1450	1410	961	1760	345	651
28	981	817	1120	1020	1080	1270	1460	1410	961	1760	362	656
29	962	890	1190	1020	---	1270	1470	1410	970	1760	480	662
30	962	934	1190	1030	---	1250	1480	1420	980	1760	576	671
31	637	---	1200	1050	---	1250	---	1450	---	1800	656	---
MONTH	694	892	1120	1100	1090	1200	1320	1190	891	1340	1640	620

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	23.0	18.0	---	3.0	11.0	14.0	17.0	21.0	26.0	26.0	26.0	---
2	23.0	---	---	5.0	12.0	---	18.0	23.0	26.0	26.0	29.0	27.0
3	23.0	18.0	16.0	3.0	12.0	---	20.0	25.0	26.0	27.0	27.0	23.0
4	24.0	---	15.0	4.0	---	14.0	17.0	---	26.0	27.0	25.0	23.0
5	23.0	17.0	13.0	6.0	12.0	18.0	---	17.0	26.0	27.0	24.0	23.0
6	---	16.0	12.0	7.0	10.0	20.0	15.0	19.0	25.0	26.0	25.0	24.0
7	24.0	17.0	11.0	5.0	8.0	20.0	---	20.0	25.0	---	25.0	---
8	23.0	17.0	13.0	7.0	7.0	20.0	16.0	20.0	24.0	27.0	25.0	---
9	23.0	16.0	13.0	5.0	8.0	20.0	16.0	22.0	23.0	27.0	26.0	23.0
10	23.0	16.0	13.0	---	---	21.0	16.0	22.0	22.0	27.0	26.0	22.0
11	22.0	---	---	3.0	9.0	21.0	17.0	22.0	22.0	26.0	---	---
12	21.0	16.0	12.0	3.0	10.0	20.0	19.0	---	21.0	26.0	26.0	24.0
13	21.0	---	13.0	---	12.0	17.0	---	22.0	22.0	---	28.0	23.0
14	21.0	18.0	12.0	7.0	13.0	17.0	---	22.0	23.0	---	28.0	21.0
15	21.0	18.0	11.0	8.0	11.0	18.0	20.0	---	25.0	26.0	28.0	---
16	19.0	16.0	10.0	8.0	---	18.0	19.0	24.0	---	27.0	27.0	23.0
17	19.0	---	9.0	12.0	---	---	18.0	25.0	26.0	27.0	---	22.0
18	---	---	12.0	13.0	14.0	18.0	18.0	---	26.0	25.0	---	22.0
19	19.0	18.0	8.0	---	12.0	19.0	19.0	---	26.0	26.0	28.0	22.0
20	18.0	17.0	6.0	12.0	13.0	18.0	20.0	25.0	27.0	---	28.0	---
21	---	15.0	---	12.0	11.0	13.0	---	25.0	28.0	---	28.0	22.0
22	18.0	16.0	7.0	13.0	10.0	13.0	21.0	25.0	---	30.0	28.0	21.0
23	18.0	18.0	8.0	10.0	10.0	14.0	20.0	---	---	30.0	27.0	19.0
24	18.0	---	---	9.0	---	---	20.0	---	28.0	28.0	26.0	18.0
25	18.0	16.0	8.0	10.0	---	---	20.0	---	29.0	27.0	---	17.0
26	19.0	---	10.0	10.0	8.0	8.0	21.0	---	27.0	29.0	25.0	17.0
27	19.0	17.0	8.0	11.0	9.0	10.0	---	25.0	26.0	---	25.0	18.0
28	18.0	14.0	9.0	10.0	12.0	12.0	---	25.0	27.0	---	24.0	---
29	17.0	14.0	9.0	10.0	---	14.0	21.0	25.0	---	30.0	24.0	---
30	18.0	15.0	10.0	10.0	---	17.0	21.0	25.0	---	28.0	24.0	17.0
31	18.0	---	---	10.0	---	18.0	---	26.0	---	27.0	26.0	---
MONTH	20.5	---	10.5	8.0	10.5	16.5	---	---	25.5	---	26.0	---

BRAZOS RIVER BASIN

08096500 BRAZOS RIVER AT WACO, TEX.

LOCATION.--Lat 31°32'06", long 97°04'22", McLennan County, at Lake Brazos Dam in Waco, 0.5 mile (0.8 km) downstream from bridge on U.S. Highways 77 and 81 (Business Route), and 1.7 miles (2.7 km) upstream from gaging station.

DRAINAGE AREA.--28,530 mi² (73,890 km²), of which 9,240 mi² (23,930 km²) is probably noncontributing.

PERIOD OF RECORD.--Chemical and biochemical analyses: March 1968 to September 1974.
Pesticide analyses: March 1968 to September 1974.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISE- CHARGE (CFS)	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 SODIUM PLUS POTAS- SIUM (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)
OCT. 31...	1145	6100	6.5	79	10	--	130	--	150	0
DEC. 08...	1035	570	5.5	100	22	250	--	6.5	150	0
MAR. 11...	1730	620	3.6	100	21	240	--	6.2	156	0
MAY 08...	1615	1320	7.5	61	5.2	40	--	3.2	154	0
JULY 19...	1130	348	5.3	98	24	280	--	6.4	145	0
SEP. 28...	1515	2680	7.2	81	16	150	--	4.9	147	0

DATE	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
OCT. 31...	130	190	.3	.50	.00	.00	.13	--	.46	627
DEC. 08...	200	420	--	.10	.00	.02	.08	--	.01	1080
MAR. 11...	200	370	--	.11	.00	.02	.66	.68	.02	1020
MAY 08...	64	48	--	1.2	.06	.13	.43	.56	.04	305
JULY 19...	210	430	--	.00	.00	.20	.54	.74	.07	1130
SEP. 28...	130	240	--	.27	.01	.06	1.3	1.4	.14	702

DATE	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	BIO- CHEM- ICAL OXYGEN DEMAND (MG/L)
OCT. 31...	240	120	3.8	1060	7.1	18.0	10.0	103	2.9
DEC. 08...	340	220	5.9	1920	7.2	12.9	11.0	103	.6
MAR. 11...	340	210	5.7	1800	7.5	20.5	8.8	97	1.1
MAY 08...	170	47	1.3	529	7.5	24.0	7.8	92	2.1
JULY 19...	340	220	6.6	1980	7.9	29.5	7.8	101	1.8
SEP. 28...	270	150	4.0	1250	7.3	22.0	8.2	93	1.3

BRAZOS RIVER BASIN

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08096500 BRAZOS RIVER AT WACO, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	ALDRIN (UG/L)	DDD (UG/L)	DDE (UG/L)	DDT (UG/L)	DI- ELDRIN (UG/L)	ENDRIN (UG/L)	HEPTA- CHLOR (UG/L)	HEPTA- CHLOR EPOXIDE (UG/L)
OCT. 31...	1145	6100	18.0	.00	.00	.01	.00	.01	.00	.00	.00
MAR. 11...	1730	620	20.5	.00	.00	.00	.00	.00	.00	.00	.00
MAY 08...	1615	1320	24.0	.00	.00	.00	.00	.00	.00	.00	.00

DATE	LINDANE (UG/L)	CHLOR- DANE (UG/L)	PCB (UG/L)	DI- AZINON (UG/L)	MALA- THION (UG/L)	METHYL PARA- THION (UG/L)	PARA- THION (UG/L)	2,4-D (UG/L)	SILVEX (UG/L)	2,4,5-T (UG/L)
OCT. 31...	.00	.0	.0	.00	.00	.00	.00	.05	.00	.00
MAR. 11...	.00	.0	.0	.00	.00	.00	.00	.02	.00	.00
MAY 08...	.00	.0	.0	.01	.00	.00	.00	.12	.00	.01

08098290 BRAZOS RIVER NEAR Highbank, TEX.

LOCATION.--Lat 31°08'02", long 96°49'29", Falls County, at gaging station at bridge on Farm Road 413, 1.4 miles (2.3 km) downstream from Highbank Slough and Spring Branch, and 2.6 miles (4.2 km) south of Highbank.

DRAINAGE AREA.--29,421 mi² (76,200 km²), of which 9,240 mi² (23,930 km²) is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: November 1967 to September 1974.

Chemical and biochemical analyses: January 1968 to September 1974.

Water temperatures: November 1967 to September 1974.

EXTREMES.--October 1973 to September 1974:

Specific conductance: Maximum daily, 2,040 micromhos July 2; minimum daily, 331 micromhos Oct. 14.

Water temperatures: Maximum, 30.0°C July 22, 23, 30; minimum, 4.0°C Jan. 1, 4, 12.

Period of record:

Specific conductance: Maximum daily, 2,170 micromhos Dec. 8, 1972; minimum daily, 298 micromhos May 11, 1968, July 31, 1971.

Water temperatures: Maximum, 30.0°C on several days during July and August; minimum, 1.0°C Jan. 9, 1968.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	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 SODIUM PLUS POTAS- SIUM (K) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)
OCT.										
23...	0730	2490	9.4	58	9.8	--	33	--	160	0
NOV.										
08...	1255	654	9.8	77	11	63	--	4.5	223	0
DEC.										
12...	1745	495	6.6	98	20	220	--	6.5	220	0
25...	0730	574	5.5	100	22	--	210	--	196	0
JAN.										
15...	0815	913	4.6	110	20	210	--	5.8	188	0
21...	1730	1400	8.9	85	16	150	--	5.4	193	0
FEB.										
15...	1335	396	1.5	95	16	98	--	4.7	258	0
MAR.										
04...	1840	598	5.0	100	20	220	--	5.9	186	0
APR.										
15...	1505	2740	5.4	64	11	120	--	5.0	120	0
MAY										
23...	1600	177	3.4	82	20	170	--	5.3	204	0
JUNE										
21...	1430	510	6.9	72	14	140	--	5.3	114	16
28...	0800	526	6.2	100	24	240	--	6.9	175	0
JULY										
09...	1000	511	3.9	99	23	270	--	7.4	180	0
AUG.										
05...	1450	428	4.2	98	25	260	--	5.6	168	6
SEP.										
21...	0800	4440	12	46	3.8	20	--	3.9	130	0

DATE	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)
OCT.										
23...	37	61	.3	--	--	--	--	--	--	288
NOV.										
08...	73	80	--	--	--	--	--	--	--	428
DEC.										
12...	180	310	--	--	--	--	--	--	--	950
25...	190	320	.3	--	--	--	--	--	--	948
JAN.										
15...	190	330	--	.50	.00	.06	.39	--	.13	963
21...	150	210	--	--	--	--	--	--	--	720
FEB.										
15...	110	130	--	.01	.00	.41	.60	--	.21	582
MAR.										
04...	180	340	--	--	--	--	--	--	--	963
APR.										
15...	110	170	--	.48	.04	.39	1.2	1.6	.32	545
MAY										
23...	150	250	--	--	--	--	--	--	--	781
JUNE										
21...	130	210	--	.01	.00	.01	.99	1.0	.27	650
28...	190	380	--	--	--	--	--	--	--	1030
JULY										
09...	200	420	--	--	--	--	--	--	--	1110
AUG.										
05...	190	400	--	.00	.00	.01	.99	1.0	.16	1070
SEP.										
21...	40	20	--	--	--	--	--	--	--	210

BRAZOS RIVER BASIN

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08098290 BRAZOS RIVER NEAR HIGHBANK, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	BIO- CHEM- ICAL OXYGEN DEMAND (MG/L)
OCT.									
23...	180	54	1.1	566	7.7	21.0	--	--	--
NOV.									
08...	240	55	1.8	753	7.9	22.0	--	--	--
DEC.									
12...	330	150	5.3	1640	7.8	15.5	--	--	--
25...	350	190	4.9	1690	7.4	10.0	--	--	--
JAN.									
15...	360	200	4.8	1710	8.0	8.0	11.2	94	9.9
21...	280	120	3.9	1200	8.0	15.0	--	--	--
FEB.									
15...	300	88	2.5	1030	7.8	17.0	10.6	109	4.6
MAR.									
04...	330	180	5.3	1760	7.6	22.0	--	--	--
APR.									
15...	210	110	3.6	982	7.4	20.0	6.8	74	5.8
MAY									
23...	290	120	4.4	1400	7.5	32.0	--	--	--
JUNE									
21...	240	120	4.0	1160	8.7	32.0	11.0	149	5.5
28...	350	210	5.6	1860	7.9	24.0	--	--	--
JULY									
09...	340	190	6.4	1990	6.9	28.0	--	--	--
AUG.									
05...	350	200	6.1	1910	8.5	29.5	10.0	130	4.4
SEP.									
21...	130	24	.8	358	8.1	26.0	--	--	--

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

MONTH	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCT- ANCE (MICRO- MHOS)	DIS- SOLVED SOLIDS (MG/L)	DIS- SOLVED SOLIDS (TONS)	DIS- SOLVED CHLORIDE (MG/L)	DIS- SOLVED CHLORIDE (TONS)	DIS- SOLVED SULFATE (MG/L)	DIS- SOLVED SULFATE (TONS)	HARDNESS (CA, MG) (MG/L)
OCT. 1973.....	134417	596	320	116000	56	20300	47	17100	210
NOV. 1973.....	46124	1070	610	76000	170	21200	120	14900	260
DEC. 1973.....	30839	1420	810	67400	250	20800	160	13300	300
JAN. 1974.....	36356	1360	780	76600	240	23600	160	15700	290
FEB. 1974.....	23013	1090	620	38500	170	10600	130	8080	260
MAR. 1974.....	39719	1810	1000	107000	360	38600	190	20400	340
APR. 1974.....	28565	1540	870	67100	280	21600	170	13100	310
MAY 1974.....	30828	1200	690	57400	200	16600	140	11700	270
JUNE 1974.....	17000	1460	830	38100	260	11900	160	7340	300
JULY 1974.....	27122	1980	1100	80600	420	30800	200	14600	360
AUG. 1974.....	29922	1360	780	63000	240	19400	160	12900	290
SEPT 1974.....	122397	572	300	99100	50	16500	43	14200	200
TOTAL	566302	**	**	887000	**	252000	**	163000	**
WTD. AVG.	1551	1040	580	**	160	**	110	**	260

BRAZOS RIVER BASIN

08098290 BRAZOS RIVER NEAR HIGHBANK, TEX.--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	756	1070	1490	942	1020	1830	1860	839	775	2000	2010	757
2	810	638	1370	850	1040	1850	1880	1170	725	2040	1990	941
3	900	640	1280	800	1060	1870	1860	1150	723	2020	1960	1370
4	1200	700	1140	785	1080	1790	1870	1320	711	2020	1870	1190
5	950	612	1020	831	1100	1690	1870	1450	747	2020	1890	1450
6	637	652	907	1530	1140	1630	1870	1210	809	1980	1800	1290
7	871	692	918	1880	1210	1670	1850	1220	941	1960	1780	1270
8	734	763	1700	1920	1210	1790	1880	1520	1180	1960	1780	1210
9	672	756	1810	1890	1170	1720	1880	1250	1320	1980	1730	1190
10	684	748	1740	1850	1140	1590	1880	797	1500	1960	1810	1150
11	700	718	1710	1770	1100	1380	1830	669	1740	1960	1760	1090
12	400	864	1680	1770	1090	1610	1790	925	1840	1960	1840	1190
13	389	931	1590	1790	1060	1800	1810	1060	1820	1940	1840	1250
14	331	776	1650	1720	1030	1800	1820	1160	1760	1960	1920	1040
15	341	902	1720	1710	1020	1830	1330	1450	1130	1920	1840	1050
16	365	1140	1680	1710	1010	1800	1110	1560	1120	1910	1920	477
17	600	1300	1600	1680	1010	1800	1080	1690	1030	1910	1910	396
18	850	1340	1650	1650	987	1830	1230	1700	1060	1920	1890	383
19	980	1360	1280	1620	1130	1830	1200	1600	1490	1810	1870	342
20	873	1480	1000	1410	1100	1850	1220	1580	1330	1870	1870	333
21	624	1560	1180	1310	957	1920	1570	1520	1200	1910	1970	361
22	568	1590	1870	1390	1140	1930	1470	1440	1190	1920	2010	378
23	566	1490	1870	1410	1040	1930	1420	1450	1330	1940	1970	441
24	561	1400	1730	1360	1130	1930	1430	1370	1620	1970	1970	483
25	433	1460	1690	1250	1310	1880	1280	1330	1810	2010	1970	358
26	436	1550	1600	917	1310	1910	1540	1250	1870	2030	1760	344
27	483	1590	1500	878	1070	1870	1550	1170	1900	1990	1810	373
28	631	1580	1400	813	933	1790	1560	1100	1880	1990	1890	974
29	794	1590	1300	813	---	1800	1560	1040	1780	2000	1350	1320
30	897	1710	1200	830	---	1830	1510	961	1950	2030	639	1250
31	608	---	1100	920	---	1830	---	858	---	2000	500	---
MONTH	666	1120	1460	1350	1090	1790	1600	1250	1340	1960	1780	855

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	24.0	18.0	14.0	4.0	14.0	17.0	22.0	21.0	25.0	27.0	27.0	27.0
2	23.0	18.0	15.0	---	17.0	17.0	21.0	23.0	26.0	28.0	27.0	28.0
3	25.0	19.0	17.0	---	13.0	18.0	21.0	24.0	26.0	28.0	26.0	24.0
4	26.0	20.0	13.0	4.0	11.0	19.0	17.0	25.0	27.0	27.0	27.0	23.0
5	24.0	19.0	12.0	5.0	12.0	20.0	16.0	24.0	27.0	28.0	27.0	22.0
6	24.0	17.0	12.0	7.0	16.0	23.0	16.0	22.0	26.0	28.0	26.0	22.0
7	25.0	18.0	12.0	7.0	10.0	21.0	17.0	23.0	26.0	27.0	25.0	22.0
8	25.0	19.0	11.0	10.0	6.0	21.0	18.0	25.0	26.0	27.0	25.0	22.0
9	25.0	19.0	12.0	9.0	7.0	21.0	18.0	25.0	26.0	28.0	26.0	22.0
10	25.0	17.0	11.0	8.0	7.0	21.0	17.0	24.0	24.0	26.0	27.0	23.0
11	25.0	16.0	10.0	5.0	9.0	22.0	19.0	22.0	26.0	27.0	27.0	24.0
12	22.0	16.0	13.0	4.0	12.0	21.0	20.0	24.0	27.0	27.0	28.0	26.0
13	22.0	18.0	14.0	5.0	15.0	19.0	22.0	25.0	25.0	27.0	29.0	25.0
14	22.0	19.0	12.0	8.0	18.0	18.0	20.0	25.0	27.0	28.0	29.0	23.0
15	22.0	21.0	12.0	9.0	17.0	18.0	19.0	25.0	27.0	28.0	29.0	22.0
16	21.0	18.0	10.0	10.0	14.0	18.0	18.0	26.0	27.0	29.0	28.0	23.0
17	20.0	17.0	9.0	13.0	13.0	17.0	19.0	26.0	28.0	29.0	28.0	29.0
18	20.0	19.0	11.0	17.0	15.0	19.0	20.0	26.0	28.0	28.0	28.0	24.0
19	21.0	20.0	12.0	15.0	12.0	21.0	21.0	26.0	27.0	28.0	28.0	24.0
20	20.0	19.0	5.0	12.0	14.0	20.0	21.0	25.0	27.0	28.0	29.0	25.0
21	20.0	16.0	5.0	12.0	15.0	15.0	21.0	26.0	28.0	29.0	28.0	26.0
22	20.0	17.0	8.0	15.0	12.0	14.0	22.0	26.0	28.0	30.0	28.0	23.0
23	21.0	19.0	11.0	11.0	11.0	16.0	22.0	26.0	28.0	30.0	27.0	22.0
24	21.0	21.0	11.0	10.0	11.0	11.0	23.0	27.0	27.0	29.0	27.0	20.0
25	22.0	18.0	10.0	10.0	9.0	10.0	22.0	27.0	26.0	28.0	26.0	21.0
26	23.0	19.0	---	10.0	10.0	11.0	22.0	26.0	24.0	28.0	27.0	20.0
27	22.0	19.0	---	12.0	11.0	14.0	21.0	25.0	24.0	28.0	28.0	20.0
28	20.0	15.0	---	12.0	13.0	17.0	22.0	27.0	24.0	29.0	28.0	22.0
29	19.0	13.0	---	11.0	---	18.0	22.0	27.0	25.0	29.0	27.0	21.0
30	19.0	13.0	---	11.0	---	18.0	23.0	27.0	26.0	30.0	25.0	21.0
31	14.0	---	---	12.0	---	20.0	---	26.0	---	28.0	25.0	---
MONTH	22.0	18.0	11.5	9.5	12.5	18.0	20.0	25.0	26.5	28.0	27.0	23.0

BRAZOS RIVER BASIN

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08103900 SOUTH FORK ROCKY CREEK NEAR BRIGGS, TEX.
(Hydrologic bench-mark station)

LOCATION.--Lat 30°54'41", long 98°02'12", Burnet County, at gaging station at bridge on Ranch Road 963, 6 miles (10 km) above confluence with North Fork Rocky Creek, and 7 miles (11 km) west of Briggs.

DRAINAGE AREA.--34.2 mi² (88.6 km²).

PERIOD OF RECORD.--Chemical analyses: October 1961 to January 1964.

Chemical and biochemical analyses: January 1968 to September 1974.

Pesticide analyses: January 1968 to September 1972.

Sediment records: February 1968 to September 1974.

REMARKS.--Radiochemical analyses available from the U.S. Geological Survey, Denver, Colo.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISE- CHARGE (CFS)	DIS- SOLVED SILICA (SiO ₂) (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 (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)
OCT. 25...	1215	26	9.2	63	25	6.3	1.5	302	0	18	10	.4
JAN. 15...	1845	2.7	6.2	46	26	8.6	1.4	266	0	20	12	--
MAR. 15...	0900	2.7	8.8	59	27	8.4	1.3	280	0	19	12	--
MAY 05...	1210	28	7.8	33	14	5.7	1.7	160	0	12	7.0	--
AUG. 28...	1200	226	7.4	20	5.5	4.3	2.5	95	0	4.6	3.0	--
SEP. 29...	1400	34	10	62	26	8.0	1.2	311	0	14	10	--

DATE	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITU- ENTS) (MG/L)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)	VOL. NON- FILT- RABLE RESIDUE (MG/L)	HARD- NESS (CA+MG) (MG/L)	NON- CAP- RONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO
OCT. 25...	.07	.00	.00	.02	270	283	<1	--	260	12	.2
JAN. 15...	.10	.03	.13	.00	--	249	--	--	220	4	.3
MAR. 15...	.04	--	--	.01	271	274	1	0	260	29	.2
MAY 05...	.07	--	--	.03	165	160	--	--	140	9	.2
AUG. 28...	.09	--	--	.08	98	94	90	--	73	0	.2
SEP. 29...	.17	--	--	.03	255	284	--	--	260	5	.2

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	BIO- CHEM- ICAL OXYGEN DEMAND (MG/L)	IMME- DIATE COLI- FORM (COL. PER 100 ML)	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT. 25...	515	7.7	20.0	--	--	9.2	100	--	2300	43	120	.0
JAN. 15...	452	8.0	12.0	--	--	11.1	103	--	530	160	29	--
MAR. 15...	485	7.5	15.0	5	2	6.8	67	--	230	160	140	--
MAY 05...	283	7.6	23.0	--	--	8.2	94	--	69	42	72	--
AUG. 28...	152	7.8	24.0	--	--	8.0	94	--	60000	2000	11000	--
SEP. 29...	531	7.2	20.5	--	--	8.8	97	.2	68	20	68	--

BRAZOS RIVER BASIN

08103900 SOUTH FORK ROCKY CREEK NEAR BRIGGS, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	TOTAL ALUMINUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL BARIUM (BA) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	TOTAL CHROMIUM (CR) (UG/L)	TOTAL COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)	CYANIDE (CN) (MG/L)	TOTAL IRON (FE) (UG/L)	DIS-SOLVED IRON (FE) (UG/L)
OCT. 25...	1215	10	0	--	0	0	0	8	--	10	10
MAR. 15...	0900	--	0	0	<10	0	--	<10	.00	50	--
AUG. 28...	1200	--	1	<100	<10	0	--	<10	.00	2400	--

DATE	TOTAL LEAD (PB) (UG/L)	TOTAL LITHIUM (LI) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL SELENIUM (SE) (UG/L)	TOTAL SILVER (AG) (UG/L)	TOTAL STRONTIUM (SR) (UG/L)	TOTAL ZINC (ZN) (UG/L)
OCT. 25...	0	0	20	0	<.2	0	--	--	2000	30
MAR. 15...	<100	--	0	--	.0	--	1	<10	--	20
AUG. 28...	<100	--	60	--	.0	--	1	<10	--	20

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TEMPERATURE (DEG C)	ALDRIN (UG/L)	ALDRIN IN BOTTOM DEPOSITS (UG/KG)	DDD (UG/L)	DDD IN BOTTOM DEPOSITS (UG/KG)	DDE (UG/L)	DDE IN BOTTOM DEPOSITS (UG/KG)	DDT (UG/L)	DDT IN BOTTOM DEPOSITS (UG/KG)
OCT. 25...	1215	26	20.0	.00	.0	.00	.0	.00	.0	.00	.0
AUG. 28...	1200	226	24.0	.00	--	.00	--	.00	--	.00	--

DATE	DI-ELDRIN (UG/L)	DI-ELDRIN IN BOTTOM DEPOSITS (UG/KG)	ENDRIN (UG/L)	ENDRIN IN BOTTOM DEPOSITS (UG/KG)	HEPTACHLOR (UG/L)	HEPTACHLOR IN BOTTOM DEPOSITS (UG/KG)	HEPTACHLOR EPOXIDE (UG/L)	HEPTACHLOR EPOXIDE IN BOTTOM DEPOSITS (UG/KG)	LINDANE (UG/L)	LINDANE IN BOTTOM DEPOSITS (UG/KG)	CHLORDANE (UG/L)
OCT. 25...	.00	.0	.00	.0	.00	.0	.00	.0	.00	.0	.0
AUG. 28...	.00	--	.00	--	.00	--	.00	--	.00	--	.0

DATE	CHLORDANE IN BOTTOM DEPOSITS (UG/KG)	PCB (UG/L)	PCB IN BOTTOM DEPOSITS (UG/KG)	DI-AZINON (UG/L)	MALATHION (UG/L)	METHYL PARATHION (UG/L)	PARATHION (UG/L)	2,4-D (UG/L)	SILVEX (UG/L)	2,4,5-T (UG/L)
OCT. 25...	0	.0	0	.00	.00	.00	.00	.00	.00	.00
AUG. 28...	--	.0	--	.00	.00	.00	.00	.00	.00	.00

BRAZOS RIVER BASIN

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08103900 SOUTH FORK ROCKY CREEK NEAR BRIGGS, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	SUS- PENDE SEDIM- ENT (MG/L)	SUS- PENDE SEDIM- ENT DIS- CHARGE (T/DAY)
OCT.					
23...	1500	28	19.5	8	.61
25...	1200	27	--	11	.80
NOV.					
27...	1530	8.4	17.0	5	.11
JAN.					
07...	0900	3.2	5.5	25	.22
15...	1845	2.8	12.0	12	.09
FEB.					
19...	0830	2.1	11.5	13	.07
MAR.					
15...	0900	2.6	15.0	22	.15
APR.					
01...	0900	1.2	21.0	13	.04
MAY					
05...	1210	30	23.0	43	3.5
14...	1400	34	26.0	7	.64
JUNE					
25...	1300	.74	26.5	5	.01
AUG.					
06...	1330	.62	24.0	1	.00
28...	1200	228	24.0	115	71
SEP.					
11...	--	21	22.5	3	.18

BRAZOS RIVER BASIN

08104500 LITTLE RIVER NEAR LITTLE RIVER, TEX.

LOCATION.--Lat 30°57'59", long 97°20'45", Bell County, at gaging station at bridge on State Highway 95, 2.4 miles (3.9 km) southeast of Little River, and 5 miles (8 km) downstream from confluence of Leon and Lampasas Rivers.

DRAINAGE AREA.--5,274 mi² (13,660 km²).

PERIOD OF RECORD.--Chemical analyses: October 1964 to September 1974.
Water temperatures: October 1964 to September 1973.

EXTREMES.--Period of record:

Specific conductance (1964-73): Maximum daily, 1,140 micromhos Oct. 28, 1964; minimum daily, 245 micromhos May 16, 1965.

Water temperatures (1964-73): Maximum, 38.0°C July 7, 1969, Sept. 15, 1972; minimum, 3.0°C Jan. 10, 1973.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	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 SODIUM PLUS POTAS- SIUM (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)
OCT.										
03...	1045	134	8.4	66	16	--	12	--	224	0
NOV.										
09...	1015	1560	7.2	55	15	--	17	--	184	0
DEC.										
13...	1320	363	8.0	70	16	26	--	2.9	274	0
JAN.										
25...	1140	1040	6.7	53	13	27	--	4.0	198	0
MAR.										
06...	1125	192	6.0	67	15	30	--	1.7	235	0
APR.										
18...	1020	91	6.7	69	13	31	--	3.7	250	0
MAY										
29...	1345	79	7.0	65	14	33	--	3.6	245	0
JULY										
10...	1100	359	5.2	58	11	23	--	4.3	197	0
AUG.										
19...	1220	318	6.7	51	17	33	--	3.2	210	0

DATE	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITU- ENTS) (MG/L)	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)
OCT.										
03...	29	31	.0	272	230	48	.3	543	7.1	24.5
NOV.										
09...	21	45	.1	250	200	49	.5	524	7.5	18.0
DEC.										
13...	25	38	--	321	240	16	.7	589	8.1	15.5
JAN.										
25...	27	40	--	268	190	23	.9	499	7.5	10.0
MAR.										
06...	28	43	--	306	230	36	.9	573	7.5	20.0
APR.										
18...	41	38	--	326	230	21	.9	588	7.6	20.0
MAY										
29...	41	40	--	324	220	19	1.0	580	7.9	28.0
JULY										
10...	31	40	--	270	190	29	.7	500	6.8	25.0
AUG.										
19...	23	60	--	297	200	25	1.0	557	8.0	22.5

BRAZOS RIVER BASIN

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08105000 SAN GABRIEL RIVER AT GEORGETOWN, TEX.

LOCATION.--Lat 30°39'13", Long 97°39'19", Williamson County, at gaging station 100 ft (30 m) downstream from Missouri-Kansas-Texas Railroad Co. bridge, 1.2 miles (1.9 km) downstream from confluence of North and South Forks, and 1.8 miles (2.9 km) northeast of Georgetown.

DRAINAGE AREA.--399 mi² (1,033 km²).

PERIOD OF RECORD.--Chemical and biochemical analyses: July to September 1974.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	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)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	TOTAL NITRATE (N) (MG/L)
JULY 15...	1300	12	64	16	16	1.5	254	0	24	25	1.5
AUG. 05...	1100	11	66	16	14	1.8	263	0	21	23	1.6
SEP. 24...	1430	12	81	15	3.5	1.6	290	0	20	13	.76

DATE	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITU- ENTS) (MG/L)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)	VOL. NON- FILT- RABLE RESIDUE (MG/L)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO
JULY 15...	.11	.51	.45	.96	.30	284	3	2	230	18	.5
AUG. 05...	.10	.71	.49	1.2	.44	282	2	0	230	15	.4
SEP. 24...	.00	.10	.42	.52	.10	289	4	1	260	26	.1

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH	TEMPER- ATURE (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	BIO- CHEM- ICAL OXYGEN DEMAND (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	PHENOLS (UG/L)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)
JULY 15...	509	7.4	27.0	0	4	7.4	91	6.8	2.7	1	.0
AUG. 05...	517	7.3	25.0	0	1	4.0	48	2.5	3.1	3	.0
SEP. 24...	512	6.4	19.5	0	1	9.1	98	.4	2.9	0	.0

DATE	TIME	DIS- SOLVED ALUM- INUM (AL) (UG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	DIS- SOLVED COBALT (CO) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)
JULY 15...	1300	0	0	70	0	0	0	1

DATE	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	DIS- SOLVED LITHIUM (LI) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED MERCURY (HG) (UG/L)	DIS- SOLVED NICKEL (NI) (UG/L)	DIS- SOLVED STRON- TIUM (SR) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)
JULY 15...	50	2	0	0	.0	0	490	0

BRAZOS RIVER BASIN

08105700 SAN GABRIEL RIVER AT LANEPORT, TEX.

LOCATION.--Lat 30°41'40", long 97°15'43", Williamson County, at gaging station on county road bridge, 0.2 mile (0.3 km) north of Laneport, 3.4 miles (5.5 km) downstream from Willis Creek, and 7.5 miles (12.1 km) northwest of Thrall.

DRAINAGE AREA.--729 mi² (1,888 km²).

PERIOD OF RECORD.--Chemical and biochemical analyses: July 1972 to September 1974.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	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 SODIUM PLUS POTAS- SIUM (K) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
OCT. 08...	0830	191	13	68	8.7	--	13	--	212	0	25	19
NOV. 08...	1610	414	10	77	13	--	16	--	268	0	26	18
DEC. 04...	0845	239	11	78	14	16	--	1.4	268	0	29	23
JAN. 15...	1200	148	7.7	70	14	18	--	1.1	244	0	32	26
FEB. 15...	1030	191	6.5	67	13	17	--	1.0	234	0	30	25
MAR. 11...	1430	143	9.5	71	14	18	--	1.5	240	0	31	24
APR. 15...	0950	229	10	68	15	15	--	2.3	249	0	27	22
MAY 09...	1030	172	11	69	10	13	--	2.2	238	0	23	17
JUNE 21...	1500	111	14	64	14	15	--	1.6	230	0	28	24
JULY 15...	1425	51	13	65	14	20	--	1.6	236	0	36	25
AUG. 05...	1215	36	12	62	15	20	--	1.5	224	0	27	31
SEP. 24...	1620	471	13	85	14	11	--	2.0	287	0	28	16

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITU- ENTS) (MG/L)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)	VOL. NON- FILT- RABLE RESIDUE (MG/L)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)
OCT. 08...	.2	1.7	.01	.10	.18	--	.11	259	77	25	210	32
NOV. 08...	.2	2.2	.00	.06	.26	--	.06	302	43	22	250	26
DEC. 04...	--	2.5	.01	.00	.36	--	.38	305	12	8	250	33
JAN. 15...	--	3.5	.00	.07	.06	--	.02	290	15	2	230	33
FEB. 15...	--	1.9	.01	.00	.03	--	.00	275	22	8	220	28
MAR. 11...	--	1.8	.01	.02	.26	28	.08	288	32	4	240	39
APR. 15...	--	1.1	.05	.35	.38	.73	.11	282	46	10	230	27
MAY 09...	--	.97	.03	.07	.86	.93	.10	263	85	11	210	19
JUNE 21...	--	.97	.01	.18	.38	.56	.08	275	34	0	220	30
JULY 15...	--	1.5	.01	.11	1.2	1.3	.16	292	36	8	220	27
AUG. 05...	--	1.3	.01	.07	.75	.82	.10	279	34	4	220	33
SEP. 24...	--	1.3	.01	.10	.57	.67	.12	311	156	152	270	35

BRAZOS RIVER BASIN

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08105700 SAN GABRIEL RIVER AT LANEPORT, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	BIO- CHEM- ICAL OXYGEN DEMAND (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	PHENOLS (UG/L)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)
OCT. 08...	--	451	7.7	24.0	20	40	7.5	88	.8	.0	10	.0
NOV. 08...	.4	525	7.8	21.0	10	20	9.3	103	.9	.0	0	.0
DEC. 04...	.4	548	7.2	15.5	0	20	7.9	78	.5	1.5	0	.0
JAN. 15...	.5	510	7.7	10.0	0	6	11.2	99	.6	.0	0	.0
FEB. 15...	.5	508	7.2	18.0	0	15	8.6	91	1.1	.0	0	.0
MAR. 11...	.5	515	7.7	25.0	7	15	9.2	110	1.1	.0	0	.0
APR. 15...	.4	498	7.5	20.5	10	25	7.8	85	1.6	4.0	--	--
MAY 09...	.4	459	7.6	24.5	0	55	7.5	89	1.7	8.0	1	.0
JUNE 21...	.4	489	7.5	28.0	0	40	7.4	94	1.0	3.5	1	--
JULY 15...	.6	524	7.6	28.5	0	25	7.5	96	1.5	2.5	2	.0
AUG. 05...	.6	491	7.6	26.0	0	15	7.2	88	.5	2.6	2	.0
SEP. 24...	.3	533	6.5	20.5	0	70	8.6	95	.7	7.2	2	.0

DATE	TIME	DIS- SOLVED ALUM- INUM (AL) (UG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	DIS- SOLVED COBALT (CO) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)
NOV. 08...	1610	--	--	80	--	--	--	--
JAN. 15...	1200	0	4	80	1	0	2	3
MAR. 11...	1430	20	2	80	0	0	0	5
MAY 09...	1030	20	8	90	1	40	1	11
JUNE 21...	1500	0	2	80	--	0	--	--
JULY 15...	1425	0	0	100	0	0	0	1

DATE	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	DIS- SOLVED LITHIUM (LI) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED MERCURY (HG) (UG/L)	DIS- SOLVED NICKEL (NI) (UG/L)	DIS- SOLVED STRON- TIUM (SR) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)
NOV. 08...	--	--	--	--	--	--	--	--
JAN. 15...	110	3	0	0	.0	0	770	20
MAR. 11...	20	4	10	0	.0	3	700	10
MAY 09...	20	4	0	0	.0	4	470	20
JUNE 21...	10	--	0	10	.0	--	700	20
JULY 15...	20	2	10	0	.0	0	600	0

BRAZOS RIVER BASIN

08106500 LITTLE RIVER AT CAMERON, TEX.

LOCATION.--Lat 30°49'53", long 96°57'01", Milam County, at bridge on U.S. Highway 77, 2,020 ft (616 m) downstream from gaging station, 0.7 mile (1.1 km) upstream from Gulf, Colorado, and Santa Fe Railway Co. bridge, and 2 miles (3 km) southeast of Cameron.

DRAINAGE AREA.--7,088 mi² (18,358 km²).

PERIOD OF RECORD.--Chemical analyses: October 1959 to September 1974.

Chemical and biochemical analyses: January 1968 to September 1974.

Water temperatures: October 1959 to September 1974.

EXTREMES.--October 1973 to September 1974:

Specific conductance: Maximum daily, 721 micromhos Mar. 27, Apr. 24; minimum daily, 154 micromhos Sept. 13.

Water temperatures: Maximum, 29.0°C on several days during June, July, and August; minimum, 5.0°C Jan. 4.

Period of record:

Specific conductance: Maximum daily, 1,280 micromhos Sept. 25, 26, 1963; minimum daily, 154 micromhos Sept. 13, 1974.

Water temperatures: Maximum, 33.0°C Aug. 6, 1964, Aug. 1, 1969; minimum, 4.0°C Jan. 11, 1968, Jan. 12-14, 1973.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTAN- TANEOUS 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 SODIUM PLUS POTAS- SIUM (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HC03) (MG/L)	CAR- BONATE (C03) (MG/L)
OCT. 03...	1440	453	12	60	7.3	19	--	4.6	196	0
NOV. 05...	1425	1960	9.0	64	13	27	--	3.9	231	0
08...	1400	1990	8.8	66	13	--	27	--	232	0
DEC. 10...	1140	543	10	80	14	32	--	2.6	284	13
JAN. 15...	1000	504	6.1	82	15	35	--	2.6	274	0
21...	1315	952	8.2	65	9.7	28	--	3.6	192	0
FEB. 08...	0900	652	8.0	86	14	35	--	2.3	284	0
15...	1215	589	5.8	83	15	35	--	2.3	276	0
MAR. 04...	1240	456	2.5	77	15	36	--	2.2	256	0
APR. 15...	1300	388	4.5	77	15	53	--	2.8	285	0
MAY 22...	1230	917	9.3	66	16	27	--	2.7	240	0
JUNE 21...	1000	699	11	60	15	33	--	3.5	232	0
JULY 08...	1130	377	7.3	59	12	29	--	3.2	210	0
AUG. 05...	1330	399	7.8	55	17	37	--	3.2	218	0
SEP. 27...	1145	2380	8.7	57	12	26	--	2.8	210	0

DATE	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
OCT.										
03...	30	20	--	--	--	--	--	--	--	249
NOV.										
05...	25	38	--	--	--	--	--	--	--	294
08...	26	39	.2	1.1	.04	.00	.36	--	.26	299
DEC.										
10...	39	40	--	--	--	--	--	--	--	371
JAN.										
15...	44	50	--	2.4	.00	.07	.00	--	.21	370
21...	44	37	--	--	--	--	--	--	--	290
FEB.										
08...	48	41	--	--	--	--	--	--	--	374
15...	48	46	--	2.0	.02	.16	.03	--	.26	371
MAR.										
04...	47	46	--	--	--	--	--	--	--	352
APR.										
15...	57	54	--	1.5	.03	.26	.46	.72	.47	404
MAY										
22...	36	42	--	--	--	--	--	--	--	317
JUNE										
21...	30	49	--	.54	.01	.09	.74	.83	.67	316
JULY										
08...	34	40	--	--	--	--	--	--	--	288
AUG.										
05...	28	58	--	.83	.02	.10	.90	1.0	.56	313
SEP.										
27...	25	40	--	--	--	--	--	--	--	275

BRAZOS RIVER BASIN

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08106500 LITTLE RIVER AT CAMERON, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)
OCT. 03...	180	19	.6	446	7.4	26.0	--	--	--
NOV. 05...	210	24	.8	533	7.7	18.0	--	--	--
08...	220	28	.8	541	7.8	22.0	9.0	102	1.2
DEC. 10...	260	3	.9	652	8.7	11.0	--	--	--
JAN. 15...	270	42	.9	653	7.9	9.0	11.6	100	1.0
21...	200	45	.9	522	8.3	13.5	--	--	--
FEB. 08...	270	39	.9	668	7.8	10.0	--	--	--
15...	270	44	.9	672	7.6	16.5	9.0	92	1.1
MAR. 04...	250	44	1.0	645	7.8	21.0	--	--	--
APR. 15...	250	20	1.4	720	7.7	21.5	9.0	101	1.6
MAY 22...	230	34	.8	568	7.6	25.5	--	--	--
JUNE 21...	210	21	1.0	559	7.6	28.5	6.9	88	1.7
JULY 08...	200	28	.9	526	7.4	28.5	--	--	--
AUG. 05...	210	29	1.1	571	7.9	25.0	7.8	93	1.3
SEP. 27...	190	20	.8	505	8.3	19.0	--	--	--

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

MONTH	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCT- ANCE (MICRO- MHOS)	DIS- SOLVED SOLIDS (MG/L)	DIS- SOLVED SOLIDS (TONS)	DIS- SOLVED CHLORIDE (MG/L)	DIS- SOLVED CHLORIDE (TONS)	DIS- SOLVED SULFATE (MG/L)	DIS- SOLVED SULFATE (TONS)	HARDNESS (CA+MG) (MG/L)
OCT. 1973.....	125936	393	220	74800	25	8500	26	8840	160
NOV. 1973.....	61400	484	270	44800	33	5470	33	5470	190
DEC. 1973.....	21006	616	340	19300	45	2550	43	2440	240
JAN. 1974.....	38721	515	290	30300	36	3760	35	3660	200
FEB. 1974.....	18050	646	360	17500	48	2340	46	2240	250
MAR. 1974.....	12570	658	370	12600	49	1660	47	1600	250
APR. 1974.....	7806	661	370	7800	49	1030	47	991	260
MAY 1974.....	54538	418	230	33900	27	3980	28	4120	170
JUNE 1974.....	16076	536	300	13000	38	1650	37	1610	210
JULY 1974.....	10261	547	310	8590	39	1080	38	1050	210
AUG. 1974.....	26340	366	200	14200	23	1640	24	1710	150
SEPT 1974.....	94220	343	190	48300	21	5340	22	5600	140
TOTAL	486924	**	**	325000	**	39000	**	39300	**
WTD.AVG.	1334	444	250	**	30	**	30	**	180

BRAZOS RIVER BASIN

08106500 LITTLE RIVER AT CAMERON, TEX.--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	372	465	542	629	579	630	669	631	594	523	578	322
2	406	439	540	643	612	627	658	647	592	535	569	350
3	434	501	587	660	636	634	658	536	608	533	558	326
4	438	552	606	662	655	636	656	385	612	523	554	498
5	481	538	550	678	664	636	670	419	640	533	608	497
6	495	545	587	680	656	640	654	500	628	542	537	516
7	580	538	605	676	666	636	643	484	623	530	536	514
8	352	545	596	674	664	642	654	502	611	528	530	535
9	430	547	609	670	670	642	668	548	599	528	531	522
10	481	539	617	655	663	645	674	357	579	523	603	502
11	475	540	656	656	670	647	662	328	500	520	552	391
12	266	549	646	641	669	649	678	292	421	526	530	505
13	314	558	668	645	669	653	666	432	469	530	552	154
14	334	561	688	650	676	657	670	471	471	520	548	224
15	282	570	633	658	670	653	699	523	491	525	548	311
16	377	574	647	664	670	657	605	528	511	540	552	434
17	302	572	624	660	651	655	639	527	528	540	561	466
18	398	572	638	664	655	679	652	566	541	533	561	258
19	485	467	574	668	650	685	627	563	549	548	566	239
20	497	494	651	509	644	674	639	564	577	556	569	372
21	516	558	678	524	653	676	629	559	569	574	569	415
22	520	574	640	544	645	665	645	569	527	694	572	493
23	531	450	650	548	641	665	701	570	543	604	595	410
24	531	269	650	538	627	642	721	571	553	601	595	496
25	510	346	639	384	634	651	703	546	568	591	605	473
26	517	476	663	402	612	700	658	594	583	599	610	505
27	517	521	663	437	605	721	620	561	589	592	618	505
28	530	564	652	510	612	703	641	586	486	603	595	512
29	500	580	634	535	---	703	654	591	507	603	300	501
30	502	559	603	543	---	684	658	594	508	590	214	484
31	515	---	628	548	---	693	---	586	---	578	289	---
MONTH	448	519	625	599	647	661	659	520	553	557	539	424

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	23.0	18.0	15.0	8.0	13.0	16.0	23.0	24.0	27.0	25.0	27.0	25.0
2	24.0	18.0	15.0	8.0	15.0	17.0	23.0	24.0	26.0	26.0	26.0	26.0
3	26.0	18.0	16.0	6.0	14.0	17.0	22.0	24.0	27.0	26.0	26.0	24.0
4	25.0	18.0	15.0	5.0	14.0	19.0	20.0	24.0	27.0	26.0	24.0	22.0
5	24.0	18.0	14.0	6.0	14.0	21.0	18.0	23.0	27.0	27.0	24.0	20.0
6	25.0	18.0	13.0	7.0	14.0	21.0	18.0	23.0	28.0	27.0	24.0	20.0
7	24.0	18.0	13.0	8.0	11.0	22.0	18.0	23.0	28.0	26.0	24.0	21.0
8	24.0	20.0	11.0	8.0	10.0	22.0	19.0	23.0	27.0	27.0	23.0	20.0
9	25.0	19.0	11.0	9.0	9.0	22.0	19.0	24.0	27.0	27.0	24.0	21.0
10	26.0	18.0	11.0	8.0	9.0	21.0	19.0	21.0	27.0	27.0	26.0	22.0
11	24.0	17.0	11.0	7.0	10.0	22.0	18.0	20.0	25.0	27.0	25.0	22.0
12	24.0	18.0	13.0	6.0	11.0	22.0	19.0	21.0	25.0	27.0	26.0	23.0
13	22.0	19.0	13.0	6.0	13.0	20.0	23.0	23.0	25.0	26.0	27.0	21.0
14	21.0	20.0	14.0	7.0	15.0	20.0	21.0	24.0	26.0	26.0	27.0	21.0
15	21.0	20.0	12.0	9.0	16.0	18.0	21.0	24.0	27.0	27.0	27.0	20.0
16	20.0	19.0	11.0	10.0	15.0	18.0	20.0	26.0	26.0	27.0	28.0	22.0
17	20.0	18.0	11.0	13.0	14.0	17.0	20.0	25.0	28.0	27.0	28.0	24.0
18	20.0	17.0	12.0	14.0	16.0	20.0	21.0	26.0	28.0	26.0	29.0	22.0
19	19.0	18.0	11.0	14.0	15.0	21.0	21.0	25.0	28.0	26.0	28.0	23.0
20	18.0	19.0	10.0	13.0	16.0	21.0	21.0	26.0	29.0	27.0	28.0	25.0
21	18.0	18.0	8.0	13.0	16.0	19.0	21.0	26.0	28.0	26.0	28.0	25.0
22	19.0	19.0	8.0	14.0	14.0	16.0	22.0	25.0	28.0	29.0	28.0	23.0
23	19.0	19.0	9.0	13.0	13.0	18.0	22.0	25.0	27.0	29.0	28.0	21.0
24	19.0	22.0	10.0	11.0	11.0	15.0	22.0	25.0	27.0	29.0	28.0	21.0
25	19.0	20.0	10.0	12.0	11.0	12.0	23.0	26.0	26.0	29.0	27.0	20.0
26	21.0	20.0	11.0	10.0	11.0	12.0	24.0	25.0	25.0	29.0	27.0	19.0
27	21.0	19.0	11.0	10.0	12.0	15.0	24.0	26.0	26.0	29.0	27.0	19.0
28	19.0	18.0	12.0	12.0	14.0	17.0	24.0	26.0	25.0	28.0	27.0	20.0
29	19.0	16.0	12.0	12.0	---	18.0	24.0	27.0	25.0	29.0	26.0	18.0
30	19.0	15.0	11.0	12.0	---	19.0	24.0	27.0	24.0	29.0	24.0	18.0
31	18.0	---	11.0	12.0	---	19.0	---	27.0	---	27.0	25.0	---
MONTH	21.5	18.5	12.0	10.0	13.0	18.5	21.0	24.5	26.5	27.0	26.5	21.5

BRAZOS RIVER BASIN

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08109500 BRAZOS RIVER NEAR COLLEGE STATION, TEX.

LOCATION.--Lat 30°33'32", long 96°25'23", Brazos County, at bridge on Farm Road 60, 6.5 miles (10.5 km) south of College Station, and 9 miles (14 km) downstream from gaging station near Bryan.

DRAINAGE AREA.--38,400 mi² (99,460 km²), of which 9,240 mi² (23,930 km²) is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: August 1961 to September 1974.
Water temperatures: August 1961 to September 1974.

EXTREMES.--October 1973 to September 1974:

Specific conductance: Maximum daily, 1,900 micromhos July 29; minimum daily, 245 micromhos Sept. 14.
Water temperatures: Maximum, 34.0°C July 28, Aug. 19; minimum, 4.5°C Jan. 3.

Period of record:

Specific conductance (1961-71, 1972-74): Maximum daily, 2,030 micromhos Oct. 1, 1963; minimum daily, 245 micromhos Sept. 14, 1974.
Water temperatures: Maximum, 34.5°C June 16, 1971; minimum, 2.0°C on several days during winter months.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report. Sampling at this site began in September 1966. From August 1961 to September 1965 samples were collected at State Highway 21 near Bryan, 17 miles (27 km) upstream, and from October 1965 to September 1966 at the gaging station near Bryan, 9 miles (14 km) upstream.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SI02) (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)	DIS- SOLVED SULFATE (SO4) (MG/L)
OCT.										
01...	1730	3240	10	70	11	120	4.7	148	0	110
NOV.										
05...	1400	4600	11	65	7.7	35	4.6	168	0	49
DEC.										
04...	1620	2740	9.4	63	12	56	4.4	185	0	65
JAN.										
14...	1625	1900	4.8	95	20	140	4.6	233	0	130
FEB.										
26...	1530	1820	5.4	72	11	68	4.6	179	0	85
MAR.										
08...	2345	1530	4.2	77	18	140	5.1	180	0	130
APR.										
08...	1515	1090	4.3	91	20	180	4.9	194	0	150
MAY										
20...	1500	1600	10	75	14	73	3.7	221	0	76
JUNE										
30...	1630	1430	8.1	71	17	110	4.0	213	0	95
JULY										
01...	1435	1680	7.7	78	16	130	4.2	188	0	120
31...	1850	1700	4.4	89	21	220	7.1	154	0	170
AUG.										
12...	1420	863	7.5	55	17	78	4.4	198	0	60
SEP.										
23...	1515	8490	14	49	5.5	15	3.9	151	0	28

DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	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)
OCT.									
01...	170	.2	568	220	98	3.4	1010	7.4	20.0
NOV.									
05...	48	--	303	190	56	1.1	539	8.0	64.0
DEC.									
04...	82	--	385	210	55	1.8	689	7.3	13.0
JAN.									
14...	210	--	719	320	130	3.4	1300	8.1	5.0
FEB.									
26...	90	--	424	230	78	2.0	768	7.7	10.5
MAR.									
08...	200	--	663	270	120	3.7	1200	8.1	22.0
APR.									
08...	260	--	806	310	150	4.5	1470	7.2	17.0
MAY									
20...	110	--	471	250	64	2.0	866	7.4	28.5
JUNE									
30...	160	--	570	250	73	3.0	1020	7.5	30.0
JULY									
01...	200	--	649	260	110	3.5	1230	7.5	24.5
31...	340	--	927	310	180	5.5	1710	7.1	31.5
AUG.									
12...	110	--	430	210	45	2.4	810	7.2	26.0
SEP.									
23...	15	--	205	150	21	.5	358	7.5	18.0

BRAZOS RIVER BASIN

08109500 BRAZOS RIVER NEAR COLLEGE STATION, TEX.--Continued

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

MONTH	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCT- ANCE (MICRO- MHOS)	DIS- SOLVED SOLIDS (MG/L)	DIS- SOLVED SOLIDS (TONS)	DIS- SOLVED CHLORIDE (MG/L)	DIS- SOLVED CHLORIDE (TONS)	DIS- SOLVED SULFATE (MG/L)	DIS- SOLVED SULFATE (TONS)	HARNESS (CA+MG) (MG/L)
OCT. 1973.....	324700	477	270	237000	32	28100	41	35900	170
NOV. 1973.....	147920	649	370	148000	71	28400	60	24000	200
DEC. 1973.....	71090	993	550	106000	150	28800	99	19000	250
JAN. 1974.....	115370	692	390	121000	81	25200	65	20200	210
FEB. 1974.....	45000	779	440	53500	100	12100	75	9110	220
MAR. 1974.....	61420	1400	780	129000	240	39800	150	24900	290
APR. 1974.....	43703	1260	700	82600	210	24800	130	15300	280
MAY 1974.....	110389	719	400	119000	87	25900	68	20300	210
JUNE 1974.....	35900	932	520	50400	140	13600	93	9010	240
JULY 1974.....	39000	1540	860	90600	270	28400	160	16800	310
AUG. 1974.....	51385	1010	560	77700	150	20800	100	13900	250
SEPT 1974.....	303370	425	240	197000	20	16400	35	28700	150
TOTAL	1349247	**	**	1410000	**	292000	**	237000	**
WTD.AVG.	3696	690	390	**	80	**	65	**	200

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	1010	579	966	991	487	961	1520	1120	815	1180	1720	600
2	536	681	966	1020	597	725	1540	896	802	1570	1680	722
3	748	663	768	1000	671	1560	1420	800	786	1680	1460	769
4	680	620	585	1020	687	1530	1480	758	721	1730	1360	571
5	613	581	627	1080	700	1360	1540	690	703	1740	1390	1120
6	575	583	597	850	715	1260	1410	825	684	1520	1170	982
7	834	580	692	819	730	1190	1530	920	676	1490	1160	1000
8	613	580	900	1440	847	1200	1470	841	685	1440	1160	1050
9	660	587	1130	1550	820	1210	1500	924	695	1410	1060	1070
10	715	603	1330	1630	807	1210	1490	916	738	1390	884	659
11	291	616	1250	1460	847	1300	1480	591	792	1390	856	544
12	476	634	1160	1380	888	1390	1480	439	966	1390	828	523
13	330	631	1120	1240	888	1180	1450	357	910	1440	937	400
14	332	699	1080	1330	816	1490	1450	572	1090	1410	1240	245
15	326	731	1180	1540	782	1470	1360	800	1140	1370	1010	270
16	299	702	1130	1410	796	1480	1450	1100	1210	1370	1210	356
17	344	700	1100	1300	793	1430	1000	1110	1050	1290	1350	371
18	446	896	1070	1170	790	1460	893	916	893	1450	1170	331
19	662	939	912	970	776	1460	907	877	815	1370	1150	327
20	686	817	765	1060	296	1460	850	873	831	1380	1190	286
21	711	841	991	728	763	1590	1100	796	845	1350	1360	300
22	600	870	996	882	796	1720	1010	784	900	1430	1560	327
23	535	900	1310	919	838	1730	1260	907	931	1370	1470	360
24	554	931	1160	497	906	1650	1220	831	914	1650	1460	395
25	570	387	1170	514	838	1570	1140	817	1040	1690	1460	458
26	535	488	1160	335	875	1430	1160	797	1260	1800	1390	375
27	498	706	1170	396	910	1450	1170	777	1350	1790	1550	500
28	509	752	1160	385	1110	1480	966	796	1250	1740	1680	630
29	546	819	1090	425	---	1400	1110	815	831	1900	1100	753
30	551	887	1050	478	---	1500	1200	780	1020	1810	877	868
31	525	---	1010	528	---	1440	---	805	---	1710	500	---
MONTH	558	700	1020	979	777	1400	1290	814	911	1520	1240	572

BRAZOS RIVER BASIN

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08109500 BRAZOS RIVER NEAR COLLEGE STATION, TEX.--Continued

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	8.0	15.0	17.5	24.0	24.0	30.5	27.5	30.5	---
2	25.5	---	16.5	6.5	17.0	17.0	23.0	24.5	30.5	30.0	29.0	28.5
3	27.0	---	16.0	4.5	14.5	19.5	23.5	---	30.0	29.0	30.0	25.5
4	---	---	13.5	5.0	13.0	20.0	---	26.5	29.5	30.5	31.0	25.0
5	25.0	---	12.5	6.5	---	22.0	20.5	25.0	29.5	29.0	29.0	24.0
6	26.0	18.0	13.5	8.5	---	21.0	18.5	24.0	27.5	32.0	28.0	24.0
7	26.5	20.0	11.5	8.0	12.0	23.0	22.0	24.0	28.0	29.0	33.0	24.5
8	27.5	21.0	---	11.0	9.0	22.0	19.0	25.0	29.5	31.0	29.0	24.5
9	---	17.0	11.0	9.0	---	23.0	19.5	26.0	28.5	31.5	29.5	23.5
10	27.5	19.0	10.5	8.0	11.0	23.5	---	24.0	29.0	31.0	30.0	25.0
11	22.0	17.5	12.5	7.0	13.0	22.0	19.5	23.0	30.5	29.0	---	25.0
12	24.5	18.5	14.5	5.0	14.5	22.0	23.5	22.5	28.5	30.0	33.5	26.5
13	22.0	19.5	15.0	7.0	15.0	20.0	25.0	24.5	26.5	32.0	32.0	23.5
14	21.5	20.5	14.0	10.0	17.5	19.5	21.0	25.0	30.5	31.5	33.0	24.0
15	21.5	20.5	13.0	10.0	16.0	20.0	19.5	---	31.0	31.5	32.0	---
16	21.0	20.0	12.0	12.5	15.0	20.0	20.5	26.0	31.0	29.5	32.0	25.5
17	20.5	19.0	11.0	17.0	---	19.5	21.0	28.0	32.0	29.0	32.0	26.5
18	21.5	20.5	13.5	17.0	17.0	21.0	21.0	27.5	31.5	30.0	33.0	27.0
19	---	21.0	8.0	15.0	15.0	---	22.0	29.0	31.5	30.0	34.0	26.5
20	---	20.0	5.0	16.0	17.0	18.5	22.0	27.0	33.0	29.5	33.5	27.0
21	---	18.0	7.0	16.0	14.0	16.0	23.0	27.0	29.0	33.0	32.0	28.0
22	---	---	8.0	14.5	14.0	16.5	24.0	20.0	---	33.5	32.0	25.0
23	---	---	11.5	11.5	14.0	18.0	24.0	29.5	32.5	33.0	31.0	---
24	---	20.5	12.0	9.5	10.5	---	25.5	30.0	29.5	31.5	31.5	23.5
25	---	21.0	10.5	9.0	12.5	11.0	23.5	---	30.0	30.5	29.0	21.5
26	---	20.0	---	10.5	---	14.0	---	---	29.0	29.5	27.0	21.5
27	---	19.0	---	12.0	11.5	---	24.5	30.5	25.0	30.0	29.5	---
28	---	15.5	13.0	12.0	16.0	19.5	24.0	30.0	28.0	34.0	28.0	---
29	---	15.0	13.0	---	---	21.0	23.5	30.0	29.0	32.0	26.5	20.5
30	---	16.0	---	13.0	---	23.0	25.0	29.0	30.0	33.5	28.0	23.0
31	---	---	10.5	14.0	---	24.0	---	29.5	---	31.5	---	---
MONTH	---	---	12.0	10.5	14.0	20.0	22.5	26.5	29.5	31.0	30.5	25.0

BRAZOS RIVER BASIN

08110000 YEGUA CREEK NEAR SOMERVILLE, TEX.

LOCATION.--Lat 30°19'18", long 96°30'26", Burleson County, at gaging station at bridge on State Highway 36, 1.0 mile (1.6 km) downstream from Somerville Lake (revised), 2.0 miles (3.2 km) south of Somerville, and 5.0 miles (8.0 km) upstream from Davidson Creek.

DRAINAGE AREA.--1,008 mi² (2,611 km²).

PERIOD OF RECORD.--Chemical analyses: September 1961 to September 1967, October 1968 to September 1974.
Water temperatures: September 1961 to September 1967.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	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 SODIUM PLUS POTAS- SIUM (K) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)
OCT.										
03...	1400	.45	14	58	10	--	57	--	51	0
24...	1645	1730	11	22	4.2	--	17	--	54	0
DEC.										
04...	1430	507	10	24	4.4	--	18	--	57	0
JAN.										
15...	1400	1.9	14	75	15	72	--	8.8	61	0
FEB.										
27...	1455	2.1	10	44	8.7	37	--	6.4	60	0
APR.										
09...	1500	.94	8.1	46	8.7	37	--	6.8	72	0
MAY										
21...	1415	5.5	6.0	41	8.8	36	--	6.2	69	0
JULY										
02...	1340	.12	13	52	10	44	--	7.7	83	0
AUG.										
13...	1440	.22	12	70	14	60	--	8.9	64	0
SEP.										
24...	1455	2680	9.8	24	6.2	19	--	5.3	52	0

DATE	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	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)
OCT.										
03...	120	100	.0	385	190	140	1.8	680	6.6	25.0
24...	30	24	.0	135	72	28	.9	259	6.9	22.5
DEC.										
04...	36	24	.0	144	78	31	.9	267	6.7	15.5
JAN.										
15...	160	140	--	515	250	200	2.0	912	7.1	10.0
FEB.										
27...	81	68	--	285	150	96	1.3	516	6.9	14.0
APR.										
09...	79	73	--	294	150	92	1.3	538	6.8	21.5
MAY										
21...	74	66	--	272	140	82	1.3	500	6.7	28.0
JULY										
02...	100	77	--	345	170	100	1.5	614	6.7	30.0
AUG.										
13...	130	120	--	446	230	180	1.7	822	7.1	28.0
SEP.										
24...	41	29	--	160	85	43	.9	284	6.8	19.5

08110400 NAVASOTA RIVER NEAR GROESBECK, TEX.

LOCATION.--Lat 31°30'45", long 96°27'03", Limestone County, at gaging station on State Highway 164, 0.4 mile (0.6 km) downstream from Pin Oak Creek, and 5 miles (8 km) east of Groesbeck.

DRAINAGE AREA.--313 mi² (811 km²).

PERIOD OF RECORD.--Chemical analyses: November 1967 to September 1974.

Water temperatures: November 1967 to September 1974.

EXTREMES.--October 1973 to September 1974:

Specific conductance: Maximum daily, 3,350 micromhos July 31; minimum daily, 91 micromhos Sept. 14.

Water temperatures: Maximum, 38.0°C on several days during July.

Period of record:

Specific conductance: Maximum daily, 6,590 micromhos Oct. 8, 9, 1969; minimum daily, 71 micromhos June 4, 1973.

Water temperatures: Maximum, 38.0°C on several days during July 1974; minimum, 1.5°C Jan. 10, 1973.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTAN- TANEOUS 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 SODIUM PLUS POTAS- SIUM (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HC03) (MG/L)	CAR- BONATE (C03) (MG/L)
OCT. 02...	1710	1050	6.1	28	3.1	27	--	5.2	90	0
NOV. 06...	1315	55	14	40	4.9	27	--	5.0	133	0
DEC. 11...	1110	18	12	59	9.3	60	--	6.0	180	0
24...	1430	851	8.8	32	4.2	--	25	--	101	0
JAN. 22...	1155	141	6.2	43	5.2	30	--	5.6	131	0
FEB. 16...	1100	21	6.8	120	19	--	140	--	278	0
MAR. 05...	1055	20	8.1	86	12	87	--	4.3	208	0
APR. 16...	1200	375	2.0	43	4.2	25	--	4.4	130	0
MAY 23...	1050	4.2	9.0	120	20	170	--	6.0	251	0
JUNE 29...	1500	3.3	8.2	140	29	290	--	6.9	245	0
JULY 08...	1600	.34	9.2	170	31	330	--	7.8	260	0
AUG. 14...	1700	.90	8.6	95	16	330	--	7.9	180	0
SEP. 27...	1500	54	13	41	5.5	38	--	3.8	128	0

DATE	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	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)
OCT.										
02...	9.2	42	--	165	83	9	1.3	314	6.9	25.0
NOV.										
06...	24	39	--	219	120	11	1.1	392	7.3	17.0
DEC.										
11...	51	93	--	379	190	38	1.9	692	7.8	9.5
24...	14	38	.2	172	97	14	1.1	301	7.4	15.5
JAN.										
22...	27	45	--	227	130	21	1.2	417	7.2	13.5
FEB.										
16...	120	240	.2	776	370	140	3.3	1400	7.7	--
MAR.										
05...	78	150	--	528	260	94	2.3	957	7.6	19.5
APR.										
16...	29	37	--	209	130	18	1.0	387	7.0	20.0
MAY										
23...	130	300	--	879	380	180	3.8	1570	7.5	26.0
JUNE										
29...	180	510	--	1280	470	270	5.8	2320	8.0	32.0
JULY										
08...	200	600	--	1480	550	340	6.1	2650	7.4	32.0
AUG.										
14...	100	540	--	1190	300	160	8.3	2210	7.7	34.0
SEP.										
27...	27	54	--	245	130	20	1.5	445	7.9	26.5

BRAZOS RIVER BASIN

08110400 NAVASOTA RIVER NEAR GROESBECK, TEX.--Continued

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

MONTH	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCT- ANCE (MICRO- MHOS)	DIS- SOLVED SOLIDS (MG/L)	DIS- SOLVED SOLIDS (TONS)	DIS- SOLVED CHLORIDE (MG/L)	DIS- SOLVED CHLORIDE (TONS)	DIS- SOLVED SULFATE (MG/L)	DIS- SOLVED SULFATE (TONS)	HARDNESS (CA+MG) (MG/L)
OCT. 1973.....	35745	205	110	10600	17	1640	7.0	676	71
NOV. 1973.....	10792	260	140	4080	26	758	12	350	85
DEC. 1973.....	4071	433	240	2640	56	616	27	297	130
JAN. 1974.....	9147	257	140	3460	26	642	12	296	84
FEB. 1974.....	2993	484	270	2180	65	525	32	259	140
MAR. 1974.....	2792	422	230	1730	54	407	26	196	130
APR. 1974.....	2241	535	300	1820	73	442	36	218	150
MAY 1974.....	1505	452	250	1020	59	240	29	118	130
JUNE 1974.....	50	1990	1100	150	410	56	160	21	450
JULY 1974.....	8	2730	1500	33	620	13	230	5.1	550
AUG. 1974.....	79	1580	880	188	300	64	130	27	390
SEPT 1974.....	20984	144	75	4250	6.6	374	1.7	96	56
TOTAL	90410	**	**	32200	**	5780	**	2560	**
WTD.AVG.	247	244	130	**	24	**	10	**	81

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	325	217	600	567	500	667	1300	346	1930	2270	3280	1160
2	280	240	650	683	590	740	1330	366	1960	2460	3280	921
3	311	257	728	715	680	813	1410	366	1990	2370	2020	949
4	325	278	354	759	771	886	1320	380	1910	2320	1500	949
5	348	299	623	880	776	960	1420	400	1870	2490	2040	1150
6	327	395	609	950	912	986	1480	399	1960	2530	2020	854
7	273	460	545	1020	851	1060	1540	405	1900	2570	2010	857
8	256	523	575	1100	848	1150	1600	411	1990	2620	2030	965
9	263	571	610	1100	1000	1230	1510	429	1890	2470	2080	877
10	277	600	653	1120	1100	1310	1670	471	2030	2500	2080	902
11	278	635	692	1140	1200	1410	1650	530	2140	2700	2120	460
12	196	674	777	1160	1380	202	2030	590	2030	2730	2160	322
13	140	881	871	1190	1360	343	1800	650	2030	2720	2230	150
14	153	962	829	1220	1460	434	500	701	1960	2770	2230	91
15	158	1010	1000	1250	1140	618	387	811	1900	2820	2230	120
16	194	1060	1000	1220	1400	696	390	885	1880	2850	2230	201
17	174	974	1010	1230	1400	680	378	970	1860	2960	2250	108
18	196	1010	1130	297	1400	671	430	1170	1810	2950	2250	109
19	222	1060	620	200	1490	752	474	1170	1830	2960	2250	172
20	256	363	379	250	1480	813	570	1320	1840	2960	2270	216
21	289	254	386	386	450	690	672	1340	2000	3040	2250	257
22	327	286	389	435	358	690	680	1470	2090	3110	2290	190
23	367	323	304	436	337	927	680	1530	2150	3110	2360	187
24	409	298	301	317	375	930	760	1530	2200	3150	2360	250
25	460	400	320	399	409	931	765	1760	2130	3120	2360	298
26	516	467	340	188	612	1090	966	1990	2160	3230	2360	404
27	616	540	359	140	530	1100	968	1840	2350	3170	2360	446
28	602	444	414	258	625	1100	969	1870	2350	3320	1900	462
29	591	497	504	368	---	1130	970	1920	2330	3320	1200	462
30	603	539	530	477	---	1160	1060	1990	2300	3330	1200	531
31	170	---	560	475	---	1230	---	1960	---	3350	1180	---
MONTH	319	551	602	707	908	884	1060	1030	2030	2850	2140	501

BRAZOS RIVER BASIN

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08110400 NAVASOTA RIVER NEAR GROESBECK, TEX.--Continued

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	15.5	---	4.5	---	26.5	26.5	26.5	24.0	32.0	32.0	21.0
2	25.0	15.5	---	7.0	---	---	24.0	30.0	---	32.0	32.0	21.0
3	26.5	16.5	21.0	---	---	---	26.5	24.0	---	35.0	32.0	21.0
4	---	---	18.5	7.0	10.0	---	21.0	---	35.0	---	---	21.0
5	25.5	21.0	15.5	9.0	13.0	21.0	29.5	---	34.0	35.0	26.5	21.0
6	25.5	---	13.0	---	4.5	21.0	---	26.5	---	---	26.5	21.0
7	25.5	24.0	13.0	7.0	4.5	---	---	---	35.0	---	26.5	21.0
8	21.0	24.0	---	7.0	4.5	21.0	24.0	---	29.5	29.5	32.0	21.0
9	23.5	18.5	---	4.5	13.0	21.0	26.5	29.5	35.0	29.5	32.0	21.0
10	24.5	---	13.0	---	---	---	26.5	32.0	29.5	32.0	32.0	21.0
11	23.5	---	15.5	---	---	24.0	24.0	---	29.5	35.0	---	21.0
12	20.0	15.5	15.5	---	18.5	24.0	24.0	---	29.5	36.5	32.0	21.0
13	20.0	15.5	21.0	---	15.5	21.0	---	---	29.5	36.5	32.0	21.0
14	20.0	26.5	10.0	7.0	18.5	21.0	---	29.5	32.0	---	32.0	21.0
15	21.0	26.5	15.5	18.5	13.0	21.0	24.0	29.5	---	32.0	32.0	21.0
16	20.0	21.0	---	15.5	---	24.0	21.0	29.5	---	35.0	32.0	21.0
17	18.0	21.0	10.0	13.0	---	---	24.0	29.5	35.0	38.0	32.0	21.0
18	20.0	---	13.0	13.0	15.5	18.5	---	29.5	32.0	38.0	---	21.0
19	20.0	21.0	15.5	---	4.5	21.0	21.0	29.5	---	38.0	26.5	21.0
20	---	21.0	21.0	---	10.0	18.5	---	26.5	---	38.0	26.5	21.0
21	16.5	26.5	10.0	18.5	---	15.5	24.0	26.5	35.0	---	26.5	21.0
22	21.0	26.5	10.0	7.0	15.5	15.5	---	32.0	---	38.0	26.5	21.0
23	15.5	21.0	15.5	10.0	15.5	21.0	26.5	29.5	---	35.0	26.5	21.0
24	15.5	21.0	15.5	4.5	---	---	26.5	29.5	32.0	35.0	26.5	20.0
25	16.5	---	---	7.0	15.5	---	26.5	---	32.0	38.0	---	20.0
26	19.0	21.0	---	10.0	10.0	24.0	26.5	29.5	---	35.0	26.5	26.5
27	18.0	21.0	21.0	---	10.0	---	---	35.0	35.5	38.0	26.5	26.5
28	16.5	21.0	15.5	7.0	4.5	---	---	32.0	32.0	35.0	26.5	26.5
29	15.5	18.5	10.0	---	---	---	26.5	35.0	32.0	32.0	26.5	21.0
30	15.5	21.0	---	15.5	---	---	26.5	29.5	---	35.0	26.5	26.5
31	15.5	---	13.0	10.0	---	---	---	---	---	35.0	26.5	---
MONTH	20.0	21.0	---	---	---	---	---	---	---	35.0	29.0	21.5

BRAZOS RIVER BASIN

08110500 NAVASOTA RIVER NEAR EASTERLY, TEX.

LOCATION.--Lat 31°10'10", Long 96°17'54", Robertson County, at bridge on U.S. Highway 79, 1.0 mile (1.6 km) upstream from Missouri Pacific Railroad Co. bridge, and 7 miles (11 km) northeast of Easterly.

DRAINAGE AREA.--940 mi² (2,430 km²).

PERIOD OF RECORD.--Chemical analyses: October 1968 to September 1974.

Sediment records: October 1968 to September 1973.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTAN- TANEOUS 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 SODIUM PLUS POTAS- SIUM (K) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)
OCT. 02...	1200	169	10	26	4.9	--	49	--	62	0
NOV. 07...	1120	367	12	29	5.5	--	24	--	74	0
DEC. 11...	1610	126	16	33	10	38	--	5.4	80	0
JAN. 22...	1830	3830	6.3	18	3.9	17	--	5.7	55	0
MAR. 05...	1350	89	13	48	14	61	--	4.4	106	0
APR. 16...	1650	1340	7.7	26	5.5	28	--	4.3	70	0
MAY 24...	1330	24	16	54	15	74	--	4.4	108	0
JULY 09...	1340	2.8	14	68	19	110	--	5.0	122	0
AUG. 15...	1420	3.4	9.6	110	28	200	--	5.3	102	0

DATE	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	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)
OCT. 02...	40	70	.0	230	85	34	2.3	430	6.5	22.5
NOV. 07...	32	37	.0	176	95	34	1.1	333	6.6	17.5
DEC. 11...	54	67	--	263	120	58	1.5	472	7.3	9.5
JAN. 22...	17	25	--	120	61	16	.9	219	6.8	14.5
MAR. 05...	82	110	--	377	180	91	2.0	688	7.3	20.0
APR. 16...	33	46	--	185	88	30	1.3	346	6.8	19.0
MAY 24...	77	140	--	434	200	110	2.3	775	7.3	27.5
JULY 09...	110	210	--	596	250	150	3.0	1110	7.3	32.0
AUG. 15...	150	430	--	983	390	310	4.4	1810	7.1	31.0

08111000 NAVASOTA RIVER NEAR BRYAN, TEX.

LOCATION.--Lat 30°52'10", long 96°11'32", Brazos County, at gaging station at bridge on U.S. Highway 190, 2.5 miles (4.0 km) upstream from Shepherd Creek, and 17 miles (27 km) northeast of Bryan.

DRAINAGE AREA.--1,429 mi² (3,701 km²).

PERIOD OF RECORD.--Chemical analyses: October 1958 to September 1974.

Chemical and biochemical analyses: October 1971 to September 1974.

Water temperatures: October 1958 to September 1974.

EXTREMES.--October 1973 to September 1974:

Specific conductance: Maximum daily, 780 micromhos July 12; minimum daily, 72 micromhos Aug. 30, Sept. 14.

Water temperatures: Maximum, 32.0°C July 5; minimum, 5.0°C Jan. 4.

Period of record:

Specific conductance: Maximum daily, 4,190 micromhos Feb. 8, 1964; minimum daily, 55 micromhos Sept. 17, 1964.

Water temperatures: Maximum, 32.0°C Aug. 4, 1959, July 5, 1974; minimum, 1.0°C Jan. 13, 1962.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

		INSTAN- TANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED SODIUM PLUS POTAS- SIUM (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	
OCT. 17...	1535	12800	9.6	11	2.6	5.3	--	5.7	44	0	9.3	8.9	
NOV. 07...	1745	1890	12	17	4.1	15	--	7.2	57	0	21	21	
08	0630	1430	12	19	4.6	--	18	--	58	0	22	24	
DEC. 12...	1310	530	13	19	6.3	24	--	5.0	51	0	36	37	
JAN. 14...	1640	143	18	45	14	56	--	4.6	78	0	89	94	
23...	1500	3650	7.1	15	4.4	18	--	5.9	32	0	28	29	
FEB. 14...	1550	211	15	44	13	56	--	4.3	83	0	84	92	
19...	0930	186	15	46	14	59	--	3.7	78	0	97	98	
MAR. 05...	1750	196	13	38	10	43	--	4.5	78	0	68	71	
APR. 15...	1800	249	16	46	15	69	--	4.7	76	0	99	110	
MAY 24...	1030	59	15	42	12	52	--	4.3	88	0	66	90	
JUNE 20...	1030	21	15	40	12	46	--	4.5	62	0	78	81	
JULY 09...	1600	8.3	14	49	16	75	--	5.4	100	0	86	130	
AUG. 09...	1500	60	7.9	20	4.8	29	--	3.3	41	0	46	46	
SEP. 21...	1000	5850	12	14	3.1	9.9	--	4.1	54	0	11	13	
DATE		DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)	VOL. NON- FILT- RABLE RESIDUE (MG/L)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)
OCT. 17...	--	--	--	--	--	--	--	--	74	--	--	38	2
NOV. 07...	--	--	--	--	--	--	--	--	125	--	--	59	13
08...	.1	.20	.00	.18	.62	--	.05	.05	130	65	9	66	19
DEC. 12...	--	--	--	--	--	--	--	--	165	--	--	73	32
JAN. 14...	--	.20	.00	.12	.13	--	.05	.05	360	28	1	170	110
23...	--	--	--	--	--	--	--	--	123	--	--	56	29
FEB. 14...	--	.10	.00	.11	.48	--	.10	.10	350	88	9	160	92
19...	--	--	--	--	--	--	--	--	371	--	--	170	110
MAR. 05...	--	--	--	--	--	--	--	--	286	--	--	140	72
APR. 15...	--	.14	.00	.16	.69	.85	.17	.17	398	105	12	180	120
MAY 24...	--	--	--	--	--	--	--	--	325	--	--	150	82
JUNE 20...	--	.05	.00	.11	.99	1.1	.14	.14	308	90	10	150	99
JULY 09...	--	--	--	--	--	--	--	--	425	--	--	190	110
AUG. 09...	--	.07	.01	.08	1.5	1.6	.23	.23	178	414	20	70	15
SEP. 21...	--	--	--	--	--	--	--	--	94	--	--	48	3

BRAZOS RIVER BASIN

08111000 NAVASOTA RIVER NEAR BRYAN, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	PHENOLS (UG/L)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)
OCT. 17...	.4	122	7.2	21.0	--	--	--	--	--	--	--	--
NOV. 07...	.8	219	7.2	19.0	--	--	--	--	--	--	--	--
08...	1.0	232	6.9	19.0	130	40	7.0	74	2.1	14	0	.0
DEC. 12...	1.2	286	7.2	12.0	--	--	--	--	--	--	--	--
JAN. 14...	1.9	647	6.7	10.5	30	20	11.3	101	.8	7.0	0	.0
23...	1.1	226	6.8	12.0	--	--	--	--	--	--	--	--
FEB. 14...	1.9	625	7.2	15.0	30	45	--	--	2.3	8.0	0	.0
19...	2.0	657	7.1	--	--	--	--	--	--	--	--	--
MAR. 05...	1.6	524	7.1	21.0	--	--	--	--	--	--	--	--
APR. 15...	2.3	682	7.1	20.5	30	50	7.9	87	1.6	9.5	4	--
MAY 24...	1.8	589	7.1	26.0	--	--	--	--	--	--	--	--
JUNE 20...	1.6	485	7.0	29.0	20	55	5.8	75	2.6	8.2	1	--
JULY 09...	2.4	778	6.5	31.0	--	--	--	--	--	--	--	--
AUG. 09...	1.1	311	6.7	26.5	100	150	5.4	66	2.9	8.3	2	--
SEP. 21...	.6	160	7.5	--	--	--	--	--	--	--	--	--

DATE	TIME	DIS- SOLVED ALUM- INUM (AL) (UG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	DIS- SOLVED COBALT (CU) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)
NOV. 08...	0630	--	--	60	--	--	--	--
JAN. 14...	1640	10	3	70	1	0	1	6
FEB. 14...	1550	30	3	70	1	0	0	7
APR. 15...	1800	100	0	90	0	20	0	9
AUG. 09...	1500	300	0	60	0	0	0	11

DATE	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	DIS- SOLVED LITHIUM (LI) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED MERCURY (HG) (UG/L)	DIS- SOLVED NICKEL (NI) (UG/L)	DIS- SOLVED STRON- TIUM (SR) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)
NOV. 08...	--	--	--	--	--	--	--	--
JAN. 14...	80	3	20	270	.0	4	510	30
FEB. 14...	60	2	10	70	.0	2	490	30
APR. 15...	220	2	20	10	.0	2	550	0
AUG. 09...	80	3	0	170	.0	3	200	0

BRAZOS RIVER BASIN

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08111000 NAVASOTA RIVER NEAR BRYAN, TEX.--Continued

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

MONTH	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCT- ANCE (MICRO- MHOS)	DIS- SOLVED SOLIDS (MG/L)	DIS- SOLVED SOLIDS (TONS)	DIS- SOLVED CHLORIDE (MG/L)	DIS- SOLVED CHLORIDE (TONS)	DIS- SOLVED SULFATE (MG/L)	DIS- SOLVED SULFATE (TONS)	HARDNESS (CA+MG) (MG/L)
OCT. 1973.....	163484	139	78	21800	13	3630	11	3070	40
NOV. 1973.....	35642	224	130	12500	27	2600	24	2310	61
DEC. 1973.....	38053	242	140	14400	30	3080	27	2770	66
JAN. 1974.....	74810	185	100	20200	21	4240	18	3640	51
FEB. 1974.....	25411	343	190	13000	47	3220	42	2880	91
MAR. 1974.....	13280	407	230	8250	58	2080	52	1860	110
APR. 1974.....	9079	450	250	6130	65	1590	59	1450	120
MAY 1974.....	19054	292	160	8230	39	2010	35	1800	78
JUNE 1974.....	1436	496	280	1090	73	283	66	256	130
JULY 1974.....	283	691	380	291	110	84	96	73	180
AUG. 1974.....	7707	137	77	1600	13	271	11	229	39
SEPT 1974.....	73685	142	80	15900	14	2790	12	2390	41
TOTAL	401924	**	**	123000	**	25900	**	22700	**
WTD.AVG.	1101	203	110	**	24	**	21	**	56

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	151	316	210	307	196	389	634	223	650	742	677	218
2	197	342	261	352	222	418	646	226	676	756	651	336
3	247	245	302	392	265	451	654	288	682	756	498	308
4	398	230	326	437	320	482	674	247	688	756	475	342
5	253	213	290	476	382	509	689	248	693	759	451	349
6		177	204	219	544	423	541	706	254	695	759	441
7		210	219	176	524	464	566	723	274	697	759	486
8		210	225	164	505	504	589	742	312	710	759	506
9		210	243	174	555	545	611	753	327	697	764	439
10		233	305	215	579	547	632	755	308	331	774	249
11		216	310	254	598	573	645	755	319	413	777	258
12		104	346	293	611	585	655	737	338	516	780	388
13		117	385	332	623	605	661	631	368	493	777	464
14		88	416	391	641	621	670	545	402	494	777	473
15		94	437	438	651	624	509	614	427	526	759	550
16		105	457	477	661	628	287	590	451	522	743	582
17		115	468	501	671	640	267	481	471	513	712	602
18		117	487	524	680	645	275	392	493	519	670	614
19		124	507	529	450	659	316	365	506	541	603	624
20		138	514	317	390	663	374	384	523	561	431	633
21		152	520	434	347	665	426	421	543	595	540	641
22		166	525	395	257	688	481	422	556	625	579	647
23		180	370	370	233	506	418	420	575	658	603	653
24		193	369	346	201	314	478	347	584	676	631	657
25		220	295	300	162	367	524	374	594	686	643	661
26		250	214	239	146	363	562	401	607	652	653	603
27		280	156	210	136	354	529	432	613	684	660	590
28		324	137	192	127	375	555	463	624	712	670	463
29		357	150	194	131	---	572	493	634	722	676	303
30		386	175	215	142	---	608	518	648	734	680	72
31		352	---	247	169	---	628	---	645	---	681	96
MONTH	205	326	308	410	491	504	559	440	612	698	498	262

BRAZOS RIVER BASIN

08111000 NAVASOTA RIVER NEAR BRYAN, TEX.--Continued

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	24.0	17.0	15.0	9.0	---	15.0	22.0	22.0	27.0	28.0	28.0	27.0
2	23.0	18.0	15.0	8.0	11.0	17.0	21.0	23.0	29.0	28.0	28.0	28.0
3	24.0	19.0	16.0	6.0	14.0	19.0	23.0	23.0	27.0	29.0	---	25.0
4	25.0	20.0	14.0	5.0	12.0	20.0	21.0	---	28.0	29.0	28.0	23.0
5	24.0	20.0	13.0	6.0	14.0	21.0	19.0	---	30.0	32.0	29.0	22.0
6	25.0	18.0	12.0	6.0	---	22.0	19.0	---	28.0	29.0	28.0	24.0
7	25.0	19.0	11.0	---	---	22.0	19.0	---	28.0	29.0	27.0	22.0
8	25.0	19.0	10.0	7.0	---	22.0	19.0	---	29.0	28.0	27.0	23.0
9	25.0	19.0	10.0	---	10.0	23.0	19.0	---	28.0	31.0	27.0	23.0
10	25.0	18.0	---	8.0	9.0	23.0	20.0	---	24.0	29.0	28.0	23.0
11	25.0	---	---	7.0	11.0	23.0	20.0	---	25.0	---	28.0	25.0
12	22.0	16.0	---	7.0	---	24.0	20.0	---	26.0	30.0	28.0	25.0
13	22.0	17.0	12.0	7.0	---	21.0	19.0	---	26.0	28.0	29.0	24.0
14	21.0	18.0	12.0	7.0	---	19.0	22.0	---	27.0	30.0	30.0	23.0
15	21.0	19.0	12.0	---	---	19.0	21.0	---	27.0	29.0	30.0	23.0
16	21.0	17.0	11.0	---	---	19.0	21.0	---	28.0	29.0	30.0	---
17	21.0	17.0	9.0	10.0	---	19.0	---	27.0	29.0	30.0	31.0	---
18	19.0	19.0	11.0	12.0	---	20.0	21.0	29.0	29.0	28.0	31.0	---
19	19.0	19.0	11.0	12.0	---	21.0	21.0	28.0	28.0	28.0	30.0	---
20	---	19.0	8.0	15.0	---	22.0	23.0	27.0	29.0	29.0	30.0	---
21	---	17.0	8.0	12.0	---	19.0	23.0	27.0	29.0	31.0	30.0	---
22	---	17.0	9.0	15.0	14.0	17.0	23.0	26.0	29.0	29.0	29.0	---
23	---	19.0	---	13.0	14.0	18.0	23.0	27.0	31.0	30.0	29.0	---
24	---	20.0	9.0	11.0	12.0	15.0	23.0	27.0	29.0	28.0	29.0	---
25	20.0	19.0	---	10.0	10.0	14.0	22.0	27.0	27.0	30.0	28.0	---
26	---	20.0	11.0	11.0	10.0	14.0	23.0	29.0	27.0	30.0	28.0	---
27	21.0	20.0	10.0	11.0	10.0	15.0	23.0	27.0	26.0	29.0	28.0	---
28	20.0	16.0	10.0	11.0	13.0	18.0	24.0	27.0	26.0	31.0	28.0	---
29	19.0	15.0	12.0	11.0	---	17.0	24.0	28.0	26.0	30.0	26.0	---
30	19.0	14.0	12.0	14.0	---	19.0	24.0	28.0	28.0	30.0	24.0	---
31	18.0	---	11.0	---	---	21.0	---	27.0	---	28.0	26.0	---
MONTH	22.0	18.0	11.5	9.5	---	19.5	21.5	---	27.5	29.5	28.5	---

BRAZOS RIVER BASIN

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08111000 NAVASOTA RIVER NEAR BRYAN, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	STREAM VELOC- ITY (FPS)	MEAN DEPTH (FT)	NUMBER OF SAM- PLING POINTS	SUS- PENDE- D SEDI- MENT (MG/L)	SUS- PENDE- D SEDI- MENT (T/DAY)	TOTAL SEDI- MENT DIS- CHARGE (T/DAY)	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM
OCT.										
02...	1700	867	22.5	.4	--	--	640	1500	--	86
05...	0940	1040	24.0	--	--	--	270	758	--	99
10...	0915	1650	25.0	--	--	--	49	218	--	--
17...	0945	1220	20.0	--	--	--	41	135	--	--
17...	1545	12900	21.0	2.1	4.2	4	71	2470	2740	71
24...	0950	2.9	--	--	--	--	32	.25	--	--
24...	1335	2490	--	.8	--	--	106	713	--	64
25...	0950	1490	20.0	--	--	--	41	165	--	--
27...	0935	560	21.0	--	--	--	55	83	--	--
28...	1140	312	20.0	--	--	--	72	61	--	--

DATE	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM	SUS. SED. SIEVE DIAM. % FINER THAN .250 MM	SUS. SED. SIEVE DIAM. % FINER THAN .500 MM	SUS. SED. SIEVE DIAM. % FINER THAN 1.00 MM	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM
OCT.									
02...	89	99	100	--	67	70	75	80	81
05...	100	--	--	--	94	94	95	99	99
10...	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--
17...	78	98	99	100	54	62	63	67	69
24...	--	--	--	--	--	--	--	--	--
24...	82	98	100	--	42	48	49	55	57
25...	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	SUS- PENDE- D SEDI- MENT (MG/L)	SUS- PENDE- D SEDI- MENT (T/DAY)
NOV.					
01...	0935	562	17.0	100	152
02...	0935	1090	18.0	130	383
03...	1415	1540	19.0	111	462
04...	1005	1840	20.0	94	467
05...	0935	2040	20.0	74	408
06...	0935	2350	18.0	65	412
07...	1650	2270	19.0	47	288
08...	0935	1770	19.0	62	296
09...	0935	1190	19.0	47	151
10...	0935	800	18.0	69	149
11...	1330	440	17.0	80	95
17...	0935	110	17.0	117	35
23...	0950	1040	19.0	129	362
24...	0950	1440	20.0	58	226
25...	0935	1650	19.0	44	196
26...	0935	2040	20.0	68	375
27...	1000	3840	20.0	96	995
28...	0945	6690	16.0	40	723
29...	1100	6060	15.0	38	622
30...	0945	4320	14.0	39	455
DEC.					
01...	0930	2440	14.0	46	303
02...	1230	1220	15.0	51	168
03...	1400	820	16.0	53	117
04...	0935	760	14.0	88	181
05...	0935	1090	13.0	121	356
06...	0915	1710	12.0	94	434
07...	0930	2530	11.0	62	424
08...	0930	3880	10.0	41	430
09...	0930	3680	10.0	35	348
12...	1310	530	12.0	40	57
13...	0930	490	12.0	65	86
20...	1000	740	8.0	143	286
21...	1410	1010	8.0	123	335
22...	0945	1260	9.0	114	388
24...	0935	1770	9.0	89	425
26...	1420	2040	11.0	75	413
27...	1235	2710	10.0	75	549
28...	0930	3450	10.0	73	680
29...	1030	3720	12.0	43	432
30...	1140	2880	12.0	47	365
31...	0945	1600	11.0	43	186

08111000 NAVASOTA RIVER NEAR BRYAN, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	SUS- PENDE SEDI- MENT DIS- CHARGE (MG/L)	SUS- PENDE SEDI- MENT DIS- CHARGE (T/DAY)
JAN.					
01...	1500	985	90.0	35	93
02...	1310	665	8.0	48	86
03...	1015	462	6.0	42	52
20...	1030	1490	15.0	145	583
21...	0930	1770	12.0	145	693
22...	0905	2530	15.0	125	854
23...	1500	3650	12.0	110	1080
27...	1215	9600	11.0	72	1870
30...	1830	6480	14.0	32	560
FEB.					
02...	1330	3300	17.0	38	339
03...	1230	1840	14.0	68	338
05...	1000	985	14.0	77	205
10...	1230	312	9.0	42	35
12...	0930	250	--	70	47
13...	1000	232	--	67	42
14...	0945	227	--	78	48
20...	0930	202	--	67	37
23...	0945	650	14.0	142	249
24...	1015	1440	12.0	112	435
25...	1030	1840	10.0	100	497
26...	0930	1840	10.0	87	432
27...	0945	1600	10.0	76	328
28...	0930	1090	13.0	68	200
MAR.					
01...	1000	635	15.0	97	166
02...	1030	382	17.0	111	114
09...	0930	152	23.0	100	41
16...	1000	1160	19.0	95	298
17...	1000	1600	19.0	95	410
18...	1000	1770	20.0	60	287
19...	0900	1190	21.0	53	170
20...	0930	665	22.0	75	135
21...	1030	382	19.0	100	103
23...	1130	562	18.0	137	208
24...	1330	438	15.0	154	182
31...	1215	178	21.0	115	55
APR.					
13...	0915	197	19.0	100	53
18...	1315	1120	21.0	140	423
19...	1030	1300	21.0	116	407
20...	1330	1120	23.0	61	184
21...	1115	575	23.0	82	127
22...	0930	462	23.0	140	175
23...	0930	635	23.0	296	507
24...	0930	665	23.0	191	343
MAY					
02...	1015	1390	23.0	131	492
03...	0930	1440	23.0	128	498
04...	0920	1650	--	106	472
05...	1030	2120	--	75	429
06...	1000	2270	--	63	386
07...	0950	1840	--	58	288
08...	0945	1340	--	76	275
09...	0945	1300	--	97	340
11...	1300	860	--	75	174
12...	1215	480	--	104	135
19...	1030	85	28.0	182	42
24...	1030	59	26.0	115	18
JUNE					
02...	1445	31	29.0	98	8.2
09...	1100	38	29.0	94	9.6
16...	1100	33	28.0	76	6.8
24...	0930	16	29.0	69	3.0
JULY					
02...	0900	8.1	28.0	60	1.3
07...	1000	8.4	29.0	92	2.1
09...	1600	8.3	31.0	35	.78
14...	1115	7.2	30.0	70	1.4
22...	0900	12	29.0	100	3.2
AUG.					
16...	1100	11	33.0	80	2.4
19...	0930	7.4	30.0	79	1.6
30...	0948	4850	24.0	160	2100
31...	1205	1770	--	67	320
SEP.					
01...	1000	720	27.0	72	140
02...	1130	207	28.0	77	43
03...	0930	124	25.0	106	35
15...	1130	3030	22.0	79	646
16...	1310	3420	--	73	674
17...	1000	6620	--	69	1230
21...	1000	5850	--	21	332
22...	1205	6200	--	30	502
23...	0930	5920	--	27	432
24...	0940	5140	--	21	291
26...	0930	2640	--	42	299
27...	0920	1710	--	54	249
29...	1510	340	--	77	71

BRAZOS RIVER BASIN

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08111700 MILL CREEK NEAR BELLVILLE, TEX.

LOCATION.--Lat 29°52'51", long 96°12'18", Austin County, at gaging station at bridge on State Highway 36, 5.0 miles (8.0 km) southeast of Bellville, and 6.0 miles (9.7 km) upstream from Brazos River.

DRAINAGE AREA.--377 mi² (976 km²).

PERIOD OF RECORD.--Chemical analyses: October 1968 to September 1974.
Sediment records: October 1966 to September 1974.

REMARKS. -For information on diversions and return flows, see REMARKS paragraph in Part I of this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SiO ₂) (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNE-SIUM (MG)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED SODIUM PLUS POTAS-SIUM (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO ₃) (MG/L)	CAR-BONATE (CO ₃) (MG/L)
OCT. 29...	1500	123	18	91	5.8	--	28	--	280	0
DEC. 06...	1115	222	18	66	3.1	22	--	5.1	204	0
JAN. 21...	1400	1240	14	55	2.6	15	--	5.2	164	0
MAR. 04...	1520	89	13	77	4.9	37	--	1.9	260	0
APR. 15...	1530	69	19	83	4.5	34	--	3.8	237	0
MAY 28...	1440	23	22	--	4.8	33	--	2.9	--	--
JULY 10...	1430	4.7	25	61	4.6	31	--	3.0	186	0
AUG. 29...	1230	118	16	51	5.3	24	--	12	159	0
SEP. 30...	1520	59	22	90	4.5	36	--	2.2	298	0

DATE	DIS-SOLVED SULFATE (SO ₄) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	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)
OCT. 29...	13	48	.3	342	250	22	.8	624	7.9	19.5
DEC. 06...	12	38	--	265	180	10	.7	474	7.7	12.0
JAN. 21...	11	25	--	209	150	14	.5	369	7.8	17.0
MAR. 04...	13	56	--	331	210	0	1.1	624	7.8	22.5
APR. 15...	15	59	--	335	230	31	1.0	588	8.0	19.0
MAY 28...	11	--	--	--	--	--	--	559	7.8	27.5
JULY 10...	8.8	54	--	279	170	19	1.0	495	7.7	33.0
AUG. 29...	9.3	41	--	237	150	19	.9	445	7.2	--
SEP. 30...	12	55	--	369	240	0	1.0	649	7.9	23.0

DATE	TIME	INSTANTANEOUS DIS-CHARGE (CFS)	TEMPER-ATURE (DEG C)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)
OCT. 29...	1445	120	19.5	94	30
DEC. 06...	1115	222	12.0	71	43
JAN. 21...	1400	1240	17.0	181	606
MAR. 04...	1520	89	22.5	2460	591
APR. 15...	1530	69	19.0	132	25
MAY 28...	1440	23	27.5	1020	63
JULY 10...	1430	4.7	33.0	23	.29
SEP. 30...	1520	56	23.0	32	4.9

08114000 BRAZOS RIVER AT RICHMOND, TEX.

LOCATION.--Lat 29°34'56", long 95°45'27", Fort Bend County, at gaging station at bridge on U.S. Highway 59 in Richmond and 925 ft (282 m) downstream from Texas and New Orleans Railroad Co. bridge.

DRAINAGE AREA.--44,020 mi² (114,000 km²), approximately, of which 9,240 mi² (23,930 km²) is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: October 1945 to September 1974.

Chemical and biochemical analyses: January 1968 to September 1974.

Pesticide analyses: February 1968 to September 1974.

Water temperatures: November 1950 to September 1974.

Sediment records: January 1966 to September 1974.

EXTREMES.--October 1973 to September 1974:

Specific conductance: Maximum daily, 1,660 micromhos Aug. 6; minimum daily, 260 micromhos Jan. 26.

Water temperatures: Maximum, 30.0°C on several days during June, July, and August.

Sediment concentrations: Maximum daily, 4,360 mg/l Jan. 27; minimum daily, 50 mg/l Aug. 19-21.

Sediment loads: Maximum daily, 562,000 tons Sept. 15; minimum daily, 102 tons Aug. 21.

Period of record:

Specific conductance: Maximum daily, 2,540 micromhos Sept. 4, 1951; minimum daily, 187 micromhos Aug. 31, 1947.

Water temperatures: Maximum, 33.0°C Aug. 5, 1951; minimum, 1.0°C Jan. 8, 1970.

Sediment concentrations: Maximum daily, 8,300 mg/l Apr. 27, 1966; minimum daily, 8 mg/l Nov. 29, 1967.

Sediment loads: Maximum daily, 1,190,000 tons Apr. 28, 1966; minimum daily, 15 tons Apr. 8-10, 1967.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

		INSTAN- TANEOUS 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 SODIUM PLUS POTAS- SIUM (MG/L)	DIS- SOLVED PHOS- PHATE SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	
OCT.													
11...	1230	7800	9.8	38	5.9	--	37	--	96	0	42	53	
31...	0710	14900	11	52	6.0	18	--	5.3	169	0	23	25	
NOV.													
27...	0645	14000	11	68	20	--	43	--	192	0	55	92	
DEC.													
06...	1245	12000	10	41	5.5	--	33	--	111	0	35	48	
23...	0740	4300	12	78	13	--	72	--	222	0	72	100	
JAN.													
16...	1315	3870	9.8	78	12	100	--	5.3	181	0	92	160	
FEB.													
05...	1415	15100	4.9	32	3.9	--	17	--	91	0	25	22	
16...	1810	4360	9.5	56	8.8	38	--	4.6	161	0	52	52	
MAR.													
22...	0630	2930	7.9	84	18	140	--	5.7	198	0	120	210	
APR.													
02...	1330	2940	8.8	81	15	110	--	4.5	224	0	110	170	
MAY													
13...	1435	8280	10	46	7.0	43	--	4.4	124	0	47	65	
JUNE													
05...	0625	980	12	67	16	60	--	3.8	228	0	54	87	
JULY													
22...	1145	1110	8.8	75	20	160	--	5.8	189	0	130	230	
AUG.													
05...	1300	2120	7.7	84	22	210	--	6.1	166	0	150	320	
SEP.													
10...	1030	5500	9.6	41	5.0	42	--	5.8	108	0	45	64	
DATE		DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITU- ENTS) (MG/L)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)	VOL. NON- FILT- RABLE RESIDUE (MG/L)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)
OCT.													
11...	.2	.40	.02	.08	.40	--	.40	235	589	80	120	40	
31...	.2	--	--	--	--	--	--	224	--	--	150	16	
NOV.													
27...	.3	--	--	--	--	--	--	383	--	--	250	92	
DEC.													
06...	.0	.50	.00	.00	.00	--	.41	230	610	90	120	34	
23...	.3	--	--	--	--	--	--	460	--	--	250	66	
JAN.													
16...	--	--	--	--	--	--	--	546	--	--	240	96	
FEB.													
05...	.2	.30	.00	.05	.68	--	.44	151	516	96	96	21	
16...	--	--	--	--	--	--	--	300	--	--	180	44	
MAR.													
22...	--	--	--	--	--	--	--	683	--	--	280	120	
APR.													
02...	--	.02	.00	.15	.30	--	.18	611	115	21	270	81	
MAY													
13...	--	--	--	--	--	--	--	284	--	--	140	42	
JUNE													
05...	--	--	--	--	--	--	--	412	--	--	230	46	
JULY													
22...	--	.03	.00	.07	.71	.78	.76	723	26	6	270	110	
AUG.													
05...	--	--	--	--	--	--	--	882	--	--	300	160	
SEP.													
10...	--	.24	.00	.18	1.3	1.5	.31	266	512	126	120	35	

BRAZOS RIVER BASIN

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08114000 BRAZOS RIVER AT RICHMOND, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)
OCT.											
11...	1.5	436	7.2	25.0	50	200	9.4	112	2.4	13	--
31...	.6	388	7.3	20.0	--	--	--	--	--	--	--
NOV.											
27...	1.2	738	7.2	23.0	--	--	--	--	--	--	--
DEC.											
06...	1.3	421	6.2	15.5	140	200	10.0	99	2.2	11	--
23...	2.0	824	7.4	11.0	--	--	--	--	--	--	--
JAN.											
16...	2.8	992	7.6	13.0	--	--	--	--	--	--	--
FEB.											
05...	.8	290	7.2	16.0	140	200	9.0	90	2.3	13	.0
16...	1.2	545	7.5	17.0	--	--	--	--	--	--	--
MAR.											
22...	3.6	1240	8.1	18.0	--	--	--	--	--	--	--
APR.											
02...	2.9	1080	7.8	24.0	20	50	9.2	108	3.2	9.0	.0
MAY											
13...	1.6	524	7.4	27.5	--	--	--	--	--	--	--
JUNE											
05...	1.7	764	7.7	--	--	--	--	--	--	--	--
JULY											
22...	4.2	1290	7.4	32.0	10	15	9.0	122	2.8	5.4	--
AUG.											
05...	5.3	1600	7.2	29.0	--	--	--	--	--	--	--
SEP.											
10...	1.6	503	6.9	25.0	50	250	7.1	85	1.0	12	--

DATE	TIME	DIS- SOLVED ALUM- INUM (AL) (UG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	DIS- SOLVED COBALT (CO) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)
OCT.								
11...	1230	20	2	--	0	0	0	5
FEB.								
05...	1415	10	1	--	0	0	0	4
APR.								
02...	1330	30	0	140	0	10	0	3
SEP.								
10...	1030	40	4	90	0	0	0	3

DATE	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	DIS- SOLVED LITHIUM (LI) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED MERCURY (HG) (UG/L)	DIS- SOLVED NICKEL (NI) (UG/L)	DIS- SOLVED STRON- TIUM (SR) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)
OCT.								
11...	60	0	0	0	.2	0	370	0
FEB.								
05...	70	0	0	0	.3	0	70	40
APR.								
02...	10	2	20	0	.2	1	880	60
SEP.								
10...	40	0	0	0	.1	2	360	0

BRAZOS RIVER BASIN

08114000 BRAZOS RIVER AT RICHMOND, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	ALDRIN (UG/L)	ALDRIN IN BOTTOM DE- POSITS (UG/KG)	DDD (UG/L)	DDD IN BOTTOM DE- POSITS (UG/KG)	DDE (UG/L)	DDE IN BOTTOM DE- POSITS (UG/KG)	DDT (UG/L)	DDT IN BOTTOM DE- POSITS (UG/KG)
OCT. 11...	1230	7800	25.0	.00	.0	.00	5.0	.01	12	.00	2.3
FEB. 05...	1415	14500	16.0	.00	.0	.00	.3	.00	1.6	.00	3.9
APR. 02...	1330	2940	24.0	.00	.0	.00	.0	.00	.2	.00	.0
SEP. 10...	1030	4600	25.0	.00	.0	.00	1.3	.00	5.0	.00	1.6

DATE	DI- ELDRIN (UG/L)	DI- ELDRIN IN BOTTOM DE- POSITS (UG/KG)	ENDRIN (UG/L)	ENDRIN IN BOTTOM DE- POSITS (UG/KG)	HEPTA- CHLOR (UG/L)	HEPTA- CHLOR IN BOTTOM DE- POSITS (UG/KG)	HEPTA- CHLOR EPOXIDE (UG/L)	HEPTA- CHLOR EPOXIDE IN BOT- TOM DE- POSITS (UG/KG)	LINDANE (UG/L)	LINDANE IN BOTTOM DE- POSITS (UG/KG)	CHLOR- DANE (UG/L)
OCT. 11...	.01	.0	.00	.0	.00	.0	.00	.0	.00	.0	.0
FEB. 05...	.00	.0	.00	.0	.00	.0	.00	.0	.00	.0	.0
APR. 02...	.00	.0	.00	.0	.00	.0	.00	.0	.00	.0	.0
SEP. 10...	.00	.3	.00	.0	.00	.4	.00	.0	.00	.0	.0

DATE	CHLOR- DANE IN BOTTOM DE- POSITS (UG/KG)	PCB (UG/L)	PCB IN BOTTOM DE- POSITS (UG/KG)	DI- AZINON (UG/L)	MALA- THION (UG/L)	METHYL PARA- THION (UG/L)	PARA- THION (UG/L)	2,4-D (UG/L)	SILVEX (UG/L)	2,4,5-T (UG/L)
OCT. 11...	0	.0	0	.01	.00	.00	.00	.02	.00	.01
FEB. 05...	0	.2	0	.00	.00	.00	.00	.02	.00	.00
APR. 02...	0	.0	0	.00	.00	.00	.00	.02	.00	.00
SEP. 10...	2	.0	0	.00	.00	.00	.00	.00	.00	.00

BRAZOS RIVER BASIN

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08114000 BRAZOS RIVER AT RICHMOND, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	SUS- PENDE SEDI- MENT (MG/L)	SUS- PENDE SEDI- MENT CHARGE (T/DAY)	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM	SUS. SED. SIEVE DIAM. % FINER THAN .250 MM
OCT.								
02...	0645	9500	26.0	1310	33600	96	100	--
05...	0630	7730	25.0	782	16300	97	99	100
14...	0755	28500	23.0	2450	189000	71	94	99
25...	0715	21500	21.0	856	49700	88	96	99
28...	0835	18200	21.0	949	46600	89	98	99
NOV.								
06...	0630	13600	20.0	1130	41500	90	96	97
DEC.								
07...	1105	10100	15.0	475	13000	86	97	99
JAN.								
26...	0600	35100	12.0	2780	263000	67	86	99
FEB.								
18...	1230	5120	16.5	431	5960	84	96	99
MAY								
13...	1345	9310	27.5	850	21400	80	95	99

DATE	SUS. SED. SIEVE DIAM. % FINER THAN .500 MM	SUS. SED. SIEVE DIAM. % FINER THAN 1.00 MM	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM
OCT.							
02...	--	--	57	66	68	80	88
05...	--	--	73	77	79	84	92
14...	100	--	44	45	50	56	64
25...	100	--	54	56	63	69	81
28...	100	--	37	43	51	60	66
NOV.							
06...	99	100	66	68	75	77	89
DEC.							
07...	100	--	56	62	71	76	81
JAN.							
26...	100	--	44	46	49	54	63
FEB.							
18...	100	--	57	65	69	76	80
MAY							
13...	100	--	49	53	56	61	70

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

MONTH	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCT- ANCE (MICRO- MHOS)	DIS- SOLVED SOLIDS (MG/L)	DIS- SOLVED SOLIDS (TONS)	DIS- SOLVED CHLORIDE (MG/L)	DIS- SOLVED CHLORIDE (TONS)	DIS- SOLVED SULFATE (MG/L)	DIS- SOLVED SULFATE (TONS)	HARDNESS (CA+MG) (MG/L)
OCT. 1973.....	705630	410	220	419000	41	78100	34	64800	130
NOV. 1973.....	293250	501	280	222000	55	43500	43	34000	150
DEC. 1973.....	227650	559	310	191000	64	39300	49	30100	170
JAN. 1974.....	376380	448	250	254000	47	47800	38	38600	140
FEB. 1974.....	231010	427	230	143000	44	27400	36	22500	130
MAR. 1974.....	110450	1000	560	167000	160	47700	93	27700	260
APR. 1974.....	63890	1100	620	107000	180	31100	100	17300	260
MAY 1974.....	158330	632	350	150000	75	32100	56	23900	190
JUNE 1974.....	36425	817	460	45200	110	10800	75	7380	240
JULY 1974.....	31962	1240	700	60400	220	19000	120	10400	270
AUG. 1974.....	44765	1130	630	76100	190	23000	110	13300	270
SEPT 1974.....	595410	408	220	354000	41	65900	34	54700	130
TOTAL	2875152	**	**	2190000	**	466000	**	345000	**
WTD.AVG.	7877	513	280	**	60	**	44	**	150

BRAZOS RIVER BASIN

08114000 BRAZOS RIVER AT RICHMOND, TEX.--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	850	402	462	580	351	780	1120	1000	813	803	1320	700
2	600	356	577	562	331	860	1090	990	829	811	1230	694
3	570	398	533	598	331	840	1180	971	798	845	1450	600
4	556	450	514	615	334	822	1140	985	764	895	1560	498
5	523	522	551	564	344	723	1040	980	764	1000	1600	462
6	525	524	462	500	332	838	1060	890	760	1250	1660	515
7	528	578	438	461	342	777	1080	881	768	1080	1580	521
8	502	471	454	451	362	714	1070	725	796	943	1310	596
9	611	473	450	518	378	987	1080	625	800	1230	1300	600
10	459	477	464	611	404	1040	1100	556	779	1480	1280	618
11	450	503	468	705	437	1080	1200	570	793	1560	883	654
12	497	474	482	741	462	1120	1220	540	824	1560	976	640
13	450	474	557	700	500	1100	1230	550	827	1580	1100	625
14	425	485	617	696	531	1070	1240	560	810	1530	1090	565
15	373	485	633	935	539	1060	1110	532	779	1470	1000	337
16	360	502	640	966	541	978	1110	423	700	1370	857	328
17	357	506	654	1050	559	1030	1070	456	696	1340	856	308
18	312	526	630	1000	636	1050	1100	442	662	1280	890	351
19	308	545	606	800	536	1070	1150	490	921	1300	1050	351
20	347	570	630	690	552	1000	1220	571	913	1310	944	341
21	374	614	688	627	632	1040	1320	651	905	1300	860	389
22	354	581	740	500	658	1240	1300	837	905	1300	845	388
23	460	572	824	426	669	1260	1400	917	892	1290	856	328
24	444	644	750	464	668	1210	1090	917	975	1320	944	323
25	436	755	600	616	664	1040	869	873	1060	1290	980	323
26	371	690	552	260	648	1060	869	800	948	1230	1040	339
27	375	738	609	295	639	1120	860	778	830	1210	1060	364
28	381	455	601	290	680	1200	860	763	760	1280	1190	370
29	812	384	573	286	---	1180	863	769	769	1340	966	440
30	385	441	572	298	---	1100	837	755	786	1310	950	381
31	388	---	590	307	---	1100	---	723	---	1270	850	---
MONTH	464	520	578	584	502	1020	1100	726	821	1250	1110	465

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	---	---	15.0	17.0	23.0	25.0	28.0	29.0	28.0	---
2	---	19.0	---	9.0	18.0	19.0	22.0	24.0	28.0	29.0	27.0	25.0
3	26.0	20.0	---	8.0	15.0	---	24.0	25.0	---	29.0	28.0	---
4	26.0	---	16.0	5.0	13.0	21.0	23.0	25.0	28.0	29.0	27.0	23.0
5	---	21.0	15.0	5.0	14.0	21.0	19.0	---	29.0	29.0	29.0	23.0
6	---	---	15.0	---	16.0	21.0	19.0	24.0	29.0	29.0	---	23.0
7	25.0	20.0	14.0	9.0	13.0	22.0	20.0	24.0	28.0	29.0	26.0	---
8	25.0	21.0	13.0	10.0	10.0	23.0	20.0	24.0	29.0	29.0	---	24.0
9	25.0	22.0	---	15.0	9.0	24.0	19.0	25.0	30.0	29.0	---	---
10	---	19.0	12.0	11.0	---	23.0	20.0	24.0	---	29.0	26.0	23.0
11	26.0	17.0	12.0	9.0	---	---	21.0	23.0	27.0	29.0	---	24.0
12	---	18.0	15.0	9.0	---	24.0	20.0	---	29.0	28.0	30.0	---
13	---	19.0	15.0	---	---	---	---	24.0	28.0	28.0	29.0	---
14	---	20.0	14.0	11.0	16.0	21.0	24.0	25.0	29.0	29.0	30.0	---
15	23.0	20.0	14.0	12.0	17.0	23.0	20.0	25.0	26.0	29.0	29.0	---
16	---	18.0	---	13.0	17.0	20.0	18.0	25.0	29.0	29.0	29.0	---
17	23.0	18.0	12.0	---	16.0	20.0	20.0	26.0	30.0	28.0	30.0	---
18	18.0	20.0	---	---	17.0	---	---	26.0	29.0	28.0	30.0	---
19	19.0	20.0	15.0	---	16.0	22.0	22.0	27.0	29.0	28.0	---	---
20	19.0	---	---	14.0	18.0	24.0	22.0	27.0	30.0	29.0	29.0	---
21	20.0	18.0	9.0	15.0	19.0	20.0	23.0	26.0	30.0	---	29.0	25.0
22	---	21.0	10.0	---	16.0	18.0	24.0	27.0	30.0	30.0	29.0	25.0
23	20.0	22.0	11.0	14.0	12.0	19.0	23.0	27.0	30.0	30.0	28.0	24.0
24	20.0	23.0	---	12.0	11.0	14.0	24.0	28.0	29.0	30.0	28.0	23.0
25	---	---	---	12.0	11.0	14.0	25.0	---	27.0	30.0	---	24.0
26	---	21.0	11.0	12.0	11.0	14.0	25.0	28.0	26.0	30.0	27.0	23.0
27	---	23.0	11.0	11.0	15.0	15.0	---	28.0	26.0	29.0	---	22.0
28	---	19.0	11.0	13.0	15.0	16.0	---	28.0	26.0	30.0	---	23.0
29	---	19.0	15.0	11.0	---	18.0	24.0	29.0	26.0	30.0	28.0	23.0
30	21.0	17.0	13.0	13.0	---	19.0	25.0	29.0	27.0	28.0	---	20.0
31	20.0	---	13.0	15.0	---	22.0	---	28.0	---	29.0	---	---
MONTH	---	20.0	---	---	14.5	20.0	22.0	26.0	28.5	29.0	---	---

08114000 BRAZOS RIVER AT RICHMOND, TEX.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCTOBER			NOVEMBER			DECEMBER		
	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	5910	571	9890	18700	1350	68200	9200	750	18600
2	10300	1920	54000	16800	950	43100	8340	250	5630
3	10000	2290	62300	15800	700	29900	7820	450	9500
4	8690	1200	28200	17700	1200	57300	8800	500	11900
5	8410	750	17000	15300	1680	69400	11300	600	18300
6	8670	650	15200	13300	1050	37700	11700	630	19900
7	9220	625	15600	11700	700	22100	10000	500	13500
8	9640	650	16900	10400	600	16800	9090	450	11000
9	9500	800	20500	9570	500	12900	8570	500	11600
10	9350	725	18300	8640	400	9330	7590	330	6760
11	8740	700	16500	7900	360	7680	6460	250	4360
12	12300	900	29900	7330	320	6330	5930	220	3520
13	18000	1470	76200	7070	330	6300	5410	220	3210
14	31300	3560	310000	7030	450	8540	5080	170	2330
15	44200	3550	421000	6970	380	7150	5120	150	2070
16	47200	2450	312000	6540	280	4940	5160	170	2370
17	49200	2600	345000	5900	180	2870	4940	200	2670
18	50900	2150	295000	5450	180	2650	4510	200	2440
19	50700	1650	226000	5150	180	2500	4140	250	2790
20	49800	1850	249000	5090	220	3020	3720	320	3210
21	43700	2100	248000	5330	280	4030	3700	150	1500
22	34600	1400	131000	5770	350	5450	4110	220	2440
23	28000	1150	86900	5810	275	4310	4360	320	3770
24	23900	1000	64500	5380	175	2540	5940	830	14400
25	21200	870	49800	5140	100	1390	12200	1870	61900
26	19300	860	44800	7480	270	5450	13400	1250	45600
27	18300	1050	51900	16200	1710	77400	10300	700	19500
28	18200	950	46700	16200	3220	143000	8440	530	12100
29	16600	750	33600	13000	1800	64600	7820	330	6970
30	15000	700	28400	10600	1200	34300	7650	270	5580
31	14800	950	38000	--	--	--	6850	220	4070
TOTAL	705630	--	3362090	293250	--	761180	227650	--	333490
DAY	JANUARY			FEBRUARY			MARCH		
	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	5870	230	3650	20900	1100	62100	3610	120	1170
2	5500	320	4750	18700	970	49000	3420	170	1570
3	5540	350	5240	17600	900	42800	3820	250	2580
4	5670	220	3370	16700	800	36100	4600	250	3110
5	5880	200	3180	15300	700	28900	5320	250	3590
6	5550	150	2250	14100	600	22800	5130	250	3460
7	5130	170	2350	12900	550	19200	4370	170	2010
8	4720	250	3190	11700	520	16400	3430	150	1390
9	4450	150	1800	10400	430	12100	2940	150	1190
10	4650	120	1510	9280	400	10000	2630	100	710
11	5110	150	2070	8050	320	6960	2530	100	683
12	5600	300	4540	7000	300	5670	2490	70	471
13	6690	450	8130	6330	340	5810	2360	100	637
14	5600	350	5290	5740	250	3870	2320	100	626
15	4470	200	2410	5160	220	3070	2470	100	667
16	3870	170	1780	4470	220	2660	2580	120	836
17	3790	150	1530	5410	180	2630	3200	150	1300
18	4010	220	2380	4910	350	4640	3460	150	1400
19	5760	630	9800	3870	420	4390	2990	150	1210
20	11100	1130	33900	3580	320	3090	2850	120	923
21	15900	1550	66500	3430	220	2040	2900	150	1170
22	11100	1320	39600	3350	200	1810	2960	200	1600
23	8020	800	17300	3610	200	1950	2980	250	2010
24	8300	750	16800	3730	170	1710	3490	270	2540
25	23800	3030	214000	3440	170	1580	4540	270	3310
26	35500	2700	259000	3360	150	1360	5240	300	4240
27	38800	4360	459000	3960	170	1820	5950	350	5620
28	37800	4170	427000	4030	150	1630	4960	320	4290
29	34300	2700	250000	--	--	--	3940	270	2870
30	29500	1950	155000	--	--	--	3700	220	2200
31	24400	1420	93500	--	--	--	3270	200	1770
TOTAL	376380	--	2100820	231010	--	356090	110450	--	61153

Brazos River Basin

08114000 BRAZOS RIVER AT RICHMOND, TEX.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	APRIL			MAY			JUNE		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	2940	200	1590	1690	230	1050	1070	700	2020
2	2920	150	1180	1610	420	1830	1130	700	2140
3	2960	150	1200	1540	320	1330	1150	670	2080
4	2780	170	1280	1500	500	2030	1120	470	1420
5	2440	150	988	3780	350	3570	979	170	449
6	1950	150	790	7050	770	14700	896	250	605
7	1680	120	544	6740	1200	21800	853	150	345
8	1520	300	1230	5720	800	12400	827	200	447
9	1380	150	559	5630	650	9880	762	250	514
10	1330	170	610	6930	720	13500	782	250	528
11	1280	250	864	10100	1250	34100	798	220	474
12	1410	170	647	9530	1070	27500	824	200	445
13	1590	150	644	9270	850	21300	932	150	377
14	2030	220	1210	15500	2060	88400	992	120	321
15	1980	200	1070	15500	3320	140000	1560	170	716
16	2040	250	1380	10800	2290	68300	2220	250	1500
17	1850	250	1250	7490	1370	27700	2110	320	1820
18	1820	150	737	5810	650	10200	1910	370	1910
19	2410	100	651	5610	720	10900	1950	700	3690
20	3090	320	2670	4750	600	7700	1850	570	2850
21	2780	370	2780	3720	450	4520	1490	500	2010
22	2470	270	1800	3100	320	2680	1290	400	1390
23	2270	400	2450	2510	440	2980	1200	220	713
24	2210	250	1490	2100	520	2950	1120	370	1120
25	2390	300	1940	1920	320	1660	1060	450	1290
26	2470	250	1670	1840	200	994	1170	320	1010
27	2150	220	1280	1650	220	980	1180	250	797
28	1940	220	1150	1500	350	1420	1100	250	743
29	1900	200	1030	1280	130	449	1090	420	1240
30	1910	200	1030	1080	370	1080	1010	550	1500
31	--	--	--	1080	600	1750	--	--	--
TOTAL	63890	--	37714	158330	--	539653	36425	--	36464
DAY	JULY			AUGUST			SEPTEMBER		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	839	570	1290	795	200	429	15500	1120	47500
2	777	570	1200	1020	70	193	16600	2210	99400
3	1130	120	366	1290	100	348	15900	2570	110000
4	1190	120	386	1700	100	459	13600	1570	57700
5	1280	300	1040	2120	150	859	11500	1100	34200
6	1540	370	1540	1970	200	1060	10200	950	26200
7	1610	250	1090	1550	170	711	9890	720	19200
8	1530	350	1450	1600	120	518	8500	620	14200
9	1230	800	2660	1750	120	567	6760	670	12200
10	973	270	709	2350	270	1710	5480	620	9170
11	871	220	517	2710	700	5120	4360	470	5530
12	837	120	271	1930	200	1040	3790	350	3580
13	896	70	169	1470	170	675	4230	400	4570
14	944	120	306	1320	120	428	18000	2150	142000
15	934	300	757	1170	220	695	48700	4330	562000
16	906	200	489	1040	200	562	53300	2950	425000
17	951	220	565	1020	170	468	44100	2200	262000
18	1060	320	916	925	70	175	34000	1720	158000
19	1010	600	1640	836	50	113	27200	1420	104000
20	985	250	665	833	50	112	31000	1910	162000
21	1080	220	642	757	50	102	36100	3080	299000
22	1110	250	749	671	120	217	31500	2270	193000
23	1010	150	409	592	150	240	23100	1650	103000
24	928	70	175	586	250	396	18500	1250	62400
25	856	70	162	740	270	539	17300	1050	49000
26	753	150	305	1310	250	884	17300	920	43000
27	783	100	211	1330	250	898	16900	850	38800
28	984	100	266	1100	450	1340	17700	850	40600
29	1100	120	356	1500	350	1420	17800	1000	48100
30	1010	100	273	1830	400	1980	16600	820	36800
31	855	120	277	4950	500	6680	--	--	--
TOTAL	31962	--	21851	44765	--	30938	595410	--	3172150
TOTAL DISCHARGE FOR YEAR (CFS-DAYS)									2875152
TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS)									10813593

BRAZOS RIVER BASIN

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08116650 BRAZOS RIVER NEAR ROSHARON, TEX.
(National stream-quality accounting network)

LOCATION.--Lat 29°20'58", long 95°34'56", Brazoria County, at gaging station at bridge on Farm Road 1462, 2.0 miles (3.2 km) downstream from Big Creek, and 7.3 miles (11.7 km) west of Rosharon.

DRAINAGE AREA.--44,340 mi² (114,800 km²), approximately, of which 9,240 mi² (23,930 km²) is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: October 1967 to September 1974.

Chemical and biochemical analyses: October 1968 to September 1974.

Pesticide analyses: February 1968 to September 1974.

Water temperatures: October 1967 to September 1974.

EXTREMES.--October 1973 to September 1974:

Specific conductance: Maximum daily, 1,550 micromhos Oct. 12, Aug. 8; minimum daily, 270 micromhos Sept. 18.

Water temperatures: Maximum, 30.0°C on several days during June, July, and August; minimum, 8.0°C Jan. 4, 5.

Period of record:

Specific conductance (1968-74): Maximum daily, 4,430 micromhos Aug. 8, 1971; minimum daily, 203 micromhos Oct. 26, 1970.

Water temperatures: Maximum, 31.0°C on several days during summer months; minimum, 4.0°C Jan. 12, 13, 1973.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO ₂) (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 SODIUM PLUS POTAS- SIUM (K) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)
OCT.										
12...	1000	15000	8.6	54	5.6	300	--	4.9	112	0
20...	0731	51800	11	51	4.6	9.8	--	5.9	173	0
NOV.										
07...	1040	12800	11	49	6.8	38	--	5.0	140	0
19...	1045	4800	11	59	10	34	--	4.4	190	0
DEC.										
25...	0722	6300	11	78	13	--	72	--	222	0
27...	0925	11600	9.4	56	6.8	41	--	5.5	148	0
JAN.										
07...	0925	5000	9.1	51	7.2	40	--	5.1	134	0
18...	0802	3650	11	81	14	110	--	4.7	204	0
FEB.										
05...	1630	15500	8.3	39	4.6	18	--	4.2	112	0
25...	0648	3450	9.2	71	12	50	--	4.3	215	0
MAR.										
18...	1015	2800	6.6	81	18	100	--	4.9	214	0
APR.										
02...	1545	2720	8.0	80	16	120	--	4.6	193	0
MAY										
09...	0930	4600	10	52	9.1	56	--	5.3	132	0
JUNE										
20...	0930	1350	9.6	64	14	82	--	5.4	200	0
JULY										
12...	1130	410	11	88	21	140	--	4.1	242	0
AUG.										
30...	1030	1800	9.0	64	20	120	--	4.4	185	0
SEP.										
19...	1030	32000	10	25	3.5	15	--	4.5	82	0

DATE	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)
OCT.										
12...	67	460	.1	.60	.01	.07	.50	.57	2.0	--
20...	18	11	.3	--	--	--	--	--	--	--
NOV.										
07...	47	56	--	--	--	--	--	--	--	--
19...	41	50	.2	.60	.01	.00	.20	.20	.20	--
DEC.										
25...	72	100	.3	--	--	--	--	--	--	--
27...	46	60	--	.60	.01	.10	.52	--	.66	309
JAN.										
07...	44	59	--	.30	.00	.19	.53	--	.21	292
18...	93	160	.2	--	--	--	--	--	--	--
FEB.										
05...	24	23	--	.30	.00	.07	.53	--	.44	252
25...	62	69	--	--	--	--	--	--	--	--
MAR.										
18...	100	150	--	.04	.01	.02	.20	--	.17	619
APR.										
02...	120	180	--	.01	.00	.50	.31	.81	.20	642
MAY										
09...	64	83	--	1.8	.00	.05	1.0	1.1	.04	375
JUNE										
20...	76	120	--	.01	.00	1.4	.60	2.0	5.0	--
JULY										
12...	120	220	--	.05	.01	.02	.97	.99	.48	727
AUG.										
30...	79	170	--	.00	.00	.13	.70	.83	.15	572
SEP.										
19...	13	11	--	.15	.01	.10	1.5	1.6	.58	132

BRAZOS RIVER BASIN

08116650 BRAZOS RIVER NEAR ROSHARON, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)	VOL. NON- FILT- RABLE RESIDUE (MG/L)	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)	COLOR (PLAT- INUM- COBALT UNITS)
OCT.										
12...	951	--	--	160	66	10	1780	6.0	21.0	--
20...	197	--	--	150	4	.4	317	7.3	20.0	--
NOV.										
07...	282	--	--	150	36	1.3	500	7.4	20.5	--
19...	305	--	--	190	32	1.1	532	6.8	16.5	--
DEC.										
25...	459	--	--	250	66	2.0	821	7.9	13.0	--
27...	298	--	--	170	49	1.4	537	6.8	13.0	--
JAN.										
07...	281	217	38	160	50	1.4	503	7.5	10.0	60
18...	574	--	--	260	92	2.9	1030	8.0	16.0	--
FEB.										
05...	177	676	82	120	28	.7	317	7.1	16.0	100
25...	384	--	--	230	50	1.4	690	7.3	13.0	--
MAR.										
18...	566	--	--	280	100	2.6	1020	6.5	22.0	--
APR.										
02...	625	--	--	270	110	3.2	1130	7.8	24.5	20
MAY										
09...	344	--	--	170	59	1.9	666	7.2	25.5	60
JUNE										
20...	470	--	--	220	53	2.4	828	6.9	29.5	--
JULY										
12...	725	--	--	310	110	3.5	1260	7.7	28.0	--
AUG.										
30...	558	--	--	240	90	3.4	1050	7.4	28.0	--
SEP.										
19...	123	--	--	77	10	.7	206	6.5	25.0	--
DATE	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)	TOTAL PHYTO- PLANK- TON (CELLS PER ML)	IMME- DIATE COLI- FORM (COL. PER 100 ML)	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)
OCT.										
12...	290	7.9	88	2.6	180	400000	2	7400	20	--
20...	--	--	--	--	--	--	--	--	--	--
NOV.										
07...	--	--	--	--	--	--	--	--	--	--
19...	85	9.6	98	.9	1400	9000	1	41	8.0	--
DEC.										
25...	--	--	--	--	--	--	--	--	--	--
27...	250	7.6	72	1.5	0	160000	10	1300	--	--
JAN.										
07...	100	11.4	101	1.2	--	69000	340	1100	7.0	.0
18...	--	--	--	--	--	--	--	--	--	--
FEB.										
05...	200	9.1	91	2.1	--	3100	360	190	15	.0
25...	--	--	--	--	--	--	--	--	--	--
MAR.										
18...	50	8.7	99	1.7	9400	2100	120	48	--	--
APR.										
02...	60	10.2	121	4.0	37000	9300	150	62	14	.0
MAY										
09...	300	7.4	89	2.4	2700	5400	780	260	24	--
JUNE										
20...	40	6.8	88	2.3	29000	4100	58	20	--	--
JULY										
12...	10	8.3	105	1.4	120000	2100	600	70	--	--
AUG.										
30...	60	9.2	116	3.1	100000	7000	310	330	--	--
SEP.										
19...	300	7.6	90	1.2	270	24000	780	660	20	--

BRAZOS RIVER BASIN

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08116650 BRAZOS RIVER NEAR ROSHARON, TEX.--Continued

WATER QUALITY DATA* WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	TOTAL ALUMINUM (AL) (UG/L)	DIS-SOLVED ALUMINUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	DIS-SOLVED BORON (B) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	DIS-SOLVED CADMIUM (CD) (UG/L)	TOTAL CHROMIUM (CR) (UG/L)	DIS-SOLVED CHROMIUM (CR) (UG/L)	TOTAL COBALT (CO) (UG/L)
OCT. 12...	1000	--	--	2	0	90	0	0	0	0	7
NOV. 19...	1045	--	--	--	--	100	--	--	--	--	--
FEB. 05...	1630	2000	10	1	1	40	0	0	0	0	0
APR. 02...	1545	--	40	--	3	150	<10	0	0	0	<50
JULY 12...	1130	--	0	6	4	190	<10	0	<10	0	<50
SEP. 19...	1030	--	30	18	4	110	<10	0	0	0	<50

DATE	DIS-SOLVED COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)	TOTAL IRON (FE) (UG/L)	DIS-SOLVED IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	TOTAL LITHIUM (LI) (UG/L)	DIS-SOLVED LITHIUM (LI) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)
OCT. 12...	0	16	4	1100	30	15	0	--	--	500	50
NOV. 19...	--	--	--	--	--	--	--	--	--	--	--
FEB. 05...	0	7	5	1100	70	6	0	0	0	240	0
APR. 02...	1	<10	3	2000	30	<100	--	--	30	140	20
JULY 12...	0	<10	3	750	350	<100	2	--	20	210	0
SEP. 19...	0	10	3	18000	60	<100	2	--	0	710	590

DATE	TOTAL MERCURY (HG) (UG/L)	DIS-SOLVED MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	DIS-SOLVED NICKEL (NI) (UG/L)	TOTAL SELENIUM (SE) (UG/L)	DIS-SOLVED SELENIUM (SE) (UG/L)	TOTAL STRONTIUM (SR) (UG/L)	DIS-SOLVED STRONTIUM (SR) (UG/L)	TOTAL ZINC (ZN) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)
OCT. 12...	<.2	--	--	--	0	0	--	--	60	--
NOV. 19...	--	--	--	--	--	--	--	--	--	--
FEB. 05...	.2	.2	4	0	0	0	180	120	40	40
APR. 02...	.4	.0	--	2	0	2	--	840	110	100
JULY 12...	.0	.1	--	0	0	0	--	970	40	10
SEP. 19...	1.6	.0	--	3	0	0	--	170	80	0

DATE	TIME	INSTANTANEOUS DIS-CHARGE (CFS)	TEMPERATURE (DEG C)	ALDRIN (UG/L)	DOD (UG/L)	DDE (UG/L)	DDT (UG/L)	DI-ELDRIN (UG/L)	ENDRIN (UG/L)	HEPTA-CHLOR (UG/L)	HEPTA-CHLOR EPOXIDE (UG/L)
OCT. 12...	1000	15000	21.0	.00	.00	.01	.00	.01	.00	.00	.00
FEB. 05...	1630	15500	16.0	.00	.00	.01	.00	.00	.00	.00	.00
APR. 02...	1545	2720	24.5	.00	.00	.00	.00	.00	.00	.00	.00
SEP. 19...	1030	32000	25.0	.00	.00	.00	.00	.00	.00	.00	.00

DATE	LINDANE (UG/L)	CHLOR-DANE (UG/L)	PCB (UG/L)	DI-AZINON (UG/L)	MALATHION (UG/L)	METHYL PARA-THION (UG/L)	PARA-THION (UG/L)	2,4-D (UG/L)	SILVEX (UG/L)	2,4,5-T (UG/L)
OCT. 12...	.00	.0	.0	.01	.00	.00	.00	.00	.00	.00
FEB. 05...	.00	.0	.0	.00	.00	.00	.00	.00	.00	.00
APR. 02...	.00	.0	.0	.00	.00	.00	.00	.02	.00	.00
SEP. 19...	.00	.0	.0	.00	.00	.00	.00	.03	.00	.01

March 18, 1974 Time - 1015

Phytoplankton Total count = 9400 cells/ml

<u>Codominants</u>	<u>Percent</u>
Scenedesmus	44
Cyclotella	22
Tetrastrum	21

Other organisms identified

Ankistrodesmus	5
Oocystis	3
Kirchneriella	3
Actinastrum	2
Tetraedron	1

April 2, 1974 Time - 1545

Phytoplankton Total count = 37000 cells/ml

<u>Codominants</u>	<u>Percent</u>
Scenedesmus	62

Other organisms identified

Anacystis	12
Cyclotella	12
Crucigenia	9
Tetrastrum	4
Ankistrodesmus	2
Trachelomonas	0

May 9, 1974 Time - 0930

Phytoplankton Total count = 2700 cells/ml

<u>Codominants</u>	<u>Percent</u>
Scenedesmus	72

Other organisms identified

Fragilaria	8
Cyclotella	8
Navicula	4
Caloneis	4
Ankistrodesmus	4

June 20, 1974 Time - 0930

Phytoplankton Total count = 29000 cells/ml

<u>Codominants</u>	<u>Percent</u>
Agmenellum	40
Scenedesmus	29

Other organisms identified

Nitzschia	6
Cyclotella	6
Actinastrum	6
Pediastrum	5
Anacystis	4
Oocystis	3
Tetraedron	1

July 12, 1974 Time - 1130

Phytoplankton Total count = 120000 cells/ml

<u>Codominants</u>	<u>Percent</u>
Agmenellum	50

Other organisms identified

Anacystis	14
Lyngbya	9
Actinastrum	5
Scenedesmus	5
Kirchneriella	4
Synedra	4
Cyclotella	2
Ankistrodesmus	2
Anabaena	1
Tetraedron	1
Nitzschia	1
Oocystis	1
Crucigenia	1
Closterium	0

August 30, 1974 Time - 1030

Phytoplankton Total count = 100000 cells/ml

<u>Codominants</u>	<u>Percent</u>
Lyngbya	39
Anabaena	24

Other organisms identified

Agmenellum	8
Anacystis	8
Crucigenia	6
Spirulina	6
Scenedesmus	3
Pediastrum	3
Achnanthes	2
Cyclotella	2
Synedra	1
Oocystis	1
Nitzschia	0

Sept. 19, 1974 Time - 1030

Phytoplankton Total count = 270 cells/ml

<u>Codominants</u>	<u>Percent</u>
Navicula	50
Nitzschia	25
Cyclotella	25

BRAZOS RIVER BASIN

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08116650 BRAZOS RIVER NEAR ROSHARON, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	SUS- PENDE SEDI- MENT (MG/L)	SUS- PENDE SEDI- MENT DIS- CHARGE (T/DAY)	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM
OCT. 12...	1000	15000	21.0	1730	70100	83
NOV. 07...	0925	12800	--	165	5700	97
DEC. 27...	0925	11600	13.0	1050	32900	83
MAR. 18...	1015	2800	22.0	271	2050	61
APR. 02...	1545	2720	24.5	209	1530	74
MAY 09...	0930	4600	25.5	612	7600	100
JUNE 20...	0930	1350	29.5	87	317	90
JULY 12...	1130	410	28.0	215	238	53
AUG. 30...	1030	1800	28.0	68	330	96
SEP. 19...	1030	32000	25.0	1230	106000	96

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

MONTH	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCT- ANCE (MICRO- MHOS)	DIS- SOLVED SOLIDS (MG/L)	DIS- SOLVED SOLIDS (TONS)	DIS- SOLVED CHLORIDE (MG/L)	DIS- SOLVED CHLORIDE (TONS)	DIS- SOLVED SULFATE (MG/L)	DIS- SOLVED SULFATE (TONS)	HARDNESS (CA, MG) (MG/L)
OCT. 1973.....	751520	427	240	487000	42	85200	35	71000	140
NOV. 1973.....	279400	492	280	211000	52	39200	42	31700	160
DEC. 1973.....	220350	549	310	184000	60	35700	48	28600	170
JAN. 1974.....	396450	481	270	289000	50	53500	41	43900	150
FEB. 1974.....	233750	413	230	145000	40	25200	34	21500	140
MAR. 1974.....	103520	960	540	151000	140	39100	88	24600	250
APR. 1974.....	56920	1110	620	95300	180	27700	100	15400	280
MAY 1974.....	148028	614	350	140000	70	28000	54	21600	190
JUNE 1974.....	21193	832	470	26900	110	6290	76	4350	230
JULY 1974.....	14987	1210	680	27500	200	8090	110	4450	290
AUG. 1974.....	32563	1170	650	57100	190	16700	110	9670	290
SEPT 1974.....	581070	374	210	329000	34	53300	30	47100	130
TOTAL	2839751	**	**	2140000	**	418000	**	324000	**
WTD.AVG.	7780	497	280	**	55	**	42	**	160

BRAZOS RIVER BASIN

08116650 BRAZOS RIVER NEAR ROSHARON, TEX.--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	861	391	397	580	295	685	1080	855	792	900	1290	1170
2	800	373	452	590	335	769	1120	920	739	951	1250	628
3	600	367	544	600	322	828	1100	995	848	1010	1280	781
4	524	412	520	619	330	831	1150	990	845	1000	1270	483
5	535	514	516	614	338	816	1150	976	831	903	1430	412
6	528	495	479	561	330	711	1060	838	845	942	1540	419
7	534	521	436	504	338	825	1070	900	866	1080	1540	501
8	404	540	438	486	351	774	1100	784	874	1260	1550	472
9	514	464	455	478	362	715	1100	706	882	899	1320	538
10	527	474	432	551	390	962	1100	603	893	1060	1260	471
11	455	474	455	627	409	1040	1100	518	889	1200	1240	540
12	1550	495	481	710	430	1100	1160	578	858	1290	990	608
13	800	485	504	666	475	1130	1220	528	840	1270	927	577
14	452	486	580	622	507	1110	1180	575	833	1310	1060	550
15	373	488	633	724	540	1080	1210	550	781	1430	1120	400
16	356	490	658	899	553	1030	1130	470	826	1390	1060	300
17	347	407	757	935	556	930	1100	409	733	1380	1000	283
18	326	514	673	1030	570	1020	1030	412	727	1270	874	270
19	315	542	623	700	642	1030	1150	435	670	1280	931	276
20	317	559	622	531	545	1030	1170	492	808	1290	948	286
21	321	583	646	567	569	1010	1220	567	871	1280	1010	333
22	407	622	699	460	654	1030	1290	639	867	1300	990	341
23	438	585	754	469	686	1220	1210	802	931	1290	957	312
24	455	578	827	410	688	1240	1440	888	944	1300	948	300
25	426	654	821	440	686	1180	1160	900	957	1290	962	299
26	408	753	582	302	688	915	926	900	1010	1300	948	317
27	379	694	502	650	676	942	885	835	1060	1320	1050	306
28	377	700	576	495	653	1000	862	802	1000	1310	990	354
29	387	394	607	329	---	1120	855	818	935	1250	1170	362
30	417	391	549	298	---	1130	918	821	918	1280	1060	402
31	355	---	569	299	---	1070	---	825	---	1290	966	---
MONTH	500	515	574	572	497	977	1110	720	862	1200	1130	443

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	20.0	18.0	---	15.0	16.0	23.0	25.0	27.0	28.0	29.0	29.0
2	27.0	20.0	18.0	---	16.0	18.0	23.0	23.0	28.0	28.0	29.0	28.0
3	27.0	20.0	18.0	---	15.0	19.0	24.0	25.0	28.0	28.0	28.0	27.0
4	27.0	22.0	18.0	8.0	15.0	20.0	23.0	26.0	28.0	28.0	28.0	25.0
5	26.0	22.0	17.0	8.0	15.0	21.0	20.0	25.0	28.0	29.0	27.0	24.0
6	26.0	20.0	16.0	9.0	16.0	21.0	19.0	25.0	28.0	30.0	28.0	24.0
7	26.0	21.0	15.0	10.0	15.0	22.0	20.0	25.0	28.0	29.0	27.0	25.0
8	26.0	21.0	14.0	10.0	13.0	22.0	20.0	25.0	28.0	29.0	28.0	24.0
9	26.0	22.0	14.0	15.0	11.0	23.0	20.0	26.0	28.0	29.0	28.0	24.0
10	27.0	20.0	13.0	15.0	11.0	23.0	20.0	25.0	28.0	29.0	28.0	24.0
11	27.0	19.0	13.0	13.0	11.0	24.0	21.0	25.0	27.0	29.0	29.0	25.0
12	25.0	19.0	14.0	10.0	13.0	24.0	21.0	24.0	28.0	29.0	30.0	25.0
13	24.0	20.0	15.0	10.0	14.0	23.0	23.0	25.0	28.0	29.0	29.0	25.0
14	23.0	20.0	15.0	10.0	15.0	22.0	25.0	26.0	26.0	29.0	30.0	25.0
15	23.0	21.0	16.0	10.0	17.0	20.0	21.0	27.0	27.0	29.0	29.0	25.0
16	23.0	20.0	13.0	13.0	16.0	20.0	19.0	26.0	28.0	29.0	28.0	24.0
17	21.0	19.0	12.0	15.0	17.0	20.0	20.0	27.0	29.0	28.0	29.0	24.0
18	20.0	20.0	13.0	16.0	17.0	21.0	21.0	27.0	29.0	27.0	29.0	25.0
19	20.0	21.0	15.0	18.0	16.0	22.0	22.0	27.0	29.0	27.0	29.0	25.0
20	20.0	22.0	9.0	16.0	17.0	24.0	22.0	28.0	29.0	29.0	30.0	26.0
21	20.0	20.0	9.0	15.0	19.0	21.0	23.0	27.0	29.0	29.0	30.0	26.0
22	20.0	20.0	9.0	17.0	16.0	19.0	24.0	27.0	29.0	30.0	30.0	25.0
23	21.0	22.0	11.0	16.0	15.0	19.0	24.0	27.0	29.0	30.0	30.0	24.0
24	21.0	23.0	13.0	15.0	15.0	18.0	24.0	27.0	30.0	30.0	28.0	24.0
25	22.0	22.0	13.0	13.0	13.0	15.0	23.0	28.0	27.0	30.0	28.0	25.0
26	22.0	24.0	12.0	11.0	13.0	14.0	24.0	28.0	26.0	30.0	26.0	24.0
27	22.0	24.0	12.0	11.0	14.0	14.0	24.0	27.0	26.0	30.0	27.0	23.0
28	22.0	20.0	12.0	12.0	15.0	16.0	24.0	27.0	26.0	30.0	28.0	24.0
29	21.0	18.0	15.0	13.0	---	18.0	24.0	28.0	25.0	30.0	28.0	22.0
30	21.0	18.0	14.0	13.0	---	20.0	24.0	29.0	26.0	30.0	28.0	21.0
31	20.0	---	15.0	14.0	---	21.0	---	28.0	---	30.0	28.0	---
MONTH	23.5	20.5	14.0	12.5	15.0	20.0	22.0	26.5	27.5	29.0	28.5	24.5

BRAZOS RIVER BASIN

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08116700 BRAZOS RIVER AT HARRIS RESERVOIR, NEAR ANGLETON, TEX.

LOCATION.--Lat 29°14'35", long 95°33'41", Brazoria County, at Harris Pumping Plant of Dow Chemical Co. and 10 miles (16 km) northwest of Angleton.

DRAINAGE AREA.--44,000 mi² (114,000 km²), of which 9,240 mi² (23,930 km²) is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: January 1962 to September 1974.

Water temperatures: October 1966 to September 1974.

EXTREMES.--October 1973 to September 1974:

Specific conductance: Maximum daily, 1,580 micromhos Aug. 8; minimum daily, 268 micromhos Sept. 20, 25.

Water temperatures: Maximum, 31.0°C July 22, 28, 29, Aug. 21; minimum, 8.0°C Jan. 4.

Period of record: Specific conductance: Maximum daily, 7,190 micromhos Mar. 3, 1964; minimum daily, 217 micromhos Oct. 26, 1970.

Water temperatures: Maximum, 31.0°C on many days during summer months; minimum, 2.0°C Jan. 8, 9, 1970.

REMARKS.--No discharge records available.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	DIS- SOLVED SILICA (SiO ₂) (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 SODIUM PLUS POTAS- SIUM (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)
OCT. 18...	1000	12	49	5.8	10	--	4.5	164	0	17
NOV. 30...	1000	11	38	6.6	--	8.3	--	99	0	22
DEC. 24...	1000	13	76	13	--	69	--	224	0	66
JAN. 18...	1000	11	79	14	100	--	4.6	200	0	92
FEB. 27...	1000	10	74	12	52	--	4.2	222	0	63
MAR. 22...	1000	8.1	81	16	100	--	5.3	212	0	90
APR. 12...	1000	8.9	73	18	110	--	5.1	210	0	100
MAY 04...	1000	8.3	74	15	99	--	4.8	198	0	91
JUNE 30...	1000	12	75	19	110	--	4.6	244	0	79
JULY 31...	1000	11	78	22	140	--	5.6	215	0	110
AUG. 31...	1000	10	56	16	110	--	3.5	184	0	80
SEP. 26...	0700	12	39	3.9	12	--	3.5	120	0	18

DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITU- ENTS) (MG/L)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHQS)	PH (UNITS)	TEMPER- ATURE (DEG C)
OCT. 18...	13	.2	192	180	12	.4	330	7.5	21.0
NOV. 30...	25	.3	160	120	40	.3	340	7.7	18.5
DEC. 24...	100	.3	447	240	0	--	799	8.0	12.5
JAN. 18...	160	.2	556	250	90	2.7	1000	8.2	15.5
FEB. 27...	70	--	395	230	52	1.5	695	8.2	--
MAR. 22...	150	--	555	270	94	2.7	1040	7.5	19.0
APR. 12...	170	--	589	260	84	3.0	1070	8.3	22.0
MAY 04...	150	--	540	250	84	2.7	995	8.0	26.0
JUNE 30...	150	--	570	270	65	2.9	1020	7.5	29.0
JULY 31...	220	--	693	290	110	3.6	1270	7.7	30.5
AUG. 31...	160	--	526	210	55	3.3	990	7.5	28.0
SEP. 26...	12	--	160	110	15	.5	286	7.4	24.0

BRAZOS RIVER BASIN

08116700 BRAZOS RIVER AT HARRIS RESERVOIR, NEAR ANGLETON, TEX.--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	810	337	377	574	304	697	1060	873	731	990	1270	1090
2	839	364	429	571	---	---	1100	885	733	990	1290	596
3	730	336	528	568	---	---	1100	995	799	952	1310	660
4	491	342	530	583	292	878	1080	995	858	917	1280	530
5	483	434	506	656	338	855	1200	986	822	1030	1400	380
6	498	480	495	---	299	713	1080	822	843	939	1490	400
7	539	479	444	510	289	800	1060	950	858	957	1560	413
8	445	551	---	482	316	824	1090	924	900	1140	1580	453
9	468	446	---	464	---	---	1080	647	917	1230	1510	538
10	553	438	427	517	---	---	1100	668	930	931	1300	447
11	457	456	435	606	372	1050	1110	402	943	1010	1280	489
12	407	493	475	---	404	1100	1110	475	900	1140	1280	588
13	1400	479	491	---	467	1150	1180	458	905	1200	871	571
14	465	461	563	631	482	1150	1180	500	754	1270	1020	547
15	340	483	---	---	518	1100	1210	681	594	1290	1120	459
16	365	471	---	864	---	1070	1190	421	765	1320	1120	291
17	311	477	759	911	560	941	1090	399	780	1420	1070	279
18	292	503	707	1000	---	1030	1080	335	712	1300	1030	302
19	321	525	631	---	624	1070	1100	372	733	1270	914	296
20	276	553	620	---	545	1000	1170	435	697	1260	962	268
21	277	569	638	613	557	1070	1180	499	926	1280	990	317
22	1180	609	---	516	629	1040	1240	597	819	1290	1040	330
23	412	596	---	463	---	1170	1280	709	892	1300	1030	297
24	434	575	799	432	697	1260	1370	841	961	1290	1010	292
25	433	641	---	424	695	1170	1220	892	990	1320	1000	268
26	414	733	590	---	697	922	1010	912	995	1290	1010	286
27	403	725	---	---	695	929	873	841	1040	1320	1020	300
28	342	803	572	506	670	991	873	815	1080	1320	1030	300
29	375	378	---	366	---	1150	822	828	1100	1350	1060	321
30	408	341	---	303	---	1150	919	845	1020	1320	1170	336
31	396	---	565	305	---	1140	---	831	---	1270	990	---
MONTH	502	503	---	---	---	1020	1110	704	867	1190	1160	421

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	27.5	20.5	17.5	12.0	15.0	15.5	22.0	24.5	28.0	28.0	30.5	29.0
2	27.5	20.5	17.0	11.0	---	---	22.0	23.5	29.0	28.0	30.0	28.0
3	---	20.5	18.5	9.0	---	---	23.0	25.0	---	29.0	29.0	27.0
4	27.0	21.0	16.0	8.0	15.0	20.0	22.0	26.0	29.0	28.5	29.0	26.0
5	26.5	21.5	17.0	10.0	15.0	20.0	20.0	25.0	29.0	29.0	28.0	25.0
6	26.5	21.0	17.0	---	16.0	21.0	20.0	25.0	29.5	29.0	28.0	25.0
7	26.0	21.0	15.0	9.0	14.0	21.5	20.5	25.0	29.0	29.5	27.0	24.5
8	26.0	21.5	---	10.5	12.0	22.0	20.0	25.5	28.0	30.0	28.0	24.5
9	26.5	22.0	---	13.0	---	---	20.0	25.0	29.0	29.5	28.0	24.0
10	27.0	20.5	13.0	14.5	---	---	21.0	25.0	28.5	30.0	28.0	24.0
11	27.0	20.0	13.0	13.0	12.0	23.0	21.0	23.0	27.5	30.0	29.0	25.0
12	26.0	20.0	14.0	---	13.0	24.0	22.0	24.0	28.0	29.0	30.0	24.5
13	24.0	20.0	14.0	---	14.0	22.0	23.0	25.0	28.0	29.0	29.5	25.0
14	23.0	20.5	15.0	10.0	15.5	20.5	24.0	26.0	28.0	30.0	30.0	25.0
15	24.0	21.5	---	---	16.0	20.0	21.5	26.0	27.5	30.0	30.0	24.5
16	22.0	20.5	---	12.0	---	19.5	22.0	26.0	29.0	30.0	30.0	24.0
17	22.0	20.0	12.5	14.5	16.0	20.0	21.0	26.0	29.0	29.0	30.0	24.5
18	21.0	20.5	14.0	15.5	---	21.0	21.0	27.0	30.0	28.5	30.0	26.0
19	20.5	21.5	14.0	---	16.0	22.0	22.0	27.5	30.0	28.0	30.5	25.0
20	20.5	20.5	10.0	---	16.0	23.0	21.5	27.5	30.0	30.0	30.5	25.0
21	20.5	20.0	9.0	15.0	17.0	21.0	22.5	26.0	30.0	30.0	31.0	26.0
22	20.0	20.5	---	17.0	16.0	19.0	23.0	27.0	30.0	31.0	30.5	25.5
23	20.5	21.5	---	16.0	---	19.0	23.0	27.0	29.5	30.5	30.5	25.0
24	21.0	22.0	12.5	14.5	15.0	18.0	23.0	28.0	29.5	30.5	30.0	24.0
25	21.0	22.0	---	13.0	13.0	15.0	23.5	28.0	28.0	30.5	29.0	24.0
26	21.5	23.0	11.5	---	17.0	13.0	24.0	28.0	28.0	30.5	27.5	24.0
27	22.0	23.0	12.0	---	13.0	14.0	23.5	28.0	28.0	30.0	28.5	23.0
28	22.0	20.0	12.5	13.0	15.0	16.0	24.0	28.5	27.0	31.0	29.0	23.5
29	21.0	18.0	---	13.0	---	18.0	24.0	29.0	27.5	31.0	28.5	23.0
30	21.0	18.5	---	12.0	---	19.0	25.0	29.0	29.0	30.5	28.0	23.0
31	---	---	14.5	13.0	---	20.0	---	28.5	---	30.5	28.0	---
MONTH	23.5	21.0	---	---	---	19.5	22.0	26.5	28.5	29.5	29.0	25.0

BRAZOS RIVER BASIN

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08117200 BRAZOS RIVER AT BRAZORIA RESERVOIR, NEAR BRAZORIA, TEX.

LOCATION.--Lat 29°30'09", long 95°33'00", Brazoria County, at Brazoria Pumping Plant of Dow Chemical Co. and 1.5 miles (2.4 km) east of Brazoria.

DRAINAGE AREA.--44,000 mi² (114,000 km²), of which 9,240 mi² (23,930 km²) is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: January 1962 to September 1974.

Water temperatures: October 1966 to September 1974.

EXTREMES.--October 1973 to September 1974:

Specific conductance: Maximum daily, 15,900 micromhos July 16; minimum daily, 243 micromhos Sept. 19.

Water temperatures: Maximum, 31.5°C July 28-30.

Period of record:

Specific conductance: Maximum daily, 37,000 micromhos Aug. 28, 1963; minimum daily, 221 micromhos Oct. 27, 1970.

Water temperatures: Maximum, 32.0°C July 28, 1973; minimum, 2.0°C Jan. 14, 15, 1968.

REMARKS.--No discharge records available.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	DIS- SOLVED SILICA (SiO ₂) (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 SODIUM PLUS POTAS- SIUM (K) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)
OCT.										
13...	0900	7.5	58	5.9	230	--	4.3	128	0	49
NOV.										
03...	0900	10	39	5.0	--	20	--	132	0	19
DEC.										
18...	0700	9.4	65	11	--	69	--	176	0	68
JAN.										
04...	0700	9.1	48	8.4	55	--	6.3	135	0	56
FEB.										
26...	0700	10	71	12	52	--	4.8	212	4	64
MAR.										
22...	0700	7.3	79	16	100	--	5.7	215	0	98
APR.										
14...	0700	8.1	82	18	110	--	6.4	232	0	110
MAY										
06...	0730	7.2	72	15	98	--	5.3	168	0	83
JUNE										
30...	0700	8.8	130	220	2100	--	80	206	0	500
JULY										
31...	0700	8.8	150	270	2500	--	49	200	0	560
AUG.										
31...	0700	11	71	18	110	--	3.2	216	0	84
SEP.										
25...	0700	11	36	4.0	13	--	3.5	112	0	18

DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITU- ENTS) (MG/L)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SURP- TION RATIO	SPEC- IFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)
OCT.									
13...	360	.2	780	170	64	7.6	1460	7.3	24.0
NOV.									
03...	23	.2	181	120	10	.8	322	7.8	22.0
DEC.									
18...	100	.3	410	210	63	2.1	741	7.9	14.0
JAN.									
04...	83	--	332	150	44	1.9	574	7.8	8.0
FEB.									
26...	71	--	393	230	46	1.5	703	8.4	13.0
MAR.									
22...	150	--	562	260	87	2.7	1030	7.9	20.5
APR.									
14...	170	--	619	280	89	2.9	1100	8.1	23.0
MAY									
06...	150	--	523	240	87	2.7	971	7.3	23.0
JUNE									
30...	3800	--	6940	1200	1100	26	11600	8.0	29.0
JULY									
31...	4400	--	8040	1500	1300	28	13500	7.8	31.0
AUG.									
31...	160	--	564	250	74	3.0	1080	7.3	29.0
SEP.									
25...	14	--	155	110	15	.5	276	7.5	24.5

08117200 BRAZOS RIVER AT BRAZORIA RESERVOIR, NEAR BRAZORIA, TEX.--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	607	364	355	566	325	698	1100	845	757	10700	14500	1100
2	694	330	404	593	308	---	1050	835	686	11800	14100	695
3	933	322	444	586	---	---	1060	912	705	10600	12300	554
4	711	334	540	577	331	812	1100	862	705	10000	8980	820
5	503	417	---	---	327	875	1090	932	725	7630	4140	456
6	514	515	466	---	301	856	1120	990	738	5350	1880	366
7	480	486	---	588	332	712	1190	990	741	3980	1310	387
8	487	530	---	519	308	779	1110	838	744	1790	1440	432
9	378	516	---	486	---	---	1070	835	746	1150	1540	473
10	471	438	465	468	---	799	1070	676	835	1040	1530	534
11	494	456	430	499	378	746	1080	493	871	1030	1570	451
12	409	473	444	---	405	938	1100	408	879	1370	1340	442
13	1460	483	481	---	426	1050	1090	499	879	2700	1300	540
14	647	462	495	666	446	1100	1090	465	871	5660	1280	541
15	346	479	---	623	505	1160	1150	529	860	12600	1280	492
16	345	472	---	633	---	900	1170	562	1130	15900	1170	314
17	300	485	637	839	545	949	1180	391	914	14900	986	266
18	294	496	741	903	---	941	1210	341	981	9050	888	274
19	282	516	718	---	562	938	1090	344	690	2290	967	243
20	277	534	635	---	606	1020	1090	370	812	1060	1010	250
21	294	555	628	508	644	1030	1050	460	760	1290	1080	304
22	---	573	---	569	571	1030	1180	---	736	1340	1230	329
23	404	610	---	420	---	1070	1180	536	744	1270	3390	316
24	424	604	715	459	682	1040	1230	616	705	1270	5800	283
25	401	577	---	394	706	1200	1300	688	715	1270	9760	276
26	393	623	799	532	703	1170	1310	805	971	2100	13000	287
27	353	708	574	---	701	821	1260	881	2420	4960	6200	258
28	336	680	519	684	706	879	1000	904	4060	9410	2960	300
29	335	759	---	458	---	938	863	892	6380	14000	2030	298
30	348	374	---	308	---	1090	860	888	11600	15300	1480	355
31	363	---	543	307	---	1100	---	855	---	13500	1080	---
MONTH	476	506	---	---	492	951	1110	688	1510	6330	3920	421

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	20.0	17.5	12.0	14.0	15.0	21.5	25.0	28.0	29.0	30.5	29.0
2	27.0	20.5	19.0	12.0	15.0	---	22.0	24.0	29.0	29.5	31.0	28.5
3	27.0	22.0	18.5	9.0	---	---	27.0	24.0	28.0	29.0	30.0	27.5
4	27.0	22.0	16.5	8.0	15.0	19.0	23.0	25.0	29.0	29.5	30.0	26.5
5	26.5	22.0	---	---	15.0	20.0	21.5	25.0	29.0	29.0	29.0	25.0
6	26.5	20.5	15.0	---	16.0	21.0	21.0	23.0	29.5	29.0	29.0	24.5
7	26.0	21.0	---	10.0	15.0	21.5	21.0	25.0	29.0	29.5	27.0	24.5
8	---	21.0	---	11.0	13.0	22.0	21.0	24.0	29.0	29.5	28.0	24.5
9	26.5	21.5	---	13.0	---	---	20.0	25.0	29.0	30.0	28.0	24.5
10	27.0	21.0	13.0	15.0	---	23.0	20.5	25.0	29.0	30.0	28.5	24.0
11	27.0	20.5	12.5	---	12.0	23.0	21.0	23.0	29.0	30.0	29.0	25.0
12	26.0	20.0	14.0	---	12.0	23.5	21.5	23.5	29.0	30.0	30.0	25.5
13	24.0	19.0	---	---	14.0	23.0	22.0	25.0	29.0	30.0	30.0	25.0
14	24.0	20.0	15.0	10.5	15.0	22.0	23.0	26.0	28.5	30.0	30.0	25.0
15	24.0	20.5	---	12.0	16.0	21.5	22.0	26.5	28.0	30.5	30.5	25.5
16	23.0	---	---	17.0	---	20.0	21.5	26.0	28.0	30.0	30.0	14.0
17	19.0	20.0	13.5	14.0	16.0	19.5	21.5	26.0	29.0	30.5	30.5	14.0
18	21.0	20.0	14.0	15.0	---	20.5	21.0	26.5	29.5	29.0	30.5	24.0
19	20.0	20.5	14.0	---	16.0	22.0	---	27.0	29.0	29.0	30.0	24.5
20	20.0	21.5	11.0	---	17.0	---	21.5	27.0	30.0	29.0	31.0	25.0
21	20.0	20.0	10.0	15.5	18.0	21.0	22.5	25.0	30.0	30.0	31.0	26.0
22	---	21.0	---	17.0	16.0	20.5	23.0	---	30.0	29.5	31.0	26.0
23	21.0	21.5	---	16.0	---	20.0	23.0	26.5	29.0	30.0	31.0	24.5
24	21.0	22.0	9.5	15.5	15.5	19.0	23.0	27.0	30.5	30.0	30.0	24.0
25	21.0	22.0	---	14.0	14.0	17.0	24.0	28.0	30.0	30.5	30.0	24.5
26	21.5	23.0	11.5	14.0	13.0	15.0	24.0	28.0	28.5	30.5	29.0	24.0
27	22.0	23.5	12.0	---	12.0	14.0	24.0	29.0	28.0	31.0	30.0	23.0
28	22.0	20.5	13.5	13.0	15.0	16.0	24.0	28.0	28.0	31.5	30.0	23.5
29	21.5	18.5	---	12.0	---	17.0	24.5	29.0	28.0	31.5	29.0	23.0
30	21.5	17.5	---	12.0	---	18.0	25.0	29.0	29.0	31.5	29.0	25.0
31	21.0	---	15.5	13.0	---	20.0	---	28.0	---	31.0	29.0	---
MONTH	23.5	21.0	---	---	15.0	20.0	22.5	26.0	29.0	30.0	29.5	24.5

BRAZOS RIVER BASIN

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MISCELLANEOUS ANALYSES OF STREAMS IN THE BRAZOS RIVER BASIN IN TEXAS

WATER QUALITY DATA, OCTOBER 1973 TO SEPTEMBER 1974

08080910 WHITE RIVER RESERVOIR NEAR SPUR, TEX. (Lat 33°27'28", long 101°05'22")

DATE	TIME	RESER- VOIR STORAGE (AC-FT)	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)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
OCT., 1973											
24...	1600	31730	1.1	16	12	130	5.2	238	0	37	110
FEB., 1974											
22...	1000	28760	.5	21	13	150	6.8	270	0	49	120
JUNE											
13...	0945	44100	4.1	17	9.8	100	6.7	202	0	40	82

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	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)	COLOR (PLAT- INUM- COBALT UNITS)	DIS- SOLVED BORON (B) (UG/L)
OCT., 1973											
24...	2.1	.00	430	90	0	6.0	801	8.3	20.0	0	340
FEB., 1974											
22...	--	--	380	110	0	6.3	870	8.3	7.0	--	400
JUNE											
13...	--	--	359	83	0	4.8	664	7.8	24.0	--	--

08080940 SALT FORK BRAZOS RIVER AT STATE HIGHWAY 208, NEAR CLAIREMONT, TEX. (Lat 33°12'22", long 100°44'50")

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	HARD- NESS (CA,MG) (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)
JUNE									
13...	1215	11	230	63	820	2800	830	9760	27.0
AUG.									
29...	1740	394	62	14	190	710	210	2780	25.0

08081050 SHORT CROTON CREEK AT MOUTH, NEAR JAYTON, TEX. (Lat 33°18'27", long 100°31'57")

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	HARD- NESS (CA,MG) (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)
AUG.									
29...	1040	4.1	710	58	1800	1500	2000	7260	24.0

08081100 CROTON CREEK BELOW SALT CROTON CREEK, NEAR JAYTON, TEX. (Lat 33°18'23", long 100°31'55")

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM PLUS POTAS- SIUM (MG) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	HARD- NESS (CA,MG) (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)
OCT.											
24...	0830	.02	1100	310	7400	3700	12000	24200	4100	36400	13.0
NOV.											
28...	1515	.04	1200	330	8200	3900	13000	26400	4200	39400	14.0
FEB.											
20...	1545	.02	1000	350	--	3800	12600	--	3900	36600	20.0
MAY											
09...	1210	310	1100	310	--	3400	10000	--	4000	31800	28.0
JUNE											
13...	1440	14	610	41	--	1600	730	--	1700	4200	30.0
AUG.											
29...	1030	367	660	40	--	1500	770	--	1800	4700	24.0

MISCELLANEOUS ANALYSES OF STREAMS IN THE BRAZOS RIVER BASIN IN TEXAS--Continued

WATER QUALITY DATA, OCTOBER 1973 TO SEPTEMBER 1974

08082950 ELM CREEK NEAR PROFFITT, TEX. (Lat 33°11'00", long 98°53'40")

DATE	TIME	INSTANTANEOUS DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SiO ₂) (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNE-SIUM (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO ₃) (MG/L)	CARBONATE (CO ₃) (MG/L)
SEP. 17...	1115	13	8.3	31	5.0	14	3.2	114	0

DATE	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLOR- IDE (CL) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITU- ENTS) (MG/L)	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)
SEP. 17...	11	19	148	98	5	.6	274	8.2	21.0

08083500 FORT PHANTOM HILL RESERVOIR NEAR NUGENT, TEX. (Lat 32°36'58", long 99°40'05")

DATE	TIME	RESERVOIR STORAGE (AC-FT)	DIS-SOLVED SILICA (SiO ₂) (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNE-SIUM (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO ₃) (MG/L)	CARBONATE (CO ₃) (MG/L)	DIS-SOLVED SULFATE (SO ₄) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)
OCT., 1973 17...	0800	50680	6.4	52	22	66	8.2	178	0	89	98
JUNE, 1974 12...	0745	34000	1.2	53	26	79	9.9	188	0	97	110

DATE	DIS-SOLVED FLUORIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	HARDNESS (CA+MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	DIS-SOLVED BORON (B) (UG/L)
OCT., 1973 17...	.3	.60	433	220	74	1.9	779	8.0	19.0	0	160
JUNE, 1974 12...	--	--	469	240	85	2.2	869	8.3	25.0	--	--

08084500 LAKE STAMFORD NEAR HASKELL, TEX. (Lat 33°04'44", long 99°34'52")

DATE	TIME	RESERVOIR STORAGE (AC-FT)	DIS-SOLVED SILICA (SiO ₂) (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNE-SIUM (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO ₃) (MG/L)	CARBONATE (CO ₃) (MG/L)	DIS-SOLVED SULFATE (SO ₄) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)
NOV., 1973 01...	1740	45950	.3	63	36	98	13	204	0	180	140

DATE	DIS-SOLVED FLUORIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	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)	COLOR (PLAT- INUM- COBALT UNITS)	DIS- SOLVED BORON (B) (UG/L)
NOV., 1973 01...	.4	.10	622	300	140	2.4	1060	8.1	19.0	0	330

BRAZOS RIVER BASIN

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MISCELLANEOUS ANALYSES OF STREAMS IN THE BRAZOS RIVER BASIN IN TEXAS--Continued

WATER QUALITY DATA, OCTOBER 1973 TO SEPTEMBER 1974

08088400 LAKE GRAHAM NEAR GRAHAM, TEX. (Lat 33°08'04", long 98°36'48")

DATE	TIME	RESER- VOIR STORAGE (AC-FT)	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)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
OCT., 1973 30...	1030	47330	5.6	46	8.7	49	6.8	118	0	16	110

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITU- ENTS) (MG/L)	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)	COLOR (PLAT- INUM- COBALT UNITS)	DIS- SOLVED BORON (B) (UG/L)
OCT., 1973 30...	.3	.20	302	150	54	1.7	584	7.7	19.5	0	60

08090300 LAKE PALO PINTO NEAR SANTO, TEX. (Lat 32°38'53", long 98°15'56")

DATE	TIME	RESER- VOIR STORAGE (AC-FT)	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)	DIS- SOLVED SULFATE (SO4) (MG/L)
FEB., 1974 19...	1440	41180	6.4	47	7.8	23	1.7	150	0	28

DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITU- ENTS) (MG/L)	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	TEMPER- ATURE (DEG C)	DIS- SOLVED BORON (B) (UG/L)
FEB., 1974 19...	35	223	150	26	.8	416	7.6	12.5	60

08091900 LAKE PAT CLEBURNE NEAR CLEBURNE, TEX. (Lat 32°17'20", long 97°24'54")

DATE	TIME	RESER- VOIR STORAGE (AC-FT)	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)
AUG., 1974 27...	1510	26600	6.6	42	4.4	12	3.5	138	0

DATE	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITU- ENTS) (MG/L)	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	TEMPER- ATURE (DEG C)
AUG., 1974 27...	16	13	166	120	10	.5	299	7.6	27.0

BRAZOS RIVER BASIN

MISCELLANEOUS ANALYSES OF STREAMS IN THE BRAZOS RIVER BASIN IN TEXAS--Continued

WATER QUALITY DATA, OCTOBER 1973 TO SEPTEMBER 1974

08095550 WACO LAKE NEAR WACO, TEX. (Lat 31°34'46", long 97°11'51")

DATE	TIME	RESER- VOIR STORAGE (AC-FT)	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 (HC03) (MG/L)	CAR- BONATE (C03) (MG/L)	
JUNE, 1974										
10...	1400	142900	8.4	46	4.3	16	3.0	141	0	
DATE	TIME	DIS- SOLVED SULFATE (S04) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	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	TEMPER- ATURE (DEG C)
JUNE, 1974										
10...	33	17	197	130	17	.6	340	8.1	25.0	

08099400 PROCTOR LAKE NEAR PROCTOR, TEX. (Lat 31°58'07", long 98°29'09")

DATE	TIME	RESER- VOIR STORAGE (AC-FT)	DIS- SOLVED SILICA (SIO2) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)
JUNE, 1974 12...	1130	50500	3.5	52	19	76	8.2	165	0
DATE	TIME	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH	TEMPERATURE (DEG C)
JUNE, 1974 12...	48	150	438	210	73	2.3	816	7.7	25.0

08104050 STILLHOUSE HOLLOW LAKE NEAR BELTON, TEX. (Lat 31°01'20", long 97°31'57")

DATE	TIME	RESER- VOIR STORAGE (AC-FT)	DIS- SOLVED SILICA (SIO2) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	
NOV., 1973												
08...	1720	243000	6.8	42	18	31	3.0	186	0	20	58	
JULY, 1974												
10...	1740	233500	5.9	35	19	36	3.3	170	0	21	70	
DATE	TIME	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	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)	COLOR (PLAT- INUM- COBALT UNITS)	DIS- SOLVED BORON (B) (UG/L)
NOV., 1973												
08...	.2	.00	270	180	26	1.0	503	7.9	22.0	0	90	
JULY, 1974												
10...	--	--	274	170	26	1.2	530	8.1	27.0	--	--	--

BRAZOS RIVER BASIN

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MISCELLANEOUS ANALYSES OF STREAMS IN THE BRAZOS RIVER BASIN IN TEXAS--Continued

WATER QUALITY DATA, OCTOBER 1973 TO SEPTEMBER 1974

08109800 EAST YEGUA CREEK NEAR DIME BOX, TEX. (Lat 30°24'26", long 96°49'02")

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	SUS- PENDEO SEDI- MENT DIS- CHARGE (MG/L)	SUS- PENDEO SEDI- MENT DIS- CHARGE (T/DAY)
OCT. 01...	1130	1.4	23.5	59	.22
NOV. 05...	1503	16	18.0	49	2.1
JAN. 14...	1340	1.2	7.0	8	.03
JUNE 10...	1215	2700	--	77	561
SEP. 23...	1215	31	20.5	37	3.1

08109900 SOMERVILLE LAKE NEAR SOMERVILLE, TEX. (Lat 30°19'06", long 96°31'24")

DATE	TIME	RESER- VOIR STORAGE (AC-FT)	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)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
DEC., 1973 04...	1545	163000	8.3	23	5.2	16	5.4	62	0	35	25
APR., 1974 09...	1600	158800	6.5	28	6.0	22	6.0	56	0	49	36

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	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)	COLOR (PLAT- INUM- COBALT UNITS)	DIS- SOLVED BORON (B) (UG/L)
DEC., 1973 04...	.2	.20	149	79	28	.8	260	7.0	17.5	45	50
APR., 1974 09...	--	--	181	95	49	1.0	334	6.7	15.5	--	--

08110100 DAVIDSON CREEK NEAR LYONS, TEX. (Lat 30°25'10", long 96°32'24")

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	SUS- PENDEO SEDI- MENT DIS- CHARGE (MG/L)	SUS- PENDEO SEDI- MENT DIS- CHARGE (T/DAY)
OCT. 01...	1430	2.2	23.5	74	.44
NOV. 05...	1225	14	19.0	41	1.5
DEC. 03...	1520	8.1	16.0	41	.90
JAN. 14...	1550	8.2	8.5	13	.29
SEP. 13...	1800	3700	22.0	148	1480
23...	1415	14	21.0	35	1.4

BRAZOS RIVER BASIN

MISCELLANEOUS ANALYSES OF STREAMS IN THE BRAZOS RIVER BASIN IN TEXAS--Continued

WATER QUALITY DATA, OCTOBER 1973 TO SEPTEMBER 1974

08110300 LAKE MEXIA NEAR MEXIA, TEX. (Lat 31°38'45", long 96°34'39")

		RESER- VOIR STORAGE (AC-FT)	DIS- SOLVED SILICA (SiO2) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
DATE	TIME										
OCT., 1973											
02...	1355	10540	1.4	38	3.5	9.8	4.7	125	0	15	12
DEC.											
11...	0900	9470	9.2	35	2.8	10	5.0	113	0	15	9.0
JULY, 1974											
08...	1830	7870	1.8	41	3.8	19	5.6	133	0	28	22

		DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	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)	COLOR (PLAT- INUM- COBALT UNITS)	DIS- SOLVED BORON (B) (UG/L)
DATE												
OCT., 1973												
02...	.2	.30	147	110	7	.4	277	7.3	28.0	0	60	
DEC.												
11...	--	--	141	99	6	.4	244	7.5	9.5	--	50	
JULY, 1974												
08...	--	--	187	120	9	.8	346	6.9	31.5	--	--	

SAN BERNARD RIVER BASIN

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08117700 SAN BERNARD RIVER NEAR WEST COLUMBIA, TEX.
(FORMERLY SAN BERNARD RIVER ON FARM ROAD 1301, NEAR WEST COLUMBIA, TEX.)

LOCATION.--Lat 29°09'37", long 95°45'56", Brazoria County, at bridge on Farm Road 1301 and 4.4 miles (7.1 km) west of West Columbia.

PERIOD OF RECORD.--Chemical analyses: October 1969 to September 1974.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED SODIUM PLUS POTAS- SIUM (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)
NOV. 02...	1230	896	13	30	5.4	--	15	--	100	0
DEC. 04...	1000	86	15	55	11	54	--	4.8	204	0
JAN. 24...	1440	4090	7.7	12	2.1	8.4	--	4.1	37	0
MAR. 06...	1540	72	13	82	18	92	--	3.3	289	0
APR. 17...	1150	194	14	88	16	120	--	5.3	262	0
JUNE 03...	1240	214	13	38	8.1	37	--	4.3	134	0
JULY 08...	1220	208	16	52	16	47	--	2.4	212	0
SEP. 05...	1635	565	24	30	7.1	23	--	6.1	108	0

DATE	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	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)
NOV. 02...	11	26	.1	150	97	15	.7	289	7.0	19.0
DEC. 04...	22	86	--	348	180	15	1.7	649	7.7	17.5
JAN. 24...	8.8	14	--	75	39	8	.6	150	7.1	13.0
MAR. 06...	31	150	--	532	280	42	2.4	1000	7.7	23.0
APR. 17...	67	200	--	639	290	71	3.1	1170	7.9	20.5
JUNE 03...	24	61	--	251	130	18	1.4	477	7.3	28.5
JULY 08...	21	74	--	333	200	22	1.5	630	7.5	28.5
SEP. 05...	12	38	--	193	100	16	1.0	344	7.2	24.0

BIG BOGGY CREEK BASIN

08117900 BIG BOGGY CREEK NEAR WADSWORTH, TEX.

LOCATION.--Lat 28°48'46", long 95°57'02", Matagorda County, at bridge on Farm Road 521, 1.3 miles (2.1 km) upstream from State Highway 60, and 2.0 miles (3.2 km) southwest of Wadsworth.

DRAINAGE AREA.--10.3 mi² (26.7 km²).

PERIOD OF RECORD.--Chemical and biochemical analyses: October 1968 to September 1974.
Pesticide analyses: October 1968 to September 1974.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

		INSTAN- TANEOUS 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)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	
DATE	TIME												
OCT. 25...	1020	2.7	14	21	6.6	16	5.2	77	0	11	27	.1	
NOV. 28...	1020	.35	3.9	59	17	59	4.6	205	0	16	120	.3	
JAN. 04...	1040	.21	1.2	62	18	65	6.2	200	0	31	130	.2	
FEB. 06...	1005	1.2	7.5	40	11	38	6.1	126	0	18	77	--	
MAR. 13...	1000	.25	5.1	56	21	100	5.0	246	0	20	170	--	
APR. 17...	1030	7.9	7.8	61	20	47	5.3	196	0	54	84	--	
MAY 02...	1325	275	--	12	3.9	12	3.7	38	0	14	20	--	
22...	1050	6.0	10	44	14	51	2.7	169	0	36	71	--	
JUNE 26...	1000	2.7	18	62	21	80	1.4	290	0	13	130	--	
SEP. 06...	0950	3.7	25	54	17	60	4.3	241	0	16	92	--	
DATE		BROMIDE (BK) (MG/L)	IODIDE (I) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)	VOL. NON- FILT- RABLE RESIDUE (MG/L)	HARD- NESS (CA+MG) (MG/L)
UCT. 25...	--	--	--	.20	.04	.46	.93	--	.38	141	--	--	80
NOV. 28...	--	--	--	.04	.00	.01	.54	--	.05	376	--	--	220
JAN. 04...	.6	.06		.03	.00	.26	.57	--	.06	413	34	--	230
FEB. 06...	--	--		.20	.00	.28	.85	--	.19	260	--	--	150
MAR. 13...	--	--		.09	.01	.96	.24	1.2	.18	498	122	16	230
APR. 17...	1.0	.30		.69	.03	.29	1.4	1.7	.06	378	59	4	240
MAY 02...	.1	.00		.18	.02	.21	.79	1.0	.17	--	27	5	46
22...	--	--		.05	.04	.16	1.4	1.6	.17	312	22	2	170
JUNE 26...	--	--		.00	.00	.10	.62	.72	.06	468	47	3	240
SEP. 06...	.4	.01		.01	.00	.06	.58	.64	.07	388	41	--	210
DATE		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)	COLOR (PLAT- INUM- COBALT UNITS)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	BIO- CHEM- ICAL OXYGEN DEMAND (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	
UCT. 25...	16	.8	250	7.1	24.5	--	120	7.3	87	3.8	18		
NOV. 28...	49	1.7	711	7.9	14.0	--	30	11.2	108	2.4	6.5		
JAN. 04...	65	1.9	775	7.2	4.5	--	20	13.4	103	2.5	--		
FEB. 06...	42	1.4	497	7.0	19.0	--	70	8.4	89	2.1	17		
MAR. 13...	25	2.9	954	7.8	19.0	--	65	9.0	96	3.5	--		
APR. 17...	74	1.3	703	7.9	20.0	30	30	9.6	104	4.7	12		
MAY 02...	15	.8	162	6.3	24.0	50	15	4.5	53	3.7	16		
22...	29	1.7	578	7.3	27.0	20	30	8.0	99	5.1	18		
JUNE 26...	3	2.2	848	7.6	23.5	20	40	7.1	83	2.0	5.5		
SEP. 06...	8	1.8	659	7.6	21.0	--	20	6.6	73	1.5	8.5		

BIG BOGGY CREEK BASIN

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08117900 BIG BOGGY CREEK NEAR WADSWORTH, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	DIS- SOLVED ALUM- INUM (AL) (UG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	DIS- SOLVED COBALT (CO) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)
JAN. 04...	1040	10	2	60	0	0	1	3
APR. 17...	1030	10	0	110	0	20	0	3
MAY 02...	1325	130	0	60	1	30	0	16
SEP. 06...	0950	30	1	120	0	0	0	0

DATE	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	DIS- SOLVED LITHIUM (LI) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED MERCURY (HG) (UG/L)	DIS- SOLVED NICKEL (NI) (UG/L)	DIS- SOLVED STRON- TIUM (SR) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)
JAN. 04...	20	2	10	50	.0	2	360	10
APR. 17...	20	0	0	10	.1	0	400	30
MAY 02...	100	4	0	30	.1	5	110	60
SEP. 06...	100	0	0	0	.3	0	360	10

BIG BOGGY CREEK BASIN

08117900 BIG BOGGY CREEK NEAR WADSWORTH, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	ALDRIN (UG/L)	ALDRIN IN BOTTOM DE- POSITS (UG/KG)	DDD (UG/L)	DDD IN BOTTOM DE- POSITS (UG/KG)	DDE (UG/L)	DDE IN BOTTOM DE- POSITS (UG/KG)	DDT (UG/L)	DDT IN BOTTOM DE- POSITS (UG/KG)
OCT. 25...	1020	2.7	24.5	--	.0	--	.0	--	.0	--	.0
JAN. 04...	1040	.21	4.5	.00	.0	.00	.0	.00	.0	.00	.0
APR. 17...	1030	7.9	20.0	.00	.0	.00	.0	.00	.3	.00	.0
MAY 02...	1325	275	24.0	.00	--	.00	--	.00	--	.00	--
SEP. 06...	0950	3.7	21.0	.00	.0	.00	.0	.00	.0	.00	.0

DATE	DI- ELDRIN (UG/L)	DI- ELDRIN IN BOTTOM DE- POSITS (UG/KG)	ENDRIN (UG/L)	ENDRIN IN BOTTOM DE- POSITS (UG/KG)	HEPTA- CHLOR (UG/L)	HEPTA- CHLOR IN BOTTOM DE- POSITS (UG/KG)	HEPTA- CHLOR EPOXIDE (UG/L)	HEPTA- CHLOR EPOXIDE IN BOT- TOM DE- POSITS (UG/KG)	LINDANE (UG/L)	LINDANE IN BOTTOM DE- POSITS (UG/KG)	CHLOR- DANE (UG/L)
OCT. 25...	--	.5	--	.0	--	.0	--	.0	--	.0	--
JAN. 04...	.00	1.1	.00	.0	.00	.0	.00	.0	.00	.0	.0
APR. 17...	.01	.3	.00	.0	.00	.0	.00	.0	.00	.0	.0
MAY 02...	.00	--	.00	--	.00	--	.00	--	.00	--	.0
SEP. 06...	.00	.0	.00	.0	.00	.0	.00	.0	.00	.0	.0

DATE	CHLOR- DANE IN BOTTOM DE- POSITS (UG/KG)	PCB (UG/L)	PCB IN BOTTOM DE- POSITS (UG/KG)	DI- AZINON (UG/L)	MALA- THION (UG/L)	METHYL PARA- THION (UG/L)	PARA- THION (UG/L)	2,4-D (UG/L)	SILVEX (UG/L)	2,4,5-T (UG/L)
OCT. 25...	0	--	0	--	--	--	--	--	--	--
JAN. 04...	0	.0	0	.00	.00	.00	.00	.00	.00	.00
APR. 17...	0	.0	0	.00	.00	.00	.00	.00	.00	.00
MAY 02...	--	.0	--	.24	.00	.00	.00	.00	.00	.01
SEP. 06...	0	.0	0	.00	.00	.00	.00	.00	.00	.00

COLORADO RIVER BASIN

511

08120700 COLORADO RIVER NEAR CUTHBERT, TEX.

LOCATION.--Lat 32°28'41", long 100°56'54", Mitchell County, at gaging station at bridge on Farm Road 1808, 4.8 miles (7.7 km) east of Cuthbert, and 8.0 miles (12.9 km) northwest of Colorado City.

DRAINAGE AREA.--4,028 mi² (10,433 km²), of which 2,600 mi² (6,730 km²) is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: March 1965 to September 1974.

Water temperatures: March 1965 to September 1974.

EXTREMES.--October 1973 to September 1974:

Specific conductance: Maximum daily, 12,100 micromhos May 31; minimum daily, 311 micromhos Aug. 10.

Water temperatures: Maximum, 31.0°C June 15, Aug. 13; minimum, freezing point Jan. 2.

Period of record:

Specific conductance: Maximum daily, 70,000 micromhos Nov. 17, 1968; minimum daily, 290 micromhos Aug. 14, 1972.

Water temperatures: Maximum, 36.0°C Aug. 2, 1966; minimum, freezing point on many days during winter months.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report. Conductivity is recorded continuously at this station.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO ₂) (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 SODIUM PLUS POTAS- SIUM (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)
OCT.										
11...	1240	1.5	7.3	150	67	930	--	9.1	178	0
NOV.										
05...	0800	5.6	.0	180	88	--	1400	--	154	0
DEC.										
14...	1145	1.9	6.8	180	74	600	--	12	347	11
JAN.										
15...	1555	2.2	3.5	190	84	650	--	11	355	0
FEB.										
26...	1120	2.3	.8	220	98	810	--	12	336	0
MAR.										
28...	1430	2.0	1.9	230	110	1100	--	15	255	0
APR.										
16...	1130	.37	.9	240	120	1300	--	15	114	0
MAY										
10...	1040	2.8	4.2	180	110	750	--	11	208	0
JUNE										
16...	1410	7.7	4.3	100	34	400	--	13	156	0
AUG.										
20...	2300	1.6	6.8	170	58	1100	--	13	158	0
SEP.										
20...	1145	62	5.8	68	16	340	--	4.7	112	0

DATE	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	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)
OCT.									
11...	420	1500	3150	660	510	16	5530	7.7	20.0
NOV.									
05...	520	2200	4420	820	700	20	7620	7.4	11.0
DEC.									
14...	500	850	2410	750	450	9.5	3940	8.5	8.5
JAN.									
15...	630	960	2700	820	530	9.9	4450	8.0	9.0
FEB.									
26...	750	1200	3260	950	680	11	5210	7.5	4.5
MAR.									
28...	740	1800	4120	1000	820	15	7110	8.0	20.0
APR.									
16...	980	1900	4610	1100	1000	17	7610	8.0	14.0
MAY									
10...	1100	850	3110	900	730	11	4710	7.9	19.0
JUNE									
16...	180	670	1480	390	260	8.8	2820	7.7	30.0
AUG.									
20...	390	1800	3620	660	530	19	6550	7.4	26.0
SEP.									
20...	110	530	1130	240	140	9.6	2160	7.6	21.0

08120700 COLORADO RIVER NEAR CUTHBERT, TEX.--Continued

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

MONTH	DISCHARGE (FT ³ /S-DAY)	SPECIFIC CONDUCT- ANCE (MICRO- MHOS)	DIS- SOLVED SOLIDS (MG/L)	DIS- SOLVED SOLIDS (TONS)	DIS- SOLVED CHLORIDE (MG/L)	DIS- SOLVED CHLORIDE (TONS)	DIS- SOLVED SULFATE (MG/L)	DIS- SOLVED SULFATE (TONS)	HARDNESS (CA, MG) (MG/L)
OCT. 1973...	23.28	3960	2310	145	940	59	420	26	420
NOV.....	26.35	4400	2570	183	1060	75	460	33	450
DEC.....	50.26	4360	2540	345	1040	141	460	62	450
JAN. 1974...	64.0	4830	2820	487	1170	202	500	86	480
FEB.....	61.7	6340	3700	616	1560	260	660	110	600
MAR.....	54.66	6510	3810	562	1610	238	680	100	620
APR.....	170.63	5600	3270	1510	1370	631	580	267	550
MAY.....	147.43	5690	3320	1320	1390	553	590	235	550
JUNE.....	551.37	1790	1030	1530	370	551	230	342	240
JULY.....	1.61	6360	3710	16	1560	6.8	670	2.9	610
AUG.....	942.8	1140	650	1650	200	509	90	229	190
SEP.....	871.47	1680	970	2280	340	800	220	518	230
TOTAL.....	2965.56	--	--	10600	--	4030	--	2010	--
WTD. AVG....	8.12	2300	1330	--	500	--	250	--	280

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	2590	6180	5580	4720	5820	5610	7370	8650	---	---	---	3200
2	2590	6490	4000	5240	5820	5430	7270	8200	1380	---	---	3350
3	2700	6720	4140	5150	6010	5470	7590	5180	1790	---	---	3580
4	2740	7020	4100	4750	6400	5660	7430	4310	2240	6420	---	4020
5	3030	7620	4060	4690	6960	5610	7140	4580	2770	6380	---	4270
6	2690	6450	4350	4630	7380	5710	6890	2820	3010	6000	---	4510
7	2680	6070	4350	4130	7740	5800	6510	4570	3320	6380	---	4750
8	3210	6350	3930	4210	7890	5980	6390	4870	3860	---	---	5000
9	3650	6460	4100	4260	7980	5960	6160	4770	4300	---	---	5470
10	5310	6240	4130	4420	7890	5890	6230	4730	4510	---	311	5550
11	5570	6260	4180	4280	7660	6140	6080	4550	4440	---	1720	5960
12	5400	5240	3840	4670	7370	5850	6040	4380	4380	---	1240	6210
13	5200	5020	3980	4350	7190	5750	6670	4410	5600	---	6800	---
14	4580	4700	3980	5390	6850	7000	6750	4550	2840	---	5060	---
15	4340	4530	4020	4310	6720	7200	7130	4570	2830	---	4850	---
16	4160	4270	3730	4670	6700	6250	7560	4850	2840	---	4950	---
17	4180	4200	3870	4620	6350	5780	8120	5230	3190	---	5560	5730
18	4330	4100	4010	4570	6320	5920	8290	5440	3590	---	5710	3340
19	4300	3860	4140	5210	6440	6340	8640	5640	3420	---	6140	1030
20	4230	3920	4350	5050	6870	6610	9090	5780	3740	---	6540	820
21	4380	3740	4440	4730	5440	7300	9140	5990	---	---	6560	550
22	4560	3940	4520	4700	6650	7360	3100	6410	---	---	7200	1090
23	4710	3790	4440	4840	5040	7400	2320	---	---	---	7220	1610
24	4930	4100	4470	5200	5220	7440	2270	---	---	---	5000	2180
25	5270	3520	4620	5050	5360	7220	2550	6810	---	---	1780	2460
26	5660	3590	4790	5120	5120	7220	2680	6700	---	---	1470	1230
27	5770	3550	4720	5770	5380	6930	2820	4740	---	---	1210	1540
28	5630	3550	4830	5580	5450	7050	2860	11000	---	---	6500	2160
29	5660	3900	4850	5800	---	7360	2340	11800	---	---	5190	2750
30	---	4070	6600	5910	---	7490	10100	11800	---	---	3910	3140
31	5900	---	5090	5850	---	7450	---	12100	---	---	2840	---
MONTH	4330	4980	4390	4900	6500	6460	6120	6190	---	---	---	3290

COLORADO RIVER BASIN

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08120700 COLORADO RIVER NEAR CUTHBERT, TEX.--Continued

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	24.0	---	13.0	2.0	13.0	16.0	20.0	24.0	---	---	---	27.0
2	26.0	13.0	11.0	0.0	10.0	17.0	14.0	18.0	20.0	---	---	18.0
3	22.0	13.0	12.0	2.0	13.0	22.0	13.0	23.0	18.0	---	---	21.0
4	20.0	16.0	---	3.0	11.0	17.0	15.0	24.0	---	26.0	---	22.0
5	17.0	11.0	5.0	---	13.0	18.0	9.0	20.0	30.0	29.0	---	22.0
6	19.0	10.0	10.0	3.0	7.0	18.0	13.0	25.0	21.0	25.0	---	22.0
7	24.0	14.0	7.0	8.0	3.0	15.0	---	25.0	22.0	26.0	---	23.0
8	25.0	15.0	12.0	11.0	7.0	23.0	11.0	28.0	30.0	---	---	23.0
9	21.0	13.0	10.0	3.0	8.0	19.0	11.0	23.0	25.0	---	---	24.0
10	23.0	14.0	7.0	2.0	7.0	19.0	14.0	18.0	20.0	---	22.0	20.0
11	24.0	14.0	11.0	6.0	12.0	13.0	15.0	23.0	22.0	---	25.0	26.0
12	23.0	14.0	11.0	3.0	13.0	13.0	14.0	26.0	21.0	---	22.0	21.0
13	20.0	19.0	11.0	10.0	13.0	12.0	15.0	22.0	30.0	---	31.0	---
14	20.0	17.0	11.0	8.0	16.0	19.0	12.0	22.0	30.0	---	29.0	---
15	22.0	11.0	8.0	4.0	15.0	14.0	12.0	21.0	31.0	---	30.0	---
16	14.0	9.0	9.0	10.0	13.0	15.0	14.0	23.0	30.0	---	24.0	---
17	22.0	18.0	9.0	12.0	15.0	22.0	21.0	24.0	28.0	---	27.0	20.0
18	14.0	14.0	---	9.0	11.0	24.0	24.0	24.0	25.0	---	30.0	20.0
19	---	15.0	2.0	7.0	11.0	23.0	24.0	28.0	29.0	---	28.0	21.0
20	20.0	10.0	1.0	9.0	19.0	16.0	24.0	22.0	23.0	---	26.0	20.0
21	20.0	10.0	---	15.0	15.0	12.0	24.0	22.0	---	---	22.0	18.0
22	20.0	13.0	5.0	10.0	10.0	9.0	18.0	27.0	---	---	27.0	19.0
23	14.0	18.0	7.0	12.5	10.0	---	23.0	---	---	---	23.0	18.0
24	15.0	15.0	6.0	8.0	16.0	6.0	16.0	---	---	---	25.0	---
25	16.0	12.0	8.0	7.0	12.0	16.0	22.0	26.0	---	---	30.0	18.0
26	15.0	10.0	9.0	11.0	11.0	11.0	24.0	26.0	---	---	25.0	19.0
27	16.0	10.0	8.0	13.0	17.0	14.0	25.0	21.0	---	---	24.0	17.0
28	14.0	10.0	9.0	11.0	---	17.0	---	24.0	---	---	27.0	---
29	24.0	4.0	10.0	4.0	---	15.0	21.0	28.0	---	---	26.0	25.0
30	---	5.0	9.0	12.0	---	18.0	19.0	26.0	---	---	22.0	24.0
31	12.0	---	6.0	9.0	---	20.0	---	24.0	---	---	30.0	---
MONTH	19.5	12.5	8.5	7.5	12.0	16.5	17.5	23.5	---	---	---	21.0

COLORADO RIVER BASIN

08121000 COLORADO RIVER AT COLORADO CITY, TEX.

LOCATION.--Lat 32°23'33", long 100°52'42", Mitchell County, at gaging station at Colorado City, 3,517 ft (1,072 m) upstream from bridge on State Highway 377, and 1.6 miles (2.6 km) upstream from Lone Wolf Creek.

DRAINAGE AREA.--4,082 mi² (10,572 km²), of which 2,600 mi² (6,730 km²) is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: May 1946 to September 1954, November 1956 to September 1974.

Water temperatures: November 1952 to September 1954, November 1956 to September 1974.

EXTREMES.--October 1973 to September 1974:

Specific conductance: Maximum daily, 26,300 micromhos Apr. 13; minimum daily, 890 micromhos Sept. 25.

Water temperatures: Maximum, 35.0°C Aug. 16; minimum, freezing point Dec. 20, Jan. 2, 3, 5.

Period of record:

Specific conductance (1946-54, 1956-69, 1971-74): Maximum daily, 67,400 micromhos May 14, 17, 1961; minimum daily, 245 micromhos May 14, 1957.

Water temperatures (1956-69, 1971-74): Maximum, 37.0°C July 29, 1960, July 9, 1965, July 1, 1973; minimum, freezing point on many days during winter months.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	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 SODIUM PLUS POTAS- SIUM (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)
OCT. 28...	1615	.17	8.8	330	150	3500	--	11	210	0
NOV. 13...	1715	.29	4.2	360	160	--	4000	--	133	0
DEC. 31...	1245	.17	2.5	460	210	--	4800	--	294	0
JAN. 22...	1010	.12	2.3	450	230	4600	--	19	284	0
FEB. 24...	0830	.17	2.0	370	250	5500	--	21	252	0
MAR. 06...	1045	.15	1.3	450	230	5300	--	22	234	0
APR. 22...	0755	.29	12	410	320	4800	--	26	192	0
MAY 26...	1510	.09	6.3	180	95	1600	--	22	172	0
JUNE 03...	0730	426	10	88	18	110	--	9.2	201	0
AUG. 14...	1400	45	6.1	82	31	470	--	9.4	105	0
SEP. 01...	0900	.45	5.2	62	32	720	--	10	76	0

DATE	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	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)
OCT. 28...	1300	5400	10800	1400	1300	40	17000	7.5	23.0
NOV. 13...	1500	6100	12200	1600	1400	--	19100	7.8	22.0
DEC. 31...	2000	7100	14600	2000	1800	--	22600	7.6	5.0
JAN. 22...	2100	7100	14600	2100	1800	44	23900	7.3	9.0
FEB. 24...	2400	8200	16900	2000	1700	54	25400	7.9	5.0
MAR. 06...	1800	8200	16100	2100	1900	51	23600	7.7	14.0
APR. 22...	2400	7300	15400	2300	2200	43	22200	7.5	16.0
MAY 26...	800	2300	5090	840	700	24	8370	7.5	34.0
JUNE 03...	160	150	644	290	130	2.8	1120	7.7	20.0
AUG. 14...	240	720	1610	330	250	11	2860	7.6	34.0
SEP. 01...	300	1000	2170	290	220	19	3980	7.7	24.0

COLORADO RIVER BASIN

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08121000 COLORADO RIVER AT COLORADO CITY, TEX.--Continued

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

MONTH	DISCHARGE (FT ³ /S-DAY)	SPECIFIC CONDUCT- ANCE (MICRO- MHOS)	DIS- SOLVED SOLIDS (MG/L)	DIS- SOLVED SOLIDS (TONS)	DIS- SOLVED CHLORIDE (MG/L)	DIS- SOLVED CHLORIDE (TONS)	DIS- SOLVED SULFATE (MG/L)	DIS- SOLVED SULFATE (TONS)	HARDNESS (CA, MG) (MG/L)
OCT. 1973...	7.17	12800	7820	151	3850	75	1040	20	--
NOV.....	6.25	18100	11600	196	5730	97	1520	26	--
DEC.....	4.49	19200	12400	150	6120	74	1630	20	--
JAN. 1974...	5.95	22500	14700	236	7270	117	1920	31	--
FEB.....	6.74	22300	14600	266	7220	131	1900	35	--
MAR.....	5.83	22900	15000	236	7420	117	1960	31	--
APR.....	6.35	19600	12700	218	6270	107	1670	29	--
MAY.....	10.37	21100	13700	384	6770	190	1790	50	--
JUNE.....	438.21	1770	1010	1190	330	390	160	189	220
JULY.....	0	--	--	0	--	0	--	0	--
AUG.....	682.41	1580	890	1640	270	497	160	295	210
SEP.....	861.01	1110	600	1390	140	325	150	349	170
TOTAL.....	2034.78	--	--	6060	--	2120	--	1080	--
WTD. AVG....	5.57	1900	1100	--	390	--	200	--	230

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	7390	17500	17600	22900	22700	23900	25500	15000	---	---	---	3980
2	8000	17800	17800	23100	23400	23900	25900	16400	7850	---	---	3970
3	8960	17800	18700	23400	13700	24000	25700	17700	1120	---	---	4240
4	8740	17800	20200	23300	18300	24500	25600	18700	1970	---	---	4380
5	8810	18100	19800	22600	20900	24400	25100	23800	2710	---	---	4440
6	9900	18100	18400	22100	22400	23700	24800	23600	3300	---	---	4570
7	10200	18100	18600	23400	23600	23000	25700	23500	3970	---	---	5020
8	10600	18000	19100	21800	24100	23200	26200	23200	4310	---	---	5270
9	11500	18600	20000	20200	23100	24900	25500	24000	---	---	---	5410
10	12200	19000	20400	22200	22600	21600	25600	24500	---	---	1090	5770
11	11900	18600	18700	23200	22300	18500	25900	24600	2500	---	1870	5930
12	12400	18700	18900	23300	15500	21000	25700	25000	2360	---	2110	6060
13	12700	19100	18800	22200	19100	21900	26300	24800	2420	---	2650	---
14	12700	19100	19100	21800	21600	22800	---	24100	2570	---	2870	---
15	13800	18700	19100	20800	22700	23500	---	23200	2820	---	3380	6130
16	14600	18400	19000	21000	24000	24100	---	---	3110	---	3580	6010
17	14600	18100	18800	20400	24400	23800	---	---	3360	---	3750	5990
18	15000	18100	18500	21900	25900	23800	20900	---	3490	---	3930	1000
19	15800	18100	15800	22700	17600	23200	18100	---	3720	---	4120	901
20	16000	18100	18400	22700	17600	23200	22200	---	4070	---	4400	978
21	16200	18500	18700	22500	22500	22200	22700	---	4130	---	---	1750
22	15800	18400	18700	23400	25300	20100	21600	---	4290	---	---	2380
23	16100	17200	19000	23600	25500	22600	20700	---	4340	---	---	2730
24	16300	17200	19000	22000	25400	23100	21200	---	---	---	---	3570
25	16200	17200	19400	23200	25400	23000	21400	9750	---	---	---	890
26	16500	17100	19000	22600	23600	23000	22200	8370	---	---	---	1160
27	16600	18100	19900	23000	23700	22700	24000	12000	---	---	5180	1610
28	17000	18100	20600	23000	24200	23500	24800	12900	---	---	2710	2100
29	17100	18100	20400	22700	---	24100	18700	---	---	---	2990	2410
30	17000	17700	21900	23200	---	24200	18700	---	---	---	3220	2900
31	17600	---	22600	23100	---	25600	---	---	---	---	3470	---
MONTH	13490	18110	19190	22490	22180	23130	23490	---	---	---	---	3630

COLORADO RIVER BASIN

08121000 COLORADO RIVER AT COLORADO CITY, TEX.--Continued

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	26.0	20.0	16.0	1.0	5.0	13.0	23.0	24.0	---	---	---	24.0
2	31.0	19.0	18.0	0.0	5.0	12.0	18.0	25.0	---	---	---	24.0
3	28.0	19.0	12.0	0.0	10.0	23.0	---	24.0	20.0	---	---	25.0
4	20.0	22.0	6.0	1.0	12.0	23.0	---	27.0	21.0	---	---	23.0
5	18.0	12.0	6.0	0.0	15.0	22.0	---	24.0	22.0	---	---	---
6	18.0	16.0	4.0	7.0	8.0	18.0	---	15.0	22.0	---	---	---
7	28.0	22.0	4.0	9.0	6.0	18.0	---	17.0	21.0	---	---	---
8	23.0	22.0	6.0	13.0	6.0	21.0	---	18.0	---	---	---	---
9	22.0	14.0	12.0	4.0	9.0	21.0	---	20.0	---	---	---	---
10	22.0	16.0	10.0	7.0	10.0	23.0	---	17.0	---	---	---	---
11	20.0	16.0	12.0	5.0	5.0	11.0	---	---	---	---	---	---
12	19.0	21.0	12.0	2.0	4.0	12.0	---	---	27.0	---	---	---
13	21.0	22.0	---	7.0	5.0	12.0	---	---	27.0	---	---	---
14	23.0	21.0	14.0	6.0	8.0	15.0	---	---	---	---	---	---
15	24.0	17.0	14.0	4.0	6.0	15.0	---	---	---	---	34.0	---
16	25.0	16.0	13.0	---	14.0	12.0	---	---	---	---	35.0	---
17	25.0	18.0	5.0	7.0	18.0	21.0	---	---	---	---	25.0	22.0
18	22.0	18.0	7.0	9.0	12.0	20.0	---	---	---	---	---	20.0
19	23.0	19.0	4.0	8.0	15.0	19.0	24.0	---	---	---	---	23.0
20	23.0	12.0	0.0	16.0	16.0	17.0	24.0	---	---	---	---	21.0
21	22.0	15.0	1.0	13.0	9.0	13.0	25.0	---	---	---	---	20.0
22	14.0	20.0	1.0	14.0	8.0	14.0	16.0	---	---	---	---	18.0
23	14.0	21.0	12.0	9.0	13.0	19.0	15.0	---	---	---	---	16.0
24	15.0	15.0	8.0	8.0	5.0	12.0	15.0	---	---	---	---	15.0
25	16.0	17.0	11.0	9.0	3.0	14.0	---	---	---	---	---	14.0
26	15.0	18.0	9.0	10.0	4.0	10.0	---	34.0	---	---	---	15.0
27	16.0	12.0	8.0	10.0	4.0	12.0	---	31.0	---	---	26.0	18.0
28	23.0	11.0	10.0	5.0	7.0	15.0	---	---	---	---	23.0	17.0
29	23.0	12.0	11.0	5.0	---	12.0	20.0	---	---	---	23.0	22.0
30	20.0	13.0	15.0	3.0	---	12.0	20.0	---	---	---	22.0	23.0
31	22.0	---	5.0	5.0	---	23.0	---	---	---	---	24.0	---
MONTH	21.5	17.0	9.0	6.5	8.5	16.5	---	---	---	---	---	---

COLORADO RIVER BASIN

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08123650 BEALS CREEK ABOVE BIG SPRING, TEX.

LOCATION.--Lat 32°15'01", Long 101°29'26", Howard County, at gaging station at end of Channing Street in Big Spring, just downstream from One Mile Lake, 2.9 miles (4.7 km) upstream from Little Sandy Creek, and 7.5 miles (12.1 km) downstream from confluence of Sulphur Springs Creek and Mustang Draw.

DRAINAGE AREA.--9,409 mi² (24,370 km²), of which 8,915 mi² (23,090 km²) is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: April to September 1974.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO ₂) (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 SODIUM PLUS POTAS- SIUM (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)
MAY 10...	1210	.20	2.0	750	2900	--	9200	--	244	0
18...	0815	.02	2.5	530	4000	15000	--	460	282	0

DATE	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	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)
MAY 10...	7700	18000	38900	14000	14000	--	56800	7.3	27.0
18...	15000	25000	60100	18000	18000	49	73400	7.0	21.0

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

MONTH	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCT- ANCE (MICRO- MHOS)	DIS- SOLVED SOLIDS (MG/L)	DIS- SOLVED SOLIDS (TONS)	DIS- SOLVED CHLORIDE (MG/L)	DIS- SOLVED CHLORIDE (TONS)	DIS- SOLVED SULFATE (MG/L)	DIS- SOLVED SULFATE (TONS)	HARDNESS (CA+MG) (MG/L)
OCT. 1973.....	0	0	0	0	0	0	0	0	0
NOV. 1973.....	0	0	0	0	0	0	0	0	0
DEC. 1973.....	0	0	0	0	0	0	0	0	0
JAN. 1974.....	0	0	0	0	0	0	0	0	0
FEB. 1974.....	0	0	0	0	0	0	0	0	0
MAR. 1974.....	0	0	0	0	0	0	0	0	0
APR. 1974.....	0	0	0	0	0	0	0	0	0
MAY 1974.....	0.90	59100	48000	117	20000	48	12000	29	14000
JUNE 1974.....	0	0	0	0	0	0	0	0	0
JULY 1974.....	0	0	0	0	0	0	0	0	0
AUG. 1974.....	0	0	0	0	0	0	0	0	0
SEPT 1974.....	0	0	0	0	0	0	0	0	0
TOTAL	0.90	**	**	117	**	48	**	29	**
WTD.AVG.	0.03	59100	48000	**	20000	**	12000	**	14000

08123650 BEALS CREEK ABOVE BIG SPRING, TEX.--Continued

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

[illegible]

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

[illegible]

COLORADO RIVER BASIN

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08123800 BEALS CREEK NEAR WESTBROOK, TEX.

LOCATION.--Lat 32°11'57", long 101°00'49", Mitchell County, at gaging station at bridge on State Highway 163, 1.5 miles (2.4 km) downstream from Crystal Creek, 11 miles (18 km) south of Westbrook, and 16 miles (26 km) southwest of Colorado City.

DRAINAGE AREA.--9,903 mi² (25,649 km²), of which 8,930 mi² (23,130 km²) is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: November 1958 to September 1974.
Water temperatures: November 1958 to September 1974.

EXTREMES.--October 1973 to September 1974:

Specific conductance: Maximum daily, 13,100 micromhos Mar. 26; minimum daily, 483 micromhos Sept. 20.
Water temperatures: Maximum, 32.0°C June 26, July 3, Aug. 18; minimum, 1.0°C Jan. 3.

Period of record:

Specific conductance: Maximum daily, 22,800 micromhos June 2, 1969; minimum daily, 219 micromhos Sept. 13, 1964.
Water temperatures: Maximum, 37.0°C June 28, 1960; minimum, freezing point Jan. 7, 1971, Jan. 9, 1973.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	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 SODIUM PLUS POTAS- SIUM (K) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)
OCT.										
01...	1020	2.5	5.5	160	110	520	--	18	204	0
NOV.										
05...	1140	1.8	2.6	230	240	1200	--	42	229	0
DEC.										
02...	1415	2.1	1.0	240	210	--	1000	--	236	0
JAN.										
24...	1130	2.6	3.9	250	240	1200	--	33	283	0
FEB.										
20...	1100	2.8	4.7	280	300	1400	--	42	182	0
MAR.										
04...	1125	2.3	2.8	270	280	1400	--	33	150	0
APR.										
15...	1100	1.2	2.4	370	390	1700	--	42	310	0
MAY										
27...	1130	1.3	3.9	200	120	590	--	21	257	0
JUNE										
30...	1710	.01	7.5	290	200	1000	--	19	52	0
JULY										
01...	1000	.01	6.3	280	200	1100	--	9.7	76	0
AUG.										
31...	1430	4.2	8.0	51	10	140	--	6.8	100	0
SEP.										
30...	0930	4.5	9.2	110	78	360	--	9.8	152	0

DATE	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	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)
OCT.									
01...	540	900	2360	850	680	7.7	3940	7.8	24.5
NOV.									
05...	1200	1900	4930	1600	1400	13	7850	7.5	13.0
DEC.									
02...	1000	1700	4340	1400	1300	12	6870	7.9	15.0
JAN.									
24...	1300	1800	4970	1600	1400	13	7590	7.2	10.0
FEB.									
20...	1400	2400	5920	1900	1800	14	8830	7.3	12.0
MAR.									
04...	1800	2200	6060	1800	1700	14	8930	7.1	18.0
APR.									
15...	1600	3100	7360	2500	2300	15	11100	7.8	17.0
MAY									
27...	530	1000	2590	990	780	8.1	4320	7.9	17.0
JUNE									
30...	810	2000	4350	1500	1500	11	7490	6.4	28.0
JULY									
01...	870	2100	4600	1500	1500	12	7390	6.6	25.0
AUG.									
31...	60	230	555	170	87	4.7	1070	6.9	28.0
SEP.									
30...	370	630	1640	600	470	6.4	2770	8.2	18.0

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

MONTH	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCT- ANCE (MICRO- MHOS)	DIS- SOLVED SOLIDS (MG/L)	DIS- SOLVED SOLIDS (TONS)	DIS- SOLVED CHLORIDE (MG/L)	DIS- SOLVED CHLORIDE (TONS)	DIS- SOLVED SULFATE (MG/L)	DIS- SOLVED SULFATE (TONS)	HARNESS (CA+MG) (MG/L)
OCT. 1973.....	79	6260	4000	861	1600	344	870	187	1300
NOV. 1973.....	58	7310	4700	747	1900	302	1000	159	1500
DEC. 1973.....	69	7620	4900	924	1900	358	1100	207	1600
JAN. 1974.....	108	7990	5200	1530	2000	588	1100	323	1700
FEB. 1974.....	69	8850	5800	1080	2300	430	1200	224	1900
MAR. 1974.....	98	9040	5900	1560	2300	609	1300	344	1900
APR. 1974.....	64	10200	6700	1160	2700	468	1400	243	2200
MAY 1974.....	415	4710	2900	3260	1100	1240	640	719	1000
JUNE 1974.....	26	8870	5800	415	2300	165	1200	86	1900
JULY 1974.....	0.08	7810	5100	1.10	2000	0.43	1100	0.24	1600
AUG. 1974.....	351	1100	610	579	190	180	110	104	310
SEPT 1974.....	4360	735	410	4830	93	1090	59	695	250
TOTAL	5703	**	**	16900	**	5770	**	3290	**
WTD.AVG.	15	1800	1100	**	380	**	210	**	460

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	3940	8770	6860	7990	8840	8680	9480	7690	9100	7510	---	1160
2	3990	8570	6870	8120	9430	8880	9660	7030	9200	7680	---	1230
3	3940	8250	6950	8250	9000	8880	10200	6980	8880	7860	---	1270
4	3830	7720	7160	8220	8720	8960	10500	5480	8550	7830	---	1330
5	3860	7760	7300	8160	8610	9050	10500	5770	8740	7710	---	1400
6	3790	7610	7710	7940	8430	9050	10400	6820	8860	7680	---	1490
7	3850	7530	7390	7940	8880	9170	10500	6520	9020	---	---	1540
8	4660	7750	7680	7970	9610	9050	10500	5850	9050	8050	---	1580
9	5430	7720	7740	7790	9250	8960	10200	6200	9260	8180	---	1700
10	6040	7530	7730	7730	8650	8920	10000	5390	9220	---	---	1800
11	6110	7500	7640	7850	8460	9130	10000	3350	9100	---	11000	1970
12	6490	7480	7600	8120	8530	9070	10600	2000	8850	---	4360	2150
13	7470	7260	7520	8160	8570	9010	11000	2270	8630	---	3090	2290
14	8250	7170	7600	8060	8960	9090	11200	2510	8270	---	1470	2450
15	8000	7150	7600	7940	9210	8440	11100	2710	7940	---	2170	2700
16	7730	7170	7600	8000	9050	7430	11100	2890	7700	---	1870	2770
17	7460	6960	7500	8000	8880	9220	11000	3020	7470	---	1640	2830
18	7460	6990	6920	7940	8840	8930	11100	3140	7440	---	1710	900
19	7460	6880	7440	7650	8840	8790	11100	3320	7390	---	1810	610
20	7300	6870	8270	7650	8840	8650	11200	3380	---	---	---	483
21	7310	6810	7990	7800	8840	8550	11300	3450	7340	---	---	1870
22	7320	6780	7640	7940	8840	8730	11400	3560	7280	---	---	2700
23	7290	6700	7480	7940	8800	9380	10700	3620	7310	---	---	2660
24	7300	6870	7480	7760	8920	8880	10500	3760	6770	---	---	1080
25	7170	6700	7800	7560	8720	9430	10200	3930	6880	---	---	500
26	7150	6890	7840	8190	8610	13100	9900	4190	6980	---	3050	2000
27	7130	7090	7880	8190	8610	12100	9760	4370	7030	---	1340	2210
28	7100	6850	7650	8160	8650	10800	9620	4870	7200	---	605	2410
29	7560	6820	7630	8060	---	9800	9440	6470	7440	---	702	2660
30	8460	6850	7640	8060	---	9690	8340	7740	7480	---	1080	2770
31	8930	---	7900	7930	---	9580	---	8620	---	---	1070	---
MONTH	6440	7300	7550	7970	8840	9270	10420	4740	8080	---	---	1820

COLORADO RIVER BASIN

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08123800 BEALS CREEK NEAR WESTBROOK, TEX.--Continued

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	24.5	13.0	---	6.0	9.0	13.0	20.0	19.0	21.0	31.0	---	31.0
2	26.0	16.0	15.0	2.0	10.0	19.0	16.0	25.0	---	30.0	---	23.0
3	22.0	13.0	13.0	1.0	10.0	19.0	20.0	21.0	27.0	32.0	---	16.0
4	20.0	13.0	14.0	---	8.0	16.0	13.0	24.0	23.0	23.0	---	17.0
5	18.0	20.0	8.0	4.0	9.0	14.0	19.0	23.0	28.0	31.0	---	---
6	19.0	13.0	7.0	6.0	8.0	14.0	20.0	24.0	25.0	24.0	---	19.0
7	---	17.0	7.0	5.0	5.0	17.0	14.0	26.0	24.0	---	---	---
8	24.0	19.0	12.0	11.0	4.0	17.0	13.0	28.0	24.0	31.0	---	28.0
9	23.0	15.0	10.0	6.0	8.0	20.0	---	25.0	28.0	29.0	---	28.0
10	25.0	12.0	5.0	6.0	13.0	23.0	22.0	22.0	26.0	---	---	24.0
11	19.0	---	7.0	5.0	7.0	15.0	15.0	20.0	21.0	---	---	---
12	19.0	19.0	12.0	5.0	14.0	---	22.0	---	21.0	---	28.0	23.0
13	24.0	21.0	9.0	6.0	10.0	13.0	13.0	28.0	23.0	---	31.0	16.0
14	23.0	18.0	10.0	8.0	11.0	16.0	21.0	27.0	24.0	---	26.0	16.0
15	---	12.0	---	12.0	11.0	16.0	20.0	28.0	29.0	---	31.0	22.0
16	18.0	10.0	11.0	8.0	15.0	15.0	14.0	28.0	31.0	---	25.0	22.0
17	18.0	15.0	10.0	11.0	17.0	23.0	24.0	30.0	27.0	---	28.0	20.0
18	17.0	15.0	13.0	12.0	12.0	18.0	23.0	24.0	22.0	---	32.0	20.0
19	15.0	19.0	5.0	9.0	8.0	---	19.0	26.0	20.0	---	26.0	21.0
20	17.0	13.0	3.0	14.0	12.0	17.0	19.0	22.0	---	---	---	20.0
21	22.0	11.0	2.0	10.0	9.0	---	27.0	24.0	20.0	---	---	20.0
22	16.0	12.0	7.0	13.0	8.0	12.0	21.0	20.0	29.0	---	---	19.0
23	18.0	---	7.0	9.0	8.0	12.0	23.0	24.0	29.0	---	---	17.0
24	17.0	16.0	7.0	7.0	9.0	14.0	25.0	24.0	23.0	---	---	13.0
25	20.0	14.0	---	7.0	6.0	9.0	20.0	23.0	31.0	---	---	13.0
26	---	15.0	6.0	6.0	6.0	19.0	24.0	30.0	32.0	---	27.0	19.0
27	---	12.0	2.0	12.0	8.0	22.0	22.0	29.0	27.0	---	22.0	19.0
28	20.0	11.0	8.0	8.0	10.0	18.0	26.0	28.0	27.0	---	25.0	18.0
29	15.0	9.0	8.0	5.0	---	15.0	24.0	24.0	22.0	---	26.0	23.0
30	17.0	12.0	13.0	7.0	---	---	20.0	25.0	28.0	---	23.0	18.0
31	13.0	---	7.0	8.0	---	---	---	22.0	---	---	28.0	---
MONTH	19.5	14.5	8.5	7.5	9.5	16.5	20.0	25.0	25.5	---	---	20.0

08123850 COLORADO RIVER ABOVE SILVER, TEX.

LOCATION.--Lat 32°03'37", long 100°45'56", Coke County, at gaging station at a Pan American Oil Co. bridge, 4.7 miles (7.6 km) west of Silver.

DRAINAGE AREA.--15,407 mi² (39,904 km²), of which 11,600 mi² (30,000 km²) is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: December 1967 to September 1974.

Pesticide analyses: October 1970 to September 1974.

Water temperatures: December 1967 to September 1974.

EXTREMES.--October 1973 to September 1974:

Specific conductance: Maximum daily, 11,800 micromhos May 4; minimum daily, 235 micromhos Aug. 10.

Water temperatures: Maximum, 25.0°C Sept. 2; minimum, freezing point on several days during December and January.

Period of record:

Specific conductance: Maximum daily, 13,600 micromhos Mar. 18, May 29, 1969; minimum daily, 235 micromhos Aug. 10, 1974.

Water temperatures: Maximum, 29.0°C on several days during summer months of 1968 and 1973; minimum, freezing point on many days during winter months.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report. Conductivity is recorded continuously at this station.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	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 SODIUM PLUS POTAS- SIUM (K) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)
OCT. 12...	1800	11	5.2	210	80	520	--	11	137	0
NOV. 12...	0800	2.9	5.0	340	130	--	800	--	158	0
DEC. 17...	1230	3.2	3.8	360	180	1200	--	26	209	0
JAN. 15...	1230	5.8	1.4	370	200	1100	--	22	184	0
FEB. 25...	1430	5.5	1.6	390	230	1200	--	24	120	0
MAR. 28...	1740	.00	3.3	360	230	1200	--	25	137	0
APR. 15...	1430	.55	6.5	530	280	1500	--	26	137	0
MAY 13...	1300	30	7.5	55	22	110	--	6.7	126	0
JUNE 21...	1430	.03	2.9	240	95	890	--	18	58	0
AUG. 06...	1630	138	8.3	49	7.7	25	--	5.2	118	0
SEP. 27...	1400	310	9.3	79	32	220	--	3.9	136	0

DATE	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	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)
OCT. 12...	650	850	2400	860	750	7.7	3870	8.1	24.0
NOV. 12...	1100	1300	3750	1400	1200	9.5	5730	7.8	14.0
DEC. 17...	1400	1800	5070	1600	1500	13	7500	7.9	10.0
JAN. 15...	1400	1900	5080	1700	1600	11	7580	7.9	8.5
FEB. 25...	1600	1900	5400	1900	1800	12	8340	7.1	12.0
MAR. 28...	1400	2000	5290	1800	1700	12	7950	7.4	22.5
APR. 15...	2100	2500	7010	2500	2400	13	9950	7.5	22.0
MAY 13...	140	160	563	230	120	3.2	1010	7.3	23.0
JUNE 21...	840	1500	3610	990	940	12	5960	6.6	32.5
AUG. 06...	59	40	252	150	57	.9	464	7.5	24.5
SEP. 27...	200	320	931	330	220	5.3	1680	7.5	20.0

COLORADO RIVER BASIN

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08123850 COLORADO RIVER ABOVE SILVER, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	ALDRIN (UG/L)	DDD (UG/L)	DOE (UG/L)	DDT (UG/L)	DI- ELDRIN (UG/L)	ENDRIN (UG/L)	HEPTA- CHLOR (UG/L)	HEPTA- CHLOR EPOXIDE (UG/L)
NOV. 01...	1745	.09	17.0	.00	.00	.00	.00	.00	.00	.00	.00
APR. 15...	1545	.54	23.0	.00	.00	.00	.00	.00	.00	.00	.00
AUG. 06...	1820	--	--	.00	.00	.00	.00	.00	.00	.00	.00
SEP. 27...	1215	--	--	.00	.00	.00	.00	.00	.00	.00	.00

DATE	LINDANE (UG/L)	CHLOR- DANE (UG/L)	PCB (UG/L)	DI- AZINON (UG/L)	MALA- THION (UG/L)	METHYL PARA- THION (UG/L)	PARA- THION (UG/L)	2,4-D (UG/L)	SILVEX (UG/L)	2,4,5-T (UG/L)
NOV. 01...	.00	.0	.0	.00	.00	.00	.00	.00	.00	.00
APR. 15...	.00	.0	.0	.01	.00	.00	.00	.00	.00	.02
AUG. 06...	.00	.0	.0	.00	.00	.00	.00	.01	.00	.30
SEP. 27...	.00	.0	.0	.01	.00	.00	.00	.00	.00	.03

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

MONTH	DISCHARGE (FT ³ /S-DAY)	SPECIFIC CONDUCT- ANCE (MICRO- MHOS)	DIS- SOLVED SOLIDS (MG/L)	DIS- SOLVED SOLIDS (TONS)	DIS- SOLVED CHLORIDE (MG/L)	DIS- SOLVED CHLORIDE (TONS)	DIS- SOLVED SULFATE (MG/L)	DIS- SOLVED SULFATE (TONS)	HARDNESS (CA, MG) (MG/L)
OCT. 1973...	172.7	3930	2390	1110	900	420	580	270	850
NOV.....	86.9	6320	4070	955	1520	357	1130	265	1480
DEC.....	108.8	7460	4950	1450	1810	532	1410	414	1780
JAN. 1974...	187.2	7490	4970	2510	1810	915	1420	718	1790
FEB.....	161.0	7940	5320	2310	1930	839	1530	665	1910
MAR.....	146.3	8560	5800	2290	2090	826	1680	664	2070
APR.....	71.13	7590	5050	970	1840	353	1440	277	1820
MAY.....	413.67	6480	4200	4690	1560	1740	1170	1310	1520
JUNE.....	448.11	2700	1620	1960	590	714	370	448	530
JULY.....	0	--	--	0	--	0	--	0	--
AUG.....	3675.37	634	320	3180	83	824	64	635	170
SEP.....	8885.27	722	380	9120	110	2640	65	1560	190
TOTAL.....	14356.45	--	--	30500	--	10200	--	7230	--
WTD. AVG....	39.3	1330	790	--	260	--	190	--	330

COLORADO RIVER BASIN

08123850 COLORADO RIVER ABOVE SILVER, TEX.--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	2630	5480	7410	7360	7590	8710	8910	7720	7260	---	---	1010
2	2770	5560	7450	7610	7650	8830	9150	4730	1770	---	---	1260
3	2900	5530	7500	7660	7620	8840	9190	6180	4370	---	---	1640
4	3060	5550	7730	7730	7600	8860	9360	11800	3570	---	---	2040
5	3170	5530	7790	7780	7680	8900	9360	10400	1440	---	3180	2240
6	3160	5520	7790	7710	7800	8900	9270	10900	2760	---	328	2480
7	3290	5520	7790	7640	7740	8940	9450	9800	4410	---	541	2720
8	3410	5550	7730	7780	7680	8980	9580	8970	4580	---	1170	2930
9	3570	5560	7640	7700	7620	8940	9490	8040	4660	---	648	3100
10	3740	5610	7540	7610	7600	8760	9670	3940	4740	---	235	3330
11	3770	5670	7470	7420	7620	8570	9620	6940	4910	---	970	3510
12	3860	5730	7320	7390	7660	8830	9620	5550	4980	---	723	3650
13	3970	5770	7240	7460	7720	8980	9620	991	4980	---	875	3890
14	4100	5850	7130	7530	7750	9060	9780	3720	5180	---	1500	4040
15	4240	5910	7180	7550	7750	9060	9950	3380	5440	---	1620	4130
16	4430	6020	7360	7470	7840	9060	9950	3400	5400	---	1760	4210
17	4480	6110	7430	7420	7990	8980	9950	3670	5370	---	1960	4020
18	4520	6190	7450	7420	7970	8710	10100	3930	5670	---	2210	1320
19	4580	6320	7420	7420	8160	8150	9620	4230	5860	---	2450	756
20	4670	6300	7570	7410	8200	7840	9710	4550	6160	---	2700	350
21	4750	6340	7360	7390	8190	7690	7230	4950	6520	---	2890	647
22	4830	6670	7390	7420	8260	7660	6800	5380	6850	---	3110	1060
23	4870	6730	7310	7380	8260	7720	8400	5570	7100	---	3250	1470
24	4990	6910	7340	7150	8330	7740	8870	5900	7340	---	3400	1300
25	5120	7130	7450	7280	8370	7810	8830	6210	7500	---	3560	675
26	5220	7180	7400	7360	8370	7810	9230	5730	---	---	3700	585
27	5320	7180	7450	7400	8510	7780	9230	6020	---	---	3800	1900
28	5360	7280	7470	7490	8700	7870	9210	6150	---	---	2150	1200
29	5400	7250	7410	7520	---	8190	9230	6430	---	---	2070	1410
30	5450	7330	7380	7570	---	8420	5390	6800	---	---	937	1630
31	5520	---	7440	7570	---	8660	---	7060	---	---	407	---
MONTH	4230	6180	7460	7500	7940	8490	9130	6100	5150	---	1950	2150

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	12.0	9.0	0.0	6.0	12.0	14.0	18.0	21.0	---	---	---
2	21.0	14.0	11.0	0.0	6.0	13.0	13.0	18.0	14.0	---	---	25.0
3	22.0	14.0	12.0	---	---	---	12.0	20.0	23.0	---	---	15.0
4	20.0	15.0	6.0	---	5.0	15.0	10.0	23.0	22.0	---	---	20.0
5	19.0	12.0	5.0	0.0	6.0	12.0	8.0	---	23.0	---	21.0	18.0
6	19.0	11.0	5.0	---	5.0	13.0	11.0	17.0	22.0	---	20.0	22.0
7	---	14.0	4.0	4.0	4.0	14.0	---	18.0	23.0	---	22.0	22.0
8	22.0	15.0	6.0	8.0	2.0	16.0	10.0	14.0	24.0	---	23.0	---
9	20.0	14.0	---	4.0	2.0	18.0	11.0	21.0	---	---	23.0	21.0
10	21.0	12.0	4.0	4.0	4.0	---	13.0	17.0	19.0	---	18.0	24.0
11	18.0	---	6.0	3.0	3.0	13.0	12.0	19.0	20.0	---	16.0	24.0
12	19.0	14.0	7.0	0.0	6.0	14.0	12.0	21.0	21.0	---	22.0	24.0
13	20.0	15.0	5.0	---	8.0	14.0	14.0	20.0	22.0	---	23.0	15.0
14	---	16.0	8.0	6.0	10.0	14.0	---	22.0	23.0	---	24.0	17.0
15	18.0	14.0	5.0	4.0	8.0	14.0	11.0	21.0	23.0	---	24.0	---
16	17.0	10.0	4.0	6.0	7.0	13.0	13.0	23.0	---	---	23.0	21.0
17	15.0	14.0	5.0	8.0	---	14.0	12.0	24.0	23.0	---	24.0	20.0
18	15.0	16.0	7.0	9.0	11.0	15.0	16.0	23.0	22.0	---	---	20.0
19	15.0	17.0	3.0	7.0	5.0	15.0	17.0	22.0	22.0	---	22.0	21.0
20	15.0	11.0	0.0	---	6.0	15.0	18.0	20.0	22.0	---	22.0	20.0
21	---	10.0	0.0	8.0	5.0	7.0	---	21.0	21.0	---	22.0	20.0
22	16.0	12.0	2.0	10.0	3.0	7.0	16.0	20.0	22.0	---	22.0	---
23	15.0	15.0	---	7.0	6.0	8.0	17.0	22.0	---	---	23.0	7.0
24	15.0	18.0	4.0	5.0	4.0	---	16.0	20.0	21.0	---	23.0	7.0
25	15.0	10.0	4.0	5.0	3.0	5.0	17.0	21.0	19.0	---	---	12.0
26	16.0	10.0	4.0	4.0	5.0	8.0	20.0	---	---	---	24.0	14.0
27	16.0	10.0	0.0	---	7.0	12.0	20.0	20.0	---	---	23.0	17.0
28	---	9.0	5.0	5.0	8.0	15.0	---	20.0	---	---	22.0	17.0
29	14.0	8.0	6.0	6.0	---	13.0	20.0	21.0	---	---	23.0	---
30	16.0	8.0	---	4.0	---	14.0	18.0	22.0	---	---	23.0	16.0
31	12.0	---	0.0	5.0	---	---	---	22.0	---	---	24.0	---
MONTH	17.5	13.0	5.0	5.0	5.5	12.5	14.5	20.5	---	---	22.0	18.5

COLORADO RIVER BASIN

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08126500 COLORADO RIVER AT BALLINGER, TEX.

LOCATION.--Lat 31°43'48", long 99°56'30", Runnels County, at gaging station at bridge on U.S. Highway 83 in Ballinger, 2,000 ft (610 m) upstream from Elm Creek.

DRAINAGE AREA.--16,840 mi² (43,620 km²), of which 11,600 mi² (30,040 km²) is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: October 1961 to September 1974.
Water temperatures: October 1961 to September 1974.

EXTREMES.--October 1973 to September 1974:

Specific conductance: Maximum daily, 3,540 micromhos Mar. 14; minimum daily, 305 micromhos Sept. 22.
Water temperatures: Maximum, 31.0°C Aug. 29; minimum, 0.5°C Jan. 3.

Period of record:

Specific conductance: Maximum daily, 13,500 micromhos May 3, 1963; minimum daily, 249 micromhos Aug. 14, 1963.
Water temperatures: Maximum, 34.0°C Aug. 14, 1973; minimum, freezing point Jan. 9-11, 1973.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	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 SODIUM PLUS POTAS- SIUM (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)
OCT.										
26...	1220	9.5	11	170	70	170	--	4.8	238	0
NOV.										
28...	1250	8.1	11	250	100	240	--	7.4	254	0
DEC.										
25...	1300	8.8	5.2	140	57	--	130	--	126	0
JAN.										
08...	1310	11	9.8	220	93	240	--	6.3	192	0
FEB.										
11...	1150	8.1	8.7	250	110	250	--	6.7	242	0
MAR.										
19...	1120	3.3	5.2	290	130	300	--	7.6	190	0
APR.										
30...	0945	4.7	4.3	210	110	270	--	7.2	189	0
MAY										
14...	2035	2.9	8.1	220	91	200	--	7.8	165	0
JUNE										
10...	1105	2.1	11	190	81	190	--	7.2	184	0
AUG.										
20...	2040	1.9	11	88	25	100	--	6.5	168	0
SEP.										
09...	1100	1.3	10	70	27	84	--	4.6	134	0

DATE	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCTI- VANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)
OCT.										
26...	440	300	.5	1290	700	510	2.9	2040	7.8	22.5
NOV.										
28...	700	400	--	1830	1000	830	3.2	2720	7.8	15.0
DEC.										
25...	410	230	.4	1030	580	480	2.3	1720	7.7	8.5
JAN.										
08...	640	440	--	1740	930	770	3.4	2720	7.8	9.0
FEB.										
11...	750	430	--	1920	1100	880	3.3	2870	7.7	11.0
MAR.										
19...	1000	510	--	2340	1300	1100	3.7	3350	7.9	18.0
APR.										
30...	730	450	--	1880	980	620	3.8	2890	7.6	22.0
MAY										
14...	720	330	--	1660	920	790	2.9	2440	7.6	26.0
JUNE										
10...	590	310	--	1470	810	660	2.9	2280	7.3	28.0
AUG.										
20...	180	150	--	643	320	180	2.4	1130	7.9	28.0
SEP.										
09...	160	130	--	552	290	180	2.2	974	7.4	25.0

08126500 COLORADO RIVER AT BALLINGER, TEX.--Continued

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

MONTH	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCT- ANCE (MICRO- MHOS)	DIS- SOLVED SOLIDS (MG/L)	DIS- SOLVED SOLIDS (TONS)	DIS- SOLVED CHLORIDE (MG/L)	DIS- SOLVED CHLORIDE (TONS)	DIS- SOLVED SULFATE (MG/L)	DIS- SOLVED SULFATE (TONS)	HARDNESS (CA+MG) (MG/L)
OCT. 1973.....	507.1	1740	1100	1510	250	342	370	507	580
NOV. 1973.....	244.5	2460	1600	1060	370	244	600	396	880
DEC. 1973.....	248.5	2630	1700	1140	390	262	660	443	950
JAN. 1974.....	302.1	2700	1800	1470	400	326	680	555	970
FEB. 1974.....	216.3	2950	2000	1170	450	263	760	444	1100
MAR. 1974.....	172.9	3180	2200	1030	480	224	840	392	1200
APR. 1974.....	189.28	3020	2000	1020	460	235	780	399	1100
MAY 1974.....	987.29	1760	1100	2930	250	666	380	1010	590
JUNE 1974.....	33.9	2400	1600	146	360	33.0	580	53.1	850
JULY 1974.....	0.17	2940	2000	0.92	440	0.20	760	0.35	1100
AUG. 1974.....	635.59	1170	680	1170	160	275	190	326	360
SEPT 1974.....	18119.89	488	230	11300	47	2300	35	1710	150
TOTAL	21657.53	**	**	23900	**	5170	**	6240	**
MTD.AVG.	59.34	744	410	**	88	**	110	**	240

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	1660	2100	2440	1350	2890	3010	2900	1660	2920	2900	---	966
2	1770	2150	2440	2720	2900	3060	2980	1390	2420	3000	---	915
3	1770	2200	2770	2700	2860	3080	2940	1680	2200	---	---	900
4	1560	2220	2740	2650	2900	3100	2980	1360	2150	---	---	880
5	1610	2260	2740	2650	2890	3140	2980	1390	2150	---	---	876
6	1870	2370	2860	2650	2890	3150	2980	1610	2150	---	2500	894
7	1970	2310	2430	2710	2800	3160	3060	2160	2170	---	2000	908
8	1930	2410	2810	2700	2760	3180	3040	2770	2220	---	2100	934
9	1930	2410	2830	2720	2840	3180	3000	2460	2240	---	2200	966
10	1920	2400	2750	2700	2890	3150	3130	2370	2400	---	1500	991
11	1540	2440	2800	2710	2900	3140	3000	2350	2420	---	995	1040
12	1730	2470	2840	2780	3050	3000	3140	2370	2480	---	953	1080
13	1370	2480	2770	2780	3090	3330	3180	2400	2500	---	880	1100
14	1740	2440	2780	2680	3030	3540	3200	2440	2520	---	895	1140
15	1600	2510	2800	2720	3030	3410	3200	2430	2540	---	953	1240
16	1720	2510	2750	2730	3030	3400	3100	2480	2580	---	982	1190
17	1780	2520	2670	2690	3030	3400	3190	2510	2650	---	1010	700
18	1840	2530	2610	2690	3010	3340	3210	2600	2670	---	1050	496
19	1830	2550	2740	2700	3050	3340	3280	2590	2690	---	1100	386
20	1830	2530	2120	2790	3050	3330	3310	2710	2720	---	1120	572
21	1850	2470	2760	2800	2780	3320	3300	2750	2750	---	1170	535
22	1900	2540	2620	2810	3030	3300	3300	2790	2780	---	1180	305
23	1920	2560	2660	2780	2960	3260	3320	2820	2780	---	1190	521
24	1990	2540	2720	2730	3010	2910	3330	2820	2800	---	1200	578
25	1990	2560	1720	2790	3020	3140	3360	2500	2800	---	1220	676
26	2040	2610	2660	2760	3030	3040	3330	2690	2900	---	1240	832
27	2080	2630	2670	2800	3070	3000	3360	3220	2800	---	1260	796
28	2090	2660	2280	2810	3040	2990	3390	3110	2700	---	1280	817
29	2100	2720	2630	2790	---	3000	3400	3070	2700	---	1290	828
30	2150	2690	2630	2800	---	3000	2980	3040	2700	---	1480	873
31	2000	---	2630	2810	---	2960	---	2990	---	---	3430	---
MONTH	1840	2460	2630	2690	2960	3170	3160	2440	2550	---	1390	829

COLORADO RIVER BASIN

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08126500 COLORADO RIVER AT BALLINGER, TEX.--Continued

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	26.5	15.5	---	5.5	11.5	16.0	18.5	23.0	24.0	---	---	28.5
2	25.5	15.5	11.0	3.0	11.5	16.5	20.0	25.0	27.0	---	---	25.5
3	27.0	16.0	13.0	0.5	13.0	16.5	18.5	24.5	25.0	---	---	---
4	24.0	18.0	9.5	3.5	12.0	18.5	18.0	25.0	26.0	---	---	24.5
5	21.0	14.5	11.0	---	10.5	20.0	18.5	23.0	26.5	---	---	23.5
6	24.0	15.5	10.0	6.5	9.0	19.5	18.0	24.0	28.5	---	---	23.5
7	24.0	18.0	11.5	6.5	1.0	19.5	18.5	23.5	29.5	---	---	24.5
8	25.5	18.0	9.5	9.0	8.5	19.0	---	25.5	30.0	---	---	24.0
9	23.5	15.0	10.0	5.5	9.0	19.5	15.5	24.0	29.0	---	---	24.0
10	24.5	14.0	5.5	6.5	12.0	19.0	18.5	27.0	26.5	---	---	23.5
11	23.5	---	11.5	6.0	13.0	20.0	19.5	25.5	27.0	---	24.0	24.0
12	22.0	15.0	13.0	4.0	10.5	19.0	20.0	---	29.5	---	25.5	23.0
13	21.5	16.0	11.5	7.0	13.0	18.5	21.5	25.0	---	---	29.0	21.5
14	21.0	17.0	---	6.5	13.5	18.5	---	26.0	28.5	---	30.5	19.5
15	23.5	18.0	9.0	11.0	13.5	22.0	10.0	26.5	27.0	---	30.0	21.0
16	21.0	14.5	11.0	8.0	14.5	20.0	23.5	26.5	28.5	---	26.5	21.0
17	19.0	---	10.0	8.0	13.5	19.5	20.5	25.0	29.0	---	28.5	18.5
18	18.0	18.0	12.0	---	12.0	21.0	20.5	26.5	29.5	---	---	21.5
19	17.0	16.5	7.0	10.0	14.5	---	21.5	25.5	29.5	---	28.5	20.5
20	18.5	14.5	5.5	11.5	14.5	18.5	21.0	26.0	30.5	---	28.0	21.5
21	21.5	12.0	6.0	---	10.0	18.5	23.0	---	29.0	---	28.5	20.5
22	17.0	15.0	6.5	8.5	14.5	18.5	22.0	29.0	29.5	---	---	19.5
23	17.0	15.0	8.0	9.0	14.0	16.5	23.0	28.0	29.5	---	---	18.5
24	17.0	17.0	8.5	9.0	9.5	10.0	23.0	27.0	---	---	---	16.0
25	18.0	16.0	8.5	8.5	10.0	11.5	20.0	27.0	---	---	---	16.0
26	19.0	16.0	9.0	7.0	11.0	12.0	23.5	25.5	---	---	---	18.5
27	19.5	13.5	---	10.0	13.5	18.0	---	28.5	---	---	---	19.5
28	---	10.0	9.0	11.5	15.0	18.5	24.5	29.0	---	---	---	18.5
29	15.5	13.0	10.0	9.5	---	17.0	23.5	---	---	---	---	24.0
30	18.0	9.0	---	10.5	---	21.0	21.5	27.0	---	---	31.0	20.0
31	15.5	---	7.0	10.5	---	19.5	---	26.5	---	---	26.5	---
MONTH	21.0	15.0	9.5	7.5	11.5	18.0	20.0	26.0	---	---	---	21.5

08127000 ELM CREEK AT BALLINGER, TEX.

LOCATION.--Lat 31°44'57", long 99°56'51", Runnels County, at gaging station 1,000 ft (305 m) upstream from storage dam at Ballinger, and 1.2 miles (1.9 km) upstream from mouth.

DRAINAGE AREA.--471 mi² (1,220 km²).

PERIOD OF RECORD.--Chemical analyses: October 1967 to September 1974.
Water temperatures: October 1967 to September 1974.

EXTREMES.--October 1973 to September 1974:

Specific conductance: Maximum daily, 3,210 micromhos June 9; minimum daily, 306 micromhos Sept. 19.
Water temperatures: Maximum, 31.5°C June 7; minimum, 1.5°C Jan. 3, Feb. 7.

Period of record:

Specific conductance: Maximum daily, 4,220 micromhos Sept. 12, 17, 1970; minimum daily, 306 micromhos Sept. 19, 1974.
Water temperatures: Maximum, 34.5°C Aug. 14, 1973; minimum, freezing point Jan. 8, 1968, Jan. 10, 13, 1973.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

		INSTAN- TANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED SODIUM PLUS POTAS- SIUM (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HC03) (MG/L)	CAR- BONATE (C03) (MG/L)	
DATE	TIME										
OCT. 26...	1355	12	10	100	58	190	--	5.6	220	0	
NOV. 28...	1445	11	11	140	100	320	--	6.4	291	0	
DEC. 30...	1610	11	14	150	110	--	310	--	308	0	
JAN. 08...	1140	11	12	130	130	290	--	4.9	210	0	
FEB. 11...	1335	13	8.5	150	120	320	--	5.2	249	0	
MAR. 19...	0950	8.4	8.4	130	100	330	--	5.2	250	0	
APR. 30...	1140	3.6	7.2	140	110	350	--	6.0	264	0	
MAY 13...	2030	5.4	9.6	140	120	330	--	5.9	251	0	
JUNE 01...	2000	.36	9.6	170	110	320	--	7.9	178	0	
AUG. 07...	1000	106	14	160	170	470	--	11	234	0	
28...	2020	.56	14	50	18	37	--	6.3	163	0	
SEP. 09...	1145	.08	14	49	22	42	--	5.4	176	0	
		DIS- SOLVED SULFATE (S04) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	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)
OCT. 26...	190	370	.5	1030	490	310	3.7	1850	7.7	20.0	
NOV. 28...	350	590	--	1660	760	520	5.0	2870	7.9	14.0	
DEC. 30...	390	610	--	1740	840	590	4.7	3040	7.9	6.0	
JAN. 08...	390	600	--	1660	860	690	4.3	2960	8.0	7.0	
FEB. 11...	400	610	--	1740	870	660	4.7	2970	7.8	9.0	
MAR. 19...	300	610	--	1610	740	530	5.3	2840	8.1	18.0	
APR. 30...	420	680	--	1840	800	590	5.4	3080	7.8	22.0	
MAY 13...	390	620	--	1740	840	640	4.9	2930	7.9	25.5	
JUNE 01...	550	590	--	1850	880	730	4.7	2970	8.2	24.5	
AUG. 07...	520	970	--	2430	1100	910	6.2	3980	7.9	25.0	
28...	47	64	--	317	200	65	1.1	588	7.7	27.0	
SEP. 09...	51	75	--	345	210	69	1.3	646	7.6	25.0	

08127000 ELM CREEK AT BALLINGER, TEX.--Continued

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

MONTH	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCT- ANCE (MICRO- MHOS)	DIS- SOLVED SOLIDS (MG/L)	DIS- SOLVED SOLIDS (TONS)	DIS- SOLVED CHLORIDE (MG/L)	DIS- SOLVED CHLORIDE (TONS)	DIS- SOLVED SULFATE (MG/L)	DIS- SOLVED SULFATE (TONS)	HARDNESS (CA+MG) (MG/L)
OCT. 1973.....	940	1670	960	2440	320	812	180	457	460
NOV. 1973.....	392	2600	1500	1590	540	573	320	339	720
DEC. 1973.....	354	2910	1700	1630	610	584	370	354	800
JAN. 1974.....	327	2950	1700	1500	620	548	380	336	810
FEB. 1974.....	249	3030	1800	1210	640	431	390	262	840
MAR. 1974.....	365	2920	1700	1680	610	602	380	375	810
APR. 1974.....	90	2940	1700	414	620	151	380	92	810
MAY 1974.....	193	2980	1800	941	620	324	390	204	820
JUNE 1974.....	2.0	3120	1800	9.7	660	3.6	410	2.2	860
JULY 1974.....	0	--	--	0	--	0	--	0	--
AUG. 1974.....	1844	784	420	2090	110	548	73	364	220
SEPT 1974.....	14237	488	240	9230	46	1770	36	1380	140
TOTAL	18996	**	**	22700	**	6350	**	4170	**
WTD.AVG.	56	824	440	**	120	**	81	**	230

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	1270	2170	2870	2340	3020	2870	2770	2860	3060	---	---	599
2	1290	2250	2890	2920	2970	2890	2830	3040	3100	---	---	601
3	1340	2340	2920	2970	3020	2850	2870	3110	3120	---	---	620
4	1240	2410	2870	2930	2920	2930	2760	3100	3140	---	---	638
5	1230	2390	2810	2930	2970	2910	2880	2980	3140	---	---	631
6	1390	2510	2890	2930	2940	2950	2810	3040	3170	---	2500	685
7	1540	2500	2850	2980	3000	2960	2930	2970	3180	---	1960	655
8	1930	2600	2840	2990	2990	2930	2930	2960	3140	---	957	637
9	2020	2610	2870	2970	3040	2980	2920	2940	3210	---	1480	668
10	2030	2560	2920	2950	2990	2960	2890	2930	---	---	1000	---
11	2020	2600	2970	2970	3030	3010	2930	2940	---	---	925	---
12	2040	2630	2970	2910	2990	3000	2940	2930	---	---	422	---
13	1690	2670	2970	3020	3050	3060	2930	2930	---	---	446	---
14	1340	2610	2920	2970	3040	3030	2930	2950	---	---	471	684
15	1430	2640	2870	3020	3050	2990	2930	2920	---	---	469	676
16	1520	2630	2950	2970	3100	2990	2890	2970	---	---	488	593
17	1520	2680	2920	2920	3160	2960	2980	2980	---	---	497	1030
18	1540	2730	2980	2950	3140	2840	2970	3010	---	---	520	414
19	1540	2750	2880	2970	3200	2840	3000	3010	---	---	540	306
20	1580	2710	2870	3000	3180	2840	3040	3070	---	---	664	475
21	1610	2660	2910	2990	3140	2790	3010	3080	---	---	550	656
22	1640	2740	2940	2980	3130	2810	2980	3010	---	---	538	794
23	1760	2780	2890	2990	3120	2840	3050	3080	---	---	578	919
24	1730	2730	2880	2990	3030	2810	3070	3100	---	---	578	1110
25	1830	2820	2890	3000	3020	2780	3040	2960	---	---	575	1220
26	1850	2830	2880	2990	2950	2720	3080	3090	---	---	574	866
27	1940	2860	2880	2980	2940	2740	3100	3060	---	---	590	930
28	1990	2860	2880	3010	2910	2750	3120	3110	---	---	580	1090
29	2030	2880	2960	3010	---	2770	3120	3110	---	---	605	1210
30	2090	2850	3040	3020	---	2790	3080	3110	---	---	589	1390
31	2130	---	3040	2990	---	2770	---	3140	---	---	584	---
MONTH	1680	2630	2910	2950	3040	2880	2960	3020	---	---	757	773

COLORADO RIVER BASIN

08127000 ELM CREEK AT BALLINGER, TEX.--Continued

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	24.5	15.5	---	5.5	13.5	17.0	19.0	24.0	24.5	---	---	29.0
2	25.0	16.0	11.5	2.0	5.5	17.0	21.5	25.5	28.0	---	---	26.0
3	26.0	16.5	13.0	1.5	13.0	18.5	19.5	25.0	26.0	---	---	---
4	24.0	18.5	9.5	3.0	11.5	19.5	17.0	25.5	27.0	---	---	25.0
5	21.0	15.0	11.0	---	10.5	20.0	19.0	23.5	28.5	---	---	24.0
6	23.5	16.0	11.0	6.0	9.0	19.5	18.0	25.0	29.5	---	---	24.0
7	24.0	15.5	11.0	6.5	1.5	19.0	19.5	24.0	31.5	---	26.0	25.5
8	25.0	19.0	10.0	7.0	8.5	18.5	---	26.0	29.5	---	25.5	24.5
9	23.0	15.0	10.0	5.0	9.0	19.5	15.5	24.5	29.5	---	28.5	25.0
10	24.0	14.5	7.0	5.5	13.0	19.0	19.5	27.0	---	---	---	---
11	23.5	---	12.0	5.0	10.0	20.5	20.5	26.0	---	---	24.5	---
12	23.0	15.0	---	5.0	10.0	19.5	21.0	---	---	---	25.5	---
13	22.0	15.0	12.0	6.5	13.5	19.5	23.0	25.5	---	---	28.5	---
14	20.5	15.5	---	8.5	13.5	19.0	---	27.0	---	---	30.0	20.0
15	24.5	17.0	9.0	11.5	13.0	23.0	21.0	26.5	---	---	30.0	22.0
16	21.0	15.0	12.0	9.0	14.5	20.0	22.0	27.0	---	---	27.0	21.0
17	19.5	---	10.0	8.5	14.0	19.5	21.0	26.0	---	---	29.0	19.5
18	18.0	17.0	13.5	---	13.0	21.5	21.5	28.0	---	---	---	22.0
19	18.0	16.5	3.5	10.5	15.5	---	23.0	26.5	---	---	28.5	21.0
20	---	14.5	4.5	11.0	10.0	19.0	23.0	26.5	---	---	28.5	23.0
21	20.0	12.0	7.0	---	11.0	18.0	23.5	---	---	---	29.0	21.5
22	17.0	13.0	8.0	10.0	15.0	19.0	23.5	30.0	---	---	28.0	20.0
23	18.0	15.5	7.0	8.5	15.0	18.0	23.0	29.0	---	---	28.0	18.5
24	18.0	17.0	7.0	9.0	10.0	11.0	24.0	24.5	---	---	30.5	16.5
25	18.0	16.5	8.5	8.5	10.5	13.0	21.0	24.5	---	---	---	15.5
26	20.0	16.0	7.0	8.0	11.5	13.0	24.5	25.5	---	---	29.5	19.5
27	19.5	14.0	---	10.0	14.0	17.0	---	29.5	---	---	26.0	20.0
28	---	10.0	8.5	12.0	15.5	19.0	25.0	29.0	---	---	27.0	19.5
29	16.5	11.0	10.5	10.0	---	17.0	23.5	---	---	---	30.5	24.5
30	18.0	9.0	6.0	11.0	---	21.0	22.0	---	---	---	29.5	20.5
31	15.5	---	---	10.0	---	19.5	---	26.5	---	---	26.5	---
MONTH	21.0	15.0	9.0	7.5	11.5	18.5	21.5	26.5	---	---	---	22.0

COLORADO RIVER BASIN

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08136150 CONCHO RIVER NEAR VERIBEST, TEX.

LOCATION.--Lat 31°32'07", long 100°13'05", Tom Green County, at bridge on county road, 2.8 miles (4.5 km) downstream from Crownest Creek, 4.5 miles (7.2 km) northeast of Veribest, and 17.3 miles (27.8 km) downstream from gaging station near San Angelo.

PERIOD OF RECORD.--Chemical and biochemical analyses: October 1968 to September 1974.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	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 SODIUM PLUS POTAS- SIUM (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)
OCT. 11...	1645	--	40	140	89	--	290	--	276	0
DEC. 07...	1500	15	26	170	92	300	--	6.1	322	0
JAN. 31...	1115	14	24	180	100	330	--	4.9	356	0
JULY 22...	0930	--	24	130	84	320	--	8.6	191	0

DATE	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
OCT. 11...	240	600	.6	3.8	.12	.07	.56	--	.08	--
DEC. 07...	260	650	--	5.8	.05	.01	.54	--	.04	1660
JAN. 31...	280	710	--	12	.05	.00	.28	--	.00	1800
JULY 22...	230	720	--	1.5	.11	.50	2.2	2.7	.16	1610

DATE	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	BIO- CHEM- ICAL OXYGEN DEMAND (MG/L)
OCT. 11...	720	490	--	2630	7.9	26.0	8.5	102	3.8
DEC. 07...	800	540	4.6	2890	8.1	11.0	9.5	86	2.7
JAN. 31...	860	570	4.9	3140	7.8	10.0	10.7	96	7.2
JULY 22...	670	510	5.4	2890	7.1	32.0	7.1	96	11

08136500 CONCHO RIVER AT PAINT ROCK, TEX.

LOCATION.--Lat 31°30'57", long 99°55'09", Concho County, at gaging station at bridge on U.S. Highway 83, 0.5 mile (0.8 km) north of Concho County Courthouse in Paint Rock, and 2.7 miles (4.3 km) downstream from Kickapoo Creek.

DRAINAGE AREA.--6,415 mi² (16,615 km²), of which 1,283 mi² (3,323 km²) is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: October 1967 to September 1974.

Chemical and biochemical analyses: October 1967 to September 1974.

Pesticide analyses: October 1967 to September 1974.

Water temperatures: October 1967 to September 1974.

EXTREMES.--October 1973 to September 1974:

Specific conductance: Maximum daily, 3,110 micromhos Apr. 20, 24, 25; minimum daily, 472 micromhos Aug. 29.

Period of record:

Specific conductance: Maximum daily, 3,110 micromhos Apr. 20, 24, 25, 1974; minimum daily, 375 micromhos June 1, 1971.

Water temperatures (1967-73): Maximum, 35.0°C Aug. 11, 1969; minimum, freezing point on many days during winter months.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	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 SODIUM PLUS POTAS- SIUM (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
OCT.												
11...	1530	30	35	140	81	--	200	--	194	0	280	460
19...	1145	32	19	140	68	160	--	4.5	188	0	250	400
NOV.												
28...	1030	20	23	170	99	270	--	6.5	260	0	300	590
DEC.												
07...	1300	18	22	180	94	240	--	5.8	260	0	310	580
30...	1010	18	20	180	98	230	--	5.8	210	0	350	550
JAN.												
22...	1055	19	18	190	100	260	--	5.3	249	0	340	610
31...	1215	16	17	200	100	230	--	5.4	244	0	320	600
FEB.												
25...	1630	5.5	12	200	110	240	--	4.4	201	0	420	600
MAR.												
13...	1715	5.2	13	180	110	240	--	6.0	196	0	410	600
APR.												
11...	1100	4.1	6.3	190	120	270	--	5.9	154	0	440	670
MAY												
31...	1455	20	20	130	68	180	--	5.9	171	0	230	410
AUG.												
21...	1535	6.2	26	120	82	240	--	8.1	118	0	210	570
SEP.												
30...	1540	29	17	84	38	120	--	4.9	177	0	140	240

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITU- ENTS) (MG/L)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)	VOL. NON- FILT- RABLE RESIDUE (MG/L)	HARD- NESS (CA+MG) (MG/L)
OCT.											
11...	.5	2.6	.10	.06	.78	--	.16	1320	132	84	680
19...	.5	--	--	--	--	--	--	1150	--	--	640
NOV.											
28...	--	--	--	--	--	--	--	1590	--	--	830
DEC.											
07...	--	9.9	.07	.02	.39	--	.02	1560	5	0	840
30...	--	--	--	--	--	--	--	1540	--	--	850
JAN.											
22...	--	--	--	--	--	--	--	1650	--	--	890
31...	--	13	.09	.09	.00	--	.14	1600	45	19	920
FEB.											
25...	--	--	--	--	--	--	--	1690	--	--	950
MAR.											
13...	--	--	--	--	--	--	--	1660	--	--	900
APR.											
11...	--	2.7	.11	.05	1.2	1.2	.14	1780	76	12	970
MAY											
31...	--	--	--	--	--	--	--	1130	--	--	600
AUG.											
21...	--	--	--	--	--	--	--	1310	--	--	640
SEP.											
30...	--	--	--	--	--	--	--	731	--	--	370

COLORADO RIVER BASIN

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08136500 CONCHO RIVER AT PAINT ROCK, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	NON-CARBONATE HARDNESS (MG/L)	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	BIO-CHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT.											
11...	520	3.3	2210	8.2	25.0	20	45	8.9	106	3.0	12
19...	480	2.8	2010	7.4	21.0	--	--	--	--	--	--
NOV.											
28...	620	4.1	2790	7.8	12.5	--	--	--	--	--	--
DEC.											
07...	620	3.6	2710	8.2	9.5	10	25	8.9	79	1.2	7.5
30...	680	3.4	2650	8.1	6.0	--	--	--	--	--	--
JAN.											
22...	680	3.8	2750	7.8	12.0	--	--	--	--	--	--
31...	720	3.3	2790	8.0	11.0	5	20	11.0	100	6.0	6.5
FEB.											
25...	790	3.4	2870	7.4	16.0	--	--	--	--	--	--
MAR.											
13...	740	3.5	2850	7.5	18.0	--	--	--	--	--	--
APR.											
11...	850	3.8	3020	7.1	19.5	10	45	9.4	101	3.3	2.0
MAY											
31...	460	3.2	1980	7.5	31.0	--	--	--	--	--	--
AUG.											
21...	540	4.1	2420	7.5	33.0	--	--	--	--	--	--
SEP.											
30...	220	2.7	1300	8.1	22.0	--	--	--	--	--	--

DATE	TIME	DIS-SOLVED ALUMINUM (AL) (UG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	DIS-SOLVED BORON (B) (UG/L)	DIS-SOLVED CADMIUM (CD) (UG/L)	DIS-SOLVED CHROMIUM (CR) (UG/L)	DIS-SOLVED COBALT (CO) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)
JAN.								
31...	1215	10	6	420	1	0	0	7
APR.								
11...	1100	0	9	470	1	40	0	10

DATE	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	DIS-SOLVED LITHIUM (LI) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)	DIS-SOLVED MERCURY (HG) (UG/L)	DIS-SOLVED NICKEL (NI) (UG/L)	DIS-SOLVED STRONTIUM (SR) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)
JAN.								
31...	80	11	60	25	.0	0	4400	40
APR.								
11...	0	8	80	20	.0	4	4400	20

COLORADO RIVER BASIN

08136500 CONCHO RIVER AT PAINT ROCK, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TEMPERATURE (DEG C)	ALDRIN (UG/L)	ALDRIN IN BOTTOM DE-POSITS (UG/KG)	DDD (UG/L)	DDD IN BOTTOM DE-POSITS (UG/KG)	DDE (UG/L)	DDE IN BOTTOM DE-POSITS (UG/KG)	DDT (UG/L)	DDT IN BOTTOM DE-POSITS (UG/KG)
OCT. 11...	1530	30	25.0	.00	.0	.00	1.2	.00	9.0	.00	.0
JAN. 31...	1215	16	11.0	.00	.0	.00	.0	.00	5.4	.00	.0
APR. 11...	1100	4.1	19.5	.00	.0	.00	.4	.00	2.3	.00	.6

DATE	DI-ELDRIN (UG/L)	DI-ELDRIN IN BOTTOM DE-POSITS (UG/KG)	ENDRIN (UG/L)	ENDRIN IN BOTTOM DE-POSITS (UG/KG)	HEPTA-CHLOR (UG/L)	HEPTA-CHLOR IN BOTTOM DE-POSITS (UG/KG)	HEPTA-CHLOR EPOXIDE (UG/L)	HEPTA-CHLOR EPOXIDE IN BOTTOM DE-POSITS (UG/KG)	LINDANE (UG/L)	LINDANE IN BOTTOM DE-POSITS (UG/KG)	CHLOR-DANE (UG/L)
OCT. 11...	.00	.0	.00	.0	.00	.0	.00	.0	.00	.0	.0
JAN. 31...	.00	.0	.00	.0	.00	.0	.00	.0	.00	.0	.0
APR. 11...	.00	.0	.00	.0	.00	.0	.00	.0	.00	.0	.0

DATE	CHLOR-DANE IN BOTTOM DE-POSITS (UG/KG)	PCB (UG/L)	PCB IN BOTTOM DE-POSITS (UG/KG)	DI-AZINON (UG/L)	MALATHION (UG/L)	METHYL PARA-THION (UG/L)	PARA-THION (UG/L)	2,4-D (UG/L)	SILVEX (UG/L)	2,4,5-T (UG/L)
OCT. 11...	0	.0	0	.00	.00	.00	.00	.00	.00	.01
JAN. 31...	0	.0	0	.00	.00	.00	.00	.00	.00	.00
APR. 11...	0	.0	0	.00	.00	.00	.00	--	--	--

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

MONTH	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCTANCE (MICRO-MHOS)	DIS-SOLVED SOLIDS (MG/L)	DIS-SOLVED SOLIDS (TONS)	DIS-SOLVED CHLORIDE (MG/L)	DIS-SOLVED CHLORIDE (TONS)	DIS-SOLVED SULFATE (MG/L)	DIS-SOLVED SULFATE (TONS)	HARDNESS (CA+MG) (MG/L)
OCT. 1973.....	1237	2030	1200	4010	420	1400	250	635	630
NOV. 1973.....	894	2590	1500	3620	540	1300	310	748	830
DEC. 1973.....	554	2550	1500	2240	530	793	310	464	810
JAN. 1974.....	615	2740	1600	2660	580	963	330	548	880
FEB. 1974.....	271	2800	1600	1170	600	440	340	250	900
MAR. 1974.....	132	2870	1700	607	620	221	340	121	920
APR. 1974.....	58	3080	1800	286	690	110	370	58	990
MAY 1974.....	1405	2240	1300	4930	460	1750	270	1020	700
JUNE 1974.....	145	2540	1500	589	530	208	310	122	810
JULY 1974.....	0	--	--	0	--	0	--	0	--
AUG. 1974.....	814	1450	800	1760	290	637	180	396	430
SEPT 1974.....	1707	1250	680	3140	240	1110	160	738	360
TOTAL	7835	**	**	25000	**	8930	**	5300	**
WTD.AVG.	23	2050	1200	**	420	**	250	**	640

COLORADO RIVER BASIN

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08136500 CONCHO RIVER AT PAINT ROCK, TEX.--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	2140	2500	2760	2730	2770	2840	2970	2720	2360	---	---	1340
2	2300	2520	1620	2720	2780	2840	2960	1960	2300	---	---	1330
3	2300	2530	2750	2730	2740	2850	2990	2340	2470	---	---	1340
4	2300	2520	2740	2710	2780	2830	2990	2350	2470	---	---	1340
5	2300	2520	2700	2730	2750	2820	2990	2330	2540	---	---	1500
6	2300	2540	2560	2730	2780	2840	3020	2330	2630	---	---	1500
7	2300	2000	2650	2730	2810	2840	2980	2350	2540	---	---	1500
8	2300	2520	2650	2720	2800	2830	2990	2350	2580	---	---	1580
9	2300	2530	2680	2710	2810	2830	3090	2350	2620	---	---	1580
10	2300	2530	2670	2730	2810	2840	3080	2390	2620	---	---	1580
11	2300	2530	2660	2710	2810	2850	3090	2390	2710	---	3050	1580
12	2290	2560	2780	2730	2800	2840	3090	2170	2710	---	1930	1600
13	1650	2560	2640	2730	2800	2850	2880	2170	2710	---	1600	1660
14	1700	2560	2670	2730	2800	2840	3080	2190	2770	---	1790	1660
15	1790	2570	2690	2730	2790	2850	3070	2180	2750	---	1930	1650
16	1840	2550	2450	2730	2800	2860	3080	2160	2770	---	2220	1870
17	1880	2570	2680	2730	2800	2860	3080	2520	2730	---	2220	1890
18	1930	2560	2680	2720	2810	2840	3080	2540	2790	---	2420	1200
19	2010	2740	2660	2710	2830	2850	3080	2510	2790	---	2430	1100
20	2100	2730	2690	2730	2830	2860	3110	2520	2810	---	2430	1200
21	2200	2740	2630	2710	2820	2930	3100	2730	2920	---	2420	1220
22	2300	2740	2660	2710	2830	2950	3090	2750	2920	---	2460	1050
23	2400	2730	2280	2780	2830	2950	3090	2510	2920	---	2470	1250
24	2500	2730	1880	2780	2830	2950	3110	2490	---	---	2460	1470
25	2560	2720	2670	2780	2830	2930	3110	1730	---	---	2460	1290
26	2560	2710	1400	2780	2820	2930	3100	1750	---	---	2350	1300
27	2560	2750	2690	2780	2820	2930	3090	1730	---	---	2000	1280
28	2570	2740	2690	2790	2840	2950	3090	1730	---	---	800	1280
29	2550	2770	2700	2790	---	2940	3090	1740	---	---	472	1280
30	2540	2740	2700	2790	---	2930	3100	1930	---	---	1170	1300
31	2530	---	2700	2780	---	2940	---	1980	---	---	1180	---
MONTH	2250	2600	2560	2740	2800	2880	3060	2250	---	---	---	1420

COLORADO RIVER BASIN

08136700 COLORADO RIVER NEAR STACY, TEX.

LOCATION.--Lat 31°29'37", long 99°34'25", McCulloch County, at gaging station at bridge on Farm Road 503, 1.2 miles (1.9 km) upstream from Bois d'Arc Creek, and 1.8 miles (2.9 km) northeast of Stacy.

DRAINAGE AREA.--24,040 mi² (62,260 km²), of which 12,880 mi² (33,360 km²) is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: April 1968 to September 1974.
Water temperatures: April 1968 to September 1974.

EXTREMES.--October 1973 to September 1974:

Specific conductance: Maximum daily, 3,310 micromhos Apr. 28, 29; minimum daily, 500 micromhos Sept. 19.
Water temperatures: Maximum, 31.0°C Aug 19, 22.

Period of record:

Specific conductance: Maximum daily, 3,580 micromhos Sept. 23, 1970; minimum daily, 188 micromhos July 29, 1971.
Water temperatures: Maximum, 33.5°C July 18, 1971; minimum, 2.0°C Jan. 8, 1970, Dec. 16, 1972, Jan. 12, 1973.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTAN- TANEOUS 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 SODIUM PLUS POTAS- SIUM (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)
OCT. 19...	1420	120	12	120	61	170	--	5.4	160	0
NOV. 21...	1500	52	14	120	75	--	210	--	130	0
DEC. 05...	1500	37	11	160	82	--	210	--	204	0
JAN. 22...	1335	59	5.3	170	96	240	--	3.5	205	0
FEB. 16...	1100	29	3.5	170	98	250	--	4.7	185	0
MAR. 04...	1330	20	2.3	180	100	240	--	5.7	154	0
APR. 15...	1120	6.3	3.3	190	120	340	--	7.2	134	0
MAY 31...	1250	57	14	150	75	190	--	6.6	140	0
AUG. 21...	1335	30	17	94	50	150	--	7.8	131	0
SEP. 19...	1630	20400	8.7	48	8.5	13	--	3.9	150	0

DATE	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	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)
OCT. 19...	240	380	.4	1070	550	420	3.1	1870	7.3	22.5
NOV. 21...	300	460	.4	1230	610	500	3.6	2210	7.8	15.5
DEC. 05...	380	450	.4	1390	730	560	3.4	2350	7.9	12.0
JAN. 22...	470	500	--	1590	820	650	3.6	2640	7.8	12.5
FEB. 16...	490	490	--	1600	830	680	3.8	2690	7.5	13.0
MAR. 04...	500	490	--	1590	860	740	3.6	2690	7.8	23.0
APR. 15...	680	640	--	2050	970	860	4.8	3220	8.2	21.0
MAY 31...	340	450	--	1290	680	570	3.2	2200	7.4	28.0
AUG. 21...	190	320	--	893	440	330	3.1	1580	7.1	32.0
SEP. 19...	29	20	--	205	150	32	.5	377	7.6	23.5

COLORADO RIVER BASIN

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08136700 COLORADO RIVER NEAR STACY, TEX.--Continued

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

MONTH	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCT- ANCE (MICRO- MHOS)	DIS- SOLVED SOLIDS (MG/L)	DIS- SOLVED SOLIDS (TONS)	DIS- SOLVED CHLORIDE (MG/L)	DIS- SOLVED CHLORIDE (TONS)	DIS- SOLVED SULFATE (MG/L)	DIS- SOLVED SULFATE (TONS)	HARDNESS (CA+MG) (MG/L)
OCT. 1973.....	3953	1490	830	8860	290	3100	210	2240	430
NOV. 1973.....	1558	1970	1100	4630	400	1680	300	1260	580
DEC. 1973.....	1329	2490	1500	5380	520	1870	390	1400	750
JAN. 1974.....	1726	2610	1500	6990	550	2560	410	1910	780
FEB. 1974.....	792	2650	1600	3420	560	1200	410	877	800
MAR. 1974.....	936	2740	1600	4040	580	1470	430	1090	820
APR. 1974.....	234	3130	1900	1200	670	424	500	316	950
MAY 1974.....	3646	2240	1300	12800	470	4630	340	3350	670
JUNE 1974.....	239	2310	1400	905	480	310	350	226	690
JULY 1974.....	0	0	0	0	0	0	0	0	0
AUG. 1974.....	4296	1660	940	10900	330	3830	240	2780	490
SEPT 1974.....	37897	624	280	28700	92	9410	62	6340	160
TOTAL	56607	**	**	87800	**	30500	**	21800	**
WTD.AVG.	169	1090	570	**	200	**	140	**	310

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	1240	1470	2320	2600	2570	2710	2800	2570	2240	---	---	1440
2	1400	1510	2330	2600	2620	2690	2900	2970	2270	---	---	1440
3	1540	1560	2340	2600	2630	2680	3080	2410	2300	---	---	1600
4	1580	1600	2350	2590	2630	2680	3100	1550	2330	---	---	1910
5	1560	1620	2350	2610	2630	2670	3120	1610	2340	---	---	2120
6	1530	1660	2350	2610	2610	2660	3120	1680	2350	---	1760	2220
7	1600	1710	2380	2620	2630	2660	3140	1970	2350	---	2920	2270
8	1680	1730	2380	2650	2650	2670	3160	2190	2350	---	2300	2290
9	1740	1750	2380	2620	2660	2670	3170	2250	2370	---	1960	2300
10	1850	1780	2380	2600	2670	2680	3180	1800	2380	---	1980	2290
11	1930	1800	2400	2610	2680	2690	3170	1610	2400	---	1950	2280
12	1780	1830	2370	2630	2650	2690	3190	1500	2400	---	1930	2280
13	1080	1850	2440	2630	2640	2710	3200	1380	2420	---	1130	2240
14	1200	1900	2450	2640	2670	2710	3210	1540	2440	---	1800	2240
15	1430	1930	2480	2640	2670	2740	3220	1720	2440	---	1500	2220
16	1660	1960	2500	2620	2670	2750	3220	1810	2460	---	1390	2130
17	1760	2010	2520	2630	2660	2750	3220	1890	2480	---	1410	1080
18	1830	2270	2530	2630	2660	2750	3250	1960	2490	---	1470	816
19	1870	2150	2550	2610	2660	2750	3250	1980	2510	---	1530	500
20	1930	2200	2570	2610	2680	2740	3260	1990	2530	---	1570	587
21	1800	2210	2560	2600	2670	2740	3260	2000	2550	---	1580	597
22	1700	2230	2580	2610	2660	2740	3270	1980	---	---	1580	550
23	1610	2240	2600	2600	2660	2740	3280	1980	---	---	1570	656
24	1510	2250	2620	2600	2660	2960	3280	1980	---	---	1570	602
25	1430	2250	2620	2600	2660	2720	3300	1970	---	---	1580	709
26	1390	2260	2620	2580	2680	2720	3300	2000	---	---	1510	760
27	1390	2280	2610	2590	2700	2730	3300	2030	---	---	1600	957
28	1390	2290	2590	2590	2710	2760	3310	2170	---	---	1610	857
29	1390	2270	2620	2590	---	2790	3310	2210	---	---	1360	875
30	1410	2290	2600	2600	---	2850	3250	2190	---	---	1580	917
31	1440	---	2600	2600	---	2730	---	2200	---	---	1440	---
MONTH	1570	1960	2480	2610	2660	2730	3190	1970	---	---	1680	1460

COLORADO RIVER BASIN

08136700 COLORADO RIVER NEAR STACY, TEX.--Continued

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	24.5	20.0	12.0	---	13.0	15.5	---	21.0	26.5	---	---	---
2	24.0	21.0	---	---	12.0	18.0	---	23.5	---	---	---	29.5
3	25.5	18.0	13.0	---	---	---	14.5	24.0	26.0	---	---	24.0
4	25.5	21.0	11.0	3.5	13.5	20.0	---	25.5	25.5	---	---	22.0
5	22.0	15.5	12.0	4.5	11.0	20.0	19.0	---	24.5	---	---	24.0
6	21.0	16.5	11.0	---	10.0	21.0	15.5	24.5	26.5	---	25.5	23.5
7	---	20.0	10.0	4.5	---	21.0	---	22.0	26.5	---	26.5	22.0
8	22.0	20.0	12.0	9.0	9.0	20.0	18.5	24.0	26.5	---	29.5	---
9	23.5	15.5	---	---	---	20.5	18.0	24.5	---	---	29.5	21.0
10	24.5	15.5	10.0	7.0	---	---	20.0	24.0	26.5	---	28.0	26.5
11	22.0	---	9.0	7.0	9.0	21.0	10.0	25.5	26.5	---	---	25.5
12	20.0	18.0	11.0	4.5	5.5	16.5	20.0	---	26.5	---	26.5	25.5
13	21.0	18.0	12.0	---	13.0	14.5	---	25.5	26.5	---	27.0	22.0
14	---	19.0	14.5	10.0	14.5	16.5	---	24.5	26.5	---	29.0	21.0
15	20.0	18.0	10.0	10.0	12.0	20.0	20.0	25.5	26.5	---	29.0	21.0
16	21.0	15.5	---	10.0	11.0	16.5	20.0	24.5	---	---	28.0	22.0
17	21.0	10.5	10.0	11.0	---	---	18.5	25.5	28.0	---	29.5	21.0
18	21.0	19.0	13.0	14.5	---	20.0	20.0	24.5	26.5	---	---	24.0
19	22.5	19.0	---	11.0	14.5	20.0	20.0	---	26.5	---	31.0	---
20	20.0	15.5	6.5	---	13.5	19.0	21.0	24.5	28.0	---	26.5	22.0
21	---	15.5	7.0	11.0	---	15.5	20.0	24.5	27.5	---	28.0	21.5
22	---	---	5.5	12.0	11.0	15.5	---	26.5	---	---	31.0	---
23	20.0	---	---	---	13.5	16.5	21.0	26.5	---	---	29.5	18.5
24	20.0	18.0	7.0	10.0	---	21.0	20.0	26.5	---	---	29.0	16.5
25	21.0	---	---	9.0	10.0	10.0	21.0	25.5	---	---	29.0	15.5
26	25.5	15.5	8.0	10.0	10.0	13.0	24.0	---	---	---	29.0	16.5
27	25.5	---	7.0	---	12.0	14.5	24.0	26.5	---	---	30.0	18.5
28	---	13.0	10.0	10.0	13.5	13.0	---	26.5	---	---	25.5	18.5
29	19.0	13.5	9.0	10.0	---	16.5	22.0	26.5	---	---	25.5	---
30	20.0	11.0	---	10.0	---	20.0	24.0	26.5	---	---	26.5	20.0
31	19.0	---	---	11.0	---	13.0	---	26.5	---	---	25.5	---
MONTH	22.0	17.0	---	---	---	17.5	---	25.0	---	---	---	21.5

COLORADO RIVER BASIN

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08138000 COLORADO RIVER AT WINCHELL, TEX.

LOCATION.--Lat 31°28'04", long 99°09'43", Brown County, at gaging station on U.S. Highway 377, 0.3 mile (0.5 km) south of Winchell, and 5.9 miles (9.5 km) downstream from Home Creek.

DRAINAGE AREA.--24,580 mi² (63,660 km²), of which 12,880 mi² (33,360 km²) is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: November 1967 to September 1974.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part I of this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	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 SODIUM PLUS POTAS- SIUM (K) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)
OCT.										
16...	1115	493	10	50	12	--	54	--	112	0
29...	1420	53	11	94	48	--	160	--	144	0
DEC.										
04...	1255	40	11	130	67	190	--	5.1	168	0
JAN.										
23...	1100	44	3.8	150	90	270	--	5.5	191	0
MAR.										
05...	1035	18	1.2	170	100	230	--	6.9	163	0
APR.										
15...	1550	.62	1.5	180	110	300	--	6.3	132	0
MAY										
30...	1510	13	6.2	.1	90	200	--	6.5	140	0
AUG.										
21...	0925	44	10	82	41	98	--	7.3	93	0

DATE	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITU- ENTS) (MG/L)	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)
OCT.										
16...	57	100	.0	338	170	82	1.8	628	7.7	20.0
29...	220	310	.1	910	430	310	3.3	1540	7.4	20.5
DEC.										
04...	310	400	--	1200	600	460	3.4	1990	7.7	14.5
JAN.										
23...	440	530	--	1580	750	590	4.3	2620	7.9	10.5
MAR.										
05...	490	530	--	1610	840	700	3.5	2700	8.0	20.0
APR.										
15...	540	600	--	1800	900	790	4.3	2950	8.2	19.0
MAY										
30...	380	450	--	1200	370	260	4.5	2220	8.2	31.0
AUG.										
21...	230	190	--	704	370	300	2.2	1240	7.4	28.0

08143600 PECAN BAYOU NEAR MULLIN, TEX.

LOCATION.--Lat 31°31'02", long 98°44'25", Mills County, at gaging station on Farm Road 573 and 5.5 miles (8.8 km) southwest of Mullin.

DRAINAGE AREA.--2,034 mi² (5,268 km²).

PERIOD OF RECORD.--Chemical analyses: October 1967 to September 1974.

Water temperatures: October 1967 to September 1974.

EXTREMES.--October 1973 to September 1974:

Specific conductance: Maximum daily, 1,900 micromhos Aug. 6; minimum daily, 203 micromhos Sept. 18.

Water temperatures: Minimum, 4.0°C Jan. 3.

Period of record:

Specific conductance (1967-70, 1972-74): Maximum daily, 1,950 micromhos Aug. 20, 1970; minimum daily, 203 micromhos Sept. 18, 1974.

Water temperatures (1967-70, 1972-74): Maximum, 32.0°C on several days during summer months of 1968, 1969, and 1973; minimum, 3.0°C Jan. 10, 1968.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	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 SODIUM PLUS POTAS- SIUM (K) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAH- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)
OCT. 13...	2000	4900	9.1	42	4.2	5.1	--	5.9	141	0
NOV. 21...	1650	34	3.2	99	25	--	170	--	247	0
DEC. 05...	1050	17	9.5	100	26	180	--	13	248	13
10...	1610	14	9.4	94	23	150	--	8.9	251	0
JAN. 23...	1355	20	3.2	93	24	190	--	10	233	0
FEB. 13...	1800	15	5.1	96	22	160	--	8.3	237	0
MAR. 05...	1425	11	1.8	100	24	180	--	9.1	255	0
APR. 16...	1000	8.9	1.7	95	20	150	--	9.0	252	0
MAY 30...	0940	6.1	12	66	13	73	--	7.8	184	8
JUNE 26...	1515	.08	12	76	16	86	--	9.1	216	0
AUG. 07...	2245	50	9.4	110	27	210	--	12	303	0
SEP. 01...	2220	17	12	66	14	85	--	8.1	174	0

DATE	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	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)
OCT. 13...	9.1	9.3	--	154	120	7	.2	252	7.2	20.0
NOV. 21...	130	270	.4	827	350	150	4.0	1460	7.4	17.0
DEC. 05...	120	280	--	864	360	130	4.1	1470	8.6	11.0
10...	120	240	--	769	330	120	3.6	1380	7.9	9.5
JAN. 23...	120	290	--	845	330	140	4.5	1520	7.6	9.0
FEB. 13...	120	250	--	778	330	140	3.8	1420	8.0	12.0
MAR. 05...	130	280	--	851	350	140	4.2	1540	8.1	20.0
APR. 16...	110	250	--	760	320	110	3.7	1350	8.1	18.0
MAY 30...	61	110	--	441	220	54	2.2	798	8.4	27.0
JUNE 26...	72	150	--	528	260	79	2.3	940	7.8	24.0
AUG. 07...	120	340	--	978	390	140	4.7	1780	7.6	21.0
SEP. 01...	59	140	--	470	220	80	2.5	865	8.1	24.0

COLORADO RIVER BASIN

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08143600 PECAN BAYOU NEAR MULLIN, TEX.--Continued

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

MONTH	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCT- ANCE (MICRO- MHOS)	DIS- SOLVED SOLIDS (MG/L)	DIS- SOLVED SOLIDS (TONS)	DIS- SOLVED CHLORIDE (MG/L)	DIS- SOLVED CHLORIDE (TONS)	DIS- SOLVED SULFATE (MG/L)	DIS- SOLVED SULFATE (TONS)	HARDNESS (CA,MG) (MG/L)
OCT. 1973.....	8642	342	190	4430	2.3	53	21	490	120
NOV. 1973.....	618	1410	790	1320	260	434	110	184	330
DEC. 1973.....	469	1450	810	1030	270	342	120	152	330
JAN. 1974.....	519	1530	860	1210	290	406	120	168	350
FEB. 1974.....	477	1480	830	1070	280	361	120	155	340
MAR. 1974.....	624	1240	700	1180	220	371	98	165	300
APR. 1974.....	298	1510	850	686	280	226	120	96	340
MAY 1974.....	1127	783	440	1340	110	335	59	180	230
JUNE 1974.....	292	1330	750	593	240	190	110	86	310
JULY 1974.....	0	--	--	0	--	0	--	0	--
AUG. 1974.....	1527	646	360	1490	75	309	47	194	190
SEPT 1974.....	7768	358	200	4190	6.1	128	23	482	120
TOTAL	22364	**	**	18500	**	3160	**	2350	**
WTD.AVG.	66	544	310	**	52	**	39	**	160

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	1530	1130	1490	1500	1620	1450	1500	1360	953	---	---	865
2	1380	1480	1510	1510	1620	1530	1520	1050	970	---	---	941
3	1180	1220	1500	1550	1610	1530	1540	1100	1000	---	---	1110
4	480	1250	1490	1560	1610	1530	1550	1180	1180	---	---	1250
5	578	1290	1440	1570	1570	1540	1550	1300	1300	---	---	1530
6	376	1320	1360	1580	1510	1590	1560	1450	1430	---	1900	1650
7	500	1350	1340	1580	1420	1620	1570	1470	1410	---	1510	1640
8	819	1390	1380	1530	1390	1640	1570	1370	1430	---	1660	1630
9	938	1420	1380	1490	1450	1640	1580	1160	1400	---	1540	1610
10	805	1450	1380	1490	1440	680	1580	469	1380	---	1490	1600
11	390	1490	1380	1510	1430	616	1570	445	1330	---	780	1590
12	360	1530	1400	1530	1420	518	1560	600	1330	---	577	1570
13	290	1550	1360	1520	1410	691	1490	1200	1370	---	744	1520
14	290	1530	1370	1510	1400	1080	1410	1150	1380	---	810	1490
15	329	1480	1380	1500	1410	1270	1360	872	1390	---	851	1500
16	376	1480	1390	1490	1440	1370	1370	762	1420	---	860	1020
17	401	1400	1390	1490	1460	1430	1380	652	1440	---	877	294
18	444	1400	1420	1480	1480	1490	1390	647	1450	---	892	203
19	469	1390	1470	1440	1490	1580	1520	660	1460	---	910	281
20	512	1380	1500	1450	1530	1610	1620	670	1490	---	921	360
21	550	1460	1520	1480	1530	1620	1630	676	1490	---	925	350
22	581	1450	1500	1510	1480	1630	1630	662	1510	---	941	295
23	625	1430	1480	1530	1430	1630	1610	650	1530	---	941	311
24	682	1430	1490	1530	1440	1680	1550	625	1520	---	957	308
25	725	1430	1500	1530	1450	1730	1460	625	1520	---	960	345
26	767	1430	1520	1530	1470	1730	1400	640	1520	---	925	300
27	828	1460	1540	1540	1440	1760	1430	665	1510	---	425	446
28	878	1480	1540	1610	1430	1390	1480	684	1500	---	211	354
29	934	1500	1490	1660	---	1420	1520	815	---	---	236	400
30	987	1500	1490	1680	---	1480	1540	865	---	---	261	533
31	1050	---	1490	1630	---	1490	---	903	---	---	455	---
MONTH	679	1420	1450	1530	1480	1420	1510	883	1380	---	906	910

COLORADO RIVER BASIN

08143600 PECAN BAYOU NEAR MULLIN, TEX.--Continued

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	24.5	18.0	13.5	---	13.0	14.0	22.0	23.0	26.0	---	---	24.0
2	25.5	17.0	14.0	5.0	11.0	18.0	20.0	23.5	29.0	---	---	22.0
3	26.0	16.5	13.0	4.0	---	---	21.0	25.5	27.0	---	---	21.0
4	24.5	---	13.0	5.0	10.5	20.0	20.0	23.0	28.5	---	---	19.0
5	21.0	16.5	10.5	---	12.0	19.0	---	---	28.0	---	---	20.0
6	22.0	16.0	11.0	---	10.0	21.0	19.5	24.5	28.0	---	---	20.0
7	---	18.5	11.5	6.5	9.5	21.0	23.5	24.0	29.5	---	21.0	20.0
8	25.0	18.0	11.0	9.0	8.0	20.0	---	25.0	27.0	---	21.0	---
9	23.5	17.0	10.0	7.0	9.0	20.5	19.0	25.5	28.0	---	22.0	20.0
10	24.0	16.5	9.5	7.0	---	---	19.0	22.5	29.0	---	24.5	20.0
11	21.5	---	11.5	---	7.0	21.0	20.5	20.0	28.0	---	23.0	19.0
12	22.0	18.0	---	5.0	11.0	19.0	---	---	28.0	---	22.0	21.0
13	20.0	19.0	10.0	---	12.0	18.0	22.5	26.5	29.5	---	23.5	18.0
14	20.0	20.0	11.0	9.0	13.0	19.0	19.0	28.0	29.5	---	26.0	16.0
15	20.0	17.0	---	9.0	11.0	20.0	22.0	29.5	27.0	---	24.0	---
16	21.0	17.0	9.0	9.0	15.0	20.0	22.0	---	---	---	26.5	19.0
17	21.0	18.5	9.5	11.0	---	---	21.0	27.0	31.0	---	27.0	18.0
18	20.0	---	9.0	12.0	---	22.0	21.0	28.0	---	---	26.0	19.0
19	18.0	19.0	6.5	11.0	14.0	22.5	22.5	---	29.0	---	26.5	20.0
20	20.5	17.0	6.0	11.0	13.0	19.0	20.0	27.0	28.5	---	25.0	20.0
21	---	17.0	5.0	12.0	12.0	16.5	---	29.0	29.5	---	27.0	19.0
22	18.0	18.0	7.0	11.5	12.0	18.0	22.0	28.0	28.0	---	28.0	20.0
23	18.0	19.5	8.0	9.5	13.0	18.0	23.5	---	30.0	---	26.0	15.5
24	19.0	18.5	7.0	10.0	---	---	24.0	29.0	29.0	---	26.0	14.5
25	19.0	---	---	10.0	9.0	12.5	23.5	26.0	28.0	---	---	13.5
26	19.5	17.0	6.0	9.0	10.0	13.0	22.0	28.0	24.0	---	23.0	---
27	20.0	15.0	7.0	11.0	11.0	15.0	22.5	28.0	26.5	---	25.0	16.5
28	---	14.0	10.0	11.0	12.0	19.0	---	26.5	19.0	---	19.5	16.0
29	17.0	13.5	8.0	10.5	---	20.0	23.0	28.0	25.0	---	19.0	17.0
30	17.5	12.5	---	11.0	---	22.0	23.0	28.5	---	---	20.0	16.5
31	18.5	---	7.5	11.5	---	---	---	26.5	---	---	21.0	---
MONTH	21.0	17.0	9.5	9.0	11.0	19.0	21.5	26.0	28.0	---	---	18.5

08147000 COLORADO RIVER NEAR SAN SABA, TEX.

LOCATION.--Lat 31°13'04", long 98°33'51", San Saba County, at gaging station at bridge on U.S. Highway 190, 5.2 miles (8.4 km) downstream from San Saba River, and 9.2 miles (14.8 km) east of San Saba.

DRAINAGE AREA.--30,600 mi² (79,250 km²), of which 12,880 mi² (33,360 km²) is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: September 1947 to September 1974.

Chemical and biochemical analyses: October 1969 to September 1974.

Pesticide analyses: January 1968 to September 1974.

Water temperatures: September 1947 to September 1974.

Sediment records: December 1950 to September 1962.

EXTREMES.--October 1973 to September 1974:

Specific conductance: Maximum daily, 1,600 micromhos May 2; minimum daily, 234 micromhos Aug. 30.

Water temperatures: Maximum, 34.0°C July 28; minimum, 5.0°C Dec. 27, Jan. 2, 4.

Period of record:

Specific conductance: Maximum daily, 5,660 micromhos June 28, 1962; minimum daily, 161 micromhos Sept. 11, 1952.

Water temperatures: Maximum, 37.0°C Aug. 3, 1956; minimum, freezing point Jan. 29, 1948, Jan. 30, 1951.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part I of this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

		INSTAN- TANEOUS 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 SODIUM PLUS POTAS- SIUM (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	
OCT.											
08...	1100	633	9.6	44	17	--	24	--	174	0	
14...	1445	46600	12	48	5.2	6.0	--	5.3	178	0	
NOV.											
09...	0940	347	14	71	29	38	--	3.9	279	0	
DEC.											
04...	1100	259	12	83	36	64	--	4.3	308	0	
12...	1250	224	11	80	32	64	--	4.7	296	0	
JAN.											
15...	1700	218	8.8	78	40	77	--	4.0	270	0	
24...	1150	208	7.7	88	43	87	--	4.1	289	0	
FEB.											
19...	1740	165	6.5	72	41	74	--	3.3	250	0	
MAR.											
06...	1010	145	7.9	80	40	71	--	3.4	298	0	
14...	1430	321	8.0	88	45	100	--	4.5	280	0	
APR.											
16...	1310	101	11	61	35	37	--	3.1	309	0	
MAY											
06...	1120	633	7.2	68	30	75	--	4.3	156	6	
JUNE											
28...	1330	38	17	48	32	40	--	3.6	270	0	
JULY											
20...	1235	20	17	42	34	42	--	3.9	267	0	
AUG.											
24...	2015	126	14	55	18	25	--	4.3	210	0	
SEP.											
29...	1200	2440	13	63	16	40	--	5.0	191	0	
		DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
OCT.											
08...	27	41	.2	.50	.11	.00	.56	--	.33	251	
14...	10	13	--	--	--	--	--	--	--	187	
NOV.											
09...	46	69	--	--	--	--	--	--	--	408	
DEC.											
04...	70	120	--	1.0	.00	.04	.40	--	.04	541	
12...	72	110	--	--	--	--	--	--	--	520	
JAN.											
15...	98	150	--	1.2	.00	.00	.45	--	.06	589	
24...	110	170	--	--	--	--	--	--	--	652	
FEB.											
19...	110	130	--	--	--	--	--	--	--	560	
MAR.											
06...	91	130	--	--	--	--	--	--	--	570	
14...	130	190	--	.84	.01	.11	.60	.71	.08	704	
APR.											
16...	40	59	--	--	--	--	--	--	--	398	
MAY											
06...	120	140	--	.37	.03	.05	.51	.56	.12	527	
JUNE											
28...	37	61	--	--	--	--	--	--	--	372	
JULY											
20...	41	64	--	.03	.00	.12	.60	.72	.25	376	
AUG.											
24...	40	40	--	--	--	--	--	--	--	300	
SEP.											
29...	47	74	--	1.1	.03	.10	1.1	1.2	.38	352	

COLORADO RIVER BASIN

08147000 COLORADO RIVER NEAR SAN SABA, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)
OCT.									
08...	180	37	--	464	7.5	23.5	6.4	74	1.4
14...	140	0	.2	290	7.3	19.5	--	--	--
NOV.									
09...	300	68	1.0	751	8.0	18.0	--	--	--
DEC.									
04...	360	100	1.5	983	7.8	13.0	8.0	75	1.4
12...	330	87	1.5	840	8.3	13.0	--	--	--
JAN.									
15...	360	140	1.8	1070	8.2	11.5	14.0	127	3.7
24...	400	160	1.9	1130	8.0	11.0	--	--	--
FEB.									
19...	350	140	1.7	1040	7.8	17.0	--	--	--
MAR.									
06...	360	120	1.6	1020	8.2	20.0	--	--	--
14...	410	180	2.2	1250	7.9	19.5	7.9	85	3.0
APR.									
16...	300	43	.9	716	8.0	--	--	--	--
MAY									
06...	290	160	1.9	944	7.5	23.0	6.5	75	2.2
JUNE									
28...	250	30	1.1	666	7.9	28.0	--	--	--
JULY									
20...	240	26	1.2	663	8.2	28.0	8.0	101	2.9
AUG.									
24...	210	39	.7	530	8.1	30.0	--	--	--
SEP.									
29...	220	67	1.2	635	6.9	20.0	7.5	82	2.2

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	ALDRIN (UG/L)	DDD (UG/L)	DDE (UG/L)	DDT (UG/L)	DI- ELDRIN (UG/L)	ENDRIN (UG/L)	HEPTA- CHLOR (UG/L)	HEPTA- CHLOR EPOXIDE (UG/L)
OCT.											
08...	1100	633	23.5	.00	.00	.00	.00	.00	.00	.00	.00

DATE	LINDANE (UG/L)	CHLOR- DANE (UG/L)	PCB (UG/L)	DI- AZINON (UG/L)	MALA- THION (UG/L)	METHYL PARA- THION (UG/L)	PARA- THION (UG/L)	2,4-D (UG/L)	SILVEX (UG/L)	2,4,5-T (UG/L)
OCT.										
08...	.00	.0	.0	.00	.00	.00	.00	.00	.00	.00

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

MONTH	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCT- ANCE (MICRO- MHOS)	DIS- SOLVED SOLIDS (MG/L)	DIS- SOLVED SOLIDS (TONS)	DIS- SOLVED CHLORIDE (MG/L)	DIS- SOLVED CHLORIDE (TONS)	DIS- SOLVED SULFATE (MG/L)	DIS- SOLVED SULFATE (TONS)	HARDNESS (CA,MG) (MG/L)
OCT. 1973.....	93884	372	210	53200	24	6080	19	4820	160
NOV. 1973.....	10371	753	420	11800	83	2320	51	1430	270
DEC. 1973.....	6952	865	480	9010	110	2060	68	1280	310
JAN. 1974.....	6746	1040	580	10600	140	2550	95	1730	360
FEB. 1974.....	4621	1030	570	7110	140	1750	93	1160	360
MAR. 1974.....	5353	1060	590	8530	150	2170	98	1420	370
APR. 1974.....	2786	786	430	3230	90	677	56	421	280
MAY 1974.....	18174	804	440	21600	94	4610	59	2900	290
JUNE 1974.....	2564	729	400	2770	78	540	47	325	270
JULY 1974.....	802	653	360	780	62	134	38	82	240
AUG. 1974.....	34195	487	270	24900	40	3690	27	2490	190
SEPT 1974.....	150209	343	190	77100	20	8110	17	6890	150
TOTAL	336657	**	**	231000	**	34700	**	24900	**
WTD.AVG.	922	456	250	**	38	**	27	**	180

COLORADO RIVER BASIN

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08147000 COLORADO RIVER NEAR SAN SABA, TEX.--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	544	728	896	871	876	1080	880	765	657	668	697	346
2	1270	593	936	1000	898	982	860	1600	640	675	685	393
3	1400	596	832	975	916	1030	877	1370	665	685	709	489
4	1060	586	853	949	1020	1030	793	885	671	675	614	500
5	1010	638	818	888	1040	1000	753	1130	780	669	614	507
6	1100	763	879	920	973	1060	760	978	809	543	629	532
7	860	770	889	974	1000	952	716	712	926	640	644	557
8	460	787	863	1020	1090	972	790	743	896	643	513	554
9	633	605	896	929	1010	991	718	851	762	615	619	585
10	752	669	841	945	1030	986	740	794	739	650	842	603
11	750	797	812	961	1070	982	750	740	716	648	845	603
12	547	707	777	1050	1080	1500	750	593	693	643	1100	605
13	439	786	799	949	1070	1300	714	588	648	632	607	608
14	265	754	827	1000	1080	1150	723	461	734	632	423	875
15	245	629	873	1050	1020	996	714	474	701	640	363	865
16	405	670	842	1090	973	987	705	506	712	649	358	859
17	378	688	801	1040	1000	1010	763	516	684	651	364	336
18	458	691	830	1040	1040	1010	819	541	695	653	472	253
19	512	797	880	1030	1030	1010	860	567	680	653	713	239
20	565	856	932	1400	1000	990	874	591	690	652	754	290
21	618	826	863	1040	1030	973	860	625	691	670	635	375
22	624	831	917	1120	1100	890	822	643	687	670	565	328
23	638	836	838	1170	1070	1020	793	657	677	676	545	331
24	645	887	830	1130	1100	1070	768	665	682	686	535	500
25	654	803	860	1100	1110	1080	796	669	684	695	533	491
26	618	823	889	1120	1100	1090	819	663	668	694	544	508
27	660	952	896	1120	1050	1090	771	675	660	688	535	526
28	670	955	853	1060	1040	1040	758	693	666	680	956	646
29	670	878	996	1170	---	956	753	673	669	691	1000	640
30	662	918	921	1130	---	956	771	667	672	699	234	661
31	661	---	889	1010	---	936	---	648	---	695	316	---
MONTH	670	761	865	1040	1030	1040	782	732	708	660	612	520

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	25.0	16.0	16.0	8.0	16.0	19.0	25.0	22.0	30.0	29.0	31.0	29.0
2	23.0	17.0	17.0	5.0	15.0	20.0	23.0	25.0	30.0	29.0	29.0	29.0
3	23.0	18.0	15.0	---	15.0	22.0	23.0	25.0	29.0	29.0	30.0	26.0
4	25.0	20.0	12.0	5.0	16.0	20.0	20.0	26.0	28.0	---	27.0	26.0
5	22.0	17.0	12.0	7.0	15.0	22.0	22.0	24.0	29.0	30.0	25.0	26.0
6	23.0	16.0	10.0	12.0	12.0	22.0	20.0	24.0	29.0	32.0	26.0	26.0
7	23.0	18.0	9.0	9.0	10.0	22.0	23.0	24.0	30.0	31.0	27.0	26.0
8	21.0	18.0	8.0	10.0	10.0	---	19.0	24.0	29.0	30.0	27.0	26.0
9	23.0	16.0	14.0	10.0	9.0	21.0	18.0	26.0	27.0	30.0	28.0	24.0
10	25.0	18.0	8.0	---	12.0	22.0	20.0	24.0	---	30.0	31.0	26.0
11	24.0	18.0	8.0	8.0	13.0	23.0	23.0	26.0	---	30.0	---	28.0
12	23.0	18.0	10.0	8.0	10.0	23.0	23.0	26.0	28.0	29.0	30.0	26.0
13	23.0	20.0	10.0	8.0	15.0	22.0	25.0	25.0	30.0	31.0	29.0	23.0
14	19.5	20.0	10.0	10.0	15.0	---	21.0	27.0	31.0	31.0	30.0	22.0
15	20.0	20.0	13.0	12.0	16.0	21.0	22.0	30.0	31.0	---	31.0	26.0
16	19.0	14.0	12.0	13.0	16.0	20.0	23.0	29.0	31.0	---	31.0	26.0
17	19.0	18.0	9.0	15.0	15.0	22.0	22.0	28.0	32.0	---	32.0	23.0
18	17.0	21.0	10.0	15.0	15.0	23.0	20.0	---	30.0	---	32.0	25.0
19	17.0	18.0	---	12.0	17.0	24.0	23.0	29.0	30.0	---	31.0	26.0
20	---	16.0	8.0	12.0	18.0	---	22.0	26.0	30.0	---	32.0	26.0
21	22.0	15.0	7.0	---	13.0	18.0	23.0	28.0	30.0	---	33.0	22.0
22	17.0	---	12.0	14.0	15.0	20.0	22.0	29.0	30.0	---	33.0	22.0
23	17.0	18.0	12.0	10.0	15.0	18.0	24.0	29.0	32.0	---	31.0	20.0
24	18.0	20.0	---	11.0	13.0	12.0	25.0	30.0	28.0	---	30.0	19.0
25	18.0	18.0	---	10.0	14.0	13.0	23.0	---	28.0	32.0	30.0	19.0
26	20.0	16.0	10.0	13.0	14.0	17.0	22.0	30.0	28.0	32.0	29.0	---
27	---	16.0	5.0	14.0	15.0	20.0	22.0	30.0	28.0	33.0	---	22.0
28	18.0	17.0	10.0	13.0	18.0	22.0	23.0	30.0	28.0	34.0	28.0	21.0
29	12.0	12.0	10.0	15.0	---	22.0	23.0	29.0	---	32.0	28.0	23.0
30	18.0	12.0	14.0	14.0	---	20.0	22.0	29.0	29.0	29.0	26.0	23.0
31	15.0	---	8.0	15.0	---	25.0	---	30.0	---	30.0	29.0	---
MONTH	20.5	17.5	10.5	11.0	14.0	20.5	22.0	27.0	29.5	---	29.5	24.5

COLORADO RIVER BASIN

08153500 PEDERNALES RIVER NEAR JOHNSON CITY, TEX.

LOCATION.--Lat 30°17'27", long 98°24'01", Blanco County, at gaging station on bridge on U.S. Highway 281, 0.2 mile (0.3 km) downstream from Towhead Creek, and 1.1 miles (1.8 km) northeast of Johnson City.

DRAINAGE AREA.--947 mi² (2,453 km²).

PERIOD OF RECORD.--Chemical analyses: April 1948 to September 1950.

Chemical and biochemical analyses: October 1971 to September 1974.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO ₂) (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 SODIUM PLUS POTAS- SIUM (K) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)
OCT. 26...	1410	170	11	55	33	--	20	--	288	0
NOV. 28...	1345	89	7.2	52	38	--	28	--	293	0
JAN. 09...	1630	71	3.8	42	48	36	--	2.6	321	0
FEB. 20...	1800	56	1.8	49	41	39	--	2.5	320	0
APR. 02...	1700	39	4.3	48	40	42	--	2.7	300	0
MAY 01...	1400	36800	13	43	6.5	3.4	--	3.8	178	0
JUNE 26...	1300	18	9.4	37	25	22	--	3.8	204	0
AUG. 07...	1430	116	13	34	34	36	--	3.4	216	0
SEP. 19...	1735	107	9.2	42	24	22	--	2.9	224	0

DATE	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	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)
OCT. 26...	27	36	.1	324	270	35	.5	615	7.3	23.0
NOV. 28...	32	52	.0	353	280	44	.7	682	7.4	13.5
JAN. 09...	39	60	--	392	300	39	1.0	731	7.9	10.5
FEB. 20...	38	65	--	392	290	29	1.0	728	8.1	19.0
APR. 02...	41	72	--	398	290	38	1.1	749	7.4	24.0
MAY 01...	6.5	4.3	--	168	130	0	.1	279	7.7	19.0
JUNE 26...	24	37	--	259	200	28	.7	478	7.3	29.5
AUG. 07...	38	63	--	328	220	48	1.0	596	7.8	26.0
SEP. 19...	25	36	--	272	200	20	.7	501	8.0	28.5

COLORADO RIVER BASIN

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08154900 LAKE AUSTIN AT AUSTIN, TEX.

LOCATION.--Lat 30°18'53", long 97°47'10", Travis County, at city of Austin Waterplant No. 2 and 1.5 miles (2.4 km) upstream from Tom Miller Dam on the Colorado River at Austin.

DRAINAGE AREA.--38,240 mi² (99,040 km²), of which 11,900 mi² (30,800 km²) is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: October 1964 to September 1974.
Water temperatures: October 1964 to September 1974.

EXTREMES.--October 1973 to September 1974:

Specific conductance: Maximum daily, 982 micromhos Aug. 15-17; minimum daily, 373 micromhos Aug. 18.
Water temperatures: Minimum, 11.0°C Jan. 4.

Period of record:

Specific conductance: Maximum daily, 982 micromhos Aug. 15-17, 1974; minimum daily, 311 micromhos June 19, 1968.
Water temperatures: Maximum, 32.0°C Aug. 24, 1965; minimum, 9.0°C Jan. 30, 1966, Jan. 9, 11, 1968, Jan. 5, 1969.

REMARKS.--No discharge records available.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	DIS- SOLVED SILICA (SIO ₂) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- OLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED SODIUM PLUS POTAS- SIUM (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)
OCT. 31...	0730	8.4	52	21	29	--	3.4	204	0	33
NOV. 08...	0800	9.0	40	22	--	18	--	166	0	23
DEC. 28...	1300	8.8	47	21	31	--	3.9	190	0	38
JAN. 17...	1000	8.7	46	21	30	--	3.8	182	0	36
FEB. 20...	1025	7.1	48	21	29	--	3.8	196	0	39
MAR. 14...	1440	7.2	49	22	29	--	3.3	206	0	36
APR. 15...	1420	8.1	47	19	29	--	3.7	188	0	39
MAY 20...	1350	8.6	47	20	29	--	3.8	186	3	40
JUNE 13...	1530	8.4	47	20	30	--	3.6	187	7	35
JULY 18...	1035	8.4	46	21	30	--	3.9	192	0	35
AUG. 20...	1520	8.8	41	20	30	--	4.1	178	0	34
SEP. 17...	1350	8.7	44	20	25	--	3.1	190	0	29

DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUG- RIDE (F) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	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)
OCT. 31...	54	.2	301	220	49	.9	541	7.9	20.0
NOV. 08...	49	.2	243	190	55	.6	495	7.6	20.0
DEC. 28...	65	--	308	200	48	.9	531	8.1	14.0
JAN. 17...	56	--	291	200	52	.9	538	8.2	15.0
FEB. 20...	54	--	299	210	46	.9	548	7.9	14.0
MAR. 14...	52	--	300	210	44	.9	551	8.3	19.0
APR. 15...	54	--	292	200	41	.9	534	7.9	18.5
MAY 20...	54	--	297	200	42	.9	535	8.4	21.0
JUNE 13...	53	--	296	200	35	.9	533	8.5	23.0
JULY 18...	55	--	294	200	44	.9	539	8.0	23.0
AUG. 20...	54	--	280	180	39	1.0	535	7.8	24.0
SEP. 17...	45	--	268	190	36	.8	500	7.5	22.0

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	541	505	538	532	544	518	525	---	542	644	494	530
2	---	541	543	529	537	546	537	526	534	---	551	510
3	---	---	547	537	---	510	500	536	545	---	535	496
4	528	506	---	533	538	506	513	526	501	547	---	529
5	---	506	526	522	526	---	507	521	493	536	527	505
6	521	547	531	535	541	---	507	513	531	540	506	524
7	---	513	526	538	545	554	528	523	531	543	---	526
8	528	495	530	539	542	542	---	---	533	534	---	521
9	528	546	527	527	538	---	500	530	537	522	498	508
10	531	517	530	519	541	540	489	522	536	---	518	519
11	528	529	527	535	547	549	527	540	---	543	---	519
12	501	568	525	538	542	487	493	531	531	565	---	519
13	---	520	527	527	541	---	523	517	531	541	---	506
14	499	555	523	---	537	477	---	540	535	529	---	400
15	498	502	525	531	542	---	528	540	---	538	982	502
16	534	541	527	531	541	503	515	538	---	541	982	---
17	---	553	527	530	541	537	496	541	---	---	982	---
18	540	556	532	545	542	497	536	541	538	534	373	500
19	547	512	530	538	---	---	---	544	523	535	526	507
20	539	539	530	539	550	538	539	563	---	540	530	---
21	532	541	530	538	547	503	519	535	537	538	---	502
22	---	553	536	544	543	530	515	552	542	536	531	501
23	---	553	532	542	546	517	517	540	537	---	531	498
24	546	---	532	539	547	534	---	540	539	---	533	496
25	543	---	---	536	545	520	542	---	531	535	533	---
26	---	526	---	535	542	502	536	---	---	509	534	474
27	543	539	528	535	543	494	516	535	---	---	---	472
28	538	---	535	534	546	528	517	541	---	---	529	468
29	532	516	532	---	---	533	535	538	535	---	518	465
30	543	535	531	535	---	529	---	535	536	---	525	460
31	541	---	530	---	---	533	---	540	---	---	522	---
MONTH	---	531	531	534	542	521	518	535	---	---	---	498

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	19.0	18.0	13.0	13.5	15.0	19.0	---	21.5	24.0	22.0	20.0
2	---	19.5	21.0	13.5	13.0	16.5	19.0	20.5	21.5	---	23.0	21.0
3	---	---	21.0	12.0	---	16.0	19.5	21.0	21.0	---	22.0	22.0
4	22.0	20.0	---	11.0	14.0	16.0	18.5	21.0	22.0	21.0	---	20.5
5	---	20.0	16.5	12.0	14.0	---	18.5	21.5	23.5	23.0	21.0	20.5
6	23.0	20.0	15.5	12.0	14.5	---	19.0	22.0	21.5	23.0	21.0	20.0
7	---	20.0	16.0	13.0	12.0	17.0	18.5	20.5	22.0	23.0	---	21.5
8	23.5	20.0	15.5	13.0	12.0	19.0	---	---	22.0	23.0	---	20.5
9	23.5	20.0	15.5	13.5	12.0	---	18.5	20.0	21.5	22.0	24.5	21.0
10	23.5	19.0	15.5	14.5	13.0	19.5	19.0	19.5	22.0	---	21.5	21.0
11	23.5	19.0	15.5	13.0	11.5	14.5	18.5	19.0	---	24.0	---	22.0
12	23.5	19.0	---	11.5	13.5	20.5	18.5	19.5	23.0	23.0	---	22.0
13	---	19.0	16.5	11.5	14.5	---	18.5	19.0	23.0	23.0	---	21.5
14	23.5	19.0	15.5	---	13.5	20.0	---	19.0	21.5	22.0	---	21.0
15	23.5	19.5	16.5	11.5	14.0	---	18.5	19.5	---	21.5	24.5	21.0
16	20.0	19.5	16.5	12.0	14.0	20.0	18.0	19.5	---	22.0	24.5	---
17	---	19.5	16.5	14.0	14.0	19.5	17.0	20.0	---	---	24.0	---
18	19.0	19.0	16.5	14.0	14.5	20.0	19.5	18.5	21.5	21.5	24.0	22.0
19	17.0	20.0	16.5	14.0	---	---	---	20.5	21.0	21.5	24.0	22.0
20	19.0	19.5	14.0	14.0	15.5	---	18.5	21.5	---	22.0	18.0	---
21	19.0	19.0	14.0	14.0	15.0	18.5	18.5	21.5	24.5	22.0	---	21.5
22	---	20.0	14.0	14.5	14.0	15.5	19.0	22.0	22.0	22.0	24.0	21.5
23	---	20.0	14.5	14.0	14.5	15.0	19.0	21.5	22.0	---	24.0	20.5
24	20.0	---	14.5	13.5	14.0	14.0	---	21.5	21.0	---	24.0	21.0
25	24.5	---	---	13.5	14.0	13.5	19.5	---	21.0	22.0	24.0	---
26	---	20.0	---	13.0	---	14.5	19.5	---	---	20.5	22.0	20.5
27	21.0	20.0	13.5	13.5	14.0	14.5	20.0	22.0	---	---	---	20.5
28	20.0	---	14.0	13.0	14.5	13.5	20.0	22.0	---	---	22.0	20.5
29	20.0	18.5	14.5	---	---	14.0	20.5	22.0	24.0	---	22.0	20.5
30	20.0	18.5	14.5	13.5	---	14.0	---	22.0	21.0	---	22.0	22.0
31	20.0	---	14.5	---	---	16.5	---	21.5	---	---	22.0	---
MONTH	---	19.5	16.0	13.0	13.5	---	19.0	20.5	---	---	---	21.0

COLORADO RIVER BASIN

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08158000 COLORADO RIVER AT AUSTIN, TEX.
(National Stream Quality Accounting Network)

LOCATION.--Lat 30°14'40", long 97°41'39", Travis County, at raw water intake at Austin City Waterplant, just downstream from Lamar Boulevard bridge in Austin, 0.5 mile (0.8 km) downstream from Barton Creek, and 4.5 miles (7.2 km) upstream from gaging station at Montopolis bridge on U.S. Highway 183.

DRAINAGE AREA.--38,400 mi² (99,500 km²), of which 12,880 mi² (33,360 km²) is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: October 1947 to September 1974.
Water temperatures: October 1947 to September 1974.

EXTREMES.--October 1973 to September 1974:

Specific conductance: Maximum daily, 606 micromhos Feb. 5; minimum daily, 377 micromhos Mar. 20.
Water temperatures: Maximum, 25.0°C Aug. 31; minimum, 10.5°C on several days during January and February.

Period of record:

Specific conductance: Maximum daily, 737 micromhos Jan. 12, 1964; minimum daily, 243 micromhos Dec. 2, 1953.
Water temperatures: Maximum, 31.0°C on several days during summer months; minimum, 6.0°C Jan. 28, 1948, Feb. 4, 1949.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report. No appreciable inflow between sampling point and gaging station except during periods of heavy local rain.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DILUTION CHANGE (CFS)	DILUTION SOLUBLE SILICA (SI02) (MG/L)	DILUTION SOLUBLE CALCIUM (CA) (MG/L)	DILUTION SOLUBLE MAGNESIUM (MG)	DILUTION SOLUBLE SODIUM (NA) (MG/L)	DILUTION SOLUBLE SODIUM PLUS POTAS- SIUM (MG/L)	DILUTION SOLUBLE PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)
OCT.										
31...	0800	475	8.8	68	19	17	--	2.5	268	0
NOV.										
30...	0800	3390	8.6	45	22	--	19	--	187	0
DEC.										
28...	1230	3750	8.6	51	20	29	--	3.7	197	0
JAN.										
16...	1600	3750	8.3	50	21	31	--	3.5	207	0
17...	0945	3390	8.8	49	21	28	--	3.5	199	0
FEB.										
21...	1500	143	8.8	61	21	27	--	3.4	234	0
MAR.										
14...	1500	167	7.5	53	21	27	--	2.9	214	0
18...	0845	78	7.4	60	21	29	--	3.1	234	0
APR.										
24...	1410	572	8.1	47	20	31	--	3.6	198	0
MAY										
20...	1030	146	8.5	50	22	29	--	3.2	220	0
JUNE										
20...	0900	56	8.6	54	21	28	--	3.2	222	0
JULY										
23...	1600	3150	8.9	44	21	29	--	3.6	193	0
AUG.										
20...	0830	54	9.0	50	21	24	--	3.6	212	0
SEP.										
26...	1600	4280	9.1	40	20	25	--	3.3	177	0

DATE	DILUTION SOLUBLE SULFATE (SO4) (MG/L)	DILUTION SOLUBLE CHLORIDE (CL) (MG/L)	DILUTION SOLUBLE FLUORIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DILUTION SOLUBLE SOLIDS (RESI- DUE AT 180 C) (MG/L)
OCT.										
31...	25	24	.2	--	--	--	--	--	--	--
NOV.										
30...	24	47	.2	--	--	--	--	--	--	--
DEC.										
28...	34	55	--	--	--	--	--	--	--	--
JAN.										
16...	35	54	--	.30	.00	.05	.05	.10	.01	--
17...	34	52	--	--	--	--	--	--	--	--
FEB.										
21...	40	46	--	.27	.01	.13	.16	.29	.10	323
MAR.										
14...	31	48	--	--	--	--	--	--	--	--
18...	39	46	--	.31	.01	.18	.77	.95	.02	311
APR.										
24...	38	51	--	.18	.01	.08	.34	.42	.04	299
MAY										
20...	36	50	--	.28	.00	.04	.63	.67	.03	322
JUNE										
20...	36	52	--	.20	.00	.07	.32	.39	.01	312
JULY										
23...	39	54	--	.11	.00	.02	.31	.33	.04	292
AUG.										
20...	34	53	--	.19	.00	.07	.38	.45	.02	311
SEP.										
26...	30	43	--	.09	.00	.06	.27	.33	.03	264

COLORADO RIVER BASIN

08158000 COLORADO RIVER AT AUSTIN, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)	VOL- NON- FILT- RABLE RESIDUE (MG/L)	HARD- NESS (CA+MG) (MG/L)	NON- CAK- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)
OCT.										
31...	300	--	--	250	28	.5	541	7.7	21.0	--
NOV.										
30...	258	--	--	200	49	.6	548	8.1	18.0	--
DEC.										
28...	298	--	--	210	48	.9	533	8.1	13.0	--
JAN.										
16...	305	--	--	210	42	.9	540	7.9	14.0	--
17...	294	--	--	210	46	.8	544	7.5	15.0	--
FEB.										
21...	323	23	4	240	48	.8	584	8.0	16.5	5
MAR.										
14...	296	--	--	220	43	.8	548	8.3	19.0	--
18...	321	--	--	240	44	.8	576	7.7	21.0	--
APR.										
24...	297	6	3	200	38	1.0	540	7.9	24.0	--
MAY										
20...	307	5	0	220	35	.9	559	7.6	25.0	0
JUNE										
20...	313	--	--	220	40	.8	580	7.1	23.5	--
JULY										
23...	295	--	--	200	38	.9	536	7.6	28.0	--
AUG.										
20...	304	--	--	210	37	.9	553	7.0	26.5	--
SEP.										
26...	258	--	--	180	37	.8	471	7.4	23.0	--

DATE	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	BIO- CHEM- ICAL OXYGEN DEMAND (MG/L)	TOTAL PHYTO- PLANK- TON (CELLS PER ML)	IMME- DIATE COLI- FORM (COL. PER 100 ML)	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT.									
31...	--	--	--	--	--	--	--	--	--
NOV.									
30...	--	--	--	--	--	--	--	--	--
DEC.									
28...	--	--	--	--	--	--	--	--	--
JAN.									
16...	3	9.8	94	.4	--	1000	12	32	--
17...	--	--	--	--	--	--	--	--	--
FEB.									
21...	15	11.7	119	1.2	--	6200	240	270	.0
MAR.									
14...	--	--	--	--	--	--	--	--	--
18...	2	5.6	62	.4	--	330	28	40	--
APR.									
24...	20	10.0	118	1.1	--	--	--	--	.0
MAY									
20...	4	8.8	105	.4	--	1600	22	43	--
JUNE									
20...	--	4.9	57	.1	--	2700	14	100	2.8
JULY									
23...	5	9.1	115	1.0	1000	230	92	51	--
AUG.									
20...	2	4.2	51	1.0	2400	1000	190	120	--
SEP.									
26...	3	9.0	103	1.0	350	500	240	28	--

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	SUS- PENDE SEDIM- ENT (MG/L)	SUS- PENDE SEDIM- ENT DIS- CHARGE (T/DAY)	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM
JAN.						
16...	1600	3750	14.0	10	101	--
FEB.						
21...	1500	143	16.5	19	7.3	--
MAR.						
18...	0845	78	21.0	5	1.1	58
APR.						
24...	1410	572	24.0	12	19	78
MAY						
20...	1030	146	25.0	20	7.9	66
JUNE						
20...	0900	56	23.5	6	.91	71
JULY						
23...	1600	3150	28.0	8	68	88
AUG.						
20...	0830	54	26.5	5	.73	81
SEP.						
26...	1600	4280	23.0	9	104	89

COLORADO RIVER BASIN

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08158000 COLORADO RIVER AT AUSTIN, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	DIS-SOLVED ALUMINUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	DIS-SOLVED BORON (B) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	DIS-SOLVED CADMIUM (CD) (UG/L)	TOTAL CHROMIUM (CR) (UG/L)	DIS-SOLVED CHROMIUM (CR) (UG/L)	TOTAL COBALT (CO) (UG/L)
FEB. 21...	1500	10	--	12	90	<10	0	0	0	<50
APR. 24...	1410	10	1	0	90	<10	0	0	10	<50
JUNE 20...	0900	10	0	0	100	<10	0	0	0	<50

DATE	DIS-SOLVED COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)	TOTAL IRON (FE) (UG/L)	DIS-SOLVED IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	DIS-SOLVED LITHIUM (LI) (UG/L)	TOTAL MANGANESE (MN) (UG/L)
FEB. 21...	0	10	5	310	30	<100	7	10	20
APR. 24...	0	10	4	200	30	<100	2	10	10
JUNE 20...	0	10	2	80	0	<100	0	10	10

DATE	DIS-SOLVED MANGANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	DIS-SOLVED MERCURY (HG) (UG/L)	DIS-SOLVED NICKEL (NI) (UG/L)	TOTAL SELENIUM (SE) (UG/L)	DIS-SOLVED SELENIUM (SE) (UG/L)	DIS-SOLVED STRONTIUM (SR) (UG/L)	TOTAL ZINC (ZN) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)
FEB. 21...	10	.0	.0	6	2	2	570	190	10
APR. 24...	0	.1	.0	0	--	1	500	30	20
JUNE 20...	10	.0	.0	3	2	0	530	0	10

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

MONTH	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCTANCE (MICRO-MHOS)	DIS-SOLVED SOLIDS (MG/L)	DIS-SOLVED SOLIDS (TONS)	DIS-SOLVED CHLORIDE (MG/L)	DIS-SOLVED CHLORIDE (TONS)	DIS-SOLVED SULFATE (MG/L)	DIS-SOLVED SULFATE (TONS)	HARDNESS (CA+MG) (MG/L)
OCT. 1973.....	87122	519	280	65900	49	11500	32	7530	200
NOV. 1973.....	29801	543	300	24100	52	4180	34	2740	210
DEC. 1973.....	69653	537	290	54500	51	9590	34	6390	210
JAN. 1974.....	69065	530	290	54100	50	9320	33	6150	210
FEB. 1974.....	17046	552	300	13800	53	2440	35	1610	220
MAR. 1974.....	29043	494	270	21200	45	3530	30	2350	190
APR. 1974.....	45172	516	280	34200	48	5850	32	3900	200
MAY 1974.....	76983	531	290	60300	50	10400	33	6860	210
JUNE 1974.....	66000	539	300	53500	52	9270	34	6060	210
JULY 1974.....	56600	539	300	45800	52	7950	34	5200	210
AUG. 1974.....	53116	527	290	41600	50	7170	33	4730	200
SEPT 1974.....	138168	499	270	101000	46	17200	30	11200	190
TOTAL	737769	**	**	570000	**	98400	**	64700	**
WTD.AVG.	2021.28	524	290	**	49	**	32	**	200

COLORADO RIVER BASIN

08158000 COLORADO RIVER AT AUSTIN, TEX.--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	495	524	515	525	489	459	422	532	534	544	544	526
2	511	421	544	508	450	476	531	490	534	538	535	519
3	542	542	539	538	562	438	453	540	543	525	530	519
4	549	540	530	535	562	458	537	537	543	538	530	522
5	529	535	546	525	606	505	541	501	541	529	530	531
6	541	549	536	533	561	393	532	519	539	538	535	527
7	503	550	536	506	559	392	525	519	538	538	555	527
8	502	550	531	512	538	414	532	528	535	538	500	517
9	550	550	531	534	547	415	551	531	539	538	455	541
10	553	548	537	533	551	458	533	444	538	538	509	521
11	548	539	541	538	521	494	520	511	543	538	522	519
12	482	545	541	536	555	525	532	525	547	538	521	519
13	485	480	530	533	555	534	526	528	539	540	520	509
14	475	523	530	544	550	486	492	530	539	539	514	508
15	496	548	530	492	560	491	509	533	535	540	523	511
16	524	548	544	517	567	509	507	535	531	552	523	493
17	523	554	535	539	547	515	537	540	540	541	525	511
18	548	551	536	531	573	498	503	541	538	537	551	505
19	549	557	533	530	580	523	536	537	538	535	536	499
20	469	545	530	538	561	377	535	554	538	534	531	496
21	447	550	528	528	566	530	521	540	540	536	529	496
22	530	539	533	541	563	530	523	549	540	540	529	494
23	558	553	529	548	567	511	526	537	540	541	530	494
24	552	542	559	536	560	548	526	539	538	539	530	505
25	435	546	569	540	550	492	397	541	540	539	530	483
26	531	548	578	536	552	541	397	533	540	538	547	473
27	523	551	546	462	561	544	551	536	543	540	538	468
28	528	540	534	528	558	512	530	536	544	539	526	468
29	543	556	534	559	---	569	527	539	538	539	507	467
30	568	548	547	560	---	478	542	533	538	560	448	466
31	541	---	542	509	---	491	---	549	---	541	524	---
MONTH	520	539	539	529	553	487	513	529	539	539	523	504

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	23.0	21.0	17.0	12.0	14.5	15.0	---	19.0	---	---	22.0	22.0
2	23.0	---	16.5	12.0	15.5	16.0	17.0	20.0	21.0	20.5	22.0	23.0
3	23.0	21.0	16.0	12.0	15.0	16.5	18.0	18.5	21.0	20.5	22.0	23.0
4	23.0	---	17.0	10.5	14.0	18.0	---	19.5	21.0	---	---	21.0
5	24.0	20.5	18.5	10.5	14.5	19.0	---	18.5	19.0	---	22.0	20.5
6	23.0	21.0	15.5	10.5	---	18.5	---	21.0	20.0	---	23.5	20.0
7	---	20.0	15.0	11.0	13.5	19.0	---	20.0	21.0	---	23.0	20.0
8	---	---	15.0	11.5	12.0	19.5	---	18.0	21.5	---	21.5	22.0
9	23.0	---	15.0	11.5	10.5	19.5	17.0	19.0	21.0	21.0	23.0	22.0
10	23.0	18.0	15.0	10.5	10.5	19.5	17.0	15.5	20.5	20.5	23.0	20.5
11	23.0	18.0	15.0	11.0	10.5	18.5	---	18.0	20.5	---	---	20.5
12	23.0	18.0	15.5	11.0	11.5	18.5	---	19.5	20.5	---	---	20.5
13	---	18.0	15.5	10.5	13.5	18.0	---	18.0	20.0	---	23.0	21.0
14	---	18.0	15.5	11.0	12.0	18.5	---	17.0	20.0	21.0	23.5	20.5
15	23.0	18.0	15.5	11.5	14.5	18.0	---	16.5	20.0	22.0	---	20.5
16	23.0	18.0	15.0	11.0	15.5	18.0	17.0	17.0	20.0	24.5	---	20.5
17	20.5	18.0	15.0	11.0	15.0	16.5	17.0	17.0	20.0	22.0	23.5	20.5
18	21.0	19.0	15.0	---	16.0	19.0	---	---	20.5	21.5	24.0	20.5
19	21.0	19.0	15.0	12.0	16.0	19.0	---	19.0	20.0	21.5	24.0	21.5
20	21.0	19.0	13.0	12.0	15.0	19.5	---	---	20.0	21.5	23.0	22.0
21	21.0	18.0	13.0	12.0	15.0	19.0	---	19.0	20.0	21.5	23.0	22.0
22	21.0	19.0	11.5	12.0	15.5	19.0	---	19.5	20.0	---	23.0	19.5
23	21.0	19.0	12.0	13.0	16.0	14.0	18.0	21.0	20.0	22.0	23.5	20.0
24	21.0	---	14.5	11.5	14.0	---	18.0	20.5	20.0	22.0	23.5	20.5
25	21.0	19.0	14.5	11.0	12.0	---	18.0	16.5	22.0	22.0	22.0	20.5
26	21.0	19.0	---	11.0	14.0	15.5	18.0	20.0	21.0	21.0	22.0	---
27	21.0	18.5	12.0	12.0	14.0	---	18.0	22.0	20.5	22.0	22.0	---
28	---	18.0	12.0	12.0	14.5	---	---	21.0	20.5	22.0	23.0	---
29	---	18.0	13.5	14.5	---	---	18.5	21.0	20.5	22.0	23.0	---
30	20.5	18.0	---	14.5	---	---	19.0	19.5	20.5	22.0	24.5	---
31	21.0	---	---	13.0	---	---	---	20.0	---	24.0	25.0	---
MONTH	22.0	19.0	15.0	11.5	14.0	---	---	19.0	20.5	---	23.0	21.0

COLORADO RIVER BASIN

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08158650 COLORADO RIVER BELOW AUSTIN, TEX.
(FORMERLY COLORADO RIVER AT FARM ROAD 973, BELOW AUSTIN, TEX.)

LOCATION.--Lat 30°12'28", long 97°38'15", Travis County, at bridge on Farm Road 973, 0.3 mile (0.5 km) northeast of intersection of State Highway 71 and Farm Road 973, and 9.6 miles (15.4 km) downstream from gaging station at Austin.

PERIOD OF RECORD.--Chemical and biochemical analyses: February 1968 to September 1974.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	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 SODIUM PLUS POTAS- SIUM (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)
NOV. 05...	1145	940	11	65	19	--	27	--	238	0
JAN. 14...	1000	860	8.9	48	21	30	--	4.1	198	0
MAR. 18...	0930	100	7.8	56	20	31	--	3.5	220	0
MAY 20...	1400	200	9.6	50	21	31	--	3.7	209	0
SEP. 26...	1510	8000	9.2	41	20	25	--	3.5	178	0

DATE	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)
NOV. 05...	36	45	.3	.90	.18	.72	.26	--	.80	326
JAN. 14...	35	55	--	.40	.02	.22	.00	--	.23	300
MAR. 18...	41	48	--	1.4	.00	.04	.45	.49	.53	316
MAY 20...	41	53	--	.67	.13	.35	1.2	1.5	.70	312
SEP. 26...	30	43	--	--	--	--	--	--	--	259

DATE	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)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	BIO- CHEM- ICAL OXYGEN DEMAND (MG/L)
NOV. 05...	240	45	.8	581	7.4	21.0	7.0	78	3.9
JAN. 14...	210	44	.9	552	7.8	--	10.0	93	1.0
MAR. 18...	220	42	.9	571	7.8	21.5	6.5	73	3.2
MAY 20...	210	40	.9	574	7.4	28.0	8.6	109	1.3
SEP. 26...	180	39	.8	477	7.3	23.0	8.6	99	1.1

COLORADO RIVER BASIN

08158700 ONION CREEK NEAR DRIFTWOOD, TEX.

LOCATION.--Lat 30°05'00", long 98°00'20", Hays County, at bridge at lower crossing on Farm Road 150, 3.2 miles (5.1 km) southeast of Driftwood, and 10 miles (16 km) west of Buda.

PERIOD OF RECORD.--Chemical and biochemical analyses: January to September 1974.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SiO ₂) (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED POTAS-SIUM (K) (MG/L)	BICARBONATE (HCO ₃) (MG/L)	CARBONATE (CO ₃) (MG/L)	DIS-SOLVED SULFATE (SO ₄) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)
JAN. 11...	1330	25	7.9	70	17	4.8	1.0	244	0	26	14
FEB. 27...	1330	31	6.9	61	17	8.3	.9	237	0	25	12
MAR. 27...	1055	24	7.2	66	15	8.1	1.1	242	0	25	12
APR. 26...	1030	11	7.8	62	16	8.6	1.1	232	0	29	15
MAY 31...	1245	5.0	12	57	16	8.5	1.3	224	0	26	14
JUNE 20...	1140	4.4	13	56	17	9.1	1.3	218	0	27	15
JULY 23...	1045	.49	14	48	16	9.0	1.4	192	0	30	17
AUG. 20...	1130	.58	14	50	15	8.9	1.4	198	0	24	17
SEP. 26...	1015	8.0	9.8	70	14	5.6	1.2	270	0	21	8.1

DATE	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO-GEN (N) (MG/L)	ORGANIC NITRO-GEN (N) (MG/L)	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	TOTAL NON-FILT-RABLE RESIDUE (MG/L)	VOL. NON-FILT-RABLE RESIDUE (MG/L)	HARD-NESS (CA+MG) (MG/L)	NON-CARBONATE HARD-NESS (MG/L)
JAN. 11...	.30	.00	.08	.15	--	.00	261	0	0	250	45
FEB. 27...	.17	.01	.16	.00	.11	.05	247	0	0	220	28
MAR. 27...	.08	.00	.02	.10	.12	.01	254	2	2	230	28
APR. 26...	.01	.01	.05	.33	.38	.04	254	2	0	220	31
MAY 31...	.03	.00	.03	.65	.68	.02	246	1	0	210	25
JUNE 20...	.01	.00	.01	.24	.25	.01	246	--	--	210	31
JULY 23...	.07	.00	.03	.21	.24	.01	230	1	0	190	29
AUG. 20...	.09	.00	.06	.17	.23	.02	228	1	0	190	24
SEP. 26...	.48	.00	.05	.37	.42	.02	263	1	0	230	11

DATE	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	TUR-BID-ITY (JTU)	DIS-SOLVED OXYGEN (MG/L)	PER-CENT SATUR-ATION	BIO-CHEM-ICAL OXYGEN DEMAND (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
JAN. 11...	.1	465	7.6	10.0	0	0	10.1	89	.2	.0
FEB. 27...	.2	446	8.1	14.0	0	1	10.6	102	.3	.0
MAR. 27...	.2	439	7.8	16.0	0	2	10.1	101	.4	.5
APR. 26...	.3	442	7.5	21.5	0	2	8.4	94	.6	.0
MAY 31...	.3	428	7.4	28.0	0	0	7.6	96	1.0	1.3
JUNE 20...	.3	431	7.4	28.5	--	--	7.1	91	.0	1.5
JULY 23...	.3	398	7.3	29.0	0	1	6.9	88	.8	3.2
AUG. 20...	.3	395	7.5	29.0	0	1	7.6	97	.6	3.7
SEP. 26...	.2	442	7.6	19.0	0	1	8.5	90	.9	2.2

COLORADO RIVER BASIN

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08158700 UNION CREEK NEAR DRIFTWOOD, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	DIS- SOLVED ALUM- INUM (AL) (UG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	DIS- SOLVED COBALT (CO) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)
JAN. 11...	1330	0	4	50	0	0	0	1
APR. 26...	1030	50	0	60	0	10	0	2
MAY 31...	1245	10	0	60	2	0	1	1
JUNE 20...	1140	--	--	80	--	--	--	--
JULY 23...	1045	0	0	70	1	0	0	1

	DIS- SOLVED IRON (FE)	DIS- SOLVED LEAD (PB)	DIS- SOLVED LITHIUM (LI)	DIS- SOLVED MAN- GANESE (MN)	DIS- SOLVED MERCURY (HG)	DIS- SOLVED NICKEL (NI)	DIS- SOLVED STRON- TIUM (SR)	DIS- SOLVED ZINC (ZN)
DATE	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)
JAN. 11...	10	4	0	0	.0	0	260	10
APR. 26...	50	2	0	0	.0	1	290	0
MAY 31...	20	4	0	0	.1	5	290	70
JUNE 20...	--	--	--	--	--	--	--	--
JULY 23...	20	2	0	0	.0	0	220	10

COLORADO RIVER BASIN

08158920 WILLIAMSON CREEK AT OAK HILL, TEX.

LOCATION.--Lat 30°14'06", long 97°51'36", Travis County, at U.S. Highway 290 crossing in Oak Hill and 7.7 miles (12.4 km) southwest from capital at Austin.

PERIOD OF RECORD.--Chemical and biochemical analyses: January to September 1974.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	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)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
JAN. 11...	1230	.40	4.8	86	25	11	.4	344	0	32	19
FEB. 27...	1230	1.2	1.3	81	26	12	.6	337	0	29	17
MAR. 27...	0935	.75	6.0	87	25	13	.8	354	0	31	18
APR. 26...	0945	.25	5.9	82	24	12	1.0	334	0	29	21
MAY 31...	1130	.51	10	79	25	13	.9	333	0	23	23
JUNE 20...	1030	.01	10	54	24	12	.6	248	0	26	21
SEP. 26...	0900	4.2	8.1	87	28	12	1.2	363	0	40	20

DATE	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)	VOL. NON- FILT- RABLE RESIDUE (MG/L)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)
JAN. 11...	.00	.00	.00	.00	--	.00	348	0	0	320	38
FEB. 27...	.10	.02	.05	.17	.22	.12	332	0	0	310	33
MAR. 27...	.00	.00	.03	.16	.19	.01	355	38	1	320	30
APR. 26...	.02	.01	.06	.34	.40	.04	340	3	1	300	30
MAY 31...	.00	.00	.04	.75	.79	.02	338	1	0	300	27
JUNE 20...	.04	.00	.07	.75	.82	.02	270	--	--	230	30
SEP. 26...	.27	.00	.04	.30	.34	.22	375	0	0	330	35

DATE	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	BIO- CHEM- ICAL OXYGEN DEMAND (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
JAN. 11...	.3	630	7.7	7.0	0	2	12.0	98	.0	1.0
FEB. 27...	.3	607	8.1	14.5	5	1	11.4	111	.6	.0
MAR. 27...	.3	626	7.6	15.0	5	5	9.1	89	.6	.0
APR. 26...	.3	614	7.4	20.5	0	2	7.6	84	.8	5.0
MAY 31...	.3	603	7.8	24.5	0	1	9.8	117	.9	2.0
JUNE 20...	.3	481	7.7	28.0	--	--	8.7	110	.3	31
SEP. 26...	.3	665	7.4	18.5	0	1	8.5	90	.7	--

COLORADO RIVER BASIN

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08158920 WILLIAMSON CREEK AT OAK HILL, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	DIS- SOLVED ALUM- INUM (AL) (UG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	DIS- SOLVED COBALT (CO) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)
JAN. 11...	1230	10	7	70	0	0	0	1
APR. 26...	0945	40	0	80	1	0	0	1
MAY 31...	1130	10	1	90	2	0	1	0
JUNE 20...	1030	--	--	80	--	--	--	--

DATE	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	DIS- SOLVED LITHIUM (LI) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED MERCURY (HG) (UG/L)	DIS- SOLVED NICKEL (NI) (UG/L)	DIS- SOLVED STRON- TIUM (SR) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)
JAN. 11...	20	1	0	0	.0	0	310	20
APR. 26...	30	2	0	10	.2	0	320	0
MAY 31...	20	2	0	0	.1	4	300	20
JUNE 20...	--	--	--	--	--	--	--	--

08159100 ONION CREEK BELOW DEL VALLE, TEX.

LOCATION.--Lat 30°11'22", long 97°37'12", Travis County, 600 ft (183 m) upstream from bridge on State Highway 71 and 2.4 miles (3.9 km) southeast of Del Valle.

PERIOD OF RECORD.--Chemical and biochemical analyses: January to September 1974.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SiO ₂) (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNE-SIUM (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED SODIUM PLUS POTAS-SIUM (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO ₃) (MG/L)	CAR-BONATE (CO ₃) (MG/L)	DIS-SOLVED SULFATE (SO ₄) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)
NOV. 05...	1245	--	11	75	16	--	16	--	266	0	35	20
JAN. 11...	1100	22	11	95	17	31	--	2.4	334	0	47	39
FEB. 27...	1110	24	8.0	81	17	33	--	2.2	274	0	53	39
MAR. 27...	1240	23	9.1	77	13	27	--	2.4	262	0	40	33
APR. 26...	1315	11	9.4	80	16	34	--	2.5	280	0	51	41
MAY 31...	0930	13	13	85	18	32	--	2.7	298	0	45	40
JUNE 20...	0930	5.9	--	80	19	30	--	--	302	--	49	42
JULY 23...	0900	2.4	15	79	19	31	--	2.9	300	0	52	41
AUG. 20...	0945	7.5	14	76	13	26	--	3.2	256	0	45	32
SEP. 26...	1300	17	13	73	15	32	--	2.9	275	0	45	35

DATE	DIS-SOLVED FLUO-RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO-GEN (N) (MG/L)	ORGANIC NITRO-GEN (N) (MG/L)	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	TOTAL NON-FILT-RABLE RESIDUE (MG/L)	VOL. NON-FILT-RABLE RESIDUE (MG/L)	HARD-NESS (CA+MG) (MG/L)
NOV. 05...	.3	1.4	.00	.03	.20	--	.03	311	--	--	250
JAN. 11...	--	2.8	.00	.07	.00	--	.01	408	0	0	310
FEB. 27...	--	1.7	.04	.06	.23	.29	.04	368	16	5	270
MAR. 27...	--	1.3	.01	.08	.34	.42	.04	331	44	6	250
APR. 26...	--	1.5	.02	.05	.40	.45	.05	373	34	10	270
MAY 31...	--	1.6	.01	.04	.82	.86	.07	384	12	0	290
JUNE 20...	--	1.7	.01	.02	.29	.31	.03	--	--	--	280
JULY 23...	--	2.1	.01	.10	.49	.59	.04	389	5	2	280
AUG. 20...	--	1.2	.10	.07	.39	.46	.09	335	11	2	240
SEP. 26...	--	.84	.00	.07	.28	.35	.03	351	18	3	240

DATE	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)	COLOR (PLAT-INUM-COBALT UNITS)	TUR-BID-ITY (JTU)	DIS-SOLVED OXYGEN (MG/L)	PER-CENT SAT-URATION	BIO-CHEM-ICAL OXYGEN DEMAND (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
NOV. 05...	35	.4	539	7.8	19.5	--	--	8.8	95	1.0	--
JAN. 11...	36	.8	700	8.3	8.0	0	7	10.3	87	.2	.0
FEB. 27...	48	.9	667	7.8	13.0	10	8	9.6	91	1.0	.0
MAR. 27...	31	.8	584	7.4	16.0	8	25	9.4	94	1.7	.0
APR. 26...	37	.9	658	7.4	23.0	5	10	8.2	94	1.1	6.0
MAY 31...	43	.8	674	7.5	25.5	0	10	6.3	76	.9	4.8
JUNE 20...	30	.8	686	7.3	26.5	--	--	6.5	79	.4	2.0
JULY 23...	30	.8	691	7.3	27.0	0	5	5.7	70	1.0	2.9
AUG. 20...	33	.7	540	7.2	28.0	0	7	6.0	76	.8	7.0
SEP. 26...	18	.9	626	7.4	21.0	0	15	8.2	91	.8	4.6

COLORADO RIVER BASIN

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08159100 ONION CREEK BELOW DEL VALLE, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	DIS- SOLVED ALUM- INUM (AL) (UG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	DIS- SOLVED COBALT (CO) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)
JAN. 11...	1100	10	3	180	0	0	0	1
APR. 26...	1315	90	0	180	1	20	0	2
MAY 31...	0930	10	0	200	2	0	1	0
JULY 23...	0900	0	0	220	0	0	0	5

DATE	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	DIS- SOLVED LITHIUM (LI) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED MERCURY (HG) (UG/L)	DIS- SOLVED NICKEL (NI) (UG/L)	DIS- SOLVED STRON- TIUM (SR) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)
JAN. 11...	80	1	10	0	.0	0	700	20
APR. 26...	50	2	20	10	.0	1	630	0
MAY 31...	10	4	20	0	.1	7	660	20
JULY 23...	10	4	20	0	.0	2	720	20

COLORADO RIVER BASIN

08159500 COLORADO RIVER AT SMITHVILLE, TEX.

LOCATION.--Lat 30°00'43", Long 97°09'43", Bastrop County, at gaging station at bridge on State Highway 71 in Smithville, 500 ft (152 m) downstream from Gazley Creek, and 3.9 miles (6.3 km) downstream from Alum Creek.

DRAINAGE AREA.--39,880 mi² (103,290 km²), approximately, of which 12,880 mi² (33,360 km²) is probably noncontributing.

PERIOD OF RECORD.--Chemical and biochemical analyses: October 1973 to September 1974.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	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 SODIUM PLUS POTAS- SIUM (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)
NOV. 05...	1415	1200	12	68	18	--	28	--	238	0
JAN. 14...	1210	3290	9.3	47	21	30	--	4.0	200	0
MAR. 18...	1045	2680	9.2	63	21	35	--	3.6	237	0
MAY 20...	1500	1190	10	55	20	32	--	3.7	210	0
SEP. 26...	1420	5860	9.6	43	20	27	--	3.6	186	0

DATE	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
NOV. 05...	43	42	.3	1.2	.02	.13	.37	--	.09	334
JAN. 14...	36	56	--	.50	.00	.09	.18	--	.17	302
MAR. 18...	46	51	--	1.3	.02	.34	.28	.62	.49	346
MAY 20...	43	52	--	.60	.01	.02	.47	.49	.30	319
SEP. 26...	31	46	--	.27	.01	.08	.43	.51	.18	272

DATE	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SUMP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICHO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	BIO- CHEM- ICAL OXYGEN DEMAND (MG/L)
NOV. 05...	240	48	.8	586	7.9	20.5	8.7	96	1.3
JAN. 14...	200	40	.9	548	7.9	11.0	10.4	94	.8
MAR. 18...	240	49	1.0	626	8.0	21.0	7.6	84	.7
MAY 20...	220	47	.9	574	7.5	27.5	7.4	92	.6
SEP. 26...	190	37	.9	504	7.5	20.5	8.4	92	1.0

COLORADO RIVER BASIN

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08161000 COLORADO RIVER AT COLUMBUS, TEX.

LOCATION.--Lat 29°42'22", long 96°32'12", Colorado County, at gaging station at bridge on U.S. Highway 90 at eastern edge of Columbus and 2.6 miles (4.2 km) downstream from Cummins Creek.

DRAINAGE AREA.--41,070 mi² (106,400 km²), of which 12,880 mi² (33,360 km²) is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: October 1967 to September 1971.

Chemical and biochemical analyses: February 1968 to September 1974.

EXTREMES.--October 1973 to September 1974:

Period of record:

Specific conductance (October 1966 to September 1973): Maximum daily, 706 micromhos Feb. 7, 1969; minimum daily, 93 micromhos Apr. 26, 1973.

Sediment concentrations: Maximum daily, 5,650 mg/l Mar. 25, 1957; minimum daily, 1 mg/l Feb. 17, Mar. 31, 1972.

Sediment loads: Maximum daily, 497,000 tons Feb. 23, 1958; minimum daily, 1.90 tons Mar. 6, 1972.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part I of this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SI02) (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNE-SIUM (MG)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED SODIUM PLUS POTAS-SIUM (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HC03) (MG/L)	CAR-BONATE (C03) (MG/L)
OCT. 11...	0845	850	11	54	12	--	19	--	176	0
DEC. 06...	0910	1800	10	67	18	--	27	--	240	0
FEB. 05...	0945	1340	13	70	14	--	21	--	220	0
APR. 02...	0915	640	13	67	19	34	--	3.7	238	0
JULY 22...	1535	1600	6.9	51	20	33	--	4.0	204	0
SEP. 10...	1515	3400	9.1	46	21	29	--	4.4	182	0

DATE	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO-GEN (N) (MG/L)	ORGANIC NITRO-GEN (N) (MG/L)	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)
OCT. 11...	39	26	.3	.80	.01	.00	.25	--	.24	252
DEC. 06...	37	44	.0	.80	.01	.00	.00	--	.19	325
FEB. 05...	34	42	.2	.80	.01	.04	.41	--	.12	306
APR. 02...	44	54	--	.80	.03	.03	.13	--	.21	352
JULY 22...	40	54	--	.20	.00	.00	1.2	1.2	.67	309
SEP. 10...	39	53	--	.33	.00	.03	.96	.99	.17	291

DATE	HARD-NESS (CA+MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	DIS-SOLVED OXYGEN (MG/L)	PER-CENT SATUR-ATION	BIO-CHEM-ICAL OXYGEN DEMAND (MG/L)
OCT. 11...	180	41	.6	476	6.9	24.5	8.8	105	1.8
DEC. 06...	240	44	.8	595	7.0	13.5	9.8	93	1.2
FEB. 05...	230	52	.6	582	7.1	15.0	9.2	90	1.4
APR. 02...	250	50	.9	635	7.5	23.0	8.0	92	2.8
JULY 22...	210	42	1.0	569	8.1	32.5	9.6	130	1.0
SEP. 10...	200	52	.9	537	7.2	27.0	6.9	85	.9

08162000 COLORADO RIVER AT WHARTON, TEX.

LOCATION.--Lat 29°18'32", long 96°06'13", Wharton County, at gaging station at bridge on U.S. Highway 59 in Wharton, 1,100 ft (335 m) downstream from Texas and New Orleans Railroad Co. bridge, and 12 miles (19 km) upstream from Jones Creek.

DRAINAGE AREA.--41,380 mi² (107,200 km²), of which 12,880 mi² (33,360 km²) is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: April 1944 to September 1974.

Chemical and biochemical analyses: January 1968 to September 1974.

Pesticide analyses: February 1968 to September 1974.

Water temperatures: October 1945 to September 1948, March 1950 to September 1974.

EXTREMES.--October 1973 to September 1974:

Specific conductance: Maximum daily, 698 micromhos Mar. 19; minimum daily, 215 micromhos Jan. 21.

Water temperatures: Maximum, 32.0°C July 23; minimum, 7.0°C Jan. 4, 5.

Period of record:

Specific conductance: Maximum daily, 904 micromhos Oct. 29, 1963; minimum daily, 146 micromhos Sept. 27, 1957.

Water temperatures: Maximum, 35.0°C July 26, 1954; minimum, 2.0°C Dec. 23, 1963, Jan. 14, 1964.

REMARKS.--For information on diversion and return flows, see REMARKS paragraph in Part 1 of this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

			INSTAN- TANEOUS 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 SODIUM PLUS POTAS- SIUM (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HC03) (MG/L)	CAR- BONATE (C03) (MG/L)	DIS- SOLVED SULFATE (S04) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	
OCT.														
11...	1030	1350		16	56	15	--	25	--	186	0	37	42	
18...	0700	27500		12	48	5.2	9.4	--	5.0	158	0	18	14	
NOV.														
20...	1330	2220		12	69	18	28	--	3.6	254	0	37	42	
DEC.														
04...	0830	1930		13	63	16	29	--	4.8	224	0	43	41	
06...	1130	1850		12	64	16	--	23	--	224	0	29	42	
JAN.														
23...	1255	5030		8.8	36	7.1	17	--	4.7	118	0	23	27	
FEB.														
05...	1145	2100		12	62	12	--	18	--	198	0	30	33	
19...	0800	1200		11	72	18	31	--	3.7	263	0	42	47	
MAR.														
15...	0800	960		8.3	76	19	39	--	4.7	282	0	52	53	
APR.														
02...	1130	1040		12	65	19	34	--	3.7	232	0	43	53	
MAY														
30...	0945	1500		9.6	52	19	31	--	3.8	206	0	40	53	
JUNE														
08...	0900	1400		10	56	20	32	--	3.5	213	0	40	53	
JULY														
22...	1330	1160		7.9	51	21	34	--	4.0	212	0	38	55	
AUG.														
21...	1235	705		10	53	17	28	--	3.9	204	0	34	46	
SEP.														
10...	1315	2300		9.4	48	18	30	--	4.3	183	0	32	49	
			DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTIT- UENTS) (MG/L)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)	VOL. NON- FILT- RABLE RESIDUE (MG/L)	HARD- NESS (CA+MG) (MG/L)	NON-CAR- BONATE HARD- NESS (MG/L)
OCT.														
11...		.2	--	.01	.03	.22	--	.37	289	143	49	200	50	
18...		.2	--	--	--	--	--	--	190	--	--	140	12	
NOV.														
20...		--	--	--	--	--	--	--	335	--	--	250	38	
DEC.														
04...		--	--	--	--	--	--	--	320	130	--	220	39	
06...		.0	.60	.01	.03	.00	--	.20	299	140	27	220	40	
JAN.														
23...		--	--	--	--	--	--	--	182	--	--	120	22	
FEB.														
05...		.2	.60	.01	.01	.45	--	.13	267	100	26	210	44	
19...		--	--	--	--	--	--	--	354	--	--	250	38	
MAR.														
15...		--	--	--	--	--	--	--	391	--	--	270	37	
APR.														
02...		--	.50	.01	.09	.21	--	.23	344	49	12	240	50	
MAY														
30...		--	--	--	--	--	--	--	310	70	--	210	39	
JUNE														
08...		--	--	--	--	--	--	--	320	--	--	220	47	
JULY														
22...		--	.13	.00	.07	.46	.53	.66	315	69	17	210	40	
AUG.														
21...		--	--	--	--	--	--	--	292	--	--	200	35	
SEP.														
10...		--	.35	.00	.06	.39	.45	.21	281	154	59	190	44	

COLORADO RIVER BASIN

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08162000 COLORADO RIVER AT WHARTON, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	BIO- CHEM- ICAL OXYGEN DEMAND (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)
OCT.											
11...	.8	514	7.2	24.5	20	45	9.2	110	2.8	4.0	--
18...	.3	305	7.4	20.0	--	--	--	--	--	--	--
NOV.											
20...	.8	592	8.1	17.5	--	--	--	--	--	--	--
DEC.											
04...	.8	566	7.7	18.0	--	--	--	--	--	--	--
06...	.7	552	6.8	15.0	30	60	9.5	93	.7	5.0	--
JAN.											
23...	.7	334	7.4	13.0	--	--	--	--	--	--	--
FEB.											
05...	.5	514	7.0	17.0	10	50	9.0	93	1.4	2.5	.0
19...	.8	632	7.8	16.0	--	--	--	--	--	--	--
MAR.											
15...	1.0	683	7.7	20.0	--	--	--	--	--	--	--
APR.											
02...	1.0	620	7.5	23.0	10	20	9.3	108	2.0	8.0	.0
MAY											
30...	.9	577	8.1	28.0	--	--	--	--	--	--	--
JUNE											
08...	.9	587	7.7	28.0	--	--	--	--	--	--	--
JULY											
22...	1.0	577	7.7	33.5	5	35	9.3	129	1.2	5.0	--
AUG.											
21...	.9	546	7.3	31.0	--	--	--	--	--	--	--
SEP.											
10...	.9	531	6.8	27.5	10	65	7.0	88	1.2	5.8	--

DATE	TIME	DIS- SOLVED ALUM- INUM (AL) (UG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	DIS- SOLVED CUBALT (CU) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)
OCT.								
11...	1030	10	3	--	0	0	0	2
FEB.								
05...	1145	20	2	--	0	0	0	2
APR.								
02...	1130	100	0	100	0	10	0	2
SEP.								
10...	1315	20	1	100	0	0	0	1

DATE	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	DIS- SOLVED LITHIUM (LI) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED MERCURY (HG) (UG/L)	DIS- SOLVED NICKEL (NI) (UG/L)	DIS- SOLVED STRON- TIUM (SR) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)
OCT.								
11...	0	0	0	0	.2	0	480	10
FEB.								
05...	10	0	10	0	.4	0	260	20
APR.								
02...	20	2	20	0	.3	0	30	70
SEP.								
10...	20	0	0	0	.0	1	380	0

08162000 COLORADO RIVER AT WHARTON, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TEMPERATURE (DEG C)	ALDRIN (UG/L)	ALDRIN IN BOTTOM DEPOSIT (UG/KG)	DDD (UG/L)	DDD IN BOTTOM DEPOSIT (UG/KG)	DDE (UG/L)	DDE IN BOTTOM DEPOSIT (UG/KG)	DDT (UG/L)	DDT IN BOTTOM DEPOSIT (UG/KG)
OCT. 11...	1030	730	24.5	.00	.0	.00	.0	.00	.0	.00	.0
FEB. 05...	1145	2100	17.0	.00	.0	.00	.0	.00	.0	.00	.0
APR. 02...	1130	1040	23.0	.00	.0	.00	.0	.00	.0	.00	.0
SEP. 10...	1315	2300	27.5	.00	.0	.00	.0	.00	.0	.00	.0

DATE	DI-ELDRIN (UG/L)	DI-ELDRIN IN BOTTOM DEPOSIT (UG/KG)	ENDRIN (UG/L)	ENDRIN IN BOTTOM DEPOSIT (UG/KG)	HEPTA-CHLOR (UG/L)	HEPTA-CHLOR IN BOTTOM DEPOSIT (UG/KG)	HEPTA-CHLOR EPOXIDE (UG/L)	HEPTA-CHLOR EPOXIDE IN BOTTOM DEPOSIT (UG/KG)	LINDANE (UG/L)	LINDANE IN BOTTOM DEPOSIT (UG/KG)	CHLOR-DANE (UG/L)
OCT. 11...	.00	.0	.00	.0	.00	.0	.00	.0	.00	.0	.0
FEB. 05...	.00	.0	.00	.0	.00	.0	.00	.0	.00	.0	.0
APR. 02...	.00	.0	.00	.0	.00	.0	.00	.0	.00	.0	.0
SEP. 10...	.00	.0	.00	.0	.00	.0	.00	.0	.00	.0	.0

DATE	CHLOR-DANE IN BOTTOM DEPOSIT (UG/KG)	PCB (UG/L)	PCB IN BOTTOM DEPOSIT (UG/KG)	DI-AZINON (UG/L)	MALATHION (UG/L)	METHYL PARATHION (UG/L)	PARATHION (UG/L)	2,4-D (UG/L)	SILVEX (UG/L)	2,4,5-T (UG/L)
OCT. 11...	0	.0	0	.01	.00	.00	.00	.00	.00	.01
FEB. 05...	0	.0	0	.00	.00	.00	.00	.00	.00	.00
APR. 02...	0	.0	0	.00	.00	.00	.00	.02	.00	.00
SEP. 10...	0	.0	0	.00	.00	.00	.00	.00	.00	.00

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

MONTH	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCTANCE (MICRO-MHOS)	DISSOLVED SOLIDS (MG/L)	DISSOLVED SOLIDS (TONS)	DISSOLVED CHLORIDE (MG/L)	DISSOLVED CHLORIDE (TONS)	DISSOLVED SULFATE (MG/L)	DISSOLVED SULFATE (TONS)	HARDNESS (CA+MG) (MG/L)
OCT. 1973.....	285697	361	210	162000	26	20100	24	18500	140
NOV. 1973.....	80640	528	290	63100	43	9360	36	7840	200
DEC. 1973.....	79090	556	310	66200	46	9820	38	8110	210
JAN. 1974.....	214570	354	200	116000	25	14500	23	13300	140
FEB. 1974.....	47082	564	310	39400	47	5970	39	4960	210
MAR. 1974.....	42163	624	340	38700	53	6030	43	4900	240
APR. 1974.....	39776	587	320	34400	49	5260	40	4300	220
MAY 1974.....	84767	491	270	61800	39	8930	33	7550	190
JUNE 1974.....	50361	532	300	40800	43	5850	36	4900	200
JULY 1974.....	36660	574	320	31700	48	4750	39	3860	220
AUG. 1974.....	53504	442	250	36100	34	4910	30	4330	170
SEPT 1974.....	239250	368	210	136000	27	17400	24	15500	140
TOTAL	1253560	**	**	826000	**	113000	**	98000	**
WTD.AVG.	3434	433	240	**	33	**	29	**	170

COLORADO RIVER BASIN

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08162000 COLORADO RIVER AT WHARTON, TEX.--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	583	490	529	611	379	594	601	608	569	564	553	312
2	480	471	538	573	411	590	572	433	566	559	572	495
3	443	500	555	565	394	674	606	601	482	565	568	500
4	466	507	559	562	432	667	584	599	546	570	589	367
5	478	516	589	562	491	667	606	605	576	564	496	424
6	487	514	566	565	535	651	584	625	584	572	545	467
7	491	415	508	560	547	644	631	617	580	578	550	527
8	384	467	571	552	582	648	595	617	587	575	553	537
9	436	519	596	558	624	596	611	619	583	586	550	567
10	487	524	590	558	635	677	659	420	567	582	300	554
11	503	567	569	566	624	685	606	485	581	575	291	553
12	329	569	567	570	600	687	670	306	422	577	305	502
13	267	573	566	481	686	671	585	434	404	580	465	404
14	286	570	564	473	650	691	567	425	481	582	508	290
15	281	569	564	436	658	683	573	423	508	563	532	240
16	302	561	569	518	623	681	565	516	525	583	472	254
17	305	594	564	548	621	685	565	567	556	581	486	312
18	305	594	565	550	635	685	571	570	568	578	508	350
19	329	611	560	540	624	698	565	535	565	582	520	376
20	354	600	560	353	630	685	549	551	574	580	530	416
21	458	586	558	215	646	677	574	560	571	583	544	441
22	489	575	565	278	626	671	577	566	569	585	560	396
23	493	550	563	359	654	646	589	556	566	580	565	481
24	485	544	544	417	633	608	584	562	562	580	570	502
25	509	535	533	372	666	579	594	570	575	579	574	510
26	546	566	419	248	670	560	589	583	567	577	549	499
27	532	584	519	254	676	559	595	601	566	574	550	499
28	524	465	550	249	693	566	587	588	565	577	551	521
29	525	418	574	280	---	595	549	592	571	567	537	510
30	545	464	595	316	---	595	610	582	577	570	515	511
31	539	---	608	336	---	603	---	573	---	517	309	---
MONTH	440	534	557	452	594	643	590	551	550	574	507	444

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	25.0	19.0	20.0	10.0	16.0	17.0	22.0	24.0	28.0	28.0	30.0	27.0
2	25.0	20.0	20.5	10.0	18.0	---	23.0	23.0	29.0	28.0	30.0	27.0
3	26.0	20.0	21.0	---	18.0	22.0	23.5	28.0	27.0	27.0	30.0	26.0
4	27.0	24.5	16.0	7.0	15.0	20.0	20.0	27.0	29.0	29.0	31.0	24.0
5	26.0	23.0	16.0	7.0	15.0	21.0	18.0	28.0	30.0	29.0	29.0	23.0
6	26.0	20.0	15.0	9.0	17.0	22.0	18.0	24.0	28.0	29.0	27.0	23.0
7	26.0	20.0	14.0	9.0	13.0	25.0	20.0	25.0	27.0	29.0	---	24.0
8	25.0	22.0	13.0	11.0	12.0	23.0	19.0	25.0	28.0	29.0	28.0	24.0
9	25.0	22.0	13.0	14.0	12.0	23.0	19.0	26.0	28.0	29.0	27.0	---
10	25.0	20.0	12.0	12.0	12.0	25.0	22.0	23.0	28.0	29.0	---	24.0
11	25.0	20.0	12.0	10.0	11.0	23.0	24.0	23.0	26.0	29.0	28.0	25.0
12	25.0	19.0	14.0	9.0	---	24.0	21.0	23.0	26.0	28.0	28.0	25.0
13	25.0	20.0	16.0	9.0	15.0	23.0	23.0	24.0	27.0	30.0	28.0	25.0
14	24.0	20.0	15.0	9.0	17.0	20.0	22.0	24.0	28.0	30.0	29.0	23.0
15	22.0	20.0	15.0	10.0	20.0	20.0	20.0	26.0	28.0	29.0	29.0	23.0
16	22.0	20.0	13.0	12.0	15.0	20.0	18.0	28.0	29.0	28.0	29.0	23.0
17	20.0	20.0	12.0	13.0	17.0	20.0	18.0	28.0	29.0	28.0	29.0	27.0
18	20.0	22.0	14.0	---	18.0	21.0	19.0	28.0	29.0	28.0	29.0	25.0
19	19.0	21.5	---	17.0	16.0	20.0	19.0	28.0	29.0	28.0	---	25.0
20	20.0	---	9.0	16.0	---	21.0	19.0	26.0	29.0	29.0	---	27.0
21	20.0	19.5	9.0	15.0	19.0	19.0	24.0	25.0	29.0	30.0	30.0	27.0
22	20.0	21.0	10.0	17.0	15.0	17.0	23.0	26.0	30.0	30.0	29.0	25.0
23	20.0	---	11.0	15.0	14.0	19.0	23.0	27.0	---	32.0	29.0	24.0
24	20.0	23.5	13.0	14.0	15.0	15.0	24.0	31.0	29.0	---	---	---
25	20.0	21.0	12.0	12.0	11.0	14.0	23.0	---	29.0	29.0	28.0	23.0
26	20.0	23.0	12.0	10.0	11.0	---	25.0	28.0	25.0	---	27.0	27.0
27	20.0	---	12.0	11.0	14.0	14.0	24.0	29.0	---	29.0	---	21.0
28	19.0	20.0	12.0	12.0	19.0	18.0	26.0	28.0	29.0	31.0	28.0	22.0
29	20.0	16.5	16.0	---	---	17.0	24.0	28.0	---	30.0	27.0	22.0
30	20.0	16.0	11.0	13.0	---	17.0	24.0	29.0	30.0	30.0	27.0	21.0
31	19.0	---	15.0	14.0	---	18.0	---	28.0	---	30.0	27.0	---
MONTH	22.5	20.5	14.0	11.5	15.0	20.0	21.5	26.5	28.5	29.0	28.5	24.5

MISCELLANEOUS ANALYSES OF STREAMS IN THE COLORADO RIVER BASIN IN TEXAS

WATER QUALITY DATA, OCTOBER 1973 TO SEPTEMBER 1974

08123000 LAKE COLORADO CITY NEAR COLORADO CITY, TEX. (Lat 32°20'41", long 100°55'10")

DATE	TIME	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)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)
NOV., 1973											
08...	0830	3.4	76	45	170	18	152	0	360	190	.9
DATE	TIME	TOTAL NITRATE (N) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	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)	COLOR (PLAT- INUM- COBALT UNITS)	DIS- SOLVED BORON (B) (UG/L)
NOV., 1973											
08...		.10	938	370	250	3.9	1510	7.6	19.0	0	300

08123600 CHAMPION CREEK RESERVOIR NEAR COLORADO CITY, TEX. (Lat 32°16'53", long 100°51'30")

DATE	TIME	RESER- VOIR STORAGE (AC-FT)	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)	DIS- SOLVED SULFATE (SO4) (MG/L)
MAR., 1974										
06...	1300	10120	1.8	89	37	60	11	172	0	260
DATE	TIME	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	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)	DIS- SOLVED BORON (B) (UG/L)
MAR., 1974										
06...		71	614	370	230	1.4	973	8.0	14.5	160

08123950 E. V. SPENCE RESERVOIR NEAR ROBERT LEE, TEX. (Lat 31°52'46", long 100°31'01")

DATE	TIME	RESER- VOIR STORAGE (AC-FT)	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)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
NOV., 1973											
08...	1245	130200	3.6	92	41	280	9.8	140	0	250	450
JAN., 1974											
17...	1030	123200	3.1	98	39	290	13	156	0	260	470
MAR.											
07...	0830	118600	3.1	100	39	300	12	165	0	260	470
MAY											
30...	0930	108800	3.6	100	46	310	10	154	0	290	520
JULY											
11...	1310	101700	4.8	100	44	340	10	154	0	250	580
DATE	TIME	TOTAL NITRATE (N) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	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)	COLOR (PLAT- INUM- COBALT UNITS)	DIS- SOLVED BORON (B) (UG/L)
NOV., 1973											
08...	.4	.10	1200	400	280	6.1	2100	7.5	22.0	0	140
JAN., 1974											
17...	--	--	1000	410	280	6.3	2180	7.9	11.0	--	140
MAR.											
07...	--	--	1270	410	280	6.4	2220	8.1	15.0	--	150
MAY											
30...	--	--	1360	440	310	6.4	2340	7.7	25.0	--	--
JULY											
11...	--	--	1410	430	300	7.1	2410	7.4	27.5	--	--

MISCELLANEOUS ANALYSES OF STREAMS IN THE COLORADO RIVER BASIN IN TEXAS--Continued

WATER QUALITY DATA, OCTOBER 1973 TO SEPTEMBER 1974

08125500 OAK CREEK RESERVOIR NEAR BLACKWELL, TEX. (Lat 32°03'25", long 100°17'37")

DATE	TIME	RESER- VOIR STORAGE (AC-FT)	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)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
OCT.. 1973											
22...	0900	23280	2.2	56	32	58	7.3	112	0	170	98
MAY . 1974											
09...	1750	19690	.8	65	36	64	8.1	114	0	210	110

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	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)	COLOR (PLAT- INUM- COBALT UNITS)	DIS- SOLVED BORON (B) (UG/L)
OCT.. 1973											
22...	.3	.00	482	270	180	1.5	826	7.8	20.0	0	140
MAY . 1974											
09...	--	--	550	310	220	1.6	925	8.0	25.0	--	--

08131200 TWIN BUTTES RESERVOIR NEAR SAN ANGELO, TEX. (Lat 31°22'59", long 100°32'11")

DATE	TIME	RESER- VOIR STORAGE (AC-FT)	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)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
OCT.. 1973											
01...	1010	69050	5.7	42	19	55	6.1	160	0	45	94
MAR.. 1974											
12...	0900	75120	7.4	48	21	59	6.5	195	0	49	100
JUNE											
03...	1510	66100	7.9	46	21	66	7.4	180	2	50	110
JULY											
12...	1045	57270	8.7	43	22	67	7.2	179	0	50	120

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	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)	COLOR (PLAT- INUM- COBALT UNITS)	DIS- SOLVED BORON (B) (UG/L)
OCT.. 1973											
01...	.3	2.0	355	180	52	1.8	644	7.9	23.0	0	140
MAR.. 1974											
12...	--	--	387	210	46	1.8	712	7.8	15.5	--	--
JUNE											
03...	--	--	399	200	50	2.0	735	8.4	24.5	--	--
JULY											
12...	--	--	406	200	51	2.1	751	7.9	24.5	--	--

08132000 LAKE NASWORTHY NEAR SAN ANGELO, TEX. (Lat 31°23'19", long 100°28'41")

DATE	TIME	RESER- VOIR STORAGE (AC-FT)	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)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
OCT.. 1973											
01...	1050	10680	.5	54	30	140	6.6	166	0	85	240
JUNE. 1974											
03...	1610	--	13	61	33	160	8.6	196	0	96	270

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	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)	COLOR (PLAT- INUM- COBALT UNITS)	DIS- SOLVED BORON (B) (UG/L)
OCT.. 1973											
01...	.3	.10	640	260	120	3.7	1210	7.6	23.5	0	260
JUNE. 1974											
03...	--	--	738	290	130	4.1	1370	7.7	24.5	--	--

COLORADO RIVER BASIN

MISCELLANEOUS ANALYSES OF STREAMS IN THE COLORADO RIVER BASIN IN TEXAS--Continued

WATER QUALITY DATA, OCTOBER 1973 TO SEPTEMBER 1974

08134500 SAN ANGELO LAKE AT SAN ANGELO, TEX. (Lat 31°29'04", long 100°28'53")

DATE	TIME	RESER- VOIR STORAGE (AC-FT)	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 (HC03) (MG/L)	CAR- BONATE (C03) (MG/L)
JULY, 1974 18...	0950	5140	7.3	40	18	47	14	169	0

DATE	TIME	DIS- SOLVED SULFATE (S04) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	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	TEMPER- ATURE (DEG C)
JULY, 1974 18...	34	85	329	170	35	1.6	621	7.5	25.0	

08141000 HORDS CREEK LAKE NEAR VALERA, TEX. (Lat 31°49'58", long 99°33'38")

DATE	TIME	RESER- VOIR STORAGE (AC-FT)	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 (HC03) (MG/L)	CAR- BONATE (C03) (MG/L)	DIS- SOLVED SULFATE (S04) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
OCT., 1973 18...	1520	7860	6.2	52	20	69	5.3	135	0	36	160

DATE	TIME	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	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	TEMPER- ATURE (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	DIS- SOLVED BORON (B) (UG/L)
OCT., 1973 18...	.2 .30	414	210	100	2.1	793	7.6	22.0	0	80		

08143000 LAKE BROWNWOOD NEAR BROWNWOOD, TEX. (Lat 31°50'13", long 99°00'13")

DATE	TIME	RESER- VOIR STORAGE (AC-FT)	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 (HC03) (MG/L)	CAR- BONATE (C03) (MG/L)
JUNE, 1974 11...	1110	96210	7.0	56	12	50	6.1	145	0

DATE	TIME	DIS- SOLVED SULFATE (S04) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	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	TEMPER- ATURE (DEG C)
JUNE, 1974 11...	44	98	345	190	70	1.6	651	7.9	25.5	

COLORADO RIVER BASIN

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MISCELLANEOUS ANALYSES OF STREAMS IN THE COLORADO RIVER BASIN IN TEXAS--Continued

WATER QUALITY DATA, OCTOBER 1973 TO SEPTEMBER 1974

08144900 BRADY CREEK RESERVOIR NEAR BRADY, TEX. (Lat 31°08'17", long 99°23'07")

DATE	RESER- VOIR STORAGE (AC-FT)	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)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)
OCT., 1973 01...	23670	9.1	46	14	60	8.8	144	0	46	110	.1

DATE	TOTAL NITRATE (N) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITU- ENTS) (MG/L)	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	TEMPER- ATURE (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	DIS- SOLVED BORON (B) (UG/L)
OCT., 1973 01...	.00	364	170	54	2.0	677	7.4	20.0	0	160

08152000 SANDY CREEK NEAR KINGSLAND, TEX. (Lat 30°33'30", long 98°28'19")

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	SUS- PENDE SEDI- MENT (MG/L)	SUS- PENDE SEDI- MENT (T/DAY)	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM	
OCT. 29...	1515	20	25.0	8	.43	--	--	
AUG. 07...	1015	102	25.0	24	6.6	--	--	
30...	1300	3760	26.5	2820	28600	15	24	
DATE		SUS. SED. SIEVE DIAM. % FINER THAN .250 MM	SUS. SED. SIEVE DIAM. % FINER THAN .500 MM	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM
OCT. 29...	--	--	--	--	--	--	--	--
AUG. 07...	--	--	--	--	--	--	--	--
30...	41	71	5	7	8	10	13	

TRES PALACIOS RIVER BASIN

08162600 TRES PALACIOS RIVER NEAR MIDFIELD, TEX.
(FORMERLY TRES PALACIOS CREEK NEAR MIDFIELD, TEX.)

LOCATION.--Lat 28°55'40", long 96°10'15", Matagorda County, at bridge on Farm Road 456, 1.0 mile (1.6 km) downstream from Juanita Creek, and 2.4 miles (3.9 km) southeast of Midfield.

DRAINAGE AREA.--145 mi² (376 km²).

PERIOD OF RECORD.--Chemical and biochemical analyses: October 1968 to September 1974.
Pesticide analyses: October 1968 to September 1974.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	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 (HC03) (MG/L)	CAR- BONATE (C03) (MG/L)	DIS- SOLVED SULFATE (S04) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)
OCT.												
25...	1255	45	20	52	15	58	4.5	208	0	16	97	.2
NOV.												
28...	1400	13	16	91	26	130	4.1	336	0	29	220	.4
JAN.												
04...	1420	56	9.0	32	8.4	38	5.5	102	0	27	61	.3
FEB.												
06...	1315	21	18	86	25	120	4.9	313	0	28	200	--
MAR.												
13...	1305	190	6.6	31	8.0	32	4.5	110	0	17	45	--
13...	1645	510	6.8	18	4.9	24	3.2	79	0	16	29	--
APR.												
17...	1400	46	13	62	18	62	4.9	223	0	39	100	--
MAY												
22...	1345	34	17	75	21	93	3.9	275	0	32	150	--
JUNE												
26...	1335	56	21	57	19	73	2.7	278	0	16	100	--
SEP.												
06...	1320	53	33	40	13	50	8.8	194	0	13	71	--

DATE	BROMIDE (BR) (MG/L)	IODIDE (I) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)	VOL. NON- FILT- RABLE RESIDUE (MG/L)	HARD- NESS (CA+MG) (MG/L)
OCT.												
25...	--	--	.80	.02	.01	.75	--	.34	368	--	--	190
NOV.												
23...	--	--	.10	.00	.02	.20	--	.24	676	--	--	330
JAN.												
04...	.2	.02	1.6	.08	.35	1.1	--	.80	232	356	--	120
FEB.												
06...	--	--	.88	.00	.25	.51	--	.31	635	--	--	320
MAR.												
13...	--	--	1.1	.02	.69	1.3	2.0	.80	198	814	94	110
13...	.0	.01	2.7	.09	.25	2.6	2.8	.35	141	2290	252	65
APR.												
17...	.5	.16	.44	.06	.24	.86	1.1	.24	410	89	39	230
MAY												
22...	--	--	.45	.10	.24	1.6	1.8	.17	527	95	6	270
JUNE												
26...	--	--	.04	.00	.10	.76	.86	.12	426	80	28	220
SEP.												
06...	.2	.02	.19	.00	.07	1.0	1.1	.36	325	100	--	150

DATE	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)	COLOR (PLAT- INUM- COBALT UNITS)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	BIO- CHEM- ICAL OXYGEN DEMAND (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT.											
25...	20	1.8	662	7.4	22.5	--	70	7.4	84	1.4	6.0
NOV.											
28...	58	3.0	1220	7.5	17.5	--	15	9.2	96	1.0	9.0
JAN.											
04...	31	1.5	474	6.6	5.5	--	170	11.4	90	4.0	--
FEB.											
06...	61	2.9	1180	6.8	20.5	--	75	8.1	89	1.7	5.0
MAR.											
13...	20	1.3	374	7.2	19.5	--	225	7.8	84	9.6	--
13...	0	1.3	284	7.3	17.5	--	700	8.5	89	8.1	--
APR.											
17...	46	1.8	767	7.7	21.5	20	70	8.0	90	3.3	6.5
MAY											
22...	48	2.4	995	7.4	27.0	10	50	7.2	89	3.2	7.0
JUNE											
26...	0	2.1	768	7.8	25.5	50	80	7.4	89	2.2	8.7
SEP.											
06...	0	1.8	530	7.7	22.5	--	50	6.8	77	1.8	13

TRES PALACIOS RIVER BASIN

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08162600 TRES PALACIOS RIVER NEAR MIDFIELD, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	DIS-SOLVED ALUMINUM (AL) (UG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	DIS-SOLVED BORON (B) (UG/L)	DIS-SOLVED CADMIUM (CD) (UG/L)	DIS-SOLVED CHROMIUM (CR) (UG/L)	DIS-SOLVED COBALT (CO) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)
JAN. 04...	1420	160	3	80	0	0	0	7
MAR. 13...	1645	20	2	50	0	0	0	6
APR. 17...	1400	10	3	100	0	30	0	4
SEP. 06...	1320	60	7	120	0	0	0	2

DATE	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	DIS-SOLVED LITHIUM (LI) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)	DIS-SOLVED MERCURY (HG) (UG/L)	DIS-SOLVED NICKEL (NI) (UG/L)	DIS-SOLVED STRONTIUM (SR) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)
JAN. 04...	90	2	10	30	.0	4	230	20
MAR. 13...	80	1	10	0	.0	2	140	30
APR. 17...	10	0	10	0	.1	0	410	0
SEP. 06...	150	0	0	0	.2	0	290	10

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TEMPERATURE (DEG C)	ALDRIN (UG/L)	ALDRIN IN BOTTOM DEPOSITS (UG/KG)	DDD (UG/L)	DDD IN BOTTOM DEPOSITS (UG/KG)	DDE (UG/L)	DDE IN BOTTOM DEPOSITS (UG/KG)	DDT (UG/L)	DDT IN BOTTOM DEPOSITS (UG/KG)
OCT. 25...	1255	45	22.5	--	.0	--	.7	--	4.1	--	1.3
JAN. 04...	1420	56	5.5	.00	.0	.00	1.0	.00	3.0	.00	2.8
MAR. 13...	1645	510	17.5	.00	--	.00	--	.00	--	.00	--
APR. 17...	1400	46	21.5	.00	.0	.00	.0	.00	1.3	.00	1.4
SEP. 06...	1320	53	22.5	.00	.0	.01	.0	.00	.8	.00	.0

DATE	DI-ELDRIN (UG/L)	DI-ELDRIN IN BOTTOM DEPOSITS (UG/KG)	ENDRIN (UG/L)	ENDRIN IN BOTTOM DEPOSITS (UG/KG)	HEPTA-CHLOR (UG/L)	HEPTA-CHLOR IN BOTTOM DEPOSITS (UG/KG)	HEPTA-CHLOR EPOXIDE (UG/L)	HEPTA-CHLOR EPOXIDE IN BOTTOM DEPOSITS (UG/KG)	LINDANE (UG/L)	LINDANE IN BOTTOM DEPOSITS (UG/KG)	CHLOR-DANE (UG/L)
OCT. 25...	--	.0	--	.0	--	.0	--	.0	--	.0	--
JAN. 04...	.00	1.7	.00	.0	.00	.0	.00	.0	.00	.0	.0
MAR. 13...	.00	--	.00	--	.00	--	.00	--	.00	--	.0
APR. 17...	.01	.0	.00	.0	.00	.0	.00	.0	.00	.0	.0
SEP. 06...	.03	.4	.00	.0	.00	.0	.00	.0	.00	.0	.0

DATE	CHLOR-DANE IN BOTTOM DEPOSITS (UG/KG)	PCB (UG/L)	PCB IN BOTTOM DEPOSITS (UG/KG)	DI-AZINON (UG/L)	MALATHION (UG/L)	METHYL PARATHION (UG/L)	PARATHION (UG/L)	2,4-D (UG/L)	SILVEX (UG/L)	2,4,5-T (UG/L)
OCT. 25...	0	--	0	--	--	--	--	--	--	--
JAN. 04...	0	.0	0	.01	.00	.00	.00	.00	.00	.00
MAR. 13...	--	.0	--	.01	.00	.00	.00	.36	.00	.00
APR. 17...	0	.0	0	.05	.00	.00	.00	.00	.00	.00
SEP. 06...	0	.0	0	.01	.00	.00	.00	.00	.01	.00

08162650 CASHS CREEK NEAR BLESSING, TEX.

LOCATION.--Lat 28°48'38", long 96°11'51", Matagorda County, at bridge on county road, 2.0 miles (3.2 km) upstream from Farm Road 521, and 4.4 miles (7.1 km) southeast of Blessing.

DRAINAGE AREA.--14.8 mi² (38.3 km²).

PERIOD OF RECORD.--Chemical and biochemical analyses: October 1968 to September 1974.
Pesticide analyses: October 1968 to September 1974.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NESIUM (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)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)
OCT.												
25...	1120	3.3	17	36	14	54	3.5	190	0	15	72	.2
NOV.												
28...	1145	.61	17	74	34	140	3.8	392	0	41	200	.6
JAN.												
04...	1135	4.3	6.0	25	7.8	30	5.5	82	0	19	52	.2
FEB.												
06...	1130	1.6	15	60	24	110	4.8	284	0	32	150	--
MAR.												
13...	1130	9.6	10	38	14	67	5.0	147	0	34	110	--
APR.												
17...	1200	5.4	13	76	28	110	6.3	290	0	45	190	--
MAY												
02...	1625	28	--	31	10	40	5.3	121	0	30	58	--
22...	1305	17	17	38	12	47	4.3	195	0	14	58	--
JUNE												
26...	1125	12	21	54	19	68	3.3	252	0	19	100	--
AUG.												
06...	1245	47	26	44	16	64	8.0	203	0	14	93	--
SEP.												
05...	1610	8.5	28	48	16	62	6.8	232	0	8.9	90	--

DATE	BROMIDE (BR) (MG/L)	IODIDE (I) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITU- ENTS) (MG/L)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)	VOL. FILT- RABLE RESIDUE (MG/L)	HARD- NESS (CA+MG) (MG/L)
OCT.												
25...	--	--	.10	.00	.00	.38	--	.17	305	--	--	150
NOV.												
24...	--	--	.05	.00	.00	.29	--	.34	708	--	--	320
JAN.												
04...	.2	.01	.60	.00	.64	.81	--	.53	187	98	--	95
FEB.												
06...	--	--	.37	.00	.16	.48	--	.30	535	--	--	250
MAR.												
13...	--	--	1.8	.01	.55	1.1	1.6	.47	350	498	70	150
APR.												
17...	.4	.18	1.1	.08	.47	.93	1.4	.15	613	53	0	310
MAY												
02...	.3	.02	--	.08	2.7	3.4	6.1	.65	--	130	19	120
22...	--	--	.15	.01	.06	1.7	1.8	.22	286	100	5	140
JUNE												
26...	--	--	.07	.01	.13	1.1	1.2	.13	409	44	4	210
AUG.												
04...	--	--	.19	.07	.72	1.5	2.2	.20	365	118	--	180
SEP.												
05...	.5	.05	.09	.00	.07	.93	1.0	.12	375	0	--	190

DATE	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)	COLOR (PLAT- INUM- COBALT UNITS)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	BIO- CHEM- ICAL OXYGEN DEMAND (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT.											
25...	0	1.9	551	7.2	22.5	--	55	6.3	72	1.6	10
NOV.											
28...	4	3.5	1270	7.4	18.0	--	20	6.2	65	1.5	15
JAN.											
04...	27	1.0	355	6.3	5.0	--	60	11.1	87	6.3	--
FEB.											
07...	16	3.0	966	6.6	24.0	--	70	7.4	87	1.6	9.0
MAR.											
13...	32	2.4	678	7.2	19.5	--	260	7.3	78	9.6	--
APR.											
17...	68	2.7	1130	7.6	20.0	25	25	6.9	75	4.5	5.0
MAY											
02...	39	1.6	478	7.2	26.0	40	65	6.5	79	7.8	19
22...	0	1.7	524	7.4	27.0	30	40	5.8	72	3.3	20
JUNE											
26...	6	2.0	738	7.6	24.0	20	35	--	--	26	10
AUG.											
06...	9	2.1	649	7.5	24.5	--	25	5.9	70	6.1	16
SEP.											
05...	0	2.0	635	7.6	23.5	--	15	6.4	74	1.5	15

08162650 CASHS CREEK NEAR BLESSING, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

		DIS-SOLVED ALUMINUM (AL) (UG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	DIS-SOLVED BORON (B) (UG/L)	DIS-SOLVED CADMIUM (CD) (UG/L)	DIS-SOLVED CHROMIUM (CR) (UG/L)	DIS-SOLVED COBALT (CO) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)
DATE	TIME							
JAN. 04...	1135	230	4	60	0	0	0	3
APR. 17...	1200	0	4	130	0	30	0	4
MAY 02...	1625	130	1	90	0	40	0	10
SEP. 05...	1610	10	6	130	0	0	0	1

		DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	DIS-SOLVED LITHIUM (LI) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)	DIS-SOLVED MERCURY (HG) (UG/L)	DIS-SOLVED NICKEL (NI) (UG/L)	DIS-SOLVED STRONTIUM (SR) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)
DATE	TIME								
JAN. 04...	230	2	0	13	.0	2	130	20	
APR. 17...	10	0	0	20	.0	0	510	90	
MAY 02...	80	1	0	30	.0	6	290	70	
SEP. 05...	130	0	0	0	.1	<1	330	30	

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TEMPERATURE (DEG C)	ALDRIN (UG/L)	ALDRIN IN BOTTOM DEPOSIT (UG/KG)	DDD (UG/L)	DDD IN BOTTOM DEPOSIT (UG/KG)	DDE (UG/L)	DDE IN BOTTOM DEPOSIT (UG/KG)	DDT (UG/L)	DDT IN BOTTOM DEPOSIT (UG/KG)
OCT. 25...	1120	3.3	22.5	--	.0	--	.0	--	.0	--	.0
JAN. 04...	1135	4.3	5.0	.00	.0	.00	.0	.00	.0	.00	.0
APR. 17...	1200	5.4	20.0	.00	--	.00	--	.00	--	.00	--
MAY 02...	1625	28	26.0	.00	--	.00	--	.00	--	.00	--
SEP. 05...	1610	8.5	23.5	.00	.0	.01	.0	.00	.0	.00	.0

DATE	DI-ELDRIN (UG/L)	DI-ELDRIN IN BOTTOM DEPOSIT (UG/KG)	ENDRIN (UG/L)	ENDRIN IN BOTTOM DEPOSIT (UG/KG)	HEPTA-CHLOR (UG/L)	HEPTA-CHLOR IN BOTTOM DEPOSIT (UG/KG)	HEPTA-CHLOR EPOXIDE (UG/L)	HEPTA-CHLOR EPOXIDE IN BOTTOM DEPOSIT (UG/KG)	LINDANE (UG/L)	LINDANE IN BOTTOM DEPOSIT (UG/KG)	CHLOR-DANE (UG/L)
OCT. 25...	--	.0	--	.0	--	.0	--	.0	--	.0	--
JAN. 04...	.01	1.1	.00	.0	.00	.0	.00	.0	.00	.0	.0
APR. 17...	.04	--	.00	--	.00	--	.00	--	.00	--	.0
MAY 02...	.02	--	.00	--	.00	--	.00	--	.00	--	.0
SEP. 05...	.05	.0	.00	.0	.00	.0	.00	.0	.00	.0	.0

DATE	CHLOR-DANE IN BOTTOM DEPOSIT (UG/KG)	PCB (UG/L)	PCB IN BOTTOM DEPOSIT (UG/KG)	DI-AZINON (UG/L)	MALATHION (UG/L)	METHYL PARATHION (UG/L)	PARATHION (UG/L)	2,4-D (UG/L)	SILVEX (UG/L)	2,4,5-T (UG/L)
OCT. 25...	0	--	0	--	--	--	--	--	--	--
JAN. 04...	0	.0	30	.01	.00	.00	.00	.00	.00	.00
APR. 17...	--	.0	--	.00	.00	.00	.00	.03	.00	.00
MAY 02...	--	.0	0	.00	.00	.00	.00	.08	.00	.00
SEP. 05...	0	.0	0	.00	.00	.00	.00	.00	.00	.00

08162700 EAST CARANCAHUA CREEK NEAR BLESSING, TEX.

LOCATION.--Lat 28°51'48", long 96°17'05", Matagorda County, at bridge on Farm Road 616, 100 ft (30 m) downstream from Missouri Pacific Railroad bridge, and 4.2 miles (6.8 km) west of Blessing.

DRAINAGE AREA.--81.2 mi² (210.3 km²).

PERIOD OF RECORD.--Chemical and biochemical analyses: October 1968 to September 1974.
Pesticide analyses: October 1968 to September 1974.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO ₂) (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 (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)
OCT. 25...	1500	18	17	36	13	37	4.3	160	0	15	60	.2
NOV. 28...	1510	4.6	15	70	33	100	3.7	300	0	43	180	.6
JAN. 04...	1530	11	8.1	42	19	63	5.2	160	0	35	110	.3
FEB. 06...	1430	9.3	13	63	28	86	5.0	266	0	41	150	--
MAR. 13...	1745	99	7.5	23	7.3	27	3.4	80	0	14	42	--
APR. 17...	1520	37	17	56	21	93	5.2	266	0	36	110	--
MAY 22...	1125	16	17	52	22	90	3.6	256	0	32	120	--
JUNE 26...	1545	14	19	52	23	110	2.8	300	0	21	140	--
AUG. 06...	1505	129	25	31	10	45	7.9	150	0	12	65	--
SEP. 05...	1445	100	24	26	7.8	27	8.0	118	0	10	41	--

DATE	BROMIDE (BR) (MG/L)	IODIDE (I) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITU- ENTS) (MG/L)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)	VOL. NON- FILT- RABLE RESIDUE (MG/L)	HARD- NESS (CA+MG) (MG/L)
OCT. 25...	--	--	.09	.00	.00	.52	--	.14	262	--	--	140
NOV. 28...	--	--	.06	.00	.02	.42	--	.05	597	--	--	310
JAN. 04...	.4	.06	.20	.00	.12	.75	--	.13	363	72	--	180
FEB. 06...	--	--	.13	.00	.14	.49	--	.12	516	--	--	270
MAR. 13...	--	--	.64	.02	.92	1.9	2.8	.33	164	1190	162	88
APR. 17...	.7	.05	.94	.06	.16	1.0	1.2	.13	471	63	8	230
MAY 22...	--	--	.08	.02	.65	5.8	6.4	.21	463	75	8	220
JUNE 26...	--	--	.02	.01	.11	.65	.76	.10	516	34	3	220
AUG. 06...	--	--	.07	.01	.17	1.2	1.4	.28	270	164	--	120
SEP. 05...	.1	.00	.08	.00	.08	1.0	1.1	.33	203	190	--	97

DATE	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)	COLOR (PLAT- INUM- COBALT UNITS)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	BIO- CHEM- ICAL OXYGEN DEMAND (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT. 25...	12	1.3	473	7.4	23.5	--	60	7.5	87	1.7	--
NOV. 28...	64	2.6	1080	7.6	18.5	--	30	9.0	96	1.3	14
JAN. 04...	52	2.0	673	6.9	6.0	--	60	12.1	97	3.7	--
FEB. 06...	54	2.3	966	7.2	20.0	--	45	8.4	91	1.6	13
MAR. 13...	22	1.3	316	7.1	20.0	--	380	8.3	90	7.2	--
APR. 17...	9	2.7	863	8.0	22.0	30	25	8.4	95	4.7	5.5
MAY 22...	10	2.6	870	7.7	27.0	20	40	6.6	81	2.3	14
JUNE 26...	0	3.2	925	8.0	28.0	15	30	9.6	122	2.0	6.4
AUG. 06...	0	1.8	466	7.5	26.0	--	70	6.1	74	5.1	17
SEP. 05...	1	1.2	323	7.6	23.0	--	85	6.6	76	3.0	13

EAST CARANCAHUA CREEK BASIN

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08162700 EAST CARANCAHUA CREEK NEAR BLESSING, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

		DIS- SOLVED ALUM- INUM (AL) (UG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	DIS- SOLVED COBALT (CO) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)
DATE	TIME							
JAN. 04...	1530	70	4	70	0	0	0	5
APR. 17...	1520	0	3	110	0	20	0	4
SEP. 05...	1445	20	6	100	0	0	0	3

		DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	DIS- SOLVED LITHIUM (LI) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED MERCURY (HG) (UG/L)	DIS- SOLVED NICKEL (NI) (UG/L)	DIS- SOLVED STRON- TIUM (SR) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)
DATE	TIME								
JAN. 04...	60	1	0	50	.0	3	390	10	
APR. 17...	10	0	10	0	.1	0	530	30	
SEP. 05...	130	1	0	0	.2	2	210	30	

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	ALDRIN (UG/L)	ALDRIN IN BOTTOM DE- POSITS (UG/KG)	DDD (UG/L)	DDD IN BOTTOM DE- POSITS (UG/KG)	DDE (UG/L)	DDE IN BOTTOM DE- POSITS (UG/KG)	DDT (UG/L)	DDT IN BOTTOM DE- POSITS (UG/KG)
OCT. 25...	1500	18	23.5	--	.0	--	2.0	--	3.0	--	2.0
JAN. 04...	1530	11	6.0	.00	.0	.00	.5	.00	.9	.00	4.7
APR. 17...	1520	37	22.0	.00	.0	.00	.6	.00	.7	.00	.5
SEP. 05...	1445	100	23.0	.00	--	.00	--	.00	--	.00	--

DATE	DI- ELDRIN (UG/L)	DI- ELDRIN IN BOTTOM DE- POSITS (UG/KG)	ENDRIN (UG/L)	ENDRIN IN BOTTOM DE- POSITS (UG/KG)	HEPTA- CHLOR (UG/L)	HEPTA- CHLOR IN BOTTOM DE- POSITS (UG/KG)	HEPTA- CHLOR EPOXIDE (UG/L)	HEPTA- CHLOR EPOXIDE IN BOT- TOM DE- POSITS (UG/KG)	LINDANE (UG/L)	LINDANE IN BOTTOM DE- POSITS (UG/KG)	CHLOR- DANE (UG/L)
OCT. 25...	--	74	--	.0	--	.0	--	.0	--	.0	--
JAN. 04...	.00	.0	.00	.0	.00	.0	.00	.0	.00	.0	.0
APR. 17...	.01	.0	.00	.0	.00	.0	.00	.0	.00	.0	.0
SEP. 05...	.00	-	.00	--	.00	--	.00	--	.00	--	.0

DATE	CHLOR- DANE IN BOTTOM DE- POSITS (UG/KG)	PCB (UG/L)	PCB IN BOTTOM DE- POSITS (UG/KG)	DI- AZINON (UG/L)	MALA- THION (UG/L)	METHYL PARA- THION (UG/L)	PARA- THION (UG/L)	2,4-D (UG/L)	SILVEX (UG/L)	2,4,5-T (UG/L)
OCT. 25...	3	--	0	--	--	--	--	--	--	--
JAN. 04...	0	.0	0	.00	.00	.00	.00	.00	.00	.00
APR. 17...	0	.0	0	.00	.00	.00	.00	.00	.00	.00
SEP. 05...	--	.0	--	.00	.00	.00	.00	.00	.00	.00

08162800 WEST CARANCAHUA CREEK NEAR LAWARD, TEX.

LOCATION.--Lat 28°53'19", long 96°27'03", Jackson County, at bridge on county road, 3.2 miles (5.1 km) northeast of Laward, 3.8 miles (6.1 km) upstream from Lunis Creek, and 6.3 miles (10.1 km) upstream from Missouri Pacific Railroad bridge and Farm Road 616.

DRAINAGE AREA.--57.1 mi² (147.9 km²).

PERIOD OF RECORD.--Chemical and biochemical analyses: October 1968 to September 1974.
Pesticide analyses: October 1968 to September 1974.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

		INSTAN- TANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SI02) (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)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)
DATE	TIME											
OCT. 25...	1605	11	26	28	6.8	29	5.3	124	0	4.8	41	.2
NOV. 28...	1605	3.7	16	47	11	62	8.2	108	0	12	150	.2
JAN. 04...	1650	.02	7.5	37	7.9	34	9.7	112	0	29	63	.2
FEB. 06...	1515	.40	6.7	34	7.2	36	7.2	120	0	20	54	--
MAR. 14...	1410	29	9.7	32	7.0	31	5.5	77	0	14	76	--
APR. 17...	1620	31	21	80	18	54	7.7	248	0	36	110	--
MAY 22...	1000	3.5	14	44	10	44	6.4	135	0	26	81	--
JUNE 26...	1640	4.4	24	54	16	65	3.7	240	6	14	91	--
AUG. 06...	1650	15	31	42	11	37	10	163	0	15	67	--
SEP. 05...	1150	52	42	42	11	43	11	185	0	12	67	--
					AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)	VOL. NON- FILT- RABLE RESIDUE (MG/L)	HARD- NESS (CA+MG) (MG/L)
DATE		BROMIDE (BR) (MG/L)	IODIDE (I) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)							
OCT. 25...	--	--	--	.06	.00	.00	.49	--	.15	202	--	98
NOV. 28...	--	--	--	.20	.01	.08	.82	--	.16	358	--	160
JAN. 04...	.2	.01	.20	.00	.14	.69	--	.15	244	162	--	120
FEB. 06...	--	--	--	.32	.00	.32	.75	--	.38	224	--	110
MAR. 14...	--	--	--	1.3	.02	.43	1.1	1.5	.28	213	1550	110
APR. 17...	.6	.02	3.7	.08	.20	.80	1.0	.11	450	71	1	270
MAY 22...	--	--	--	.38	.05	.08	1.8	1.9	.26	292	6	150
JUNE 26...	--	--	--	.02	.00	.09	.49	.58	.12	392	2	200
AUG. 06...	--	--	--	.13	.01	.69	1.3	2.0	.24	293	--	150
SEP. 05...	.1	.01	.02	.00	.07	.93	1.0	.26	320	93	--	150
		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)	COLOR (PLAT- INUM- COBALT UNITS)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	RIO- CHEM- ICAL OXYGEN DEMAND (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT. 25...	0		1.3	347	7.5	24.5	--	65	7.9	94	2.5	12
NOV. 28...	74		2.1	674	7.4	18.5	--	85	8.9	95	2.4	18
JAN. 04...	33		1.3	450	6.9	7.0	--	85	13.4	110	2.9	--
FEB. 06...	16		1.5	425	7.8	21.0	--	175	9.1	101	5.8	18
MAR. 14...	46		1.3	427	7.1	18.5	--	420	8.7	93	7.2	--
APR. 17...	71		1.4	830	7.9	23.0	30	30	8.0	92	3.2	3.5
MAY 22...	40		1.6	552	7.8	27.5	20	40	6.4	80	4.0	17
JUNE 26...	0		2.0	695	8.4	31.0	20	25	8.8	117	2.2	6.2
AUG. 06...	16		1.3	505	7.5	26.5	--	160	7.0	85	5.8	17
SEP. 05...	0		1.5	505	7.8	22.0	--	40	6.8	77	2.4	11

EAST CARANCAHUA CREEK BASIN

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08162800 WEST CARANCAHUA CREEK NEAR LAWARD, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	DIS-SOLVED ALUMINUM (AL) (UG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	DIS-SOLVED BORON (B) (UG/L)	DIS-SOLVED CADMIUM (CD) (UG/L)	DIS-SOLVED CHROMIUM (CR) (UG/L)	DIS-SOLVED COBALT (CO) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)
JAN. 04...	1650	150	6	60	0	0	0	7
APR. 17...	1620	10	--	70	0	10	0	4
SEP. 05...	1150	10	5	130	0	0	0	1

DATE	TIME	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	DIS-SOLVED LITHIUM (LI) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)	DIS-SOLVED MERCURY (HG) (UG/L)	DIS-SOLVED NICKEL (NI) (UG/L)	DIS-SOLVED STRONTIUM (SR) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)
JAN. 04...	110	0	0	0	0	0	4	190	20
APR. 17...	110	0	0	20	10	1	0	540	10
SEP. 05...	80	1	0	0	0	1	1	300	10

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TEMPERATURE (DEG C)	ALDRIN (UG/L)	ALDRIN IN BOTTOM DEPOSITS (UG/KG)	DDD (UG/L)	DDD IN BOTTOM DEPOSITS (UG/KG)	DDE (UG/L)	DDE IN BOTTOM DEPOSITS (UG/KG)	DDT (UG/L)	DDT IN BOTTOM DEPOSITS (UG/KG)
OCT. 25...	1605	11	24.5	--	0	--	0	--	0	--	0
JAN. 04...	1650	02	7.0	00	0	00	0	00	0	00	0
APR. 17...	1620	31	23.0	00	0	00	0	00	0	00	0
SEP. 05...	1150	52	22.0	00	0	00	0	00	0	00	0

DATE	DI-ELDRIN (UG/L)	DI-ELDRIN IN BOTTOM DEPOSITS (UG/KG)	ENDRIN (UG/L)	ENDRIN IN BOTTOM DEPOSITS (UG/KG)	HEPTACHLOR (UG/L)	HEPTACHLOR IN BOTTOM DEPOSITS (UG/KG)	HEPTACHLOR EPOXIDE (UG/L)	HEPTACHLOR EPOXIDE IN BOTTOM DEPOSITS (UG/KG)	LINDANE (UG/L)	LINDANE IN BOTTOM DEPOSITS (UG/KG)	CHLORDANE (UG/L)
OCT. 25...	--	0	--	0	--	0	--	0	--	0	--
JAN. 04...	00	0	00	0	00	0	00	0	00	0	0
APR. 17...	01	0	00	0	00	0	00	0	00	0	0
SEP. 05...	00	0	00	0	00	0	00	0	00	0	0

DATE	CHLORDANE IN BOTTOM DEPOSITS (UG/KG)	PCB (UG/L)	PCB IN BOTTOM DEPOSITS (UG/KG)	DI-AZINON (UG/L)	MALATHION (UG/L)	METHYL PARATHION (UG/L)	PARATHION (UG/L)	2,4-D (UG/L)	SILVEX (UG/L)	2,4,5-T (UG/L)
OCT. 25...	0	--	0	--	--	--	--	--	--	--
JAN. 04...	0	0	0	00	00	00	00	27	1.4	46
APR. 17...	0	0	0	00	00	00	00	03	00	00
SEP. 05...	0	0	0	00	00	00	00	00	00	09

LAVACA RIVER BASIN

08164000 LAVACA RIVER NEAR EDNA, TEX.

LOCATION.--Lat 28°57'35", long 96°41'10", Jackson County, at gaging station on U.S. Highway 59, 660 ft (201 m) upstream from Texas and New Orleans Railroad Co. bridge, and 2.8 miles (4.5 km) southwest of Edna.

DRAINAGE AREA.--817 mi² (2,116 km²).

PERIOD OF RECORD.--Chemical analyses: October 1960 to September 1974.
Pesticide analyses: January 1968 to September 1974.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO ₂) (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 SODIUM PLUS POTAS- SIUM (K) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)
NOV. 07...	1015	184	27	110	6.7	--	46	--	348	0
JAN. 15...	1730	125	18	110	6.6	66	--	2.8	314	0
MAR. 18...	1430	116	23	100	6.8	60	--	2.3	338	0
MAY 20...	1940	112	24	94	5.9	40	--	3.4	302	0
JULY 24...	0910	57	27	98	6.1	54	--	2.7	342	0
SEP. 24...	1000	650	18	41	3.6	21	--	3.9	138	0

DATE	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
NOV. 07...	23	59	.3	.50	.00	.03	.20	--	.16	442
JAN. 15...	30	99	--	1.2	.00	.03	.14	--	.11	489
MAR. 18...	30	80	--	.58	.01	.23	.77	1.0	.13	469
MAY 20...	19	55	--	.08	.00	.04	.96	1.0	.23	390
JULY 24...	23	62	--	.01	.00	.21	.21	.42	.11	441
SEP. 24...	13	28	--	.27	.01	.16	1.1	1.3	.23	197

DATE	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SUMP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICHO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	BIO- CHEM- ICAL OXYGEN DEMAND (MG/L)
NOV. 07...	290	10	1.2	738	7.7	21.5	10.1	113	1.2
JAN. 15...	300	44	1.7	892	7.8	15.0	9.8	96	.9
MAR. 18...	280	0	1.6	809	7.8	23.5	8.6	100	1.7
MAY 20...	260	11	1.1	671	7.8	25.5	8.4	101	2.6
JULY 24...	270	0	1.4	736	7.8	27.0	5.5	68	1.8
SEP. 24...	120	4	.8	322	7.5	21.5	7.4	83	3.1

LAVACA RIVER BASIN

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08164000 LAVACA RIVER NEAR EDNA, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	ALDRIN (UG/L)	ALDRIN IN BOTTOM DE- POSITS (UG/KG)	DDD (UG/L)	DDD IN BOTTOM DE- POSITS (UG/KG)	DDE (UG/L)	DDE IN BOTTOM DE- POSITS (UG/KG)	DDT (UG/L)	DDT IN BOTTOM DE- POSITS (UG/KG)
JAN. 15...	1730	125	15.0	.00	.0	.00	.0	.00	.0	.00	.0
MAR. 18...	1430	116	23.5	.00	.0	.00	.0	.00	.0	.00	.0
MAY 20...	1940	112	25.5	.00	.0	.00	.0	.00	.0	.00	.0
SEP. 24...	1000	720	--	.00	.0	.00	.0	.00	.0	.00	.0

DATE	DI- ELDRIN (UG/L)	DI- ELDRIN IN BOTTOM DE- POSITS (UG/KG)	ENDRIN (UG/L)	ENDRIN IN BOTTOM DE- POSITS (UG/KG)	HEPTA- CHLOR (UG/L)	HEPTA- CHLOR IN BOTTOM DE- POSITS (UG/KG)	HEPTA- CHLOR EPOXIDE (UG/L)	HEPTA- CHLOR EPOXIDE IN BOT- TOM DE- POSITS (UG/KG)	LINDANE (UG/L)	LINDANE IN BOTTOM DE- POSITS (UG/KG)	CHLOR- DANE (UG/L)
JAN. 15...	.00	.0	.00	.0	.00	.0	.00	.0	.00	.0	.0
MAR. 18...	.00	.0	.00	.0	.00	.0	.00	.0	.00	.0	.0
MAY 20...	.00	.0	.00	.0	.00	.0	.00	.0	.00	.0	.0
SEP. 24...	.00	.0	.00	.0	.00	.0	.00	.0	.00	.0	.0

DATE	CHLOR- DANE IN BOTTOM DE- POSITS (UG/KG)	PCB (UG/L)	PCB IN BOTTOM DE- POSITS (UG/KG)	DI- AZINON (UG/L)	MALA- THION (UG/L)	METHYL PARA- THION (UG/L)	PARA- THION (UG/L)	2,4-D (UG/L)	SILVEX (UG/L)	2,4,5-T (UG/L)
JAN. 15...	0	.0	0	.00	.00	.00	.00	.00	.00	.00
MAR. 18...	0	.0	0	.00	.00	.00	.00	.00	.00	.00
MAY 20...	0	.0	0	.00	.00	.00	.00	.01	.00	.00
SEP. 24...	0	.0	0	.00	.00	.00	.00	.00	.00	.01

08164500 NAVIDAD RIVER NEAR GANADO, TEX.

LOCATION.--Lat 29°01'32", long 96°33'08", Jackson County, at gaging station at bridge on U.S. Highway 59, 170 ft (52 m) upstream from Texas and New Orleans Railroad Co. bridge, 0.2 mile (0.3 km) downstream from Sandy Creek, and 2.5 miles (4.0 km) southwest of Ganado.

DRAINAGE AREA.--1,062 mi² (2,751 km²).

PERIOD OF RECORD.--Chemical analyses: October 1959 to September 1974.

Chemical and biochemical analyses: January 1968 to September 1974.

Pesticide analyses: January 1968 to September 1974.

Water temperatures: October 1959 to September 1974.

EXTREMES.--October 1973 to September 1974:

Specific conductance: Maximum daily, 881 micromhos Apr. 6; minimum daily, 62 micromhos Sept. 15.

Period of record:

Specific conductance: Maximum daily, 1,350 micromhos Oct. 26, 28, 1963; minimum daily, 44 micromhos Mar. 24, 25, 1973.

Water temperatures (1959-73): Maximum, 37.0°C July 21, 27, 28, 1962, Aug. 19, 1969; minimum, freezing point Jan. 9-11, 1962, Feb. 22, 1963.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	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 SODIUM PLUS POTAS- SIUM (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
OCT.												
14...	0800	9260	9.2	9.0	2.3	6.2	--	4.3	37	0	4.8	10
NOV.												
07...	0830	711	18	60	4.4	--	33	--	196	0	14	45
29...	1512	224	16	42	3.7	25	--	5.6	148	0	10	34
DEC.												
19...	0800	84	22	--	--	--	--	--	--	--	18	72
JAN.												
05...	1145	79	19	72	4.7	36	--	4.5	246	0	14	51
15...	1700	222	12	45	3.0	24	--	4.2	140	0	14	40
30...	0900	1570	12	30	3.2	13	--	4.5	98	0	9.4	22
FEB.												
07...	1230	384	14	57	3.0	25	--	3.9	171	0	14	34
27...	0920	136	21	100	5.6	50	--	2.3	350	0	22	74
MAR.												
14...	1225	347	6.1	9.7	1.7	8.9	--	4.2	28	0	11	13
18...	1345	129	17	83	4.8	45	--	3.0	269	0	21	62
APR.												
18...	1235	136	19	73	9.0	59	--	5.2	214	0	41	94
MAY												
20...	1810	89	21	72	4.9	35	--	3.4	254	0	13	50
JUNE												
27...	1245	94	16	42	10	47	--	1.9	162	0	23	65
JULY												
24...	0835	112	18	49	13	79	--	3.2	209	0	22	110
AUG.												
20...	1550	34	26	85	6.1	54	--	4.8	296	0	13	67
SEP.												
24...	0910	1700	20	16	4.0	12	--	3.0	68	0	6.4	17

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)	VOL. NON- FILT- RABLE RESIDUE (MG/L)	HARD- NESS (CA+MG) (MG/L)
OCT.											
14...	.2	--	--	--	--	--	--	64	--	--	32
NOV.											
07...	.3	.30	.00	.10	1.4	--	.10	272	535	65	170
29...	--	--	--	--	--	--	--	209	--	--	120
DEC.											
19...	.3	--	--	--	--	--	--	--	--	--	--
JAN.											
05...	--	--	--	--	--	--	--	332	--	--	200
15...	--	.70	.00	.08	.39	--	.13	211	134	30	120
30...	.2	--	--	--	--	--	--	142	--	--	88
FEB.											
07...	--	--	--	--	--	--	--	235	--	--	150
27...	--	--	--	--	--	--	--	447	--	--	270
MAR.											
14...	--	--	--	--	--	--	--	68	--	--	31
18...	--	.34	.01	.19	.63	.82	.10	369	78	5	230
APR.											
18...	--	--	--	--	--	--	--	406	--	--	220
MAY											
20...	--	.18	.00	.04	1.3	1.3	.15	325	77	8	200
JUNE											
27...	--	--	--	--	--	--	--	285	--	--	150
JULY											
24...	--	.08	.00	.05	.62	.67	.09	398	42	11	180
AUG.											
20...	--	--	--	--	--	--	--	402	--	--	240
SEP.											
24...	--	.07	.00	.17	1.0	1.2	.16	112	116	19	56

LAVACA RIVER BASIN

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08164500 NAVIDAD RIVER NEAR GANADO, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	NON-CARBONATE HARDNESS (MG/L)	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	BIOCHEMICAL OXYGEN DEMAND (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT. 14...	2	.5	94	7.2	23.0	--	--	--	--	--	--
NOV. 07...	7	1.1	478	7.4	21.0	50	150	7.4	82	2.5	.0
29...	0	1.0	371	7.7	17.0	--	--	--	--	--	--
DEC. 19...	--	--	693	7.9	7.0	--	--	--	--	--	--
JAN. 05...	0	1.1	572	7.8	8.5	--	--	--	--	--	--
15...	10	.9	385	7.5	13.0	30	60	10.2	96	1.9	5.0
30...	8	.6	239	7.2	13.0	--	--	--	--	--	--
FEB. 07...	14	.9	409	7.9	13.5	--	--	--	--	--	--
27...	0	1.3	793	7.9	13.0	--	--	--	--	--	--
MAR. 14...	8	.7	129	6.7	20.0	--	--	--	--	--	--
18...	7	1.3	631	7.7	23.0	20	45	8.4	97	1.7	8.0
APR. 18...	44	1.7	719	7.8	22.0	--	--	--	--	--	--
MAY 20...	0	1.1	579	7.8	26.0	10	35	7.9	96	2.1	--
JUNE 27...	13	1.7	513	7.6	28.0	--	--	--	--	--	--
JULY 24...	5	2.6	710	8.0	27.0	50	20	6.2	77	1.3	7.8
AUG. 20...	0	1.5	695	7.4	32.0	--	--	--	--	--	--
SEP. 24...	1	.7	167	7.2	21.0	140	40	7.4	82	1.9	16

DATE	TIME	DISSOLVED ALUMINUM (AL) (UG/L)	DISSOLVED ARSENIC (AS) (UG/L)	DISSOLVED BORON (B) (UG/L)	DISSOLVED CADMIUM (CD) (UG/L)	DISSOLVED CHROMIUM (CR) (UG/L)	DISSOLVED COBALT (CO) (UG/L)	DISSOLVED COPPER (CU) (UG/L)
JAN. 15...	1700	30	1	60	0	0	0	5
MAR. 18...	1345	0	3	110	0	0	0	3
MAY 20...	1810	50	5	100	5	0	1	10
JULY 24...	0835	10	2	160	0	0	0	0

DATE	DISSOLVED IRON (FE) (UG/L)	DISSOLVED LEAD (PB) (UG/L)	DISSOLVED LITHIUM (LI) (UG/L)	DISSOLVED MANGANESE (MN) (UG/L)	DISSOLVED MERCURY (HG) (UG/L)	DISSOLVED NICKEL (NI) (UG/L)	DISSOLVED STRONTIUM (SR) (UG/L)	DISSOLVED ZINC (ZN) (UG/L)
JAN. 15...	50	0	0	0	.0	3	110	10
MAR. 18...	30	2	10	0	.0	0	310	20
MAY 20...	60	11	10	30	.0	9	270	70
JULY 24...	20	2	0	0	.0	0	390	10

08164500 NAVIDAD RIVER NEAR GANADO, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TEMPERATURE (DEG C)	ALDRIN (UG/L)	ALDRIN IN BOTTOM DE-POSITS (UG/KG)	DDU (UG/L)	DDD IN BOTTOM DE-POSITS (UG/KG)	DDE (UG/L)	DDE IN BOTTOM DE-POSITS (UG/KG)	DDT (UG/L)	DDT IN BOTTOM DE-POSITS (UG/KG)
JAN. 15...	1700	222	13.0	.00	.0	.00	.4	.00	1.1	.00	.0
MAR. 18...	1345	129	23.0	.00	.0	.00	.0	.00	.5	.00	.0
MAY 20...	1810	89	26.0	--	.0	--	.0	--	.0	--	.0
SEP. 24...	0910	1700	21.0	.00	.0	.00	.0	.00	.0	.00	.0

DATE	DI-ELDRIN (UG/L)	DI-ELDRIN IN BOTTOM DE-POSITS (UG/KG)	ENDRIN (UG/L)	ENDRIN IN BOTTOM DE-POSITS (UG/KG)	HEPTA-CHLOR (UG/L)	HEPTA-CHLOR IN BOTTOM DE-POSITS (UG/KG)	HEPTA-CHLOR EPOXIDE (UG/L)	HEPTA-CHLOR EPOXIDE IN BOTTOM DE-POSITS (UG/KG)	LINDANE (UG/L)	LINDANE IN BOTTOM DE-POSITS (UG/KG)	CHLOR-DANE (UG/L)
JAN. 15...	.00	.9	.00	.0	.00	.0	.00	.0	.00	.0	.0
MAR. 18...	.00	.0	.00	.0	.00	.0	.00	.0	.00	.0	.0
MAY 20...	--	.0	--	.0	--	.0	--	.0	--	.0	--
SEP. 24...	.00	.0	.00	.0	.00	.0	.00	.0	.00	.0	.0

DATE	CHLOR-DANE IN BOTTOM DE-POSITS (UG/KG)	PCB (UG/L)	PCB IN BOTTOM DE-POSITS (UG/KG)	DI-AZINON (UG/L)	MALATHION (UG/L)	METHYL PARATHION (UG/L)	PARATHION (UG/L)	2,4-D (UG/L)	SILVEX (UG/L)	2,4,5-T (UG/L)
JAN. 15...	0	.0	0	.00	.00	.00	.00	.00	.00	.02
MAR. 18...	0	.0	0	.00	.00	.00	.00	.00	.00	.00
MAY 20...	0	--	0	--	--	--	--	--	--	--
SEP. 24...	0	.0	0	.00	.00	.00	.00	.00	.00	.00

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

MONTH	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCTANCE (MICRO-MHOS)	DIS-SOLVED SOLIDS (MG/L)	DIS-SOLVED SOLIDS (TONS)	DIS-SOLVED CHLORIDE (MG/L)	DIS-SOLVED CHLORIDE (TONS)	DIS-SOLVED SULFATE (MG/L)	DIS-SOLVED SULFATE (TONS)	HARNESS (CA+MG) (MG/L)
OCT. 1973.....	63734	178	100	17200	17	2930	8.0	1380	57
NOV. 1973.....	13485	346	200	7280	32	1170	13	473	110
DEC. 1973.....	5177	484	280	3910	45	629	17	238	160
JAN. 1974.....	60341	175	100	16300	17	2770	7.9	1290	56
FEB. 1974.....	7854	534	310	6570	49	1040	14	382	180
MAR. 1974.....	5541	520	300	4490	48	718	18	269	170
APR. 1974.....	10104	310	180	4910	29	791	12	327	100
MAY 1974.....	29399	180	110	8730	17	1350	8.1	643	57
JUNE 1974.....	27236	218	130	9560	21	1540	9	669	70
JULY 1974.....	5827	638	370	5820	70	1100	21	330	210
AUG. 1974.....	9969	409	240	6460	38	1020	15	404	140
SEPT 1974.....	126534	143	84	28700	14	4780	7.0	2390	45
TOTAL	365201	**	**	120000	**	19800	**	8790	**
WTD.AVG.	1000	209	120	**	20	**	8.9	**	67

LAVACA RIVER BASIN

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08164500 NAVIDAD RIVER NEAR GANADO, TEX.--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	518	239	538	536	377	591	623	803	300	620	641	252
2	534	240	405	554	410	725	618	815	280	616	670	287
3	503	251	567	620	280	512	687	812	274	599	731	378
4	503	257	465	703	337	745	683	803	293	628	720	348
5	503	346	400	728	400	758	707	700	338	621	715	300
6	210	335	336	573	449	750	881	649	375	638	675	362
7	224	329	461	580	450	755	840	673	452	635	667	404
8	228	331	459	585	649	622	802	711	514	630	550	450
9	353	427	652	588	621	650	800	728	520	637	525	490
10	351	449	656	600	709	670	780	200	97	629	339	538
11	250	464	645	614	748	680	759	94	97	646	405	556
12	146	427	571	682	700	685	743	118	178	637	446	400
13	149	532	573	298	632	243	728	164	212	608	461	200
14	94	578	683	297	710	335	796	211	230	570	496	85
15	119	580	605	558	602	480	787	230	262	609	521	62
16	135	585	630	581	613	540	705	378	370	631	540	117
17	196	600	660	592	691	719	700	367	375	628	567	128
18	247	650	693	561	613	644	717	449	386	616	604	150
19	252	719	693	595	640	731	767	500	410	617	604	190
20	259	609	662	79	660	785	130	576	445	624	642	240
21	365	602	591	164	718	701	120	604	486	624	606	280
22	425	550	600	165	764	685	158	599	564	624	615	134
23	371	600	630	167	705	857	232	593	648	722	625	156
24	429	620	650	158	745	860	271	620	648	722	632	200
25	458	269	250	189	795	450	382	653	658	730	788	292
26	474	184	280	174	780	315	559	680	650	741	787	298
27	480	311	400	120	770	340	636	710	662	760	730	398
28	450	249	555	130	756	370	700	739	648	780	695	431
29	491	462	579	154	---	391	778	742	686	793	400	413
30	495	466	678	239	---	408	763	747	650	728	302	472
31	397	---	657	300	---	500	---	361	---	659	296	---
MONTH	342	442	556	416	619	597	628	549	424	656	580	300

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	24.5	18.0	4.0	10.0	16.5	18.0	23.0	23.0	---	25.5	26.5	26.5
2	24.5	---	19.0	9.0	19.0	18.5	24.0	23.5	---	25.0	26.5	28.0
3	24.5	21.0	19.0	6.0	---	19.0	24.0	23.5	24.5	26.0	25.5	26.0
4	---	21.5	16.0	5.5	16.5	20.5	---	24.0	26.0	26.5	---	25.5
5	25.0	24.0	10.5	6.5	17.0	21.0	16.0	---	26.5	26.5	24.5	---
6	---	---	13.0	9.0	17.0	21.0	14.5	22.0	---	26.5	25.0	24.0
7	24.5	21.5	11.0	---	12.0	21.5	---	21.5	26.5	---	24.5	21.0
8	24.5	21.5	10.0	---	9.0	22.0	18.5	22.0	27.0	26.5	---	---
9	24.5	21.5	10.0	16.5	8.5	---	18.5	23.5	---	26.5	26.0	---
10	24.5	20.5	10.0	---	10.0	---	---	---	25.5	26.5	25.5	24.5
11	---	19.0	10.0	6.5	10.0	---	---	23.5	24.0	26.5	26.5	24.5
12	23.5	18.5	10.0	8.0	---	21.5	21.0	24.0	26.0	26.5	26.5	---
13	23.0	18.5	10.0	8.0	16.0	19.0	23.5	25.0	27.0	26.0	27.0	---
14	23.0	18.5	10.0	7.0	18.5	18.5	22.0	25.5	26.5	---	26.5	23.0
15	23.0	---	10.0	9.0	18.5	18.5	16.5	25.5	26.5	26.0	27.0	23.5
16	23.0	---	---	11.5	17.0	19.5	15.5	25.5	26.5	26.0	---	24.5
17	21.0	---	---	14.5	17.0	20.5	---	25.5	26.5	25.5	27.0	25.5
18	18.0	21.0	10.0	18.0	17.0	21.0	20.0	26.0	26.5	25.0	26.5	---
19	19.0	21.0	7.0	17.0	---	21.5	20.5	---	26.5	25.5	26.5	---
20	---	15.5	6.0	15.5	15.5	23.5	---	25.0	---	26.0	26.5	26.0
21	19.0	19.5	5.0	14.5	18.0	23.5	---	24.0	26.0	---	26.0	---
22	19.0	---	---	---	18.0	23.0	23.0	25.0	26.0	26.5	---	24.5
23	19.0	---	---	15.5	16.0	23.0	21.5	24.5	26.0	26.5	---	22.0
24	19.0	---	---	17.0	---	---	22.0	---	26.5	26.5	25.5	---
25	20.5	21.0	---	10.0	10.0	---	21.0	26.0	26.5	---	25.5	21.0
26	21.5	21.5	---	10.0	---	10.5	21.0	---	23.5	26.5	25.0	21.0
27	---	21.0	---	---	13.0	---	21.0	---	25.5	---	---	21.0
28	---	---	16.0	13.0	16.0	17.0	---	24.5	23.5	---	26.0	24.0
29	20.5	14.5	16.0	13.0	---	18.5	23.0	25.0	22.0	27.0	---	23.0
30	20.0	13.5	15.0	13.0	---	18.5	23.5	26.0	---	27.0	25.5	20.0
31	19.0	---	14.5	---	---	21.5	---	25.0	---	26.5	25.5	---
MONTH	22.0	---	---	11.5	15.0	20.0	---	24.5	25.5	26.0	---	---

GARCITAS CREEK BASIN

08164600 GARCITAS CREEK NEAR INEZ, TEX.

LOCATION.--Lat 28°53'28", long 96°49'08", Victoria County, at gaging station at bridge on U.S. Highway 59, 0.3 mile (0.5 km) upstream from Southern Pacific Railroad bridge, 2.0 miles (3.2 km) southwest of Inez, and 3.6 miles (5.8 km) upstream from Casa Blanca Creek.

DRAINAGE AREA.--91.7 mi² (237.5 km²).

PERIOD OF RECORD.--Chemical and biochemical analyses: October 1969 to September 1974.
Pesticide analyses: October 1969 to September 1974.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	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 (HC03) (MG/L)	CAR- BONATE (C03) (MG/L)	DIS- SOLVED SULFATE (S04) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)
OCT. 26...	0905	12	25	54	6.5	25	3.0	188	0	20	31	.2
NOV. 27...	1605	4.0	26	78	9.6	33	2.1	258	0	31	41	.3
JAN. 03...	1630	2.2	25	94	12	42	1.5	308	0	43	57	.4
FEB. 05...	1515	7.8	19	49	6.1	23	3.2	162	0	21	30	--
MAR. 12...	1600	2.6	28	86	11	45	1.8	282	0	42	57	--
APR. 16...	1525	4.0	27	87	12	37	2.4	250	0	45	66	--
MAY 21...	1010	7.5	29	66	7.3	26	2.7	223	0	28	32	--
JUNE 25...	1605	4.7	32	73	8.2	26	2.1	240	0	31	41	--
AUG. 07...	1623	55	12	24	3.5	12	3.2	86	0	10	18	--
SEP. 05...	0930	3.2	32	45	7.5	45	5.9	193	0	14	54	--

DATE	BROMIDE (BR) (MG/L)	IODIDE (I) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	TOTAL FILT- RABLE RESIDUE (MG/L)	VOL. NON- FILT- RABLE RESIDUE (MG/L)	HARD- NESS (CA+MG) (MG/L)
OCT. 26...	--	--	.04	.00	.00	.20	--	.07	257	--	--	160
NOV. 27...	--	--	.04	.00	.00	.23	--	.03	350	--	--	230
JAN. 03...	.3	.10	.00	.00	.00	.00	--	.02	429	20	--	280
FEB. 05...	--	--	.10	.00	.07	.60	--	.07	230	--	--	150
MAR. 12...	--	--	.02	.00	.12	.39	.51	.07	410	8	2	260
APR. 16...	.3	.20	.08	.00	.17	.28	.45	.05	401	16	3	270
MAY 21...	--	--	.02	.00	.03	1.3	1.3	.07	301	18	0	190
JUNE 25...	--	--	.00	.00	.08	.58	.66	.03	332	11	0	220
AUG. 07...	--	--	.04	.01	.09	1.4	1.5	.17	125	832	--	74
SEP. 05...	.2	.04	.00	.00	.11	.89	1.0	.09	300	93	--	140

DATE	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)	COLOR (PLAT- INUM- COBALT UNITS)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	PEN- CENT SATUR- ATION	BIO- CHEM- ICAL OXYGEN DEMAND (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT. 26...	7	.9	432	7.4	23.0	--	25	7.0	80	1.0	12
NOV. 27...	22	.9	587	8.1	25.5	--	10	8.5	102	1.4	4.5
JAN. 03...	32	1.1	723	7.4	5.0	--	6	11.4	89	.9	--
FEB. 05...	15	.8	407	7.3	18.0	--	35	9.4	99	1.8	10
MAR. 12...	29	1.2	686	7.8	26.0	--	8	9.0	110	1.4	4.0
APR. 16...	0	1.4	717	7.8	24.5	30	10	9.0	107	.7	7.0
MAY 21...	12	.8	510	7.6	26.5	40	15	6.6	80	1.7	14
JUNE 25...	19	.8	540	8.8	30.5	25	15	8.0	105	1.0	8.6
AUG. 07...	4	.6	208	7.6	24.0	--	180	7.6	89	3.7	17
SEP. 05...	0	1.7	477	8.0	21.0	--	50	7.1	79	2.2	10

GARCITAS CREEK BASIN

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08164600 GARCITAS CREEK NEAR INEZ, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

		DIS- SOLVED ALUM- INUM (AL) (UG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	DIS- SOLVED COBALT (CO) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)
DATE	TIME							
JAN. 03...	1630	0	5	140	1	0	0	2
APR. 16...	1525	20	4	150	0	20	0	2
SEP. 05...	0930	30	6	160	0	0	0	2

		DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	DIS- SOLVED LITHIUM (LI) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED MERCURY (HG) (UG/L)	DIS- SOLVED NICKEL (NI) (UG/L)	DIS- SOLVED STRON- TIUM (SR) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)
DATE	TIME								
JAN. 03...	30	2	10	50	.0	2	470	20	
APR. 16...	10	0	0	20	.1	0	290	40	
SEP. 05...	60	0	0	0	.1	<1	220	10	

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	ALDRIN (UG/L)	ALDRIN IN BOTTOM DE- POSITS (UG/KG)	DDD (UG/L)	DDD IN BOTTOM DE- POSITS (UG/KG)	DDE (UG/L)	DDE IN BOTTOM DE- POSITS (UG/KG)	DDT (UG/L)	DDT IN BOTTOM DE- POSITS (UG/KG)
OCT. 26...	0905	12	23.0	--	.0	--	.0	--	.0	--	.0
JAN. 03...	1630	2.2	5.0	.00	.0	.00	.0	.00	.0	.00	.0
APR. 16...	1525	4.0	24.5	.00	.0	.00	.0	.00	.0	.00	.0
SEP. 05...	0930	3.2	21.0	.00	.0	.00	.0	.00	.0	.00	.0

DATE	DI- ELDRIN (UG/L)	DI- ELDRIN IN BOTTOM DE- POSITS (UG/KG)	ENDRIN (UG/L)	ENDRIN IN BOTTOM DE- POSITS (UG/KG)	HEPTA- CHLOR (UG/L)	HEPTA- CHLOR IN BOTTOM DE- POSITS (UG/KG)	HEPTA- CHLOR EPOXIDE (UG/L)	HEPTA- CHLOR EPOXIDE IN BOT- TOM DE- POSITS (UG/KG)	LINDANE (UG/L)	LINDANE IN BOTTOM DE- POSITS (UG/KG)	CHLOR- DANE (UG/L)
OCT. 26...	--	.0	--	.0	--	.0	--	.0	--	.0	--
JAN. 03...	.00	.0	.00	.0	.00	.0	.00	.0	.00	.0	.0
APR. 16...	.00	.0	.00	.0	.00	.0	.00	.0	.00	.0	.0
SEP. 05...	.00	.0	.00	.0	.00	.0	.00	.0	.00	.0	.0

DATE	CHLOR- DANE IN BOTTOM DE- POSITS (UG/KG)	PCB (UG/L)	PCB IN BOTTOM DE- POSITS (UG/KG)	DI- AZINON (UG/L)	MALA- THION (UG/L)	METHYL PARA- THION (UG/L)	PARA- THION (UG/L)	2,4-D (UG/L)	SILVEX (UG/L)	2,4,5-T (UG/L)
OCT. 26...	0	--	0	--	--	--	--	--	--	--
JAN. 03...	0	.0	0	.00	.00	.00	.00	.00	.00	.00
APR. 16...	0	.0	0	.00	.00	.00	.00	.00	.00	.00
SEP. 05...	0	.0	0	.00	.00	.00	.00	.00	.00	.00

08164800 PLACEDO CREEK NEAR PLACEDO, TEX.

LOCATION.--Lat 28°43'30", long 96°46'07", Victoria County, at gaging station at bridge on Farm Road 616, 0.1 mile (0.2 km) downstream from confluence of Lone Tree Creek and Arroyo Palo Alto, and 4.4 miles (7.1 km) northeast of Placedo.

DRAINAGE AREA.--68.3 mi² (176.9 km²).

PERIOD OF RECORD.--Chemical and biochemical analyses: October 1968 to September 1974.
Pesticide analyses: October 1968 to September 1974.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO ₂) (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 (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)
OCT.												
24...	1615	2.0	31	140	30	320	4.5	304	0	33	720	.4
NOV.												
27...	1330	1.3	30	230	42	470	4.3	354	0	45	1000	.5
JAN.												
03...	1345	.85	43	310	51	620	3.6	400	0	58	1400	.5
FEB.												
05...	1255	1.2	26	150	25	250	6.2	286	0	40	530	--
MAR.												
12...	1400	1.2	29	330	57	670	4.3	377	0	50	1500	--
APR.												
16...	1320	6.0	11	76	15	210	7.5	332	0	32	280	--
MAY												
02...	1232	86	20	28	4.6	39	5.7	147	0	13	43	--
21...	1310	1.9	29	140	27	300	4.3	311	0	29	660	--
JUNE												
25...	1320	.68	26	150	24	270	4.8	270	0	43	560	--
AUG.												
07...	1025	14	18	290	39	640	7.8	249	0	30	1500	--
SEP.												
04...	1650	1.6	37	78	13	160	9.9	254	0	16	280	--

DATE	BROMIDE (BR) (MG/L)	IODIDE (I) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL- NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITU- ENTS) (MG/L)	TOTAL NON- FIL- TABLE RESIDUE (MG/L)	VOL. NON- FIL- TABLE RESIDUE (MG/L)	HARD- NESS (CA+MG) (MG/L)
OCT.												
24...	--	--	.08	.00	.00	.09	--	.12	1480	--	--	580
NOV.												
27...	--	--	.02	.00	.08	.35	--	.09	2040	--	--	740
JAN.												
03...	5.7	.32	.00	.00	.05	.09	--	.04	2690	18	--	990
FEB.												
05...	--	--	1.2	.03	.08	.57	--	.14	1170	--	--	480
MAR.												
12...	--	--	.02	.00	.09	.35	.44	.11	2830	24	5	1100
APR.												
16...	.4	.20	.03	.00	.41	.99	1.4	.06	797	170	18	250
MAY												
02...	.2	.03	.85	.09	.29	1.0	1.3	.29	227	1200	170	89
21...	--	--	.08	.00	.07	1.1	1.2	.16	1380	86	5	560
JUNE												
25...	--	--	.07	.01	.12	.39	.51	.11	1210	31	4	470
AUG.												
07...	--	--	.03	.01	.06	1.2	1.3	.20	2650	120	--	880
SEP.												
04...	1.2	.03	.08	.00	.10	1.2	1.3	.32	722	99	--	250

DATE	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)	COLOR (PLAT- INUM- COBALT UNITS)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	BIO- CHEM- ICAL OXYGEN DEMAND (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT.											
24...	340	5.8	2730	7.1	25.0	--	15	5.6	67	.7	3.0
NOV.											
27...	450	7.5	3700	7.4	24.5	--	10	4.7	57	1.3	6.5
JAN.											
03...	660	8.5	4670	6.9	7.0	--	4	8.0	67	.7	--
FEB.											
05...	240	5.0	2150	7.0	16.5	--	20	6.8	69	1.7	6.5
MAR.											
12...	750	9.0	5390	7.1	25.5	--	15	7.1	87	1.8	3.5
APR.											
16...	0	5.8	1460	7.6	18.5	45	75	8.4	89	2.7	7.0
MAY											
02...	0	1.8	402	7.5	23.5	40	45	6.2	72	7.9	27
21...	310	5.5	2640	7.2	26.5	10	20	4.4	54	2.1	14
JUNE											
25...	250	5.4	2290	7.3	26.0	25	25	7.0	85	1.6	5.4
AUG.											
07...	680	9.4	4920	7.7	24.5	--	55	5.5	66	2.9	9.5
SEP.											
04...	41	4.4	1220	7.3	24.0	--	45	5.2	61	2.5	16

PLACEDO CREEK BASIN

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08164800 PLACEDO CREEK NEAR PLACEDO, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	DIS-SOLVED ALUMINUM (AL) (UG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	DIS-SOLVED BORON (B) (UG/L)	DIS-SOLVED CADMIUM (CD) (UG/L)	DIS-SOLVED CHROMIUM (CR) (UG/L)	DIS-SOLVED COBALT (CO) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)
JAN. 03...	1345	0	2	800	0	0	0	4
APR. 16...	1320	0	3	380	1	30	0	4
MAY 02...	1232	120	6	110	0	20	0	10
SEP. 04...	1650	0	14	370	0	0	0	2

DATE	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	DIS-SOLVED LITHIUM (LI) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)	DIS-SOLVED MERCURY (HG) (UG/L)	DIS-SOLVED NICKEL (NI) (UG/L)	DIS-SOLVED STRONTIUM (SR) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)
JAN. 03...	20	3	70	140	.0	4	4100	30
APR. 16...	40	0	30	20	.0	0	710	40
MAY 02...	60	1	10	20	.1	6	200	240
SEP. 04...	70	2	13	30	.0	1	800	40

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TEMPERATURE (DEG C)	ALDRIN (UG/L)	ALDRIN IN BOTTOM DEPOSITS (UG/KG)	DDD (UG/L)	DDD IN BOTTOM DEPOSITS (UG/KG)	DDE (UG/L)	DDE IN BOTTOM DEPOSITS (UG/KG)	DDT (UG/L)	DDT IN BOTTOM DEPOSITS (UG/KG)
OCT. 24...	1615	2.0	25.0	--	.0	--	.0	--	.0	--	.0
JAN. 03...	1345	.85	7.0	.00	.0	.00	.0	.00	.0	.00	.0
APR. 16...	1320	6.0	18.5	.00	.0	.00	.5	.00	.7	.00	.0
MAY 02...	1232	86	23.5	.00	--	.00	--	.00	--	.00	--
SEP. 04...	1650	1.6	24.0	.00	.0	.00	1.5	.00	2.8	.00	.0

DATE	DI-ELDRIN (UG/L)	DI-ELDRIN IN BOTTOM DEPOSITS (UG/KG)	ENDRIN (UG/L)	ENDRIN IN BOTTOM DEPOSITS (UG/KG)	HEPTA-CHLOR (UG/L)	HEPTA-CHLOR IN BOTTOM DEPOSITS (UG/KG)	HEPTA-CHLOR EPOXIDE (UG/L)	HEPTA-CHLOR EPOXIDE IN BOTTOM DEPOSITS (UG/KG)	LINDANE (UG/L)	LINDANE IN BOTTOM DEPOSITS (UG/KG)	CHLOR-DANE (UG/L)
OCT. 24...	--	.0	--	.0	--	.0	--	.0	--	.0	--
JAN. 03...	.00	.0	.00	.0	.00	.0	.00	.0	.00	.0	.0
APR. 16...	.00	.0	.00	.0	.00	.0	.00	.0	.00	.0	.0
MAY 02...	.00	--	.00	--	.00	--	.00	--	.01	--	.0
SEP. 04...	.00	.0	.00	.0	.00	.0	.00	.0	.00	.0	.0

DATE	CHLOR-DANE IN BOTTOM DEPOSITS (UG/KG)	PCB (UG/L)	PCB IN BOTTOM DEPOSITS (UG/KG)	DI-AZINON (UG/L)	MALATHION (UG/L)	METHYL PARATHION (UG/L)	PARATHION (UG/L)	2,4-D (UG/L)	SILVEX (UG/L)	2,4,5-T (UG/L)
OCT. 24...	0	--	0	--	--	--	--	--	--	--
JAN. 03...	0	.0	0	.00	.00	.00	.00	.31	.00	.00
APR. 16...	0	.0	0	.00	.00	.00	.00	.00	.00	.00
MAY 02...	--	.0	--	.00	.00	.00	.00	.30	.00	.00
SEP. 04...	0	.0	0	.00	.00	.00	.00	.00	.00	.02

08164850 CHOCOLATE BAYOU NEAR PORT LAVACA, TEX.

LOCATION.--Lat 28°35'40", long 96°41'48", Calhoun County, at bridge on Sweetwater Road, 2.3 miles (3.7 km) upstream from State Highway 35, and 4.5 miles (7.2 km) southwest of Port Lavaca.

DRAINAGE AREA.--53.7 mi² (139.1 km²).

PERIOD OF RECORD.--Chemical and biochemical analyses: October 1968 to September 1974.
Pesticide analyses: October 1968 to September 1974.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	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)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)
OCT.												
24...	1415	2.3	14	100	22	160	5.4	164	0	74	350	.2
NOV.												
27...	1120	1.0	24	160	35	250	6.1	212	0	120	550	.3
JAN.												
03...	1045	.34	19	430	100	730	5.5	358	0	370	1700	.4
FEB.												
05...	1125	1.2	22	120	26	190	8.6	177	0	100	390	--
MAR.												
12...	1210	.35	22	460	110	770	9.4	313	0	340	1800	--
APR.												
16...	1115	.56	19	120	27	340	7.2	382	0	63	570	--
MAY												
02...	1305	58	--	22	3.3	19	5.3	76	0	15	24	--
21...	1500	2.0	27	81	17	140	5.3	159	0	59	290	--
JUNE												
25...	1107	.22	23	270	68	570	8.2	284	0	260	1200	--
AUG.												
07...	1325	15	18	130	28	280	6.8	182	0	84	590	--
SEP.												
04...	1325	2.4	43	62	14	190	14	258	0	27	280	--

DATE	BROMIDE (BR) (MG/L)	IODIDE (I) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITU- ENTS) (MG/L)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)	VOL. NON- FILT- RABLE RESIDUE (MG/L)	HARD- NESS (CA+MG) (MG/L)
OCT.												
24...	--	--	.30	.01	.09	.52	--	.20	807	--	--	340
NOV.												
27...	--	--	.40	.03	.22	.72	--	.12	1250	--	--	530
JAN.												
03...	7.4	.49	.30	.02	1.6	.30	--	.66	3540	6	--	1500
FEB.												
05...	--	--	4.4	.01	.30	.85	--	.23	944	--	--	410
MAR.												
12...	--	--	.02	.01	.24	.63	.87	.14	3670	30	9	1600
APR.												
16...	3.2	.30	5.3	.36	1.1	1.1	2.2	.36	1340	34	16	410
MAY												
02...	.1	.01	--	.03	.15	2.0	2.1	.42	--	380	53	69
21...	--	--	.14	.01	.05	2.0	2.0	.23	698	60	4	270
JUNE												
25...	--	--	.09	.02	.23	.72	.95	.25	2540	8	2	950
AUG.												
07...	--	--	.25	.01	.21	1.3	1.5	.23	1230	127	--	440
SEP.												
04...	1.3	.05	.13	.05	.63	1.3	1.9	.28	760	109	--	210

DATE	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)	COLOR (PLAT- INUM- COBALT UNITS)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	BIO- CHEM- ICAL OXYGEN DEMAND (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT.											
24...	210	3.7	1500	7.0	26.5	--	40	7.7	94	1.9	12
NOV.											
27...	360	4.7	2250	4.3	25.5	--	30	6.1	73	3.3	10
JAN.											
03...	1200	8.3	6160	7.3	4.5	--	5	10.2	80	5.7	--
FEB.											
05...	260	4.1	1720	6.8	16.0	--	30	7.6	76	3.0	14
MAR.											
12...	1300	8.4	6610	7.3	24.5	--	2	7.9	107	3.6	10
APR.											
16...	98	7.3	2550	7.5	17.5	40	15	7.7	81	1.9	10
MAY											
02...	7	1.0	250	7.2	25.5	70	80	6.0	72	4.3	22
21...	140	3.7	1280	7.4	30.5	60	30	9.4	124	4.8	24
JUNE											
25...	720	8.0	4400	7.4	24.5	10	9	7.9	95	2.9	11
AUG.											
07...	290	5.8	2280	7.4	26.0	--	45	5.6	68	5.2	12
SEP.											
04...	2	6.6	1230	7.5	25.5	--	55	3.9	47	4.0	21

CHOCOLATE BAYOU BASIN

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08164850 CHOCOLATE BAYOU NEAR PORT LAVACA, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	DIS-SOLVED ALUMINUM (AL) (UG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	DIS-SOLVED BORON (B) (UG/L)	DIS-SOLVED CADMIUM (CD) (UG/L)	DIS-SOLVED CHROMIUM (CR) (UG/L)	DIS-SOLVED COBALT (CO) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)
JAN. 03...	1005	0	2	870	0	0	1	6
APR. 16...	1115	0	8	580	0	20	0	4
MAY 02...	1305	140	6	100	0	10	0	9
SEP. 04...	1325	30	15	480	0	0	0	0

DATE	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	DIS-SOLVED LITHIUM (LI) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)	DIS-SOLVED MERCURY (HG) (UG/L)	DIS-SOLVED NICKEL (NI) (UG/L)	DIS-SOLVED STRONTIUM (SR) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)
JAN. 03...	30	3	60	860	.0	7	3300	20
APR. 16...	80	0	20	110	.1	0	730	70
MAY 02...	70	8	0	30	.2	5	20	50
SEP. 04...	140	0	13	160	.0	0	760	30

DATE	TIME	INSTANTANEOUS DIS-CHARGE (CFS)	TEMPERATURE (DEG C)	ALDRIN (UG/L)	ALDRIN IN BOTTOM DE-POSITS (UG/KG)	DDD (UG/L)	DDD IN BOTTOM DE-POSITS (UG/KG)	DDE (UG/L)	DDE IN BOTTOM DE-POSITS (UG/KG)	DDT (UG/L)	DDT IN BOTTOM DE-POSITS (UG/KG)
OCT. 24...	1415	2.3	26.5	--	.0	--	91	--	120	--	17
JAN. 03...	1045	.34	4.5	.00	.0	.00	34	.00	31	.00	20
APR. 16...	1115	.56	17.5	.00	.0	.00	470	.00	360	.00	17
MAY 02...	1305	58	25.5	.00	--	.00	--	.00	--	.00	--
SEP. 04...	1325	2.4	25.5	.00	.0	.00	800	.00	580	.00	83

DATE	DI-ELDRIN (UG/L)	DI-ELDRIN IN BOTTOM DE-POSITS (UG/KG)	ENDRIN (UG/L)	ENDRIN IN BOTTOM DE-POSITS (UG/KG)	HEPTA-CHLOR (UG/L)	HEPTA-CHLOR IN BOTTOM DE-POSITS (UG/KG)	HEPTA-CHLOR EPOXIDE (UG/L)	HEPTA-CHLOR EPOXIDE IN BOTTOM DE-POSITS (UG/KG)	LINDANE (UG/L)	LINDANE IN BOTTOM DE-POSITS (UG/KG)	CHLOR-DANE (UG/L)
OCT. 24...	--	.0	--	.0	--	.0	--	.0	--	.0	--
JAN. 03...	.00	.0	.00	.0	.00	.0	.00	.0	.00	.0	.0
APR. 16...	.01	16	.00	.0	.00	.0	.00	.0	.00	.0	.0
MAY 02...	.00	--	.00	--	.00	--	.00	--	.00	--	.0
SEP. 04...	.01	.0	.00	.0	.00	.0	.00	.0	.00	.0	.0

DATE	CHLOR-DANE IN BOTTOM DE-POSITS (UG/KG)	PCB (UG/L)	PCB IN BOTTOM DE-POSITS (UG/KG)	DI-AZINON (UG/L)	MALATHION (UG/L)	METHYL PARA-THION (UG/L)	PARA-THION (UG/L)	2,4-D (UG/L)	SILVEX (UG/L)	2,4,5-T (UG/L)
OCT. 24...	0	--	0	--	--	--	--	--	--	--
JAN. 03...	0	.0	0	.01	.00	.00	.00	.00	.00	.00
APR. 16...	0	.0	0	.00	.00	.00	.00	.00	.00	.00
MAY 02...	--	.0	--	.00	.00	.00	.00	--	--	--
SEP. 04...	0	.0	0	.00	.00	.00	.00	.00	.00	.00

GUADALUPE RIVER BASIN

08169580 GUADALUPE RIVER BELOW NEW BRAUNFELS, TEX.

LOCATION.--Lat 29°40'00", long 98°04'14", Comal County, in Lake Dunlap, 8 miles (13 km) southeast of New Braunfels, and 15 miles (24 km) downstream from Interstate Highway 35 bridge.

PERIOD OF RECORD.--Chemical and biochemical analyses: January 1968 to September 1974.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	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 SODIUM PLUS POTAS- SIUM (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)
NOV. 05...	1630	12	71	16	--	9.9	--	266	0	20
JAN. 21...	1035	11	72	16	13	--	1.8	266	0	21
MAR. 11...	1100	11	69	17	12	--	1.9	284	0	22
MAY 14...	1000	12	67	16	7.0	--	1.7	264	0	19
JULY 10...	0835	12	58	16	12	--	1.7	234	0	23
SEP. 09...	0830	12	61	14	9.9	--	2.1	246	0	18

DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJFL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
NOV. 05...	15	.2	1.1	.00	.04	.04	--	.06	280
JAN. 21...	20	--	1.3	.00	.11	.00	--	.05	286
MAR. 11...	18	--	.95	.01	.10	.34	.44	.13	291
MAY 14...	15	--	.83	.01	.17	.39	.56	.06	268
JULY 10...	18	--	.53	.01	.17	.30	.47	.04	256
SEP. 09...	16	--	.64	.01	.12	.34	.46	.14	254

DATE	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	BIO- CHEM- ICAL OXYGEN DEMAND (MG/L)
NOV. 05...	240	25	.3	489	8.0	20.5	12.9	142	1.1
JAN. 21...	250	27	.4	519	7.7	17.0	9.6	99	.7
MAR. 11...	240	9	.3	497	7.7	21.5	8.4	94	1.0
MAY 14...	230	17	.2	479	7.6	23.0	7.4	85	.9
JULY 10...	210	19	.4	384	7.6	26.5	11.6	141	4.4
SEP. 09...	210	8	.3	436	7.4	22.0	8.1	92	.9

GUADALUPE RIVER BASIN

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08171000 BLANCO RIVER NEAR WIMBERLEY, TEX.

LOCATION.--Lat 29°59'33", long 98°05'28", Hays County, at gaging station on bridge on State Highway 12, 1,200 ft (366 m) downstream from Cypress Creek, and 0.3 mile (0.5 km) southeast of Wimberley.

DRAINAGE AREA.--355 mi² (919 km²).

PERIOD OF RECORD.--Chemical and biochemical analyses: January to September 1974.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report.

WATER QUALITY DATA* WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	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)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	TOTAL NITRATE (N) (MG/L)
JAN. 21...	0900	105	9.3	71	17	8.1	1.2	272	0	21	15	1.1
MAR. 11...	0915	88	9.1	61	17	8.6	1.2	242	0	23	13	.86
MAY 14...	0830	78	9.3	65	17	8.5	1.3	256	0	23	13	.45
JULY 23...	1230	31	11	53	19	8.9	1.4	209	0	37	16	.45
SEP. 26...	1130	102	11	53	19	7.3	1.3	240	0	21	12	.48

DATE	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)	VOL. NON- FILT- RABLE RESIDUE (MG/L)	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)
JAN. 21...	.00	.01	.00	--	.00	277	0	0	250	27	.2	500
MAR. 11...	.01	.09	.15	.24	.14	252	0	0	220	24	.3	456
MAY 14...	.01	.02	.10	.12	.01	264	2	0	230	23	.2	462
JULY 23...	.00	.05	.18	.23	.01	250	1	1	210	40	.3	432
SEP. 26...	.00	.11	.27	.38	.03	243	19	6	210	14	.2	447

DATE	PH (UNITS)	TEMPER- ATURE (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	BIO- CHEM- ICAL OXYGEN DEMAND (MG/L)	IMME- DIATE COLI- FORM (COL. PER 100 ML)	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)
JAN. 21...	7.5	12.0	0	0	10.6	98	.3	90	28	48	.0
MAR. 11...	7.5	21.0	2	3	8.7	97	.7	80	22	43	.0
MAY 14...	7.6	24.0	0	2	7.4	87	.8	440	28	83	8.0
JULY 23...	7.6	30.0	0	1	8.5	112	.8	20	12	110	4.4
SEP. 26...	7.9	20.5	0	15	9.6	105	.8	160	73	86	--

GUADALUPE RIVER BASIN

08171000 BLANCO RIVER NEAR WIMBERLEY, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	DIS-SOLVED ALUMINUM (AL) (UG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	DIS-SOLVED BORON (B) (UG/L)	DIS-SOLVED CADMIUM (CD) (UG/L)	DIS-SOLVED CHROMIUM (CR) (UG/L)	DIS-SOLVED COBALT (CO) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)
JAN. 21...	0900	10	0	60	0	0	0	2
MAY 14...	0830	10	0	50	3	0	0	5
JULY 23...	1230	0	0	70	0	0	0	0

DATE	TIME	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	DIS-SOLVED LITHIUM (LI) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)	DIS-SOLVED MERCURY (HG) (UG/L)	DIS-SOLVED NICKEL (NI) (UG/L)	DIS-SOLVED STRONTIUM (SR) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)
JAN. 21...	30	4	0	0	0	.0	4	420	20
MAY 14...	40	4	0	30	0	.0	4	410	30
JULY 23...	20	4	0	0	0	.0	0	580	10

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TEMPERATURE (DEG C)	ALDRIN (UG/L)	DDD (UG/L)	DDE (UG/L)	DDT (UG/L)	DI-ELDRIN (UG/L)	ENDRIN (UG/L)	HEPTACHLOR (UG/L)	HEPTACHLOR EPOXIDE (UG/L)
JAN. 21...	0900	105	12.0	.00	.00	.00	.00	.00	.00	.00	.00
MAY 14...	0830	78	24.0	.00	.00	.00	.00	.00	.00	.00	.00

DATE	LINDANE (UG/L)	CHLORDANE (UG/L)	PCB (UG/L)	DI-AZINON (UG/L)	MALATHION (UG/L)	METHYL PARATHION (UG/L)	PARATHION (UG/L)	2,4-D (UG/L)	SILVEX (UG/L)	2,4,5-T (UG/L)
JAN. 21...	.00	.0	.0	.00	.00	.00	.00	.00	.00	.00
MAY 14...	.00	.0	.0	.00	.00	.00	.00	.00	.00	.00

GUADALUPE RIVER BASIN

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08172000 SAN MARCOS RIVER AT LULING, TEX.

LOCATION.--Lat 29°39'54", long 97°38'59", Caldwell County, at gaging station 390 ft (120 m) downstream from bridge on State Highway 80, 1.0 miles (1.6 km) south of Luling, and 9.4 miles (15.1 km) upstream from Plum Creek.

DRAINAGE AREA.--838 mi² (2,170 km²).

PERIOD OF RECORD.--Chemical analyses: September 1961 to April 1966, October 1968 to September 1974.
Water temperatures: September 1961 to April 1966.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	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 SODIUM PLUS POTAS- SIUM (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)
NOV. 01...	1200	1200	9.7	71	15	--	13	--	246	0
DEC. 06...	1500	499	9.5	76	18	--	17	--	268	0
JAN. 22...	1445	377	11	79	19	25	--	2.3	297	0
MAR. 04...	1230	304	6.6	78	20	28	--	1.6	287	0
APR. 12...	1400	244	11	88	20	32	--	2.1	294	0
MAY 23...	1000	246	11	78	19	22	--	1.9	286	0
JULY 08...	1030	180	12	79	19	22	--	1.8	286	0
AUG. 16...	1300	185	13	73	17	19	--	1.8	280	0
SEP. 30...	1240	273	12	85	18	23	--	2.0	311	0

DATE	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	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)	TEMPER- ATURE (DEG C)
NOV. 01...	28	25	.0	283	240	36	.4	539	7.4	19.0
DEC. 06...	30	36	.0	318	260	42	.5	607	7.7	11.0
JAN. 22...	34	41	--	356	280	32	.7	645	8.2	14.0
MAR. 04...	35	50	--	361	280	42	.7	663	7.8	22.0
APR. 12...	41	63	--	402	300	61	.8	720	7.9	19.5
MAY 23...	29	36	--	338	270	38	.6	612	7.8	27.0
JULY 08...	28	39	--	342	280	41	.6	614	8.0	28.0
AUG. 16...	30	33	--	325	250	23	.5	567	8.1	25.5
SEP. 30...	35	42	--	370	290	31	.6	634	8.2	21.0

GUADALUPE RIVER BASIN

08173000 PLUM CREEK NEAR LULING, TEX.

LOCATION.--Lat 29°41'58", long 97°36'12", Caldwell County, at gaging station at bridge on county road, 1.2 miles (1.9 km) upstream from West Fork, 1.9 miles (3.1 km) upstream from Southern Pacific Railroad Co. bridge, 2.2 miles (3.5 km) upstream from McNeil Creek, and 3.0 miles (4.8 km) northeast of Luling.

DRAINAGE AREA.--309 mi² (800 km²).

PERIOD OF RECORD.--Chemical analyses: October 1967 to September 1974.

Water temperatures: October 1967 to September 1974.

EXTREMES.--October 1973 to September 1974:

Specific conductance: Maximum daily, 2,380 micromhos July 25; minimum daily, 174 micromhos Oct. 12.

Water temperatures: Maximum, 31.0°C July 28; minimum, 6.0°C Jan. 4.

Period of record:

Specific conductance: Maximum daily, 2,560 micromhos Oct. 27, 1968; minimum daily, 148 micromhos Dec. 1, 1968.

Water temperatures: Maximum, 35.0°C July 24, 1969; minimum, 4.0°C Jan. 4, 1968.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	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)	DIS- SOLVED SULFATE (SO ₄) (MG/L)
OCT.										
31...	0800	368	14	110	17	100	7.0	200	0	120
NOV.										
02...	1300	136	15	61	5.9	42	7.7	171	0	49
DEC.										
06...	1050	24	16	150	15	130	6.2	321	0	110
JAN.										
22...	1030	56	9.4	71	9.5	75	6.5	168	0	60
FEB.										
14...	1600	27	12	160	19	170	5.8	305	0	160
MAR.										
04...	0940	23	6.4	160	21	180	5.0	343	0	160
APR.										
12...	1120	22	15	140	16	160	4.9	312	0	140
MAY										
23...	1210	56	10	56	4.5	35	5.0	170	0	41
JUNE										
30...	1100	4.4	16	150	17	220	6.5	313	9	130
JULY										
31...	0900	1.8	21	130	15	230	7.4	380	0	97
AUG.										
16...	1135	23	12	53	4.9	47	5.9	167	0	44
SEP.										
30...	1025	19	18	120	16	130	4.6	282	0	100

DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	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)
OCT.									
31...	200	.3	666	340	180	2.4	1160	7.6	18.0
NOV.									
02...	62	--	327	180	36	1.4	571	7.4	20.0
DEC.									
06...	250	--	836	440	170	2.7	1450	7.8	12.5
JAN.									
22...	140	--	454	220	79	2.2	839	7.5	5.5
FEB.									
14...	320	--	997	480	230	3.4	1640	7.7	18.0
MAR.									
04...	320	--	1020	490	200	3.6	1810	7.8	20.0
APR.									
12...	270	--	900	420	160	3.4	1560	7.7	20.0
MAY									
23...	45	--	280	160	19	1.2	501	7.4	25.5
JUNE									
30...	370	--	1070	440	170	4.5	1900	8.4	26.0
JULY									
31...	350	--	1040	390	75	5.1	1790	8.0	26.0
AUG.									
16...	52	--	301	150	16	1.7	538	7.9	25.5
SEP.									
30...	220	--	748	370	130	3.0	1360	7.8	18.5

08173000 PLUM CREEK NEAR LULING, TEX.--Continued

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

MONTH	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCT- ANCE (MICRO- MHOS)	DIS- SOLVED SOLIDS (MG/L)	DIS- SOLVED SOLIDS (TONS)	DIS- SOLVED CHLORIDE (MG/L)	DIS- SOLVED CHLORIDE (TONS)	DIS- SOLVED SULFATE (MG/L)	DIS- SOLVED SULFATE (TONS)	HARDNESS (CA+MG) (MG/L)
OCT. 1973.....	28049	304	170	12900	29	2200	28	2120	120
NOV. 1973.....	2364	870	500	3190	130	830	68	434	250
DEC. 1973.....	626	1470	850	1440	260	439	110	186	390
JAN. 1974.....	6207	680	390	6540	85	1420	55	922	200
FEB. 1974.....	1026	1280	740	2050	220	609	97	269	350
MAR. 1974.....	473.1	1830	1100	1410	340	434	140	179	480
APR. 1974.....	275.8	1630	950	707	300	223	120	89.4	430
MAY 1974.....	6216.19	523	300	5040	50	839	43	722	170
JUNE 1974.....	1857.79	684	390	1960	86	431	55	276	200
JULY 1974.....	97.8	1850	1100	290	350	92.4	140	37.0	490
AUG. 1974.....	6552.39	451	250	4420	34	602	38	672	150
SEPT 1974.....	12472	296	160	5390	28	943	27	909	120
TOTAL	66217.06	**	**	45300	**	9060	**	6820	**
WTD.AVG.	181.42	449	250	**	51	**	38	**	150

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	485	590	1270	1740	561	1660	1740	1570	699	1910	1780	280
2	526	570	1060	1630	1050	1810	1810	2210	383	1920	1840	274
3	559	550	1380	1720	1070	1820	1820	1560	1380	1890	1840	274
4	495	530	1460	1680	1070	1910	1570	1740	991	1920	1800	810
5	499	710	1020	1660	1120	1760	1670	2200	594	1840	1780	270
6	408	1160	1010	1760	896	1690	1500	1720	783	1910	1690	293
7	525	830	1500	1660	1220	1830	1760	1750	701	1860	493	307
8	556	890	1570	1690	1320	1630	1470	1590	841	1840	470	247
9	900	580	1200	1510	386	1920	1530	1680	496	1840	1810	453
10	620	930	1640	1710	1640	1810	1520	571	485	1860	352	552
11	300	590	1670	1670	1520	1890	1790	328	700	1860	1800	286
12	174	1020	1430	1620	1230	1860	1630	800	452	1840	384	375
13	277	900	1690	1650	1060	2100	1740	326	618	1860	329	248
14	306	1050	1670	1660	1650	1910	1470	598	765	1870	1650	223
15	181	840	1320	1430	1670	2020	1690	357	1100	1840	523	259
16	200	1050	1650	1670	1650	2000	1560	363	970	1780	340	314
17	262	1060	1620	1690	1540	1850	1680	374	1510	1780	577	448
18	280	900	1720	1660	1610	1740	1770	381	764	1770	679	424
19	325	1020	1440	374	1320	1920	1690	1460	1520	1770	640	459
20	1270	1140	1560	569	1640	1700	1620	419	1820	1800	665	547
21	975	1020	1670	698	1660	1910	1500	1720	612	1760	583	639
22	383	1010	1530	370	1670	1800	1760	460	758	1830	716	906
23	416	1050	1660	987	1620	1850	1580	493	1810	1790	530	929
24	445	1020	1630	701	1800	2040	1380	335	1940	1780	759	853
25	474	1180	1700	863	1680	1740	1490	594	1840	2380	640	1140
26	497	1060	1390	385	1690	1760	1540	961	1100	1850	827	548
27	860	1010	1680	870	1890	1910	1600	692	1940	1790	818	1220
28	564	1020	1330	551	1760	1770	1690	758	1910	1750	661	1300
29	534	1060	1720	640	---	1760	1570	1530	1840	1800	536	716
30	507	1200	1560	739	---	1770	1690	417	1900	1800	259	1390
31	1160	---	1750	1670	---	2180	---	584	---	1800	367	---
MONTH	515	918	1500	1270	1390	1850	1630	988	1110	1850	908	566

GUADALUPE RIVER BASIN

08173000 PLUM CREEK NEAR LULING, TEX.--Continued

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	25.0	22.0	14.0	12.0	18.0	16.0	25.0	22.0	25.0	25.0	26.0	27.0
2	27.0	23.0	16.0	11.0	19.0	15.0	24.0	24.0	24.0	25.0	28.0	28.0
3	25.0	20.0	18.0	8.0	17.0	15.0	24.0	25.0	24.0	27.0	25.0	24.0
4	25.0	20.0	18.0	6.0	16.0	18.0	20.0	24.0	27.0	28.0	25.0	26.0
5	24.0	20.0	14.0	7.0	16.0	20.0	20.0	25.0	27.0	29.0	25.0	23.0
6	24.0	21.0	15.0	10.0	14.0	20.0	16.0	22.0	27.0	29.0	26.0	23.0
7	24.0	22.0	15.0	10.0	12.0	21.0	24.0	22.0	26.0	29.0	25.0	23.0
8	25.0	23.0	13.0	11.0	13.0	20.0	19.0	22.0	24.0	29.0	25.0	23.0
9	25.0	20.0	14.0	12.0	12.0	23.0	19.0	25.0	24.0	28.0	28.0	23.0
10	27.0	18.0	14.0	13.0	14.0	23.0	18.0	21.0	25.0	25.0	28.0	25.0
11	---	18.0	13.0	10.0	14.0	24.0	18.0	24.0	25.0	25.0	28.0	25.0
12	24.0	18.0	14.0	8.0	15.0	28.0	20.0	24.0	25.0	25.0	27.0	25.0
13	22.0	20.0	14.0	12.0	16.0	23.0	22.0	24.0	24.0	25.0	28.0	23.0
14	24.0	20.0	14.0	10.0	18.0	20.0	18.0	25.0	27.0	25.0	28.0	23.0
15	23.0	20.0	13.0	12.0	16.0	19.0	19.0	25.0	27.0	25.0	30.0	22.0
16	---	19.0	13.0	14.0	16.0	19.0	20.0	25.0	25.0	28.0	30.0	23.0
17	23.0	18.0	13.0	15.0	16.0	20.0	18.0	27.0	27.0	28.0	30.0	28.0
18	21.0	20.0	15.0	16.0	19.0	20.0	19.0	25.0	27.0	25.0	30.0	28.0
19	22.0	20.0	13.0	15.0	18.0	21.0	20.0	24.0	28.0	28.0	27.0	27.0
20	22.0	19.0	9.0	15.0	19.0	22.0	20.0	27.0	28.0	27.0	27.0	25.0
21	20.0	18.0	9.0	17.0	16.0	18.0	20.0	27.0	24.0	28.0	30.0	25.0
22	---	19.0	10.0	17.0	16.0	18.0	23.0	25.0	24.0	28.0	29.0	22.0
23	22.0	23.0	11.0	13.0	13.0	19.0	25.0	25.0	28.0	30.0	29.0	24.0
24	21.0	20.0	13.0	13.0	15.0	16.0	24.0	25.0	28.0	30.0	28.0	22.0
25	23.0	19.0	13.0	10.0	14.0	16.0	25.0	26.0	27.0	30.0	28.0	22.0
26	24.0	19.0	14.0	10.0	12.0	15.0	24.0	26.0	28.0	30.0	27.0	24.0
27	21.0	22.0	12.0	12.0	15.0	18.0	---	25.0	25.0	28.0	27.0	21.0
28	20.0	15.0	14.0	14.0	16.0	20.0	25.0	27.0	25.0	31.0	28.0	24.0
29	18.0	14.0	15.0	14.0	---	---	25.0	27.0	28.0	28.0	25.0	22.0
30	21.0	14.0	14.0	15.0	---	19.0	22.0	25.0	26.0	28.0	25.0	22.0
31	18.0	---	12.0	13.0	---	22.0	---	25.0	---	26.0	25.0	---
MONTH	23.0	19.5	13.5	12.0	15.5	19.5	21.0	24.5	26.0	27.5	27.5	24.0

GUADALUPE RIVER BASIN

597

08174600 PEACH CREEK BELOW DILWORTH, TEX.

LOCATION.--Lat 29°28'26", long 97°18'59", Gonzales County, at gaging station at bridge on U.S. Highway 90-A, 1.3 miles (2.1 km) downstream from Mitchell Creek, 3.1 miles (5.0 km) southwest of Dilworth, 6.4 miles (10.3 km) upstream from mouth, and 8.5 miles (13.7 km) south-east of Gonzales.

DRAINAGE AREA.--460 mi² (1,190 km²).

PERIOD OF RECORD.--Chemical analyses: April 1962 to September 1974.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	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 SODIUM PLUS POTAS- SIUM (K) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)
OCT. 24...	1100	45	22	87	20	--	68	--	132	0
NOV. 29...	1021	49	14	35	6.7	--	32	--	72	0
JAN. 10...	1645	12	22	110	31	140	--	7.3	171	0
MAR. 18...	1035	20	23	140	25	160	--	7.5	172	0
APR. 30...	1310	6.8	20	120	32	130	--	5.9	188	0
JUNE 11...	1724	380	14	22	3.8	20	--	6.7	62	0
JULY 22...	1500	.30	15	33	6.3	120	--	4.1	245	0
SEP. 03...	1445	40	19	19	3.2	17	--	7.0	62	0

DATE	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	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)
OCT. 24...	200	96	.0	553	300	190	1.7	907	7.2	20.0
NOV. 29...	63	42	.0	228	120	56	1.3	413	6.3	14.5
JAN. 10...	310	160	--	865	400	260	3.0	1370	7.7	10.5
MAR. 18...	370	200	--	1010	450	310	3.3	1590	7.8	21.0
APR. 30...	330	170	--	901	430	280	2.7	1440	7.8	23.0
JUNE 11...	37	24	--	158	71	20	1.0	270	7.2	25.0
JULY 22...	77	67	--	443	110	0	5.0	740	8.0	28.0
SEP. 03...	29	17	--	142	61	10	1.0	212	7.3	26.0

GUADALUPE RIVER BASIN

08175000 SANDIES CREEK NEAR WESTHOFF, TEX.

LOCATION.--Lat 29°12'54", long 97°26'57", De Witt County, at gaging station 100 ft (30 m) downstream from bridge on county highway, 1.9 miles (3.1 km) upstream from Birds Creek, and 2.0 miles (3.2 km) northeast of Westhoff.

DRAINAGE AREA.--549 mi² (1,422 km²).

PERIOD OF RECORD.--Chemical analyses: April 1962 to September 1974.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO ₂) (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 SODIUM PLUS POTAS- SIUM (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)
OCT. 17...	1355	2340	16	14	2.7	--	12	--	49	0
NOV. 26...	1415	104	12	22	3.4	--	59	--	80	0
JAN. 02...	1244	16	17	59	23	240	--	11	335	0
FEB. 11...	1207	19	20	82	18	150	--	9.1	225	0
MAR. 29...	1600	16	17	81	20	260	--	10	380	0
MAY 03...	1431	18	16	59	14	220	--	10	335	0
JUNE 17...	1150	849	22	50	11	120	--	11	224	0
JULY 29...	1155	1.9	20	54	10	210	--	14	371	0
AUG. 19...	1240	5.2	23	26	5.0	91	--	9.2	160	0

DATE	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	HAZU- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HAZU- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)
OCT. 17...	14	12	.0	95	46	6	.8	167	6.4	23.0
NOV. 26...	34	68	.0	237	69	3	3.1	442	6.6	22.0
JAN. 02...	160	240	--	915	240	0	6.7	1560	7.9	8.5
FEB. 11...	150	200	--	740	280	94	3.9	1280	7.7	10.5
MAR. 29...	130	300	--	1010	280	0	6.7	1730	8.3	21.0
MAY 03...	95	240	--	819	210	0	6.7	1450	8.0	25.5
JUNE 17...	79	140	--	543	170	0	4.0	939	7.3	--
JULY 29...	60	220	--	771	180	0	6.9	1340	8.0	28.0
AUG. 19...	41	87	--	361	86	0	4.3	607	7.5	28.0

GUADALUPE RIVER BASIN

599

08175800 GUADALUPE RIVER AT CUERO, TEX.

LOCATION.--Lat 29°03'57", long 97°19'16", De Witt County, at gaging station on U.S. Highways 77-A, 87, and 183, 2.1 miles (3.4 km) upstream from Gohlke Creek, 2.4 miles (3.9 km) southwest of Cuero, and 4.2 miles (6.8 km) downstream from Sandies Creek.

DRAINAGE AREA.--4,934 mi² (12,779 km²).

PERIOD OF RECORD.--Chemical analyses: March 1968 to September 1974.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NESIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED SODIUM PLUS POTAS- SIUM (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)
OCT.										
17...	1050	18100	12	40	6.9	--	4.3	--	124	0
23...	1300	7150	12	72	14	--	10	--	252	0
NOV.										
27...	1130	2740	12	75	18	--	26	--	254	0
JAN.										
02...	1704	1600	11	77	19	30	--	2.4	284	0
FEB.										
11...	1900	1660	13	88	18	34	--	2.7	294	0
MAR.										
29...	1120	1220	13	77	19	33	--	2.4	286	2
MAY										
03...	1132	1100	13	74	17	31	--	2.4	293	0
JUNE										
17...	1735	1390	12	59	14	23	--	3.2	217	0
JULY										
30...	0945	637	13	63	19	26	--	2.3	252	0
SEP.										
13...	0940	3410	13	45	9.6	15	--	3.5	170	0

DATE	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	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)
OCT.										
17...	17	13	.0	154	130	26	.2	298	7.0	23.0
23...	21	22	.0	275	240	30	.3	518	7.5	22.5
NOV.										
27...	43	46	.0	345	260	54	.7	628	7.8	22.0
JAN.										
02...	35	41	--	355	270	38	.8	627	8.2	12.0
FEB.										
11...	46	49	--	396	290	53	.9	694	7.9	14.0
MAR.										
29...	40	50	--	377	270	33	.9	666	8.4	18.0
MAY										
03...	38	43	--	363	250	14	.8	624	8.2	25.0
JUNE										
17...	33	36	--	287	210	27	.7	499	8.0	--
JULY										
30...	29	39	--	316	240	29	.7	554	8.2	30.0
SEP.										
13...	20	14	--	209	150	12	.5	354	8.1	25.0

GUADALUPE RIVER BASIN

08176500 GUADALUPE RIVER AT VICTORIA, TEX.
(National stream-quality accounting network)

LOCATION.--Lat 28°47'34", Long 97°00'46", Victoria County, at gaging station at bridge on U.S. Highway 59 in Victoria, 1,300 ft (396 m) upstream from Southern Pacific Railroad Co. bridge, and 15 miles (24 km) upstream from Coleta Creek.

DRAINAGE AREA.--5,198 mi² (13,460 km²).

PERIOD OF RECORD.--Chemical analyses: October 1945 to September 1946, October 1948 to September 1974.

Water temperatures: November 1950 to September 1974.

Sediment records: October 1972 to September 1974.

EXTREMES.--October 1973 to September 1974:

Specific conductance: Maximum daily, 705 micromhos Feb. 18; minimum daily, 178 micromhos Oct. 13.

Water temperatures: Maximum, 30.0°C on several days during June, July, and August; minimum, 9.0°C Jan. 4, 16.

Period of record:

Specific conductance: Maximum daily, 1,950 micromhos on several days during January 1946; minimum daily, 155 micromhos Sept. 22, 1967.

Water temperatures (1950-74): Maximum, 32.0°C Aug. 4, 27, 1952; minimum, 2.0°C Jan. 11, 12, 1962, Jan. 24, 1963.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO ₂) (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 (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)
OCT.										
16...	1805	24900	12	32	4.6	7.6	6.3	121	0	11
24...	1620	7400	14	70	13	14	3.0	256	0	22
NOV.										
13...	1700	2860	14	85	17	27	2.3	308	0	31
20...	1108	3180	13	66	16	19	2.3	255	0	24
DEC.										
11...	1245	2030	14	76	18	28	2.1	286	0	28
11...	1430	2020	14	80	19	24	2.4	289	0	27
JAN.										
03...	1730	1660	12	43	19	31	2.1	197	0	23
15...	1820	3800	7.8	36	6.3	13	4.8	124	0	23
FEB.										
13...	1715	1800	14	86	18	34	2.6	301	0	46
20...	1530	1680	12	86	18	37	2.6	288	0	46
MAR.										
19...	1500	1390	13	83	18	36	2.6	295	0	40
28...	0920	1350	14	77	17	34	2.4	284	0	42
APR.										
23...	1145	1140	12	78	18	34	2.3	291	0	39
MAY										
21...	1050	1630	13	63	13	21	2.7	228	0	27
JUNE										
25...	1500	1130	15	66	17	25	2.6	266	0	26
JULY										
23...	1410	773	14	59	17	29	2.2	234	0	33
AUG.										
28...	1010	835	14	69	17	25	3.1	252	0	29
SEP.										
24...	1305	2260	15	58	11	22	3.8	204	0	30

GUADALUPE RIVER BASIN

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08176500 GUADALUPE RIVER AT VICTORIA, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL- NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)
OCT.										
16...	9.5	--	--	--	--	--	--	--	--	143
24...	21	.2	.60	.01	.00	.16	.16	.15	--	286
NOV.										
13...	38	.2	1.3	.00	.00	.14	.14	.09	--	371
20...	26	--	--	--	--	--	--	--	--	292
DEC.										
11...	36	.2	1.2	.00	.00	.12	.12	.09	345	349
11...	36	--	--	--	--	--	--	--	--	345
JAN.										
03...	54	--	--	--	--	--	--	--	--	281
15...	19	--	.90	.00	.13	.69	.82	.33	193	171
FEB.										
13...	51	--	--	--	--	--	--	--	--	400
20...	57	--	1.2	.01	.15	.07	.22	.09	412	401
MAR.										
19...	47	--	1.2	.01	.07	.34	.41	.08	380	385
28...	48	--	--	--	--	--	--	--	--	374
APR.										
23...	46	--	.85	.01	.08	.19	.27	.10	371	374
MAY										
21...	29	--	.95	.00	.02	.69	.71	.15	302	281
JUNE										
25...	33	--	.78	.01	.12	.52	.64	.18	328	316
JULY										
23...	41	--	.50	.00	.28	.17	.45	.06	307	311
AUG.										
28...	37	--	.75	.00	.09	.84	.93	.10	323	319
SEP.										
24...	29	--	.61	.00	.08	.46	.54	.14	274	269

DATE	TOTAL NON- FILT- RABLE RESIDUE (MG/L)	VOL. NON- FILT- RABLE RESIDUE (MG/L)	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)	COLOR (PLAT- INUM- COBALT UNITS)
OCT.									
16...	--	--	99	0	.3	247	7.8	24.0	--
24...	--	--	230	18	.4	503	7.6	23.0	--
NOV.									
13...	--	--	280	30	.7	643	7.8	21.0	--
20...	--	--	230	22	.5	518	8.1	22.5	--
DEC.									
11...	--	--	260	29	.8	599	7.7	16.0	5
11...	--	--	280	41	.6	599	8.1	16.0	--
JAN.									
03...	--	--	190	24	1.0	513	7.9	11.0	--
15...	48	8	120	14	.5	314	7.7	15.0	40
FEB.									
13...	--	--	290	42	.9	706	7.7	16.5	--
20...	32	1	290	53	.9	712	8.0	19.0	10
MAR.									
19...	38	4	280	39	.9	670	7.8	24.0	5
28...	--	--	260	29	.9	669	8.3	18.0	--
APR.									
23...	27	6	270	31	.9	653	7.7	25.0	2
MAY									
21...	97	6	210	24	.6	501	8.1	--	0
JUNE									
25...	23	0	240	17	.7	560	8.3	30.0	0
JULY									
23...	23	0	220	25	.9	548	8.1	31.0	--
AUG.									
28...	37	11	240	36	.7	530	7.9	29.0	10
SEP.									
24...	87	16	190	23	.7	442	7.7	24.0	20

GUADALUPE RIVER BASIN

08176500 GUADALUPE RIVER AT VICTORIA, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	BIO- CHEM- ICAL OXYGEN DEMAND (MG/L)	TOTAL PHYTO- PLANK- TON (CELLS PER ML)	IMME- DIATE COLI- FORM (COL. PER 100 ML)	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT.									
16...	--	--	--	--	--	--	--	--	--
24...	60	8.0	92	.8	40	150000	650	640	--
NOV.									
13...	25	8.3	92	.6	74	6000	15	20	.0
20...	--	--	--	--	--	--	--	--	--
DEC.									
11...	15	9.6	96	.5	100	360	6	10	--
11...	--	--	--	--	--	--	--	--	--
JAN.									
03...	--	--	--	--	--	--	--	--	--
15...	130	9.8	96	3.8	6000	39000	300	420	--
FEB.									
13...	--	--	--	--	--	--	--	--	--
20...	15	10.3	110	1.6	1300	3000	41	40	.0
MAR.									
19...	20	8.3	98	.7	2100	360	140	32	--
28...	--	--	--	--	--	--	--	--	--
APR.									
23...	10	8.9	106	1.2	380	--	--	--	.0
MAY									
21...	50	7.2	88	.7	1200	6200	0	480	--
JUNE									
25...	25	10.8	142	1.4	1500	2600	52	320	2.8
JULY									
23...	20	7.9	105	4.8	3600	48000	300	380	--
AUG.									
28...	15	7.7	99	1.2	560	7000	80	110	3.1
SEP.									
24...	45	7.6	89	.9	110	12000	1000	1260	--

DATE	TIME	DIS- SOLVED ALUM- INUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	DIS- SOLVED BORON (B) (UG/L)	TOTAL CAU- MIUM (CD) (UG/L)	DIS- SOLVED CAU- MIUM (CD) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	TOTAL COBALT (CO) (UG/L)
FEB.										
20...	1530	30	--	2	130	<10	0	0	0	<50
APR.										
23...	1145	10	2	1	120	<10	0	10	10	<50
JUNE										
25...	1500	10	1	0	120	<10	1	10	10	<50
AUG.										
28...	1010	10	2	3	120	<10	0	0	0	<50

DATE	DIS- SOLVED COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)	TOTAL IRON (FE) (UG/L)	DIS- SOLVED IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	DIS- SOLVED LITHIUM (LI) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)
FEB.									
20...	0	10	4	490	10	<100	3	20	30
APR.									
23...	0	10	2	620	10	<100	1	20	30
JUNE									
25...	0	10	3	590	10	<100	3	10	20
AUG.									
28...	0	<10	1	750	20	<100	0	0	10

DATE	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL MERCURY (MG) (UG/L)	DIS- SOLVED MERCURY (MG) (UG/L)	DIS- SOLVED NICKEL (NI) (UG/L)	TOTAL SELE- NIUM (SE) (UG/L)	DIS- SOLVED SELE- NIUM (SE) (UG/L)	DIS- SOLVED STRON- TIUM (SR) (UG/L)	TOTAL ZINC (ZN) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)
FEB.									
20...	0	.0	.0	3	2	1	650	20	10
APR.									
23...	40	.1	.1	0	1	2	630	20	0
JUNE									
25...	0	.2	.0	0	6	1	550	10	10
AUG.									
28...	0	.0	.0	0	1	2	540	70	10

GUADALUPE RIVER BASIN

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08176500 GUADALUPE RIVER AT VICTORIA, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	ALDRIN (UG/L)	ALDRIN IN BOTTOM DE- POSITS (UG/KG)	DDD (UG/L)	DDD IN BOTTOM DE- POSITS (UG/KG)	DDE (UG/L)	DDE IN BOTTOM DE- POSITS (UG/KG)	DDT (UG/L)	DDT IN BOTTOM DE- POSITS (UG/KG)
FEB. 20...	1530	1680	19.0	.00	.0	.00	.3	.00	.4	.00	.0
APR. 23...	1145	1140	25.0	.00	.0	.00	.5	.00	1.0	.00	.7
AUG. 28...	1010	835	29.0	.00	.0	.00	1.1	.00	.8	.00	.0

DATE	DI- ELDRIN (UG/L)	DI- ELDRIN IN BOTTOM DE- POSITS (UG/KG)	ENDRIN (UG/L)	ENDRIN IN BOTTOM DE- POSITS (UG/KG)	HEPTA- CHLOR (UG/L)	HEPTA- CHLOR IN BOTTOM DE- POSITS (UG/KG)	HEPTA- CHLOR EPOXIDE (UG/L)	HEPTA- CHLOR EPOXIDE IN BOT- TOM DE- POSITS (UG/KG)	LINDANE (UG/L)	LINDANE IN BOTTOM DE- POSITS (UG/KG)	CHLOR- DANE (UG/L)
FEB. 20...	.00	.0	.00	.0	.00	.0	.00	.0	.00	.0	.0
APR. 23...	.00	.0	.00	.0	.00	.0	.00	.0	.00	.0	.0
AUG. 28...	.00	.0	.00	.0	.00	.0	.00	.0	.00	.0	.0

DATE	CHLOR- DANE IN BOTTOM DE- POSITS (UG/KG)	PCB (UG/L)	PCB IN BOTTOM DE- POSITS (UG/KG)	DI- AZINON (UG/L)	MALA- THION (UG/L)	METHYL PARA- THION (UG/L)	PARA- THION (UG/L)	2,4-D (UG/L)	SILVEX (UG/L)	2,4,5-T (UG/L)
FEB. 20...	0	.0	0	.00	.00	.00	.00	.00	.00	.00
APR. 23...	0	.0	0	.00	.00	.00	.00	.00	.00	.00
AUG. 28...	2	.0	0	.00	.00	.00	.00	.00	.00	.02

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	SUS- PENDE SEDIM- ENT DIS- CHARGE (MG/L)	SUS- PENDE SEDIM- ENT DIS- CHARGE (T/DAY)	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM
OCT. 24...	1620	7400	23.0	137	2740	96
NOV. 13...	1700	2860	21.0	128	988	70
DEC. 11...	1245	2030	16.0	38	208	90
JAN. 15...	1820	3800	15.0	310	3180	--
FEB. 20...	1530	1680	19.0	32	145	--
MAR. 19...	1500	1390	24.0	40	150	77
APR. 23...	1145	1140	25.0	35	108	55
MAY 21...	1050	1630	--	88	387	88
JUNE 25...	1500	1130	30.0	52	159	90
JULY 23...	1410	773	31.0	48	100	97
AUG. 28...	1010	835	29.0	31	70	93
SEP. 24...	1305	2250	24.0	89	541	90

GUADALUPE RIVER BASIN

08176500 GUADALUPE RIVER AT VICTORIA, TEX.--Continued

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

MONTH	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCT- ANCE (MICRO- MHOS)	DIS- SOLVED SOLIDS (MG/L)	DIS- SOLVED SOLIDS (TONS)	DIS- SOLVED CHLORIDE (MG/L)	DIS- SOLVED CHLORIDE (TONS)	DIS- SOLVED SULFATE (MG/L)	DIS- SOLVED SULFATE (TONS)	HARDNESS (CA+MG) (MG/L)
OCT. 1973.....	327010	308	170	150000	17	15000	18	15900	120
NOV. 1973.....	101910	595	340	93600	41	11300	32	8810	270
DEC. 1973.....	66470	628	360	64600	44	7900	33	5920	280
JAN. 1974.....	113090	424	240	73300	27	8240	24	7330	180
FEB. 1974.....	52970	639	370	52900	45	6440	34	4860	280
MAR. 1974.....	45350	653	380	46500	46	5630	37	4530	280
APR. 1974.....	35730	619	360	34700	43	4150	33	3180	270
MAY 1974.....	68550	517	290	53700	34	6290	28	5180	230
JUNE 1974.....	51700	509	290	40500	34	4750	28	3910	220
JULY 1974.....	26710	548	310	22400	37	2670	29	2090	250
AUG. 1974.....	30763	522	300	24900	35	2910	28	2330	230
SEPT 1974.....	117840	342	190	60500	20	6360	20	6360	140
TOTAL	1038093	**	**	718000	**	81600	**	70400	**
WTD.AVG.	2844	452	260	**	29	**	25	**	190

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	305	522	634	618	435	605	684	567	533	523	465	483
2	329	551	658	568	527	589	531	641	520	556	544	350
3	348	520	638	661	578	644	697	646	505	559	568	289
4	377	578	631	659	420	633	595	645	451	547	564	285
5	419	575	598	587	572	644	672	603	493	567	554	321
6	455	590	584	588	628	644	668	625	485	507	498	388
7	462	595	571	570	644	644	531	648	483	515	555	317
8	412	610	575	645	679	600	646	648	497	510	527	300
9	433	624	572	640	684	653	584	639	511	517	539	402
10	450	624	594	631	688	661	503	528	475	502	555	446
11	507	639	607	595	690	667	582	317	492	519	514	420
12	211	644	616	641	700	663	668	519	521	548	526	404
13	178	648	629	660	693	665	593	576	503	572	505	425
14	188	650	638	500	696	641	620	493	442	566	501	347
15	202	646	652	316	685	643	658	475	527	569	561	303
16	236	614	643	308	689	670	658	459	500	568	555	303
17	242	578	645	397	691	660	543	451	462	568	600	223
18	276	553	643	528	705	662	517	454	505	585	489	223
19	278	526	626	617	684	668	657	479	500	576	459	269
20	275	545	663	500	678	663	626	500	494	577	465	299
21	288	599	656	388	695	669	666	511	530	578	470	362
22	394	606	638	398	687	683	645	480	547	553	442	393
23	433	618	668	284	685	644	656	463	566	543	454	415
24	489	630	696	334	682	683	652	479	570	548	484	460
25	499	627	672	422	680	673	621	509	578	559	520	472
26	484	579	631	459	678	651	660	541	569	551	510	483
27	427	655	668	340	674	683	623	552	558	556	531	510
28	515	611	662	335	678	671	632	539	553	540	547	509
29	538	669	668	332	---	667	549	552	511	554	520	541
30	544	659	648	294	---	673	616	558	544	553	538	563
31	499	---	582	330	---	658	---	549	---	567	542	---
MONTH	377	603	632	489	651	654	618	537	514	550	519	384

GUADALUPE RIVER BASIN

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08176500 GUADALUPE RIVER AT VICTORIA, TEX.--Continued

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	25.0	20.0	18.0	12.0	15.0	17.0	22.0	24.0	28.0	27.0	30.0	28.0
2	24.0	20.0	19.0	12.0	11.0	18.0	22.0	24.0	---	28.0	30.0	---
3	25.0	21.0	19.0	11.0	16.0	19.0	22.0	25.0	28.0	28.0	30.0	28.0
4	25.0	23.0	18.0	9.0	11.0	20.0	20.0	25.0	28.0	28.0	30.0	25.0
5	24.0	23.0	17.0	10.0	15.0	20.0	20.0	24.0	28.0	28.0	29.0	24.0
6	25.0	20.0	15.0	10.0	17.0	21.0	20.0	---	28.0	29.0	27.0	24.0
7	25.0	21.0	16.0	11.0	15.0	21.0	21.0	25.0	28.0	29.0	27.0	24.0
8	25.0	23.0	14.0	12.0	13.0	23.0	21.0	25.0	28.0	29.0	27.0	---
9	25.0	22.0	15.0	14.0	13.0	23.0	20.0	25.0	28.0	29.0	27.0	24.0
10	26.0	19.0	15.0	12.0	13.0	23.0	21.0	24.0	27.0	28.0	28.0	24.0
11	26.0	20.0	14.0	11.0	13.0	23.0	22.0	24.0	27.0	29.0	28.0	25.0
12	23.0	---	15.0	10.0	14.0	23.0	23.0	25.0	28.0	29.0	28.0	25.0
13	22.0	20.0	16.0	---	15.0	23.0	24.0	25.0	28.0	28.0	29.0	25.0
14	22.0	21.0	15.0	11.0	17.0	22.0	---	25.0	27.0	28.0	29.0	24.0
15	23.0	21.0	14.0	10.0	18.0	21.0	21.0	25.0	27.0	29.0	30.0	24.0
16	24.0	19.0	14.0	9.0	16.0	22.0	20.0	25.0	---	28.0	30.0	24.0
17	21.0	20.0	13.0	12.0	17.0	---	20.0	26.0	28.0	28.0	30.0	24.0
18	19.0	22.0	15.0	14.0	17.0	22.0	21.0	26.0	29.0	28.0	30.0	24.0
19	21.0	22.0	13.0	15.0	16.0	22.0	22.0	27.0	---	29.0	30.0	25.0
20	20.0	21.0	12.0	---	16.0	24.0	23.0	27.0	30.0	29.0	30.0	25.0
21	20.0	20.0	11.0	16.0	18.0	21.0	23.0	26.0	28.0	29.0	30.0	25.0
22	22.0	21.0	11.0	16.0	17.0	20.0	23.0	26.0	29.0	29.0	29.0	25.0
23	20.0	23.0	---	15.0	15.0	20.0	24.0	27.0	30.0	29.0	29.0	23.0
24	20.0	24.0	13.0	15.0	16.0	19.0	24.0	27.0	28.0	29.0	29.0	22.0
25	21.0	21.0	13.0	14.0	15.0	17.0	24.0	28.0	28.0	29.0	27.0	24.0
26	22.0	23.0	13.0	12.0	13.0	15.0	23.0	28.0	27.0	29.0	28.0	22.0
27	22.0	22.0	13.0	12.0	15.0	17.0	24.0	27.0	26.0	29.0	28.0	23.0
28	20.0	19.0	13.0	---	16.0	18.0	25.0	27.0	26.0	30.0	28.0	25.0
29	21.0	17.0	15.0	12.0	---	19.0	25.0	28.0	27.0	30.0	28.0	22.0
30	22.0	17.0	16.0	13.0	---	19.0	25.0	28.0	26.0	30.0	27.0	22.0
31	21.0	---	15.0	13.0	---	21.0	---	28.0	---	30.0	28.0	---
MONTH	22.5	21.0	14.5	12.5	15.0	20.5	22.0	26.0	28.0	28.5	28.5	24.0

GUADALUPE RIVER BASIN

08177600 OLMOS CREEK TRIBUTARY AT FARM ROAD 1535, SHAVANO PARK, TEX.

LOCATION.--Lat 29°34'35", long 98°32'45", Bexar County, at culvert on Farm Road 1535 at Shavano Park and 1.9 miles (3.1 km) southeast of intersection of Farm Roads 1535 and 1604.

DRAINAGE AREA.--0.33 mi² (0.85 km²).

PERIOD OF RECORD.--Chemical and biochemical analyses: October 1968 to September 1974.

Pesticide analyses: October 1968 to September 1974.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SiO ₂) (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNE-SIUM (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED POTAS-SIUM (K) (MG/L)	BICARBONATE (HCO ₃) (MG/L)	CARBONATE (CO ₃) (MG/L)	DIS-SOLVED SULFATE (SO ₄) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)
AUG.											
08...	0940	28	11	22	1.0	4.0	5.4	70	0	7.2	6.4
08...	1330	1.0	4.4	29	1.7	4.3	5.9	85	0	10	5.0
30...	0915	1.0	4.0	15	.3	.7	1.3	50	0	2.2	1.7
30...	1145	15	14	23	1.3	3.0	4.2	76	0	6.4	3.4

DATE	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO-GEN (N) (MG/L)	ORGANIC NITRO-GEN (N) (MG/L)	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	TOTAL NON-FILT-RABLE RESIDUE (MG/L)	VOL. NON-FILT-RABLE RESIDUE (MG/L)	HARD-NESS (CA+MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)
AUG.											
08...	1.3	.02	.08	1.5	1.6	.33	92	53	8	59	2
08...	1.4	.04	.06	1.5	1.6	.38	102	20	1	79	10
30...	.16	.00	.05	.93	.98	.11	50	384	48	39	0
30...	.52	.01	.16	1.3	1.5	.36	93	52	16	63	1

DATE	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	TUR-BID-ITY (JTU)	DIS-SOLVED OXYGEN (MG/L)	PER-CENT SATUR-ATION	BIO-CHEM-ICAL OXYGEN DEMAND 5 DAY (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L)
AUG.											
08...	.2	155	7.6	22.0	100	15	7.4	84	3.6	19	.0
08...	.2	185	7.3	25.0	140	3	6.8	81	2.9	--	.1
30...	.0	75	7.7	22.5	45	85	7.8	89	1.2	6.3	.0
30...	.2	139	7.7	22.0	90	25	8.0	91	2.5	17	.0

DATE	TIME	DIS-SOLVED ALUM-INUM (AL) (UG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	DIS-SOLVED BORON (B) (UG/L)	DIS-SOLVED CAD-MIUM (CD) (UG/L)	DIS-SOLVED CHRO-MIUM (CR) (UG/L)	DIS-SOLVED COBALT (CO) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)
AUG.								
08...	0940	30	1	80	<1	0	0	4
08...	1330	10	1	100	<1	0	0	5
30...	1145	50	1	60	0	0	0	3

DATE	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	DIS-SOLVED LITHIUM (LI) (UG/L)	DIS-SOLVED MAN-GANESE (MN) (UG/L)	DIS-SOLVED MERCURY (HG) (UG/L)	DIS-SOLVED NICKEL (NI) (UG/L)	DIS-SOLVED STRON-TIUM (SR) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)
AUG.								
08...	50	2	0	0	.0	1	50	20
08...	50	3	0	0	.1	2	50	0
30...	50	0	0	0	.0	0	40	0

GUADALUPE RIVER BASIN

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08177600 OLMOS CREEK TRIBUTARY AT FARM ROAD 1535, SHAVANO PARK, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	ALDRIN (UG/L)	DDD (UG/L)	DDE (UG/L)	DDT (UG/L)	DI- ELDRIN (UG/L)	ENDRIN (UG/L)	HEPTA- CHLOR (UG/L)	HEPTA- CHLOR EPOXIDE (UG/L)
AUG.											
08...	0940	28	22.0	.00	.00	.01	.00	.01	.00	.00	.00
08...	1330	1.0	25.0	.00	.00	.00	.00	.01	.00	.00	.00
30...	0915	1.0	22.5	.00	.00	.00	.00	.00	.00	.00	.00
30...	1145	15	--	.00	.00	.00	.00	.00	.00	.00	.00

DATE	LINDANE (UG/L)	CHLOR- DANE (UG/L)	PCB (UG/L)	DI- AZINON (UG/L)	MALA- THION (UG/L)	METHYL PARA- THION (UG/L)	PARA- THION (UG/L)	2,4-D (UG/L)	SILVEX (UG/L)	2,4,5-T (UG/L)
AUG.										
08...	.00	.0	.0	.04	.00	.00	.04	.00	.00	.25
08...	.00	.0	.0	.01	.00	.00	.00	.00	.00	1.1
30...	.00	.0	.0	.00	.00	.00	.00	.00	.00	.00
30...	.00	.0	.0	.03	.00	.00	.00	.00	.00	.21

GUADALUPE RIVER BASIN

08177700 OLMOS CREEK AT DRESDEN DRIVE, SAN ANTONIO, TEX.

LOCATION.--Lat 29°29'56", long 98°30'36", Bexar County, at gaging station at bridge on Dresden Drive in San Antonio, 0.15 mile (0.24 km) west of intersection of Blanco Road and Dresden Drive, and 4.0 miles (6.4 km) upstream from Olmos Dam.

DRAINAGE AREA.--21.2 mi² (54.9 km²).

PERIOD OF RECORD.--Chemical and biochemical analyses: October 1968 to September 1974.

Pesticide analyses: October 1969 to September 1974.

Sediment analyses: October 1970 to September 1973.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NESIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (CO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
APR.											
11...	0825	14	5.2	41	2.7	17	4.3	113	0	31	23
30...	1223	3.7	17	120	8.3	50	2.5	310	0	91	60
MAY											
09...	2140	120	7.2	40	1.9	9.3	2.6	115	0	17	11
JULY											
12...	0900	1.5	15	68	6.4	37	4.1	173	0	69	52
12...	1145	1.0	14	55	5.5	32	3.7	140	0	54	42
AUG.											
07...	0905	--	4.9	23	1.0	4.0	3.3	75	0	11	5.3
08...	1420	--	8.8	25	.7	3.2	4.3	79	0	13	4.4

DATE	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	TOTAL NON- FIL- TRABLE RESIDUE (MG/L)	VOL. NON- FIL- TRABLE RESIDUE (MG/L)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)
APR.											
11...	1.4	.12	.20	3.5	3.7	.60	181	332	64	110	21
30...	1.2	.65	.26	.64	.90	.15	502	14	2	330	76
MAY											
09...	.10	.01	.19	.91	1.1	.27	146	230	24	110	13
JULY											
12...	.43	.00	.09	2.4	2.5	.29	338	80	14	200	57
12...	.28	.03	.08	1.3	1.4	.30	276	38	12	160	46
AUG.											
07...	.27	.01	.05	1.5	1.5	.50	90	--	--	62	0
08...	.72	.03	.09	1.2	1.3	.57	98	--	--	65	1

DATE	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)
APR.											
11...	.7	329	7.6	18.5	60	60	8.4	89	23	30	.1
30...	1.2	838	7.0	22.5	0	15	7.6	86	2.7	9.5	.2
MAY											
09...	.4	257	7.5	21.0	0	70	7.6	84	6.4	15	.0
JULY											
12...	1.1	520	7.4	25.5	80	25	3.6	43	22	36	.5
12...	1.1	477	6.9	27.0	65	10	6.8	84	15	14	.3
AUG.											
07...	.2	177	7.7	22.0	--	--	--	--	--	13	.0
08...	.2	168	7.4	24.5	--	--	--	--	--	16	.0

GUADALUPE RIVER BASIN

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08177700 OLMOS CREEK AT DRESDEN DRIVE, SAN ANTONIO, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	DIS- SOLVED ALUM- INUM (AL) (UG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	DIS- SOLVED COBALT (CO) (UG/L)	DIS- SOLVED CUPPER (CU) (UG/L)
APR. 11...	0825	30	4	170	0	20	1	19
JULY 12...	0900	0	7	370	1	0	<1	15
12...	1145	0	8	280	0	0	0	9
AUG. 07...	0905	20	9	70	<1	0	0	2

DATE	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	DIS- SOLVED LITHIUM (LI) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED MERCURY (HG) (UG/L)	DIS- SOLVED NICKEL (NI) (UG/L)	DIS- SOLVED STRON- TIUM (SR) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)
APR. 11...	130	82	10	50	.0	6	190	30
JULY 12...	80	100	10	140	.0	8	460	40
12...	70	67	10	30	.0	1	470	30
AUG. 07...	40	3	6	0	.0	1	80	30

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	ALDRIN (UG/L)	DDD (UG/L)	DDE (UG/L)	DDT (UG/L)	DI- ELDRIN (UG/L)	ENDRIN (UG/L)	HEPTA- CHLOR (UG/L)	HEPTA- CHLOR EPOXIDE (UG/L)
APR. 11...	0825	14	18.5	.00	.00	.00	.05	.01	.00	.00	.00
30...	1223	3.7	22.5	.00	.00	.00	.00	.01	.00	.00	.00
MAY 09...	2140	120	21.0	.00	.00	.00	.02	.02	.00	.00	.00
JULY 12...	0900	1.5	25.5	.00	.00	.00	.00	.02	.00	.00	.00
12...	1145	1.0	27.0	.00	.00	.00	.00	.01	.00	.00	.00
AUG. 07...	0905	--	--	.00	.00	.00	.00	.00	.00	.00	.00
08...	1420	--	--	.00	.00	.00	.00	.01	.00	.00	.00

DATE	LINDANE (UG/L)	CHLOR- DANE (UG/L)	PCB (UG/L)	DI- AZINON (UG/L)	MALA- THION (UG/L)	METHYL PARA- THION (UG/L)	PARA- THION (UG/L)	2,4-D (UG/L)	SILVEX (UG/L)	2,4,5-T (UG/L)
APR. 11...	.00	.5	.0	.10	.00	.00	.00	.00	.00	1.6
30...	.00	.1	.0	.13	.00	.00	.00	.00	.00	.05
MAY 09...	.00	.2	.0	.15	.00	.00	.00	.00	.00	.05
JULY 12...	.00	.1	.0	.18	.00	.00	.00	.00	.00	.30
12...	.00	--	.0	.10	.00	.00	.00	.00	.00	.06
AUG. 07...	.00	.1	.0	.07	.00	.00	.00	.02	.00	.15
08...	.00	.1	.0	.15	.00	.00	.00	.00	.00	.25

08178000 SAN ANTONIO RIVER AT SAN ANTONIO, TEX.

LOCATION.--Lat 29°24'34", long 98°29'41", Bexar County, at gaging station near South Alamo Street Bridge in San Antonio, and 2.1 miles (3.4 km) upstream from San Pedro Creek.

DRAINAGE AREA.--41.8 mi² (108.3 km²).

PERIOD OF RECORD.--Chemical and biochemical analyses: October 1968 to September 1974.

Pesticide analyses: October 1968 to September 1974.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SiO ₂) (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNE-SIUM (MG)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED POTAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO ₃) (MG/L)	CAR-BONATE (CO ₃) (MG/L)	DIS-SOLVED SULFATE (SO ₄) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)
APR.											
11...	1135	77	12	65	15	11	2.0	260	0	25	16
JULY											
12...	1105	268	9.4	53	12	13	2.7	199	0	30	18
12...	1245	161	5.5	35	6.1	8.5	3.3	124	0	21	12
AUG.											
07...	1135	750	5.2	20	2.0	5.2	4.3	72	0	14	5.2
07...	1350	350	6.0	26	2.6	5.4	4.4	83	0	16	5.8
08...	1430	510	7.9	23	2.1	4.8	4.6	79	0	14	4.4

DATE	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO-GEN (N) (MG/L)	ORGANIC NITRO-GEN (N) (MG/L)	TOTAL KJEL-DAHL NITRO-GEN (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	TOTAL NON-FILT-RABLE RESIDUE (MG/L)	VOL. NON-FILT-RABLE RESIDUE (MG/L)	HARD-NESS (CA+MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)
APR.											
11...	1.5	.02	.04	.46	.50	.14	275	18	5	220	11
JULY											
12...	.99	.01	.22	2.6	2.8	.56	237	424	72	180	19
12...	.54	.01	.14	1.7	1.8	.46	153	152	35	110	11
AUG.											
07...	.69	.01	.14	1.3	1.4	.38	92	157	13	58	0
07...	.97	.03	.14	1.3	1.4	.38	107	126	21	76	8
08...	.90	.02	.17	1.3	1.5	.44	100	230	36	66	1

DATE	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICHO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	TUR-BID-ITY (JTU)	DIS-SOLVED OXYGEN (MG/L)	PER-CENT SATUR-ATION	BIO-CHEM-ICAL OXYGEN DEMAND (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L)
APR.											
11...	.3	488	8.0	23.0	15	9	8.1	93	4.9	2.5	.2
JULY											
12...	.4	420	7.9	25.5	45	70	6.8	82	22	41	.2
12...	.3	264	8.0	25.5	55	35	7.8	94	23	21	.3
AUG.											
07...	.3	170	7.3	23.5	50	50	7.2	84	4.4	9.2	.0
07...	.3	192	7.6	24.0	55	55	7.2	85	3.7	13	.0
08...	.3	181	7.8	24.5	65	120	7.9	94	4.5	13	.0

DATE	TIME	DIS-SOLVED ALUM-INUM (AL) (UG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	DIS-SOLVED BORON (B) (UG/L)	DIS-SOLVED CAD-MIUM (CD) (UG/L)	DIS-SOLVED CHRO-MIUM (CR) (UG/L)	DIS-SOLVED COBALT (CO) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)
APR.								
11...	1135	20	2	100	0	20	1	7
JULY								
12...	1105	10	4	130	<1	0	0	14
12...	1245	40	13	120	--	0	--	--
AUG.								
07...	1135	30	2	60	1	0	1	6
07...	1350	60	3	70	<1	0	0	5
08...	1430	20	2	80	<1	0	0	3

DATE	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	DIS-SOLVED LITHIUM (LI) (UG/L)	DIS-SOLVED MAN-GANESE (MN) (UG/L)	DIS-SOLVED MERCURY (HG) (UG/L)	DIS-SOLVED NICKEL (NI) (UG/L)	DIS-SOLVED STRON-TIUM (SR) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)
APR.								
11...	30	23	10	20	.0	4	550	30
JULY								
12...	60	25	0	40	.0	1	510	30
12...	50	--	0	.0	.0	--	260	30
AUG.								
07...	50	10	0	0	.0	16	150	70
07...	50	10	0	0	.7	3	150	0
08...	50	4	0	20	.0	1	150	20

GUADALUPE RIVER BASIN

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08178000 SAN ANTONIO RIVER AT SAN ANTONIO, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	ALDRIN (UG/L)	DDD (UG/L)	DDE (UG/L)	DDT (UG/L)	DI- ELDRIN (UG/L)	ENDRIN (UG/L)	HEPTA- CHLOR (UG/L)	HEPTA- CHLOR EPOXIDE (UG/L)
APR.											
11...	1135	77	23.0	.00	.00	.00	.01	.00	.00	.00	.00
JULY											
12...	1105	268	25.5	.00	.03	.00	.06	.04	.00	.00	.00
12...	1245	161	25.5	.00	.00	.00	.00	.13	.00	.00	.00
AUG.											
07...	1135	--	--	.00	.04	.02	.06	.04	.00	.00	.07
07...	1350	--	--	.00	.02	.01	.04	.02	.00	.00	.00
08...	1430	--	--	.00	.00	.00	.00	.03	.00	.00	.00

DATE	LINDANE (UG/L)	CHLOR- DANE (UG/L)	PCB (UG/L)	DI- AZINON (UG/L)	MALA- THION (UG/L)	METHYL PARA- THION (UG/L)	PARA- THION (UG/L)	2,4-D (UG/L)	SILVEX (UG/L)	2,4,5-T (UG/L)
APR.										
11...	.00	.0	.0	.12	.00	.00	.00	.14	.00	.01
JULY										
12...	.00	.4	.0	.22	.00	.00	.00	.00	.00	.01
12...	.00	.6	.0	.24	.05	.00	.00	.00	.00	.01
AUG.										
07...	.00	.3	.0	.42	.00	.00	.00	.00	.15	.16
07...	.02	.2	.0	.34	.00	.00	.00	.02	.04	.17
08...	.00	.1	.0	.12	.00	.00	.00	.05	.64	.23

GUADALUPE RIVER BASIN

08178300 ALAZAN CREEK AT ST. CLOUD STREET, SAN ANTONIO, TEX.

LOCATION.--Lat 29°27'29", long 98°32'59", Bexar County, at bridge on St. Cloud Street in San Antonio, and 1.5 miles (2.4 km) upstream from Woodlawn Lake Dam.

DRAINAGE AREA.--3.26 mi² (8.44 km²).

PERIOD OF RECORD.--Chemical and biochemical analyses: October 1968 to September 1974.

Pesticide analyses: October 1968 to September 1974.

Sediment analyses: October 1970 to September 1973.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DIS-SOLVED SILICA (SI02) (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)
APR. 11...	0900	25	6.6	54	4.4	22	5.1	167	0	34	25
JULY 12...	0955	2.0	13	79	16	39	2.4	243	0	85	44
AUG. 06...	1015	3.0	11	52	5.1	31	4.9	120	0	74	27
07...	1005	.70	3.6	19	1.1	4.0	2.0	63	0	9.1	4.0
07...	1230	12	5.7	27	1.7	8.6	2.4	84	0	20	8.1

DATE	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	TOTAL NON-FILTRABLE RESIDUE (MG/L)	VOL. NON-FILTRABLE RESIDUE (MG/L)	HARDNESS (CA+MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)
APR. 11...	1.0	.07	.42	2.9	3.3	.63	234	565	98	150	16
JULY 12...	.86	.03	.03	.92	.95	.06	399	29	8	260	65
AUG. 06...	.46	.07	.06	1.7	1.8	.30	265	18	0	150	53
07...	.19	.01	.04	.52	.56	.21	74	61	9	52	0
07...	.23	.01	.04	.66	.70	.19	115	31	28	75	6

DATE	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	TURBIDITY (JTU)	DIS-SOLVED OXYGEN (MG/L)	PERCENT SATURATION	BIO-CHEMICAL OXYGEN DEMAND (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	METHYLENE BLUE ACTIVE SUBSTANCE (MG/L)
APR. 11...	.8	464	7.6	18.5	70	95	8.3	88	35	36	.2
JULY 12...	1.0	678	7.9	23.5	35	10	5.2	60	5.5	15	.1
AUG. 06...	1.1	461	6.8	25.5	100	4	6.6	80	12	19	.4
07...	.2	133	7.9	22.0	50	35	8.1	92	3.2	6.2	.0
07...	.4	208	8.1	23.5	45	10	8.0	93	3.1	6.4	1.0

DATE	TIME	DIS-SOLVED ALUMINUM (AL) (UG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	DIS-SOLVED BORON (B) (UG/L)	DIS-SOLVED CADMIUM (CD) (UG/L)	DIS-SOLVED CHROMIUM (CR) (UG/L)	DIS-SOLVED COBALT (CO) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)
APR. 11...	0900	40	7	230	0	0	1	15
JULY 12...	0955	20	2	190	<1	0	0	4
AUG. 06...	1015	10	3	280	3	0	0	8
07...	1005	50	1	50	<1	0	0	2
07...	1230	20	2	90	<1	0	0	3

DATE	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	DIS-SOLVED LITHIUM (LI) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)	DIS-SOLVED MERCURY (HG) (UG/L)	DIS-SOLVED NICKEL (NI) (UG/L)	DIS-SOLVED STRONTIUM (SR) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)
APR. 11...	150	100	10	60	.0	7	260	20
JULY 12...	50	10	20	10	.0	0	730	10
AUG. 06...	70	26	10	0	.3	2	400	140
07...	50	19	0	0	.0	0	90	10
07...	50	14	0	0	.1	2	160	30

GUADALUPE RIVER BASIN

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08178300 ALAZAN CREEK AT ST. CLOUD STREET, SAN ANTONIO, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	ALDRIN (UG/L)	DDD (UG/L)	DDE (UG/L)	DDT (UG/L)	DI- ELDRIN (UG/L)	ENDRIN (UG/L)	HEPTA- CHLOR (UG/L)	HEPTA- CHLOR EPOXIDE (UG/L)
APR. 11...	0900	25	18.5	.00	.00	.00	.00	.10	.00	.01	.00
JULY 12...	0955	--	--	.00	.00	.00	.00	.00	.00	.00	.00
AUG. 06...	1015	--	--	.00	.00	.00	.00	.00	.00	.00	.00
07...	1005	.70	22.0	.00	.00	.01	.00	.00	.00	.00	.00
07...	1250	--	--	.00	.01	.00	.00	.01	.00	.00	.01

DATE	LINDANE (UG/L)	CHLOR- DANE (UG/L)	PCB (UG/L)	DI- AZINON (UG/L)	MALA- THION (UG/L)	METHYL PARA- THION (UG/L)	PARA- THION (UG/L)	2,4-D (UG/L)	SILVEX (UG/L)	2,4,5-T (UG/L)
APR. 11...	.00	.6	.0	.63	.00	.00	.00	.13	.00	.03
JULY 12...	.00	.0	.0	.01	.00	.00	.00	.00	.00	.00
AUG. 06...	.00	.0	.0	.07	.00	.00	.00	.00	.00	.78
07...	.00	.1	.0	.07	.00	.00	.00	.00	.00	.58
07...	.00	.0	.0	.05	.00	.00	.00	.04	.00	.85

GUADALUPE RIVER BASIN

08178600 PANTHER SPRINGS CREEK AT FARM ROAD 2696, NEAR SAN ANTONIO, TEX.

LOCATION.--Lat 29°37'31", long 98°31'06", Bexar County, at culvert on Farm Road 2696, 1.3 miles (2.1 km) north of intersection of Farm Roads 2696 and 1604, and 5.5 miles (8.8 km) north of San Antonio.

DRAINAGE AREA.--9.54 mi² (24.71 km²).

PERIOD OF RECORD.--Chemical and biochemical analyses: October 1968 to September 1974.
Pesticide analyses: October 1968 to September 1974.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SiO2) (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	
AUG. 30...	1215	3.0	13	23	1.3	1.4	3.2	74	0	3.5	3.0	
DATE	TIME	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	ORGANIC NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	TOTAL FILTRABLE RESIDUE (MG/L)	VOL. FILTRABLE RESIDUE (MG/L)	HARDNESS (CA+MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	
AUG. 30...	.07	.01	.05	.78	.83	.06	85	11	11	63	2	
DATE	TIME	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	TURBIDITY (JTU)	DIS-SOLVED OXYGEN (MG/L)	PERCENT SATURATION	BIOCHEMICAL OXYGEN DEMAND (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	METHYLENE BLUE ACTIVE SUBSTANCE (MG/L)
AUG. 30...	.1	119	7.5	22.5	65	5	8.0	91	1.8	9.0	.0	
DATE	TIME	DIS-SOLVED ALUMINUM (AL) (UG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	DIS-SOLVED BORON (B) (UG/L)	DIS-SOLVED CADMIUM (CD) (UG/L)	DIS-SOLVED CHROMIUM (CR) (UG/L)	DIS-SOLVED COBALT (CO) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)				
OCT. 11...	1000	40	0	--	1	0	0	3				
AUG. 30...	1215	10	0	40	<1	0	0	1				
DATE	TIME	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	DIS-SOLVED LITHIUM (LI) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)	DIS-SOLVED MERCURY (HG) (UG/L)	DIS-SOLVED NICKEL (NI) (UG/L)	DIS-SOLVED STRONTIUM (SR) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)			
OCT. 11...	50	1	0	0	.0	5	0	40				
AUG. 30...	40	0	0	0	.0	0	20	0				
DATE	TIME	INSTANTANEOUS DIS-CHARGE (CFS)	TEMPERATURE (DEG C)	ALDRIN (UG/L)	DDD (UG/L)	DDE (UG/L)	DDT (UG/L)	DI-ELDRIN (UG/L)	ENDRIN (UG/L)	HEPTACHLOR (UG/L)	HEPTACHLOR EPOXIDE (UG/L)	
AUG. 30...	1215	3.0	22.5	.00	.00	.00	.00	.00	.00	.00	.00	
DATE	TIME	LINDANE (UG/L)	CHLORDANE (UG/L)	PCB (UG/L)	DI-AZINON (UG/L)	MALATHION (UG/L)	METHYL PARATHION (UG/L)	PARATHION (UG/L)	2,4-D (UG/L)	SILVEX (UG/L)	2,4,5-T (UG/L)	
AUG. 30...	.00	.0	.0	.0	.00	.00	.00	.00	.00	.00	.00	

GUADALUPE RIVER BASIN

615

08178690 SALADO CREEK TRIBUTARY AT BITTERS ROAD, SAN ANTONIO, TEX.

LOCATION.--Lat 29°31'36", long 98°26'25", Bexar County, at culvert on Bitters Road immediately east of MacArthur High School in San Antonio.

DRAINAGE AREA.--0.26 mi² (0.67 km²).

PERIOD OF RECORD.--Chemical and biochemical analyses: October 1968 to September 1974.
Pesticide analyses: October 1968 to September 1974.
Sediment analyses: October 1972 to September 1974.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DIS-SOLVED SILICA (SiO ₂) (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO ₃) (MG/L)	CARBONATE (CO ₃) (MG/L)	DIS-SOLVED SULFATE (SO ₄) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)
APR. 11...	1035	.26	3.0	20	.9	1.7	3.7	63	0	6.6	2.8
MAY 04...	2100	29	2.4	11	.4	2.3	2.5	41	0	4.4	.9
JULY 12...	0935	29	2.9	18	1.8	5.1	5.6	85	0	9.3	2.0
AUG. 06...	0845	1.5	3.1	20	.6	2.8	2.4	61	0	7.5	2.8
07...	0840	3.0	3.5	14	1.2	2.6	2.4	54	0	4.0	2.6
SEP. 13...	0940	1.5	7.1	18	1.0	1.9	3.7	66	0	6.4	2.5

DATE	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	TOTAL FILTERABLE RESIDUE (MG/L)	VOL. NON-FILTERABLE RESIDUE (MG/L)	HARDNESS (CA+MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)
APR. 11...	.43	.04	.31	1.3	1.6	.52	70	30	6	54	2
MAY 04...	.08	.02	.34	1.2	1.5	.46	45	260	42	30	0
JULY 12...	.31	.01	.14	1.9	2.0	.65	87	319	50	52	0
AUG. 06...	.16	.01	.06	.53	.59	.31	71	7	0	53	2
07...	.28	.01	.06	.62	.68	.36	57	23	2	40	0
SEP. 13...	.35	.01	.05	.59	.64	.46	73	16	6	49	0

DATE	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	TURBIDITY (JTU)	DIS-SOLVED OXYGEN (MG/L)	PERCENT SATURATION	BIO-CHEMICAL OXYGEN DEMAND (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	METHYLENE BLUE ACTIVE SUBSTANCE (MG/L)
APR. 11...	.1	142	7.8	19.5	60	10	7.5	81	11	16	.2
MAY 04...	.2	83	8.6	20.0	20	70	8.6	93	6.2	16	.0
JULY 12...	.3	141	8.1	25.0	90	65	7.2	86	17	35	.2
AUG. 06...	.2	119	6.7	25.5	40	2	4.8	58	4.0	8.2	.1
07...	.2	106	7.7	23.0	35	7	7.4	85	2.3	9.9	.0
SEP. 13...	.1	121	6.8	22.5	55	10	6.9	78	1.8	7.4	.4

GUADALUPE RIVER BASIN

08178690 SALADO CREEK TRIBUTARY AT BITTERS ROAD, SAN ANTONIO, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	DIS-SOLVED ALUM- INUM (AL) (UG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	DIS-SOLVED BORON (B) (UG/L)	DIS-SOLVED CAU- MIUM (CD) (UG/L)	DIS-SOLVED CHRO- MIUM (CR) (UG/L)	DIS-SOLVED COBALT (CO) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)
APR. 11...	1035	40	3	60	0	0	0	8
MAY 09...	2100	50	6	30	0	30	0	13
JULY 12...	0935	30	3	90	2	0	0	24
AUG. 06...	0845	10	1	80	15	0	0	8
07...	0840	40	1	30	<1	0	0	2
SEP. 13...	0940	40	1	40	0	0	1	2

DATE	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	DIS-SOLVED LITHIUM (LI) (UG/L)	DIS-SOLVED MAN- GANESE (MN) (UG/L)	DIS-SOLVED MERCURY (HG) (UG/L)	DIS-SOLVED NICKEL (NI) (UG/L)	DIS-SOLVED STRON- TIUM (SR) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)
APR. 11...	80	130	0	30	2.3	4	20	10
MAY 09...	30	14	0	0	.0	3	630	20
JULY 12...	60	91	0	20	.0	4	50	40
AUG. 06...	70	21	0	0	.0	2	80	1700
07...	70	15	0	0	.1	1	60	0
SEP. 13...	50	10	0	0	.0	2	30	10

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	ALDRIN (UG/L)	DDD (UG/L)	DDE (UG/L)	DDT (UG/L)	DI- ELDRIN (UG/L)	ENDRIN (UG/L)	HEPTA- CHLOR (UG/L)	HEPTA- CHLOR EPOXIDE (UG/L)
APR. 11...	1035	.26	19.5	.00	.00	.00	.06	.02	.00	.00	.00
MAY 09...	2100	29	20.0	.00	.00	.00	.05	.03	.00	.00	.00
JULY 12...	0935	29	25.0	.00	.03	.00	.00	.01	.00	.00	.00
AUG. 06...	0845	1.5	25.5	.00	.00	.00	.00	.02	.00	.00	.02
07...	0840	3.0	23.0	.00	.01	.00	.00	.02	.00	.00	.02
SEP. 13...	0940	1.5	22.5	.00	.00	.00	.00	.03	.00	.00	.00

DATE	LINDANE (UG/L)	CHLOR- DANE (UG/L)	PCB (UG/L)	DI- AZINON (UG/L)	MALA- THION (UG/L)	METHYL PARA- THION (UG/L)	PARA- THION (UG/L)	2,4-D (UG/L)	SILVEX (UG/L)	2,4,5-T (UG/L)
APR. 11...	.01	.2	.0	.69	.00	.00	.00	.00	.00	.09
MAY 09...	.00	.2	.0	.29	.00	.00	.00	.09	.01	.22
JULY 12...	.00	.3	.0	.13	.00	.00	.00	.00	.00	.29
AUG. 06...	.00	.0	.0	.37	.03	.00	.00	--	--	--
07...	.00	.1	.0	.11	.00	.00	.00	1.5	.02	.13
SEP. 13...	.00	.2	.0	.13	.00	.00	.00	.06	.01	.44

GUADALUPE RIVER BASIN

617

08178700 SALADO CREEK (UPPER STATION) AT SAN ANTONIO, TEX.

LOCATION.--Lat 29°30'57", long 98°25'51", Bexar County, at gaging station at upstream bridge of two bridges on Interstate Highway 410 in San Antonio, 1.0 mile (1.6 km) west of Northeast School, 1.2 miles (1.9 km) upstream from Perrin-Beitel Creek, and 2.7 miles (4.3 km) east of San Antonio International Airport.

DRAINAGE AREA.--137 mi² (355 km²).

PERIOD OF RECORD.--Chemical and biochemical analyses: October 1968 to September 1974.

Pesticide analyses: October 1968 to September 1974.

Sediment analyses: October 1972 to September 1974.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DIS-SOLVED SILICA (SiO ₂) (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO ₃) (MG/L)	CARBONATE (CO ₃) (MG/L)	DIS-SOLVED SULFATE (SO ₄) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)
MAY 09...	2325	85	11	71	7.3	26	5.9	118	0	120	35
JULY 12...	0900	2.4	19	230	46	40	7.8	92	0	680	68
AUG. 07...	0925	260	7.0	27	1.1	9.8	5.0	67	0	35	11
08...	1505	2200	10	23	.7	4.9	4.7	76	0	14	5.3
SEP. 13...	0900	350	11	30	1.9	8.4	6.7	90	0	26	10

DATE	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	TOTAL NON-FILTERABLE RESIDUE (MG/L)	VOL. NON-FILTERABLE RESIDUE (MG/L)	HARDNESS (CA+MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)
MAY 09...	.00	.03	.16	.94	1.1	.24	335	220	40	210	110
JULY 12...	.26	.01	.22	.62	.84	.14	1140	32	9	770	690
AUG. 07...	.40	.01	.08	2.0	2.1	3.1	129	2840	288	72	17
08...	.76	.12	.06	5.7	5.8	1.9	100	5	74	60	0
SEP. 13...	.23	.01	.11	.56	.67	.36	139	1090	128	83	9

DATE	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	TURBIDITY (JTU)	DIS-SOLVED OXYGEN (MG/L)	PERCENT SATURATION	BIO-CHEMICAL OXYGEN DEMAND (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	METHYLENE BLUE ACTIVE SUBSTANCE (MG/L)
MAY 09...	.8	553	8.0	22.5	0	90	6.9	78	5.0	14	.0
JULY 12...	.6	1530	8.2	26.0	10	15	6.9	84	2.3	5.0	.0
AUG. 07...	.5	230	7.6	22.5	45	900	7.0	80	5.0	10	.0
08...	.3	165	7.3	24.5	90	400	6.6	79	3.8	14	.0
SEP. 13...	.4	230	7.9	22.5	40	450	7.4	84	3.2	16	.0

GUADALUPE RIVER BASIN

08178700 SALADO CREEK (UPPER STATION) AT SAN ANTONIO, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	DIS-SOLVED ALUMINUM (AL) (UG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	DIS-SOLVED BORON (B) (UG/L)	DIS-SOLVED CADMIUM (CD) (UG/L)	DIS-SOLVED CHROMIUM (CR) (UG/L)	DIS-SOLVED COBALT (CO) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)
MAY 09...	2325	0	25	120	0	0	0	9
JULY 12...	0900	0	5	240	0	0	0	4
AUG. 07...	0925	60	3	80	<1	0	0	5
08...	1505	100	1	70	<1	0	0	3
SEP. 13...	0900	60	1	70	0	0	1	2

DATE	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	DIS- SOLVED LITHIUM (LI) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	Dis- SOLVED MERCURY (HG) (UG/L)	DIS- SOLVED NICKEL (NI) (UG/L)	DIS- SOLVED STRON- TIUM (SR) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)
MAY 09...	10	4	180	0	.0	5	320	40
JULY 12...	20	4	80	10	.0	1	1500	20
AUG. 07...	70	1	70	0	.0	1	150	30
08...	40	1	30	0	.3	1	80	0
SEP. 13...	50	0	360	0	.0	1	170	10

DATE	TIME	INSTANTANEOUS DIS-CHARGE (CFS)	TEMPERATURE (DEG C)	ALDRIN (UG/L)	DDD (UG/L)	DDE (UG/L)	DDT (UG/L)	DI-ELDRIN (UG/L)	ENDRIN (UG/L)	HEPTA-CHLOR (UG/L)	HEPTA-CHLOR EPOXIDE (UG/L)
MAY 09...	2325	85	22.5	.00	.00	.00	.00	.00	.00	.00	.00
JULY 12...	0900	2.4	26.0	.00	.00	.00	.00	.00	.00	.00	.00
AUG. 07...	0925	260	22.5	.00	.00	.00	.00	.00	.00	.00	.00
08...	1505	2200	24.5	.00	.00	.00	.00	.00	.00	.00	.00
SEP. 13...	0900	350	22.5	.00	.00	.00	.00	.02	.00	.00	.05

DATE	LINDANE (UG/L)	CHLOR-DANE (UG/L)	PCB (UG/L)	DI-AZINON (UG/L)	MALATHION (UG/L)	METHYL PARA-THION (UG/L)	PARA-THION (UG/L)	2,4-D (UG/L)	SILVEX (UG/L)	2,4,5-T (UG/L)
MAY 09...	.00	.0	.0	.06	.00	.00	.00	.10	.15	.15
JULY 12...	.00	.0	.0	.00	.00	.00	.00	.00	.01	.01
AUG. 07...	.00	.0	.0	.06	.00	.00	.00	.02	.02	.23
08...	.00	.0	.0	.03	.00	.00	.00	.15	.00	.14
SEP. 13...	.00	.1	.0	.03	.00	.00	.00	.03	.00	.14

08178736 SALADO CREEK TRIBUTARY AT BEE STREET, SAN ANTONIO, TEX.

LOCATION.--Lat 29°26'37", long 98°27'13", Bexar County, at culvert at intersection of Bee and Shirley Streets in San Antonio and 0.25 mile (0.40 km) north of Pershing Elementary School.

DRAINAGE AREA.--0.45 mi² (1.17 km²).

PERIOD OF RECORD.--Chemical and biochemical analyses: October 1970 to September 1974.

Pesticide analyses: October 1970 to September 1974.

Sediment analyses: October 1972 to September 1974.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	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)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
APR.											
11...	1005	4.2	3.9	25	2.4	8.3	4.5	82	0	16	8.6
30...	0940	8.9	3.9	34	2.2	10	3.5	102	0	19	13
JULY											
12...	1025	24	2.5	13	1.2	4.1	2.8	56	0	8.6	3.3
AUG.											
08...	1620	1.5	18	46	5.9	26	5.1	155	0	48	20
SEP.											
13...	1030	3.0	22	36	3.8	17	4.6	134	0	23	12

DATE	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIOS (SUM OF CONSTI- TUENTS) (MG/L)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)	VOL. NON- FILT- RABLE RESIDUE (MG/L)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)
APR.											
11...	.80	.05	.39	1.7	2.1	.64	110	47	23	72	5
30...	.77	.10	3.6	7.4	11	2.9	136	130	37	94	10
JULY											
12...	.37	.01	.06	1.3	1.4	.42	64	99	25	37	0
AUG.											
08...	1.6	.01	.04	1.4	1.4	.32	245	55	9	140	12
SEP.											
13...	.34	.01	.02	1.2	1.2	.35	185	44	13	110	0

DATE	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	BIO- CHEM- ICAL OXYGEN DEMAND (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)
APR.											
11...	.4	207	7.8	19.5	60	20	8.7	94	28	36	.4
30...	.4	245	7.1	21.0	30	20	8.1	90	21	47	1.4
JULY											
12...	.3	115	7.9	24.5	50	15	8.4	100	11	12	.2
AUG.											
08...	1.0	404	7.7	27.5	80	20	8.2	102	5.4	17	.0
SEP.											
13...	.7	283	7.0	22.0	80	20	8.6	100	3.5	15	.0

DATE	TIME	DIS- SOLVED ALUM- INUM (AL) (UG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	DIS- SOLVED MORON (B) (UG/L)	DIS- SOLVED CAU- MIUM (CD) (UG/L)	DIS- SOLVED CHKO- MIUM (CR) (UG/L)	DIS- SOLVED COBALT (CO) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)
APR.								
11...	1005	60	0	280	1	0	1	40
JULY								
12...	1025	30	2	130	1	0	0	24
SEP.								
13...	1030	50	4	490	0	0	1	6

DATE	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	DIS- SOLVED LITHIUM (LI) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED MERCURY (HG) (UG/L)	DIS- SOLVED NICKEL (NI) (UG/L)	DIS- SOLVED STRON- TIUM (SR) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)
APR.								
11...	180	150	10	20	.1	8	120	70
JULY								
12...	70	53	0	10	.0	1	50	40
SEP.								
13...	80	30	0	10	.4	2	230	40

GUADALUPE RIVER BASIN

08178736 SALADO CREEK TRIBUTARY AT BEE STREET, SAN ANTONIO, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	ALDRIN (UG/L)	DDD (UG/L)	DDE (UG/L)	DDT (UG/L)	DI- ELDRIN (UG/L)	ENDRIN (UG/L)	HEPTA- CHLOR (UG/L)	HEPTA- CHLOR EPOXIDE (UG/L)
APR. 11...	1005	4.2	19.5	.00	.04	.03	.11	.00	.00	.00	.00
30...	0940	8.9	21.0	.00	.00	.01	.00	.00	.00	.00	.00
JULY 12...	1025	24	24.5	.00	.01	.02	.09	.00	.00	.00	.00
AUG. 08...	1620	1.5	27.5	.00	.01	.01	.03	.00	--	--	.01
SEP. 13...	1030	3.0	22.0	.00	.00	.01	.02	.00	.00	.00	.04

DATE	LINDANE (UG/L)	CHLOR- DANE (UG/L)	PCB (UG/L)	DI- AZINON (UG/L)	MALA- THION (UG/L)	METHYL PARA- THION (UG/L)	PARA- THION (UG/L)	2,4-D (UG/L)	SILVEX (UG/L)	2,4,5-T (UG/L)
APR. 11...	.00	.1	.0	.15	.00	.00	.00	.07	.00	.01
30...	.00	.1	.0	.02	.00	.00	.00	.00	.00	.06
JULY 12...	.00	--	.0	.05	.04	.00	.00	.00	.00	.02
AUG. 08...	.00	.1	.0	.02	.00	.00	.00	.00	.00	.03
SEP. 13...	.00	.1	.0	.01	.00	.00	.00	.00	.00	.00

GUADALUPE RIVER BASIN

621

08178800 SALADO CREEK (LOWER STATION) AT SAN ANTONIO, TEX.

LOCATION.--Lat 29°21'25", long 98°24'45", Bexar County, at gaging station at bridge on Loop 13 at San Antonio, 1.4 miles (2.3 km) east of Brooks Air Force Base, and 3.3 miles (5.3 km) upstream from Rosillo Creek.

DRAINAGE AREA.--189 mi² (490 km²).

PERIOD OF RECORD.--Chemical and biochemical analyses: October 1968 to September 1974.

Pesticide analyses: October 1968 to September 1974.

Sediment analyses: October 1972 to September 1974.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SiO ₂) (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNE-SIUM (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED POTAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO ₃) (MG/L)	CAR-BONATE (CO ₃) (MG/L)	DIS-SOLVED SULFATE (SO ₄) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)
MAY 10...	0923	800	8.8	38	4.8	13	5.0	124	0	26	14
JULY 12...	1145	41	16	88	15	48	2.7	289	0	47	69
AUG. 07...	1020	420	7.7	35	5.4	19	4.1	117	0	26	21
07...	1235	620	6.5	34	4.4	12	3.9	107	0	19	14
08...	1520	3020	7.3	21	2.5	5.9	4.5	74	0	14	5.6
SEP. 13...	1200	720	13	34	4.3	12	6.0	113	0	25	15

DATE	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO-GEN (N) (MG/L)	ORGANIC NITRO-GEN (N) (MG/L)	TOTAL KJEL-Dahl NITRO-GEN (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	TOTAL NON-FILT-RABLE RESIDUE (MG/L)	VOL. NON-FILT-RABLE RESIDUE (MG/L)	HARD-NESS (CA+MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)
MAY 10...	.09	.03	.24	1.7	1.9	.32	171	610	110	120	13
JULY 12...	2.0	.00	.02	.81	.83	.12	429	150	20	280	46
AUG. 07...	.52	.01	.12	2.1	2.2	.58	176	1080	112	110	14
07...	.67	.01	.12	1.7	1.8	.49	148	124	19	100	16
08...	.55	.03	.16	1.7	1.9	.64	98	1010	102	63	2
SEP. 13...	.34	.01	.15	.59	.74	.42	165	425	57	100	10

DATE	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICHO-MOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	TUR-BID-ITY (JTU)	DIS-SOLVED OXYGEN (MG/L)	PER-CENT SATUR-ATION	BIO-CHEM-ICAL OXYGEN DEMAND (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L)
MAY 10...	.5	302	6.9	22.5	5	60	5.8	66	6.5	23	.0
JULY 12...	1.2	757	8.1	25.5	15	50	7.1	86	2.3	--	.0
AUG. 07...	.8	315	7.6	23.5	35	300	6.4	74	4.8	9.1	.0
07...	.5	264	7.7	23.5	35	310	6.0	70	4.6	4.6	.0
08...	.3	175	7.7	24.0	80	500	7.0	82	4.8	16	.0
SEP. 13...	.5	272	7.1	22.0	60	170	7.8	88	3.1	15	.0

GUADALUPE RIVER BASIN

08178800 SALADO CREEK (LOWER STATION) AT SAN ANTONIO, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

		DIS- SOLVED ALUM- INUM (AL) (UG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	DIS- SOLVED COBALT (CO) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)			
DATE	TIME										
MAY											
10...	0923	120	6	110	0	20	0	8			
JULY											
12...	1145	0	3	240	0	0	0	2			
AUG.											
07...	1020	20	1	120	<1	0	0	3			
07...	1235	640	2	90	--	0	--	--			
08...	1520	30	2	80	<1	0	0	3			
		DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	DIS- SOLVED LITHIUM (LI) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED NICKEL (NI) (UG/L)	DIS- SOLVED STRON- TIUM (SR) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)			
DATE	TIME										
MAY											
10...	50	1	0	0	.0	6	30	50			
JULY											
12...	30	4	20	0	.0	1	990	10			
AUG.											
07...	60	3	0	0	.0	1	370	0			
07...	540	--	0	20	.0	--	290	30			
08...	70	2	0	0	.0	2	150	20			
		INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	ALDRIN (UG/L)	DDD (UG/L)	DDE (UG/L)	DDT (UG/L)	DI- ELDRIN (UG/L)	ENDRIN (UG/L)	HEPTA- CHLOR (UG/L)	HEPTA- CHLOR EPOXIDE (UG/L)
DATE	TIME										
MAY											
10...	0923	800	22.5	.00	.00	.00	.03	.02	.00	.00	.00
JULY											
12...	1145	41	25.5	.00	.00	.00	.00	.00	.00	.00	.00
AUG.											
07...	1020	420	23.5	.00	.01	.01	.04	.01	.00	.00	.00
07...	1235	620	23.5	.00	.02	.02	.04	.03	.00	.00	.04
08...	1520	3020	24.0	.00	.01	.01	.06	.02	.00	.00	.00
SEP.											
13...	1200	1200	--	.00	.00	.00	.00	.02	.00	.00	.00
		LINDANE (UG/L)	CHLOR- DANE (UG/L)	PCB (UG/L)	DI- AZINON (UG/L)	MALA- THION (UG/L)	METHYL PARA- THION (UG/L)	PARA- THION (UG/L)	2,4-D (UG/L)	SILVEX (UG/L)	2,4,5-T (UG/L)
DATE	TIME										
MAY											
10...		.03	.2	.0	.22	.00	.00	.00	.13	.70	.00
JULY											
12...		.00	.0	.0	.00	.00	.00	.00	.00	.00	.00
AUG.											
07...		.00	.1	.0	.05	.00	.00	.00	.00	.00	.06
07...		.02	.2	.0	.04	.00	.00	.00	.00	.01	.02
08...		.01	.2	.0	.11	.00	.00	.00	.05	.00	.06
SEP.											
13...		.00	.1	.0	.09	.00	.00	.00	.00	.00	.05

GUADALUPE RIVER BASIN

623

08179000 MEDINA RIVER NEAR PIPE CREEK, TEX.

LOCATION.--Lat 29°40'33", long 98°58'34", Bandera County, at gaging station 600 ft (183 m) upstream from Bandera Falls, 0.6 mile (1.0 km) upstream from Red Bluff Creek, and 4.1 miles (6.6 km) southwest of Pipe Creek.

DRAINAGE AREA.--474 mi² (1,228 km²).

PERIOD OF RECORD.--Chemical and biochemical analyses: January to September 1974.
Pesticide analyses: January to September 1974.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	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) (K) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	TOTAL NITRATE (N) (MG/L)
JAN. 21...	1215	122	11	85	21	10	1.5	263	0	69	19	1.5
MAR. 11...	1400	100	9.9	79	21	13	1.5	242	0	68	17	.99
MAY 14...	1300	220	12	78	17	8.3	1.4	276	0	51	13	1.0
JULY 10...	1020	57	13	72	21	10	1.9	238	0	78	20	.75
SEP. 09...	1015	186	13	80	17	9.7	2.1	249	0	60	15	1.2

DATE	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)	VOL. NON- FILT- RABLE RESIDUE (MG/L)	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)
JAN. 21...	.00	.03	.15	--	.00	347	0	0	300	84	.3	584
MAR. 11...	.01	.13	.22	.35	.05	329	0	0	280	85	.3	574
MAY 14...	.00	.10	.04	.14	.07	318	10	2	270	39	.2	528
JULY 10...	.00	.04	.23	.27	.00	335	7	6	270	72	.3	550
SEP. 09...	.00	.05	.11	.16	.02	320	3	1	270	66	.3	524

DATE	PH (UNITS)	TEMPER- ATURE (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	BIO- CHEM- ICAL OXYGEN DEMAND (MG/L)	IMME- DIATE COLI- FORM (COL. PER 100 ML)	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)
JAN. 21...	7.7	15.0	0	0	10.8	106	.2	56	12	12	1.0
MAR. 11...	7.7	21.0	5	5	8.4	93	.9	260	48	22	.0
MAY 14...	7.7	23.5	0	10	7.4	86	.6	890	140	220	4.0
JULY 10...	7.6	25.5	0	0	7.4	89	.4	260	28	100	2.1
SEP. 09...	7.3	22.5	3	4	7.5	85	.8	2500	184	196	3.3

GUADALUPE RIVER BASIN

08179000 MEDINA RIVER NEAR PIPE CREEK, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	DIS-SOLVED ALUMINUM (AL) (UG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	DIS-SOLVED BORON (B) (UG/L)	DIS-SOLVED CADMIUM (CD) (UG/L)	DIS-SOLVED CHROMIUM (CR) (UG/L)	DIS-SOLVED COBALT (CO) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)
JAN. 21...	1215	10	2	70	0	0	0	3
MAY 14...	1300	0	0	60	0	0	0	2
JULY 10...	1020	0	1	90	0	0	0	3

DATE	TIME	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	DIS-SOLVED LITHIUM (LI) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)	DIS-SOLVED MERCURY (HG) (UG/L)	DIS-SOLVED NICKEL (NI) (UG/L)	DIS-SOLVED STRONTIUM (SR) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)
JAN. 21...	10	4	0	0	0	.0	3	1100	20
MAY 14...	20	0	0	0	10	.0	4	820	10
JULY 10...	20	1	0	0	0	.0	2	1200	10

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TEMPERATURE (DEG C)	ALDRIN (UG/L)	DDD (UG/L)	DDE (UG/L)	DDT (UG/L)	DI-ELDRIN (UG/L)	ENDRIN (UG/L)	HEPTACHLOR (UG/L)	HEPTACHLOR EPOXIDE (UG/L)
JAN. 21...	1215	122	15.0	.00	.00	.00	.00	.00	.00	.00	.00
MAY 14...	1300	220	23.5	.00	.00	.00	.00	.00	.00	.00	.00
SEP. 09...	1015	--	--	.00	.00	.00	.00	.00	.00	.00	.00

DATE	LINDANE (UG/L)	CHLORDANE (UG/L)	PCB (UG/L)	DI-AZINON (UG/L)	MALATHION (UG/L)	METHYL PARATHION (UG/L)	PARATHION (UG/L)	2,4-D (UG/L)	SILVEX (UG/L)	2,4,5-T (UG/L)
JAN. 21...	.00	.0	.0	.00	.00	.00	.00	.00	.00	.00
MAY 14...	.00	.0	.0	.00	.00	.00	.00	.00	.00	.00
SEP. 09...	.00	.0	.0	.00	.00	.00	.00	.00	.00	.00

GUADALUPE RIVER BASIN

625

08181000 LEON CREEK TRIBUTARY AT FARM ROAD 1604, SAN ANTONIO, TEX.

LOCATION.--Lat 29°35'14", long 98°37'40", Bexar County, at culvert on Farm Road 1604 at San Antonio and 1.5 miles (2.4 km) west of bridge over Leon Creek.

DRAINAGE AREA.--5.57 mi² (14.43 km²).

PERIOD OF RECORD.--Chemical and biochemical analyses: October 1968 to September 1974.

Pesticide analyses: October 1968 to September 1974.

Sediment analyses: October 1972 to September 1974.

WATER QUALITY DATA. WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

		INSTAN- TANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO2) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)					
DATE	TIME															
AUG. 30...	1100	5.0	15	24	.8	1.7	3.4	80	0	3.1	2.0					
		TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)	VOL. NON- FILT- RABLE RESIDUE (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)					
DATE																
AUG. 30...	.10	.01	.05	.95	1.0	.06	90	24	4	63	0					
		SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH	TEMPER- ATURE (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	BIO- CHEM- ICAL OXYGEN DEMAND (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)				
DATE																
AUG. 30...	.1	129	7.7	22.5	70	15	7.4	84	1.9	12	.0					
		DIS- SOLVED ALUM- INUM (AL) (UG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	DIS- SOLVED COBALT (CO) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	DIS- SOLVED LITHIUM (LI) (UG/L)	DIS- SOLVED MANG- NESE (MN) (UG/L)	DIS- SOLVED MERCURY (HG) (UG/L)	DIS- SOLVED NICKEL (NI) (UG/L)	DIS- SOLVED STRON- TIUM (SR) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)
DATE	TIME															
AUG. 30...	1100		40	0	30	<1	0	0	2							
		DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	DIS- SOLVED LITHIUM (LI) (UG/L)	DIS- SOLVED MANG- NESE (MN) (UG/L)	DIS- SOLVED MERCURY (HG) (UG/L)	DIS- SOLVED NICKEL (NI) (UG/L)	DIS- SOLVED STRON- TIUM (SR) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)	DIS- SOLVED ALUM- INUM (AL) (UG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED CADMIUM (CD) (UG/L)	DIS- SOLVED CHROMIUM (CR) (UG/L)	DIS- SOLVED COBALT (CO) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)
DATE	TIME															
AUG. 30...		40	0	0	0	.0	0	<10	0							
		INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	ALDRIN (UG/L)	DDD (UG/L)	DDE (UG/L)	DDT (UG/L)	DI- ELDRIN (UG/L)	ENDRIN (UG/L)	HEPTA- CHLOR (UG/L)	HEPTA- CHLOR EPOXIDE (UG/L)					
DATE	TIME															
AUG. 08...	1140	--	--	.00	.05	.02	.11	.01	.00	.00	.00					
AUG. 30...	1100	5.0	22.5	.00	.00	.00	.00	.00	.00	.00	.00					
		LINDANE (UG/L)	CHLORDANE (UG/L)	PCB (UG/L)	DI-AZINON (UG/L)	MALATHION (UG/L)	METHYL PARATHION (UG/L)	PARATHION (UG/L)	2,4-D (UG/L)	SILVEX (UG/L)	2,4,5-T (UG/L)					
DATE																
AUG. 08...		.01	.0	.0	.01	.00	.00	.00	.00	.00	.00					
AUG. 30...		.00	.0	.0	.00	.00	.00	.00	.00	.00	.00					

GUADALUPE RIVER BASIN

08181400 HELOTES CREEK AT HELOTES, TEX.

LOCATION.--Lat 29°34'42", long 98°41'29", Bexar County, at gaging station at bridge on State Highway 16, 0.1 mile (0.2 km) northwest of Helotes, and 8.6 miles (13.8 km) upstream from mouth.

DRAINAGE AREA.--15.0 mi² (38.8 km²).

PERIOD OF RECORD.--Chemical and biochemical analyses: October 1968 to September 1974.
Pesticide analyses: October 1968 to September 1974.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

		INSTAN- TANEOUS 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 POTAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLOR- IDE (CL) (MG/L)	
AUG. 07...	1405	12	7.5	42	8.0	6.6	2.3	126	0	32	13	
08...	1020	4.8	7.0	44	6.6	5.4	1.9	110	0	40	8.9	
		TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SULFIDS (SUM OF CONSTITU- ENTS) (MG/L)	TOTAL NON- FILTRABLE RESIDUE (MG/L)	VOL. NON- FILTRABLE RESIDUE (MG/L)	HARD- NESS (CA+MG) (MG/L)	NON- CARBONATE HARD- NESS (MG/L)
AUG. 07...	.96	.04	.15	1.9	2.0	.21	174	614	274	140	35	
08...	1.1	.04	.12	1.3	1.4	.09	168	185	26	140	47	
		SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	BIO- CHEM- ICAL OXYGEN DEMAND (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)
AUG. 07...	.2	317	7.9	23.0	50	250	7.6	87	3.7	20	.0	
08...	.2	319	7.8	23.0	40	85	7.6	87	2.5	13	.0	
		DIS- SOLVED ALUM- INUM (AL) (UG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	DIS- SOLVED COBALT (CO) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)				
AUG. 07...	1405	0	1	60	<1	0	0	2				
08...	1020	0	0	60	<1	0	0	2				
		DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	DIS- SOLVED LITHIUM (LI) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED MERCURY (HG) (UG/L)	DIS- SOLVED NICKEL (NI) (UG/L)	DIS- SOLVED STRON- TIUM (SR) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)			
AUG. 07...	30	<1	0	0	.1	0	80	0				
08...	20	1	0	0	.0	1	90	20				
		INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	ALDRIN (UG/L)	DDD (UG/L)	DDE (UG/L)	DDT (UG/L)	DI- ELDRIN (UG/L)	ENDRIN (UG/L)	HEPTA- CHLOR (UG/L)	HEPTA- CHLOR EPOXIDE (UG/L)	
AUG. 07...	1405	12	23.0	.00	.00	.00	.00	.00	.00	.00	.00	
08...	1020	4.8	23.0	.00	.00	.00	.00	.01	.00	.00	.00	
		LINDANE (UG/L)	CHLOR- DANE (UG/L)	PCB (UG/L)	OI- AZINON (UG/L)	MALA- THION (UG/L)	METHYL PARA- THION (UG/L)	PARA- THION (UG/L)	2,4-D (UG/L)	SILVEX (UG/L)	2,4,5-T (UG/L)	
AUG. 07...	.00	.0	.0	.00	.00	.00	.00	.00	.07	.00	.01	
08...	.00	.0	.0	.0	.01	.00	.00	.00	.00	.00	.03	

GUADALUPE RIVER BASIN

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08181450 LEON CREEK TRIBUTARY AT KELLY AIR FORCE BASE, TEX.

LOCATION.--Lat 29°23'12", long 98°36'00", Bexar County, at gaging station near bridge on Billy Mitchell Road at Kelly Air Force Base, 0.15 mile (0.24 km) upstream from mouth, and 2.0 miles (3.2 km) southeast of intersection of U.S. Highway 90 West and Loop 13.

DRAINAGE AREA.--1.19 mi² (3.08 km²).

PERIOD OF RECORD.--Chemical and biochemical analyses: October 1969 to September 1974.

Pesticide analyses: October 1969 to September 1974.

Sediment analyses: October 1972 to September 1974.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NESIUM (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)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
AUG.											
07...	1130	26	3.6	15	.1	1.4	2.3	54	0	3.6	1.3
08...	1140	160	3.8	11	.3	1.2	2.3	42	0	1.9	.6
08...	1315	53	5.0	13	.7	.9	2.7	49	0	2.4	.8

DATE	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)	VOL. FILT- RABLE RESIDUE (MG/L)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)
AUG.											
07...	.09	.01	.03	.72	.75	.19	54	13	1	38	0
08...	.08	.01	.02	.70	.72	.23	42	59	6	29	0
08...	.05	.01	.04	.77	.81	.24	50	34	4	35	0

DATE	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	BIO- CHEM- ICAL OXYGEN DEMAND (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)
AUG.											
07...	.1	93	7.9	21.5	40	3	6.7	75	3.4	5.8	.0
08...	.1	68	8.1	23.0	50	25	7.9	91	2.2	4.4	.0
08...	.1	81	8.0	24.5	50	15	7.2	86	2.7	6.0	.0

DATE	TIME	DIS- SOLVED ALUM- INUM (AL) (UG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	DIS- SOLVED COBALT (CO) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)
AUG.								
07...	1130	40	2	40	<1	0	0	6
08...	1140	20	1	30	<1	0	0	3
08...	1315	20	2	40	<1	0	0	4

DATE	TIME	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	DIS- SOLVED LITHIUM (LI) (UG/L)	DIS- SOLVED MANGANESE (MN) (UG/L)	DIS- SOLVED MERCURY (HG) (UG/L)	DIS- SOLVED NICKEL (NI) (UG/L)	DIS- SOLVED STRON- TIUM (SR) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)
AUG.									
07...	60	5	0	0	0	.0	0	30	20
08...	30	1	0	0	0	.0	1	40	10
08...	40	1	0	0	0	.0	1	30	20

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	ALDRIN (UG/L)	DDD (UG/L)	DDE (UG/L)	DDT (UG/L)	DI- ELDRIN (UG/L)	ENDRIN (UG/L)	HEPTA- CHLOR (UG/L)	HEPTA- CHLOR EPOXIDE (UG/L)
AUG.											
07...	1130	26	21.5	.00	.04	.01	.07	.00	.00	.00	.00
08...	1350	--	--	.00	.04	.02	.05	.00	.00	.00	.00

DATE	LINDANE (UG/L)	CHLOR- DANE (UG/L)	PCB (UG/L)	DI- AZINON (UG/L)	MALA- THION (UG/L)	METHYL PARA- THION (UG/L)	PARA- THION (UG/L)	2,4-D (UG/L)	SILVEX (UG/L)	2,4,5-T (UG/L)
AUG.										
07...	.00	.0	.0	.02	.04	.00	.00	.00	.00	.00
08...	.00	.0	.0	.01	.00	.00	.00	.00	.00	.00

GUADALUPE RIVER BASIN

08181500 MEDINA RIVER AT SAN ANTONIO, TEX.

LOCATION.--Lat 29°15'14", long 98°28'20", Bexar County, at gaging station at bridge on U.S. Highway 281 in San Antonio and 6.8 miles (10.9 km) upstream from mouth.

DRAINAGE AREA.--1,317 mi² (3,411 km²).

PERIOD OF RECORD.--Chemical and biochemical analyses: October 1970 to September 1974.
Pesticide analyses: October 1970 to September 1974.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SiO ₂) (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNE-SIUM (MG)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED SODIUM PLUS POTAS-SIUM (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO ₃) (MG/L)	CAR-BONATE (CO ₃) (MG/L)	DIS-SOLVED SULFATE (SO ₄) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)
OCT. 25...	1300	1650	13	74	14	--	20	--	238	0	47	25
NOV. 14...	1210	665	13	88	18	--	29	--	272	0	64	40
DEC. 12...	1230	369	14	98	22	--	36	--	298	0	78	52
JAN. 16...	1400	252	13	100	22	45	--	3.7	302	0	80	60
FEB. 21...	1300	179	13	110	25	55	--	4.0	314	0	100	78
MAR. 21...	1630	156	14	100	24	61	--	4.1	303	0	110	78
APR. 24...	1205	137	15	99	23	57	--	4.3	308	0	100	74
MAY 23...	1130	155	15	97	21	45	--	3.4	283	0	84	58
JUNE 26...	1500	95	16	100	22	65	--	5.7	310	0	95	84
JULY 24...	1430	86	15	94	22	57	--	4.6	300	0	92	70
AUG. 28...	1610	123	15	100	23	61	--	4.3	306	0	100	79
SEP. 25...	1300	429	16	86	20	47	--	4.7	282	0	77	59

DATE	DIS-SOLVED FLUO-RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO-GEN (N) (MG/L)	ORGANIC NITRO-GEN (N) (MG/L)	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	TOTAL NON-FILT-RABLE RESIDUE (MG/L)	VOL. NON-FILT-RABLE RESIDUE (MG/L)	HARD-NESS (CA+MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)
OCT. 25...	.2	1.6	.00	.00	.08	--	.18	317	68	21	240	47
NOV. 14...	.2	3.1	.01	.00	.20	--	.26	400	53	12	290	70
DEC. 12...	.3	4.1	.02	.24	.40	--	.46	466	20	5	340	91
JAN. 16...	--	5.5	.16	.24	.06	--	.58	473	17	6	340	93
FEB. 21...	--	5.1	.09	.09	.33	.42	.69	484	30	0	380	120
MAR. 21...	--	5.9	.37	.21	.62	.83	.78	540	56	6	350	100
APR. 24...	--	5.2	.29	.35	.75	1.1	1.1	525	64	13	340	90
MAY 23...	--	4.5	.15	.11	1.4	1.5	1.0	463	90	9	330	97
JUNE 26...	--	6.4	.50	.86	.54	1.4	1.7	542	40	7	340	87
JULY 24...	--	5.1	.49	.74	.66	1.4	1.6	503	42	5	330	79
AUG. 28...	--	4.5	.05	.11	.99	1.1	.28	535	24	0	350	95
SEP. 25...	--	2.8	.27	1.3	.70	2.0	1.2	449	116	20	300	66

GUADALUPE RIVER BASIN

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08181500 MEDINA RIVER AT SAN ANTONIO, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	BIO- CHEM- ICAL OXYGEN DEMAND (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	PHENOLS (UG/L)
OCT.											
25...	.6	546	7.9	22.5	15	25	7.5	85	.4	5.0	0
NOV.											
14...	.7	676	7.7	21.5	15	25	7.6	85	.4	4.0	0
DEC.											
12...	.9	787	7.7	16.0	0	15	8.8	88	.9	--	0
JAN.											
16...	1.1	843	7.8	16.0	0	10	8.6	86	4.4	2.0	0
FEB.											
21...	1.2	953	7.9	18.0	10	20	7.9	83	4.8	.0	0
MAR.											
21...	1.4	958	7.8	20.5	10	25	7.3	80	8.4	3.5	0
APR.											
24...	1.3	914	7.7	23.0	5	15	6.8	78	3.4	.0	2
MAY											
23...	1.1	803	7.7	27.0	0	50	6.7	83	1.6	--	0
JUNE											
26...	1.5	937	7.7	25.0	0	35	6.5	77	3.4	3.6	4
JULY											
24...	1.4	894	7.7	28.5	12	20	6.6	85	3.6	4.7	3
AUG.											
28...	1.4	919	7.7	27.5	10	25	6.8	85	1.5	2.7	0
SEP.											
25...	1.2	767	7.6	21.5	5	40	6.8	76	5.8	4.6	2

DATE	TIME	DIS- SOLVED ALUM- INUM (AL) (UG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	DIS- SOLVED COBALT (CO) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)
FEB.								
21...	1300	40	3	--	0	0	0	1
APR.								
24...	1205	10	0	280	0	0	0	3
JUNE								
26...	1500	10	0	330	0	0	0	3
AUG.								
28...	1610	10	2	330	1	0	0	1

DATE	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	DIS- SOLVED LITHIUM (LI) (UG/L)	DIS- SOLVED MANGANESE (MN) (UG/L)	DIS- SOLVED MERCURY (HG) (UG/L)	DIS- SOLVED NICKEL (NI) (UG/L)	DIS- SOLVED STRON- TIUM (SR) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)
FEB.								
21...	20	2	20	0	.1	0	1100	10
APR.								
24...	20	2	20	0	.0	0	950	0
JUNE								
26...	10	0	20	10	.0	13	960	10
AUG.								
28...	50	0	13	0	.0	5	1000	0

GUADALUPE RIVER BASIN

08181500 MEDINA RIVER AT SAN ANTONIO, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTMEBRER 1974

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	ALDRIN (UG/L)	ALDRIN IN BOTTOM DE- POSITS (UG/KG)	DDD (UG/L)	DDD IN BOTTOM DE- POSITS (UG/KG)	DDE (UG/L)	DDE IN BOTTOM DE- POSITS (UG/KG)	DDT (UG/L)	DDT IN BOTTOM DE- POSITS (UG/KG)
FEB. 21...	1300	179	18.0	.00	.0	.00	.2	.00	1.4	.00	.0
APR. 24...	1205	137	23.0	.00	.0	.00	.5	.00	1.8	.00	1.6
AUG. 28...	1610	123	27.5	.00	.0	.00	4.5	.00	15	.00	.0

DATE	DI- ELDRIN (UG/L)	DI- ELDRIN IN BOTTOM DE- POSITS (UG/KG)	ENDRIN (UG/L)	ENDRIN IN BOTTOM DE- POSITS (UG/KG)	HEPTA- CHLOR (UG/L)	HEPTA- CHLOR IN BOTTOM DE- POSITS (UG/KG)	HEPTA- CHLOR EPOXIDE (UG/L)	HEPTA- CHLOR EPOXIDE IN ROT- TOM DE- POSITS (UG/KG)	LINDANE (UG/L)	LINDANE IN BOTTOM DE- POSITS (UG/KG)	CHLOR- DANE (UG/L)
FEB. 21...	.00	.0	.00	.0	.00	.0	.00	.0	.00	.0	.0
APR. 24...	.01	.9	.00	.0	.00	.0	.00	.0	.00	.0	.0
AUG. 28...	.00	1.9	.00	.0	.00	.0	.00	.0	.00	.0	.0

DATE	CHLOR- DANE IN BOTTOM DE- POSITS (UG/KG)	PCB (UG/L)	PCB IN BOTTOM DE- POSITS (UG/KG)	DI- AZINON (UG/L)	MALA- THION (UG/L)	METHYL PARA- THION (UG/L)	PARA- THION (UG/L)	2,4-D (UG/L)	SILVEX (UG/L)	2,4,5-T (UG/L)
FEB. 21...	2	.0	0	.03	.00	.00	.00	.00	.00	.00
APR. 24...	4	.0	0	.00	.00	.00	.00	.00	.00	.00
AUG. 28...	91	.0	0	.00	.00	.00	.00	.00	.00	.00

08181800 SAN ANTONIO RIVER NEAR ELMENDORF, TEX.

LOCATION.--Lat 29°14'15", long 98°21'43", Bexar County, at gaging station 2,000 ft (610 m) downstream from Braunig Plant Lake and 2.2 miles (3.5 km) southwest of Elmendorf.

DRAINAGE AREA.--1,743 mi² (4,514 km²).

PERIOD OF RECORD.--Chemical analyses: October 1966 to September 1974.

Chemical and biochemical analyses: January 1968 to September 1974.

Pesticide analyses: January 1968 to September 1974.

Water temperatures: October 1966 to September 1974.

EXTREMES.--October 1973 to September 1974:

Specific conductance: Maximum daily, 996 micromhos Apr. 12; minimum daily 306 micromhos Aug. 9.

Water temperatures: Maximum, 30.0°C July 20, 21, Aug. 17; minimum, 12.0°C Jan. 3, 4.

Period of record:

Specific conductance: Maximum daily, 1,240 micromhos Jan. 29, 1973; minimum daily, 263 micromhos Sept. 27, 1973.

Water temperatures: Maximum, 32.0°C June 21, 1969; minimum, 5.5°C Jan. 10, 1973.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	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 SODIUM PLUS POTAS- SIUM (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
OCT.												
15...	--	3010	14	70	12	21	--	4.3	212	0	46	29
25...	1200	1940	13	78	15	--	28	--	250	0	54	34
NOV.												
14...	1120	1050	15	90	19	--	40	--	280	0	70	55
30...	0840	843	14	90	22	--	29	--	274	0	64	61
DEC.												
12...	1130	731	14	94	21	--	48	--	292	0	74	68
31...	0805	613	14	92	22	--	44	--	294	0	79	65
JAN.												
07...	1046	603	14	92	20	48	--	4.4	283	0	73	67
16...	1305	586	15	93	21	54	--	5.1	289	0	70	70
FEB.												
19...	1345	485	14	97	21	58	--	5.6	282	0	82	76
21...	1210	471	14	92	22	60	--	5.3	285	0	87	80
MAR.												
14...	1130	400	16	94	21	65	--	4.4	291	0	89	82
21...	1535	378	15	94	21	66	--	5.0	291	0	85	86
APR.												
24...	1110	390	15	83	18	60	--	5.5	264	0	87	77
MAY												
23...	1330	308	15	89	20	55	--	4.7	278	0	75	77
JUNE												
26...	1230	156	17	89	19	75	--	7.0	296	0	73	92
JULY												
24...	1335	211	17	81	19	73	--	7.0	286	0	79	85
AUG.												
28...	1510	360	16	92	20	68	--	5.2	279	0	89	88
SEP.												
25...	1140	933	16	77	20	50	--	4.5	279	0	68	63

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)	VOL. NON- FILT- RABLE RESIDUE (MG/L)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)
OCT.												
15...	.2	--	--	--	--	--	--	300	--	--	220	50
25...	.2	1.8	.22	.10	.22	--	.61	354	89	24	260	51
NOV.												
14...	.3	3.0	.48	.69	.58	--	1.8	443	53	12	300	73
30...	.3	--	--	--	--	--	--	415	--	--	310	90
DEC.												
12...	.3	3.6	.36	.50	.92	--	1.6	481	30	5	320	82
31...	.3	--	--	--	--	--	--	461	--	--	320	79
JAN.												
07...	--	--	--	--	--	--	--	458	--	--	310	80
16...	--	4.6	1.1	2.0	.31	--	2.1	471	24	7	320	82
FEB.												
19...	--	--	--	--	--	--	--	493	--	--	330	97
21...	--	5.1	.06	.08	.46	.54	2.4	500	24	6	320	87
MAR.												
14...	--	--	--	--	--	--	--	515	--	--	320	83
21...	--	5.0	.20	.66	.64	1.3	1.9	515	41	2	320	83
APR.												
24...	--	3.8	.37	.89	1.0	1.9	2.2	477	64	15	280	66
MAY												
23...	--	3.7	.92	.86	2.4	3.3	2.5	473	60	6	300	77
JUNE												
26...	--	5.4	.89	1.5	1.3	2.8	4.3	519	28	8	300	59
JULY												
24...	--	3.9	1.1	1.2	1.5	2.7	4.6	502	9	5	280	46
AUG.												
28...	--	4.1	.90	1.2	.80	2.0	2.4	517	34	4	310	85
SEP.												
25...	--	3.7	.56	.65	.95	1.6	1.4	436	190	33	270	46

GUADALUPE RIVER BASIN

08181800 SAN ANTONIO RIVER NEAR ELMENDORF, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	HIO- CHEM- ICAL OXYGEN DEMAND (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	PHENOLS (UG/L)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)
OCT.												
15...	.6	523	7.6	22.5	--	--	--	--	--	--	--	--
25...	.8	612	8.0	22.0	20	40	7.3	83	4.8	2.5	0	.0
NOV.												
14...	1.0	760	7.7	22.0	15	25	6.6	75	6.6	1.0	0	.0
30...	.7	794	8.1	18.0	--	--	--	--	--	--	--	--
DEC.												
12...	1.2	824	7.6	17.5	10	20	7.6	79	6.6	--	0	.0
31...	1.1	817	8.1	15.5	--	--	--	--	--	--	--	--
JAN.												
07...	1.2	829	7.9	15.0	--	--	--	--	--	--	--	--
16...	1.3	848	7.6	17.5	10	9	6.6	69	5.3	3.0	0	.1
FEB.												
19...	1.4	869	8.3	18.5	--	--	--	--	--	--	--	--
21...	1.5	888	7.7	19.0	20	15	6.5	69	9.0	.0	0	.1
MAR.												
14...	1.6	917	7.9	22.5	--	--	--	--	--	--	--	--
21...	1.6	920	7.6	22.0	8	10	5.8	66	12	4.0	0	.8
APR.												
24...	1.6	836	7.5	24.0	15	15	6.8	80	6.4	1.0	4	.1
MAY												
23...	1.4	843	7.4	30.0	0	30	5.1	67	10	--	2	.0
JUNE												
26...	1.9	918	7.7	26.5	10	15	6.4	78	5.8	6.8	4	.1
JULY												
24...	1.9	899	7.6	30.5	25	10	4.0	53	5.4	7.0	4	.2
AUG.												
28...	1.7	875	7.6	29.0	15	15	6.1	78	5.0	5.1	2	.1
SEP.												
25...	1.3	765	7.6	22.5	8	35	6.5	74	3.2	3.6	1	.0

DATE	TIME	DIS- SOLVED ALUM- INUM (AL) (UG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	DIS- SOLVED COBALT (CO) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)
FEB.								
21...	1210	0	2	--	0	0	0	2
APR.								
24...	1110	10	1	240	1	0	0	4
JUNE								
26...	1230	0	0	350	1	0	0	5
AUG.								
28...	1510	0	0	270	1	0	0	3

DATE	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	DIS- SOLVED LITHIUM (LI) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED MERCURY (HG) (UG/L)	DIS- SOLVED NICKEL (NI) (UG/L)	DIS- SOLVED STRON- TIUM (SR) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)
FEB.								
21...	20	2	30	20	.0	5	1000	30
APR.								
24...	10	7	20	30	.2	2	990	20
JUNE								
26...	20	5	20	20	.0	9	1100	20
AUG.								
28...	40	0	13	20	.0	9	1100	10

GUADALUPE RIVER BASIN

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08181800 SAN ANTONIO RIVER NEAR ELMENDORF, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TEMPERATURE (DEG C)	ALDRIN (UG/L)	ALDRIN IN BOTTOM DE-POSITS (UG/KG)	DDD (UG/L)	DDD IN BOTTOM DE-POSITS (UG/KG)	DDE (UG/L)	DDE IN BOTTOM DE-POSITS (UG/KG)	DDT (UG/L)	DDT IN BOTTOM DE-POSITS (UG/KG)
FEB. 21...	1210	471	19.0	.00	.0	.00	2.8	.00	2.1	.00	4.3
APR. 24...	1110	390	24.0	.00	.0	.00	7.6	.00	6.4	.00	.0
AUG. 28...	1510	360	29.0	--	.0	--	8.2	--	2.5	--	2.4

DATE	DI-ELDRIN (UG/L)	DI-ELDRIN IN BOTTOM DE-POSITS (UG/KG)	ENDRIN (UG/L)	ENDRIN IN BOTTOM DE-POSITS (UG/KG)	HEPTA-CHLOR (UG/L)	HEPTA-CHLOR IN BOTTOM DE-POSITS (UG/KG)	HEPTA-CHLOR EPOXIDE (UG/L)	HEPTA-CHLOR EPOXIDE IN BOTTOM DE-POSITS (UG/KG)	LINDANE (UG/L)	LINDANE IN BOTTOM DE-POSITS (UG/KG)	CHLOR-DANE (UG/L)
FEB. 21...	.01	1.5	.00	.0	.00	.0	.00	.0	.01	.0	.0
APR. 24...	.01	3.7	.00	.0	.00	.0	.00	.0	.01	.0	.0
AUG. 28...	--	1.7	--	.0	--	.0	--	.0	--	.0	--

DATE	CHLOR-DANE IN BOTTOM DE-POSITS (UG/KG)	PCB (UG/L)	PCB IN BOTTOM DE-POSITS (UG/KG)	DI-AZINON (UG/L)	MALATHION (UG/L)	METHYL PARA-THION (UG/L)	PARA-THION (UG/L)	2,4-D (UG/L)	SILVEX (UG/L)	2,4,5-T (UG/L)
FEB. 21...	9	.0	0	.10	.00	.00	.00	.05	.00	.00
APR. 24...	30	.0	0	.14	.00	.00	.00	.09	.03	.05
AUG. 28...	29	--	24	--	--	--	--	.00	.00	.01

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

MONTH	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCTANCE (MICRO-MHOS)	DIS-SOLVED SOLIDS (MG/L)	DIS-SOLVED SOLIDS (TONS)	DIS-SOLVED CHLORIDE (MG/L)	DIS-SOLVED CHLORIDE (TONS)	DIS-SOLVED SULFATE (MG/L)	DIS-SOLVED SULFATE (TONS)	HARDNESS (CA+MG) (MG/L)
OCT. 1973.....	75130	583	330	66900	44	8930	51	10300	220
NOV. 1973.....	33266	731	410	36800	57	5120	65	5840	280
DEC. 1973.....	21514	828	470	27300	71	4120	74	4300	310
JAN. 1974.....	19115	831	470	24300	72	3720	75	3870	310
FEB. 1974.....	14139	858	480	18300	76	2900	77	2940	310
MAR. 1974.....	13384	891	500	18100	82	2960	80	2890	310
APR. 1974.....	11495	878	490	15200	79	2450	79	2450	310
MAY 1974.....	17388	724	410	19200	57	2680	64	3000	270
JUNE 1974.....	8837	855	480	11500	76	1810	77	1840	310
JULY 1974.....	6125	880	490	8100	80	1320	79	1310	310
AUG. 1974.....	39525	500	290	30900	36	3840	43	4590	190
SEPT 1974.....	28603	623	350	27000	48	3710	55	4250	230
TOTAL	288521	**	**	304000	**	43600	**	47600	**
WTD.AVG.	790	690	390	**	56	**	61	**	260

GUADALUPE RIVER BASIN

08181800 SAN ANTONIO RIVER NEAR ELMENDORF, TEX.--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	698	658	786	848	810	912	867	650	721	954	885	450
2	735	663	794	937	842	916	857	614	836	883	918	580
3	759	659	811	812	842	898	881	759	830	912	926	508
4	752	675	797	827	816	874	888	750	830	950	911	583
5	730	678	806	855	827	874	885	717	878	908	780	645
6	656	699	814	848	858	912	910	616	892	911	812	659
7	622	697	789	819	852	909	907	780	878	970	562	677
8	709	708	811	825	871	916	885	788	889	915	368	707
9	705	722	789	850	878	920	881	829	922	866	306	681
10	732	716	938	840	868	913	914	479	876	911	470	645
11	600	708	800	849	827	902	925	648	868	908	639	667
12	386	719	811	907	837	895	996	724	900	927	778	550
13	568	738	818	827	852	909	895	766	729	775	862	531
14	489	758	830	790	852	909	902	780	668	860	882	461
15	519	758	806	828	852	884	892	851	858	838	892	617
16	550	771	806	832	913	784	878	851	871	841	918	692
17	493	741	909	831	885	888	900	829	832	676	922	721
18	559	731	806	837	856	851	907	829	854	822	926	730
19	559	829	935	882	846	881	903	826	892	850	892	738
20	579	757	814	849	878	888	914	802	908	880	878	763
21	560	744	950	806	888	894	910	794	900	901	903	752
22	570	740	838	812	892	891	780	832	933	880	921	755
23	581	755	832	840	868	905	755	832	937	841	957	757
24	597	763	820	840	865	902	816	838	911	901	961	789
25	594	750	829	795	868	854	854	858	885	904	945	710
26	615	817	811	798	865	950	877	770	929	904	861	691
27	636	908	838	786	878	884	899	730	937	942	845	758
28	533	752	826	769	871	884	888	753	926	954	891	822
29	616	762	835	804	---	881	874	838	942	894	340	825
30	651	794	850	812	---	884	875	842	942	844	480	793
31	675	---	817	800	---	898	---	750	---	890	400	---
MONTH	614	739	830	805	859	892	884	765	872	884	775	675

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	25.5	20.5	17.0	14.5	19.0	20.0	24.5	23.5	25.5	26.5	29.0	26.0
2	25.5	21.0	18.0	13.5	19.0	22.0	23.0	24.5	27.0	28.5	29.0	---
3	26.0	22.0	20.0	12.0	18.0	21.0	24.5	25.5	28.0	28.0	27.0	25.5
4	26.5	23.0	19.0	12.0	18.5	22.0	23.5	25.0	28.0	27.0	29.0	24.5
5	25.0	24.0	18.0	15.0	18.0	23.5	21.0	24.0	28.0	27.0	26.5	24.0
6	25.0	21.0	17.0	16.0	19.0	23.5	20.0	23.5	28.5	27.0	28.0	24.0
7	24.0	21.0	16.5	15.5	16.5	23.5	22.0	24.5	28.0	27.0	26.5	22.0
8	25.0	22.0	17.0	15.5	15.0	23.5	21.0	24.0	27.0	27.0	25.0	23.0
9	25.5	22.0	18.0	18.0	15.0	23.0	20.5	25.5	28.0	28.5	25.0	24.5
10	26.5	21.0	18.0	15.5	17.0	23.0	21.0	22.0	26.5	28.0	28.0	24.5
11	26.5	21.0	16.5	15.5	15.5	23.5	23.0	25.0	26.5	29.0	28.0	25.0
12	23.5	20.5	17.0	15.0	16.5	24.0	22.0	25.0	28.5	28.0	28.0	26.5
13	22.0	21.0	19.0	14.0	19.0	22.0	24.0	25.5	25.5	27.0	29.0	25.5
14	21.0	22.0	18.0	15.5	20.0	23.5	22.0	26.0	25.5	26.0	29.0	23.0
15	22.5	23.0	17.0	17.0	21.0	21.5	20.5	28.0	27.0	28.0	29.0	23.0
16	23.5	21.0	16.0	17.0	20.0	18.0	20.0	28.0	27.0	28.0	29.0	26.5
17	22.0	20.0	16.0	19.5	19.0	21.0	---	26.5	28.0	28.0	30.0	26.5
18	22.0	21.0	16.0	15.0	20.0	22.0	21.5	26.0	29.0	26.5	29.0	26.5
19	21.5	22.0	16.5	20.0	18.5	22.0	23.5	26.0	28.5	28.0	29.0	26.5
20	22.0	22.0	14.5	18.0	19.5	23.5	23.0	26.5	29.0	30.0	29.0	26.5
21	22.0	20.0	15.5	18.0	20.0	21.0	24.0	26.5	28.5	30.0	28.5	26.0
22	---	---	14.0	18.0	18.5	19.0	23.5	27.0	26.0	28.0	28.5	---
23	21.0	---	17.0	19.0	17.0	19.0	23.5	27.0	27.0	28.0	28.5	24.0
24	21.0	23.0	15.5	15.5	17.0	15.0	24.5	26.5	28.0	28.5	27.0	23.5
25	21.5	23.0	16.0	14.5	15.5	16.5	24.5	27.0	26.5	29.5	26.0	24.5
26	22.0	21.5	15.5	15.0	15.0	16.5	20.5	27.0	26.5	29.0	26.5	21.5
27	23.0	22.0	16.0	16.0	16.5	20.0	25.0	---	26.0	28.0	26.5	25.0
28	21.0	19.5	16.0	16.5	18.0	21.0	23.0	26.5	26.5	29.0	28.0	25.0
29	21.0	18.5	17.0	16.5	---	21.0	24.5	28.0	28.0	29.0	25.5	23.0
30	21.5	18.0	18.0	16.5	---	23.0	23.5	28.0	28.0	28.5	26.0	22.0
31	21.5	---	15.5	16.5	---	24.0	---	---	---	29.0	25.0	---
MONTH	23.0	21.5	17.0	16.0	18.0	21.5	22.5	26.0	27.5	28.0	27.5	24.5

GUADALUPE RIVER BASIN

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08183500 SAN ANTONIO RIVER NEAR FALLS CITY, TEX.

LOCATION.--Lat 28°57'05", Long 98°03'50", Karnes County, at gaging station at bridge on Farm Road 791, 0.9 mile (1.4 km) upstream from Scared Dog Creek, and 3.6 miles (5.8 km) southwest of Falls City.

DRAINAGE AREA.--2,113 mi² (5,473 km²).

PERIOD OF RECORD.--Chemical and biochemical analyses: January 1968 to September 1974.

Sediment analyses: January 1966 to September 1974.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

		INSTAN- TANEOUS 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 SODIUM PLUS POTAS- SIUM (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HC03) (MG/L)	CAR- BONATE (C03) (MG/L)	
DATE	TIME										
OCT. 25...	1110	2550	14	80	15	--	29	--	256	0	
NOV. 14...	1010	1260	15	94	20	--	45	--	288		
DEC. 12...	1035	785	15	98	22	--	59	--	304	0	
JAN. 16...	1200	680	15	98	20	56	--	5.6	298	0	
FEB. 21...	1045	531	14	100	24	65	--	5.0	300	0	
MAR. 21...	1415	466	15	98	22	69	--	5.2	284	0	
APR. 24...	1015	847	15	92	21	61	--	5.3	290	0	
MAY 22...	2015	472	16	92	20	60	--	4.5	281	0	
JUNE 26...	1125	298	20	110	22	92	--	9.1	308	0	
JULY 24...	1240	150	18	100	25	95	--	7.0	301	0	
AUG. 28...	1355	427	17	97	22	79	--	5.5	297	0	
SEP. 25...	1045	658	16	80	21	53	--	4.5	286	0	
		DIS- SOLVED SULFATE (S04) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)
DATE											
OCT. 25...	56	34	.2	1.6	.08	.01	.26	--	.85	362	
NOV. 14...	79	58	.2	3.4	.36	.00	.39	--	.70	469	
DEC. 12...	91	72	.3	4.6	.08	.06	.69	--	.92	527	
JAN. 16...	84	70	--	4.7	.05	.07	.23	--	1.3	496	
FEB. 21...	110	86	--	5.8	.02	.06	.49	.55	1.6	551	
MAR. 21...	100	86	--	5.4	.00	.03	.85	.88	1.7	535	
APR. 24...	97	79	--	5.4	.24	.07	1.0	1.1	2.1	513	
MAY 22...	92	73	--	4.8	.14	.05	1.1	1.1	1.8	496	
JUNE 26...	110	140	--	--	--	--	--	1.7	4.0	655	
JULY 24...	130	130	--	5.3	.05	.08	.69	.77	2.2	653	
AUG. 28...	100	100	--	4.9	.10	.11	1.6	1.7	1.8	567	
SEP. 25...	83	64	--	3.3	.11	.11	.75	.86	1.1	463	

GUADALUPE RIVER BASIN

08183500 SAN ANTONIO RIVER NEAR FALLS CITY, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	BIO- CHEM- ICAL OXYGEN DEMAND (MG/L)
OCT. 25...	260	51	.8	618	7.7	22.0	6.9	78	1.0
NOV. 14...	320	81	1.1	783	7.7	21.0	6.4	71	1.4
DEC. 12...	340	86	1.4	874	7.6	16.5	8.0	82	4.2
JAN. 16...	330	83	1.3	882	7.9	15.0	7.8	76	5.4
FEB. 21...	350	100	1.5	957	7.6	19.0	7.2	77	4.8
MAR. 21...	340	100	1.6	954	7.5	22.0	6.0	68	7.8
APR. 24...	320	78	1.5	900	7.7	23.5	5.5	64	2.3
MAY 22...	310	82	1.5	873	7.5	28.0	5.6	71	1.6
JUNE 26...	370	110	2.1	1070	7.7	28.0	6.9	87	3.2
JULY 24...	350	110	2.2	1100	7.8	30.0	5.7	75	1.9
AUG. 28...	330	89	1.9	969	7.5	28.0	6.0	76	2.4
SEP. 25...	290	52	1.4	784	7.6	23.0	6.1	70	1.1

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	SUS- PENDED SEDI- MENT DIS- CHARGE (MG/L)	SUS- PENDED SEDI- MENT DIS- CHARGE (T/DAY)
NOV. 13...	1420	1270	22.0	127	435
JAN. 24...	1345	607	15.5	84	138
MAY 07...	0950	420	24.0	59	67

08186000 CIBOLO CREEK NEAR FALLS CITY, TEX.

LOCATION.--Lat 29°00'50", long 97°55'48", Karnes County, at gaging station at bridge on State Highway 123, 5.7 miles (9.2 km) northeast of Falls City, and 10.4 miles (16.7 km) upstream from mouth.

DRAINAGE AREA.--827 mi² (2,142 km²).

PERIOD OF RECORD.--Chemical analyses: October 1968 to September 1974.

Chemical and biochemical analyses: October 1969 to September 1974.

Water temperatures: October 1968 to September 1974.

Sediment records: October 1968 to September 1969.

EXTREMES.--October 1973 to September 1974:

Specific conductance: Maximum daily, 1,680 micromhos Jan. 23; minimum daily, 274 micromhos Aug. 30.

Water temperatures: Maximum, 33.0°C on several days during summer months.

Period of record:

Specific conductance: Maximum daily, 2,270 micromhos May 20, 21, 1971; minimum daily, 176 micromhos Sept. 28, 1973.

Water temperatures: Maximum, 33.0°C on several days during August, 1969; minimum, 4.5°C Jan. 7, 1970.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part I of this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED SODIUM PLUS POTAS- SIUM (K) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)
OCT.										
04...	1630	506	15	80	10	39	--	5.7	212	0
25...	1035	419	16	110	14	--	46	--	328	0
NOV.										
14...	0935	152	19	140	22	--	95	--	364	0
14...	1310	138	20	71	22	91	--	5.2	177	0
DEC.										
12...	1000	78	18	140	27	--	110	--	348	0
13...	1400	76	18	130	26	120	--	7.0	333	0
JAN.										
16...	1130	88	15	130	26	120	--	6.0	324	0
25...	0920	73	17	110	23	120	--	6.9	322	0
FEB.										
21...	1015	57	16	140	27	130	--	6.2	350	0
24...	1700	56	13	110	27	130	--	5.5	242	0
MAR.										
07...	1255	54	16	130	27	130	--	5.6	300	0
21...	1345	51	18	130	26	130	--	6.0	302	0
APR.										
24...	0935	101	17	130	26	120	--	5.9	328	0
MAY										
22...	1930	33	20	130	22	110	--	6.8	290	0
JUNE										
26...	1045	23	15	120	28	130	--	7.9	272	0
JULY										
24...	1205	23	19	120	27	130	--	8.1	270	0
AUG.										
28...	1315	26	19	120	23	120	--	8.4	283	0
SEP.										
25...	1000	51	20	110	21	98	--	8.2	289	0

DATE	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)
OCT.										
04...	86	46	.2	--	--	--	--	--	--	386
25...	80	47	.2	1.7	.00	.00	.14	--	.17	479
NOV.										
14...	170	110	.3	3.8	.01	.00	.25	--	.12	742
14...	170	100	--	--	--	--	--	--	--	566
DEC.										
12...	200	130	.3	4.4	.00	.02	.18	--	.01	814
13...	200	130	--	--	--	--	--	--	--	795
JAN.										
16...	200	140	--	5.4	.00	.05	.26	--	.03	797
25...	200	130	--	--	--	--	--	--	--	766
FEB.										
21...	220	150	--	4.4	.10	.07	.37	.44	.14	861
24...	240	150	--	--	--	--	--	--	--	795
MAR.										
07...	250	160	--	--	--	--	--	--	--	867
21...	220	150	--	2.8	.05	.34	.66	1.0	.10	829
APR.										
24...	210	150	--	2.5	.02	.02	1.1	1.1	.16	820
MAY										
22...	220	140	--	1.4	.00	.03	1.2	1.2	.23	792
JUNE										
26...	250	160	--	--	--	--	--	1.0	.14	845
JULY										
24...	260	160	--	.84	.01	.14	.42	.56	.08	857
AUG.										
28...	230	150	--	.62	.01	.14	1.1	1.2	.13	810
SEP.										
25...	140	110	--	1.2	.01	.10	.83	.93	.37	690

GUADALUPE RIVER BASIN

08186000 CIBOLO CREEK NEAR FALLS CITY, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	BIO- CHEM- ICAL OXYGEN DEMAND (MG/L)
OCT.									
04...	240	67	1.1	633	7.6	25.5	--	--	--
25...	320	56	1.1	799	7.8	21.5	7.4	83	.4
NOV.									
14...	430	130	2.0	1200	7.8	20.5	7.8	86	.9
14...	270	120	2.4	963	8.1	22.0	--	--	--
DEC.									
12...	450	170	2.3	1320	7.7	15.0	9.8	96	1.2
13...	430	160	2.5	1210	7.8	13.5	--	--	--
JAN.									
16...	430	170	2.5	1330	7.9	13.0	10.1	95	1.0
25...	370	110	2.7	1280	8.1	13.5	--	--	--
FEB.									
21...	460	170	2.6	1400	7.9	17.0	8.8	91	1.7
24...	390	190	2.9	1310	7.8	17.0	--	--	--
MAR.									
07...	440	190	2.7	1370	8.0	24.0	--	--	--
21...	430	180	2.7	1370	8.0	20.5	10.7	118	6.1
APR.									
24...	430	160	2.5	1320	8.0	23.0	7.7	89	4.8
MAY									
22...	420	180	2.4	1300	8.0	29.0	9.0	115	3.2
JUNE									
26...	420	190	2.8	1370	7.8	24.5	8.6	102	3.7
JULY									
24...	410	190	2.8	1390	7.9	29.5	6.2	81	1.5
AUG.									
28...	390	160	2.6	1260	7.7	28.0	8.6	109	1.4
SEP.									
25...	360	120	2.2	1100	7.8	21.5	7.8	88	1.8

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	SUS- PENDED SEDI- MENT (MG/L)	SUS- PENDED SEDI- MENT DIS- CHARGE (T/DAY)
NOV.					
14...	1310	138	22.0	131	49
DEC.					
13...	1400	76	13.5	36	7.4
MAY					
07...	1255	54	24.0	140	20

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

MONTH	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCT- ANCE (MICRO- MHOS)	DIS- SOLVED SOLIDS (MG/L)	DIS- SOLVED SOLIDS (TONS)	DIS- SOLVED CHLORIDE (MG/L)	DIS- SOLVED CHLORIDE (TONS)	DIS- SOLVED SULFATE (MG/L)	DIS- SOLVED SULFATE (TONS)	HARDNESS (CA,MG) (MG/L)
OCT. 1973.....	30874	470	270	22500	27	2250	60	5000	170
NOV. 1973.....	5020	1000	610	8270	100	1360	170	2300	330
DEC. 1973.....	2486	1260	780	5240	140	940	220	1480	410
JAN. 1974.....	3100	1300	800	6700	140	1170	230	1930	420
FEB. 1974.....	1644	1360	840	3730	150	666	240	1070	440
MAR. 1974.....	1591	1400	870	3740	160	687	250	1070	450
APR. 1974.....	1277	1370	850	2930	150	517	240	827	440
MAY 1974.....	3367	749	450	4090	66	600	120	1090	250
JUNE 1974.....	936	1170	720	1820	120	303	200	505	380
JULY 1974.....	653	1390	860	1520	150	264	240	423	450
AUG. 1974.....	6624	442	260	4650	23	411	54	966	160
SEPT 1974.....	6735	475	280	5090	28	509	61	1110	170
TOTAL	64307	**	**	70300	**	9700	**	17800	**
WTD.AVG.	176	677	400	**	56	**	100	**	230

GUADALUPE RIVER BASIN

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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	529	621	1200	1300	1220	1280	1380	1060	872	1420	1410	404
2	548	673	1190	1280	1300	1340	1400	1180	892	1420	1410	311
3	608	786	1260	1340	1360	1390	1420	1070	1000	1430	1380	377
4	633	820	1270	1330	1390	1330	1420	1100	1090	1440	1460	300
5	733	947	1280	1330	1360	1410	1440	1110	1210	1450	1460	354
6	635	970	1200	1330	1380	1380	1460	1000	1500	1400	1460	587
7	768	1010	1240	1340	1370	1330	1480	966	1060	1280	580	529
8	832	966	1300	1340	1340	1350	1510	907	1030	1400	395	700
9	848	1070	1280	1340	1350	1360	1490	1000	1080	1430	295	804
10	927	1060	1250	1330	1390	1380	1460	682	1080	1380	512	853
11	1090	1060	1260	1340	1400	1380	1450	423	1100	1440	429	800
12	402	974	1290	1350	1400	1340	1440	480	1170	1430	500	598
13	329	1090	1210	1310	1290	1420	1420	500	1230	1460	685	318
14	300	1190	1330	1320	1360	1400	1420	743	1290	1440	782	399
15	345	1190	1210	1300	1350	1390	1420	1040	1300	1420	877	331
16	314	1190	1300	1340	1340	1400	1390	1030	1320	1300	1040	455
17	309	1030	1270	1340	1350	1430	1380	1100	1340	1390	1040	379
18	402	1200	1250	1340	1380	1430	1410	1180	1330	1340	1170	697
19	523	1200	1260	1330	1390	1450	1390	1220	1310	1350	1100	806
20	626	1200	1280	1230	1400	1380	1370	1260	1300	1310	1060	870
21	687	1230	1280	1250	1410	1380	1350	1300	1300	1340	1210	942
22	722	1190	1280	1260	1390	1440	1300	1300	1320	1360	1210	1020
23	741	1210	1350	1680	1350	1450	1230	1320	1340	1380	1230	1090
24	760	1210	1250	1320	1390	1460	1220	1320	1340	1380	1250	1140
25	786	1200	1280	1330	1380	1460	1210	1320	1330	1370	1280	1170
26	782	1340	1260	1340	1390	1470	1250	1290	1370	1380	1280	1200
27	800	1610	1260	1260	1390	1500	1330	1300	1390	1380	1270	1220
28	561	1190	1280	1160	1390	1480	1360	1320	1390	1400	1300	1220
29	453	1190	1290	1160	---	1450	1350	1320	1380	1430	800	1220
30	700	1230	1250	1170	---	1440	1320	1100	1380	1460	274	1220
31	660	---	1310	1200	---	1400	---	465	---	1470	308	---
MONTH	624	1090	1270	1310	1360	1400	1380	1050	1230	1400	982	744

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	26.0	20.0	---	---	17.0	20.0	27.0	24.0	26.0	26.5	28.0	28.0
2	25.0	21.0	18.0	10.0	17.0	---	---	25.0	26.0	---	---	28.0
3	25.5	22.0	19.0	11.0	16.0	20.0	26.0	26.0	---	27.0	28.0	28.0
4	25.5	---	---	9.0	17.0	19.0	24.0	---	25.0	27.0	28.0	---
5	26.0	21.5	17.0	10.0	17.0	18.0	26.0	26.0	26.0	26.5	28.0	28.0
6	26.0	---	18.0	---	16.5	19.0	---	---	26.0	27.0	26.0	28.5
7	26.5	22.5	17.0	---	15.0	21.0	---	25.0	25.0	28.0	25.0	27.0
8	25.0	22.0	18.0	0.0	14.0	20.0	24.0	26.0	26.0	---	26.0	---
9	26.0	22.5	---	---	---	---	---	---	25.0	27.0	28.0	28.0
10	27.0	---	13.0	---	15.0	24.0	25.0	27.0	26.0	28.0	28.0	26.5
11	25.0	20.0	14.5	---	17.0	26.0	---	25.0	---	28.0	28.0	---
12	24.0	21.5	18.0	---	17.0	25.0	26.0	---	26.0	28.0	---	27.0
13	22.0	23.0	18.0	---	19.0	23.5	25.0	26.0	25.0	27.5	28.0	28.0
14	23.0	23.0	18.0	---	20.0	---	23.0	25.0	26.0	---	28.0	28.0
15	22.0	---	15.0	12.0	---	24.0	24.0	26.0	24.0	28.0	28.0	28.0
16	22.0	23.5	15.0	17.0	19.0	---	25.0	25.0	---	28.5	28.0	28.0
17	22.0	22.0	15.0	13.0	19.0	23.0	26.0	---	26.0	28.0	26.5	28.0
18	21.0	22.0	16.0	17.0	20.0	25.0	24.0	26.0	25.5	27.0	28.0	28.5
19	21.5	---	---	18.5	19.0	25.0	23.0	---	24.0	28.5	---	28.5
20	22.0	23.0	12.5	18.0	---	25.0	---	26.0	---	28.0	28.0	---
21	21.0	22.0	---	---	18.0	21.0	24.0	25.0	25.0	28.5	28.0	27.0
22	21.5	23.0	14.0	20.0	17.0	22.0	25.0	24.0	26.0	---	28.0	28.5
23	---	23.5	13.0	15.0	21.0	---	26.0	26.0	25.5	28.0	---	27.0
24	21.5	24.0	15.0	15.0	17.0	20.0	25.0	---	---	28.0	28.0	28.0
25	22.5	---	14.5	13.0	19.0	---	26.0	25.0	26.0	28.5	27.0	28.5
26	27.0	21.5	15.0	15.0	19.0	20.0	---	24.0	24.5	27.0	28.0	---
27	23.0	18.0	15.0	15.0	---	22.0	27.0	26.0	25.0	28.0	28.0	28.0
28	22.0	18.5	15.5	16.0	19.0	---	26.0	26.5	26.5	---	26.5	27.0
29	23.0	20.0	16.5	15.0	---	25.0	26.0	25.0	25.0	28.0	26.0	---
30	21.0	18.0	17.0	16.0	---	26.0	24.0	26.0	27.0	28.0	26.5	28.0
31	---	---	14.0	---	---	26.0	---	24.0	---	27.0	27.0	---
MONTH	23.5	21.5	16.0	---	17.5	---	---	---	25.5	27.5	27.5	28.0

LOCATION.--Lat 28°38'58", Long 97°23'04", Goliad County, at gaging station at bridge on U.S. Highway 183 and 1.2 miles (1.9 km) southeast of courthouse in Goliad.

DRAINAGE AREA.--3,921 mi² (10,155 km²).

PERIOD OF RECORD.--Chemical analyses: September 1945 to September 1946, September 1958 to September 1974.

Chemical and biochemical analyses: January 1968 to September 1974.

Pesticide analyses: January 1968 to September 1974.

Water temperatures: September 1958 to September 1974.

EXTREMES.--October 1973 to September 1974:

Specific conductance: Maximum daily, 1,460 micromhos July 7; minimum daily, 218 micromhos Oct. 1.

Water temperatures: Maximum, 32.0°C July 29; minimum, 4.5°C Jan. 2.

Period of record:

Specific conductance: Maximum daily, 1,500 micromhos July 15, 17, 1969; minimum daily, 138 micromhos Oct. 27, 1960.

Water temperatures: Maximum, 36.0°C June 5, 1969; minimum, 3.5°C Feb. 3, 1972, Jan. 12, 1973.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SI02) (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED SODIUM PLUS POTASSIUM (MG/L)	DIS-SOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)
OCT.												
02...	1950	22800	12	40	5.0	15	--	7.8	134	0	23	18
25...	0910	3940	15	85	14	--	34	--	270	0	55	41
NOV.												
14...	0815	1520	18	110	20	--	61	--	318	0	92	83
28...	1123	1260	19	110	21	63	--	5.6	314	8	100	88
DEC.												
11...	1200	979	20	110	24	--	82	--	336	0	110	110
13...	1530	958	19	110	20	87	--	5.9	327	10	110	110
20...	0900	905	19	110	23	77	--	4.7	333	0	110	100
JAN.												
05...	1410	788	18	110	22	82	--	5.0	331	0	110	110
16...	0900	806	18	110	22	79	--	5.6	327	0	110	110
FEB.												
12...	1713	687	18	120	23	90	--	5.7	333	0	130	120
21...	0830	635	18	120	25	90	--	5.6	326	0	120	120
MAR.												
19...	1330	749	18	110	25	95	--	5.5	319	0	110	130
28...	1830	573	20	110	23	98	--	5.3	326	0	120	130
APR.												
24...	0800	502	19	110	25	100	--	6.1	330	0	150	150
MAY												
21...	1900	561	20	100	21	84	--	5.7	300	0	110	120
JUNE												
26...	0900	379	21	110	22	110	--	7.4	316	0	120	140
JULY												
24...	1030	244	23	110	23	100	--	6.8	311	0	130	140
AUG.												
28...	1150	474	20	110	23	100	--	6.3	328	0	140	140
SEP.												
23...	1630	1170	18	80	16	56	--	6.3	253	0	76	72

DATE	DIS-SOLVED FLUORIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	TOTAL NON-FILT-RABLE RESIDUE (MG/L)	VOL. NON-FILT-RABLE RESIDUE (MG/L)	HARDNESS (CA+MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)
OCT.												
02...	--	--	--	--	--	--	--	187	--	--	120	11
25...	.2	1.5	.04	.00	.54	--	.50	384	208	42	270	48
NOV.												
14...	.3	3.1	.03	.05	.59	--	.72	552	163	23	350	92
28...	--	--	--	--	--	--	--	569	--	--	360	90
DEC.												
11...	.3	4.2	.05	.00	.37	--	.80	641	101	12	380	100
13...	--	--	--	--	--	--	--	633	--	--	360	72
20...	--	--	--	--	--	--	--	608	--	--	370	96
JAN.												
05...	--	--	--	--	--	--	--	621	--	--	370	98
16...	--	4.5	.00	.00	.44	--	1.2	616	66	47	370	97
FEB.												
12...	--	--	--	--	--	--	--	671	--	--	390	120
21...	--	4.1	.02	.15	.51	.66	1.2	659	112	18	400	140
MAR.												
19...	--	5.0	.02	.13	.68	.81	1.7	651	239	25	380	120
28...	--	--	--	--	--	--	--	667	--	--	370	100
APR.												
24...	--	3.4	.02	.04	.74	.78	1.8	724	128	22	380	110
MAY												
21...	--	4.2	.01	.04	1.2	1.2	2.1	609	190	10	340	90
JUNE												
26...	--	4.2	.01	.13	.97	1.1	2.7	688	164	24	370	110
JULY												
24...	--	4.2	.02	.11	.77	.88	1.9	686	118	13	370	110
AUG.												
28...	--	3.5	.01	.10	1.3	1.4	1.7	703	118	10	370	100
SEP.												
23...	--	2.7	.00	.22	2.0	2.2	1.7	449	916	120	270	58

GUADALUPE RIVER BASIN

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08188500 SAN ANTONIO RIVER AT GOLIAD, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	BIO- CHEM- ICAL OXYGEN DEMAND (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	PHENOLS (UG/L)
OCT.											
02...	.6	333	7.6	25.5	--	--	--	--	--	--	--
25...	.9	653	7.7	21.5	20	85	7.2	81	.4	7.5	0
NOV.											
14...	1.4	909	7.7	21.0	10	70	7.4	82	1.0	.0	0
28...	1.4	941	8.4	21.5	--	--	--	--	--	--	--
DEC.											
11...	1.8	1050	7.7	16.0	10	55	9.1	91	3.6	--	0
13...	2.0	1040	8.5	18.0	--	--	--	--	--	--	--
20...	1.7	1030	8.3	9.0	--	--	--	--	--	--	--
JAN.											
05...	1.9	1080	7.7	11.0	--	--	--	--	--	--	--
16...	1.8	1060	7.7	14.0	10	35	9.0	87	4.2	2.5	0
FEB.											
12...	2.0	1130	7.9	16.0	--	--	--	--	--	--	--
21...	2.0	1140	7.8	19.0	10	45	8.4	89	1.2	.0	0
MAR.											
19...	2.1	1160	7.6	23.0	10	65	7.5	86	1.5	2.0	0
28...	2.2	1180	8.2	19.0	--	--	--	--	--	--	--
APR.											
24...	2.2	1220	7.7	23.0	10	50	7.8	90	2.6	3.0	2
MAY											
21...	2.0	1060	7.6	28.5	0	70	7.0	90	1.3	--	0
JUNE											
26...	2.5	1200	7.9	26.0	40	70	7.9	96	2.3	6.2	5
JULY											
24...	2.3	1200	7.9	28.5	30	50	5.9	7	2.5	7.7	4
AUG.											
28...	2.3	1140	7.9	28.0	20	55	7.2	91	1.5	4.2	2
SEP.											
23...	1.5	764	7.8	25.0	20	300	6.7	80	2.3	8.3	2

DATE	TIME	DIS- SOLVED ALUM- INUM (AL) (UG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED CAD- MIUM (CU) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	DIS- SOLVED COBALT (CO) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)
FEB.								
21...	0830	80	1	--	0	0	0	4
APR.								
24...	0800	10	1	360	0	0	0	2
JUNE								
26...	0900	20	4	410	0	0	0	4
AUG.								
28...	1150	10	5	370	<1	0	0	2

DATE	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	DIS- SOLVED LITHIUM (LI) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED MERCURY (HG) (UG/L)	DIS- SOLVED NICKEL (NI) (UG/L)	DIS- SOLVED STRON- TIUM (SR) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)
FEB.								
21...	10	3	40	0	.0	5	1100	10
APR.								
24...	10	2	40	10	.2	2	1200	0
JUNE								
26...	10	5	40	0	.0	8	1200	10
AUG.								
28...	30	0	25	0	.0	4	1200	0

GUADALUPE RIVER BASIN

08188500 SAN ANTONIO RIVER AT GOLIAD, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TEMPERATURE (DEG C)	ALDRIN (UG/L)	ALDRIN IN BOTTOM DE-POSITS (UG/KG)	DDD (UG/L)	DDD IN BOTTOM DE-POSITS (UG/KG)	DDE (UG/L)	DDE IN BOTTOM DE-POSITS (UG/KG)	DDT (UG/L)	DDT IN BOTTOM DE-POSITS (UG/KG)
OCT. 02...	1045	--	--	.00	--	.00	--	.00	--	.00	--
FEB. 21...	0830	635	19.0	.00	.0	.00	.6	.00	.8	.00	2.0
AUG. 28...	1150	474	28.0	.00	.0	.00	3.3	.00	2.7	.00	2.4

DATE	DI-ELDRIN (UG/L)	DI-ELDRIN IN BOTTOM DE-POSITS (UG/KG)	ENDRIN (UG/L)	ENDRIN IN BOTTOM DE-POSITS (UG/KG)	HEPTA-CHLOR (UG/L)	HEPTA-CHLOR IN BOTTOM DE-POSITS (UG/KG)	HEPTA-CHLOR EPOXIDE (UG/L)	HEPTA-CHLOR EPOXIDE IN BOTTOM DE-POSITS (UG/KG)	LINDANE (UG/L)	LINDANE IN BOTTOM DE-POSITS (UG/KG)	CHLOR-DANE (UG/L)
OCT. 02...	.01	--	.00	--	.00	--	.00	--	.00	--	.0
FEB. 21...	.01	.8	.00	.0	.00	.0	.00	.0	.01	.0	.0
AUG. 28...	.01	.5	.00	.0	.00	.0	.00	.0	.00	.0	.0

DATE	CHLOR-DANE IN BOTTOM DE-POSITS (UG/KG)	PCB (UG/L)	PCB IN BOTTOM DE-POSITS (UG/KG)	DI-AZINON (UG/L)	MALATHION (UG/L)	METHYL PARATHION (UG/L)	PARATHION (UG/L)	2,4-D (UG/L)	SILVEX (UG/L)	2,4,5-T (UG/L)
OCT. 02...	--	.0	--	.05	.00	.00	.00	.02	.01	.04
FEB. 21...	0	.0	0	.04	.00	.00	.00	.02	.00	.03
AUG. 28...	8	.0	0	.06	.00	.00	.00	.00	.00	.02

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

MONTH	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCTANCE (MICRO-MHOS)	DIS-SOLVED SOLIDS (MG/L)	DIS-SOLVED SOLIDS (TONS)	DIS-SOLVED CHLORIDE (MG/L)	DIS-SOLVED CHLORIDE (TONS)	DIS-SOLVED SULFATE (MG/L)	DIS-SOLVED SULFATE (TONS)	HARDNESS (CA+MG) (MG/L)
OCT. 1973.....	219610	435	250	148000	30	17800	33	19600	160
NOV. 1973.....	48740	859	500	65800	88	11600	89	11700	310
DEC. 1973.....	29209	1030	610	48100	110	8680	110	8680	360
JAN. 1974.....	25575	1060	620	42800	120	8290	120	8290	370
FEB. 1974.....	18932	1110	650	33200	120	6130	120	6130	370
MAR. 1974.....	18203	1160	680	33400	130	6390	130	6390	370
APR. 1974.....	15401	1180	700	29100	130	5410	130	5410	380
MAY 1974.....	24162	850	500	32600	86	5610	88	5740	310
JUNE 1974.....	15629	989	580	24500	110	4640	110	4640	360
JULY 1974.....	7885	1320	780	16600	150	3190	150	3190	380
AUG. 1974.....	32280	635	370	32200	57	4970	59	5140	230
SEPT 1974.....	49802	546	320	43000	45	6050	47	6320	200
TOTAL	505428	**	**	549000	**	88800	**	91200	**
WTD.AVG.	1384	690	400	**	65	**	67	**	240

08188500 SAN ANTONIO RIVER AT GOLIAD, TEX.--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	218	645	958	1060	991	1150	1160	1060	890	1280	1150	450
2	292	711	987	1080	996	1160	1200	1110	500	1330	1180	348
3	306	725	970	1060	1040	1150	1220	1130	585	1360	1200	397
4	398	723	983	1070	1070	1130	1220	1170	934	1410	1190	332
5	579	782	1000	1070	1080	1160	1230	888	954	1420	1190	404
6	716	814	1040	1060	1100	1170	1230	700	954	1420	1110	556
7	764	832	1020	1080	1100	1200	1210	760	1030	1460	1110	524
8	775	853	1030	1080	1140	1200	1180	796	1090	1440	1040	539
9	811	856	1040	1090	1100	1210	1230	742	1090	1450	1000	692
10	715	884	1050	1100	1090	1190	1230	763	822	1420	561	709
11	752	884	1050	1100	1130	1160	1230	772	1100	1410	352	728
12	223	884	1020	1090	1130	1200	1240	764	1150	1350	271	758
13	337	878	1030	1080	1150	1210	1260	600	1070	1400	276	747
14	431	908	1050	1060	1160	1060	1250	491	1180	1400	339	600
15	405	909	1050	1050	1150	1130	1210	552	1170	1410	531	487
16	339	905	1040	1040	1130	1210	1200	710	1190	1410	732	402
17	412	922	1060	1060	1120	1210	1220	796	1020	1360	857	451
18	383	929	1060	1070	1140	1200	1220	899	962	1280	944	467
19	355	944	1030	1050	1140	1150	1220	949	938	1260	987	571
20	436	963	1040	1060	1140	1120	1220	1000	966	1250	1030	665
21	501	943	1030	1060	1140	1050	1200	1010	1070	1190	1070	759
22	550	955	1050	1060	1160	1090	1190	1030	1110	1220	1100	816
23	581	951	1020	1070	1140	1140	1230	1040	1140	1230	1120	847
24	610	943	1030	1060	1130	1130	1220	1060	1140	1210	1130	716
25	620	955	1060	1100	1130	1130	1170	1040	1130	1280	1130	857
26	670	939	1060	1110	1140	1190	1070	1020	1200	1250	1100	881
27	701	975	1100	1050	1160	1210	1060	1030	1210	1270	1140	906
28	694	939	1080	1050	1150	1200	882	1070	1230	1310	1160	899
29	716	979	1080	1030	---	1190	996	1100	1240	1280	1030	881
30	718	979	1050	978	---	1180	1100	1020	1260	1210	1180	884
31	638	---	1060	938	---	1160	---	1020	---	1150	700	---
MONTH	537	884	1040	1060	1120	1160	1180	906	1040	1330	933	642

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	23.5	20.0	18.0	10.0	18.5	18.5	24.0	24.0	28.0	28.0	29.5	28.0
2	23.5	21.0	18.5	4.5	18.5	18.5	22.0	24.0	28.0	28.0	29.5	29.0
3	23.5	23.5	20.0	7.0	15.5	20.0	24.0	26.5	28.0	29.5	29.5	24.0
4	25.5	24.0	18.0	7.0	14.5	21.0	21.0	26.5	28.0	29.5	29.5	23.5
5	25.5	24.0	15.5	9.0	14.5	22.0	20.0	24.0	29.5	29.5	28.0	23.5
6	25.5	21.0	15.5	7.0	15.5	22.0	20.0	24.0	29.0	29.5	26.5	23.5
7	25.5	22.0	14.5	10.0	13.0	24.0	21.0	26.5	29.0	31.0	25.5	22.0
8	25.5	22.0	14.5	13.0	10.0	24.0	21.0	26.5	28.0	29.5	25.5	22.0
9	25.5	23.5	14.5	15.5	10.0	24.0	20.0	28.0	29.5	29.5	28.0	24.0
10	26.5	20.0	13.0	14.5	10.0	24.0	21.0	24.0	26.5	28.0	26.5	22.0
11	26.5	18.5	14.5	12.0	10.0	24.0	21.0	25.5	26.5	29.5	28.0	25.5
12	23.5	20.0	13.0	10.0	15.5	24.0	24.0	26.5	28.0	28.0	28.0	25.5
13	22.0	20.0	16.5	10.0	15.5	22.0	24.0	26.5	28.0	28.0	29.0	25.5
14	24.0	21.0	16.5	12.0	18.5	20.0	23.5	25.5	26.5	29.5	28.0	23.5
15	23.5	21.0	15.5	14.5	18.5	21.0	20.0	26.5	28.0	29.5	29.5	22.0
16	23.5	20.0	13.0	13.0	15.5	21.0	21.0	28.0	29.5	29.5	29.5	25.5
17	22.0	21.0	11.0	18.5	15.5	20.0	18.5	29.0	29.5	28.0	29.5	25.5
18	20.0	21.0	15.5	18.5	18.5	23.5	20.0	29.0	29.5	29.5	29.5	25.5
19	21.0	23.5	13.0	15.5	18.5	23.5	23.5	28.0	29.5	28.0	29.5	26.5
20	20.0	21.0	9.0	18.5	18.5	24.0	24.0	28.0	29.5	28.0	29.5	26.5
21	20.0	20.0	7.0	18.5	20.0	18.5	24.0	26.5	29.5	29.5	31.0	26.5
22	21.5	22.0	13.0	20.0	15.5	18.5	25.5	29.5	29.5	29.5	28.0	25.5
23	20.0	23.5	14.5	16.5	14.5	18.5	25.5	28.0	29.5	31.0	29.0	24.0
24	20.0	23.5	15.5	14.5	14.5	15.5	24.0	29.0	29.5	29.5	29.5	22.0
25	21.0	22.0	13.0	13.0	10.0	14.5	25.5	29.0	28.0	29.5	28.0	23.5
26	22.0	22.0	13.0	10.0	13.0	14.5	25.5	29.0	28.0	29.5	28.0	22.0
27	23.5	23.5	12.0	15.5	13.0	14.5	24.0	28.0	26.5	29.5	28.0	22.0
28	21.0	18.5	15.5	15.5	18.5	18.5	25.5	29.5	26.5	31.0	29.0	22.0
29	21.0	16.5	16.5	14.5	---	21.0	23.5	29.0	26.5	32.0	26.5	21.0
30	22.0	16.5	16.5	13.0	---	22.0	25.5	29.5	26.5	31.0	29.0	20.0
31	20.0	---	13.0	14.5	---	22.0	---	28.0	---	29.5	28.0	---
MONTH	23.0	21.0	14.5	13.0	15.0	20.5	22.5	27.0	28.5	29.5	28.5	24.0

08188800 GUADALUPE RIVER NEAR TIVOLI, TEX.

LOCATION.--Lat 28°30'20", long 96°53'04", Refugio County, at mouth of Calhoun County Irrigation Canal, 550 ft (168 m) upstream from diversion dam and salt-water barrier, 0.4 mile (0.6 km) downstream from mouth of San Antonio River, 3.5 miles (5.6 km) north of Tivoli, and 10.2 miles (16.4 km) upstream from mouth.

DRAINAGE AREA.--10,128 mi² (26,232 km²).

PERIOD OF RECORD.--Chemical analyses: October 1965 to September 1974.

Chemical and biochemical analyses: October 1968 to September 1974.

Water temperatures: October 1966 to September 1974.

EXTREMES.--October 1973 to September 1974:

Specific conductance: Maximum daily, 950 micromhos Sept. 1, 2; minimum daily, 250 micromhos Oct. 15.

Period of record:

Specific conductance (1965-70, 1972-74): Maximum daily, 990 micromhos Oct. 9, 1969; minimum daily, 170 micromhos Oct. 30, 1972.

Water temperatures (1966-69): Maximum, 32.0°C on several days during June, July, and August 1967, 1968, and 1969; minimum, 8.0°C Jan. 15, 1968.

REMARKS.--No discharge records available. For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED SODIUM PLUS POTAS- SIUM (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SU4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
OCT.											
16...	1553	14	42	5.7	18	--	6.5	140	0	25	24
NOV.											
06...	1420	16	86	16	--	43	--	264	0	63	61
21...	1415	19	94	18	45	--	3.9	297	0	58	68
DEC.											
28...	1005	15	97	20	--	54	--	322	0	62	79
JAN.											
04...	1500	15	91	20	53	--	3.7	307	9	60	74
15...	1515	14	92	19	48	--	3.2	306	0	53	71
FEB.											
15...	1940	16	92	19	55	--	3.7	306	0	62	83
MAR.											
19...	1115	15	92	19	59	--	3.6	302	0	56	86
27...	0923	17	89	19	59	--	3.2	292	0	62	90
APR.											
15...	0945	15	95	20	63	--	3.7	302	0	63	89
MAY											
21...	1500	16	71	13	42	--	4.6	225	0	49	60
JUNE											
19...	1535	16	76	16	48	--	4.4	270	0	59	66
JULY											
23...	1320	18	84	21	67	--	4.1	295	0	68	95
AUG.											
19...	1700	15	69	11	46	--	5.5	206	0	52	62
SEP.											
24...	1130	16	60	9.8	34	--	4.5	183	0	44	43

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)	VOL. NON- FILT- RABLE RESIDUE (MG/L)	HARD- NESS (CA+MG)
OCT.											
16...	--	--	--	--	--	--	--	204	--	--	130
NOV.											
06...	.3	1.7	.00	.03	.50	--	.15	423	213	30	280
21...	--	--	--	--	--	--	--	452	--	--	310
DEC.											
28...	.3	--	--	--	--	--	--	485	--	--	320
JAN.											
04...	--	--	--	--	--	--	--	477	--	--	310
15...	--	2.7	.00	.01	.14	--	.38	452	47	10	310
FEB.											
15...	--	--	--	--	--	--	--	482	--	--	310
MAR.											
19...	--	1.9	.02	.14	.56	.70	.54	481	122	3	310
27...	--	--	--	--	--	--	--	483	--	--	300
APR.											
15...	--	--	--	--	--	--	--	498	--	--	320
MAY											
21...	--	1.6	.01	.03	.59	.62	.73	368	200	23	230
JUNE											
19...	--	--	--	--	--	--	--	419	--	--	260
JULY											
23...	--	1.2	.01	.18	.73	.91	.77	504	114	19	300
AUG.											
19...	--	--	--	--	--	--	--	362	--	--	220
SEP.											
24...	--	1.1	.00	.08	.92	1.0	.53	302	198	27	190

GUADALUPE RIVER BASIN

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08188800 GUADALUPE RIVER NEAR TIVOLI, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	NON-CARBONATE HARDNESS (MG/L)	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	BIOCHEMICAL OXYGEN DEMAND (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT. 16...	14	.7	360	8.2	24.5	--	--	--	--	--	--
NOV. 06...	64	1.1	720	7.7	21.0	22	90	7.8	87	1.4	6.5
21...	65	1.1	782	8.1	22.5	--	--	--	--	--	--
DEC. 28...	60	1.3	852	7.5	15.0	--	--	--	--	--	--
JAN. 04...	43	1.3	818	8.5	10.5	--	--	--	--	--	--
15...	58	1.2	809	8.1	13.0	0	30	9.4	89	.7	.0
FEB. 15...	57	1.4	841	7.9	18.5	--	--	--	--	--	--
MAR. 19...	61	1.5	861	8.0	23.0	10	50	6.9	79	1.0	4.0
27...	61	1.5	857	8.2	--	--	--	--	--	--	--
APR. 15...	72	1.5	870	8.0	21.0	--	--	--	--	--	--
MAY 21...	47	1.2	662	7.5	29.5	5	75	6.0	78	1.1	--
JUNE 19...	34	1.3	712	7.8	30.0	--	--	--	--	--	--
JULY 23...	55	1.7	865	7.9	30.5	30	45	5.8	7	2.1	4.6
AUG. 19...	49	1.4	657	7.6	30.5	--	--	--	--	--	--
SEP. 24...	40	1.1	505	7.7	24.0	40	90	6.2	73	1.9	13

DATE	TIME	DISSOLVED ALUMINUM (AL) (UG/L)	DISSOLVED ARSENIC (AS) (UG/L)	DISSOLVED BORON (B) (UG/L)	DISSOLVED CADMIUM (CD) (UG/L)	DISSOLVED CHROMIUM (CR) (UG/L)	DISSOLVED COBALT (CO) (UG/L)	DISSOLVED COPPER (CU) (UG/L)
JAN. 15...	1515	0	0	180	0	0	0	4
MAR. 19...	1115	0	2	200	0	0	0	4
MAY 21...	1500	50	5	160	2	0	1	9
JULY 23...	1320	10	3	230	0	0	0	1

DATE	DISSOLVED IRON (FE) (UG/L)	DISSOLVED LEAD (PB) (UG/L)	DISSOLVED LITHIUM (LI) (UG/L)	DISSOLVED MANGANESE (MN) (UG/L)	DISSOLVED MERCURY (HG) (UG/L)	DISSOLVED NICKEL (NI) (UG/L)	DISSOLVED STRONTIUM (SR) (UG/L)	DISSOLVED ZINC (ZN) (UG/L)
JAN. 15...	30	3	10	0	.0	3	780	10
MAR. 19...	20	2	20	0	.0	2	760	20
MAY 21...	50	7	10	30	.0	10	620	30
JULY 23...	10	1	10	0	.0	0	760	20

GUADALUPE RIVER BASIN

08188800 GUADALUPE RIVER NEAR TIVOLI, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	TEMPER- ATURE (DEG C)	ALDRIN (UG/L)	ALDRIN IN BOTTOM DE- POSITS (UG/KG)	DDD (UG/L)	DDD IN BOTTOM DE- POSITS (UG/KG)	DDE (UG/L)	DDE IN BOTTOM DE- POSITS (UG/KG)	DDT (UG/L)	DDT IN BOTTOM DE- POSITS (UG/KG)	DI- ELDRIN (UG/L)
JAN. 15...	1515	13.0	.00	.0	.00	2.2	.00	4.9	.00	2.1	.00
MAR. 19...	1115	23.0	.00	.0	.00	2.2	.00	3.4	.00	1.4	.00
MAY 21...	1500	29.5	--	.0	--	.0	--	1.5	--	.0	--
SEP. 24...	1130	24.0	.00	.0	.00	2.8	.00	2.0	.00	3.2	.00

DATE	DI- ELDRIN IN BOTTOM DE- POSITS (UG/KG)	ENDRIN (UG/L)	ENDRIN IN BOTTOM DE- POSITS (UG/KG)	HEPTA- CHLOR (UG/L)	HEPTA- CHLOR IN BOTTOM DE- POSITS (UG/KG)	HEPTA- CHLOR EPOXIDE (UG/L)	HEPTA- CHLOR EPOXIDE IN BOT- TOM DE- POSITS (UG/KG)	LINDANE (UG/L)	LINDANE IN BOTTOM DE- POSITS (UG/KG)	CHLOR- DANE (UG/L)
JAN. 15...	.0	.00	.0	.00	.0	.00	.0	.00	.0	.0
MAR. 19...	.0	.00	.0	.00	.0	.00	.0	.00	.0	.0
MAY 21...	.0	--	.0	--	.0	--	.0	--	.0	--
SEP. 24...	.0	.00	.0	.00	.0	.00	.0	.00	.0	.0

DATE	CHLOR- DANE IN BOTTOM DE- POSITS (UG/KG)	PCB (UG/L)	PCB IN BOTTOM DE- POSITS (UG/KG)	DI- AZINON (UG/L)	MALA- THION (UG/L)	METHYL PARA- THION (UG/L)	PARA- THION (UG/L)	2,4-D (UG/L)	SILVEX (UG/L)	2,4,5-T (UG/L)
JAN. 15...	0	.0	0	.02	.00	.00	.00	.00	.00	.00
MAR. 19...	3	.0	0	.01	.00	.00	.00	.02	.00	.00
MAY 21...	0	--	0	--	--	--	--	.06	.00	.01
SEP. 24...	7	.0	0	.01	.00	.00	.00	.00	.00	.01

GUADALUPE RIVER BASIN

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0818800 GUADALUPE RIVER NEAR TIVOLI, TEX.--Continued

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

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	460	350	400	690	640	660	840	830	840	840	830	830
2	350	280	310	670	650	660	840	840	840	840	830	840
3	280	270	270	670	650	660	840	830	840	840	830	840
4	300	280	290	690	670	680	830	820	830	850	830	840
5	310	290	300	710	700	700	820	810	820	850	830	840
6	370	320	350	730	710	720	810	800	800	860	830	850
7	480	390	430	750	740	740	810	800	800	860	850	850
8	590	490	540	770	750	760	800	790	800	850	830	840
9	650	590	620	750	730	740	800	800	800	850	820	840
10	700	650	680	750	750	750	800	780	790	840	810	830
11	730	660	700	760	750	760	800	790	790	850	840	840
12	660	620	640	790	770	780	800	780	790	840	800	820
13	620	560	590	810	800	800	810	800	800	830	810	820
14	560	280	420	830	810	820	800	790	800	830	800	820
15	280	250	260	810	810	810	800	800	800	810	770	800
16	390	290	340	810	810	810	800	800	800	790	660	730
17	420	400	410	820	810	810	820	790	810	660	590	620
18	400	390	390	810	790	800	840	810	820	640	610	620
19	390	380	380	790	770	780	850	840	850	710	650	680
20	400	390	390	790	770	780	850	840	840	800	720	750
21	400	380	390	790	780	780	840	830	840	820	760	790
22	420	380	400	790	790	790	840	830	840	760	700	730
23	480	420	450	810	800	810	---	---	---	710	640	670
24	550	480	510	820	810	820	---	---	---	650	620	630
25	590	550	570	820	810	820	---	---	---	690	660	680
26	620	590	600	830	810	820	850	830	840	710	670	690
27	650	620	630	840	830	830	840	820	840	750	710	730
28	650	630	640	830	820	820	850	830	840	720	700	710
29	660	640	650	840	820	830	870	820	850	710	670	690
30	690	660	670	820	820	820	870	840	850	690	510	610
31	700	690	690	---	---	---	850	840	850	530	470	500
MONTH	730	250	481	840	640	772	870	780	822	860	470	753

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

DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	570	460	480	---	---	---	---	---	---	800	750	775
2	630	590	610	---	---	---	---	---	---	810	770	790
3	680	640	660	---	---	---	---	---	---	830	770	800
4	720	690	710	---	---	---	---	---	---	830	790	810
5	730	720	720	---	---	---	---	---	---	880	820	850
6	720	660	690	---	---	---	---	---	---	910	860	885
7	760	730	750	---	---	---	---	---	---	860	760	810
8	780	760	770	---	---	---	---	---	---	790	690	740
9	800	780	790	---	---	---	---	---	---	760	690	725
10	840	800	810	---	---	---	---	---	---	720	440	580
11	850	830	840	---	---	---	---	---	---	490	435	462
12	850	820	830	---	---	---	---	---	---	480	410	445
13	860	840	850	---	---	---	---	---	---	580	475	528
14	860	840	850	---	---	---	---	---	---	600	570	585
15	870	860	870	---	---	---	---	---	---	675	580	628
16	870	850	860	---	---	---	880	860	870	600	460	530
17	870	850	860	---	---	---	890	860	880	555	500	528
18	870	850	860	---	---	---	890	860	880	560	525	542
19	850	830	840	---	---	---	880	860	870	600	560	580
20	840	820	830	---	---	---	910	740	870	640	600	620
21	870	850	860	---	---	---	780	720	760	650	640	645
22	860	850	860	---	---	---	790	730	760	700	650	675
23	860	840	850	---	---	---	800	760	770	700	690	695
24	870	870	870	---	---	---	820	790	800	710	690	700
25	890	870	880	---	---	---	830	800	810	710	700	705
26	870	860	870	---	---	---	870	840	850	730	700	715
27	860	840	850	---	---	---	920	870	900	750	730	740
28	860	840	850	---	---	---	920	870	900	740	720	730
29	---	---	---	---	---	---	880	840	860	740	720	730
30	---	---	---	---	---	---	840	800	820	750	720	735
31	---	---	---	---	---	---	---	---	---	775	750	762
MONTH	890	460	799	---	---	---	---	---	---	910	410	679

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

	JUNE			JULY			AUGUST			SEPTEMBER		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	780	730	755	830	770	800	920	860	890	950	760	855
2	750	710	730	820	750	785	920	850	885	950	510	730
3	800	720	760	800	735	768	875	810	842	530	370	450
4	735	450	592	820	730	775	850	810	830	510	375	444
5	510	480	495	840	770	805	860	810	835	500	390	445
6	620	510	565	850	750	800	860	790	825	430	390	410
7	660	620	640	850	750	800	825	770	798	470	430	450
8	690	650	670	850	760	805	830	760	795	540	470	505
9	690	670	680	830	720	775	810	750	780	540	460	500
10	700	590	645	850	720	785	810	720	765	500	470	485
11	770	640	705	840	730	785	900	610	755	570	490	530
12	760	520	640	845	725	785	620	510	565	570	560	565
13	610	540	575	850	735	792	630	360	495	590	560	575
14	670	600	635	830	740	785	400	360	380	580	560	570
15	630	500	565	850	770	810	450	400	425	580	550	565
16	650	550	600	850	790	820	440	390	415	600	450	525
17	700	645	672	860	800	830	520	440	480	470	390	430
18	700	590	645	920	800	860	610	500	555	---	---	---
19	740	690	715	920	850	885	700	610	655	---	---	---
20	700	680	690	900	830	865	700	680	690	---	---	---
21	690	670	680	880	830	855	715	700	708	---	---	---
22	700	670	685	900	830	865	730	700	715	---	---	---
23	735	700	718	900	845	872	770	730	750	---	---	---
24	770	730	750	890	840	865	800	750	775	---	---	---
25	800	760	780	870	790	830	800	760	780	---	---	---
26	800	795	798	840	790	815	820	780	800	---	---	---
27	800	795	798	850	800	825	820	780	800	---	---	---
28	810	750	780	840	790	815	830	770	800	---	---	---
29	810	760	785	885	810	848	830	770	800	---	---	---
30	820	770	795	880	850	865	840	810	825	---	---	---
31	---	---	---	910	850	880	830	790	810	---	---	---
MONTH	820	450	685	920	720	821	920	360	717	---	---	---

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

[illegible]

GUADALUPE RIVER BASIN

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MISCELLANEOUS ANALYSES OF STREAMS IN THE GUADALUPE RIVER BASIN IN TEXAS

WATER QUALITY DATA, OCTOBER 1973 TO SEPTEMBER 1974

08167700 CANYON LAKE NEAR NEW BRAUNFELS, TEX. (Lat 29°52'07", long 98°11'55")

DATE	TIME	RESER- VOIR STORAGE (AC-FT)	DIS- SOLVED SILICA (SI02) (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)	DIS- SOLVED SULFATE (SO4) (MG/L)
JAN., 1974										
08...	1530	378500	11	56	16	9.2	4.6	222	4	16
SEP.										
27...	1045	387400	12	52	18	8.4	2.0	221	0	16

DATE	TIME	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	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	TEMPER- ATURE (DEG C)	DIS- SOLVED BORON (B) (UG/L)
JAN., 1974										
08...	13		239	210	17	.3	417	8.4	12.0	60
SEP.										
27...	15		232	200	23	.3	398	7.6	19.0	--

08179500 MEDINA LAKE NEAR SAN ANTONIO, TEX. (Lat 29°32'24", long 98°56'01")

DATE	TIME	RESER- VOIR STORAGE (AC-FT)	DIS- SOLVED SILICA (SI02) (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)	DIS- SOLVED SULFATE (SO4) (MG/L)
FEB., 1974										
26...	1126	252300	10	68	15	8.0	1.9	222	0	41
MAR.										
13...	1130	250500	9.9	52	15	7.9	1.9	176	0	42
SEP.										
17...	1430	255200	10	47	14	7.9	1.7	170	0	35

DATE	TIME	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	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	TEMPER- ATURE (DEG C)	DIS- SOLVED BORON (B) (UG/L)
FEB., 1974											
26...	13	--		266	230	49	.2	462	8.1	23.5	40
MAR.											
13...	15	.2		231	190	47	.2	452	7.9	18.5	--
SEP.											
17...	14	--		213	180	36	.3	354	8.1	25.0	--

08186500 ECLETO CREEK NEAR RUNGE, TEX. (Lat 28°55'12", long 97°46'19")

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	SUS- PENDEO SEDI- MENT (MG/L)	SUS- PENDEO SEDI- MENT DIS- CHARGE (T/DAY)
NOV.					
14...	0900	5.6	21.5	102	1.5
DEC.					
12...	1400	2.4	13.0	87	.56
JAN.					
23...	1450	5.3	15.5	275	3.9
MAR.					
06...	1420	1.7	24.5	213	.98

SALT CREEK BASIN

08189100 SALT CREEK NEAR REFUGIO, TEX.

LOCATION.--Lat 28°19'00", long 97°00'24", Refugio County, at culvert on Farm Road 774 and 16.4 miles (26.4 km) east of Refugio.

DRAINAGE AREA.--13.6 mi² (35.2 km²).

PERIOD OF RECORD.--Chemical and biochemical analyses: October 1968 to September 1974.

Pesticide analyses: October 1970 to September 1974.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SiO ₂) (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNE-SIUM (MG)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED POTAS-SIUM (K) (MG/L)	BICARBONATE (HCO ₃) (MG/L)	CARBONATE (CO ₃) (MG/L)	DIS-SOLVED SULFATE (SO ₄) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)
OCT. 24...	1143	16	21	25	4.2	14	4.0	114	0	.6	12
NOV. 27...	1015	.03	16	36	4.9	23	5.1	144	0	10	26
FEB. 05...	1015	2.2	18	32	5.2	30	7.3	138	0	12	30
MAY 21...	1335	11	40	25	3.5	20	6.2	117	0	6.7	19

DATE	DIS-SOLVED FLUORIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	TOTAL NON-FILTERABLE RESIDUE (MG/L)	VOL. NON-FILTERABLE RESIDUE (MG/L)	HARDNESS (CA+MG) (MG/L)
OCT. 24...	.1	.06	.00	--	.90	--	.10	137	--	--	80
NOV. 27...	.2	.30	.02	.18	.00	--	.16	194	--	--	110
FEB. 05...	--	.23	.70	.10	1.0	--	.11	202	--	--	100
MAY 21...	--	.00	.00	.06	1.9	2.0	.07	178	36	5	77

DATE	NON-CARBONATE HARDNESS (MG/L)	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	TURBIDITY (JTU)	DIS-SOLVED OXYGEN (MG/L)	PERCENT SATURATION	BIO-CHEMICAL OXYGEN DEMAND (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT. 24...	0	.7	223	6.9	23.5	--	85	7.6	88	.0	12
NOV. 27...	0	1.0	329	7.4	25.5	--	130	5.0	60	5.5	24
FEB. 05...	0	1.3	349	7.2	14.0	--	75	8.1	78	1.8	21
MAY 21...	0	1.0	257	7.0	30.0	120	20	3.4	45	2.3	35

DATE	TIME	INSTANTANEOUS DIS-CHARGE (CFS)	TEMPERATURE (DEG C)	ALDRIN IN BOTTOM DE-POSITS (UG/KG)	DDD IN BOTTOM DE-POSITS (UG/KG)	DDE IN BOTTOM DE-POSITS (UG/KG)	DDT IN BOTTOM DE-POSITS (UG/KG)
OCT. 24...	1143	16	23.5	.0	.0	.0	.0
JAN. 03...	0910	--	--	.0	.0	.0	.0

DATE	DI-ELDRIN IN BOTTOM DE-POSITS (UG/KG)	ENDRIN IN BOTTOM DE-POSITS (UG/KG)	HEPTACHLOR IN BOTTOM DE-POSITS (UG/KG)	HEPTACHLOR EPOXIDE IN BOTTOM DE-POSITS (UG/KG)	LINDANE IN BOTTOM DE-POSITS (UG/KG)	CHLORDANE IN BOTTOM DE-POSITS (UG/KG)	PCB IN BOTTOM DE-POSITS (UG/KG)
OCT. 24...	.0	.0	.0	.0	.0	0	0
JAN. 03...	.0	.0	.0	M.0	.0	0	--

COPANO CREEK BASIN

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08189200 COPANO CREEK NEAR REFUGIO, TEX.

LOCATION.--Lat 28°18'12", long 97°06'44", Refugio County, at bridge on Farm Road 774, 3.6 miles (5.8 km) upstream from Alameda Creek, 8.1 miles (13.0 km) east of Refugio, and 11.9 miles (19.1 km) upstream from mouth.

DRAINAGE AREA.--87.8 mi² (227.4 km²).

PERIOD OF RECORD.--Chemical and biochemical analyses: October 1968 to September 1974.
Pesticide analyses: October 1968 to September 1974.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	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)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)
OCT. 24...	1000	80	12	8.8	2.6	19	5.0	46	0	.6	30	.0
NOV. 27...	0945	1.8	12	19	4.0	54	7.5	84	0	32	61	.2
JAN. 03...	0910	.05	5.7	48	7.8	230	8.2	192	0	130	250	.3
FEB. 05...	0920	3.5	12	21	3.7	57	9.0	96	0	21	71	--
MAR. 12...	0930	.03	7.8	62	9.4	170	10	319	0	36	180	--
APR. 16...	0910	5.5	13	16	2.6	64	6.4	68	0	45	69	--
MAY 21...	1215	14	20	14	2.2	18	5.3	72	0	8.1	16	--

DATE	BROMIDE (BR) (MG/L)	IODIDE (I) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)	VOL. NON- FILT- RABLE RESIDUE (MG/L)	HARD- NESS (CA+MG) (MG/L)
OCT. 24...	--	--	.01	.00	.00	.62	--	.12	101	--	--	33
NOV. 27...	--	--	.20	.00	.07	.93	--	.13	232	--	--	64
JAN. 03...	1.3	.05	.07	.00	.22	.54	--	.09	769	62	--	150
FEB. 05...	--	--	.39	.00	.17	1.3	--	.20	242	--	--	68
MAR. 12...	--	--	.06	.01	.35	1.1	1.4	.16	632	103	10	190
APR. 16...	.6	.01	.23	.04	.65	1.2	1.8	.28	251	249	29	51
MAY 21...	--	--	.17	.01	.13	1.9	2.0	.21	119	180	24	44

DATE	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)	COLOR (PLAT- INUM- COBALT UNITS)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT. 24...	0	1.4	176	6.5	23.0	--	55	6.5	75	1.4	18
NOV. 27...	0	2.9	409	6.9	24.5	--	95	5.1	61	1.9	24
JAN. 03...	0	8.0	1360	6.8	5.0	--	45	9.9	77	3.7	--
FEB. 05...	0	3.0	464	6.8	15.0	--	125	7.4	73	2.2	23
MAR. 12...	0	5.3	1160	7.5	23.0	--	60	6.1	70	2.6	16
APR. 16...	0	3.9	440	7.0	16.0	300	125	8.1	81	3.2	23
MAY 21...	0	1.2	195	6.9	27.5	160	70	5.8	72	2.6	39

COPANO CREEK BASIN

0818920C COPANO CREEK NEAR REFUGIO, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

		DIS- SOLVED ALUM- INUM (AL) (UG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	DIS- SOLVED COBALT (CO) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)			
DATE	TIME										
JAN. 03...	0910	40	3	420	0	0	0	5			
APR. 16...	0910	30	4	290	0	20	0	8			
		DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	DIS- SOLVED LITHIUM (LI) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED MERCURY (HG) (UG/L)	DIS- SOLVED NICKEL (NI) (UG/L)	DIS- SOLVED STRON- TIUM (SR) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)		
DATE	TIME										
JAN. 03...	60	2	30	0	.0	4	760	20			
APR. 16...	210	0	0	10	.0	0	210	60			
DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	ALDRIN (UG/L)	ALDRIN IN BOTTOM DE- POSITS (UG/KG)	DDD (UG/L)	DDD IN BOTTOM DE- POSITS (UG/KG)	DDE (UG/L)	DDE IN BOTTOM DE- POSITS (UG/KG)	DDT (UG/L)	DDT IN BOTTOM DE- POSITS (UG/KG)
OCT. 24...	1000	80	23.0	--	.0	--	.0	--	.0	--	.0
JAN. 03...	0910	.05	5.0	.00	.0	.00	.0	.00	.0	.00	.0
APR. 16...	0910	5.5	16.0	.00	.0	.00	.0	.00	.0	.00	.0
DATE	DI- ELDRIN (UG/L)	DI- ELDRIN IN BOTTOM DE- POSITS (UG/KG)	ENDRIN (UG/L)	ENDRIN IN BOTTOM DE- POSITS (UG/KG)	HEPTA- CHLOR (UG/L)	HEPTA- CHLOR IN BOTTOM DE- POSITS (UG/KG)	HEPTA- CHLOR EPOXIDE (UG/L)	HEPTA- CHLOR EPOXIDE IN BOT- TOM DE- POSITS (UG/KG)	LINDANE (UG/L)	LINDANE IN BOTTOM DE- POSITS (UG/KG)	CHLOR- DANE (UG/L)
OCT. 24...	--	.0	--	.0	--	.0	--	.0	--	.0	--
JAN. 03...	.00	.0	.00	.0	.00	.0	.00	.0	.00	.0	.0
APR. 16...	.00	.0	.00	.0	.00	.0	.00	.0	.00	.0	.0
DATE	CHLOR- DANE IN BOTTOM DE- POSITS (UG/KG)	PCB (UG/L)	PCB IN BOTTOM DE- POSITS (UG/KG)	DI- AZINON (UG/L)	MALA- THION (UG/L)	METHYL PARA- THION (UG/L)	PARA- THION (UG/L)	2,4-D (UG/L)	SILVEX (UG/L)	2,4,5-T (UG/L)	
OCT. 24...	0	--	0	--	--	--	--	--	--	--	
JAN. 03...	0	.0	0	.00	.00	.00	.00	.00	.00	.00	
APR. 16...	0	.0	0	.00	.00	.00	.00	--	--	--	

08189500 MISSION RIVER AT REFUGIO, TEX.

LOCATION.--Lat 28°17'30", long 97°16'44", Refugio County, at gaging station on upstream bridge of two bridges on U.S. Highway 77, 560 ft (171 m) upstream from Missouri Pacific Railroad Co. bridge, and 0.2 mile (0.3 km) southwest of Refugio.

DRAINAGE AREA.--690 mi² (1,787 km²).

PERIOD OF RECORD.--Chemical analyses: September 1961 to September 1974.

Chemical and biochemical analyses: January 1968 to September 1974.

Water temperatures: November 1962 to September 1974.

EXTREMES.--October 1973 to September 1974:

Specific conductance: Maximum daily, 3,660 micromhos May 5; minimum daily, 100 micromhos Oct. 12.

Water temperatures: Maximum, 32.0°C Aug. 14, 15; minimum, 9.0°C Jan. 3.

Period of record:

Specific conductance: Maximum daily, 100,000 micromhos Nov. 28, 1965; minimum daily, 85 micromhos Sept. 13, 1971.

Water temperatures: Maximum, 37.0°C May 12, 1967; minimum, 1.0°C Jan. 11, 1973.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	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 SODIUM PLUS POTAS- SIUM (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
OCT. 13...	1430	15500	6.9	14	1.3	3.8	--	4.3	53	0	1.7	5.2
NOV. 06...	1200	112	36	110	16	--	250	--	322	0	24	420
27...	1625	63	42	64	18	250	--	4.0	192	0	32	410
DEC. 28...	0900	39	37	94	21	--	360	--	266	0	35	600
JAN. 05...	0915	37	40	110	20	370	--	4.7	297	0	38	620
15...	1405	35	39	140	22	360	--	5.2	356	0	38	640
FEB. 13...	1150	29	38	150	25	440	--	4.5	357	0	45	790
MAR. 19...	1230	36	27	87	15	250	--	5.7	221	0	27	420
26...	0934	25	37	130	21	370	--	5.5	326	0	35	630
APR. 21...	1930	21	43	110	26	420	--	5.0	265	0	43	720
MAY 21...	1700	25	35	120	19	300	--	4.5	296	0	30	540
JUNE 20...	0840	38	32	88	13	200	--	4.8	254	0	18	350
JULY 23...	1225	26	46	130	27	470	--	5.3	339	0	40	820
AUG. 23...	1915	7.7	43	110	26	540	--	6.2	258	0	34	910
SEP. 23...	1545	290	17	39	5.5	62	--	4.3	118	0	9.6	100

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)	VOL. NON- FILT- RABLE RESIDUE (MG/L)	HARD- NESS (CA+MG) (MG/L)
OCT. 13...	--	--	--	--	--	--	--	63	--	--	40
NOV. 06...	.3	.08	.00	.03	.25	--	.05	1020	36	7	350
27...	--	--	--	--	--	--	--	915	--	--	230
DEC. 28...	.3	--	--	--	--	--	--	1270	--	--	320
JAN. 05...	--	--	--	--	--	--	--	1350	--	--	360
15...	--	.20	.00	.05	.19	--	.03	1420	24	6	440
FEB. 13...	--	--	--	--	--	--	--	1670	--	--	480
MAR. 19...	--	--	--	.19	.70	.89	.05	943	51	6	280
26...	--	--	--	--	--	--	--	1390	--	--	410
APR. 21...	--	--	--	--	--	--	--	1500	--	--	380
MAY 21...	--	.03	.00	.12	1.4	1.5	.07	1200	41	5	380
JUNE 20...	--	--	--	--	--	--	--	831	--	--	270
JULY 23...	--	.08	.00	.06	.43	.49	.07	1710	42	19	440
AUG. 23...	--	--	--	--	--	--	--	1800	--	--	380
SEP. 23...	--	.12	.01	.11	1.2	1.3	.06	296	112	11	120

MISSION RIVER BASIN

08189500 MISSION RIVER AT REFUGIO, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	NON-CARBONATE HARDNESS (MG/L)	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	BIOCHEMICAL OXYGEN DEMAND (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT. 13...	0	.3	106	7.2	24.0	--	--	--	--	--	--
NOV. 06...	82	5.8	1810	7.6	21.5	25	15	8.9	100	1.2	15
27...	76	7.1	1740	8.1	25.0	--	--	--	--	--	--
DEC. 28...	100	8.7	2410	7.6	15.0	--	--	--	--	--	--
JAN. 05...	110	8.5	2420	7.9	11.5	--	--	--	--	--	--
15...	150	7.5	2540	7.6	17.0	10	15	8.4	88	.5	.0
FEB. 13...	180	8.8	3040	7.8	18.5	--	--	--	--	--	--
MAR. 19...	100	6.5	1780	7.5	23.0	80	25	6.5	75	1.6	16
26...	140	7.9	2580	8.0	13.0	--	--	--	--	--	--
APR. 21...	160	9.4	2770	7.7	25.5	--	--	--	--	--	--
MAY 21...	140	6.7	2180	7.7	30.5	10	20	8.8	116	2.5	--
JUNE 20...	65	5.3	1530	7.6	28.0	--	--	--	--	--	--
JULY 23...	160	9.8	3140	7.8	29.5	35	20	6.7	87	2.0	5.8
AUG. 23...	170	12	3230	7.9	30.0	--	--	--	--	--	--
SEP. 23...	23	2.5	533	7.3	23.5	120	50	6.3	73	2.8	15

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

MONTH	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCTANCE (MICROMHOS)	DISSOLVED SOLIDS (MG/L)	DISSOLVED SOLIDS (TONS)	DISSOLVED CHLORIDE (MG/L)	DISSOLVED CHLORIDE (TONS)	DISSOLVED SULFATE (MG/L)	DISSOLVED SULFATE (TONS)	HARDNESS (CA+MG) (MG/L)
OCT. 1973.....	58345	234	120	18900	35	5510	4.3	677	34
NOV. 1973.....	3221	1530	820	7130	340	2960	23	200	220
DEC. 1973.....	1387	2230	1200	4490	560	2100	33	124	320
JAN. 1974.....	1325	2150	1200	4290	530	1900	32	114	310
FEB. 1974.....	840	2820	1500	3400	740	1680	41	93	410
MAR. 1974.....	1385	1790	960	3590	420	1570	27	101	260
APR. 1974.....	609	2800	1500	2470	730	1200	41	67	400
MAY 1974.....	2677	821	430	3110	130	940	13	94	120
JUNE 1974.....	5637	373	190	2890	55	837	6.3	95	54
JULY 1974.....	430	2660	1400	1630	690	803	39	45	380
AUG. 1974.....	401	2400	1300	1410	610	660	35	37	350
SEPT 1974.....	25537	211	110	7580	31	2140	4.0	276	31
TOTAL	101795	**	**	60900	**	22300	**	1930	**
WTD.AVG.	278	421	220	**	81	**	7.0	**	61

MISSION RIVER BASIN

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08189500 MISSION RIVER AT REFUGIO, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TEMPERATURE (DEG C)	ALDRIN (UG/L)	ALDRIN IN BOTTOM DEPOSITS (UG/KG)	DDD (UG/L)	DDD IN BOTTOM DEPOSITS (UG/KG)	DDE (UG/L)	DDE IN BOTTOM DEPOSITS (UG/KG)	DDT (UG/L)	DDT IN BOTTOM DEPOSITS (UG/KG)
JAN. 15...	1405	35	17.0	.00	--	.00	--	.00	--	.00	--
FEB. 15...	1405	--	--	--	.0	--	.0	--	.0	--	.0
MAR. 19...	1230	36	23.0	.00	.0	.00	.0	.00	.0	.00	.0
MAY 21...	1700	25	30.5	--	.0	--	.3	--	.0	--	.3
SEP. 23...	1545	290	23.5	.00	--	.00	--	.00	--	.00	--

DATE	DI-ELDRIN (UG/L)	DI-ELDRIN IN BOTTOM DEPOSITS (UG/KG)	ENDRIN (UG/L)	ENDRIN IN BOTTOM DEPOSITS (UG/KG)	HEPTA-CHLOR (UG/L)	HEPTA-CHLOR IN BOTTOM DEPOSITS (UG/KG)	HEPTA-CHLOR EPOXIDE (UG/L)	HEPTA-CHLOR EPOXIDE IN BOTTOM DEPOSITS (UG/KG)	LINDANE (UG/L)	LINDANE IN BOTTOM DEPOSITS (UG/KG)	CHLOR-DANE (UG/L)
JAN. 15...	.00	--	.00	--	.00	--	.00	--	.00	--	.0
FEB. 15...	--	.0	--	.0	--	.0	--	.0	--	.0	--
MAR. 19...	.00	.0	.00	.0	.00	.0	.00	.0	.00	.0	.0
MAY 21...	--	.0	--	.0	--	.0	--	.0	--	.0	--
SEP. 23...	.00	--	.00	--	.00	--	.00	--	.00	--	.0

DATE	CHLOR-DANE IN BOTTOM DEPOSITS (UG/KG)	PCB (UG/L)	PCB IN BOTTOM DEPOSITS (UG/KG)	DI-AZINON (UG/L)	MALATHION (UG/L)	METHYL PARATHION (UG/L)	PARATHION (UG/L)	2,4-D (UG/L)	SILVEX (UG/L)	2,4,5-T (UG/L)
JAN. 15...	--	.0	--	.00	.00	.00	.00	.00	.00	.00
FEB. 15...	0	--	0	--	--	--	--	--	--	--
MAR. 19...	2	.0	0	.00	.00	.00	.00	.00	.00	.00
MAY 21...	2	--	--	--	--	--	--	.01	.00	.01
SEP. 23...	--	.0	--	.00	.00	.00	.00	.00	.00	.01

MISSION RIVER BASIN

08189500 MISSION RIVER AT REFUGIO, TEX.--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	900	424	2200	2300	2520	2550	2700	2720	1350	2780	3270	1380
2	1200	921	2230	2400	2590	2810	2900	2960	1610	2080	3270	1770
3	1500	1300	2230	2450	2610	2850	2570	2800	519	2120	3510	2010
4	1300	1560	2140	2420	2510	2910	2670	2710	933	2260	3350	2170
5	1320	1640	2130	2440	2680	2690	2690	3660	1450	2430	2770	2390
6	1630	1730	2170	2390	2890	2700	2820	2530	2070	2500	2930	2550
7	1250	1790	2200	2290	2800	2640	2770	2350	2630	2500	2590	2680
8	1450	1900	2250	2340	2780	2670	2800	2520	2740	2510	2210	2880
9	1860	1780	2200	2390	2930	2710	2950	2670	2740	2680	1300	3120
10	2230	1840	2110	2280	2930	2650	3130	1210	371	2770	1490	2950
11	300	1860	2230	2260	2940	2580	3110	261	119	2710	1830	3150
12	100	1880	2220	2420	3000	2740	2740	305	130	1960	1930	1500
13	106	1930	2130	2470	3000	1800	2200	500	254	2410	2220	106
14	134	2040	2200	2570	3030	966	2560	733	266	2460	2570	101
15	228	2040	2090	2540	2890	900	2710	987	350	2570	2510	109
16	276	2050	2250	2450	2900	795	2550	1510	462	2680	2200	162
17	484	2120	2360	2540	3000	1000	2700	1610	648	2780	2040	245
18	799	2120	2290	2350	3110	1530	2800	1800	957	2710	2400	618
19	1090	2210	2100	2270	2960	1750	2860	2070	1370	2740	2860	900
20	1260	1780	2090	2350	2720	1960	2930	2270	1510	2820	2840	1560
21	1400	1820	2200	2420	2760	2060	2830	2200	1700	3060	2980	1870
22	1520	2050	2380	2580	2610	2290	2850	2320	1860	2950	3320	1000
23	1610	2170	2300	2550	2840	2390	2800	2390	2000	2960	3280	502
24	1690	2210	2210	1620	2720	2450	2850	2640	2120	3130	3340	1370
25	1660	2150	2200	1980	2790	2470	2880	2730	2120	3080	3190	1660
26	1690	1930	2280	1130	2880	2990	2950	2660	2290	3070	3000	1500
27	1720	1900	2330	1500	2880	2410	3070	2810	2340	3230	2380	1460
28	408	1930	2410	1860	2840	2310	3150	2760	2370	3330	2660	1640
29	700	2070	2400	2090	---	2150	3140	2890	2490	3380	3450	2050
30	1020	2100	2400	2320	---	2310	3030	2990	2600	3430	2280	2300
31	1330	---	2270	2360	---	2500	---	2790	---	3340	1620	---
MONTH	1100	1840	2230	2270	2830	2240	2820	2170	1480	2760	2630	1590

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	---	20.5	18.5	---	21.0	20.5	---	24.0	26.5	28.0	31.0	30.5
2	27.0	21.0	19.0	---	20.5	22.0	23.5	24.5	28.5	28.5	31.0	31.0
3	28.5	24.0	20.5	9.0	19.0	---	27.0	---	26.0	29.5	27.0	27.0
4	---	25.0	19.0	9.5	16.0	23.0	21.5	26.5	29.0	26.5	29.0	25.0
5	25.5	25.5	16.0	11.0	16.5	24.0	22.0	25.0	30.0	26.5	26.0	25.5
6	25.0	21.0	16.0	12.0	18.5	24.5	23.5	26.5	27.0	26.5	26.0	20.5
7	25.5	23.0	---	14.0	14.5	25.0	25.5	25.5	29.5	---	28.0	26.0
8	27.0	24.0	17.0	16.5	13.5	---	24.5	27.0	27.0	26.5	28.5	24.5
9	28.0	23.0	17.0	19.0	12.0	25.0	25.5	25.5	29.0	26.5	---	26.0
10	28.0	21.0	15.5	20.0	---	---	23.0	24.0	26.0	26.5	27.0	30.0
11	26.5	20.5	17.0	14.0	17.0	26.0	21.5	26.0	23.5	26.5	31.0	30.0
12	---	22.0	18.0	12.0	19.5	26.5	25.5	26.5	---	25.5	28.5	26.5
13	24.0	21.5	19.0	12.0	---	23.0	26.0	---	28.5	26.0	28.5	23.5
14	23.5	22.0	20.0	15.0	19.5	21.0	19.0	28.0	26.0	---	32.0	24.5
15	23.5	---	17.0	16.0	19.5	23.5	21.5	26.5	---	26.0	32.0	25.5
16	23.5	23.0	15.0	17.0	---	20.5	23.5	29.5	26.0	26.0	---	26.0
17	22.0	22.0	16.0	18.5	---	---	24.5	26.5	26.5	27.0	28.0	28.5
18	21.0	23.5	18.5	---	19.0	23.5	---	---	27.0	26.5	---	28.5
19	21.0	23.5	---	19.5	18.0	22.0	23.0	28.0	27.0	31.0	31.5	---
20	21.0	21.0	11.5	---	21.0	25.5	23.5	27.0	28.0	26.5	31.0	29.0
21	21.5	18.5	---	18.0	18.5	25.0	25.5	29.5	30.5	28.0	31.0	27.0
22	22.0	22.0	15.5	21.0	19.0	18.0	26.5	27.0	29.5	27.0	28.0	25.0
23	23.5	24.0	---	16.5	15.0	19.5	27.0	31.0	---	30.5	30.0	21.5
24	23.5	24.0	18.5	13.0	16.0	---	26.0	27.0	28.0	26.5	26.5	24.5
25	24.0	21.5	---	13.5	15.0	13.0	25.0	29.5	28.5	27.0	26.5	24.0
26	24.5	23.5	13.5	15.5	12.0	14.5	---	28.0	24.0	29.0	25.0	---
27	24.0	25.0	13.5	---	20.0	20.0	25.0	29.0	28.5	28.0	29.5	26.0
28	21.0	21.5	15.0	17.0	17.0	21.5	25.5	31.0	28.0	28.0	30.0	25.0
29	---	20.5	---	17.0	---	24.5	24.0	27.0	24.0	27.0	29.0	23.5
30	22.0	---	20.0	18.5	---	25.0	27.0	27.0	---	28.0	29.5	20.5
31	21.0	---	15.5	18.0	---	---	---	26.0	---	30.0	30.5	---
MONTH	24.0	22.5	17.0	15.5	17.5	22.5	24.5	27.0	27.5	27.5	29.0	26.0

ARANSAS RIVER BASIN

657

08189800 CHILTIPI CREEK AT SINTON, TEX.

LOCATION.--Lat 28°02'48", long 97°30'13", San Patricio County, 100 ft (30 m) downstream from sewage outfall, 400 ft (120 m) downstream from bridge on U.S. Highway 77, and 0.8 mile (1.3 km) north of Sinton.

DRAINAGE AREA.--128 mi² (332 km²).

PERIOD OF RECORD.--Chemical analyses: October 1968 to September 1969.

Chemical and biochemical analyses: October 1969 to September 1974.

Pesticide analyses: October 1969 to September 1974.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

		INSTAN- TANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SI02) (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 (HC03) (MG/L)	CAR- BONATE (C03) (MG/L)	DIS- SOLVED SULFATE (S04) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	
DATE	TIME												
OCT.													
13...	1800	3710	12	12	3.0	5.0	6.9	53	0	1.6	4.7	.0	
15...	1350	798	16	12	3.0	7.1	7.2	62	0	2.4	6.8	.1	
23...	1740	3.7	19	62	12	240	7.9	124	0	21	440	.1	
NOV.													
20...	1515	.27	14	700	140	3800	24	254	0	13	7300	.3	
JAN.													
02...	1635	.18	7.3	1600	300	7900	37	208	0	170	16000	.2	
FEB.													
04...	1615	.17	11	1400	280	6800	42	96	0	400	14000	--	
MAR.													
11...	1735	.08	--	2300	440	12000	56	153	0	20	24000	--	
APR.													
15...	1705	.15	2.2	880	210	4900	28	84	0	23	10000	--	
MAY													
21...	0925	.63	22	190	37	780	12	114	0	4.8	1600	--	
JUNE													
24...	1525	.22	29	140	26	640	14	108	0	19	1200	--	
AUG.													
04...	1200	.31	10	93	14	510	6.2	98	0	54	890	--	
SEP.													
04...	0910	.07	22	530	110	4800	46	137	0	97	8800	--	
DATE		BROMIDE (BR) (MG/L)	IODIDE (I) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL RJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITU- ENTS) (MG/L)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)	VOL. NON- FILT- RABLE RESIDUE (MG/L)	HARD- NESS (CA+MG) (MG/L)
OCT.													
13...		.0	.01	.20	.00	.00	.50	--	.51	72	616	--	42
15...		--	--	.10	.00	.00	.46	--	.45	85	352	--	42
23...		--	--	.06	.00	.00	.46	--	.41	854	--	--	200
NOV.													
20...		--	--	.02	.00	.07	.00	--	.24	12100	--	--	2400
JAN.													
02...	24	3.5	.08	.00	.21	1.1	--	--	.32	26000	10	--	5300
FEB.													
04...	--	--	.06	.00	.52	.41	--	--	.36	23000	--	--	4700
MAR.													
11...	--	--	.02	.01	.44	.02	.46	--	.20	38900	29	13	7600
APR.													
15...	61	1.7	.06	.02	.48	1.2	1.7	--	.20	16200	22	12	3100
MAY													
21...	--	--	.01	.00	.06	1.5	1.6	--	.76	2700	20	3	630
JUNE													
24...	--	--	.00	.01	.14	1.5	1.6	--	.64	2120	188	3	470
AUG.													
04...	--	--	.27	.04	.32	1.5	1.8	--	.53	1630	51	--	290
SEP.													
04...	.5	1.4	.00	.00	.10	2.0	2.1	--	.15	14500	35	--	1800

ARANSAS RIVER BASIN

08189800 CHILTIPI CREEK AT SINTON, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	NON-CARBONATE HARDNESS (MG/L)	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICHOHMS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	BIOCHEMICAL OXYGEN DEMAND (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT. 13...	0	.3	105	5.8	23.0	--	175	5.5	63	.8	16
15...	0	.5	131	6.5	24.0	--	150	5.7	67	1.0	10
23...	100	7.2	1620	8.7	27.0	--	65	8.3	102	1.6	12
NOV. 26...	2200	34	20600	7.9	28.5	--	10	--	--	5.6	20
JAN. 02...	5100	48	42600	7.8	9.0	--	4	13.2	136	9.3	--
FEB. 04...	4600	43	39000	8.3	22.0	--	15	17.6	220	15	24
MAR. 11...	7400	60	61800	7.9	30.5	--	10	10.2	176	10	28
APR. 15...	3000	39	25400	8.4	17.0	35	15	10.7	122	14	20
MAY 21...	530	14	5230	7.8	25.0	20	15	7.7	93	2.7	18
JUNE 24...	380	13	4140	8.1	33.5	60	40	8.9	125	4.4	17
AUG. 04...	210	13	3100	7.2	--	--	25	5.6	75	8.7	23
SEP. 04...	1700	50	23800	7.7	23.0	--	8	4.9	60	6.9	25

DATE	TIME	DISSOLVED ALUMINUM (AL) (UG/L)	DISSOLVED ARSENIC (AS) (UG/L)	DISSOLVED BORON (B) (UG/L)	DISSOLVED CADMIUM (CD) (UG/L)	DISSOLVED CHROMIUM (CR) (UG/L)	DISSOLVED COBALT (CO) (UG/L)	DISSOLVED COPPER (CU) (UG/L)
OCT. 13...	1800	240	3	70	0	0	0	5
JAN. 02...	1635	0	12	13000	1	20	3	5
APR. 15...	1705	0	8	8600	0	40	0	6
SEP. 04...	0910	20	6	10000	1	20	0	6

DATE	DISSOLVED IRON (FE) (UG/L)	DISSOLVED LEAD (PB) (UG/L)	DISSOLVED LITHIUM (LI) (UG/L)	DISSOLVED MANGANESE (MN) (UG/L)	DISSOLVED MERCURY (HG) (UG/L)	DISSOLVED NICKEL (NI) (UG/L)	DISSOLVED STRONTIUM (SR) (UG/L)	DISSOLVED ZINC (ZN) (UG/L)
OCT. 13...	290	0	0	0	<.2	0	200	50
JAN. 02...	40	2	900	1200	.0	12	59000	70
APR. 15...	50	0	640	430	.0	2	36000	30
SEP. 04...	60	3	770	150	.0	<1	39000	50

ARANSAS RIVER BASIN

659

08189800 CHILTIPI CREEK AT SINTON, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	ALDRIN (UG/L)	ALDRIN IN BOTTOM DE- POSITS (UG/KG)	DDD (UG/L)	DDD IN BOTTOM DE- POSITS (UG/KG)	DDE (UG/L)	DDE IN BOTTOM DE- POSITS (UG/KG)	DDT (UG/L)	DDT IN BOTTOM DE- POSITS (UG/KG)
OCT. 13...	1800	3710	23.0	.00	--	.00	--	.00	--	.01	--
23...	1740	3.7	27.0	--	.0	--	.9	.00	4.2	--	1.4
JAN. 02...	1635	.18	9.0	.00	.0	.00	.0	.00	.0	.00	.0
APR. 15...	1705	.15	17.0	--	.0	--	.0	--	.0	--	.0
SEP. 04...	0910	.07	23.0	.00	.0	.00	.0	.00	.0	.00	.0

DATE	DI- ELDRIN (UG/L)	DI- ELDRIN IN BOTTOM DE- POSITS (UG/KG)	ENDRIN (UG/L)	ENDRIN IN BOTTOM DE- POSITS (UG/KG)	HEPTA- CHLOR (UG/L)	HEPTA- CHLOR IN BOTTOM DE- POSITS (UG/KG)	HEPTA- CHLOR EPOXIDE (UG/L)	HEPTA- CHLOR EPOXIDE IN BOT- TOM DE- POSITS (UG/KG)	LINDANE (UG/L)	LINDANE IN BOTTOM DE- POSITS (UG/KG)	CHLOR- DANE (UG/L)
OCT. 13...	.00	--	.00	--	.00	--	.00	--	.00	--	.0
23...	--	.0	--	.0	--	.0	--	.0	--	.0	--
JAN. 02...	.00	.0	.00	.0	.00	.0	.00	.0	.00	.0	.0
APR. 15...	--	.0	--	.0	--	.0	--	.0	--	.0	--
SEP. 04...	.00	.0	.00	.0	.00	.0	.00	.0	.00	.0	.0

DATE	CHLOR- DANE IN BOTTOM DE- POSITS (UG/KG)	PCB (UG/L)	PCB IN BOTTOM DE- POSITS (UG/KG)	DI- AZINON (UG/L)	MALA- THION (UG/L)	METHYL PARA- THION (UG/L)	PARA- THION (UG/L)	2,4-D (UG/L)	SILVEX (UG/L)	2,4,5-T (UG/L)
OCT. 13...	--	.0	--	.00	.00	.00	.00	.06	.00	.00
23...	0	--	0	--	--	--	--	--	--	--
JAN. 02...	0	.0	0	.00	.00	.00	.00	.00	.00	.00
APR. 15...	0	--	0	--	--	--	--	--	--	--
SEP. 04...	0	.0	0	.00	.00	.00	.00	.33	.00	.15

ARANSAS RIVER BASIN

MISCELLANEOUS ANALYSES OF STREAMS IN THE ARANSAS RIVER BASIN IN TEXAS

WATER QUALITY DATA, OCTOBER 1973 TO SEPTEMBER 1974

08189700 ARANSAS RIVER NEAR SKIDMORE, TEX. (Lat 28°16'56", long 97°37'14")

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	SUS- PENDE SEDIM- ENT (MG/L)	SUS- PENDE SEDIM- ENT DIS- CHARGE (T/DAY)
OCT.					
10...	1435	5.7	29.5	47	.72
NOV.					
12...	1600	7.3	22.0	11	.22
DEC.					
12...	0900	5.5	12.5	31	.46
JAN.					
23...	0835	5.9	18.5	79	1.3
MAY					
06...	0930	5.6	23.0	48	.73
AUG.					
22...	0840	4.2	26.5	106	1.2

NUECES RIVER BASIN

661

08190000 NUECES RIVER NEAR LAGUNA, TEX.

LOCATION.--Lat 29°25'41", long 99°59'46", Uvalde County, at gaging station 0.5 mile (0.8 km) downstream from Sycamore Creek and 1.0 mile (1.6 km) northeast of Laguna.

DRAINAGE AREA.--764 mi² (1,979 km²).

PERIOD OF RECORD.--Chemical and biochemical analyses: January to September 1974.
Pesticide analyses: January to September 1974.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- 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)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	TOTAL NITRATE (N) (MG/L)
JAN. 22...	0915	184	11	65	15	11	1.1	218	0	17	21	3.1
MAR. 12...	1600	92	11	60	14	9.8	1.1	220	0	17	20	2.4
MAY 15...	0930	178	11	59	14	8.1	.9	224	0	14	15	2.2
JULY 10...	1525	23	13	55	14	8.1	1.0	215	0	16	18	1.7
SEP. 09...	1500	171	13	58	14	8.8	1.6	227	0	12	15	1.6

DATE	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL- NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITU- ENTS) (MG/L)	TOTAL NON- FILL- RABLE RESIDUE (MG/L)	VOL. NON- FILT- RABLE RESIDUE (MG/L)	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)
JAN. 22...	.00	.01	.19	--	.00	249	0	0	220	45	.3	454
MAR. 12...	.00	.06	.05	.11	.04	241	0	0	210	27	.3	449
MAY 15...	.00	.12	.12	.24	.01	233	0	0	210	22	.2	426
JULY 10...	.00	.04	.15	.19	.00	231	4	--	200	19	.3	415
SEP. 09...	.00	.08	.34	.42	.02	234	0	0	200	16	.3	405

DATE	PH (UNITS)	TEMPER- ATURE (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	BIO- CHEM- ICAL OXYGEN DEMAND (MG/L)	IMME- DIATE COLI- FORM (COL. PER 100 ML)	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)
JAN. 22...	7.8	17.0	0	0	9.1	94	.1	90	4	8	.0
MAR. 12...	7.8	21.0	0	1	9.0	100	.3	18	1	10	.0
MAY 15...	7.6	24.0	0	0	7.1	84	.2	64	7	38	5.0
JULY 10...	8.0	27.0	0	0	9.2	114	.0	4	0	0	8.9
SEP. 09...	7.7	26.0	0	0	8.6	105	.4	40	0	0	1.2

NUECES RIVER BASIN

08190000 NUECES RIVER NEAR LAGUNA, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	DIS-SOLVED ALUM- INUM (AL) (UG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	DIS-SOLVED BORON (B) (UG/L)	DIS-SOLVED CAD- MIUM (CD) (UG/L)	DIS-SOLVED CHRO- MIUM (CR) (UG/L)	DIS-SOLVED COBALT (CO) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)
JAN. 22...	0915	40	1	60	0	130	0	7
MAY 15...	0930	0	1	60	0	0	0	1
JULY 10...	1525	10	0	70	1	0	0	1

DATE	TIME	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	DIS-SOLVED LITHIUM (LI) (UG/L)	DIS-SOLVED MAN- GANESE (MN) (UG/L)	DIS-SOLVED MERCURY (HG) (UG/L)	DIS-SOLVED NICKEL (NI) (UG/L)	DIS-SOLVED STRON- TIUM (SR) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)
JAN. 22...	80	80	6	0	0	.0	46	--	120
MAY 15...	10	10	1	0	50	.0	0	250	0
JULY 10...	20	20	2	0	0	.0	0	260	10

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	ALDRIN (UG/L)	DDD (UG/L)	DDE (UG/L)	DDT (UG/L)	DI- ELDRIN (UG/L)	ENDRIN (UG/L)	HEPTA- CHLOR (UG/L)	HEPTA- CHLOR EPOXIDE (UG/L)
JAN. 22...	0915	184	17.0	.00	.00	.00	.00	.00	.00	.00	.00
MAY 15...	0930	178	24.0	.00	.00	.00	.00	.00	.00	.00	.00
SEP. 09...	1500	171	--	.00	.00	.00	.00	.00	.00	.00	.00

DATE	LINDANE (UG/L)	CHLOR- DANE (UG/L)	PCB (UG/L)	DI- AZINON (UG/L)	MALA- THION (UG/L)	METHYL PARA- THION (UG/L)	PARA- THION (UG/L)	2,4-D (UG/L)	SILVEX (UG/L)	2,4,5-T (UG/L)
JAN. 22...	.00	.0	.0	.00	.00	.00	.00	.00	.00	.00
MAY 15...	.00	.0	.0	.00	.00	.00	.00	.00	.00	.00
SEP. 09...	.00	.0	.0	.00	.00	.00	.00	.00	.00	.00

NUECES RIVER BASIN

663

08195000 FRIO RIVER AT CONCAN, TEX.

LOCATION.--Lat 29°29'18", long 99°42'16", Uvalde County, at gaging station 0.7 mile (1.1 km) southeast of Concan Post Office and 15 miles (24 km) upstream from Dry Frio River.

DRAINAGE AREA.--405 mi² (1,049 km²).

PERIOD OF RECORD.--Chemical and biochemical analyses: January to September 1974.
Pesticide analyses: January to September 1974.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO ₂) (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 (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	TOTAL NITRATE (N) (MG/L)
JAN. 22...	1115	122	11	73	15	8.1	1.1	242	0	31	18	2.5
MAR. 12...	1400	91	11	59	15	8.2	1.0	222	0	16	15	1.6
MAY 15...	1130	153	11	62	14	6.9	.9	236	0	14	13	1.7
JULY 10...	1400	51	12	53	14	7.7	1.0	210	0	18	17	.55
SEP. 10...	1010	125	12	66	15	8.3	1.3	248	0	16	15	1.5

DATE	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)	VOL. NON- FILT- RABLE RESIDUE (MG/L)	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)
JAN. 22...	.00	.02	.25	--	.00	277	0	0	240	46	.2	497
MAR. 12...	.01	.07	.13	.20	.06	235	0	0	210	27	.2	432
MAY 15...	.00	.02	.08	.10	.01	239	0	0	210	19	.2	424
JULY 10...	.00	.05	.08	.13	.00	227	2	0	190	18	.2	415
SEP. 10...	.00	.06	.17	.23	.01	256	0	0	230	23	.2	437

DATE	PH (UNITS)	TEMPER- ATURE (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	BIO- CHEM- ICAL OXYGEN DEMAND (MG/L)	IMME- DIATE COLI- FORM (COL. PER 100 ML)	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)
JAN. 22...	7.7	18.0	0	0	8.3	87	.1	140	28	32	.0
MAR. 12...	7.8	21.5	0	2	8.4	94	.4	100	16	47	.0
MAY 15...	8.0	24.5	0	0	7.6	90	.0	128	11	103	6.0
JULY 10...	7.9	27.5	0	0	9.3	116	.6	2100	12	80	3.1
SEP. 10...	7.5	23.5	0	0	8.0	93	.3	480	12	58	2.9

NUECES RIVER BASIN

08195000 FRIO RIVER AT CONCAN, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	DIS-SOLVED ALUMINUM (AL) (UG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	DIS-SOLVED BORON (B) (UG/L)	DIS-SOLVED CADMIUM (CD) (UG/L)	DIS-SOLVED CHROMIUM (CH) (UG/L)	DIS-SOLVED COBALT (CO) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)
JAN. 22...	1115	0	0	50	2	0	0	4
MAY 15...	1130	0	0	40	0	0	0	0
JULY 10...	1400	0	1	70	0	0	0	2

DATE	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	DIS-SOLVED LITHIUM (LI) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)	DIS-SOLVED MERCURY (HG) (UG/L)	DIS-SOLVED NICKEL (NI) (UG/L)	DIS-SOLVED STRONTIUM (SR) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)
JAN. 22...	90	3	0	0	.0	2	440	20
MAY 15...	20	0	0	40	.0	0	270	10
JULY 10...	20	2	0	0	.0	1	310	10

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TEMPERATURE (DEG C)	ALDRIN (UG/L)	DDD (UG/L)	DDE (UG/L)	DDT (UG/L)	DI-ELDRIN (UG/L)	ENDRIN (UG/L)	HEPTACHLOR (UG/L)	HEPTACHLOR EPOXIDE (UG/L)
JAN. 22...	1115	122	18.0	.00	.00	.00	.00	.00	.00	.00	.00
MAY 15...	1130	153	24.5	.00	.00	.00	.00	.00	.00	.00	.00
SEP. 10...	1010	125	23.5	.00	.00	.00	.00	.00	.00	.00	.00

DATE	LINDANE (UG/L)	CHLORDANE (UG/L)	PCB (UG/L)	DI-AZINON (UG/L)	MALATHION (UG/L)	METHYL PARATHION (UG/L)	PARATHION (UG/L)	2,4-D (UG/L)	SILVEX (UG/L)	2,4,5-T (UG/L)
JAN. 22...	.00	.0	.0	.00	.00	.00	.00	.00	.00	.00
MAY 15...	.00	.0	.0	.00	.00	.00	.00	.00	.00	.00
SEP. 10...	.00	.0	.0	.00	.00	.00	.00	.00	.00	.00

NUECES RIVER BASIN

665

08196000 DRY FRIO RIVER AT REAGAN WELLS, TEX.

LOCATION.--Lat 29°30'16", long 99°46'52", Uvalde County, at gaging station 2.3 miles (3.7 km) upstream from bridge on U.S. Highway 83, 3.1 miles (5.0 km) upstream from Rocky Creek, and 4.3 miles (6.9 km) southeast of Reagan Wells.

DRAINAGE AREA.--117 mi² (303 km²).

PERIOD OF RECORD.--Chemical and biochemical analyses: January to September 1974.
Pesticide analyses: January to September 1974.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	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)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	TOTAL NITRATE (N) (MG/L)
JAN. 22...	1030	27	9.0	66	13	11	.8	222	0	16	17	2.9
MAR. 12...	1430	21	9.0	59	13	8.3	.9	204	0	17	16	2.0
MAY 15...	1035	37	9.6	59	13	6.9	.7	218	0	16	12	1.7
JULY 10...	1430	12	12	54	12	7.4	.8	207	0	19	16	.67
SEP. 10...	0850	31	11	68	13	7.2	1.3	243	0	13	12	1.6

DATE	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)	VOL. NON- FILT- RABLE RESIDUE (MG/L)	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)
JAN. 22...	.00	.34	.39	--	.00	243	0	0	220	37	.3	441
MAR. 12...	.00	.07	.06	.13	.03	224	0	0	200	34	.3	410
MAY 15...	.01	.00	.06	.06	.01	225	0	0	200	23	.2	405
JULY 10...	.00	.04	.18	.22	.00	224	1	0	180	15	.2	410
SEP. 10...	.00	.07	.12	.19	.01	245	0	0	220	24	.2	419

DATE	PH (UNITS)	TEMPER- ATURE (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	BIO- CHEM- ICAL OXYGEN DEMAND (MG/L)	IMME- DIATE COLI- FORM (COL. PER 100 ML)	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)
JAN. 22...	7.6	17.0	0	0	8.8	91	.1	180	36	44	.0
MAR. 12...	7.9	22.0	0	2	8.2	93	.5	160	53	40	.0
MAY 15...	7.5	25.0	0	0	7.0	83	.1	112	21	78	4.5
JULY 10...	7.9	28.0	0	0	8.6	109	.1	170	4	56	3.7
SEP. 10...	7.2	23.0	0	0	6.8	78	.1	600	12	68	3.9

NUECES RIVER BASIN

08196000 DRY FRIO RIVER AT REAGAN WELLS, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	DIS-SOLVED ALUM- INUM (AL) (UG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	DIS-SOLVED BORON (B) (UG/L)	DIS-SOLVED CAD- MIUM (CD) (UG/L)	DIS-SOLVED CHRO- MIUM (CR) (UG/L)	DIS-SOLVED COBALT (CO) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)
JAN. 22...	1030	0	0	--	0	0	0	2
MAY 15...	1035	0	1	50	0	0	0	0
JULY 10...	1430	10	1	70	<1	0	0	3

DATE	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	DIS-SOLVED LITHIUM (LI) (UG/L)	DIS-SOLVED MAN- GANESE (MN) (UG/L)	DIS-SOLVED MERCURY (HG) (UG/L)	DIS-SOLVED NICKEL (NI) (UG/L)	DIS-SOLVED STRON- TIUM (SR) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)
JAN. 22...	10	3	0	0	.0	4	390	20
MAY 15...	40	0	0	20	.0	0	400	10
JULY 10...	20	2	0	0	.0	0	390	10

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	ALDRIN (UG/L)	DDD (UG/L)	DDE (UG/L)	DDT (UG/L)	DI- ELDRIN (UG/L)	ENDRIN (UG/L)	HEPTA- CHLOR (UG/L)	HEPTA- CHLOR EPOXIDE (UG/L)
JAN. 22...	1030	27	17.0	.00	.00	.00	.00	.00	.00	.00	.00
MAY 15...	1035	37	25.0	.00	.00	.00	.00	.00	.00	.00	.00
SEP. 10...	0850	31	23.0	.00	.00	.00	.00	.00	.00	.00	.00

DATE	LINDANE (UG/L)	CHLOR- DANE (UG/L)	PCB (UG/L)	DI- AZINON (UG/L)	MALA- THION (UG/L)	METHYL PARA- THION (UG/L)	PARA- THION (UG/L)	2,4-D (UG/L)	SILVEX (UG/L)	2,4,5-T (UG/L)
JAN. 22...	.00	.0	.0	.00	.00	.00	.00	.00	.00	.00
MAY 15...	.00	.0	.0	.00	.00	.00	.00	.00	.00	.00
SEP. 10...	.00	.0	.0	.00	.00	.00	.00	.00	.00	.00

NUECES RIVER BASIN

667

08198000 SABINAL RIVER AT SABINAL, TEX.

LOCATION.--Lat 29°29'35", long 99°29'49", Uvalde County, at gaging station 108 ft (33 m) upstream from concrete dam, 2.3 miles (3.7 km) downstream from mouth of Onion Creek, and 12.5 miles (20.1 km) north of Sabinal.

DRAINAGE AREA.--206 mi² (534 km²).

PERIOD OF RECORD.--Chemical and biochemical analyses: January to September 1974.
Pesticide analyses: January to September 1974.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	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)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	TOTAL NITRATE (N) (MG/L)
JAN. 21...	1530	58	11	74	13	8.8	1.1	230	0	27	18	2.5
MAR. 12...	1300	36	12	68	14	9.0	1.8	231	0	27	17	1.7
MAY 15...	1230	66	12	72	13	7.8	1.2	252	0	24	13	1.3
JULY 10...	1250	18	14	61	13	8.7	1.2	223	0	29	18	1.0
SEP. 09...	1300	60	14	72	12	8.8	1.6	254	0	20	16	1.5

DATE	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)	VOL. NON- FILT- RABLE RESIDUE (MG/L)	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)
JAN. 21...	.00	.06	.00	--	.00	267	0	0	240	50	.2	468
MAR. 12...	.01	.07	.07	.14	.04	263	0	0	230	38	.3	470
MAY 15...	.01	.09	.01	.10	.01	268	0	0	230	27	.2	468
JULY 10...	.00	.01	.15	.16	.00	255	1	0	210	23	.3	445
SEP. 09...	.00	.10	.44	.54	.02	270	1	1	230	21	.3	460

DATE	PH (UNITS)	TEMPER- ATURE (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	BIO- CHEM- ICAL OXYGEN DEMAND (MG/L)	IMME- DIATE COLI- FORM (COL. PER 100 ML)	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)
JAN. 21...	7.9	17.5	0	3	11.0	115	.3	110	8	12	.5
MAR. 12...	7.7	20.5	0	2	8.6	95	.5	88	44	56	.0
MAY 15...	7.7	25.5	0	2	8.0	96	.4	72	11	59	8.0
JULY 10...	7.7	27.5	0	0	7.9	99	.0	48	12	4	1.6
SEP. 09...	7.6	23.0	0	0	7.9	91	.7	120	28	13	1.7

NUECES RIVER BASIN

08158000 SABINAL RIVER AT SABINAL, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	DIS-SOLVED ALUM- INIUM (AL) (UG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	DIS- SOLVED COBALT (CO) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)
JAN. 21...	1530	10	1	50	0	0	0	3
MAY 15...	1230	0	1	50	0	0	0	0
JULY 10...	1250	0	1	70	<1	0	0	1

DATE	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	DIS- SOLVED LITHIUM (LI) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED MERCURY (HG) (UG/L)	DIS- SOLVED NICKEL (NI) (UG/L)	DIS- SOLVED STRON- TIUM (SR) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)
JAN. 21...	10	3	0	0	.0	1	330	20
MAY 15...	10	0	0	30	.0	2	360	10
JULY 10...	20	4	0	0	.0	0	350	10

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	ALDRIN (UG/L)	DDD (UG/L)	DDE (UG/L)	DDT (UG/L)	DI- ELDRIN (UG/L)	ENDRIN (UG/L)	HEPTA- CHLOR (UG/L)	HEPTA- CHLOR EPOXIDE (UG/L)
JAN. 21...	1530	58	17.5	.00	.00	.00	.00	.00	.00	.00	.00
MAY 15...	1230	66	25.5	.00	.00	.00	.00	.00	.00	.00	.00
SEP. 09...	1300	60	23.0	.00	.00	.00	.00	.00	.00	.00	.00

DATE	LINDANE (UG/L)	CHLOR- DANE (UG/L)	PCB (UG/L)	DI- AZINON (UG/L)	MALA- THION (UG/L)	METHYL PARA- THION (UG/L)	PARA- THION (UG/L)	2,4-D (UG/L)	SILVEX (UG/L)	2,4,5-T (UG/L)
JAN. 21...	.00	.0	.0	.00	.00	.00	.00	.00	.00	.00
MAY 15...	.00	.0	.0	.00	.00	.00	.00	.00	.00	.00
SEP. 09...	.00	.0	.0	.00	.00	.00	.00	.00	.00	.00

NUECES RIVER BASIN

669

08200000 HONDO CREEK NEAR TARPLEY, TEX.

LOCATION.--Lat 29°34'10", long 99°14'47", Medina County, at gaging station 460 ft (140 m) downstream from bridge on Ranch Road 462, 6.3 miles (10.1 km) southeast of Tarpley, and 16.6 miles (26.7 km) northwest of Hondo.

DRAINAGE AREA.--86.2 mi² (223.3 km²).

PERIOD OF RECORD.--Chemical and biochemical analyses: January to September 1974.
Pesticide analyses: January to September 1974.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	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)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	TOTAL NITRATE (N) (MG/L)
JAN. 21...	1320	18	12	77	11	11	1.2	234	0	36	19	1.8
MAR. 12...	1015	12	11	68	12	10	1.5	215	0	43	16	.86
MAY 14...	1430	116	12	75	10	7.2	1.1	264	0	23	11	1.1
JULY 10...	1115	14	15	68	13	11	1.2	235	0	37	18	1.0
SEP. 09...	1115	34	12	66	10	8.0	1.6	218	0	28	12	.71

DATE	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	TOTAL NON- FIL- TRABLE RESIDUE (MG/L)	VOL. NON- FIL- TRABLE RESIDUE (MG/L)	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)
JAN. 21...	.00	.00	.00	--	.00	283	0	0	240	46	.3	500
MAR. 12...	.01	.11	.17	.28	.03	268	0	0	220	43	.3	469
MAY 14...	.00	.04	.18	.22	.01	270	1	0	230	12	.2	455
JULY 10...	.00	.04	.02	.06	.00	280	6	3	220	31	.3	460
SEP. 09...	.00	.06	.02	.08	.01	245	0	0	210	27	.2	407

DATE	PH (UNITS)	TEMPER- ATURE (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	BIO- CHEM- ICAL OXYGEN DEMAND (MG/L)	IMMF- DIATE COLI- FORM (COL. PER 100 ML)	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)
JAN. 21...	7.6	16.0	0	1	11.0	110	.1	140	20	20	.0
MAR. 12...	7.7	21.0	0	2	8.5	94	.8	1000	150	210	.0
MAY 14...	7.6	25.5	0	1	8.0	96	.5	84	16	105	5.0
JULY 10...	7.9	27.0	0	0	8.3	102	.0	8	32	36	--
SEP. 09...	7.7	21.5	0	0	8.2	92	.7	156	80	80	2.4

NUECES RIVER BASIN

08200000 HONDO CREEK NEAR TAPLEY, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	DIS-SOLVED ALUMINUM (AL) (UG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	DIS-SOLVED BORON (B) (UG/L)	DIS-SOLVED CADMIUM (CD) (UG/L)	DIS-SOLVED CHROMIUM (CR) (UG/L)	DIS-SOLVED COBALT (CO) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)
JAN. 21...	1320	10	0	70	0	0	0	4
MAY 14...	1430	0	0	50	0	0	0	1
JULY 10...	1115	10	1	80	<1	0	0	3

DATE	TIME	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	DIS-SOLVED LITHIUM (LI) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)	DIS-SOLVED MERCURY (HG) (UG/L)	DIS-SOLVED NICKEL (NI) (UG/L)	DIS-SOLVED STRONTIUM (SR) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)
JAN. 21...	30	4	0	0	0	.0	3	430	20
MAY 14...	20	0	0	0	40	.0	11	350	10
JULY 10...	20	2	0	0	0	.0	0	430	10

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TEMPERATURE (DEG C)	ALDRIN (UG/L)	DDD (UG/L)	DDE (UG/L)	DDT (UG/L)	DI-ELDRIN (UG/L)	ENDRIN (UG/L)	HEPTACHLOR (UG/L)	HEPTACHLOR EPOXIDE (UG/L)
JAN. 21...	1320	18	16.0	.00	.00	.00	.00	.00	.00	.00	.00
MAY 14...	1430	116	25.5	.00	.00	.00	.00	.00	.00	.00	.00
SEP. 09...	1115	34	--	.00	.00	.00	.00	.00	.00	.00	.00

DATE	LINDANE (UG/L)	CHLORDANE (UG/L)	PCB (UG/L)	DI-AZINON (UG/L)	MALATHION (UG/L)	METHYL PARATHION (UG/L)	PARATHION (UG/L)	2,4-D (UG/L)	SILVEX (UG/L)	2,4,5-T (UG/L)
JAN. 21...	.00	.0	.0	.00	.00	.00	.00	.00	.00	.00
MAY 14...	.00	.0	.0	.00	.00	.00	.00	.00	.00	.00
SEP. 09...	.00	.0	.0	.00	.00	.00	.00	.00	.00	.00

NUECES RIVER BASIN

671

08201500 SECO CREEK AT MILLER RANCH, NEAR UTOPIA, TEX.

LOCATION.--Lat 29°34'23", long 99°24'10", Medina County, at gaging station 200 ft (61 m) upstream from county road crossing, 4.5 miles (7.2 km) downstream from Cascade Creek, and 7.9 miles (12.7 km) southeast of Utopia.

DRAINAGE AREA.--43.1 mi² (111.6 km²).

PERIOD OF RECORD.--Chemical and biochemical analyses: January to September 1974.
Pesticide analyses: January to September 1974.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	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)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	TOTAL NITRATE (N) (MG/L)
JAN. 21...	1435	7.4	12	67	12	6.0	1.1	186	0	44	18	1.5
MAR. 12...	1200	4.5	11	62	12	9.2	1.2	178	0	46	16	.86
MAY 15...	1500	20	12	67	11	7.5	1.3	216	0	41	12	1.2
JULY 10...	1200	3.1	14	57	11	8.8	1.3	176	0	47	18	.72
SEP. 09...	1200	15	13	63	12	7.7	1.6	187	0	44	12	.96

DATE	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)	VOL. NON- FILT- RABLE RESIDUE (MG/L)	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)
JAN. 21...	.00	.00	.00	--	.00	252	0	0	220	65	.2	438
MAR. 12...	.00	.08	.13	.21	.03	245	0	0	200	58	.3	429
MAY 15...	.01	.14	.00	.12	.05	259	2	0	210	36	.2	439
JULY 10...	.00	.08	.42	.50	.00	244	7	0	190	44	.3	410
SEP. 09...	.00	.13	.32	.45	.01	246	0	0	210	53	.2	396

DATE	PH (UNITS)	TEMPER- ATURE (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	BIO- CHEM- ICAL OXYGEN DEMAND (MG/L)	IMME- DIATE COLI- FORM (COL. PER 100 ML)	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)
JAN. 21...	8.0	17.5	0	0	10.2	106	.0	72	28	0	.0
MAR. 12...	7.9	22.0	0	2	10.0	114	.4	840	150	62	.0
MAY 15...	8.3	30.0	0	2	8.2	108	.2	160	108	32	5.5
JULY 10...	8.2	29.0	0	0	9.5	122	.2	2500	120	84	3.1
SEP. 09...	7.8	23.0	0	0	9.0	103	.5	560	232	32	2.6

NUECES RIVER BASIN

08201500 SECO CREEK AT MILLER RANCH, NEAR UTOPIA, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	DIS-SOLVED ALUMINUM (AL) (UG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	DIS-SOLVED BORON (B) (UG/L)	DIS-SOLVED CADMIUM (CD) (UG/L)	DIS-SOLVED CHROMIUM (CR) (UG/L)	DIS-SOLVED COBALT (CO) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)
JAN. 21...	1435	0	2	60	0	0	0	1
MAY 15...	1500	0	0	50	0	0	0	0
JULY 10...	1200	10	1	70	<1	0	0	4

DATE	TIME	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	DIS-SOLVED LITHIUM (LI) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)	DIS-SOLVED MERCURY (HG) (UG/L)	DIS-SOLVED NICKEL (NI) (UG/L)	DIS-SOLVED STRONTIUM (SR) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)
JAN. 21...	1435	10	3	0	13	.0	1	420	20
MAY 15...	1500	40	0	0	20	.0	1	400	10
JULY 10...	1200	30	3	0	0	.0	0	380	10

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TEMPERATURE (DEG C)	ALDRIN (UG/L)	DDD (UG/L)	DDE (UG/L)	DDT (UG/L)	DI-ELDRIN (UG/L)	ENDRIN (UG/L)	HEPTACHLOR (UG/L)	HEPTACHLOR EPOXIDE (UG/L)
JAN. 21...	1435	7.4	17.5	.00	.00	.00	.00	.00	.00	.00	.00
MAY 15...	1500	20	30.0	.00	.00	.00	.00	.00	.00	.00	.00
SEP. 09...	1200	15	23.0	.00	.00	.00	.00	.00	.00	.00	.00

DATE	LINDANE (UG/L)	CHLORDANE (UG/L)	PCB (UG/L)	DI-AZINON (UG/L)	MALATHION (UG/L)	METHYL PARATHION (UG/L)	PARATHION (UG/L)	2,4-D (UG/L)	SILVEX (UG/L)	2,4,5-T (UG/L)
JAN. 21...	.00	.0	.0	.00	.00	.00	.00	.00	.00	.00
MAY 15...	.00	.0	.0	.00	.00	.00	.00	.00	.00	.00
SEP. 09...	.00	.0	.0	.00	.00	.00	.00	.00	.00	.00

NUECES RIVER BASIN

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08207000 FRIO RIVER AT CALLIHAM, TEX.

LOCATION.--Lat 28°29'31", long 98°20'47", McHullen County, at gaging station at county bridge, 0.6 mile (1.0 km) upstream from bridge on Farm Road 99, 0.8 mile (1.3 km) north of Calliham, and 10.7 miles (17.2 km) downstream from San Miguel Creek.

DRAINAGE AREA.--5,491 mi² (14,222 km²).

PERIOD OF RECORD.--Chemical analyses: November 1967 to September 1974.
Water temperatures: November 1967 to September 1974.

EXTREMES.--October 1973 to September 1974:

Specific conductance: Maximum daily, 2,900 micromhos Aug. 6; minimum daily, 254 micromhos Sept. 6.
Water temperatures: Maximum, 31.0°C Aug. 17; minimum, 7.5°C Jan. 4.

Period of record:

Specific conductance: Maximum daily, 5,750 micromhos Nov. 30, 1968; minimum daily, 104 micromhos Feb. 13, 1969.
Water temperatures: Maximum, 33.0°C July 17, 1971; minimum, 6.0°C Jan. 9, 1970, Jan. 12, 13, 1973.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED SODIUM PLUS POTAS- SIUM (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)
OCT. 02...	1455	4070	14	39	4.2	12	--	7.6	133	0
NOV. 11...	1530	374	14	100	22	--	84	--	200	0
DEC. 10...	1412	144	14	150	33	190	--	5.9	242	0
23...	1740	121	10	130	35	180	--	4.4	168	0
JAN. 21...	1320	117	6.9	160	36	190	--	4.2	222	0
FEB. 27...	1340	80	12	150	35	190	--	4.1	169	0
MAR. 04...	1252	80	12	170	37	200	--	4.9	203	0
APR. 15...	1630	58	15	150	38	210	--	5.5	175	1
MAY 28...	1310	62	17	150	29	160	--	5.4	222	0
JUNE 30...	0740	25	12	120	27	180	--	6.3	183	0
JULY 08...	1130	15	13	130	30	220	--	7.3	206	0
AUG. 31...	0725	251	11	45	5.9	44	--	6.3	96	0
SEP. 30...	1100	160	17	150	33	160	--	5.3	189	0

DATE	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	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)
OCT. 02...	18	17	.1	177	120	6	.5	301	7.3	27.0
NOV. 11...	120	160	.2	607	340	180	2.0	1120	7.9	20.0
DEC. 10...	250	320	--	1080	510	310	3.7	1800	7.6	14.0
23...	250	320	--	1010	470	330	3.6	1800	8.0	12.0
JAN. 21...	250	340	--	1100	550	370	3.5	1940	7.8	16.5
FEB. 27...	260	350	--	1080	520	380	3.6	1900	7.8	16.0
MAR. 04...	260	380	--	1160	580	410	3.6	2040	8.0	22.5
APR. 15...	270	410	--	1190	530	390	4.0	2040	7.9	21.5
MAY 28...	230	300	--	1000	490	310	3.1	1630	7.7	29.0
JUNE 30...	190	320	--	946	410	260	3.9	1680	8.0	26.0
JULY 08...	200	380	--	1080	450	280	4.5	1930	7.9	28.5
AUG. 31...	65	57	--	282	140	58	1.6	522	6.7	26.0
SEP. 30...	230	300	--	988	510	360	3.1	1720	8.2	23.5

NUECES RIVER BASIN

08207000 FRIO RIVER AT CALLIHAM, TEX.--Continued

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

MONTH	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCT- ANCE (MICRO- MHOS)	DIS- SOLVED SOLIDS (MG/L)	DIS- SOLVED SOLIDS (TONS)	DIS- SOLVED CHLORIDE (MG/L)	DIS- SOLVED CHLORIDE (TONS)	DIS- SOLVED SULFATE (MG/L)	DIS- SOLVED SULFATE (TONS)	HARDNESS (CA+MG) (MG/L)
OCT. 1973.....	44516	515	300	36100	46	5530	53	6370	170
NOV. 1973.....	8091	1250	720	15700	210	4590	160	3500	350
DEC. 1973.....	4319	1780	1000	11700	320	3730	230	2680	480
JAN. 1974.....	3788	1940	1100	11300	360	3680	260	2660	520
FEB. 1974.....	2722	1910	1100	8080	350	2570	250	1840	510
MAR. 1974.....	7347	943	540	10700	140	2780	110	2180	280
APR. 1974.....	1755	2140	1200	5690	400	1900	280	1330	560
MAY 1974.....	5571	1170	670	10100	190	2860	150	2260	330
JUNE 1974.....	1937	1260	720	3770	210	1100	160	837	350
JULY 1974.....	434	2090	1200	1410	390	458	280	329	550
AUG. 1974.....	16053	431	250	10800	38	1650	41	1780	150
SEPT 1974.....	35962	491	280	27200	41	3980	49	4760	170
TOTAL	132496	**	**	153000	**	34800	**	30500	**
WTD.AVG.	363	743	430	**	97	**	85	**	230

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	279	892	1610	1900	1960	1950	2000	2270	1740	1690	2730	783
2	298	966	1640	1840	1970	1910	2010	2260	950	1700	2760	737
3	276	934	1680	1860	1970	1950	2020	2050	472	1810	2790	493
4	316	1020	1690	1880	1920	2010	2000	2500	746	1820	2760	780
5	480	1060	1660	1850	1890	1990	2040	2000	1130	1800	2810	312
6	700	996	1630	1860	1850	2030	2090	1840	1340	1820	2900	254
7	1040	1010	1700	1970	1820	2030	2060	1350	1460	1870	1700	264
8	1120	1080	1760	1940	1820	2010	2060	845	1600	1900	575	300
9	1240	1160	1800	1900	1850	1990	2140	759	1740	1960	320	395
10	1390	1200	1750	1920	1870	2010	2120	765	1750	2010	278	589
11	1630	1170	1690	1970	1890	2030	2110	771	1760	2070	340	836
12	1290	1290	1750	1920	1890	2020	2060	787	1300	2060	319	1040
13	1110	1240	1720	1920	1890	2000	2090	776	1060	2090	326	880
14	932	1230	1740	1930	1880	2020	2090	798	1400	2090	400	696
15	840	1250	1800	1920	1910	1900	2060	800	1540	2140	416	582
16	790	1310	1800	1940	1910	844	2090	882	1180	2200	122	457
17	766	1370	1760	1970	1950	527	2090	1010	1060	2140	02	700
18	840	1460	1780	1990	1910	428	2120	1110	1340	2220	03	681
19	569	1510	1800	1970	1910	403	2170	1140	1480	2250	970	693
20	414	1470	1810	1950	1920	663	2120	1170	1580	2290	1040	852
21	440	1540	1900	1930	1960	942	2410	1160	1690	2330	1100	1000
22	460	1510	1860	1920	1950	1190	2440	1320	1730	2350	1180	1220
23	485	1510	1880	1950	1950	1290	2350	1430	1740	2390	1230	1380
24	548	1600	1870	1970	1940	1480	2290	1470	1780	2410	1290	1480
25	647	1640	1870	1950	1920	1680	2280	1500	1770	2410	1340	1580
26	724	1640	1870	1990	1920	1770	2250	1530	1740	2470	1370	1570
27	766	1630	1890	1980	1920	1850	2270	1600	1720	2540	1440	1710
28	844	1680	1850	1970	1950	1850	2290	1620	1690	2640	1550	1750
29	860	1680	1870	1950	---	1880	2270	1670	1680	2680	1120	1810
30	889	1710	1940	1950	---	1900	2280	1700	1690	2710	775	1720
31	925	---	1890	2030	---	1910	---	1730	---	2750	513	---
MONTH	771	1330	1780	1940	1910	1630	2160	1370	1460	2180	1250	918

NUECES RIVER BASIN

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08207000 FRIO RIVER AT CALLIHAM, TEX.--Continued

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	26.0	23.0	14.0	10.0	15.5	19.0	24.0	23.0	27.0	27.0	28.0	28.0
2	27.0	22.0	18.0	9.5	19.0	20.5	---	23.5	27.0	26.5	28.0	27.0
3	28.5	22.5	18.0	---	17.5	---	23.5	24.0	26.5	26.5	28.0	28.0
4	27.5	24.5	18.0	7.5	16.0	21.0	22.0	24.0	26.5	28.0	28.0	26.0
5	---	22.0	---	8.5	18.0	24.0	20.0	25.0	27.0	26.5	28.0	24.0
6	---	19.5	14.0	10.5	17.0	22.5	20.5	23.0	28.0	28.0	28.0	23.0
7	26.0	20.5	14.5	10.0	16.0	24.0	20.0	24.0	28.0	27.0	26.5	24.5
8	27.0	---	14.0	13.5	13.0	25.0	22.5	23.0	28.0	28.0	26.0	25.0
9	27.5	21.0	13.5	19.0	---	23.5	21.0	24.0	30.0	27.0	---	26.0
10	27.0	23.0	14.0	12.0	12.0	24.0	---	23.0	27.0	27.0	25.5	25.0
11	27.0	18.5	15.0	11.0	11.5	24.0	22.0	23.5	25.5	28.0	27.0	26.0
12	25.0	21.5	16.0	10.0	---	25.5	22.0	26.5	26.5	29.0	30.0	26.0
13	25.0	24.0	16.0	---	15.0	22.0	25.0	25.0	27.0	27.0	29.5	24.0
14	23.0	21.0	16.0	11.5	17.0	24.0	21.5	25.5	26.5	26.0	30.5	23.0
15	---	21.0	14.5	13.0	20.5	22.0	20.0	26.0	26.0	27.0	29.0	23.5
16	23.0	18.5	13.5	13.0	18.0	20.0	19.5	26.5	27.0	27.0	30.0	26.5
17	23.5	22.0	13.0	16.0	18.5	22.0	21.0	27.0	27.0	26.5	31.0	26.5
18	20.5	22.0	13.5	17.0	17.5	21.0	22.0	26.5	27.0	27.0	---	28.0
19	21.0	24.0	13.0	15.0	16.5	22.0	23.0	---	28.0	27.0	28.5	26.5
20	20.0	21.0	10.5	---	17.0	23.0	23.0	25.5	28.0	26.5	29.0	28.0
21	22.0	19.0	10.0	16.0	18.0	21.5	24.0	26.5	28.0	27.0	29.0	---
22	---	22.0	10.0	17.0	18.0	20.0	24.0	26.0	28.0	28.0	30.0	25.5
23	23.5	23.0	12.0	15.0	16.5	21.5	26.0	26.5	28.0	27.0	29.0	24.0
24	21.0	22.0	12.0	13.0	16.5	---	25.0	---	27.0	29.0	28.0	24.0
25	23.0	22.0	---	12.5	15.0	14.5	25.5	28.5	25.0	28.0	27.0	23.0
26	23.5	22.0	11.0	13.0	14.5	16.0	25.0	29.0	23.5	28.5	27.0	23.0
27	23.0	21.5	10.5	15.0	16.0	19.5	---	29.0	24.0	28.0	28.0	26.0
28	22.0	20.0	12.0	15.0	21.0	20.5	24.0	27.0	24.5	28.5	---	24.0
29	22.0	18.5	11.5	14.0	---	20.0	24.5	27.5	24.0	28.0	28.0	25.0
30	21.5	18.5	16.0	14.0	---	21.5	24.5	27.5	26.0	28.0	26.0	23.5
31	21.5	---	12.0	14.0	---	25.0	---	26.0	---	29.0	26.0	---
MONTH	24.0	21.5	13.5	13.0	16.5	21.5	23.0	25.5	26.5	27.5	28.0	25.5

NUECES RIVER BASIN

08210000 NUECES RIVER NEAR THREE RIVERS, TEX.

LOCATION.--Lat 28°26'10", long 98°11'06", Live Oak County, at gaging station on downstream side of Missouri Pacific Railroad bridge, 0.2 mile (0.3 km) downstream from Frio River, and 1.7 miles (2.7 km) south of Three Rivers.

DRAINAGE AREA.--15,600 mi² (40,400 km²).

PERIOD OF RECORD.--Chemical analyses: October 1941 to September 1947, September 1950 to September 1952.

Chemical and biochemical analyses: January 1968 to September 1974.

Pesticide analyses: January 1968 to September 1974.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report.

WATER QUALITY DATA: WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO ₂) (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 SODIUM PLUS POTAS- SIUM (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
NOV. 06...	0930	1420	15	93	15	--	61	--	239	0	66	110
JAN. 15...	1230	263	6.8	130	28	160	--	5.0	238	0	180	270
MAR. 21...	1215	1740	15	70	7.3	79	--	8.4	148	0	44	140
MAY 22...	1720	242	15	89	16	76	--	5.7	207	0	90	150
JULY 23...	1050	9.0	14	150	29	260	--	11	270	0	210	450
SEP. 23...	1400	502	20	87	15	86	--	8.8	213	0	100	130

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)	VOL. NON- FILT- RABLE RESIDUE (MG/L)	HARD- NESS (CA+MG) (MG/L)
NOV. 06...	.2	2.0	.00	.03	.50	--	.21	487	158	12	290
JAN. 15...	--	3.3	.00	.00	.14	--	.03	899	21	14	440
MAR. 21...	--	.27	.02	.45	.75	1.2	.38	437	227	13	210
MAY 22...	--	1.4	.00	.04	.92	.96	.25	545	70	24	290
JULY 23...	--	.23	.00	.13	.83	.96	.21	1260	47	19	500
SEP. 23...	--	.74	.00	.08	.78	.86	.22	552	120	19	280

DATE	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)	COLOR (PLAT- INUM- COBALT UNITS)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	RIO- CHEM- ICAL OXYGEN DEMAND (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
NOV. 06...	98	1.5	848	7.8	21.0	35	75	8.1	90	1.6	8.5
JAN. 15...	250	3.3	1610	7.7	12.5	10	6	10.8	101	.8	3.0
MAR. 21...	84	2.4	830	7.2	22.0	50	85	6.4	73	2.7	15
MAY 22...	120	1.9	944	7.8	30.5	10	40	8.0	105	1.7	--
JULY 23...	270	5.1	2230	7.7	29.0	35	20	5.4	69	1.9	6.3
SEP. 23...	100	2.2	933	7.7	24.0	40	55	7.4	87	1.1	7.7

NUECES RIVER BASIN

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08210000 NUECES RIVER NEAR THREE RIVERS, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	DIS-SOLVED ALUMINUM (AL) (UG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	DIS-SOLVED BORON (B) (UG/L)	DIS-SOLVED CADMIUM (CD) (UG/L)	DIS-SOLVED CHROMIUM (CR) (UG/L)	DIS-SOLVED COBALT (CO) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)
JAN. 15...	1230	0	2	380	0	0	0	1
MAR. 21...	1215	0	4	190	0	0	0	4
MAY 22...	1720	50	5	250	2	0	1	9
JULY 23...	1050	20	5	830	0	0	0	3

DATE	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	DIS-SOLVED LITHIUM (LI) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)	DIS-SOLVED MERCURY (HG) (UG/L)	DIS-SOLVED NICKEL (NI) (UG/L)	DIS-SOLVED STRONTIUM (SR) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)
JAN. 15...	10	1	40	0	.0	3	1100	10
MAR. 21...	60	1	20	0	.0	2	410	20
MAY 22...	30	7	20	20	.0	9	600	30
JULY 23...	20	2	70	0	.0	0	1200	30

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TEMPERATURE (DEG C)	ALDRIN (UG/L)	ALDRIN IN BOTTOM DEPOSITS (UG/KG)	DDD (UG/L)	DDD IN BOTTOM DEPOSITS (UG/KG)	DDE (UG/L)	DDE IN BOTTOM DEPOSITS (UG/KG)	DDT (UG/L)	DDT IN BOTTOM DEPOSITS (UG/KG)
JAN. 15...	1230	263	12.5	.00	.0	.00	.0	.00	.0	.00	.0
MAR. 21...	1215	1740	22.0	.00	.0	.00	.0	.00	.0	.00	.0
MAY 22...	1720	242	30.5	.00	.0	.00	.0	.00	.0	.00	.0
SEP. 23...	1400	502	24.0	.00	--	.00	--	.00	--	.00	--

DATE	DI-ELDRIN (UG/L)	DI-ELDRIN IN BOTTOM DEPOSITS (UG/KG)	ENDRIN (UG/L)	ENDRIN IN BOTTOM DEPOSITS (UG/KG)	HEPTACHLOR (UG/L)	HEPTACHLOR IN BOTTOM DEPOSITS (UG/KG)	HEPTACHLOR EPOXIDE (UG/L)	HEPTACHLOR EPOXIDE IN BOTTOM DEPOSITS (UG/KG)	LINDANE (UG/L)	LINDANE IN BOTTOM DEPOSITS (UG/KG)	CHLORDANE (UG/L)
JAN. 15...	.00	.0	.00	.0	.00	.0	.00	.0	.00	.0	.0
MAR. 21...	.00	.0	.00	.0	.00	.0	.00	.0	.00	.0	.0
MAY 22...	.00	.0	.00	.0	.00	.0	.00	.0	.00	.0	.0
SEP. 23...	.00	--	.00	--	.00	--	.00	--	.00	--	.0

DATE	CHLORDANE IN BOTTOM DEPOSITS (UG/KG)	PCB (UG/L)	PCB IN BOTTOM DEPOSITS (UG/KG)	DI-AZINON (UG/L)	MALATHION (UG/L)	METHYL PARATHION (UG/L)	PARATHION (UG/L)	2,4-D (UG/L)	SILVEX (UG/L)	2,4,5-T (UG/L)
JAN. 15...	0	.0	0	.00	.00	.00	.00	.00	.00	.00
MAR. 21...	0	.0	0	.00	.00	.00	.00	.00	.00	.02
MAY 22...	0	.0	3	.00	.00	.00	.00	--	--	--
SEP. 23...	--	.0	--	.00	.00	.00	.00	.00	.00	.00

NUECES RIVER BASIN

08211000 NUECES RIVER NEAR MATHIS, TEX.

LOCATION.--Lat 28°02'17", long 97°51'36", San Patricio County, at intake tower at Wesley E. Seale Dam, 0.6 mile (1.0 km) upstream from gaging station at bridge on State Highway 359, and 4 miles (6 km) southwest of Mathis.

DRAINAGE AREA.--16,660 mi² (43,150 km²).

PERIOD OF RECORD.--Chemical analyses: October 1947 to September 1974.

Chemical and biochemical analyses: October 1969 to September 1970.

Water temperatures: October 1947 to September 1964, October 1965 to September 1974.

EXTREMES.--October 1973 to September 1974:

Specific conductance: Maximum daily, 917 micromhos Aug. 28; minimum daily, 377 micromhos Oct. 22, 24.

Water temperatures: Maximum, 29.5°C on several days during June and July; minimum, 11.0°C Jan. 3-5.

Period of record:

Specific conductance: Maximum daily, 1,040 micromhos July 1, 1948; minimum daily, 216 micromhos Sept. 19, 1971.

Water temperatures: Maximum, 36.0°C Aug. 8, 1964; minimum, 3.0°C Jan. 19, 1968.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTAN- TANEOUS 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 (HC03) (MG/L)	CAR- BONATE (C03) (MG/L)	DIS- SOLVED SULFATE (S04) (MG/L)
OCT.										
03...	1020	12600	18	56	7.3	36	6.7	168	0	35
NOV.										
12...	1330	6.4	19	50	5.3	34	8.8	154	0	27
DEC.										
11...	1420	230	19	50	6.1	36	8.0	175	0	27
JAN.										
22...	1415	198	18	67	7.8	37	7.4	188	0	34
FEB.										
17...	1600	190	16	69	8.9	44	7.0	187	0	43
MAR.										
05...	1345	195	16	68	8.8	45	7.1	203	0	39
APR.										
16...	1855	201	16	79	10	61	6.7	202	0	59
MAY										
29...	1130	191	17	79	12	63	6.9	198	0	63
JUNE										
23...	1600	180	17	72	12	68	7.6	174	0	65
JULY										
09...	1205	188	17	75	12	75	8.2	178	0	65
AUG.										
21...	1400	1200	17	72	12	84	9.0	166	0	73
SEP.										
21...	1630	997	18	57	8.9	53	6.6	161	0	46

DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	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)
OCT.									
03...	58	.2	300	170	32	1.2	521	7.8	28.5
NOV.									
12...	54	--	274	150	20	1.2	475	7.7	22.5
DEC.									
11...	57	--	289	150	6	1.3	510	8.1	18.0
JAN.									
22...	68	--	332	200	45	1.1	577	8.2	16.5
FEB.									
17...	74	--	354	210	56	1.3	642	8.2	16.0
MAR.									
05...	75	--	359	210	40	1.4	661	8.1	19.5
APR.									
16...	110	--	441	240	73	1.7	780	7.6	21.0
MAY									
29...	120	--	458	250	84	1.7	814	7.8	27.5
JUNE									
23...	130	--	457	230	86	2.0	815	8.0	29.0
JULY									
09...	140	--	480	240	91	2.1	843	8.0	27.0
AUG.									
21...	150	--	499	230	93	2.4	909	7.5	29.0
SEP.									
21...	86	--	355	180	47	1.7	634	8.2	27.0

NUECES RIVER BASIN

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08211000 NUECES RIVER NEAR MATHIS, TEX.--Continued

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

MONTH	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCT- ANCE (MICRO- MHOS)	DIS- SOLVED SOLIDS (MG/L)	DIS- SOLVED SOLIDS (TONS)	DIS- SOLVED CHLORIDE (MG/L)	DIS- SOLVED CHLORIDE (TONS)	DIS- SOLVED SULFATE (MG/L)	DIS- SOLVED SULFATE (TONS)	HARDNESS (CA+MG) (MG/L)
OCT. 1973.....	234900	446	270	171000	49	31100	23	14600	150
NOV. 1973.....	33248	466	280	25100	51	4580	26	2330	150
DEC. 1973.....	9996	528	300	8100	60	1620	32	864	170
JAN. 1974.....	7416	583	330	6610	67	1340	38	761	180
FEB. 1974.....	7478	632	350	7070	73	1470	43	868	200
MAR. 1974.....	14793	685	380	15200	86	3430	49	1960	210
APR. 1974.....	6627	777	440	7870	120	2150	59	1060	230
MAY 1974.....	6014	799	450	7310	120	1950	61	991	240
JUNE 1974.....	5460	809	460	6780	130	1920	62	914	240
JULY 1974.....	4804	817	460	5970	130	1690	63	817	240
AUG. 1974.....	35257	887	510	48500	150	14300	70	6660	260
SEPT 1974.....	88017	767	430	102000	110	26100	58	13800	230
TOTAL	454010	**	**	412000	**	91600	**	45600	**
WTD.AVG.	1243	577	340	**	75	**	37	**	180

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	508	432	508	558	602	647	764	778	802	759	880	881
2	507	438	516	550	608	663	777	787	803	737	815	888
3	522	457	508	549	611	653	759	782	806	744	849	888
4	537	458	511	547	613	659	761	801	806	772	856	892
5	539	459	519	567	613	653	766	796	812	809	863	892
6	517	460	516	559	610	653	769	796	806	759	849	888
7	518	473	518	566	616	659	769	807	806	789	847	885
8	500	468	527	581	617	667	766	807	815	778	860	871
9	494	469	516	585	618	665	766	801	812	803	867	875
10	486	481	517	577	616	673	775	799	789	830	877	851
11	431	476	518	569	621	667	766	799	796	792	874	842
12	425	476	521	583	622	674	774	810	809	783	877	829
13	406	474	519	577	629	670	766	796	792	830	874	792
14	396	477	525	583	641	678	774	804	806	824	884	737
15	391	490	523	577	637	650	784	804	806	818	877	677
16	401	449	530	584	640	668	788	801	803	830	884	667
17	382	488	534	584	637	668	785	801	806	836	891	633
18	382	489	527	595	636	668	785	799	812	830	895	612
19	379	498	525	577	651	666	785	799	809	845	898	643
20	381	495	529	656	636	668	786	804	812	848	898	626
21	382	500	550	622	640	693	788	804	818	852	909	639
22	377	496	551	584	640	687	785	790	821	848	913	640
23	378	503	556	587	646	689	785	787	818	859	913	593
24	377	500	543	595	642	695	796	801	818	862	902	634
25	383	494	547	599	667	706	791	810	818	855	898	598
26	404	494	551	598	673	702	788	804	815	855	913	606
27	389	496	547	601	659	700	788	804	815	859	915	609
28	407	497	543	598	648	711	785	795	821	862	917	592
29	415	510	542	616	---	720	788	801	818	862	913	593
30	425	503	545	615	---	740	791	810	818	865	891	604
31	451	---	548	604	---	753	---	801	---	872	902	---
MONTH	435	481	530	585	632	680	778	799	810	822	881	733

NUECES RIVER BASIN

08211000 NUECES RIVER NEAR MATHIS, TEX.--Continued

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	24.0	21.0	13.5	15.0	17.0	20.0	24.0	29.0	29.0	29.0	28.0
2	28.5	24.0	21.0	13.0	15.0	17.0	20.0	24.5	29.0	29.5	28.5	28.0
3	28.5	24.0	21.0	11.0	15.0	17.0	20.0	24.5	28.5	29.0	29.0	28.0
4	28.5	24.0	21.0	11.0	15.0	18.5	20.0	24.5	28.5	28.5	29.0	27.0
5	28.5	24.0	20.0	11.0	16.5	18.5	21.0	25.0	28.5	29.0	29.0	27.0
6	28.5	24.0	20.0	11.5	16.5	18.5	21.0	25.5	28.0	28.5	28.0	27.0
7	28.5	24.0	20.0	12.5	14.5	19.5	21.0	25.0	28.0	28.5	28.0	27.0
8	28.5	23.5	18.5	14.5	13.5	19.5	20.0	25.5	28.5	28.5	28.0	27.0
9	28.5	23.5	18.5	14.5	13.5	19.0	20.0	25.5	29.0	28.5	28.0	27.0
10	28.5	22.0	18.5	13.5	13.5	21.0	21.0	25.5	27.0	28.0	28.0	27.0
11	28.0	22.0	18.5	13.5	14.5	21.0	21.0	26.5	28.0	28.0	28.0	27.0
12	28.0	22.0	18.5	13.5	14.5	21.5	23.0	26.0	28.5	28.0	28.0	27.0
13	28.0	22.0	18.5	13.0	15.0	21.5	22.0	26.0	28.0	28.0	28.0	23.0
14	28.0	22.0	18.0	13.0	16.5	21.5	20.5	25.5	28.0	28.0	28.0	27.0
15	28.0	23.0	18.0	13.5	16.5	21.5	20.0	26.5	28.5	28.0	28.0	27.0
16	28.0	23.0	17.0	13.5	16.5	21.0	21.5	26.5	28.5	28.0	28.0	27.0
17	28.0	23.0	17.0	14.0	16.0	21.0	21.5	26.5	28.5	28.0	28.0	27.0
18	28.0	22.0	17.0	14.5	16.0	21.0	21.0	26.5	28.5	28.5	28.0	27.0
19	26.0	22.0	17.0	13.5	17.0	21.5	21.0	26.5	28.5	29.5	28.0	27.0
20	26.0	22.0	14.5	14.5	18.0	21.5	21.0	26.5	28.5	29.5	28.0	27.0
21	26.0	21.5	14.0	15.0	17.5	21.0	22.0	27.0	28.5	29.5	28.0	27.0
22	25.5	22.0	14.5	15.5	17.0	21.0	22.5	27.0	28.5	29.0	29.0	27.0
23	25.5	22.0	15.0	13.5	17.0	21.0	23.0	28.0	29.0	29.5	29.0	25.0
24	25.5	23.0	15.0	13.0	16.5	19.0	23.0	28.0	29.0	28.5	29.0	25.5
25	24.5	22.0	14.5	13.0	16.5	18.5	23.5	28.5	29.0	29.5	28.5	27.0
26	24.0	23.5	14.5	13.0	16.0	18.0	23.0	28.5	29.5	29.5	28.5	25.5
27	24.0	23.0	14.5	13.0	16.5	18.0	23.0	28.5	29.0	29.5	28.5	26.5
28	24.5	21.0	14.5	13.0	17.0	19.5	23.0	29.0	29.0	29.5	28.5	26.5
29	25.0	21.0	14.5	14.0	---	19.5	23.0	29.0	29.5	29.5	28.5	25.5
30	24.0	21.0	14.5	15.0	---	20.0	24.0	29.0	29.5	29.5	28.0	25.0
31	24.0	---	14.0	15.0	---	20.0	---	29.0	---	29.5	28.0	---
MONTH	27.0	22.5	17.0	13.5	16.0	20.0	21.5	26.5	28.5	29.0	28.5	26.5

OSO CREEK BASIN

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08211520 OSO CREEK AT CORPUS CHRISTI, TEX.

LOCATION.--Lat 27°42'40", long 97°30'06", Nueces County, at gaging station at bridge on Farm Road 763, 1.6 miles (2.6 km) downstream from West Oso Creek, and 1.9 miles (3.1 km) southwest of intersection of Farm Road 665 and State Highway 357.

DRAINAGE AREA.--90.3 mi² (233.9 km²).

PERIOD OF RECORD.--Chemical and biochemical analyses: July 1972 to September 1974.

Pesticide analyses: July 1972 to September 1974.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part I of this report.

WATER QUALITY DATA* WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	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)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)
OCT.												
12...	1525	5940	4.9	20	1.5	12	3.8	80	0	8.0	10	.1
13...	1015	2810	12	24	2.0	15	4.4	95	0	11	12	.2
15...	1710	463	14	37	3.0	23	5.3	133	0	16	27	.2
23...	1310	5.5	17	210	30	480	9.8	183	0	110	1030	.1
NOV.												
26...	1230	2.2	24	330	57	910	19	208	0	190	1900	.3
JAN.												
02...	1400	1.6	16	290	43	770	17	194	0	200	1600	.3
FEB.												
04...	1315	1.6	16	280	48	750	21	184	0	190	1500	--
MAR.												
11...	1350	1.6	23	280	49	770	23	203	0	180	1600	--
APR.												
15...	1310	1.5	11	250	42	670	16	174	0	180	1300	--
MAY												
20...	1415	1.7	14	210	32	460	12	174	0	130	990	--
JUNE												
24...	1305	1.4	14	200	32	410	11	134	10	120	930	--
SEP.												
03...	1445	1.0	23	220	40	490	27	160	0	180	1100	--

DATE	BROMIDE (BR) (MG/L)	IODIDE (I) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITU- ENTS) (MG/L)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)	VOL. NON- FILT- RABLE RESIDUE (MG/L)	HARD- NESS (CA+MG) (MG/L)
OCT.												
12...	.0	.01	.20	.00	.00	.54	--	.54	105	896	--	56
13...	--	--	.20	.00	.00	.54	--	.50	128	940	--	68
15...	--	--	.20	.02	.07	.63	--	.69	192	720	--	100
23...	--	--	.80	.19	.04	.44	--	.72	1980	--	--	640
NOV.												
26...	--	--	2.7	1.1	1.5	.00	--	4.1	3570	--	--	1100
JAN.												
02...	7.6	.38	3.8	.81	9.8	2.0	--	4.4	3030	16	--	910
FEB.												
04...	--	--	2.2	.00	12	.04	--	6.0	2800	--	--	900
MAR.												
11...	--	--	.07	.10	1.8	3.1	4.9	1.4	3030	28	10	900
APR.												
15...	6.6	.22	.44	.13	.27	1.5	1.8	.40	2570	12	4	800
MAY												
20...	--	--	.56	.12	.05	2.9	2.9	1.1	1930	68	10	660
JUNE												
24...	--	--	.34	.15	.25	.75	1.0	1.1	1790	20	2	630
SEP.												
03...	5.0	.40	.02	.03	.24	1.7	2.0	1.4	2170	67	--	720

OSO CREEK BASIN

08211520 OSO CREEK AT CORPUS CHRISTI, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTERRER 1974

DATE	NON- CAH- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	BIO- CHEM- ICAL OXYGEN DEMAND (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT.											
12...	0	.7	181	6.6	24.0	--	230	6.1	72	1.0	14
13...	0	.8	221	6.6	23.0	--	230	6.1	70	1.3	9.5
15...	0	1.0	336	6.4	24.5	--	190	7.0	83	1.4	8.0
23...	490	8.3	3660	9.1	26.0	--	10	9.8	121	3.2	9.5
NOV.											
26...	890	12	6250	7.7	27.5	--	15	--	--	6.3	16
JAN.											
02...	750	11	5400	7.6	9.0	--	6	14.0	123	13	--
FEB.											
04...	750	11	5210	7.3	16.0	--	10	11.8	120	13	15
MAR.											
11...	730	13	5490	8.7	26.0	--	7	14.9	184	28	32
APR.											
15...	660	10	4500	8.6	18.0	20	8	13.4	140	7.0	14
MAY											
20...	510	7.8	3550	8.4	31.0	5	40	15.6	211	11	16
JUNE											
24...	500	7.1	3220	8.4	30.0	20	20	12.8	168	5.1	8.8
SEP.											
03...	590	8.0	3980	8.3	28.5	--	25	13.7	178	7.5	21

DATE	TIME	DIS- SOLVED ALUM- INUM (AL) (UG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	DIS- SOLVED COBALT (CO) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)
OCT.								
12...	1525	190	4	80	0	0	0	4
JAN.								
02...	1400	10	9	1300	0	0	0	3
APR.								
15...	1310	0	18	1300	0	30	0	4
SEP.								
03...	1445	60	20	1200	<1	0	0	6

DATE	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	DIS- SOLVED LITHIUM (LI) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED MERCURY (HG) (UG/L)	DIS- SOLVED NICKEL (NI) (UG/L)	DIS- SOLVED STRON- TIUM (SR) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)
OCT.								
12...	200	0	0	0	<.2	0	230	10
JAN.								
02...	10	2	120	1300	.0	3	5400	30
APR.								
15...	10	0	110	780	.0	4	4600	30
SEP.								
03...	40	1	90	670	.0	4	3700	10

OSO CREEK BASIN

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08211520 OSO CREEK AT CORPUS CHRISTI, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	ALDRIN (UG/L)	ALDRIN IN BOTTOM DE- POSITS (UG/KG)	DDD (UG/L)	DDD IN BOTTOM DE- POSITS (UG/KG)	DDE (UG/L)	DDE IN BOTTOM DE- POSITS (UG/KG)	DDT (UG/L)	DDT IN BOTTOM DE- POSITS (UG/KG)
OCT.											
12...	1525	5990	24.0	.00	--	.00	--	.00	--	.01	--
23...	1310	5.6	26.0	--	.0	--	.0	--	.5	--	.0
JAN.											
02...	1400	1.6	9.0	.00	.0	.00	.9	.00	1.1	.00	.0
APR.											
15...	1310	1.5	18.0	.00	.0	.00	.9	.00	1.3	.00	.0
SEP.											
03...	1445	1.0	28.5	.00	.0	.00	130	.00	.0	.00	.0

DATE	DI- ELDRIN (UG/L)	DI- ELDRIN IN BOTTOM DE- POSITS (UG/KG)	ENDRIN (UG/L)	ENDRIN IN BOTTOM DE- POSITS (UG/KG)	HEPTA- CHLOR (UG/L)	HEPTA- CHLOR IN BOTTOM DE- POSITS (UG/KG)	HEPTA- CHLOR EPOXIDE (UG/L)	HEPTA- CHLOR EPOXIDE IN BOT- TOM DE- POSITS (UG/KG)	LINDANE (UG/L)	LINDANE IN BOTTOM DE- POSITS (UG/KG)	CHLOR- DANE (UG/L)
OCT.											
12...	.00	--	.00	--	.00	--	.00	--	.00	--	.0
23...	--	.0	--	.0	--	.0	--	.0	--	.0	--
JAN.											
02...	.00	.0	.00	.0	.00	.0	.00	.0	.01	.0	.0
APR.											
15...	.00	.0	.00	.0	.00	.0	.00	.0	.00	.0	.0
SEP.											
03...	.00	.0	.00	.0	.00	.0	.00	.0	.00	.0	.0

DATE	CHLOR- DANE IN BOTTOM DE- POSITS (UG/KG)	PCB (UG/L)	PCB IN BOTTOM DE- POSITS (UG/KG)	DI- AZINON (UG/L)	MALA- THION (UG/L)	METHYL PARA- THION (UG/L)	PARA- THION (UG/L)	2,4-D (UG/L)	SILVEX (UG/L)	2,4,5-T (UG/L)
OCT.										
12...	--	.0	--	.02	.00	.00	.00	.00	.00	.00
23...	0	--	0	--	--	--	--	--	--	--
JAN.										
02...	0	.0	0	.10	.00	.00	.00	.00	.00	.01
APR.										
15...	0	.0	0	.10	.00	.00	.00	.00	.00	.05
SEP.										
03...	0	.0	0	.02	.00	.00	.00	.03	.00	.00

08364000 RIO GRANDE AT EL PASO, TEX.

LOCATION.--Lat 31°48'10", long 106°32'25", at gaging station on the downstream side of the Courchesne Bridge, 5.6 miles (9.0 km) upstream from the Santa Fe Street-Juarez Avenue bridge between El Paso, Tex., and Cd. Juarez, Mex., and 1.7 miles (2.7 km) upstream from the American Dam.

DRAINAGE AREA.--29,267 mi² (75,802 km²).

PERIOD OF RECORD.--Chemical analyses: February 1930 to September 1974.

REMARKS.--Records of specific conductance and discharge for water year 1974 are given in International Boundary and Water Commission Water Bulletins Nos. 43 and 44.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	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)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
OCT. 01-31	--	132	28	276	11	312	0	458	225
NOV. 01-30	--	136	31	334	12	328	0	528	275
DEC. 01-31	--	130	32	351	11	334	0	534	285
JAN. 01-31	--	120	30	370	12	306	0	580	290
FEB. 01-28	--	130	32	390	11	316	0	570	320
MAR. 01-31	--	75	14	100	7.3	194	0	180	87
APR. 01-30	--	79	16	120	6.7	212	0	200	86
MAY 01-31	18	82	17	120	7.9	220	0	220	92
JUNE 01-30	16	74	14	99	8.5	218	0	200	75
JULY 01-31	17	79	13	110	7.5	212	16	190	78
AUG. 01-31	17	85	15	110	7.6	220	0	210	79
SEP. 01-30	18	97	21	160	9.9	254	0	300	130

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	TOTAL FIL- TRABLE RESIDUE (MG/L)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)
OCT. 01-31	--	--	270	1370	444	189	5.7	2040	7.8
NOV. 01-30	--	--	360	1590	467	198	6.7	2320	8.0
DEC. 01-31	--	--	380	1600	466	192	7.1	2370	7.7
JAN. 01-31	--	.10	450	1620	420	170	7.8	2400	7.9
FEB. 01-28	--	.17	480	1700	460	200	7.9	2500	8.1
MAR. 01-31	--	.44	160	590	250	86	2.8	941	7.7
APR. 01-30	--	.01	180	676	260	89	3.2	1040	7.6
MAY 01-31	--	.09	180	685	270	94	3.2	1090	7.5
JUNE 01-30	--	.00	170	616	240	64	2.8	964	7.4
JULY 01-31	--	.44	190	636	250	50	3.0	972	8.7
AUG. 01-31	.6	.25	170	644	270	94	2.9	995	7.7
SEP. 01-30	--	.41	200	892	330	120	3.8	1350	8.1

RIO GRANDE BASIN

685

08370500 RIO GRANDE AT FORT QUITMAN, TEX.

LOCATION.--Lat 31°05'05", long 105°36'25", at gaging station on the rectified channel of the Rio Grande, 1.5 miles (2.4 km) downstream from Old Fort Quitman, and 81.1 river miles (130.5 km) downstream from the American Dam at El Paso.

DRAINAGE AREA.--32,035 mi² (82,971 km²), United States and Mexico; from International Boundary and Water Commission Water Bulletin No. 31.

PERIOD OF RECORD.--Chemical analyses: February 1930 to September 1974.

REMARKS.--Records of discharge for water year 1974 are given in International Boundary and Water Commission Water Bulletins Nos. 43 and 44.

WATER QUALITY DATA: WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	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 (HC03) (MG/L)	CAR- BONATE (C03) (MG/L)	DIS- SOLVED SULFATE (S04) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
OCT.									
01-31	--	320	83	1010	16	320	0	1060	1400
NOV.									
01-30	--	269	68	802	14	342	0	864	1070
DEC.									
01-31	--	287	74	864	14	356	0	888	1160
JAN.									
01-31	--	330	95	1000	15	364	0	1000	1300
FEB.									
01-28	--	440	140	1600	13	348	0	1400	2300
MAR.									
01-31	--	360	100	1200	17	282	0	1200	1700
APR.									
01-30	--	300	90	970	8.5	284	0	940	1400
MAY									
01-31	.1	380	100	1100	16	302	0	1100	1700
JUNE									
01-30	31	430	150	1500	24	168	0	1400	2500
JULY									
01-31	21	130	25	280	11	246	0	350	340
AUG.									
01-31	26	230	60	700	13	252	0	650	1100
SEP.									
01-30	26	260	72	840	18	256	0	840	1200

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	TOTAL FILT- RABLE RESIDUE (MG/L)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)
OCT.									
01-31	--	--	660	4190	1140	878	13	6350	7.9
NOV.									
01-30	--	--	560	3460	950	670	11	5170	8.0
DEC.									
01-31	--	--	570	3670	1020	729	12	5500	7.8
JAN.									
01-31	--	1.6	710	4390	1200	920	12	6600	7.9
FEB.									
01-28	--	.01	930	6490	1700	1400	17	9060	8.0
MAR.									
01-31	--	.43	810	4810	1300	1100	14	7330	7.9
APR.									
01-30	--	.57	670	4210	1100	890	13	6440	8.1
MAY									
01-31	--	.02	730	4710	1400	1100	13	7440	7.3
JUNE									
01-30	--	.25	960	6540	1700	1600	16	9760	7.7
JULY									
01-31	--	.96	300	1390	430	230	5.9	2180	8.2
AUG.									
01-31	.7	.56	550	3040	820	610	11	4710	8.1
SEP.									
01-30	--	.16	560	3600	950	740	12	5480	7.9

08371500 RIO GRANDE ABOVE RIO CONCHOS, NEAR PRESIDIO, TEX.

LOCATION.--Lat 29°37'15", long 104°28'50", at gaging station 7.8 river miles (12.6 km) upstream from the junction of Rio Conchos, about 10 miles (16 km) northwest of Presidio, Tex., and Ojinaga, Chihuahua, Mex., and 285.7 river miles (459.7 km) downstream from the American Dam at El Paso.

DRAINAGE AREA.--34,988 mi² (90,619 km²), United States and Mexico; from International Boundary and Water Commission Water Bulletin No. 31.

PERIOD OF RECORD.--Chemical analyses: February 1935 to September 1974. Prior to 1964, published as "Rio Grande at Upper Presidio".

REMARKS.--Records of specific conductance and discharge for water year 1974 are given in International Boundary and Water Commission Water Bulletins Nos. 43 and 44.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	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 (HC03) (MG/L)	CAR- BONATE (C03) (MG/L)	DIS- SOLVED SULFATE (S04) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
JAN. 01-31	--	230	70	820	--	220	0	--	1100
FEB. 01-28	--	240	72	860	--	226	0	--	1100
MAR. 01-31	--	83	5.6	50	7.5	132	0	180	34
AUG. 01-31	--	76	4.8	60	--	128	0	--	35
SEP. 01-30	8.4	83	6.0	78	5.8	120	0	240	43

DATE	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	TOTAL FILT- RABLE RESIDUE (MG/L)	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)
JAN. 01-31	--	--	3420	860	680	12	5190	7.9
FEB. 01-28	--	--	3490	900	710	13	5320	8.1
MAR. 01-31	.69	100	457	230	120	1.4	689	7.6
AUG. 01-31	--	--	460	210	100	1.8	693	7.6
SEP. 01-30	.52	100	563	230	130	2.2	836	7.9

RIO GRANDE BASIN

687

08375000 RIO GRANDE AT JOHNSON RANCH, TEX.

LOCATION.--Lat 29°02'05", Long 103°23'30", Brewster County, at gaging station about 2 miles (3 km) upstream from Johnson Ranch, 14 miles (23 km) downstream from Castolon, and 392.9 river miles (632.2 km) downstream from the American Dam at El Paso.

DRAINAGE AREA.--70,715 mi² (183,152 km²), United States and Mexico; from International Boundary and Water Commission Water Bulletin No. 31.

PERIOD OF RECORD.--Chemical analyses: June 1947 to September 1974.

REMARKS.--Records of specific conductance and discharge for water year 1974 are given in International Boundary and Water Commission Water Bulletins Nos. 43 and 44.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	DIS- SOLVED SILICA (SiO ₂) (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 (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
OCT. 01-31	--	--	--	174	--	182	0	--	94
NOV. 01-30	--	--	--	171	--	202	0	--	94
DEC. 01-31	--	--	--	184	--	222	0	--	103
JAN. 01-31	--	100	18	170	--	216	0	--	95
FEB. 01-28	--	110	16	170	--	216	0	--	98
MAR. 01-31	--	110	14	130	7.5	197	0	360	71
APR. 01-30	--	94	14	140	--	180	0	--	63
MAY 01-31	--	92	13	120	--	203	0	--	41
JUNE 01-30	--	79	13	140	--	184	0	--	50
JULY 01-31	--	100	9.7	120	--	180	0	--	58
AUG. 01-31	--	94	9.2	91	--	180	0	--	32
SEP. 01-30	15	100	7.4	50	4.9	142	0	230	21

DATE	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	TOTAL FILT- RABLE RESIDUE (MG/L)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)
OCT. 01-31	--	--	1020	352	203	4.0	1420	7.5
NOV. 01-30	--	--	1010	324	158	4.1	1400	7.6
DEC. 01-31	--	--	1060	380	198	4.1	1510	7.6
JAN. 01-31	--	--	952	320	150	4.1	1400	7.7
FEB. 01-28	--	--	978	340	160	4.0	1370	8.0
MAR. 01-31	.80	270	806	330	170	3.1	1230	7.7
APR. 01-30	--	--	793	290	140	3.6	1200	7.7
MAY 01-31	--	--	739	280	120	3.1	1090	7.3
JUNE 01-30	--	--	781	250	100	3.8	1140	7.7
JULY 01-31	--	--	789	290	140	3.1	1130	8.0
AUG. 01-31	--	--	663	270	130	2.4	948	8.0
SEP. 01-30	1.1	80	548	280	160	1.3	763	8.0

08377200 RIO GRANDE AT FOSTER RANCH, NEAR LANGTRY, TEX.

LOCATION.--Lat 29°46'50", long 101°45'20", Val Verde County, at gaging station 0.1 mile (0.2 km) downstream from Terrell-Val Verde County line, 16.9 river miles (27.2 km) from Langtry, and 597.2 river miles (960.9 km) downstream from the American Dam at El Paso.

DRAINAGE AREA.--84,120 mi² (217,870 km²), United States and Mexico.

PERIOD OF RECORD.--Chemical analyses: April 1944 to September 1974.

REMARKS.--Records of specific conductance and discharge for water year 1974 are given in International Boundary and Water Commission Water Bulletins Nos. 43 and 44.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	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)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
OCT. 01-31	--	88	16	110	5.7	198	0	283	60
NOV. 01-30	--	80	20	128	5.5	180	0	316	71
DEC. 01-31	--	82	20	124	5.2	200	0	286	73
JAN. 01-31	--	82	20	120	5.4	180	0	310	72
FEB. 01-28	--	81	20	120	5.7	188	0	280	72
MAR. 01-31	--	87	19	120	7.0	176	0	310	73
MAY 01-31	29	89	11	110	6.6	206	0	260	45
JUNE 01-30	30	84	14	120	8.2	196	0	310	46
JULY 01-31	22	85	13	98	6.9	156	0	270	49
AUG. 01-31	19	80	8.0	52	4.7	216	0	140	19
SEP. 01-30	11	65	4.4	18	3.5	182	0	68	7.7

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	TOTAL FILT- RABLE RESIDUE (MG/L)	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)
OCT. 01-31	--	--	190	710	286	123	2.8	1040	7.6
NOV. 01-30	--	--	250	761	282	134	3.3	1110	7.7
DEC. 01-31	--	--	250	749	287	123	3.2	1110	7.7
JAN. 01-31	--	.48	270	755	290	140	3.1	1110	7.8
FEB. 01-28	--	.37	270	746	280	130	3.1	110	7.9
MAR. 01-31	--	.45	270	708	300	150	3.0	1120	7.6
MAY 01-31	--	.59	290	686	270	99	2.9	1020	7.3
JUNE 01-30	--	.82	320	751	270	110	3.2	1100	7.7
JULY 01-31	--	.91	240	685	270	140	2.6	965	8.0
AUG. 01-31	.6	.57	120	461	230	56	1.5	694	7.7
SEP. 01-30	--	.69	60	287	180	31	.6	444	8.1

RIO GRANDE BASIN

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08412500 PECOS RIVER NEAR ORLA, TEX.

LOCATION.--Lat 31°52'21", long 103°49'52", Reeves County, at gaging station at bridge on Farm Road 652, 5.5 miles (8.8 km) downstream from Salt (screwbean) Draw, 5.9 miles (9.5 km) northeast of Orla, and 8.5 miles (13.7 km) downstream from Red Bluff Reservoir.

DRAINAGE AREA.--21,210 mi² (54,930 km²), approximately (contributing area).

PERIOD OF RECORD.--Chemical analyses: July 1937 to September 1974.

Water temperatures: March 1953 to September 1974.

EXTREMES.--October 1973 to September 1974:

Specific conductance: Maximum daily, 23,600 micromhos Mar. 13; minimum daily, 2,100 micromhos Sept. 24.

Water temperatures: Maximum, 28.5°C Aug. 11; minimum, 2.0°C Jan. 4.

Period of record:

Specific conductance: Maximum daily, 29,100 micromhos Sept. 2, 1969; July 22, 1972; minimum daily, 1,610 micromhos June 2, 1948.

Water temperatures (1953-61, 1968-74): Maximum, 28.5°C Aug. 11, 1974; minimum, 0.5°C Jan. 6, 1971, Jan. 11, 1973.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	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)
OCT.									
03...	1715	72	11	460	150	1400	50	106	0
NOV.									
14...	1250	18	4.5	840	300	3900	58	136	0
DEC.									
11...	1030	42	11	590	200	1800	57	115	0
JAN.									
09...	1200	34	11	620	230	2300	60	136	0
FEB.									
20...	1700	36	6.0	600	210	2200	49	106	0
MAR.									
20...	0830	200	7.5	550	190	1700	22	125	0
APR.									
04...	1125	44	6.2	590	210	2000	61	122	0
MAY									
16...	1010	46	4.1	620	240	2100	71	128	0
JUNE									
17...	1625	37	6.0	680	260	2500	83	136	0
JULY									
19...	0730	61	8.2	750	300	3000	96	128	0
AUG.									
21...	0815	44	8.9	720	280	2800	89	130	0
SEP.									
23...	1720	257	11	450	98	1000	11	104	0

DATE	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	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)
OCT.									
03...	1700	2200	5920	1800	1700	15	9130	7.2	23.0
NOV.									
14...	2900	5900	14000	3300	3200	29	20500	7.5	14.0
DEC.									
11...	1900	3200	7810	2300	2200	16	11700	7.5	5.5
JAN.									
09...	2100	3800	9190	2500	2400	20	13900	7.5	7.0
FEB.									
20...	2200	3400	8720	2400	2300	20	12800	8.1	15.0
MAR.									
20...	1800	2700	7030	2200	2100	16	10800	7.0	13.0
APR.									
04...	2000	3400	8330	2300	2200	18	11800	7.4	13.5
MAY									
16...	2100	3500	8700	2500	2400	18	12500	8.0	20.0
JUNE									
17...	2400	4100	10100	2800	2700	21	14500	7.9	23.5
JULY									
19...	2400	5000	11600	3100	3000	23	16600	7.6	24.5
AUG.									
21...	2300	4400	10700	3000	2800	22	16000	7.7	25.0
SEP.									
23...	1200	1600	4420	1500	1400	11	6840	8.0	19.0

RIO GRANDE BASIN

08412500 PECOS RIVER NEAR ORLA, TEX.--Continued

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

MONTH	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCT- ANCE (MICRO- MHOS)	DIS- SOLVED SOLIDS (MG/L)	DIS- SOLVED SOLIDS (TONS)	DIS- SOLVED CHLORIDE (MG/L)	DIS- SOLVED CHLORIDE (TONS)	DIS- SOLVED SULFATE (MG/L)	DIS- SOLVED SULFATE (TONS)	HARDNESS (CA+MG) (MG/L)
OCT. 1973.....	2705	11100	7400	54000	3000	21900	1800	13100	1900
NOV. 1973.....	521	19300	13000	18300	5700	8020	2700	3800	3100
DEC. 1973.....	1204	11800	7900	25700	3200	10400	1900	6180	2000
JAN. 1974.....	1147	13500	9100	28200	3800	11800	2100	6500	2300
FEB. 1974.....	921	13000	8800	21900	3600	8950	2000	4970	2200
MAR. 1974.....	2443	11300	7600	50100	3000	19800	1800	11900	1900
APR. 1974.....	1248	12600	8500	28600	3500	11800	2000	6740	2100
MAY 1974.....	4155	11800	7900	88600	3200	35900	1900	21300	2000
JUNE 1974.....	3623	12700	8600	84100	3500	34200	2000	19600	2200
JULY 1974.....	1622	16000	11000	48200	4600	20100	2400	10500	2600
AUG. 1974.....	3181	14700	9900	85000	4200	36100	2200	18900	2400
SEPT 1974.....	7083	4690	3000	57400	860	16400	1000	19100	980
TOTAL	29853	**	**	590000	**	235000	**	143000	**
WTD.AVG.	81	10900	7300	**	2900	**	1800	**	1900

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	9240	20700	11600	12200	13300	14500	13100	12600	11800	14100	16800	17200
2	9330	20900	11600	12200	13100	17700	12500	11000	12000	14100	16600	17000
3	9230	20300	11700	12300	13100	21000	12900	11300	12000	14100	15200	15000
4	9240	20900	12200	12400	12900	22300	12200	11300	12300	14100	15100	15700
5	9810	21000	11700	12400	13200	22600	12400	11400	12700	14100	15200	16200
6	10900	21000	11900	13200	13200	22900	12200	11100	12600	14200	15200	16200
7	8900	21000	11800	13400	13200	23000	12200	11300	12500	14200	15300	14200
8	7170	20900	11600	13600	12900	23100	12500	11700	12300	17000	15200	15900
9	8850	21300	11900	13500	12900	22900	12500	12000	12300	13800	15900	15900
10	9500	21700	11800	13500	13100	22900	12400	12200	12200	14700	18500	15900
11	9900	19700	11600	13400	13300	23300	13100	12300	12400	13800	16500	15900
12	10300	19300	11900	13500	13400	23500	12600	13300	13800	14800	15800	15900
13	10400	19600	12000	13300	13300	23600	12500	13000	15000	15600	15400	15800
14	10500	20000	11900	13100	13300	20200	12500	12800	15700	17200	15800	15000
15	10500	20200	11800	13200	13200	10600	12500	12700	15300	16900	16000	14700
16	11100	20300	11700	13200	12800	10500	12500	12600	14800	15300	13700	15300
17	12800	20300	11600	13200	13000	10900	12500	12500	14600	14600	15800	15900
18	14600	20100	11700	13100	13000	10900	12700	12400	14600	16300	16100	8910
19	15900	18900	11900	13100	13100	10800	12800	12400	14600	16600	16300	4450
20	17500	19600	11600	12400	12900	10800	13100	12500	14800	16600	15900	9140
21	18400	19600	11500	12600	12800	10800	12900	12500	14700	18300	15900	11800
22	18900	19500	11300	12700	12700	11000	12900	12500	14500	18000	15600	2230
23	19100	19700	11600	12400	12600	11000	12500	11800	14400	17900	11400	5500
24	19600	19000	11900	13600	12700	11000	12500	11500	14200	17500	9670	2100
25	19400	18800	11900	15900	12800	10900	12600	11500	13800	17900	9860	2480
26	19800	17000	10800	16000	12800	10800	12700	11700	13800	18000	16900	6530
27	20000	21100	12300	15600	12800	10900	12900	11700	13900	17700	17500	9530
28	20200	18200	12600	15900	13900	12600	12900	11700	13900	17700	17800	11500
29	20400	15400	12400	14400	---	12700	12800	11700	14000	17700	15200	12900
30	20400	11500	12700	13500	---	13000	12500	11800	14000	16800	19000	14100
31	20600	---	12600	13200	---	13100	---	12100	---	16600	18000	---
MONTH	13950	19580	11840	13420	13050	15990	12630	12030	13650	16010	15580	12300

RIO GRANDE BASIN

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08412500 PECOS RIVER NEAR ORLA, TEX.--Continued

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	13.5	7.0	4.0	8.0	11.0	15.0	16.5	22.0	25.5	25.5	25.0
2	21.0	14.0	8.0	3.0	9.0	12.0	9.0	19.0	22.0	24.5	24.5	24.5
3	23.0	13.0	9.5	3.0	8.5	13.5	5.0	19.5	21.0	23.5	23.5	24.5
4	20.5	14.0	6.5	2.0	8.5	14.5	14.5	20.0	21.5	24.0	24.0	21.0
5	18.0	14.0	7.0	3.0	9.0	13.5	14.5	20.5	22.0	24.5	24.5	21.5
6	18.5	13.0	6.5	4.0	8.5	13.5	14.0	19.5	22.0	24.0	24.0	22.0
7	20.5	12.0	6.0	6.0	6.5	14.0	16.0	18.5	21.5	23.5	23.5	23.0
8	23.5	12.0	6.5	7.0	6.5	14.0	16.0	19.5	22.0	24.0	24.0	22.0
9	20.0	13.0	6.5	8.0	5.5	14.5	15.0	19.5	20.5	24.5	24.5	22.0
10	20.0	13.0	6.5	6.5	7.0	15.0	16.0	19.0	21.5	24.5	24.5	22.0
11	18.5	13.0	6.5	7.0	7.0	13.5	15.0	20.0	22.0	25.5	28.5	22.0
12	16.5	13.5	8.5	6.0	8.5	14.0	15.0	21.0	---	25.0	24.5	24.0
13	18.0	13.5	11.0	3.5	10.0	15.0	15.5	23.0	21.5	24.5	25.0	23.5
14	18.5	13.0	10.0	5.0	10.5	16.5	15.0	20.0	23.0	24.0	25.0	20.0
15	18.0	12.0	9.5	5.5	9.5	13.5	15.0	20.5	23.0	24.5	26.0	21.5
16	18.0	10.5	---	5.5	9.5	14.5	14.5	21.0	23.5	24.5	25.5	21.5
17	17.0	10.5	---	7.0	10.0	13.0	15.5	20.0	23.5	24.5	26.0	21.0
18	20.0	10.0	---	9.5	10.0	13.5	18.0	22.0	23.5	25.0	26.0	20.5
19	16.5	11.5	---	7.0	9.5	13.5	18.5	24.0	24.0	24.5	25.0	19.5
20	14.5	9.5	---	8.0	9.5	13.0	18.5	23.5	23.5	25.0	25.0	20.0
21	16.0	9.0	4.0	9.0	9.5	13.0	12.0	19.5	24.0	25.0	25.0	20.0
22	16.0	8.5	4.0	10.0	8.5	12.0	15.5	19.5	24.0	25.0	25.0	15.5
23	15.5	8.5	6.5	9.5	9.5	12.0	18.5	24.0	25.0	25.0	22.0	15.0
24	18.5	9.5	5.5	6.0	8.5	11.5	19.0	21.0	25.0	25.5	21.0	13.5
25	14.5	8.5	5.0	7.0	8.0	12.0	20.0	21.0	24.5	25.0	21.5	14.0
26	14.5	9.0	6.5	7.0	8.5	11.5	19.5	22.0	24.5	28.0	23.0	15.0
27	15.5	8.5	3.5	7.0	8.5	13.0	20.5	22.0	24.5	26.0	24.0	19.0
28	14.0	6.5	6.0	6.5	9.5	14.5	21.0	21.5	24.0	---	22.0	19.5
29	14.0	6.0	6.5	7.0	---	14.5	20.0	22.0	24.0	25.5	23.0	20.0
30	14.0	7.0	9.0	6.5	---	15.0	18.5	21.5	24.0	25.5	24.5	19.0
31	12.0	---	8.0	7.0	---	16.0	---	21.5	---	25.0	25.0	---
MONTH	17.5	11.0	7.0	6.0	8.5	13.5	16.0	20.5	23.0	25.0	24.5	20.5

RIO GRANDE BASIN

08414000 PECOS RIVER NEAR MENTONE, TEX.

LOCATION.--Lat 31°40'07", long 103°37'34", Loving County, at bridge on State Highway 302 and 3.0 miles (4.8 km) southwest of Mentone.

DRAINAGE AREA.--21,650 mi² (56,070 km²), approximately (contributing area).

PERIOD OF RECORD.--Chemical analyses: October 1968 to September 1974.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED SODIUM PLUS POTAS- SIUM (K) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HC03) (MG/L)	CAR- BONATE (C03) (MG/L)
OCT. 03...	1845	55	4.5	460	130	--	1200	--	34	0
NOV. 14...	1440	12	.0	750	340	--	3200	--	52	0
DEC. 11...	1220	47	8.6	280	110	2300	--	64	113	0
JAN. 09...	1435	32	8.8	540	190	2300	--	55	127	0
FEB. 20...	1440	31	.4	590	220	2300	--	61	84	0
APR. 04...	1305	42	1.1	600	250	2200	--	67	82	0
MAY 16...	1310	36	.1	580	220	2100	--	65	52	0
JUNE 17...	1445	36	.9	500	200	2200	--	81	46	0
JULY 30...	1745	53	.0	760	290	3300	--	120	56	0
SEP. 12...	1015	66	.1	740	250	2900	--	89	45	0

DATE	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	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)
OCT. 03...	1400	2000	.2	5250	1700	1700	13	8190	6.8	23.0
NOV. 14...	2400	5400	.3	12100	3300	3300	--	17200	6.9	18.0
DEC. 11...	1900	3000	--	7720	1200	1100	29	12100	7.9	7.0
JAN. 09...	2100	3300	--	8560	2100	2000	22	12800	7.8	6.0
FEB. 20...	2300	3700	--	9210	2400	2300	21	13600	7.6	14.0
APR. 04...	2200	3600	--	8960	2500	2500	19	13400	7.3	17.0
MAY 16...	2000	3400	--	8390	2400	2300	19	12600	7.0	23.5
JUNE 17...	2000	3400	--	8410	2100	2000	21	12700	6.6	28.0
JULY 30...	2600	5600	--	12700	3100	3000	26	18700	7.5	30.0
SEP. 12...	2400	4800	--	11200	2900	2800	24	16600	7.4	20.0

RIO GRANDE BASIN

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08435600 PAISANO CREEK NEAR ALPINE, TEX.

LOCATION.--Lat 30°21'30", long 103°42'48", Brewster County, on right bank 200 ft (61 m) upstream from bridge on Farm Road 1703 and 3.4 miles (5.5 km) west of Alpine.

DRAINAGE AREA.--27.9 mi² (72.3 km²).

PERIOD OF RECORD.--Chemical analyses: May 1972 to September 1974.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO ₂) (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 (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)
MAY									
09...	1200	8.9	16	6.5	1.4	.7	4.3	20	0
AUG.									
11...	2030	31	20	22	2.2	2.1	6.6	84	0
21...	0630	8.2	21	11	.9	1.2	4.6	35	0
21...	0700	5.2	--	--	--	--	--	62	0
21...	0730	1.3	--	--	--	--	--	42	0
25...	0700	18	28	38	3.5	2.1	4.9	135	0
25...	0730	1600	--	--	--	--	--	108	0
25...	0800	1490	--	--	--	--	--	102	0

DATE	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	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)
MAY									
09...	2.5	2.2	43	22	6	.1	49	6.4	17.0
AUG.									
11...	3.4	2.4	100	64	0	.1	144	7.3	14.0
21...	3.2	6.5	66	31	2	.1	73	6.9	18.0
21...	--	--	--	--	--	--	122	6.9	19.0
21...	--	--	--	--	--	--	91	7.0	19.0
25...	4.9	4.5	152	110	0	.1	324	7.0	17.0
25...	--	--	--	--	--	--	185	7.4	19.0
25...	--	--	--	--	--	--	180	7.8	19.0

RIO GRANDE BASIN

08435620 ALPINE CREEK AT ALPINE, TEX.

LOCATION.--Lat 30°21'06", long 103°40'00", Brewster County, on left bank at low-water crossing at Avenue G in Alpine.

DRAINAGE AREA.--18.1 mi² (46.9 km²).

PERIOD OF RECORD.--Chemical analyses: October 1972 to September 1974.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTAN- TANEOUS 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 (HC03) (MG/L)	CAR- BONATE (C03) (MG/L)
SEP.									
18...	--	4.8	15	11	1.8	2.1	3.5	44	0
20...	1500	500	--	--	--	--	--	44	0
24...	1250	6.2	--	--	--	--	--	45	0
25...	1045	6.3	28	22	3.8	5.6	4.2	66	0
26...	0915	1.2	34	41	6.8	10	5.7	106	0

DATE	DIS- SOLVED SULFATE (S04) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	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)
SEP.									
18...	4.5	1.1	61	35	0	.2	103	7.1	19.0
20...	--	--	--	--	--	--	101	7.0	20.0
24...	--	--	--	--	--	--	118	7.1	13.0
25...	17	5.8	119	71	16	.3	183	7.0	13.0
26...	30	16	196	130	43	.4	336	7.8	13.5

RIO GRANDE BASIN

695

08435660 WEST MOSS CREEK NEAR ALPINE, TEX.

LOCATION.--Lat 30°20'10", long 103°38'24", Brewster County, on right bank 0.3 mile (0.5 km) upstream from State Highway 118 and 1.8 miles (2.9 km) south of Alpine.

DRAINAGE AREA.--11.3 mi² (29.3 km²).

PERIOD OF RECORD.--Chemical analyses: May 1972 to September 1974.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SI02) (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)
JULY									
11...	1330	13	--	--	--	--	--	48	0
AUG.									
25...	1415	280	28	30	4.2	6.0	3.4	135	0
25...	1445	230	--	--	--	--	--	126	0
25...	1530	122	--	--	--	--	--	88	0
26...	1600	38	17	12	2.1	1.5	3.0	47	0
26...	1635	84	--	--	--	--	--	110	0
26...	1720	62	--	--	--	--	--	56	0
SEP.									
18...	1615	7.5	--	--	--	--	--	36	0
20...	1230	257	17	18	2.9	2.6	3.1	64	0
20...	1430	84	--	--	--	--	--	54	0
20...	1600	26	--	--	--	--	--	50	0

DATE	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	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)
JULY									
11...	--	1.0	--	56	17	--	142	7.2	24.0
AUG.									
25...	2.6	1.7	142	92	0	.3	215	7.7	18.0
25...	--	--	--	--	--	--	225	7.5	20.0
25...	--	--	--	--	--	--	175	7.4	23.0
26...	2.2	.8	62	39	0	.1	85	7.0	19.0
26...	--	--	--	--	--	--	184	7.6	20.0
26...	--	--	--	--	--	--	104	7.2	20.0
SEP.									
18...	--	--	--	--	--	--	84	6.8	20.0
20...	7.3	2.0	84	57	4	.2	134	7.3	19.0
20...	--	--	--	--	--	--	120	7.3	21.0
20...	--	--	--	--	--	--	118	6.8	24.0

RIO GRANDE BASIN

08446500 PECOS RIVER NEAR GIRVIN, TEX.

LOCATION.--Lat 31°06'40", Long 102°25'00", Pecos County, at gaging station 2.4 miles (3.9 km) upstream from Comanche Creek, 2.6 miles (4.2 km) northwest of Girvin, and 7.8 miles (12.6 km) upstream from bridge on Highway 67.

DRAINAGE AREA.--29,560 mi² (76,560 km²), approximately (contributing area).

PERIOD OF RECORD.--Chemical analyses: October 1939 to June 1941, October 1946 to September 1947, October 1953 to September 1974.

Pesticide analyses: October 1968 to September 1974.

Water temperatures: October 1953 to January 1959, March 1964 to September 1974.

EXTREMES.--October 1973 to September 1974:

Specific conductance: Maximum daily, 29,500 micromhos Aug. 11; minimum daily, 1,500 micromhos Sept. 19.

Water temperatures: Maximum, 32.0°C July 23; minimum, 4.0°C Jan. 3-5.

Period of record:

Specific conductance: Maximum daily, 38,900 micromhos Aug. 6, 1965; minimum daily, 790 micromhos Apr. 26, 1957.

Water temperatures (1953-59, 1964-68, 1970-74): Maximum, 34.0°C July 21, 1971; minimum, 3.0°C Feb. 3, 4, 1956.

REMARKS.--For information on diversions and return flows, see REMARKS paragraph in Part 1 of this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	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)	DIS- SOLVED SULFATE (SO ₄) (MG/L)
OCT.										
30...	1400	12	.0	720	430	3100	47	69	0	3300
NOV.										
13...	1350	17	.1	720	540	3600	76	72	0	3500
DEC.										
10...	1345	18	2.9	870	490	3700	71	117	0	3600
JAN.										
07...	1325	37	7.7	820	400	3600	60	169	0	3200
FEB.										
26...	1300	21	.3	770	460	3500	56	181	0	3400
MAR.										
14...	1600	14	1.0	810	530	3800	60	138	0	3500
APR.										
01...	1240	16	.5	810	560	4100	60	83	0	3600
MAY										
14...	1320	9.9	5.4	600	320	2400	38	61	0	2200
JUNE										
21...	1500	6.2	6.1	930	570	4500	94	65	0	4300
JULY										
31...	1545	4.7	6.5	1100	790	5600	110	77	0	5400
AUG.										
31...	1330	27	1.5	640	360	2700	30	64	0	2600
SEP.										
30...	1230	491	10	170	29	270	11	114	0	400

DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	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)
OCT.									
30...	5000	--	12500	3600	3500	23	17800	6.8	21.0
NOV.									
13...	5500	--	14000	4000	4000	25	19300	7.4	17.0
DEC.									
10...	6200	.05	15000	4200	4100	25	20800	8.0	8.0
JAN.									
07...	5900	--	14100	3700	3600	26	20200	7.9	7.0
FEB.									
26...	5500	--	13800	3800	3700	25	19200	7.8	8.0
MAR.									
14...	6200	--	14500	2100	2000	36	21100	7.1	18.0
APR.									
01...	6900	--	16100	4300	4300	27	22200	7.4	18.0
MAY									
14...	4400	--	9990	2800	2800	20	14000	7.5	26.0
JUNE									
21...	7100	--	17500	4700	4600	29	23600	6.8	29.0
JULY									
31...	9000	.16	22000	6000	5900	31	28400	7.4	31.0
AUG.									
31...	4200	--	10600	3100	3000	21	15300	7.0	29.0
SEP.									
30...	380	.09	1330	540	450	5.0	2290	8.3	20.0

RIO GRANDE BASIN

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08446500 PECOS RIVER NEAR GIRVIN, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	ALDRIN (UG/L)	DDD (UG/L)	DDE (UG/L)	DDT (UG/L)	DI- ELDRIN (UG/L)	ENDRIN (UG/L)	HEPTA- CHLOR (UG/L)	HEPTA- CHLOR EPOXIDE (UG/L)
OCT. 02...	1625	21	26.0	.00	.00	.00	.00	.00	.00	.00	.00
FEB. 26...	1300	21	8.0	.00	.00	.00	.00	.00	.00	.00	.00
JUNE 21...	1600	--	--	.00	.00	.00	.00	.00	.00	.00	.00
JULY 31...	1545	4.7	31.0	.00	.00	.00	.00	.00	.00	.00	.00

DATE	LINDANE (UG/L)	CHLOR- DANE (UG/L)	PCB (UG/L)	DI- AZINON (UG/L)	MALA- THION (UG/L)	METHYL PARA- THION (UG/L)	PARA- THION (UG/L)	2,4-D (UG/L)	SILVEX (UG/L)	2,4,5-T (UG/L)
OCT. 02...	.00	.0	.0	.00	.00	.00	.00	.00	.00	.00
FEB. 26...	.00	.0	.0	.00	.00	.00	.00	.00	.02	.00
JUNE 21...	.00	.0	.0	.00	.00	.00	.00	.00	.00	.00
JULY 31...	.00	.0	.0	.00	.00	.00	.00	.00	.00	.00

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

MONTH	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCT- ANCE (MICRO- MHOS)	DIS- SOLVED SOLIDS (MG/L)	DIS- SOLVED SOLIDS (TONS)	DIS- SOLVED CHLORIDE (MG/L)	DIS- SOLVED CHLORIDE (TONS)	DIS- SOLVED SULFATE (MG/L)	DIS- SOLVED SULFATE (TONS)	HARDNESS (CA, MG) (MG/L)
OCT. 1973.....	424	16800	12000	13700	4600	5270	2800	3210	3300
NOV. 1973.....	389	19000	14000	14700	5500	5780	3200	3360	3800
DEC. 1973.....	834	20200	14000	31500	5900	13300	3500	7880	4000
JAN. 1974.....	1156	17400	12000	37500	4900	15300	2900	9050	3500
FEB. 1974.....	832	17500	12000	27000	4900	11000	2900	6510	3500
MAR. 1974.....	603	21200	15000	24400	6300	10300	3700	6020	4200
APR. 1974.....	721	21300	15000	29200	6300	12300	3700	7210	4300
MAY 1974.....	561	13200	9300	14100	3300	5010	2000	3030	2600
JUNE 1974.....	231	20800	15000	9370	6100	3810	3600	2250	4200
JULY 1974.....	172	27100	20000	9300	8500	3950	5000	2330	5500
AUG. 1974.....	683	20500	15000	27700	6000	11100	3600	6640	4100
SEPT 1974.....	5449	5970	3900	57400	590	8680	430	6330	1100
TOTAL	12057	**	**	296000	**	106000	**	63800	**
WTD.AVG.	33	13100	9100	**	3200	**	2000	**	2600

RIO GRANDE BASIN

08446500 PECOS RIVER NEAR GIRVIN, TEX.--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	17400	18100	20000	18300	16600	19900	22100	7210	17100	26200	28900	14900
2	17300	18100	20200	18400	16600	20300	23100	9300	17100	26000	29100	11700
3	17000	17900	20000	18900	16800	20300	23400	11400	16500	26000	28300	14900
4	16600	18200	20200	19600	16600	20400	23700	12800	17300	26700	28500	16000
5	14900	18300	20200	20700	16900	20500	23900	12800	17400	27000	28900	17100
6	14100	18500	20400	20800	17000	20400	23900	12200	17300	26700	28500	16900
7	15900	18200	20200	19400	16900	20500	24100	11300	17600	27000	28900	15500
8	15600	18300	20200	18400	16900	20600	23900	10900	18400	26900	27700	14900
9	16100	18700	20400	17700	16900	20500	24100	10600	18900	26000	29100	15000
10	17200	18700	20600	17300	16800	20800	24300	10800	18800	27000	27200	15900
11	18200	19000	20300	17000	16900	20600	24800	12000	19400	27300	29500	17400
12	18400	18900	20100	16800	17200	21000	25000	12600	20200	27500	28900	18100
13	18400	18900	20500	16700	17300	21200	24700	13800	20400	27300	25600	19200
14	18200	19000	20500	16600	17500	21100	24000	14200	21100	27600	23600	20000
15	17900	19100	20500	16600	17600	21200	23900	14300	21400	27900	20700	21000
16	17600	19200	20500	16600	17600	21400	23600	14000	22200	28200	20100	21500
17	17800	19000	20500	16600	17800	21600	23000	13900	22200	27900	19900	22000
18	17800	19000	20500	16600	18100	21700	22500	14000	22700	27800	19900	23300
19	17600	19500	20700	16700	18200	21800	21600	15500	23200	28200	19700	1500
20	17700	19100	20200	16800	18400	21800	21800	16200	23800	27900	19700	5170
21	17700	19600	19600	16800	18600	21300	22500	16100	23400	25700	19400	6340
22	18300	19300	19800	16900	18400	21900	23500	15700	23800	27000	19300	6610
23	18000	19300	20200	16800	18600	21800	23200	15400	24000	27000	19200	8350
24	18200	19300	20500	16500	18900	21600	23200	15100	24300	26600	18100	7250
25	18200	19400	21000	16400	19100	22400	23100	14900	24600	26600	18000	9100
26	18200	19500	20600	16500	19300	21700	23000	15100	25100	26600	15600	10800
27	18000	19500	20000	16200	19300	20700	22900	15400	25300	26600	14500	11700
28	17900	19500	20400	16200	19600	20900	22700	15500	24500	26900	13000	10700
29	17900	19900	20400	16500	---	21400	20700	15900	26000	27800	14000	3680
30	17800	19800	19300	16400	---	21600	11300	16200	26700	27400	13600	2290
31	---	---	18900	16500	---	21900	---	16600	---	28500	15400	---
MONTH	17400	18960	20240	17360	17730	21120	22920	13600	21360	27100	22350	13290

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	28.0	21.0	13.0	6.0	12.0	12.0	18.0	23.0	28.0	27.0	29.0	31.0
2	28.0	20.0	12.0	8.0	15.0	16.0	20.0	---	29.0	26.0	30.0	28.0
3	28.0	21.0	11.0	4.0	13.0	19.0	21.0	26.0	25.0	27.0	29.0	28.0
4	24.0	23.0	13.0	4.0	11.0	18.0	20.0	29.0	27.0	---	26.0	---
5	22.0	17.0	10.0	4.0	15.0	21.0	20.0	25.0	23.0	28.0	24.0	23.0
6	24.0	18.0	8.0	5.0	12.0	22.0	20.0	26.0	29.0	26.0	25.0	29.0
7	24.0	19.0	10.0	---	11.0	22.0	22.0	27.0	25.0	29.0	28.0	28.0
8	26.0	19.0	12.5	---	11.0	19.0	22.0	24.0	30.0	25.0	25.0	29.0
9	26.0	18.0	11.0	---	9.0	22.0	21.0	21.0	29.0	30.0	30.0	30.0
10	26.0	18.0	10.0	---	11.0	22.0	23.0	26.0	24.0	30.0	26.0	29.0
11	25.0	18.5	15.0	---	10.0	21.0	20.0	27.0	29.0	28.0	30.0	30.0
12	24.0	18.0	15.0	5.0	14.0	22.0	21.0	24.0	29.0	29.0	30.0	24.0
13	24.0	21.0	14.0	10.0	15.0	23.0	17.0	29.0	29.0	27.0	29.0	25.0
14	23.0	19.0	13.0	13.0	15.0	18.0	19.0	29.0	30.0	27.0	30.0	---
15	23.0	18.0	10.0	10.0	17.0	23.0	20.0	29.0	27.0	29.0	25.0	23.0
16	24.0	16.0	10.0	15.0	16.0	23.0	19.0	26.0	30.0	30.0	28.0	25.0
17	23.0	18.0	12.0	17.0	18.0	22.0	20.0	28.0	29.0	30.0	26.0	24.0
18	22.0	17.0	14.0	15.0	17.0	24.0	19.0	28.0	28.0	29.0	26.0	24.0
19	22.0	15.0	10.0	14.0	17.0	23.0	24.0	28.0	27.0	29.0	25.0	20.0
20	23.0	17.0	7.0	15.0	---	22.0	24.0	28.0	29.0	29.0	30.0	21.0
21	19.0	14.0	7.0	16.0	12.0	18.0	24.0	26.0	29.0	28.0	29.0	20.0
22	20.0	20.0	11.0	15.0	14.0	22.0	21.0	29.0	30.0	31.0	30.0	17.0
23	20.0	18.0	10.0	7.0	14.0	18.0	22.0	25.0	30.0	32.0	24.0	17.0
24	23.0	15.0	---	9.0	11.0	17.0	25.0	29.0	27.0	30.0	29.0	15.0
25	23.0	---	11.0	9.0	11.0	18.0	24.0	29.0	26.0	30.0	28.0	15.0
26	21.0	15.0	9.0	14.0	10.0	20.0	22.0	27.0	28.0	30.0	27.0	23.0
27	19.0	13.0	11.0	14.0	12.0	20.0	27.0	28.0	29.0	27.0	27.0	24.0
28	20.0	14.0	12.0	14.0	15.0	20.0	24.0	26.0	26.0	31.0	27.0	20.0
29	20.0	13.0	13.0	13.0	---	15.0	23.0	30.0	23.0	25.0	28.0	23.0
30	21.0	14.0	14.0	13.0	---	16.0	22.0	26.0	23.0	24.0	29.0	20.0
31	---	---	9.0	11.0	---	---	---	30.0	---	31.0	29.0	---
MONTH	23.0	17.5	11.5	11.0	13.5	20.0	21.5	27.0	27.5	28.5	27.5	24.0

RIO GRANDE BASIN

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08447000 PECOS RIVER NEAR SHEFFIELD, TEX.

LOCATION.--Lat 30°39'34", long 101°46'11", Pecos County, at bridge on U.S. Highway 290, 3.5 miles (5.6 km) southeast of Sheffield, and 4 miles (6 km) upstream from Live Oak Creek.

DRAINAGE AREA.--31,600 mi² (81,800 km²), approximately (contributing area).

PERIOD OF RECORD.--Chemical analyses: November 1939 to June 1941, October 1946 to September 1947, October 1968 to September 1974.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	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 SODIUM PLUS POTAS- SIUM (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)
OCT. 04...	1310	26	7.2	330	170	--	1300	--	176	0
NOV. 14...	1245	21	11	420	220	--	1600	--	210	0
DEC. 12...	1145	26	6.9	500	290	2000	--	30	152	0
JAN. 21...	1500	43	4.5	580	330	2700	--	48	198	0
APR. 10...	1605	19	6.9	470	270	2000	--	30	190	0
30...	1130	618	8.2	73	9.1	74	--	6.8	170	0
MAY 23...	1135	12	7.1	370	230	1500	--	20	198	0
AUG. 05...	1335	6.7	16	220	120	710	--	13	208	0
SEP. 23...	1630	5400	9.0	130	27	200	--	9.7	129	0
30...	1300	1600	17	540	300	1900	--	13	248	0

DATE	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	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)
OCT. 04...	1200	2100	.4	5230	1500	1400	15	8130	7.5	24.0
NOV. 14...	1400	2700	.5	6490	1900	1800	--	10100	6.9	21.0
DEC. 12...	1800	3500	--	8200	2400	2300	18	12300	8.0	12.0
JAN. 21...	2300	4100	--	10200	2800	2600	22	15300	7.8	13.0
APR. 10...	1900	3400	--	8170	2300	2100	18	12100	7.7	20.0
30...	71	120	--	446	220	80	2.2	829	7.4	12.0
MAY 23...	1400	2600	--	6220	1900	1700	15	9620	7.7	26.5
AUG. 05...	610	1300	--	3090	1000	870	9.6	5040	7.5	20.5
SEP. 23...	270	320	--	1030	440	330	4.2	1790	7.7	21.0
30...	1800	3100	--	7790	2600	2400	16	11700	7.5	22.0

RIO GRANDE BASIN

08447410 PECOS RIVER NEAR LANGTRY, TEX.

LOCATION.--Lat 29°48'10", long 101°26'45", at gaging station 7.5 miles (12.1 km) east of Langtry, 15.0 river miles (24.1 km) upstream from confluence with the Rio Grande, and 638.2 river miles (1,026.9 km) downstream from the American Dam at El Paso.

DRAINAGE AREA.--35,179 mi² (91,114 km²).

PERIOD OF RECORD.--Chemical analyses: October 1954 to September 1974.

REMARKS.--Records of specific conductance and discharge for water year 1974 are given in International Boundary and Water Commission Water Bulletins Nos. 43 and 44.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	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)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
OCT.									
01-31	--	124	52	333	7.6	180	0	326	548
NOV.									
01-30	--	130	58	364	6.6	180	0	350	602
DEC.									
01-31	--	136	62	382	6.8	192	0	352	630
JAN.									
01-31	--	160	80	510	8.7	178	0	540	820
FEB.									
01-28	--	170	92	610	9.9	168	0	630	980
MAR.									
01-31	--	170	78	560	12	162	0	580	940
MAY									
01-31	14	140	56	390	8.5	176	0	360	650
JUNE									
01-30	15	120	53	360	9.5	164	0	340	590
JULY									
01-31	15	120	56	360	7.3	152	0	310	590
AUG.									
01-31	16	120	53	340	7.5	164	0	320	570
SEP.									
01-30	5.7	61	14	85	4.3	140	0	90	140

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	TOTAL FILT- RABLE RESIDUE (MG/L)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)
OCT.									
01-31	--	--	150	1630	524	376	6.3	2580	7.2
NOV.									
01-30	--	--	180	1840	563	420	6.7	2780	7.5
DEC.									
01-31	--	--	210	1930	594	437	6.8	2890	7.4
JAN.									
01-31	--	.76	250	2540	730	580	8.2	3730	7.8
FEB.									
01-28	--	.64	290	2870	800	670	9.4	4210	7.8
MAR.									
01-31	--	.19	270	2590	750	610	8.9	4070	7.4
MAY									
01-31	--	.41	240	1080	580	440	7.0	3000	7.6
JUNE									
01-30	--	.18	220	1730	520	380	6.9	2850	7.8
JULY									
01-31	--	.18	240	1730	530	410	6.8	2770	8.1
AUG.									
01-31	.8	.49	220	1560	520	380	6.5	2530	7.8
SEP.									
01-30	--	.89	80	513	210	95	2.6	862	8.2

RIO GRANDE BASIN

701

08450900 RIO GRANDE BELOW AMISTAD DAM, NEAR DEL RIO, TEX.

LOCATION.--Lat 29°25'00", long 101°02'00", 2.2 river miles (3.5 km) downstream from Amistad Dam and 10 miles (16 km) northwest of Del Rio.

PERIOD OF RECORD.--Chemical analyses: July 1968 to September 1974.

REMARKS.--The flow is controlled largely by releases from Amistad Reservoir. Records of daily mean discharge for water year 1974 are given in International Boundary and Water Commission Water Bulletins Nos. 43 and 44.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	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 (HC03) (MG/L)	CAR- BONATE (C03) (MG/L)	DIS- SOLVED SULFATE (S04) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
OCT. 01-31	--	68	15	93	4.9	166	0	188	82
NOV. 01-30	--	98	13	83	3.2	186	0	200	87
DEC. 01-31	--	82	14	89	4.1	170	0	183	94
JAN. 01-31	--	80	14	88	4.2	164	0	200	82
FEB. 01-28	--	76	14	88	4.3	152	0	190	85
MAR. 01-31	--	75	15	92	5.6	157	0	190	82
APR. 01-30	--	70	16	91	4.8	160	0	170	83
MAY 01-31	17	68	17	94	5.1	156	0	180	86
JUNE 01-30	16	66	15	93	5.9	152	0	190	87
JULY 01-31	17	70	14	110	3.0	148	0	200	90
AUG. 01-31	18	66	16	100	5.4	148	0	210	90
SEP. 01-30	15	62	14	82	5.6	140	0	180	72

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	TOTAL FILT- RABLE RESIDUE (MG/L)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)
OCT. 01-31	--	--	160	566	231	95	2.7	891	7.3
NOV. 01-30	--	--	140	635	298	146	2.1	958	7.7
DEC. 01-31	--	--	160	597	262	122	2.4	931	7.4
JAN. 01-31	--	.08	170	588	260	120	2.4	905	7.7
FEB. 01-28	--	.13	180	590	250	120	2.4	909	8.0
MAR. 01-31	--	.04	180	558	250	120	2.4	905	7.6
APR. 01-30	--	.01	180	562	240	110	2.6	909	7.8
MAY 01-31	--	.01	160	569	240	110	2.6	920	7.4
JUNE 01-30	--	.00	180	578	230	100	2.7	922	7.7
JULY 01-31	--	.01	220	593	230	110	3.1	928	8.0
AUG. 01-31	.9	.05	200	603	230	110	2.9	941	7.7
SEP. 01-30	--	.22	150	522	210	98	2.4	819	8.0

RIO GRANDE BASIN

08459000 RIO GRANDE AT LAREDO, TEX.
(National stream-quality accounting network)

LOCATION.--Lat 27°29'45", long 99°29'30", at gaging station 1.1 miles (1.8 km) downstream from the highway bridge between Laredo, Tex., and Nuevo Laredo, Tamaulipas, Mex., and 891.0 river miles (1,434 km) downstream from the American Dam at El Paso.

DRAINAGE AREA.--135,976 mi² (352,178 km²), United States and Mexico; from International Boundary and Water Commission Water Bulletin No. 31.

PERIOD OF RECORD.--Chemical analyses: July 1955 to September 1974.
Chemical and biochemical analyses: January 1973 to September 1974.
Sediment analyses: January 1973 to September 1974.

REMARKS.--Records of discharge for water year 1974 are given in International Boundary and Water Commission Water Bulletins Nos. 43 and 44.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SI02) (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 (HC03) (MG/L)	CAR- BONATE (C03) (MG/L)	DIS- SOLVED SULFATE (S04) (MG/L)
OCT.										
01-31	--	6070	--	--	--	61	--	186	0	--
23...	1140	7350	15	80	13	72	3.7	180	0	160
NOV.										
01-30	--	1280	--	--	--	81	--	170	0	--
12...	1140	1250	15	80	18	73	2.9	194	0	160
DEC.										
01-31	--	835	--	76	19	77	2.5	170	0	168
10...	1130	858	13	79	20	69	2.9	184	0	160
JAN.										
01-31	--	810	--	76	21	86	--	156	0	--
14...	1200	802	7.3	91	21	90	3.0	189	0	206
FEB.										
01-28	--	706	--	77	24	100	--	140	0	--
19...	1230	459	7.1	85	24	100	3.1	168	0	230
MAR.										
01-31	--	3010	--	75	18	96	5.3	163	0	210
20...	1500	1590	16	78	16	94	4.8	171	0	190
APR.										
01-30	--	1010	--	71	20	110	--	140	0	--
22...	1300	908	16	81	20	100	4.4	170	0	220
MAY										
01-31	--	3550	--	77	17	92	--	161	0	--
22...	1000	2030	17	73	17	93	4.6	164	0	190
JUNE										
01-30	--	1790	--	69	17	100	--	156	0	--
24...	1400	1100	19	69	17	100	5.7	142	0	210
JULY										
01-31	--	948	--	76	17	110	--	152	0	--
22...	1100	968	18	73	19	110	5.6	139	0	220
AUG.										
01-31	--	1730	--	70	16	91	--	150	0	--
26...	1130	1110	18	72	19	99	5.1	148	0	210
SEP.										
01-30	--	20450	18	67	14	83	6.0	152	0	170
23...	1115	39000	16	53	14	77	6.5	142	0	150

RIO GRANDE BASIN

703

08459000 RIO GRANDE AT LAREDO, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	DIS- SOLVED KJEL- NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)
OCT.										
01-31	63	--	--	--	--	--	--	--	--	--
23...	72	.6	.50	.00	.00	.20	.20	--	.14	--
NOV.										
01-30	84	--	--	--	--	--	--	--	--	--
12...	80	.3	1.0	.00	.04	.13	.17	--	.04	--
DEC.										
01-31	80	--	--	--	--	--	--	.60	--	--
10...	83	.4	.60	.00	.00	.09	.09	--	.00	496
JAN.										
01-31	94	--	--	--	--	--	--	--	--	--
14...	96	--	.60	.00	.08	.19	.27	--	.02	--
FEB.										
01-28	110	--	--	--	--	--	--	--	--	--
19...	110	--	.28	.00	.14	.15	.29	--	.06	672
MAR.										
01-31	93	--	--	--	--	--	--	--	--	--
20...	94	--	.47	.01	.06	.38	.44	--	.07	596
APR.										
01-30	110	--	--	--	--	--	--	--	--	--
22...	100	--	.16	.01	.08	.21	.29	--	.08	655
MAY										
01-31	88	--	--	--	--	--	--	--	--	--
22...	88	--	.24	.00	.02	.69	.71	--	.15	590
JUNE										
01-30	97	--	--	--	--	--	--	--	--	--
24...	93	--	.06	.00	.10	.57	.67	--	.07	594
JULY										
01-31	100	--	--	--	--	--	--	--	--	--
22...	100	--	--	--	--	--	--	--	--	641
AUG.										
01-31	88	--	--	--	--	--	--	--	--	--
26...	94	--	.13	.00	.11	.80	.91	--	.09	631
SEP.										
01-30	75	--	--	--	--	--	--	--	--	--
23...	67	--	.32	.01	.14	.96	1.1	--	.26	480

DATE	DIS- SOLVED SOLIDS (SUM OF CONSTITU- ENTS) (MG/L)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)	VOL. NON- FILT- RABLE RESIDUE (MG/L)	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)	COLOR (PLAT- INUM- COBALT UNITS)
OCT.										
01-31	--	--	--	216	64	1.8	723	7.7	--	--
23...	511	--	--	250	110	2.0	835	7.7	23.0	--
NOV.										
01-30	--	--	--	248	108	2.2	874	7.7	--	--
12...	527	--	--	270	110	1.9	858	7.9	21.0	--
DEC.										
01-31	509	--	--	268	128	2.0	888	7.2	--	--
10...	523	--	--	280	130	1.8	867	7.9	14.5	--
JAN.										
01-31	--	--	--	280	150	2.3	949	7.6	--	--
14...	632	--	--	310	160	2.2	986	7.6	12.5	--
FEB.										
01-28	--	--	--	290	180	2.6	1040	7.7	--	--
19...	644	28	7	310	180	2.5	1070	7.9	18.0	5
MAR.										
01-31	--	--	--	260	130	2.6	966	7.7	--	--
20...	577	--	--	260	120	2.5	958	7.9	23.0	--
APR.										
01-30	--	--	--	260	140	3.0	1020	7.6	--	--
22...	627	50	9	290	150	2.6	1030	7.6	26.0	--
MAY										
01-31	--	--	--	260	130	2.5	940	7.3	--	--
22...	563	98	8	250	120	2.5	932	7.9	28.0	0
JUNE										
01-30	--	--	--	240	110	2.8	990	7.7	--	--
24...	585	54	7	240	130	2.8	954	7.9	30.5	5
JULY										
01-31	--	--	--	260	140	3.0	1060	8.1	--	--
22...	614	--	--	260	150	3.0	965	7.6	29.0	--
AUG.										
01-31	--	--	--	240	120	2.6	913	7.8	--	--
26...	592	--	--	260	140	2.7	943	7.9	28.5	--
SEP.										
01-30	510	--	--	230	100	2.4	839	8.0	--	--
23...	454	305	42	190	74	2.4	732	7.2	23.0	--

RIO GRANDE BASIN

08459000 RIO GRANDE AT LAREDO, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)	TOTAL PHYTO- PLANK- TON (CELLS PER ML)	IMME- DIATE COLI- FORM (COL. PER 100 ML)	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCOCI (COL- ONIES PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT.									
01-31	--	--	--	--	--	--	--	--	--
23...	60	8.4	97	.3	66	22000	160	170	--
NOV.									
01-30	--	--	--	--	--	--	--	--	--
12...	25	8.6	96	.4	25	8200	120	140	2.5
DEC									
01-31	--	--	--	--	--	--	--	--	--
10...	2	9.6	93	.5	5800	5000	210	200	--
JAN.									
01-31	--	--	--	--	--	--	--	--	--
14...	6	10.2	95	.6	2300	5000	26	32	--
FEB.									
01-28	--	--	--	--	--	--	--	--	--
19...	15	8.9	94	1.1	900	14000	130	160	.0
MAR.									
01-31	--	--	--	--	--	--	--	--	--
20...	40	7.7	89	.5	1000	11000	540	350	--
APR.									
01-30	--	--	--	--	--	--	--	--	--
22...	30	8.1	99	.8	61	--	--	--	2.0
MAY									
01-31	--	--	--	--	--	--	--	--	--
22...	55	7.6	96	.8	1300	1900	160	130	--
JUNE									
01-30	--	--	--	--	--	--	--	--	--
24...	50	7.7	101	.8	710	27000	68	710	3.4
JULY									
01-31	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	310	--	--	--	--
AUG.									
01-31	--	--	--	--	--	--	--	--	--
26...	45	7.3	94	1.1	120	10000	210	280	5.1
SEP.									
01-30	--	--	--	--	--	--	--	--	--
23...	200	3.8	44	1.7	150	350000	5000	5800	--

DATE	TIME	DIS-SOLVED ALUM- INUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	DIS-SOLVED BORON (B) (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 COBALT (CO) (UG/L)
DEC. 01-31	--	--	--	--	200	--	--	--	--	--
FEB. 19...	1230	20	0	0	260	20	0	0	0	<50
MAR. 01-31	--	--	--	--	210	--	--	--	--	--
APR. 22...	1300	--	4	3	240	<10	0	20	20	<50
JUNE 24...	1400	50	4	3	210	<10	1	0	0	<50
AUG. 26...	1130	20	4	4	210	<10	0	0	0	<50
SEP. 01-30	--	--	--	--	200	--	--	--	--	--

[illegible]

RIO GRANDE BASIN

705

08459000 RIO GRANDE AT LAREDO, TEX.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	DIS- SOLVED MERCURY (HG) (UG/L)	DIS- SOLVED NICKEL (NI) (UG/L)	TOTAL SELE- NIUM (SE) (UG/L)	DIS- SOLVED SELE- NIUM (SE) (UG/L)	DIS- SOLVED STRON- TIUM (SR) (UG/L)	TOTAL ZINC (ZN) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)
DEC. 01-31	--	--	--	--	--	--	--	--	--
FEB. 19...	0	.0	.0	2	2	1	1900	20	10
MAR. 01-31	--	--	--	--	--	--	--	--	--
APR. 22...	0	.0	.0	0	1	--	1600	70	0
JUNE 24...	20	.3	.0	0	2	1	1300	20	0
AUG. 26...	0	.0	.0	1	2	1	1500	20	0
SFP. 01-30	--	--	--	--	--	--	--	--	--

DATE	TIME	TEMPER- ATURE (DEG C)	SUS- PENDE SEDI- MENT (MG/L)	SUS- PENDE SEDI- MENT DIS- CHARGE (T/DAY)	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM
OCT. 23...	1140	23.0	193	3830	91
NOV. 12...	1140	21.0	69	233	93
JAN. 14...	1200	12.5	29	63	--
FEB. 19...	1230	18.0	15	19	--
MAR. 20...	1500	23.0	116	498	89
APR. 22...	1300	26.0	89	218	98
MAY 22...	1000	28.0	142	778	83
JUNE 24...	1400	30.5	2	5.9	33
JULY 22...	1100	29.0	59	154	84
AUG. 26...	1130	28.5	76	228	99

08459000 RIO GRANDE AT LAREDO, TEX.--Continued

Apr. 22, 1974 Time - 1300

Phytoplankton Total count = 61 cells/ml

Codominants PercentCocconeis 50
Navicula 38Other organisms identified

Gomphonema 13

May 22, 1974 Time - 1000

Phytoplankton Total count = 1300 cells/ml

Codominants Percent

Navicula 67

Other organisms identifiedSynedra 11
Scenedesmus 9
Cyclotella 7
Nitzschia 4
Kirchneriella 2

June 24, 1974 Time - 1400

Phytoplankton Total count = 710 cells/ml

Codominants PercentCyclotella 63
Navicula 21Other organisms identifiedScenedesmus 11
Synedra 5

July 22, 1974 Time - 1100

Phytoplankton Total count = 310 cells/ml

Codominants PercentNavicula 67
Cyclotella 24Other organisms identifiedCymbella 5
Ankistrodesmus 5

Aug. 26, 1974 Time - 1130

Phytoplankton Total count = 120 cells/ml

Codominants PercentCyclotella 30
Navicula 20
Synedra 20Other organisms identifiedGomphonema 10
Gyrosigma 10
Scenedesmus 10

Sept. 23, 1974 Time - 1115

Phytoplankton Total count = 150 cells/ml

Codominants PercentCyclotella 69
Achnanthes 15Other organisms identifiedNitzschia 8
Ankistrodesmus 8

RIO GRANDE BASIN

707

08459000 RIO GRANDE AT LAREDO, TEX.--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	998	905	847	970	934	932	949	1010	941	1040	1040	892
2	988	874	859	870	1120	935	966	990	935	1040	1060	802
3	975	895	866	877	1190	912	989	983	953	1050	1060	948
4	965	---	832	928	1100	954	990	871	959	1050	1060	621
5	969	963	842	910	1080	951	997	905	984	1040	1050	697
6	719	961	874	964	1030	948	997	914	1010	1040	1060	865
7	460	984	868	918	1030	883	989	944	1000	1050	1010	909
8	347	922	828	949	972	947	1010	945	1010	1050	559	911
9	538	915	786	879	1010	934	999	915	1000	1040	561	940
10	542	855	848	876	1020	953	992	929	985	1060	970	955
11	633	847	873	945	951	939	1050	933	967	1070	1000	961
12	681	858	833	979	1050	942	1080	913	975	1070	951	950
13	723	868	862	952	1070	926	1080	960	933	1070	1010	961
14	741	884	863	959	1000	825	1010	961	944	1060	951	902
15	705	837	862	981	1000	972	978	977	949	1060	935	894
16	691	869	829	991	1010	1020	992	959	934	1050	955	919
17	757	835	873	992	1070	1060	1030	948	1040	1050	997	942
18	849	793	880	922	1070	967	1040	963	1110	1050	988	945
19	913	785	847	912	1010	962	1050	927	982	1060	888	947
20	882	838	880	891	1060	968	1070	904	982	1070	---	946
21	824	792	900	946	1090	978	1070	966	990	1060	759	588
22	849	772	908	998	1090	1020	1070	966	974	1060	861	768
23	831	770	912	971	1070	1090	1000	951	982	1050	908	782
24	868	813	905	962	1130	1050	1020	937	977	1040	972	855
25	881	824	919	977	1060	1060	1050	958	997	1060	991	826
26	877	808	931	980	1120	1030	1020	920	1000	1070	999	885
27	876	837	928	980	1030	1060	1030	920	1030	1060	919	854
28	798	854	865	996	999	1020	1030	935	1030	1050	1000	866
29	872	855	941	967	---	1040	989	956	1040	1050	1010	849
30	896	812	949	976	---	956	997	947	1040	1050	897	834
31	909	---	938	988	---	952	---	935	---	1050	770	---
MONTH	792	856	876	949	1050	974	1020	943	988	1050	940	867

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	26.5	23.0	25.0	24.5	26.5	26.0	26.5	25.0	25.0	23.0	23.5	26.5
2	26.5	23.0	24.0	24.5	27.0	26.0	27.0	25.0	25.0	23.0	23.5	26.5
3	28.0	23.5	23.0	24.5	27.0	26.0	27.0	25.5	25.0	23.0	23.5	27.5
4	26.5	---	23.0	24.5	27.0	26.0	27.0	25.5	25.0	23.5	23.5	26.5
5	27.5	23.5	23.0	24.5	27.5	26.0	27.0	25.5	25.0	23.5	23.5	27.5
6	---	23.5	23.0	24.5	27.5	26.0	26.5	25.5	25.0	23.5	23.5	26.0
7	---	23.5	23.0	24.5	27.0	26.0	26.5	25.5	25.0	23.5	23.5	26.0
8	---	23.5	23.0	24.5	27.0	26.0	26.5	25.0	25.0	23.5	23.5	26.0
9	---	23.0	24.0	24.5	27.0	26.0	27.0	25.0	25.0	23.5	23.5	24.0
10	25.5	23.0	24.0	24.5	27.0	26.0	27.0	25.0	25.0	23.5	23.5	25.0
11	26.5	23.5	22.5	24.5	27.0	26.0	27.5	25.5	25.0	23.5	23.5	26.0
12	25.5	---	22.5	24.0	27.5	26.0	27.5	25.5	25.0	23.5	23.5	25.5
13	25.0	23.5	22.0	24.0	28.0	26.0	27.5	25.5	25.0	23.5	23.5	25.0
14	24.0	23.5	22.0	24.0	28.0	26.0	27.5	25.5	25.0	23.5	23.5	24.0
15	23.5	23.5	22.0	24.0	28.0	26.0	27.5	25.5	25.0	23.5	23.5	24.0
16	25.5	23.5	22.5	24.0	28.0	26.0	27.0	25.5	25.0	23.5	23.5	23.5
17	22.0	23.0	24.0	24.0	27.5	26.0	27.0	25.5	25.0	23.5	23.5	25.0
18	18.5	23.0	23.0	24.0	27.5	26.0	27.0	25.5	25.0	23.5	23.5	24.5
19	---	23.5	22.5	24.0	27.5	26.0	27.5	25.5	25.0	23.5	23.5	24.5
20	23.5	23.5	22.5	24.0	27.0	26.0	27.5	25.0	25.0	23.5	---	25.0
21	23.5	23.5	22.5	24.0	27.0	26.0	27.5	25.0	25.0	23.5	23.5	24.0
22	---	23.5	22.0	24.0	27.5	26.0	27.5	25.5	25.0	23.5	23.5	23.0
23	22.0	23.5	22.5	24.0	27.5	26.0	27.0	25.5	25.0	23.5	23.5	23.5
24	22.0	23.5	23.0	24.0	27.5	26.0	27.0	25.5	25.0	23.5	23.5	24.0
25	23.0	23.0	24.5	24.5	27.5	26.0	27.0	25.5	25.0	23.5	23.5	25.5
26	23.0	23.0	24.0	24.5	27.5	26.0	27.0	25.5	25.0	23.5	23.5	23.5
27	23.0	23.5	24.0	24.5	27.5	26.0	27.0	25.5	25.0	23.5	23.5	23.0
28	23.0	23.5	23.5	24.5	27.5	26.0	27.0	25.5	25.0	23.5	23.5	23.0
29	23.0	23.5	23.5	24.5	---	26.0	27.0	25.5	25.0	23.5	23.5	23.0
30	24.0	23.5	23.5	24.5	---	26.0	27.0	25.0	25.0	23.5	23.5	23.0
31	---	---	23.5	24.5	---	26.0	---	25.0	---	23.5	23.5	---
MONTH	---	23.5	23.0	24.5	27.5	26.0	27.0	25.5	25.0	23.5	23.5	25.0

08461300 RIO GRANDE BELOW FALCON DAM, TEX.

LOCATION.--Lat 26°33'25", long 99°10'05", U.S. Tailrace at Falcon Dam.

DRAINAGE AREA.--164,482 mi² (426,008 km²), United States and Mexico; from International Boundary and Water Commission Water Bulletin No. 31.

PERIOD OF RECORD.--Chemical analyses: July 1955 to September 1974.

REMARKS.--Records of specific conductance and discharge for water year 1974 are given in International Boundary and Water Commission Water Bulletins Nos. 43 and 44.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	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)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
OCT.									
01-31	--	70	22	108	4.7	132	0	234	114
NOV.									
01-30	--	72	22	104	4.5	126	0	227	110
DEC.									
01-31	--	71	21	104	4.6	132	0	218	112
FEB.									
01-28	--	75	21	100	4.8	136	0	220	110
MAR.									
01-31	--	79	21	110	5.5	137	0	240	110
APR.									
01-30	--	74	21	110	4.8	140	0	220	110
MAY									
01-31	11	77	23	110	5.4	138	0	230	120
JUNE									
01-30	11	75	22	110	4.9	140	0	230	110
JULY									
01-31	11	78	21	120	4.5	136	0	250	120
AUG.									
01-31	12	78	24	120	5.7	134	0	270	120
SEP.									
01-30	11	77	25	120	6.6	128	0	280	120

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	TOTAL FILT- RABLE RESIDUE (MG/L)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)
OCT.									
01-31	--	--	240	652	265	157	2.9	1030	7.3
NOV.									
01-30	--	--	220	637	270	166	2.8	1010	7.6
DEC.									
01-31	--	--	240	637	264	156	2.8	1010	7.6
FEB.									
01-28	--	.20	270	668	270	160	2.6	1030	7.9
MAR.									
01-31	--	.08	340	667	280	170	2.8	1050	7.5
APR.									
01-30	--	.02	280	655	270	160	2.9	1050	7.6
MAY									
01-31	--	.02	270	669	290	170	2.8	1070	7.3
JUNE									
01-30	--	.01	260	697	280	160	2.9	1090	7.8
JULY									
01-31	--	.02	300	732	280	170	3.1	1130	8.0
AUG.									
01-31	.6	.08	300	736	290	180	3.0	1140	7.7
SEP.									
01-30	--	.11	270	762	300	190	3.0	1160	7.9

08464700 RIO GRANDE AT FORT RINGGOLD, RIO GRANDE CITY, TEX.

LOCATION.--Lat 26°22'05", long 98°48'20", Starr County, at gaging station about 1 mile (2 km) downstream from Rio Grande City, 3.9 miles (6.3 km) downstream from mouth of Rio San Juan, and 1,014.3 river miles (1,632.0 km) downstream from the American Dam at El Paso.

DRAINAGE AREA.--180,396 mi² (467,226 km²), United States and Mexico; from International Boundary and Water Commission Water Bulletin No. 31.

PERIOD OF RECORD.--Chemical analyses: January 1959 to September 1974.

REMARKS.--Records of specific conductance and discharge for water year 1974 are given in International Boundary and Water Commission Water Bulletins Nos. 43 and 44.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	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 (HC03) (MG/L)	CAR- BONATE (C03) (MG/L)	DIS- SOLVED SULFATE (S04) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
OCT. 01-31	--	72	18	80	3.9	164	0	174	86
NOV. 01-30	--	70	16	70	2.9	164	0	145	79
DEC. 01-31	--	76	19	86	3.2	156	0	180	100
JAN. 01-31	--	74	21	100	4.6	146	0	230	110
FEB. 01-28	--	77	22	110	4.9	140	0	230	120
MAR. 01-31	--	77	21	120	5.6	142	0	230	140
APR. 01-30	--	77	21	110	5.3	140	0	230	120
MAY 01-31	11	74	22	110	5.3	142	0	230	120
JUNE 01-30	12	76	23	110	4.9	140	0	240	120
JULY 01-31	12	78	21	130	6.0	140	0	250	130
AUG. 01-31	12	78	24	120	5.5	136	0	260	130
SEP. 01-30	11	77	25	130	6.7	136	0	270	130

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	TOTAL FILT- RABLE RESIDUE (MG/L)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)
OCT. 01-31	--	--	170	539	254	119	2.2	858	7.4
NOV. 01-30	--	--	170	521	240	106	2.0	815	7.6
DEC. 01-31	--	--	230	589	268	140	2.3	931	7.4
JAN. 01-31	--	.17	270	653	270	150	2.6	1020	7.7
FEB. 01-28	--	.03	280	684	280	170	2.8	1050	7.9
MAR. 01-31	--	.19	320	710	280	160	3.1	1130	7.8
APR. 01-30	--	.05	280	692	280	160	2.9	1090	7.7
MAY 01-31	--	.01	290	687	280	160	2.9	1110	7.3
JUNE 01-30	--	.02	280	715	280	170	2.8	1120	7.6
JULY 01-31	--	.01	320	755	280	170	3.4	1170	8.1
AUG. 01-31	.6	.02	300	753	290	180	3.0	1150	7.7
SEP. 01-30	--	.01	290	772	300	180	3.3	1180	8.0

08469200 RIO GRANDE AT ANZALDUAS DAM, TEX.

LOCATION.--Lat 26°08'00", long 98°20'05", Hidalgo County, at gaging station 0.5 mile (0.8 km) downstream from Anzalduas Dam, 12.2 miles (19.6 km) from Hidalgo, and 1,077.1 river miles (1,733.1 km) downstream from the American Dam at El Paso.

DRAINAGE AREA.--182,138 mi² (471,737 km²), United States and Mexico; from International Boundary and Water Commission Water Bulletin No. 31.

PERIOD OF RECORD.--Chemical analyses: March 1959 to September 1974.
Pesticide analyses: October 1968 to September 1971.

REMARKS.--Records of specific conductance and discharge for water year 1974 are given in International Boundary and Water Commission Water Bulletins Nos. 43 and 44.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	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 (HC03) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
OCT. 01-31	--	76	20	110	4.2	152	0	202	129
NOV. 01-30	--	86	21	123	3.4	174	0	196	167
DEC. 01-31	--	85	23	117	3.4	180	0	197	155
FEB. 01-28	--	81	24	130	5.1	144	0	250	150
MAR. 01-31	--	90	24	160	5.9	148	0	270	190
APR. 01-30	--	86	25	160	5.3	152	0	270	180
MAY 01-31	12	78	24	130	5.6	139	0	240	140
JUNE 01-30	12	85	25	150	5.4	148	0	270	160
JULY 01-31	12	85	22	150	6.1	144	0	260	170
AUG. 01-31	12	78	24	130	5.7	138	0	240	140
SEP. 01-30	11	82	26	140	6.8	142	0	280	150

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	TOTAL FILT- RABLE RESIDUE (MG/L)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)
OCT. 01-31	--	--	260	662	272	148	2.9	1060	7.2
NOV. 01-30	--	--	300	751	301	158	3.1	1180	7.7
DEC. 01-31	--	--	280	726	306	159	2.9	1160	7.5
FEB. 01-28	--	.17	340	772	300	180	3.3	1170	7.9
MAR. 01-31	--	.23	400	850	320	200	3.9	1360	7.8
APR. 01-30	--	.02	410	842	320	190	3.9	1360	7.7
MAY 01-31	--	.02	340	741	290	180	3.3	1200	7.3
JUNE 01-30	--	.01	350	843	320	190	3.7	1330	7.6
JULY 01-31	--	.10	420	872	300	180	3.8	1360	8.1
AUG. 01-31	.6	.12	350	773	290	180	3.3	1190	7.8
SEP. 01-30	--	.10	330	818	310	200	3.5	1260	7.8

RIO GRANDE BASIN

711

08470200 NORTH FLOODWAY NEAR SEBASTIAN, TEX.

LOCATION.--Lat 26°18'51", long 97°46'36", Cameron County, at International Boundary and Water Commission gaging station on U.S. Highway 77 and approximately 2 miles (3 km) south of Sebastian.

PERIOD OF RECORD.--Sediment records: February 1966 to September 1974.

REMARKS.--Records of discharge are given in International Boundary and Water Commission Water Bulletins Nos. 43 and 44.

MONTHLY AND ANNUAL SUMMARY OF WATER AND SUSPENDED-SEDIMENT DISCHARGE

WATER YEAR, OCTOBER 1973 TO SEPTEMBER 1974

DATE	DISCHARGE (CFS-DAYS)	MEAN WEIGHTED SUSPENDED SEDIMENT CONCENTRATION (MG/L)	SUSPENDED SEDIMENT DISCHARGE (TONS)
OCT. 1973...	9477	336	8610
NOV.	5513	384	5710
DEC.	3888	365	3830
JAN. 1974...	4535	266	3260
FEB.	4863	235	3080
MAR.	5522	321	4800
APR.	6718	318	5760
MAY.	5220	370	5150
JUNE.	3996	311	3360
JULY.	3321	256	2300
AUG.	3183	278	2390
SEP.	16870	342	15600
TOTAL.	73106	323	63800

RIO GRANDE BASIN

08470300 ARROYO COLORADO FLOODWAY AT EL FUSTE SIPHON, SOUTH OF MERCEDES, TEX.

LOCATION.--Lat 26°07'45", long 97°54'45", at International Boundary and Water Commission gaging station, 50 ft (15 m) upstream from Mercedes Canal Fuste Siphon on Arroyo Colorado, approximately 1.4 miles (2.3 km) downstream from Arroyo Colorado heading on the main floodway, and 1.5 miles (2.4 km) south of Mercedes.

PERIOD OF RECORD.--Chemical analyses: November 1967 to February 1968.

Pesticide analyses: May 1968 to September 1973.

Sediment records: February 1966 to September 1974.

REMARKS.--Records of discharge are given in International Boundary and Water Commission Water Bulletins Nos. 43 and 44.

MONTHLY AND ANNUAL SUMMARY OF WATER AND SUSPENDED-SEDIMENT DISCHARGE

WATER YEAR, OCTOBER 1973 TO SEPTEMBER 1974

DATE	DISCHARGE (CFS-DAYS)	MEAN WEIGHTED SUSPENDED SEDIMENT CONCENTRATION (MG/L)	SUSPENDED SEDIMENT DISCHARGE (TONS)
OCT. 1973...	4519.9	160	1950
NOV.	3647.4	142	1400
DEC.	3630.5	137	1340
JAN. 1974...	3480.0	127	1190
FEB.	3426.1	135	1250
MAR.	5290.1	123	1760
APR.	5768.3	182	2840
MAY.	3593.9	156	1510
JUNE.	3868.4	149	1560
JULY.	4189.3	176	1990
AUG.	2825.1	130	990
SEP.	7464.9	190	3820
TOTAL.	51703.9	155	21600

08475000 RIO GRANDE NEAR BROWNSVILLE, TEX.

LOCATION.--Lat 25°52'35", long 97°27'15", Cameron County, at International Boundary and Water Commission gaging station, 1,000 ft (300 m) downstream from El Jardin pumping plant, 6.8 river miles (10.9 km) below International Bridge between Brownsville, Texas and Matamoras, Tamps., and 48.8 river miles (78.5 km) above the Gulf of Mexico.

PERIOD OF RECORD.--Chemical analyses: October 1967 to January 1968.

Specific conductance: April 1967 to October 1969, October 1970 to September 1974.

Water temperatures: October 1966 to September 1969, October 1970 to September 1974.

Sediment records: February 1966 to September 1974.

EXTREMES.--October 1973 to September 1974:

Specific conductance: Maximum daily, 2,210 micromhos Apr. 6; minimum daily, 746 micromhos Oct. 3.

Sediment concentrations: Maximum daily, 1,220 mg/l Sept. 26, 27; minimum daily, 11 mg/l Jan. 4.

Sediment loads: Maximum daily, 30,800 tons Sept. 27; minimum daily, 1.30 tons May 29.

Period of record:

Specific conductance (1967-69, 1970-74): Maximum daily, 4,130 micromhos May 29, 1972; minimum daily, 337 micromhos Sept. 3, 1967.

Water temperatures (1966-69, 1970-73): Maximum, 33.0°C on several days during August 1968, August and September 1973; minimum, 8.0°C Jan. 10, 1967.

Sediment concentrations: Maximum daily, 3,560 mg/l Sept. 16, 1971; minimum daily, 4 mg/l Apr. 26, 1970.

Sediment loads: Maximum daily, 83,500 tons Sept. 16, 1971; minimum daily, 0.58 tons Apr. 30, 1970.

REMARKS.--Records of discharge furnished by International Boundary and Water Commission.

WATER QUALITY DATA, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TEMPERATURE (DEG C)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM
OCT.							
02...	1635	13900	27.0	648	24300	85	92
03...	0940	13500	27.0	503	18300	91	95
18...	0600	13900	27.0	401	15000	98	99

DATE	SUS. SED. SIEVE DIAM. % FINER THAN .250 MM	SUS. SED. SIEVE DIAM. % FINER THAN .002 MM	SUS. SED. SIEVE DIAM. % FINER THAN .004 MM	SUS. SED. SIEVE DIAM. % FINER THAN .008 MM	SUS. SED. SIEVE DIAM. % FINER THAN .016 MM	SUS. SED. SIEVE DIAM. % FINER THAN .031 MM
OCT.						
02...	100	55	59	63	69	72
03...	100	64	66	76	78	85
18...	100	52	64	75	89	96

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	810	1200	1110	1290	1190	1620	1860	1600	1480	1690	1880	---
2	986	1230	1340	1300	1410	1510	1590	1840	---	1720	1970	1940
3	746	1200	1210	1300	1370	1500	1860	1840	1390	1710	1910	1290
4	877	1220	1210	1310	1370	1380	1890	1410	1230	1690	---	1370
5	885	1370	1200	1300	1390	1590	2120	---	1300	1820	1780	1420
6	973	1300	1210	---	1420	1570	2210	1650	1330	1530	1550	1420
7	973	1310	1200	1300	1580	1570	---	1280	1390	---	1640	1540
8	973	1290	1190	1150	1580	1470	2030	1280	1400	1250	1920	---
9	986	1310	1230	1240	1580	1500	1940	1340	1200	1260	1450	1410
10	991	---	1200	1360	---	---	1780	1340	1200	1520	1440	1430
11	938	---	1250	1200	1370	1490	2030	1360	1220	1390	---	1460
12	930	1230	1220	1340	1410	1470	2010	---	1200	1500	1340	1490
13	942	1170	1200	1390	1520	1450	2070	1570	1150	1560	1360	1500
14	934	1060	1150	1310	1530	1530	---	1700	1140	---	1360	1490
15	955	1050	1120	1310	1720	1510	1450	1670	1180	1560	1360	1470
16	1020	1060	---	1160	1630	1420	1250	1700	---	1580	1360	1470
17	1030	1060	1020	1150	1370	---	1300	1650	1260	1580	1350	1430
18	1030	1070	1000	1150	1380	---	1320	1730	1310	1700	---	1430
19	1030	966	1050	1240	1390	1310	1350	---	1310	1840	1250	1470
20	880	962	1230	1370	1440	1260	1190	1650	1550	1820	1420	1520
21	891	1020	1370	1240	1460	1370	1090	1540	1510	---	1290	1270
22	982	1070	1400	1140	1380	1270	1340	1460	1730	1820	1380	---
23	1010	1110	1180	1140	1370	1300	1290	1840	---	1730	1420	1270
24	1080	1070	1190	1100	---	---	1270	1600	1540	1640	---	1280
25	1080	1090	1210	1100	1400	1840	1390	1650	1600	1830	---	1480
26	1000	1160	1270	1130	1520	1910	1340	---	1470	1890	1280	1480
27	1030	1100	1230	1130	1620	1910	1380	1810	1730	2180	1360	1240
28	1070	1160	1290	1130	1620	1660	---	1810	1870	---	1420	1220
29	1120	1100	1290	1130	---	1740	1450	1790	1900	1850	1460	1190
30	1160	1100	---	1200	---	1670	1560	1660	---	1830	1380	1200
31	1180	---	1300	1140	---	---	---	1590	---	1800	---	---
MONTH	984	1140	1210	1230	1460	1530	1610	1610	1410	1680	1490	1410

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCTOBER			NOVEMBER			DECEMBER		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	13900	770	28900	3460	550	5140	1150	180	559
2	13900	540	20300	3030	560	4580	1270	140	480
3	13500	550	20000	2470	700	4670	1480	90	360
4	13100	520	18400	2330	520	3270	1410	90	343
5	12700	420	14400	2490	260	1750	1120	90	272
6	12400	370	12400	2750	220	1630	890	100	240
7	12100	380	12400	2870	190	1470	822	110	244
8	12100	440	14400	2510	250	1690	828	100	224
9	12300	510	16900	2250	570	3460	876	110	260
10	12300	520	17300	2150	610	3540	724	100	195
11	11100	510	15300	2540	520	3570	521	110	155
12	10400	510	14300	2850	420	3230	466	130	164
13	10800	510	14900	2850	330	2540	756	140	286
14	11900	540	17400	2660	220	1580	826	260	580
15	12900	640	22300	2390	210	1360	805	340	739
16	13500	460	16800	2260	190	1160	1290	330	1150
17	13700	470	17400	2210	200	1190	1570	250	1060
18	13900	420	15800	2260	220	1340	1430	210	811
19	13800	470	17500	2280	300	1850	884	170	406
20	13100	420	14900	2220	310	1860	421	120	136
21	11600	390	12200	1990	220	1180	249	280	188
22	9710	620	16300	1800	170	826	278	290	218
23	7860	680	14400	1770	170	812	877	370	876
24	6450	540	9400	1900	180	923	1240	400	1340
25	5670	440	6740	1820	170	835	1340	330	1190
26	5250	370	5240	1590	140	601	1330	120	431
27	4930	490	6520	1740	130	611	1110	30	90
28	4740	480	6140	1780	130	625	770	30	62
29	4580	400	4950	1520	150	616	517	22	31
30	4240	590	6750	1260	160	544	357	20	19
31	3830	750	7760	--	--	--	328	21	19
TOTAL	322260	--	438400	68000	--	58453	27935	--	13128
DAY	JANUARY			FEBRUARY			MARCH		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	339	15	14	208	100	56	82	47	10
2	359	20	19	184	46	23	119	52	17
3	533	21	30	217	50	29	113	50	15
4	684	11	20	269	68	49	111	43	13
5	695	22	41	420	75	85	187	95	48
6	400	20	22	429	78	90	255	46	32
7	458	21	26	189	67	34	104	79	22
8	543	80	117	113	25	7.6	59	130	21
9	493	130	173	109	43	13	81	97	21
10	286	130	100	137	50	18	107	100	29
11	101	110	30	154	76	32	88	150	36
12	76	51	10	132	54	19	168	83	38
13	108	50	15	148	83	33	227	99	61
14	659	53	94	98	42	11	137	65	24
15	738	41	82	51	57	7.8	176	69	33
16	563	28	43	65	64	11	173	85	40
17	394	39	41	285	43	33	186	100	50
18	294	40	32	456	48	59	214	120	69
19	192	20	10	325	92	81	568	130	199
20	108	22	6.4	200	110	59	1080	87	254
21	185	22	11	102	40	11	619	66	110
22	455	39	48	114	36	11	144	120	47
23	584	66	104	152	130	53	166	62	28
24	671	67	121	144	150	58	344	70	65
25	802	86	186	229	160	99	318	70	60
26	862	93	216	162	44	19	293	44	35
27	754	100	204	93	58	15	260	50	35
28	952	110	283	62	55	9.2	294	91	72
29	619	100	167	--	--	--	283	55	42
30	631	100	170	--	--	--	429	86	100
31	531	110	158	--	--	--	422	86	98
TOTAL	15069	--	2593.4	5247	--	1025.6	7807	--	1724

08475000 RIO GRANDE NEAR BROWNSVILLE, TEX.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	APRIL			MAY			JUNE		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	489	86	114	225	110	67	79	70	15
2	370	90	90	134	100	36	746	350	705
3	193	100	52	78	160	34	1220	550	1810
4	141	154	59	152	140	57	987	380	1010
5	141	210	80	246	100	66	456	160	197
6	125	79	27	352	72	68	157	70	30
7	108	100	29	531	51	73	91	57	14
8	115	150	47	659	54	96	139	63	24
9	243	220	174	598	67	108	137	80	30
10	177	210	100	319	48	41	339	110	101
11	88	310	74	211	41	23	788	98	209
12	166	200	90	180	40	19	1100	140	416
13	263	170	121	92	44	11	645	58	101
14	207	140	78	55	63	9.4	283	58	44
15	333	120	108	57	77	12	891	100	241
16	605	100	163	45	54	6.6	1270	480	1650
17	440	90	107	34	43	3.9	1430	290	1120
18	165	66	29	37	73	7.3	779	330	694
19	151	60	24	67	60	11	211	180	103
20	1120	390	1180	120	44	14	93	110	28
21	2450	290	1920	465	68	85	65	110	19
22	2290	480	2970	202	47	26	66	40	7.1
23	805	290	630	41	57	6.3	154	140	58
24	207	130	73	24	44	2.9	236	140	89
25	93	140	35	21	42	2.4	243	100	66
26	121	100	33	20	43	2.3	176	170	81
27	332	140	125	15	44	1.8	116	32	10
28	304	130	107	17	40	1.8	62	70	12
29	227	130	80	9.0	52	1.3	47	41	5.2
30	136	120	44	19	70	3.6	61	40	6.6
31	--	--	--	28	59	4.5	--	--	--
TOTAL	12655	--	8763	5053.0	--	901.1	13067	--	8895.9

DAY	JULY			AUGUST			SEPTEMBER		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	86	41	9.5	42	100	11	207	100	56
2	83	98	22	33	65	5.8	296	64	51
3	115	45	14	63	70	12	197	68	36
4	83	43	9.6	184	66	33	100	55	15
5	85	45	10	178	66	32	54	100	15
6	333	84	76	230	69	43	19	110	5.6
7	571	90	139	131	66	23	12	68	2.2
8	801	100	216	36	53	5.2	94	70	18
9	311	58	49	35	72	6.8	138	76	28
10	122	100	33	86	74	17	76	60	12
11	83	100	22	133	70	25	54	100	15
12	71	45	8.6	167	60	27	52	57	8.0
13	71	59	11	146	60	24	80	45	9.7
14	80	60	13	105	63	18	107	56	16
15	117	58	18	67	59	11	130	70	25
16	108	130	38	70	65	12	225	86	52
17	87	62	15	76	65	13	195	68	36
18	71	57	11	81	70	15	193	61	32
19	54	89	13	113	71	22	145	60	23
20	51	71	9.8	142	62	24	116	35	11
21	61	89	15	253	110	75	133	75	27
22	65	89	16	101	140	38	207	70	39
23	76	64	13	43	140	16	383	74	77
24	108	59	17	71	110	21	588	172	293
25	81	76	17	146	150	59	3070	1000	6880
26	67	63	11	125	110	37	6610	1220	21400
27	69	50	9.3	93	100	25	9350	1220	30800
28	77	60	12	45	91	11	10800	960	28000
29	110	64	19	29	140	11	11300	750	22900
30	119	63	20	29	96	7.5	11500	600	18600
31	91	76	19	98	100	26	--	--	--
TOTAL	4307	--	905.8	3151	--	706.3	56431	--	129482.5

TOTAL DISCHARGE FOR YEAR (CFS-DAYS)

TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS)

540982.0

664978.6

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