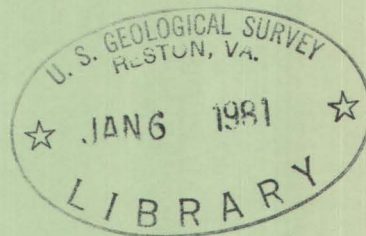


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Water Resources Data for New Mexico

Part 2. Water Quality Records



UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Prepared in cooperation with the State of New Mexico
and with other agencies

JANUARY 1972

S	M	T	W	T	F	S
						1
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MARCH 1972

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APRIL 1972

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MAY 1972

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JUNE 1972

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JULY 1972

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30	31					

AUGUST 1972

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

SEPTEMBER 1972

S	M	T	W	T	F	S
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OCTOBER 1972

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

NOVEMBER 1972

S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
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DECEMBER 1972

S	M	T	W	T	F	S
					1	2
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1972

Water Resources Data

for

New Mexico

Part 2. Water Quality Records



UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

**Prepared in cooperation with the State of New Mexico
and with other agencies**

Prepared in cooperation with

New Mexico Office of the State Engineer
New Mexico Interstate Stream Commission
New Mexico Institute of Mining and Technology
Pecos River Commission
New Mexico Environmental Improvement Agency
Bureau of Reclamation, U.S. Department of the
Interior
Soil Conservation Service, U.S. Department of
Agriculture
Corps of Engineers, U.S. Army

Streamflow records for New Mexico are contained
in the companion volume to this report. It is
entitled: Water Resources Data for New Mexico,
1972, Part 1. Surface Water Records

Copies of this report may be obtained from the
District Chief, Water Resources Division
U.S. Geological Survey
P. O. Box 4369
Albuquerque, New Mexico 87106

1975

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

V

*(Letters after station name designate type of data: (c) chemical,
(s) sediment, (b) biological, (k) daily specific conductance,
(t) daily water temperature)*

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WATER RESOURCES DATA FOR NEW MEXICO, 1972

Part 2. Water-Quality Records

INTRODUCTION

Water-resources investigations of the U.S. Geological Survey include the collection of water-quality data on the chemical and physical characteristics of surface- and ground-water supplies of the Nation. The data for the 1972 calendar year for the quality of surface and selected ground waters in New Mexico are presented in this report. These data represent the New Mexico portion of the National Water Data System. Data for a few water-quality stations in bordering States are also included. These data were collected by the Water Resources Division of the U.S. Geological Survey under the direction of W. E. Hale, New Mexico District Chief.

New Mexico District personnel directly involved in the collection and organization of the data in this report were: Kim Ong, supervisory chemist; Jack D. Dewey, supervisory hydraulic engineer; Richard L. Lepp, biologist; Joseph E. O'Neill, chemist; Miko Lyon, hydrologist; David E. Funderburg, engineering technician; Bruce M. Delaney, engineering technician; Trancito Diaz, engineering technician; Robert M. McBreen, physical science technician; Emilio Pargas, engineering aid; Linda V. Beal, card punch operator; Gerald Young, hydrologic aid; Charles L. Coon, hydrologic aid; Bruce L. Lewis, hydrologic aid; Barbara L. Christy, hydrologic aid; Mary Nunez, hydrologic aid; Joyce M. Brooks, hydrologic aid; and Ralph C. Newcomer, hydrologic aid. Also, numerous other District personnel and individuals outside the District helped indirectly with this report. Appreciation is expressed to them although their names are not listed for practical reasons.

Water-quality information is presented for chemical quality, aquatic biology, water temperatures, 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. Biological data include coliform bacteria, streptococci bacteria, and benthic organisms. Water-temperature data represent once-daily observations except for stations where a continuous temperature recorder furnishes information from which daily maximum, minimum, and mean values are obtained. Fluvial-sediment information is given for suspended-sediment discharges and concentrations, total sediment discharges, and for particle size distribution of suspended sediment and bed material.

The Geological Survey, beginning with the 1941 water year, has published an annual series of water-supply papers, "Quality of Surface Waters of the United States," which contained the chemical-quality, temperature, and sediment data of the water. Each volume covered an area whose boundaries coincided with those of certain natural drainage areas. The records for New Mexico are contained in Parts 7, 8, and 9 of the water-supply paper series. (See table 4, p. 18.) These publications are available in most public libraries. Beginning with the 1964 water year, water-quality records for surface and ground water have been released by the Geological Survey on a state boundary basis. This report is one of such reports and is primarily for local and immediate use, and its distribution is limited. The 1964 through 1970 reports were published on a water year basis. The 1971 report was both a calendar year and water year report. Subsequent reports are published on a calendar basis. Records in this report will be published later in Geological Survey water-supply papers.

Prior to the 1968 water year, data for chemical constituents and concentration of suspended sediment were reported in parts per million (ppm) and water temperatures were reported in degrees Fahrenheit (°F). In October 1967 the U.S. Geological Survey began to use the metric system; data for chemical constituents and concentrations of suspended sediment are now reported in milligrams per litre (mg/l) or micrograms per litre (ug/l) and water temperatures are given in degrees Celsius (centigrade, °C). In waters with a density of 1.000 grams per millilitre (g/ml), parts per million and milligrams per litre can be considered equal. In waters with a density greater than 1.000 g/ml, values in milligrams per litre may be converted to parts per million by dividing by the density. (See section in this report on "Collection and Examination of Data" for further information.)

COOPERATION

Data in this report were obtained as part of the Federal program of the U.S. Geological Survey or in cooperation with the following State, Interstate, or Federal Agencies:

New Mexico State Engineer, S. E. Reynolds.

New Mexico Interstate Stream Commission, S. E. Reynolds,
secretary.

New Mexico Institute of Mining and Technology,
S. A. Colgate, president.

Pecos River Commission, H. M. Babcock, Federal representative
and chairman, J. B. Walker, commissioner for New Mexico,
Mr. R. B. McGowen, commissioner for Texas.

New Mexico Environmental Improvement Agency
Bureau of Reclamation, U.S. Department of the Interior.
Soil Conservation Service, U.S. Department of Agriculture.
Corps of Engineers, U.S. Army.

DEFINITION OF TERMS

Terms related to water-quality and hydrologic data, as used in this report are defined as follows:

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

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

Benthic organisms are aquatic bottom-dwelling organisms which include such animals as sponges, oysters, insects, snails, clams, and worms.

Biochemical oxygen demand (BOD) is the amount of oxygen required by bacteria while stabilizing decomposable organic matter under aerobic conditions.

Cfs-day is the volume of water represented by a flow of 1 cubic foot per second for 24 hours. It is equivalent to 86,400 cubic feet, 1.983471 acre-feet, or 646,317 gallons, and represents a runoff of 0.0372 inches from 1 square mile.

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

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

Composite-period is the time interval in which samples collected during that period are combined into a single composite sample. The chemical analysis and other measurements made on the composite sample are assumed to be representative of the entire period. The composite periods in this report vary from one day to one month and are based upon changes in the specific conductances of daily samples and/or changes in daily discharges. In this report "sampling period" and "composite period" are used interchangeably.

Cubic foot per second (CFS, cfs) is the rate of discharge representing a volume of 1 cubic foot passing a given point during 1 second and is equivalent to 7.48 gallons per second or 448.8 gallons per minute.

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

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

Instantaneous discharge is the discharge at a particular instant of time. If this discharge is reported instead of the daily mean, the heading of the discharge column in the tables is "Discharge (cfs)."

Discharge-weighted average, (see weighted average).

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

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

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

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

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

Micrograms per litre (UG/L, ug/l) is a unit for 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.

Milliequivalents per litre (ME/L, me/l) is a unit for expressing chemical equivalent concentrations of ions or constituents in solution. Concentrations in milligrams per litre are converted to milliequivalents per litre by multiplying by the appropriate factors in table 1, page 6. The factors are reciprocals of equivalent weights and are calculated by dividing the valences by the atomic or formula weights. The term "milliequivalents" is a contraction of the more precise term "milligram equivalents."

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 per litre may be converted to parts per million (ppm) by dividing by the density in grams per millilitre. 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 6.

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

Particle size is the diameter, in millimeters (mm), of suspended sediment or bed material determined either by sieve or sedimentation methods. Sedimentation methods (pipet, 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). Fall diameter of a particle is the diameter of a quartz sphere that would fall in water at the same rate as the particle under the same settling conditions.

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

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

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

Picocurie per litre (PC/L, pCi/l) is one trillionth (1×10^{-12}) of the amount of radioactivity represented by a curie (C or Ci). A curie is the amount of radioactivity that yields 3.7×10^{10} radioactive disintegrations per second. A picocurie yields 2.22 disintegrations per minute.

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

<u>Ion</u>	<u>Multi- ply by</u>	<u>Ion</u>	<u>Multi- ply by</u>
Aluminum (Al^{+3}) *....	0.11119	Iodide (I^{-1})	0.00788
Ammonia as NH_4^{+1} ....	.05544	Iron (Fe^{+3}) *.....	.05372
Barium (Ba^{+2}) .....	.01456	Lead (Pb^{+2}) *.....	.00965
Bicarbonate (HCO_3^{-1})..	.01639	Lithium (Li^{+1}) *....	.14411
Bromide (Br^{-1}) .....	.01251	Magnesium (Mg^{+2}) ...	.08226
Calcium (Ca^{+2}) .....	.04990	Manganese (Mn^{+2}) *..	.03640
Carbonate (CO_3^{-2}) ...	.03333	Nickel (Ni^{+2}) *.....	.03406
Chloride (Cl^{-1}) .....	.02821	Nitrate (NO_3^{-1}) ....	.01613
Chromium (Cr^{+6}) *....	.11539	Nitrite (NO_2^{-1}) ....	.02174
Cobalt (Co^{+2}) *.....	.03394	Phosphate (PO_4^{-3}) ..	.03159
Copper (Cu^{+2}) *.....	.03148	Potassium (K^{+1}) ....	.02557
Cyanide (CN^{-1}) .....	.03844	Sodium (Na^{+1}) .....	.04350
Fluoride (F^{-1}) .....	.05264	Strontium (Sr^{+2}) *..	.02283
Hydrogen (H^{+1}) .....	.99209	Sulfate (SO_4^{-2}) ....	.02082
Hydroxide (OH^{-1}) ....	.05880	Zinc (Zn^{+2}) *.....	.03060

*Concentrations given in micrograms per litre in this report; multiply concentration by factor and divide results by 1,000.

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

Range of concentration in 1000 mg/l	Di- vide by	Range of concentration in 1000 mg/l	Di- vide by	Range of concentration in 1000 mg/l	Di- vide by	Range of concentration in 1000 mg/l	Di- vide by
0 - 8	1.00	201-217	1.13	411-424	1.26	619-634	1.39
8.05- 24	1.01	218-232	1.14	427-440	1.27	636-650	1.40
24.2 - 40	1.02	234-248	1.15	443-457	1.28	652-666	1.41
40.5 - 56	1.03	250-264	1.16	460-473	1.29	668-682	1.42
56.5 - 72	1.04	266-280	1.17	476-489	1.30	684-698	1.43
72.5 - 88	1.05	282-297	1.18	492-506	1.31	700-715	1.44
88.5 -104	1.06	299-313	1.19	508-522	1.32	717-730	1.45
105 -120	1.07	315-329	1.20	524-538	1.33	732-747	1.46
121 -136	1.08	331-345	1.21	540-554	1.34	749-762	1.47
137 -152	1.09	347-361	1.22	556-570	1.35	765-780	1.48
153 -169	1.10	363-378	1.23	572-585	1.36	782-796	1.49
170 -185	1.11	380-393	1.24	587-602	1.37	798-810	1.50
186 -200	1.12	395-409	1.25	604-617	1.38		

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

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

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

Suspended-sediment discharge is the rate at which dry weight of sediment passes a section of a stream or is the quantity of sediment, as measured by dry weight, or by volume, that is discharged in a given time (Porterfield, 1972). It is computed by multiplying discharge times concentration in mg/l times 0.0027.

Total sediment discharge or total sediment load is the sum of the suspended-sediment discharge and the bedload discharge. It is the total quantity of sediment, as measured by dry weight or volume, that is discharged during a given time (Colby and Hubbell, 1961).

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). These concentrations are determined by filtration and (or) evaporation methods (Guy, 1969).

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 irrigated farmland.

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

Solution is the homogenous mixture of solutes and water. The solutes usually comprise a very small fraction of the total weight of the mixture. For this reason, the terms "solution" and "water" are used interchangeably.

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

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

Thermograph is a temperature sensing device that continuously and automatically records, on a chart, the water temperature of a stream. "Temperature recorder" implies the use of a thermograph or other automatic temperature recording device.

Time-weighted average concentration in this report is computed by multiplying the number of days in individual composite periods by the concentration for the corresponding periods and dividing the sum of these products by the total number of days. An annual time-weighted average concentration represents the composition of the water that would be contained in a vessel or reservoir that had received equal volumes of water from the sampled stream for each day of the year. (See composite period, weighted average.)

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 liter by 0.00136.

Tons per day is the quantity of a substance in a solution or suspension that passes a stream section during a 24-hour day. When tons per day are computed from instantaneous discharges and concentrations, it is assumed that these values are representative of the 24-hour period.

Weighted-average concentration is synonymous to discharge-weighted average concentration in this report. It is computed by multiplying the total discharge for a composite period by the concentration for the corresponding period and dividing the sum of these products by the sum of the discharges. An annual discharge-weighted average concentration represents the composition of the water that would be contained in a reservoir that had received all the water that flowed from the sampled stream during the year. (See composite period, time-weighted average.)

SPECIAL NETWORKS AND PROGRAMS

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

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

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

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

Radiochemical program is a network of regularly sampled water-quality stations where additional samples are collected twice a year, presumably one during high flow conditions and one during low flow conditions, to be analyzed for radiochemical parameters. Radiochemical parameters measured in this program are gross alpha count, gross beta counts, radium isotope 226, and natural uranium in both the dissolved and solid phases of a water-sediment mixture.

Surveillance network stations are surface-water stations selected for water-quality examinations for water-quality control purposes. These stations are usually located at key regulatory streamflow gaging stations or near the statelines. Data for major inorganic constituents, nutrients, dissolved oxygen, and bacteria are collected at all these stations. Data for trace elements, radiochemicals, and pesticides are collected at some of these stations.

DOWNSTREAM ORDER AND STATION NUMBERS

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

As an added means of identification, each water-quality station, gaging station, and partial-record station has been assigned a station number. These are in the same downstream order used in this report. In assigning station numbers, no distinction is made between partial-record and continuous-record stations; therefore, the station number for a partial-record station indicates downstream order position in a list made up of both types of stations. Water-quality stations located at or near gaging stations or partial-record stations have the same number as the gaging or partial-record station. Gaps are left in the numbers to allow for new stations that may be established; hence the numbers are not consecutive. The complete 8-digit number for each station, such as 08313000 which appears just to left of the station name includes the 2-digit part number "08" plus the 6-digit downstream order number "313000." 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 07 (Lower Mississippi River basin), Part 08 (Western Gulf of Mexico basin), and Part 09 (Colorado River basin). All records for a drainage basin encompassing more than one State could be arranged in downstream order by assembling pages from the various State reports by station number to include all records in the basin.

Miscellaneous surface water sites which have not been assigned an eight-digit downstream number are identified by using the latitudes and longitudes of the sites as station numbers.

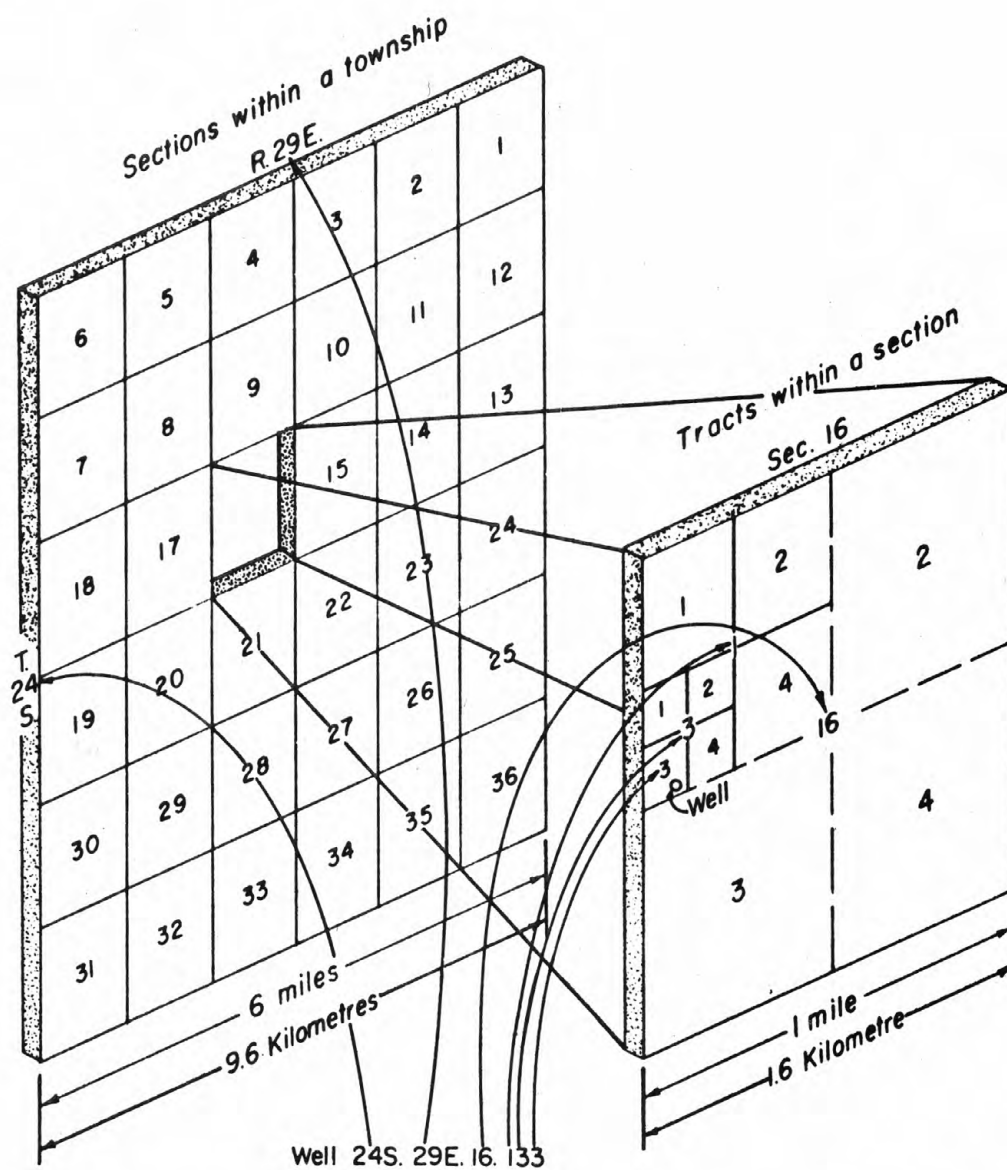


Figure 1.--System of numbering wells and springs in New Mexico.

LOCAL IDENTIFIER AND STATION NUMBER FOR WELLS AND SPRINGS

Wells and springs in this report are identified by local identifiers derived from a system used by the U.S. Geological Survey for numbering wells and springs in New Mexico. The local identifier is based on the system of public land surveys. The local identifier consists of a series of numbers, and letters separated by periods, giving the township, range, section, and tract within a section, in that order, as illustrated on page 11. The letters N or S locate the township north or south of the New Mexico base line. The letters E or W locate the range east or west of the New Mexico principal meridian. A zero in a tract number indicates that the well or spring is centrally positioned or has not been located accurately enough to be placed within a tract or quarter section. Three digits in a tract number can locate a well or spring to the nearest 10 acre tract while six digits will locate a site to the nearest 0.16 acre tract. This numbering system is illustrated in Figure 1, page 11.

Wells and springs in this report are also identified by a station number which is essentially the latitude and the longitude locating the well or the spring. This station number is the principal identifier of wells and springs in the Water Resources Division's National Data System.

COLLECTION AND EXAMINATION OF DATA

Water samples for analyses and water-quality field measurements usually are collected at or near points on streams where gaging stations are maintained by the U.S. Geological Survey for measurement of water discharge. Discharge records for streams in New Mexico have been released in the report "Water Resources Data for New Mexico, 1972, Part 1. Surface Water Records." Most of these records are used in conjunction with the computations of the chemical constituents and sediment loads in this report.

Data on the quality of surface water were collected daily at some stations and less frequently at other stations; the locations of the stations are shown on the map on page 13, Figure 2.

The data in this report includes 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. For miscellaneous surface-water sites no descriptive statements are given. For ground-water sampling stations, no descriptive statements are given either. However, the well number, depth of well, date of sampling, and other pertinent data, if available, are given in the tables containing the chemical analyses of ground water.

Solutes

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

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

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

For measurements such as pH and specific conductance, field values are considered to be more representative than laboratory values; however, if a sample changes very little between the time it is collected and the time it is measured in the laboratory, and if the laboratory method is more accurate than the field method, the laboratory value may be the better value.

The chemical analyses of composite samples in this report generally represent discharge-weighted composites which range from one-day composites to thirty-day composites. The composite periods are selected on the basis of changes in the specific conductance of individual samples and fluctuations in streamflow.

Ground-water quality at a site generally does not change significantly during a short period. Changes in quality may be defined adequately by sampling as infrequently as seasonally or annually.

Temperature

Water temperatures are measured at all of the water-quality stations. Water temperatures are taken at the same time water samples are collected. The water temperature records listed under "Records Available" of some station headings are for daily water temperature records. Large streams have a small diurnal temperature change; shallow streams may have a daily range of several degrees and may follow closely the changes in air temperature. Some streams may be affected by waste-heat discharges.

At stations where continuously recording thermographs are used, the records consist of maximum, minimum, and mean temperatures for each day. Monthly averages are also shown. To convert temperatures between degrees Celsius ($^{\circ}\text{C}$) and degrees Fahrenheit ($^{\circ}\text{F}$), see table 3, below.

Table 3.—Temperature conversion table, degrees Fahrenheit ($^{\circ}\text{F}$) and degrees Celsius ($^{\circ}\text{C}$)*
(Temperature reported to nearest 0.5°C)

$^{\circ}\text{F}$	$^{\circ}\text{C}$	$^{\circ}\text{F}$	$^{\circ}\text{C}$	$^{\circ}\text{F}$	$^{\circ}\text{C}$	$^{\circ}\text{F}$	$^{\circ}\text{C}$	$^{\circ}\text{F}$	$^{\circ}\text{C}$
32	0.0	50	10.0	68	20.0	86	30.0	104	40.0
33	.5	51	10.5	69	20.5	87	30.5	105	40.5
34	1.0	52	11.0	70	21.0	88	31.0	106	41.0
35	1.5	53	11.5	71	21.5	89	31.5	107	41.5
36	2.0	54	12.0	72	22.0	90	32.0	108	42.0
37	3.0	55	13.0	73	23.0	91	33.0	109	43.0
38	3.5	56	13.5	74	23.5	92	33.5	110	43.5
39	4.0	57	14.0	75	24.0	93	34.0	111	44.0
40	4.5	58	14.5	76	24.5	94	34.5	112	44.5
41	5.0	59	15.0	77	25.0	95	35.0	113	45.0
42	5.5	60	15.5	78	25.5	96	35.5	114	45.5
43	6.0	61	16.0	79	26.0	97	36.0	115	46.0
44	6.5	62	16.5	80	26.5	98	36.5	116	46.5
45	7.0	63	17.0	81	27.0	99	37.0	117	47.0
46	8.0	64	18.0	82	28.0	100	38.0	118	48.0
47	8.5	65	18.5	83	28.5	101	38.5	119	48.5
48	9.0	66	19.0	84	29.0	102	39.0	120	49.0
49	9.5	67	19.5	85	29.5	103	39.5	121	49.5

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

Sediment

Suspended sediment concepts are described by Guy, and the techniques for sample collection, analyses, and measurement of suspended-sediment are described by Guy and Norman. Methods for computation of fluvial sediment discharges are described by Porterfield. Suspended-sediment concentrations are determined from samples collected by using depth-intergrating 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 section.

During periods of rapidly changing flow or rapidly changing concentration, samples may have been collected more frequently (twice daily or, in some instances, hourly). The published sediment discharges for days of rapidly changing flow or concentration were computed by the sub-divided day method (time-discharge weighted average). Therefore, for those days when the published sediment discharge value differs from the value computed as the product of discharge times mean concentration times 0.0027, the reader can assume that the sediment discharge for that day was computed by the 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 periodic measurements of the particle-size distribution of the suspended sediment and bed material are included.

Biology

Generally two types of biological data appear in this report; microbiological data on coliform and streptococci bacteria and aquatic biological data on benthic (bottom dwelling) organisms. Prescribed methods for the collection and analysis of aquatic biological and microbiological samples are being developed by the U.S. Geological Survey.

Coliform and streptococci bacteria are indicators of animal waste discharges into a stream or aquifer because these organisms are present in the intestinal tract of warm-blooded animals. These organisms are short-lived and relatively harmless, but their presence in a water supply suggest recent contamination and a possibility that dangerous bacteria may also be present.

The distribution and abundance of benthic organism in a stream are related to the water quality of that stream. Aquatic benthic organisms were collected by use of a square-foot surber sampler or artificial substrate. The surber sampler is a one-foot square frame with a conical net attached. The frame is implanted firmly on the bottom of a shallow stream, usually in a riffle zone. The stones, rocks, and gravels within the square frame are scrubbed and washed to dislodge any organisms which are then carried by the current into the collection net. An artificial substrate is made by suspending a basket of rocks into a stream. After a specified period, usually six weeks to two months, the basket is removed from the stream, and any organisms are collected from the rocks.

At least three sections within a stream cross section are sampled in an attempt to obtain a representative sample. The presence or absence of certain organisms in the benthic zone may be used as an indicator of the water-quality conditions within the stream.

PARAMETER CODES

The five-digit codes shown in parentheses in the column headings of the tables in this report are parameter codes which uniquely identify the data. These are standard codes used to identify the data stored in the files of the National Water Data Storage and Retrieval System which was implemented and is managed by the Water Resources Division (WRD) of the U.S. Geological Survey. These codes are identical to those used by the Environmental Protection Agency (EPA) in all cases where EPA has assigned a parameter code.

WATER-SUPPLY PAPERS

Table 4, below, shows the annual series of Water-supply Papers that give information on quality of surface waters in New Mexico. Data for the Lower Mississippi River basin are given in Part 7; for the Western Gulf of Mexico basins in Part 8; and for the Colorado River basin in Part 9.

Table 4.--Water-supply paper numbers and parts containing quality of surface water for New Mexico

<u>Report year</u>	<u>Parts 1-14</u>	<u>Parts 7-8</u>	<u>Parts 9-14</u>	<u>Irriga- tion A</u>
1941	942	----	----	----
1942	950	----	----	----
1943	970	----	----	----
1944	1022	----	----	----
1945	1030	----	----	----
1946	1050	----	----	----
1947	1102	----	----	----
1948	----	1133	1133	----
1949	----	1163	1163	----
1950	----	1188	1189	----
1951	----	1199	1200	1264
1952	----	1252	1253	1362
1953	----	1292	1293	1380
1954	----	1352	1353	1430
1955	----	1402	1403	1465
1956	----	1452	1453	1485
1957	----	1522	1523	1524
1958	----	1573	1574	1575
1959	----	1644	1645	1699
1960	----	1744	1745	1746
1961	----	1884	1885	1886
1962	----	1944	1945	1946
1963	----	1950	1951	1952
1964	----	1957	1958	1967
1965	----	1964	1965	1968
1966	----	1994	1995	----
1967	----	2014	2015	----
1968	----	2096, B2097	2098	----
1969	----	B2146, 2147	B2148	----
1970	----	B2156, 2157	B2158	----
1971	----	B2166, 2167	B2168	----
1972	----	C	C	----

A "Quality of Surface Waters for Irrigation, Western States."

B In preparation. These reports contain Parts 7, 8, or 9. Parts 10 to 14 in these or other reports.

C Not assigned yet.

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WATER-QUALITY STATIONS IN DOWNSTREAM ORDER

PART 7. LOWER MISSISSIPPI RIVER BASIN

ARKANSAS RIVER BASIN

07153500 DRY CIMARRON RIVER NEAR GUY, N. MEX.

LOCATION.--Lat 36°59'15", long 103°25'25", in SE¼ sec.21, T.32 N., R.33 E., Union County, at gaging station 1.5 miles upstream from Baker damsite, 1.7 miles northwest of Valley, 3.0 miles upstream from Travesser Creek, 12 miles north of Guy, and 26 miles northwest of Kenton, Okla.

DRAINAGE AREA.--545 sq mi.

PERIOD OF RECORD.--Chemical analyses: September 1969 to current year.
Sediment records: April 1963 to June 1968.

CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	DIS- CHARGE (CFS) (000400)	DIS- SOLVED SILICA (ST02) (MG/L) (00955)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- SIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED PO- SIUM (K) (MG/L) (00935)	RICAR- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)
JAN.												
11...	1300	3.0	--	--	--	--	--	--	--	--	--	--
27...	1710	3.0	18	--	87	62	120	4.6	275	0	460	25
FEB.												
17...	1520	2.1	18	--	81	66	120	5.0	264	0	510	23
MAR.												
10...	1130	2.1	17	--	91	77	140	5.1	292	0	550	38
24...	1015	1.7	--	--	--	--	--	--	--	--	--	--
APR.												
18...	1415	.14	18	10	91	66	130	5.1	286	0	510	25
MAY												
09...	1615	.23	15	--	82	63	130	5.0	255	0	500	22
JUNE												
07...	1000	.05	16	--	84	65	140	6.4	250	0	530	25
21...	1610	.84	16	--	82	42	88	6.0	187	0	350	16
JULY												
08...	1445	3.9	15	--	54	29	62	7.4	171	0	240	9.0
20...	1510	5.7	9.3	--	50	22	55	6.9	136	0	220	10
AUG.												
09...	1030	1.0	15	--	68	36	78	6.2	219	0	290	13
SEP.												
05...	1345	3.7	17	--	54	23	44	7.0	170	0	180	8.2
OCT.												
24...	1310	2.1	13	9	86	57	110	7.0	270	0	430	21
NOV.												
10...	1150	1.7	12	--	41	69	130	5.2	291	0	500	23
30...	1130	2.5	17	--	98	70	130	4.5	320	0	480	24
DEC.												
21...	1020	2.2	18	9	99	72	130	4.7	310	0	490	22

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	DIS- SOLVED ORTHOPHOS- PHORUS (P) (MG/L) (00671)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L) (70300)	DIS- SOLVED SOLIDS (SUM OF TUENT) (MG/L) (70301)	HARD- NESS (CA, MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AD- SORP- TION RATIO (MG/L) (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (MG/L) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	DIS- SOLVED BORON (B) (UG/L) (01020)
JAN.												
11...	--	--	--	--	--	--	--	--	1470	--	1.0	--
27...	.5	2.1	--	--	922	470	250	2.4	1250	8.2	.0	--
FEB.												
17...	.5	1.2	--	--	959	470	260	2.4	1330	8.0	10.0	--
MAR.												
10...	.6	.63	--	--	1070	540	300	2.6	1480	8.1	15.0	--
24...	--	--	--	--	--	--	--	--	1450	--	12.0	--
APR.												
18...	.6	.18	.02	1040	987	500	260	2.5	1410	7.8	15.0	180
MAY												
09...	.6	.09	--	--	943	460	250	2.6	1350	8.2	26.0	--
JUNE												
07...	.8	.01	--	--	990	480	270	2.8	1410	7.9	24.0	--
21...	.5	.00	--	--	673	330	170	2.1	1000	7.5	26.0	--
JULY												
08...	.5	1.8	--	--	513	260	120	1.7	771	7.7	28.0	--
20...	.4	.87	--	--	444	220	100	1.6	680	7.5	--	--
AUG.												
09...	.6	.17	--	--	615	320	140	1.9	891	7.9	22.5	--
SEP.												
05...	.4	.43	--	--	419	230	90	1.3	641	7.4	--	--
OCT.												
24...	.6	.55	--	--	860	450	230	2.3	1210	7.6	--	140
NOV.												
10...	.7	.44	--	--	976	510	270	2.5	1350	7.8	10.0	--
30...	.5	1.4	--	--	988	530	270	2.5	1390	8.1	1.0	--
DEC.												
21...	.5	2.3	.02	1090	999	540	290	2.4	1420	8.0	.0	100

ARKANSAS RIVER BASIN

23

07199000 CANADIAN RIVER NEAR HEBRON, N. MEX.

LOCATION.--Lat 36°47'14", long 104°27'42", Colfax County, in Maxwell Grant, at gaging station on highway bridge on U.S. Highways 64 and 85, 3.1 miles north of Hebron, 5.0 miles upstream from Chicorica Creek, and 8.0 miles south of Raton.

DRAINAGE AREA.--229 sq mi.

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

CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	DIS- CHARGE (CFS) (00060)	DIS- SOLVED SILICA (SIOP) (MG/L) (00955)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	RICAR- BONATE (CO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)
JAN.												
12...	0935	1.3	--	--	--	--	--	--	--	--	--	--
27...	1415	1.4	9.7	--	110	39	100	3.0	241	0	420	15
FEB.												
17...	1215	.18	8.8	--	170	81	170	3.9	264	0	900	15
MAR.												
09...	1440	.10	12	--	190	90	220	5.6	268	0	1100	20
23...	1500	.06	--	--	--	--	--	--	--	--	--	--
APR.												
19...	1030	.06	12	30	200	100	220	4.4	267	0	1100	19
MAY												
10...	1115	.12	9.9	--	210	110	240	4.6	249	0	1200	19
JUNE												
06...	1200	.06	11	--	220	110	250	6.1	224	0	1300	19
22...	1020	.04	8.3	--	230	110	270	5.7	268	0	1400	20
JULY												
08...	0845	.05	7.7	--	240	110	270	5.5	262	0	1400	19
20...	0815	.07	6.9	--	240	130	350	6.1	246	0	1600	22
AUG.												
08...	1500	.07	11	--	220	95	240	9.7	217	0	1300	20
SEP.												
06...	1000	.06	11	--	230	90	230	6.7	263	0	1200	15
OCT.												
19...	1415	.06	9.0	30	260	120	290	5.8	257	0	1400	19
NOV.												
10...	0900	.08	11	--	290	130	290	4.9	318	0	1600	22
29...	1600	.07	7.9	--	220	98	230	4.0	257	0	1200	17
DEC.												
20...	1155	.08	8.7	--	240	130	300	4.3	277	0	1500	17

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	DIS- SOLVED ORTHO- PHOS- PHORUS (P) (MG/L) (00671)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L) (70300)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L) (70301)	HARD- NESS (CA,MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AD- SORP- TION RATIO (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	DIS- SOLVED BORON (B) (UG/L) (01020)
JAN.												
12...	--	--	--	--	--	--	--	--	1380	--	.0	--
27...	.3	.96	--	--	820	430	240	2.1	1220	8.0	1.0	--
FEB.												
17...	.4	.01	--	--	1480	760	540	2.7	1940	7.7	10.0	--
MAR.												
09...	.3	.00	--	--	1770	840	620	3.3	2220	8.1	15.0	--
23...	--	--	--	--	--	--	--	--	2240	--	15.0	--
APR.												
19...	.3	.06	.00	1920	1790	910	690	3.2	2310	7.5	16.0	60
MAY												
10...	.3	.00	--	--	1920	980	770	3.3	2460	7.9	17.0	--
JUNE												
06...	--	.00	--	--	2030	1000	820	3.4	2530	7.7	30.0	--
22...	.3	.02	--	--	2180	1000	810	3.7	2650	7.7	25.0	--
JULY												
08...	.3	.01	--	--	2180	1100	840	3.6	2550	7.6	17.0	--
20...	.4	.02	--	--	2480	1100	930	4.5	2940	8.0	17.0	--
AUG.												
08...	.5	.03	--	--	2000	940	760	3.4	2480	7.5	30.0	--
SEP.												
06...	.4	.03	--	--	1910	940	730	3.3	2360	8.0	--	--
OCT.												
19...	.5	.20	--	--	2230	1100	930	3.7	2700	7.6	7.0	40
NOV.												
10...	.3	.05	--	--	2500	1300	1000	3.6	2970	7.9	--	--
29...	.3	.03	--	--	1900	950	740	3.2	2330	8.0	.0	--
DEC.												
20...	.1	.03	--	--	2340	1100	910	3.9	2790	7.7	.0	--

ARKANSAS RIVER BASIN

07202000 CHICORICA CREEK NEAR HEBRON, N. MEX.

LOCATION.--Lat 36°46'13", long 104°23'45", in SW¼SE¼SW¼ sec.4, T.29 N., R.24 E., Colfax County, at gaging station at highway bridge near east boundary of Maxwell Grant, 300 ft downstream from Una de Gato Creek, 4.4 miles northeast of Hebron, and 9 miles south of Raton.

DRAINAGE AREA.--381 sq mi.

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

Sediment records: October 1949 to September 1950.

CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	DIS- CHARGE (CFS) (000060)	DIS- SOLVED SILICA (SI02) (MG/L) (00955)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NESIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED POTAS- SIUM (K) (MG/L) (00935)	RICAR- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	
JAN.													
12...	0900	2.5	13	--	180	110	250	7.1	324	0	1100	43	
27...	1500	4.0	12	--	170	100	240	6.4	292	0	990	42	
FEB.													
17...	1300	3.0	12	--	180	110	220	6.3	303	0	1000	40	
MAR.													
09...	1540	3.0	9.3	--	190	120	250	5.7	301	11	1200	43	
23...	1530	1.0	--	--	--	--	--	--	--	--	--	--	
APR.													
19...	1000	.60	6.3	10	200	150	270	4.6	298	0	1300	34	
MAY													
10...	1030	.60	5.5	--	190	160	320	4.9	247	0	1500	39	
JUNE													
06...	1320	.20	4.8	--	200	150	270	5.5	217	0	1400	27	
22...	0945	1.0	9.7	--	140	71	120	5.4	198	0	680	13	
AUG.													
10...	1035	2.8	9.7	--	120	56	120	6.3	182	0	580	17	
SEP.													
06...	0930	1.8	10	--	140	73	140	5.8	233	0	730	21	
DEC.													
20...	1225	2.5	5.8	--	180	110	240	5.8	307	0	1100	42	
DATE		DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	DIS- SOLVED ORTHOPHOS- PHORUS (P) (MG/L) (00671)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L) (70300)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L) (70301)	HARD- NESS (CA,MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AD- SORP- TION RATIO (00931)	SPF- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	DIS- SOLVED BORON (B) (UG/L) (01020)
JAN.													
12...	.6	7.6	--	--	1900	900	640	3.6	2330	7.5	.0	--	
27...	.6	5.5	--	--	1730	840	600	3.6	2250	7.3	1.0	--	
FEB.													
17...	.6	6.9	--	--	1750	900	650	3.2	2300	7.7	10.0	--	
MAR.													
09...	.6	1.3	--	--	1980	970	700	3.5	2530	8.5	15.0	--	
23...	--	--	--	--	--	--	--	--	2580	--	15.0	--	
APR.													
19...	.5	.19	.05	2370	2110	1100	870	3.5	2760	7.4	14.0	160	
MAY													
10...	.5	.01	--	--	2340	1100	930	4.1	2920	7.8	18.0	--	
JUNE													
06...	--	.00	--	--	2170	1100	940	3.5	2720	7.6	22.0	--	
22...	.7	.23	--	--	1140	640	480	2.1	1540	7.8	19.0	--	
AUG.													
10...	.4	.99	--	--	1000	530	380	2.3	1370	7.5	23.0	--	
SEP.													
06...	.5	.28	--	--	1240	650	460	2.4	1670	7.8	--	--	
DEC.													
20...	.3	5.8	--	--	1860	900	650	3.5	2290	7.7	.0	--	

ARKANSAS RIVER BASIN

25

07203000 VERMEJO RIVER NEAR DAWSON, N. MEX.

LOCATION.--Lat 36°40'50", long 104°47'08", Colfax County, in Maxwell Grant, at gaging station, 1.3 miles north of Dawson, and 2.3 miles upstream from Rail Canyon.

DRAINAGE AREA.--301 sq mi.

PERIOD OF RECORD.--Chemical analyses: January 1945 to October 1950, March 1964 to current year.
Sediment records: January 1949 to September 1951.

CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	DIS- CHARGE (CFS) (00060)	DIS- SOLVED SILICA (SIO ₂) (MG/L) (00955)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	RICAR- BONATE (CO ₃) (MG/L) (00440)	CAR- BONATE (CO ₃) (MG/L) (00445)	DIS- SOLVED SULFATE (SO ₄) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)
JAN.												
12...	1230	5.1	--	--	--	--	--	--	--	--	--	--
27...	1245	15	10	20	65	17	30	1.9	207	0	120	5.7
APR.												
04...	1700	3.0	9.1	200	70	18	33	2.4	205	0	130	5.9
JUNE												
07...	1507	2.6	10	220	52	16	42	3.1	195	0	130	7.6
JULY												
19...	1745	3.7	11	--	50	16	34	2.8	171	0	120	5.5
AUG.												
01...	1748	271	9.7	40	42	9.4	25	4.1	180	0	70	4.2
NOV.												
16...	1314	2.0	11	30	130	36	83	2.2	288	0	370	11

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	DIS- SOLVED ORTHOM- PHOS- PHORUS (P) (MG/L) (00671)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L) (70300)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L) (70301)	HARD- NESS (CA, MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AD- SORP- TION RATIO (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHO) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	DIS- SOLVED BORON (B) (UG/L) (01020)
JAN.												
12...	--	--	--	--	--	--	--	--	566	--	3.0	--
27...	.6	.29	.00	392	353	230	62	.9	563	8.0	1.0	20
APR.												
04...	.7	.08	.00	382	370	250	81	.9	565	8.2	12.0	20
JUNE												
07...	.6	.05	.00	378	357	200	36	1.3	561	8.3	25.0	40
JULY												
19...	.9	.02	--	--	324	190	50	1.1	528	8.0	23.0	--
AUG.												
01...	.6	.44	.01	270	256	140	0	.9	416	6.8	23.0	70
NOV.												
16...	.7	.00	.01	848	786	470	240	1.7	1100	7.8	4.5	50

TRACE ELEMENT ANALYSES, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	DIS- SOLVED ALUM- INUM (AL) (UG/L) (01106)	DIS- SOLVED ARSENIC (AS) (UG/L) (01000)	DIS- SOLVED BARIUM (BA) (UG/L) (01005)	DIS- SOLVED BERYL- LIUM (BE) (UG/L) (01010)	DIS- SOLVED BISMUTH (BI) (UG/L) (01015)	DIS- SOLVED BORON (B) (UG/L) (01020)	DIS- SOLVED CAD- MIUM (CD) (UG/L) (01025)	DIS- SOLVED CHRO- MIUM (CR) (UG/L) (01030)	DIS- SOLVED COBALT (CO) (UG/L) (01035)
JAN.										
27...	1245	28	0	110	<3	<10	20	0	<10	<7
APR.										
04...	1700	34	1	100	<4	<7	20	0	<16	<16
JUNE										
07...	1507	14	0	110	<4	<7	40	0	<15	<7
AUG.										
01...	1748	200	4	220	<3	<5	70	0	<10	<5
NOV.										
16...	1314	340	0	54	<5	<14	50	0	<14	<14

ARKANSAS RIVER BASIN

07203000 VERMEJO RIVER NEAR DAWSON, N. MEX.--Continued

TRACE ELEMENT ANALYSES, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	DIS- SOLVED COPPER (CU) (UG/L) (01040)	DIS- SOLVED GALLIUM (GA) (UG/L) (01120)	DIS- SOLVED GER- MANIUM (GE) (UG/L) (01125)	DIS- SOLVED IRON (FE) (UG/L) (01046)	TOTAL LEAD (PB) (UG/L) (01051)	DIS- SOLVED LEAD (PR) (UG/L) (01049)	DIS- SOLVED LITHIUM (LI) (UG/L) (01130)	DIS- SOLVED MAN- GANESE (MN) (UG/L) (01056)	TOTAL MERCURY (HG) (UG/L) (71900)	DIS- SOLVED MOLYB- DENIUM (MO) (UG/L) (01060)
JAN. 27...	3	<4	<15	20	7	<7	<10	<7	.2	<4
APR. 04...	2	<7	<16	200	3	<7	<10	8	.2	<2
JUNE 07...	8	<7	<15	220	35	<7	<10	<7	.0	<2
AUG. 01...	7	<5	<10	40	170	<5	<10	17	1.2	2
NOV. 16...	3	<7	<14	30	--	<14	10	350	.1	<7

DATE	DIS- SOLVED NICKEL (NI) (UG/L) (01065)	DIS- SOLVED SILVER (AG) (UG/L) (01075)	DIS- SOLVED SELE- NIUM (SE) (UG/L) (01145)	DIS- SOLVED STRON- TIUM (SR) (UG/L) (01080)	DIS- SOLVED TIN (SN) (UG/L) (01100)	DIS- SOLVED TI- TANIUM (TI) (UG/L) (01150)	DIS- SOLVED VANA- DIUM (V) (UG/L) (01085)	DIS- SOLVED ZINC (ZN) (UG/L) (01090)	DIS- SOLVED ZIR- CONIUM (ZR) (UG/L) (01160)
JAN. 27...	<7	<1	0	740	<10	<5	<7.0	--	--
APR. 04...	<16	<2	0	780	<16	<7	<7.0	<710	<16
JUNE 07...	<7	<2	1	660	<15	<31	<4.0	<670	<15
AUG. 01...	3	<1	0	570	<10	11	<3.0	<460	<10
NOV. 16...	<14	<2	0	1300	<14	<14	<14	<940	<20

FIELD AND BIOCHEMICAL MEASUREMENTS, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	DIS- CHARGE (CFS) (00060)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	TEMPER- ATURE (DEG C) (00010)	AIR TEMPER- ATURE (DEG C) (00020)	COLOR (PLAT- INUM- COBALT UNITS) (00080)	TUR- BID- ITY (JTU) (00070)	DIS- SOLVED OXYGEN (MG/L) (00300)
APR. 04...	1700	3.0	566	12.0	20.5	5	2	--
JUNE 07...	1507	2.6	575	25.0	26.5	--	--	--
AUG. 01...	1748	271	370	23.0	22.0	--	--	6.8

ARKANSAS RIVER BASIN

27

07211500 CANADIAN RIVER NEAR TAYLOR SPRINGS, N. MEX.
(Surveillance network station)

LOCATION.--Lat 36°17'49", long 104°29'36", in NW¼ sec.21, T.24 N., R.23 E., Colfax County, at gaging station at head of gorge, 2.0 miles south of Taylor Springs, 2.2 miles downstream from Cimarron River, and 2.4 miles upstream from Chico Creek, and 7.1 miles southeast of Springer.

DRAINAGE AREA.--2,850 sq mi.

PERIOD OF RECORD.--Chemical analyses: June 1966 to current year.
Sediment records: August 1969 to current year.

REMARKS.--Bacteria and aquatic biology analyzed by the New Mexico Environmental Improvement Agency on samples collected by the U.S. Geological Survey. After June 1972, Bacteria analyzed by the U.S. Geological Survey.

CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	DIS- CHARGE (CFS) (00060)	DIS- SOLVED SILICA (SI02) (MG/L) (00955)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NESIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	RICAR- BONATE (MCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)
JAN.											
12...	1545	18	7.6	--	260	140	240	5.4	262	0	1400
FEB.											
08...	1415	20	7.0	--	270	140	230	4.1	257	0	1500
MAR.											
13...	1530	5.4	6.2	--	310	170	290	5.2	236	0	1800
APR.											
04...	1430	7.5	5.6	20	300	180	290	4.8	221	0	1800
MAY											
03...	1557	7.0	4.0	--	320	190	280	7.3	223	0	1900
JUNE											
07...	1748	1.6	6.0	--	310	190	320	5.4	201	0	1900
JULY											
13...	1105	5.4	8.2	10	200	100	180	5.9	177	0	1100
19...	1320	7.3	--	--	--	--	--	--	--	--	--
AUG.											
02...	1713	41	11	60	100	33	70	4.7	149	0	430
SEP.											
06...	1834	15	9.4	10	190	90	170	6.1	208	0	970
OCT.											
04...	1628	3.2	9.1	120	240	130	250	4.8	221	0	1300
NOV.											
16...	1528	23	7.8	100	240	140	230	4.7	246	0	1400
DEC.											
04...	1432	24	7.2	9	230	130	220	3.7	246	0	1300

DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED NITRATE (N) (MG/L) (00618)	DIS- SOLVED NITRITE (N) (MG/L) (00613)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	AMMONIA NITRO- GEN (N) (MG/L) (00610)	DIS- SOLVED AMMONIA NITRO- GEN (N) (MG/L) (00608)	ORGANIC NITRO- GEN (N) (MG/L) (00605)	TOTAL NITRO- GEN (N) (MG/L) (00600)	TOTAL PHOS- PHORUS (P) (MG/L) (00665)
JAN.										
12...	48	.7	--	--	.04	--	--	--	--	--
FEB.										
08...	50	.4	--	--	.01	--	--	--	--	--
MAR.										
13...	67	.6	--	--	.01	--	--	--	--	--
APR.										
04...	65	.6	.00	.00	.00	--	.06	.21	.27	.02
MAY										
03...	78	.6	--	--	.02	--	--	--	--	--
JUNE										
07...	94	.4	--	--	.04	--	--	--	--	--
JULY										
13...	46	--	.04	.00	.04	--	.06	.63	.73	.20
19...	--	--	--	--	--	--	--	--	--	--
AUG.										
02...	11	.6	.70	.00	.70	--	.55	32	34	9.6
SEP.										
06...	38	.6	.04	.00	.04	--	.14	.43	.61	.10
OCT.										
04...	120	.7	.00	.00	.00	--	.05	.40	.45	.09
NOV.										
16...	45	.6	.01	.00	.01	--	.03	.18	.22	.04
DEC.										
04...	46	.6	.01	.00	.01	.03	.03	.14	.18	.06

ARKANSAS RIVER BASIN

07211500 CANADIAN RIVER NEAR TAYLOR SPRINGS, N. MEX.--Continued

CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	DIS- SOLVED ORTHO- PHOS- PHORUS (P) (MG/L) (000671)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L) (70300)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L) (70301)	HARD- NESS (CA, MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AD- SORP- TION RATIO (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	DIS- SOLVED BORON (B) (UG/L) (01020)
JAN.										
12...	--	--	2230	1200	1000	3.0	2770	7.8	.0	--
FEB.										
08...	.00	2450	2330	1300	1000	2.8	2760	7.8	4.5	--
MAR.										
13...	.01	2900	2770	1500	1300	3.3	3180	8.1	13.0	--
APR.										
04...	.00	2920	2760	1500	1300	3.3	3220	8.0	18.0	180
MAY										
03...	.00	2940	2890	1600	1400	3.1	3390	8.0	24.5	--
JUNE										
07...	.00	3180	2920	1600	1400	3.5	3430	8.0	22.0	--
JULY										
13...	.00	1890	1730	910	770	2.6	2200	7.7	24.0	170
19...	--	--	--	--	--	--	2730	--	26.5	--
AUG.										
02...	.01	828	741	390	260	1.6	1080	7.2	25.0	90
SEP.										
06...	.00	1710	1580	840	670	2.5	2040	8.0	21.5	150
OCT.										
04...	.00	2330	2160	1100	950	3.2	2624	7.9	19.0	240
NOV.										
16...	.01	2430	2190	1200	970	2.9	2580	8.2	5.5	170
DEC.										
04...	.01	2170	2060	1100	910	2.9	2510	7.6	6.0	130

FIELD AND BIOCHEMICAL MEASUREMENTS, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	DIS- CHARGE (CFS) (00060)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	AIR TEMPER- ATURE (DEG C) (00020)	COLOR (PLAT- INUM- CORAL UNITS) (00080)	TUR- BID- ITY (JTU) (00070)
JAN.								
12...	1545	18	2750	8.3	.0	8.5	4	20
FEB.								
06...	1415	20	2900	8.4	4.5	18.0	5	45
MAR.								
13...	1530	5.4	--	8.3	13.0	25.0	5	3
APR.								
04...	1430	7.5	3400	8.2	18.0	20.5	5	6
MAY								
03...	1557	7.0	3500	8.3	24.5	24.5	5	4
JUNE								
07...	1748	1.6	3600	8.3	22.0	27.0	10	10
JULY								
13...	1105	5.4	2120	8.0	24.0	34.5	10	50
AUG.								
02...	1713	41	1010	7.9	25.0	24.0	15	11600
SEP.								
06...	1834	15	2000	8.6	21.5	17.0	15	70
OCT.								
04...	1628	3.2	2620	8.4	19.0	23.0	--	20
NOV.								
16...	1528	23	2630	8.0	5.5	6.5	5	10
DEC.								
04...	1432	24	2600	8.3	6.0	14.0	5	10

07211500 CANADIAN RIVER NEAR TAYLOR SPRINGS, N. MEX.--Continued

FIELD AND BIOCHEMICAL MEASUREMENTS, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	DIS- SOLVED OXYGEN (MG/L) (00300)	CHEM- ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L) (00335)	BIO- CHEM- ICAL OXYGEN DEMAND (MG/L) (00310)	IMME- DIATE COLI- FORM (COL. PER 100 ML) (31501)	FECAL COLI- FORM (COL. PER 100 ML) (31616)	STREP- TOCOCCI (COL- ONIES PER 100 ML) (31679)	TOTAL ORGANIC CARBON (C) (MG/L) (00680)
JAN. 12...	11.2	4	1.0	60	<100	<10	--
FEB. 08...	9.5	5	1.2	0	<10	<100	--
MAR. 13...	11.6	3	.4	<10	<10	<10	--
APR. 04...	8.5	3	.8	<10	10	<10	--
MAY 03...	9.5	3	1.7	<10	<10	<10	--
JUNE 07...	7.9	4	1.5	<10	<10	<10	--
JULY 13...	6.9	--	--	--	160	--	--
AUG. 02...	6.8	--	--	--	27000	--	--
SEP. 06...	7.3	--	--	--	--	--	70
OCT. 04...	7.2	--	--	--	14	--	10
NOV. 16...	10.6	--	--	--	1	--	11
DEC. 04...	9.8	--	--	--	0	--	3.6

* Analyzed by New Mexico Environmental Improvement Agency.

BIOLOGICAL ANALYSES, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

Date: April 4, 1972

Method of sampling: Surber (3 square feet)

Organisms (classification, number)

Diptera: Chironomidae larvae, 116

Ephemeroptera: Baetidae; *Traverella* sp., 6Trichoptera: Hydropsychidae; *Hydropsyche* sp., 1*Cheumatopsyche* sp., 2

Hydroptilidae, 1

Unidentified, 1

Date: November 16, 1972

Method of sampling: Surber (3 square feet)

No macroinvertebrates in sample

PESTICIDE ANALYSES, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	TOTAL ORGANIC CARBON (C) (MG/L) (00680)	ALDRIN (UG/L) (39330)	CHLOR- DANE (UG/L) (39350)	DDD (UG/L) (39360)	DDE (UG/L) (39365)	DDT (UG/L) (39370)	DI- ELDRIN (UG/L) (39380)
APR. 04...	1430	--	.00	.0	.00	.00	.00	.00
JUNE 07...	1748	--	.00	.0	.00	.00	.00	.00
JULY 13...	1105	6.5	--	--	--	--	--	--
AUG. 02...	1713	--	.00	.0	.00	.00	.00	.00
OCT. 04...	1628	--	.00	.0	.00	.00	.00	.00

DATE	ENDRIN (UG/L) (39390)	HEPTA- CHLOR (UG/L) (39410)	HEPTA- CHLOR EPOXIDE (UG/L) (39420)	LINDANE (UG/L) (39340)	PCB (UG/L) (39516)	2,4-D (UG/L) (39730)	2,4,5-T (UG/L) (39740)	SILVEX (UG/L) (39760)
APR. 04...	.00	.00	.00	.00	--	--	--	--
JUNE 07...	.00	.00	.00	.00	--	.00	.00	.00
JULY 13...	--	--	--	--	--	--	--	--
AUG. 02...	.00	.00	.00	.00	--	.00	.00	.00
OCT. 04...	.00	.00	.00	.00	.0	--	--	--

ARKANSAS RIVER BASIN

07211500 CANADIAN RIVER NEAR TAYLOR SPRINGS, N. MEX.--Continued

INSTANTANEOUS SUSPENDED SEDIMENT AND PARTICLE SIZE, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	TEMPER- ATURE (DEG C) (00010)	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SUS- PENDE SEDIM- ENT (MG/L) (80154)	SUS- PENDE SEDIM- ENT (T/DAY) (80155)	SUS. SED. FALL DIAM. % FINER THAN ,002 MM (70337)	SUS. SED. FALL DIAM. % FINER THAN ,004 MM (70338)	SUS. SED. FALL DIAM. % FINER THAN ,016 MM (70340)	SUS. SED. FALL DIAM. % FINER THAN ,062 MM (70342)
JAN. 12...	1545	.0	18	89	4.3	--	--	--	--
FEB. 08...	1415	4.5	20	216	12	--	--	--	--
MAR. 13...	1530	13.0	5.4	10	.15	--	--	--	--
APR. 04...	1430	18.0	7.5	29	.59	--	--	--	--
MAY 03...	1557	24.5	7.0	9	.17	--	--	--	--
JUNE 07...	1748	22.0	1.6	22	.10	--	--	--	--
JULY 13...	1105	24.0	5.4	98	1.4	--	--	--	--
AUG. 02...	1713	25.0	41	28400	3140	69	83	99	100
SEP. 06...	1834	21.5	15	112	4.5	--	--	--	--
OCT. 04...	1628	19.0	3.2	69	.60	--	--	--	--
NOV. 16...	1528	5.5	23	52	3.2	--	--	--	--
DEC. 04...	1432	6.0	24	76	4.9	--	--	--	--

ARKANSAS RIVER BASIN

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07223300 CONCHAS CANAL BELOW CONCHAS DAM, N. MEX.

LOCATION.--Lat 35°22'35", long 104°10'03", San Miguel County, in Pablo Montoya Grant, at gaging station, at upstream end of tunnel transition section, 1.0 mile downstream from headgates in Conchas Dam, and 21.5 miles north of Newkirk.

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

REMARKS.--No flow during most of each winter.

CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	DIS- CHARGE (CFS) (000060)	DIS- SOLVED SILICA (STO2) (MG/L) (000955)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NESIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	RICAR- BONATE (MCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)
JAN.												
06...	1225	.01	7.8	--	110	50	110	7.6	241	0	480	27
26...	0930	.01	--	--	--	--	--	--	--	--	--	--
FEB.												
08...	1000	.02	5.2	--	98	45	100	6.8	207	0	430	24
MAR.												
08...	0910	.01	4.0	--	110	52	140	6.9	224	0	560	37
21...	1030	.01	--	--	--	--	--	--	--	--	--	--
APR.												
07...	0900	.49	6.9	20	80	37	76	5.1	172	0	370	20
28...	1405	323	7.1	--	84	36	73	4.7	176	0	330	19
MAY												
10...	1350	214	6.7	--	80	36	73	4.8	165	0	350	18
JUNE												
13...	1515	189	6.4	--	81	38	75	5.0	166	0	350	19
JULY												
03...	1430	328	6.6	--	80	38	73	4.7	173	0	360	19
AUG.												
01...	1500	244	6.5	--	74	31	69	5.2	153	0	310	18
NOV.												
03...	1030	.06	2.0	20	29	13	51	2.9	105	0	140	11
DEC.												
08...	1115	5.8	6.5	--	63	24	55	4.5	148	0	230	14

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	DIS- SOLVED ORTHOPHOS- PHORUS (P) (MG/L) (00671)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L) (70300)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L) (70301)	HARD- NESS (CA, MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AD- SORP- TION RATIO (MG/L) (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	DIS- SOLVED BORON (B) (UG/L) (01020)
JAN.												
06...	.6	.20	--	--	912	480	280	2.2	1240	8.0	.0	--
26...	--	--	--	--	--	--	--	--	1060	--	.0	--
FEB.												
08...	.6	.10	--	--	812	430	260	2.1	1160	8.1	3.0	--
MAR.												
08...	.7	.15	--	--	1020	490	300	2.8	1440	8.0	6.0	--
21...	--	--	--	--	--	--	--	--	1620	--	17.0	--
APR.												
07...	.5	.05	.00	764	680	350	210	1.8	980	8.1	12.0	90
28...	.5	.04	--	--	641	360	210	1.7	970	7.7	16.0	--
MAY												
10...	.5	.00	--	--	650	350	210	1.7	970	7.9	16.0	--
JUNE												
13...	.7	.01	--	--	657	360	220	1.7	989	7.8	28.0	--
JULY												
03...	.5	.03	--	--	667	360	210	1.7	988	7.5	22.0	--
AUG.												
01...	.6	.10	--	--	590	310	190	1.7	856	7.4	24.0	--
NOV.												
03...	.4	.10	--	--	301	130	40	2.0	507	7.6	10.0	70
DEC.												
08...	.4	.14	--	--	471	260	130	1.5	703	8.3	6.0	--

ARKANSAS RIVER BASIN

07226800 UTE RESERVOIR NEAR LOGAN, N. MEX.

LOCATION.--Lat 35°20'35", long 103°26'37", in NW 1/4 sec. 21, T.13 N., R.33 E., Quay County, in Ute Reservoir impounded by Ute Dam on the Canadian River which is 2.5 miles southwest of Logan, and 3.5 miles downstream from Ute Creek.

DRAINAGE AREA.--11,140 sq mi, of which 1,110 sq mi is noncontributing, and 7,400 sq mi is controlled by Conchas Dam (total area downstream from Conchas Dam is 3,731 sq mi).

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

REMARKS.--Samples for chemical analyses are collected quarterly each year at surface, median, and bottom levels of selected sites. Site locations are as follows: Site A, 0.4 mile upstream from Ute Dam; Site B, 0.6 mile upstream from Ute Dam; Site C, 1.9 miles upstream from Ute Dam; Site D, on the Ute Creek arm, 5.7 miles upstream from Ute Dam; Site E, 3.8 miles upstream from Ute Dam at confluence of Ute Creek and Canadian River arms; Site F, on the Canadian River arm, 9.1 miles upstream from Ute Dam; Site G, on the Ute Creek arm, 6.9 miles upstream from Ute Dam; Site H, on the Canadian River arm, 12.8 miles upstream from Ute Dam.

CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	DEPTH (FT) (000003)	DIS- SOLVED SILICA (SiO2) (MG/L) (00955)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	BICAR- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)
07226510 UTE RESERVOIR AT SITE F (LAT 35°20'21", LONG 103°33'07")												
JAN.												
11...	0905	5.0	--	--	37	17	--	--	230	0	170	29
11...	0915	12	3.8	20	39	17	110	4.8	222	6	180	29
11...	0935	25	--	--	38	18	--	--	228	4	180	29
APR.												
10...	1140	5.0	--	--	39	18	--	--	250	0	190	30
10...	1142	15	3.5	10	41	19	120	5.1	256	0	190	32
10...	1143	25	--	--	44	21	--	--	272	0	210	34
JULY												
07...	1205	5.0	--	--	31	16	--	--	209	0	160	26
07...	1215	15	5.2	--	31	16	110	5.1	208	0	160	26
07...	1230	30	--	--	31	16	--	--	209	0	160	26

DATE	TIME	DEPTH (FT) (00950)	DIS- SOLVED NITRITE PLUS NITRATE (F) (MG/L) (00631)	DIS- SOLVED ORTHOPHOS- PHORUS (P) (MG/L) (00671)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L) (70300)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L) (70301)	HARD- NESS (CA+MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AD- SORP- TION RATIO (MG/L) (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (MG/L) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	DIS- SOLVED BORON (B) (UG/L) (01020)
JAN.													
11...	--	--	--	--	--	--	160	0	--	788	8.1	5.0	--
11...	.8	.13	.01	588	500	500	170	0	3.7	806	8.5	6.0	200
11...	--	--	--	--	--	--	170	0	--	802	8.4	6.0	--
APR.													
10...	--	--	--	--	--	--	170	0	--	846	8.1	--	--
10...	.9	.05	.00	560	538	538	180	0	3.9	875	8.1	--	220
10...	--	--	--	--	--	--	200	0	--	948	7.9	--	--
JULY													
07...	--	--	--	--	--	--	140	0	--	785	7.5	--	--
07...	.9	.32	--	--	--	458	140	0	4.0	740	7.2	--	--
07...	--	--	--	--	--	--	140	0	--	736	7.6	--	--

07226530 UTE RESERVOIR AT SITE D (LAT 35°22'20", LONG 103°29'47")												
DATE	TIME	DEPTH (FT) (000003)	DIS- SOLVED SILICA (SiO2) (MG/L) (00955)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	BICAR- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)		
JULY												
07...	1110	5.0	--	32	16	--	--	209	0	160		
07...	1115	25	6.1	31	16	100	5.1	208	0	160		
07...	1125	45	--	32	16	--	--	209	0	150		

DATE	TIME	DEPTH (FT) (00940)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED NITRATE (N) (MG/L) (00631)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L) (70301)	HARD- NESS (CA+MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AD- SORP- TION RATIO (MG/L) (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (MG/L) (00095)	PH (UNITS) (00400)
JULY											
07...	26	--	--	--	--	--	150	0	--	730	7.1
07...	26	.9	--	.06	448	448	140	0	3.6	734	6.9
07...	26	--	--	--	--	--	150	0	--	722	7.4

ARKANSAS RIVER BASIN

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07226800 UTE RESERVOIR NEAR LOGAN, N. MEX.--Continued

CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

		DIS-		DIS-		DIS-		DIS-		DIS-		DIS-	
		SOLVED	SOLVED	SOLVED	SOLVED	SOLVED	SOLVED	SOLVED	SOLVED	SOLVED	SOLVED	SOLVED	SOLVED
		SILIC/	IRON	CAL-	MAG-	SODIUM	TAS-	BICAR-	CAR-	SULFATE	CHLO-	RIDE	
		(SIO2)	(FE)	(CA)	(MG)	(NA)	(K)	(HCO3)	(CO3)	(SO4)	(CL)		
DATE	TIME	DEPTH	(MG/L)	(UG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)
		(00003)	(00955)	(01046)	(00915)	(00925)	(00930)	(00935)	(00440)	(00445)	(00945)	(00940)	(00940)
07226540 UTE RESERVOIR AT SITE E (LAT 35°21'16", LONG 103°29'29")													
JAN.													
11...	1010	5.0	--	--	34	15	--	--	217	0	150	27	
11...	1025	20	5.1	10	35	15	100	4.9	225	0	150	26	
11...	1035	40	--	--	34	15	--	--	218	0	150	26	
APR.													
10...	0011	5.0	--	--	38	17	--	--	242	0	170	30	
10...	0012	25	3.9	10	37	18	110	5.0	244	0	180	30	
10...	0013	50	--	--	39	17	--	--	245	0	170	29	

DATE	TIME	DEPTH (FT) (000003)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	DIS- SOLVED ORTHU. PHOS- PHORUS (P) (MG/L) (00671)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L) (70300)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L) (70301)	HARD- NESS (CA,MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AD- SORP- TION RATIO (MG/L) (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MMOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	DIS- SOLVED BORON (B) (UG/L) (01020)
JAN.	11...	--	--	--	--	--	150	0	--	710	8.1	5.0	--
	11...	.8	.09	.00	472	448	150	0	3.6	726	8.1	6.0	180
	11...	--	--	--	--	--	150	0	--	718	8.2	6.0	--
APR.	10...	--	--	--	--	--	160	0	--	811	8.1	--	--
	10...	.8	.04	.00	508	505	170	0	3.7	816	8.1	--	200
	10...	--	--	--	--	--	170	0	--	817	8.0	--	--

07226560 UTE RESERVOIR AT SITE B (LAT 35°20'32", LONG 103°27'16")

DATE	TIME	DEPTH (FT) (000003)	DIS-	DIS-	DIS-	DIS-	DIS-	DIS-	BICAR-	CAR-	DIS-	DIS-
			SOLVED SILICA (SIO2) (MG/L) (00955)	SOLVED IRON (FE) (UG/L) (01046)	SOLVED CAL- CIUM (CA) (MG/L) (00915)	SOLVED MAG- NE- SIUM (MG) (MG/L) (00925)	SOLVED SODIUM (NA) (MG/L) (00930)	SOLVED PO- TAS- SIUM (K) (MG/L) (00935)			SOLVED SULFATE (SO4) (MG/L) (00945)	SOLVED CHLO- RIDE (CL) (MG/L) (00940)
JAN.												
11...	1130	5.0	--	--	34	15	--	--	216	0	150	26
11...	1140	30	5.0	20	34	15	95	5.0	226	0	150	26
11...	1155	60	--	--	35	15	--	--	216	0	150	26
APR.												
10...	0001	5.0	--	--	37	17	--	--	240	0	170	29
10...	0002	27.5	3.9	10	37	16	110	4.7	239	0	170	29
10...	0003	55	--	--	43	17	--	--	238	0	170	29
JULY												
07...	1000	5.0	--	--	30	16	--	--	210	0	160	27
07...	1010	30	4.7	--	31	16	110	5.1	210	0	160	27
07...	1020	55	--	--	31	16	--	--	208	0	160	28

DATE	TIME	DEPTH (FT) (000003)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	DIS- SOLVED ORTHU. PHOS- PHORUS (P) (MG/L) (00671)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L) (70300)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L) (70301)	HARD- NESS (CA,MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AD- SORP- TION RATIO (MG/L) (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MMOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	DIS- SOLVED BORON (B) (UG/L) (01020)
JAN.	11...	--	--	--	--	--	150	0	--	716	8.1	5.0	--
	11...	.7	.07	.00	478	442	150	0	3.4	712	8.2	5.0	180
	11...	--	--	--	--	--	150	0	--	712	8.1	5.0	--
APR.	10...	--	--	--	--	--	160	0	--	794	8.1	--	--
	10...	.8	.00	.00	478	489	160	0	3.8	793	8.1	.0	210
	10...	--	--	--	--	--	180	0	--	792	7.8	--	--
JULY	07...	--	--	--	--	--	140	0	--	749	7.5	--	--
	07...	.9	.00	--	--	458	140	0	4.0	748	7.4	--	--
	07...	--	--	--	--	--	140	0	--	742	7.4	--	--

ARKANSAS RIVER BASIN

07227100 REVUELTO CREEK NEAR LOGAN, N. MEX.

LOCATION.--Lat 35°20'28", long 103°23'40", in SW 1/4 sec. 24, T.13 N., R.33 E., Quay County, at gaging station 0.3 mile upstream from bridge on State Highway 39, 1.9 miles southeast of Logan, and 2.3 miles upstream from mouth.

DRAINAGE AREA.--786 sq mi.

PERIOD OF RECORD.--Chemical analyses: July 1959 to current year.

Water temperatures: July 1959 to January 1966.

Sediment records: July 1970 to current year.

CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	DIS- CHARGE (CFS) (00060)	DIS- SOLVED SILICA (SI02) (MG/L) (00955)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NESIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	RICAR- BONATE (MCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)
JAN. 25...	1310	.98	9.0	--	69	50	420	5.0	274	0	600	270
FEB. 07...	1535	2.8	9.5	--	75	56	410	5.0	281	0	820	160
MAR. 07...	1440	.04	12	--	55	45	830	6.0	349	7	500	900
20...	1500	.01	--	--	--	--	--	--	--	--	--	--
MAY 03...	1545	12	4.3	10	84	54	220	7.3	198	0	620	71
18...	1605	2.9	7.6	--	82	61	310	7.9	227	0	790	120
JUNE 12...	1445	1.4	7.2	--	60	27	260	7.3	145	0	540	130
JULY 05...	1300	242	11	--	19	6.3	92	2.0	211	0	100	16
18...	1105	227	10	--	13	4.0	98	2.3	173	0	120	19
AUG. 31...	1545	27	10	--	17	6.4	170	2.6	209	0	220	31
SEP. 26...	1120	12	11	--	59	30	220	3.9	268	0	430	69
OCT. 16...	1600	17	9.4	40	69	43	230	5.5	240	0	550	73
NOV. 17...	1040	5.5	9.6	--	76	51	290	4.0	285	--	660	120
DEC. 15...	1340	9.5	8.8	--	76	47	330	2.7	283	0	640	110

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	DIS- SOLVED ORTHO- PHOS- PHORUS (P) (MG/L) (00671)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L) (70300)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L) (70301)	HARD- NESS (CA, MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AD- SORP- TION RATIO (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	DIS- SOLVED BORON (B) (UG/L) (01020)
JAN. 25...	.8	.81	--	--	1560	380	150	9.4	2380	8.1	9.0	--
FEB. 07...	.9	.50	--	--	1680	420	190	8.7	2330	8.2	11.0	--
MAR. 07...	1.0	.00	--	--	2530	320	25	20	4240	8.4	20.0	--
20...	--	--	--	--	--	--	--	--	5810	--	19.0	--
MAY 03...	.8	.04	.00	1220	1160	430	270	4.6	1700	7.7	26.0	260
18...	1.1	.01	--	--	1490	460	270	6.3	2170	7.8	26.0	--
JUNE 12...	.6	.71	--	--	1110	260	140	7.0	1680	7.7	31.0	--
JULY 05...	.6	.54	--	--	353	73	0	4.7	578	7.0	15.0	--
18...	.6	.13	--	--	353	49	0	6.1	510	8.3	10.0	--
AUG. 31...	.8	.79	--	--	564	69	0	8.9	906	7.8	28.0	--
SEP. 26...	.8	.49	--	--	958	270	51	5.8	1450	7.6	18.0	--
OCT. 16...	.9	.62	--	--	1100	350	150	5.4	1590	7.9	24.0	310
NOV. 17...	.8	.37	--	--	1350	400	170	6.3	2130	8.2	5.0	--
DEC. 15...	.7	.64	--	--	1360	380	150	7.3	1940	8.0	.0	--

ARKANSAS RIVER BASIN

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07227100 REVUELTO CREEK NEAR LOGAN, N. MEX.--Continued

INSTANTANEOUS SUSPENDED SEDIMENT AND PARTICLE SIZE, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	TEMPER- ATURE (DEG C) (00010)	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SUS- PENDE SED- IMENT CHARGE (MG/L) (80154)	SUS- PENDE SED- IMENT CHARGE (T/DAY) (80155)	SUS. SED. FALL DIAM. % FINER THAN .002 MM (70337)	SUS. SED. FALL DIAM. % FINER THAN .004 MM (70338)	SUS. SED. FALL DIAM. % FINER THAN .016 MM (70340)	SUS. SED. FALL DIAM. % FINER THAN .062 MM (70331)	SUS. SED. FALL DIAM. % FINER THAN .125 MM (70332)	SUS. SED. FALL DIAM. % FINER THAN .250 MM (70333)
FEB.											
07...	1535	11.0	2.8	570	4.3	--	--	--	--	--	--
MAY											
03...	1545	26.0	12	108	3.5	--	--	--	--	--	--
11...	1400	26.0	7.0	130	2.5	--	--	--	--	--	--
JUNE											
12...	1445	31.0	1.4	1070	4.0	--	--	--	--	--	--
JULY											
05...	1300	15.0	242	267	174	--	--	--	--	--	--
AUG.											
03...	1545	28.0	27	435	32	81	93	96	98	99	100
SEP.											
26...	1120	18.0	12	627	20	--	--	--	--	--	--
OCT.											
16...	1440	24.0	18	214	10	--	--	--	--	--	--
NOV.											
17...	1040	5.0	5.5	17	.25	--	--	--	--	--	--
DEC.											
15...	1340	.0	9.5	181	4.6	--	--	--	--	--	--

ARKANSAS RIVER BASIN

07227140 CANADIAN RIVER ABOVE NEW MEXICO-TEXAS STATE LINE, N. MEX.
(Surveillance network station)

LOCATION.--Lat 35°23'35", long 103°02'30", in SW¼ sec.32, T.14 N., R.37 E., Quay County, 0.1 mile upstream from New Mexico-Texas State line.
5.5 miles downstream from Rana Canyon, and 14.7 miles north of Glenrio.

DRAINAGE AREA.--12,616 sq mi.

PERIOD OF RECORD.--Chemical analyses: July 1969 to current year.
Sediment records: February 1970 to current year.

REMARKS.--Aquatic biology analyzed by the New Mexico Environmental Improvement Agency on samples collected by the U.S. Geological Survey.

CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	DIS- CHARGE (CFS) (000600)	DIS- SOLVED SILICA (SIO2) (MG/L) (00955)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED MAN- GANESE (MN) (UG/L) (01056)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	BICAR- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)
JAN. 17...	1310	15	13	--	--	130	64	1300	8.9	324	0	410
FEB. 14...	1250	9.9	13	--	--	130	69	1500	8.7	314	0	480
MAR. 13...	1230	7.8	14	--	--	110	70	1500	9.1	296	0	420
APR. 10...	1235	4.3	12	--	--	110	76	1400	9.2	260	0	450
MAY 08...	1320	10	9.0	10	30	100	71	1200	13	260	0	520
JULY 17...	1320	18	9.5	20	--	57	28	500	6.3	195	0	300
AUG. 21...	1215	28	10	10	--	90	46	810	7.7	224	0	410
SEP. 11...	1315	1000	6.0	40	--	23	9.0	83	3.4	154	0	120
OCT. 10...	1245	31	11	20	--	110	60	1100	8.0	274	0	450
NOV. 13...	1225	20	11	40	--	120	62	1300	8.0	313	0	470
DEC. 11...	1330	17	13	20	--	140	75	1600	7.9	378	0	480

DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED NITRATE (N) (MG/L) (00618)	DIS- SOLVED NITRITE (N) (MG/L) (00613)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	AMMONIA NITRO- GEN (N) (MG/L) (00610)	DIS- SOLVED AMMONIA NITRO- GEN (N) (MG/L) (00608)	ORGANIC NITRO- GEN (N) (MG/L) (00605)	TOTAL NITRO- GEN (N) (MG/L) (00600)	TOTAL PHOS- PHORUS (P) (MG/L) (00665)	DIS- SOLVED ORTHO- PHOS- PHORUS (P) (MG/L) (00671)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L) (70300)
JAN. 17...	1900	.8	--	--	.61	--	--	--	--	--	.00	4140
FEB. 14...	2100	.6	--	--	.62	--	--	--	--	--	.01	4440
MAR. 13...	2200	.7	--	--	.66	--	--	--	--	--	.01	4720
APR. 10...	2100	.6	--	--	.14	--	--	--	--	--	.00	4720
MAY 08...	1700	.7	--	--	.11	--	--	--	--	--	.00	3720
JULY 17...	670	.7	1.8	.00	1.8	--	.08	1.5	3.4	1.6	.00	1710
AUG. 21...	1200	.6	.00	.01	.01	--	.10	.36	.47	.22	.02	2860
SEP. 11...	36	.6	.00	.00	.00	--	.06	1.9	2.0	2.0	.02	352
OCT. 10...	1600	.7	.25	.00	.25	--	.11	.17	.53	.06	.01	3840
NOV. 13...	1800	.6	.21	.02	.23	--	.04	.13	.40	.06	.02	3980
DEC. 11...	2300	.6	.45	.00	.45	.09	.09	.09	.63	.07	.01	4740

07227140 CANADIAN RIVER ABOVE NEW MEXICO-TEXAS STATE LINE, N. MEX.--Continued

CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L) (70301)	HARDNESS (CA,MG) (MG/L) (00900)	NON-CARBONATE HARDNESS (MG/L) (00902)	SODIUM ADSORPTION RATIO (00931)	SPECIFIC CONDUCTANCE (MICRO-MHOS) (00095)	PH (UNITS) (00400)	TEMPERATURE (DEG C) (00010)	DIS-SOLVED BORON (R) (UG/L) (01020)
JAN. 17...	3990	590	320	23	6700	7.9	8.0	--
FEB. 14...	4460	610	350	26	7820	7.6	9.5	--
MAR. 13...	4470	560	320	28	7700	7.9	19.5	--
APR. 10...	4290	590	370	25	7590	8.0	26.0	--
MAY 08...	3740	540	330	22	6480	8.2	28.0	350
JULY 17...	1680	260	98	14	2880	7.8	30.5	300
AUG. 21...	2690	410	230	17	4790	7.9	28.5	340
SEP. 11...	357	94	0	3.7	595	7.7	24.0	130
OCT. 10...	3480	520	300	21	5900	7.9	20.0	380
NOV. 13...	3930	550	300	24	6410	8.0	7.5	360
DEC. 11...	4810	660	350	27	7630	7.9	.0	380

TRACE ELEMENT ANALYSES, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	DIS-SOLVED ARSENIC (AS) (UG/L) (01000)	DIS-SOLVED BARIUM (BA) (UG/L) (01005)	DIS-SOLVED BORON (B) (UG/L) (01020)	DIS-SOLVED CADMIUM (CD) (UG/L) (01025)	HEXA-VALENT CHROMIUM (CR6) (UG/L) (01032)	DIS-SOLVED COPPER (CU) (UG/L) (01040)
MAY 08...	1320	0	0	350	0	0	1

DATE	DIS-SOLVED IRON (FE) (UG/L) (01046)	TOTAL LEAD (PB) (UG/L) (01051)	DIS-SOLVED MANGANESE (MN) (UG/L) (01056)	TOTAL MERCURY (HG) (UG/L) (71900)	DIS-SOLVED SILVER (AG) (UG/L) (01075)	DIS-SOLVED SELENIUM (SE) (UG/L) (01145)	DIS-SOLVED ZINC (ZN) (UG/L) (01090)
MAY 08...	10	3	30	.0	0	5	20

FIELD AND BIOCHEMICAL MEASUREMENTS, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	DIS-CHARGE (CFS) (00060)	SPECIFIC CONDUCTANCE (MICRO-MHOS) (00095)	PH (UNITS) (00400)	TEMPERATURE (DEG C) (00010)	AIR TEMPERATURE (DEG C) (00020)	COLOR (PLATINUM-COBALT UNITS) (00080)	TURBIDITY (JTU) (00070)
JAN. 17...	1310	15	6550	8.2	8.0	21.0	5	50
FEB. 14...	1250	9.9	7560	8.2	9.5	11.5	3	30
MAR. 13...	1230	7.8	7750	8.2	19.5	23.0	3	15
APR. 10...	1235	4.3	7250	8.3	26.0	34.0	3	7
MAY 08...	1320	10	6500	8.3	28.0	28.0	5	10
JULY 17...	1320	18	3000	8.4	30.5	33.0	20	1300
AUG. 21...	1215	28	4750	8.3	28.5	30.5	15	80
SEP. 11...	1315	1000	580	8.1	24.0	30.0	15	2000
OCT. 10...	1245	31	6000	8.3	20.0	31.5	10	15
NOV. 13...	1225	20	7000	8.4	7.5	7.5	10	40
DEC. 11...	1330	17	--	8.5	.0	1.5	5	30

ARKANSAS RIVER BASIN

07227140 CANADIAN RIVER ABOVE NEW MEXICO-TEXAS STATE LINE, N. MEX.--Continued
FIELD AND BIOCHEMICAL MEASUREMENTS, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	DIS- SOLVED OXYGEN (MG/L) (00300)	CHEM- ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L) (00335)	BIO- CHEM- ICAL OXYGEN DEMAND (MG/L) (00310)	IMME- DIATE COLI- FORM (COL. PER 100 ML) (31501)	FECAL COLI- FORM (COL. PER 100 ML) (31616)	STREP- TOCOCCI (COL- ONIES PER 100 ML) (31679)	TOTAL ORGANIC CARBON * (C) (MG/L) (00680)
JAN. 17...	10.4	2	1.0	0	0	14	--
FEB. 14...	11.0	5	.8	0	0	2	--
MAR. 13...	8.6	3	.4	0	0	1	--
APR. 10...	8.5	3	1.0	10	0	0	--
MAY 08...	8.3	2	.8	1	1	1	--
JULY 17...	6.6	--	--	--	1800	--	7.9
AUG. 21...	7.6	--	--	--	20	--	5.9
SEP. 11...	7.1	--	--	--	5000	--	29
OCT. 10...	8.2	--	--	--	9	--	5.0
NOV. 13...	10.8	--	--	--	1	--	2.5
DEC. 11...	12.2	--	--	--	1	--	2.4

* Analyzed by New Mexico Environmental Improvement Agency.

BIOLOGICAL ANALYSES, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

Date: April 10, 1972
Method of sampling:
Organisms (classification, number)
Odonata: Gomphidae; Progomphus, sp., 1

PESTICIDE ANALYSES, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	TOTAL ORGANIC CARBON (C) (MG/L) (00680)	ALDRIN (UG/L) (39330)	CHLOR- DANE (UG/L) (39350)	DDD (UG/L) (39360)	DDE (UG/L) (39365)	DDT (UG/L) (39370)	DI- ELDRIN (UG/L) (39380)
APR. 10...	1235	--	.00	.0	.00	.00	.00	.00
JULY 17...	1320	15	.00	.0	.00	.00	.00	.01
AUG. 21...	1215	14	.00	.0	.00	.00	.00	.00
NOV. 13...	1225	--	.00	.0	.00	.00	.00	.00

DATE	ENDRIN (UG/L) (39390)	HEPTA- CHLOR (UG/L) (39410)	HEPTA- CHLOR EPOXIDE (UG/L) (39420)	LINDANE (UG/L) (39340)	PCB (UG/L) (39516)	2,4-D (UG/L) (39730)	2,4,5-T (UG/L) (39740)	SILVEX (UG/L) (39760)
APR. 10...	.00	.00	.00	.00	--	.00	.00	.00
JULY 17...	.00	.00	.00	.00	--	.00	.00	.00
AUG. 21...	.00	.00	.00	.00	--	.00	.00	.00
NOV. 13...	.00	.00	.00	.00	.0	.00	.00	.00

ARKANSAS RIVER BASIN

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07227140 CANADIAN RIVER ABOVE NEW MEXICO-TEXAS STATE LINE, N. MEX.--Continued

INSTANTANEOUS SUSPENDED SEDIMENT AND PARTICLE SIZE, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	TEMPER- ATURE (DEG C) (00010)	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SUS- PENDED SEDI- MENT CHARGE (MG/L) (80154)	SUS- PENDED SEDI- MENT DIS- CHARGE (T/DAY) (80155)	SUS. SED. FALL DIAM. % FINER THAN (70337)	SUS. SED. FALL DIAM. % FINER THAN (70338)	SUS. SED. FALL DIAM. % FINER THAN (70340)	SUS. SED. FALL DIAM. % FINER THAN (70342)	SUS. SED. FALL DIAM. % FINER THAN (70343)	SUS. SED. FALL DIAM. % FINER THAN (70344)
JAN.											
08...	1400	.0	9.2	33	.8	--	--	--	--	--	--
17...	1310	8.0	15	151	6.1	--	--	--	--	--	--
FEB.											
14...	1250	9.5	10	143	3.8	--	--	--	--	--	--
MAR.											
13...	1230	19.5	7.4	86	1.4	--	--	--	--	--	--
APR.											
10...	1235	26.0	4.3	28	.3	--	--	--	--	--	--
MAY											
08...	1320	28.0	10	47	1.3	--	--	--	--	--	--
JULY											
17...	1320	30.5	18	2200	107	--	--	--	--	--	--
AUG.											
21...	1215	28.5	28	235	18	--	--	--	--	--	--
SEP.											
11...	1315	24.0	1000	5870	15800	35	41	49	77	94	100
OCT.											
10...	1245	20.0	31	110	9.2	--	--	--	--	--	--
NOV.											
13...	1225	7.5	20	377	20	--	--	--	--	--	--
DEC.											
11...	1330	.0	17	405	19	--	--	--	--	--	--

PART 8. WESTERN GULF OF MEXICO BASINS

RIO GRANDE BASIN

08251500 RIO GRANDE NEAR LOBATOS, COLO.

LOCATION.--Lat 37°04'42", long 105°45'22", in sec.22, T.33 N., R.11 E., Conejos County, at gaging station at highway bridge, 6 miles north of Colorado-New Mexico State line, 7 miles downstream from Culebra Creek, 10 miles east of Lobatos, and 14 miles east of Antonito.

DRAINAGE AREA.--7,700 sq mi, approximately (includes 2,940 sq mi in closed basin in northern part of San Luis Valley, Colo.).

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

REMARKS.--Replaces station 08249200 Rio Grande above Culebra Creek, near Lobatos, Colo. which was discontinued July 1969. This station operated by the Colorado District.

CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	DIS- CHARGE (CFS) (000660)	DIS- SOLVED SILICA (SiO ₂) (MG/L) (00955)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED MAN- GANESE (MN) (UG/L) (01056)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NESIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	DIS- SOLVED BICAR- BONATE (HCO ₃) (MG/L) (00440)
JAN.										
11...	1115	275	--	--	--	26	5.0	--	--	99
FEB.										
09...	1200	265	--	--	--	25	4.6	--	--	96
MAR.										
02...	1410	532	--	--	--	24	4.4	--	--	86
APR.										
13...	1235	154	--	--	--	45	9.2	--	--	134
MAY										
04...	1340	60	--	--	--	72	15	--	--	168
JUNE										
15...	1145	118	21	50	5	78	21	91	9.3	187
JULY										
12...	1520	40	--	--	--	61	16	--	--	162
AUG.										
15...	1400	108	--	--	--	25	4.7	--	--	81
SEP.										
21...	1330	139	22	--	--	27	4.9	17	3.3	94
OCT.										
25...	1500	198	23	--	--	24	4.7	19	3.7	96
NOV.										
24...	1515	280	28	--	--	27	5.0	17	3.0	103
DEC.										
21...	1100	280	32	50	0	24	4.4	13	3.1	97

DATE	CAR- BONATE (CO ₃) (MG/L) (00445)	DIS- SOLVED SULFATE (SO ₄) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	DIS- SOLVED AMMONIA NITRO- GEN (N) (MG/L) (00608)	TOTAL PHOS- PHORUS (P) (MG/L) (00665)	DIS- SOLVED ORTHO- PHOS- PHORUS (P) (MG/L) (00671)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L) (70300)
JAN.									
11...	0	40	7.8	--	.31	.17	.10	--	184
FEB.									
09...	0	29	4.2	--	.22	.07	.09	--	160
MAR.									
02...	0	54	5.8	--	.19	.07	.15	--	174
APR.									
13...	6	110	13	--	.00	.04	.18	--	364
MAY									
04...	10	220	24	--	.05	.07	.18	--	548
JUNE									
15...	0	300	29	.8	.00	--	--	.02	674
JULY									
12...	0	220	25	--	.14	.12	.02	--	530
AUG.									
15...	15	27	4.3	--	.04	.10	.18	--	174
SEP.									
21...	7	36	5.3	--	.00	--	--	.08	--
OCT.									
25...	0	41	5.8	--	.01	--	--	.07	--
NOV.									
24...	0	50	4.5	--	.01	--	--	.04	--
DEC.									
21...	0	27	4.1	.3	.17	--	--	.04	--

RIO GRANDE BASIN

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08251500 RIO GRANDE NEAR LOBATOS, COLO.--Continued

CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L) (70301)	HARD- NESS (CA, MG) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AD- SORP- TION RATIO (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	COLOR (PLAT- INUM- COBALT UNITS) (00080)	TUR- BID- ITY (JTU) (00070)
JAN. 11...	--	85	4	--	234	7.2	.0	3	3
FEB. 09...	--	81	3	--	230	7.5	.0	5	3
MAR. 02...	--	78	8	--	224	7.7	4.0	3	10
APR. 13...	--	150	30	--	456	8.6	11.0	10	10
MAY 04...	--	240	87	--	756	8.5	18.5	20	10
JUNE 15...	642	280	130	2.4	944	7.8	20.0	40	7
JULY 12...	--	220	85	--	773	6.4	24.0	30	20
AUG. 15...	--	82	0	--	230	8.6	25.0	30	20
SEP. 21...	169	88	0	.8	254	8.5	18.0	--	--
OCT. 25...	169	79	1	.9	254	7.9	13.0	--	--
NOV. 24...	185	88	4	.8	249	7.8	.0	--	--
DEC. 21...	157	78	0	.6	216	7.7	.0	--	--

RADIOCHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	DIS- SOLVED GROSS ALPHA AS U-NAT. (UG/L) (80030)	SUS- PENDED GROSS ALPHA AS U-NAT. (UG/L) (80040)	DIS- SOLVED GROSS BETA AS CS-137 (PC/L) (03515)	SUS- PENDED GROSS BETA AS CS-137 (PC/L) (03516)	DIS- SOLVED GROSS BETA AS SR90 /Y90 (PC/L) (80050)	SUS- PENDED GROSS BETA AS SR90 /Y90 (PC/L) (80060)	DIS- SOLVED RA-226 (PLAN- CHET COUNT) (PC/L) (09510)	DIS- SOLVED RA-226 (RADON METHOD) (PC/L) (09511)	DIS- SOLVED NATURAL URANIUM (U) (UG/L) (22703)	DIS- SOLVED URANIUM (U) (UG/L) (80020)
JAN. 11...	1300	1.7	<.4	4.5	.6	3.8	.6	--	.02	.8	--
FEB. 09...	1200	<1.8	.8	4.5	.9	3.8	.8	--	.02	.8	--
MAR. 02...	1430	2.5	6.0	4.0	3.5	3.3	2.9	--	.02	--	.88
APR. 13...	1235	14	1.0	7.1	1.9	5.7	1.7	--	.03	1.9	--
MAY 04...	1335	11	1.3	9.7	1.8	8.1	1.5	--	.04	4.1	--
JUNE 15...	1130	19	<.4	13	1.5	10	1.4	--	.04	3.7	--
JULY 12...	1500	11	1.7	9.3	2.4	7.6	2.0	--	.04	2.6	--
AUG. 15...	1300	3.8	2.0	5.5	1.7	4.3	1.5	--	.06	.7	--
SEP. 21...	1310	1.8	1.3	4.4	1.7	3.5	1.5	<.1	--	.6	--
OCT. 25...	1500	<2.0	1.3	4.8	1.6	4.2	1.4	--	.06	.8	--
NOV. 24...	1515	3.9	.8	4.6	.9	3.9	.8	--	.03	.9	--

RIO GRANDE BASIN

08251500 RIO GRANDE NEAR LOBATOS, COLO.--Continued

FIELD AND BIOCHEMICAL MEASUREMENTS, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	DIS- CHARGE (CFS) (00060)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	DIS- SOLVED OXYGEN (MG/L) (00300)	RIO- CHEM- ICAL OXYGEN DEMAND (MG/L) (00310)	IMME- DIATE COLI- FORM (COL. PER 100 ML) (31501)	FECAL COLI- FORM (COL. PER 100 ML) (31616)	STREP- TOCOCCI (COL- UNITES PER 100 ML) (31679)
JAN. 11...	1115	275	300	9.0	.0	9.7	2.8	92	12	104
FEB. 09...	1230	265	220	8.3	.0	11.0	1.0	30	20	20
MAR. 02...	1300	532	230	7.7	4.0	10.4	2.0	70	5	20
APR. 13...	1235	154	460	8.0	11.0	8.0	1.8	700	17	0
MAY 04...	1340	60	770	8.3	18.5	7.1	--	--	9500	--
JUNE 15...	1140	118	--	8.2	20.0	7.0	1.8	360	92	0
JULY 12...	1515	40	775	8.2	24.0	6.3	26	--	180	--
AUG. 15...	1400	108	240	8.1	25.0	6.0	28	--	7600	1300
SEP. 21...	1400	130	--	8.1	18.0	9.4	8.8	580	480	--
OCT. 25...	1500	108	--	--	--	--	8.0	--	--	--
NOV. 24...	1515	280	290	7.8	.0	11.2	2.7	19	13	--
DEC. 21...	1100	280	210	6.9	.0	9.9	.8	208	31	--

RIO GRANDE BASIN

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08255500 COSTILLA CREEK NEAR COSTILLA, N. MEX.

LOCATION.--Lat 36°58'01", long 105°30'23", Taos County, in Sangre de Cristo Grant, at gaging station, 70 ft downstream from bridge on State Highway 196, 0.5 mile upstream from diversion dam, and 1.6 miles southeast of Costilla.

DRAINAGE AREA.--195 sq mi.

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

CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	DIS- CHARGE (CFS) (000600)	DIS- SOLVED SILICA (SiO ₂) (MG/L) (00955)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	RICAR- BONATE (HCO ₃) (MG/L) (00440)	CAR- BONATE (CO ₃) (MG/L) (00445)	DIS- SOLVED SULFATE (SO ₄) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)
FEB.												
01...	1130	6.7	17	20	30	4.7	7.6	1.1	116	0	8.3	1.9
MAR.												
29...	1235	16	16	10	24	4.2	6.5	1.5	102	0	10	2.6
MAY												
17...	1035	58	18	40	19	3.0	5.4	1.1	77	0	7.0	1.0
AUG.												
07...	1135	38	16	--	22	3.4	5.9	1.3	87	7	7.6	1.3
NOV.												
03...	1230	6.0	16	50	28	4.5	7.3	1.1	115	0	9.7	2.7

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	DIS- SOLVED ORTHOPHOS- PHORUS (P) (MG/L) (00671)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L) (70300)	DIS- SOLVED SOLIDS (SUM OF TUENTS) (MG/L) (70301)	HARD- NESS (CA,MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AD- SORP- TION RATIO (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	DIS- SOLVED BORON (B) (UG/L) (01020)
FEB.												
01...	.8	.06	--	--	129	94	0	.3	203	7.9	.0	20
MAR.												
29...	.7	.04	.00	144	116	77	0	.3	183	7.8	.0	20
MAY												
17...	.8	.04	--	--	93	60	0	.3	141	7.6	8.0	40
AUG.												
07...	1.2	.01	--	--	109	69	0	.3	158	8.6	16.5	--
NOV.												
03...	.8	.02	--	--	127	88	0	.3	200	7.7	2.0	0

RIO GRANDE BASIN

08266800 RED RIVER AT FISH HATCHERY, NEAR QUESTA, N. MEX.

LOCATION.--Lat 36°41'07", long 105°39'05", SE $\frac{1}{4}$ SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec.3, T.28 N., R.12 E., Taos County, at Fish Hatchery bridge, 3.5 miles upstream from mouth, and 4 miles southwest of Questa.

DRAINAGE AREA.--185 sq mi, approximately.

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

Water temperatures: January 1966 to current year.

Sediment records: July 1970 to current year.

EXTREMES:

Current year:

Hardness: Maximum, 610 mg/l Dec. 6-16; minimum, 59 mg/l Dec. 17.

Specific conductance: Maximum daily, 1,320 micromhos Dec. 13, 1972; minimum daily, 208 micromhos May 27.

Water temperatures: Maximum, 16.0°C July 31; minimum, 3.0°C on several days during January.

Period of record:

Hardness: Maximum, 640 mg/l June 30, 1971; minimum, 59 mg/l Dec. 17, 1972.

Specific conductance: Maximum daily, 1,320 micromhos Dec. 13, 1972; minimum daily, 172 micromhos May 21, 1968.

Water temperatures: Maximum, 20.0°C July 24, 1970; minimum, freezing point Feb. 7, 1966, Dec. 17, 1968, Nov. 18, 26, 1969.

REMARKS.--Mean daily discharge is estimated by subtracting 10-15 cfs from the mean daily discharge computed from the record of the station at the mouth of the river.

CHEMICAL ANALYSES, COMPOSITES OF DAILY SAMPLES, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	DIS- CHARGE (CFS) (00060)	DIS- SOLVED SILICA (SiO ₂) (MG/L) (00955)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	BICAR- BONATE (HCO ₃) (MG/L) (00440)	CAR- BONATE (CO ₃) (MG/L) (00445)	DIS- SOLVED SULFATE (SO ₄) (MG/L) (00945)
JAN.										
01-02	27	--	--	49	8.8	--	--	111	0	--
03-04	26	--	--	71	9.3	--	--	97	0	--
05-10	29	--	--	53	8.6	--	--	104	0	--
11-15	31	--	--	42	7.5	--	--	98	0	--
16-18	36	--	--	71	9.6	--	--	92	0	--
19-31	34	--	--	43	7.8	--	--	94	0	--
FEB.										
01-05	30	--	--	46	8.5	--	--	105	0	--
06-07	36	--	--	60	9.1	--	--	92	0	--
08-11	34	--	--	46	8.5	--	--	86	0	--
12-13	32	--	--	53	9.3	--	--	106	0	--
14-29	33	--	--	42	8.4	--	--	91	0	--
MAR.										
01-10	31	--	--	55	8.9	--	--	91	0	--
11-31	38	--	--	47	8.2	--	--	89	0	--
APR.										
01-07	35	--	--	42	8.2	--	--	94	0	--
08-30	44	--	--	37	7.3	--	--	86	0	--
MAY										
01-31	46	--	--	26	6.7	--	--	53	0	--
JUNE										
01-14	57	--	--	33	6.5	--	--	74	0	--
15-23	53	--	--	53	7.8	--	--	58	0	--
24-30	43	--	--	69	9.1	--	--	61	0	--
JULY										
01-31	41	--	--	91	9.5	--	--	97	0	--
AUG.										
01-03	36	--	--	84	9.8	--	--	112	0	--
04-31	35	--	--	160	11	--	--	109	0	--
SEP.										
01-16	43	--	--	130	12	--	--	69	0	--
17-23	36	--	--	160	14	--	--	89	0	--
24-30	32	--	--	120	12	--	--	86	0	--
OCT.										
01-17	33	--	--	170	14	--	--	82	0	--
18...	29	--	--	58	10	--	--	82	0	--
19-24	40	--	--	170	14	--	--	48	2	--
25-31	40	--	--	89	10	--	--	46	0	--
NOV.										
06...	48	--	--	160	12	--	--	87	0	--
15...	45	22	9	150	12	25	7.8	90	0	390
DEC.										
01...	29	--	--	110	11	--	--	6	11	--
06-16	37	--	--	220	14	--	--	83	0	--
17...	31	--	--	16	4.6	--	--	104	0	--
18-19	34	--	--	87	10	--	--	103	0	--
20-28	37	--	--	160	11	--	--	90	0	--
29-31	33	--	--	66	8.6	--	--	101	0	--
CALENDAR YEAR										
WTD. AVG.	--	--	--	83	9.3	--	--	82	0	--
TIME WTD.										
AVG.	39	--	--	86	9.5	--	--	84	0	--
TONS										
PER DAY	--	--	--	8.7	1.0	--	--	9	0	--
WATER YEAR										
WTD. AVG.	--	--	--	77	8.8	--	--	86	0	--
TIME WTD.										
AVG.	39	--	--	68	8.9	--	--	88	0	--
TONS										
PFR DAY	--	--	--	7.1	.9	--	--	9	0	--

RIO GRANDE BASIN

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08266800 RED RIVER AT FISH HATCHERY, NEAR QUESTA, N. MEX.--Continued

CHEMICAL ANALYSES, COMPOSITES OF DAILY SAMPLES, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	DIS- SOLVED ORTHO. PHOS- PHORUS (P) (MG/L) (00671)	DIS- SOLVED BORON (B) (UG/L) (01020)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L) (70300)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L) (70301)	DIS- SOLVED SOLIDS (TONS PER 4C-FT) (70303)	DIS- SOLVED SOLIDS (TONS PER DAY) (70302)
JAN.									
01-02	--	--	.35	--	--	--	--	--	--
03-04	--	--	.44	--	--	--	--	--	--
05-10	--	--	.29	--	--	--	--	--	--
11-15	--	--	.28	--	--	--	--	--	--
16-18	--	--	.30	--	--	--	--	--	--
19-31	--	--	.27	--	--	--	--	--	--
FEB.									
01-05	--	--	.22	--	--	--	--	--	--
06-07	--	--	.23	--	--	--	--	--	--
08-11	--	--	.16	--	--	--	--	--	--
12-13	--	--	.26	--	--	--	--	--	--
14-29	--	--	.06	--	--	--	--	--	--
MAR.									
01-10	--	--	.27	--	--	--	--	--	--
11-31	--	--	.18	--	--	--	--	--	--
APR.									
01-07	--	--	.21	--	--	--	--	--	--
08-30	--	--	.22	--	--	--	--	--	--
MAY									
01-31	--	--	.01	--	--	--	--	--	--
JUNE									
01-14	--	--	.01	--	--	--	--	--	--
15-23	--	--	.03	--	--	--	--	--	--
24-30	--	--	.06	--	--	--	--	--	--
JULY									
01-31	--	--	.29	--	--	--	--	--	--
AUG.									
01-03	--	--	.21	--	--	--	--	--	--
04-31	--	--	.27	--	--	--	--	--	--
SEP.									
01-16	--	--	.08	--	--	--	--	--	--
17-23	--	--	.32	--	--	--	--	--	--
24-30	--	--	.13	--	--	--	--	--	--
OCT.									
01-17	--	--	.20	--	--	--	--	--	--
18...	--	--	.00	--	--	--	--	--	--
19-24	--	--	.07	--	--	--	--	--	--
25-31	--	--	.00	--	--	--	--	--	--
NOV.									
06...	--	--	.29	--	--	--	--	--	--
15...	7.1	1.3	.44	.05	30	756	662	.90	80.4
DEC.									
01...	--	--	.00	--	--	--	--	--	--
06-16	--	--	.49	--	--	--	--	--	--
17...	--	--	.08	--	--	--	--	--	--
18-19	--	--	.07	--	--	--	--	--	--
20-28	--	--	.13	--	--	--	--	--	--
29-31	--	--	.07	--	--	--	--	--	--
CALENDAR YEAR									
WTD. AVG.	--	--	.17	--	--	--	--	--	--
TIME WTD.									
AVG.	--	--	.18	--	--	--	--	--	--
TONS									
PER DAY	--	--	.02	--	--	--	--	--	--
WATER YEAR									
WTD. AVG.	--	--	.23	--	--	--	--	--	--
TIME WTD.									
AVG.	--	--	.25	--	--	--	--	--	--
TONS									
PER DAY	--	--	.03	--	--	--	--	--	--

RIO GRANDE BASIN

08266800 RED RIVER AT FISH HATCHERY, NEAR QUESTA, N. MEX.--Continued

CHEMICAL ANALYSES, COMPOSITES OF DAILY SAMPLES, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	HARD- NESS (CA,MG) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AD- SORP- TION RATIO (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	COLOR (PLAT- INUM- CORALT UNITS) (000A0)	TUR- BID- ITY (JTU) (00070)	DIS- SOLVED COPPER (CU) (UG/L) (01040)	DIS- SOLVED ZINC (ZN) (UG/L) (01090)
JAN.									
01-02	160	67	--	405	7.7	5	2	1	20
03-04	220	140	--	522	7.7	3	1	20	30
05-10	170	82	--	438	7.9	3	0	1	70
11-15	140	55	--	358	7.9	0	2	1	20
16-18	220	140	--	513	7.5	0	1	10	110
19-31	140	62	--	352	7.6	0	2	1	20
FEB.									
01-05	150	64	--	387	8.3	10	1	1	8
06-07	190	120	--	457	7.8	5	2	2	20
08-11	150	79	--	383	8.3	5	2	2	20
12-13	170	84	--	433	8.3	10	1	2	20
14-29	140	65	--	362	7.8	5	1	1	8
MAR.									
01-10	170	99	--	427	7.9	0	6	3	8
11-31	150	78	--	366	7.9	5	10	2	8
APR.									
01-07	140	61	--	351	7.6	5	3	3	8
08-30	120	52	--	314	7.4	2	6	4	8
MAY									
01-31	92	49	--	249	8.3	0	1	4	20
JUNE									
01-14	110	48	--	255	8.2	0	1	8	20
15-23	160	120	--	392	8.0	0	1	4	20
24-30	210	160	--	490	8.0	0	1	6	10
JULY									
01-31	270	190	--	590	7.6	0	1	4	30
AUG.									
01-03	250	160	--	529	7.7	0	4	2	10
04-31	440	360	--	882	7.9	0	1	1	20
SEP.									
01-16	370	320	--	807	7.7	2	1	10	10
17-23	460	380	--	955	7.7	1	1	6	20
24-30	350	280	--	802	7.9	1	2	3	10
OCT.									
01-17	480	420	--	874	8.2	0	1	1	10
18...	190	120	--	473	8.3	0	1	--	10
19-24	480	440	--	996	8.5	0	1	2	20
25-31	260	230	--	614	8.3	0	1	1	10
NOV.									
06...	450	380	--	910	8.0	1	5	5	10
15...	420	350	.5	877	7.2	2	30	--	--
DEC.									
01...	320	300	--	755	9.7	2	4	12	10
06-16	610	540	--	1160	7.7	2	1	5	10
17...	59	0	--	220	8.1	0	1	8	80
18-19	260	170	--	644	7.9	1	1	5	10
20-28	440	370	--	936	7.9	0	1	5	20
29-31	200	120	--	495	8.0	1	1	4	10
CALENDAR YEAR									
WTD. AVG. TIME WTD.	245	179	--	541	7.9	--	--	4	18
AVG. TONS PER DAY	252	185	--	555	7.9	--	--	4	18
	--	--	--	--	--	--	--	0	0
WATER YEAR									
WTD. AVG. TIME WTD.	202	132	--	469	7.9	--	--	5	20
AVG. TONS PER DAY	207	135	--	480	7.9	--	--	5	19
	--	--	--	--	--	--	--	0	

08266800 RED RIVER AT FISH HATCHERY, NEAR QUESTA, N. MEX.--Continued

CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	DIS- CHARGE (CFS) (00060)	DIS- SOLVED SILICA (SI02) (MG/L) (00955)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED MAN- GANESE (MN) (UG/L) (01056)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NESIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	BICAR- BONATE (HCO3) (MG/L) (00440)
JAN.										
14...	0900	32	--	--	--	--	--	--	--	--
FEB.										
29...	0930	31	--	--	--	--	--	--	--	--
APR.										
05...	1005	35	17	60	180	46	8.8	14	1.8	91
05...	1145	35	--	--	--	--	--	--	--	--
25...	0750	43	--	--	--	--	--	--	--	--
MAY										
17...	1345	47	--	--	--	--	--	--	--	--
JUNE										
06...	0800	60	--	--	--	--	--	--	--	--
06...	1924	59	19	90	4	34	6.3	13	1.8	96
27...	1215	40	--	--	--	--	--	--	--	--
JULY										
17...	1030	45	--	--	--	--	--	--	--	--
AUG.										
02...	1204	49	19	140	98	62	8.8	18	3.4	106
18...	0835	36	--	--	--	--	--	--	--	--
OCT.										
16...	0915	33	--	--	--	--	--	--	--	--
NOV.										
15...	0958	40	22	9	200	150	12	25	7.8	90
DEC.										
20...	0820	39	--	--	--	--	--	--	--	--

DATE	CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	DIS- SOLVED ORTHO- PHOS- PHORUS (P) (MG/L) (00671)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L) (70300)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L) (70301)	HARD- NESS (CA+MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)
JAN.										
14...	--	--	--	--	--	--	--	--	--	--
FEB.										
29...	--	--	--	--	--	--	--	--	--	--
APR.										
05...	0	100	4.8	.9	.06	.01	262	239	150	77
05...	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--
MAY										
17...	--	--	--	--	--	--	--	--	--	--
JUNE										
06...	--	--	--	--	--	--	--	--	--	--
06...	0	52	4.7	.6	.36	.01	212	181	110	32
27...	--	--	--	--	--	--	--	--	--	--
JULY										
17...	--	--	--	--	--	--	--	--	--	--
AUG.										
02...	0	190	4.4	1.0	.18	.01	416	361	190	110
18...	--	--	--	--	--	--	--	--	--	--
OCT.										
16...	--	--	--	--	--	--	--	--	--	--
NOV.										
15...	0	390	7.1	1.3	.44	.05	756	664	430	350
DEC.										
20...	--	--	--	--	--	--	--	--	--	--

DATE	SODIUM AD- SORP- TION RATIO (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MMOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	COLOR (PLAT- INUM- COBALT UNITS) (00080)	TUR- BID- ITY (JTU) (00070)	DIS- SOLVED BORON (B) (UG/L) (01020)	DIS- SOLVED COPPER (CU) (UG/L) (01040)	DIS- SOLVED ZINC (ZN) (UG/L) (01090)
JAN.									
14...	--	311	--	7.5	0	2	--	--	--
FEB.									
29...	--	311	--	9.0	2	3	--	--	--
APR.									
05...	.5	368	7.9	10.0	5	3	30	3	440
05...	--	319	--	13.0	5	1	--	--	--
25...	--	240	--	9.0	1	6	--	--	--
MAY									
17...	--	252	--	11.0	1	10	--	--	--
JUNE									
06...	--	276	--	12.0	0	3	--	--	--
06...	.5	280	8.0	15.5	6	1	20	4	350
27...	--	430	--	16.5	2	1	--	--	--
JULY									
17...	--	448	--	17.0	10	7	--	--	--
AUG.									
02...	.6	562	8.0	17.0	20	10	20	2	640
18...	--	680	--	15.0	5	5	--	--	--
OCT.									
16...	--	697	--	13.0	4	3	--	--	--
NOV.									
15...	.5	877	7.2	9.0	2	30	30	3	700
DEC.									
20...	--	788	--	7.5	3	9	--	--	--

RIO GRANDE BASIN

08266800 RED RIVER AT FISH HATCHERY, NEAR QUESTA, N. MEX.--Continued

TRACE ELEMENT ANALYSES, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	DIS- SOLVED ALUM- INUM (AL) (UG/L) (01106)	DIS- SOLVED ARSENIC (AS) (UG/L) (01000)	DIS- SOLVED BARIUM (BA) (UG/L) (01005)	DIS- SOLVED BERYL- LIUM (BE) (UG/L) (01010)	DIS- SOLVED BISMUTH (BI) (UG/L) (01015)	DIS- SOLVED BORON (B) (UG/L) (01020)	DIS- SOLVED CAD- MIUM (CD) (UG/L) (01025)	DIS- SOLVED CHRO- MIUM (CR) (UG/L) (01030)	DIS- SOLVED COBALT (CO) (UG/L) (01035)
APR. 05...	1005	140	0	39	<3	<5	30	0	<10	<10
JUNE 06...	1924	71	0	58	<2	<4	20	0	<8	<4
AUG. 02...	1204	230	3	38	<3	<7	20	1	<14	<7
NOV. 15...	0958	130	0	33	<4	<10	30	0	<10	<10

DATE	DIS- SOLVED COPPER (CU) (UG/L) (01040)	DIS- SOLVED GALLIUM (GA) (UG/L) (01120)	DIS- SOLVED GER- MANIUM (GE) (UG/L) (01125)	DIS- SOLVED IRON (FE) (UG/L) (01046)	TOTAL LEAD (PB) (UG/L) (01051)	DIS- SOLVED LEAD (PR) (UG/L) (01049)	DIS- SOLVED LITHIUM (LI) (UG/L) (01130)	DIS- SOLVED MAN- GANESE (MN) (UG/L) (01056)	TOTAL MERCURY (HG) (UG/L) (71900)	DIS- SOLVED MOLYB- DENUM (MO) (UG/L) (01060)
APR. 05...	3	<5	<10	60	2	<5	10	180	.3	220
JUNE 06...	4	<4	<8	90	14	5	10	<4	.0	54
AUG. 02...	2	<7	<14	140	8	<7	<10	98	.1	320
NOV. 15...	3	<5	<10	9	5	<10	30	200	.1	400

DATE	DIS- SOLVED NICKEL (NI) (UG/L) (01065)	DIS- SOLVED SILVER (AG) (UG/L) (01075)	DIS- SOLVED SELE- NIUM (SE) (UG/L) (01145)	DIS- SOLVED STRON- TIUM (SR) (UG/L) (01080)	DIS- SOLVED TIN (SN) (UG/L) (01100)	DIS- SOLVED TANIUM (TI) (UG/L) (01150)	DIS- SOLVED VANA- DIUM (V) (UG/L) (01085)	DIS- SOLVED ZINC (ZN) (UG/L) (01090)	DIS- SOLVED ZIR- CONIUM (ZR) (UG/L) (01160)
APR. 05...	<10	<1	0	390	<10	<5	<5.0	<440	<10
JUNE 06...	<4	<1	0	230	<8	<17	3.0	<350	<8
AUG. 02...	<3	<2	0	700	<14	5	<3.0	<640	<14
NOV. 15...	<10	<1	0	1900	<10	<10	<10	<700	<15

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C.) CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972
(ONCE-DAILY)

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	393	381	408	330	312	241	556	460	856	817	---	---
2	393	363	420	322	251	253	562	519	829	973	---	---
3	532	376	434	327	292	268	562	568	878	892	---	---
4	482	379	440	351	266	275	543	745	857	823	---	---
5	423	379	408	365	274	260	502	982	800	829	---	---
6	431	446	415	348	254	279	474	777	817	849	---	1210
7	425	438	418	348	220	261	411	915	738	991	---	1090
8	428	364	421	313	245	270	380	939	673	1140	---	1150
9	393	379	---	306	251	260	456	964	754	1140	---	1080
10	433	368	402	301	240	224	456	1010	794	1190	---	1060
11	354	365	378	301	273	229	540	812	812	907	---	1180
12	341	429	359	295	240	253	502	740	812	856	---	1250
13	332	404	---	296	240	237	600	1020	850	947	---	1320
14	339	380	358	287	257	270	777	1010	857	982	---	1060
15	366	364	333	318	232	315	584	1080	817	1050	---	917
16	527	386	381	310	225	361	806	1180	823	1100	---	1130
17	520	383	375	307	223	335	599	1090	899	1130	---	217
18	469	356	373	303	229	413	602	885	935	459	---	702
19	355	371	360	320	237	382	777	947	1030	939	---	570
20	342	365	348	317	217	413	725	956	1000	1100	---	981
21	342	342	334	312	233	447	688	915	857	892	---	955
22	338	328	338	307	231	438	610	831	885	939	---	946
23	333	331	321	315	234	414	692	783	964	884	---	774
24	331	325	324	320	249	580	740	915	836	991	---	848
25	371	325	340	307	213	489	637	806	849	572	---	1030
26	337	325	372	289	224	438	632	871	618	527	---	991
27	325	348	344	289	208	441	517	794	713	563	---	848
28	345	344	329	299	268	484	500	688	884	622	---	883
29	342	339	377	309	216	429	450	735	877	669	---	541
30	346	---	368	---	216	447	502	915	728	656	---	473
31	387	---	346	---	---	---	493	908	---	510	---	416
MONTH	390	368	373	314	242	347	577	863	835	869	---	909

RIO GRANDE BASIN

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08266800 RED RIVER AT FISH HATCHERY, NEAR QUESTA, N. MEX.--Continued
 TEMPERATURE (DEG. C) OF WATER, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972
 (ONCE-DAILY)

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	7.0	6.0	5.0	4.0	5.0	8.0	12.0	15.0	14.0	11.0	---	---
2	6.0	5.0	5.0	5.0	5.0	9.0	11.0	15.0	14.0	11.0	---	---
3	7.0	5.0	5.0	5.0	5.0	9.0	13.0	14.0	13.0	11.0	---	---
4	6.0	5.0	5.5	6.0	5.0	9.0	13.0	15.0	13.0	11.0	---	---
5	7.0	5.0	5.0	6.5	10.0	10.0	12.0	14.0	14.0	12.0	---	---
6	7.0	4.0	5.0	7.0	7.0	9.0	11.0	15.0	13.0	13.0	---	5.0
7	7.0	4.0	5.0	7.0	8.0	11.0	11.0	14.0	13.0	13.0	---	5.0
8	7.0	5.0	5.0	6.5	5.5	11.0	12.0	14.0	13.0	13.0	---	5.0
9	7.0	5.0	5.0	7.0	8.0	10.0	12.0	14.0	14.0	12.0	---	5.0
10	6.0	4.0	5.5	6.0	7.0	10.0	13.0	15.0	13.0	12.0	---	5.0
11	6.0	4.0	5.0	8.0	7.0	10.0	13.0	15.0	13.0	12.0	---	5.0
12	5.0	4.0	4.5	8.0	7.0	10.0	13.0	13.0	13.0	12.0	---	4.0
13	5.0	4.0	5.0	6.5	7.0	10.0	13.0	14.0	13.0	12.0	---	4.0
14	5.0	4.0	5.0	5.5	7.5	10.0	13.0	14.0	13.0	11.0	---	6.0
15	5.0	5.0	5.0	4.0	8.0	10.0	13.0	15.0	13.0	12.0	---	4.0
16	3.0	5.0	5.0	6.0	8.0	11.0	14.0	15.0	13.0	11.0	---	4.0
17	3.0	5.0	5.5	5.5	8.5	11.0	14.0	15.0	13.0	11.0	---	4.0
18	3.0	4.0	5.0	5.5	8.5	11.0	15.0	15.0	13.0	12.0	---	5.0
19	3.0	5.0	5.0	5.5	8.0	11.0	15.0	15.0	12.0	12.0	---	5.0
20	3.0	4.0	5.0	5.5	8.0	11.0	15.0	15.0	12.0	12.0	---	5.0
21	4.0	4.0	5.0	4.0	8.0	11.0	15.0	15.0	12.0	11.0	---	5.0
22	4.0	6.0	5.0	5.5	8.0	11.0	15.0	15.0	12.0	10.0	---	5.0
23	3.0	6.0	6.5	5.0	7.0	12.0	15.0	14.0	12.0	10.0	---	5.0
24	4.0	6.0	5.0	6.0	7.0	11.0	14.0	14.0	11.0	9.0	---	4.0
25	4.0	5.0	5.0	5.0	7.0	11.0	15.0	14.0	12.0	10.0	---	4.0
26	4.0	5.0	6.5	5.0	9.0	11.0	14.0	14.0	11.0	10.0	---	4.0
27	5.0	5.0	6.0	6.0	9.0	11.0	12.0	13.0	11.0	10.0	---	4.0
28	4.0	5.0	6.0	6.0	10.0	11.0	13.0	13.0	12.0	8.0	---	7.0
29	4.0	5.0	5.0	6.0	10.0	11.0	13.0	13.0	11.0	8.0	---	6.0
30	4.0	---	6.0	5.0	8.0	12.0	13.0	13.0	11.0	8.0	---	5.0
31	6.0	---	5.0	---	---	---	16.0	13.0	---	8.0	---	5.0
MONTH	5.0	5.0	5.0	6.0	7.5	10.5	13.5	14.5	12.5	11.0	---	5.0

INSTANTANEOUS SUSPENDED SEDIMENT AND PARTICLE SIZE, CALENDAR YEAR JANUARY 1972 to DECEMBER 1972

DATE	TIME	TEMPER- ATURE (DEG C) (00010)	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SUS- PENDEO SEDI- MENT (MG/L) (80154)	SUS- PENDEO SEDI- MENT DIS- CHARGE (T/DAY) (80155)
JAN.					
14...	0900	7.5	32	11	.95
FEB.					
08...	0945	7.5	31	11	.92
29...	0930	9.0	31	6	.50
MAR.					
13...	1035	10.0	38	24	2.5
APR.					
04...	1145	13.0	35	22	2.1
25...	0750	9.0	43	17	2.0
MAY					
17...	1345	11.0	47	36	4.6
JUNE					
06...	0800	12.0	60	18	3.0
27...	1215	16.5	40	14	1.5
JULY					
17...	1030	17.0	45	32	3.9
AUG.					
09...	0715	16.0	34	30	2.8
18...	0835	15.0	36	21	2.0
UCL.					
16...	0915	13.0	33	7	.62
NOV.					
16...	1015	19.0	38	14	1.4
DEC.					
01...	1000	8.5	23	14	.87

RIO GRANDE BASIN

08279000 EMBUDO CREEK AT DIXON, N. MEX.

LOCATION.--Lat 36°12'39", long 105°54'47", in NE 1/4 sec. 19, T.23 N., R.10 E., Rio Arriba County, at gaging station, on U.S. Highway 64, 0.5 mile upstream from mouth, 0.5 mile east of Embudo Post Office, and 1.7 miles northwest of Dixon. Prior to Sept. 2, 1971, at site 750 ft downstream.

DRAINAGE AREA.--305 sq mi.

PERIOD OF RECORD.--Chemical analyses: August 1970 to current year.

CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	DIS- CHARGE (CFS) (00060)	DIS- SOLVED SILICA (SiO2) (MG/L) (00955)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NE- SIUM (NA) (MG/L) (00925)	DIS- SOLVED SODIUM (K) (MG/L) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	BICAR- BONATE (HCO3) (MG/L) (00440)
JAN.									
20...	1310	28	29	--	32	5.7	16	2.8	123
FEB.									
14...	1320	27	15	--	58	6.9	9.7	1.3	187
MAR.									
02...	1135	16	17	--	59	7.0	9.4	1.1	205
22...	1330	34	--	--	--	--	--	--	--
APR.									
05...	1602	15	14	10	69	7.6	11	1.4	223
14...	1145	20	--	--	--	--	--	--	--
19...	1105	13	--	--	--	--	--	--	--
MAY									
04...	1210	7.9	23	--	41	8.3	29	3.6	153
25...	1110	7.7	17	--	65	7.4	15	1.6	183
JUNE									
06...	1723	17	17	11	67	7.9	11	1.8	257
12...	1125	37	18	--	43	7.9	20	2.6	123
JULY									
07...	1400	22	18	--	68	8.2	11	2.1	258
27...	1200	18	--	--	--	--	--	--	--
AUG.									
02...	1017	6.0	18	50	70	7.9	16	1.8	244
18...	1113	10	--	--	--	--	--	--	--
SEP.									
05...	1305	27	17	--	61	7.6	9.6	1.5	219
OCT.									
25...	1515	36	17	--	67	7.9	9.3	1.5	234
NOV.									
14...	1522	40	15	20	65	7.8	8.8	1.3	222
17...	1420	40	--	--	--	--	--	--	--
DEC.									
06...	1355	27	16	--	69	7.6	10	1.4	239

DATE	CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	DIS- SOLVED ORTHO- PHOS- PHORUS (P) (MG/L) (00671)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L) (70300)	DIS- SOLVED SOLIDS (SUM OF CONSTITU- ENTS) (MG/L) (70301)	HARD- NESS (CA, MG) (MG/L) (00900)
JAN.									
20...	0	31	5.6	.6	2.1	--	--	192	100
FEB.									
14...	0	25	6.2	.4	.12	--	--	215	170
MAR.									
02...	0	27	12	.3	.07	--	--	234	180
22...	--	--	--	--	--	--	--	--	--
APR.									
05...	0	26	6.1	.4	.06	.00	256	245	200
14...	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--
MAY									
04...	0	65	9.0	.7	.02	--	--	255	140
25...	0	34	8.0	.5	.23	--	--	240	190
JUNE									
06...	0	24	7.2	.3	.27	.00	264	264	200
12...	0	79	4.0	.3	.05	--	--	236	140
JULY									
07...	0	25	6.0	.4	.18	--	--	266	200
27...	--	--	--	--	--	--	--	--	--
AUG.									
02...	0	27	7.6	.0	.25	.01	284	269	210
18...	--	--	--	--	--	--	--	--	--
SEP.									
05...	0	24	5.3	.4	.16	--	--	235	180
OCT.									
25...	0	25	6.2	.4	1.4	--	--	256	200
NOV.									
14...	0	28	5.5	.4	.09	.02	284	241	190
17...	--	--	--	--	--	--	--	--	--
DEC.									
06...	0	28	6.4	.4	.62	--	--	259	200

08279000 EMBUDO CREEK AT DIXON, N. MEX.--Continued

CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	NON-CARBONATE HARDNESS (MG/L) (00902)	SODIUM ADSORPTION RATIO (00931)	SPECIFIC CONDUCTANCE (MICRO-MHOS) (00095)	PH (UNITS) (00400)	TEMPERATURE (DEG C) (00010)	COLOR (PLATINUM-COBALT UNITS) (00080)	TURBIDITY (JTU) (00070)	DIS-SOLVED BORON (B) (UG/L) (01020)
JAN.								
20...	2	.7	275	7.9	3.0	--	--	--
FEB.								
14...	20	.3	384	7.9	1.0	--	--	--
MAR.								
02...	8	.3	371	7.9	8.0	--	--	--
22...	--	--	308	--	13.0	--	--	--
APR.								
05...	21	.3	400	8.0	16.0	3	5	30
14...	--	--	352	--	--	--	--	--
19...	--	--	407	--	15.0	--	--	--
MAY								
04...	11	1.1	411	8.0	17.5	--	--	--
25...	43	.5	369	7.4	18.0	--	--	--
JUNE								
06...	0	.3	435	8.1	17.0	--	--	50
12...	39	.7	367	7.7	17.0	--	--	--
JULY								
07...	0	.3	445	7.9	22.0	--	--	--
27...	--	--	382	--	22.0	--	240	--
AUG.								
02...	7	.5	457	7.2	19.0	--	--	10
18...	--	--	471	--	20.0	--	--	--
SEP.								
05...	4	.3	379	7.4	21.0	--	--	--
OCT.								
25...	8	.3	402	7.8	12.0	--	--	--
NOV.								
14...	12	.3	389	7.2	6.5	--	--	30
17...	--	--	384	--	5.5	7	8	--
DEC.								
06...	8	.3	430	7.9	3.0	--	--	--

TRACE ELEMENT ANALYSES, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	DIS-SOLVED ALUMINUM (AL) (UG/L) (01106)	DIS-SOLVED ARSENIC (AS) (UG/L) (01000)	DIS-SOLVED BARIUM (BA) (UG/L) (01005)	DIS-SOLVED BERYLLIUM (BE) (UG/L) (01010)	DIS-SOLVED BISMUTH (BI) (UG/L) (01015)	DIS-SOLVED BORON (B) (UG/L) (01020)	DIS-SOLVED CADMIUM (CD) (UG/L) (01025)	DIS-SOLVED CHROMIUM (CR) (UG/L) (01030)	DIS-SOLVED COBALT (CO) (UG/L) (01035)
APR.										
05...	1602	38	2	240	<3	<6	30	0	<13	<13
JUNE										
06...	1723	7	0	120	<3	<6	50	0	<13	<6
AUG.										
02...	1017	110	2	230	<3	<6	10	0	<13	<6
NOV.										
14...	1522	19	0	130	<2	<6	30	0	<6	<6

DATE	DIS-SOLVED COPPER (CU) (UG/L) (01040)	DIS-SOLVED GALLIUM (GA) (UG/L) (01120)	DIS-SOLVED GERMANIUM (GE) (UG/L) (01125)	DIS-SOLVED IRON (FE) (UG/L) (01046)	TOTAL LEAD (PB) (UG/L) (01051)	DIS-SOLVED LEAD (PB) (UG/L) (01049)	DIS-SOLVED LITHIUM (LI) (UG/L) (01130)	DIS-SOLVED MANGANESE (MN) (UG/L) (01056)	TOTAL MERCURY (HG) (UG/L) (01900)	DIS-SOLVED MOLYBDENUM (MO) (UG/L) (01060)
APR.										
05...	2	<6	<13	10	6	<6	10	23	.3	<2
JUNE										
06...	4	<6	<13	11	16	<3	10	<6	.0	<2
AUG.										
02...	<2	<6	<13	50	4	<6	30	27	.2	<2
NOV.										
14...	2	<3	<6	20	1	<6	<10	20	.1	<3

DATE	DIS-SOLVED NICKEL (NI) (UG/L) (01065)	DIS-SOLVED SILVER (AG) (UG/L) (01075)	DIS-SOLVED SELENIUM (SE) (UG/L) (01145)	DIS-SOLVED STRONTIUM (SR) (UG/L) (01080)	DIS-SOLVED TIN (SN) (UG/L) (01100)	DIS-SOLVED TANTALUM (TA) (UG/L) (01150)	DIS-SOLVED VANADIUM (V) (UG/L) (01085)	DIS-SOLVED ZINC (ZN) (UG/L) (01090)	DIS-SOLVED ZIRCONIUM (ZR) (UG/L) (01160)
APR.									
05...	<13	<2	0	430	<13	<6	<6.0	<580	<13
JUNE									
06...	<6	<2	0	230	<13	<27	<3.0	<570	<13
AUG.									
02...	<3	<2	0	460	<13	3	<3.0	<600	<13
NOV.									
14...	<6	<0	1	300	<6	<6	<6.0	<350	<8

RIO GRANDE BASIN

08286500 RIO CHAMA ABOVE ABIQUIU RESERVOIR, N. MEX.

LOCATION.--Lat 36°19'06", long 106°35'50", Rio Arriba County, at gaging station 7.7 miles downstream from Rio Gallina, 9 miles northwest of Youngsville, 15.6 miles upstream from Abiquiu Dam, 30.3 miles downstream from El Vado Dam, and at mile 47.4.

DRAINAGE AREA.--1,600 sq mi, of which 100 sq mi is probably noncontributing.

PERIOD OF RECORD.--Specific conductance: October 1969 to current year.

Water temperatures: October 1962 to current year.

Sediment records: October 1962 to current year.

EXTREMES:

Current year:

Specific conductance: Maximum daily, 1,150 micromhos Aug. 31; minimum daily, 197 micromhos Apr. 29.

Water temperatures: Maximum daily, 23.5°C on July 10, Aug. 21; minimum, freezing point Jan. 4.

Sediment concentrations: Maximum daily, 35,200 mg/l Oct. 20; minimum daily, 10 mg/l July 4.

Sediment discharge: Maximum daily, 115,000 tons Oct. 20; minimum daily, .81 ton July 4.

Period of record:

Specific conductance: Maximum daily, 1,270 micromhos July 16, 1970; minimum daily, 153 micromhos May 23, 1970.

Water temperatures: Maximum, 32.0°C Aug. 19, 1964; minimum, freezing point on many days during winter months.

Sediment concentrations: Maximum daily, 73,800 mg/l Dec. 6, 1966; minimum daily, 10 mg/l on several days during Sept. 1968,

July 1969, and July 1972.

Sediment discharge: Maximum daily, 230,000 tons Aug. 11, 1967; minimum daily, .81 ton July 4, 1972.

REMARKS.--Records furnished by the Corps of Engineers, Albuquerque, District. Suspended sediment particle-size analyses for the 1963-72 water years determined by method established by the Corps of Engineers.

SPECIFIC CONDUCTANCE (MICROMHUS/CM AT 25 DEG. C) CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972
(ONCE-DAILY)

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	---	---	455	306	207	309	357	390	769	769	361	---
2	---	---	469	294	208	316	349	395	769	769	366	---
3	---	---	455	303	205	303	448	353	857	732	395	---
4	---	---	526	309	222	306	435	448	938	732	380	---
5	---	---	536	303	210	330	714	833	714	833	366	---
6	---	---	455	275	205	326	714	462	667	833	370	---
7	---	---	462	300	203	306	600	449	1030	682	361	---
8	---	---	380	259	203	288	588	395	1110	667	353	---
9	---	---	395	273	205	283	526	400	769	682	448	---
10	---	---	370	273	219	280	517	441	714	555	462	---
11	---	---	380	244	208	330	395	455	732	545	405	---
12	---	---	326	252	216	341	395	441	732	517	395	---
13	---	---	345	268	208	500	353	462	750	500	390	---
14	---	---	357	226	233	448	375	448	732	536	405	---
15	---	---	345	248	236	370	366	448	652	577	385	---
16	---	---	303	221	256	366	366	441	667	545	341	---
17	---	---	309	217	254	370	357	435	638	555	333	---
18	---	---	300	229	236	370	353	536	652	566	345	---
19	---	---	316	216	242	390	211	517	732	545	353	---
20	---	---	309	234	244	411	203	462	732	566	326	---
21	---	---	283	222	244	337	403	455	625	536	319	---
22	---	---	254	216	270	366	375	462	612	319	330	---
23	---	789	265	200	297	357	370	469	638	309	326	---
24	---	750	263	205	224	333	375	508	638	323	345	---
25	---	555	256	233	231	337	500	500	---	435	345	---
26	---	508	286	207	261	353	469	508	---	476	345	---
27	---	566	240	236	252	326	370	484	---	492	357	---
28	---	577	286	217	268	326	423	811	---	323	345	---
29	---	492	306	197	268	337	390	750	667	341	423	---
30	---	---	288	213	341	323	380	1110	---	366	417	---
31	---	---	294	---	300	---	429	1150	---	366	---	---
MONTH	---	---	350	247	238	345	423	530	741	548	370	---

RIO GRANDE BASIN

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08286500 RIO CHAMA ABOVE ABIQUIU RESERVOIR, N. MEX.--Continued

TEMPERATURE (DEG. C) OF WATER-CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972
(ONCE-DAILY)

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

SUSPENDED-SEDIMENT DISCHARGE, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

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	70	100	19	55	1170	174	389	2190	2300
2	75	110	22	58	1300	204	368	1610	1600
3	77	110	23	56	1260	191	173	1800	824
4	77	130	27	56	420	64	120	730	237
5	77	120	25	56	310	47	132	440	157
6	77	120	25	56	260	39	142	1130	433
7	77	180	37	56	280	42	213	1480	867
8	75	320	65	56	310	47	224	1420	859
9	75	250	51	56	300	45	260	1180	828
10	75	250	51	56	160	24	260	2140	1500
11	75	220	45	55	190	28	307	1700	1410
12	75	200	41	55	230	34	364	1850	1820
13	73	220	43	58	260	41	392	1760	1860
14	73	270	53	60	220	36	406	2360	2590
15	73	310	61	70	280	53	446	1950	2350
16	72	420	82	90	280	68	403	1400	1520
17	71	410	79	100	380	103	406	1160	1270
18	71	420	81	120	490	159	458	1450	1790
19	71	480	92	135	610	222	410	1150	1270
20	71	460	88	150	720	292	406	1420	1560
21	71	490	94	200	840	454	438	1400	1660
22	70	520	98	350	4220	3990	434	1560	1830
23	68	540	99	700	12300	23200	438	1420	1680
24	68	520	95	500	6160	8320	470	2080	2640
25	65	640	112	520	4300	6040	434	1710	2000
26	60	680	110	250	4280	2890	392	1030	1090
27	60	680	110	170	1470	675	375	820	830
28	60	720	117	250	1250	844	337	890	810
29	60	865	140	389	1440	1510	283	1620	1240
30	58	920	144	--	--	--	238	500	321
31	55	1030	153	--	--	--	235	540	343
TOTAL	2175	--	2282	4783	--	49836	10353	--	41489

RIO GRANDE BASIN

08286500 RIO CHAMA ABOVE ABIQUIU RESERVOIR, N. MEX.--Continued

SUSPENDED-SEDIMENT DISCHARGE, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

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	227	400	245	304	370	304	254	2700	1850
2	216	500	292	251	130	88	214	280	162
3	216	750	437	204	140	77	152	80	33
4	216	620	362	202	220	120	138	60	22
5	243	990	650	202	140	76	120	80	26
6	385	2340	2450	240	150	97	186	43	21
7	526	2500	3550	248	190	127	197	75	40
8	566	1800	2750	292	180	142	263	85	60
9	598	1520	2450	286	185	143	295	160	127
10	616	1500	2490	227	250	153	277	150	112
11	630	1250	2130	227	180	110	310	370	310
12	650	1410	2470	227	120	74	325	550	483
13	640	1290	2230	194	140	73	246	1090	724
14	518	640	895	190	80	41	263	970	689
15	490	920	1220	190	90	46	104	100	29
16	422	580	661	142	90	35	146	1640	650
17	350	400	378	172	65	30	134	700	253
18	347	590	553	209	80	45	114	270	83
19	344	330	307	188	90	46	99	600	160
20	344	390	362	154	240	100	180	683	334
21	347	350	328	192	80	41	183	140	69
22	347	290	272	307	280	250	269	430	338
23	350	270	255	364	390	383	310	510	427
24	347	220	206	372	600	603	328	280	248
25	307	740	613	356	690	667	331	340	304
26	310	230	193	358	690	667	334	510	460
27	310	180	151	372	690	693	334	280	253
28	310	140	117	372	690	693	331	330	295
29	310	110	92	368	670	666	289	490	382
30	307	160	133	322	500	435	298	240	193
31	--	--	--	298	8910	7170	--	--	--
TOTAL	11789	--	29242	8032	--	14195	7024	--	9137
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	82	21	263	350	249	49	1780	235
2	60	45	7.3	248	330	221	58	4540	711
3	40	20	2.2	266	350	251	135	12000	6620
4	30	10	.81	302	1730	1830	35	2700	255
5	41	2130	318	332	2870	3290	23	1700	106
6	47	4350	552	283	5600	4280	21	950	54
7	35	2480	234	232	3300	2070	99	16000	5930
8	32	690	60	180	750	365	65	13500	2370
9	98	979	389	110	410	122	45	3000	365
10	156	840	354	90	300	73	35	1390	131
11	176	630	299	100	380	103	45	4270	1260
12	194	852	448	100	300	81	219	15500	10300
13	375	590	597	100	300	81	88	3380	886
14	382	670	691	100	300	81	87	7330	1850
15	382	640	660	98	320	85	65	11000	1930
16	386	490	511	98	530	140	35	7500	709
17	148	215	101	97	890	233	25	1500	101
18	38	960	98	97	4100	1070	25	750	51
19	95	14900	4520	97	5020	1310	35	2550	735
20	209	22000	12400	104	2600	730	491	29500	44500
21	271	4100	3000	88	600	143	324	24800	23700
22	268	550	398	64	330	57	80	11100	2400
23	266	400	287	56	110	17	35	830	78
24	274	2080	1930	73	310	61	35	370	35
25	317	12400	11400	76	410	84	36	280	27
26	313	5020	4240	85	440	101	37	400	40
27	271	820	600	119	17100	7400	37	200	20
28	266	500	359	70	3950	747	22	250	15
29	224	680	411	78	8550	2730	20	150	8.1
30	268	250	181	77	14800	3080	30	230	19
31	257	400	278	57	3300	508	--	--	--
TOTAL	6005	--	45347.31	4140	--	31593	2336	--	105441.1

RIO GRANDE BASIN

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08286500 RIO CHAMA ABOVE ABIQUIU RESERVOIR, N. MEX.--Continued

SUSPENDED-SEDIMENT DISCHARGE, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

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	32	250	22	342	3450	3320	107	508	205
2	16	110	4.8	321	4890	4970	132	720	257
3	11	90	2.7	306	5670	4790	110	750	223
4	18	90	4.4	306	4820	4100	136	820	301
5	20	90	4.9	269	5320	2650	104	863	245
6	66	719	201	254	2080	1430	127	955	334
7	248	3790	2650	296	1080	830	72	890	173
8	156	1810	1250	204	860	474	118	1100	450
9	336	4810	4680	277	5280	3950	134	1090	394
10	142	2180	836	216	5180	3020	148	1050	420
11	150	1580	640	190	2330	1200	113	1040	317
12	89	406	96	190	1550	765	79	940	201
13	169	4300	2270	190	5120	1600	82	1010	224
14	152	4640	1910	199	3100	1670	99	1010	270
15	246	4800	3210	222	3410	2040	83	1090	274
16	246	5360	3560	140	880	335	116	1240	388
17	390	5420	6060	181	810	396	120	1300	421
18	262	17400	12700	158	650	269	156	1410	518
19	242	16400	10900	148	540	216	140	1380	522
20	1140	35200	115000	181	690	337	134	1270	459
21	918	17300	46800	156	540	227	116	1040	326
22	620	3780	6450	140	930	352	89	890	214
23	393	2370	2790	134	800	289	91	860	211
24	269	967	703	96	600	156	80	880	190
25	323	2990	2920	144	590	229	93	1010	254
26	271	13200	9800	127	390	134	91	1020	251
27	206	6740	3750	91	390	96	94	1090	277
28	260	4750	3330	136	560	212	102	1100	303
29	216	3000	1750	134	150	56	104	1050	295
30	292	3790	2990	80	213	46	94	1060	269
31	322	2850	2480				97	1080	283
TOTAL	8223	--	249704.8	5852	--	40177	3351	--	9369

TOTAL DISCHARGE FOR 1972 WATER YEAR (CFS-DAYS)

TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR 1972 WATER YEAR (TONS)

TOTAL DISCHARGE FOR 1972 CALENDAR YEAR (CFS-DAYS)

TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR 1972 CALENDAR YEAR (TONS)

74628
446530.01
74043
627813.21

RIO GRANDE BASIN

08286500 RIO CHAMA ABOVE ABIQUIU RESERVOIR, N. MEX.--Continued

SUSPENDED-SEDIMENT DISCHARGE, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	TEMPER- ATURE (DEG C) (00010)	INSTAN- TANEOUS DIS- CHARGE (00061)	SUS- PENDE SEDIM- ENT CHARGE (MG/L) (80154)	SUS- PENDE SEDIM- ENT CHARGE (T/DAY) (80155)	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM (70331)	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM (70332)	SUS. SED. SIEVE DIAM. % FINER THAN .250 MM (70333)	SUS. SED. SIEVE DIAM. % FINER THAN .500 MM (70334)	SUS. SED. SIEVE DIAM. % FINER THAN 1.00 MM (70335)
FER. 23...	1500	7.8	700	9670	18300	90	95	99	100	--
MAR. 07...	1400	7.2	204	1190	655	44	74	95	99	100
APR. 13...	1000	6.7	650	1330	2330	45	72	95	99	100
MAY 23...	1500	15.0	403	440	479	75	87	97	100	--
JUNE 16...	1000	16.7	144	3000	1170	34	48	85	99	100
JULY 10...	1800	23.4	154	1930	802	74	90	98	100	--
AUG. 06...	1800	20.6	246	2690	1790	74	92	99	100	--
SEP. 06...	1105	19.0	165	5800	2580	98	99	100	--	--
07...	1800	18.9	158	24000	10200	98	99	100	--	--

	SUS. SED. FALL DIAM. % FINER THAN .004 MM 70327	SUS. SED. FALL DIAM. % FINER THAN .008 MM 70328	SUS. SED. FALL DIAM. % FINER THAN .016 MM 70329	SUS. SED. FALL DIAM. % FINER THAN .031 MM 70330
FER. 23...	--	66	77	84
MAR. 07...	17	20	24	30
APR. 13...	16	20	23	29
MAY 23...	6	19	33	55
JUNE 16...	15	23	28	31
JULY 10...	15	24	37	54
AUG. 06...	18	34	47	59
SEP. 06...	18	55	83	95
07...	--	--	60	92

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LOCATION.--Lat 36°14'12", long 106°24'59", in SE~~1~~⁴ sec.8, T.23 N., R.5., Rio Arriba County, at gaging station 0.8 mile downstream from Abiquiu Dam, 5.9 miles northwest of Abiquiu, and at mile 31.3.

Water temperatures: October 1962 to current year

Sediment records: October 1962 to current year.

Current year:

Specific conductance: Maximum daily, 833 micromhos Sept. 20; minimum daily, 229 micromhos May 5.

Water temperatures: Maximum 21.0°C July 21; minimum, freezing point Jan 6.

Sediment concentrations: Maximum daily, 25,000 mg/l Oct. 21; minimum daily, 20 mg/l on several days during January, September, and December, 1972.

Sediment discharge: Maximum daily, 68,200 tons Oct. 21; minimum daily, .54 ton Sept. 19.

Specific conductance: Maximum daily, 1,220 micromhos July 24, 1970; minimum daily, 146 micromhos May 28, 1970.

Water temperatures: Maximum, 28.0°C June 16, 1964; minimum, freezing point on many days during winter months.

Sediment concentrations: Maximum daily, 85,000 mg/l Nov. 29, 1967; minimum daily, 10 mg/l on many days each year.

Sediment discharge: Maximum daily, 214,000 tons Aug. 1, 1969; minimum daily, .54 ton Sept. 19, 1972.

REMARKS.--Records furnished by the Corps of Engineers. Suspended sediment particle-size analyses for the 1963-72 water years determined by method established by the Corps of Engineers.

[illegible]

RIO GRANDE BASIN

08287000 RIO CHAMA BELOW ABIQUIU DAM, N. MEX.--Continued

TEMPERATURE (DEG. C) OF WATER, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972
(ONCE-DAILY)

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

SUSPENDED-SEDIMENT DISCHARGE, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

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	88	133	36	52	50	7.0	386	70	73
2	104	150	42	59	50	8.0	336	70	64
3	74	130	26	59	60	9.6	354	130	124
4	57	90	14	41	40	4.4	197	120	64
5	69	30	5.6	56	40	6.0	84	100	23
6	58	30	4.7	60	50	8.1	141	70	27
7	46	20	2.5	58	50	7.8	252	90	61
8	47	20	2.5	78	70	15	293	85	67
9	115	25	7.8	66	50	8.9	277	75	56
10	96	30	7.8	67	80	14	323	70	61
11	67	50	9.0	71	50	9.6	353	80	76
12	76	80	16	47	50	6.3	402	100	109
13	81	100	22	60	50	8.1	441	125	149
14	74	30	6.0	86	95	22	459	160	198
15	67	25	4.5	102	60	17	468	200	253
16	93	25	6.3	96	50	13	482	240	312
17	68	25	4.6	137	60	22	405	250	273
18	54	40	5.8	219	150	89	456	250	308
19	67	30	5.4	309	320	267	466	240	302
20	74	25	5.0	328	450	399	430	200	232
21	72	25	4.9	408	520	573	456	180	222
22	67	25	4.5	470	530	673	446	165	199
23	78	30	6.3	701	3730	7060	424	160	183
24	83	30	6.7	1150	1300	4040	473	160	204
25	67	35	6.3	476	600	771	489	155	205
26	60	52	8.4	426	400	460	401	155	168
27	78	50	11	237	220	141	371	150	150
28	44	55	6.5	131	130	46	348	140	132
29	80	85	18	285	100	77	301	135	110
30	69	50	9.3	---	---	---	249	140	94
31	55	52	7.7	---	---	---	225	138	84
TOTAL	2228	--	323.1	6335	--	14782.8	11188	--	4583

08287000 RIO CHAMA BELOW ABIQUIU DAM, N. MEX.--Continued

SUSPENDED-SEDIMENT DISCHARGE, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

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	226	120	73	298	70	56	257	100	69
2	231	110	69	248	70	47	196	105	56
3	218	95	56	199	70	38	161	110	48
4	208	80	45	199	70	38	97	130	34
5	223	80	48	194	70	37	103	140	39
6	357	220	212	228	60	37	127	50	17
7	520	320	449	231	50	31	201	60	33
8	540	240	408	264	40	29	216	60	35
9	588	240	381	292	45	35	258	70	49
10	619	230	384	224	50	30	259	70	49
11	602	230	374	204	60	33	271	70	51
12	613	250	414	210	55	31	308	70	58
13	659	250	445	192	50	26	264	70	50
14	525	255	361	174	40	19	250	70	47
15	488	225	296	172	40	19	178	70	34
16	446	180	217	144	35	14	89	70	17
17	368	150	149	120	35	11	121	130	42
18	331	135	121	167	40	18	119	155	50
19	345	120	112	195	40	21	92	120	30
20	342	110	102	147	40	16	123	135	45
21	342	100	92	150	45	18	173	80	37
22	344	90	84	169	50	23	220	65	39
23	347	85	80	341	210	193	276	60	45
24	342	80	74	387	55	57	292	60	47
25	314	80	68	313	40	34	314	55	47
26	298	80	64	328	35	31	314	50	42
27	290	75	59	339	30	27	315	50	43
28	294	70	56	342	35	32	313	50	42
29	298	70	56	342	40	37	278	50	38
30	299	70	57	342	50	46	285	50	38
31	--	--	--	332	65	58	--	--	--
TOTAL	11617	--	5406	7487	--	1142	6470	--	1271
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	158	50	21	252	90	61	28	153	12
2	63	90	15	259	80	56	28	140	11
3	55	75	11	251	70	47	97	230	60
4	48	85	11	261	60	42	117	185	58
5	55	100	15	282	50	38	66	110	20
6	70	90	17	207	45	25	21	354	19
7	44	90	11	214	40	24	24	225	15
8	33	90	8.0	272	35	26	69	130	24
9	33	90	8.0	267	40	29	97	153	40
10	126	130	44	185	45	22	78	140	29
11	177	45	22	110	60	18	39	133	14
12	181	40	20	113	60	18	149	270	109
13	291	80	63	99	60	16	190	190	97
14	391	120	127	78	70	15	81	55	12
15	400	95	103	78	80	17	67	25	4.5
16	303	80	65	88	90	21	65	20	3.5
17	127	70	24	89	100	24	41	20	2.2
18	128	70	24	90	110	27	18	20	.97
19	216	63	37	81	110	24	10	20	.54
20	235	84	53	78	125	26	28	1580	119
21	271	100	73	85	130	30	45	1360	165
22	285	100	77	73	120	24	153	1020	421
23	284	100	77	55	120	18	213	350	201
24	277	80	60	52	120	17	51	140	19
25	298	100	80	47	120	15	24	120	7.8
26	335	130	118	48	150	19	24	120	7.8
27	313	120	101	58	170	27	29	125	9.8
28	274	100	74	70	183	35	33	83	7.4
29	237	85	54	44	160	19	25	50	3.4
30	252	70	48	39	155	16	21	40	2.3
31	270	80	58	37	155	15	--	--	--
TOTAL	6230	--	1519.0	3967	--	811	1931	--	1495.21

RIO GRANDE BASIN

08287000 RIO CHAMA BELOW ABIQUIU DAM, N. MEX.--Continued

SUSPENDED-SEDIMENT DISCHARGE, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

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	21	48	2.7	363	156	153	102	60	17
2	24	65	4.2	283	175	134	137	60	22
3	24	70	4.5	256	156	108	136	54	20
4	16	68	2.9	324	128	112	121	48	16
5	16	60	2.6	293	115	91	139	45	17
6	24	65	4.2	256	105	73	81	40	8.7
7	148	130	52	303	102	83	85	48	11
8	185	116	58	231	107	67	113	43	13
9	162	105	46	260	102	72	92	40	9.9
10	210	140	79	277	58	43	131	40	14
11	120	63	20	188	50	25	168	40	18
12	95	45	12	223	50	30	152	40	16
13	93	38	9.5	180	50	24	71	40	7.7
14	145	35	14	203	55	30	70	40	7.6
15	158	33	14	260	60	42	80	40	8.6
16	260	110	77	173	60	28	84	57	13
17	488	180	237	187	55	28	129	40	14
18	570	90	139	220	52	31	97	33	8.6
19	297	64	51	175	48	23	94	38	9.6
20	692	20900	39000	173	45	21	148	40	16
21	1010	25000	68200	176	42	20	125	40	14
22	759	8850	18100	170	40	18	93	40	10
23	612	1380	2280	184	40	20	106	40	11
24	330	500	446	120	40	13	120	40	13
25	299	176	142	71	40	7.7	90	40	9.7
26	299	197	159	170	65	30	90	36	8.7
27	208	170	95	202	70	38	89	22	5.3
28	182	140	69	103	65	18	88	20	4.8
29	261	150	106	189	50	26	121	20	6.5
30	292	152	120	148	50	20	131	20	7.1
31	324	150	131				85	20	4.6
TOTAL	8324	--	129677.6	6361	--	1428.7	3368	--	362.4

TOTAL DISCHARGE FOR 1972 WATER YEAR (CFS-DAYS)

78090

TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR 1972 WATER YEAR (TONS)

87839.71

TOTAL DISCHARGE FOR 1972 CALENDAR YEAR (CFS-DAYS)

75506

TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR 1972 CALENDAR YEAR (TONS)

162801.81

INSTANTANEOUS SUSPENDED SEDIMENT AND PARTICLE SIZE, JANUARY 1972 TO DECEMBER 1972

DATE	TIME	TEMPER- ATURE (DEG C) (00010)	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SUS- PENDE D SED- IMENT DIS- CHARGE (MG/L) (80154)	SUS- PENDE D SED- IMENT DIS- CHARGE (T/DAY) (80155)	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM (70331)	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM (70332)	SUS. SED. SIEVE DIAM. % FINER THAN .250 MM (70333)	SUS. SED. SIEVE DIAM. % FINER THAN .500 MM (70334)	SUS. SED. SIEVE DIAM. % FINER THAN 1.00 MM (70335)
FEB. 22...	0800	6.1	471	530	674	97	98	99	100	--
MAR. 17...	0800	7.2	449	250	303	98	99	100	--	--
JUNE 05...	0800	17.2	74	160	32	93	95	98	99	100
JULY 20...	0800	20.0	220	3290	1950	99	100	--	--	--
SEP. 07...	1240	19.5	21	270	15	99	100	--	--	--
				SUS. SED. FALL DIAM. % FINER THAN .004 MM 70327	SUS. SED. FALL DIAM. % FINER THAN .008 MM 70328	SUS. SED. FALL DIAM. % FINER THAN .016 MM 70329	SUS. SED. FALL DIAM. % FINER THAN .031 MM 70330			
FEB. 22...				76	86	93	96			
MAR. 17...				72	87	93	96			
JUNE 05...				55	78	85	89			
JULY 20...				26	73	90	97			
SEP. 07...				58	86	95	98			

RIO GRANDE BASIN

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08290000 RIO CHAMA NEAR CHAMITA, N. MEX.

LOCATION.--Lat 36°04'26", long 106°06'40", in NE¼NE¼ sec.8, T.21 N., R.8 E., Rio Arriba County, San Juan Pueblo Grant at gaging station, at bridge on U.S. Highway 285, 0.5 mile west of Chamita, 2.5 miles northwest of San Juan Pueblo, and at mile 2.8.

DRAINAGE AREA.--3,144 sq mi, of which about 100 sq mi is probably noncontributing.

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

Water temperatures: October 1950 to current year.

Sediment records: October 1947 to current year.

EXTREMES:

Current year:

Specific conductance: Maximum daily, 909 micromhos Sept. 24; minimum daily, 274 micromhos Mar. 8, 10, 11.

Water temperatures: Maximum, 24.0°C July 7; minimum, 1.0°C on several days during January.

Sediment concentrations: Maximum daily, 29,700 mg/l Oct. 8; minimum daily, 20 mg/l May 15, July 3-4.

Sediment discharge: Maximum daily, 25,000 tons Feb. 24; minimum daily, 1.1 tons July 4.

Period of record:

Specific conductance (1969-72): Maximum daily, 1,010 micromhos July 25, 1970; minimum daily, 186 micromhos May 26, 1970.

Water temperatures: Maximum, 32.0°C July 19, 1951, Aug. 8, 1956, Aug. 21, 1969; minimum, freezing point on many days during winter months.

Sediment concentrations: Maximum daily, 62,800 mg/l July 27, 1971; minimum daily, no flow on several days in August 1950, 1951, September 1953, and July 1955.

Sediment discharge: Maximum daily, 340,000 tons Aug. 9, 1967; minimum daily, 0 tons on several days in August 1950 and 1951, September 1953, and July 1955.

REMARKS.--Daily specific conductance, daily temperature, and suspended sediment records furnished by Corps of Engineers, Albuquerque District. Suspended sediment particle-size analyses for the 1963-72 water years determined by method established by the Corps of Engineers.

CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	DIS- CHARGE (CFS) (00060)	DIS- SOLVED SILICA (SiO2) (MG/L) (00955)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NESIUM (MG) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED POT- AS- SIUM (K) (MG/L) (00935)	BICAR- BONATE (HCO3) (MG/L) (00440)
JAN.									
21...	1130	137	22	--	60	14	45	3.0	188
FEB.									
11...	1630	136	23	--	54	13	47	3.2	186
28...	1125	176	18	--	51	12	33	3.6	156
MAR.									
23...	1300	479	--	--	--	--	--	--	--
APR.									
05...	1735	252	18	180	34	6.8	19	2.4	111
13...	1030	654	--	--	--	--	--	--	--
MAY									
05...	1105	151	17	--	33	5.7	15	1.6	107
22...	1305	142	--	--	--	--	--	--	--
JUNE									
06...	0920	51	--	--	--	--	--	--	--
06...	1634	60	18	10	46	8.2	26	3.0	165
12...	1600	218	17	--	65	8.0	10	1.8	238
JULY									
06...	1120	25	16	--	56	11	34	3.1	177
20...	1540	182	13	--	47	8.3	21	2.7	133
26...	1610	317	--	--	--	--	--	--	--
AUG.									
02...	0926	218	16	20	52	8.6	22	2.7	130
14...	1130	45	--	--	--	--	--	--	--
SEP.									
08...	0915	28	20	--	71	12	65	4.2	229
OCT.									
19...	1230	540	--	--	--	--	--	--	--
24...	1525	475	18	--	47	8.5	22	2.8	146
NOV.									
07...	1530	308	--	--	--	--	--	--	--
14...	1343	201	19	9	48	10	36	2.9	153
15...	1525	285	--	--	--	--	--	--	--
DEC.									
12...	1445	221	20	--	48	9.9	28	2.6	148

RIO GRANDE BASIN

08290000 RIO CHAMA NEAR CHAMITA, N. MEX.--Continued

CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	DIS- SOLVED ORTHO- PHOS- PHORUS (P) (MG/L) (00671)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L) (70300)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L) (70301)	HARD- NESS (CA, MG) (MG/L) (00900)
JAN.									
21...	0	130	14	.4	.04	--	--	381	210
FEB.									
11...	0	130	15	.4	.04	--	--	377	190
28...	0	120	10	.4	.36	--	--	326	180
MAR.									
23...	--	--	--	--	--	--	--	--	--
APR.									
05...	0	57	6.1	.3	.01	.01	214	198	110
13...	--	--	--	--	--	--	--	--	--
MAY									
05...	0	55	5.0	.2	.07	--	--	185	110
22...	--	--	--	--	--	--	--	--	--
JUNE									
06...	--	--	--	--	--	--	--	--	--
06...	0	79	6.9	.1	.00	.00	310	268	150
12...	0	24	5.0	.4	.17	--	--	249	200
JULY									
06...	0	100	10	.5	.00	--	--	318	190
20...	0	91	4.9	.3	.02	--	--	254	150
26...	--	--	--	--	--	--	--	--	--
AUG.									
02...	0	110	3.0	.3	.02	.01	320	279	170
14...	--	--	--	--	--	--	--	--	--
SEP.									
08...	0	160	18	.5	.28	--	--	465	230
OCT.									
19...	--	--	--	--	--	--	--	--	--
24...	0	84	6.6	.4	.33	--	--	263	150
NOV.									
07...	--	--	--	--	--	--	--	--	--
14...	0	110	11	.4	.00	.01	344	313	160
15...	--	--	--	--	--	--	--	--	--
DEC.									
12...	0	91	9.8	.3	.02	--	--	283	160

DATE	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AD- SORP- TION RATIO (00931)	SP- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	COLOR (PLAT- INUM- COBALT UNITS) (00080)	TUR- BID- ITY (JTU) (00070)	DIS- SOLVED SOLIDS (B) (01020)
JAN.								
21...	53	1.4	590	8.1	3.0	20	30	--
FEB.								
11...	36	1.5	563	7.8	1.0	0	50	--
28...	49	1.1	499	7.8	6.5	10	90	--
MAR.								
23...	--	--	256	--	11.0	--	--	--
APR.								
05...	22	.8	298	7.8	15.0	100	90	40
13...	--	--	225	--	10.5	--	--	--
MAY								
05...	18	.6	288	7.0	17.5	20	3	--
22...	--	--	323	--	18.5	10	25	--
JUNE								
06...	--	--	406	--	17.5	--	--	--
06...	13	.9	416	8.2	24.5	30	50	50
12...	0	.3	421	7.4	20.0	20	6	--
JULY								
06...	40	1.1	505	7.6	22.0	20	30	--
20...	42	.7	384	8.2	22.0	5	100	--
26...	--	--	520	--	20.0	--	--	--
AUG.								
02...	59	.7	428	8.0	19.0	40	300	50
14...	--	--	556	--	23.0	--	--	--
SEP.								
08...	39	1.9	701	7.6	--	20	300	--
OCT.								
19...	--	--	563	--	11.5	10	380	--
24...	33	.8	397	6.9	11.5	30	200	--
NOV.								
07...	--	--	378	8.0	7.5	10	30	--
14...	36	1.2	461	7.4	7.0	7	70	50
15...	--	--	421	--	6.5	--	70	--
DEC.								
12...	39	1.0	403	8.0	1.0	20	60	--

08290000 RIO CHAMA NEAR CHAMITA, N. MEX.--Continued

TRACE ELEMENT ANALYSES, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	DIS- SOLVED ALUM- INUM (AL) (UG/L) (01106)	DIS- SOLVED ARSENIC (AS) (UG/L) (01000)	DIS- SOLVED BARIUM (BA) (UG/L) (01005)	DIS- SOLVED BERYL- LIUM (BE) (UG/L) (01010)	DIS- SOLVED BISMUTH (BI) (UG/L) (01015)	DIS- SOLVED BORON (B) (UG/L) (01020)	DIS- SOLVED CAD- MIUM (CD) (UG/L) (01025)	DIS- SOLVED CHRO- MIUM (CR) (UG/L) (01030)	DIS- SOLVED COBALT (CO) (UG/L) (01035)
APR. 05...	1735	62	0	55	<2	<4	40	1	<9	<9
JUNE 06...	1634	23	0	94	<3	<5	50	0	<11	<5
AUG. 02...	0926	44	2	130	<3	<5	50	1	<11	<5
NOV. 14...	1345	180	1	87	<2	<6	50	1	<6	<6

DATE	DIS- SOLVED COPPER (CU) (UG/L) (01040)	DIS- SOLVED GALLIUM (GA) (UG/L) (01120)	DIS- SOLVED GER- MANIUM (GE) (UG/L) (01125)	DIS- SOLVED IRON (FE) (UG/L) (01046)	TOTAL LEAD (PB) (UG/L) (01051)	DIS- SOLVED LEAD (PB) (UG/L) (01049)	DIS- SOLVED LITHIUM (LI) (UG/L) (01130)	DIS- SOLVED MAN- GANESE (MN) (UG/L) (01056)	TOTAL MERCURY (HG) (UG/L) (71900)	DIS- SOLVED MOLYB- DENUM (MO) (UG/L) (01060)
APR. 05...	3	<4	<9	180	10	<4	30	4	.4	1
JUNE 06...	3	<5	<11	10	15	<5	30	<5	.0	2
AUG. 02...	2	<5	<11	20	9	<5	20	<5	.0	2
NOV. 14...	2	<3	<6	9	4	6	50	15	.1	<3

DATE	DIS- SOLVED NICKEL (NI) (UG/L) (01065)	DIS- SOLVED SILVER (AG) (UG/L) (01075)	DIS- SOLVED SELE- NIUM (SE) (UG/L) (01145)	DIS- SOLVED STRON- TIUM (SR) (UG/L) (01080)	DIS- SOLVED TIN (SN) (UG/L) (01100)	DIS- SOLVED TAN- IUM (TI) (UG/L) (01150)	DIS- SOLVED VANA- DIUM (V) (UG/L) (01085)	DIS- SOLVED ZINC (ZN) (UG/L) (01090)	DIS- SOLVED ZIR- CONIUM (ZR) (UG/L) (01160)
APR. 05...	<9	<1	0	300	<9	<4	<4.0	<390	<9
JUNE 06...	<5	<2	1	450	<11	<24	3.0	<510	<11
AUG. 02...	<3	<2	2	580	<11	<3	6.0	<490	<11
NOV. 14...	22	<0	1	460	<6	10	<6.0	<380	<9

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972
(ONCE-DAILY)

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	---	666	555	366	300	345	---	476	---	769	366	---
2	---	666	280	370	278	---	526	833	---	714	365	---
3	---	666	555	366	333	400	526	811	---	769	411	476
4	---	666	526	353	316	417	526	833	714	769	395	500
5	---	666	513	400	345	408	555	588	714	833	577	476
6	---	625	625	361	376	426	500	625	714	769	---	455
7	---	666	299	361	417	417	500	665	714	769	---	476
8	---	---	274	353	283	400	500	645	714	769	435	476
9	---	666	286	345	313	400	500	625	714	769	476	526
10	666	666	274	337	306	385	500	588	606	769	484	476
11	666	666	274	297	303	---	500	556	526	769	476	476
12	666	625	294	300	303	---	500	541	513	769	462	476
13	666	625	294	303	303	448	476	556	526	714	429	476
14	625	769	353	313	313	455	429	605	541	---	435	476
15	625	769	400	316	323	462	---	526	769	---	462	476
16	625	769	411	303	385	455	433	556	714	---	769	476
17	625	769	411	306	400	476	395	---	690	---	417	476
18	625	769	411	306	357	417	395	---	690	423	417	556
19	769	769	417	306	345	625	400	588	---	420	417	526
20	625	769	441	297	357	555	469	588	714	370	435	526
21	625	769	395	306	370	555	441	571	714	370	455	556
22	625	667	375	303	370	625	448	605	---	377	435	556
23	625	625	400	297	---	400	455	588	839	390	---	556
24	625	612	---	309	306	400	435	588	909	390	---	556
25	---	500	---	309	316	400	435	---	667	390	435	556
26	666	588	---	500	297	370	566	588	667	380	455	556
27	625	588	337	345	---	370	484	588	698	448	---	556
28	---	555	337	309	316	370	500	714	698	366	435	556
29	625	625	333	300	319	---	476	789	698	375	435	556
30	---	---	330	---	330	---	492	732	---	375	441	556
31	588	---	316	---	341	---	484	714	---	370	---	556
MONTH	---	674	383	332	332	439	477	632	686	570	453	514

RIO GRANDE BASIN

08290000 RIO CHAMA NEAR CHAMITA, N. MEX.--Continued

TEMPERATURE (DEG. C) OF WATER, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972
(ONCE-DAILY)

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

SUSPENDED-SEDIMENT DISCHARGE, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

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	121	250	82	94	140	36	539	510	742
2	155	280	117	76	190	39	529	390	557
3	146	180	71	98	240	64	373	320	322
4	65	135	24	69	160	30	485	360	471
5	79	40	8.5	86	190	44	170	300	138
6	119	50	16	90	320	78	163	370	163
7	112	60	18	93	360	90	309	440	367
8	108	40	12	91	400	98	380	600	616
9	98	50	13	126	250	85	404	700	764
10	185	140	70	88	360	86	415	630	706
11	123	140	46	107	190	55	492	480	638
12	154	190	79	86	60	14	528	260	371
13	123	170	56	83	110	25	593	170	272
14	133	210	75	103	300	83	629	160	272
15	107	210	61	137	470	174	629	150	255
16	122	215	71	139	370	139	631	170	290
17	153	210	87	121	460	150	597	170	274
18	101	300	82	191	440	227	510	360	496
19	124	410	137	334	500	451	628	1290	2190
20	125	290	98	419	430	486	552	1020	1520
21	140	340	129	452	700	854	518	1670	2340
22	119	350	112	608	1750	2870	558	1890	2850
23	129	300	104	629	2600	4420	508	1060	1450
24	137	280	104	1340	6810	25000	505	280	382
25	117	340	107	946	1820	4650	522	230	324
26	104	240	67	590	500	796	482	270	351
27	135	150	55	560	200	302	378	300	306
28	92	50	12	192	240	124	386	300	313
29	100	140	38	251	240	163	307	300	249
30	113	220	67	---	---	---	289	330	257
31	98	180	48	---	---	---	219	270	160
TOTAL	3737	--	2066.5	8199	--	41633	14228	--	20406

08290000 RIO CHAMA NEAR CHAMITA, N. MEX.--Continued

SUSPENDED-SEDIMENT DISCHARGE, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

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	207	1160	648	265	110	78	281	100	76
2	200	1380	745	255	100	69	183	120	59
3	187	760	384	177	100	48	157	290	123
4	167	460	207	170	70	32	111	180	54
5	198	750	401	150	40	16	56	100	15
6	276	420	313	161	70	30	48	1790	232
7	487	210	276	263	120	85	109	1430	421
8	585	180	284	198	90	48	147	210	83
9	585	170	269	261	150	106	184	70	35
10	656	160	283	235	60	38	190	190	97
11	619	110	184	161	40	17	175	320	151
12	621	130	218	166	50	22	229	770	476
13	649	130	228	150	45	18	275	1060	787
14	631	100	170	141	30	11	151	1040	424
15	478	90	116	138	20	7.5	229	1090	674
16	521	90	127	120	80	26	92	380	94
17	416	110	124	86	90	21	56	70	11
18	315	120	102	78	90	19	84	160	36
19	327	140	124	158	140	60	60	100	16
20	326	160	141	163	100	44	37	150	15
21	333	120	108	74	60	12	71	330	63
22	314	90	76	138	75	28	120	420	136
23	333	85	76	159	125	54	202	250	136
24	318	90	77	414	160	179	224	100	60
25	297	110	88	298	50	40	241	710	462
26	254	1570	1080	272	50	37	235	310	197
27	237	790	506	263	60	43	235	310	197
28	250	180	122	254	80	55	230	60	37
29	258	120	84	280	80	60	225	50	30
30	275	100	74	346	290	271	209	60	34
31	--	--	--	330	150	134	--	--	--
TOTAL	11320	--	7635	6322	--	1708.5	4846	--	5231

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	223	100	60	195	180	95	21	2340	133
2	70	40	7.6	190	790	405	23	2400	149
3	27	20	1.5	236	2250	1430	120	14300	4630
4	20	20	1.1	397	6590	7060	148	8020	3200
5	21	25	1.4	303	18600	15200	113	2300	702
6	26	40	2.8	252	7400	5030	74	1320	264
7	27	50	3.6	168	4200	1910	34	2720	250
8	16	50	2.2	240	900	583	22	1900	113
9	16	50	2.2	226	800	488	211	8280	4720
10	20	60	3.2	235	600	381	231	11100	6920
11	78	160	34	110	350	104	132	10500	3740
12	96	30	7.8	84	950	215	160	12800	5530
13	109	40	12	72	1100	214	269	5060	3680
14	245	70	46	50	630	85	148	1600	639
15	265	90	64	41	700	77	96	800	207
16	495	6390	15400	80	5260	1140	71	520	100
17	206	1950	1080	53	4380	627	64	210	36
18	96	1500	389	55	1300	193	30	200	16
19	124	1830	613	63	750	128	19	150	7.8
20	206	2770	1540	47	640	81	15	130	5.3
21	374	7270	7340	54	600	87	15	535	31
22	265	1350	966	49	570	75	24	550	36
23	234	700	442	35	450	43	269	1380	1000
24	263	2300	1760	21	500	28	103	900	250
25	292	4600	3630	27	1180	86	26	600	42
26	320	3850	3330	69	1010	188	14	390	15
27	305	750	618	42	190	22	12	380	12
28	247	570	247	53	90	13	12	360	12
29	207	400	224	55	4880	725	13	360	13
30	153	480	198	42	5620	637	11	290	8.6
31	196	380	201	16	1150	49	--	--	--
TOTAL	5262	--	38227.4	3560	--	37399	2500	--	36461.7

SUSPENDED-SEDIMENT DISCHARGE, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

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	9.3	150	3.8	425	2190	2510	121	200	65
2	8.9	130	3.1	406	620	680	155	170	71
3	8.5	110	2.5	246	880	584	179	140	68
4	7.6	70	1.5	360	780	758	162	80	35
5	7.7	320	6.7	358	700	677	133	100	36
6	7.6	260	5.3	278	710	533	162	110	48
7	12	1420	46	306	1270	1050	80	140	30
8	192	29700	15400	345	480	447	152	160	66
9	98	380	101	253	100	68	120	160	52
10	179	490	237	372	150	151	152	120	49
11	121	510	167	239	180	116	161	90	39
12	101	420	115	243	190	125	201	75	41
13	71	460	88	267	660	476	109	80	24
14	104	620	174	176	830	394	109	140	41
15	205	1380	764	299	760	614	107	100	29
16	207	3820	2130	293	340	269	92	120	30
17	336	2980	2700	171	310	143	155	100	42
18	691	4240	7910	307	470	390	156	70	29
19	530	8020	11500	248	400	268	125	50	17
20	465	4480	5620	230	270	168	144	50	19
21	1170	2850	9000	252	400	272	198	50	27
22	839	1640	3720	218	290	171	122	140	46
23	770	800	1660	239	220	142	124	100	33
24	447	580	700	247	300	200	154	60	25
25	304	790	648	140	350	132	137	45	17
26	344	850	789	124	330	110	116	40	13
27	254	990	679	355	400	383	122	50	16
28	207	4160	2330	124	210	70	128	50	17
29	212	5250	3010	203	250	137	130	50	18
30	314	4350	3690	253	250	171	152	40	16
31	351	1460	1380	--	--	--	136	50	18
TOTAL	8573.8	--	74580.9	7977	--	12209	4294	--	1077

TOTAL DISCHARGE FOR 1972 WATER YEAR (CFS-DAYS)

TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR 1972 WATER YEAR (TONS)

TOTAL DISCHARGE FOR 1972 CALENDAR YEAR (CFS-DAYS)

TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR 1972 CALENDAR YEAR (TONS)

85683
319352.1
80818.8
278635

INSTANTANEOUS SUSPENDED SEDIMENT AND PARTICLE SIZE, JANUARY 1972 TO DECEMBER 1972

DATE	TIME	TEMPERATURE (DEG C) (00010)	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SUS- PEN- DED SEDIM- ENT DIS- CHARGE (MG/L) (80154)	SUS- PEN- DED SEDIM- ENT DIS- CHARGE (T/DAY) (80155)	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM (70331)	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM (70332)	SUS. SED. SIEVE DIAM. % FINER THAN .250 MM (70333)	SUS. SED. SIEVE DIAM. % FINER THAN .500 MM (70334)	SUS. SED. SIEVE DIAM. % FINER THAN 1.00 MM (70335)
MAR.										
30...	1730	11.1	352	340	323	77	92	99	100	--
APR.										
13...	1800	17.2	660	130	232	84	95	99	100	--
MAY										
02...	1715	18.3	212	140	80	90	93	95	97	100
JUNE										
13...	1800	20.0	272	1120	823	94	98	99	100	--
SEP.										
15...	1900	20.0	87	6440	1510	100	--	--	--	--
26...	1400	15.0	151	390	159	79	86	98	100	--
OCT.										
19...	1930	19.5	235	7640	4850	14	50	96	99	100
NOV.										
12...	1700	6.7	252	180	122	97	98	99	100	--
				SUS. SED. FALL DIAM. % FINER THAN .004 MM 70327	SUS. SED. FALL DIAM. % FINER THAN .008 MM 70328	SUS. SED. FALL DIAM. % FINER THAN .016 MM 70329	SUS. SED. FALL DIAM. % FINER THAN .031 MM 70330			
MAR.										
30...				40	52	50	68			
APR.										
13...				40	54	53	72			
MAY										
02...				--	--	84	87			
JUNE										
13...				40	63	78	88			
SEP.										
15...				4	15	85	99			
26...				43	60	70	74			
OCT.										
19...				4	5	6	7			
NOV.										
12...				53	66	75	90			

08313000 RIO GRANDE AT OTOWI BRIDGE, NEAR SAN ILDEFONSO, N. MEX.
(Irrigation and surveillance network station)

LOCATION.--Lat 35°52'29", long 106°08'30", in SW 1/4 sec. 18, T. 19 N., R. 8 E., Santa Fe County, in San Ildefonso Pueblo Grant at gaging station, 400 ft downstream from bridge on State Highway 4, 1.8 miles southwest of San Ildefonso Pueblo, 2.5 miles downstream from Pojoaque River, and 6.8 miles west of Pojoaque.

DRAINAGE AREA.--14,300 sq mi, approximately (includes 2,940 sq mi in closed basin in San Luis Valley, Colo.).

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

Water temperatures: October 1948 to current year.

Sediment records: October 1947 to current year.

EXTREMES:

Current year:

Dissolved solids: Maximum, 536 mg/l Aug. 6-7; minimum, 175 mg/l Mar. 12-20.

Hardness: Maximum, 330 mg/l Aug. 6-7; minimum, 95 mg/l Mar 12-20.

Specific conductance: Maximum daily, 831 micromhos Aug. 6; minimum daily, 246 micromhos Mar. 20.

Water temperatures: Maximum, 30.0°C July 23; minimum, freezing point on many days during winter months.

Sediment concentrations: Maximum daily, 17,200 mg/l July 16; minimum daily, 105 mg/l July 4.

Sediment discharge: Maximum daily, 58,200 tons July 16; minimum daily, 60 tons July 4.

Period of record:

Dissolved solids: Maximum, 1,030 mg/l Aug. 5, 1963; minimum, 135 mg/l May 1-31, 1969.

Hardness: Maximum, 702 mg/l Aug. 5, 1963; minimum, 83 mg/l May 22-26, 1960, June 22-28, 1968.

Specific conductance: Maximum daily, 1,310 micromhos Aug. 5, 1963; minimum daily, 165 micromhos June 13, 1952.

Water temperatures: Maximum, 31.0°C Aug. 4, 5, 1954; minimum, freezing point on many days during winter months.

Sediment concentrations: Maximum daily, 43,500 mg/l Aug. 21, 1955; maximum daily, 11 mg/l July 27, 1963.

Sediment discharge: Maximum daily, 366,000 tons Aug. 23, 1961; minimum daily, 3 tons July 27, 1963.

REMARKS.--Bacteria and aquatic biology analyzed by the New Mexico Environmental Improvement Agency on samples collected by the U.S. Geological Survey. After June 1972, Bacteria analyzed by the U.S. Geological Survey. Daily mean temperature is computed by averaging the maximum and minimum temperatures for each day.

CHEMICAL ANALYSES, COMPOSITES OF DAILY SAMPLES, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	DIS- CHARGE (CFS) (00060)	DIS- SOLVED SILICA (SI02) (MG/L) (00955)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED NE- SIUM (NG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED TAS- SIUM (K) (MG/L) (00935)	BICAR- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)
JAN.												
01-31	688	28	--	38	7.5	23	2.8	142	0	50	7.3	.5
FEB.												
01-18	651	32	--	38	7.2	22	2.8	144	0	52	7.4	.5
19-23	1080	27	--	47	11	26	4.6	134	0	95	33	.4
24...	1910	20	--	63	13	29	3.8	135	0	150	6.7	.4
25-27	1310	24	--	42	9.1	22	3.2	122	0	88	5.6	.4
28-29	1020	28	--	36	7.1	20	2.9	124	0	57	6.7	.4
MAR.												
01-11	1240	24	--	34	6.8	19	3.2	115	0	59	5.3	.4
12-20	1630	23	--	29	5.6	14	2.4	105	0	44	3.7	.3
21-28	1120	21	--	32	6.0	16	2.6	112	0	46	4.9	.4
29-31	756	23	--	36	6.7	20	2.8	126	0	55	6.6	.4
APR.												
01-06	663	23	--	38	7.3	22	2.8	132	0	56	8.6	.5
07-17	946	19	--	32	6.2	17	2.4	116	0	50	7.3	.4
18-24	642	20	--	37	6.9	20	2.6	125	0	55	8.7	.5
25-30	557	20	--	37	6.8	21	2.7	132	0	54	8.8	.6
MAY												
01-31	433	17	--	38	7.6	27	2.9	127	0	69	9.0	.4
JUNE												
01-30	470	23	--	52	10	35	4.3	157	0	110	11	.6
JULY												
01-15	301	24	--	52	9.7	35	4.1	162	0	100	11	.6
16...	1060	23	--	65	8.6	49	3.7	246	0	83	13	.5
17-31	442	22	--	60	8.7	28	3.8	158	0	100	7.1	.6
AUG.												
01-05	460	22	--	50	8.0	32	3.5	159	0	84	7.9	.5
06-07	459	22	--	110	14	34	5.0	164	0	260	6.6	.5
08-31	370	26	--	48	7.9	28	4.0	157	0	91	7.5	.5
SEP.												
01-22	486	23	--	50	8.0	29	3.7	158	0	91	13	.7
23-24	514	19	--	72	12	46	4.6	176	0	180	8.9	.6
25-30	294	24	--	45	7.9	25	3.6	152	0	77	7.1	.7
OCT.												
01-07	261	23	--	40	7.8	27	3.8	161	0	58	6.8	.7
08-17	523	22	--	48	9.1	34	4.0	164	0	65	6.5	.6
18-20	894	20	--	61	9.7	36	3.9	172	0	120	9.2	.5
21-22	1480	12	--	58	10	29	3.5	150	0	120	5.4	.4
23-25	998	21	--	47	8.3	23	3.3	131	0	72	5.7	.5
26-31	946	22	--	38	6.6	21	3.2	125	0	56	6.2	.5
NOV.												
01-30	1020	25	--	37	6.5	19	2.5	130	0	58	5.6	.5
DEC.												
01-31	734	25	--	41	7.2	22	2.9	143	0	64	7.4	.5
CALENDAR YEAR												
WTD. AVG.	--	24	--	41	7.6	24	3.1	137	0	70	7.9	.5
TIME WTD.												
AVG.	678	24	--	43	7.8	25	3.3	142	0	75	8.3	.5
TONS												
PER DAY	--	43	--	76	14	43	5.8	251	0	128	14	.9
WATER YEAR												
WTD. AVG.	--	24	--	41	7.6	24	3.2	136	0	69	8.0	.4
TIME WTD.												
AVG.	708	24	--	43	7.8	25	3.3	141	0	74	8.5	.5
TONS												
PER DAY	--	45	--	78	15	45	6.2	260	0	133	15	.9

RIO GRANDE BASIN

08313000 RIO GRANDE AT OTOWI BRIDGE, NEAR SAN ILDEFONSO, N. MEX.--Continued

CHEMICAL ANALYSES, COMPOSITES OF DAILY SAMPLES, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	DIS- SOLVED ORTHO- PHOS- PHORUS (P) (MG/L) (00671)	DIS- SOLVED HORTH- (H) (UG/L) (01020)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L) (70300)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L) (70301)	DIS- SOLVED SOLIDS (TONS PER DAY) (70303)	DIS- SOLVED SOLIDS (TONS PER DAY) (70302)	HARD- NESS (CA, MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AD- SORP- TION RATIO (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)
JAN.												
01-31	.23	--	--	--	228	.31	424	130	9	.9	335	8.0
FEB.												
01-18	.16	--	--	--	233	.32	410	120	6	.9	342	7.9
19-23	.40	--	--	--	312	.42	910	160	53	.9	393	7.8
24...	.78	--	--	--	356	.48	1840	210	100	.9	532	7.8
25-27	.42	--	--	--	256	.35	905	140	42	.8	385	7.7
28-29	.28	--	--	--	220	.30	606	120	17	.8	321	7.7
MAR.												
01-11	.34	--	--	--	210	.29	703	110	19	.8	326	8.0
12-20	.32	--	--	--	175	.24	770	95	9	.6	274	8.0
21-28	.19	--	--	--	185	.25	559	100	13	.7	290	8.0
29-31	.09	--	--	--	213	.29	435	120	14	.8	326	8.1
APR.												
01-06	.12	--	--	--	224	.30	401	120	17	.9	351	7.8
07-17	.18	--	--	--	142	.26	490	110	10	.7	303	7.9
18-24	.18	--	--	--	213	.29	369	120	17	.8	323	8.0
25-30	.11	--	--	--	216	.29	325	120	12	.8	343	8.1
MAY												
01-31	.00	--	--	--	233	.32	272	130	22	1.0	371	8.2
JUNE												
01-30	.23	--	--	--	324	.44	411	170	42	1.2	490	8.1
JULY												
01-15	.29	--	--	--	317	.43	258	170	37	1.2	493	8.1
16...	.28	--	--	--	368	.50	1050	200	0	1.5	579	7.8
17-31	.38	--	--	--	310	.42	370	190	56	.9	468	7.8
AUG.												
01-05	.11	--	--	--	287	.39	356	160	27	1.1	445	7.5
06-07	.74	--	--	--	536	.73	664	330	200	.8	802	7.7
08-31	.19	--	--	--	291	.40	291	150	24	1.0	456	7.7
SEP.												
01-22	.41	--	--	--	248	.41	391	160	28	1.0	462	7.9
23-24	.22	--	--	--	431	.59	598	230	85	1.3	661	7.5
25-30	.07	--	--	--	265	.36	210	140	20	.9	419	7.7
OCT.												
01-07	.09	--	--	--	247	.34	174	130	0	1.0	398	7.8
08-17	.26	--	--	--	301	.41	425	160	23	1.2	502	7.5
18-20	.43	--	--	--	347	.47	838	190	51	1.1	470	7.7
21-22	.21	--	--	--	313	.43	1250	190	63	.9	480	7.0
23-25	.18	--	--	--	246	.33	663	150	44	.8	384	7.3
26-31	.19	--	--	--	216	.29	552	120	20	.8	327	7.2
NOV.												
01-30	.20	--	--	--	219	.30	603	120	13	.8	332	8.1
DEC.												
01-31	.11	--	--	--	241	.33	478	130	15	.8	359	8.2
CALENDAR YEAR												
WTD. AVG.	.22	--	--	--	246	.34	--	134	22	.9	374	7.9
TIME WTD.												
AVG.	.21	--	--	--	258	.35	--	141	24	.9	394	7.9
TONS												
PER DAY	.41	--	--	--	450	--	--	--	--	--	--	--
WATER YEAR												
WTD. AVG.	.24	--	--	--	245	.34	--	134	22	.9	374	7.9
TIME WTD.												
AVG.	.22	--	--	--	256	.35	--	140	24	.9	392	8.0
TONS												
PER DAY	.45	--	--	--	468	--	--	--	--	--	--	--

08313000 RIO GRANDE AT OTOWI BRIDGE, NEAR SAN ILDEFONSO, N. MEX.--Continued

CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	DIS- CHARGE (CFS) (00060)	DIS- SOLVED SILICA (STU2) (MG/L) (00955)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED PO- SIUM (K) (MG/L) (00935)	RICAR- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)
JAN.											
13...	1130	812	28	--	40	7.5	22	4.0	141	0	50
FEB.											
09...	1209	701	26	--	41	7.7	23	3.4	147	0	52
MAR.											
14...	1030	1650	21	--	31	6.1	17	2.8	108	0	57
APR.											
06...	1115	661	22	40	36	6.9	21	2.6	128	0	55
MAY											
03...	1146	404	20	--	40	7.1	22	4.1	136	0	66
JUNE											
06...	1452	335	22	--	55	11	40	4.5	187	0	110
JULY											
12...	1728	232	20	50	52	9.8	33	4.0	163	0	100
AUG.											
03...	1033	394	20	170	51	8.8	27	3.2	152	0	87
SEP.											
06...	1152	463	22	10	50	8.1	32	4.1	150	0	100
OCT.											
05...	1141	225	24	20	43	7.7	26	3.4	159	0	57
NOV.											
15...	1503	1090	23	60	40	6.5	20	3.0	126	0	55
DEC.											
05...	1143	833	26	50	37	7.2	21	2.8	138	0	55

DATE	DIS- SOLVED CHLOR- IDE (CL) (MG/L) (00940)	DIS- SOLVED FLUOR- IDE (F) (MG/L) (00950)	DIS- SOLVED NITRATE (N) (MG/L) (00618)	DIS- SOLVED NITRITE (N) (MG/L) (00613)	TOTAL NITRATE PLUS NITRITE (N) (MG/L) (00630)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	AMMONIA NITRO- GEN (N) (MG/L) (00610)	DIS- SOLVED AMMONIA NITRO- GEN (N) (MG/L) (00608)	ORGANIC NITRO- GEN (N) (MG/L) (00605)	TOTAL NITRO- GEN (N) (MG/L) (00600)	TOTAL PHOS- PHORUS (P) (MG/L) (00665)
JAN.											
13...	7.4	.6	--	--	--	.30	--	--	--	--	--
FEB.											
09...	10	.3	--	--	--	.04	--	--	--	--	--
MAR.											
14...	4.8	.4	--	--	--	.19	--	--	--	--	--
APR.											
06...	7.4	.4	.00	.00	--	.00	--	.14	.24	.38	.19
MAY											
03...	6.9	.4	--	--	--	.00	--	--	--	--	--
JUNE											
06...	13	.4	--	--	--	.06	--	--	--	--	--
JULY											
12...	10	.7	.01	.00	--	.01	--	.05	.50	.56	.18
AUG.											
03...	6.1	.5	.00	.00	--	.00	--	.12	.56	.68	.23
SEP.											
06...	6.5	.6	.00	.00	--	.00	--	.15	.66	.81	.49
OCT.											
05...	8.8	.7	.00	.01	--	.00	--	.06	.43	.49	.16
NOV.											
15...	6.3	.4	.00	.00	--	.00	--	.01	.19	.20	.22
DEC.											
05...	6.6	.5	.16	.00	--	.16	.04	.04	.20	.40	.13

DATE	DIS- SOLVED ORTHOPHOS- PHORUS (P) (MG/L) (00671)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L) (70300)	DIS- SOLVED SOLIDS (SUM OF TUENTS) (MG/L) (70301)	HARD- NESS (CA,MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AD- SORP- TION RATIO (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	DIS- SOLVED BORON (B) (UG/L) (01020)
JAN.										
14...	.01	240	230	130	15	.8	344	8.0	2.5	--
FEB.										
09...	.01	250	236	130	14	.9	360	8.0	5.0	--
MAR.										
14...	.03	220	193	100	14	.7	282	8.1	9.5	--
APR.										
06...	.01	230	215	120	13	.8	333	8.1	14.5	40
MAY										
03...	.04	246	234	130	18	.8	353	7.9	14.0	--
JUNE										
06...	.02	364	348	180	29	1.3	517	8.3	22.0	--
JULY										
12...	.01	320	310	170	36	1.1	485	8.2	27.0	70
AUG.										
03...	.01	318	279	160	39	.9	439	7.8	21.0	70
SEP.										
06...	.01	328	297	160	35	1.1	459	7.8	19.5	50
OCT.										
05...	.03	296	249	140	9	1.0	406	7.8	16.5	80
NOV.										
15...	.03	238	216	130	23	.8	348	7.6	5.0	30
DEC.										
05...	.03	228	226	120	9	.8	327	7.6	2.0	50

RIO GRANDE BASIN

08313000 RIO GRANDE AT OTOWI BRIDGE, NEAR SAN ILDEFONSO, N. MEX.--Continued
FIELD AND BIOCHEMICAL MEASUREMENTS, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	DIS- CHARGE (CFS) (00060)	SPECIFIC CONDUCTANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	AIR TEMPER- ATURE (DEG C) (00020)	COLOR (PLAT- INUM- COBALT UNITS) (00080)	TUR- BID- ITY (JTU) (00070)
JAN.								
13...	1130	812	350	8.4	2.5	16.0	5	20
FEB.								
09...	1209	701	400	8.3	5.0	10.5	3	20
MAR.								
14...	1030	1650	298	7.9	9.5	24.0	40	85
APR.								
06...	1115	661	325	8.3	14.5	25.5	20	45
MAY								
03...	1146	404	360	8.4	14.0	24.5	10	30
JUNE								
06...	1452	335	520	8.3	22.0	30.0	15	20
JULY								
12...	1728	232	--	8.0	27.0	35.0	10	30
AUG.								
03...	1033	394	430	8.2	21.0	28.0	10	75
SEP.								
06...	1152	463	460	8.3	19.5	26.0	10	325
OCT.								
05...	1141	225	402	8.3	16.5	20.5	10	35
NOV.								
15...	1503	1090	332	7.9	5.0	9.0	20	35
DEC.								
05...	1143	833	325	8.0	2.0	8.0	5	25

DATE	DIS- SOLVED OXYGEN (MG/L) (00300)	CHEM- ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L) (00335)	BIO- CHEM- ICAL OXYGEN DEMAND (MG/L) (00310)	IMME- DIATE COLI- FORM (COL. PER 100 ML) (31501)	FECAL COLI- FORM (COL. PER 100 ML) (31616)	STREP- TOCOCCI (COL- ONIES PER 100 ML) (31679)	TOTAL ORGANIC CARBON * (C) (00680)
JAN.							
13...	11.3	4	.8	440	30	40	--
FEB.							
09...	11.8	9	1.6	>300	300	10	--
MAR.							
14...	11.0	7	1.8	990	990	70	--
APR.							
06...	11.5	5	1.6	800	350	40	--
MAY							
03...	9.4	4	1.9	600	340	30	--
JUNE							
06...	8.2	5	2.6	70	10	<10	--
JULY							
12...	7.8	--	--	--	73	--	6.0
AUG.							
03...	8.0	--	--	--	2300	--	11
SEP.							
06...	7.6	--	--	--	--	--	8.0
OCT.							
05...	8.0	--	--	--	21	--	5.0
NOV.							
15...	10.2	--	--	--	3	--	3.5
DEC.							
05...	11.2	--	--	--	220	--	3.5

E ESTIMATED.

* Analyzed by New Mexico Environmental Improvement Agency.

BIOLOGICAL ANALYSES, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

Date: April 6, 1972

Method of sampling: Surber (3 square feet)

Organisms (classification, number)

Coleoptera: Elmidae; Microcylloepus sp., 1

Diptera: Chironomidae, 108

Ephemeroptera: Baetidae; Baetis sp., 1

Ephemerella sp., 47

Date: November 15, 1972

Method of sampling: Surber (3 square feet)

Organisms (classification, number)

Diptera: Chironomidae;

Tanytarsus sp. 2, 15

Rheotanytarsus sp. 1

Cricopterus (species 2, 3, and 5), 4

Ablabesmyia sp., 3

Simuliidae, 15

Heleidae; Palpomyia sp., 1

Odonata: Gomphidae; Gomphus sp., 1

Trichoptera: Hydropsychidae; Hydropsyche sp., 1

Cheumatopsyche sp., 1

Gastropoda: Physidae; Physa sp., 1

RIO GRANDE BASIN

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08313000 RIO GRANDE AT OTOWI BRIDGE, NEAR SAN ILDEFONSO, N. MEX.--Continued

PESTICIDE ANALYSES, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	TOTAL ORGANIC CARBON (C) (MG/L) (00680)	ALDRIN (UG/L) (39330)	CHLOR- DANE (UG/L) (39350)	DDD (UG/L) (39360)	DDE (UG/L) (39365)	DDT (UG/L) (39370)	DI- ELDRIN (UG/L) (39380)
APR. 06...	1115	--	.00	.0	.00	.00	.00	.00
JULY 12...	1728	3.5	--	--	--	--	--	--

DATE	ENDRIN (UG/L) (39390)	HEPTA- CHLOR (UG/L) (39410)	HEPTA- CHLOR EPOXIDE (UG/L) (39420)	LINDANE (UG/L) (39340)	2,4-D (UG/L) (39730)	2,4,5-T (UG/L) (39740)	SILVEX (UG/L) (39760)
APR. 06...	.00	.00	.00	.00	.00	.00	.00
JULY 12...	--	--	--	--	--	--	--

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972
(ONCE-DAILY)

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	331	319	347	328	330	393	430	437	388	396	311	354
2	328	316	347	341	330	434	470	425	396	378	315	345
3	340	322	327	340	313	441	519	425	438	399	315	331
4	331	325	331	354	351	464	529	409	452	394	303	328
5	308	321	290	353	351	495	502	458	502	387	321	332
6	373	324	297	328	351	500	480	431	431	388	300	348
7	374	320	322	315	333	493	482	497	396	399	306	345
8	351	344	311	306	347	471	458	597	382	548	294	365
9	340	354	313	297	333	471	509	527	419	524	291	342
10	323	333	309	276	348	475	427	507	438	557	307	360
11	334	330	304	277	356	507	476	470	436	505	315	351
12	328	326	294	287	352	486	470	470	431	484	311	351
13	323	326	283	290	359	482	474	480	534	448	331	354
14	330	333	279	271	350	464	478	429	466	432	331	365
15	311	331	269	289	383	433	450	435	434	460	331	346
16	318	326	260	276	369	444	560	433	430	454	342	345
17	323	325	260	295	386	488	411	457	419	502	321	366
18	320	350	248	317	406	498	427	412	397	540	331	346
19	318	367	248	315	388	510	460	442	392	507	331	339
20	312	362	246	313	327	544	404	420	364	507	321	339
21	320	371	263	300	396	558	476	412	366	514	322	347
22	323	409	263	312	403	527	454	420	388	429	322	358
23	327	413	275	312	364	493	425	423	692	391	333	347
24	327	520	278	307	335	467	454	405	505	382	339	330
25	323	416	282	317	347	461	422	399	430	372	340	328
26	326	371	290	325	367	457	412	416	391	302	361	321
27	316	347	290	318	362	461	532	404	388	343	355	334
28	316	308	297	327	367	451	514	418	387	324	353	333
29	320	315	308	337	376	448	484	404	378	318	380	320
30	327	---	312	343	353	448	456	428	388	315	368	329
31	329	---	324	---	352	---	450	395	---	---	---	321
MONTH	328	349	292	312	358	475	468	461	429	430	327	343

08313000 RIO GRANDE AT OTOWI BRIDGE, NEAR SAN ILDEFONSO, N. MEX.--Continued
 TEMPERATURE (DEG. C) OF WATER, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DAY	JANUARY			FEBRUARY			MARCH			APRIL		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	2.0	0.0	1.0	3.5	0.0	2.0	9.5	5.5	7.5	11.0	5.5	8.0
2	2.5	0.0	1.0	1.5	0.0	1.0	8.5	4.0	6.0	12.0	8.0	10.0
3	1.0	0.0	0.5	2.0	0.0	1.0	9.5	4.5	7.0	13.0	6.5	10.0
4	0.0	0.0	0.0	2.5	0.0	1.0	10.0	5.5	8.0	14.5	8.0	11.0
5	0.0	0.0	0.0	3.5	0.0	2.0	11.0	5.5	8.0	15.5	9.5	12.5
6	0.0	0.0	0.0	3.0	0.0	1.5	12.0	6.5	9.0	14.5	10.5	12.5
7	0.0	0.0	0.0	4.5	0.0	2.0	13.0	8.0	10.5	16.0	9.5	13.0
8	1.0	0.0	0.5	5.0	0.0	2.5	13.0	8.5	11.0	15.5	10.0	13.0
9	1.0	0.0	0.5	5.0	0.5	3.0	13.0	8.5	11.0	15.5	9.5	12.5
10	1.5	0.0	1.0	4.0	1.0	2.5	14.0	9.0	11.5	16.0	10.5	13.0
11	2.5	0.0	1.0	4.0	0.0	2.0	14.0	9.0	11.5	15.0	13.0	14.0
12	3.5	0.0	2.0	4.5	0.0	2.0	13.0	6.5	10.0	14.0	11.5	13.0
13	5.0	1.0	3.0	6.5	0.0	3.0	13.0	8.0	10.5	13.5	9.0	11.0
14	3.5	0.5	2.0	6.5	1.0	4.0	11.5	8.5	10.0	11.5	9.0	10.0
15	2.5	0.0	1.0	8.0	4.0	6.0	11.5	8.0	10.0	12.0	6.0	9.0
16	3.5	0.0	2.0	8.0	4.5	6.0	11.5	6.5	9.0	15.0	8.0	11.5
17	3.5	0.0	2.0	8.5	3.5	6.0	11.5	7.0	9.0	16.0	9.5	13.0
18	2.5	0.0	1.0	8.5	3.5	6.0	12.0	7.0	9.5	14.0	10.0	12.0
19	4.5	0.0	2.0	8.5	4.0	6.0	12.5	8.5	10.5	15.0	9.5	12.0
20	5.0	0.5	3.0	9.0	4.0	6.5	12.0	9.5	11.0	14.0	8.5	11.0
21	5.0	1.0	3.0	9.0	5.0	7.0	12.0	7.0	9.5	15.0	7.0	11.0
22	5.5	1.0	3.0	9.0	6.5	8.0	13.0	8.0	10.5	16.5	9.0	13.0
23	5.5	1.0	3.0	9.5	5.5	7.5	13.0	8.5	11.0	17.0	9.5	13.0
24	5.0	1.5	3.0	8.0	4.0	6.0	13.5	9.5	11.5	18.5	11.0	15.0
25	3.5	0.0	2.0	8.0	4.0	6.0	13.0	8.0	10.5	18.0	12.0	15.0
26	4.5	0.0	2.0	8.5	4.5	6.5	11.5	7.0	9.0	15.0	10.5	13.0
27	6.0	3.5	5.0	8.0	4.5	6.0	10.0	8.5	9.0	17.0	10.0	13.5
28	5.0	1.0	3.0	9.5	4.0	7.0	10.0	5.5	8.0	18.5	10.5	14.5
29	5.0	1.0	3.0	9.5	4.5	7.0	9.5	4.5	7.0	18.0	11.0	14.5
30	4.0	0.0	2.0	---	---	---	10.5	5.0	8.0	18.0	12.0	15.0
31	3.5	0.0	2.0	---	---	---	11.0	5.0	8.0	---	---	---
MONTH	6.0	0.0	2.0	9.5	0.0	4.5	14.0	4.0	9.5	18.5	5.5	12.5

DAY	MAY			JUNE			JULY			AUGUST		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	18.0	10.0	14.0	23.5	16.0	20.0	24.0	19.0	21.5	27.5	21.0	24.0
2	18.0	11.0	14.5	24.0	16.5	20.0	25.0	19.0	22.0	26.0	20.0	23.0
3	19.5	11.0	15.0	23.0	16.0	19.5	25.5	18.5	22.0	26.0	20.0	23.0
4	18.0	13.0	15.5	24.0	16.0	20.0	23.0	18.5	21.0	25.0	18.5	22.0
5	19.5	14.0	17.0	23.5	16.5	20.0	24.0	15.5	20.0	25.0	18.5	22.0
6	18.0	13.5	16.0	23.0	16.0	19.5	25.5	17.0	21.0	25.0	19.0	22.0
7	14.0	12.0	13.0	19.5	16.5	18.0	24.0	18.5	21.0	25.0	17.0	21.0
8	18.5	9.5	14.0	23.0	15.5	19.0	25.0	18.0	21.5	23.0	17.0	20.0
9	18.0	12.0	15.0	23.0	15.5	19.0	26.5	21.0	24.0	24.5	18.0	21.0
10	17.0	12.0	14.5	24.0	18.0	21.0	25.0	19.0	22.0	26.0	18.5	22.0
11	18.0	11.5	15.0	24.0	17.0	20.5	26.5	19.5	23.0	26.5	19.0	23.0
12	19.0	11.0	15.0	20.5	17.0	19.0	27.0	19.5	23.0	25.5	18.0	22.0
13	18.0	12.0	15.0	23.5	16.5	20.0	28.0	20.0	24.0	25.0	18.0	21.5
14	20.5	13.0	17.0	20.5	17.0	19.0	28.0	20.0	24.0	24.5	18.0	21.0
15	22.0	14.0	18.0	20.5	14.5	17.5	26.0	21.0	23.5	25.0	18.5	22.0
16	23.0	15.0	19.0	21.0	16.0	18.5	24.0	16.5	20.0	23.0	18.0	20.5
17	21.0	16.0	18.5	23.5	16.5	20.0	25.5	19.0	22.0	22.0	16.5	19.0
18	20.5	15.0	18.0	24.0	18.5	21.0	24.5	20.0	22.0	23.0	17.0	20.0
19	19.0	15.5	17.0	24.5	16.5	20.5	26.0	19.0	22.5	23.5	16.5	20.0
20	21.0	14.0	17.5	25.0	17.0	21.0	25.5	20.0	23.0	22.0	18.0	20.0
21	20.0	16.0	18.0	23.0	17.0	20.0	25.0	19.0	22.0	24.5	18.5	21.5
22	19.5	12.0	16.0	24.5	16.0	20.0	25.5	18.5	22.0	23.5	18.5	21.0
23	20.0	11.5	16.0	24.0	18.5	21.0	30.0	19.5	25.0	24.0	18.5	21.0
24	20.0	13.0	16.5	25.0	17.0	21.0	25.5	19.5	22.5	24.0	18.0	21.0
25	21.0	13.5	17.0	24.0	19.5	22.0	25.0	20.0	22.5	21.0	15.5	18.0
26	21.5	14.5	18.0	24.0	17.0	20.5	25.5	19.0	22.0	21.5	16.0	19.0
27	20.5	14.0	17.0	24.5	16.0	20.0	27.0	20.0	23.5	20.0	17.0	18.5
28	18.0	16.0	17.0	25.0	16.5	21.0	27.0	20.5	24.0	24.5	17.0	21.0
29	20.0	14.5	17.0	24.0	19.0	21.5	27.0	20.0	23.5	23.5	19.5	21.5
30	18.5	14.5	16.5	23.5	18.5	22.0	28.0	20.5	24.0	24.0	18.0	21.0
31	22.0	14.0	18.0	---	---	---	27.0	21.0	24.0	24.0	19.0	21.5
MONTH	23.0	9.5	16.5	25.5	14.5	20.0	30.0	15.5	22.5	27.5	15.5	21.0

08313000 RIO GRANDE AT OTOWI BRIDGE, NEAR SAN ILDEFONSO, N. MEX.--Continued

TEMPERATURE (DEG. C) OF WATER, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DAY	SEPTEMBER			OCTOBER			NOVEMBER			DECEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	22.0	19.0	20.5	18.5	10.5	14.5	5.5	3.5	4.5	4.0	0.0	2.0
2	23.0	16.5	20.0	19.5	12.0	16.0	7.0	3.0	5.0	3.5	0.0	2.0
3	20.5	16.0	18.0	19.5	12.0	16.0	8.5	4.0	6.0	4.0	0.0	2.0
4	21.0	15.5	18.0	17.0	14.0	15.5	8.0	4.0	6.0	5.0	1.0	3.0
5	22.0	18.0	20.0	15.5	14.0	15.0	7.0	3.5	5.0	4.0	2.0	3.0
6	20.0	17.0	18.5	15.0	12.0	13.5	8.0	4.0	6.0	2.0	0.0	1.0
7	22.0	15.5	19.0	15.0	11.5	13.0	6.5	3.5	5.0	3.5	1.5	2.5
8	21.0	17.0	19.0	17.0	12.0	14.5	7.0	4.0	5.5	4.0	0.5	2.0
9	22.0	16.5	19.0	19.0	13.5	16.0	8.0	5.0	6.5	3.5	1.5	2.5
10	21.0	15.0	18.0	17.0	14.0	15.5	6.5	3.5	5.0	3.5	0.5	2.0
11	21.5	17.0	19.0	17.0	13.0	15.0	6.5	4.5	5.5	2.0	1.5	2.0
12	21.0	16.5	19.0	20.0	14.5	17.0	5.0	3.5	4.0	2.0	0.0	1.0
13	20.5	17.0	19.0	19.5	15.5	17.5	6.0	3.0	4.5	0.0	0.0	0.0
14	21.0	17.0	19.0	18.5	14.0	16.0	5.0	2.0	3.5	2.0	0.0	1.0
15	20.5	15.5	18.0	18.0	14.0	16.0	5.0	3.0	4.0	1.5	0.0	1.0
16	22.0	15.5	19.0	18.0	13.0	15.5	4.5	1.5	3.0	0.0	0.0	0.0
17	22.0	15.5	19.0	17.0	13.0	15.0	4.5	2.0	3.0	1.0	0.5	1.0
18	23.5	16.0	20.0	16.0	14.0	15.0	5.0	3.0	4.0	3.0	0.5	2.0
19	22.0	17.0	19.5	15.0	10.5	13.0	4.5	1.5	3.0	3.5	0.5	2.0
20	21.5	15.5	18.5	12.0	9.5	11.0	1.5	1.5	1.5	4.5	1.5	3.0
21	20.0	15.5	18.0	11.5	9.0	10.0	4.0	1.0	2.5	4.0	0.5	2.0
22	20.0	13.0	16.5	12.5	8.5	10.5	3.0	0.0	1.5	4.0	0.5	2.0
23	18.0	14.0	16.0	13.0	10.0	11.5	2.0	0.0	1.0	5.0	1.5	3.0
24	18.0	13.5	16.0	12.0	8.5	10.0	3.5	0.5	2.0	4.0	0.5	2.0
25	18.5	13.0	16.0	12.0	10.0	11.0	3.5	0.0	2.0	4.0	0.5	2.0
26	18.5	12.0	15.0	13.0	9.0	11.0	3.5	0.0	2.0	3.0	0.5	2.0
27	18.5	12.0	15.0	11.0	8.5	10.0	4.5	0.5	2.5	3.0	0.5	2.0
28	19.0	13.0	16.0	11.0	8.5	10.0	3.0	0.0	1.5	2.0	1.0	1.5
29	19.0	12.0	15.5	10.5	6.5	8.5	3.5	0.5	2.0	3.5	1.0	2.0
30	18.5	11.5	15.0	10.5	9.0	10.0	3.0	0.0	1.5	3.0	0.5	2.0
31	---	---	---	8.5	4.0	6.0	---	---	---	0.0	0.0	0.0
MONTH	23.5	11.5	18.0	20.0	4.0	13.0	8.5	0.0	3.5	5.0	0.0	2.0

SUSPENDED-SEDIMENT DISCHARGE, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

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	728	790	1550	629	484	822	1300	1300	4560
2	776	780	1630	629	570	968	1300	1160	4070
3	776	1000	2100	585	440	695	1200	860	2790
4	769	750	1560	610	470	774	1310	1040	3680
5	555	1010	1510	598	525	848	1050	900	2550
6	512	740	1020	623	460	774	1000	950	2570
7	674	840	1530	623	390	656	1110	940	2820
8	655	780	1380	616	420	699	1230	1000	3320
9	623	790	1330	642	570	988	1330	1050	3770
10	681	1140	2100	648	1600	2800	1330	2440	8760
11	688	780	1450	635	2270	3890	1430	1210	4670
12	681	725	1330	629	710	1210	1460	2490	9820
13	742	625	1250	629	530	900	1590	1590	6830
14	714	750	1450	661	495	883	1640	1410	6240
15	688	630	1170	707	2380	4540	1690	1570	7160
16	681	750	1380	721	730	1420	1720	1760	8170
17	735	1350	2680	721	750	1460	1730	1510	7050
18	707	840	1600	819	770	1700	1620	2460	10800
19	681	460	846	946	940	2400	1660	2100	9410
20	707	620	1180	1030	1020	2840	1540	1450	6030
21	714	680	1310	1030	1020	2840	1360	990	3640
22	688	650	1210	1180	1370	4360	1270	1280	4390
23	694	490	918	1220	2550	8400	1170	1960	6190
24	721	560	1090	1910	7300	40400	1150	1860	5780
25	681	550	1010	1490	2790	11200	1130	1360	4150
26	661	610	1090	1190	1360	4370	1070	870	2510
27	714	525	1010	1250	1270	4290	908	770	1890
28	674	580	1060	1010	2240	6110	915	850	2100
29	674	590	1070	1020	1090	3000	819	2300	5090
30	681	450	827	--	--	--	762	1060	2180
31	655	570	1010	--	--	--	688	1470	2730
TOTAL	21330	--	41651	25001	--	116237	39482	--	155720

RIO GRANDE BASIN

08313000 RIO GRANDE AT OTOWI BRIDGE, NEAR SAN ILDEFONSO, N. MEX.--Continued

SUSPENDED-SEDIMENT DISCHARGE, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

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	642	1160	2010	527	393	559	570	730	1120
2	629	2240	3800	506	405	553	486	427	560
3	694	2050	3840	420	385	437	448	637	771
4	688	1350	2510	398	156	168	416	337	379
5	642	1860	3220	390	140	147	378	262	267
6	681	2760	5070	382	192	198	338	318	290
7	848	610	1400	476	318	409	374	287	290
8	978	1040	2750	462	281	351	434	482	565
9	930	690	1730	491	207	274	481	354	460
10	1020	1230	3390	491	107	142	506	532	727
11	1000	1100	2970	434	199	233	512	363	502
12	1060	1280	3660	416	587	659	581	421	660
13	1070	980	2830	398	320	344	645	710	1240
14	1060	860	2460	365	140	158	548	530	784
15	812	540	1180	365	241	238	576	500	778
16	862	620	1440	338	167	152	529	1050	1630
17	769	630	1310	304	140	115	438	800	946
18	674	570	1040	280	132	100	438	647	765
19	642	480	832	349	175	165	403	429	467
20	642	520	901	407	1580	1740	365	322	317
21	661	590	1050	338	570	520	353	1170	1120
22	635	500	857	330	431	384	407	1970	2160
23	629	1570	2670	361	310	302	448	700	847
24	610	710	1170	539	1010	1540	548	760	1120
25	573	1960	3030	501	359	486	559	690	1040
26	549	710	1050	452	330	403	522	1430	2020
27	537	870	1260	486	342	449	481	1000	1300
28	567	389	596	481	367	477	457	360	444
29	567	333	510	506	425	581	448	400	484
30	549	400	593	622	673	1130	412	1290	1430
31	--	--	--	610	670	1100	--	--	--
TOTAL	22220	--	61129	13425	--	14494	14101	--	25483

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	443	755	903	382	850	877	412	5300	5900
2	319	265	228	394	1000	1060	412	1310	1460
3	222	130	78	390	850	895	467	3980	5020
4	210	105	60	434	2500	2930	554	8110	12100
5	268	308	276	700	11900	25500	501	8460	11400
6	349	360	339	457	9600	11800	438	2030	2400
7	330	500	446	461	15300	33000	429	2320	2690
8	254	450	309	481	5890	7650	394	1500	1600
9	235	220	140	452	4950	6040	677	7530	27600
10	232	170	106	429	3800	4400	898	11300	38500
11	247	200	133	353	2800	2670	586	7250	11500
12	280	225	170	308	1290	1070	564	6300	9590
13	270	175	128	290	1000	783	581	10200	16000
14	390	410	432	287	930	721	564	16300	24800
15	462	405	505	273	660	486	481	1590	2060
16	1060	17200	58200	273	1300	958	443	980	1170
17	583	7180	11900	319	6700	5770	434	1100	1290
18	326	2280	2010	369	4500	4480	398	990	1060
19	290	1330	1040	353	4500	4290	357	750	723
20	378	1750	1790	734	9330	38400	361	930	906
21	532	5690	8930	342	3000	2770	361	720	702
22	496	4920	6590	301	4000	3250	382	990	1020
23	420	1930	2190	301	3200	2600	546	16500	27800
24	476	3480	4470	298	1520	1220	482	4800	6250
25	425	2050	2350	304	980	804	353	1108	1050
26	506	2450	3350	403	1740	1890	304	870	714
27	522	2410	3400	369	1340	1340	280	650	476
28	486	1500	1970	412	1580	1760	277	1620	1210
29	443	1200	1440	429	1420	1640	277	825	617
30	369	1000	996	416	1100	1240	270	375	273
31	382	870	897	394	750	798	--	--	--
TOTAL	12205	--	115776	12108	--	173092	13483	--	217881

08313000 RIO GRANDE AT OTOWI BRIDGE, NEAR SAN ILDEFONSO, N. MEX.--Continued

SUSPENDED-SEDIMENT DISCHARGE, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

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	277	375	280	1150	2050	6370	670	910	1650
2	270	355	259	1100	1900	5640	729	900	1770
3	250	290	196	954	1390	3580	790	650	1390
4	244	275	181	1110	1680	5030	805	545	1180
5	244	345	227	1270	2200	7540	790	600	1280
6	264	370	264	1270	2000	6860	797	925	1990
7	280	375	284	1310	2000	7070	735	700	1390
8	434	900	1050	1350	2400	8750	729	600	1180
9	407	875	962	1150	1800	5590	735	700	1390
10	452	1060	1290	1220	1930	6360	702	980	1860
11	537	1020	1480	1110	1800	5390	749	740	1500
12	496	950	1270	1060	1410	4040	819	775	1710
13	496	2000	2680	1090	1100	3240	735	550	1090
14	476	980	1260	1000	1300	3510	683	1050	1940
15	582	3200	7010	1050	2000	5670	633	870	1490
16	680	8730	17700	1080	1800	5250	639	1050	1810
17	670	4100	7420	938	1900	4810	639	820	1410
18	1000	5800	15700	1030	1780	4950	742	1900	3810
19	962	7580	19700	1010	1150	3140	689	1210	2250
20	720	3560	7220	986	1140	3030	702	1130	2140
21	1670	8400	37900	1030	990	2750	763	1340	2760
22	1290	3600	12500	970	945	2470	709	925	1770
23	1220	3380	11100	915	890	2200	742	1150	2300
24	954	2750	7080	900	980	2380	756	1330	2710
25	819	1900	4200	722	880	1720	769	1240	2570
26	833	2050	4610	650	650	1140	735	890	1770
27	790	1700	3630	855	1050	2420	722	650	1270
28	908	1900	4660	735	1030	2040	756	475	970
29	954	1850	4770	783	960	2030	797	675	1450
30	1090	2000	5890	812	980	2150	790	300	640
31	1100	2400	7130	--	--	--	715	575	1110
TOTAL	21369	--	189903	30610	--	127120	22766	--	53550

TOTAL DISCHARGE FOR 1972 WATER YEAR (CFS-DAYS)

TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR 1972 WATER YEAR (TONS)

TOTAL DISCHARGE FOR 1972 CALENDAR YEAR (CFS-DAYS)

TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR 1972 CALENDAR YEAR (TONS)

258899

1464464

248100

1292036

INSTANTANEOUS SUSPENDED SEDIMENT AND PARTICLE SIZE, JANUARY 1972 TO DECEMBER 1972

DATE	TIME	TEMPER- ATURE (DEG C) (00010)	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SUS- PENDED SEDIM- ENT (MG/L) (80154)	SUS- PENDED SEDIM- ENT DIS- CHARGE (T/DAY) (80155)	SUS. SED. FALL DIAM. % FINER THAN .002 MM (70337)	SUS. SED. FALL DIAM. % FINER THAN .004 MM (70338)
JAN.							
01...	1245	1.0	701	567	1070	--	--
FEB.							
16...	1345	8.0	674	459	835	--	--
MAR.							
01...	1515	9.0	1310	1330	4700	--	--
15...	1520	11.5	1700	1570	7210	8	9
APR.							
12...	1500	13.0	1020	1390	3830	10	12
MAY							
20...	1530	20.0	382	1600	1650	56	68
JULY							
01...	1400	24.0	467	1320	1660	--	--
02...	1630	25.0	301	183	149	--	--
16...	1545	22.5	729	15000	29500	36	46
26...	1415	25.0	496	2370	3170	33	38
AUG.							
03...	1033	21.0	394	611	650	19	21
07...	2030	--	1040	163000	458000	24	29
17...	1000	18.5	301	6470	5260	50	62
SEP.							
01...	1545	21.0	486	7840	10300	32	36
13...	1600	20.0	627	12300	20800	51	65
23...	1400	15.0	657	28100	49800	56	69
OCT.							
21...	1345	11.5	1680	8660	39300	29	38
NOV.							
01...	1500	4.5	1150	1920	5960	8	9
DEC.							
15...	1430	1.5	542	429	628	--	--

RIO GRANDE BASIN

08313000 RIO GRANDE AT OTOWI BRIDGE, NEAR SAN ILDEFONSO, N. MEX.--Continued
 INSTANTANEOUS SUSPENDED SEDIMENT AND PARTICLE SIZE, JANUARY 1972 TO DECEMBER 1972

DATE	SUS. SED. FALL DIAM. % FINER THAN .016 MM (70340)	SUS. SED. FALL DIAM. % FINER THAN .062 MM (70342)	SUS. SED. FALL DIAM. % FINER THAN .125 MM (70343)	SUS. SED. FALL DIAM. % FINER THAN .250 MM (70344)	SUS. SED. FALL DIAM. % FINER THAN .500 MM (70345)	SUS. SED. FALL DIAM. % FINER THAN 1.00 MM (70346)
JAN. 01...	--	16	37	82	99	100
FEB. 16...	--	14	27	65	99	100
MAR. 01...	--	20	48	83	100	--
15...	12	25	53	86	99	100
APR. 12...	13	16	23	48	92	100
MAY 20...	90	92	94	99	100	--
JULY 01...	--	5	9	39	92	100
02...	--	27	39	95	100	--
16...	67	81	96	99	100	--
26...	53	70	84	99	100	--
AUG. 03...	25	36	55	95	100	--
07...	46	89	98	100	--	--
17...	83	88	92	98	100	--
SEP. 01...	52	73	93	99	100	--
13...	87	91	96	99	100	--
23...	88	93	97	100	--	--
OCT. 21...	52	70	92	99	100	--
NOV. 01...	11	22	63	98	100	--
DEC. 15...	--	14	37	77	100	--

08317400 RIO GRANDE BELOW COCHITI DAM, N. MEX.
(Radiochemical network station)

LOCATION.--Lat 35°35'47", long 106°20'48", in SE¼SW¼ sec. 19, T.16 N., R.6 E., Sandoval County, in Pueblo de Cochiti Grant, at gaging station, 0.3 mile upstream from Peralta Canyon, 0.5 mile downstream from Santa Fe River, 0.9 mile south of Cochiti Pueblo, and 2.5 miles downstream from Cochiti Dam.

DRAINAGE AREA.--14,900 sq mi, approximately (includes 2,940 sq mi in closed basin in San Luis Valley, Colo.).

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

RADIOCHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	DIS- SOLVED GROSS ALPHA AS U-NAT. (UG/L) (80030)	SUS- PENDED GROSS ALPHA AS U-NAT. (UG/L) (80040)	DIS- SOLVED GROSS BETA AS CS-137 (PC/L) (03515)	SUS- PENDED GROSS BETA AS CS-137 (PC/L) (03516)	DIS- SOLVED GROSS BETA AS SR90 /Y90 (PC/L) (80050)	SUS- PENDED GROSS BETA AS SR90 /Y90 (PC/L) (80060)	DIS- SOLVED GROSS RA-226 (PLAN- CHET COUNT) (PC/L) (09510)	DIS- SOLVED GROSS RA-226 (RA-226 METHOD) (PC/L) (09511)	DIS- SOLVED NATURAL URANIUM (U) (UG/L) (22703)
MAY 03...	1938	5.0	10	4.2	6.2	5.3	4.9	--	.07	2.4
OCT. 05...	1617	9.4	8.3	6.7	6.2	5.5	4.9	<.1	--	2.9

FIELD AND BIOCHEMICAL MEASUREMENTS, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	DIS- CHARGE (CFS) (00060)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	AIR TEMPER- ATURE (DEG C) (00020)	DIS- SOLVED OXYGEN (MG/L) (00300)
MAY 03...	1938	378	361	--	17.5	20.0	--
OCT. 05...	1617	179	420	8.3	19.0	22.5	8.3

TEMPERATURE (DEG. C) OF WATER-CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DAY	JANUARY			FEBRUARY			MARCH			APRIL		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	1.5	0.0	0.5	3.0	0.0	1.5	9.0	6.0	7.5	13.0	6.5	9.5
2	2.0	0.0	0.5	2.0	0.0	0.5	8.0	5.5	7.0	13.5	7.5	10.0
3	1.0	0.0	0.5	1.0	0.0	0.0	9.5	5.5	7.5	14.0	8.0	11.0
4	---	---	---	1.0	0.0	0.5	10.5	7.0	8.5	15.0	9.0	12.0
5	---	---	0.0	3.0	0.0	1.5	11.0	7.5	9.0	16.5	10.5	13.0
6	---	---	0.0	4.0	0.5	2.0	11.5	7.5	9.0	15.5	12.0	13.5
7	---	---	0.0	5.5	1.5	3.0	12.5	8.0	10.0	16.5	11.0	13.5
8	---	---	0.0	6.0	1.5	3.5	12.5	8.5	10.0	16.5	11.5	13.5
9	---	---	0.0	3.0	3.0	3.0	12.5	9.0	10.5	16.5	11.5	13.5
10	---	---	0.0	3.5	2.5	3.0	13.0	9.5	11.0	17.0	12.0	14.5
11	0.5	0.0	0.0	5.5	1.5	3.0	13.5	10.0	11.5	17.0	13.5	15.0
12	1.5	0.0	0.5	5.5	1.0	3.0	13.0	9.5	11.0	14.0	11.0	13.0
13	4.0	0.5	2.0	6.5	1.5	3.5	13.0	10.0	11.5	15.0	10.5	12.0
14	3.5	1.5	2.5	7.0	2.5	4.5	12.0	10.0	11.0	12.5	8.5	10.5
15	3.0	0.5	1.5	8.5	4.5	6.0	11.5	9.0	10.0	14.0	8.0	10.5
16	3.0	0.0	1.0	8.0	4.0	5.5	11.5	8.5	10.0	15.5	9.0	12.0
17	3.5	0.0	1.5	8.5	4.0	6.0	12.5	9.0	10.5	16.5	10.5	13.0
18	3.0	0.5	1.5	8.5	4.5	6.0	12.5	9.5	10.5	14.5	10.5	12.5
19	4.0	0.5	2.0	9.0	5.0	6.5	12.5	9.5	11.0	16.0	10.0	12.0
20	---	---	---	9.0	5.0	7.0	12.5	9.5	10.5	14.0	9.0	11.0
21	4.5	3.0	3.5	9.0	5.5	7.0	13.0	9.0	11.0	15.5	9.0	12.0
22	5.5	2.5	3.5	9.0	6.5	7.5	13.5	9.5	11.5	16.5	9.5	13.0
23	6.0	2.5	4.0	9.0	6.0	7.0	14.0	11.0	12.0	17.5	10.5	14.0
24	5.5	2.5	3.5	7.0	5.0	6.0	13.5	9.5	11.5	18.5	12.0	15.0
25	2.5	1.0	2.0	7.0	4.5	5.5	13.5	9.0	11.0	18.0	12.5	15.0
26	4.5	1.0	2.5	7.5	4.5	6.0	13.5	10.0	11.5	16.5	10.5	13.0
27	6.0	3.0	4.0	8.5	5.5	6.5	10.0	7.5	9.0	17.5	9.5	13.5
28	5.0	2.0	3.5	9.0	5.0	7.0	10.5	6.0	8.0	17.5	10.5	14.0
29	5.0	1.5	3.0	9.0	6.0	7.5	10.0	5.5	7.5	18.5	11.5	15.0
30	4.0	1.5	2.5	---	---	---	10.0	5.0	7.0	18.0	12.0	15.0
31	3.5	0.0	1.5	---	---	---	12.0	5.5	8.0	---	---	---
MONTH	---	---	1.5	9.0	0.0	4.5	14.0	5.0	10.0	18.5	6.5	13.0

RIO GRANDE BASIN

08317400 RIO GRANDE BELOW COCHITI DAM, N. MEX.--Continued

TEMPERATURE (DEG. C) OF WATER, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DAY	MAY			JUNE			JULY			AUGUST		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	17.5	11.5	14.5	25.0	18.0	21.0	25.5	19.5	22.5	27.5	21.5	24.0
2	18.5	11.5	15.0	25.5	18.5	21.5	26.5	19.5	22.5	28.5	21.0	24.0
3	19.5	12.0	16.0	26.0	19.0	21.5	28.5	19.5	23.5	27.0	21.0	23.5
4	20.0	12.5	16.0	25.5	18.0	21.5	24.0	19.0	20.5	25.0	18.5	21.5
5	21.0	14.0	17.0	25.0	18.0	21.5	28.5	16.0	21.0	24.5	19.0	22.0
6	19.5	14.0	16.5	23.5	18.0	20.5	24.0	16.5	20.0	27.0	16.0	22.0
7	19.5	13.5	16.0	20.5	18.0	19.5	24.5	19.5	21.5	26.5	20.0	22.5
8	19.5	12.0	15.5	23.5	17.5	20.5	27.0	18.5	22.5	23.5	20.0	21.5
9	19.5	13.0	16.0	24.5	18.0	21.0	28.5	19.5	23.5	25.5	18.5	21.5
10	19.0	14.0	16.0	26.0	18.5	22.0	28.5	20.5	23.5	27.0	19.5	23.0
11	19.5	12.5	16.0	26.0	20.0	22.5	26.5	20.0	23.0	28.0	20.5	23.5
12	20.5	12.5	16.5	22.5	19.5	21.5	27.0	19.0	23.0	27.0	19.5	22.5
13	21.0	13.0	17.0	24.5	18.5	21.0	29.0	19.5	24.0	28.5	19.0	23.0
14	22.0	13.5	17.5	24.5	19.5	21.5	30.0	20.0	24.5	26.5	19.0	23.0
15	23.0	13.5	18.0	23.0	17.5	20.0	27.5	21.5	24.5	28.0	19.5	23.5
16	24.0	15.0	19.5	24.5	18.0	20.5	23.5	19.5	21.5	28.5	19.5	22.0
17	21.5	16.0	18.5	22.0	12.5	17.5	24.0	16.5	20.5	25.5	18.5	22.0
18	24.0	15.0	18.5	24.5	17.5	20.5	26.0	19.5	22.0	25.0	18.5	21.5
19	19.0	15.0	17.0	24.5	17.0	20.5	27.0	19.5	22.5	26.5	19.0	22.5
20	22.5	15.0	18.5	25.0	17.5	21.5	26.0	20.0	22.5	24.0	20.0	21.5
21	21.0	14.5	18.0	25.0	18.0	21.0	25.0	20.0	22.5	25.5	19.0	22.0
22	21.5	13.5	17.0	25.5	18.0	21.5	26.0	20.0	22.5	26.0	19.0	22.0
23	22.0	13.0	17.0	26.0	19.5	22.5	26.0	20.0	22.5	26.5	19.0	22.0
24	22.0	13.5	17.5	25.0	19.5	22.0	26.5	20.0	22.5	24.5	18.0	21.0
25	22.0	15.0	18.5	25.0	18.5	21.5	25.5	21.0	23.0	24.0	17.5	20.0
26	23.5	15.5	19.5	24.5	18.5	21.0	26.5	20.5	23.0	23.5	17.5	20.0
27	22.0	16.0	19.0	25.5	18.0	21.5	27.0	21.5	24.0	20.5	18.0	19.0
28	23.0	16.0	18.5	26.0	18.5	22.0	27.5	21.5	24.0	25.5	18.0	21.0
29	21.5	15.5	18.0	27.0	20.0	23.0	26.5	21.5	24.0	24.0	20.0	22.0
30	19.5	16.5	17.5	26.5	19.0	22.5	28.0	21.5	24.5	26.0	19.5	22.5
31	23.0	16.0	19.0	---	---	---	30.0	21.5	24.5	26.0	19.5	22.0
MONTH	24.0	11.5	17.5	27.0	12.5	21.0	30.0	16.0	23.0	28.5	16.0	22.0
DAY	SEPTEMBER			OCTOBER			NOVEMBER			DECEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	24.5	19.5	21.5	20.5	12.5	16.5	7.0	3.5	5.0	3.5	0.0	1.5
2	24.0	18.5	21.0	21.0	13.5	17.0	---	---	---	---	---	---
3	23.0	19.0	20.5	16.5	13.5	15.0	---	---	---	---	---	---
4	23.5	17.5	20.0	19.0	15.5	17.0	7.5	5.5	6.5	---	---	---
5	24.5	19.0	21.5	19.0	16.0	17.5	7.5	5.5	6.5	---	---	---
6	22.5	19.5	21.0	17.0	14.0	15.5	8.5	5.5	6.5	---	---	---
7	24.0	18.0	20.5	18.5	13.0	15.5	---	---	---	---	---	---
8	24.0	19.0	21.0	20.0	13.5	16.5	7.5	5.5	6.5	---	---	---
9	24.0	19.0	21.0	19.5	14.5	16.5	8.5	6.0	7.0	---	---	---
10	21.5	18.0	20.0	18.5	14.5	16.5	7.0	5.5	6.0	---	---	---
11	23.0	19.0	20.5	18.0	13.5	16.0	7.0	5.5	6.0	---	---	---
12	23.5	18.0	20.5	20.5	15.5	17.5	6.0	4.5	5.5	---	---	---
13	23.5	18.5	20.5	21.0	17.0	19.0	6.0	3.5	4.5	---	---	0.0
14	22.5	12.5	19.5	20.0	16.0	18.0	4.5	4.0	4.5	1.5	0.0	0.5
15	22.5	15.5	19.0	19.0	15.5	17.0	5.5	4.0	4.5	1.0	0.0	0.0
16	23.5	17.5	20.0	18.0	15.5	17.0	4.5	3.0	3.5	---	---	0.0
17	23.5	17.5	20.0	17.5	14.0	16.0	5.5	3.5	4.0	---	---	0.0
18	23.5	17.5	20.5	18.0	15.0	16.0	5.5	3.5	4.5	0.5	0.0	0.0
19	23.5	18.0	20.0	15.5	11.0	13.0	4.5	3.0	4.0	2.0	0.0	0.5
20	22.5	16.5	19.5	13.0	10.5	11.0	3.5	1.5	2.5	3.5	0.5	1.5
21	21.5	16.5	18.5	13.0	10.5	11.0	3.5	1.0	2.5	3.5	0.5	1.5
22	21.0	14.5	17.5	13.0	10.0	11.5	3.0	1.0	2.0	3.0	0.0	1.5
23	20.0	15.0	17.0	13.5	11.0	12.0	2.5	0.0	1.0	3.5	0.5	2.0
24	19.0	14.5	17.0	13.0	10.0	11.5	---	---	---	3.5	1.0	1.5
25	19.5	14.5	17.0	12.0	10.5	11.0	---	---	---	3.0	0.5	1.5
26	20.0	13.5	16.5	14.0	10.5	11.5	---	---	---	2.0	0.0	0.5
27	20.0	13.5	17.0	11.0	9.5	10.5	---	---	---	1.5	0.0	0.5
28	20.5	14.5	17.0	---	---	---	2.0	0.5	1.5	1.0	0.0	0.5
29	20.5	13.5	17.0	---	---	---	4.5	1.0	2.0	1.5	0.5	1.0
30	20.0	13.5	16.5	---	---	---	3.0	0.0	1.5	2.5	0.0	1.0
31	---	---	---	8.5	5.0	6.5	---	---	---	0.5	0.0	0.0
MONTH	24.5	12.5	19.5	21.0	5.0	14.5	---	---	4.0	---	---	---

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LOCATION.--Lat 35°27'56", long 106°12'57", in SE₄SE₄ sec.5, T.14 N., R.7 E., Santa Fe County, in Mesita de Juana Lopez Grant, at gaging station, 0.6 mile downstream from Galisteo Dam, and 5.5 miles northwest of Cerrillos.

Water temperatures: July 1971 to current year

Sediment records: July 1971 to current year.

Specific conductance: Maximum, not determined; minimum, not determined.

Water temperatures: Maximum, not determined; minimum, not determined.

Sediment concentrations: Maximum daily, 73,100 mg/l July 17; minimum daily, no flow on many days.

Sediment discharge: Maximum daily, 111,000 tons July 17; minimum daily, 0 tons on many days.

Specific conductance: Maximum, not determined; minimum, not determined.

Water temperatures: Maximum, not determined; minimum, not determined.

Sediment concentrations: Maximum daily, 73,100 mg/l July 17, 1972; minimum daily, no flow on many days in 1971 and 1972.

Sediment discharge: Maximum daily 111,000 tons July 17; minimum daily, 0 tons on many days in 1971 and 1972.

REMARKS.—No flow Apr. 11-15, Apr. 18 to May 6, 11-29, June 1-7, 10-12, 14, 15, June 21 to July 5, 9, 13-15, Aug. 1-4, 12-15, 21-25, Sept. 30, Oct. 1-4. The extremes for specific conductance and water temperatures were not reported because the number of missing days of record exceeded 20 percent of flow of year.

[illegible]

RIO GRANDE BASIN

08317950 GALISTEO CREEK BELOW GALISTEO DAM, N. MEX.--Continued

TEMPERATURE (DEG. C) OF WATER, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972
(ONCE-DAILY)

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	16.5	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	30.0	---	---	---
6	0.0	---	15.0	---	---	---	25.5	---	---	---	---	---
7	---	---	---	---	---	---	19.0	25.3	25.0	---	---	---
8	---	---	---	---	---	---	---	26.3	---	---	---	---
9	---	---	---	---	22.0	28.0	---	---	15.0	---	---	---
10	---	---	---	---	---	---	31.5	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---	---	---	0.0
13	---	---	---	---	---	---	---	---	28.0	---	6.5	---
14	---	---	---	---	---	---	---	---	20.0	---	---	---
15	---	12.5	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	23.0	---	---	---	---	---	---
17	---	---	---	---	---	---	20.0	24.0	---	17.0	---	---
18	---	---	---	---	---	---	20.5	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	---	---	---	---	---	---	---	---	16.0	12.0	---	---
21	---	---	---	---	---	---	30.0	---	---	---	---	---
22	---	---	---	---	---	---	---	---	15.5	---	---	---
23	---	---	17.0	---	---	---	---	---	---	12.0	---	---
24	---	---	---	---	---	---	26.0	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---	19.0	---	---
26	---	---	---	---	---	---	7.0	---	---	14.0	---	---
27	---	---	---	---	---	---	---	---	---	---	---	---
28	---	---	---	---	---	---	31.5	25.0	---	---	---	---
29	---	---	---	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

SUSPENDED-SEDIMENT DISCHARGE, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

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	5.0	400	5.4	.75	80	.16	.50	75	.10
2	4.0	350	3.8	.75	80	.16	.50	75	.10
3	3.0	300	2.4	.75	80	.16	1.0	100	.27
4	2.0	200	1.1	1.0	90	.24	1.0	100	.27
5	1.0	100	.27	1.0	90	.24	.50	100	.14
6	1.5	86	.35	1.0	90	.24	.37	190	.19
7	1.5	100	.41	1.0	90	.24	.32	150	.13
8	1.5	100	.41	1.0	90	.24	.23	150	.09
9	1.5	100	.41	1.0	90	.24	.35	150	.14
10	1.5	100	.41	1.0	90	.24	.40	150	.16
11	1.5	100	.41	.75	80	.16	.34	150	.14
12	1.5	100	.41	.75	80	.16	.26	150	.11
13	1.5	100	.41	1.0	90	.24	.30	200	.16
14	1.5	100	.41	1.5	100	.41	.30	250	.20
15	1.5	100	.41	2.0	441	2.4	.34	250	.23
16	1.5	100	.41	1.5	250	1.0	.32	250	.22
17	1.5	100	.41	1.0	200	.54	.38	250	.26
18	1.5	100	.41	1.5	200	.81	.40	250	.27
19	1.6	110	.48	1.5	150	.61	.33	250	.22
20	2.1	200	1.1	1.5	150	.61	.23	300	.19
21	2.2	200	1.2	1.5	100	.41	.32	300	.26
22	1.6	150	.65	1.0	100	.27	.38	250	.26
23	1.5	100	.41	1.0	100	.27	.56	300	.45
24	1.1	90	.27	1.0	100	.27	.20	250	.14
25	.96	90	.23	1.0	100	.27	.12	300	.10
26	1.8	150	.73	1.0	100	.27	.04	250	.03
27	1.2	100	.32	1.0	100	.27	.01	200	.01
28	.70	80	.15	1.0	100	.27	.09	250	.06
29	.83	80	.18	1.0	100	.27	.22	250	.15
30	.75	80	.16	--	--	--	.29	250	.20
31	.75	80	.16	--	--	--	.27	250	.18
TOTAL	51.59	--	24.28	31.75	--	11.67	10.87	--	5.43

08317950 GALISTEO CREEK BELOW GALISTEO DAM, N. MEX.--Continued

SUSPENDED-SEDIMENT DISCHARGE, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

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	.19	250	.13	0	0	0	0	0	0
2	.12	200	.06	0	0	0	0	0	0
3	.12	250	.08	0	0	0	0	0	0
4	.09	250	.06	0	0	0	0	0	0
5	.12	250	.08	0	0	0	0	0	0
6	.08	200	.04	0	0	0	0	0	0
7	.05	200	.03	1.6	440	2.0	0	0	0
8	.04	150	.02	1.4	371	1.6	16	4730	1020
9	.05	150	.02	.13	202	.10	3.5	11100	167
10	.04	100	.01	.02	53	.01	0	0	0
11	0	0	0	0	0	0	0	0	0
12	0	0	0	0	0	0	0	0	0
13	.15	88	.08	0	0	0	.07	1210	1.2
14	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0
16	.03	18	0	0	0	0	408	54400	71200
17	.02	18	0	0	0	0	30	10500	1500
18	0	0	0	0	0	0	1.5	1900	7.7
19	0	0	0	0	0	0	.58	1500	2.3
20	0	0	0	0	0	0	.28	700	.53
21	0	0	0	0	0	0	0	0	0
22	0	0	0	0	0	0	0	0	0
23	0	0	0	0	0	0	0	0	0
24	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0
26	0	0	0	0	0	0	0	0	0
27	0	0	0	0	0	0	0	0	0
28	0	0	0	0	0	0	0	0	0
29	0	0	0	0	0	0	0	0	0
30	0	0	0	3.3	408	3.7	0	0	0
31	--	--	--	1.1	293	.94	--	--	--
TOTAL	1.10	--	.61	7.55	--	8.35	459.93	--	73898.73

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	0	0	0	0	0	156	20100	19300
2	0	0	0	0	0	0	697	46900	106000
3	0	0	0	0	0	0	20	13000	817
4	0	0	0	0	0	0	5.0	2800	38
5	0	0	0	34	2350	287	1.6	2200	9.5
6	135	35300	24800	226	44300	38000	1.5	800	3.2
7	3.7	4000	53	31	18500	2770	1.1	450	1.3
8	.25	1500	1.0	16	7170	454	1.4	2580	32
9	0	0	0	7.4	2280	88	215	63700	39400
10	18	33200	2130	.80	500	1.1	26	10200	716
11	.75	13000	26	.42	500	.57	43	12800	2020
12	.04	4000	.43	0	0	0	182	57700	52100
13	0	0	0	0	0	0	11	3000	89
14	0	0	0	0	0	0	4.8	500	6.5
15	0	0	0	0	0	0	3.0	400	3.2
16	466	54600	95100	9.4	11300	1540	2.0	300	1.6
17	409	73100	111000	12	14900	501	1.2	200	.65
18	12	2980	129	6.3	3330	69	.62	150	.25
19	7.5	1250	25	1.0	2500	6.8	37	7450	3340
20	7.1	1610	35	.43	3640	6.2	141	11400	8370
21	3.0	740	6.0	0	0	0	9.5	1240	32
22	6.6	4200	75	0	0	0	3.8	520	5.3
23	71	16700	12200	0	0	0	2.1	380	2.2
24	121	23600	11800	0	0	0	1.6	300	1.3
25	140	33900	20800	0	0	0	1.2	200	.65
26	66	29400	7280	11	14200	922	.89	150	.36
27	30	8050	2750	6.3	6320	246	.73	150	.30
28	86	38900	12600	10	7500	203	.88	150	.36
29	15	2500	101	20	28000	2200	.27	100	.07
30	2.0	2000	11	25	12900	1050	0	0	0
31	.10	1200	.32	13	2500	88	--	--	--
TOTAL	1600.04	--	300922.75	430.05	--	48432.67	1571.19	--	232290.74

RIO GRANDE BASIN

08317950 GALISTEO CREEK BELOW GALISTEO DAM, N. MEX.--Continued

SUSPENDED-SEDIMENT DISCHARGE, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

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	0	0	0	2.5	500	3.4	2.5	450	3.0
2	0	0	0	2.5	500	3.4	2.7	450	3.3
3	0	0	0	2.2	450	2.7	2.5	450	3.0
4	0	0	0	2.1	450	2.6	2.4	450	2.9
5	1.1	300	.89	1.9	300	1.5	2.4	400	2.6
6	1.8	250	1.2	1.7	300	1.4	2.0	400	2.2
7	1.6	250	1.1	1.6	300	1.3	2.0	400	2.2
8	1.2	200	.65	1.9	350	1.8	1.5	350	1.4
9	.69	150	.28	2.2	350	2.1	1.5	350	1.4
10	.60	150	.24	1.6	250	1.1	1.5	350	1.4
11	.35	150	.14	1.6	250	1.1	1.3	350	1.2
12	23	15900	2290	1.9	300	1.5	1.0	300	.81
13	12	3300	107	1.7	220	1.0	1.5	250	1.0
14	6.5	2000	35	1.6	200	.86	1.5	300	1.2
15	1.5	400	1.6	2.3	300	1.9	1.5	250	1.0
16	.80	200	.43	1.8	250	1.2	1.5	250	1.0
17	1.4	400	1.5	2.2	300	1.8	1.5	250	1.0
18	4.7	5980	96	6.6	1000	18	2.0	300	1.6
19	4.8	3500	45	3.8	500	5.1	2.0	300	1.6
20	60	26600	4900	2.9	500	3.9	2.0	250	1.4
21	160	43100	25500	2.6	500	3.5	2.0	250	1.4
22	7.5	6000	122	2.5	500	3.4	2.0	250	1.4
23	100	24000	6480	2.4	450	2.9	2.0	200	1.1
24	40	19000	2050	3.0	500	4.1	2.0	200	1.1
25	15	11000	446	2.1	450	2.6	1.5	200	.81
26	20	14500	783	2.2	450	2.7	1.5	200	.81
27	13	3000	105	2.6	500	3.5	2.0	250	1.4
28	9.0	1800	44	2.7	500	3.6	2.0	250	1.4
29	6.0	1000	16	3.0	500	4.1	1.5	200	.81
30	4.0	800	8.6	2.5	450	3.0	1.5	200	.81
31	3.0	700	5.7	--	--	--	1.5	200	.81
TOTAL	499.54	--	43041.33	72.2	--	91.06	56.3	--	47.06

TOTAL DISCHARGE FOR 1972 WATER YEAR (CFS-DAYS)

TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR 1972 WATER YEAR (TONS)

TOTAL DISCHARGE FOR 1972 CALENDAR YEAR (CFS-DAYS)

TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR 1972 CALENDAR YEAR (TONS)

4672.14

696367.25

4792.11

698774.68

INSTANTANEOUS SUSPENDED SEDIMENT AND PARTICLE SIZE, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	TEMPER- ATURE (DEG C) (00010)	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SUS- PENDED SEDIM- ENT (MG/L) (80154)	SUS- PENDED SEDIM- ENT DIS- CHARGE (T/DAY) (80155)	SUS- SED. FALL DIAM. % FINER THAN .002 MM (70337)	SUS. SED. FALL DIAM. % FINER THAN .004 MM (70338)	SUS. SED. FALL DIAM. % FINER THAN .016 MM (70340)
JUNE								
16...	1500	23.0	261	45200	31900	35	46	67
JULY								
10...	1400	31.5	8.7	23800	559	65	82	94
26...	1005	7.0	84	43200	9800	52	62	83
AUG.								
17...	1615	24.0	15	19000	770	67	81	96
SEP.								
05...	1530	30.0	1.8	715	3.5	48	58	68
09...	2100	--	103	29600	8230	31	39	57
22...	1140	15.5	4.5	434	5.3	60	74	83

DATE	SUS. SED. FALL DIAM. % FINER THAN .062 MM (70342)	SUS. SED. FALL DIAM. % FINER THAN .125 MM (70343)	SUS. SED. FALL DIAM. % FINER THAN .250 MM (70344)	SUS. SED. FALL DIAM. % FINER THAN .500 MM (70345)	SUS. SED. FALL DIAM. % FINER THAN .062 MM (70331)	SUS. SED. FALL DIAM. % FINER THAN .125 MM (70332)	SUS. SED. FALL DIAM. % FINER THAN .250 MM (70333)
------	--	--	--	--	--	--	--

JUNE							
16...	84	95	100	--	--	--	--
JULY							
10...	98	100	--	--	--	--	--
26...	94	98	100	--	--	--	--
AUG.							
17...	99	99	100	--	--	--	--
SEP.							
05...	--	--	--	--	96	99	100
09...	84	97	99	100	--	--	--
22...	--	--	--	--	90	96	100

08329000 JEMEZ RIVER BELOW JEMEZ CANYON DAM, N. MEX.

LOCATION.--Lat 35°23'24", long 106°32'03", in NE¼ sec. 5, T.13 N., R.4 E., Sandoval County, at gaging station 0.8 mile downstream from Jemez Canyon Dam, 1.5 miles upstream from mouth, and 6 miles north of Bernalillo.

DRAINAGE AREA.--1,038 sq mi.

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

CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	DIS- CHARGE (CFS) (00060)	DIS- SOLVED SILICA (SiO ₂) (MG/L) (00955)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)
JAN.								
03...	1200	18	35	--	76	9.4	230	14
FEB.								
14...	1115	4.5	37	--	68	9.1	210	12
28...	1300	60	27	--	34	4.5	82	9.3
APR.								
03...	1215	17	--	--	--	--	--	--
10...	1130	16	--	--	--	--	--	--
16...	0915	36	31	20	54	6.8	120	9.1
24...	1105	1.2	--	--	--	--	--	--
SEP.								
25...	1100	2.2	31	--	94	11	210	9.1
NOV.								
13...	1100	97	26	9	71	7.9	170	8.1
28...	1555	95	--	--	--	--	--	--
DEC.								
05...	1515	54	31	--	72	8.9	170	9.2
19...	1420	65	29	--	69	8.3	170	9.1
27...	1420	10	30	--	69	8.8	180	9.5

DATE	BICAR- BONATE (HCO ₃) (MG/L) (00440)	CAR- BONATE (CO ₃) (MG/L) (00445)	DIS- SOLVED SULFATE (SO ₄) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	DIS- SOLVED ORTHO. PHOS- PHORUS (P) (MG/L) (00671)	DIS- SOLVED SOLIDS DUE AT 180 C (MG/L) (70300)	DIS- SOLVED SOLIDS (SUM OF TUEENTS) (MG/L) (70301)
JAN.									
03...	278	0	230	200	.8	.07	--	--	932
FEB.									
14...	303	0	150	190	1.3	.13	--	--	827
28...	185	0	59	71	.8	.02	--	--	379
APR.									
03...	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--
16...	255	0	69	110	1.1	.04	.02	580	527
24...	--	--	--	--	--	--	--	--	--
SEP.									
25...	273	0	240	210	1.5	.03	--	--	941
NOV.									
13...	307	0	190	150	.9	.12	--	--	776
28...	--	--	--	--	--	--	--	--	--
DEC.									
05...	255	0	170	170	1.0	.04	--	--	758
19...	239	0	170	160	1.0	.03	--	--	734
27...	263	0	150	170	1.0	.08	--	--	748

DATE	HARD- NESS (CA, MG) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AD- SORP- TION RATIO (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	TUR- BID- ITY (JTU) (00070)	DIS- SOLVED BORON (B) (UG/L) (01020)
JAN.								
03...	230	0	6.6	1510	7.9	.0	--	--
FEB.								
14...	210	0	6.3	1350	8.0	3.0	--	--
28...	100	0	3.5	612	7.9	10.5	--	--
APR.								
03...	--	--	--	779	--	11.5	--	--
10...	--	--	--	745	--	13.0	--	--
16...	160	0	4.1	862	8.1	10.5	--	750
24...	--	--	--	1100	--	110.0	--	--
SEP.								
25...	280	56	5.5	1545	8.0	--	--	--
NOV.								
13...	210	0	5.1	1180	7.4	--	--	740
28...	--	--	--	1110	--	3.0	1000	--
DEC.								
05...	220	7	5.0	1230	8.0	3.5	--	--
19...	210	10	5.1	1190	7.9	3.0	--	--
27...	210	0	5.4	1210	8.2	.5	--	--

E ESTIMATED

RIO GRANDE BASIN

08329100 BERNALILLO FLOODWATER RETARDING RESERVOIR NO. 1 (PIEDRA LISA ARROYO), NEAR BERNALILLO, N. MEX.

LOCATION.--Lat 35°18'50", long 106°31'44", Sandoval County, in Bernalillo Grant, at out flow pipe of reservoir, 0.3 mile east of intersection of State Highways 44 and 422, and 1.5 miles northeast of Bernalillo.

DRAINAGE AREA.--4.1 sq mi, of which 2.0 sq mi has contouring, pitting and small dams to reduce surface runoff.

PERIOD OF RECORD.--Sediment records: July 1956 to current year.

SUSPENDED SEDIMENT, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

Date	Flow event no.	Flow duration (hours)	Mean Discharge for event (cfs)	Mean concentration (mg/l)	Outflow sediment discharge (tons)
July 23, 1972	28	1	3.78	17800	8
Oct. 19, 1972	29	.75	1.04	10200	.03
Oct. 25, 1972	30	10.75	.40	5090	5

Instantaneous suspended sediment and particle size, Calendar year January 1972 to December 1972

(C, chemically dispersed; N, native water; P, pipet; S, sieve; V, visual accumulation tube; W, distilled water)

Date of collection	Time	Water temperature (°C)	Discharge (cfs)	Sediment concentration (mg/l)	Sediment discharge (tons per day)	Suspended sediment										Method of analysis
						Percent finer than indicated size in millimeters										
						0.002	0.004	0.008	0.016	0.031	0.062	0.125	0.250	0.500	1.000	
Oct. 25, 1972	1530	12.0	0.81	8230	18	57	68	--	93	--	100	--	--	--	--	SPWC
Oct. 25, 1972	1600	12.0	0.71	6460	12.4	59	75	--	97	--	100	--	--	--	--	SPWC
Oct. 25, 1972	1615	11.5	0.60	5750	9.3	71	89	--	100	--	--	--	--	--	--	SPWC
Oct. 25, 1972	1645	11.5	0.50	4980	6.7	71	90	--	99	--	100	--	--	--	--	SPWC
Oct. 25, 1972	1730	11.0	0.35	2700	2.6	82	96	--	99	--	100	--	--	--	--	SPWC

RIO GRANDE BASIN

85

08330000 RIO GRANDE AT ALBUQUERQUE, N. MEX.

LOCATION.--Lat 35°05'21", long 106°40'48", Bernalillo County, in Atrisco Grant, at gaging station on U.S. Highway 66 at Albuquerque.

DRAINAGE AREA.--17,440 sq mi, approximately (includes 2,940 sq mi in closed basin in San Luis Valley, Colo.).

PERIOD OF RECORD.--Specific conductance: October 1969 to current year.

Water temperatures: October 1969 to current year.

Sediment records: May 1969 to September 1969 (partial-record station), October 1969 to current year.

EXTREMES:

Current year:

Specific conductance: Maximum daily, 1,680 micromhos Oct. 14; minimum daily, 240 micromhos Aug. 28.

Water temperatures: Maximum, 33.0°C June 19; minimum, 1.0°C Dec. 21.

Sediment concentrations: Maximum daily, 33,400 mg/l July 17; minimum daily, no flow on many days.

Sediment discharge: Maximum daily, 86,800 tons Sept. 15; minimum daily, 0 tons on many days.

Period of record:

Specific conductance: Maximum, 1,680 micromhos Oct. 14, 1972; minimum daily 133 micromhos July 21, 1971.

Water temperatures: Maximum, 34.0°C July 12, 1970; minimum, freezing point Nov. 1, 1970, Jan. 3-5, 1971.

Sediment concentrations: Maximum daily, 45,500 mg/l July 21, 1971; minimum daily, no flow on many days in 1971 and 1972.

Sediment discharge: Maximum daily, 275,000 tons July 27, 1971; minimum daily; 0 tons on many days in 1971 and 1972.

REMARKS.--Additional sediment total discharge determination were made bi-weekly when needed. No flow May 24-30, June 2-16, June 20 to July 16, July 23 to Aug. 4, Oct. 1-12.

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C) • CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972
(ONCE-DAILY)

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	458	433	365	385	400	---	---	---	484	---	443	463
2	416	421	368	389	408	---	---	---	1360	---	467	503
3	474	402	379	401	412	---	---	---	447	---	478	443
4	---	404	381	402	419	---	---	---	520	---	472	432
5	452	408	362	411	429	---	---	---	600	---	438	443
6	461	492	369	413	---	---	---	857	841	---	458	417
7	466	455	365	425	---	---	---	1130	586	---	403	444
8	467	442	361	411	444	---	---	557	509	---	448	443
9	464	441	361	386	445	---	---	684	487	---	397	443
10	478	452	362	375	460	---	---	669	612	---	401	445
11	484	446	867	368	---	---	---	569	473	---	422	439
12	460	447	859	355	487	---	---	539	1050	---	401	455
13	517	405	370	367	---	---	---	---	1080	435	408	421
14	489	427	372	362	---	---	---	503	774	1680	472	430
15	483	428	330	352	---	---	---	503	898	591	481	435
16	486	422	317	348	---	---	---	---	505	737	424	447
17	480	412	311	352	---	824	660	---	523	621	474	422
18	476	414	301	356	---	852	620	---	506	565	460	404
19	470	411	291	365	---	459	556	265	498	770	487	478
20	464	415	293	387	---	---	---	---	459	1310	493	418
21	453	416	281	386	---	---	---	531	1140	1000	447	431
22	466	423	305	383	---	---	---	433	565	1150	415	412
23	458	427	289	385	---	---	---	---	488	986	474	442
24	478	442	329	376	---	---	---	---	481	512	425	436
25	446	526	331	388	---	---	---	---	581	498	440	425
26	436	447	342	382	---	---	---	---	581	490	482	417
27	446	425	339	405	---	---	---	---	549	496	510	428
28	453	404	357	397	---	---	---	---	240	---	538	435
29	458	403	361	399	---	---	---	1120	---	520	419	447
30	444	---	376	375	---	---	---	463	---	444	452	380
31	429	---	374	---	---	---	---	975	---	445	---	363
MONTH	464	431	376	383	---	---	---	---	652	---	447	434

RIO GRANDE BASIN

08330000 RIO GRANDE AT ALBUQUERQUE, N. MEX.--Continued

TEMPERATURE (DEG. C) OF WATER, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972
(ONCE-DAILY)

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	6.0	4.0	10.0	13.0	17.0	---	---	---	20.0	---	8.0	6.0
2	7.0	4.0	6.0	13.0	18.0	---	---	---	20.0	---	8.0	8.0
3	5.0	3.0	6.0	11.0	20.0	---	---	---	18.0	---	9.0	8.0
4	---	3.0	7.0	13.0	23.0	---	---	---	19.0	---	6.0	7.0
5	4.0	5.0	14.0	16.0	24.0	---	---	---	20.0	---	10.0	6.0
6	5.0	5.0	15.0	15.0	---	---	---	27.0	20.0	---	12.0	3.0
7	8.0	8.0	10.0	15.0	---	---	---	23.0	20.0	---	10.0	5.0
8	9.0	7.0	14.0	15.0	22.0	---	---	---	20.0	---	6.0	7.0
9	9.0	5.0	14.0	17.0	22.0	---	---	24.0	20.0	---	9.0	7.0
10	8.0	4.0	15.0	14.0	24.0	---	---	24.0	19.0	---	9.0	7.0
11	4.0	6.0	10.0	17.0	---	---	---	22.0	23.0	---	9.0	4.0
12	4.0	8.0	11.0	17.0	21.0	---	---	26.0	23.0	---	7.0	4.0
13	4.0	9.0	12.0	17.0	---	---	---	---	19.0	18.0	7.0	3.0
14	2.0	7.0	15.0	14.0	---	---	---	21.0	18.0	16.0	7.0	5.0
15	6.0	7.0	12.0	11.0	---	---	---	---	18.0	14.0	7.0	3.0
16	4.0	8.0	12.0	16.0	---	---	---	---	16.0	18.0	7.0	3.0
17	4.0	5.0	11.0	17.0	---	---	25.0	---	21.0	12.0	8.0	2.5
18	3.0	5.0	13.0	14.0	---	21.0	27.5	---	17.0	16.0	7.0	5.0
19	6.0	10.0	15.0	15.0	---	33.0	30.0	19.0	20.0	13.0	8.0	5.0
20	7.0	14.0	15.0	15.0	---	---	---	---	18.0	9.0	6.0	4.0
21	7.0	10.0	15.0	11.0	---	---	---	22.0	14.0	8.0	7.0	1.0
22	9.0	8.5	12.0	17.0	---	---	---	19.0	14.0	10.0	5.0	3.0
23	6.0	6.0	15.0	20.0	---	---	---	---	14.0	10.0	7.0	7.0
24	6.5	---	10.0	18.0	---	---	---	---	16.0	9.0	8.0	7.0
25	5.0	9.0	15.0	16.0	---	---	---	---	14.0	11.0	6.0	7.0
26	4.0	11.0	15.0	15.0	---	---	---	---	16.0	8.0	8.0	5.0
27	8.0	10.0	10.0	18.0	---	---	---	---	14.0	10.0	8.0	6.0
28	7.0	11.0	7.0	18.0	---	---	---	19.0	---	9.0	5.0	5.0
29	6.0	10.0	8.0	22.0	---	---	---	18.0	---	9.0	5.0	4.0
30	6.0	---	11.0	18.0	---	---	---	18.0	---	10.0	6.0	5.0
31	4.0	---	11.0	---	---	---	---	18.0	---	7.0	---	3.0
MONTH	6.0	7.0	12.0	15.5	---	---	---	---	18.0	---	7.5	5.0

SUSPENDED-SEDIMENT DISCHARGE, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

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	833	3750	8450	660	2040	3640	1190	2200	7070
2	779	3350	7050	533	2310	3320	1460	3250	12800
3	849	3200	7340	496	1800	2410	1360	2200	8080
4	583	2400	3780	503	1550	2110	1250	3220	10900
5	483	840	1100	595	1450	2330	1570	2600	11000
6	383	1000	1030	649	1810	3170	1010	2150	5860
7	383	600	620	662	1670	2980	949	2000	5120
8	483	525	685	673	1360	2470	805	2200	4780
9	583	1450	2280	643	1950	3390	1030	3600	10000
10	651	1700	2990	631	1450	2470	1220	2200	7250
11	757	2170	4440	635	1490	2550	1240	1700	5690
12	820	2760	6110	589	1230	1960	1390	2300	8630
13	840	3420	7760	688	1000	1860	1420	2190	8400
14	840	3360	7620	622	845	1420	1410	3000	11400
15	809	2000	4370	627	750	1270	1480	2800	11200
16	783	1750	3700	642	1250	2170	1510	2800	11400
17	677	1950	3560	670	1180	2130	1490	3200	12900
18	629	2750	4670	687	1160	2150	1470	3250	12900
19	652	2170	3820	746	1600	3220	1360	2650	9730
20	708	2050	3920	827	1920	4290	1410	3550	13500
21	716	1950	3770	910	1950	4790	1220	2790	9190
22	762	1650	3390	979	1850	4890	1110	2400	7190
23	825	1930	4300	1110	2450	7340	1200	1400	4540
24	772	1770	3690	1040	5800	16300	1110	1700	5090
25	719	1850	3590	1680	15600	70800	1070	1400	4040
26	725	2180	4270	1200	8800	28500	1050	1200	3400
27	730	1980	3900	1260	4400	15000	997	1300	3500
28	830	1900	4260	1310	2900	10300	770	1200	2490
29	903	2030	4950	1220	2300	7580	549	850	1260
30	825	1740	3880	---	---	---	486	775	1020
31	768	1760	3650	---	---	---	400	600	648
TOTAL	22100	--	128925	23487	--	216810	35986	--	230978

08330000 RIO GRANDE AT ALBUQUERQUE, N. MEX.--Continued

SUSPENDED-SEDIMENT DISCHARGE, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

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	311	550	462	169	290	132	1.4	100	.38
2	214	500	289	145	235	92	0	0	0
3	200	455	246	105	225	64	0	0	0
4	150	420	170	86	265	67	0	0	0
5	268	460	333	70	185	35	0	0	0
6	270	620	452	50	100	14	0	0	0
7	230	520	323	40	60	6.5	0	0	0
8	288	610	474	25	125	8.4	0	0	0
9	559	800	1210	60	325	53	0	0	0
10	583	910	1430	17	160	7.3	0	0	0
11	471	740	941	10	300	8.1	0	0	0
12	548	870	1290	5.0	600	8.1	0	0	0
13	771	1100	2290	5.0	520	7.0	0	0	0
14	816	1040	2290	10	380	10	0	0	0
15	913	1030	2540	18	290	14	0	0	0
16	658	810	1440	13	250	8.8	0	0	0
17	581	770	1210	9.0	225	5.5	15	15200	1220
18	447	655	791	6.6	140	2.5	69	10000	1860
19	291	520	409	4.8	110	1.4	23	3400	211
20	220	470	279	1.8	100	.49	0	0	0
21	218	360	212	.60	110	.18	0	0	0
22	227	380	233	1.4	100	.38	0	0	0
23	267	360	260	.50	90	.12	0	0	0
24	299	325	262	0	0	0	0	0	0
25	261	380	268	0	0	0	0	0	0
26	370	400	400	0	0	0	0	0	0
27	346	240	224	0	0	0	0	0	0
28	235	300	190	0	0	0	0	0	0
29	165	260	116	0	0	0	0	0	0
30	155	310	130	0	0	0	0	0	0
31	--	--	--	.50	135	.18	--	--	--
TOTAL	11332	--	21164	853.20	--	540.95	108.4	--	3291.38

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	0	0	0	0	10	5000	135
2	0	0	0	0	0	0	327	16200	22000
3	0	0	0	0	0	0	610	16700	28100
4	0	0	0	0	0	0	398	7500	8060
5	0	0	0	83	15500	4550	333	4800	4320
6	0	0	0	792	27200	61100	113	11500	3510
7	0	0	0	187	25800	13500	61	13500	2220
8	0	0	0	93	10200	2560	40	8000	864
9	0	0	0	57	14800	2280	141	15100	9030
10	0	0	0	51	16600	2290	305	21100	20000
11	0	0	0	47	4900	622	278	18700	15100
12	0	0	0	45	2100	255	981	17100	61800
13	0	0	0	72	2360	738	263	22100	20600
14	0	0	0	137	1800	666	584	12800	21300
15	0	0	0	125	1420	479	1490	17600	86800
16	0	0	0	67	1400	253	249	9600	6450
17	587	33400	74000	45	1200	146	144	4500	1750
18	194	27000	14100	39	1080	114	78	1600	337
19	16	4000	173	35	2610	277	56	1400	212
20	9.2	300	7.5	24	1300	84	558	16100	35700
21	5.7	200	3.1	67	31200	6460	485	24500	32100
22	3.0	200	1.6	20	19000	1030	183	15600	7710
23	0	0	0	19	9000	462	168	1000	454
24	0	0	0	19	4000	205	161	4700	2040
25	0	0	0	18	3000	146	166	10100	4530
26	0	0	0	18	2800	136	80	2650	572
27	0	0	0	18	2500	122	50	999	135
28	0	0	0	24	3000	194	45	700	85
29	0	0	0	32	7100	613	30	400	32
30	0	0	0	50	8600	1160	10	300	8.1
31	0	0	0	26	7000	491	--	--	--
TOTAL	814.9	--	88285.2	2210	--	100933	8397	--	395954.1

RIO GRANDE BASIN

08330000 RIO GRANDE AT ALBUQUERQUE, N. MEX.--Continued

SUSPENDED-SEDIMENT DISCHARGE, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

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	0	0	0	1250	5400	18200	810	2200	4810
2	0	0	0	1050	5500	15600	723	1990	3880
3	0	0	0	1040	4900	13800	745	2240	4510
4	0	0	0	1150	4500	14000	790	1900	4050
5	0	0	0	1440	5000	19400	746	2000	4030
6	0	0	0	1550	5000	20900	689	2100	3910
7	0	0	0	1520	4800	19700	673	2600	4720
8	0	0	0	1440	5500	21400	724	2300	4500
9	0	0	0	1290	5500	19200	746	2150	4330
10	0	0	0	1150	4750	14700	775	2600	5440
11	0	0	0	1300	5000	17600	739	2800	5590
12	0	0	0	991	4000	10700	701	2300	4350
13	39	5900	1010	967	3750	9790	683	2520	4650
14	253	22000	15000	977	3600	9500	760	1980	4060
15	166	5000	2240	968	4000	10500	725	1700	3330
16	376	9500	9640	1110	4500	13500	673	1600	2910
17	366	7700	7610	1060	4750	13600	650	2020	3550
18	274	8000	5920	1170	6250	19700	620	2000	3350
19	1020	14200	42100	1180	4300	13700	755	1930	3930
20	1460	17200	67800	1140	4000	12300	674	2500	4550
21	1210	12000	39200	1190	5000	16100	620	2500	4190
22	1290	12700	44200	1240	4250	14200	664	2900	5200
23	802	5850	12700	1060	4000	11400	663	2200	3940
24	900	7200	17500	1010	4300	11700	741	2200	4400
25	798	8400	18100	920	3990	9910	747	2550	5140
26	855	10700	24700	806	4700	10200	696	2450	4600
27	640	4600	7950	805	2200	4780	681	2200	4050
28	652	3550	6250	1070	3100	8960	677	2200	4020
29	677	3200	5850	771	2040	4250	784	2700	5720
30	831	3300	7400	852	2500	5750	618	2340	3900
31	1100	4000	11900	--	--	--	553	2800	4180
TOTAL	13709	--	347070	33467	--	405040	21845	--	133790

TOTAL DISCHARGE FOR 1972 WATER YEAR (CFS-DAYS)

TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR 1972 WATER YEAR (TONS)

TOTAL DISCHARGE FOR 1972 CALENDAR YEAR (CFS-DAYS)

TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR 1972 CALENDAR YEAR (TONS)

193091.50

2428211.63

174309.50

2072781.63

INSTANTANEOUS SUSPENDED SEDIMENT AND PARTICLE SIZE, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	TEMPER- ATURE (DEG C) (00010)	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SUS- PENDED SEDIMENT DISCHARGE (MG/L) (80154)	SUS- PENDED SEDIMENT DISCHARGE (T/DAY) (80155)	SUS. SED. FALL DIAM. % FINER THAN (70337)	SUS. SED. FALL DIAM. % FINER THAN (70338)	SUS. SED. FALL DIAM. % FINER THAN (70340)	SUS. SED. FALL DIAM. % FINER THAN (70342)	SUS. SED. FALL DIAM. % FINER THAN (70343)
JAN.										
10...	1230	--	657	2180	3870	4	4	7	21	36
24...	1400	6.5	794	1580	3390	14	17	24	47	73
FEB.										
07...	1430	8.0	720	1450	2820	12	15	21	46	72
22...	1130	8.5	1010	1860	5070	10	12	21	54	80
MAR.										
06...	1530	15.0	1090	2280	6710	13	18	26	46	70
APR.										
10...	1430	13.5	605	1150	1880	16	20	26	42	51
24...	1320	18.0	269	305	222	37	42	50	65	84
MAY										
08...	1200	22.0	28	77	6.0	--	--	--	--	--
JUNE										
19...	1500	33.0	17	2770	130	73	93	99	100	--
JULY										
17...	1132	25.0	387	31100	32500	58	77	99	100	--
AUG.										
06...	1800	27.0	962	33300	86500	61	74	94	98	99
21...	0900	20.0	231	32000	20000	59	73	88	--	--
SEP.										
25...	1145	16.5	194	10800	5660	78	83	96	98	99
OCT.										
22...	1000	8.0	1450	14100	55200	48	57	76	89	94
NOV.										
06...	1545	12.0	1550	5290	22100	17	20	35	73	89
DEC.										
19...	1030	2.5	700	2410	4560	13	15	21	57	81

RIO GRANDE BASIN

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08330000 RIO GRANDE AT ALBUQUERQUE, N. MEX.--Continued

SUSPENDED-SEDIMENT DISCHARGE, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	SUS. SED. FALL DIAM. % FINER THAN (70344)	SUS. SED. FALL DIAM. % FINER THAN (70345)	SUS. SED. FALL DIAM. % FINER THAN (70346)	SUS. SED. FALL DIAM. % FINER THAN (70331)	SUS. SED. FALL DIAM. % FINER THAN (70332)	SUS. SED. FALL DIAM. % FINER THAN (70333)	SUS. SED. FALL DIAM. % FINER THAN (70334)	SUS. SED. FALL DIAM. % FINER THAN (70335)	SUS. SED. FALL DIAM. % FINER THAN (70336)
JAN.									
10...	76	99	100	--	--	--	--	--	--
24...	96	100	--	--	--	--	--	--	--
FEB.									
07...	98	100	--	--	--	--	--	--	--
22...	98	100	--	--	--	--	--	--	--
MAR.									
06...	95	100	--	--	--	--	--	--	--
APR.									
10...	81	100	--	--	--	--	--	--	--
24...	98	100	--	--	--	--	--	--	--
MAY									
08...	--	--	--	82	91	98	100	--	--
JUNE									
19...	--	--	--	--	--	--	--	--	--
JULY									
17...	--	--	--	--	--	--	--	--	--
AUG.									
06...	100	--	--	--	--	--	--	--	--
21...	--	--	--	88	91	94	96	97	100
SEP.									
25...	100	--	--	--	--	--	--	--	--
OCT.									
22...	99	100	--	--	--	--	--	--	--
NOV.									
06...	99	100	--	--	--	--	--	--	--
DEC.									
19...	96	100	--	--	--	--	--	--	--

PARTICLE SIZE OF SURFACE BED MATERIAL, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SUS- PENED SEDI- MENT CHARGE (MG/L) (80154)	SUS- PENED SEDI- MENT CHARGE (T/DAY) (80155)	BED MAT. FALL DIAM. % FINER THAN .062 MM (80158)	BED MAT. FALL DIAM. % FINER THAN .125 MM (80159)	BED MAT. FALL DIAM. % FINER THAN .250 MM (80160)	BED MAT. FALL DIAM. % FINER THAN .500 MM (80161)	BED MAT. FALL DIAM. % FINER THAN 1.00 MM (80162)	BED MAT. FALL DIAM. % FINER THAN 2.00 MM (80163)
JAN.										
10...	1230	657	2180	3870	5	16	72	96	100	--
24...	1400	794	1580	3390	2	7	65	98	100	--
FEB.										
07...	1430	720	1450	2820	7	22	71	97	100	--
22...	1130	1010	1860	5070	2	7	58	95	100	--
MAR.										
06...	1530	1090	2280	6710	6	17	72	98	99	100
APR.										
10...	1430	605	1150	1880	2	5	56	94	99	100
MAY										
08...	1200	28	77	6.0	2	6	60	94	100	--
JUNE										
19...	1500	17	2770	130	4	5	36	92	98	100
JULY										
17...	1132	387	31100	32500	4	14	64	96	100	--
SEP.										
25...	1145	194	10800	5660	7	16	60	92	99	100
NOV.										
06...	1545	1550	5290	22100	10	51	95	99	100	--
DEC.										
19...	1030	700	2410	4560	10	28	74	98	100	--

RIO GRANDE BASIN

08330000 RIO GRANDE AT ALBUQUERQUE, N. MEX.--Continued

TOTAL SEDIMENT DISCHARGE, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	TEMPER- ATURE (DEG C) (00010)	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SUS- PENDE SEDIM- ENT (MG/L) (80154)	SUS- PENDE SEDIM- ENT DIS- CHARGE (T/DAY) (80155)	TOTAL SEDIM- ENT DIS- CHARGE (T/DAY) (80156)	STREAM WIDTH (FT) (00004)	MEAN DEPTH (FT) (00064)	STREAM VELOC- ITY (FPS) (00055)
JAN.									
10...	1230	--	657	2180	3870	7790	272	1.1	2.2
24...	1400	6.5	794	1580	3390	5910	245	1.3	2.5
FEB.									
07...	1430	8.0	720	1450	2820	5590	215	1.3	2.6
22...	1130	8.5	1010	1860	5070	7620	275	1.4	2.6
MAR.									
06...	1530	15.0	1090	2280	6710	12500	291	1.3	2.9
APR.									
10...	1430	13.5	605	1150	1880	2100	211	1.6	1.8
24...	1320	18.0	269	305	222	419	99	1.4	1.9
MAY									
08...	1200	22.0	28	77	6.0	13	33	.70	1.2
JUNE									
19...	1500	33.0	17	2770	130	130	36	.76	.6
JULY									
17...	1132	25.0	387	31100	32500	33400	180	.90	2.4
SEP.									
25...	1145	16.5	194	10800	5660	6080	110	.82	2.1
NOV.									
06...	1545	12.0	1550	5290	22100	31100	235	1.8	3.6
DEC.									
19...	1030	2.5	700	2410	4560	6790	191	1.5	2.4

RIO GRANDE BASIN

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08331000 RIO GRANDE AT ISLETA, N. MEX.
(Surveillance network station)

LOCATION.--Lat 34°54'21", long 106°41'04", in NE 1/4 sec. 24, T. 08 N., R. 02 E., Valencia County, 50 feet upstream from diversion dam, 50 feet downstream from bridge on State Highway 147, at Isleta.

DRAINAGE AREA.--18,100 sq mi (estimated).

PERIOD OF RECORD.--Chemical analyses: July 1972 to current year.

REMARKS.--Samples are collected on the Peralta main canal or the Belen Highline canal when the river is completely diverted.

CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	DIS- CHARGE (CFS) (00060)	DIS- SOLVED SILICA (SI02) (MG/L) (00955)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NESIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	BICAR- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)
JULY 20...	1500	145	29	20	53	8.5	46	5.6	195	0	85
AUG. 16...	1008	195	35	50	64	9.6	55	7.0	205	0	100
SEP. 13...	1415	959	29	30	64	8.9	56	6.5	177	0	140
OCT. 13...	1330	203	30	20	58	9.4	42	6.5	172	0	120
NOV. 21...	1500	1170	31	210	68	11	48	5.5	219	2	100
DEC. 14...	1430	746	27	30	52	8.7	40	4.6	174	0	89

DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED NITRATE (N) (MG/L) (00618)	DIS- SOLVED NITRITE (N) (MG/L) (00613)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	AMMONIA NITRO- GEN (N) (MG/L) (00610)	DIS- SOLVED AMMONIA NITRO- GEN (N) (MG/L) (00608)	ORGANIC NITRO- GEN (N) (MG/L) (00605)	TOTAL NITRO- GEN (N) (MG/L) (00600)	TOTAL PHOS- PHORUS (P) (MG/L) (00665)
JULY 20...	24	.7	.13	.00	.13	--	2.0	2.9	5.0	2.6
AUG. 16...	31	.8	.65	.00	.65	--	2.1	3.7	6.5	3.0
SEP. 13...	34	.7	.00	.00	.00	--	3.0	.80	3.8	1.9
OCT. 13...	19	.7	.21	.07	.28	--	2.6	1.2	4.1	1.9
NOV. 21...	28	.5	.13	.02	.15	--	.53	.15	.81	.64
DEC. 14...	20	.5	.13	.00	.13	1.7	1.7	.50	2.3	2.2

DATE	DIS- SOLVED ORTHO- PHOS- PHORUS (P) (MG/L) (00671)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L) (70300)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L) (70301)	HARD- NESS (CA, MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AD- SORP- TION RATIO (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	DIS- SOLVED BORON (B) (UG/L) (01020)
JULY 20...	1.2	344	355	170	7	1.5	580	6.7	23.0	150
AUG. 16...	2.2	424	419	200	31	1.7	655	7.0	19.5	190
SEP. 13...	1.7	428	435	200	51	1.7	685	7.0	20.0	200
OCT. 13...	1.1	406	379	180	42	1.4	579	7.4	20.5	140
NOV. 21...	.46	414	405	220	32	1.4	630	8.4	9.5	130
DEC. 14...	.59	352	333	170	23	1.4	505	7.4	4.5	130

RIO GRANDE BASIN

08331000 RIO GRANDE AT ISLETA, N. MEX.--Continued

FIELD AND BIOCHEMICAL MEASUREMENTS, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	DIS- CHARGE (CFS) (00060)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	AIR TEMPER- ATURE (DEG C) (00020)	COLOR (PLAT- INUM- COBALT UNITS) (00080)	TUR- BID- ITY (JTU) (00070)	DIS- SOLVED OXYGEN (MG/L) (00300)	FECAL COLI- FORM (COL. PER 100 ML) (31616)	TOTAL ORGANIC CARBON * (C) (00680)
JULY 20...	1500	145	560	7.7	23.0	27.0	40	500	6.9	1600	13
AUG. 16...	1008	195	650	7.7	19.5	27.5	35	260	5.7	1700	15
SEP. 13...	1415	959	690	7.4	20.0	27.5	15	60	3.9	4000	8.0
OCT. 13...	1330	203	605	7.5	20.5	21.5	20	260	5.5	19000	12
NOV. 21...	1500	1170	650	8.2	9.5	10.5	10	20	11.3	100	10
DEC. 14...	1430	746	500	7.8	4.5	6.0	10	365	9.6	20	--

* ANALYZED BY THE NEW MEXICO ENVIRONMENTAL IMPROVEMENT AGENCY.

PESTICIDE ANALYSES, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	TOTAL ORGANIC CARBON (C) (MG/L) (00680)	ALDRIN (UG/L) (39330)	CHLOR- DANE (UG/L) (39350)	DDD (UG/L) (39360)	DDE (UG/L) (39365)	DDT (UG/L) (39370)	DI- ELDRIN (UG/L) (39380)
JULY 20...	1500	32	--	--	--	--	--	--
AUG. 16...	1008	20	.00	.0	.00	.01	.00	.01
NOV. 21...	1500	--	.00	.0	.00	.00	.00	.00

DATE	ENDRIN (UG/L) (39390)	HEPTA- CHLOR (UG/L) (39410)	HEPTA- CHLOR EPOXIDE (UG/L) (39420)	LINDANE (UG/L) (39340)	PCB (UG/L) (39516)	2,4-D (UG/L) (39730)	2,4,5-T (UG/L) (39740)	SILVEX (UG/L) (39760)
JULY 20...	--	--	--	--	--	--	--	--
AUG. 16...	.00	.00	.00	.00	--	.00	.00	.00
NOV. 21...	.00	.00	.00	.00	.0	.00	.00	.00

3T40

RIO GRANDE BASIN

93

08331990 RIO GRANDE CONVEYANCE CHANNEL NEAR BERNARDO, N. MEX.

LOCATION.--Lat 34°24'52", long 106°48'11", Socorro County, in Sevilleta or Belen Grant, at gaging station, 0.2 mile south of U.S. Highway 60, 1.8 miles east of Bernardo, about 3 miles upstream from floodway, and 4 miles upstream from Rio Puerco.

PERIOD OF RECORD.--Chemical analyses: October 1956 to current year.

Specific conductance: October 1956 to current year.

Water temperatures: October 1958 to current year.

Sediment records: October 1947 to current year.

EXTREMES:

Current year:

Specific conductance: Maximum daily, 1,060 micromhos May 2-4; minimum daily, 220 micromhos Aug. 29.

Water temperatures: Maximum 30.0°C Sept. 4; minimum, freezing point Jan. 5, 6.

Sediment concentrations (1964-72): Maximum daily, 47,900 mg/l Oct. 21; minimum daily, no flow on many days.

Sediment discharge: Maximum daily, 83,600 tons Oct. 21; minimum daily, 0 tons on many days.

Period of record:

Specific conductance (1964-72): Maximum daily, 2,250 micromhos Aug. 4, 1966; minimum daily, 220 micromhos Aug. 29, 1972.

Water temperatures (1964-72): Maximum, 39.0°C July 13, 1968; minimum, freezing point on several days during 1967, 1970-1972.

Sediment concentrations (1964-72): Maximum daily, 47,900 mg/l Aug. 4, 1966; minimum daily, no flow on many days in 1964, 1966-72.

Sediment discharge (1964-72): Maximum daily, 150,000 tons Aug. 3, 1966; minimum daily, 0 tons on many days in 1964, 1966-72.

REMARKS.--Records prior to 1965 water year were published as 08332000 Rio Grande near Bernardo, N. Mex., a composite of 08331990 Rio Grande Conveyance Channel near Bernardo, 08332010 Rio Grande Floodway near Bernardo, and 08332050 Bernardo Interior Drain at Bernardo. No flow May 25 to Aug. 25, Oct. 4-6.

CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	DIS- CHARGE (CFS) (00060)	DIS- SOLVED SILICA (SiO2) (MG/L) (00955)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NESIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	BICAR- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)
JAN.											
19...	1500	752	29	60	9.2	48	5.2	183	0	98	29
FEB.											
15...	1330	567	27	57	9.7	46	5.2	183	0	100	21
SEP.											
05...	1100	322	21	120	16	47	5.6	205	0	260	15
19...	0915	160	29	71	10	58	6.0	215	0	130	27
DEC.											
07...	1145	800	27	61	9.5	46	4.4	200	0	100	25
13...	1130	700	27	59	9.3	46	4.4	196	0	100	25
21...	0900	650	--	--	--	--	--	--	--	--	--
28...	1130	700	24	59	9.2	45	4.5	195	0	100	23

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED NITRATE PLUS NITRATE (N) (MG/L) (00631)	DIS- SOLVED SOLIDS (SUM OF TUENTS) (MG/L) (70301)	HARD- NESS (CA, MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AD- SORP- TION RATIO (MG/L) (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	COLOR (PLAT- INUM- COBALT UNITS) (00080)	TUR- BID- ITY (JTU) (00070)
JAN.											
19...	.4	.96	373	190	38	1.5	580	7.5	7.0	--	--
FEB.											
15...	.5	1.0	361	180	32	1.5	554	7.7	10.5	--	--
SEP.											
05...	.5	.46	588	370	200	1.1	849	7.3	22.0	--	--
19...	.6	1.5	444	220	42	1.7	676	7.1	19.5	--	--
DEC.											
07...	.6	.54	374	190	27	1.4	567	7.6	5.0	--	--
13...	.5	.70	371	190	25	1.5	581	7.5	3.0	--	--
21...	--	--	--	--	--	--	484	--	2.0	10	400
28...	.3	.96	365	190	25	1.4	566	7.7	5.0	--	--

RIO GRANDE BASIN

08331990 RIO GRANDE CONVEYANCE CHANNEL NEAR BERNARDO, N. MEX.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972
(ONCE-DAILY)

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	---	---	492	592	1050	---	---	---	635	---	535	540
2	---	---	490	602	1060	---	---	---	903	---	530	547
3	507	---	469	638	1060	---	---	---	480	---	502	565
4	---	---	460	678	1060	---	---	---	705	---	555	473
5	484	---	465	685	672	---	---	---	628	---	580	450
6	580	---	453	729	690	---	---	---	647	---	515	530
7	585	---	467	740	673	---	---	---	630	---	525	497
8	---	---	462	745	642	---	---	---	652	---	513	490
9	---	---	478	825	638	---	---	---	620	658	508	555
10	606	---	468	750	636	---	---	---	518	653	498	498
11	563	528	462	748	---	---	---	---	481	634	513	540
12	567	---	472	760	---	---	---	---	537	640	473	535
13	537	---	447	741	---	---	---	---	510	840	520	525
14	---	---	441	654	---	---	---	---	628	664	497	503
15	---	542	438	632	---	---	---	---	756	654	625	535
16	556	---	419	627	---	---	---	---	667	834	625	545
17	564	534	417	597	---	---	---	---	630	615	510	515
18	---	---	402	670	---	---	---	---	630	698	525	503
19	535	---	402	735	---	---	---	---	665	620	526	516
20	548	---	404	765	---	---	---	---	627	716	535	452
21	---	---	374	756	---	---	---	---	642	1040	521	505
22	---	503	414	848	---	---	---	---	644	970	550	543
23	---	501	426	791	---	---	---	---	781	714	516	492
24	---	495	472	706	---	---	---	---	665	605	536	464
25	---	507	461	857	---	---	---	---	676	566	498	470
26	---	---	489	927	---	---	---	850	623	558	520	513
27	---	513	529	847	---	---	---	---	738	510	565	475
28	---	485	516	832	---	---	---	225	722	568	508	490
29	---	468	517	990	---	---	---	220	714	602	539	500
30	---	---	543	957	---	---	---	615	698	582	500	563
31	---	---	561	---	---	---	---	710	---	558	---	522
MONTH	---	---	462	749	---	---	---	---	648	---	529	511

TEMPERATURE (DEG. C) OF WATER, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972
(ONCE-DAILY)

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

08331990 RIO GRANDE CONVEYANCE CHANNEL NEAR BERNARDO, N. MEX.--Continued

SUSPENDED-SEDIMENT DISCHARGE, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

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	899	2850	6920	740	1440	2880	822	2870	6370
2	764	1830	3770	709	1570	3010	885	6200	14800
3	816	1650	3640	710	1490	2860	948	6100	15600
4	886	2270	5430	627	1430	2420	836	3520	7950
5	667	1840	3310	520	1300	1830	815	2400	5280
6	490	1330	1760	493	1900	2530	815	3600	7920
7	472	990	1260	568	2800	4290	668	2820	5090
8	364	920	904	619	3030	5060	631	1800	3070
9	370	975	974	673	2900	5270	521	2800	3940
10	618	1350	2570	708	2840	5430	647	2000	3490
11	785	1700	3600	711	2320	4450	661	2000	3570
12	877	1990	4710	782	2900	6120	647	1500	2620
13	1000	2220	5990	664	2700	4840	745	2650	5330
14	1060	2420	6930	704	2860	5440	878	3820	9060
15	1020	2580	7110	609	2700	4440	871	6100	14300
16	865	1840	4300	651	2570	4520	941	4400	11200
17	788	2970	6320	724	1860	3640	962	3000	7790
18	773	2220	4630	738	1430	2850	857	3050	7060
19	794	1550	3320	653	1410	2490	766	2600	5380
20	752	1930	3920	657	1610	2860	913	2850	7030
21	760	1730	3550	799	1840	3970	1130	2400	7320
22	773	1450	3030	836	1690	3810	794	2700	5790
23	787	1570	3340	832	1870	4200	661	2700	4820
24	762	1570	3230	968	2470	6460	573	2490	3850
25	775	1540	3220	1070	2680	7740	412	1800	2000
26	793	1490	3190	948	2540	6500	301	1450	1180
27	734	1450	2870	843	2360	5370	779	1950	4100
28	678	1350	2470	804	2160	4690	548	1600	2370
29	709	1350	2580	1050	2830	8020	412	1180	1310
30	725	1520	2980	--	--	--	339	1040	952
31	676	1420	2590	--	--	--	282	860	655
TOTAL	23232	--	114418	21410	--	127990	22060	--	181197

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	226	605	369	33	26	2.3			
2	222	610	366	29	20	1.6			
3	255	835	575	29	18	1.4			
4	144	345	134	19	20	1.0			
5	128	250	86	3.3	20	.18			
6	113	255	78	2.5	16	.11			
7	85	240	55	1.9	119	.61			
8	78	180	38	1.6	25	.11			
9	66	180	32	1.3	32	.11			
10	98	240	64	.99	30	.08			
11	111	220	66	.93	25	.06			
12	112	260	79	.87	20	.05			
13	146	465	183	.79	20	.04			
14	206	1120	623	.70	20	.04			
15	232	870	545	.67	18	.03			
16	231	660	412	.54	18	.03			
17	274	625	462	1.2	50	.16			
18	156	425	179	.45	25	.03			
19	144	345	134	.20	25	.01			
20	115	240	75	.14	20	.01			
21	95	220	56	.05	20	0			
22	64	136	24	.05	15	0			
23	88	216	51	.01	15	0			
24	81	149	33	.01	10	0			
25	76	138	28	0	0	0			
26	61	94	15	0	0	0			
27	80	89	19	0	0	0			
28	63	70	12	0	0	0			
29	46	43	5.3	0	0	0			
30	44	41	4.9	0	0	0			
31	--	--	--	0	0	0			
TOTAL	3840	--	4803.2	128.20	--	7.96	0	--	0

08331990 RIO GRANDE CONVEYANCE CHANNEL NEAR BERNARDO, N. MEX.--Continued

SUSPENDED-SEDIMENT DISCHARGE, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

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	0	42	3400	386
2				0	0	0	90	13600	6130
3				0	0	0	69	5400	1010
4				0	0	0	55	4000	594
5				0	0	0	250	19000	12800
6				0	0	0	83	7000	1570
7				0	0	0	83	5050	1130
8				0	0	0	80	3950	853
9				0	0	0	116	7350	2300
10				0	0	0	125	6400	2160
11				0	0	0	174	5600	2630
12				0	0	0	328	10300	9120
13				0	0	0	406	12800	14000
14				0	0	0	962	13400	35500
15				0	0	0	500	11200	15100
16				0	0	0	500	7700	10400
17				0	0	0	808	10100	24300
18				0	0	0	275	4400	3270
19				0	0	0	170	2800	1290
20				0	0	0	204	2400	1320
21				0	0	0	210	1850	1050
22				0	0	0	372	9800	9840
23				0	0	0	305	11200	9220
24				0	0	0	204	5800	3190
25				0	0	0	150	1550	628
26				16	9180	1140	128	2800	968
27				6.2	14000	234	147	5400	2140
28				60	16400	3540	90	2000	486
29				15	2000	81	46	2000	248
30				25	1600	108	25	400	27
31				42	3900	442	--	--	--
TOTAL	0	--	0	164.2	--	5545	6997	--	173660

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	7.3	154	3.0	1130	6190	18900	899	4450	10800
2	9.5	67	1.7	1280	5850	20200	892	4250	10200
3	4.3	24	.28	1130	4750	14500	773	2990	6240
4	0	0	0	1050	6000	17000	836	3500	7900
5	0	0	0	941	5600	14200	871	3500	8230
6	0	0	0	1210	5500	18000	864	4800	11200
7	13	3830	242	1340	5300	19200	857	3650	8450
8	32	1200	104	1350	4900	17900	864	4200	9800
9	26	137	9.6	1440	5100	19800	780	3850	8110
10	17	100	4.6	1490	5200	20900	829	3990	8930
11	17	77	3.5	1370	5450	20200	808	3790	8270
12	26	76	5.3	1440	5200	20200	808	3850	8400
13	146	7890	3150	1310	4700	16600	815	4900	10800
14	83	950	213	1250	4300	14500	857	3250	7520
15	93	1600	402	1210	4050	13200	724	3550	6940
16	81	6600	1440	1110	4650	13900	731	3500	6910
17	90	5450	1320	1220	5300	17500	689	3730	6940
18	122	5800	1910	1270	4250	14600	710	3450	6610
19	103	6940	1930	1220	5050	16600	696	3000	5640
20	285	8780	6970	1230	5400	17900	815	3150	6930
21	1610	19500	83600	1180	4300	13700	745	3200	6440
22	1090	7600	22400	1170	4600	14500	738	3100	6180
23	1450	12600	50300	1170	4550	14400	780	3500	7370
24	766	6500	13400	1070	3450	9970	724	3390	6630
25	801	5360	12400	1060	3400	9730	759	3300	6760
26	1220	8100	26700	1010	3600	9820	787	3870	8220
27	1140	8580	29000	836	3550	8010	794	3730	8000
28	724	5850	11400	738	3000	5980	773	3070	6410
29	675	4600	8380	1030	4800	13300	850	3700	8490
30	640	3650	6310	773	3000	6260	948	4400	11300
31	857	4000	9260	--	--	--	808	4200	9160
TOTAL	12128.1	--	290858.98	35028	--	451470	24824	--	249780

TOTAL DISCHARGE FOR 1972 WATER YEAR (CFS-DAYS)

TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR 1972 WATER YEAR (TONS)

TOTAL DISCHARGE FOR 1972 CALENDAR YEAR (CFS-DAYS)

TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR 1972 CALENDAR YEAR (TONS)

145131.20

1486870.16

149811.50

1599730.14

RIO GRANDE BASIN

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08331990 RIO GRANDE CONVEYANCE CHANNEL NEAR BERNARDO, N. MEX.--Continued

INSTANTANEOUS SUSPENDED SEDIMENT AND PARTICLE SIZE, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	TEMPER- ATURE (DEG C) (00010)	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SUS- PENDE SEDIM- ENT CHARGE (MG/L) (80154)	SUS- PENDE SEDIM- ENT CHARGE (T/DAY) (80155)	SUS. SED. FALL DIAM. % FINER THAN .002 MM (70337)	SUS. SED. FALL DIAM. % FINER THAN .004 MM (70338)	SUS. SED. FALL DIAM. % FINER THAN .016 MM (70340)	SUS. SED. FALL DIAM. % FINER THAN .062 MM (70342)	SUS. SED. FALL DIAM. % FINER THAN .125 MM (70343)
JAN. 20...	1330	6.0	710	2000	3830	18	22	36	57	72
FEB. 09...	0930	4.0	682	2760	5080	11	13	19	36	53
MAR. 07...	1730	15.0	682	4860	8950	12	14	20	29	38
17...	0945	10.0	990	2990	7990	20	24	34	61	81
27...	0930	10.5	1140	2120	6530	20	25	43	65	83
APR. 07...	1000	14.0	92	291	73	65	75	93	--	--
16...	1700	20.0	250	601	406	38	44	55	72	86
SEP. 05...	1900	27.0	140	11300	4270	83	96	100	--	--
12...	1700	25.0	328	10300	9120	70	84	90	--	--
17...	1015	21.5	920	10400	25800	74	87	93	95	97
OCT. 21...	1700	12.5	1740	21800	102000	60	72	87	92	99
NOV. 06...	1830	11.0	1160	5180	16200	33	39	50	61	72
25...	1530	8.0	1020	3070	8460	32	38	53	72	97
DEC. 12...	1700	4.0	787	3670	7800	16	21	32	48	66

DATE	SUS. SED. FALL DIAM. % FINER THAN .250 MM (70344)	SUS. SED. FALL DIAM. % FINER THAN .500 MM (70345)	SUS. SED. FALL DIAM. % FINER THAN 1.00 MM (70346)	SUS. SED. FALL DIAM. % FINER THAN 2.00 MM (70347)	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM (70331)	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM (70332)	SUS. SED. SIEVE DIAM. % FINER THAN .250 MM (70333)	SUS. SED. SIEVE DIAM. % FINER THAN .500 MM (70334)	SUS. SED. SIEVE DIAM. % FINER THAN 1.00 MM (70335)	SUS. SED. SIEVE DIAM. % FINER THAN 2.00 MM (70336)
JAN. 20...	89	97	100	--	--	--	--	--	--	--
FEB. 09...	75	96	100	--	--	--	--	--	--	--
MAR. 07...	74	93	99	100	--	--	--	--	--	--
17...	94	99	100	--	--	--	--	--	--	--
27...	96	100	--	--	--	--	--	--	--	--
APR. 07...	--	--	--	--	98	99	99	100	--	--
16...	98	100	--	--	--	--	--	--	--	--
SEP. 05...	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	91	91	91	94	98	100
17...	99	100	--	--	--	--	--	--	--	--
OCT. 21...	100	--	--	--	--	--	--	--	--	--
NOV. 06...	91	100	--	--	--	--	--	--	--	--
25...	100	--	--	--	--	--	--	--	--	--
DEC. 12...	89	99	100	--	--	--	--	--	--	--

RIO GRANDE BASIN

08332010 RIO GRANDE FLOODWAY NEAR BERNARDO, N. MEX.

LOCATION.--Lat 34°25'01", long 106°48'00", Socorro County, in Belen or Sevilleta Grant, at gaging station on U.S. Highway 60, 5 miles downstream from heading of conveyance channel, and 2 miles east of Bernardo.

DRAINAGE AREA.--19,230 sq mi, approximately (includes 2,940 sq mi in closed basin in San Luis Valley, Colo.).

PERIOD OF RECORD.--Chemical analyses: October 1956 to current year.

Specific conductance: October 1956 to current year.

Water temperatures: October 1964 to current year.

Sediment records: October 1964 to current year.

EXTREMES:

Current year:

Specific conductance: Maximum daily, 646 Feb. 3; minimum daily, 386 Mar. 19, 20.

Water temperatures: Maximum, 19.0°C Mar. 4; minimum, freezing point Feb. 3.

Sediment concentrations: Maximum daily, 25,000 mg/l Nov. 9; minimum daily, no flow on many days.

Sediment discharge: Maximum daily, 11,600 tons Nov. 9; minimum daily, 0 tons on many days.

Period of record:

Specific conductance (1964 to 1972): Maximum daily, 1,330 micromhos Aug. 10, 1967; minimum daily, 281 micromhos May 27, 1965.

Water temperatures (1964 to 1972): Maximum, 30.0°C June 27, 1968; minimum (1964-72), freezing point Feb. 23, 1971, and Feb. 3, 1972.

Sediment concentrations (1964 to 1972): Maximum daily, not determined; minimum daily, no flow on many days each year.

Sediment discharge (1964 to 1972): Maximum daily, 356,000 tons Aug. 11, 1967; minimum daily, 0 tons on many days each year.

REMARKS.--Additional sediment total discharge determinations were made bi-weekly when needed. Records prior to 1965 water year were published as 08332000 Rio Grande near Bernardo, N. Mex., a composite of 08331990 Rio Grande Conveyance Channel near Bernardo, 08332010 Rio Grande Floodway near Bernardo, and 08332050 Bernardo Interior Drain at Bernardo. No flow Jan. 8, 9, Jan. 31 to Feb. 1, Mar. 22 to Oct. 26, Oct. 28 to Nov. 1, 4-6, Nov. 14 to Dec. 31.

CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	DIS- CHARGE (CFS) (00060)	DIS- SOLVED SILICA (SiO2) (MG/L) (00955)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED PO- SIUM (K) (MG/L) (00935)	RICAR- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)
JAN. 17...	1300	26	28	53	9.1	43	4.9	176	0	98
FEB. 11...	1500	4.0	27	54	8.8	44	4.9	178	4	94
17...	1230	9.7	27	56	9.1	45	5.0	178	0	90
22...	1400	254	27	54	8.7	40	5.1	168	0	92
29...	1205	100	8.3	25	6.8	37	4.1	45	17	90

DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L) (70301)	HARD- NESS (CA, MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AD- SORP- TION RATIO (MG/L) (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (MG/L) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)
JAN. 17...	23	.0	.90	350	170	25	1.4	541	7.6	6.0
FEB. 11...	21	.5	.95	350	170	18	1.5	526	8.4	10.5
17...	22	.5	.92	346	180	31	1.5	543	7.8	10.0
22...	17	.5	1.1	332	170	33	1.3	503	7.6	13.5
29...	16	.5	.02	227	90	25	1.7	361	8.5	8.5

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SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972
(ONCE-DAILY)

[illegible]

TEMPERATURE (DEG. C) OF WATER, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972
(ONCE-DAILY)

[illegible]

RIO GRANDE BASIN

08332010 RIO GRANDE FLOODWAY NEAR BERNARDO, N. MEX.--Continued

SUSPENDED-SEDIMENT DISCHARGE, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

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	302	2590	2110	0	0	0	22	970	58
2	148	2190	875	3.5	932	16	65	1250	219
3	107	2260	653	6.4	1550	27	296	2100	1680
4	175	2200	1040	13	1550	54	178	1370	658
5	150	2120	859	12	1500	49	232	1400	877
6	10	1560	42	11	1600	48	614	2350	3900
7	5.0	1210	16	6.4	2770	48	178	1290	620
8	0	0	0	7.8	1700	36	104	860	241
9	0	0	0	9.9	200	5.3	54	700	102
10	1.5	830	3.4	6.4	175	3.0	196	1380	730
11	30	1700	138	9.9	260	6.9	260	1460	1020
12	36	1030	100	21	420	24	192	1100	570
13	54	1400	204	3.8	360	3.7	303	1450	1580
14	179	2120	1170	7.1	325	6.2	34	750	69
15	229	2260	1400	1.1	104	.79	83	1330	387
16	87	1080	254	6.4	370	6.4	132	1600	570
17	94	1060	269	11	270	8.0	187	1630	933
18	97	880	230	9.2	460	11	152	1410	645
19	136	750	275	11	490	15	283	1770	1550
20	79	535	114	9.2	750	19	124	1280	515
21	17	640	29	95	1650	462	8.5	1470	34
22	31	1490	125	188	2020	1030	0	0	0
23	22	1310	78	182	1670	821	0	0	0
24	6.9	533	13	317	2110	1930	0	0	0
25	.75	745	3.0	719	2380	5360	0	0	0
26	2.0	1510	8.2	716	2180	4210	0	0	0
27	1.0	453	3.7	472	1700	2170	0	0	0
28	1.8	975	9.2	543	2240	3280	0	0	0
29	9.5	1660	44	192	1750	907	0	0	0
30	1.0	500	1.4	--	--	--	0	0	0
31	0	0	0	--	--	--	0	0	0
TOTAL	2012.45	--	10066.9	3590.1	--	20557.29	3697.5	--	16958
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									
2									
3									
4									
5									
6									
7									
8									
9									
10									
11									
12									
13									
14									
15									
16									
17									
18									
19									
20									
21									
22									
23									
24									
25									
26									
27									
28									
29									
30									
31									
TOTAL	0	--	0	0	--	0	0	--	0

08332010 RIO GRANDE FLOODWAY NEAR BERNARDO, N. MEX.--Continued

SUSPENDED-SEDIMENT DISCHARGE, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

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									
2									
3									
4									
5									
6									
7									
8									
9									
10									
11									
12									
13									
14									
15									
16									
17									
18									
19									
20									
21									
22									
23									
24									
25									
26									
27									
28									
29									
30									
31									
TOTAL	0	--	0	0	--	0	0	--	0
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	0	0	0	0	0	0			
2	0	0	0	40	8740	1490			
3	0	0	0	1.7	800	11			
4	0	0	0	0	0	0			
5	0	0	0	0	0	0			
6	0	0	0	0	0	0			
7	0	0	0	22	6710	942			
8	0	0	0	65	16900	2970			
9	0	0	0	164	25000	11600			
10	0	0	0	56	20300	3070			
11	0	0	0	17	980	45			
12	0	0	0	4.5	1260	15			
13	0	0	0	2.5	510	3.4			
14	0	0	0	0	0	0			
15	0	0	0	0	0	0			
16	0	0	0	0	0	0			
17	0	0	0	0	0	0			
18	0	0	0	0	0	0			
19	0	0	0	0	0	0			
20	0	0	0	0	0	0			
21	0	0	0	0	0	0			
22	0	0	0	0	0	0			
23	0	0	0	0	0	0			
24	0	0	0	0	0	0			
25	0	0	0	0	0	0			
26	0	0	0	0	0	0			
27	37	1730	498	0	0	0			
28	0	0	0	0	0	0			
29	0	0	0	0	0	0			
30	0	0	0	0	0	0			
31	0	0	0	0	0	0			
TOTAL	37	--	498	372.7	--	20146.4	0	--	0

TOTAL DISCHARGE FOR 1972 WATER YEAR (CFS-DAYS)
 TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR 1972 WATER YEAR (TONS)
 TOTAL DISCHARGE FOR 1972 CALENDAR YEAR (CFS-DAYS)
 TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR 1972 CALENDAR YEAR (TONS)

15035.24
 89406.69
 9709.75
 68226.59

RIO GRANDE BASIN

08332010 RIO GRANDE FLOODWAY NEAR BERNARDO, N. MEX.--Continued

INSTANTANEOUS SUSPENDED SEDIMENT AND PARTICLE SIZE, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	TEMPER- ATURE (DEG C) (00010)	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SUS- PEN- DED SEDI- MENT (MG/L) (80154)	SUS- PEN- DED SEDI- MENT (T/DAY) (80155)	SUS- SED- FALL DIAM. % FINER THAN (70337)	SUS- SED- FALL DIAM. % FINER THAN (70338)	SUS- SED- FALL DIAM. % FINER THAN (70340)
MAR.								
05...	1600	14.0	227	1340	821	44	56	73
17...	0930	10.0	243	1990	1310	27	34	58
OCT.								
27...	0930	10.0	128	4290	1480	68	82	98
NOV.								
10...	1700	11.0	37	1960	196	68	84	98

DATE	SUS- SED- FALL DIAM. % FINER THAN (70342)	SUS- SED- FALL DIAM. % FINER THAN (70343)	SUS- SED- FALL DIAM. % FINER THAN (70344)	SUS- SED- FALL DIAM. % FINER THAN (70331)	SUS- SED- FALL DIAM. % FINER THAN (70332)	SUS- SED- FALL DIAM. % FINER THAN (70333)	SUS- SED- FALL DIAM. % FINER THAN (70334)
MAR.							
05...	--	--	--	90	95	99	100
17...	87	96	100	--	--	--	--
OCT.							
27...	--	--	--	99	100	--	--
NOV.							
10...	--	--	--	99	100	--	--

PARTICLE SIZE OF SURFACE BED MATERIAL, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SUS- PEN- DED SEDI- MENT (MG/L) (80154)	SUS- PEN- DED SEDI- MENT (T/DAY) (80155)	RED MAT. FALL DIAM. % FINER THAN (80158)	BED MAT. FALL DIAM. % FINER THAN (80159)	BED MAT. FALL DIAM. % FINER THAN (80160)	BED MAT. FALL DIAM. % FINER THAN (80161)	BED MAT. FALL DIAM. % FINER THAN (80162)
JAN.									
17...	1300	--	--	--	68	93	100	--	--
20...	1300	--	--	--	69	90	99	100	--
FEB.									
22...	1500	--	--	--	32	80	99	100	--
29...	1315	--	--	--	2	12	74	98	100

08353000 RIO PUERCO NEAR BERNARDO, N. MEX.

LOCATION.--Lat 34°24'33", long 106°51'09", in SE¼ sec.8, T.2 N., R.1 E., Socorro County, at gaging station on former U.S. Highway 85, and 0.2 mile upstream from Interstate Highway 25, 1.2 miles southwest of Bernardo, 3 miles upstream from mouth, and 18 miles south of Belen.

DRAINAGE AREA.--7,350 sq mi, approximately, of which at least 1,130 sq mi does not contribute directly to surface runoff.

PERIOD OF RECORD.--Chemical analyses: July 1956 to current year.

Specific conductance: July 1956 to current year.

Water temperatures: October 1964 to current year.

Sediment records: October 1947 to current year.

EXTREMES:

Current year:

Specific conductance: Maximum daily, not determined; minimum daily, not determined.

Water temperatures: Maximum, not determined; minimum not determined.

Sediment concentrations: Maximum daily, 217,000 mg/l Aug. 21; minimum daily, no flow on many days.

Sediment discharge: Maximum daily, 1,220,000 tons Sept. 13; minimum daily, 0 tons on many days.

Period of record:

Specific conductance (1964-71): Maximum daily, 11,400 micromhos June 10, 1968; minimum daily, 238 micromhos

July 30, 1969.

Water temperatures (1964-71): Maximum, 30.5°C on Aug. 3, 1970; minimum, freezing point Dec. 30, 1971.

Sediment concentrations: Maximum daily, 267,000 mg/l July 26, 1957; minimum daily, no flow on many days of each year.

Sediment discharge: Maximum daily, 2,240,000 tons Aug. 7, 1957; minimum daily, 0 tons on many days of each year.

REMARKS.--Chemical analyses are run on composite samples collected during the day or period indicated. No flow Jan. 10-13, 16, 17, Jan. 19 to May 29, June 1-13, 16, June 20 to July 18, 22, July 31 to Aug. 3, 14, 15, Sept. 25 to Oct. 11, Nov. 30 to Dec. 31. Averages are computed on flow periods analyzed. The current year extremes for specific conductance and water temperatures were not reported because the number of missing days of record exceeded 20 percent of flow for the year.

CHEMICAL ANALYSES, COMPOSITES OF DAILY SAMPLES, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	DIS- CHARGE (CFS) (00060)	DIS- SOLVED SILICA (SI02) (MG/L) (00955)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NES- IUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	BICAR- BONATE (HC03) (MG/L) (00440)	CAR- BONATE (C03) (MG/L) (00445)	DIS- SOLVED SULFATE (S04) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)
JULY												
24...	48	12	--	130	25	140	8.2	214	0	460	44	.8
25...	110	11	--	86	15	140	8.4	197	0	410	58	1.0
27...	173	18	--	320	72	390	10	344	0	1500	58	.8
28-29	53	18	--	210	48	220	9.3	285	0	890	72	.8
AUG.												
05-07	583	16	--	270	47	170	8.5	243	0	920	44	.7
08-09	60	15	--	370	69	290	9.3	295	0	1500	46	.7
11-22	73	16	--	310	66	390	10	313	0	1400	130	.7
26...	325	16	--	70	12	93	5.1	187	0	200	39	.8
27-31	945	13	--	210	41	220	8.3	208	0	890	51	.8
SEP.												
03...	803	12	--	78	13	120	5.6	151	0	280	68	.7
04-08	119	12	--	200	35	220	4.0	192	0	860	50	.8
09...	238	12	--	120	18	160	6.9	152	0	470	50	.8
10-18	1640	10	--	160	31	200	7.0	154	0	770	39	.9
21-25	166	9.9	--	190	34	230	7.4	164	0	870	40	.8
OCT.												
14...	180	15	--	71	11	65	4.8	159	0	180	34	.5
15-24	601	9.5	--	150	24	180	7.0	149	0	600	41	.8
25...	331	8.7	--	43	6	59	5.5	114	0	140	29	.5
26-30	333	8.3	--	120	23	160	5.9	130	0	550	55	.8
NOV.												
01-07	126	7.7	--	120	27	220	5.9	166	0	610	89	.8
08-14	34	9.0	--	140	36	270	7.1	213	0	730	100	.7
15-24	18	11	--	170	48	320	7.8	242	0	910	160	.9
25-30	2.9	12	--	190	62	410	8.5	252	0	1100	220	1.2
CALENDAR YEAR												
WTD. AVG.	--	11	--	170	33	199	7.2	172	0	761	48	.8
TIME WTD.												
AVG.	364	12	--	186	40	252	7.7	209	0	861	86	.8
TONS												
PER DAY	--	11	--	167	32	196	7.1	169	0	749	47	.8
WATER YEAR												
WTD. AVG.	--	12	--	178	35	214	7.7	188	0	819	46	.8
TIME WTD.												
AVG.	550	13	--	217	44	257	8.5	227	0	965	73	.8
TONS												
PER DAY	--	17	--	265	52	317	11	280	0	1220	68	1.2

RIO GRANDE BASIN

08353000 RIO PUERCO NEAR BERNARDO, N. MEX.--Continued

CHEMICAL ANALYSES, COMPOSITES OF DAILY SAMPLES, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	DIS- SOLVED ORTHOPHOSPHORUS (P) (MG/L) (00671)	DIS- SOLVED AMMONIUM (H) (UG/L) (01020)	DIS- SOLVED SOLIDS (RESIDUE AT 180 C) (MG/L) (70300)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L) (70301)	DIS- SOLVED SOLIDS (PER AC-FT) (TONS) (70303)	DIS- SOLVED SOLIDS (PER DAY) (TONS) (70302)	HARD- NESS (CA.MG) (MG/L) (00900)	NON-CARBONATE HARDNESS (MG/L) (00902)	SODIUM AD-SORPTION RATIO (00931)	SPECIFIC CONDUCTANCE (MICROMHOS) (00095)	PH (UNITS) (00400)
JULY												
24...	.09	--	--	--	926	1.26	120	430	250	2.9	1310	7.5
25...	5.7	--	--	--	852	1.16	253	280	110	3.7	1310	7.5
27...	.12	--	--	--	2540	3.45	1190	1100	810	5.1	3400	7.5
28-29	.18	--	--	--	1610	2.19	230	720	490	3.6	2100	7.5
AUG.												
05-07	.08	--	--	--	1600	2.18	2520	870	670	2.5	2020	7.6
08-09	.08	--	--	--	2450	3.33	397	1200	970	3.6	2940	7.5
11-22	.17	--	--	--	2480	3.37	489	1000	790	5.2	3150	7.5
26...	1.4	--	--	--	535	.73	469	220	71	2.7	823	7.6
27-31	.52	--	--	--	1540	2.09	3930	690	520	3.6	2030	7.7
SEP.												
03...	.53	--	--	--	654	.89	1420	250	120	3.3	1020	7.9
04-08	.49	--	--	--	1440	2.01	476	640	490	3.8	1980	7.4
09...	1.3	--	--	--	918	1.25	590	370	250	3.6	1320	7.9
10-18	.71	--	--	--	1300	1.77	5760	530	400	3.8	1780	7.6
21-25	.64	--	--	--	1470	2.00	659	610	480	4.0	1990	7.7
OCT.												
14...	.95	--	--	--	464	.63	226	220	92	1.9	718	6.8
15-24	.99	--	--	--	1140	1.60	1910	490	370	3.5	1612	7.4
25...	.88	--	--	--	347	.47	310	130	48	2.2	541	7.1
26-30	1.5	--	--	--	994	1.35	894	390	290	3.5	1440	7.3
NOV.												
01-07	1.1	--	--	--	1170	1.59	398	410	270	4.7	1700	7.3
08-14	1.6	--	--	--	1400	1.90	129	500	320	5.3	1993	8.2
15-24	1.3	--	--	--	1750	2.38	85.1	620	420	5.6	2490	8.0
25-30	1.3	--	--	--	2130	2.90	16.7	730	520	6.6	2860	7.9
CALENDAR YEAR												
WTD. AVG. TIME WTD.	.76	--	--	--	1320	1.80	--	557	417	3.7	1790	7.6
AVG. TONS PER DAY	.89	--	--	--	1550	2.11	--	622	456	4.4	2100	7.6
WATER YEAR	.74	--	--	--	1300	--	--	--	--	--	--	--
WTD. AVG. TIME WTD.	.57	--	--	--	1410	1.92	--	540	435	3.9	1900	7.7
AVG. TONS PER DAY	.53	--	--	--	1690	2.30	--	713	538	4.1	2230	7.6

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C). CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972
(ONCE-DAILY)

[illegible]

RIO GRANDE BASIN

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08353000 RIO PUERCO NEAR BERNARDO, N. MEX.--Continued

 TEMPERATURE (DEG. C) OF WATER, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972
(ONCE-DAILY)

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	---	---	---	---	---	---	---	---	---	---	5.5	---
2	---	---	---	---	---	---	---	---	---	---	8.5	---
3	---	---	4.0	---	---	---	---	---	18.0	---	9.5	---
4	---	---	---	---	---	---	---	---	18.5	---	9.5	---
5	---	---	---	---	---	---	---	21.5	22.0	---	7.5	---
6	---	---	---	---	---	---	---	21.5	22.5	---	10.0	---
7	---	---	---	---	---	---	---	22.5	---	---	9.5	---
8	---	---	---	---	---	---	---	21.5	24.0	---	11.0	---
9	---	---	---	---	---	---	---	21.0	24.5	---	9.5	---
10	---	---	---	---	---	---	---	---	22.5	---	8.5	---
11	---	---	---	---	---	---	---	21.0	19.5	---	9.5	---
12	---	---	---	---	---	---	---	---	---	---	7.0	---
13	---	---	---	---	---	---	---	---	23.5	---	9.0	---
14	---	---	---	---	---	---	---	---	19.0	18.0	9.5	---
15	---	---	---	---	---	---	---	---	22.5	19.0	8.0	---
16	---	---	---	---	---	---	---	---	21.0	19.5	---	---
17	---	---	---	---	---	---	---	19.0	---	23.0	---	---
18	---	---	---	---	---	---	---	---	18.0	---	8.0	---
19	---	---	---	---	---	---	---	20.0	---	---	8.0	---
20	---	---	---	---	---	---	---	---	---	12.0	7.0	---
21	---	---	---	---	---	---	---	21.5	18.0	12.0	7.0	---
22	---	---	---	---	---	---	---	23.5	15.0	10.0	6.5	---
23	---	---	---	---	---	---	---	---	15.5	13.5	7.0	---
24	---	---	---	---	---	---	22.0	---	17.5	13.0	8.0	---
25	---	---	---	---	---	---	---	---	19.5	11.5	7.0	---
26	---	---	---	---	---	---	---	14.0	---	13.0	7.0	---
27	---	---	---	---	---	---	26.5	18.5	---	10.0	7.0	---
28	---	---	---	---	---	---	22.5	18.0	---	12.0	6.0	---
29	---	---	---	---	---	---	31.0	21.0	---	12.0	5.5	---
30	---	---	---	---	---	---	---	19.0	---	11.5	5.5	---
31	---	---	---	---	---	---	---	27.0	---	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	8.0	---

SUSPENDED-SEDIMENT DISCHARGE, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

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	15	30000	1220						
2	10	25000	675						
3	5.0	15000	203						
4	2.0	10000	54						
5	2.0	10000	54						
6	2.0	10000	54						
7	1.0	8000	22						
8	2.0	10000	54						
9	.50	5000	6.8						
10	0	0	0						
11	0	0	0						
12	0	0	0						
13	0	0	0						
14	1.0	10000	1.0						
15	1.0	8000	22						
16	0	0	0						
17	0	0	0						
18	1.0	10000	27						
19	0	0	0						
20	0	0	0						
21	0	0	0						
22	0	0	0						
23	0	0	0						
24	0	0	0						
25	0	0	0						
26	0	0	0						
27	0	0	0						
28	0	0	0						
29	0	0	0						
30	0	0	0						
31	0	0	0						
TOTAL	42.50	--	2392.8	0	--	0	0	--	0

RIO GRANDE BASIN

08353000 RIO PUERCO NEAR BERNARDO, N. MEX.--Continued

SUSPENDED-SEDIMENT DISCHARGE, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

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				0	0	0	0	0	0
2				0	0	0	0	0	0
3				0	0	0	0	0	0
4				0	0	0	0	0	0
5				0	0	0	0	0	0
6				0	0	0	0	0	0
7				0	0	0	0	0	0
8				0	0	0	0	0	0
9				0	0	0	0	0	0
10				0	0	0	0	0	0
11				0	0	0	0	0	0
12				0	0	0	0	0	0
13				0	0	0	0	0	0
14				0	0	0	4.8	6960	302
15				0	0	0	7.75	5060	27
16				0	0	0	0	0	0
17				0	0	0	9.0	8150	550
18				0	0	0	2.0	5150	56
19				0	0	0	--	--	--
20				0	0	0	0	0	0
21				0	0	0	0	0	0
22				0	0	0	0	0	0
23				0	0	0	0	0	0
24				0	0	0	0	0	0
25				0	0	0	0	0	0
26				0	0	0	0	0	0
27				0	0	0	0	0	0
28				0	0	0	0	0	0
29				0	0	0	0	0	0
30				3.5	12300	397	0	0	0
31				1.3	6000	65	--	--	--
TOTAL	0	--	0	4.8	--	462	16.55	--	935

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	0	0	0	0	63	38000	6460
2	0	0	0	0	0	0	50	47300	9480
3	0	0	0	0	0	0	803	111000	251000
4	0	0	0	200	20000	10800	323	114000	112000
5	0	0	0	1200	118000	382000	113	103000	31400
6	0	0	0	400	68000	73400	101	97000	26500
7	0	0	0	150	78000	31600	35	48000	4540
8	0	0	0	84	123000	27900	25	98000	6620
9	0	0	0	35	106000	10000	238	90000	57800
10	0	0	0	23	64000	3970	615	151000	313000
11	0	0	0	106	217000	62100	2080	135000	758000
12	0	0	0	10	160000	4320	2230	100000	602000
13	0	0	0	1.0	72000	194	3700	122000	1220000
14	0	0	0	0	0	0	4930	75000	998000
15	0	0	0	0	0	0	560	61000	92200
16	0	0	0	5.0	50000	675	329	45000	40000
17	0	0	0	67	116000	32100	230	43000	26700
18	0	0	0	25	75000	5060	124	35000	11700
19	15	111000	7690	340	144000	168000	83	34000	7620
20	13	14700	2750	160	107000	46200	48	27000	3500
21	.50	21000	28	56	101000	15300	437	78500	111000
22	0	0	0	101	121000	38600	264	117000	83400
23	4.1	7670	1010	47	64000	8120	110	95000	28200
24	48	52300	14800	35	37000	3500	20	82500	4460
25	110	65800	27300	30	29000	2350	0	0	0
26	1.0	37000	100	325	77100	88200	0	0	0
27	173	75900	62300	1180	166000	543000	0	0	0
28	45	68000	8930	2340	121000	775000	0	0	0
29	61	71300	14800	719	67000	130000	0	0	0
30	1.0	62500	169	365	60500	66100	0	0	0
31	0	0	0	122	38000	12500	--	--	--
TOTAL	471.60	--	139877	8126.0	--	2540989	17511	--	4805580

RIO GRANDE BASIN

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08353000 RIO PUERCO NEAR BERNARDO, N. MEX.--Continued

SUSPENDED-SEDIMENT DISCHARGE, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

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	0	0	0	80	30500	6590			
2	0	0	0	70	23000	4350			
3	0	0	0	50	22500	3040			
4	0	0	0	160	31000	13400			
5	0	0	0	180	34000	16500			
6	0	0	0	180	33200	16100			
7	0	0	0	160	29500	12700			
8	0	0	0	80	26900	5810			
9	0	0	0	30	27500	2230			
10	0	0	0	15	28500	1150			
11	0	0	0	25	27000	1820			
12	13	1500	2090	35	37000	3500			
13	305	37500	43100	35	38000	3590			
14	180	27300	19300	20	38000	2050			
15	219	77300	46900	15	33000	1340			
16	353	120000	125000	10	32100	867			
17	454	116000	149000	26	33000	2320			
18	220	55000	32700	30	35000	2840			
19	190	47000	24100	25	35500	2400			
20	1620	144000	666000	20	28500	1540			
21	1610	80000	348000	15	24500	992			
22	869	75000	176000	15	25500	1030			
23	275	47000	34900	15	24000	972			
24	200	35000	18900	10	20000	540			
25	331	45000	40200	8.0	21500	464			
26	324	48100	47300	5.0	22500	304			
27	688	95300	88000	3.0	20500	166			
28	331	49500	44200	1.0	18000	49			
29	200	32000	17300	.50	30000	41			
30	120	22900	7420	0	0	0			
31	90	24000	5830						
TOTAL	8592	--	1936240	1318.50	--	108695	0	--	0

TOTAL DISCHARGE FOR 1972 WATER YEAR (CFS-DAYS)
 TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR 1972 WATER YEAR (TONS)
 TOTAL DISCHARGE FOR 1972 CALENDAR YEAR (CFS-DAYS)
 TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR 1972 CALENDAR YEAR (TONS)

31011.65
 9490326.8
 36082.95
 9535170.8

INSTANTANEOUS SUSPENDED SEDIMENT AND PARTICLE SIZE, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	TEMPER- ATURE (DEG C) (00010)	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SUS- PENDE SEDIM- ENT (MG/L) (80154)	SUS- PENDE SEDIM- ENT (T/DAY) (80155)	SUS- SED. FALL DIAM. % FINER THAN ,002 MM (70337)	SUS. SED. FALL DIAM. % FINER THAN ,004 MM (70338)	SUS. SED. FALL DIAM. % FINER THAN ,016 MM (70340)	SUS. SED. FALL DIAM. % FINER THAN ,062 MM (70342)	SUS. SED. FALL DIAM. % FINER THAN ,125 MM (70343)	SUS. SED. FALL DIAM. % FINER THAN ,250 MM (70344)	SUS. SED. FALL DIAM. % FINER THAN ,500 MM (70345)
JULY												
20...	1830	24.5	21	47200	2680	47	65	90	99	100	--	--
27...	1430	26.0	341	140000	129000	60	71	89	98	100	--	--
AUG.												
05...	0830	20.0	1200	101000	327000	51	61	79	96	99	100	--
08...	0700	20.0	112	136000	41100	63	71	94	99	100	--	--
11...	0700	21.0	132	216000	77000	51	63	87	98	99	100	--
17...	1700	25.5	202	226000	123000	64	76	94	97	98	99	100
19...	0900	20.0	737	273000	543000	37	47	64	86	94	99	100
28...	1150	18.0	410	106000	117000	41	47	61	84	96	100	--
SEP.												
03...	1100	18.0	615	37900	62900	48	62	73	93	98	99	100
12...	0700	17.0	1790	65300	316000	50	63	75	97	100	--	--
14...	1200	19.0	50	63400	8560	68	78	94	97	98	100	--
22...	0700	12.5	218	123000	72400	51	62	83	97	100	--	--
OCT.												
16...	1830	19.5	242	89000	58200	52	62	74	94	99	100	--
NOV.												
07...	1730	9.5	160	31900	13800	76	85	98	99	100	--	--

RIO GRANDE BASIN

08354000 RIO SALADO NEAR SAN ACACIA, N. MEX.

LOCATION.--Lat 34°17'50", long 106°53'59", in NW¼ sec.24, T.1 N., R.1 W., Socorro County, at gaging station at former bridge site, 0.3 mile upstream from bridge on Interstate Highway 25, 3.1 miles upstream from mouth, 2.9 miles north of San Acacia, and 15 miles north of Socorro.

DRAINAGE AREA.--1,380 sq mi, approximately.

PERIOD OF RECORD.--Chemical analyses: July to September 1956, June 1966 to current year.
Sediment records: July 1948 to current year.

REMARKS.--Samples are collected when flow is observed on this ephemeral stream.

CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	DIS- CHARGE (CFS) (00060)	DIS- SOLVED SILICA (SI02) (00955)	DIS- SOLVED IRON (FE) (01046)	DIS- SOLVED CAL- CIUM (CA) (00915)	DIS- SOLVED MAG- NE- SIUM (MG) (00925)	DIS- SOLVED SODIUM (NA) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (00935)	BICAR- BONATE (CO3) (00440)	CAR- BONATE (CO3) (00445)	DIS- SOLVED SULFATE (S04) (00945)
JUNE											
18...	0930	59	20	--	97	23	87	5.4	290	0	230
JULY											
17...	0945	419	20	--	130	26	170	7.6	301	0	510
18...	0915	10	16	--	95	19	150	6.1	343	0	290
22...	1045	600	14	--	70	14	80	5.4	250	0	260
22...	1245	359	14	--	67	13	72	5.4	223	0	230
25...	1145	132	17	--	99	19	67	4.3	305	0	170
26...	1130	1510	17	--	110	20	90	4.4	288	0	230
AUG.											
18...	1030	113	14	--	81	15	99	4.3	267	0	200
21...	1130	170	18	--	120	22	100	4.4	276	0	250
26...	1530	3220	19	--	89	16	89	4.3	258	0	240
SEP.											
13...	1230	90	17	--	99	17	100	5.3	195	0	280
OCT.											
26...	1500	340	10	9	44	8.6	89	3.2	133	0	180

DATE	TIME	DIS- SOLVED CHLO- RIDE (CL) (00940)	DIS- SOLVED FLUO- RIDE (F) (00950)	DIS- SOLVED NITRITE PLUS NITRATE (N) (00631)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L) (70301)	HARD- NESS (CA+MG) (00900)	NON- CAR- BONATE NESS (MG/L) (00902)	SODIUM AD- SORP- TION RATIO (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	DIS- SOLVED BORON (B) (01020)
JUNE												
18...	48	.6	.48	656	340	99	2.1	1050	6.8	18.5	--	--
JULY												
17...	62	.8	.30	1080	430	180	3.6	1550	7.2	18.5	--	--
18...	140	.8	.54	888	320	34	3.7	1449	7.1	19.0	--	--
22...	33	.8	.72	603	230	27	2.3	1018	7.3	21.0	--	--
22...	25	.7	.54	539	220	38	2.1	921	7.4	24.5	--	--
25...	29	.6	.05	556	330	75	1.6	843	7.3	23.0	--	--
26...	44	.6	.06	658	360	120	2.1	999	7.3	21.0	--	--
AUG.												
18...	40	1.1	.02	586	260	45	2.7	892	7.6	21.0	--	--
21...	88	.6	.04	739	390	160	2.2	1130	7.7	27.0	--	--
26...	29	.6	.20	615	290	76	2.3	918	7.9	19.0	--	--
SEP.												
13...	64	.6	.57	681	320	160	2.4	1036	7.8	--	--	--
OCT.												
26...	36	.6	.81	441	150	36	3.2	701	7.8	18.0	170	--

INSTANTANEOUS SUSPENDED SEDIMENT AND PARTICLE SIZE, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	TEMPER- ATURE (DEG C) (00010)	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SUS- PENDE SED- IMENT (MG/L) (80154)	SUS- PENDE SED- IMENT DIS- CHARGE (T/DAY) (80155)	SUS- SED. FALL DIAM. % FINER THAN .002 MM (70337)	SUS- SED. FALL DIAM. % FINER THAN .004 MM (70338)	SUS- SED. FALL DIAM. % FINER THAN .016 MM (70340)	SUS- SED. FALL DIAM. % FINER THAN .062 MM (70342)	SUS- SED. FALL DIAM. % FINER THAN .125 MM (70343)	SUS- SED. FALL DIAM. % FINER THAN .250 MM (70344)
JUNE											
18...	0930	18.5	59	57600	9180	66	79	95	99	100	--
JULY											
18...	0915	19.0	10	62500	1690	--	--	--	--	--	--
25...	0900	19.5	160	62100	26800	--	--	--	--	--	--
AUG.											
18...	1030	21.0	113	71400	21800	54	62	82	92	97	100

RIO GRANDE BASIN

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08354800 RIO GRANDE CONVEYANCE CHANNEL AT SAN ACACIA, N. MEX.

LOCATION.--Lat 34°14'54", long 106°54'04", in SW¼ sec.1, T.1 S., R.1 W., Socorro County, about 100 ft downstream from gaging station, at downstream side of railway crossing, 0.5 mile south of San Acacia, and 1.2 miles downstream from San Acacia diversion dam.

PERIOD OF RECORD.--Specific conductance: October 1964 to current year.

Water temperatures: May 1959 to current year.

Sediment records: January 1959 to current year.

EXTREMES:

Current year:

Specific conductance: Maximum daily, 3,060 micromhos Aug. 23; minimum daily, 440 micromhos Mar. 21.

Water temperatures: Maximum, 33.0°C July 11,13; minimum, freezing point Jan. 6, Dec. 6, 15.

Sediment concentrations: Maximum daily, 125,000 mg/l Aug. 27; minimum daily, no flow on several days during July and August.

Sediment discharge: Maximum daily, 528,000 tons Aug. 28; minimum daily, 0 tons on several days during July and August.

Period of record:

Specific conductance: Maximum daily, 3,840 micromhos Oct. 8, 1964; minimum daily, 136 micromhos June 19, 1967.

Water temperatures: Maximum, 36.0°C July 13, 1970; minimum, freezing point on several days during 1967, 1968, 1969, 1971, and 1972.

Sediment concentrations: Maximum daily, 141,000 mg/l Aug. 10, 1959; minimum daily, no flow on many days during most years.

Sediment discharge: Maximum daily, 528,000 tons Aug. 28, 1972; minimum daily, 0 tons on many days during most years.

REMARKS.--No flow July 30 to Aug. 3, 9, 10, 12-16.

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972
(ONCE-DAILY)

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	---	612	---	631	949	1300	938	---	980	935	868	580
2	---	616	541	655	993	1190	1410	---	938	995	790	640
3	602	623	498	637	1040	930	1310	---	733	985	705	648
4	---	---	523	727	1040	928	1330	1160	1260	962	738	627
5	---	---	516	775	1020	832	1230	1300	1110	950	756	600
6	478	---	495	802	1070	1160	1450	980	1100	1940	710	550
7	454	633	540	777	1090	895	1800	985	755	840	635	624
8	---	649	549	821	1080	1170	796	991	898	841	590	565
9	---	637	534	796	1130	1120	2120	---	800	815	635	635
10	738	---	520	830	1160	1360	2100	---	865	833	600	608
11	642	607	521	779	1180	1480	2120	978	1530	1020	600	571
12	872	---	497	785	1170	1410	2200	---	1430	864	625	626
13	---	---	508	763	1140	1420	2220	---	1590	786	610	635
14	---	651	512	747	1170	1460	915	---	807	696	612	602
15	---	645	597	662	1180	1440	2410	---	680	1480	590	655
16	615	---	477	670	1170	1450	2310	---	1460	1520	600	630
17	606	626	452	636	1180	1320	1290	2060	1250	1440	612	647
18	---	---	455	687	1270	1110	1460	2030	919	1040	610	650
19	592	---	452	737	1420	1130	1760	2020	885	957	608	640
20	588	---	478	741	1350	1170	1550	1650	808	1000	630	451
21	---	---	440	766	1280	1220	722	1330	1120	1320	570	623
22	---	585	471	822	1330	1240	715	1940	990	1120	600	632
23	---	583	502	836	1280	1250	910	3060	909	940	621	605
24	623	573	520	817	1340	1250	1120	1660	768	784	625	590
25	628	551	547	908	1330	1180	1570	1400	840	738	605	625
26	612	---	599	893	1280	1260	1100	959	850	719	617	590
27	---	---	568	929	1270	1180	1210	1640	764	1080	465	600
28	637	556	---	880	1310	1420	1230	1580	835	1060	680	592
29	---	525	---	936	1310	1400	1950	1300	853	811	625	497
30	---	---	621	953	1320	945	---	1610	857	720	637	578
31	628	---	460	---	1220	---	---	930	---	736	---	652
MONTH	---	---	514	780	1200	1220	1490	---	984	998	639	605

RIO GRANDE BASIN

08354800 RIO GRANDE CONVEYANCE CHANNEL AT SAN ACACIA, N. MEX.--Continued

TEMPERATURE (DEG. C) OF WATER, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972
(ONCE-DAILY)

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

SUSPENDED-SEDIMENT DISCHARGE, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

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	1100	4100	12200	863	1940	4520	905	2380	5820
2	910	3450	8480	818	1900	4200	865	2360	5510
3	806	2900	6310	744	2000	4020	1150	2610	8100
4	870	3600	8460	806	2160	4700	957	1600	4130
5	840	4600	10400	747	2110	4260	933	1350	3400
6	620	3250	5440	747	2320	4680	1200	2570	8330
7	530	1500	2150	723	2440	4760	787	1460	3100
8	470	1530	1940	711	1810	3470	676	1180	2150
9	380	1400	1440	713	2080	4000	521	960	1350
10	420	1340	1520	717	2000	3870	684	1220	2250
11	735	2160	4290	757	2250	4600	748	1070	2160
12	625	1750	3900	826	2340	5220	737	1050	2090
13	994	2760	7410	750	2100	4250	935	1820	4590
14	1150	2900	9000	754	2090	4250	860	1320	3070
15	1360	4000	14700	658	2100	3730	956	2010	5190
16	1060	3170	9070	698	2100	3960	1100	1920	5700
17	981	2340	6200	712	1970	3790	1140	2180	6710
18	918	2120	5250	750	2020	4090	1060	2580	7380
19	969	2160	5650	751	1770	3590	1000	2750	7430
20	921	1910	4750	759	1560	3200	965	1910	4980
21	849	1800	4130	872	1690	3980	1010	1740	4740
22	879	1870	4440	1020	2060	5670	789	1760	3750
23	864	2050	4780	1060	2620	7500	644	1200	2090
24	864	2280	5320	1220	2490	8200	590	1150	1830
25	852	2080	4780	1370	2950	10900	479	1050	1360
26	906	2030	4970	1670	3650	16500	354	1000	956
27	870	2350	5520	1460	3460	13600	582	1870	2940
28	795	2400	5150	1370	5100	18900	490	1540	2040
29	822	2280	5060	1380	4700	17500	426	1000	1150
30	892	2350	5660	---	---	---	348	870	817
31	842	1950	4430	---	---	---	335	860	778
TOTAL	26294	--	182800	26426	--	85910	24226	--	115891

08354800 RIO GRANDE CONVEYANCE CHANNEL AT SAN ACACIA, N. MEX.--Continued

SUSPENDED-SEDIMENT DISCHARGE, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

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	297	750	601	2.1	29	.21	1.2	37	.12
2	253	615	420	2.5	19	.13	1.1	68	.20
3	308	725	603	2.3	23	.14	1.0	68	.18
4	164	450	199	2.1	21	.12	.90	75	.18
5	75	294	60	1.7	20	.09	.80	73	.16
6	55	257	38	1.5	12	.05	.60	48	.08
7	32	246	21	1.3	8	.03	.50	49	.07
8	18	175	8.5	1.2	14	.05	.50	43	.06
9	17	155	7.1	.95	4	.01	.50	37	.05
10	15	140	5.7	.83	9	.02	.50	40	.05
11	24	160	10	.83	11	.02	.60	44	.07
12	22	172	10	.83	8	.02	.50	35	.05
13	25	195	13	.83	11	.02	.90	27	.07
14	92	435	108	.72	12	.02	1.2	17	.06
15	169	570	260	.72	16	.03	1.4	27	.10
16	138	470	175	.72	17	.03	24	5350	6390
17	221	760	453	.72	11	.02	255	55000	60500
18	125	525	177	.72	19	.04	68	17000	3120
19	85	375	86	.72	17	.03	3.4	310	2.8
20	75	412	83	.72	15	.03	3.2	183	1.6
21	36	225	22	.72	19	.04	3.0	148	1.2
22	11	113	3.4	.72	18	.03	3.0	145	1.2
23	13	108	3.8	.72	12	.02	2.6	154	1.1
24	12	96	3.1	.83	19	.04	2.5	136	.92
25	5.0	88	1.2	.83	11	.02	2.4	127	.82
26	4.5	78	.95	.95	11	.03	2.2	120	.71
27	4.1	57	.63	.95	23	.06	2.0	73	.39
28	4.0	47	.51	1.1	9	.03	1.6	58	.25
29	3.6	45	.44	1.1	9	.03	1.3	47	.16
30	3.0	30	.24	1.2	36	.12	1.2	70	.23
31	--	--	--	1.2	17	.06	--	--	--
TOTAL	2306.2	--	3374.57	34.93	--	1.59	387.60	--	70022.88

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	1.0	86	.23	0	0	0	492	60500	90000
2	.80	82	.18	0	0	0	651	78200	156000
3	.70	73	.14	0	0	0	1200	57000	195000
4	.60	71	.12	298	104000	145000	723	65000	127000
5	.50	100	.14	752	905000	240000	387	50000	52200
6	.80	199	.43	796	88100	220000	116	38000	11900
7	.42	115	.13	142	52000	19900	435	50000	58700
8	.54	115	.17	10	27000	729	158	27000	11500
9	.60	105	.17	0	0	0	894	55000	133000
10	.72	96	.19	0	0	0	1200	65000	211000
11	.83	100	.22	1.2	4000	13	1550	102000	427000
12	1.1	120	.36	0	0	0	1720	80000	372000
13	1.2	99	.32	0	0	0	1640	114000	505000
14	1.3	154	.54	0	0	0	1510	90000	367000
15	1.4	143	.54	0	0	0	1080	50000	146000
16	1.6	214	.92	0	0	0	680	29000	53200
17	46	35300	4380	15	14000	1740	909	32000	78500
18	1.2	340	1.1	390	78700	139000	468	16400	20700
19	1.2	454	1.5	735	108000	109000	275	9000	6680
20	26	18600	1310	479	103000	134000	215	9300	5400
21	210	36000	35600	298	87600	78300	603	23300	51800
22	387	36300	40500	181	69200	31600	786	43000	91300
23	268	56500	81400	29	61000	4780	501	34800	47100
24	13	5280	185	12	32500	1050	265	13500	9660
25	466	78700	130000	5.2	18000	253	181	11000	5380
26	414	79700	163000	1170	68700	241000	90	8000	1940
27	14	5450	206	1530	125000	516000	138	6000	2240
28	5.9	12400	198	1810	108000	528000	71	4500	863
29	1.0	1750	4.7	1370	70000	200000	35	2160	204
30	0	0	0	1310	74100	289000	16	1770	76
31	0	0	0	1300	60000	211000	--	--	--
TOTAL	1867.41	--	496791.10	12633.4	--	3200365	18989	--	3238343

RIO GRANDE BASIN

08354800 RIO GRANDE CONVEYANCE CHANNEL AT SAN ACACIA, N. MEX.--Continued

SUSPENDED-SEDIMENT DISCHARGE, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

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	7.4	4080	82	1270	12500	42900	857	13500	31200
2	1.9	1000	5.1	1440	14000	54400	881	11600	27600
3	2.2	350	2.1	1370	15500	57300	783	11000	23300
4	3.1	250	2.1	1290	15500	54000	804	12000	26000
5	6.7	1150	21	1180	15500	49400	856	10800	25000
6	30	950	77	1270	14000	48000	863	12400	28900
7	48	3300	428	1320	12000	42800	883	13000	31000
8	60	3350	543	1340	12000	43400	870	14000	32900
9	90	2000	486	1350	11000	40100	814	10200	22400
10	74	700	140	1430	11500	44400	757	11500	23500
11	88	790	188	1280	14200	49100	783	11000	23300
12	86	1170	272	1380	14500	54000	832	17500	39300
13	1530	53300	220000	1310	14700	52000	883	15000	35800
14	963	31000	80600	1260	13300	45200	907	14900	36500
15	633	62000	106000	1280	13600	47000	822	14500	32200
16	675	58000	106000	1190	16500	53000	786	11500	24400
17	669	46000	83100	1240	13500	45200	747	9400	19000
18	441	32000	38100	1260	10700	36400	746	10800	21800
19	558	36100	65500	1240	9500	31800	682	14500	26700
20	1630	76000	334000	1230	11000	36500	823	8500	18900
21	1710	63000	291000	1210	11400	37200	799	11900	25700
22	1610	50500	220000	1160	12000	37600	761	9700	19900
23	1620	31000	136000	1180	12300	39200	807	8600	18700
24	1080	23000	67100	1110	10700	32100	774	7200	15000
25	1070	32000	92400	1070	13000	37600	804	6600	14300
26	1590	39000	167000	1050	14000	39700	817	9600	21200
27	1610	49900	217000	882	14500	34500	847	8500	19400
28	1220	27000	88900	758	16000	32700	823	9900	22000
29	999	17800	48000	947	15000	38400	851	7100	16300
30	846	13000	29700	791	13600	29000	986	7000	18600
31	1010	10900	29700	--	--	--	880	8700	20700
TOTAL	21961.3	--	2422346.3	36088	--	1284900	25528	--	761500

192859.54
10091002.14
196741.84
9082245.44

TOTAL DISCHARGE FOR 1972 WATER YEAR (CFS-DAYS)
TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR 1972 WATER YEAR (TONS)
TOTAL DISCHARGE FOR 1972 CALENDAR YEAR (CFS-DAYS)
TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR 1972 CALENDAR YEAR (TONS)

INSTANTANEOUS SUSPENDED SEDIMENT AND PARTICLE SIZE, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	TEMPER- ATURE (DEG C) (00010)	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SUS- PEN- DED SEDIM- ENT DIS- CHARGE (MG/L) (80154)	SUS- PEN- DED SEDIM- ENT DIS- CHARGE (T/DAY) (80155)	SUS- SED. FALL DIAM. % FINER THAN .002 MM (70337)	SUS- SED. FALL DIAM. % FINER THAN .004 MM (70338)	SUS- SED. FALL DIAM. % FINER THAN .016 MM (70340)	SUS- SED. FALL DIAM. % FINER THAN .062 MM (70342)
JAN.									
07...	1330	3.0	474	1050	1340	30	37	58	80
19...	1415	9.0	963	2270	5900	20	24	39	69
FEB.									
28...	0815	7.5	1380	14700	54800	27	31	44	69
MAR.									
02...	1750	13.5	909	2770	6800	25	30	44	69
08...	1650	18.0	690	1130	2110	51	60	83	--
17...	0845	10.0	1060	2120	6070	25	30	44	79
28...	0630	5.0	453	1600	1960	25	29	43	74
APR.									
07...	0830	11.5	16	200	8.6	57	72	81	--
20...	0640	8.0	141	538	205	36	41	52	--
JULY									
17...	0610	17.5	834	180000	405000	43	53	73	95
21...	0830	18.0	618	39500	65900	42	52	72	89
AUG.									
04...	0930	22.0	1010	197000	537000	36	43	58	78
06...	1200	25.0	1620	91000	398000	38	46	62	83
19...	0800	18.0	591	60600	96700	34	41	56	78
26...	1130	17.0	1780	59600	286000	45	53	69	91
31...	0630	17.0	1870	67900	343000	41	48	65	87
SEP.									
09...	0915	20.5	843	74100	169000	57	63	77	89
11...	1230	25.0	1400	101000	382000	40	46	57	78
17...	0900	20.0	1150	35000	109000	42	52	61	77
OCT.									
01...	0900	15.0	21	4280	243	59	70	88	91
13...	1440	23.0	1890	57800	295000	38	50	63	90
21...	1730	13.0	1720	70600	328000	31	41	49	75
27...	0730	10.0	1650	48800	217000	35	42	52	77
NOV.									
10...	0645	5.5	1470	9730	38600	25	28	35	53
24...	0930	5.5	1100	11100	33000	12	15	21	34
DEC.									
05...	1110	2.0	894	12500	30200	7	8	14	27
17...	1600	6.0	750	8800	17800	8	9	15	29
30...	1610	3.5	984	8310	22100	11	13	20	33

RIO GRANDE BASIN

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08354800 RIO GRANDE CONVEYANCE CHANNEL AT SAN ACACIA, N. MEX.--Continued

INSTANTANEOUS SUSPENDED SEDIMENT AND PARTICLE SIZE, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	SUS. SED. FALL DIAM. % FINER THAN .125 MM (70343)	SUS. SED. FALL DIAM. % FINER THAN .250 MM (70344)	SUS. SED. FALL DIAM. % FINER THAN .500 MM (70345)	SUS. SED. FALL DIAM. % FINER THAN 1.00 MM (70346)	SUS. SED. FALL DIAM. % FINER THAN 2.00 MM (70347)	SUS. SED. FALL SIEVE DIAM. % FINER THAN .062 MM (70331)	SUS. SED. FALL SIEVE DIAM. % FINER THAN .125 MM (70332)	SUS. SED. FALL SIEVE DIAM. % FINER THAN .250 MM (70333)	SUS. SED. FALL SIEVE DIAM. % FINER THAN .500 MM (70334)
JAN.									
07...	90	100	--	--	--	--	--	--	--
19...	93	100	--	--	--	--	--	--	--
FEB.									
28...	84	97	100	--	--	--	--	--	--
MAR.									
02...	71	90	99	100	--	--	--	--	--
08...	--	--	--	--	--	96	98	99	100
17...	93	99	100	--	--	--	--	--	--
28...	97	100	--	--	--	--	--	--	--
APR.									
07...	--	--	--	--	--	98	100	--	--
20...	--	--	--	--	--	80	96	99	100
JULY									
17...	98	100	--	--	--	--	--	--	--
21...	97	100	--	--	--	--	--	--	--
AUG.									
04...	94	100	--	--	--	--	--	--	--
06...	94	98	99	99	100	--	--	--	--
19...	96	100	--	--	--	--	--	--	--
26...	99	100	--	--	--	--	--	--	--
31...	97	100	--	--	--	--	--	--	--
SEP.									
09...	95	99	100	--	--	--	--	--	--
11...	96	100	--	--	--	--	--	--	--
17...	92	100	--	--	--	--	--	--	--
OCT.									
01...	94	100	--	--	--	--	--	--	--
13...	97	100	--	--	--	--	--	--	--
21...	91	99	100	--	--	--	--	--	--
27...	91	99	100	--	--	--	--	--	--
NOV.									
10...	80	96	100	--	--	--	--	--	--
24...	64	96	100	--	--	--	--	--	--
DEC.									
05...	49	91	100	--	--	--	--	--	--
17...	62	91	99	100	--	--	--	--	--
30...	56	88	99	100	--	--	--	--	--

RIO GRANDE BASIN

08354900 RIO GRANDE FLOODWAY AT SAN ACACIA, N. MEX.

LOCATION.—Lat 34°15'23", long 106°53'18", Socorro County, in Sevilleta Grant, at gaging station, 0.2 mile below San Acacia diversion dam, 0.3 mile east of San Acacia, and 2 miles downstream from Rio Salado.

DRAINAGE AREA.—26,770 sq mi, approximately (includes 2,940 sq mi in closed basin in San Luis Valley, Colo.).

PERIOD OF RECORD.—Chemical analyses: July to December 1937, March 1939 to September 1956.

Specific conductance: July to December 1937, March 1939 to September 1956, October 1964 to current year.

Water temperatures: October 1947 to August 1956, January 1959 to current year.

Sediment records: July 1946 to June 1956, January 1959 to current year.

EXTREMES:

Current year:

Specific conductance: Maximum daily, 2,970 micromhos Aug. 23; minimum daily, 318 micromhos May 7.

Water temperatures: Maximum, 33.0°C July 11, 13; minimum, freezing point Dec. 6.

Sediment concentrations: Maximum daily, 85,400 mg/l Aug. 4; minimum daily, no flow Nov. 29.

Sediment discharge: Maximum daily, 916,000 tons Sept. 14; minimum daily, 0 tons Nov. 29.

Period of record:

Specific conductance (1937, 1939-56, 1964-72): Maximum daily, 3,700 micromhos July 14, 1940; minimum daily, 236 micromhos May 17, 1942.

Water temperatures: Maximum, 34.5°C July 13, 1971; minimum (1947-56, 1959-62, 1964-72), freezing point on many days during winter months.

Sediment concentrations: Maximum daily, 223,000 mg/l Aug. 11 1946; minimum daily, no flow on many days of most years.

Sediment discharge: Maximum daily, 1,760,000 tons Aug. 12, 1955, minimum daily, 0 tons on many days of most years.

REMARKS.—Additional sediment total discharge determinations were made bi-weekly when needed. No flow Nov. 29.

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972
(ONCE-DAILY)

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	---	754	---	677	832	960	1220	974	950	973	808	980
2	---	752	629	686	885	935	935	970	923	970	782	935
3	---	735	627	698	918	900	940	950	903	1040	1060	990
4	775	---	637	758	947	325	445	1470	1090	1050	1160	1050
5	---	---	532	811	914	1180	885	1850	1040	1040	1200	998
6	---	---	566	827	913	925	1420	1170	1040	973	768	1030
7	853	768	628	809	314	---	1560	1300	1020	1020	795	1020
8	---	740	581	816	892	890	919	1540	1000	1000	710	1050
9	---	794	588	816	923	934	920	1360	813	820	855	1140
10	945	---	582	809	945	916	1280	1450	1030	865	1060	1010
11	930	760	546	801	932	875	959	1540	1680	970	1060	1090
12	---	---	608	816	932	855	945	1090	1440	900	1110	880
13	915	---	628	773	908	885	2610	1010	1380	1100	709	1000
14	---	---	556	760	891	1240	2600	998	1440	---	1080	1030
15	---	797	580	716	892	845	940	1030	1220	1140	1150	980
16	875	---	474	728	901	1240	1290	995	1100	1250	1080	1020
17	885	785	616	657	924	1290	1270	900	960	1200	692	1040
18	---	---	635	710	950	985	1130	1800	976	1060	703	820
19	891	---	632	750	960	895	1000	870	920	970	1160	670
20	634	---	550	754	963	899	960	1180	842	968	1140	505
21	---	---	579	766	973	880	993	970	1220	1330	1200	690
22	---	750	570	817	968	885	1140	930	1210	1110	1090	653
23	---	788	614	860	978	930	890	2970	1060	1120	1170	605
24	771	---	637	844	1360	760	913	1920	1040	960	1170	700
25	---	806	654	890	983	987	706	1290	1010	1180	1180	810
26	719	---	683	871	967	1600	926	950	989	774	1140	810
27	---	---	654	927	1010	2170	1080	1460	1070	1080	1200	805
28	813	---	683	898	972	905	1580	1920	970	995	1180	880
29	---	795	693	920	982	845	1360	1120	968	945	---	770
30	---	---	421	938	1100	1120	974	1020	890	777	1110	800
31	733	---	701	---	1000	---	970	980	---	776	---	755
MONTH	---	---	604	797	937	1000	1170	1290	1070	1010	1020	888

RIO GRANDE BASIN

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08354900 RIO GRANDE FLOODWAY AT SAN ACACIA, N. MEX.--Continued

TEMPERATURE (DEG. C) OF WATER-CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972
(ONCE-DAILY)

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

SUSPENDED-SEDIMENT DISCHARGE, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

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	1.6	11	.05	2.0	276	1.5	2.8	510	3.9
2	1.6	10	.04	2.6	337	2.4	2.7	640	4.7
3	1.5	20	.08	2.8	255	1.9	2.4	710	4.6
4	2.5	45	.30	3.1	211	1.8	2.2	650	3.9
5	2.3	57	.35	3.3	202	1.8	6.3	730	12
6	1.5	47	.19	3.8	192	2.0	4.4	750	8.9
7	1.5	53	.21	4.1	182	2.0	5.1	710	9.8
8	1.2	38	.12	5.1	230	3.2	6.1	710	12
9	1.1	27	.08	4.2	165	1.9	5.8	600	9.4
10	1.1	17	.05	3.9	146	1.5	5.1	475	6.5
11	1.1	18	.05	3.6	160	1.6	4.2	450	5.1
12	1.2	23	.07	3.2	132	1.1	4.3	450	5.2
13	1.3	18	.06	2.5	105	.71	8.6	771	18
14	1.2	24	.08	2.4	115	.75	4.4	870	10
15	1.3	33	.12	1.9	123	.63	3.7	825	8.2
16	1.1	46	.14	1.6	122	.53	15	1160	75
17	1.1	45	.13	1.5	175	.71	4.5	440	5.3
18	1.0	35	.09	1.5	145	.59	6.0	300	4.9
19	.89	24	.06	1.8	133	.65	19	470	24
20	7.5	350	7.1	1.9	135	.69	5.2	370	5.2
21	4.7	90	1.1	2.0	144	.78	4.8	450	5.8
22	3.9	70	.74	2.6	177	1.2	4.9	450	6.0
23	3.7	72	.72	2.8	208	1.6	4.1	360	4.0
24	3.4	285	2.6	3.6	208	2.0	3.9	350	3.7
25	3.2	374	3.2	148	921	1780	3.9	370	3.9
26	3.3	377	3.4	330	2020	2940	3.2	230	2.0
27	2.9	345	2.7	2.1	275	1.6	5.1	400	5.5
28	2.5	290	2.0	8.6	680	16	3.6	330	3.2
29	2.4	281	1.8	5.3	550	7.9	3.5	200	1.9
30	2.3	308	1.9	---	---	---	3.3	300	2.7
31	2.5	330	2.0	---	---	---	3.1	210	1.8
TOTAL	68.19	--	31.53	561.8	--	4779.04	161.2	--	277.1

08354900 RIO GRANDE FLOODWAY AT SAN ACACIA, N. MEX.--Continued

SUSPENDED-SEDIMENT DISCHARGE, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

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	3.3	200	1.8	2.0	216	1.2	1.4	79	.30
2	3.8	260	2.7	1.5	165	.67	1.4	64	.24
3	3.7	197	2.0	1.5	57	.23	1.3	36	.11
4	3.5	134	1.3	1.5	51	.21	1.2	40	.13
5	3.4	114	1.0	1.7	58	.27	1.1	47	.14
6	3.1	216	1.8	1.7	65	.30	1.2	61	.20
7	3.1	186	1.6	1.7	57	.26	1.1	55	.16
8	2.9	163	1.3	1.7	50	.23	1.0	50	.14
9	3.0	130	1.1	1.8	55	.27	.97	60	.16
10	2.7	125	.91	1.7	65	.30	.83	67	.15
11	3.0	144	1.2	1.7	57	.26	.73	60	.12
12	3.1	172	1.4	1.8	50	.24	.59	244	.39
13	4.6	218	2.7	1.8	50	.24	.99	80	.21
14	8.2	186	4.1	2.0	52	.28	1.6	22	.10
15	4.1	190	2.1	2.0	54	.29	2.3	55	.34
16	12	153	5.0	2.0	52	.28	54	12200	25000
17	5.5	228	3.4	2.0	47	.25	136	24600	16500
18	5.3	393	5.6	1.9	42	.22	1.9	3140	16
19	4.9	283	3.7	1.9	57	.29	1.2	450	1.5
20	5.1	276	3.8	1.8	55	.27	.96	313	.81
21	4.7	186	2.4	1.7	58	.27	.86	233	.54
22	4.1	132	1.5	1.7	59	.27	.81	161	.35
23	4.2	200	2.3	1.6	49	.21	.77	163	.34
24	4.7	130	1.6	1.5	43	.17	.74	251	.50
25	4.0	170	1.8	1.6	50	.22	.67	155	.28
26	3.4	123	1.1	1.6	48	.21	.62	210	.35
27	2.8	80	.60	1.5	43	.17	.56	199	.30
28	2.9	68	.53	1.4	73	.28	.48	165	.21
29	2.3	63	.39	1.4	88	.33	.47	167	.21
30	2.0	62	.33	1.6	72	.31	.45	145	.18
31	--	--	--	1.4	62	.23	--	--	--
TOTAL	123.4	--	61.06	52.7	--	9.23	218.20	--	41524.46

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	.47	135	.17	1.0	308	.83	18	200	9.7
2	.48	113	.15	.93	178	.45	55	6300	3250
3	.48	134	.17	1.1	210	.62	467	25600	52900
4	.46	265	.33	138	85400	57300	5.0	10000	135
5	.47	217	.28	462	60200	73000	3.7	7000	70
6	.53	295	.42	537	58100	111000	3.0	278	2.3
7	.50	209	.28	38	21000	2150	3.0	345	2.8
8	.53	295	.42	2.9	21000	164	.64	334	.58
9	.54	275	.40	2.8	9800	74	22	15900	3620
10	.59	284	.45	2.6	9900	69	18	12000	2970
11	.65	213	.37	2.7	11000	80	498	48200	148000
12	.70	260	.49	2.3	758	4.7	1870	79500	242000
13	.77	185	.38	2.0	475	2.6	780	67300	178000
14	.78	82	.17	1.7	190	.87	4250	79800	916000
15	.82	168	.37	1.3	104	.37	30	30000	2430
16	.92	370	.92	1.1	1000	3.0	1.4	12000	45
17	15	59400	3990	2.5	2100	14	3.2	7000	60
18	1.4	2860	11	272	47300	76200	2.2	1500	8.9
19	1.4	650	2.5	3.3	4000	36	9.7	1450	38
20	87	2870	5550	4.7	4690	354	12	1420	49
21	1.2	2150	18	2.5	241	1.6	20	12800	4130
22	360	19100	93800	1.4	130	.49	2.6	21000	107
23	43	13200	7320	11	32400	687	1.0	9990	27
24	32	5210	7930	4.9	27000	357	1.0	3770	10
25	46	21900	3190	3.5	14000	132	1.0	2500	6.8
26	260	21000	14700	1210	31000	149000	2.4	1580	10
27	1.6	3000	13	60	28000	32000	2.8	1570	12
28	3.1	625	5.2	870	59400	221000	2.1	950	5.4
29	1.3	460	1.6	4.6	21000	261	3.0	725	5.9
30	1.0	258	.70	747	36700	185000	3.3	530	4.7
31	.95	235	.60	1630	28000	123000	--	--	--
TOTAL	864.64	--	136538.37	6024.83	--	1031893.53	8091.04	--	1553950.08

RIO GRANDE BASIN

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08354900 RIO GRANDE FLOODWAY AT SAN ACACIA, N. MEX.--Continued

SUSPENDED-SEDIMENT DISCHARGE, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

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	6.7	700	13	7.9	2230	48	1.2	268	.87
2	1.9	749	3.8	7.7	1530	32	1.1	110	.33
3	1.6	160	.69	3.2	350	3.0	1.0	66	.18
4	1.7	226	1.0	2.4	240	1.6	.82	235	.52
5	1.9	310	1.6	2.2	225	1.3	.82	200	.44
6	2.2	280	1.7	6.7	2950	137	.59	70	.11
7	2.2	239	1.4	5.8	2250	35	.66	57	.10
8	2.3	175	1.1	6.8	2900	118	.63	35	.06
9	5.6	315	4.8	18	2130	243	.76	25	.05
10	5.1	385	5.3	29	3540	621	.57	25	.04
11	7.0	345	6.5	6.1	375	6.2	.70	23	.04
12	6.0	319	5.2	4.1	350	3.9	.70	19	.04
13	1450	57400	309000	7.9	2080	207	.74	55	.11
14	1170	51800	322000	6.9	625	12	.71	87	.17
15	76	20000	4100	8.9	500	12	.61	67	.11
16	36	22000	2140	4.5	350	4.3	.52	28	.04
17	17	9000	413	5.6	2450	78	.51	10	.01
18	9.7	2000	52	4.4	1500	18	4.3	478	1.9
19	21	8500	482	2.7	265	1.9	2.1	380	2.2
20	2320	42600	259000	1.8	97	.47	2.0	300	1.6
21	2010	55200	300000	1.3	73	.26	1.9	260	1.3
22	813	40000	87800	1.3	69	.24	1.7	230	1.1
23	59	16500	2630	1.3	55	.19	1.7	280	1.3
24	1.7	3000	14	1.4	45	.17	1.8	220	1.1
25	645	17200	38700	1.2	59	.19	1.8	184	.89
26	1280	29300	178000	1.2	52	.17	1.8	189	.92
27	698	33000	73500	1.3	300	1.1	1.8	136	.66
28	10	12900	348	.70	250	.47	1.7	131	.60
29	5.0	3000	41	0	0	0	1.7	140	.64
30	7.0	2500	47	.50	962	2.7	1.7	160	.73
31	8.0	1980	43	--	--	--	1.4	179	.68
TOTAL	10680.6	--	1578356.09	152.80	--	1589.16	40.04	--	35.94

TOTAL DISCHARGE FOR 1972 WATER YEAR (CFS-DAYS)
 TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR 1972 WATER YEAR (TONS)
 TOTAL DISCHARGE FOR 1972 CALENDAR YEAR (CFS-DAYS)
 TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR 1972 CALENDAR YEAR (TONS)

18376.80
 3254441.27
 27039.44
 4349045.59

INSTANTANEOUS SUSPENDED SEDIMENT AND PARTICLE SIZE, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	TEMPERATURE (DEG C) (00010)	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SUS- PEN- DED SED- IMENT DIS- CHARGE (MG/L) (80154)	SUS- PEN- DED SED- IMENT DIS- CHARGE (T/DAY) (80155)	SUS. SED. FALL DIAM. & FINER THAN .002 MM (70337)	SUS. SED. FALL DIAM. & FINER THAN .004 MM (70338)
JAN.							
20...	1200	7.0	7.1	992	19	52	69
MAR.							
07...	1830	17.0	7.1	1310	25	30	34
JUNE							
16...	2315	18.0	750	97100	197000	55	66
17...	1100	18.0	1.3	22400	79	68	81
JULY							
17...	0730	19.0	6.2	126000	2110	50	62
22...	0945	19.5	2800	78700	595000	40	52
AUG.							
06...	0915	20.5	860	94600	220000	48	57
26...	1230	18.0	2100	47700	270000	47	61
28...	1415	24.0	2120	96700	554000	48	59
SEP.							
13...	0700	18.0	240	87000	56400	49	55
14...	1130	--	7330	88000	1740000	49	53
21...	1615	22.0	7.9	36600	780	58	64
OCT.							
13...	0855	17.0	13	39200	1380	56	65
21...	0745	10.0	1660	55300	248000	40	46
27...	0745	10.0	1000	34800	94000	51	55
NOV.							
08...	1705	11.0	17	4470	205	52	62
17...	1615	9.0	9.7	3260	85	36	42

RIO GRANDE BASIN

08354900 RIO GRANDE FLOODWAY AT SAN ACACIA, N. MEX.--Continued

INSTANTANEOUS SUSPENDED SEDIMENT AND PARTICLE SIZE, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	SUS. SED. FALL DIAM. % FINER THAN (70340)	SUS. SED. FALL DIAM. % FINER THAN (70342)	SUS. SED. FALL DIAM. % FINER THAN (70343)	SUS. SED. FALL DIAM. % FINER THAN (70344)	SUS. SED. FALL DIAM. % FINER THAN (70345)	SUS. SED. FALL DIAM. % FINER THAN (70331)	SUS. SED. FALL DIAM. % FINER THAN (70332)
JAN. 20...	94	--	--	--	--	99	100
MAR. 07...	44	51	68	98	100	--	--
JUNE 16...	92	100	--	--	--	--	--
17...	97	99	99	100	--	--	--
JULY 17...	87	98	99	100	--	--	--
22...	69	94	97	99	100	--	--
AUG. 06...	74	95	100	--	--	--	--
26...	81	98	100	--	--	--	--
28...	75	96	100	--	--	--	--
SEP. 13...	70	97	100	--	--	--	--
14...	70	86	97	100	--	--	--
21...	80	88	94	99	100	--	--
OCT. 13...	85	96	98	99	100	--	--
21...	56	89	99	100	--	--	--
27...	70	96	100	--	--	--	--
NOV. 08...	76	94	100	--	--	--	--
17...	57	78	99	100	--	--	--

TOTAL SEDIMENT DISCHARGE, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	TEMPER- ATURE (DEG C) (00010)	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SUS- PENDE DIAM- MENT (MG/L) (80154)	SUS- PENDE DIAM- MENT (T/DAY) (80155)	TOTAL SEDIM- ENT DIS- CHARGE (T/DAY) (80156)	STREAM WIDTH (FT) (00004)	MEAN DEPTH (FT) (00064)	STREAM VELOC- ITY (FPS) (00055)
AUG. 26...	1230	18.0	2100	47700	270000	275000	60	6.3	5.6
SEP. 14...	1130	--	7330	88000	1740000	1780000	240	6.0	5.1

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LOCATION.--Lat 33°41'07", long 106°59'40", Socorro County, in Pedro Armendaris Grant No. 34, at gaging station 0.4 mile northwest of Atchison, Topeka and Santa Fe Railway Co. bridge over floodway channel, 1.0 mile southwest of former site of San Marcial, 3.5 miles downstream from railroad bridge near Tiffany siding, and 51 miles downstream from heading at San Acacia.

EXTREMES:

Current year:

Specific conductance: Maximum daily, 2,290 micromhos Aug. 14; minimum daily, 482 micromhos Mar. 20.

Water temperatures: Maximum, 30.5°C July 27; minimum, freezing point Jan. 6.

Sediment concentrations: Maximum daily, 123,000 mg/l Aug. 28; minimum daily, no flow on many days during June, July, and August.

Sediment discharge: Maximum daily, 638,000 tons Aug. 28; minimum daily, 0 tons on many days during June, July, and August.

Period of record:

Record:
Dissolved solids (1954-70): Maximum, 2,010 mg/l Aug. 2-8, 1956; minimum, 240 mg/l Jan. 8-13, 1963.
Hardness (1954-70): Maximum, 948 mg/l Aug. 2-8, 1956; minimum, 108 mg/l Jan. 8-13, 1963.
Specific conductance: Maximum daily, 2,860 micromhos Oct. 25, 1956; minimum daily, 353 micromhos Jan. 8, 1963.
Water temperatures: Maximum, 35.0°C on several days during 1955, 1963, and 1971; minimum, freezing point on many days during December and January of most years.
Sediment concentrations: Maximum daily, 144,000 mg/l Sept. 19, 1971; minimum daily, no flow on many days during 1956, 1958, 1963, 1964, 1968, 1969, 1971, and 1972.
Sediment discharge: Maximum daily, 638,000 tons Aug. 28 1972; minimum daily, 0 tons on many days during 1956, 1958, 1963, 1964, 1968, 1969, 1971, and 1972.

REMARKS.—Bacteria and aquatic biology analyzed by the New Mexico Environmental Improvement Agency on samples collected by the U.S. Geological Survey. After June 1972, Bacteria analyzed by the U.S. Geological Survey. Additional sediment total discharge determinations were made bi-weekly when needed. No flow June 14-16, June 24 to July 17, 19, 20, Aug. 1-3, 16, 17.

CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

[illegible]

RIO GRANDE BASIN

08358300 RIO GRANDE CONVEYANCE CHANNEL AT SAN MARCIAL, N. MEX.--Continued

CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED NITRATE (N) (MG/L) (00618)	DIS- SOLVED NITRITE (N) (MG/L) (00613)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	AMMONIA NITRO- GEN (N) (MG/L) (00610)	DIS- SOLVED AMMONIA NITRO- GEN (N) (MG/L) (00608)	ORGANIC NITRO- GEN (N) (MG/L) (00605)	TOTAL NITRO- GEN (N) (MG/L) (00600)	TOTAL PHOS- PHORUS (P) (MG/L) (00665)	DIS- SOLVED ORTHO- PHOS- PHORUS (P) (MG/L) (00671)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L) (70300)
JAN.												
06...	42	.7	--	--	.31	--	--	--	--	--	.28	454
FEB.												
01...	39	.4	--	--	.35	--	--	--	--	--	.38	468
28...	27	.6	--	--	.61	--	--	--	--	--	.23	394
MAR.												
28...	34	.4	--	--	.54	--	--	--	--	--	.28	406
APR.												
18...	47	.6	1.1	.00	1.1	--	.01	1.1	2.2	1.7	.28	516
MAY												
22...	140	.6	--	--	.00	--	--	--	--	--	.14	832
JUNE												
17...	--	--	--	--	--	--	--	--	--	--	--	--
20...	110	.7	--	--	.83	--	--	--	--	--	.03	888
JULY												
25...	40	.8	1.2	.00	1.2	--	.12	.42	1.7	13	.02	546
AUG.												
21...	52	.8	1.8	.00	1.8	--	.23	26	28	15	.02	1220
SEP.												
05...	--	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--	--
18...	34	.7	.03	.01	.04	--	.06	9.9	10	7.0	.10	672
OCT.												
17...	52	.8	1.4	.02	1.4	--	.55	21	23	3.1	.03	980
31...	45	.8	.50	.01	.51	--	.05	1.4	1.9	.29	.26	528
DEC.												
04...	--	--	--	--	--	--	--	--	--	--	--	--
11...	--	--	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--	--	--
19...	43	.6	.71	.00	.71	.25	.25	.85	1.8	.93	.44	522
26...	--	--	--	--	--	--	--	--	--	--	--	--

DATE	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L) (70301)	HARD- NESS (CA,MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AD- SORP- TION RATIO (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	COLOR (PLAT- INUM- COBALT UNITS) (00080)	TUR- BID- ITY (JTU) (00070)	DIS- SOLVED BORON (B) (MG/L) (01020)	DIS- SOLVED COPPER (CU) (UG/L) (01040)	DIS- SOLVED ZINC (ZN) (UG/L) (01090)
JAN.												
06...	444	200	36	2.0	674	7.7	.0	--	--	130	--	--
FEB.												
01...	421	190	36	1.9	647	7.7	3.5	--	--	140	--	--
28...	393	190	49	1.6	589	7.6	11.5	--	--	110	--	--
MAR.												
28...	403	180	36	1.9	627	7.6	10.5	--	--	110	--	--
APR.												
18...	489	210	40	2.1	739	7.7	14.0	--	--	170	2	20
MAY												
22...	850	320	100	3.9	1290	8.1	17.5	--	--	250	--	--
JUNE												
17...	--	--	--	--	621	--	18.5	--	2400	--	--	--
20...	841	330	130	3.3	1280	7.5	22.5	--	--	250	--	--
JULY												
25...	666	230	18	3.7	877	6.9	24.5	--	--	110	--	--
AUG.												
21...	1190	490	340	3.3	1630	7.3	27.0	--	--	170	--	--
SEP.												
05...	--	--	--	--	1210	7.5	--	--	6900	--	--	--
15...	--	--	--	--	1450	--	18.5	--	14000	--	--	--
18...	619	290	140	2.3	956	7.5	22.5	--	--	170	--	--
OCT.												
17...	969	420	290	3.0	1390	7.7	19.0	--	--	180	--	--
31...	504	220	58	2.3	797	7.2	9.0	--	--	160	--	--
DEC.												
04...	--	--	--	--	691	7.6	12.0	--	750	--	--	--
11...	--	--	--	--	665	7.6	4.0	--	75	--	--	--
19...	--	--	--	--	682	--	--	10	500	--	--	--
19...	456	210	48	2.0	698	7.7	4.5	--	--	160	--	--
26...	--	--	--	--	648	--	3.0	10	600	--	--	--

RIO GRANDE BASIN

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08358300 RIO GRANDE CONVEYANCE CHANNEL AT SAN MARCIAL, N. MEX.--Continued

TRACE ELEMENT AND RADIOCHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	DIS- SOLVED ARSENIC (AS) (UG/L) (01000)	DIS- SOLVED BARIUM (BA) (UG/L) (01005)	DIS- SOLVED BORON (B) (UG/L) (01020)	DIS- SOLVED CAD- MIUM (CD) (UG/L) (01025)	HEXA- VALENT CHRO- MIUM (CR6) (UG/L) (01032)	DIS- SOLVED COPPER (CU) (UG/L) (01040)	DIS- SOLVED IRON (FE) (UG/L) (01046)	TOTAL LEAD (PB) (UG/L) (01051)	DIS- SOLVED MAN- GANESE (MN) (UG/L) (01056)	TOTAL MERCURY (HG) (UG/L) (71900)
APR. 18...	1400	3	0	170	1	0	2	20	27	10	.1
MAY 22...	1130	--	--	--	--	--	--	--	--	--	--
JUNE 20...	1100	--	--	--	--	--	--	--	--	--	--
OCT. 31...	1000	--	--	--	--	--	--	--	--	--	--

DATE	DIS- SOLVED SILVER (AG) (UG/L) (01075)	DIS- SOLVED SELE- NIUM (SE) (UG/L) (01145)	DIS- SOLVED ZINC (ZN) (UG/L) (01090)	DIS- SOLVED GROSS ALPHA AS (U-NAT.) (UG/L) (80030)	SUS- PENDE GROSS ALPHA AS (U-NAT.) (UG/L) (80040)	DIS- SOLVED GROSS BETA AS (CS-137 (PC/L) (03515)	SUS- PENDE GROSS BETA AS (CS-137 (PC/L) (03516)	DIS- SOLVED GROSS BETA AS SR90 /Y90 (PC/L) (80050)	SUS- PENDE GROSS BETA AS SR90 /Y90 (PC/L) (80060)	DIS- SOLVED RA-226 (RADON METHOD) (PC/L) (09511)	DIS- SOLVED NATURAL URANIUM (U) (UG/L) (22703)
APR. 18...	1	0	20	--	--	--	--	--	--	--	--
MAY 22...	--	--	--	<10	4.5	8.7	3.8	7.2	3.1	.11	3.2
JUNE 20...	--	--	--	18	2300	14	980	12	810	.12	1.4
OCT. 31...	--	--	--	20	170	8.7	73	7.2	58	.09	1.5

FIELD AND BIOCHEMICAL MEASUREMENTS, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	DIS- CHARGE (CFS) (00060)	SPE- CIFIC CON- DUCT- ANCE (MICHO- MMOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	AIR TEMPER- ATURE (DEG C) (00020)	COLOR (PLAT- INUM- COBALT UNITS) (00080)	TUR- BID- ITY (JTU) (00070)
JAN. 06...	1130	875	690	8.0	6.0	4.5	5	300
FEB. 01...	1130	938	625	8.2	3.5	6.0	3	325
MAR. 28...	1430	1260	570	8.0	11.5	24.0	50	1240
MAR. 28...	1200	558	610	8.2	10.5	13.5	20	350
APR. 18...	1400	168	650	8.3	14.0	25.0	20	300
MAY 22...	1130	21	1290	8.4	17.5	23.5	25	45
JUNE 20...	1100	76	1200	7.8	22.5	32.5	20	10000
JULY 25...	1400	642	830	7.6	24.5	20.0	35	38000
AUG. 21...	1400	231	1520	7.9	27.0	29.5	40	36000
SEP. 18...	1445	389	945	7.8	22.5	31.0	20	6600
OCT. 17...	1300	410	1330	8.1	19.0	24.0	20	32000
OCT. 31...	1000	980	750	8.7	9.0	1.0	10	290
DEC. 19...	1430	855	670	8.1	4.5	11.5	5	425

RIO GRANDE BASIN

08358300 RIO GRANDE CONVEYANCE CHANNEL AT SAN MARCIAL, N. MEX.--Continued
 FIELD AND BIOCHEMICAL MEASUREMENTS, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	DIS- SOLVED OXYGEN (MG/L) (00300)	CHEM- ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L) (00335)	BIO- CHEM- ICAL OXYGEN DEMAND (MG/L) (00310)	IMME- DIATE COLI- FORM (COL. PER 100 ML) (31501)	FECAL COLI- FORM (COL. PER 100 ML) (31616)	STREP- TOCOCCI (COL- ONIES PER 100 ML) (31679)	TOTAL ORGANIC CARBON * (C) (00680)
JAN. 06...	12.7	10	3.2	14000	1300	200	--
FEB. 01...	10.7	20	4.7	41	0	0	--
28...	10.0	15	5.0	E500	E500	<100	--
MAR. 28...	9.6	10	4.1	610	490	110	--
APR. 18...	9.0	12	3.9	1350	230	10	--
MAY 22...	9.1	14	1.6	70	10	<10	--
JUNE 20...	7.0	30	20	>100000	15000	19000	--
JULY 25...	4.4	--	--	--	4600	--	--
AUG. 21...	4.8	--	--	--	490	--	>200
SEP. 18...	6.9	--	--	--	14000	--	1000
OCT. 17...	--	--	--	--	2200	--	150
31...	9.3	--	--	--	770	--	25
DEC. 19...	11.0	--	--	--	16000	--	7.0

E ESTIMATED.

M PRESENCE OF MATERIAL VERIFIED BUT NOT QUANTIFIED.

* Analyzed by New Mexico Environmental Improvement Agency.

BIOLOGICAL ANALYSES, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

Date: April 18, 1972

Method of sampling: Artificial substrate (rocks in basket)

Organisms (classification, number)

Ephemeroptera: Baetidae; Ephemerella sp., 17Heptageniidae; Heptagenia sp., 3Rhythrogena sp., 1Odonata: Coenagrionidae; Hyponeura sp., 1

Plecoptera: Chloroperlidae (early nymphs), 24

Trichoptera: Hydropsychidae, Hydropsyche sp., 17

RIO GRANDE BASIN

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08358300 RIO GRANDE CONVEYANCE CHANNEL AT SAN MARCIAL, N. MEX.--Continued

PESTICIDE ANALYSES, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	TOTAL ORGANIC CARBON (C) (MG/L) (00680)	ALDRIN (UG/L) (39330)	ALDRIN IN BOTTOM DE- POSITS (UG/KG) (39333)	CHLOR- DANE (UG/L) (39350)	CHLOR- DANE IN BOTTOM DE- POSITS (UG/KG) (39351)	DDD (UG/L) (39360)	DDD IN BOTTOM DE- POSITS (UG/KG) (39363)	DDE (UG/L) (39365)	DDE IN BOTTOM DE- POSITS (UG/KG) (39368)	DDT (UG/L) (39370)
FEB. 01...	1130	--	.00	<.2	.0	<1	.00	<.2	.00	<.2	.00
MAR. 28...	1200	--	.00	<.2	.0	<1	.00	<.2	.00	<.2	.00
MAY 22...	1130	--	.00	<.2	.0	<1	.00	<.2	.00	<.2	.00
JULY 25...	1400	700	.00	--	.0	--	.00	--	.02	--	.00
AUG. 21...	1400	1760	--	--	--	--	--	--	--	--	--
OCT. 31...	1000	--	.00	.0	.0	0	.00	.0	.01	.0	.02

DATE	DDT IN BOTTOM DE- POSITS (UG/KG) (39373)	DI- AZINON (UG/L) (39570)	DI- ELDRIN (UG/L) (39380)	DI- ELDRIN IN BOTTOM DE- POSITS (UG/KG) (39383)	ENDRIN (UG/L) (39390)	ENDRIN IN BOTTOM DE- POSITS (UG/KG) (39393)	HEPTA- CHLOR (UG/L) (39410)	HEPTA- CHLOR IN BOTTOM DE- POSITS (UG/KG) (39413)	HEPTA- CHLOR IN POT- EPOXIDE (UG/L) (39420)	HEPTA- CHLOR IN POT- EPOXIDE TOM DE- POSITS (UG/KG) (39423)
FEB. 01...	<.2	.00	.00	<.2	.00	<.2	.00	<.2	.00	<.2
MAR. 28...	<.2	--	.01	2.4	.00	<.2	.00	<.2	.00	<.2
MAY 22...	<.2	.00	.00	<.2	.00	<.2	.00	<.2	.00	<.2
JULY 25...	--	.07	.00	--	.00	--	.00	--	.00	--
AUG. 21...	--	--	--	--	--	--	--	--	--	--
OCT. 31...	.0	.00	.01	.0	.00	.0	.00	.0	.00	.0

DATE	LINDANE (UG/L) (39340)	LINDANE IN BOTTOM DE- POSITS (UG/KG) (39343)	MALA- THION (UG/L) (39530)	METHYL PARA- THION (UG/L) (39600)	PARA- THION (UG/L) (39540)	PCB (UG/L) (39516)	PCB IN BOTTOM DE- POSITS (UG/KG) (39519)	2,4-D (UG/L) (39730)	2,4,5-T (UG/L) (39740)	SILVEX (UG/L) (39760)
FEB. 01...	.00	<.2	.00	.00	.00	.0	<2	.00	.00	.00
MAR. 28...	.01	<.2	--	--	--	.0	<2	.00	.00	.00
MAY 22...	.00	<.2	.00	.00	.00	.0	<2	.00	.00	.00
JULY 25...	.00	--	.00	.00	.00	.0	--	.00	.00	.00
AUG. 21...	--	--	--	--	--	--	--	--	--	--
OCT. 31...	.00	.0	.00	.00	.00	.0	0	.00	.00	.00

08358300 RIO GRANDE CONVEYANCE CHANNEL AT SAN MARCIAL, N. MEX.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972
(ONCE-DAILY)

[illegible]

TEMPERATURE (DEG. C) OF WATER-CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972
(ONCE-DAILY)

[illegible]

08358300 RIO GRANDE CONVEYANCE CHANNEL AT SAN MARCIAL, N. MEX.--Continued

SUSPENDED-SEDIMENT DISCHARGE, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

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	1210	5200	17000	795	2640	5670	1020	3400	9360
2	1040	4720	13300	790	5800	12400	875	3440	8130
3	900	4400	10700	820	4200	9300	1170	5200	16400
4	940	4700	11900	790	2080	4440	1140	4800	14800
5	1020	5100	14000	745	1800	3620	1030	2600	7230
6	770	4100	8520	730	1900	3740	1220	4070	14600
7	525	2300	3260	670	1670	3020	1020	4160	12200
8	525	1300	1840	660	1850	3300	770	2240	4660
9	500	900	1220	650	1490	2610	695	2250	4220
10	485	800	1050	615	1900	3150	685	1900	3510
11	765	2310	5210	665	2400	4310	850	2000	4590
12	795	3760	8710	640	2100	3740	870	2300	5400
13	970	5400	14100	625	1980	3340	955	3600	9280
14	1140	7000	21500	555	1940	2910	905	1920	4690
15	1460	9580	39600	570	2100	3230	1000	2200	5940
16	1080	4050	11800	540	2200	3210	1190	2100	6750
17	965	3200	8340	560	2500	3780	1260	2150	7310
18	920	2400	5960	610	2600	4280	1220	2500	8240
19	945	2200	5610	625	2200	3710	1070	2000	5780
20	950	2050	5260	650	2000	3510	1040	2500	7020
21	850	2040	4680	710	2150	4120	1120	2910	8800
22	905	1990	4860	910	2640	6490	935	2210	5580
23	900	1990	4840	990	2620	7000	760	1300	2670
24	885	2450	5850	1110	3300	9890	735	1150	2280
25	875	3100	7320	1320	3700	13200	575	1060	1650
26	890	2450	5890	1780	7200	34600	520	2250	3160
27	890	1700	4090	1650	5500	24500	630	1750	2980
28	770	1460	3040	1320	5300	18900	575	1900	2950
29	775	1700	3560	1420	4300	16500	540	1320	1920
30	880	2100	4990	--	--	--	505	1150	1570
31	805	1900	4130	--	--	--	475	950	1220
TOTAL	27330	--	262130	24535	--	222470	27355	--	194890

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	495	1200	1600	71	129	25	14	98	3.7
2	420	950	1080	57	116	18	9.8	93	2.5
3	460	1150	1430	51	97	13	9.8	75	2.0
4	588	950	995	49	68	9.0	9.8	66	1.7
5	255	700	482	43	59	6.8	8.4	53	1.2
6	205	540	299	37	53	5.3	5.6	53	.80
7	185	600	300	39	70	7.4	2.8	55	.42
8	146	572	225	37	78	7.8	1.4	51	.19
9	132	535	191	33	280	25	1.4	48	.18
10	142	595	228	25	182	12	1.0	50	.14
11	120	589	191	24	73	4.7	1.0	53	.14
12	124	739	247	28	67	5.1	1.0	54	.15
13	120	570	185	28	67	5.1	1.4	40	.15
14	118	552	176	55	150	22	0	0	0
15	165	588	262	58	177	28	0	0	0
16	228	665	409	66	255	45	0	0	0
17	240	799	518	88	282	67	185	26900	28100
18	368	892	886	77	310	68	470	50900	88000
19	228	755	465	55	235	35	100	34700	9370
20	243	765	502	35	180	16	68	30800	5650
21	231	680	424	30	150	12	33	13100	1170
22	220	610	362	24	132	8.6	8.4	3500	79
23	163	599	264	21	117	6.6	4.2	2000	23
24	185	630	315	21	113	6.4	0	0	0
25	168	392	178	14	109	4.1	0	0	0
26	150	360	146	11	105	3.1	0	0	0
27	114	260	80	9.8	104	2.8	0	0	0
28	90	202	49	11	105	3.1	0	0	0
29	79	167	36	11	108	3.2	0	0	0
30	80	126	27	14	108	4.1	0	0	0
31	--	--	--	21	107	6.1	--	--	--
TOTAL	6262	--	12552	1141.8	--	481.3	936.0	--	152405.27

RIO GRANDE BASIN

08358300 RIO GRANDE CONVEYANCE CHANNEL AT SAN MARCIAL, N. MEX.--Continued

SUSPENDED-SEDIMENT DISCHARGE, CALENDAR YER JANUARY 1972 TO DECEMBER 1972

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	0	0	0	0	0	348	31700	87200
2	0	0	0	0	0	0	635	59800	211000
3	0	0	0	0	0	0	1060	49300	206000
4	0	0	0	82	35800	41600	1450	101000	344000
5	0	0	0	560	77600	159000	560	59600	89900
6	0	0	0	910	84300	286000	465	24000	30100
7	0	0	0	450	58000	70500	710	38500	92500
8	0	0	0	168	39000	17700	525	19000	26900
9	0	0	0	122	38000	12500	945	32000	50600
10	0	0	0	85	47000	10800	1350	80000	240000
11	0	0	0	39	31000	3260	1080	103000	321000
12	0	0	0	36	35800	7930	1380	90700	340000
13	0	0	0	100	104000	28100	1620	61800	271000
14	0	0	0	60	71000	11500	1890	99900	504000
15	0	0	0	9.4	39000	1030	1410	45300	180000
16	0	0	0	0	0	0	845	19000	43300
17	0	0	0	0	0	0	1060	42800	132000
18	4.2	62000	703	66	23900	19100	660	23000	41000
19	0	0	0	895	67600	205000	344	14500	13500
20	0	0	0	535	112000	172000	296	10000	7990
21	203	41800	46300	306	95000	77100	460	21000	26100
22	336	35100	18500	276	56500	52000	810	66600	172000
23	760	82900	219000	130	57100	21400	570	30000	46200
24	193	64000	33400	60	8500	1380	360	14600	14200
25	360	45100	68800	104	54000	15200	276	13700	10200
26	850	82800	243000	450	51800	174000	215	8100	4700
27	195	68000	35800	1970	69000	367000	203	5000	2740
28	173	40900	21400	1920	123000	638000	175	3500	1650
29	200	38500	20800	1900	101000	518000	120	3500	1130
30	124	32000	10700	1700	73000	335000	88	2500	594
31	46	34000	4220	1630	54400	243000	--	--	--
TOTAL	3444.2	--	722623	14563.8	--	3488100	21910	--	3511504
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	76	1250	257	1290	13200	46000	900	10900	26500
2	54	350	51	1560	16800	70800	995	11000	29600
3	28	255	19	1580	16000	68300	915	6000	14800
4	21	248	14	1420	14500	55600	835	3900	8790
5	20	252	14	1310	14500	51300	930	4300	10800
6	18	267	13	1370	14000	51800	970	5400	14100
7	55	1050	156	1470	13900	55200	950	5100	13100
8	68	1600	294	1530	14200	58700	940	4900	12400
9	82	1650	365	1450	14200	55600	930	4800	12100
10	94	1680	426	1590	15400	66100	815	4100	9020
11	84	1640	372	1390	14500	54400	935	5650	14300
12	102	7000	1930	1400	14100	53300	855	5290	12200
13	667	55300	119000	1330	13100	47000	885	5290	12600
14	635	48900	113000	1270	12100	41500	935	5380	13600
15	600	47700	90600	1270	11400	39100	935	5130	13000
16	621	58200	120000	1210	9600	31400	785	4080	8650
17	635	47500	81400	1250	9000	30400	805	3700	8040
18	695	49500	92900	1300	8250	29000	805	3200	6960
19	640	34000	58800	1330	7750	27800	760	3090	6340
20	1430	44400	97400	1260	6850	23300	870	3300	7750
21	1720	13500	62700	1260	6180	21000	935	3300	8330
22	1720	21500	99800	1260	5400	18400	805	2580	5610
23	1640	30500	135000	1270	4800	16500	855	3190	7360
24	1430	25500	98500	1230	4700	15600	885	3100	7410
25	1160	24300	76100	1130	4450	13600	800	3400	7340
26	1630	39000	172000	1170	4350	13700	850	3500	8030
27	1630	33500	147000	980	9800	25900	890	3850	9250
28	1440	27700	108000	835	3600	8120	865	3400	7940
29	1190	24000	77100	960	7000	18100	850	3500	8030
30	915	10800	26700	1040	13500	37900	1010	4200	11500
31	1020	9450	26000	--	--	--	962	3700	9610
TOTAL	22120	--	1805911	38715	--	1145420	27457	--	345060

TOTAL DISCHARGE FOR 1972 WATER YEAR (CFS-DAYS)
 TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR 1972 WATER YEAR (TONS)
 TOTAL DISCHARGE FOR 1972 CALENDAR YEAR (CFS-DAYS)
 TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR 1972 CALENDAR YEAR (TONS)

206201.8
 11094431.57
 215769.8
 11843546.57

RIO GRANDE BASIN

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08358300 RIO GRANDE CONVEYANCE CHANNEL AT SAN MARCIAL, N. MEX.--Continued

INSTANTANEOUS SUSPENDED SEDIMENT AND PARTICLE SIZE, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	TEMPER- ATURE (DEG C) (00010)	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SUS- PEN- DED SEDI- MENT (MG/L) (80154)	SUS- PEN- DED SEDI- MENT DIS- CHARGE (T/DAY) (80155)	SUS. SED. FALL DIAM. % FINER THAN .002 MM (70337)	SUS. SED. FALL DIAM. % FINER THAN .004 MM (70338)	SUS. SED. FALL DIAM. % FINER THAN .016 MM (70340)	SUS. SED. FALL DIAM. % FINER THAN .062 MM (70342)	SJS. SED. FALL DIAM. % FINER THAN .125 MM (70343)	SUS. SED. FALL DIAM. % FINER THAN .250 MM (70344)	SUS. SED. FALL DIAM. % FINER THAN .500 MM (70345)
JAN.												
JAN.	16...	5.0	1040	3890	10900	19	22	34	67	88	99	100
FEB.												
FEB.	27...	10.0	1570	5220	22100	46	52	69	93	98	100	--
MAR.												
MAR.	06...	13.0	1020	2160	5950	28	36	53	74	88	97	100
MAR.	20...	12.0	1100	2540	7540	28	32	46	81	94	100	--
APR.												
APR.	03...	11.5	409	905	999	33	41	57	89	98	100	--
APR.	17...	12.0	237	800	512	39	48	67	90	96	100	--
JUNE												
JUNE	20...	19.5	74	32800	6550	70	86	99	100	--	--	--
JULY												
JULY	24...	19.0	207	73400	41000	57	69	90	98	98	99	100
AUG.												
AUG.	07...	21.5	445	61100	73400	57	68	86	98	100	--	--
AUG.	28...	17.5	1230	92200	306000	43	54	71	82	97	100	--
SEP.												
SEP.	05...	--	350	51600	48800	63	79	96	100	--	--	--
SEP.	15...	18.5	1460	61600	243000	51	64	70	88	98	100	--
SEP.	25...	15.0	298	15600	12600	68	77	91	97	99	100	--
NOV.												
NOV.	13...	9.0	1340	12700	45900	25	30	37	63	91	100	--
NOV.	27...	5.0	955	9570	24700	17	20	26	54	91	100	--
DEC.												
DEC.	19...	4.5	713	3660	7050	22	26	38	69	94	99	100

PARTICLE SIZE OF SURFACE BED MATERIAL, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SUS- PEN- DED SEDI- MENT (MG/L) (80154)	SUS- PEN- DED SEDI- MENT DIS- CHARGE (T/DAY) (80155)	BED MAT. FALL DIAM. % FINER THAN .062 MM (80158)	BED MAT. FALL DIAM. % FINER THAN .125 MM (80159)	BED MAT. FALL DIAM. % FINER THAN .250 MM (80160)	BED MAT. FALL DIAM. % FINER THAN .500 MM (80161)	BED MAT. FALL DIAM. % FINER THAN 1.00 MM (80162)	BED MAT. FALL DIAM. % FINER THAN 2.00 MM (80163)
JAN.										
JAN.	16...	1015	1040	3890	10900	22	80	98	99	100
FEB.										
FEB.	06...	1100	--	--	--	35	76	95	96	97
FEB.	27...	1200	1570	5220	22100	21	71	96	97	97
MAR.										
MAR.	06...	0945	1020	2160	5950	11	55	91	100	--
MAR.	20...	1100	1100	2540	7540	42	81	94	99	100
APR.										
APR.	03...	0845	409	905	999	1	9	78	100	--
JUNE										
JUNE	20...	1000	74	32800	6550	1	4	83	100	--
JULY										
JULY	24...	1015	207	73400	41000	7	10	59	98	100
JULY	24...	1030	--	--	--	3	3	51	97	100
AUG.										
AUG.	07...	1000	445	61100	73400	11	24	78	99	100
AUG.	21...	1000	--	--	--	8	42	93	99	100
AUG.	28...	1215	1230	92200	306000	70	88	99	100	--
SEP.										
SEP.	05...	1045	350	51600	48800	6	28	76	97	100
SEP.	15...	0800	1460	61600	243000	36	87	97	98	98
SEP.	25...	1100	298	15600	12600	2	9	83	99	100
NOV.										
NOV.	13...	1200	1340	12700	45900	34	82	97	100	--
NOV.	27...	1015	955	9570	24700	21	80	100	--	--

RIO GRANDE BASIN

08358300 RIO GRANDE CONVEYANCE CHANNEL AT SAN MARCIAL, N. MEX.--Continued

TOTAL SEDIMENT DISCHARGE, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	TEMPER- ATURE (DEG C) (00010)	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SUS- PENDE SEDIM- ENT (MG/L) (80154)	SUS- PENDE SEDIM- ENT DIS- CHARGE (T/DAY) (80155)	TOTAL SEDIM- ENT DIS- CHARGE (T/DAY) (80156)	STREAM WIDTH (FT) (00004)	MEAN DEPTH (FT) (00064)	STREAM VELOC- ITY (FPS) (00055)
JAN. 16...	1015	5.0	1040	3890	10900	15800	64	3.1	5.3
FEB. 27...	1200	10.0	1570	5220	22100	26500	67	4.1	5.7
MAR. 06...	0945	13.0	1020	2160	5950	9120	64	3.1	5.1
20...	1100	12.0	1100	2540	7540	12300	65	3.2	5.3
APR. 03...	0845	11.5	409	905	999	1450	68	1.8	3.3
17...	0830	12.0	237	800	512	642	66	1.8	2.0
JUNE 20...	1000	19.5	74	32800	6550	6680	65	.83	1.4
JULY 24...	1015	19.0	207	73400	41000	42700	65	1.1	2.9
AUG. 07...	1000	21.5	445	61100	73400	75700	69	1.5	4.3
28...	1215	17.5	1230	92700	306000	307000	65	2.9	6.4
SEP. 05...	1045	--	350	51600	48800	49000	62	1.4	4.1
25...	1100	15.0	298	15600	12600	13800	64	1.4	3.4
NOV. 13...	1200	9.0	1340	12700	45900	57500	63	3.6	5.9
27...	1015	5.0	955	9570	24700	33500	63	2.7	5.6
DEC. 19...	1430	4.5	713	3660	7050	10200	65	2.5	4.4

08358400 RIO GRANDE FLOODWAY AT SAN MARCIAL, N. MEX.
(Irrigation and surveillance network station)

LOCATION.--Lat 33°40'50", long 106°59'30", Socorro County, in Pedro Armendaris Grant No. 33 at gaging station on pier of the Atchison, Topeka, and Santa Fe Railway Co. bridge, 1.1 miles downstream from former site of San Marcial, and 18.5 miles southwest of San Antonio.

DRAINAGE AREA.--27,700 sq mi, approximately (includes 2,940 sq mi in closed basin in San Luis Valley, Colo.).

PERIOD OF RECORD.--Chemical analyses: May 1905 to April 1907, July 1946 to current year.

Specific conductance: May 1905 to April 1907, July 1946 to current year.

Water temperatures: January 1949 to current year.

Sediment records: July 1946 to current year.

EXTREMES:

Current year:

Specific conductance: Maximum daily, 1,430 micromhos Aug. 28; minimum daily, 428 micromhos Aug. 22.

Water temperatures: Maximum, 29.0°C July 28; minimum, 7.0°C Feb. 27.

Sediment concentrations: Maximum daily, 82,800 mg/l July 27; minimum daily, no flow on many days.

Sediment discharge: Maximum daily, 269,000 tons Oct. 21; minimum daily, 0 tons on many days.

Period of record:

Dissolved solids (1946-70): Maximum, 2,030 mg/l July 20, 21, 1967; minimum, 209 mg/l June 19, 20, 1967.

Hardness (1946-70): Maximum, 1,010 mg/l Aug. 3-10, 1954; minimum, 99 mg/l June 19, 20, 1967.

Specific conductance: Maximum daily, 2,730 micromhos Apr. 8, 1953; minimum daily, 293 micromhos June 20, 1967.

Water temperatures (1949-62, 1964-72): Maximum, 36.0°C Aug. 11, 1951; minimum (1949-62, 1965-72), freezing point on many days.

Sediment concentrations: Maximum daily, 126,000 mg/l Aug. 8, 1959; minimum daily, no flow on many days each year.

Sediment discharge: Maximum daily, 966,000 tons Oct. 22, 1957; minimum daily, 0 tons on many days each year.

REMARKS.--Records of chemical analyses and sediment discharge for years prior to 1946 have been published in Water Bulletins of International Boundary and Water Commission. No flow Jan. 1 to Feb. 26, Feb. 29 to June 16, June 20 to July 20, July 29 to Aug. 5, 9-17, 20, 21, 24, 25, Sept. 5-9, Sept. 18 to Oct. 11, 16, 18, 30, Oct. 31 to Dec. 31. Additional sediment total load determinations were made bi-weekly when needed.

CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	DIS- SOLVED SILICA (SI02) (MG/L) (00060)	DIS- SOLVED IRON (FE) (MG/L) (01046)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (K) (MG/L) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	RICAR- BONATE (CO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)
FEB. 27...	1100	50	23	61	10	48	5.6	184	0
AUG. 07...	1015	170	20	30	160	32	120	5.9	309
SEP. 15...	1045	2640	14	20	150	30	190	7.8	234
OCT. 17...	1200	50	12	40	70	11	60	4.6	97

DATE	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED NITRATE (N) (MG/L) (00614)	DIS- SOLVED NITRATE (N) (MG/L) (00613)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	DIS- SOLVED AMMONIA NITRO- GEN (N) (MG/L) (00608)	ORGANIC NITRO- GEN (N) (MG/L) (00605)	TOTAL NITRO- GEN (N) (MG/L) (00600)	TOTAL PHOS- PHORUS (P) (MG/L) (00665)
FEB. 27...	120	19	.5	--	--	.62	--	--	--	--
AUG. 07...	450	41	.6	--	--	.14	--	--	--	--
SEP. 15...	660	35	.6	--	--	.36	--	--	--	--
OCT. 17...	230	30	.6	.00	.01	.00	.05	1.1	1.1	.60

DATE	DIS- SOLVED ORTHOPHOS- PHORUS (P) (MG/L) (00671)	DIS- SOLVED SOLIDS (RESIDUE AT 180 C) (MG/L) (70300)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L) (70301)	NON- CAR- BONATE HARD- NESS (CA, MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AD- SORP- TION RATIO (MG/L) (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (MG/L) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	DIS- SOLVED PHOSPHORUS (P) (MG/L) (01020)
FEB. 27...	.09	386	381	190	43	1.5	603	7.3	7.0	100
AUG. 07...	.01	1110	982	530	280	2.3	1350	7.6	--	190
SEP. 15...	.01	1230	1200	500	310	3.7	1620	7.8	--	190
OCT. 17...	.03	480	466	220	140	1.8	728	7.3	18.0	100

FIELD AND BIOCHEMICAL MEASUREMENTS, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

* Analyzed by New Mexico Environmental Improvement Agency.

	ENDRIN	HEPTA- CHLOR EPOXIDE	LINDANE	2,4-D	2,4,5-T	SILVEX
DATE	(UG/L) (39390)	(UG/L) (39410)	(UG/L) (39420)	(UG/L) (39730)	(UG/L) (39740)	(UG/L) (39760)
DEC. 22...	.00	.00	.00	.00	.00	.00

[illegible]

RIO GRANDE BASIN

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08358400 RIO GRANDE FLOODWAY AT SAN MARCIAL, N. MEX.--Continued

TEMPERATURE (DEG. C) OF WATER-CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972
(ONCE-DAILY)

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	---	22.5	---	---	---	---
9	---	---	---	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---	18.0	---	---
18	---	---	---	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	19.5	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---	---	---	---
26	---	---	---	---	---	---	---	---	---	---	---	---
27	---	7.0	---	---	---	---	---	---	---	---	---	---
28	---	---	---	---	---	---	29.0	---	---	---	---	---
29	---	---	---	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

SUSPENDED-SEDIMENT DISCHARGE, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

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				0	0	0			
2				0	0	0			
3				0	0	0			
4				0	0	0			
5				0	0	0			
6				0	0	0			
7				0	0	0			
8				0	0	0			
9				0	0	0			
10				0	0	0			
11				0	0	0			
12				0	0	0			
13				0	0	0			
14				0	0	0			
15				0	0	0			
16				0	0	0			
17				0	0	0			
18				0	0	0			
19				0	0	0			
20				0	0	0			
21				0	0	0			
22				0	0	0			
23				0	0	0			
24				0	0	0			
25				0	0	0			
26				0	0	0			
27				59	9280	2020			
28				2.0	788	14			
29				0	0	0			
30				--	--	--			
31				--	--	--			
TOTAL	0	--	0	61.0	--	2034	0	--	0

RIO GRANDE BASIN

08358400 RIO GRANDE FLOODWAY AT SAN MARCIAL, N. MEX.--Continued

SUSPENDED-SEDIMENT DISCHARGE, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

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							0	0	0
2							0	0	0
3							0	0	0
4							0	0	0
5							0	0	0
6							0	0	0
7							0	0	0
8							0	0	0
9							0	0	0
10							0	0	0
11							0	0	0
12							0	0	0
13							0	0	0
14							0	0	0
15							0	0	0
16							0	0	0
17							6.6	3530	554
18							55	27100	5160
19							16	19300	1370
20							0	0	0
21							0	0	0
22							0	0	0
23							0	0	0
24							0	0	0
25							0	0	0
26							0	0	0
27							0	0	0
28							0	0	0
29							0	0	0
30							0	0	0
31							--	--	--
TOTAL	0	--	0	0	--	0	77.6	--	7084

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	0	0	0	0	0	491	44300	89400
2	0	0	0	0	0	0	16	10000	452
3	0	0	0	0	0	0	152	26300	26100
4	0	0	0	0	0	0	266	35700	38700
5	0	0	0	0	0	0	0	0	0
6	0	0	0	93	40000	21100	0	0	0
7	0	0	0	138	58100	37000	0	0	0
8	0	0	0	7.0	16600	407	0	0	0
9	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	13	13300	1760
11	0	0	0	0	0	0	53	39300	6670
12	0	0	0	0	0	0	791	40500	94400
13	0	0	0	0	0	0	1060	39500	133000
14	0	0	0	0	0	0	1460	46000	181000
15	0	0	0	0	0	0	1960	46800	263000
16	0	0	0	0	0	0	125	15000	5060
17	0	0	0	0	0	0	4.4	4000	48
18	0	0	0	40	40000	4320	0	0	0
19	0	0	0	5.0	3000	41	0	0	0
20	0	0	0	0	0	0	0	0	0
21	195	29700	48400	0	0	0	0	0	0
22	59	19000	5100	8.6	4320	116	0	0	0
23	53	36200	11800	5.6	1800	17	0	0	0
24	5.0	13000	176	0	0	0	0	0	0
25	2.6	5460	215	0	0	0	0	0	0
26	15	22300	1510	22	3390	1660	0	0	0
27	74	82800	25800	522	45100	78100	0	0	0
28	2.8	9900	75	143	31100	14700	0	0	0
29	0	0	0	425	36000	55800	0	0	0
30	0	0	0	62	18300	5410	0	0	0
31	0	0	0	486	55200	86800	--	--	--
TOTAL	406.4	--	91076	1955.2	--	305471	6391.4	--	839570

RIO GRANDE BASIN

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08358400 RIO GRANDE FLOODWAY AT SAN MARCIAL, N. MEX.--Continued

SUSPENDED-SEDIMENT DISCHARGE, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

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	0	0	0						
2	0	0	0						
3	0	0	0						
4	0	0	0						
5	0	0	0						
6	0	0	0						
7	0	0	0						
8	0	0	0						
9	0	0	0						
10	0	0	0						
11	0	0	0						
12	12	7180	853						
13	300	37100	56600						
14	1040	56600	184000						
15	92	19000	4720						
16	0	0	0						
17	5.5	15400	719						
18	0	0	0						
19	1.0	4500	12						
20	489	36400	63900						
21	1580	63000	269000						
22	1220	48400	167000						
23	280	22500	18500						
24	74	25500	5090						
25	9.8	12000	318						
26	1530	53600	231000						
27	401	31500	44000						
28	145	20100	10700						
29	.50	3500	4.7						
30	0	0	0						
31	0	0	0						
TOTAL	7179.80	--	1056416.7	0	--	0	0	--	0

TOTAL DISCHARGE FOR 1972 WATER YEAR (CFS-DAYS) 9527.30
 TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR 1972 WATER YEAR (TONS) 1400686
 TOTAL DISCHARGE FOR 1972 CALENDAR YEAR (CFS-DAYS) 16071.40
 TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR 1972 CALENDAR YEAR (TONS) 2301651.7

INSTANTANEOUS SUSPENDED SEDIMENT AND PARTICLE SIZE, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	TEMPER- ATURE (DEG C) (00010)	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SUS- PENDE DI- CHARGE (MG/L) (80154)	SUS- PENDE DI- CHARGE (T/DAY) (80155)	SUS. SED. FALL DIAM. % FINER THAN (70337)	SUS. SED. FALL DIAM. % FINER THAN (70338)	SUS. SED. FALL DIAM. % FINER THAN (70340)	SUS. SED. FALL DIAM. % FINER THAN (70342)
FEB.									
27...	0950	7.0	50	11900	1610	68	85	99	100
JULY									
27...	1700	29.0	9.2	55500	1380	77	91	100	--
AUG.									
07...	1115	22.5	203	77400	42400	76	87	98	100
28...	1200	18.5	210	55300	31400	69	86	99	100
SEP.									
13...	1030	--	1340	38200	138000	68	87	97	100

RIO GRANDE BASIN

08358400 RIO GRANDE FLOODWAY AT SAN MARCIAL, N. MEX.--Continued
 PARTICLE SIZE OF SURFACE BED MATERIAL, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SUS- PENDE DIS- CHARGE (MG/L) (80154)	SUS- PENDE DIS- CHARGE (T/DAY) (80155)	BED MAT. FALL DIAM. % FINER THAN .062 MM (80158)	BED MAT. FALL DIAM. % FINER THAN .125 MM (80159)	BED MAT. FALL DIAM. % FINER THAN .250 MM (80160)	BED MAT. FALL DIAM. % FINER THAN .500 MM (80161)
FEB. 27...	0950	50	11900	1610	28	46	90	100
AUG. 07...	1115	203	77400	42400	36	64	98	100
28...	1200	210	55300	31400	60	76	98	100
SEP. 13...	1030	1340	38200	138000	62	91	100	--

TOTAL SEDIMENT DISCHARGE, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	TEMPER- ATURE (DEG C) (00010)	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SUS- PENDE DIS- CHARGE (MG/L) (80154)	SUS- PENDE DIS- CHARGE (T/DAY) (80155)	TOTAL SEDIM- ENT DIS- CHARGE (T/DAY) (80156)	STREAM WIDTH (FT) (00004)	MEAN DEPTH (FT) (00064)	STREAM VELOC- ITY (FPS) (00055)
FEB. 27...	0950	7.0	50	11900	1610	1930	27	.79	2.4
AUG. 07...	1115	22.5	203	77400	42400	43500	78	1.0	2.5
28...	1200	18.5	210	55300	31400	39800	120	.83	2.1
SEP. 13...	1030	--	1340	38200	138000	140000	126	7.5	1.4

RIO GRANDE BASIN

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08363700 TORTUGAS ARROYO NEAR LAS CRUCES, N. MEX.

LOCATION.--Lat 32°17'15", long 106°43'43", Dona Ana County, in Dona Ana Bend Colony Grant, at gaging station, downstream from flood detention dam, 1.2 miles northeast of New Mexico State University, and 3.3 miles southeast of Las Cruces.

DRAINAGE AREA.--20.7 sq mi.

PERIOD OF RECORD.--Sediment records: July 1963 to current year.

REMARKS.--Records of specific conductance and water temperatures available at the district office in Albuquerque, N. Mex.

SUSPENDED SEDIMENT, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	Flow event no.	Flow duration (hours)	Mean Discharge for event (cfs)	Mean concentration (mg/l)	Outflow sediment discharge (tons)
June 11-13, 1972	48	46	23.2	1090	148
Aug. 18	49	2	.25	2540	.14
Aug. 27-28	50	21.5	13.5	2880	111
Sept. 1-4	51	71.5	51.2	610	307
Oct. 18-21	52	57.5	4.53	1920	186
Oct. 26	53	23	15.2	3190	191

Instantaneous suspended sediment and particle size, Calendar year January 1972 to December 1972

(C,chemically dispersed; N, native water; P, pipet; S, sieve; V, visual accumulation tube; W, distilled water)

Date of collection	Time	Water temperature (°C)	Discharge (cfs)	Sediment concentration (mg/l)	Sediment discharge (tons per day)	Suspended sediment										Method of analysis
						Percent finer than indicated size in millimeters										
						0.002	0.004	0.008	0.016	0.031	0.062	0.125	0.250	0.500	1.000	
June 12, 1972	1100	16.0	33.3	982	88	98	98	--	99	--	100	--	--	--	--	SPWC
Aug. 27	1000	19.0	28.9	3320	259	65	87	--	100	--	--	--	--	--	--	SPWC
Sept. 2	0900	18.0	71.2	613	118	94	99	--	99	--	99	99	100	--	--	SPWC

RIO GRANDE BASIN

08377900 RIO MORA NEAR TERRERO, N. MEX.
(Hydrologic bench-mark station)

LOCATION.--Lat 35°46'38", long 105°39'27", in E. 1/4 sec. 22, T. 18 N., R. 12 E., San Miguel County, in Santa Fe National Forest, at gaging station 450 ft upstream from bridge on State Highway 63, 600 ft upstream from mouth, and 2.6 miles north of Terrero.

DRAINAGE AREA.--53.2 sq mi.

PERIOD OF RECORD.--Chemical analyses: November 1962 to current year.
Sediment records: August 1967 to current year.

CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	DIS- CHARGE (CFS) (00060)	DIS- SOLVED SILICA (SI02) (MG/L) (00955)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED MAN- GANESE (MN) (UG/L) (01056)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	BICAR- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)
MAR. 13...	1130	17	5.7	40	--	16	1.7	1.3	.5	51	0
MAY 02...	1537	20	5.5	30	13	15	1.6	1.0	.4	48	0
JULY 13...	1504	8.7	6.9	20	--	18	1.9	1.2	.5	57	0
SEP. 05...	1409	49	5.9	20	--	14	1.5	.8	.5	45	0
NOV. 17...	1145	17	6.3	40	0	16	1.6	1.0	.4	51	0

DATE	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED NITRATE (N) (MG/L) (00618)	DIS- SOLVED NITRITE (N) (MG/L) (00613)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	DIS- SOLVED AMMONIA NITRO- GEN (N) (MG/L) (00608)	ORGANIC NITRO- GEN (N) (MG/L) (00605)	TOTAL NITRO- GEN (N) (MG/L) (00600)	TOTAL PHOS- PHORUS (P) (MG/L) (00665)	DIS- SOLVED ORTHO. PHOS- PHORUS (P) (MG/L) (00671)
MAR. 13...	8.0	1.1	.2	--	--	.03	--	--	--	--	.00
MAY 02...	10	.8	.2	.01	.00	.01	.03	.01	.05	.03	.00
JULY 13...	7.6	1.0	.2	.00	.00	.00	.07	.19	.26	.01	.00
SEP. 05...	7.7	.3	.2	.00	.00	.00	.07	.03	.10	.01	.00
NOV. 17...	11	1.1	.1	.01	.00	.01	.00	.08	.09	.02	.00

DATE	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L) (70300)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L) (70301)	HARD- NESS (CA, MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AD- SORP- TION RATIO (MG/L) (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH	TEMPER- ATURE (DEG C) (00010)	DIS- SOLVED IRON (B) (UG/L) (01020)	DIS- SOLVED COPPER (CU) (UG/L) (01040)	DIS- SOLVED ZINC (ZN) (UG/L) (01090)
MAR. 13...	68	60	47	5	.1	103	8.2	6.0	20	--	--
MAY 02...	66	58	44	5	.1	92	7.7	12.0	0	1	8
JULY 13...	70	65	53	6	.1	112	7.9	17.0	10	--	--
SEP. 05...	60	53	41	4	.1	83	7.6	13.0	0	--	--
NOV. 17...	64	63	47	5	.1	104	7.7	.0	30	6	10

08377900 RIO MORA NEAR TERRERO, N. MEX.--Continued

TRACE ELEMENT AND RADIOCHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	DIS- SOLVED ALUM- INUM (AL) (UG/L) (01106)	DIS- SOLVED ARSENIC (AS) (UG/L) (01000)	DIS- SOLVED BARIUM (BA) (UG/L) (01005)	DIS- SOLVED BERYL- LIUM (BE) (UG/L) (01010)	DIS- SOLVED BISMUTH (BI) (UG/L) (01015)	DIS- SOLVED BORON (B) (UG/L) (01020)	DIS- SOLVED CAD- MIUM (CD) (UG/L) (01025)	DIS- SOLVED CHRO- MIUM (CR) (UG/L) (01030)	HEXA- VALENT CHRO- MIUM (CR6) (UG/L) (01032)
MAY 02...	1537	--	1	0	--	--	0	0	--	0
NOV. 17...	1145	150	5	0	<1	<2	30	0	<2	0

DATE	DIS- SOLVED COBALT (CO) (UG/L) (01035)	DIS- SOLVED COPPER (CU) (UG/L) (01040)	DIS- SOLVED GALLIUM (GA) (UG/L) (01120)	DIS- SOLVED GER- MANIUM (GE) (UG/L) (01125)	DIS- SOLVED IRON (FE) (UG/L) (01046)	TOTAL LEAD (PB) (UG/L) (01051)	DIS- SOLVED LEAD (PB) (UG/L) (01049)	DIS- SOLVED LITHIUM (LI) (UG/L) (01130)	DIS- SOLVED MAN- GANESE (MN) (UG/L) (01056)	TOTAL MERCURY (HG) (UG/L) (71900)
MAY 02...	--	1	--	--	30	2	--	--	13	.8
NOV. 17...	<2	6	<1	<2	40	--	5	<10	0	.5

DATE	DIS- SOLVED MOLYB- DENUM (MO) (UG/L) (01060)	DIS- SOLVED NICKEL (NI) (UG/L) (01065)	DIS- SOLVED SILVER (AG) (UG/L) (01075)	DIS- SOLVED SELE- NIUM (SE) (UG/L) (01145)	DIS- SOLVED STRON- TIUM (SR) (UG/L) (01080)	DIS- SOLVED TIN (SN) (UG/L) (01100)	DIS- SOLVED TANIUM (TI) (UG/L) (01150)	DIS- SOLVED DIUM (V) (UG/L) (01085)	DIS- SOLVED ZINC (ZN) (UG/L) (01090)
MAY 02...	--	--	0	0	--	--	--	--	8
NOV. 17...	<1	2	3	0	28	<2	9	<2.0	10

DATE	DIS- SOLVED ZIR- CONIUM (ZR) (UG/L) (01160)	DIS- SOLVED GROSS ALPHA AS (UG/L) (80030)	SUS- PENDE GROSS ALPHA AS (UG/L) (80040)	DIS- SOLVED GROSS BETA AS (PC/L) (03515)	SUS- PENDE GROSS BETA AS (PC/L) (03516)	DIS- SOLVED GROSS BETA AS /Y90 (PC/L) (80050)	SUS- PENDE GROSS BETA AS /Y90 (PC/L) (80060)	DIS- SOLVED RA-226 (RADON METHOD) (PC/L) (09511)	DIS- SOLVED URANIUM (U) (UG/L) (80020)
MAY 02...	--	--	--	--	--	--	--	--	--
NOV. 17...	<2	<1.1	<.4	3.0	<.4	2.3	<.4	.05	.18

FIELD AND BIOCHEMICAL MEASUREMENTS, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	DIS- CHARGE (CFS) (00060)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	AIR TEMPER- ATURE (DEG C) (00020)	COLOR (PLAT- INUM- COBALT UNITS) (00080)	TUR- BID- ITY (JTU) (00070)
MAR. 13...	1130	17	98	8.0	6.0	24.5	5	5
MAY 02...	1537	20	98	7.8	12.0	16.5	3	1
JULY 13...	1504	8.7	116	8.0	17.0	24.0	5	1
SEP. 05...	1409	49	91	8.2	13.0	22.0	10	1
NOV. 17...	1145	17	97	8.3	.0	2.5	5	1

DATE	DIS- SOLVED OXYGEN (MG/L) (00300)	CHEM- ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L) (00335)	BIO- CHEM- ICAL OXYGEN DEMAND (MG/L) (00310)	IMME- DIATE COLI- FORM (COL. PER 100 ML) (31501)	FECAL COLI- FORM (COL. PER 100 ML) (31616)	STREP- TOCOCCI (COL- ONIES PER 100 ML) (31679)	TOTAL ORGANIC CARBON (C) (MG/L) (00680)
MAR. 13...	11.5	2	.4	0	0	1	--
MAY 02...	10.1	2	.6	0	0	0	--
JULY 13...	6.8	--	--	--	30	--	1.5
SEP. 05...	8.0	--	--	--	--	--	3.0
NOV. 17...	12.0	--	--	--	0	--	2.0

* ANALYZED BY THE NEW MEXICO ENVIRONMENTAL IMPROVEMENT AGENCY.

RIO GRANDE BASIN

08377900 RIO MORA NEAR TERRERO, N. MEX.--Continued

PESTICIDE ANALYSES, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	TOTAL ORGANIC CARBON (C) (MG/L) (00680)	ALDRIN (UG/L) (39330)	ALDRIN IN BOTTOM DE- POSITS (UG/KG) (39333)	CHLOR- DANE (UG/L) (39350)	CHLOR- DANE IN BOTTOM DE- POSITS (UG/KG) (39351)	DDD (UG/L) (39360)	DDD IN BOTTOM DE- POSITS (UG/KG) (39363)	DOE (UG/L) (39365)	DOE IN BOTTOM DE- POSITS (UG/KG) (39368)	DDT (UG/L) (39370)
JULY 13...	1504	.0	--	--	--	--	--	--	--	--	--
NOV. 17...	1145	4.0	.00	.0	.0	3	.00	1.1	.00	1.6	.00

DATE	DDT IN BOTTOM DE- POSITS (UG/KG) (39373)	DI- AZINON (UG/L) (39570)	DI- ELDRIN (UG/L) (39380)	DI- ELDRIN IN BOTTOM DE- POSITS (UG/KG) (39383)	ENDRIN (UG/L) (39390)	ENDRIN IN BOTTOM DE- POSITS (UG/KG) (39393)	HEPTA- CHLOR (UG/L) (39410)	HEPTA- CHLOR IN BOTTOM DE- POSITS (UG/KG) (39413)	HEPTA- CHLOR IN ROT- TOM DE- POSITS (UG/L) (39420)	HEPTA- CHLOR EPOXIDE (UG/KG) (39423)
JULY 13...	--	--	--	--	--	--	--	--	--	--
NOV. 17...	3.6	.00	.00	.0	.00	.0	.00	.0	.00	.0

DATE	LINDANE (UG/L) (39340)	LINDANE IN BOTTOM DE- POSITS (UG/KG) (39343)	MALA- THION (UG/L) (39530)	METHYL PARA- THION (UG/L) (39600)	PARA- THION (UG/L) (39540)	PCB (UG/L) (39516)	PCB IN BOTTOM DE- POSITS (UG/KG) (39519)	2,4-D (UG/L) (39730)	2,4,5-T (UG/L) (39740)	SILVEX (UG/L) (39760)
JULY 13...	--	--	--	--	--	--	--	--	--	--
NOV. 17...	.00	.0	.00	.00	.00	.0	0	.00	.00	.00

INSTANTANEOUS SUSPENDED SEDIMENT AND PARTICLE SIZE, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	TEMPER- ATURE (DEG C) (00010)	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SUS- PENDEO SEDI- MENT DIS- CHARGE (MG/L) (80154)	SUS- PENDEO SEDI- MENT DIS- CHARGE (T/DAY) (80155)
MAR. 07...	1625	4.5	19	7	.36
27...	1015	1.5	18	6	.29
APR. 20...	1045	3.0	20	24	1.3
MAY 10...	1010	5.0	28	2	.15
JUNE 01...	1110	10.0	26	6	.42
JULY 11...	1050	13.0	8.7	12	.28
AUG. 02...	1415	16.5	34	6	.55
SEP. 12...	1545	--	38	2	.21
NOV. 02...	1400	1.0	30	11	.89
21...	1245	.0	18	4	.19
DEC. 11...	1415	.0	19	3	.15

RIO GRANDE BASIN

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08378500 PECOS RIVER NEAR PECOS, N. MEX.

LOCATION. --Lat 35°42'30", long 105°40'55", in NE¼ sec.17, T.17 N., R.12 E., San Miguel County, in Santa Fe National Forest, at gaging station on left bank at downstream side of bridge on private road, 300 ft upstream from Indian Creek, 2.4 miles downstream from Holy Ghost Creek, and 9.0 miles north of Pecos.

DRAINAGE AREA.--189 sq mi.

PERIOD OF RECORD.--Chemical analyses: July 1970 to current year.

FIELD AND BIOCHEMICAL MEASUREMENTS, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

FIELD AND BIOCHEMICAL MEASUREMENTS, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	DIS- CHARGE (CFS) (00060)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	COLOR (PLAT- INUM- COBALT UNITS) (00080)	TUR- BID- ITY (JTU) (00070)
JAN.							
03...	1400	42	197	--	.0	3	1
28...	1230	45	208	--	.0	0	2
FEB.							
16...	1300	30	197	--	1.0	3	1
MAR.							
08...	1005	50	173	--	3.0	4	2
27...	1100	61	158	--	3.0	4	1
APR.							
20...	1205	64	156	--	5.0	5	1
MAY							
02...	1450	74	150	--	11.0	2	1
10...	1045	86	144	--	7.0	5	1
11...	1120	79	146	--	6.5	5	1
JULY							
11...	1200	39	180	--	15.0	8	1
AUG.							
01...	1545	60	151	--	17.5	5	3
23...	1155	72	147	--	14.5	5	1
SEP.							
12...	1600	83	144	--	15.0	10	1
NOV.							
02...	1120	76	157	8.0	10.0	5	--
21...	1040	52	166	7.8	.5	0	5
DEC.							
12...	1445	54	176	--	.0	8	1

RIO GRANDE BASIN

08379500 PECOS RIVER NEAR ANTON CHICO, N. MEX.

LOCATION.--Lat 35°10'44", long 105°06'30", Guadalupe County in Anton Chico Grant, at gaging station 2.1 miles upstream from Canon Blanco, 2.3 miles southeast of Anton Chico, and 9.7 miles downstream from Tecolote Creek.

DRAINAGE AREA.--1,050 sq mi, approximately (contributing area).

PERIOD OF RECORD.--Chemical analyses: August 1967 to current year.

CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	DIS- CHARGE (CFS) (00060)	DIS- SOLVED SILICA (SI02) (MG/L) (00955)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NESIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	BICAR- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)
JAN. 05...	1235	22	10	--	56	6.2	5.6	1.5	182	0	26	3.2
FEB. 25...	1300	0.05	8.4	--	57	9.3	8.1	1.7	214	0	31	3.1
MAR. 29...	0935	7.5	8.3	--	51	6.5	5.7	1.0	178	0	22	3.2
APR. 25...	1030	4.5	7.2	10	52	8.0	6.0	1.7	202	0	24	2.8
MAY 23...	1600	9.7	7.2	--	47	8.4	6.6	1.3	171	0	23	2.0
JUNE 28...	1210	2.0	8.1	--	49	12	8.0	1.3	203	0	25	2.0
JULY 12...	1340	105	10	--	40	5.4	3.5	2.3	150	0	17	2.0
AUG. 30...	1455	195	11	--	39	4.4	4.3	1.8	125	0	17	1.8
OCT. 12...	1200	24	8.9	9	48	6.0	5.2	1.2	177	0	20	3.4
NOV. 15...	1350	87	10	--	41	4.4	4.5	.9	137	0	20	2.6
DEC. 13...	1115	32	9.3	--	51	6.2	7.7	.9	173	0	25	2.5

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	DIS- SOLVED ORTHU- PHOS- PHORUS (P) (MG/L) (00671)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L) (70300)	DIS- SOLVED SOLIDS (SUM OF CONSTITU- ENTS) (MG/L) (70301)	HARD- NESS (CA+MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AD- SORP- TION RATIO (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- HOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	DIS- SOLVED BORON (B) (UG/L) (01020)
JAN. 05...	.3	.18	--	--	199	170	16	.2	323	8.0	1.0	--
FEB. 25...	.4	.22	--	--	225	180	5	.3	380	8.2	11.0	--
MAR. 29...	.2	.19	--	--	186	150	8	.2	319	8.2	6.0	--
APR. 25...	.3	.21	.00	218	202	160	0	.2	354	8.0	20.0	30
MAY 23...	.3	.10	--	--	180	150	12	.2	313	7.7	25.0	--
JUNE 28...	.3	.04	--	--	206	170	5	.3	365	7.6	26.0	--
JULY 12...	.3	.33	--	--	156	120	0	.1	261	7.6	28.0	--
AUG. 30...	.5	.14	--	--	142	120	13	.2	233	7.6	25.0	--
OCT. 12...	.3	.05	--	--	180	140	0	.2	288	7.6	22.0	20
NOV. 15...	.2	.02	--	--	151	120	8	.2	242	8.1	8.0	--
DEC. 13...	.2	.05	--	--	188	150	11	.3	323	8.1	.0	--

08383000 PECOS RIVER AT SANTA ROSA, N. MEX.

LOCATION.--Lat 34°56'36", long 104°41'55", in NW¼SE¼ sec.3, T.8 N., R.21 E., Guadalupe County, 0.6 mile downstream from gaging station, at bridge on U.S. Highway 66, in Santa Rosa, and 1.3 miles upstream from El Rito Creek.

DRAINAGE AREA.--2,650 sq mi, approximately (contributing area).

PERIOD OF RECORD.--Chemical analyses: July 1905 to December 1906. November 1970 to December 1971 (discontinued).

Specific conductance: October 1964 to current year.

Water temperatures: October 1958 to current year.

Sediment records: October 1958 to current year.

EXTREMES:

Current year:

Specific conductance: Maximum daily, 2,300 micromhos Feb. 3; minimum daily, 187 micromhos Oct. 26.

Water temperatures: Maximum, 35.0°C Sept. 7; minimum, 1.0°C Dec. 6, 11.

Sediment concentrations: Maximum daily, 21,500 mg/l Aug. 8, minimum; daily, 3 mg/l Apr. 30.

Sediment discharge: Maximum daily, 200,000 tons July 22; minimum daily, .09 ton Apr. 30.

Period of record:

Specific conductance: Maximum daily, 2,480 micromhos Sept. 18, 1969; minimum daily, 187 micromhos Oct. 26, 1972.

Water temperatures: Maximum (1958-63, 1964-72), 38.0°C May 11, 1970; minimum, freezing point on several days during winter months of most years.

Sediment concentrations: Maximum daily, 31,400 mg/l Aug. 18, 1961; minimum daily, 3 mg/l Apr. 30, 1972.

Sediment discharge: Maximum daily, 344,000 tons July 30, 1971; minimum daily, .09 ton Apr. 30, 1972.

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972
(ONCE-DAILY)

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	1030	1860	1860	1950	2140	2200	1100	670	403	1600	500	990
2	1350	1970	1880	1930	2120	2210	1100	440	309	1590	528	905
3	1640	2300	1760	1960	2080	2210	1350	428	280	1650	537	970
4	2160	1570	1780	1990	2100	2240	1300	437	348	1660	547	1070
5	2100	1700	1790	1970	2060	2250	480	644	386	1660	557	1120
6	1840	1730	1780	1960	2080	2240	369	672	396	1670	565	997
7	1720	1830	1900	2030	2060	2240	347	545	557	1640	557	1600
8	1740	1910	1890	2010	1980	2240	362	658	689	1640	570	---
9	1780	1750	1870	2050	2220	2210	375	450	542	1700	---	1620
10	1940	1720	1840	2030	2150	2250	382	435	288	1740	---	1750
11	1760	1890	1890	1990	2140	2250	487	502	217	1680	---	1810
12	1650	1770	1900	2090	2130	2250	492	641	209	1640	---	1560
13	1810	1750	1920	2020	2130	2200	391	975	319	1600	---	1380
14	1900	1790	1870	2060	2240	2200	390	1400	433	1700	---	1380
15	2210	1760	1890	2020	2200	2250	582	1440	550	515	---	1500
16	2150	1780	1870	2020	2250	2110	591	1410	654	960	---	1730
17	1740	1770	1870	2080	2250	952	587	1600	700	1410	860	1600
18	1780	1800	1850	2040	2210	672	349	780	625	1530	735	1390
19	1780	1840	---	---	2220	1230	389	760	823	1500	780	1190
20	1770	1840	1880	2140	2230	2200	375	1040	966	---	730	1540
21	1770	1870	1860	2000	2240	2170	596	1220	1160	1150	745	1510
22	1720	1820	1900	2030	2260	2190	342	1440	551	380	741	1400
23	1730	1810	1890	2070	2250	2200	381	1230	725	355	825	1430
24	1730	1840	1970	2070	2220	2290	545	1080	994	276	940	1480
25	1690	1840	1930	2050	2280	2250	651	1320	1380	478	940	1490
26	1680	1870	1940	2100	2230	2240	857	985	1470	187	1060	1630
27	1770	1840	---	2120	2220	2260	545	769	1500	408	960	1510
28	1730	1870	1950	2170	2260	2200	889	402	1560	432	970	1490
29	1730	1890	1940	2060	2210	2230	677	352	1580	475	950	1590
30	1840	---	1920	2080	2170	2200	581	765	1610	498	860	1680
31	1770	---	1880	---	1130	---	780	390	---	517	---	1830
MONTH	1780	1830	1880	2040	2140	2090	596	814	741	1140	---	1440

RIO GRANDE BASIN

08383000 PECOS RIVER AT SANTA ROSA, N. MEX.--Continued

TEMPERATURE (DEG. C) OF WATER, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972
(ONCE-DAILY)

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	3.0	4.0	12.0	17.0	18.0	26.0	28.0	20.0	21.0	25.0	5.0	8.0
2	4.0	3.0	9.0	13.0	26.0	32.0	27.0	27.0	17.0	18.0	9.0	8.0
3	2.0	7.0	10.0	15.0	27.0	34.0	25.0	26.0	16.0	24.0	12.0	6.0
4	2.0	9.0	11.0	18.0	23.0	27.0	14.0	24.0	17.0	21.0	10.0	10.0
5	2.0	9.0	14.0	19.0	23.0	30.0	18.0	22.0	25.0	20.0	12.0	6.0
6	10.0	5.0	16.0	17.0	16.0	21.0	15.0	23.0	23.0	14.0	8.0	1.0
7	7.0	7.0	13.0	20.0	12.0	26.0	19.0	27.0	35.0	19.0	10.0	3.0
8	8.0	8.0	11.0	22.0	27.0	27.0	27.0	24.0	21.0	13.0	8.0	---
9	8.0	7.0	13.0	23.0	25.0	24.0	22.0	27.0	20.0	14.0	9.0	9.0
10	7.0	4.0	13.0	19.0	26.0	28.0	29.0	24.0	22.0	23.0	8.0	2.0
11	3.0	11.0	18.0	19.0	25.0	22.0	29.0	21.0	20.0	25.5	9.0	1.0
12	6.0	8.0	15.0	24.0	25.0	25.0	25.0	20.0	16.0	21.0	9.0	4.5
13	8.0	5.0	17.0	19.0	25.0	17.0	17.0	21.0	21.0	17.0	10.0	3.0
14	5.0	10.0	14.0	13.0	25.0	23.0	28.0	26.0	19.0	18.0	7.0	7.0
15	3.0	12.0	16.0	24.0	29.0	19.0	20.0	20.0	24.0	14.0	7.0	5.0
16	6.0	16.0	13.0	19.0	30.0	27.0	25.0	17.0	22.0	20.0	9.0	5.0
17	9.0	16.0	14.0	16.0	28.0	17.0	18.0	24.0	17.0	10.0	5.0	6.0
18	6.0	17.0	13.0	19.0	23.0	18.0	23.0	21.0	17.0	10.0	5.0	8.0
19	8.0	15.0	---	---	16.0	22.0	24.0	19.0	24.0	---	6.0	6.0
20	10.0	16.0	18.0	10.0	24.0	30.0	23.0	18.0	20.0	---	3.0	9.0
21	16.0	15.0	22.0	20.0	24.0	29.0	26.0	30.0	20.0	15.0	5.0	8.0
22	12.0	15.0	23.0	21.0	25.0	30.0	17.0	17.0	17.0	13.0	8.0	10.0
23	10.0	13.0	20.0	16.0	23.0	28.0	25.0	18.0	13.0	11.0	9.0	6.0
24	7.0	16.0	15.0	16.0	18.0	28.0	28.0	17.0	18.0	10.0	3.0	3.0
25	8.0	16.0	18.0	23.0	25.0	25.0	25.0	16.0	19.0	17.0	7.0	9.0
26	11.0	15.0	20.0	13.0	30.0	23.0	26.0	17.0	23.0	14.0	7.0	9.0
27	5.0	17.0	---	25.0	26.0	30.0	25.0	18.0	23.0	10.0	7.0	7.0
28	10.0	18.0	16.0	15.0	21.0	33.0	22.0	19.0	21.0	14.0	5.0	7.0
29	7.0	15.0	11.0	25.0	16.0	28.0	22.0	23.0	12.0	14.0	6.0	7.0
30	4.0	---	8.0	17.0	15.0	28.0	29.0	19.0	11.0	13.0	8.0	4.0
31	7.0	---	16.0	---	24.0	---	31.0	24.0	---	4.0	---	5.0
MONTH	7.0	11.5	15.0	18.5	23.0	26.0	23.5	21.5	20.0	16.0	7.5	6.0

SUSPENDED-SEDIMENT DISCHARGE, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

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	29	360	28	13	53	1.9	13	30	1.1
2	22	187	11	11	45	1.3	14	29	1.1
3	15	100	4.1	9.0	95	2.3	14	22	.83
4	8.5	70	1.6	11	135	4.0	13	64	2.2
5	10	83	2.2	16	73	3.2	13	23	.81
6	16	80	3.5	14	50	1.9	14	17	.64
7	19	77	4.0	13	35	1.2	13	33	1.2
8	20	65	3.5	14	35	1.3	14	25	.95
9	16	61	2.6	14	36	1.4	14	18	.68
10	13	55	1.9	14	38	1.4	14	18	.68
11	14	57	2.2	14	30	1.1	14	23	.87
12	14	110	4.2	14	30	1.1	12	17	.55
13	13	53	1.9	14	28	1.1	13	14	.49
14	10	36	.97	14	20	.76	14	14	.53
15	7.0	48	.91	13	28	.98	14	20	.76
16	10	47	1.3	13	45	1.6	14	48	1.8
17	19	53	2.7	13	35	1.2	14	12	.45
18	16	75	3.2	13	45	1.6	13	30	1.1
19	14	71	2.7	13	44	1.5	13	26	.91
20	14	37	1.4	12	32	1.0	13	22	.77
21	14	44	1.7	13	105	3.7	13	25	.88
22	14	43	1.6	13	35	1.2	13	42	1.5
23	14	35	1.3	14	20	.76	13	19	.67
24	13	50	1.8	13	15	.53	12	18	.58
25	13	40	1.4	13	25	.88	12	48	1.6
26	14	45	1.7	12	104	3.4	12	92	3.0
27	14	45	1.7	14	69	2.6	13	26	.91
28	13	50	1.8	14	48	1.8	13	26	.91
29	13	37	1.3	13	68	2.4	13	14	.49
30	12	40	1.3	--	--	--	14	10	.38
31	12	45	1.5	--	--	--	16	16	.69
TOTAL	445.5	--	100.98	381.0	--	49.11	414	--	30.03

08383000 PECOS RIVER AT SANTA ROSA, N. MEX.--Continued

SUSPENDED-SEDIMENT DISCHARGE, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

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	14	108	4.1	9.0	16	.39	7.3	19	.37
2	13	32	1.1	10	94	2.5	6.6	36	.64
3	13	23	.81	11	32	.95	5.3	14	.20
4	13	27	.95	10	47	1.3	4.7	15	.19
5	13	20	.70	11	42	1.2	4.7	84	1.1
6	13	18	.63	11	73	2.2	5.3	18	.26
7	13	65	2.3	12	18	.58	5.9	11	.18
8	13	18	.63	14	30	1.1	6.6	10	.18
9	12	33	1.1	11	40	1.2	8.1	108	2.4
10	11	18	.53	8.1	45	.98	8.1	16	.35
11	10	20	.54	9.0	40	.97	7.3	36	.71
12	10	30	.81	8.1	29	.65	9.0	8	.19
13	9.0	25	.61	8.1	29	.63	11	37	1.1
14	9.0	30	.73	9.0	52	1.3	11	90	2.7
15	9.0	35	.85	10	43	1.2	9.0	12	.29
16	9.0	38	.92	10	92	2.5	19	46	2.4
17	10	20	.54	10	34	.92	211	11100	9400
18	10	14	.38	9.0	23	.56	82	4350	963
19	11	36	1.1	10	25	.68	27	930	68
20	11	36	1.1	11	27	.80	16	358	15
21	11	23	.68	11	28	.83	9.0	244	5.9
22	10	51	1.4	7.3	35	.69	8.1	103	2.3
23	10	23	.62	7.3	58	1.1	8.1	107	2.3
24	12	25	.81	9.0	19	.46	8.1	148	3.2
25	12	30	.97	8.1	24	.52	6.6	72	1.3
26	11	25	.74	8.1	36	.79	7.3	33	.65
27	10	39	1.1	7.3	22	.43	8.1	38	.83
28	10	223	6.0	7.3	89	1.8	8.1	76	1.7
29	11	35	1.0	11	22	.65	10	219	5.9
30	11	3	.09	12	12	.39	20	1500	81
31	--	--	--	10	165	4.5	--	--	--
TOTAL	334.0	--	33.84	299.7	--	34.75	558.3	--	7564.34
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	122	8200	4320	75	4300	871	620	13400	29800
2	104	8080	2590	310	8900	7450	1750	16100	90100
3	36	1410	221	250	8200	5540	694	8400	15700
4	630	14200	30300	200	9400	5080	360	3900	3790
5	243	12600	9770	177	9300	4440	226	5000	3050
6	1090	20100	61700	80	4400	950	190	4400	2660
7	719	17700	37300	110	5700	1690	94	2500	635
8	151	9100	3710	85	3700	849	78	1000	211
9	213	7680	7010	134	5200	1880	920	9600	36500
10	157	10400	5090	265	12600	9020	835	14000	41500
11	187	11200	5650	151	12600	5140	1600	12600	82500
12	81	5400	1180	75	6700	1360	3750	13800	182000
13	756	18000	42700	31	2200	184	614	5950	10900
14	187	14000	7070	13	570	20	270	3200	2330
15	97	6000	1570	11	379	11	164	1660	735
16	60	4700	761	9.0	323	7.8	108	720	210
17	1100	17100	50800	20	1540	321	130	1070	376
18	410	14300	17500	85	8100	1060	101	1220	333
19	1050	19300	57400	49	4600	609	75	1020	207
20	410	15500	17900	31	2420	203	50	610	82
21	224	10000	6650	27	1720	125	46	530	66
22	2860	21500	200000	11	480	14	123	2380	790
23	532	10400	15500	42	2100	273	69	1770	330
24	211	6200	3530	35	1480	140	41	1480	164
25	94	4200	1070	14	920	55	29	1660	130
26	63	2970	623	348	11000	20900	22	630	37
27	148	5230	2420	259	12300	8600	22	207	12
28	82	1900	421	565	8480	18600	20	164	8.9
29	226	9500	5670	760	9160	19500	19	161	8.3
30	75	8000	1620	318	8100	6950	19	136	7.0
31	82	5200	1150	187	4400	2220	--	--	--
TOTAL	12400	--	603196	4727.0	--	124842.8	13039	--	505172.2

RIO GRANDE BASIN

08383000 PECOS RIVER AT SANTA ROSA, N. MEX.--Continued

SUSPENDED-SEDIMENT DISCHARGE, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

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	19	96	4.9	135	495	180	46	135	17
2	19	75	3.8	130	445	156	54	34	5.0
3	17	63	2.9	130	435	153	46	43	5.3
4	16	53	2.3	155	565	236	46	62	7.7
5	16	49	2.1	155	595	249	33	85	7.6
6	16	42	1.8	140	505	191	15	43	1.7
7	17	44	2.0	125	595	201	17	35	1.6
8	16	93	4.0	119	445	143	29	43	3.4
9	17	56	2.6	101	405	110	25	43	2.9
10	14	56	2.1	75	295	60	33	40	3.6
11	16	66	2.9	72	245	48	25	41	2.8
12	19	83	4.3	69	195	36	20	30	1.6
13	19	95	4.9	58	150	23	19	45	2.3
14	20	90	4.9	58	170	27	15	42	1.7
15	164	1460	1190	58	120	19	17	34	1.6
16	64	1450	261	54	110	16	18	45	2.2
17	33	345	31	54	105	15	23	37	2.3
18	29	192	15	66	175	31	25	45	3.0
19	25	174	12	64	205	35	22	45	2.7
20	41	235	26	72	445	87	20	31	1.7
21	84	1810	843	69	242	45	20	22	1.2
22	375	8100	8200	51	118	16	27	46	3.4
23	293	4450	3520	37	83	8.3	27	36	2.6
24	620	8300	16400	37	110	11	22	32	1.9
25	382	5650	5830	39	109	11	22	31	1.8
26	242	2630	1720	31	91	7.6	19	24	1.2
27	248	1150	770	51	105	14	20	42	2.3
28	200	920	497	44	83	9.9	22	29	1.7
29	175	940	444	58	284	44	20	27	1.5
30	145	740	290	69	384	72	17	30	1.4
31	130	452	159	--	--	--	16	20	.86
TOTAL	3491	--	40253.5	2376	--	2254.8	780	--	97.56

TOTAL DISCHARGE FOR 1972 WATER YEAR (CFS-DAYS)

TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR 1972 WATER YEAR (TONS)

TOTAL DISCHARGE FOR 1972 CALENDAR YEAR (CFS-DAYS)

TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR 1972 CALENDAR YEAR (TONS)

34866.5

1250400.15

39245.5

1286629.91

INSTANTANEOUS SUSPENDED SEDIMENT AND PARTICLE SIZE, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	TEMPER- ATURE (DEG C) (00010)	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SUS- PEN- DED SED- IMENT DIS- CHARGE (MG/L) (80154)	SUS- PEN- DED SED- IMENT DIS- CHARGE (T/DAY) (80155)	SUS. SED. FALL DIAM. % FINER THAN .002 MM (70337)	SUS. SED. FALL DIAM. % FINER THAN .004 MM (70338)
JUNE							
17...	1200	17.0	355	16600	15900	33	44
JULY							
01...	1140	28.0	37	2400	240	59	84
04...	1520	14.0	1210	24900	81300	22	32
06...	0915	15.0	2170	22300	131000	23	28
07...	1050	19.0	810	19400	42400	40	50
13...	0900	17.0	1560	19700	83000	26	35
15...	0745	20.0	134	6270	2270	64	76
18...	1400	23.0	253	12800	8740	51	62
22...	0900	17.0	311	21000	17600	30	40
AUG.							
05...	0800	22.0	281	11100	8420	45	54
28...	0925	19.0	177	3100	1480	41	50
SEP.							
02...	1000	17.0	2300	18100	112000	30	36
09...	1050	20.0	2430	17900	117000	28	40
12...	1330	16.0	3480	14300	134000	25	31
OCT.							
24...	1715	10.0	472	7480	9530	25	33

RIO GRANDE BASIN

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08383000 PECOS RIVER AT SANTA ROSA, N. MEX.--Continued

INSTANTANEOUS SUSPENDED SEDIMENT AND PARTICLE SIZE, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	SUS. SED. FALL DIAM. % FINER THAN (70340)	SUS. SED. FALL DIAM. % FINER THAN (70342)	SUS. SED. FALL DIAM. % FINER THAN (70343)	SUS. SED. FALL DIAM. % FINER THAN (70344)	SUS. SED. FALL DIAM. % FINER THAN (70345)	SUS. SED. FALL DIAM. % FINER THAN (70331)	SUS. SED. FALL DIAM. % FINER THAN (70332)
JUNE							
17...	70	92	99	99	100	--	--
JULY							
01...	98	--	--	--	--	99	100
04...	53	84	94	96	100	--	--
06...	46	89	98	99	100	--	--
07...	73	93	98	99	100	--	--
13...	54	90	99	100	--	--	--
15...	92	97	98	99	100	--	--
18...	81	93	96	99	100	--	--
22...	62	90	96	100	--	--	--
AUG.							
05...	85	98	100	--	--	--	--
28...	69	93	99	99	100	--	--
SEP.							
02...	45	81	95	100	--	--	--
09...	58	88	98	100	--	--	--
12...	43	77	92	98	100	--	--
OCT.							
24...	53	82	92	98	100	--	--

08383500 PECOS RIVER NEAR PUERTO DE LUNA, N. MEX.
(Surveillance network station)

LOCATION.--Lat 34°43'48", long 104°31'28", in NE¼SE¼ sec.20, T.6 N., R.23 E., Guadalupe County, at gaging station 9 miles southeast of Puerto de Luna, and 15.8 miles upstream from Alamogordo Dam.

DRAINAGE AREA.--3,970 sq mi, approximately (contributing area).

PERIOD OF RECORD.--Chemical analyses: July 1939 to September 1941, December 1942 to April 1943, November 1946 to June 1959, October 1967 to current year.

Water temperatures: June 1949 to June 1959, October 1967 to August 1969.

Sediment records: January 1948 to November 1958.

EXTREMES:

Period of record--1939-41, 1946-49, 1967-69:

Dissolved solids: Maximum, 2,740 mg/l May 1-10, 1955, July 1-9, 1956; minimum, 220 mg/l Aug. 7, 1957.

Hardness: Maximum, 1,910 mg/l Apr. 21-30, 1954; minimum, 161 mg/l Aug. 7, 1957.

Specific conductance: Maximum daily, 3,880 micromhos June 27, 30, 1957; minimum daily, 344 micromhos Sept. 21, 1941.

Water temperatures (1967-69): Maximum, 36.0°C Aug. 6, 1969; minimum, freezing point Dec. 14, 15, 18, 1967, Jan. 7, 1968.

REMARKS.--Formerly published as 8-3834. Pecos River at Puerto de Luna, N. Mex., which was located at bridge in the village of Puerto de Luna, 9 miles northwest of the gaging station. Bacteria and aquatic biology analyzed by the New Mexico Environmental Improvement Agency on samples collected by the U.S. Geological Survey. After June 1972, bacteria analyzed by the U.S. Geological Survey.

CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	DIS- CHARGE (CFS) (000060)	DIS- SOLVED SILICA (SIO2) (MG/L) (00955)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NE- SIUM (MG) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	BICAR- ONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)
JAN. 18...	0845	82	15	--	540	65	100	3.1	160	0	1500
FEB. 15...	0900	78	15	10	560	66	100	2.3	156	0	1600
MAR. 14...	0900	82	14	--	560	67	100	2.3	135	0	1500
APR. 11...	0900	72	15	--	580	69	97	2.4	129	0	1700
MAY 09...	0920	67	14	20	570	66	100	4.3	138	0	1600
JUNE 28...	1100	51	15	--	620	71	99	2.9	127	0	1700
JULY 18...	0920	563	9.4	20	100	11	17	2.8	115	0	220
AUG. 22...	0845	92	14	20	440	58	77	2.7	154	0	1200
SEP. 12...	1030	5450	6.2	30	45	5.0	6.9	2.0	114	0	80
OCT. 11...	0945	91	15	50	540	65	91	2.3	157	0	1500
NOV. 14...	0930	172	13	20	390	45	69	2.1	175	0	980
DEC. 12...	1045	117	14	20	500	61	81	2.0	176	0	1300

DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED NITRATE (N) (MG/L) (00618)	DIS- SOLVED NITRITE (N) (MG/L) (00613)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	AMMONIA NITRO- GEN (N) (MG/L) (00610)	DIS- SOLVED AMMONIA NITRO- GEN (N) (MG/L) (00608)	ORGANIC NITRO- GEN (N) (MG/L) (00605)	TOTAL NITRO- GEN (N) (MG/L) (00600)	TOTAL PHOS- PHORUS (P) (MG/L) (00665)
JAN. 18...	130	.8	--	--	.10	--	--	--	--	--
FEB. 15...	130	.6	--	--	.02	--	--	--	--	--
MAR. 14...	140	.7	--	--	.01	--	--	--	--	--
APR. 11...	68	.7	--	--	.01	--	--	--	--	--
MAY 09...	160	.7	.00	.00	.00	--	.03	.11	.14	.09
JUNE 28...	140	1.0	--	--	.04	--	--	--	--	--
JULY 18...	19	.3	.75	.00	.75	--	.05	8.6	9.4	4.4
AUG. 22...	110	.6	.11	.00	.11	--	.06	1.2	1.4	.46
SEP. 12...	5.7	.3	.00	.00	.00	--	.24	3.1	3.3	4.3
OCT. 11...	130	.7	.00	.02	.02	--	.07	.18	.27	.09
NOV. 14...	92	.5	.06	.00	.06	--	.04	.08	.18	.24
DEC. 12...	130	.6	.08	.00	.08	.03	.03	.41	.52	.14

08383500 PECOS RIVER NEAR PUERTO DE LUNA, N. MEX.--Continued
 CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	DIS- SOLVED ORTHO- PHOS- PHORUS (P) (00671)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (00300)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (00301)	HARD- NESS (CA+MG) (00900)	NON- CAR- BONATE HARD- NESS (00902)	SODIUM AD- SORP- TION RATIO (00931)	SPF- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	DIS- SOLVED BORON (B) (01020)
JAN. 18...	.00	2280	2430	1600	1500	1.1	2740	7.8	1.5	--
FEB. 15...	.00	2510	2550	1700	1500	1.1	2870	7.7	3.0	100
MAR. 14...	.00	2690	2450	1700	1600	1.1	2860	7.8	11.5	--
APR. 11...	.00	2850	2600	1700	1600	1.0	2940	7.8	13.0	--
MAY 09...	.00	2700	2580	1700	1600	1.1	2950	8.0	14.5	130
JUNE 28...	.01	2850	2710	1800	1700	1.0	2940	7.7	22.5	--
JULY 18...	.01	466	443	290	200	.4	656	7.3	19.5	60
AUG. 22...	.03	2170	1980	1300	1200	.9	2310	8.0	19.5	110
SEP. 12...	.05	192	208	130	39	.3	341	7.4	17.0	40
OCT. 11...	.01	2540	2420	1600	1500	1.0	2740	8.2	17.0	110
NOV. 14...	.03	1670	1680	1200	1000	.9	1970	8.0	4.0	70
DEC. 12...	.02	2420	2180	1500	1400	.9	2410	7.8	.0	120

TRACE ELEMENT ANALYSES, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	DIS- SOLVED ALUM- INUM (AL) (01106)	DIS- SOLVED ARSENIC (AS) (01000)	DIS- SOLVED BARIUM (BA) (01005)	DIS- SOLVED BERYL- LIUM (BE) (01010)	DIS- SOLVED BISMUTH (BI) (01015)	DIS- SOLVED BORON (B) (01020)	DIS- SOLVED CAD- MIUM (CD) (01025)	DIS- SOLVED CHRO- MIUM (CR) (01030)	DIS- SOLVED COBALT (CO) (01035)
FEB. 15...	0900	28	0	<80	<1	<2	100	0	<1	<1
MAY 09...	0920	73	2	<180	<18	<38	130	0	<81	<38
AUG. 22...	0845	29	2	180	<2	<1	110	1	<4	<1
OCT. 11...	0945	56	3	24	<1	<2	110	1	<2	<1

DATE	DIS- SOLVED COPPER (CU) (01040)	DIS- SOLVED GALLIUM (GA) (01120)	DIS- SOLVED GER- MANIUM (GE) (01125)	DIS- SOLVED IRON (FE) (01046)	TOTAL LEAD (PB) (01051)	DIS- SOLVED LEAD (PB) (01049)	DIS- SOLVED LITHIUM (LI) (01130)	DIS- SOLVED MAN- GANESE (MN) (01056)	TOTAL MERCURY (HG) (71900)	DIS- SOLVED MOLYB- DENUM (MO) (01060)
FEB. 15...	10	<18	<80	10	10	1	30	10	.4	1
MAY 09...	24	<38	<81	20	--	45	30	<38	.2	<9
AUG. 22...	13	<14	<30	20	44	8	20	<20	.3	3
OCT. 11...	2	<4	<8	50	8	7	30	11	.2	3

DATE	DIS- SOLVED NICKEL (NI) (01065)	DIS- SOLVED SILVER (AG) (01075)	DIS- SOLVED SELE- NIUM (SE) (01145)	DIS- SOLVED STRON- TIUM (SR) (01080)	DIS- SOLVED TIN (SN) (01100)	DIS- SOLVED TAN- IUM (TI) (01150)	DIS- SOLVED VANA- DIUM (V) (01085)	DIS- SOLVED ZINC (ZN) (01090)	DIS- SOLVED ZIR- CONIUM (ZR) (01160)
FEB. 15...	<2	<1	5	7200	<60	<1	<40	<22	<3
MAY 09...	<38	<9	2	6600	<81	<180	<18	<3800	<81
AUG. 22...	<30	<2	0	5400	<30	<1	<20	<190	<9
OCT. 11...	<2	<1	0	140	<8	<2	<8.	<20	<1

08383500 PECOS RIVER NEAR PUERTO DE LUNA, N. MEX.--Continued

FIELD AND BIOCHEMICAL MEASUREMENTS, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	DIS- CHARGE (CFS) (00060)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	AIR TEMPER- ATURE (DEG C) (00020)	COLOR (PLAT- NUM- COBALT UNITS) (00080)	TUR- BID- ITY (JTU) (00070)
JAN.								
18...	0845	82	2800	8.2	1.5	9.5	5	50
FEB.								
15...	0900	78	3000	8.2	3.0	3.5	3	65
MAR.								
14...	0900	82	2800	8.1	11.5	20.5	3	15
APR.								
11...	0900	72	3000	8.2	13.0	25.5	3	15
MAY								
09...	0920	67	3000	8.1	14.5	19.0	5	35
JUNE								
28...	1100	51	3100	8.1	22.5	29.5	5	75
JULY								
18...	0920	563	655	7.8	19.5	23.0	30	4500
AUG.								
22...	0845	92	2400	8.3	19.5	24.0	5	380
SEP.								
12...	1030	5450	300	7.8	17.0	25.0	35	4800
OCT.								
11...	0945	91	2850	8.3	17.0	22.0	5	30
NOV.								
14...	0930	172	2100	8.3	4.0	8.5	10	55
DEC.								
12...	1045	117	2600	8.3	.0	-1.0	5	25

DATE	DIS- SOLVED OXYGEN (MG/L) (00300)	CHEM- ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L) (00335)	BIO- CHEM- ICAL OXYGEN DEMAND (MG/L) (00310)	IMME- DIATE COLI- FORM (COL. PER 100 ML) (31501)	FECAL COLI- FORM (COL. PER 100 ML) (31616)	STREP- TOCOCCI (COL- ONIES PER 100 ML) (31679)	TOTAL ORGANIC CARBON * (C) (MG/L) (00680)
JAN.							
18...	12.2	2	1.0	<100	<100	<100	--
FEB.							
15...	12.2	7	.6	5000	<10	50	--
MAR.							
14...	10.0	4	.6	20	10	10	--
APR.							
11...	9.0	2	.4	<100	<100	<100	--
MAY							
09...	8.6	4	.6	100	100	<100	--
JUNE							
28...	7.3	5	1.2	660	420	<10	--
JULY							
18...	7.2	--	--	--	12000	--	142
AUG.							
22...	7.7	--	--	--	1400	--	10
SEP.							
12...	7.2	--	--	--	7000	--	120
OCT.							
11...	8.4	--	--	--	25	--	102
NOV.							
14...	10.5	--	--	--	30	--	4.0
DEC.							
12...	11.6	--	--	--	2	--	.7

* Analyzed by New Mexico Environmental Improvement Agency.

BIOLOGICAL ANALYSES, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

Date: November 4, 1972

Method of sampling: Surber (3 square feet)

Organisms (classification, number)

Diptera: Chironomidae, 1

Ephemeroptera: Baetidae; Ephemerella sp., 1Trichoptera: Hydropsychidae; Hydropsyche sp., 126Cheumatopsyche sp., 8

Date: November 14, 1972

Method of sampling: Surber (3 square feet)

Organisms (classification, number)

Diptera: Chironomidae; Cricotopus sp., 5, 2

Simuliidae, 1

Ephemeroptera: Baetidae; Traverella sp., 5Trichoptera: Tricorythodes sp., 2Trichoptera: Hydropsychidae; Hydropsyche sp., 21Cheumatopsyche sp., 7

08384500 PECOS RIVER BELOW ALAMOGORDO DAM, N. MEX.

LOCATION.--Lat 34°36'14", long 104°23'15", in lot 1, sec. 2, T.4 N., R.24 E., Debaca County at gaging station 1,200 ft downstream from Alamogordo Dam, 2.9 miles upstream from Salado Creek, and 4.6 miles northeast of Guadalupe, and 12.2 miles northwest of Fort Sumner.

DRAINAGE AREA.--4,390 Sq mi, approximately (contributing area).

PERIOD OF RECORD.--Chemical analysis: June 1937 to January 1966.

Specific conductance: March 1972 to current year.

Water temperature: March 1972 to current year.

Sediment records: March 1972 to current year.

REMARKS.--Records of reservoir levels and contents furnished by Bureau of Reclamation.

INSTANTANEOUS SUSPENDED SEDIMENT, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	CONDUCTIVITY (MICROMHOS)	TEMPERATURE (C°)	DISCHARGE (CFS)	CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	RES. LEVEL (FEET)	CONTENTS (ACRE/FEET)
March								
7	1105	2198	9.5	69	73	14	4259.50	54,930
8	0845	2198	9.0	76	22	4.5	4259.50	54,930
9	0730	2200	8.5	69	16	3.0	4259.50	54,930
10	0800	2215	9.0	73	22	4.3	4259.50	54,930
11	0845	2200	9.0	70	22	4.2	4259.50	54,930
12	0730	2216	9.0	71	20	3.8	4259.50	54,930
13	0900	2232	9.0	71	22	4.2	4259.50	54,930
14	0845	2230	--	72	38	7.4	4259.50	54,930
15	0830	2230	--	74	18	3.6	4259.50	54,930
16	0830	2230	--	74	27	5.4	4259.50	54,930
23	1540	2163	--	1070	841	2430	4259.45	54,790
April								
1	1110	2290	14.5	1110	48	144	4252.30	37,330
12	1045	2500	10.5	1110	120	360	4237.55	14,040
	1705	2340	14.0	790	113	241		
13	0715	2350	14.5	790	98	209	4235.30	11,680
	1400	2338	14.5	790	121	258		
	1800	2380	15.0	790	116	247		
14	0730	2375	14.0	768	116	245	4233.90	10,320
	1330	2375	15.0	804	442	959		
	1830	2340	15.0	790	139	296		
15	0700	2330	15.0	779	119	250	4231.90	8,520
	1330	2372	15.0	790	133	284		
	1800	3194	14.5	790	149	318		
16	0800	2391	14.0	779	139	292	4229.45	6,560
	1805	2403	13.0	680	102	187		
18	0815	2350	14.5	78	155	33	4225.70	4,050
	1830	2420	14.5	86	154	36		
19	0810	2468	15.0	88	149	36	4225.70	4,050
	1830	2496	14.5	77	157	32		
20	0805	2496	15.0	78	136	28	4225.70	4,050
	1815	2470	--	78	153	32		
21	0750	2540	--	78	127	27	4225.70	4,050
22	0820	3593	14.0	78	117	25	4225.70	4,050
23	0815	3520	15.0	78	129	27	4225.70	4,050
24	1815	3570	--	80	124	27	4225.75	4,080
25	1330	3570	17.0	82	116	26	4225.70	4,050
	1825	3539	15.5	82	126	28		
26	1315	2580	--	82	128	29	4225.70	4,050
May								
9	1120	3730	--	72	101	20	4226.10	4,290
21	1845	2299	14.0	72	205	40	4225.95	4,200
22	1035	2298	19.5	76	162	33	4225.95	4,200
	1505	2299	18.0	76	200	41		
23	0805	2297	17.0	76	205	42	4225.95	4,200
	1315	2298	20.0	76	136	28		
	1945	2298	18.5	76	156	32		
24	0805	2289	18.0	76	166	34	4225.95	4,200
June								
19	0900	2825	23.0	74	202	40	4228.50	5,870
	1330	2811	24.0	74	309	62		
	1945	2810	22.0	75	266	54		
20	0815	2990	22.5	75	236	48	4228.65	5,980
	1340	2710	24.5	75	107	22		
	1945	2530	22.0	76	297	61		
21	0810	1491	22.5	77	233	48	4228.65	5,980
	1340	1750	24.0	77	270	56		
	1950	1550	22.5	77	238	49		
22	0810	1421	23.0	77	230	48	4228.65	5,980
	1325	1322	24.0	77	169	35		
	1920	1322	22.5	77	128	26		
23	0800	1991	23.0	77	96	20	4228.60	5,940
	1315	1460	25.0	77	111	23		
	1920	1460	23.0	73	112	22		
24	0650	1323	23.0	73	137	27	4228.55	5,900
	1330	1323	23.0	78	136	28		
	1930	1324	25.0	77	162	34		
25	0815	1324	25.0	77	174	36	4228.45	5,830
	1455	2500	23.0	77	230	48		
	1945	2500	23.5	77	199	41		

RIO GRANDE BASIN

08384500 PECOS RIVER BELOW ALAMOGORDO DAM, N. MEX.--Continued

INSTANTANEOUS SUSPENDED SEDIMENT, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	CONDUCTIVITY (MICROMHOS)	TEMPERATURE (C°)	DISCHARGE (CFS)	CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	RES. LEVEL (FEET)	CONTENTS (ACRE/FEET)
June								
26	2005	2480	23.0	80	480	104	4228.35	5,760
27	0805	2500	23.0	82	96	21	4228.25	5,690
	2005	2460	23.0	82	277	62		
28	0820	2570	23.0	84	173	39	4228.05	5,550
	1340	2500	25.0	84	250	56		
	1415	2490	23.5	82	153	34		
	2005	2510	23.0	84	197	44		
29	0810	1320	22.5	84	231	52	4228.00	5,510
	1415	2229	24.0	84	204	46		
	1945	1820	22.5	84	198	45		
30	0805	2530	23.0	86	180	42	4228.40	5,800
	1315	2530	25.0	84	164	37		
	1930	2510	23.0	84	158	36		
July								
1	0805	1930	23.0	84	107	24	4228.85	6,120
	1435	1720	23.5	84	145	33		
	1935	1610	22.5	86	198	46		
2	0815	1810	23.0	86	109	25	4229.80	6,830
7	1035	2340	22.5	101	15,500	4,230	4239.80	16,600
	1945	1450	20.0	0.28	156,000	118		
8	0820	1430	20.0	0.03	124,000	10	4241.40	18,720
	1415	1490	20.0	0.03	208,000	17		
	1920	1460	20.0	0.13	206,000	72		
9	1715	1312	20.0	4.40	234,000	2,750	4242.00	19,520
13	0735	2040	21.0	1090	3,400	10,000	4243.60	21,820
14	0810	1911	21.5	1050	141	400	4242.85	22,180
	1335	1890	22.0	1050	92	261		
	2010	1790	21.5	1050	83	235		
15	0810	1710	22.0	1050	70	198	4242.80	20,650
18	1210	1350	24.0	1070	74	214	4240.10	17,030
	1315	1307	25.0	1070	113	326		
	1915	1180	25.0	1070	12	35		
19	0805	1300	24.0	1090	191	562	4241.80	19,260
	1740	1090	23.5	1090	3,510	10,330		
20	0805	1060	23.5	1070	138	399	4243.10	21,080
21	0815	950	23.0	990	5,560	14,900	4244.20	22,710
	1325	993	23.5	990	4,210	11,300		
	1930	960	23.0	1030	106	295		
22	1930	982	--	1030	15,400	42,800	4243.20	21,230
23	0805	868	--	1030	64	178	4245.40	24,600
August								
3	0815	1100	26.0	97	230	60	4226.30	4,410
4	0815	1385	24.0	107	108	31	4227.10	4,910
	1935	1391	24.0	103	145	40		
5	0830	1340	24.0	104	95	27	4227.90	5,450
	1955	1235	24.0	102	137	38		
6	0820	1270	24.0	107	126	36	4228.40	5,800
	1900	1250	24.0	101	136	37		
7	0820	1200	25.0	104	110	31	4228.70	6,010
8	0800	1220	24.0	104	81	23	4228.80	6,080
22	1110	1535	23.5	938	43	109	4232.30	8,870
September								
1	1110	1545	22.0	112	117,000*	53,500	4232.30	30,660
	1110	--	22.0	112	143,000**	23,200		
	1540	1550	22.0	110	85,000	25,200		
	2020	1542	21.0	108	14,400	4,200		
2	0820	1560	20.0	109	297	87	4249.80	32,370
12	0900	1500	21.0	3	68	0.73	4257.20	48,730
October								
11	1145	1995	18.5	97	101	26	4260.80	58,610
November								
14	1155	1325	10.0	4.1	18	0.20	4264.70	70,580

* taken at gaging station

** taken from pipe at dam

RIO GRANDE BASIN

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08386000 PECOS RIVER NEAR ACME, N. MEX.

LOCATION.--Lat 33°32'10", long 104°22'34", in SW 1/4 sec.14, T.9 S., R.25 E., Chaves County, at gaging station, 3.0 miles downstream from U.S. Highway 70, 3.7 miles downstream from Salt Creek, 4.7 miles southwest of Acme, and 14 miles northeast of Roswell.

DRAINAGE AREA.--11,380 sq mi, approximately (contributing area).

PERIOD OF RECORD.--Chemical analyses: July 1937 to current year.
Water temperatures: May 1952 to August 1969.

CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	DIS- SOLVED CHARGE (CFS) (000600)	DIS- SOLVED SILICA (STO2) (MG/L) (00955)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NESIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED TAS- SIUM (K) (MG/L) (00935)	RICAR- BONATE (HC03) (MG/L) (00440)	CAR- BONATE (CU3) (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)
JAN.												
05...	1040	5.9	13	--	550	150	520	6.3	157	0	1900	760
24...	1025	6.9	9.5	--	520	130	490	5.1	124	0	1800	730
FEB.												
18...	1135	4.8	7.6	--	550	140	590	4.4	117	0	1900	870
MAR.												
14...	1150	.91	7.5	--	630	210	800	8.4	123	0	2500	1200
24...	1035	1.8	6.9	--	690	200	880	8.1	118	0	2400	1400
APR.												
27...	1005	42	15	20	520	93	230	6.6	100	0	1500	330
MAY												
03...	1050	23	13	--	510	110	310	5.1	74	0	1700	440
22...	1040	14	8.2	--	230	50	160	3.9	58	0	730	230
JUNE												
15...	1040	52	11	--	200	42	140	4.3	90	0	670	160
SEP.												
21...	0950	59	14	--	370	80	250	4.8	114	0	1200	370
OCT.												
05...	1505	32	14	180	420	110	370	5.2	123	0	1400	520
18...	0950	27	13	--	400	100	320	5.2	121	0	1400	420
NOV.												
06...	1100	30	14	--	420	110	340	4.0	147	0	1400	460
30...	1035	28	12	--	430	100	370	3.7	135	0	1500	510
DEC.												
20...	1055	42	11	30	440	110	370	3.9	136	0	1500	510

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	DIS- SOLVED ORTHOPHOS- PHORUS (P) (MG/L) (00471)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L) (70300)	DIS- SOLVED SOLIDS (SUM OF CONSTITU- ENTS) (MG/L) (70301)	HARD- NESS (CA,MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AD- SORP- TION RATIO (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	DIS- SOLVED BORON (B) (UG/L) (01020)
JAN.												
05...	.7	.24	--	--	3980	2000	1900	5.1	5250	7.8	2.5	--
24...	.7	.21	--	--	3750	1800	1700	5.0	4940	7.9	8.0	--
FEB.												
18...	.7	.02	--	--	4120	1900	1900	5.8	5440	7.8	12.0	--
MAR.												
14...	1.1	.02	--	--	5420	2400	2300	7.1	7080	7.9	7.5	--
24...	.9	.01	--	--	5640	2500	2400	7.6	7570	8.0	18.0	--
APR.												
27...	.6	.12	.00	3240	2750	1700	1600	2.4	3550	7.8	15.5	240
MAY												
03...	.7	.02	--	--	3130	1700	1700	3.2	3900	8.2	18.5	--
22...	.6	.01	--	--	1440	780	730	2.5	2040	8.1	20.0	--
JUNE												
15...	.7	.49	--	--	1270	670	600	2.4	1810	7.7	23.5	--
SEP.												
21...	.6	.16	--	--	2350	1300	1200	3.1	3120	7.8	17.0	--
OCT.												
05...	.7	.28	--	--	2400	1500	1400	4.2	3760	7.3	26.0	330
18...	.7	.22	--	--	2720	1400	1300	3.7	3640	7.1	18.0	--
NOV.												
06...	.6	.46	--	--	2820	1500	1400	3.8	3750	7.4	13.0	--
30...	.4	.43	--	--	2990	1500	1400	4.2	3290	7.8	4.5	--
DEC.												
20...	.4	.28	.01	3140	3010	1600	1400	4.1	3720	7.7	4.5	320

08396500 PECOS RIVER NEAR ARTESIA, N. MEX.
(Irrigation, pesticide and surveillance network station)

LOCATION.--Lat 32°50'25", long 104°19'23", in NW 1/4 sec. 18, T. 17 S., R. 27 E., Eddy County, at gaging station at bridge on State Highway 83, 4.3 miles east of Artesia, 7.0 miles north of mouth of Rio Pecos, and 17 miles north of McMillan Dam.

DRAINAGE AREA.--15,300 sq mi, approximately (contributing area).

PERIOD OF RECORD.--Chemical analyses: July 1937 to current year.

Water temperatures: April 1949 to current year.

Sediment records: January 1949 to current year.

EXTREMES:

Current year:

Dissolved solids: Maximum, 18,000 mg/l June 6, 1971; 602 mg/l Sept. 12.

Hardness: Maximum, 4,600 mg/l June 6; 320 mg/l Sept. 12.

CHEMICAL ANALYSES, COMPOSITES OF DAILY SAMPLES, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	DIS- CHARGE (CFS) (00060)	DIS- SOLVED SILICA (SI02) (MG/L) (00955)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NESIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED TAS- SIUM (K) (MG/L) (00935)	BICAR- BONATE (HC03) (MG/L) (00440)	CAR- BONATE (C03) (MG/L) (00445)	DIS- SOLVED SULFATE (S04) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)
JAN.												
01-31	43	7.7	--	590	230	1400	12	181	0	2000	2200	1.2
FEB.												
01-29	28	7.0	--	650	260	1600	12	164	0	2200	2800	1.1
MAR.												
01-13	18	13	--	690	310	2000	15	148	0	2400	3300	.6
14-26	10	14	--	800	340	2600	28	154	0	2700	4500	1.2
27-31	81	18	--	870	380	3200	33	154	0	3100	5200	1.2
28-29	513	21	--	500	110	330	6.8	175	0	1600	480	.9
30-31	624	17	--	460	71	160	4.8	152	0	1400	220	.7
APR.												
01-15	710	14	--	480	67	120	4.2	145	0	1400	160	.7
16-20	515	15	--	490	68	120	4.1	133	0	1400	170	.7
21-23	151	14	--	540	75	170	4.5	132	0	1500	250	.7
24-25	65	15	--	520	91	300	5.4	122	0	1600	440	.7
26-27	40	15	--	540	110	440	6.7	116	0	1700	680	.8
28-30	34	16	--	560	130	640	8.8	116	0	1900	980	.8
MAY												
01-09	33	19	--	640	170	1000	12	131	0	2000	1700	.9
10-11	87	16	--	650	180	880	9.5	139	0	2200	1500	1.0
12-17	17	18	--	520	130	760	10	127	0	1800	1200	.7
18-24	10	16	--	630	220	1800	19	131	0	2200	3000	.8
25-31	5.3	14	--	860	310	2500	26	173	0	2800	4300	1.0
JUNE												
01-16	6.0	17	--	800	350	3400	38	134	0	3000	5800	1.1
17-19	206	23	--	530	160	1100	14	188	0	1800	1800	1.1
18-19	94	14	--	160	30	180	6.3	170	0	380	290	.6
20-22	12	10	--	250	68	560	10	86	0	770	930	.7
23-30	3.5	11	--	480	160	1300	18	115	0	1800	2100	.9
JULY												
01-04	3.3	12	--	730	250	2300	31	131	0	2700	3700	1.1
05-10	494	18	--	230	39	180	4.6	168	0	640	250	.8
11-16	66	16	--	280	53	250	6.8	120	0	800	380	.8
17-20	568	15	--	370	58	140	5.7	132	0	1000	170	.7
21-22	1920	15	--	250	33	98	5.1	139	0	680	130	.6
23-31	782	14	--	220	26	68	4.1	141	0	550	75	.7
AUG.												
01-09	429	14	--	210	26	69	3.7	127	0	520	84	.4
10-17	57	12	--	380	71	450	7.2	112	0	1100	730	.5
18-24	52	14	--	480	140	1200	12	131	0	1600	1800	.7
25-26	161	14	--	360	52	240	4.9	122	0	1100	320	.6
27-31	1510	12	--	220	27	94	3.9	127	0	570	110	.5
SEP.												
01-05	826	12	--	240	26	93	4.2	130	0	620	140	.4
06-09	457	14	--	290	51	210	5.9	136	0	810	340	.5
10-11	3400	8.3	--	150	19	75	4.3	133	0	370	100	.3
11-12	1320	13	--	160	22	93	3.7	165	0	390	130	.5
13-18	780	12	--	180	32	160	4.8	144	0	450	250	.5
19-21	257	15	--	330	86	420	5.5	172	0	1100	650	.7
22-24	157	18	--	380	110	580	6.1	184	0	1100	950	.7
25-30	99	17	--	470	150	860	9.5	138	0	1600	1400	.7
OCT.												
01-20	55	18	--	540	180	1200	10	154	0	1900	1900	.9
21-23	115	14	--	470	150	900	8.8	178	0	1600	1500	.9
24-27	201	16	--	330	91	440	5.3	168	0	1100	690	.8
28-31	121	17	--	380	120	600	6.4	191	0	1200	970	.9
NOV.												
01-08	93	18	--	480	150	860	8.2	178	0	1500	1400	.8
09-30	73	15	--	540	180	1200	9.9	183	0	1700	1800	.8
DEC.												
01-18 A	66	9.5	--	570	200	1200	9.5	193	0	1900	2000	.9
19-23 B	68	11	--	560	200	1300	9.6	212	0	2000	2100	1.2
24-31 C	75	6.3	--	530	180	1000	7.7	185	0	1800	1700	.9
CALENDAR YEAR												
WTD. AVG.	--	14	--	333	65	293	5.4	145	0	967	449	.6
TIME WTD.												
AVG.	205	13	--	520	170	1120	12	154	0	1710	1850	.9
TUNS												
PER DAY	--	7.5	--	184	36	162	3.0	80	0	534	248	.4
WATER YEAR												
WTD. AVG.	--	14	--	327	63	266	5.7	143	0	949	412	.6
TIME WTD.												
AVG.	197	14	--	520	173	1110	13	149	0	1730	1850	.8
TUNS												
PER DAY	--	7.3	--	174	33	142	3.0	76	0	505	219	.3

Other values in micrograms per liter:

A (32730) Phenols 0; B (32730) Phenols 3; C (32730) Phenols 3.

08396500 PECOS RIVER NEAR ARTESIA, N. MEX.--Continued

EXTREMES: Current year.--Continued

Specific conductance: Maximum daily, 24,700 micromhos June 7; minimum daily, 973 micromhos Sept. 12.

Water temperatures: Maximum, 33.0°C June 21, 28; minimum, freezing point Feb. 3.

Sediment concentrations: Maximum daily, 20,100 mg/l Aug. 27; minimum daily, 6 mg/l Jan. 1.

Sediment discharge: Maximum daily, 87,500 tons Aug. 28; minimum daily, .15 ton June 29.

Period of record:

Dissolved solids: Maximum, 18,000 mg/l June 6, 1972; minimum, 461 mg/l May 31, 1963.

Hardness: Maximum, 4,740 mg/l May 3; minimum, 235 mg/l May 31, 1963.

Specific conductance: Maximum daily, 28,600 micromhos June 24, 1971; minimum daily, 682 micromhos Aug. 1, 1962.

Water temperatures (1949-72): Maximum, 36.0°C July 27, 1966, July 25, 1969; minimum, freezing point on several days during February 1956, January 1959, 1962, 1963, February 1966, January 1970, January 1971, and February 3, 1972.

Sediment concentrations: Maximum daily, 21,300 mg/l Aug. 1, 1962; minimum daily, no flow on many days during July 1953, July and August 1954, July 1957, July to October 1964.

Sediment discharge: Maximum daily, 183,000 tons Sept. 26, 1955; minimum daily, 0 tons on many days during July 1953, July and August 1954, July 1957, July to October 1964.

REMARKS.--Bacteria and aquatic biology analyzed by the New Mexico Environmental Improvement Agency on samples collected by the U.S. Geological Survey. After June 1972, Bacteria analyzed by the U.S. Geological Survey.

CHEMICAL ANALYSES, COMPOSITES OF DAILY SAMPLES, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	DIS- SOLVED ORTHOPHOS- PHATE (P) (MG/L) (00671)	DIS- SOLVED BORON (B) (UG/L) (01020)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L) (70300)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L) (70301)	DIS- SOLVED SOLIDS (TONS) PER AC+FT) (70303)	DIS- SOLVED SOLIDS (TONS) PER DAY) (70302)	HARD- NESS (CA,MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AD- SORP- TION RATIO (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)
JAN.												
01-31	.58	--	--	--	6530	8.88	758	2400	2300	12	9310	7.7
FEB.												
01-29	.62	--	--	--	7610	10.4	575	2700	2600	13	11100	7.6
MAR.												
01-13	.48	--	--	--	8800	12.0	428	3000	2900	16	12500	7.0
14-26	.39	--	--	--	11100	15.1	300	3400	3300	19	16100	6.8
27...	.03	--	--	--	12900	17.5	2820	3700	3600	23	18900	6.7
28-29	.13	--	--	--	3140	4.27	4350	1700	1600	3.5	4030	6.3
30-31	.54	--	--	--	2410	3.28	4060	1400	1300	1.8	2950	6.9
APR.												
01-15	.63	--	--	--	2320	3.16	4450	1500	1400	1.4	2730	7.1
16-20	.73	--	--	--	2340	3.18	3250	1500	1400	1.3	2790	7.6
21-23	.57	--	--	--	2620	3.56	1070	1700	1500	1.8	3160	6.9
24-25	.36	--	--	--	3030	4.12	532	1700	1600	3.2	3870	7.0
26-27	.21	--	--	--	3550	4.83	383	1800	1700	4.5	4730	7.0
28-30	.36	--	--	--	4290	5.83	394	1900	1800	6.3	5750	6.9
MAY												
01-09	.05	--	--	--	5610	7.63	500	2300	2200	9.1	7780	7.6
10-11	.03	--	--	--	5510	7.49	1290	2400	2200	7.9	7100	8.3
12-17	.20	--	--	--	4500	6.12	207	1800	1700	7.7	6300	7.7
18-24	.00	--	--	--	7950	10.8	215	2500	2400	16	11800	8.0
25-31	.15	--	--	--	10900	14.8	156	3400	3300	19	16100	8.1
JUNE												
01-16	.36	--	--	--	13500	18.4	219	3400	3300	25	20000	7.7
17...	.37	--	--	--	5520	7.51	3070	2000	1800	11	8100	7.7
18-19	.65	--	--	--	1150	1.56	292	520	380	3.4	1830	7.8
20-22	.47	--	--	--	2640	3.59	85.5	900	830	8.1	4180	7.7
23-30	.38	--	--	--	5930	8.06	56.0	1900	1800	13	8590	8.2
JULY												
01-04	.47	--	--	--	9790	13.3	87.2	2900	2700	19	14100	7.4
05-10	.03	--	--	--	1450	1.97	1930	730	600	2.9	2120	7.4
11-16	.68	--	--	--	1850	2.52	330	920	820	3.6	2660	7.6
17-20	.65	--	--	--	1830	2.49	2810	1200	1100	1.8	2390	7.5
21-22	.00	--	--	--	1280	1.74	6640	760	650	1.5	1750	7.0
23-31	.63	--	--	--	1030	1.40	2170	660	540	1.2	1400	7.0
AUG.												
01-09	.46	--	--	--	992	1.35	1150	630	530	1.2	1470	7.7
10-17	.31	--	--	--	2810	3.82	432	1200	1100	5.6	3980	7.8
18-24	.21	--	--	--	5310	7.22	746	1800	1700	12	7590	8.0
25-26	.42	--	--	--	2150	2.92	935	1100	1000	3.1	2790	7.8
27-31	.71	--	--	--	1100	1.50	4480	660	560	1.6	1500	8.0
SEP.												
01-05	.69	--	--	--	1200	1.63	2680	710	600	1.5	1650	7.7
06-09	.65	--	--	--	1790	2.43	2210	930	820	3.0	2570	7.7
10...	.69	--	--	--	795	1.08	7300	450	340	1.5	1150	8.2
11-12	.63	--	--	--	896	1.22	3190	490	350	1.8	1340	7.7
13-18	.60	--	--	--	1160	1.58	2440	580	460	2.9	1810	7.8
19-21	.81	--	--	--	2700	3.67	1870	1200	1000	5.3	3710	8.0
22-24	1.2	--	--	--	3240	4.41	1370	1400	1300	6.7	4770	7.6
25-30	.08	--	--	--	4580	6.23	1220	1800	1700	8.8	6450	7.6
OCT.												
01-20	.39	--	--	--	5830	7.93	866	2100	2000	11	7990	7.5
21-23	.63	--	--	--	4730	6.43	1470	1800	1600	9.3	6380	7.7
24-27	1.5	--	--	--	2760	3.75	1500	1200	1100	5.5	3900	7.8
28-31	1.4	--	--	--	3390	4.61	1110	1400	1300	6.9	4930	8.0
NOV.												
01-08	1.3	--	--	--	4510	6.13	1130	1800	1700	8.8	6390	7.6
09-30	1.1	--	--	--	5540	7.53	1090	2100	1900	11	7800	7.4
DEC.												
01-18	.63	--	--	--	5990	8.15	1070	2200	2100	11	8360	7.8
19-23	1.3	--	--	--	6290	8.55	1150	2200	2000	12	7770	8.0
24-31	.39	--	--	--	5320	7.24	1080	2100	1900	9.6	7690	8.0
CALENDAR YEAR												
WTD. AVG.	.59	--	--	--	2200	3.00	--	1100	989	3.3	2980	7.5
TIME WTD.												
AVG.	.55	--	--	--	5480	7.46	--	2000	1880	9.9	7790	7.6
TONS												
PER DAY	.33	--	--	--	1220	--	--	--	--	--	--	--
WATER YEAR												
WTD. AVG.	.58	--	--	--	2110	2.87	--	1080	969	3.0	2870	7.5
TIME WTD.												
AVG.	.58	--	--	--	5480	7.46	--	2010	1900	9.8	7890	7.5
TONS												
PER DAY	.31	--	--	--	1120	--	--	--	--	--	--	--

RIO GRANDE BASIN

08396500 PECOS RIVER NEAR ARTESIA, N. MEX.--Continued

CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	DIS- CHARGE (CFS) (00060)	DIS- SOLVED SILICA (SiO2) (MG/L) (00955)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	BICAR- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)
JAN.											
11...	1700	43	5.6	--	570	230	1500	14	197	0	2000
FEB.											
07...	1745	35	7.8	--	630	240	1500	14	174	0	2100
MAR.											
06...	1545	21	9.2	--	700	300	2100	18	148	0	2400
APR.											
03...	1645	701	11	10	460	65	130	4.4	141	0	1300
MAY											
02...	1800	24	14	--	640	150	770	13	110	0	2000
JUNE											
06...	1800	4.4	14	--	1100	440	4600	46	165	0	3500
JULY											
10...	1500	176	11	20	250	38	130	5.4	105	0	760
AUG.											
07...	1710	158	8.5	20	220	34	120	4.4	115	0	620
SEP.											
12...	1600	830	8.8	40	100	16	69	3.5	109	0	250
OCT.											
03...	1630	105	13	20	510	170	1100	10	123	0	1700
NOV.											
07...	1700	131	14	30	480	170	970	7.9	132	0	1600
DEC.											
04...	1600	117	8.9	30	550	200	1100	9.4	188	0	1700

DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED NITRATE (N) (MG/L) (00618)	DIS- SOLVED NITRITE (N) (MG/L) (00613)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	AMMONIA NITRO- GEN (N) (MG/L) (00610)	DIS- SOLVED AMMONIA NITRO- GEN (N) (MG/L) (00608)	ORGANIC NITRO- GEN (N) (MG/L) (00605)	TOTAL NITRO- GEN (N) (MG/L) (00600)	TOTAL PHOS- PHORUS (P) (MG/L) (00665)	DIS- SOLVED ORTHO. PHOS- PHORUS (P) (MG/L) (00671)
JAN.											
11...	2300	1.2	--	--	.57	--	--	--	--	--	.02
FEB.											
07...	2400	.8	--	--	.05	--	--	--	--	--	.02
MAR.											
06...	3300	1.2	--	--	.02	--	--	--	--	--	.03
APR.											
03...	170	.7	.13	.00	.13	--	.05	.87	1.1	1.2	.01
MAY											
02...	1200	.8	--	--	.00	--	--	--	--	--	.00
JUNE											
06...	7900	1.1	--	--	.01	--	--	--	--	--	.05
JULY											
10...	160	1.2	.62	.01	.63	--	.19	2.5	3.3	3.1	.01
AUG.											
07...	170	.5	.01	.00	.01	--	.12	.70	.83	.43	.01
SEP.											
12...	100	.4	.00	.00	.00	--	.11	3.5	3.6	1.5	.04
OCT.											
03...	1700	.8	.00	.00	.00	--	.10	1.1	1.2	.17	.01
NOV.											
07...	1700	.8	.01	.00	.01	--	.31	1.3	1.6	.10	.01
DEC.											
04...	1900	.9	.04	.00	.04	.38	.38	.53	.95	.10	.01

DATE	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L) (70300)	DIS- SOLVED SOLIDS (SUM OF TUENTS) (MG/L) (70301)	HARD- NESS (CA, MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AD- SORP- TION RATIO (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE AT (DEG C) (00010)	DENSITY (GM/ML AT 20 C) (71820)	DIS- SOLVED BORON (B) (UG/L) (01020)
JAN.										
11...	6700	6720	2400	2200	13	9620	8.0	8.5	--	--
FEB.										
07...	7180	6980	2600	2400	13	10000	7.7	9.0	--	--
MAR.										
06...	9440	8900	3000	2900	17	12200	7.1	18.0	1.003	--
APR.										
03...	2410	2210	1400	1300	1.5	2700	7.5	14.5	--	140
MAY										
02...	5100	4840	2200	2100	7.1	6790	7.4	23.0	--	--
JUNE										
06...	18000	17700	4600	4400	30	25700	7.4	24.0	1.011	--
JULY										
10...	1490	1410	780	690	2.0	1970	7.5	27.0	--	160
AUG.										
07...	1340	1230	690	590	2.0	1740	7.6	26.5	--	120
SEP.										
12...	636	602	320	230	1.7	991	7.5	23.5	--	110
OCT.										
03...	5520	5270	2000	1900	11	7210	7.7	23.5	--	560
NOV.										
07...	5220	5010	1900	1800	9.7	6710	6.9	13.0	--	440
DEC.										
04...	5740	5560	2200	2000	10	7560	7.7	9.5	--	520

RIO GRANDE BASIN

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08396500 PECOS RIVER NEAR ARTESIA, N. MEX.--Continued

FIELD AND BIOCHEMICAL MEASUREMENTS, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	DIS- CHARGE (CFS) (00060)	SPP- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	AIR TEMPER- ATURE (DEG C) (00020)	COLOR (PLAT- INUM- COBALT UNITS) (00080)	TUR- BID- ITY (JTU) (00070)
JAN.								
11...	1700	43	8700	8.3	8.5	14.4	3	4
FEB.								
07...	1745	35	9710	8.1	9.0	7.0	5	9
MAR.								
06...	1545	21	12000	8.1	18.0	30.0	20	7
APR.								
03...	1645	701	2600	8.1	14.5	18.0	5	850
MAY								
02...	1800	24	6520	8.0	23.0	26.0	5	15
JUNE								
06...	1800	4.4	24000	8.1	24.0	26.5	5	4
JULY								
10...	1500	176	1900	8.0	27.0	31.5	15	3500
AUG.								
07...	1710	158	1650	8.0	26.5	26.0	15	350
SEP.								
12...	1600	830	1000	7.8	23.5	27.0	10	480
OCT.								
03...	1630	105	7700	8.1	23.5	29.0	15	50
NOV.								
07...	1700	131	7050	8.4	13.0	14.5	20	35
DEC.								
04...	1600	117	8300	8.3	9.5	21.0	10	10

DATE	DIS- SOLVED OXYGEN (MG/L) (00300)	CHEM- ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L) (00335)	BIO- CHEM- ICAL OXYGEN DEMAND (MG/L) (00310)	IMME- DIATE COLI- FORM (COL. PER (31501)	FECAL COLI- FORM (COL. PER (31616)	STREP- TOCOCCI (COL- ONIFS PER (31679)	TOTAL ORGANIC CARBON* (C) (00680)
JAN.							
11...	15.0	8	2.2	<100	<100	<100	--
FEB.							
07...	11.6	6	2.5	20	<10	<10	--
MAR.							
06...	8.4	20	7.8	<10	<10	<10	--
APR.							
03...	9.0	12	4.6	>800	>500	<100	--
MAY							
02...	8.4	15	7.4	<10	<10	<10	--
JUNE							
06...	9.2	20	6.8	<100	<100	<100	--
JULY							
10...	6.7	--	--	--	2000	--	5A
AUG.							
07...	7.2	--	--	--	29	--	1.0
SEP.							
12...	7.9	--	--	--	33000	--	56
OCT.							
03...	7.7	--	--	--	16	--	20
NOV.							
07...	13.9	--	--	--	10	--	13
DEC.							
04...	9.8	--	--	--	1	--	.3

* ANALYZED BY THE NEW MEXICO ENVIRONMENTAL IMPROVEMENT AGENCY.

BIOLOGICAL ANALYSES, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

Date: November 7, 1972

Method of sampling: Surber (3 square feet)

Organisms (classification, number)

Diptera: Chironomidae; Ablabesmyia sp., 3 larvaeCricopterus sp., 5 larvaeTanytarsus sp., 18 larvae

Simuliidae, 22

RIO GRANDE BASIN

08396500 PECOS RIVER NEAR ARTESIA, N. MEX.--Continued

PESTICIDE ANALYSES, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	TOTAL ORGANIC CARBON (C) (MG/L) (00680)	ALDRIN (UG/L) (39330)	CHLOR- DANE (UG/L) (39350)	DDD (UG/L) (39360)	DDE (UG/L) (39365)	DDT (UG/L) (39370)	DI- ELDRIN (UG/L) (39380)
APR.								
03...	A 1645	--	--	--	--	--	--	--
18...	A 1030	--	--	--	--	--	--	--
MAY								
04...	A 1200	--	--	--	--	--	--	--
11...	A 1130	--	--	--	--	--	--	--
17...	A 1000	--	--	--	--	--	--	--
31...	A 0945	--	--	--	--	--	--	--
JUNE								
06...	1800	--	.00	.0	.00	.00	.00	.00
07...	A 0945	--	--	--	--	--	--	--
JULY								
10...	1500	50	--	--	--	--	--	--
AUG.								
07...	1710	10	.00	.0	.00	.00	.00	.01
SEP.								
12...	1600	--	.00	.0	.00	.00	.00	.01
OCT.								
03...	1630	--	.00	.0	.00	.00	.00	.00

DATE	ENDRIN (UG/L) (39390)	HEPTA- CHLOR (UG/L) (39410)	HEPTA- CHLOR EPOXIDE (UG/L) (39420)	LINDANE (UG/L) (39340)	PCP (UG/L) (39516)	2,4-D (UG/L) (39730)	2,4,5-T (UG/L) (39740)	SILVEX (UG/L) (39760)
APR.								
03...	--	--	--	--	--	.00	.00	.00
18...	--	--	--	--	--	.00	.00	.00
MAY								
04...	--	--	--	--	--	.00	.00	.15
11...	--	--	--	--	--	.00	.00	.00
17...	--	--	--	--	--	.00	.00	.00
31...	--	--	--	--	--	.00	.00	.00
JUNE								
06...	.00	.00	.00	.00	--	.00	.00	.00
07...	--	--	--	--	--	.00	.00	.00
JULY								
10...	--	--	--	--	--	--	--	--
AUG.								
07...	.00	.00	.00	.00	--	.00	.00	.10
SEP.								
12...	.00	.00	.00	.00	--	.00	.00	.00
OCT.								
03...	.00	.00	.00	.00	.0	.00	.00	.01

A OTHER VALUES IN MICROGRAMS PER LITER FOR EACH DATE: (2,4-DP), 0.00; DICAMBA, 0.00

ADDITIONAL ANALYSES IN MICROGRAMS PER LITER:

APR 26 ... 1400:

WATER SAMPLE: (2,4-D), 0.00; SILVEX, 0.04; (2,4,5-T), 0.00; (2,4-DP), 0.00; DICAMBA, 0.00.

BOTTOM DEPOSIT SAMPLE: (2,4-D), <7.7; SILVEX, <2.3; (2,4,5-T), <1.7; (2,4-DP), <8.1; DICAMBA, <2.6

JUN 21 ...

BOTTOM DEPOSIT SAMPLE: (2,4-D), <4.7; SILVEX, <1.5; (2,4,5-T), <1.4; (2,4-DP), <4.6; DICAMBA, <1.9

RIO GRANDE BASIN

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08396500 PECOS RIVER NEAR ARTESIA, N. MEX.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972
(ONCE-DAILY)

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	8670	9720	11500	2710	6520	14500	12200	1250	1610	6940	6090	7590
2	8670	10200	12000	2670	6600	15300	12100	1260	1370	7270	6060	7640
3	8750	10200	12600	2670	6730	16700	13400	1280	1700	7470	6200	7750
4	8610	10200	12600	2680	7280	18800	14900	1300	1690	7520	6200	7990
5	8820	10100	12400	2670	9910	20600	17000	1390	1450	8070	6620	8170
6	8540	10300	12700	2670	8110	24500	2200	1510	2340	8260	6790	8170
7	9120	10100	13200	2630	8110	24700	2060	1670	2450	8650	6840	8360
8	8970	10600	13200	2650	7750	22400	1960	1710	2440	8650	6970	8430
9	8600	10500	13100	2630	7930	20600	1760	2180	2680	8720	7310	8560
10	8740	10800	13300	2620	8290	18900	1940	2820	1120	8730	7410	8630
11	9290	10800	14000	2640	6080	18000	2090	3140	1580	8860	7460	8710
12	9340	11400	14000	2650	5070	17100	2420	3210	973	8570	7810	8710
13	9040	11400	13800	2670	5220	16500	2540	4100	2000	8640	8050	8370
14	9050	10700	15000	2690	6330	21900	2670	4280	2100	9240	8170	8570
15	8610	10500	16600	2700	7380	20800	3260	4710	1890	9820	8150	8930
16	8390	10500	15600	2720	6290	20200	3940	5020	1010	9730	8150	8180
17	8600	10400	15200	2740	7380	8180	4250	5270	1710	8380	8150	8120
18	8730	10400	17300	2740	9390	1540	2570	6290	2540	7030	8030	8060
19	9040	10900	16100	2760	11500	2220	2330	6020	3150	6570	8030	8500
20	9040	10600	17600	2800	11900	3650	2090	7160	3780	6340	8030	8370
21	9200	10700	15500	2900	11200	3990	1810	7230	4140	6390	8090	8850
22	9290	10800	15900	3110	11700	5000	1590	8260	4360	6920	8150	8850
23	9290	11000	15800	3470	12500	3170	1500	6210	4910	6590	8280	8710
24	9540	10900	15700	3690	13400	7830	1550	8120	5070	4540	7970	7830
25	9290	11300	15500	3950	15200	8780	1440	2980	5840	4080	7850	7200
26	9200	11700	17500	4330	16900	9820	1420	2470	6320	3370	7850	6880
27	9450	11800	18600	4880	16700	9080	1350	1040	6510	3300	7680	7250
28	9900	11700	4860	5250	17200	9230	1310	1530	6470	3910	7680	7550
29	10000	11400	3320	5680	14900	10500	1280	1430	6810	4470	7740	7550
30	9900	---	2990	5910	14500	11400	1250	1630	6810	5260	7740	7640
31	9340	---	2800	---	14000	---	1220	1550	---	5650	---	7710
MONTH	9070	10750	13230	3230	10060	13530	3980	3480	3230	7030	7520	8120

TEMPERATURE (DEG. C) OF WATER, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972
(ONCE-DAILY)

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	7.0	4.0	12.0	13.0	23.0	26.0	31.0	26.0	26.0	20.0	7.0	8.0
2	4.0	2.0	11.0	15.0	16.0	28.0	31.0	25.0	26.0	25.0	12.0	10.0
3	5.0	0.0	17.0	15.0	22.0	26.0	25.0	25.0	20.0	21.0	14.0	10.0
4	2.0	6.0	14.0	14.0	19.0	23.0	24.0	25.0	20.0	25.0	14.0	10.0
5	3.0	5.0	10.0	14.0	24.0	25.0	20.0	26.0	25.0	24.0	15.0	10.0
6	5.0	6.0	18.0	15.0	25.0	27.0	20.0	25.0	26.0	20.0	15.0	6.0
7	3.0	8.0	18.0	16.0	23.0	25.0	23.0	25.0	23.0	20.0	11.0	4.0
8	4.0	8.0	14.0	18.0	25.0	27.0	27.0	28.0	23.0	19.0	14.0	8.0
9	8.0	9.0	15.0	19.0	22.0	26.0	24.0	24.0	23.0	24.0	11.0	10.0
10	4.0	5.0	19.0	20.0	25.0	30.0	26.0	25.0	21.0	25.0	10.0	5.0
11	5.0	8.0	14.0	19.0	23.0	25.0	29.0	23.0	24.0	24.0	10.0	3.0
12	10.0	6.0	20.0	19.0	24.0	24.0	30.0	28.0	23.0	25.0	9.0	2.0
13	8.0	4.0	22.0	18.0	26.0	22.0	25.0	28.0	23.0	26.0	12.0	4.0
14	6.0	7.0	18.0	18.0	22.0	30.0	25.0	29.0	22.0	25.0	10.0	3.0
15	2.0	6.0	17.0	15.0	20.0	29.0	26.0	26.0	23.0	20.0	8.0	1.0
16	1.0	6.0	19.0	16.0	27.0	29.0	30.0	25.0	24.0	23.0	12.0	2.0
17	8.0	12.0	17.0	18.0	22.0	21.0	27.0	27.0	24.0	23.0	10.0	2.0
18	9.0	11.0	17.0	15.0	26.0	23.0	27.0	27.0	26.0	23.0	7.0	4.0
19	9.0	14.0	17.0	17.0	21.0	25.0	25.0	24.0	25.0	15.0	7.0	6.0
20	7.0	8.0	17.0	16.0	22.0	30.0	24.0	27.0	25.0	13.0	6.0	4.0
21	11.0	10.0	18.0	17.0	18.0	33.0	25.0	31.0	23.0	18.0	5.0	8.0
22	10.0	12.0	18.0	18.0	20.0	31.0	24.0	25.0	18.0	14.0	5.0	9.0
23	7.0	16.0	22.0	20.0	17.0	28.0	27.0	27.0	22.0	14.0	4.0	7.0
24	11.0	11.0	19.0	18.0	27.0	32.0	26.0	25.0	22.0	14.0	5.0	7.0
25	7.0	13.0	20.0	21.0	27.0	24.0	26.0	25.0	22.0	13.0	5.0	6.0
26	10.0	11.0	20.0	22.0	20.0	29.0	27.0	23.0	24.0	15.0	8.0	4.0
27	7.0	12.0	17.0	22.0	28.0	32.0	28.0	23.0	21.0	14.0	8.0	5.0
28	9.0	13.0	15.0	23.0	22.0	33.0	28.0	22.0	26.0	17.0	10.0	9.0
29	6.0	10.0	13.0	23.0	25.0	32.0	28.0	25.0	25.0	16.0	8.0	8.0
30	7.0	---	11.0	25.0	20.0	32.0	25.0	25.0	22.0	17.0	5.0	7.0
31	4.0	---	13.0	---	23.0	---	27.0	27.0	---	11.0	---	4.0
MONTH	6.5	8.5	16.5	18.0	22.5	27.5	26.0	25.5	23.0	19.5	9.0	6.0

08396500 PECOS RIVER NEAR ARTESIA, N. MEX.--Continued

SUSPENDED-SEDIMENT DISCHARGE, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

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	47	6	.76	36	20	1.9	24	9	.58
2	47	26	3.3	33	15	1.3	21	8	.45
3	47	66	8.4	32	22	1.9	21	18	1.0
4	44	20	2.4	32	18	1.6	21	19	1.1
5	36	11	1.1	33	12	1.1	19	12	.62
6	42	14	1.6	31	18	1.5	19	8	.41
7	46	11	1.4	28	58	9.8	19	8	.41
8	49	17	2.2	32	21	1.8	17	13	.60
9	46	14	1.7	29	10	.78	14	12	.45
10	44	14	1.7	26	10	.70	16	14	.60
11	43	14	1.6	25	12	.81	14	15	.57
12	46	10	1.2	27	26	1.9	11	14	.42
13	46	14	1.7	29	13	1.0	12	20	.65
14	46	15	1.9	29	9	.70	12	20	.65
15	49	14	1.9	29	9	.70	8.5	23	.53
16	48	14	1.8	29	15	1.2	11	22	.65
17	47	10	1.3	29	11	.86	9.9	24	.64
18	45	11	1.3	26	7	.49	11	29	.86
19	44	19	2.3	29	8	.63	12	21	.68
20	43	29	3.4	29	9	.70	12	23	.75
21	42	17	1.9	27	13	.95	14	28	1.1
22	42	16	1.8	29	7	.55	11	22	.65
23	40	20	2.2	28	9	.68	8.1	30	.66
24	41	26	2.9	25	7	.47	8.5	27	.62
25	41	21	2.3	23	10	.62	8.1	29	.63
26	41	12	1.3	23	9	.56	8.5	40	.92
27	39	30	3.2	24	7	.45	8.1	700	536
28	36	8	.78	25	8	.54	454	4870	6080
29	36	28	2.7	29	9	.70	570	4230	6510
30	39	9	.95	--	--	--	615	3280	5450
31	35	19	1.8	--	--	--	632	2820	4810
TOTAL	1337	--	64.79	826	--	36.89	2714.6	--	23403.20

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	672	2680	4860	39	45	4.7	4.8	238	3.1
2	681	2450	4500	28	50	3.8	4.6	130	1.6
3	690	2250	4190	19	68	3.5	5.8	65	1.0
4	742	2400	4810	28	105	7.9	4.8	50	.65
5	739	2320	4630	32	150	13	6.3	30	.51
6	759	2330	4770	39	188	20	6.0	25	.41
7	684	2270	4190	39	192	20	4.8	47	.61
8	704	2270	4310	39	150	16	4.4	30	.36
9	716	2250	4350	38	245	25	5.5	25	.37
10	736	2260	4490	99	325	91	4.8	24	.31
11	716	2360	4560	75	336	68	4.6	136	1.7
12	710	2140	4100	33	330	29	5.8	58	.91
13	713	2180	4200	21	360	20	7.6	60	1.2
14	718	2150	4170	15	530	21	7.3	100	2.0
15	658	1780	3160	8.1	240	5.2	4.8	50	.65
16	548	1620	2400	11	120	3.6	14	54	2.0
17	546	1480	2180	12	389	13	206	1940	1510
18	503	1360	1850	14	236	8.9	138	3400	1270
19	505	1390	1900	14	356	13	50	950	128
20	464	1470	1840	12	270	8.7	10	340	9.2
21	218	890	539	10	122	3.3	20	85	4.6
22	132	600	214	7.8	184	3.9	7.0	105	2.0
23	102	460	127	5.5	438	6.5	7.5	80	1.6
24	81	325	71	8.1	275	6.0	4.0	60	.65
25	49	198	26	9.9	140	3.7	3.0	90	.73
26	42	125	14	5.9	115	1.8	4.0	43	.46
27	37	50	5.0	4.9	148	2.0	3.0	48	.39
28	35	35	3.3	4.0	203	2.2	2.0	40	.22
29	32	40	3.5	4.2	148	1.7	1.8	31	.15
30	36	50	4.9	4.2	100	1.1	2.5	38	.26
31	--	--	--	4.2	128	1.5	--	--	--
TOTAL	13968	--	76467.7	683.8	--	429.0	554.7	--	2945.64

08396500 PECOS RIVER NEAR ARTESIA, N. MEX.--Continued

SUSPENDED-SEDIMENT DISCHARGE, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

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	3.0	57	.46	689	2850	5300	340	4100	3760
2	3.5	98	.93	661	2790	4980	528	4000	5700
3	2.5	79	.53	658	2720	4830	1810	10800	55900
4	4.2	72	1.6	545	2250	3310	803	6000	13000
5	589	5320	14600	510	2700	3720	650	5330	10200
6	852	17700	40700	314	1650	1400	368	2100	2090
7	297	14000	11200	184	930	462	306	2300	1900
8	512	14600	20200	196	1080	572	423	2000	2280
9	520	16700	24600	105	590	167	730	4280	16400
10	193	8900	4640	80	430	93	3400	6200	56900
11	112	5300	1600	85	360	83	1500	10600	42900
12	81	3200	700	60	190	31	1150	8580	26900
13	74	1700	340	50	120	16	587	3900	6180
14	54	400	58	36	70	6.8	1190	6480	24800
15	41	700	77	50	80	11	607	3300	5410
16	32	700	60	56	130	20	1370	5280	22200
17	141	2710	2040	39	100	11	501	2100	2840
18	552	9600	14300	32	450	39	425	1600	1840
19	648	7400	12900	36	100	9.7	317	1200	1030
20	932	7000	17600	24	66	4.3	242	900	588
21	2120	10400	59500	23	60	3.7	213	655	377
22	1710	7700	35600	18	58	2.8	185	555	277
23	1050	8600	24400	30	75	6.1	154	520	216
24	778	7100	14900	198	4080	3480	132	320	114
25	749	7000	14200	192	8600	4460	125	411	139
26	733	5000	9900	130	6300	2210	114	219	67
27	765	4200	8680	1050	20100	59500	104	49	14
28	772	3900	8130	1800	18000	87500	94	38	9.6
29	731	3100	6120	1750	12900	61000	88	38	9.0
30	741	3600	7200	2250	6900	41900	69	87	16
31	715	3020	5830	678	6500	11900	--	--	--
TOTAL	16507.2	--	360078.52	12529	--	297028.4	18525	--	304056.6

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	64	83	14	103	455	127	72	26	5.1
2	59	240	38	102	560	154	70	18	3.4
3	62	181	30	98	345	91	69	15	2.8
4	57	330	51	96	255	66	68	18	3.3
5	56	210	32	90	815	198	64	67	12
6	52	134	19	87	520	127	64	30	5.2
7	48	112	5	85	380	87	64	52	9.0
8	50	95	13	84	165	37	63	32	5.4
9	51	103	14	80	126	27	64	140	24
10	50	115	16	76	95	19	59	132	21
11	52	115	16	76	80	16	60	145	23
12	48	120	16	70	203	38	65	177	31
13	44	138	16	64	128	22	64	46	7.9
14	42	150	17	67	362	65	67	135	24
15	44	250	30	70	140	26	69	232	43
16	50	268	36	70	90	17	64	57	9.8
17	97	438	115	70	17	3.2	74	48	9.6
18	68	520	95	72	28	5.4	74	203	41
19	54	328	48	69	29	5.4	67	110	20
20	57	384	59	69	29	5.4	64	146	25
21	78	352	74	69	18	3.4	60	100	16
22	102	308	85	69	17	3.2	67	63	11
23	165	439	196	72	24	4.7	80	83	18
24	200	725	392	78	50	11	88	35	8.3
25	224	1730	1050	77	20	4.2	84	128	29
26	209	1350	762	76	22	4.5	76	315	65
27	170	1590	730	78	120	25	73	22	4.3
28	146	970	382	77	45	9.4	72	7	1.4
29	124	720	241	77	30	6.2	72	19	3.7
30	106	790	226	76	28	5.7	70	12	2.3
31	109	460	135	--	--	--	68	118	22
TOTAL	2738	--	4963	2347	--	1208.7	2135	--	506.5

TOTAL DISCHARGE FOR 1972 WATER YEAR (CFS-DAYS)

TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR 1972 WATER YEAR (TONS)

TOTAL DISCHARGE FOR 1972 CALENDAR YEAR (CFS-DAYS)

TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR 1972 CALENDAR YEAR (TONS)

72221.3
1065188.44
74865.3
1071188.94

RIO GRANDE BASIN

08396500 PECOS RIVER NEAR ARTESIA, N. MEX.--Continued

INSTANTANEOUS SUSPENDED SEDIMENT AND PARTICLE SIZE, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	TEMPER- ATURE (DEG C) (00010)	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SUS- PENDE SEDI- MENT (MG/L) (80154)	SUS- PENDE SEDI- MENT (T/DAY) (80155)	SUS. SED. FALL DIAM. % FINER THAN (70337)	SUS. SED. FALL DIAM. % FINER THAN (70338)
MAR.							
28...	1120	15.0	446	5320	6410	54	68
APR.							
03...	1645	14.5	701	2210	4180	45	52
04...	1125	14.0	756	2480	5060	45	51
11...	1130	--	704	2680	5090	27	35
18...	0910	15.0	500	1280	1730	36	45
21...	1135	17.0	203	822	451	57	72
JULY							
07...	1050	23.0	297	14200	11400	57	74
10...	1500	27.0	176	8380	3980	64	79
12...	1725	30.0	74	1840	368	67	85
18...	1615	16.0	570	11000	16900	54	61
21...	1910	24.0	2720	10900	80000	44	55
27...	1730	28.0	806	4150	9030	41	54
AUG.							
02...	1050	25.0	660	2780	4950	33	40
07...	1710	26.5	158	929	396	44	56
28...	1115	22.0	2200	17300	103000	49	62
30...	0630	--	3100	7280	60900	39	54
SEP.							
11...	0900	23.0	1410	13100	49900	47	65
12...	1600	25.5	830	4680	10500	45	54
16...	1505	24.0	1140	3170	9760	28	36

DATE	SUS. SED. FALL DIAM. % FINER THAN (70340)	SUS. SED. FALL DIAM. % FINER THAN (70342)	SUS. SED. FALL DIAM. % FINER THAN (70343)	SUS. SED. FALL DIAM. % FINER THAN (70344)	SUS. SED. FALL DIAM. % FINER THAN (70331)	SUS. SED. FALL DIAM. % FINER THAN (70332)
MAR.						
28...	92	--	--	--	99	100
APR.						
03...	80	96	100	--	--	--
04...	76	95	100	--	--	--
11...	53	77	90	100	--	--
18...	66	93	99	100	--	--
21...	92	--	--	--	99	100
JULY						
07...	97	99	100	--	--	--
10...	99	100	--	--	--	--
12...	98	100	--	--	--	--
18...	88	97	99	100	--	--
21...	78	94	99	100	--	--
27...	71	97	100	--	--	--
AUG.						
02...	61	93	100	--	--	--
07...	71	82	91	100	--	--
28...	82	98	100	--	--	--
30...	75	94	99	100	--	--
SEP.						
11...	86	97	99	100	--	--
12...	67	87	99	100	--	--
16...	52	85	99	100	--	--

08398500 RIO PENASCO AT DAYTON, N. MEX.

LOCATION.--Lat 32°44'36", long 104°24'49", in NE 1/4 SE 1/4 sec. 18, T. 18 S., R. 26 E., Eddy County, at gaging station 1.2 miles upstream from U.S. Highway 285, 1.9 miles northwest of old Dayton railway station, 6 miles upstream from mouth, and 7 miles south of Artesia.

DRAINAGE AREA.--1,060 sq mi, approximately.

PERIOD OF RECORD.--Sediment records: September 1951 to December 1972 (discontinued).

EXTREMES:

Current year:

Sediment concentration: Maximum daily, 7,070 mg/l Sept. 9; minimum daily, no flow on most days.
Sediment discharge: Maximum daily, 47,300 tons Sept. 9; minimum daily, 0 tons on most days.

Period of record:

Sediment concentrations: Maximum daily, 30,600 mg/l Oct. 7, 1954; minimum daily, no flow on most days of each year.
Sediment discharge: Maximum daily, 600,000 tons Oct. 7, 1954; minimum daily, 0 tons on most days of each year.

REMARKS.--Records of specific conductance and water temperatures of daily samples available in district office at Albuquerque, N. Mex.
Flow occurred only on days indicated. Sediment table omitted for period of no flow January 1 to June 30.

SUSPENDED-SEDIMENT DISCHARGE, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

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	0	0	0	0	0
2				0	0	0	227	5870	7820
3				0	0	0	11	900	44
4				0	0	0	.06	83	.01
5				0	0	0	.03	55	0
6				0	0	0	.02	35	0
7				0	0	0	.02	20	0
8				0	0	0	2.4	188	1.7
9				0	0	0	956	7070	47300
10				0	0	0	61	2200	362
11				0	0	0	.74	98	.20
12				0	0	0	66	2500	1180
13				0	0	0	13	1000	35
14				0	0	0	85	1780	1130
15				0	0	0	178	2130	3490
16				0	0	0	18	250	12
17				0	0	0	.58	153	.24
18				0	0	0	.24	84	.05
19				0	0	0	.24	70	.05
20				0	0	0	.24	63	.04
21				0	0	0	.15	62	.03
22				0	0	0	.12	54	.02
23				9.7	1820	198	.12	50	.02
24				.06	36	.01	.10	50	.01
25				0	0	0	.09	50	.01
26				0	0	0	.09	49	.01
27				0	0	0	.09	42	.01
28				0	0	0	.08	35	.01
29				0	0	0	.06	30	0
30				0	0	0	.06	27	0
31				0	0	0	--	--	--
TOTAL	0	--	0	9.76	--	198.01	1620.53	--	61375.41

RIO GRANDE BASIN

08398500 RIO PENASCO AT DAYTON, N. MEX.--Continued

SUSPENDED-SEDIMENT DISCHARGE, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

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	.06	25	0	.02	10	0			
2	.06	25	0	.02	6	0			
3	.06	25	0	.02	8	0			
4	.04	24	0	.02	9	0			
5	.04	28	0	.02	10	0			
6	.04	23	0	.02	7	0			
7	.04	23	0	.02	7	0			
8	.04	18	0	0	0	0			
9	.04	15	0	0	0	0			
10	.04	13	0	0	0	0			
11	.04	13	0	0	0	0			
12	.04	11	0	0	0	0			
13	.04	13	0	0	0	0			
14	.04	12	0	0	0	0			
15	34	1880	615	0	0	0			
16	.58	137	.21	0	0	0			
17	.15	65	.03	0	0	0			
18	.12	47	.02	0	0	0			
19	.08	36	.01	0	0	0			
20	.08	37	.01	0	0	0			
21	.09	29	.01	0	0	0			
22	.09	27	.01	0	0	0			
23	.08	27	.01	0	0	0			
24	.06	25	0	0	0	0			
25	.06	21	0	0	0	0			
26	.06	23	0	0	0	0			
27	.04	24	0	0	0	0			
28	.04	20	0	0	0	0			
29	.03	21	0	0	0	0			
30	.02	20	0	0	0	0			
31	.02	14	0	--	--	--			
TOTAL	36.22	--	615.31	.14	--	0	0	--	0

TOTAL DISCHARGE FOR 1972 WATER YEAR (CFS-DAYS)

TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR 1972 WATER YEAR (TONS)

TOTAL DISCHARGE FOR 1972 CALENDAR YEAR (CFS-DAYS)

TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR 1972 CALENDAR YEAR (TONS)

1630.29

61573.42

1666.65

62188.73

INSTANTANEOUS SUSPENDED SEDIMENT AND PARTICLE SIZE, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	TEMPER- ATURE (DEG C) (00010)	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SUS- PENDED SEDI- MENT (MG/L) (80154)	SUS- PENDED SEDI- MENT DIS- CHARGE (T/DAY) (80155)	SUS- SED. FALL DIAM. % FINER THAN (70337)	SUS. SED. FALL DIAM. % FINER THAN (70338)	SUS. SED. FALL DIAM. % FINER THAN (70340)	SUS. SED. FALL DIAM. % FINER THAN (70342)	SUS. SED. FALL DIAM. % FINER THAN (70343)
SEP.										
02...	1335	19.5	1530	21200	87600	39	55	82	97	100
02...	1700	19.5	398	7930	8520	56	73	98	100	--
10...	0115	22.5	184	5290	2630	66	84	98	100	--
12...	1605	25.5	240	6340	4110	50	73	98	100	--

08405000 PECOS RIVER AT CARLSBAD, N. MEX.

LOCATION.--Lat 32°24'42", long 104°13'17", in SE 1/4 sec. 7, T.22 S., R.27 E., Eddy County, immediately downstream from Lower Tansil Dam, which is approximately 0.2 mile upstream from Dark Canyon, and 0.5 mile downstream from the Greene Street Bridge on U.S. Highway 62-180 in Carlsbad.

DRAINAGE AREA.--18,100 sq mi, approximately (contributing area).

PERIOD OF RECORD.--Chemical analyses: May 1905 to April 1907, May 1937 to September 1946, July 1951 to current year.
Water temperatures: July 1951 to current year.

EXTREMES:

Current year:

Dissolved solids: Maximum, 3,020 mg/l June 13; minimum, 1,190 mg/l Sept. 4.
Hardness: Maximum, 1,500 Aug. 1-27; minimum, 660 mg/l Sept. 4.
Specific conductance: Maximum daily, 4,210 micromhos Aug. 14; minimum daily, 1,690 micromhos Sept. 4.
Water temperatures: Maximum, 26.0°C on several days during June, July, and Sept; minimum, 2.0°C on Jan. 5.

Period of record:

Dissolved solids: Maximum, 3,850 mg/l Aug. 27-30, 1969; minimum, 335 mg/l Oct. 21, 1969.
Hardness: Maximum, 1,970 mg/l May 1, 1941; minimum, 216 mg/l Oct. 21, 1969.
Specific conductance: Maximum daily, 5,870 micromhos Apr. 25, 1942; minimum daily, 578 micromhos Oct. 21, 1969.
Water temperatures (1951-70): Maximum, 38.0°C May 28, 1969; minimum, freezing point Dec. 18, 1965.

REMARKS.--Prior to impoundment above Lower Tansil Dam in January 1970 samples were collected at gage on Greene Street Bridge. Additional samples were collected at 08405200 Pecos River below Dark Canyon for comparison with those collected at this station. Mean daily discharges are estimated from the gage below Dark Canyon.

CHEMICAL ANALYSES, COMPOSITES OF DAILY SAMPLES, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	DIS- CHARGE (CFS) (00060)	DIS- SOLVED SILICA (SI02) (MG/L) (00955)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NESIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED POT- ASSIUM (K) (MG/L) (00935)	BICAR- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)
JAN.												
01-31	13	18	--	290	99	260	4.7	198	0	970	430	.8
FEB.												
01-29	11	17	--	280	99	250	4.2	194	0	930	410	.8
MAR.												
01-19	8.4	16	--	280	100	250	4.1	172	0	940	410	.7
20-28	28	17	--	280	100	240	4.3	180	0	930	400	.8
29-31	2.6	22	--	300	100	260	4.5	149	0	960	430	.7
APR.												
01-14	.19	13	0	330	110	300	4.5	194	0	1100	470	.8
15-30	.01	12	--	330	120	320	4.7	186	0	1200	500	.8
MAY												
01-02	.01	6.7	--	360	130	340	5.1	168	0	1300	560	1.0
03-16	.08	11	--	340	110	320	5.1	181	0	1100	520	.9
17-31	2.2	6.3	--	340	120	330	5.6	143	0	1200	560	.8
JUNE												
01-12	5.7	10	--	350	130	350	6.5	148	0	1300	590	.7
13...	140	11	--	340	130	320	7.4	119	0	1300	850	.8
14-30	8.4	14	--	340	130	350	6.3	122	0	1200	580	.9
JULY												
01-31	1.3	18	--	340	120	350	6.0	163	0	1200	560	1.0
AUG.												
01-27	1.4	18	--	360	140	370	7.0	129	0	1300	620	.8
28-31	49	11	--	310	120	320	6.4	112	0	1100	530	.6
SEP.												
01-03	192	6.0	--	300	110	300	5.3	112	0	1100	500	.7
04...	1480	6.2	--	210	33	120	4.2	95	0	590	180	.5
05-20	534	3.4	--	230	35	130	4.4	62	0	700	190	.5
21-30	28	11	--	260	54	170	4.5	135	0	730	270	.6
OCT.												
01-31	24	12	--	320	94	280	5.0	171	0	1000	430	.7
NOV.												
01-30	22	20	--	350	110	320	5.1	208	0	1100	510	.7
DEC.												
01-31	19	16	--	350	110	310	4.3	192	0	1100	500	.7
CALENDAR YEAR												
WTD. AVG.	--	7.1	--	255	57	178	4.6	110	0	796	279	.6
TIME WTD.												
AVG.	40	15	--	319	107	294	5.1	168	0	1070	478	.8
TONS												
PER DAY	--	.8	--	28	6.1	19	.5	12	0	86	30	.1
WATER YEAR												
WTD. AVG.	--	7.0	--	249	54	173	4.6	105	0	781	269	.6
TIME WTD.												
AVG.	38	16	--	317	108	300	5.4	166	0	1070	485	.8
TONS												
PER DAY	--	.7	--	25	5.5	18	.5	11	0	79	27	.1

08405000 PECOS RIVER AT CARLSBAD, N. MEX.--Continued

CHEMICAL ANALYSES, COMPOSITES OF DAILY SAMPLES, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	DIS- SOLVED ORTHO- PHOS- PHORUS (P) (MG/L) (00671)	DIS- SOLVED BORON (B) (UG/L) (01020)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L) (70300)	DIS- SOLVED SOLIDS (SUM OF TUE-TS) (MG/L) (70301)	DIS- SOLVED SOLIDS (TONS AC-FT) (70303)	DIS- SOLVED SOLIDS (TONS PER DAY) (70302)	HARD- NESS (CA,MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AD- SORP- TION RATIO (00931)	SPF- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)
JAN.												
01-31	1.0	--	--	--	2170	2.95	76.2	1100	970	3.4	2970	7.7
FEB.												
01-29	.87	--	--	--	2090	2.84	62.1	1100	950	3.3	3000	7.7
MAR.												
01-19	.67	--	--	--	2090	2.84	47.4	1100	970	3.3	2970	7.7
20-28	.70	--	--	--	2060	2.80	156	1100	960	3.1	2970	7.6
29-31	.72	--	--	--	2170	2.95	15.2	1200	1000	3.3	3110	7.6
APR.												
01-14	.29	.00	200	2440	2430	3.30	1.25	1300	1100	3.7	3380	7.1
15-30	.21	--	--	--	2580	3.51	.07	1300	1200	3.8	3600	7.1
MAY												
01-02	.02	--	--	--	2790	3.79	.08	1400	1300	3.9	3570	8.0
03-16	.17	--	--	--	2500	3.40	.54	1300	1200	3.9	3540	7.6
17-31	.13	--	--	--	2630	3.58	15.6	1300	1200	3.9	3660	8.2
JUNE												
01-12	.27	--	--	--	2810	3.82	43.2	1400	1300	4.1	3750	7.7
13...	.51	--	--	--	3020	4.11	1140	1400	1300	3.7	3420	7.5
14-30	.39	--	--	--	2680	3.64	60.8	1400	1300	4.1	3690	7.5
JULY												
01-31	.33	--	--	--	2680	3.64	9.41	1300	1200	4.2	3688	7.4
AUG.												
01-27	.28	--	--	--	2880	3.92	10.9	1500	1400	4.2	3930	7.5
28-31	.54	--	--	--	2460	3.35	325	1300	1200	3.9	3540	7.4
SEPT.												
01-03	.34	--	--	--	2380	3.24	1230	1200	1100	3.8	3210	7.7
04...	.15	--	--	--	1190	1.62	4760	660	580	2.0	1690	7.8
05-20	.41	--	--	--	1340	1.82	1930	720	650	2.1	1880	8.0
21-30	.16	--	--	--	1570	2.14	119	870	760	2.5	2240	7.8
OCT.												
01-31	.57	--	--	--	2230	3.03	145	1200	1000	3.5	2680	7.9
NOV.												
01-30	1.4	--	--	--	2520	3.43	150	1300	1200	3.8	3570	7.8
DEC.												
01-31	1.4	--	--	--	2490	3.39	128	1300	1200	3.7	3460	8.0
CALENDAR YEAR												
WTD. AVG.	.50	--	--	--	1640	2.22	--	868	779	2.6	2260	7.9
TIME WTD.												
AVG.	.63	--	--	--	2370	3.23	--	1230	1110	3.6	3270	7.7
TONS												
PER DAY	.06	--	--	--	177	--	--	--	--	--	--	--
WATER YEAR												
WTD. AVG.	.47	--	--	--	1590	2.17	--	846	758	2.5	2220	7.9
TIME WTD.												
AVG.	.63	--	--	--	2390	3.25	--	1230	1110	3.7	3310	7.6
TONS												
PER DAY	.05	--	--	--	162	--	--	--	--	--	--	--

CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	DIS- CHARGE (CFS) (00060)	DIS- SOLVED SILICA (SiO2) (MG/L) (00955)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	BICAR- BONATE (HCO3) (MG/L) (00440)	
FEB. 08...	1645	16	16	10	270	94	250	4.3	186	
DATE		CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	TOTAL NITRO- GEN (N) (MG/L) (00600)	TOTAL PHOS- PHORUS (P) (MG/L) (00665)	DIS- SOLVED ORTHO- PHOS- PHORUS (P) (MG/L) (00671)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L) (70300)
FEB. 08...	0	930	410	.7	.94	1.4	.01	.00	2460	
DATE		DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L) (70301)	HARD- NESS (CA,MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AD- SORP- TION RATIO (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	DIS- SOLVED BORON (B) (UG/L) (01020)	
FEB. 08...	2070	1100	910	3.3	2980	7.7	10.0	170		

RIO GRANDE BASIN

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08405000 PECOS RIVER AT CARLSBAD, N. MEX.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972
(ONCE-DAILY)

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	2970	2910	---	3210	3780	3740	3710	3960	3960	2550	---	3410
2	2960	2930	2900	3190	3650	3730	2760	4040	3260	2570	3300	3420
3	2960	2890	2890	3340	3550	3790	3100	4040	3770	2710	3340	3420
4	2990	2890	2880	3250	3680	3840	3400	4040	1690	2700	3360	3410
5	3020	2900	2890	3230	3550	3880	3640	3790	1950	2780	3360	3420
6	2640	2890	2880	3230	3750	3860	3600	3820	1830	2750	3360	3430
7	2900	2890	2880	3290	3590	3880	3600	3870	1840	2830	3400	3430
8	2910	2890	2890	3290	3340	3780	3600	3930	1840	2830	3420	3430
9	2900	2930	2880	3310	3220	3750	3660	4000	1870	2930	3410	3430
10	2900	2890	2940	3320	3340	3780	3690	4040	1830	2960	3440	3460
11	2960	2860	2910	3320	3490	3840	3750	4110	1820	2990	3440	3470
12	2910	2870	2890	3350	3540	3840	---	4150	1740	3020	3460	3520
13	2940	2870	2910	3330	3590	3340	3520	4180	1850	3090	3460	3480
14	2930	---	2890	3320	3640	3650	3600	4210	1850	3090	3460	3480
15	2930	2890	2890	3340	3610	3640	3700	4010	1790	3140	3460	3480
16	2940	2880	2890	3410	3680	3690	3780	4010	2060	3160	3470	3410
17	2930	2870	2910	3430	3740	3540	3600	4100	1960	3140	3470	3460
18	2920	2870	2900	3440	3640	3600	3840	4130	1940	3230	3470	3410
19	2910	2860	2900	3460	3740	3570	3740	4130	1920	3220	3440	3400
20	---	---	2850	3430	3730	3590	3660	4150	1920	3230	3430	3460
21	2900	2860	2850	3560	3530	3610	3720	4160	2030	3130	3440	3500
22	2990	2850	2860	3510	3400	3600	3710	4180	2070	2970	3440	3410
23	2900	---	2850	3510	3520	3600	3800	3890	2120	3050	3440	3410
24	2910	2890	2860	3540	3490	3630	3670	3910	2110	3170	3410	3410
25	2930	2890	2890	3540	3520	3630	3710	3960	2150	3200	3390	3380
26	2910	2870	2920	3500	3610	3700	3760	3890	2150	3250	3360	3380
27	2900	2880	2930	3590	3660	3700	3740	3910	2240	3230	3360	3350
28	2910	2880	2980	3650	3590	3720	3780	3360	2290	3260	3390	3340
29	2900	2870	3000	3620	3640	3750	3760	3580	2410	3260	3390	3340
30	2900	---	3030	3670	3620	3700	3820	3690	2500	3270	3400	3310
31	2900	---	3160	---	3640	---	3860	3850	---	3290	---	3340
MONTH	2920	2880	2910	3410	3580	3700	3640	3970	2160	3030	3410	3420

TEMPERATURE (DEG. C) OF WATER, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972
(ONCE-DAILY)

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

RIO GRANDE BASIN

08405200 PECOS RIVER BELOW DARK CANYON, AT CARLSBAD, N. MEX.

LOCATION.--Lat 32°24'37", long 104°12'58", in NE 1/4 sec. 8, T.22 S., R.27 E., Eddy County, at gaging station, 700 ft downstream from mouth of Dark Canyon, 0.3 mile downstream from lower Tansil Dam and Bataan recreational area, and 0.8 mile downstream from bridge on U.S. Highway 62-180 in Carlsbad.

DRAINAGE AREA.--18,550 sq mi, approximately (contributing area).

PERIOD OF RECORD.--Chemical analyses: February 1972 to December 1972.

REMARKS.--Samples collected at this station for comparison with those collected at 08405000 Pecos River at Carlsbad, N. Mex.

CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	DIS- CHARGE (CFS) (00060)	DIS- SOLVED SILICA (SI02) (MG/L) (00955)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)
FEB. 08...	1730	16	15	20	290	99	260	4.4
MAR. 03...	1840	4.9	--	--	--	--	--	--
APR. 04...	1615	.09	--	--	--	--	--	--
DEC. 05...	1415	35	--	--	--	--	--	--

DATE	BICAR- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	TOTAL NITRO- GEN (N) (MG/L) (00600)	TOTAL PHOS- PHORUS (P) (MG/L) (00665)	DIS- SOLVED ORTHO. PHOS- PHORUS (P) (MG/L) (00671)
FEB. 08...	187	0	980	420	.7	.84	1.2	.01	.00
MAR. 03...	--	--	--	--	--	--	--	--	--
APR. 04...	--	--	--	--	--	--	--	--	--
DEC. 05...	--	--	--	--	--	--	--	--	--

DATE	DIS- SOLVED SULFUR (SUM OF TUENTS) (MG/L) (70301)	HARD- NESS (CA, MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AD- SORP- TION RATIO (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MMOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	DIS- SOLVED BORON (B) (UG/L) (01020)
FEB. 08...	2170	1100	980	3.4	3010	8.0	9.0	170
MAR. 03...	--	--	--	--	2900	--	16.0	--
APR. 04...	--	--	--	--	3360	--	18.0	--
DEC. 05...	--	--	--	--	3520	--	11.0	--

08406500 PECOS RIVER NEAR MALAGA, N. MEX.
(Surveillance network station)

LOCATION.--Lat 32°12'26", long 104°01'22", in SW 1/4 sec. 19, T.24 S., R.29 E., Eddy County, 2.5 miles upstream from gaging station near Malaga, which is 3.1 miles southeast of Malaga, and 4.3 miles downstream from Black River.

DRAINAGE AREA.--19,190 sq mi, approximately, upstream from gaging station (contributing area).

PERIOD OF RECORD.--Chemical analyses: July 1937 to current year.

Water temperatures: February 1959 to current year.

Sediment records: July 1969 to current year.

EXTREMES:

Current year:

Dissolved solids: Maximum, 7,040 mg/l July 11; minimum, 1,020 Sept. 2.

Hardness: Maximum, 2,400 mg/l Mar. 7, June 7, July 11; minimum, 620 mg/l Sept. 2.

Specific conductance: Maximum daily, 9,820 micromhos July 13; minimum daily, 1,080 micromhos Sept. 2.

Water temperatures: Maximum, 32.0°C Aug. 30; minimum, 5.0°C Jan. 5, 10, Dec. 11, 15.

Period of record:

Dissolved solids: Maximum, 18,700 mg/l June 7, 1966; minimum, 344 mg/l Oct. 21, 1969.

Hardness: Maximum, 3,110 mg/l June 7, 1966; minimum, 235 mg/l Oct. 21, 1969.

Specific conductance: Maximum daily, 28,100 micromhos June 7, 1966; minimum daily, 450 micromhos Sept. 21, 1941.

Water temperatures (1959-72): Maximum, 34.0°C June 25, 1964; minimum, 3.0°C Jan. 13, 1963.

REMARKS.--No appreciable inflow between sampling point and gaging station. Bacteria and aquatic biology analyzed by the New Mexico Environmental Improvement Agency on samples collected by the U.S. Geological Survey. After June 1972, Bacteria analyzed by the U.S. Geological Survey.

CHEMICAL ANALYSES, COMPOSITES OF DAILY SAMPLES, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	DIS- CHARGE (CFS) (00060)	DIS- SOLVED SILICA (SI02) (MG/L) (00955)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NESIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED POT- AS- SIUM (K) (MG/L) (00935)	BICAR- BONATE (MCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)
JAN.												
01-31	27	16	--	530	200	1100	29	178	0	1800	1700	1.1
FEB.												
01-09	20	17	--	530	210	1100	32	181	0	1900	1800	1.2
10-29	19	20	--	550	210	1300	42	186	0	1900	2100	1.2
MAR.												
01-14	20	19	--	560	210	1100	30	185	0	1900	1800	1.2
15-31	18	19	--	550	220	1200	36	182	0	2000	2000	1.1
APR.												
01-08	16	20	--	540	200	1100	36	178	0	1900	1700	1.1
09-30	12	21	--	550	200	1300	47	182	0	2000	2100	1.1
MAY												
01-09	13	22	--	560	200	1400	41	181	0	2100	2100	1.1
10-15	16	18	--	520	170	940	1.5	168	0	1800	1600	1.0
16-31	12	20	--	550	170	1200	45	186	0	2000	2000	1.1
JUNE												
01-30	11	24	--	550	190	1200	36	168	0	2000	2000	1.1
JULY												
01-18	8.8	26	--	580	200	1400	46	171	0	2000	2200	1.3
19...	747	9.6	--	290	29	120	7.2	100	0	720	200	.3
20...	138	12	--	300	52	280	11	104	0	890	480	.4
21-31	14	21	--	480	150	880	29	164	0	1600	1500	.9
AUG.												
01-14	14	22	--	540	170	1000	31	173	0	1800	1700	1.0
15-23	24	20	--	520	160	840	23	169	0	1700	1400	.9
24-26	34	17	--	400	100	450	15	148	0	1100	730	.7
27-31	15	21	--	510	160	910	27	177	0	1700	1600	.9
SEP.												
01...	23	15	--	510	160	920	25	140	0	1800	1500	1.0
02...	717	1.0	--	210	22	76	4.2	50	0	560	120	.3
03-04	640	5.6	--	570	210	810	10	119	0	2000	1500	1.0
05-09	234	4.7	--	230	71	270	7.7	41	5	830	430	.5
10-13	1240	11	--	230	47	170	5.6	28	0	800	250	.6
14-15	290	3.5	--	230	59	310	10	25	0	840	490	.5
16-18	844	3.3	--	250	49	180	5.1	36	5	830	280	.6
19-22	133	5.3	--	270	65	320	11	32	6	940	500	.6
23-30	32	7.2	--	360	110	690	3.6	74	0	1300	1100	.7
OCT.												
01-20	30	11	--	450	140	810	22	114	0	1600	1300	.9
21-22	71	7.2	--	390	110	580	14	54	0	1300	890	.6
23-31	41	11	--	420	140	690	18	90	0	1500	1100	.8
NOV.												
01-30	41	18	--	480	160	790	15	173	0	1600	1300	1.0
DEC.												
01-31	46	13	--	470	160	700	18	179	0	1600	1200	.9
CALENDAR YEAR												
WTD. AVG.	--	11	--	360	106	515	14	92	1	1230	842	.7
TIME WTD.												
AVG.	57	18	--	501	173	986	28	160	0	1740	1610	1.0
TONS												
PER DAY	--	1.6	--	55	16	79	2.1	14	0	188	129	.1
WATER YEAR												
WTD. AVG.	--	12	--	362	107	535	15	90	1	1230	883	.7
TIME WTD.												
AVG.	52	20	--	529	186	1090	32	170	0	1820	1810	1.0
TONS												
PER DAY	--	1.6	--	51	15	75	2.1	13	0	172	124	.1

RIO GRANDE BASIN

08406500 PECOS RIVER NEAR MALAGA, N. MEX.--Continued

CHEMICAL ANALYSES, COMPOSITES OF DAILY SAMPLES, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	DIS- SOLVED ORTHO. PHOS- PHORUS (P) (MG/L) (00671)	DIS- SOLVED BORON (B) (UG/L) (01020)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L) (70300)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L) (70301)	DIS- SOLVED SOLIDS (TONS PER AC-FT) (70303)	DIS- SOLVED SOLIDS (TONS PER DAY) (70302)	HARD- NESS (CA+MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AD- SORP- TION RATIO (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)
JAN.												
01-31	2.0	--	--	--	5470	7.44	399	2100	2000	10	7590	7.6
FEB.												
01-09	2.2	--	--	--	5690	7.74	307	2200	2000	10	8340	7.5
10-29	2.3	--	--	--	6220	8.46	319	2200	2100	12	9090	7.6
MAR.												
01-14	2.1	--	--	--	5720	7.78	309	2300	2100	10	8360	7.5
15-31	1.8	--	--	--	6120	8.32	297	2300	2100	11	8870	7.6
APR.												
01-08	2.1	--	--	--	5590	7.60	241	2200	2000	10	8040	7.0
09-30	1.7	--	--	--	6320	8.60	205	2200	2000	12	9200	7.0
MAY												
01-09	1.7	--	--	--	6520	8.87	229	2200	2100	13	8990	7.9
10-15	1.5	--	--	--	5140	6.99	222	2000	1900	9.2	7140	7.8
16-31	1.3	--	--	--	6100	8.30	198	2200	2000	11	8120	8.0
JUNE												
01-30	1.5	--	--	--	6090	8.28	181	2200	2000	11	8540	7.5
JULY												
01-18	1.6	--	--	--	6540	8.89	155	2300	2100	13	9020	7.8
19...	.14	--	--	--	1430	1.94	2880	840	760	1.8	1590	7.7
20...	.99	--	--	--	2080	2.83	775	960	880	3.9	3060	7.6
21-31	1.4	--	--	--	4750	6.46	180	1800	1700	9.0	6570	7.9
AUG.												
01-14	1.5	--	--	--	5360	7.29	203	2000	1900	9.6	7380	7.3
15-23	1.5	--	--	--	4750	6.46	308	2000	1800	8.3	6700	7.4
24-26	.92	--	--	--	2890	3.93	265	1400	1300	5.2	4280	7.3
27-31	1.4	--	--	--	5020	6.83	203	1900	1800	9.0	6920	7.3
SEP.												
01...	.82	--	--	--	5000	6.80	311	1900	1800	9.1	6930	7.9
02...	.08	--	--	--	1020	1.39	1970	620	570	1.3	1070	7.7
03-04	.08	--	--	--	5170	7.03	8930	2300	2200	7.4	6710	7.6
05-09	.01	--	--	--	1870	2.54	1180	870	820	4.0	2760	8.7
10-13	.00	--	--	--	1530	2.08	5120	770	750	2.7	2150	7.7
14-15	.00	--	--	--	1960	2.67	1530	820	800	4.7	2900	7.4
16-18	.03	--	--	--	1620	2.20	3690	830	790	2.7	2220	8.6
19-22	.00	--	--	--	2130	2.90	765	940	910	4.5	3060	8.7
23-30	.24	--	--	--	3610	4.91	312	1400	1300	8.2	5260	8.5
OCT.												
01-20	.61	--	--	--	4390	5.97	356	1700	1600	8.6	5980	7.9
21-22	.09	--	--	--	3320	4.52	636	1400	1400	6.7	4780	8.2
23-31	.51	--	--	--	3930	5.34	435	1600	1600	7.4	5430	8.0
NOV.												
01-30	1.7	--	--	--	4460	6.07	494	1900	1700	8.0	6270	7.8
DEC.												
01-31	1.8	--	--	--	4260	5.79	529	1800	1700	7.1	5640	7.7
CALENDAR YEAR												
WTD. AVG.	.63	--	--	--	3130	4.25	--	1340	1260	5.6	4320	7.9
TIME WTD.												
AVG.	1.5	--	--	--	5140	6.99	--	1970	1830	9.5	7210	7.7
TONS												
PER DAY	.10	--	--	--	478	--	--	--	--	--	--	--
WATER YEAR												
WTD. AVG.	.66	--	--	--	3190	4.34	--	1350	1270	5.7	4450	7.9
TIME WTD.												
AVG.	1.7	--	--	--	5580	7.58	--	2100	1940	10	7900	7.6
TONS												
PER DAY	.09	--	--	--	447	--	--	--	--	--	--	--

RIO GRANDE BASIN

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08406500 PECOS RIVER NEAR MALAGA, N. MEX.--Continued
CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	DIS- CHARGE (CFS) (00060)	DIS- SOLVED SILICA (SIO2) (MG/L) (00955)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	BICAR- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)
JAN.										
12...	1145	36	12	--	490	210	1200	31	174	0
FEB.										
08...	1440	21	14	--	530	200	1200	35	174	0
MAR.										
07...	1130	25	15	--	620	210	1100	25	188	0
APR.										
04...	1345	18	18	10	570	210	1100	30	178	0
MAY										
03...	1230	20	19	--	610	200	1200	59	182	0
JUNE										
07...	1700	16	20	--	600	210	1400	47	196	0
JULY										
11...	0950	8	22	20	600	210	1400	47	167	0
AUG.										
08...	0910	21	16	30	450	130	810	26	154	0
SEP.										
13...	1230	505	10	140	240	40	150	5.8	92	0
OCT.										
04...	1030	42	18	10	490	150	710	17	175	0
NOV.										
08...	1200	27	17	40	500	160	930	26	176	0
DEC.										
05...	1030	44	12	20	480	160	790	17	176	0

DATE	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED NITRATE (N) (MG/L) (00618)	DIS- SOLVED NITRITE (N) (MG/L) (00613)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	DIS- SOLVED AMMONIA NITRO- GEN (N) (MG/L) (00608)	DIS- SOLVED ORGANIC NITRO- GEN (N) (MG/L) (00605)	TOTAL NITRO- GEN (N) (MG/L) (00600)	TOTAL PHOS- PHORUS (P) (MG/L) (00665)
JAN.										
12...	1800	1700	1.1	--	--	1.6	--	--	--	--
FEB.										
08...	1900	2000	.9	--	--	1.7	--	--	--	--
MAR.										
07...	2000	1700	1.2	--	--	2.5	--	--	--	--
APR.										
04...	1900	1800	1.1	1.9	.03	1.9	.08	.24	2.2	.07
MAY										
03...	2000	2000	1.2	--	--	1.6	--	--	--	--
JUNE										
07...	2000	2200	.9	--	--	1.1	--	--	--	--
JULY										
11...	2100	2300	1.2	1.1	.01	1.1	.13	.52	1.8	.09
AUG.										
08...	1500	1300	.8	1.2	.01	1.2	.15	.68	2.0	.14
SEP.										
13...	670	210	.5	.00	.00	.00	.05	.53	.58	.13
OCT.										
04...	1600	1200	1.0	1.8	.07	1.9	.06	.58	2.5	.06
NOV.										
08...	1600	1500	1.2	1.4	.01	1.4	.04	.50	1.9	.05
DEC.										
05...	1500	1200	1.0	1.4	.00	1.4	.27	.23	1.9	.04

RIO GRANDE BASIN

08406500 PECOS RIVER NEAR MALAGA, N. MEX.--Continued

CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	DIS- SOLVED ORTHOPHOS- PHORUS (P) (MG/L) (00671)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L) (70300)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L) (70301)	HARD- NESS (CA+MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AD- SORP- TION RATIO (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	DIS- SOLVED BORON (B) (UG/L) (01020)
JAN. 12...	.00	5600	5540	2100	1900	11	7920	7.5	9.5	--
FEB. 08...	.00	6120	5970	2100	2000	11	8660	7.5	12.5	--
MAR. 07...	.02	6260	5770	2400	2300	9.7	7950	7.7	16.0	--
APR. 04...	.02	6070	5730	2300	2100	10	8290	7.6	17.0	510
MAY 03...	.00	6460	6190	2300	2200	11	9050	7.8	20.0	--
JUNE 07...	.02	7020	6580	2400	2200	13	9490	7.5	23.0	--
JULY 11...	.02	7040	6770	2400	2200	13	9790	7.5	24.0	620
AUG. 08...	.04	4540	4320	1700	1500	8.7	6430	7.6	24.5	410
SEP. 13...	.02	1430	1370	760	690	2.4	1960	7.7	26.0	130
OCT. 04...	.05	4530	4290	1800	1700	7.2	5760	8.1	21.0	440
NOV. 08...	.02	5140	4830	1900	1800	9.3	6970	7.6	15.0	450
DEC. 05...	.01	4240	4260	1900	1700	8.0	5720	7.4	10.5	390

FIELD AND BIOCHEMICAL MEASUREMENTS, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	DIS- CHARGE (CFS) (00060)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	AIR TEMPER- ATURE (DEG C) (00020)	COLOR (PLAT- INUM- COBALT UNITS) (00080)	TUR- BID- ITY (JTU) (00070)
JAN. 12...	1145	36	7700	7.8	9.5	18.5	3	6
FEB. 08...	1440	21	8430	7.9	12.5	17.0	5	9
MAR. 07...	1130	25	7600	7.9	16.0	29.5	3	10
APR. 04...	1345	18	8000	7.8	17.0	20.5	5	15
MAY 03...	1230	20	8800	8.1	20.0	24.5	10	15
JUNE 07...	1700	16	8700	8.1	23.0	27.5	10	20
JULY 11...	0950	8.4	9400	7.9	24.0	29.5	15	10
AUG. 08...	0910	21	6300	7.9	24.5	24.5	15	30
SEP. 13...	1230	505	2000	7.9	26.0	25.0	15	20
OCT. 04...	1030	42	6050	8.1	21.0	21.5	5	15
NOV. 08...	1200	27	7200	8.1	15.9	20.5	10	10
DEC. 05...	1030	44	6000	8.1	10.5	24.0	5	20

RIO GRANDE BASIN

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08406500 PECOS RIVER NEAR MALAGA, N. MEX.--Continued

FIELD AND BIOCHEMICAL MEASUREMENTS, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	DIS- SOLVED OXYGEN (MG/L) (00300)	CHEM- ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L) (00335)	BIO- CHEM- ICAL OXYGEN DEMAND (MG/L) (00310)	IMME- DIATE COLI- FORM (COL. PER 100 ML) (31501)	FECAL COLI- FORM (COL. PER 100 ML) (31616)	STREP- TOCOCCI (COL- ONIES PER 100 ML) (31679)	TOTAL ORGANIC CARBON * (MG/L) (00680)
JAN. 12...	10.7	7	2.7	<1	<1	<100	--
FEB. 08...	11.8	8	2.2	<10	<10	<10	--
MAR. 07...	9.0	8	2.8	70	<10	<10	--
APR. 04...	9.8	10	3.6	<100	<100	<100	--
MAY 03...	8.6	7	3.0	70	20	10	--
JUNE 07...	9.2	13	6.2	2900	<100	<100	--
JULY 11...	7.8	--	--	--	8	--	7.5
AUG. 08...	6.9	--	--	--	1000	--	6.0
SEP. 13...	8.0	--	--	--	500	--	7.0
OCT. 04...	7.9	--	--	--	22	--	5.0
NOV. 08...	9.2	--	--	--	10	--	5.0
DEC. 05...	9.9	--	--	--	10	--	5.5

* ANALYZED BY THE NEW MEXICO ENVIRONMENTAL IMPROVEMENT AGENCY.

BIOLOGICAL ANALYSES, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

Date: April 4, 1972

Method of Sampling: Surber (3 square feet)

Organisms (classification, number)

Diptera: Chironomidae, 44

Ephemeroptera: Bactidae; Caenis sp., 1

Ephemerella sp., 1

Odonata, 1

Trichoptera: Hydropsychidae; Cheumatopsyche sp., 2

Amphipoda: Talitridae; Hyalella sp., 7

Gastropoda: Physidae; Physa sp., 10

Date: November 8, 1972

Method of sampling: Surber (3 square feet)

Organisms (classification, number)

Diptera: Chironomidae; Cricopterus sp., 1

Goeldichironomus holoprasinus (Goeldi), 1

Polypedilum sp., 1

Rheotanytarsus sp., 3 pupae, 10 larvae

Odonata: Coenagrionidae; Hetaerina sp., 2

Trichoptera: Hydropsychidae; Cheumatopsyche sp., 142

Gastropoda: Physidae; Physa sp., 3

RIO GRANDE BASIN

08406500 PECOS RIVER NEAR MALAGA, N. MEX.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C) CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972
(ONCE-DAILY)

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	7090	7630	8520	8170	8620	8240	9320	7930	6880	6310	5290	5810
2	7190	7690	8520	8130	8620	8640	9320	8050	1080	6390	5680	5870
3	7340	7920	8520	8190	9070	8710	9020	8560	7570	6420	5620	5810
4	7390	8110	8390	8060	9220	8930	9020	7930	5380	5790	6030	5780
5	7240	8050	8390	8000	9460	9000	9240	7640	2610	5760	6390	5870
6	7290	8240	8460	7070	9810	9150	9170	7930	2790	5220	6540	5810
7	7340	8240	7940	7820	9550	9080	9320	6820	3450	5670	6710	5970
8	7340	8440	8000	7590	9140	9000	9480	6770	2760	6230	6920	5780
9	7500	8170	7540	8390	8760	8850	9400	6690	2650	6240	7010	5810
10	---	8660	7650	8660	7070	8780	9400	7430	2220	6620	6920	5840
11	7500	8660	7480	8440	6840	8710	9440	7870	2150	6620	7060	5930
12	7610	8510	7480	8600	7460	8780	9570	8360	1910	6670	7350	5870
13	---	8580	7760	8670	7740	8180	9820	8350	2050	6580	7450	5810
14	7500	8960	8000	9040	7680	8310	9730	8430	2770	6060	7500	5780
15	7500	8800	8600	8890	7910	8310	9400	6410	3100	6110	6970	5930
16	7500	8580	8670	8970	8410	8310	9320	5600	2020	6410	6630	5840
17	7450	8580	8670	8960	8350	8120	9570	5940	2360	5910	6710	5740
18	7610	8720	8970	9280	8760	7350	9400	6770	2320	5780	---	5710
19	7720	8570	8890	9280	9140	7550	1530	7040	2740	5910	6140	5870
20	7660	8790	9040	8960	9370	7660	3070	7180	3320	5730	5840	5780
21	7550	8790	9120	8880	9460	7710	4400	7040	3080	4340	5740	5870
22	7550	8870	8890	9640	8470	8060	5120	7090	3490	4950	5710	5810
23	7610	9120	9370	9360	7720	8370	6120	6860	4080	5380	5620	5810
24	7660	9120	8810	9360	7720	8440	6690	3810	4690	5320	5620	5810
25	7660	9270	8320	9120	7910	8370	7270	4710	5220	5120	5620	5680
26	7610	9360	8250	9360	8550	8370	7480	4730	5580	5070	5650	5780
27	7660	9270	8120	9630	9300	8570	7910	5910	5960	5200	5540	5740
28	7610	8570	8000	9200	9060	8640	8030	5940	6060	5460	5600	5840
29	7550	8430	8000	8640	9130	8850	8210	7090	5920	5980	5650	5710
30	7500	---	8120	9030	8900	8930	7620	7640	6090	5730	5780	5740
31	7550	---	8120	---	8330	---	8130	7640	---	5860	---	5970
MONTH	7490	8580	8340	8690	8570	8470	8080	6970	3740	5830	6250	5820

TEMPERATURE (DEG. C) OF WATER CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972
(ONCE-DAILY)

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

RIO GRANDE BASIN

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08406500 PECOS RIVER NEAR MALAGA, N. MEX.--Continued

INSTANTANEOUS SUSPENDED SEDIMENT AND PARTICLE SIZE, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	TEMPER- ATURE (DEG C) (00010)	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SUS- PENDED SEDI- MENT (MG/L) (80154)	SUS- PENDED SEDI- MENT DIS- CHARGE (T/DAY) (80155)
JAN.					
12...	1145	9.5	36	20	1.9
FEB.					
08...	1440	12.5	21	40	2.3
MAR.					
07...	1130	16.0	25	15	1.0
APR.					
04...	1345	17.0	18	28	1.4
MAY					
03...	1230	20.0	20	48	2.6
JUNE					
07...	1700	23.0	16	81	3.5
JULY					
11...	0950	24.0	8.4	55	1.2
AUG.					
08...	0910	24.5	21	66	3.7
29...	1900	22.0	14	2	.08

08407000 PECOS RIVER AT PIERCE CANYON CROSSING, NEAR MALAGA, N. MEX.

LOCATION.--Lat 32°11'19", long 103°58'43", in SW 1/4 sec. 27, T. 24 S., R. 29 E., Eddy County, 0.2 mile downstream from gaging station, at Pierce Canyon Crossing, which is 6 miles southeast of Malaga.

DRAINAGE AREA.--19,260 sq mi, approximately (contributing area).

PERIOD OF RECORD.--Chemical analyses: March 1938 to September 1941, October 1951 to current year.
Water temperatures: October 1952 to current year.

EXTREMES:

Current year:

Dissolved solids: Maximum, 37,500 mg/l June 1-16; minimum, 1,330 mg/l Sept. 3.

Hardness: Maximum, 4,100 mg/l June 1-16; minimum, 610 Sept. 3.

CHEMICAL ANALYSES, COMPOSITES OF DAILY SAMPLES, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	DIS- CHARGE (CFS) (00060)	DIS- SOLVED SILICA (SIO2) (MG/L) (00955)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NESIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	BICAR- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)
JAN.												
01-04	33	15	--	510	200	1900	73	181	0	1900	3100	1.0
05-13	28	15	--	540	230	2600	90	184	0	2000	4100	1.0
14-15	29	14	--	560	280	4000	160	189	0	2200	6500	1.1
16-18	28	14	--	530	220	2100	80	183	0	2000	3400	1.0
19-26	29	14	--	560	250	2900	120	188	0	2100	4600	1.0
27-30	31	13	--	540	220	2100	81	193	0	2000	3400	1.1
31...	30	13	--	580	290	4300	210	202	0	2300	7000	1.1
FEB.												
01-09	23	7.5	0	540	230	2200	94	188	0	2000	3600	1.1
10-21	19	17	--	580	290	3800	200	189	0	2300	6000	1.1
22-26	15	16	--	570	380	6600	400	201	0	2700	11000	1.3
27-29	21	18	--	560	280	3400	190	192	0	2200	5400	1.2
MAR.												
01-04	18	18	--	580	360	5200	260	195	0	2600	8700	1.2
05-17	20	16	--	590	290	3500	160	182	0	2400	5700	1.2
18-22	12	16	--	580	390	7100	330	192	0	2800	11000	1.3
23-31	24	16	--	590	330	4500	210	184	0	2500	7500	.9
APR.												
01-07	20	12	--	650	320	3900	170	179	0	2300	7000	1.3
08-22	14	8.8	--	620	330	5400	240	165	0	2600	8800	1.3
23-30	10	2.8	--	630	430	8200	390	62	19	2900	13000	1.2
MAY												
01-09	12	15	--	660	420	7500	350	183	0	3000	12000	1.3
10-14	15	8.8	--	600	280	3600	150	117	22	2300	6200	1.2
15-18	7.2	15	--	640	330	5200	240	174	0	2600	8800	1.3
19-31	6.5	12	--	650	450	9000	410	173	0	3100	15000	1.3
JUNE												
01-16	5.1	22	--	700	560	12000	560	181	0	3600	20000	1.4
17...	22	14	--	220	110	2500	110	104	0	380	3600	.7
18-30	11	22	--	610	370	6500	300	145	0	2700	11000	1.2
JULY												
01-18	8.1	24	--	660	390	8100	330	162	0	3000	12000	1.4
19...	550	15	--	430	210	3800	170	142	0	1800	6200	.9
20-22	95	6.6	--	300	44	480	23	91	0	780	800	.4
23-26	11	11	--	370	110	1700	69	112	0	1100	2700	.6
27-31	4.9	9.1	--	380	160	3300	140	118	0	1500	5100	.7
AUG.												
01-04	5.6	16	--	450	230	4700	200	140	0	1900	7800	.8
05-08	23	16	--	350	150	2400	96	98	0	1300	3900	.8
09-15	14	19	--	540	230	3600	140	123	0	2000	5700	.9
16-31	24	16	--	410	160	1800	69	114	0	1700	2900	.8
SEP.												
01-02	284	13	--	440	170	1900	67	128	0	1700	3000	.9
03...	510	3.6	--	210	21	200	9.7	75	0	520	330	.4
04-05	718	2.8	--	300	110	480	11	116	0	1000	820	.6
06-10	419	1.0	--	270	88	690	26	108	0	1000	1100	.6
11-13	1030	4.0	--	250	43	180	6.9	100	0	770	270	.5
14-15	172	4.3	--	260	55	520	20	118	0	790	740	.5
16-18	920	3.1	--	270	52	230	8.4	111	0	790	340	.6
19-20	166	2.7	--	290	64	480	19	102	0	900	760	.6
21-25	83	3.2	--	320	87	850	32	120	0	1100	1300	.7
26-30	32	8.1	--	380	140	1600	67	149	0	1400	2600	1.0
OCT.												
01-24	39	19	--	470	180	2100	85	173	0	1700	3600	1.0
25-31	44	19	--	460	160	1900	67	173	0	1600	2900	1.0
NOV.												
01-06	42	19	--	480	170	1800	67	177	0	1600	3000	1.0
07-20	38	19	--	530	220	2800	77	197	0	2000	4400	1.1
21-30	53	16	--	480	200	2200	6.8	177	0	1900	3400	1.0
DEC.												
01-31	47	13	--	480	210	2300	93	120	0	1900	3700	.9
CALENDAR YEAR												
WTD. AVG.	--	8.6	--	375	139	1600	64	130	0	1370	2590	.8
TIME WTD.												
AVG.	56	15	--	528	267	4090	178	157	1	2160	6620	1.1
TONS												
PER DAY	--	1.3	--	57	21	242	9.7	20	0	206	390	.1
WATER YEAR												
WTD. AVG.	--	8.4	--	386	142	1640	69	132	0	1370	2680	.8
TIME WTD.												
AVG.	51	16	--	559	285	4320	192	167	1	2260	7090	1.1
TONS												
PER DAY	--	1.2	--	52	20	226	9.5	18	0	189	371	.1

08407000 PECOS RIVER AT PIERCE CANYON CROSSING, NEAR MALAGA, N. MEX.--Continued

EXTREMES: Current year.--Continued

Specific conductance: Maximum daily, 65,500 micromhos June 13; minimum daily, 1,800 micromhos Sept. 13.
 Water temperatures: Maximum, 33.0°C June 21; minimum, 2.0°C Jan. 5.

Period of record:

Dissolved solids: Maximum, 40,900 mg/l Aug. 1-7, 1966; minimum, 280 mg/l Sept. 21, 1941.

Hardness: Maximum, 4,850 mg/l Aug. 16, 1969; minimum, 202 mg/l Sept. 21, 1941.

Specific conductance: Maximum daily, 66,000 micromhos Aug. 1, 2, 1966; minimum daily, 433 micromhos Sept. 21, 1941.

Water temperatures (1952-72): Maximum 35.0°C July 6, 1968; minimum, 2.0°C Jan. 13, 1963, Jan. 6, 1971, and Jan. 5, 1972.

REMARKS.--No appreciable inflow between gaging station and sampling point except during periods of heavy local rains.

CHEMICAL ANALYSES, COMPOSITES OF DAILY SAMPLES, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	DIS- SOLVED NITRATE (N) (MG/L) (00631)	DIS- SOLVED ORTHOPHOS- PHORUS (P) (MG/L) (00671)	DIS- SOLVED BORON (B) (UG/L) (01020)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L) (70300)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L) (70301)	DIS- SOLVED SOLIDS (TONS PER AC-FT) (70303)	DIS- SOLVED SOLIDS (TONS PER DAY) (70302)	HARD- NESS (CA, MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AD- SORP- TION RATIO (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)
JAN.												
01-04	2.0	--	--	--	7800	10.6	695	2100	1900	18	11100	7.5
05-13	1.8	--	--	--	9670	13.2	731	2300	2100	24	14400	7.4
14-15	1.9	--	--	--	13800	18.8	1080	2500	2400	34	20400	7.7
16-18	1.9	--	--	--	8440	11.5	638	2200	2100	19	12500	7.5
19-26	1.9	--	--	--	10600	14.4	830	2400	2300	26	15800	7.7
27-30	1.9	--	--	--	8460	11.5	708	2300	2100	19	12500	7.7
31...	1.8	--	--	--	14800	20.1	1200	2600	2500	36	22400	7.5
FEB.												
01-09	1.6	.02	830	9300	8770	11.9	545	2300	2100	20	13200	7.5
10-21	1.7	--	--	--	13300	18.1	682	2600	2500	32	20000	7.6
22-26	1.6	--	--	--	21800	29.6	883	3000	2800	53	32100	7.8
27-29	1.6	--	--	--	12200	16.6	692	2500	2400	29	18400	7.7
MAR.												
01-04	1.6	--	--	--	17800	24.2	865	2900	2800	42	27800	7.9
05-17	1.7	--	--	--	12800	17.4	691	2700	2500	30	19300	7.7
18-22	1.3	--	--	--	22300	30.3	723	3100	2900	56	32700	7.8
23-31	1.1	--	--	--	15700	21.4	1020	2800	2700	37	24500	7.7
APR.												
01-07	.78	--	--	--	14400	19.6	778	2900	2800	31	20800	7.9
08-22	.46	--	--	--	18100	24.6	684	2900	2800	44	26300	8.3
23-30	.08	--	--	--	25600	34.8	691	3300	3300	62	37200	8.5
MAY												
01-09	.23	--	--	--	24000	32.6	778	3400	3200	56	35500	8.2
10-14	.00	--	--	--	13200	18.0	535	2600	2500	30	18400	8.5
15-18	.21	--	--	--	17900	24.3	348	3000	2800	42	27000	8.1
19-31	.04	--	--	--	28700	39.0	504	3500	3300	66	41500	8.3
JUNE												
01-16	.57	--	--	--	37500	51.0	516	4100	3900	82	53700	7.8
17...	2.2	--	--	--	7000	9.52	416	1000	920	34	10700	7.2
18-30	.74	--	--	--	21600	29.4	642	3000	2900	51	32800	7.7
JULY												
01-18	.17	--	--	--	24600	33.5	538	3300	3100	62	35600	7.9
19...	1.3	--	--	--	12700	17.3	18900	1900	1800	38	19600	7.7
20-22	1.1	--	--	--	2480	3.37	636	930	850	6.8	3820	7.4
23-26	.63	--	--	--	6120	8.32	182	1400	1300	20	9500	7.7
27-31	.31	--	--	--	10700	14.6	142	1600	1500	36	16200	7.7
AUG.												
01-04	.42	--	--	--	15400	20.9	233	2100	2000	45	23000	7.7
05-08	1.4	--	--	--	8270	11.2	514	1500	1400	27	13100	7.5
09-15	.53	--	--	--	12300	16.7	465	2300	2200	33	18600	7.7
16-31	.82	--	--	--	7120	9.68	461	1700	1600	19	10800	7.7
SEP.												
01-02	.06	--	--	--	7350	10.0	5640	1800	1700	20	11500	7.7
03...	.20	--	--	--	1330	1.81	1830	610	550	3.5	2050	8.0
04-05	.50	--	--	--	2780	3.78	5390	1200	1100	6.0	4170	7.8
06-10	.02	--	--	--	3230	4.39	3650	1000	950	9.3	4980	7.3
11-13	.00	--	--	--	1570	2.14	4370	800	720	2.8	2240	7.9
14-15	.14	--	--	--	2450	3.33	1140	880	780	7.6	3640	8.1
16-18	.11	--	--	--	1750	2.38	4350	890	800	3.4	2510	8.0
19-20	.01	--	--	--	2570	3.50	1150	990	900	6.6	3780	8.3
21-25	.03	--	--	--	3750	5.10	840	1200	1100	11	5590	7.9
26-30	.79	--	--	--	6270	8.53	542	1500	1400	18	9880	8.0
OCT.												
01-24	1.2	--	--	--	8250	11.2	869	1900	1800	21	13000	7.4
25-31	1.1	--	--	--	7200	9.79	855	1800	1700	19	10700	7.6
NOV.												
01-06	1.5	--	--	--	7230	9.83	820	1900	1800	18	11500	7.9
07-20	1.6	--	--	--	10200	13.9	1050	2200	2100	26	15300	7.9
21-30	1.4	--	--	--	8300	11.3	1190	2000	1900	21	12500	8.0
DEC.												
01-31	1.4	--	--	--	8760	11.9	1110	2100	2000	22	13300	7.6
CALENDAR YEAR												
WTD. AVG.	.61	--	--	--	6210	8.45	--	1510	1410	15	9340	7.8
TIME WTD.												
AVG.	.97	--	--	--	13900	19.0	--	2420	2290	34	20700	7.8
TONS												
PER DAY	.09	--	--	--	937	--	--	--	--	--	--	--
WATER YEAR												
WTD. AVG.	.59	--	--	--	6350	8.64	--	1530	1430	15	9510	7.8
TIME WTD.												
AVG.	1.1	--	--	--	14800	20.1	--	2570	2430	35	21900	7.8
TONS												
PER DAY	.08	--	--	--	878	--	--	--	--	--	--	--

RIO GRANDE BASIN

08407000 PECOS RIVER AT PIERCE CANYON CROSSING, NEAR MALAGA, N. MEX.--Continued

CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	DIS-CHARGE (CFS) (00060)	DIS-SOLVED SILICA (SIO2) (MG/L) (00955)	DIS-SOLVED IRON (FE) (UG/L) (01046)	DIS-SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS-SOLVED MAG- NE- SIUM (MG) (MG/L) (00925)	DIS-SOLVED SODIUM (NA) (MG/L) (00930)	DIS-SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	BICAR- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	DIS-SOLVED SULFATE (SO4) (MG/L) (00945)	DIS-SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS-SOLVED FLUO- RIDE (F) (MG/L) (00950)
FEB. 03...	21	18	0	560	440	8400	490	230	0	2800	13000	1.2
DATE	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	DIS-SOLVED ORTHO- PHOS- PHORUS (P) (MG/L) (00671)	DIS-SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L) (70300)	DIS-SOLVED SOLIDS (SOLU OF TUEENTS) (MG/L) (70301)	HARD- NESS (CA, MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AD- SORP- TION RATIO (MICRO- MHOS) (00931)	SPE- CIFIC CON- DUCT- ANCE (PH) (00095)	DENSITY (GM/ML AT 20 C) (71820)	DIS-SOLVED BORON (B) (UG/L) (01020)		
FEB. 03...	2.0	.09	26200	25800	3200	3000	65	39800	7.5	1.014	2400	

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C). CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972
(ONCE-DAILY)

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	9550	11100	23600	16200	33700	38200	37400	20300	11000	13000	11300	12600
2	12800	11500	31400	17800	31900	44600	32200	24500	11300	12800	11800	10800
3	11900	38500	23800	23900	38000	47200	52700	24800	2120	12500	10800	12600
4	10100	13400	29900	26700	38600	52400	36400	23700	7790	12300	10600	13800
5	16300	12100	20200	19300	38400	56800	34700	7800	7790	13300	10200	13300
6	10700	11700	16300	18600	39500	60000	29700	13300	3730	11900	10900	18000
7	11900	14100	16100	21700	37400	61000	29400	13900	4190	13700	17400	12800
8	12600	13900	21400	28600	38500	55700	27500	13800	5020	11500	16300	11700
9	13600	14700	15200	21500	30500	57100	33800	17500	5790	11300	13100	13400
10	---	25900	14900	---	17500	59300	28200	17600	5240	12200	14600	16800
11	16300	17600	17100	20500	21500	61700	32400	18100	2260	13800	14700	13300
12	13300	13100	18200	22500	15400	61700	26200	18800	2310	12800	12100	9820
13	16000	12900	18700	24600	17700	65500	28200	17900	1800	12300	18600	11900
14	23800	23600	22700	26100	20900	48200	30300	18700	3190	12500	15100	10900
15	17400	25100	22500	28600	23300	52400	31400	19500	4410	12800	13800	10700
16	11400	17900	22100	28200	25400	56800	34100	11300	2300	15300	13600	11600
17	12700	21400	18900	30100	29600	11700	42400	10700	2500	13600	13700	11000
18	12600	15600	34600	28900	32000	39000	48600	11100	2720	13000	---	10900
19	17300	18500	28500	26900	44000	35300	1970	11600	3340	13300	13700	11200
20	12000	19000	31400	26500	40400	35400	3930	13500	4630	14000	17000	11600
21	13900	18900	30800	28700	40000	25700	4180	13000	5460	11600	11500	12600
22	15600	29800	31900	30900	41900	39900	5320	13100	5000	13600	12900	12300
23	16200	24200	26500	36800	31500	36500	7700	8230	5890	11500	12500	13800
24	15500	23900	25700	36600	41900	31900	8490	9640	6500	12100	11200	14000
25	18300	33100	21900	44200	42200	26800	10400	8170	7020	9900	12400	12100
26	14100	35900	22600	33800	39300	30700	10800	9640	8280	9820	12900	14000
27	12200	19100	23600	32000	41900	28100	13600	11200	9380	10300	12400	12600
28	12400	18500	22600	33600	45500	25500	14200	11800	10100	10600	13200	15500
29	12000	15500	28100	36100	45300	34200	17700	11300	10400	10600	12500	12400
30	12300	---	26800	---	46500	27400	16300	10700	11000	11700	12500	20100
31	21700	---	15700	---	46100	---	19500	9640	---	11500	---	13100
MONTH	14220	19670	23350	27500	34720	43560	24180	14330	5750	12290	13220	12970

RIO GRANDE BASIN

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08407000 PECOS RIVER AT PIERCE CANYON CROSSING, NEAR MALAGA, N. MEX.--Continued

TEMPERATURE (DEG. C) OF WATER, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972
(ONCE-DAILY)

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

RIO GRANDE BASIN

08407500 PECOS RIVER AT RED BLUFF, N. MEX.
(Surveillance network station)

LOCATION.--Lat 32°04'30", long 104°02'21", in SW 1/4 sec. 1, T.26 S., R.28 E., Eddy County, 2 miles downstream from gaging station which is at Red Bluff, 0.5 mile upstream from pipeline bridge, 0.2 mile downstream from Red Bluff Draw, and 5.5 miles upstream from Delaware River.

DRAINAGE AREA.--19,540 sq mi, approximately, upstream from gaging station (contributing area).

PERIOD OF RECORD.--Chemical analyses: July 1937 to current year.

Water temperatures: October 1952 to current year.

Sediment records: July 1969 to current year.

EXTREMES:

Current year:

Specific conductance: Maximum daily, 51,400 micromhos June 20; minimum daily, 1,990 micromhos Sept. 13.

Water temperatures: Maximum, 32.5°C July 29, Aug 21; minimum, 3.0°C Dec. 11, 25, and 26.

Period of record:

Dissolved solids (1937-70): Maximum, 32,800 mg/l May 25-30, 1965; minimum, 342 mg/l Aug. 22, 1966.

Hardness (1937-70): Maximum, 4,570 mg/l Aug. 13-18, 1964; minimum, 216 mg/l Aug. 22, 1966.

Specific conductance: Maximum daily, 51,400 micromhos June 20, 1972; minimum daily, 268 micromhos Sept. 19, 1946.

Water temperatures (1952-72): Maximum, 36.0°C July 31, 1966, July 13, 1970; minimum, 1.0°C Jan. 10, 11, 1962, Jan. 13, 1963.

REMARKS.--No appreciable inflow between gaging station and sampling point except during periods of heavy local rains. Aquatic biology analyzed by the New Mexico Environmental Improvement Agency on samples collected by the U.S. Geological Survey. After June 1972, Bacteria analyzed by the U.S. Geological Survey.

CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	DIS- CHARGE (CFS) (00060)	DIS- SOLVED SILICA (SI02) (MG/L) (00955)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED MAN- GANESE (MNI) (UG/L) (01056)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	BICAR- BONATE (CO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)
JAN.												
12...	0720	32	12	0	--	520	240	2400	102	174	0	1970
FEB.												
08...	1030	33	9.4	10	--	550	250	2500	--	166	0	2000
MAR.												
07...	0730	28	10	10	--	630	320	4800	180	168	0	2600
APR.												
04...	0400	27	13	50	70	700	330	4900	220	175	0	2600
MAY												
03...	0800	34	7.7	20	--	720	430	6900	360	167	0	3100
JUNE												
07...	1330	4.2	16	20	200	740	400	6600	260	--	0	3300
JULY												
11...	1215	9.1	15	30	--	720	430	8000	370	113	0	3300
AUG.												
08...	1120	35	8.4	40	--	310	110	2000	71	72	0	1100
SEP.												
13...	1500	2190	11	80	--	240	40	150	6.9	94	0	720
OCT.												
04...	0800	37	13	30	--	450	190	2700	83	147	0	1700
NOV.												
08...	0740	39	13	20	--	500	190	2000	74	169	0	1700
DEC.												
05...	1200	40	10	30	--	460	200	2400	76	158	0	1800

DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED NITRATE (N) (MG/L) (00618)	DIS- SOLVED NITRITE (N) (MG/L) (00613)	DIS- SOLVED NITRITE PLUS NITRATE (MG/L) (00631)	AMMONIA NITRO- GEN (N) (MG/L) (00610)	DIS- SOLVED AMMONIA NITRO- GEN (N) (MG/L) (00608)	ORGANIC NITRO- GEN (N) (MG/L) (00605)	TOTAL NITRO- GEN (N) (MG/L) (00600)	TOTAL PHOS- PHORUS (P) (MG/L) (00665)	DIS- SOLVED ORTHO- PHOS- PHORUS (P) (MG/L) (00671)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L) (70300)
JAN.												
12...	3900	1.1	--	--	1.6	--	--	--	--	--	.00	9640
FEB.												
08...	4300	.9	--	--	1.1	--	--	--	--	--	.01	10100
MAR.												
07...	7400	1.2	--	--	.61	--	--	--	--	--	.04	16800
APR.												
04...	8200	1.3	.36	.01	.37	--	.15	.20	.72	.09	.04	17300
MAY												
03...	11000	1.4	--	--	.02	--	--	--	--	--	.04	23800
JUNE												
07...	10000	1.4	--	--	.00	--	--	--	--	--	.05	21800
JULY												
11...	13000	1.3	.03	.00	.03	--	.24	1.1	1.3	.12	.05	26900
AUG.												
08...	3200	.5	.00	.00	.00	--	.10	.64	.74	.08	.03	7260
SEP.												
13...	220	.5	.00	.02	.00	--	.18	.67	.85	.19	.02	1490
OCT.												
04...	4300	.8	.00	.00	.00	--	.12	1.1	1.2	.09	.02	9970
NOV.												
08...	3400	.9	.74	.01	.75	--	.06	.38	1.2	.05	.02	8360
DEC.												
05...	3700	1.0	.92	.01	.93	.11	.11	.29	1.3	.06	.01	8760

RIO GRANDE BASIN

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08407500 PECOS RIVER AT RED BLUFF, N. MEX.--Continued

CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L) (70301)	HARD- NESS (CA, MG) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AD- SORP- TION RATIO (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	DENSITY (GM/ML) AT 20 C) (71820)	DIS- SOLVED BORON (B) (UG/L) (01020)	DIS- SOLVED COPPER (CU) (UG/L) (01040)	DIS- SOLVED ZINC (ZN) (UG/L) (01090)
JAN. 12...	9240	2300	2100	22	14200	7.8	5.5	1.002	790	--	--
FEB. 08...	9700	2400	2300	22	14800	7.9	7.5	1.005	840	--	--
MAR. 07...	16000	2900	2800	39	24700	7.5	13.0	1.008	1100	--	--
APR. 04...	17100	3100	3000	38	25400	7.4	14.0	1.008	1500	1	20
MAY 03...	22600	3600	3400	50	35000	7.8	18.0	1.013	2300	--	--
JUNE 07...	--	3500	--	49	32000	7.0	24.0	1.012	1800	4	40
JULY 11...	25900	3600	3500	58	38800	7.5	27.0	1.015	2300	--	--
AUG. 08...	6840	1200	1200	25	11400	7.1	26.5	1.000	520	--	--
SEP. 13...	1440	760	690	2.4	2040	7.5	26.0	--	130	--	--
OCT. 04...	9510	1900	1800	27	15000	8.0	21.0	1.001	330	--	--
NOV. 08...	7970	2000	1900	19	11600	7.4	13.0	1.003	700	--	--
DEC. 05...	8730	2000	1800	24	13300	7.9	10.0	1.006	720	--	--

TRACE ELEMENT AND RADIOCHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	DIS- SOLVED ARSENIC (AS) (UG/L) (01000)	DIS- SOLVED BARIUM (BA) (UG/L) (01005)	DIS- SOLVED BORON (B) (UG/L) (01020)	DIS- SOLVED CAD- MIUM (CD) (UG/L) (01025)	HEXA- VALENT CHRO- MIUM (CR6) (UG/L) (01032)	DIS- SOLVED COPPER (CU) (UG/L) (01040)	DIS- SOLVED IRON (FE) (UG/L) (01046)	TOTAL LEAD (PB) (UG/L) (01051)	DIS- SOLVED MAN- GANESE (MN) (UG/L) (01056)	TOTAL MERCURY (HG) (UG/L) (71900)
APR. 04...	0800	1	0	1500	0	0	1	50	4	70	.1
JUNE 07...	1330	6	300	1800	2	0	4	20	4	200	.0
DEC. 05...	1200	--	--	--	--	--	--	--	--	--	--

DATE	DIS- SOLVED SILVER (AG) (UG/L) (01075)	DIS- SOLVED SELE- NIUM (SE) (UG/L) (01145)	DIS- SOLVED ZINC (ZN) (UG/L) (01090)	DIS- SOLVED GROSS ALPHA AS (UG/L) (80030)	SUS- PENDE GROSS ALPHA AS (UG/L) (80040)	DIS- SOLVED GROSS BETA AS (PC/L) (03515)	SUS- PENDE GROSS BETA AS (PC/L) (03516)	DIS- SOLVED GROSS BETA AS (PC/L) (80050)	SUS- PENDE GROSS BETA AS (PC/L) (80060)	DIS- SOLVED RA-226 (RADON METHOD) (PC/L) (09511)	DIS- SOLVED NATURAL URANIUM (U) (UG/L) (22703)
APR. 04...	0	3	20	--	--	--	--	--	--	--	--
JUNE 07...	0	5	40	--	--	--	--	--	--	--	--
DEC. 05...	--	--	--	<91	<.4	98	.8	88	.7	.09	6.4

RIO GRANDE BASIN

08407500 PECOS RIVER AT RED BLUFF, N. MEX.--Continued

FIELD AND BIOCHEMICAL MEASUREMENTS, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	DIS- CHARGE (CFS) (00060)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	AIR TEMPER- ATURE (DEG C) (00020)	COLOR (PLAT- INUM- COBALT UNITS) (00080)	TUR- BID- ITY (JTU) (00070)
JAN.								
12...	0720	32	12000	8.2	5.5	.0	3	4
FEB.								
08...	1030	33	14400	8.2	7.5	9.0	5	5
MAR.								
07...	0730	28	24200	8.2	13.0	18.0	5	9
APR.								
04...	0800	27	24000	8.2	14.0	9.5	10	15
MAY								
03...	0800	34	33700	8.1	18.0	18.0	15	10
JUNE								
07...	1330	4.2	29500	8.2	24.0	29.5	20	9
JULY								
11...	1215	9.1	37000	8.3	27.0	32.5	20	10
AUG.								
08...	1120	35	10800	8.5	26.5	26.5	25	10
SEP.								
13...	1500	2190	2100	7.9	26.0	29.0	15	85
OCT.								
04...	0800	37	14900	8.1	21.0	14.0	20	15
NOV.								
08...	0740	39	12400	8.2	13.0	10.0	10	3
DEC.								
05...	1200	40	13300	8.4	10.0	23.0	5	4

DATE	DIS- SOLVED OXYGEN (MG/L) (00300)	CHEM- ICAL OXYGEN DEMAND (LOW LEVFL) (MG/L) (00335)	BIO- CHEM- ICAL OXYGEN DEMAND (MG/L) (00310)	IMME- DIATE COLI- FORM (COL. PER 100 ML) (31501)	FECAL COLI- FORM (COL. PER 100 ML) (31616)	STREP- TOCOCCI (CUL- UNIES PER 100 ML) (31679)	TOTAL ORGANIC CARBON (C) (00680)
JAN.							
12...	12.0	7	2.0	<100	<100	<100	--
FEB.							
08...	12.7	8	2.0	<10	<10	<10	--
MAR.							
07...	9.6	9	2.8	10	<10	<10	--
APR.							
04...	10.1	14	6.2	6	4	4	--
MAY							
03...	8.2	13	5.4	24	4	12	--
JUNE							
07...	10.0	29	14	1290	0	1120	--
JULY							
11...	7.2	--	--	--	6	--	16
AUG.							
08...	10.6	--	--	--	900	--	12
SEP.							
13...	8.1	--	--	--	400	--	17%
OCT.							
04...	7.9	--	--	--	0	--	9
NOV.							
08...	10.2	--	--	--	20	--	4.5
DEC.							
05...	10.0	--	--	--	0	--	4.5

* ANALYZED BY THE NEW MEXICO ENVIRONMENTAL IMPROVEMENT AGENCY.

BIOLOGICAL ANALYSES, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

Date: April 4, 1972

Method of sampling: Surber (3 square feet)

No macroinvertebrates in sample

Date: September 8, 1972

Method of sampling: Surber (3 square feet)

Organisms (classification, number)

Coleoptera: Hydrophilidae, *Berosus* sp., 11Diptera: Chironomidae; *Dicrotendipes californica* (Johannsen),

2 pupae, 2 larvae

Odonata: Coenagrionidae, 1

08407500 PECOS RIVER AT RED BLUFF, N. MEX.--Continued

PESTICIDE ANALYSES, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	TOTAL ORGANIC CARBON (C) (MG/L) (00680)	ALDRIN (UG/L) (39330)	CHLOR- DANE (UG/L) (39350)	DDD (UG/L) (39360)	DDE (UG/L) (39365)	DDT (UG/L) (39370)	DI- ELDRIN (UG/L) (39360)
APR. 04...	0800	--	.00	.0	.00	.00	.00	.00
JUNE 07...	1330	--	.00	.0	.00	.00	.00	.00
JULY 11...	1215	16	--	--	--	--	--	--
AUG. 08...	1120	12	.00	.0	.00	.00	.00	.00
SEP. 13...	1500	--	.00	.0	.00	.00	.00	.00
OCT. 04...	0800	9.0	.00	.0	.00	.00	.00	.00
NOV. 08...	0740	4.5	--	--	--	--	--	--
DEC. 05...	1200	4.5	--	--	--	--	--	--

DATE	ENDRIN (UG/L) (39390)	HEPTA- CHLOR (UG/L) (39410)	HEPT- CHLOR EPOXIDE (UG/L) (39420)	LINDANE (UG/L) (39340)	PCB (UG/L) (39516)	2,4-D (UG/L) (39730)	2,4,5-T (UG/L) (39740)	SILVEX (UG/L) (39760)
APR. 04...	.00	.00	.00	.00	--	.00	.00	.00
JUNE 07...	.00	.00	.00	.00	--	--	--	--
JULY 11...	--	--	--	--	--	--	--	--
AUG. 08...	.00	.00	.00	.00	--	.00	.00	.00
SEP. 13...	.00	.00	.00	.00	--	.00	.00	.08
OCT. 04...	.00	.00	.00	.00	.0	.00	.00	.03
NOV. 08...	--	--	--	--	--	--	--	--
DEC. 05...	--	--	--	--	--	.00	.00	.00

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C) CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972
(ONCE-DAILY)

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	15000	17200	27200	26700	32800	30000	40500	7110	11500	13600	11900	12600
2	15300	16100	29300	25400	33200	29800	40400	7300	11000	14100	12700	13000
3	15900	16400	31200	24400	33400	29800	40200	7450	3640	14300	12500	12600
4	13100	17800	27400	25500	33500	30200	41500	9910	2810	14900	12800	12900
5	13200	19200	24800	27700	33800	30200	40500	9820	4230	15900	12400	13200
6	15000	16500	24300	25700	34000	30600	39300	9820	3280	16600	12900	13600
7	14200	14700	28800	23300	34600	30900	39200	9910	4230	15600	11900	11600
8	13000	14700	30600	22700	35600	31500	39200	11100	5260	14900	12400	14600
9	14300	17800	28600	23600	36700	32400	38500	10800	6110	15300	13000	17900
10	13600	19300	24800	26300	38200	15300	38500	8370	6360	14900	12600	15500
11	12800	18000	22500	27500	39500	14900	38500	6590	2290	14700	13500	12900
12	14200	16700	23100	26300	39700	33300	38400	5810	3260	15500	13500	12900
13	14900	17000	24000	26500	38800	38200	39000	5450	1990	15200	14400	14100
14	15400	18200	23400	25900	37500	33400	40800	5400	3630	14500	15800	14000
15	16100	18400	22300	25700	36900	37900	40800	5480	5880	14800	17400	11800
16	17400	20700	22500	25700	36700	38800	41600	3960	2360	15600	16900	11700
17	16600	22900	23400	26000	35600	38200	42100	9150	2320	15400	18700	11700
18	19400	20500	23400	26900	35800	48400	40600	12500	2560	14800	15900	11500
19	20400	19700	23600	28200	34600	50500	4490	15700	3300	14400	14200	11700
20	17800	20300	23400	28900	22300	51400	5550	16600	4760	15600	14700	11900
21	15900	22200	22900	29200	25400	51000	4400	14900	6630	15000	13500	11600
22	15400	24100	22900	29100	22500	46500	4490	14900	6430	15300	13700	12000
23	16900	24400	23500	29100	23200	39300	4820	13800	7380	14700	13500	11600
24	17400	24300	25400	29000	26800	36800	5150	4010	8090	13000	12000	12300
25	16700	23900	27100	29100	28300	36800	5350	3520	8730	13600	12800	11800
26	17700	23600	27100	29400	29000	39700	5610	3540	9320	12500	12000	12700
27	18600	23700	28100	30600	29400	44000	5890	7540	11200	10800	12200	14600
28	18500	23700	32900	30900	29500	44000	6270	10800	11200	11700	12500	13500
29	19600	24000	29100	31700	29600	44500	6500	12500	12100	11000	12500	14300
30	23600	---	29100	32600	29700	44700	6790	12900	13200	10900	13400	13700
31	20800	---	28800	---	29800	---	6470	12200	---	11400	---	---
MONTH	16410	19860	25980	27320	32470	36770	25540	9320	6170	14210	13610	13020

RIO GRANDE BASIN

08407500 PECOS RIVER AT RED BLUFF, N. MEX.--Continued

TEMPERATURE (DEG. C) OF WATER-CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972
(ONCE-DAILY)

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

INSTANTANEOUS SUSPENDED SEDIMENT AND PARTICLE SIZE, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	TEMPER- ATURE (DEG C) (00010)	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SUS- PENDE- D(SI- MENT MENT (MG/L) (80154)	SUS- PENDE- D(SI- MENT MENT (T/DAY) (80155)
JAN.					
09...	1100	3.0	59	14	2.2
12...	0720	5.5	32	5	.43
FEB.					
08...	1030	7.5	33	23	2.0
MAR.					
07...	0730	13.0	28	12	.91
APR.					
04...	0800	14.0	27	29	2.1
MAY					
03...	0800	18.0	34	16	1.5
JUNE					
07...	1330	24.0	4.2	28	.32
JULY					
11...	1215	27.0	9.1	17	.42
AUG.					
08...	1120	26.5	35	13	1.2
SEP.					
13...	1500	26.0	2190	397	2350
OCT.					
04...	0800	21.0	37	30	3.0
NOV.					
08...	0740	13.0	39	140	15
DEC.					
05...	1200	10.0	40	16	1.7

08476300 MIMBRES RIVER AT MCKNIGHT DAMSITE, NEAR MIMBRES, N. MEX.

LOCATION.--Lat 32°56'14", long 108°00'55", in SW¼SE¼ sec.6, T.16 S., R.11 W., Grant County, at gaging station 0.3 mile upstream from Mimbres Ranger station, 0.4 mile downstream from Cottonwood Canyon, and 8 miles northwest of Mimbres.

DRAINAGE AREA.--97.3 sq mi.

PERIOD OF RECORD.--Chemical analyses: August 1967 to November 1972 (discontinued).
Sediment records: August 1967 to October 1972 (discontinued).

REMARKS.--No flow Mar. 14 to July 26, July 29 to Aug. 2, 5-15, 17-25.

CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	DIS- CHARGE (CFS) (00060)	DIS- SOLVED SILICA (SI02) (MG/L) (00955)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	BICAR- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)
FEB. 01...	1630	8.2	41	20	18	5.5	6.3	2.0	53	0	34	3.4
MAR. 09...	1140	.10	40	--	16	5.0	6.2	2.4	50	0	31	4.1
AUG. 31...	1150	3.7	39	--	20	5.3	6.6	1.8	59	0	34	2.2
SEP. 19...	1030	12	42	20	20	6.0	6.5	2.2	64	0	35	2.9
26...	1340	4.8	43	--	19	6.1	7.3	2.5	68	0	35	2.6
OCT. 17...	1730	15	43	20	19	5.5	7.1	2.3	61	0	33	3.3
18...	1125	3.0	43	--	19	5.7	7.0	2.6	61	0	34	2.6
19...	1315	52	29	--	25	4.0	4.2	2.7	75	0	26	1.8
NOV. 30...	0900	20	39	9	24	6.8	6.9	2.0	72	0	38	3.4

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	DIS- SOLVED ORTHO- PHOS- PHORUS (P) (MG/L) (00671)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L) (70300)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L) (70301)	HARD- NESS (CA,MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AD- SORP- TION RATIO (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	DIS- SOLVED BORON (B) (UG/L) (01020)
FEB. 01...	.2	.56	.08	98	139	68	24	.3	173	7.8	9.0	20
MAR. 09...	.2	.21	--	--	130	60	20	.3	164	7.8	17.0	--
AUG. 31...	.3	.20	--	--	139	72	23	.3	162	7.4	21.0	--
SEP. 19...	.2	.16	.12	174	147	75	22	.3	188	7.3	14.0	30
26...	.2	.47	--	--	151	73	17	.4	193	7.5	20.0	--
OCT. 17...	.2	.63	.14	158	147	70	20	.4	186	7.4	15.0	10
18...	.2	.53	--	--	146	71	21	.4	181	7.8	16.0	--
19...	.3	.46	--	--	132	79	17	.2	179	7.4	12.0	--
NOV. 30...	.2	1.5	.10	182	163	88	29	.3	211	7.1	10.0	0

TRACE ELEMENT ANALYSES, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	DIS- SOLVED ALUM- INUM (AL) (UG/L) (01106)	DIS- SOLVED ARSENIC (AS) (UG/L) (01000)	DIS- SOLVED BARIUM (BA) (UG/L) (01005)	DIS- SOLVED BERYL- LIUM (BE) (UG/L) (01010)	DIS- SOLVED BISMUTH (BI) (UG/L) (01015)	DIS- SOLVED BORON (B) (UG/L) (01020)	DIS- SOLVED CAD- MIUM (CD) (UG/L) (01025)	DIS- SOLVED CHRO- MIUM (CR) (UG/L) (01030)	DIS- SOLVED COBALT (CO) (UG/L) (01035)
FEB. 01...	1630	12	8	30	<1	<4	20	0	<4	<3
SEP. 20...	1100	--	0	--	--	--	30	1	--	--
OCT. 17...	1730	56	0	45	<1	<3	10	<33	<3	<3
NOV. 30...	0900	66	4	60	<1	<3	0	0	<3	<3

DATE	DIS- SOLVED COPPER (CU) (UG/L) (01040)	DIS- SOLVED GALLIUM (GA) (UG/L) (01120)	DIS- SOLVED GER- MANIUM (GE) (UG/L) (01125)	DIS- SOLVED IRON (FE) (UG/L) (01046)	TOTAL LEAD (PB) (UG/L) (01051)	DIS- SOLVED LEAD (PB) (UG/L) (01049)	DIS- SOLVED LITHIUM (LI) (UG/L) (01130)	DIS- SOLVED MAN- GANESE (MN) (UG/L) (01056)	TOTAL MERCURY (HG) (UG/L) (71900)	DIS- SOLVED MOLYB- DENUM (MO) (UG/L) (01060)
FEB. 01...	1	<2	<5	20	7	<3	<10	<3	.3	<2
SEP. 20...	--	--	--	20	30	--	--	--	.0	--
OCT. 17...	2	<1	<3	20	5	<3	<10	4	.2	<1
NOV. 30...	2	<2	<3	9	0	<3	<10	4	.0	<2

MIMBRES RIVER BASIN

08476300 MIMBRES RIVER AT MCKNIGHT DAMSITE, NEAR MIMBRES, N. MEX.--Continued

TRACE ELEMENT ANALYSES, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	DIS- SOLVED NICKEL (NI) (UG/L) (01065)	DIS- SOLVED SILVER (AG) (UG/L) (01075)	DIS- SOLVED SELE- NIUM (SE) (UG/L) (01145)	DIS- SOLVED STRON- TIUM (SR) (UG/L) (01080)	DIS- SOLVED TIN (SN) (UG/L) (01100)	DIS- SOLVED TAN- IUM (TI) (UG/L) (01150)	DIS- SOLVED VANAD- IUM (V) (UG/L) (01085)	DIS- SOLVED ZINC (ZN) (UG/L) (01090)	DIS- SOLVED ZIR- CONIUM (ZR) (UG/L) (01160)
FEB. 01...	<3	<1	4	97	<4	<2	3.0	--	--
SEP. 20...	--	--	4	--	--	--	--	--	--
OCT. 17...	<3	<1	5	150	<3	6	4.0	<150	<4
NOV. 30...	<3	<1	2	120	<3	<3	4.0	<200	<5

FIELD AND BIOCHEMICAL MEASUREMENTS, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	DIS- CHARGE (CFS) (00060)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	AIR TEMPER- ATURE (DEG C) (00020)	DIS- SOLVED OXYGEN (MG/L) (00300)
FEB. 01...	1630	8.2	175	--	9.0	8.5	--
SEP. 19...	1030	12	199	7.3	17.0	23.0	7.7
OCT. 17...	1730	15	190	--	15.0	18.5	--
NOV. 30...	0900	20	215	--	10.0	2.0	--

INSTANTANEOUS SUSPENDED SEDIMENT AND PARTICLE SIZE, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	TEMPER- ATURE (DEG C) (00010)	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SUS- PENDED SEDI- MENT (MG/L) (80154)	SUS- PENDED SEDI- MENT DIS- CHARGE (T/DAY) (80155)
JAN. 24...	1130	11.0	4.6	5	.06
FEB. 01...	1630	9.0	8.2	6	.13
29...	1150	16.0	1.3	4	.01
MAR. 09...	1140	17.0	.10	2	.00
AUG. 31...	1150	21.0	3.7	8	.08
SEP. 26...	1340	20.0	4.8	2	.03
OCT. 18...	1125	16.0	3.0	1	.01
19...	1315	12.0	52	2260	317

TULAROSA VALLEY BASIN

185

08481500 RIO TULAROSA NEAR BENT, N. MEX.

LOCATION.--Lat 33°08'41", long 105°53'50", in SE¼NW¼ sec.32, T.13 S., R.11 E., Lincoln County, at gaging station on U.S. Highway 70, 2.6 miles west of Bent, and 8.5 miles northeast of Tularosa.

DRAINAGE AREA.--120 sq mi, approximately.

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

CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	DIS- CHARGE (CFS) (00060)	DIS- SOLVED SILICA (SiO2) (MG/L) (00955)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED PU- TAS- SIUM (K) (MG/L) (00935)	RICAR- BONATE (MCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)
JAN.												
19...	1430	10	15	--	210	62	51	1.6	253	0	580	65
FEB.												
07...	1400	11	17	--	210	59	48	1.1	232	0	570	69
28...	1420	10	15	--	200	62	51	1.2	240	0	600	65
MAR.												
23...	0950	4.4	15	--	250	74	56	1.5	226	0	730	80
APR.												
17...	1715	2.1	16	20	320	87	68	3.0	220	0	980	110
MAY												
18...	1500	6.1	15	--	230	69	52	1.4	214	0	700	70
30...	1540	3.0	16	--	260	73	60	1.4	174	0	820	80
JUNE												
21...	1500	5.4	15	--	190	60	44	1.5	161	0	580	31
AUG.												
24...	1300	8.1	16	--	210	57	43	1.6	217	0	570	55
SEP.												
14...	1210	11	16	--	230	58	41	1.6	243	0	600	56
OCT.												
11...	1510	7.7	15	30	200	60	42	1.3	198	0	560	58
31...	1300	12	13	--	220	56	39	1.7	266	0	550	63
NOV.												
20...	1550	9.6	14	--	200	61	44	1.5	237	0	550	60
DEC.												
13...	1310	9.8	14	--	220	64	52	1.4	240	0	590	64

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	DIS- SOLVED ORTHOPHOS- PHORUS (P) (MG/L) (00671)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L) (70300)	DIS- SOLVED SOLIDS (SUM OF TUEENTS) (MG/L) (70301)	HARD- NESS (CA, MI.) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AD- SORP- TION RATIO (MG/L) (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (MG/L) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	DIS- SOLVED BORON (B) (UG/L) (01020)
JAN.												
19...	.5	.57	--	--	1110	780	570	.8	1530	7.8	6.0	--
FEB.												
07...	.3	.40	--	--	1090	770	580	.8	1500	7.7	9.5	--
28...	.6	.38	--	--	1110	750	560	.8	1490	7.7	15.0	--
MAR.												
23...	.6	.71	--	--	1320	930	740	.8	1730	7.7	13.5	--
APR.												
17...	.6	.35	.00	1900	1690	1200	980	.9	2130	7.8	15.0	80
MAY												
18...	.5	.34	--	--	1240	860	680	.8	1620	7.6	20.5	--
30...	.5	.28	--	--	1400	950	810	.8	1810	7.7	20.5	--
JUNE												
21...	.5	.15	--	--	1000	720	590	.7	1400	7.4	25.0	--
AUG.												
24...	.6	.39	--	--	1060	760	580	.7	1430	7.8	23.0	--
SEP.												
14...	.6	.44	--	--	1120	810	610	.6	1490	7.8	16.5	--
OCT.												
11...	.5	.26	--	--	1040	750	580	.7	1350	7.5	20.0	60
31...	.5	.46	--	--	1080	780	560	.6	1470	7.9	3.5	--
NOV.												
20...	.3	.39	--	--	1050	750	560	.7	1380	7.6	8.0	--
DEC.												
13...	.3	1.6	--	--	1130	810	620	.8	1430	7.6	6.5	--

PART 9. COLORADO RIVER BASIN

SAN JUAN RIVER BASIN

09346000 NAVAJO RIVER AT EDITH, COLO.

(Surveillance network station)

LOCATION.--Lat 37°00'10", long 106°54'25", in NW¼ sec.24, T.32 N., R.1 W., Archuleta County, at gaging station, 290 ft downstream from highway bridge, 0.2 mile southeast of Edith, 0.5 mile upstream from Colorado-New Mexico State line, and 1.3 miles upstream from Coyote Creek.

DRAINAGE AREA.--172 sq mi.

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

Sediment records: October 1969 to current year.

REMARKS.--Bacteria analyzed by the New Mexico Environmental Improvement Agency on samples collected by the U.S. Geological Survey. After June 1972, Bacteria analyzed by the U.S. Geological Survey.

CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	DIS- CHARGE (CFS) (00060)	DIS- SOLVED SILICA (SI02) (MG/L) (00955)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	BICAR- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)
FEB. 15...	1100	30	26	40	30	6.0	9.4	1.9	79	0	49
MAY 23...	1045	87	20	60	19	5.4	6.5	1.5	70	0	30
AUG. 28...	1900	20	23	40	34	8.8	12	2.9	--	--	59
NOV. 27...	1600	47	22	40	30	7.6	11	1.5	93	0	57

DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED NITRATE (N) (MG/L) (00618)	DIS- SOLVED NITRITE (N) (MG/L) (00613)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	AMMONIA NITRO- GEN (N) (MG/L) (00610)	DIS- SOLVED AMMONIA NITRO- GEN (N) (MG/L) (00608)	ORGANIC NITRO- GEN (N) (MG/L) (00605)	TOTAL NITRO- GEN (N) (MG/L) (00600)	TOTAL PHOS- PHORUS (P) (MG/L) (00665)	DIS- SOLVED ORTHO. PHOS- PHORUS (P) (MG/L) (00671)
FEB. 15...	1.3	.3	1.3	.00	1.3	--	.07	.30	1.7	.09	.02
MAY 23...	1.4	.1	.01	.00	.01	--	.04	.25	.30	.09	.04
AUG. 28...	1.1	.2	.00	.00	.00	--	.01	.29	.30	.11	.05
NOV. 27...	1.5	.2	.00	.00	.00	.07	.07	.08	.15	.11	.01

DATE	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L) (70300)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L) (70301)	HARD- NESS (CA, MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AD- SORP- TION RATIO (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	COLOR (PLAT- INUM- COBALT UNITS) (00080)	TUR- BID- ITY (JTU) (00070)	DIS- SOLVED BORON (B) (UG/L) (01020)
FEB. 15...	166	169	100	35	.4	242	7.8	.0	--	--	10
MAY 23...	118	119	70	12	.3	180	7.2	9.0	--	--	30
AUG. 28...	194	--	120	--	.5	299	8.5	22.0	--	--	30
NOV. 27...	184	177	110	30	.5	256	7.6	1.0	--	--	0

SAN JUAN RIVER BASIN

187

09346000 NAVAJO RIVER AT EDITH, COLO.--Continued

FIELD AND BIOCHEMICAL MEASUREMENTS, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	DIS- CHARGE (CFS) (00060)	SPF- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	AIR TEMPER- ATURE (DEG C) (00020)	COLOR (PLAT- INUM- COBALT UNITS) (00080)	TUR- BID- ITY (JTU) (00070)
FEB. 15...	1100	30	240	8.4	.0	10.0	10	20
MAY 23...	1045	87	173	8.1	9.0	13.0	15	10
AUG. 28...	1900	20	295	8.7	22.0	20.5	10	8
NOV. 27...	1600	47	269	8.3	1.0	.0	5	5

DATE	DIS- SOLVED OXYGEN (MG/L) (00300)	CHEM- ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L) (00335)	BIO- CHEM- ICAL OXYGEN DEMAND (MG/L) (00310)	IMME- DIATE COLI- FORM (COL. PER 100 ML) (31501)	FECAL COLI- FORM (COL. PER 100 ML) (31616)	STREP- TOCOCCI (COL- ONIES PER 100 ML) (31679)	TOTAL ORGANIC CARBON * (C) (00680)
FEB. 15...	12.2	7	.8	30	<10	50	--
MAY 23...	9.3	5	1.0	--	10	--	--
AUG. 28...	6.6	--	--	--	68	--	2.8
NOV. 27...	10.8	--	--	--	2	--	2.5

* Analyzed by New Mexico Environmental Improvement Agency.

INSTANTANEOUS SUSPENDED SEDIMENT AND PARTICLE SIZE, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	TEMPER- ATURE (DEG C) (00010)	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SUS- PENDE SEDIM- ENT (MG/L) (80154)	SUS- PENDE SEDIM- ENT DIS- CHARGE (T/DAY) (80155)
FEB. 15...	1100	.0	30	33	2.7
MAY 23...	1045	9.0	87	28	6.6
MAY 31...	1035	12.0	88	72	17
JUNE 13...	1250	18.0	60	95	15
JULY 05...	1100	14.0	48	11	1.4
AUG. 01...	1145	21.0	24	10	.65
SEP. 05...	1130	15.0	27	8	.58
NOV. 27...	1600	1.0	47	19	2.4

SAN JUAN RIVER BASIN

09346400 SAN JUAN RIVER NEAR CARRACAS, COLO.
(Surveillance network station)

LOCATION.—Lat 37°00'49", long 107°18'42", in SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec.17, T.32 N., R.4 W., Archuleta County, at gaging station just upstream from flow line of Navajo Reservoir, 3 miles northwest of Carracas, 7.2 miles upstream from Piedra River, and at mile 178.8.

DRAINAGE AREA.—1,230 sq mi, approximately.

PERIOD OF RECORD.—Chemical analyses: July 1969 to current year.
Sediment records: July 1970 to current year.

REMARKS.—Bacteria analyzed by the New Mexico Environmental Improvement Agency on samples collected by the U.S. Geological Survey. After June 1972, Bacteria analyzed by the U.S. Geological Survey.

CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	DIS- CHARGE (CFS) (00060)	DIS- SOLVED SILICA (SI02) (MG/L) (00955)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NESIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	RICAR- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)
FEB. 15...	1400	200	17	30	38	8.9	25	3.1	113	0	93
MAY 23...	1400	980	16	50	14	2.7	6.0	1.1	53	0	18
AUG. 29...	1230	88	18	120	40	9.9	30	4.5	153	0	84
NOV. 28...	1045	207	17	50	34	8.8	20	2.2	111	0	59

DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED NITRATE (N) (MG/L) (00618)	DIS- SOLVED NITRITE (N) (MG/L) (00613)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	AMMONIA NITRO- GEN (N) (MG/L) (00610)	DIS- SOLVED AMMONIA NITRO- GEN (N) (MG/L) (00608)	ORGANIC NITRO- GEN (N) (MG/L) (00605)	TOTAL NITRO- GEN (N) (MG/L) (00600)	TOTAL PHOS- PHORUS (P) (MG/L) (00665)
FEB. 15...	4.6	.3	.18	.00	.18	--	.05	.90	1.1	.43
MAY 23...	1.7	.1	.00	.00	.00	--	.05	.13	.18	.22
AUG. 29...	5.2	.3	.00	.00	.00	--	.01	.50	.51	.15
NOV. 28...	2.7	.2	.00	.00	.00	.08	.08	.07	.15	.13

DATE	DIS- SOLVED ORTHO- PHOS- PHORUS (P) (MG/L) (00671)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L) (70300)	DIS- SOLVED SOLIDS (SUM OF CONSTITU- ENTS) (MG/L) (70301)	HARD- NESS (CA, MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AD- SORP- TION RATIO (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	DIS- SOLVED BORON (B) (UG/L) (01020)
FEB. 15...	.01	270	246	130	39	.9	384	7.9	.0	50
MAY 23...	.04	90	86	46	3	.4	125	7.4	12.0	30
AUG. 29...	.01	258	267	140	15	1.1	424	8.2	18.0	80
NOV. 28...	.01	192	199	120	30	.8	277	7.5	.0	10

SAN JUAN RIVER BASIN

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09346400 SAN JUAN RIVER NEAR CARRACAS, COLO.--Continued

FIELD AND BIOCHEMICAL MEASUREMENTS, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	DIS- CHARGE (CFS) (00060)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	AIR TEMPER- ATURE (DEG C) (00020)	COLOR (PLAT- NUM- COBALT UNITS) (00080)	TUR- BID- ITY (JTU) (00070)
FEB. 15...	1400	200	375	8.4	.0	8.0	30	170
MAY 23...	1400	980	132	7.8	12.0	23.0	20	35
AUG. 29...	1230	88	430	8.4	18.0	21.5	20	75
NOV. 28...	1045	207	2.9	8.0	.0	-4.0	10	10

DATE	DIS- SOLVED OXYGEN (MG/L) (00300)	CHEM- ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L) (00335)	BIO- CHEM- ICAL OXYGEN DEMAND (MG/L) (00310)	IMME- DIATE COLI- FORM (COL. PER 100 ML) (31501)	FECAL COLI- FORM (COL. PER 100 ML) (31616)	STREP- TOCOCCI (COL- ONIES PER 100 ML) (31679)	TOTAL ORGANIC CARBON * (C) (00680)
FEB. 15...	11.1	6	1.4	20	10	40	--
MAY 23...	9.2	4	.6	--	20	--	--
AUG. 29...	8.4	--	--	--	93	--	--
NOV. 28...	11.7	--	--	--	2	--	3.0

* Analyzed by New Mexico Environmental Improvement Agency.

INSTANTANEOUS SUSPENDED SEDIMENT AND PARTICLE SIZE, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	TEMPER- ATURE (DEG C) (00010)	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SUS- PENDE SEDI- MENT (MG/L) (80154)	SUS- PENDE SEDI- MENT CHARGE (T/DAY) (80155)	SUS. SED. FALL DIAM. % FINER THAN .002 MM (70337)	SUS. SED. FALL DIAM. % FINER THAN .004 MM (70338)
FEB. 15...	1400	.0	200	632	341	--	--
MAY 23...	1400	12.0	980	173	458	21	27
AUG. 29...	1230	18.0	88	150	36	66	91
NOV. 28...	1045	0.0	207	92	51	--	--

DATE	SUS. SED. FALL DIAM. % FINER THAN .016 MM (70340)	SUS. SED. FALL DIAM. % FINER THAN .062 MM (70342)	SUS. SED. FALL DIAM. % FINER THAN .125 MM (70343)	SUS. SED. FALL DIAM. % FINER THAN .250 MM (70344)	SUS. SED. FALL DIAM. % FINER THAN .500 MM (70345)	SUS. SED. FALL DIAM. % FINER THAN .062 MM (70331)	SUS. SED. FALL DIAM. % FINER THAN .125 MM (70332)
FEB. 15...	--	--	--	--	--	--	--
MAY 23...	40	72	86	99	100	--	--
AUG. 29...	93	--	--	--	--	99	100

SAN JUAN RIVER BASIN

09349800 PIEDRA RIVER NEAR ARBOLES, COLO.
(Surveillance network station)

LOCATION.--Lat 37°05'18", long 107°23'50", in NE¼SW¼ sec.21, T.33 N., R.5 W., Archuleta County, at gaging station 3 miles downstream from Ignacio Creek, 5.2 miles northeast of Arboles Post Office, 8 miles upstream from mouth.

DRAINAGE AREA.--629 sq mi.

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

Sediment records: July 1970 to current year.

REMARKS.--Bacteria analyzed by the New Mexico Environmental Improvement Agency on samples collected by the U.S. Geological Survey. After June 1972, Bacteria analyzed by the U.S. Geological Survey.

CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	DIS- CHARGE (CFS) (00060)	DIS- SOLVED SILICA (SiO ₂) (MG/L) (00955)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED PU- TAS- SIUM (K) (MG/L) (00935)	BICAR- BONATE (HCO ₃) (MG/L) (00440)	CAR- BONATE (CO ₃) (MG/L) (00445)	DIS- SOLVED SULFATE (SO ₄) (MG/L) (00945)
FEB. 15...	1520	80	16	20	59	9.2	21	2.9	152	0	110
MAY 23...	1630	622	13	50	19	2.6	5.2	1.2	61	0	20
AUG. 29...	1000	42	15	10	63	8.5	22	2.9	159	0	100
NOV. 28...	1400	410	14	40	46	7.2	13	1.7	125	0	69

DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED NITRATE (N) (MG/L) (00618)	DIS- SOLVED NITRITE (N) (MG/L) (00613)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	AMMONIA NITRO- GEN (N) (MG/L) (00610)	DIS- SOLVED AMMONIA NITRO- GEN (N) (MG/L) (00608)	ORGANIC NITRO- GEN (N) (MG/L) (00605)	TOTAL NITRO- GEN (N) (MG/L) (00600)	TOTAL PHOS- PHORUS (P) (MG/L) (00665)
FEB. 15...	4.1	.3	.00	.00	.00	--	.10	.36	.46	.06
MAY 23...	1.6	.1	.00	.00	.00	--	.04	.09	.13	.11
AUG. 29...	4.4	.4	.00	.00	.00	--	.01	.22	.23	.03
NOV. 28...	3.3	.7	.01	.00	.01	.07	.07	.28	.36	.06

DATE	DIS- SOLVED ORTHO- PHOS- PHORUS (P) (MG/L) (00671)	DIS- SOLVED SOLIDS (RESI- DUE AT 160 C) (MG/L) (70300)	DIS- SOLVED SOLIDS (SUM OF TUENTS) (MG/L) (70301)	HARD- NESS (CA, MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AD- SORP- TION RATIO (MG/L) (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (MG/L) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	DIS- SOLVED BORON (B) (UG/L) (01020)
FEB. 15...	.00	286	297	190	60	.7	456	8.3	6.0	40
MAY 23...	.02	108	93	58	8	.3	142	7.8	12.5	40
AUG. 29...	.01	292	294	190	62	.7	461	8.2	17.0	50
NOV. 28...	.06	228	217	140	42	.5	336	7.0	.5	0

SAN JUAN RIVER BASIN

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09349800 PIEDRA RIVER NEAR ARBOLES, COLO.--Continued

FIELD AND BIOCHEMICAL MEASUREMENTS, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	DIS- CHARGE (CFS) (00060)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	AIR TEMPER- ATURE (DEG C) (00020)	COLOR (PLAT- INUM- COBALT UNITS) (00080)	TUR- BID- ITY (JTU) (00070)
FEB. 15...	1520	80	455	8.8	6.0	8.5	15	35
MAY 23...	1630	622	151	8.0	12.5	23.0	10	20
AUG. 29...	1000	42	409	8.3	17.0	18.0	2	2
NOV. 28...	1400	410	340	8.1	.5	-1.5	10	7

DATE	DIS- SOLVED OXYGEN (MG/L) (00300)	CHEM- ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L) (00335)	BIO- CHEM- ICAL OXYGEN DEMAND (MG/L) (00310)	IMME- DIATE COLI- FORM (COL. PER 100 ML) (31501)	FECAL COLI- FORM (COL. PER 100 ML) (31616)	STREP- TOCOCCI (COL- ONIES PER 100 ML) (31679)	TOTAL ORGANIC CARBON * (C) (00680)
FEB. 15...	10.4	5	1.1	0	0	30	--
MAY 23...	9.1	3	.6	--	0	--	--
AUG. 29...	8.6	--	--	--	33	--	1.7
NOV. 28...	11.1	--	--	--	0	--	3.0

* Analyzed by New Mexico Environmental Improvement Agency.

INSTANTANEOUS SUSPENDED SEDIMENT AND PARTICLE SIZE, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	TEMPER- ATURE (DEG C) (00010)	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SUS- PENDE- D SEDI- MENT (MG/L) (80154)	SUS- PENDE- D SEDI- MENT CHARGE (T/DAY) (80155)	SUS. SED. FALL DIAM. % FINER THAN .002 MM (70337)	SUS. SED. FALL DIAM. % FINER THAN .004 MM (70338)	SUS. SED. FALL DIAM. % FINER THAN .016 MM (70340)	SUS. SED. FALL DIAM. % FINER THAN .062 MM (70331)	SUS. SED. FALL DIAM. % FINER THAN .125 MM (70332)	SUS. SED. FALL DIAM. % FINER THAN .250 MM (70333)	SUS. SED. FALL DIAM. % FINER THAN .500 MM (70334)
FEB. 15...	1520	6.0	80	43	9.3	--	--	--	--	--	--	--
MAY 23...	1630	12.5	622	68	114	23	36	53	73	89	96	100
NOV. 28...	1400	0.5	410	10	11	--	--	--	--	--	--	--

SAN JUAN RIVER BASIN

09354500 LOS PINOS RIVER AT LA BOCA, COLO.
(Surveillance network station)

LOCATION.--Lat 37°00'37", long 107°35'49", in S½ sec.15, T.32 N., R.7 W., La Plata County, at gaging station at the Denver & Rio Grande Western Railroad Co. bridge, at southeast edge of La Boca, 0.1 mile upstream from Spring Creek, and 13 miles upstream from mouth.

DRAINAGE AREA.--510 sq mi, approximately.

PERIOD OF RECORD.--Chemical analyses: July 1969 to current year.
Sediment records: July 1970 to current year.

REMARKS.--Bacteria analyzed by the New Mexico Environmental Improvement Agency on samples collected by the U.S. Geological Survey. After June 1972, Bacteria analyzed by the U.S. Geological Survey.

CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	DIS- CHARGE (CFS) (000600)	DIS- SOLVED SILICA (SI02) (MG/L) (00955)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	RICAR- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)
FEB. 15...	1645	130	2.4	30	28	4.5	13	1.6	115	0	19
MAY 23...	1900	112	4.8	50	34	5.6	17	3.0	132	7	24
AUG. 29...	1600	135	6.9	90	32	6.2	19	2.4	159	0	21
NOV. 28...	1630	138	4.8	40	42	7.0	21	1.4	172	0	34

DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED NITRATE (N) (MG/L) (00618)	DIS- SOLVED NITRITE (N) (MG/L) (00613)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	AMMONIA NITRO- GEN (N) (MG/L) (00610)	DIS- SOLVED AMMONIA NITRO- GEN (N) (MG/L) (00608)	ORGANIC NITRO- GEN (N) (MG/L) (00605)	TOTAL NITRO- GEN (N) (MG/L) (00600)	TOTAL PHOS- PHORUS (P) (MG/L) (00665)	DIS- SOLVED ORTHO. PHOS- PHORUS (P) (MG/L) (00671)
FEB. 15...	3.6	.2	.00	.00	.00	--	.11	.47	.58	.07	.00
MAY 23...	5.0	.3	.00	.00	.00	--	.16	.30	.46	.24	.10
AUG. 29...	3.1	.4	.00	.01	.00	--	.09	.41	.50	.09	.01
NOV. 28...	5.9	.3	.02	.00	.02	.07	.07	.16	.25	.10	.00

DATE	DIS- SOLVED SULIDS (RESI- DUE AT 180 C) (MG/L) (70300)	DIS- SOLVED SULIDS (SUM OF CONSTI- TUENTS) (MG/L) (70301)	HARD- NESS (CA,MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AD- SORP- TION RATIO (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00995)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	COLOR (PLAT- NUM- COBALT UNITS) (00080)	TUR- BID- ITY (JTU) (00070)	DIS- SOLVED BORON (B) (UG/L) (01020)
FEB. 15...	152	129	88	0	.6	225	7.6	6.0	--	--	10
MAY 23...	170	166	110	0	.7	277	8.6	18.0	--	--	40
AUG. 29...	174	169	110	0	.8	291	8.1	17.5	--	--	20
NOV. 28...	210	201	130	0	.8	331	7.9	.5	--	--	0

SAN JUAN RIVER BASIN

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09354500 LOS PINOS RIVER AT LA BOCA, COLO.--Continued

FIELD AND BIOCHEMICAL MEASUREMENTS, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	DIS- CHARGE (CFS) (00060)	SFF- CIFIC CO- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	AIR TEMPER- ATURE (DEG C) (00020)	COLOR (PLAT- INUM- COBALT UNITS) (00080)	TUR- BID- ITY (JTU) (00070)
FEB. 15...	1645	130	235	8.8	6.0	5.0	30	35
MAY 23...	1900	112	277	8.9	18.0	21.5	50	40
AUG. 29...	1600	135	295	8.4	17.5	17.5	30	25
NOV. 28...	1630	138	323	8.4	.5	-1.5	10	6

DATE	DIS- SOLVED OXYGEN (MG/L) (00300)	CHEM- ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L) (00335)	RIO- CHEM- ICAL OXYGEN DEMAND (MG/L) (00310)	IMME- DIATE COLI- FORM (COL. PER 100 ML) (31501)	FECAL COLI- FORM (COL. PER 100 ML) (31616)	STREP- TOCOCCI (COL- ONIES PER 100 ML) (31679)	TOTAL ORGANIC CARBON * (C) (00680)
FEB. 15...	10.4	10	2.3	10	<10	90	--
MAY 23...	7.6	5	2.8	--	0	--	--
AUG. 29...	8.3	--	--	--	87	--	6.2
NOV. 28...	12.1	--	--	--	6	--	3.5

* Analyzed by New Mexico Environmental Improvement Agency.

INSTANTANEOUS SUSPENDED SEDIMENT AND PARTICLE SIZE, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	TEMPER- ATURE (DEG C) (00010)	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SUS- PENDED SEDI- MENT (MG/L) (00154)	SUS- PENDED SEDI- MENT DIS- CHARGE (T/DAY) (00155)	SUS. SED. FALL DIAM. % FINER THAN .002 MM (70337)	SUS. SED. FALL DIAM. % FINER THAN .004 MM (70338)	SUS. SED. FALL DIAM. % FINER THAN .016 MM (70340)	SUS. SED. FALL DIAM. % FINER THAN .062 MM (70331)	SUS. SED. FALL DIAM. % FINER THAN .125 MM (70332)	SUS. SED. FALL DIAM. % FINER THAN .250 MM (70333)	SUS. SED. FALL DIAM. % FINER THAN .500 MM (70334)
FEB. 15...	1645	6.0	130	48	17	--	--	--	--	--	--	--
MAY 23...	1900	18.0	112	86	26	67	79	91	98	99	100	--
AUG. 29...	1600	17.5	135	52	14	67	79	93	96	98	99	100
NOV. 28...	1630	0.5	138	12	4.5	--	--	--	--	--	--	--

SAN JUAN RIVER BASIN

09355500 SAN JUAN RIVER NEAR ARCHULETA, N. MEX.
(Irrigation network station)

LOCATION.--Lat 36°48'05", long 107°41'51", in N₂ sec.20, T.30 N., R.8 W., San Juan County, at gaging station, 0.5 mile upstream from Gobernador Canyon, 0.8 mile northeast of Archuleta, 7.2 miles downstream from Navajo Dam, and at river mile 136.8.

DRAINAGE AREA.--3,260 sq mi, approximately.

PERIOD OF RECORD.--Chemical analyses: December 1954 to current year.

Water temperatures: December 1954 to January 1969.

Sediment records: December 1954 to September 1965.

CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	DIS- CHARGE (CFS) (00060)	DIS- SOLVED SILICA (SiO ₂) (MG/L) (00955)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED MAN- GANESE (MN) (UG/L) (01056)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	BICAR- BONATE (HCO ₃) (MG/L) (00440)	CAR- BONATE (CO ₃) (MG/L) (00445)	DIS- SOLVED SULFATE (SO ₄) (MG/L) (00945)
JAN.												
24...	1530	1510	12	30	--	31	5.4	14	1.8	124	0	43
FEB.												
14...	1530	1490	12	20	--	32	5.7	15	2.0	103	1	52
MAR.												
20...	1400	1510	14	10	--	32	6.0	15	2.0	102	4	54
APR.												
17...	1620	405	11	20	10	32	6.0	17	2.3	104	0	59
MAY												
22...	1715	492	11	100	--	34	6.0	16	1.9	105	1	51
JUNE												
19...	1530	504	11	30	--	37	5.9	16	1.9	126	0	56
JULY												
31...	1600	498	11	10	--	33	5.9	16	2.0	104	0	63
AUG.												
29...	1815	660	11	10	--	32	6.0	17	2.0	105	0	51
SEP.												
25...	1700	510	11	20	--	34	5.8	17	1.8	105	0	62
OCT.												
24...	1500	522	11	10	--	34	5.9	15	1.2	105	0	61
NOV.												
30...	1600	480	12	30	0	34	5.9	17	2.1	119	0	58

DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED NITRATE (N) (MG/L) (00618)	DIS- SOLVED NITRITE (N) (MG/L) (00613)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	AMMONIA NITRO- GEN (N) (MG/L) (00610)	DIS- SOLVED AMMONIA NITRO- GEN (N) (MG/L) (00608)	ORGANIC NITRO- GEN (N) (MG/L) (00605)	TOTAL NITRO- GEN (N) (MG/L) (00600)	TOTAL PHOS- PHORUS (P) (MG/L) (00665)	DIS- SOLVED ORTHO- PHOS- PHORUS (P) (MG/L) (00671)
JAN.											
24...	4.7	.2	--	--	.02	--	--	--	--	--	.01
FEB.											
14...	3.1	.2	--	--	.00	--	--	--	--	--	.00
MAR.											
20...	2.7	.1	--	--	.00	--	--	--	--	--	.00
APR.											
17...	3.8	.3	.01	.00	.01	--	.09	.04	.14	.03	.00
MAY											
22...	2.8	.3	--	--	.00	--	--	--	--	--	.00
JUNE											
19...	2.7	.1	--	--	.05	--	--	--	--	--	.01
JULY											
31...	2.6	.3	.01	.00	.01	--	.01	.25	.27	.03	.00
AUG.											
29...	2.9	.3	.00	.00	.00	--	.06	.15	.21	.03	.00
SEP.											
25...	3.1	.3	.00	.01	.00	--	.00	.00	.00	.03	.00
OCT.											
24...	2.9	.3	.00	.00	.00	--	.01	.17	.18	.04	.02
NOV.											
30...	3.1	.3	.04	.00	.04	.09	.09	.10	.23	.12	.01

09355500 SAN JUAN RIVER NEAR ARCHULETA, N. MEX.--Continued

CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	DIS-SOLVED SOLIDS (RESIDUE AT 180 C) (MG/L) (70300)	DIS-SOLVED SOLIDS (SUM OF TUNENTS) (MG/L) (70301)	HARDNESS (CA, MG) (MG/L) (00900)	NON-CARBONATE HARDNESS (MG/L) (00902)	SODIUM ADSORPTION RATIO (00931)	SPECIFIC CONDUCTANCE (MICRO-MHOS) (00095)	PH (UNITS) (00400)	TEMPERATURE (DEG C) (00010)	DIS-SOLVED BORON (B) (UG/L) (01020)	DIS-SOLVED COPPER (CU) (UG/L) (01040)	DIS-SOLVED ZINC (ZN) (UG/L) (01090)
JAN. 24...	164	173	100	0	.6	270	8.5	7.0	30	--	--
FEB. 14...	188	174	100	17	.6	265	8.8	6.0	20	--	--
MAR. 20...	208	180	100	14	.6	274	8.5	7.5	30	--	--
APR. 17...	204	183	100	19	.7	294	8.2	11.0	30	1	20
MAY 22...	176	189	110	22	.7	288	8.4	12.0	50	--	--
JUNE 19...	204	193	120	13	.6	282	8.5	12.5	30	--	--
JULY 31...	218	185	110	21	.7	283	8.2	13.0	20	--	--
AUG. 29...	180	174	100	18	.7	283	8.3	9.0	30	--	--
SEP. 25...	198	187	110	23	.7	285	8.3	11.5	30	--	--
OCT. 24...	214	183	110	23	.6	291	7.5	10.0	30	--	--
NOV. 30...	200	192	110	12	.7	288	7.8	8.0	20	2	10

TRACE ELEMENT ANALYSES, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	DIS-	DIS-	DIS-	DIS-	HEXA-	DIS-
		SOLVED	SOLVED	SOLVED	SOLVED	VALENT	SOLVED
		ARSENIC	BARIUM	BORON	CAD-	CHRO-	COPPER
		(AS)	(BA)	(B)	MIUM	MIUM	(CU)
		(UG/L)	(UG/L)	(UG/L)	(CD)	(CR6)	(UG/L)
		(01000)	(01005)	(01020)	(01025)	(01032)	(01040)
APR.							
17...	1620	2	100	30	0	0	1
NOV.							
30...	1600	9	0	20	0	0	2
		DIS-	DIS-		DIS-	DIS-	DIS-
		SOLVED	SOLVED		SOLVED	SOLVED	SOLVED
		IRON	MAN-	TOTAL	SILVER	SELE-	ZINC
		(FE)	GANESE	MERCURY	(AG)	NIUM	(ZN)
DATE		(UG/L)	(MN)	(HG)	(UG/L)	(SE)	(UG/L)
		(01046)	(UG/L)	(UG/L)	(01075)	(UG/L)	(01090)
APR.							
17...	20	4	10	.0	0	3	20
NOV.							
30...	30	3	0	.0	0	0	10

FIELD AND BIOCHEMICAL MEASUREMENTS, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	DISCHARGE (CFS) (00060)	SPECIFIC CONDUCTANCE (MICRO-MHOS) (00095)	PH (UNITS) (00400)	TEMPERATURE (DEG C) (00010)	AIR TEMPERATURE (DEG C) (00020)	COLOR (PLATINUM-COBALT UNITS) (00080)	TURBIDITY (JTU) (00070)	DIS-SOLVED OXYGEN (MG/L) (00300)	CHEMICAL OXYGEN DEMAND (LOW LEVEL) (MG/L) (00335)	BIOCHEMICAL OXYGEN DEMAND (MG/L) (00310)	TOTAL ORGANIC CARBON (C) (MG/L) (00680)
JAN. 24...	1530	1510	262	8.7	7.0	6.0	7	7	13.4	4	1.4	--
FEB. 14...	1530	1490	272	9.3	6.0	11.5	5	7	15.3	8	.7	--
MAR. 20...	1400	1510	272	8.4	7.5	17.5	5	9	14.1	3	.8	--
APR. 17...	1620	405	298	8.8	11.0	20.5	5	5	11.2	3	1.0	--
MAY 22...	1715	492	287	8.6	12.0	20.5	5	3	10.8	3	.6	--
JUNE 19...	1530	504	295	8.6	12.5	32.5	5	2	11.6	3	.7	--
JULY 31...	1600	498	300	8.5	13.0	36.5	--	--	11.8	--	--	5.5
AUG. 29...	1815	660	--	8.7	9.0	19.5	5	1	12.4	--	--	3.0
SEP. 25...	1700	510	296	8.0	11.5	22.0	10	1	11.1	--	--	4.0
OCT. 24...	1500	522	299	8.3	10.0	17.0	--	--	10.4	--	--	3.0
NOV. 30...	1600	480	299	8.6	8.0	4.0	--	--	11.6	--	--	3.5

* Analyzed by New Mexico Environmental Improvement Agency.

SAN JUAN RIVER BASIN

09357300 SAN JUAN RIVER ABOVE ANIMAS RIVER, AT FARMINGTON, N. MEX.

LOCATION.--Lat 36°43'10", long 108°12'45", in NE¼SE¼NE¼ sec.20, T.29 N., R.13 W., San Juan County, 100 ft upstream from mouth of Animas River, at south edge of Farmington, and at river mile 99.

DRAINAGE AREA.--5,800 sq mi, approximately.

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

REMARKS.--Discharges are estimated from the streamflow records of the San Juan River at Farmington and Animas River at Farmington stations.

CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	DIS- CHARGE (CFS) (00060)	DIS- SOLVED SILICA (SiO2) (MG/L) (00955)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	BICAR- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)
JAN.											
25...	1440	1400	12	39	6.4	24	1.9	113	0	80	3.4
FEB.											
16...	1315	1670	11	40	6.5	24	2.1	114	0	84	3.1
MAR.											
21...	1400	1640	14	36	6.8	23	2.1	118	0	77	2.9
APR.											
18...	1640	400	11	61	10	59	2.5	149	0	200	6.8
MAY											
24...	1540	580	8.9	66	9.8	56	2.4	142	0	190	4.9
JUNE											
20...	1500	280	11	58	8.9	45	2.4	142	0	150	18
AUG.											
01...	1330	340	9.4	54	8.9	46	2.3	136	0	160	4.0
30...	1145	850	11	55	7.6	46	2.5	133	0	160	5.2
SEP.											
26...	1415	368	12	64	8.6	48	2.2	141	0	170	5.1
OCT.											
25...	1600	1830	11	61	8.5	45	3.1	137	0	170	5.9
NOV.											
30...	1200	800	12	55	8.7	48	2.2	131	0	160	4.2

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	DIS- SOLVED SOLIDS (SUM OF CONSTITU- ENTS) (MG/L) (70301)	HARD- NESS (CA+MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AD- SORP- TION RATIO (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	DIS- SOLVED BORON (B) (UG/L) (01020)
JAN.										
25...	.3	.11	223	120	31	.9	364	8.0	2.5	--
FEB.										
16...	.2	.06	227	130	33	.9	347	8.2	5.0	--
MAR.										
21...	.2	.03	222	120	26	.9	349	8.1	9.5	--
APR.										
18...	.3	.21	425	190	71	1.8	665	8.3	14.0	--
MAY										
24...	.3	.04	408	210	89	1.7	621	8.0	21.5	60
JUNE										
20...	.3	.04	364	180	65	1.5	537	8.4	23.0	--
AUG.										
01...	.3	.05	352	170	60	1.5	541	8.1	24.5	40
30...	.3	.14	354	170	60	1.5	542	7.6	14.0	70
SEP.										
26...	.3	.15	380	200	80	1.5	580	7.8	16.5	--
OCT.										
25...	.3	.26	373	190	75	1.4	596	7.3	11.5	--
NOV.										
30...	.2	.26	356	170	66	1.6	534	7.6	3.0	40

SAN JUAN RIVER BASIN

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09357300 SAN JUAN RIVER ABOVE ANIMAS RIVER, AT FARMINGTON, N. MEX.--Continued
 FIELD AND BIOCHEMICAL MEASUREMENTS, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	DIS- CHARGE (CFS) (00060)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	AIR TEMPER- ATURE (DEG C) (00020)
JAN.						
25...	1440	1400	357	--	7.5	7.5
FEB.						
16...	1315	1670	350	--	5.0	12.0
MAR.						
21...	1400	1647	345	--	9.5	20.0
APR.						
18...	1640	400	655	--	14.0	20.5
MAY						
24...	1540	580	630	--	21.5	29.5
JUNE						
20...	1500	280	540	--	23.0	34.0
AUG.						
01...	1330	340	525	--	24.5	34.0
30...	1145	850	539	--	14.0	22.0
SEP.						
26...	1415	368	592	--	16.5	25.0
OCT.						
25...	1600	1830	600	--	11.5	13.0
NOV.						
30...	1200	800	535	--	3.0	6.5

SAN JUAN RIVER BASIN

09363500 ANIMAS RIVER NEAR CEDAR HILL, N. MEX.
(Surveillance network station)

LOCATION.--Lat 37°02'17", long 107°52'25", in sec.7, T.32 N., R.9 W., La Plata County, at gaging station 0.8 mile downstream from Florida River, 2.5 miles upstream from Colorado-New Mexico State line, and 8.5 miles north of Cedar Hill.

DRAINAGE AREA.--1,090 sq mi, approximately.

PERIOD OF RECORD.--Chemical analyses: July 1969 to current year.
Sediment records: July 1970 to current year.

REMARKS.--Bacteria analyzed by the New Mexico Environmental Improvement Agency on samples collected by the U.S. Geological Survey. After June 1972, Bacteria analyzed by the U.S. Geological Survey.

CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	DIS- CHARGE (CFS) (00060)	DIS- SOLVED SILICA (SI02) (MG/L) (00955)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	BICAR- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)
FEB. 14...	1715	282	8.2	10	77	13	21	3.2	174	0	130
MAY 22...	1900	1630	5.6	60	34	4.8	6.1	1.3	82	0	49
JULY 31...	1800	299	4.4	10	72	12	30	4.2	170	0	110
AUG. 29...	2000	317	8.1	10	78	14	35	4.5	192	0	120
SEP. 25...	1845	375	18	20	60	8.9	19	3.0	128	0	110
NOV. 29...	1730	524	8.2	9	69	11	20	2.6	172	0	110

DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED NITRATE (N) (MG/L) (00618)	DIS- SOLVED NITRITE (N) (MG/L) (00613)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	AMMONIA NITRO- GEN (N) (MG/L) (00610)	DIS- SOLVED AMMONIA NITRO- GEN (N) (MG/L) (00608)	ORGANIC NITRO- GEN (N) (MG/L) (00605)	TOTAL NITRO- GEN (N) (MG/L) (00600)	TOTAL PHOS- PHORUS (P) (MG/L) (00665)
FEB. 14...	18	.4	.20	.00	.20	--	.10	.35	.65	.08
MAY 22...	5.9	.2	.12	.00	.12	--	.07	.12	.31	.15
JULY 31...	27	.5	.02	.00	.02	--	.08	.20	.30	.05
AUG. 29...	29	.6	.00	--	.02	--	.07	.13	.22	.08
SEP. 25...	17	.5	.00	.00	.00	--	.10	.04	.14	.08
NOV. 29...	16	.4	.19	.00	.19	.08	.08	.11	.38	.06

DATE	DIS- SOLVED ORTHO- PHOS- PHORUS (P) (MG/L) (00671)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L) (70300)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L) (70301)	HARD- NESS (CA,MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AD- SORP- TION RATIO (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	DIS- SOLVED BORON (B) (UG/L) (01020)
FEB. 14...	.03	348	358	250	100	.6	572	8.3	5.0	60
MAY 22...	.01	158	148	100	37	.3	253	7.6	11.0	50
JULY 31...	.00	378	344	230	90	.9	579	7.5	24.0	90
AUG. 29...	.01	376	384	250	95	1.0	620	8.1	17.0	100
SEP. 25...	--	284	300	190	81	.6	472	8.2	15.5	70
NOV. 29...	.01	338	324	220	76	.6	503	7.4	1.5	30

RADIOCHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	DIS- SOLVED GROSS ALPHA AS U-NAT. (UG/L) (80030)	SUS- PENDED GROSS ALPHA AS U-NAT. (UG/L) (80040)	DIS- SOLVED GROSS BETA AS CS-137 (PC/L) (03515)	SUS- PENDED GROSS BETA AS CS-137 (PC/L) (03516)	DIS- SOLVED GROSS BETA AS AS SR90 /Y90 (PC/L) (80050)	SUS- PENDED GROSS BETA AS AS SR90 /Y90 (PC/L) (80060)	DIS- SOLVED RA-226 (PLAN- CHET COUNT) (PC/L) (09510)	DIS- SOLVED RA-226 (RADON METHOD) (PC/L) (09511)	DIS- SOLVED NATURAL URANIUM (U) (UG/L) (22703)
AUG. 29...	2000	<4.4	2.0	7.6	1.7	6.2	1.4	.2	--	1.8
NOV. 29...	1730	4.9	2.0	4.3	1.4	3.5	1.2	--	.06	1.5

SAN JUAN RIVER BASIN

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09363500 ANIMAS RIVER NEAR CEDAR HILL, N. MEX.--Continued

FIELD AND BIOCHEMICAL MEASUREMENTS, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	DIS- CHARGE (CFS) (00060)	SPF- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	AIR TEMPER- ATURE (DEG C) (00020)	COLOR (PLAT- INUM- COBALT UNITS) (00080)	TUR- BID- ITY (JTU) (00070)
JAN.								
24...	1720	274	580	8.3	3.0	.5	5	20
FEB.								
14...	1715	282	569	8.8	5.0	6.0	3	10
MAR.								
20...	1600	684	380	8.3	10.5	17.0	5	30
APR.								
17...	1830	666	437	8.5	13.0	13.0	5	10
MAY								
22...	1900	1630	255	8.0	11.0	17.5	10	25
JUNE								
19...	1715	1360	282	8.4	17.5	29.5	5	6
JULY								
31...	1800	299	569	8.5	24.0	30.0	5	5
AUG.								
29...	2000	317	--	8.6	17.0	14.0	5	10
SEP.								
25...	1845	375	479	8.4	15.5	17.0	10	9
OCT.								
24...	1700	1220	330	8.3	9.5	15.5	20	15
NOV.								
29...	1730	524	499	8.6	1.5	.5	5	8

DATE	DIS- SOLVED OXYGEN (MG/L) (00300)	CHEM- ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L) (00335)	BIO- CHEM- ICAL OXYGEN DEMAND (MG/L) (00310)	IMME- DIATE COLI- FORM (COL. PER 100 ML) (31501)	FECAL COLI- FORM (COL. PER 100 ML) (31616)	STREP- TOCOCCI (COL- ONIES PER 100 ML) (31679)	TOTAL ORGANIC CARBON * (C) (00680)
JAN.							
24...	11.6	3	1.9	<10	<10	70	--
FEB.							
14...	11.6	4	1.0	0	0	<10	--
MAR.							
20...	9.9	2	.7	100	<100	<100	--
APR.							
17...	9.0	4	1.2	20	<10	<10	--
MAY							
22...	9.4	4	1.0	--	10	--	--
JUNE							
19...	9.0	2	.7	200	<100	100	--
JULY							
31...	8.6	--	--	--	5	--	5.4
AUG.							
29...	8.6	--	--	--	26	--	3.7
SEP.							
25...	8.5	--	--	--	21	--	5.1
OCT.							
24...	8.9	--	--	--	47	--	3.5
NOV.							
29...	11.0	--	--	--	2	--	2.0

* Analyzed by New Mexico Environmental Improvement Agency.

INSTANTANEOUS SUSPENDED SEDIMENT AND PARTICLE SIZE, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	TEMPER- ATURE (DEG C) (00010)	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SUS- PENDED SEDI- MENT (MG/L) (80154)	SUS- PENDED SEDI- MENT DIS- CHARGE (T/DAY) (80155)
FEB.					
14...	1715	5.0	282	31	24
MAY					
22...	1900	11.0	1630	145	638
AUG.					
29...	2000	17.0	317	38	33
NOV.					
29...	1730	1.5	524	30	42

SAN JUAN RIVER BASIN

09364500 ANIMAS RIVER AT FARMINGTON, N. MEX.
(Radiochemical network station)

LOCATION.--Lat 36°43'12", long 108°12'08", in SE¼ sec.16, T.29 N., R.13 W., San Juan County, at gaging station at bridge on former State Highway 17, 0.6 mile downstream from bridge on State Highway 17, and 1.3 miles upstream from mouth.

DRAINAGE AREA.--1,360 sq mi, approximately.

PERIOD OF RECORD.--Chemical analyses: June 1940 to current year.

Specific conductance: October 1941 to current year.

Water temperatures: December 1950 to current year.

Sediment records: December 1950 to current year.

EXTREMES:

Current year:

Specific conductance: Maximum daily, 1,340 micromhos Sept. 20; minimum daily, 156 micromhos May 29.

Water temperatures: Maximum, 30.5°C Aug. 12; minimum, freezing point on several days during winter months.

Sediment concentrations: Maximum daily, 14,300 mg/l Oct.8; minimum daily, 13 mg/l Aug. 14.

Sediment discharge: Maximum daily, 293,000 tons Oct. 20; minimum daily, .21 ton Aug. 14.

Period of record:

Specific conductance: Maximum daily, 1,980 micromhos Aug. 19, 1944; minimum daily, 156 micromhos May 29, 1972.

Water temperatures: Maximum, 32.0°C Aug. 26, 1966; minimum, freezing point on many days during winter months.

Sediment concentrations: Maximum daily, 36,800 mg/l July 23, 1954; minimum daily, 1 mg/l on several days during September 1956, and September 1958.

Sediment discharge: Maximum daily, 337,000 tons July 23, 1954; minimum daily, less than 0.50 ton on many days during 1955-57, 1959, 1960, 1963, and 1972.

CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	DIS- CHARGE (CFS) (000060)	DIS- SOLVED SILICA (SIUO) (MG/L) (000955)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED MANGANESE (MN) (UG/L) (01056)	DIS- SOLVED CALCIUM (CA) (MG/L) (000915)	DIS- SOLVED MAGNESIUM (MG) (MG/L) (000925)	DIS- SOLVED SODIUM (NA) (MG/L) (000930)	DIS- SOLVED POTASSIUM (K) (MG/L) (000935)	BICARBONATE (HCO3) (MG/L) (00440)	CARBONATE (CO3) (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (000945)
JAN. 25...	1700	330	8.2	600	--	95	14	30	2.7	196	0	180
FEB. 16...	1500	330	6.8	10	--	86	15	34	3.3	192	0	180
MAR. 21...	1630	552	9.6	20	--	67	9.8	16	2.0	145	0	120
APR. 18...	1930	480	6.9	60	0	72	11	22	2.1	149	0	130
MAY 24...	1900	1180	6.6	40	--	52	7.4	14	1.8	114	0	84
JUNE 20...	1800	1190	6.4	20	--	47	6.7	14	1.9	101	0	88
AUG. 01...	1630	71	5.9	20	--	100	17	52	3.4	179	0	250
30...	0930	166	8.1	40	--	120	18	52	3.9	239	0	240
SEP. 26...	1630	282	8.1	20	--	92	14	35	3.0	179	0	180
OCT. 26...	1030	1610	7.5	20	30	53	10	16	2.7	137	0	100
NOV. 30...	1000	528	8.6	9	--	84	13	27	2.5	182	0	150

DATE	DIS- SOLVED CHLORIDE (CL) (MG/L) (000940)	DIS- SOLVED FLUORIDE (F) (MG/L) (000950)	DIS- SOLVED NITRATE (N) (MG/L) (000618)	DIS- SOLVED NITRITE (N) (MG/L) (000613)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (000631)	AMMONIA NITROGEN (N) (MG/L) (000610)	DIS- SOLVED AMMONIA NITROGEN (N) (MG/L) (000608)	ORGANIC NITROGEN (N) (MG/L) (000605)	TOTAL NITROGEN (N) (MG/L) (000600)	TOTAL PHOSPHORUS (P) (MG/L) (000665)	DIS- SOLVED ORTHOPHOSPHORUS (P) (MG/L) (000671)	DIS- SOLVED SOLIDS (RESIDUE AT 180 C) (MG/L) (70300)
JAN. 25...	22	.5	--	--	.25	--	--	--	--	--	.02	446
FEB. 16...	23	.5	--	--	.09	--	--	--	--	--	.01	482
MAR. 21...	10	.3	--	--	.12	--	--	--	--	--	.00	334
APR. 18...	12	.4	.06	.00	.06	--	.02	.05	.13	.13	.01	376
MAY 24...	9.3	.3	--	--	.15	--	--	--	--	--	.02	244
JUNE 20...	7.7	.3	--	--	.14	--	--	--	--	--	.00	252
AUG. 01...	26	.5	.04	.00	.04	--	.02	.33	.39	.06	.00	--
30...	30	.5	.07	.00	.07	--	.01	.44	.52	.10	.01	620
SEP. 26...	22	.5	.00	.00	.00	--	.07	.24	.31	.16	.04	452
OCT. 26...	10	.4	.20	.00	.20	--	.06	1.1	1.4	.51	.02	296
NOV. 30...	18	.6	.23	.00	.23	.09	.09	.15	.47	.10	.02	414

SAN JUAN RIVER BASIN

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09364500 ANIMAS RIVER AT FARMINGTON, N. MEX.--Continued

CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L) (70301)	HARD- NESS (CA, MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AD- SORP- TION RATIO (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	COLOR (PLAT- INUM- COBALT UNITS) (00080)	TUR- BID- ITY (JTU) (00070)	DIS- SOLVED BORON (B) (UG/L) (01020)	DIS- SOLVED COPPER (CU) (UG/L) (01040)	DIS- SOLVED ZINC (ZN) (UG/L) (01090)
JAN. 25...	451	290	130	.8	720	8.2	1.0	--	--	80	--	--
FEB. 16...	444	280	120	.9	694	8.3	7.0	--	--	70	--	--
MAR. 21...	307	210	89	.5	478	7.9	13.0	--	--	40	--	--
APR. 18...	330	220	100	.6	527	8.0	11.0	--	--	50	--	--
MAY 24...	232	160	67	.5	384	7.7	16.0	--	--	50	--	--
JUNE 20...	222	140	62	.5	364	8.1	20.0	--	--	40	--	--
AUG. 01...	543	320	170	1.3	804	7.9	27.5	--	--	100	--	--
SEP. 30...	591	370	180	1.2	912	7.9	17.0	--	--	110	--	--
SEP. 26...	443	290	140	.9	699	8.3	18.5	--	--	90	--	--
OCT. 26...	269	170	61	.5	446	7.8	8.0	--	--	50	--	--
NOV. 30...	395	260	110	.7	612	7.3	.0	--	--	40	--	--

TRACE ELEMENT AND RADIOCHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	DIS- SOLVED ARSENIC (AS) (UG/L) (01000)	DIS- SOLVED BARIUM (BA) (UG/L) (01005)	DIS- SOLVED BORON (B) (UG/L) (01020)	DIS- SOLVED CAD- MIUM (CD) (UG/L) (01025)	HEXA- VALENT CHRO- MIUM (CR6) (UG/L) (01032)	DIS- SOLVED COPPER (CU) (UG/L) (01040)	DIS- SOLVED IRON (FE) (UG/L) (01046)	TOTAL LEAD (PB) (UG/L) (01051)	DIS- SOLVED MAN- GANESE (MN) (UG/L) (01056)	TOTAL MERCURY (HG) (UG/L) (71900)
APR. 18...	1930	0	0	50	1	0	2	60	19	0	.0
MAY 24...	1900	--	--	--	--	--	--	--	--	--	--
OCT. 26...	1030	3	200	50	0	0	3	20	47	30	.3

DATE	DIS- SOLVED SILVER (AG) (UG/L) (01075)	DIS- SOLVED SELE- NIUM (SE) (UG/L) (01145)	DIS- SOLVED ZINC (ZN) (UG/L) (01090)	DIS- SOLVED GROSS ALPHA AS U-NAT. (UG/L) (80030)	SUS- PENDE GROSS ALPHA AS U-NAT. (UG/L) (80040)	DIS- SOLVED GROSS BETA AS CS-137 (PC/L) (03515)	SUS- PENDE GROSS BETA AS CS-137 (PC/L) (03516)	DIS- SOLVED GROSS BETA AS AS SP90 /Y90 (PC/L) (80050)	SUS- PENDE GROSS BETA AS AS SR90 /Y90 (PC/L) (80060)	DIS- SOLVED RA-226 (RADON METHOD) (PC/L) (09511)	DIS- SOLVED NATURAL URANIUM (U) (UG/L) (22703)
APR. 18...	1	0	50	--	--	--	--	--	--	--	--
MAY 24...	--	--	--	4.3	13	4.2	6.1	3.4	6.4	.08	1.2
OCT. 26...	2	3	20	--	--	--	--	--	--	--	--

SAN JUAN RIVER BASIN

09364500 ANIMAS RIVER AT FARMINGTON, N. MEX.--Continued

FIELD AND BIOCHEMICAL MEASUREMENTS, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	DIS- CHARGE (CFS) (00060)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	AIR TEMPER- ATURE (DEG C) (00020)	COLOR (PLAT- INUM- COBALT UNITS) (00080)	TUR- BID- ITY (JTU) (00070)	DIS- SOLVED OXYGEN (MG/L) (00300)	CHEM- ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L) (00335)	BIO- CHEM- ICAL OXYGEN DEMAND (MG/L) (00310)	TOTAL ORGANIC CARBON (C) (00680)	*
JAN.													
25...	1700	330	710	8.2	1.0	5.5	7	40	11.8	6	2.8	--	
FEB.													
16...	1500	330	705	9.1	7.0	11.0	10	25	12.2	8	1.4	--	
MAR.													
21...	1630	552	484	8.3	13.0	20.5	5	80	9.3	4	1.6	--	
APR.													
18...	1930	480	540	8.3	11.0	15.0	3	25	8.7	3	1.4	--	
MAY													
24...	1900	1180	380	8.1	16.0	26.5	10	40	8.1	5	.6	--	
JUNE													
20...	1800	1190	373	8.3	20.0	33.0	5	15	8.0	4	.6	--	
AUG.													
01...	1630	71	845	8.3	27.5	36.0	--	--	8.4	--	--	7.5	
30...	0930	166	895	8.3	17.0	18.5	10	40	8.7	--	--	4.0	
SEP.													
26...	1630	282	707	8.6	18.5	24.5	5	25	8.4	--	--	4.0	
OCT.													
26...	1030	1610	464	8.3	8.0	7.5	--	--	9.6	--	--	11	
NOV.													
30...	1000	528	610	8.0	.0	1.0	--	--	11.7	--	--	5.0	

* Analyzed by New Mexico Environmental Improvement Agency.

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C.) CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972
(ONCE-DAILY)

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	---	693	672	537	357	253	492	790	911	784	500	502
2	705	647	644	---	375	247	529	813	820	805	497	500
3	739	690	625	552	356	246	513	808	880	850	490	500
4	722	698	623	581	335	255	578	821	880	874	435	545
5	773	674	623	586	318	278	571	819	921	940	530	576
6	726	668	627	572	315	262	616	810	931	800	546	585
7	701	682	651	560	365	259	586	960	1180	605	549	517
8	682	701	612	---	401	517	587	978	961	665	570	535
9	---	693	---	504	432	263	601	975	871	481	568	580
10	660	663	528	506	440	276	627	969	764	463	550	595
11	682	668	509	439	435	---	615	964	762	505	545	605
12	700	670	478	425	442	290	673	961	774	538	548	596
13	653	677	470	431	464	307	675	1180	765	648	546	634
14	649	672	465	437	477	320	700	1180	696	594	555	618
15	671	685	439	467	464	340	682	1180	705	691	556	596
16	673	678	438	487	412	351	761	1190	698	637	557	655
17	673	682	465	525	328	347	788	1180	720	523	557	515
18	683	655	468	528	337	347	765	1170	752	413	580	535
19	681	665	470	473	324	---	693	975	784	604	590	535
20	642	650	467	473	307	351	870	972	1340	332	603	560
21	634	699	468	485	337	392	837	971	694	310	610	595
22	640	661	474	486	303	401	845	893	498	344	555	630
23	---	635	458	494	335	415	845	902	552	363	550	520
24	649	607	438	478	378	391	807	870	624	389	547	560
25	682	617	429	415	355	400	830	874	650	416	530	525
26	713	629	458	337	281	401	737	935	674	409	580	490
27	666	633	492	352	158	430	728	932	714	479	580	535
28	657	664	499	394	163	432	698	930	737	489	593	575
29	659	689	494	414	156	473	718	938	764	468	590	478
30	673	---	513	364	160	470	743	935	770	473	548	630
31	700	---	548	---	254	---	742	860	---	481	---	620
MONTH	682	667	518	476	341	347	692	959	793	560	552	563

SAN JUAN RIVER BASIN

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09364500 ANIMAS RIVER AT FARMINGTON, N. MEX.--Continued
 TEMPERATURE (DEG. C) OF WATER, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972
 (ONCE-DAILY)

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

SUSPENDED-SEDIMENT DISCHARGE, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

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	324	108	94	288	303	236	344	630	585
2	306	88	73	300	138	112	358	460	445
3	324	90	79	294	79	63	351	240	227
4	330	141	126	282	148	113	365	270	266
5	320	108	93	324	172	150	372	440	442
6	320	114	98	324	127	111	344	460	427
7	324	146	128	318	96	82	365	420	414
8	358	79	76	306	138	114	424	540	618
9	365	84	83	306	117	97	464	370	464
10	330	98	87	306	76	63	480	480	622
11	306	104	86	306	67	55	520	880	1240
12	330	100	89	294	64	51	568	980	1500
13	350	122	115	300	52	42	576	680	1060
14	335	118	107	300	57	46	600	800	1300
15	312	127	107	288	45	35	632	780	1330
16	318	113	97	312	92	78	648	620	1080
17	312	134	113	318	72	62	640	480	829
18	324	137	120	337	92	84	624	400	674
19	351	148	140	344	195	181	608	390	640
20	358	143	138	365	360	355	593	400	640
21	365	136	134	344	2160	2010	584	530	836
22	365	113	111	351	970	919	576	300	467
23	358	58	56	408	1200	1320	592	340	543
24	351	184	174	400	930	1000	608	470	772
25	337	285	259	372	650	653	592	257	411
26	337	115	105	365	500	493	536	245	355
27	358	103	100	351	330	313	488	203	267
28	337	100	91	324	390	341	464	187	234
29	324	73	64	324	630	551	464	152	190
30	318	72	62	---	---	---	408	137	151
31	288	144	112	---	---	---	393	122	129
TOTAL	10335	--	3317	9451	--	9730	15581	--	19158

09364500 ANIMAS RIVER AT FARMINGTON, N. MEX.--Continued

SUSPENDED-SEDIMENT DISCHARGE, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

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	386	71	74	1170	412	1300	2730	1370	10100
2	372	61	61	1260	704	2400	2680	610	4410
3	337	68	62	1460	353	1390	2460	730	4850
4	311	58	49	1660	805	3610	2320	1930	12100
5	306	60	50	1610	214	930	2030	3400	18600
6	318	68	58	1520	393	1610	2150	2600	15100
7	372	98	98	1220	505	1660	2220	2000	12000
8	379	107	109	970	699	1830	2330	3480	21900
9	440	174	207	756	618	1260	2630	2030	14400
10	576	426	663	738	483	962	2140	880	5080
11	632	667	1140	738	783	1560	1960	1350	7140
12	608	506	831	656	682	1210	1860	3240	16300
13	632	522	891	576	514	799	1820	2570	12600
14	552	373	556	584	326	514	1540	2320	9650
15	456	250	308	656	170	301	1380	1300	4840
16	393	212	225	990	885	2370	1310	520	1840
17	344	184	171	1390	974	3660	1280	4170	14400
18	337	222	202	1440	288	1120	1280	2190	7570
19	480	277	359	1630	295	1300	1210	3670	12000
20	432	187	218	1680	713	3230	1190	3240	10400
21	416	201	226	1740	376	1770	1190	77	247
22	393	176	187	1710	501	1390	1230	65	216
23	365	128	126	1460	397	1560	1610	9930	53700
24	584	287	453	1270	536	1840	1430	1250	4830
25	1000	696	1880	1540	278	1160	1280	635	2190
26	1040	242	680	1980	854	4570	1100	525	1560
27	950	785	2010	2140	680	3930	882	225	536
28	783	895	1890	2180	890	5240	626	155	262
29	783	664	1400	2330	2140	13500	520	87	122
30	1060	490	1400	2490	1850	12400	528	87	124
31	--	--	--	2730	1300	9580	--	--	--
TOTAL	16037	--	16584	44274	--	89956	48916	--	279067
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	424	77	88	69	183	34	120	130	42
2	386	88	92	75	38	7.7	113	43	13
3	324	47	41	42	28	3.2	93	27	6.8
4	265	58	41	39	43	4.5	85	83	19
5	255	44	30	59	85	14	79	122	26
6	300	55	45	37	28	2.8	75	106	21
7	300	53	43	48	63	8.2	170	7500	3440
8	270	49	36	30	58	4.7	205	920	509
9	260	53	37	21	36	2.0	205	650	360
10	250	52	35	5.0	42	.57	330	320	285
11	230	114	71	8.0	53	1.1	358	260	251
12	220	105	62	5.0	17	.23	265	890	637
13	200	.62	33	6.0	22	.36	230	1630	1010
14	208	48	27	6.0	13	.21	225	450	273
15	175	44	21	8.0	14	.30	312	430	362
16	130	36	13	12	16	.52	386	180	188
17	79	44	9.4	72	42	8.2	379	140	143
18	48	47	6.1	113	63	19	337	110	100
19	39	31	3.3	117	109	34	330	2550	2270
20	35	19	1.8	190	236	121	352	8200	7790
21	35	24	2.3	200	174	94	624	3800	6400
22	44	19	2.3	125	88	30	504	1200	1630
23	46	14	1.7	101	56	15	424	378	433
24	59	24	3.8	69	56	10	351	237	225
25	121	71	23	56	43	6.5	330	192	171
26	161	86	37	93	61	15	288	137	107
27	265	346	248	138	208	78	265	127	91
28	210	157	89	161	200	87	230	90	56
29	156	75	32	156	186	78	225	109	66
30	134	44	16	166	137	61	230	85	53
31	100	33	8.9	152	143	59	--	--	--
TOTAL	5729	--	1199.6	2379.0	--	800.09	8120	--	26977.8

SAN JUAN RIVER BASIN

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09364500 ANIMAS RIVER AT FARMINGTON, N. MEX.--Continued

SUSPENDED-SEDIMENT DISCHARGE, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

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	170	56	26	1110	540	1620	504	1000	1360
2	180	49	24	1060	490	1400	512	225	311
3	138	44	16	1010	360	982	480	205	266
4	185	38	19	960	280	726	480	210	272
5	492	1580	2570	930	190	477	568	670	1030
6	1200	2780	9490	873	340	801	504	780	1060
7	1520	7150	32100	891	1750	4210	480	250	324
8	1100	14300	42500	864	2580	6020	512	225	311
9	970	3100	8120	828	220	492	520	140	197
10	783	1300	2750	810	160	350	464	67	84
11	672	1800	3270	765	260	537	424	72	82
12	624	1100	1850	810	260	569	480	78	101
13	827	5120	12100	792	280	599	416	66	74
14	656	1650	2920	720	200	389	408	82	90
15	608	2500	4100	720	180	350	393	71	75
16	1170	13900	47400	696	140	263	330	62	55
17	1910	13600	78300	672	590	1070	416	80	90
18	2350	9200	58400	688	285	529	464	193	242
19	3750	13500	171000	672	125	227	472	515	656
20	8880	12500	293000	672	125	227	480	189	245
21	3760	4100	47100	696	90	169	496	86	115
22	2180	1260	7420	648	110	192	544	91	134
23	1750	940	4440	632	104	177	496	141	189
24	1460	760	3000	624	95	160	496	100	134
25	1660	2290	11200	592	97	155	464	135	169
26	1570	1260	5340	560	80	121	457	92	114
27	1410	570	2170	584	135	213	464	56	70
28	1540	1140	4740	568	155	238	496	100	134
29	1290	500	1740	520	102	143	544	100	147
30	1170	410	1300	528	120	171	504	110	150
31	1120	280	847	--	--	--	440	75	89
TOTAL	47095	--	859252	22495	--	23577	14708	--	8370

TOTAL DISCHARGE FOR 1972 WATER YEAR (CFS-DAYS)

TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR 1972 WATER YEAR (TONS)

TOTAL DISCHARGE FOR 1972 CALENDAR YEAR (CFS-DAYS)

TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR 1972 CALENDAR YEAR (TONS)

197284
513367.49
245120
1337988.49

INSTANTANEOUS SUSPENDED SEDIMENT AND PARTICLE SIZE, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	TEMPERATURE (DEG C) (0001C)	INSTANTANEOUS DISCHARGE (CFS) (00061)	SUSPENDED SEDIMENT DISCHARGE (MG/L) (80154)	SUSPENDED SEDIMENT DISCHARGE (T/DAY) (80155)	SUSPENDED SEDIMENT DIAM. % FINER THAN .002 MM (70337)	SUSPENDED SEDIMENT DIAM. % FINER THAN .004 MM (70338)
JAN.							
25...	1700	1.0	330	283	252	--	--
FEB.							
16...	1500	7.0	330	176	157	--	--
MAR.							
21...	1630	13.0	552	839	1250	9	12
APR.							
11...	1700	15.0	608	675	1110	14	20
27...	1630	12.5	909	1290	3170	10	13
MAY							
24...	1900	16.0	1180	582	1850	7	9
JUNE							
08...	1715	17.5	2430	3630	23800	37	48
20...	1800	20.0	1190	80	257	11	16
23...	2020	17.5	1530	27900	115000	47	56
AUG.							
30...	0930	17.0	166	150	67	25	38
OCT.							
08...	1145	14.5	1000	13500	36500	39	54
21...	1330	9.5	3250	2700	23700	12	18
26...	0705	8.0	1610	1700	7390	35	42
NOV.							
30...	1000	.0	528	123	175	--	--

SAN JUAN RIVER BASIN

09364500 ANIMAS RIVER AT FARMINGTON, N. MEX.--Continued

INSTANTANEOUS SUSPENDED SEDIMENT AND PARTICLE SIZE, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	SUS. SED. FALL DIAM. % FINER THAN (70340)	SUS. SED. FALL DIAM. % FINER THAN (70342)	SUS. SED. FALL DIAM. % FINER THAN (70343)	SUS. SED. FALL DIAM. % FINER THAN (70344)	SUS. SED. FALL DIAM. % FINER THAN (70345)	SUS. SED. FALL DIAM. % FINER THAN (70346)
JAN. 25...	--	52	67	86	100	--
FEB. 16...	--	47	62	89	100	--
MAR. 21...	20	43	68	88	100	--
APR. 11...	33	84	99	100	--	--
27...	17	48	77	94	100	--
MAY 24...	12	29	46	80	99	100
JUNE 08...	75	98	100	--	--	--
20...	23	53	66	79	97	100
23...	79	98	100	--	--	--
AUG. 30...	55	92	99	100	--	--
OCT. 08...	79	93	97	98	100	--
21...	31	62	84	95	100	--
26...	57	77	85	94	100	--
NOV. 30...	--	35	47	65	99	100

09365000 SAN JUAN RIVER AT FARMINGTON, N. MEX.
(Surveillance network station)

LOCATION.--Lat 36°43'22", long 108°13'30", in SE¼ sec.17, T.29 N., R.13 W., San Juan County, at gaging station 4,000 ft downstream from Animas River, and 1 mile west of Farmington, river mile 97.4.

DRAINAGE AREA.--7,240 sq mi, approximately.

PERIOD OF RECORD.--Chemical analyses: May 1962 to current year.
Water temperatures: June 1962 to current year.

EXTREMES:

Current year:

Dissolved solids: Maximum, 1,100 mg/l Aug. 5-6; minimum, 224 mg/l May 26-31.

Hardness: Maximum, 390 mg/l Aug. 5-6; minimum, 130 mg/l Jan. 25, Feb. 16, Apr. 1-10.

Specific conductance: Maximum daily, 2,040 micromhos Aug. 5; minimum daily, 319 micromhos June 2.

Water temperatures: Maximum, 27.0°C on several days during July to August; minimum, freezing point on several days during January and December.

Period of record:

Dissolved solids: Maximum, 1,720 mg/l Aug. 8, 1970; minimum, 103 mg/l May 11-15, 1962.

Hardness: Maximum, 820 mg/l Aug. 6, 1968; minimum, 65 mg/l May 11-15, 1962.

Specific conductance: Maximum daily, 2,290 micromhos Aug. 8, 1970; minimum daily, 154 micromhos May 13, 1962.

Water temperatures: Maximum, 33.0°C July 6, 1967; minimum, freezing point on several days during December and January of most years.

REMARKS.--Daily chemical samples are collected by transversing the stream cross section. Bacteria and aquatic biology analyzed by the New Mexico Environmental Improvement Agency on samples collected by the U.S. Geological Survey. After June 1972, Bacteria analyzed by the U.S. Geological Survey. Cross sectional locations shown in tables are referenced from right bank which is determined by facing upstream.

CHEMICAL ANALYSES, COMPOSITES OF DAILY SAMPLES, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	DIS- CHARGE (CFS) (00060)	DIS- SOLVED SILICA (SIO2) (MG/L) (00955)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L) (00925)	DIS- SOLVED TAS- SODIUM (NA) (MG/L) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	BICAR- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RINE (CL) (MG/L) (00940)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)
JAN.												
01-31 1950		13	--	47	7.6	26	2.2	128	0	98	8.4	.2
FEB.												
01-29 1920		12	--	48	8.1	28	2.8	125	0	100	6.3	.2
MAR.												
01-08 1900		13	--	50	8.0	26	2.3	129	0	99	6.1	.3
09-31 2120		11	--	47	7.4	22	2.1	132	0	91	6.0	.2
APR.												
01-10 1780		13	--	41	7.0	25	2.2	118	0	92	5.1	.2
11-16 984		9.4	--	57	9.4	35	2.2	137	0	140	8.1	.3
17-24 756		10	--	64	9.5	43	2.4	139	0	170	11	.3
25-26 1210		8.9	--	74	11	32	2.2	125	0	130	50	.4
27-30 1140		8.9	--	57	8.4	32	2.0	130	0	130	9.8	.3
MAY												
01-08 1460		8.6	--	59	7.8	27	1.9	129	0	120	8.7	.5
09-16 1030		9.4	--	67	9.4	36	2.2	143	0	150	11	.5
17-25 1760		7.6	--	58	7.4	25	1.9	119	0	110	7.5	.5
26-31 2410		4.5	--	46	5.6	19	1.6	104	0	88	7.3	.4
JUNE												
01-13 2510		7.6	--	47	6.0	19	2.1	102	0	88	7.7	.4
14-23 1510		5.9	--	60	7.7	26	2.0	120	0	110	11	.4
24-30 1150		7.1	--	67	9.1	33	1.8	123	0	140	22	.4
JULY												
01-31 512		12	--	67	10	47	2.5	153	0	170	10	.6
AUG.												
01-04 350		11	--	61	9.4	42	2.6	144	0	160	7.0	.4
05-06 686		17	--	130	15	200	5.0	334	0	550	14	.6
07-18 422		14	--	64	9.0	51	2.8	151	0	170	7.6	.4
19-20 1360		15	--	130	12	140	4.6	279	0	430	12	.5
21-26 742		12	--	67	8.5	43	2.7	141	0	160	8.9	.4
27-28 1450		17	--	94	10	110	4.8	254	0	320	11	.5
29-31 810		15	--	67	9.2	44	3.2	153	0	160	9.3	.4
SEP.												
01-06 740		13	--	70	9.2	52	3.2	179	0	160	8.2	.4
07-11 852		13	--	75	9.9	48	3.4	179	0	180	13	.5
12-19 937		12	--	71	9.1	44	3.3	171	0	150	9.7	.6
20-30 732		12	--	76	10	47	3.0	164	0	170	12	.6
OCT.												
01-04 453		5.8	--	74	11	52	2.7	164	0	200	12	.4
05-08 1720		8.8	--	93	11	96	4.3	252	0	270	13	.5
09-12 1480		8.1	--	68	9.2	38	2.7	157	0	150	10	.4
13-15 1480		5.5	--	83	8.6	64	3.8	192	0	210	14	.4
16-19 3330		9.5	--	100	10	71	4.2	276	0	220	10	.4
20... 10100		5.2	--	74	8.4	45	3.9	207	0	150	6.5	.4
21-25 3500		3.5	--	61	8.2	25	2.4	149	0	110	7.8	.3
26-31 2040		10	--	68	9.5	38	2.6	164	0	140	11	.4
NOV.												
01-30 1410		12	--	70	11	39	2.4	164	0	160	12	.4
DEC.												
01-04 1230		11	--	68	11	40	2.4	158	0	170	11	.4
05-31 1670		12	--	59	9.6	31	2.4	150	0	120	9.8	.3
CALENDAR YEAR												
WTD. AVG.	--	10	--	59	8.5	34	2.5	144	0	128	9.0	.3
TIME WTD.												
AVG. 1500		11	--	61	8.9	37	2.5	147	0	139	9.6	.4
TONS												
PER DAY	--	42	--	238	34	137	10	584	0	516	36	1.4
WATER YEAR												
WTD. AVG.	--	11	--	57	8.7	34	2.4	135	0	128	8.9	.4
TIME WTD.												
AVG. 1300		11	--	62	8.8	40	2.6	143	0	148	9.5	.4
TONS												
PER DAY	--	39	--	199	29	119	8.6	476	0	439	31	1.2

SAN JUAN RIVER BASIN

09365000 SAN JUAN RIVER AT FARMINGTON, N. MEX.--Continued

CHEMICAL ANALYSES, COMPOSITES OF DAILY SAMPLES, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	DIS- SULVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	DIS- SOLVED ORTHOPHOS- PHORUS (P) (MG/L) (00671)	DIS- SOLVED MURON (B) (UG/L) (01020)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L) (70300)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L) (70301)	DIS- SOLVED SOLIDS (TONS PER AC-FT) (70303)	DIS- SOLVED SOLIDS (TONS PER DAY) (70302)	HARD- NESS (CA, MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AD- SORP- TION RATIO (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)
JAN.												
01-31	.37	--	--	--	267	.36	1410	150	44	.9	404	7.8
FEB.												
01-29	.26	--	30	--	268	.36	1390	150	51	1.0	420	7.4
MAR.												
01-08	.29	--	50	--	269	.37	1380	160	52	.9	423	7.5
09-31	.33	--	40	--	253	.34	1450	150	40	.8	400	7.6
APR.												
01-10	.21	--	30	--	244	.33	1170	130	34	1.0	380	7.0
11-16	.41	--	40	--	331	.45	879	180	69	1.1	534	7.1
17-24	.38	--	50	--	380	.52	776	200	85	1.3	590	6.9
25-26	.54	--	50	--	372	.51	1220	230	130	.9	628	7.5
27-30	.37	--	30	--	314	.43	966	180	70	1.0	500	7.2
MAY												
01-08	.26	--	60	--	298	.41	1170	180	74	.9	473	8.3
09-16	1.7	--	40	--	363	.49	1010	210	89	1.1	579	7.5
17-25	.16	--	30	--	277	.38	1320	180	78	.8	443	7.4
26-31	.05	--	30	--	224	.30	1460	140	53	.7	370	7.4
JUNE												
01-13	.35	--	30	--	230	.31	1560	140	58	.7	371	7.7
14-23	.09	--	50	--	282	.38	1150	180	83	.8	456	7.8
24-30	.21	--	50	--	342	.47	1060	200	100	1.0	553	7.3
JULY												
01-31	1.0	--	80	--	399	.54	552	210	83	1.4	618	7.6
AUG.												
01-04	.11	--	60	--	365	.50	345	190	73	1.3	580	7.5
05-06	.79	--	150	--	1100	1.50	2040	390	110	4.4	1580	7.8
07-18	.46	--	90	--	395	.54	450	200	73	1.6	611	7.7
19-20	.18	--	120	--	882	1.20	3240	370	150	3.2	1290	7.8
21-26	.38	--	60	--	374	.51	749	200	87	1.3	558	7.6
27-28	.94	--	100	--	696	.95	2720	280	88	2.9	1060	7.8
29-31	.35	--	60	--	385	.52	842	210	80	1.3	610	7.9
SEP.												
01-06	.55	--	80	--	407	.55	813	210	66	1.6	629	7.7
07-11	.64	--	80	--	434	.59	998	230	81	1.4	677	7.6
12-19	.70	--	80	--	387	.53	979	210	74	1.3	605	7.9
20-30	.58	--	80	--	414	.56	818	230	96	1.3	650	7.7
OCT.												
01-04	.06	--	80	--	439	.60	537	230	96	1.5	683	8.1
05-08	.63	--	90	--	624	.85	2900	280	71	2.5	946	7.8
09-12	.10	--	60	--	364	.50	1450	210	79	1.1	577	8.1
13-15	.71	--	80	--	487	.66	1950	240	85	1.8	754	8.1
16-19	.78	--	90	--	565	.77	5080	290	65	1.8	866	7.9
20...	.00	--	60	--	396	.54	10800	220	50	1.3	614	8.3
21-25	.01	--	30	--	292	.40	2760	190	64	.8	471	8.3
26-31	.43	--	50	--	362	.49	1990	210	74	1.1	578	7.6
NOV.												
01-30	.33	--	50	--	389	.53	1480	220	86	1.1	605	7.9
DEC.												
01-04	.34	--	60	--	393	.53	1310	220	86	1.2	583	8.0
05-31	.30	--	50	--	319	.43	1440	190	64	1.0	513	7.8
CALENDAR YEAR												
WTD. AVG.	.36	--	49	--	324	.44	--	183	64	1.1	508	7.7
TIME WTD.												
AVG.	.43	--	55	--	343	.47	--	190	69	1.1	537	7.7
TONS												
PER DAY	1.5	--	0	--	1310	--	--	--	--	--	--	--
WATER YEAR												
WTD. AVG.	.41	--	--	--	311	.43	--	175	64	1.1	489	7.6
TIME WTD.												
AVG.	.48	--	--	--	353	.48	--	190	73	1.2	542	7.6
TONS												
PER DAY	1.4	--	--	--	1120	--	--	--	--	--	--	--

SAN JUAN RIVER BASIN

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09365000 SAN JUAN RIVER AT FARMINGTON, N. MEX.--Continued

CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	CROSS SECTION LOC- ATION (FT) (00001)	DIS- CHARGE (CFS) (00060)	DIS- SOLVED SILICA (SI02) (MG/L) (00955)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NESIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	BICAR- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)
JAN.											
25...	1600	20	1730	12	--	40	6.4	24	1.8	113	0
FEB.											
16...	1415	20	2000	11	--	40	6.5	25	2.1	114	0
MAR.											
21...	1520	20	2190	14	--	43	6.9	22	2.1	119	0
APR.											
18...	1740	20	770	10	--	68	10	52	2.4	145	0
MAY											
24...	1745	20	1640	7.8	60	59	8.4	32	2.0	135	0
JUNE											
20...	1620	20	1340	8.5	--	53	7.9	29	2.0	131	0
AUG.											
01...	1509	20	371	9.4	10	57	9.2	44	2.1	137	0
30...	1330	20	901	11	10	57	7.7	47	2.3	137	0
SEP.											
26...	1530	20	540	11	10	64	9.5	48	2.5	143	0
OCT.											
25...	1730	20	2950	7.5	30	51	7.2	28	3.2	123	0
NOV.											
30...	1330	20	1290	11	20	61	9.6	43	2.1	142	0

DATE	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED NITRATE (N) (MG/L) (00618)	DIS- SOLVED NITRITE (N) (MG/L) (00613)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	AMMONIA NITRO- GEN (N) (MG/L) (00610)	DIS- SOLVED AMMONIA NITRO- GEN (N) (MG/L) (00608)	ORGANIC NITRO- GEN (N) (MG/L) (00605)	TOTAL NITRO- GEN (N) (MG/L) (00600)	TOTAL PHOS- PHORUS (P) (MG/L) (00665)
JAN.											
25...	89	4.4	.2	--	--	.10	--	--	--	--	--
FEB.											
16...	87	4.2	.3	--	--	.04	--	--	--	--	--
MAR.											
21...	83	3.6	.3	--	--	.03	--	--	--	--	--
APR.											
18...	200	7.7	.3	--	--	.18	--	--	--	--	--
MAY											
24...	127	9.1	.3	.13	.00	.13	--	.04	.24	.41	.10
JUNE											
20...	120	11	.1	--	--	.07	--	--	--	--	--
AUG.											
01...	150	4.2	.3	.02	.00	.02	--	.04	.29	.35	.05
30...	160	5.3	.2	.15	.00	.15	--	.03	.74	.92	.44
SEP.											
26...	170	5.9	.3	.00	.00	.00	--	.06	.03	.09	.31
OCT.											
25...	110	17	.4	.24	.00	.24	--	.13	3.7	4.0	2.0
NOV.											
30...	160	7.9	.3	.27	.00	.27	.16	.16	.13	.56	.28

DATE	DIS- SOLVED ORTHO- PHOS- PHORUS (P) (MG/L) (00671)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L) (70300)	DIS- SOLVED SOLIDS (SUM OF TUENTS) (MG/L) (70301)	HARD- NESS (CA,MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AD- SORP- TION RATIO (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	DIS- SOLVED BORON (B) (UG/L) (01020)
JAN.										
25...	.01	232	234	130	34	.9	367	8.0	2.0	--
FEB.										
16...	.01	230	232	130	33	1.0	368	7.9	6.0	--
MAR.										
21...	.00	270	234	140	38	.8	360	8.1	11.0	--
APR.										
18...	.00	466	423	210	92	1.6	629	8.2	13.0	--
MAY										
24...	.05	324	313	180	71	1.0	501	7.8	19.0	60
JUNE										
20...	.00	308	296	160	57	1.0	451	8.3	22.0	30
AUG.										
01...	.00	398	344	160	68	1.4	549	8.2	26.0	40
30...	.01	380	359	170	62	1.6	548	7.9	15.0	50
SEP.										
26...	.03	406	382	200	82	1.5	604	8.0	17.0	60
OCT.										
25...	.03	312	287	160	56	1.0	496	7.7	10.0	50
NOV.										
30...	.01	394	367	190	75	1.4	553	7.3	3.5	30

SAN JUAN RIVER BASIN

09365000 SAN JUAN RIVER AT FARMINGTON, N. MEX.--Continued

FIELD AND BIOCHEMICAL MEASUREMENTS, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	CROSS SECTION LOC- ATION (FT) (00001)	DIS- CHARGE (CFS) (00060)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	AIR TEMPER- ATURE (DEG C) (00020)	COLOR (PLAT- INUM- COBALT UNITS) (00080)
JAN.								
25...	1515	60	1730	555	7.8	2.0	7.5	--
25...	1600	20	1730	369	8.2	2.0	7.5	10
FEB.								
16...	1340	60	2000	535	8.7	6.0	10.5	--
16...	1415	20	2000	363	8.5	6.0	10.5	10
MAR.								
21...	1350	60	2190	444	8.2	11.5	20.0	--
21...	1520	20	2190	360	8.4	11.0	20.0	10
APR.								
18...	1710	60	770	569	8.3	14.0	20.5	--
18...	1740	20	770	645	8.5	13.0	20.5	5
MAY								
24...	1700	60	1640	425	8.0	17.0	27.0	--
24...	1745	20	1640	504	8.2	19.0	27.0	10
JUNE								
20...	1545	60	1340	390	8.1	22.0	30.0	--
20...	1620	20	1340	450	8.3	22.0	30.0	5
AUG.								
01...	1415	60	371	635	8.2	25.5	33.0	--
01...	1500	20	371	670	8.2	26.0	33.0	--
30...	1245	60	901	710	8.3	16.0	22.0	10
30...	1330	20	901	555	8.0	15.0	22.0	10
SEP.								
26...	1455	60	540	700	8.2	19.0	23.5	10
26...	1530	20	540	615	8.2	17.0	23.5	10
OCT.								
25...	1630	60	2950	455	8.0	10.0	11.5	10
25...	1730	20	2950	440	7.9	10.0	4.0	15
NOV.								
30...	1245	60	1290	660	8.2	3.0	6.5	5
30...	1330	20	1290	569	8.2	3.5	6.5	5

DATE	TUR- BIO- ITY (JTU) (00070)	DIS- SOLVED OXYGEN (MG/L) (00300)	CHEM- ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L) (00335)	BIO- CHEM- ICAL OXYGEN DEMAND (MG/L) (00310)	IMMF- DIATE COLI- FORM (COL. ONIES PER 100 ML) (31501)	FECAL COLI- FORM (COL. PER 100 ML) (31616)	STREP- TOCOCCI (COL- ONIES PER 100 ML) (31679)	TOTAL ORGANIC CARBON (C) (00680)
JAN.								
25...	--	11.8	--	--	15000	7000	1500	--
25...	30	11.5	4	1.5	1200	40	60	--
FEB.								
16...	--	12.2	--	--	5000	5000	5000	--
16...	25	11.5	4	.8	150	<10	10	--
MAR.								
21...	--	10.6	--	--	>3000	>3000	400	--
21...	25	11.2	2	.8	500	500	<100	--
APR.								
18...	--	8.4	--	--	E3700	E3700	1660	--
18...	20	9.0	3	1.2	320	20	<10	--
MAY								
24...	--	8.5	--	--	--	2200	--	--
24...	35	8.0	8	.9	--	100	--	--
JUNE								
20...	--	8.2	--	--	E223000	17000	24000	--
26...	25	8.3	3	.8	400	<100	500	--
AUG.								
01...	--	7.9	--	--	--	10000	--	--
01...	--	8.2	--	--	--	30	--	7.0
30...	225	8.2	--	--	--	110000	--	1.5
30...	350	8.7	--	--	--	2400	--	15
SEP.								
26...	50	7.9	--	--	--	68000	--	6.1
26...	90	8.0	--	--	--	530	--	5.5
OCT.								
25...	430	8.3	--	--	--	29000	--	14
25...	1400	8.0	--	--	--	11000	--	30
NOV.								
30...	20	10.6	--	--	--	3600	--	3.7
30...	60	10.6	--	--	--	83	--	4.1

E ESTIMATED.

* Analyzed by New Mexico Environmental Improvement Agency.

SAN JUAN RIVER BASIN

09365000 SAN JUAN RIVER AT FARMINGTON, N. MEX.--Continued

BIOLOGICAL ANALYSES, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

Date: April 18, 1972

Method of sampling: Surber (3 square feet)

Organisms (classification, number)

Diptera: Chironomidae, 427

Simuliidae, 9

Ephemeroptera: Baetidae; Ephemerella sp., 13Baetis sp., 1Trichoptera: Hydropsychidae; Hydropsyche sp., 11

Date: November 30, 1972

Method of sampling: Surber (3 square feet)

Organisms (classification, number)

Diptera: Tipulidae; Hexatoma sp., 1Ephemeroptera: Baetidae; Ephemerella sp., 6Baetis sp., 5Heptageniidae; Cinygma sp., 2Plecoptera: Perlodidae; Isoperla sp., 2Trichoptera: Hydropsychidae; Hydropsyche sp., 85

Oligochaeta: Lumbriculidae, 2

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C) CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972
(ONCE-DAILY)

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	---	437	413	375	491	338	543	548	552	652	606	562
2	354	392	406	---	472	319	540	565	517	665	589	568
3	430	415	389	348	444	320	554	578	884	648	574	557
4	400	398	406	347	446	341	563	557	652	648	553	568
5	411	419	417	349	412	443	572	2040	524	772	565	509
6	400	356	420	371	412	365	677	837	505	784	599	489
7	335	423	426	392	450	330	601	592	775	1000	568	505
8	421	419	406	---	478	---	585	574	652	835	562	512
9	---	433	381	361	545	---	591	581	629	567	562	507
10	400	412	396	394	527	357	611	621	594	549	553	476
11	427	402	396	498	519	---	598	581	594	533	556	493
12	423	422	389	510	524	359	641	587	615	564	565	482
13	424	359	407	505	540	368	591	583	748	848	592	472
14	414	407	392	500	557	429	611	589	588	686	574	474
15	355	396	383	536	554	408	585	600	535	652	574	521
16	354	415	375	542	502	433	578	562	522	750	568	465
17	416	433	398	575	429	445	588	574	519	1000	565	466
18	411	360	393	588	400	433	585	610	514	820	602	466
19	411	467	369	533	450	482	622	1470	535	784	732	472
20	416	439	402	568	427	---	615	1110	618	590	580	524
21	398	431	392	565	---	436	601	606	781	451	590	484
22	---	404	379	626	404	441	601	540	530	439	577	472
23	391	430	379	553	422	458	618	529	560	443	574	507
24	464	422	380	544	456	616	591	505	601	475	581	480
25	390	419	377	536	425	427	615	500	605	475	571	476
26	400	422	353	658	364	493	622	551	615	633	568	480
27	414	419	384	441	374	478	633	1200	626	555	578	467
28	359	425	384	481	342	699	605	844	635	553	571	484
29	377	417	345	495	334	512	591	568	645	533	578	507
30	347	---	379	533	333	534	582	590	656	533	568	509
31	432	---	350	---	386	---	591	571	---	556	---	519
MONTH	399	414	391	490	447	433	597	702	611	644	580	499

SAN JUAN RIVER BASIN

09365000 SAN JUAN RIVER AT FARMINGTON, N. MEX.--Continued

TEMPERATURE (DEG. C) OF WATER, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972
(ONCE-DAILY)

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

09366500 LA PLATA RIVER AT COLORADO-NEW MEXICO STATE LINE

LOCATION.--Lat 36°59'51", (revised) long 108°11'17", in NW¼SE¼ sec. 10, T.32 N., R.13 W., La Plata County, Colorado, at gaging station at Colorado-New Mexico State line, 0.2 mile downstream from Ponds Arroyo, and 4.8 miles north of La Plata, N. Mex.

DRAINAGE AREA.--331 sq mi.

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

REMARKS.--Chemical quality data collected by the Colorado District of the U.S. Geological Survey.

CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	DIS- CHARGE (CFS) (00060)	DIS- SOLVED SILICA (SI02) (MG/L) (00955)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	BICAR- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)
MAR. 02...	1415	15	13	150	72	53	2.5	280	0	490
JUNE 05...	1400	92	9.7	110	63	41	4.8	240	0	390
SEP. 13...	1420	.35	12	99	43	42	3.6	190	0	350
DEC. 08...	1000	31	8.5	77	41	26	1.6	162	0	330

DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	DIS- SOLVED ORTHO- PHOS- PHORUS (P) (MG/L) (00671)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L) (70301)	HARD- NESS (CA+MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AD- SORP- TION RATIO (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)
MAR. 02...	25	.56	.00	946	670	440	.9	1280	8.0	7.0
JUNE 05...	6.6	.09	.00	744	530	340	.8	1070	7.6	20.0
SEP. 13...	20	.09	.01	663	420	270	.9	967	8.2	22.0
DEC. 08...	11	.10	.00	575	360	230	.6	811	7.3	1.0

FIELD AND BIOCHEMICAL MEASUREMENTS, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	DIS- CHARGE (CFS) (00060)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	COLOR (PLAT- INUM- COBALT UNITS) (00040)	TUR- BID- ITY (JTU) (00070)	DIS- SOLVED OXYGEN (MG/L) (00300)
FEB. 08...	0800	E12	1400	--	.0	2	7	--
MAR. 02...	0800	5.2	1260	--	1.0	5	80	--
02...	1415	15	1200	8.1	7.0	--	--	9.8
APR. 04...	0800	5.2	1150	--	7.5	5	15	--
MAY 04...	1440	55	656	--	13.0	15	55	--
JUNE 05...	1400	92	1000	7.7	20.0	--	--	6.0
06...	0830	51	750	--	14.0	20	345	--
JULY 06...	0830	.40	1110	--	18.0	12	7	--
AUG. 02...	0800	.05	1030	--	22.0	10	3	--
SEP. 02...	0745	E1.5	990	--	15.0	10	1	--
13...	1420	.35	1000	7.4	22.0	--	--	8.2
OCT. 02...	1430	2.0	1140	--	15.0	5	5	--
NOV. 15...	1530	36	1000	8.1	3.0	8	7	--
DEC. 08...	1000	31	800	8.8	1.0	--	--	11.0

E ESTIMATED

SAN JUAN RIVER BASIN

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09367500 LA PLATA RIVER NEAR FARMINGTON, N. MEX.

LOCATION.--Lat 36°44'23", long 108°14'51", in SW¼ sec.7, T.29 N., R.13 W., San Juan County, at gaging station 1,300 ft upstream from bridge on U.S. Highway 550, 1,800 ft upstream from mouth, and 2.5 miles northwest of Farmington.

DRAINAGE AREA.--583 sq mi.

PERIOD OF RECORD.--Chemical analyses: July 1970 to current year.

CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	DIS- CHARGE (CFS) (00060)	DIS- SOLVED SILICA (SiO2) (MG/L) (00955)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	BICAR- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)
NOV. 30...	1430	42	11	150	63	100	2.4	257	0	580	34

DATE	TIME	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L) (70301)	HARD- NESS (CA,MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AD- SORP- TION RATIO (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	DIS- SOLVED BORON (B) (UG/L) (01020)
NOV. 30...		.4	.19	1070	630	420	1.7	1500	7.7	5.0	80

FIELD AND BIOCHEMICAL MEASUREMENTS, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	DIS- CHARGE (CFS) (00060)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	TEMPER- ATURE (DEG C) (00010)	AIR TEMPER- ATURE (DEG C) (00020)	COLOR (PLAT- INUM- COBALT UNITS) (00080)	TUR- BID- ITY (JTU) (00070)
JAN. 25...	1415	17	2050	8.0	1.5	40	150
FEB. 16...	1245	15	2000	7.0	12.5	3	130
MAR. 21...	1330	1.0	5000	21.5	18.5	3	35
APR. 18...	1600	1.5	3510	14.0	19.0	5	10
MAY 24...	1430	1.3	4500	28.0	27.0	5	15
JUNE 20...	1430	.80	1290	27.5	31.0	--	--
AUG. 01...	1300	.01	2200	33.0	33.5	5	1
30...	1500	.05	1690	25.0	27.0	10	25
SEP. 26...	1345	.02	1360	24.0	25.0	10	3
OCT. 25...	1515	262	849	10.0	16.5	--	--
NOV. 30...	1430	42	1410	5.0	7.0	--	--

SAN JUAN RIVER BASIN

09368000 SAN JUAN RIVER AT SHIPROCK, N. MEX.
(Surveillance and radiochemical network station)

LOCATION.--Lat 36°47'32", long 108°43'54", in NW1 sec.27, T.30 N., R.18 W., San Juan County, at gaging station 3 miles west of Shiprock, 6 miles downstream from Chaco River, and at river mile 61.0.

DRAINAGE AREA.--12,900 sq mi, approximately.

PERIOD OF RECORD.--Chemical analyses: February 1941 to September 1945, July 1957 to current year.

Water temperatures: December 1950 to current year.

Sediment records: December 1950 to current year.

EXTREMES:

Current year:

Dissolved solids: Maximum, 2,020 mg/l Aug. 27; minimum, 227 mg/l May 27-31.

Hardness: Maximum, 800 mg/l Aug.27; minimum, 120 mg/l May 1-8, 27-31.

Specific conductance: Maximum daily, 2,590 micromhos Aug. 27; minimum daily, 294 micromhos May 31.

Water temperatures: Maximum, 30.5°C Aug. 4; minimum, freezing point on several days during January and December.

CHEMICAL ANALYSES, COMPOSITES OF DAILY SAMPLES, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	DIS- CHARGE (CFS) (00060)	DIS- SOLVED SILICA (SiO2) (00955)	DIS- SOLVED IRON (FE) (01046)	DIS- SOLVED CAL- CIUM (CA) (00915)	DIS- SOLVED MAG- NESIUM (MG) (00925)	DIS- SOLVED SODIUM (NA) (00930)	DIS- SOLVED POTAS- SIUM (K) (00935)	BICARB- ONATE (HCO3) (00440)	CARB- ONATE (CO3) (00445)	DIS- SOLVED SULFATE (SO4) (00945)	DIS- SOLVED CHLO- RIDE (CL) (00940)	DIS- SOLVED FLUO- RIDE (F) (00950)
JAN.												
01-31	1890	12	--	57	11	36	2.3	135	0	140	11	.3
FEB.												
01-29	1820	11	--	56	11	36	2.6	134	0	140	8.1	.3
MAR.												
01-07	1880	11	--	51	10	34	3.8	132	0	120	9.9	.3
06-31	2100	10	--	52	9.2	29	3.5	124	0	120	12	.3
APR.												
01-10	1670	11	--	50	16	34	2.3	130	0	130	7.8	.3
11-16	813	9.4	--	67	14	50	2.5	144	0	200	13	.4
17-25	551	8.2	--	79	16	62	2.6	154	0	250	17	.4
26-30	978	8.4	--	68	13	42	2.3	138	0	180	13	.4
MAY												
01-08	1260	9.4	--	33	8.9	34	1.9	39	0	150	11	.4
09-16	744	1.2	--	41	14	50	2.4	43	0	210	15	.5
17-26	1480	1.7	--	38	9.9	34	2.0	60	0	150	10	.4
27-31	2230	.4	--	35	7.2	25	1.7	60	0	120	8.2	.4
JUNE												
01-13	2370	7.4	--	53	7.8	24	2.4	102	0	110	7.5	.4
14-23	1330	8.4	--	62	11	33	2.6	126	0	150	10	.4
24-30	874	9.4	--	73	13	41	3.5	143	0	180	13	.4
JULY												
01-06	354	6.7	--	88	19	57	2.6	172	0	260	18	.5
07-15	245	6.4	--	100	26	80	3.1	188	0	360	23	.5
16-20	129	4.1	--	120	36	120	4.1	179	0	480	28	.6
21-27	134	3.6	--	110	42	120	4.1	144	0	550	32	.6
28-31	241	4.0	--	93	27	82	3.6	157	0	370	23	.5
AUG.												
01-05	112	8.1	--	120	38	110	4.3	166	0	500	28	.6
06-07	480	17	--	160	22	260	5.6	290	0	780	23	.7
08-19	166	13	--	140	42	140	5.0	202	0	630	32	.9
20-21	874	18	--	150	17	190	5.4	260	0	630	23	.6
22-26	468	14	--	87	17	79	3.8	172	0	300	16	.5
27...	1560	23	--	240	49	310	9.7	229	0	1200	72	1.8
28-29	1160	20	--	120	13	180	5.9	257	0	500	20	.7
30-31	812	13	--	90	13	71	4.4	174	0	270	15	.6
SEP.												
01-07	709	12	--	86	14	68	3.6	166	0	250	16	.5
08-30	794	11	--	88	17	60	2.9	170	0	270	18	.6
OCT.												
01-06	462	9.1	--	99	20	91	4.0	173	0	320	22	.4
07-08	4040	15	--	96	9.6	160	6.3	272	0	370	21	.7
09-19	2050	12	--	96	11	75	4.9	210	0	250	14	.6
20-21	9380	12	--	75	8.7	72	4.5	229	0	190	8.0	.5
22-25	3340	8.6	--	62	8.8	50	3.3	159	0	150	10	.4
26...	4520	14	--	95	10	85	5.4	211	0	240	11	.4
27-31	2090	9.7	--	74	12	58	3.4	160	0	200	14	.5
NOV.												
01-30	1470	9.9	--	83	16	51	2.7	174	0	220	17	.4
DEC.												
01-31	1580	11	--	71	14	44	2.6	158	0	180	13	.4
CALENDAR YEAR												
WTD. AVG.	--	10	--	66	12	48	3.0	146	0	183	12	.4
TIME WTD.												
AVG.	1410	9.7	--	74	15	57	3.1	148	0	230	15	.4
TONS												
PER DAY	--	38	--	252	46	184	11	554	0	696	47	1.5
WATER YEAR												
WTD. AVG.	--	10	--	64	12	47	2.9	135	0	185	13	.4
TIME WTD.												
AVG.	1210	9.9	--	75	16	59	3.0	147	0	240	16	.4
TONS												
PER DAY	--	33	--	209	40	154	9.3	442	0	603	42	1.3

SAN JUAN RIVER BASIN

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09368000 SAN JUAN RIVER AT SHIPROCK, N. MEX.--Continued

EXTREMES: Current year.--Continued

Sediment concentrations: Maximum daily, 59,600 mg/l Oct. 8; minimum daily, 19 mg/l July 26.
Sediment discharge: Maximum daily, 1,020,000 tons Oct. 20; minimum daily, 7.3 tons July 26.

Period of record:

Dissolved solids (1941-45, 1957-72): Maximum, 2,980 mg/l July 30, 31, 1959; minimum, 115 mg/l June 21-28, 30, 1944.
Hardness (1941-45, 1957-72): Maximum, 1,100 mg/l July 30, 31, 1959; minimum, 70 mg/l June 21-28, 30, 1944.
Specific conductance (1957-72): Maximum daily, 4,360 micromhos July 31, 1959; minimum daily, 188 micromhos June 6, 1958.
Water temperatures (1950-72): Maximum, 34.0°C July 20, 1968; minimum, freezing point on many days during winter months of most years.
Sediment concentrations: Maximum daily, 114,000 mg/l Aug. 11, 1967; minimum daily, 2 mg/l May 4, 1963.
Sediment discharge: Maximum daily, 2,000,000 tons Aug. 11, 1967; minimum daily, 1 ton on several days during July and September 1959, September 1962, May and July 1963.

REMARKS.--Bacteria and aquatic biology analyzed by the New Mexico Environmental Improvement Agency on samples collected by the U.S. Geological Survey. After June 1972, Bacteria analyzed by the U.S. Geological Survey.

CHEMICAL ANALYSES, COMPOSITES OF DAILY SAMPLES, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	DIS- SOLVED NITRATE PLUS NITRATE (N) (MG/L) (00631)	DIS- SOLVED ORTHOS- PHOS- PHORUS (P) (MG/L) (00671)	DIS- SOLVED (RESI- SOLVED) BORON (B) (UG/L) (01020)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L) (70300)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L) (70301)	DIS- SOLVED SOLIDS (TONS PER AC-FT) (70303)	DIS- SOLVED SOLIDS (TONS PER DAY) (70302)	HARD- NESS PER (CA, MG) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AD- SORP- TION RATIO (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)
JAN.												
01-31	.53	--	--	--	338	.46	1720	190	77	1.1	513	7.7
FEB.												
01-29	.41	--	40	--	333	.45	1640	190	75	1.2	504	8.2
MAR.												
01-07	.35	--	50	--	307	.42	1560	170	60	1.1	494	7.8
08-31	.34	--	60	--	299	.41	1700	170	66	1.0	458	8.0
APR.												
01-10	.30	--	60	--	311	.42	1400	170	59	1.1	487	7.2
11-16	.68	--	110	--	430	.58	944	220	110	1.5	654	7.7
17-25	.68	--	140	--	514	.70	765	260	140	1.7	776	7.6
26-30	.88	--	90	--	399	.54	1050	220	110	1.2	616	7.5
MAY												
01-08	.01	--	80	--	268	.36	912	120	87	1.4	392	8.0
09-16	.03	--	180	--	356	.48	715	160	120	1.7	568	7.8
17-26	.01	--	80	--	276	.38	1100	140	86	1.3	431	7.7
27-31	.00	--	50	--	227	.31	1370	120	68	1.0	343	7.6
JUNE												
01-13	.49	--	70	--	265	.36	1700	160	81	.8	424	7.8
14-23	.50	--	80	--	342	.47	1230	200	97	1.0	537	8.0
24-30	.64	--	70	--	407	.55	960	240	120	1.2	636	8.0
JULY												
01-06	.64	--	90	--	539	.73	515	300	160	1.4	828	8.0
07-15	1.2	--	250	--	697	.95	461	360	200	1.8	1050	8.1
16-20	1.7	--	450	--	889	1.21	310	450	300	2.5	1270	7.9
21-27	1.9	--	430	--	942	1.28	341	450	330	2.5	1380	7.9
28-31	.99	--	170	--	645	.93	446	340	210	1.9	1030	8.0
AUG.												
01-05	1.5	--	280	--	898	1.22	272	460	320	2.2	1300	8.1
06-07	.17	--	270	--	1410	1.92	1830	490	250	5.1	1940	7.9
08-19	2.8	--	770	--	1120	1.52	502	520	360	2.7	1540	8.0
20-21	.40	--	210	--	1160	1.58	2740	440	230	3.9	1620	7.8
22-26	1.0	--	230	--	607	.83	800	290	150	2.0	873	7.9
27...	.72	--	1300	--	2020	2.75	8510	800	610	4.8	2660	8.0
28-29	.41	--	180	--	988	1.34	3090	350	140	4.2	1400	7.9
30-31	1.1	--	160	--	568	.77	1250	280	140	1.9	839	7.9
SEP.												
01-07	.96	--	170	--	536	.73	1030	270	140	1.8	845	8.0
08-30	.71	--	210	--	554	.75	1190	290	150	1.5	873	8.0
OCT.												
01-06	.73	--	210	--	654	.89	816	330	190	2.2	975	8.0
07-08	.33	--	120	--	814	1.11	8880	280	56	4.2	1190	7.9
09-19	.76	--	90	--	570	.78	3160	290	110	1.9	850	7.7
20-21	.85	--	80	--	487	.66	12300	220	35	2.1	715	7.7
22-25	.53	--	--	--	374	.51	3370	190	61	1.6	598	7.6
26...	2.2	--	140	--	575	.78	7020	280	110	2.2	869	7.6
27-31	.49	--	80	--	453	.62	2560	230	100	1.7	687	7.9
NOV.												
01-30	.23	--	100	--	487	.66	1930	270	130	1.3	741	7.4
DEC.												
01-31	.50	--	90	--	416	.57	1770	240	110	1.3	636	8.0
CALENDAR YEAR												
WTD. AVG.	.49	--	97	--	409	.56	--	216	96	1.4	622	7.8
TIME WTD.												
AVG.	.63	--	150	--	481	.65	--	249	128	1.5	723	7.8
TONS												
PER DAY	1.8	--	0	--	1560	--	--	--	--	--	--	--
WATER YEAR												
WTD. AVG.	.55	--	--	--	403	.55	--	211	99	1.4	610	7.9
TIME WTD.												
AVG.	.75	--	--	--	495	.67	--	253	132	1.6	739	7.9
TONS												
PER DAY	1.8	--	--	--	1320	--	--	--	--	--	--	--

SAN JUAN RIVER BASIN

09368000 SAN JUAN RIVER AT SHIPROCK, N. MEX.--Continued

CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	DIS- CHARGE (CFS) (00060)	DIS- SOLVED SILICA (SI02) (MG/L) (00955)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED MAN- GANESE (MN) (UG/L) (01056)	DIS- SOLVED CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	BICAR- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)
JAN.												
25...	1045	1820	11	--	--	54	10	32	2.0	134	0	130
FEB.												
16...	1030	1860	11	--	--	55	10	36	2.4	134	0	130
MAR.												
21...	0930	2020	13	--	--	50	9.4	27	2.2	129	0	110
APR.												
18...	1230	404	8.6	20	--	87	18	68	2.6	161	0	270
MAY												
24...	1100	1220	7.4	--	--	62	11	34	2.0	124	0	150
JUNE												
20...	1020	1210	8.0	--	--	61	11	35	2.1	136	0	150
AUG.												
01...	1030	151	6.1	40	--	98	32	110	3.1	199	0	460
30...	1620	812	11	20	--	78	12	71	3.8	170	0	250
SEP.												
26...	1000	495	11	20	--	96	17	65	3.0	173	0	270
OCT.												
25...	1045	3050	8.8	30	<5	65	11	50	3.1	141	0	180
NOV.												
29...	1145	1240	10	20	--	82	16	51	2.5	172	0	220

DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED NITRATE (N) (MG/L) (00618)	DIS- SOLVED NITRATE (N) (MG/L) (00613)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	AMMONIA NITRO- GEN (N) (MG/L) (00610)	DIS- SOLVED AMMONIA NITRO- GEN (N) (MG/L) (00608)	ORGANIC NITRO- GEN (N) (MG/L) (00605)	TOTAL NITRO- GEN (N) (MG/L) (00600)	TOTAL PHOS- PHORUS (P) (MG/L) (00665)	DIS- SOLVED ORTHO- PHOS- PHORUS (P) (MG/L) (00671)
JAN.											
25...	11	.3	--	--	.33	--	--	--	--	--	.03
FEB.											
16...	11	.3	--	--	.26	--	--	--	--	--	.04
MAR.											
21...	7.4	.3	--	--	.24	--	--	--	--	--	.01
APR.											
18...	18	.5	.66	.00	.66	--	.04	.14	.84	.12	.04
MAY											
24...	9.7	.3	--	--	.45	--	--	--	--	--	.04
JUNE											
20...	10	.2	--	--	.47	--	--	--	--	--	.03
AUG.											
01...	24	.5	1.9	.02	1.9	--	.10	.37	2.4	.11	.05
30...	15	.5	.82	.00	.82	--	.06	3.2	4.1	.96	.03
SEP.											
26...	19	.6	.00	.00	.00	--	.10	.16	.26	.42	.06
OCT.											
25...	14	.6	.66	.00	.66	--	.05	2.9	3.6	1.5	.03
NOV.											
29...	16	.4	.58	.00	.58	.19	.19	.22	.99	.28	.05

DATE	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L) (70300)	DIS- SOLVED SOLIDS (SUM OF TUENTS) (MG/L) (70301)	HARD- NESS (CA+MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AD- SORP- TION RATIO (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	DIS- SOLVED BORON (B) (UG/L) (01020)	DIS- SOLVED COPPER (CU) (UG/L) (01040)	DIS- SOLVED ZINC (ZN) (UG/L) (01090)
JAN.											
25...	340	318	180	66	1.1	513	8.0	.5	--	--	--
FEB.											
16...	328	323	180	69	1.2	512	7.8	3.0	--	--	--
MAR.											
21...	320	284	160	58	.9	453	7.8	7.5	--	--	--
APR.											
18...	624	558	290	160	1.7	818	8.1	13.5	200	--	--
MAY											
24...	362	340	200	98	1.0	534	7.2	14.5	70	--	--
JUNE											
20...	372	346	200	86	1.1	543	8.0	19.0	50	--	--
AUG.											
01...	968	849	380	210	2.5	1230	8.0	21.5	120	--	--
30...	580	532	240	100	2.0	806	7.9	20.0	140	--	--
SEP.											
26...	624	567	310	170	1.6	865	8.1	14.0	270	--	--
OCT.											
25...	438	406	210	93	1.5	635	7.8	10.0	150	4	<490
NOV.											
29...	508	488	270	130	1.4	723	7.5	2.0	100	--	--

SAN JUAN RIVER BASIN

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09368000 SAN JUAN RIVER AT SHIPROCK, N. MEX.--Continued

TRACE ELEMENT AND RADIOCHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	DIS- SOLVED ALUM- INUM (AL) (UG/L) (01106)	DIS- SOLVED BARIUM (BA) (UG/L) (01005)	DIS- SOLVED BERYL- LIUM (BE) (UG/L) (01010)	DIS- SOLVED BISMUTH (BI) (UG/L) (01015)	DIS- SOLVED BORON (B) (UG/L) (01020)	DIS- SOLVED CAD- MIUM (CD) (UG/L) (01025)	DIS- SOLVED CHRO- MIUM (CR) (UG/L) (01030)	DIS- SOLVED COBALT (CO) (UG/L) (01035)	DIS- SOLVED COPPER (CU) (UG/L) (01040)	DIS- SOLVED GALLIUM (GA) (UG/L) (01120)	DIS- SOLVED GER- MANIUM (GE) (UG/L) (01125)
APR. 18...	1230	--	--	--	--	200	--	--	--	--	--	--
AUG. 30...	1620	--	--	--	--	140	--	--	--	--	--	--
OCT. 25...	1045	30	78	<3	<8	150	<110	<8	<8	4	<4	<8
NOV. 29...	1145	--	--	--	--	100	--	--	--	--	--	--

DATE	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED LEAD (PB) (UG/L) (01049)	DIS- SOLVED LITHIUM (LI) (UG/L) (01130)	DIS- SOLVED MAN- GANESE (MN) (UG/L) (01056)	DIS- SOLVED MOLYB- DENUM (MO) (UG/L) (01060)	DIS- SOLVED NICKEL (NI) (UG/L) (01065)	DIS- SOLVED SILVER (AG) (UG/L) (01075)	DIS- SOLVED STRON- TIUM (SR) (UG/L) (01080)	DIS- SOLVED TIN (SN) (UG/L) (01100)	DIS- SOLVED TANIUM (TI) (UG/L) (01150)	DIS- SOLVED VANA- DIUM (V) (UG/L) (01085)
APR. 18...	20	--	--	--	--	--	--	--	--	--	--
AUG. 30...	20	--	--	--	--	--	--	--	--	--	--
OCT. 25...	30	<8	10	<5	<4	<8	<1	940	<8	9	<8.0
NOV. 29...	20	--	--	--	--	--	--	--	--	--	--

DATE	DIS- SOLVED ZINC (ZN) (UG/L) (01090)	DIS- SOLVED ZIR- CONIUM (ZR) (UG/L) (01160)	DIS- SOLVED GROSS ALPHA AS U-NAT. (UG/L) (80030)	SUS- PENDE GROSS ALPHA AS U-NAT. (UG/L) (80040)	DIS- SOLVED GROSS BETA AS CS-137 (PC/L) (03515)	SUS- PENDE GROSS BETA AS CS-137 (PC/L) (03516)	DIS- SOLVED GROSS BETA AS AS SR90 /Y90 (PC/L) (80050)	SUS- PENDE GROSS BETA AS AS SR90 /Y90 (PC/L) (80060)	DIS- SOLVED RA-226 (PLAN- CHET COUNT) (09510)	DIS- SOLVED RA-226 (RADON METHOD) (09511)	DIS- SOLVED NATURAL URANIUM (U) (UG/L) (22703)
APR. 18...	--	--	12	2.7	6.0	2.9	5.0	2.3	--	.08	3.2
AUG. 30...	--	--	<6.7	470	11	140	8.8	120	.2	--	2.8
OCT. 25...	<490	<11	8.0	460	8.4	190	7.1	160	--	.07	2.2
NOV. 29...	--	--	9.2	13	5.7	9.4	5.0	7.5	--	.08	2.5

FIELD AND BIOCHEMICAL MEASUREMENTS, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	DIS- CHARGE (CFS) (00060)	SPF- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	AIR TEMPER- ATURE (DEG C) (00020)	COLOR (PLAT- INUM- COBALT UNITS) (00080)	TUR- BID- ITY (JTU) (00070)
JAN. 25...	1045	1820	502	8.4	.5	4.0	10	50
FEB. 16...	1030	1860	520	8.5	3.0	8.5	10	35
MAR. 21...	0930	2020	458	8.1	7.5	11.0	10	50
APR. 18...	1230	404	845	8.5	13.5	22.5	5	20
MAY 24...	1100	1220	536	8.1	14.5	23.5	5	55
JUNE 20...	1020	1210	559	8.2	19.0	28.5	5	30
AUG. 01...	1030	151	1240	8.4	21.5	33.5	--	--
30...	1620	812	810	8.2	20.0	27.5	15	2000
SEP. 26...	1000	495	808	8.3	14.0	20.0	10	245
OCT. 25...	1045	3220	635	8.3	10.0	10.5	20	1500
NOV. 29...	1145	1240	700	8.3	2.0	2.5	5	50

SAN JUAN RIVER BASIN

09368000 SAN JUAN RIVER AT SHIPROCK, N. MEX.--Continued

FIELD AND BIOCHEMICAL MEASUREMENTS, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	DIS- SOLVED OXYGEN (MG/L) (00300)	CHEM- ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L) (00335)	BIO- ICAL OXYGEN DEMAND (MG/L) (00310)	IMME- DIATE CHEM- ICAL FORM (COL. PER 100 ML) (31501)	FECAL COLI- FORM (COL. PER 100 ML) (31616)	STREP- TOCOCCI (COL- ONIFS PER 100 ML) (31679)	TOTAL ORGANIC CARBON (C) (00680)	*
JAN. 25...	12.1	4	1.7	ET000	3500	500	--	
FEB. 16...	11.0	7	.9	5000	5000	530	--	
MAR. 21...	10.4	8	1.0	>2000	500	300	--	
APR. 18...	9.3	4	1.4	850	170	10	--	
MAY 24...	8.7	5	.9	--	1100	--	--	
JUNE 20...	8.1	5	.8	4800	1000	300	--	
AUG. 01...	9.3	--	--	--	90	--	--	
30...	7.7	--	--	--	16000	--	20	
SEP. 26...	8.4	--	--	--	1500	--	6.0	
OCT. 25...	8.3	--	--	--	6200	--	35	
NOV. 29...	12.0	--	--	--	2800	--	3.3	

* Analyzed by New Mexico Environmental Improvement Agency.

BIOLOGICAL ANALYSES, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

Date: April 18, 1972
 Method of sampling: Surber (3 square feet)
 Organisms (classification, number)
 Diptera: Chironomidae, 19
 Ephemeroptera: Baetidae exuviae, 2
 Trichoptera: Hydropsychidae; Hydropsyche sp., 2

PESTICIDE ANALYSES, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	ALDRIN (UG/L) (39330)	CHLOR- DANE (UG/L) (39350)	DDD (UG/L) (39360)	DDE (UG/L) (39365)	DDT (UG/L) (39370)	DI- ELDRIN (UG/L) (39380)	ENDRIN (UG/L) (39390)
APR. 18...	1230	.00	.0	.00	.00	.00	.00	.00
JUNE 20...	1020	.00	.0	.00	.00	.00	.00	.00
AUG. 30...	1620	.00	.0	.00	.00	.00	.01	.00
OCT. 25...	1045	.00	.0	.00	.00	.00	.00	.00

DATE	HEPTA- CHLOR (UG/L) (39410)	HEPTA- CHLOR EPOXIDE (UG/L) (39420)	LINDANE (UG/L) (39340)	PCB (UG/L) (39516)	2,4-D (UG/L) (39730)	2,4,5-T (UG/L) (39740)	SILVEX (UG/L) (39760)
APR. 18...	.00	.00	.00	--	.00	.00	.00
JUNE 20...	.00	.00	.00	--	.00	.00	.00
AUG. 30...	.00	.00	.00	--	.00	.00	.00
OCT. 25...	.00	.00	.00	.0	.00	.00	.00

SAN JUAN RIVER BASIN

09368000 SAN JUAN RIVER AT SHIPROCK, N. MEX.--Continued

SPECIFIC CONDUCTANCE (MICROMHUS/CM AT 25 DEG. C), CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972
(ONCE-DAILY)

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	498	491	490	450	418	398	716	1200	783	815	689	739
2	507	500	472	475	413	375	764	1050	766	955	714	739
3	498	487	472	460	468	352	817	1210	725	1030	714	745
4	498	466	470	456	401	360	836	1520	711	991	724	745
5	479	468	458	464	391	394	828	1610	850	1000	705	652
6	479	485	458	486	365	460	862	2060	750	991	700	587
7	479	491	481	472	378	394	922	1700	947	1100	705	600
8	486	498	462	470	480	394	939	1240	1020	1210	698	629
9	482	499	464	479	484	527	930	1270	812	835	705	644
10	515	493	468	486	542	387	939	1470	788	639	705	621
11	500	476	448	556	542	413	1070	1840	1210	662	700	610
12	520	487	452	671	467	426	1060	1660	1170	667	714	636
13	512	488	442	654	571	440	1150	1610	870	1010	714	618
14	515	499	450	638	596	440	1070	1560	733	841	724	603
15	515	509	420	693	616	493	1080	1650	709	828	724	603
16	522	494	415	691	583	517	1200	1650	713	862	724	590
17	525	525	426	736	480	509	1260	1610	704	964	734	610
18	520	493	446	852	387	514	1260	1620	695	972	739	600
19	512	514	444	788	454	505	1270	1320	738	671	739	580
20	520	516	466	727	418	491	1200	1870	823	779	734	577
21	517	513	442	698	466	519	1390	1190	811	609	739	583
22	515	513	433	759	411	574	1520	885	695	592	734	614
23	507	519	436	743	368	602	1460	826	748	558	734	603
24	520	517	424	736	400	565	1180	838	798	596	739	583
25	510	499	426	720	480	540	1530	844	823	576	739	586
26	525	508	427	620	415	581	1210	812	823	848	745	583
27	522	492	441	539	371	610	1140	2590	863	693	745	583
28	502	486	435	582	365	645	915	1530	877	639	719	625
29	512	479	435	628	338	659	1020	1120	907	675	729	621
30	505	---	433	599	372	706	991	831	877	662	750	614
31	488	---	472	---	294	---	1100	800	---	662	---	600
MONTH	507	497	448	611	443	493	1080	1390	825	804	723	623

TEMPERATURE (DEG. C) OF WATER, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972
(ONCE-DAILY)

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

SAN JUAN RIVER BASIN

09368000 SAN JUAN RIVER AT SHIPROCK, N. MEX.--Continued

SUSPENDED-SEDIMENT DISCHARGE, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

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	1990	1710	9190	1750	2370	11200	1780	1160	5570
2	1960	1990	10500	1750	790	3730	1810	1090	5330
3	1990	1750	9400	1720	520	2410	1820	920	4520
4	1930	1420	7400	1700	1080	4960	1920	920	4770
5	1910	1140	5880	1770	1810	8650	1990	1800	9670
6	1930	1500	7820	1810	1390	6790	1970	1410	7500
7	2000	2330	12600	1780	1390	6680	1880	1070	5430
8	1910	2080	10700	1750	1440	6800	2020	1780	9710
9	1910	2350	12100	1800	1280	6220	2080	1410	7920
10	1910	2090	10800	1820	1130	5550	2030	2070	11300
11	1800	1470	7140	1800	990	4810	2100	1490	8450
12	1760	2090	9930	1790	1010	4880	2170	1430	8380
13	1840	1650	8700	1770	1220	5830	2170	2130	12500
14	1880	1500	7610	1750	1190	5620	2190	1780	10500
15	1850	2110	10500	1760	990	4700	2170	1360	7970
16	1870	1960	9900	1810	1620	7920	2140	1270	7340
17	1900	1630	8360	1880	1790	9090	2060	1100	6120
18	1840	1700	8450	1900	1260	6460	2120	1000	5720
19	1870	1380	6970	1840	1160	5760	2160	1020	5950
20	1880	1390	7060	1870	1160	5860	2070	1200	6710
21	1920	1390	7210	1910	2420	12500	2020	1610	8780
22	1910	1460	7530	1900	1450	7440	2170	1110	6500
23	1900	1130	5800	1980	1100	5880	2200	1190	7070
24	1840	1230	6110	1970	1400	7450	2280	1120	6890
25	1790	1400	6770	1870	1180	5960	2300	900	5590
26	1780	1330	6390	1850	1020	5090	2180	820	4830
27	1920	1350	7000	1900	1100	5640	2090	1220	6880
28	1960	1470	7780	1820	990	4860	1970	1000	5320
29	1950	1280	6740	1770	880	4210	1960	710	3760
30	1910	1250	6450	--	--	--	1900	1570	8050
31	1810	1290	6300	--	--	--	1860	600	3010
TOTAL	58620	--	254590	52790	--	182950	63580	--	218040

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	1720	670	3110	1050	640	1810	2610	2250	15900
2	1730	750	3500	1010	190	518	2630	2320	16500
3	1780	600	2880	990	470	1260	2670	2170	15600
4	1560	480	2020	1170	690	2180	2270	2490	15300
5	1550	1000	4190	1550	450	1880	2190	1470	8690
6	1560	670	2820	1740	175	822	2190	1640	9700
7	1670	420	1890	1450	335	1310	2290	1070	6310
8	1660	2490	11200	1130	340	1040	2550	1410	9710
9	1660	1070	4800	860	520	1210	2410	2340	15200
10	1840	630	3130	748	550	1110	2570	1440	9990
11	1240	450	1510	796	450	967	2290	1240	7670
12	772	430	896	796	535	1150	2100	999	5660
13	732	910	1800	686	280	519	2020	825	4500
14	788	580	1250	602	235	382	1800	960	4670
15	724	310	606	679	250	458	1540	620	2580
16	623	500	841	788	375	798	1540	780	3240
17	588	270	429	1220	290	955	1550	660	2760
18	465	270	339	1700	520	2390	1510	650	2650
19	542	570	834	1520	725	2980	1510	600	2450
20	588	355	564	1680	830	3760	1160	680	2130
21	554	515	770	1480	395	1580	887	280	671
22	512	273	377	1760	292	1390	744	320	660
23	518	231	323	1510	390	1590	1060	580	1660
24	518	509	712	1160	600	1880	1540	2880	12000
25	672	177	321	1130	595	1820	1200	1240	4020
26	1170	625	1970	1610	1200	5220	1030	840	2340
27	1120	713	2160	1920	1670	8660	780	400	842
28	960	325	842	2040	1940	10700	616	330	549
29	780	285	600	2210	2250	15400	518	320	448
30	860	550	1280	2430	2270	14900	432	290	338
31	--	--	--	2530	2720	18600	--	--	--
TOTAL	31456	--	57944	41945	--	107230	50227	--	184738

SUSPENDED-SEDIMENT DISCHARGE, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

JULY				AUGUST			SEPTEMBER		
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)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	413	240	268	151	344	140	674	1980	5600
2	383	220	228	127	433	148	651	1240	2180
3	351	120	114	109	438	129	741	2200	4400
4	321	160	139	91	1590	391	732	6900	13600
5	351	130	123	83	740	166	596	9700	15600
6	304	120	98	657	47100	61400	649	5390	10900
7	275	190	141	304	21000	17200	919	16100	44000
8	321	1240	1070	203	3000	1640	758	22400	45800
9	269	325	236	133	750	269	726	5020	9840
10	272	95	70	78	285	60	762	1700	3500
11	275	114	85	78	285	60	947	12300	38900
12	226	72	44	85	215	48	1460	40900	194000
13	205	107	59	99	265	71	1310	49300	183000
14	187	47	24	85	170	38	1080	17800	51900
15	177	29	14	78	75	16	928	6200	15500
16	159	28	12	70	155	29	808	3300	7200
17	140	26	9.8	83	770	173	735	2300	4560
18	127	30	10	101	655	179	854	3200	7380
19	114	100	31	906	19000	71300	748	3200	6460
20	104	204	57	1000	42900	116000	836	3900	8800
21	104	32	9.0	748	12200	24600	1120	14200	42900
22	101	30	8.2	623	4300	7230	1040	12200	34300
23	122	26	8.6	470	1080	1370	748	3100	6260
24	122	47	15	383	715	739	548	1560	2310
25	117	39	12	370	572	571	542	1240	1810
26	143	19	7.3	592	7010	13900	480	1100	1430
27	229	33	20	1560	42100	210000	441	720	857
28	317	242	207	1410	49000	187000	436	780	918
29	242	69	45	918	21200	52500	427	950	1100
30	218	21	12	847	3770	8620	536	910	1320
31	187	27	14	777	3000	6290	--	--	--
TOTAL	6876	--	3190.9	13215	--	782277	23232	--	764325
OCTOBER				NOVEMBER			DECEMBER		
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)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	422	820	934	1840	2980	14800	1220	860	2830
2	380	900	923	1800	3810	18500	1180	900	2870
3	354	580	554	1760	4320	20500	1160	820	2570
4	368	430	427	1700	3770	17300	1120	800	2420
5	481	8120	12300	1650	2190	9760	1610	1510	6560
6	767	14300	29600	1620	1920	8400	1880	2540	12900
7	3870	47200	633000	1640	2100	9300	1790	2550	12300
8	4200	59600	734000	1560	1630	6870	1730	2410	11300
9	2170	20800	122000	1540	1370	5700	1730	2550	11900
10	1570	7800	33100	1480	530	2120	1580	2150	9170
11	1340	5600	20300	1480	840	3360	1500	1400	5670
12	1410	8740	53400	1480	1480	5910	1500	1380	5590
13	1740	18200	85500	1450	1190	4660	1660	1490	6680
14	1620	18400	80500	1390	1150	4320	1660	1560	6990
15	1400	17200	65000	1400	1120	4230	1660	1550	6950
16	2000	30300	164000	1430	1160	4480	1670	1350	6090
17	2570	39800	276000	1400	1090	4120	1730	1370	6400
18	3280	38500	341000	1470	1220	4840	1690	2450	11200
19	3500	41000	407000	1460	1180	4650	1720	2200	10200
20	11100	32900	1020000	1440	910	3540	1720	2320	10800
21	7650	21000	434000	1440	1040	4040	1720	2090	9710
22	4680	13000	164000	1410	930	3540	1580	1870	7980
23	3200	6300	54400	1360	760	2790	1540	4680	19500
24	2490	4300	28900	1380	830	3090	1580	1400	5970
25	2980	11300	145000	1340	820	2970	1580	900	3840
26	4520	31100	460000	1320	850	3030	1530	620	2560
27	2630	8400	59600	1300	960	3370	1520	690	2830
28	2330	3110	19600	1280	900	3110	1560	700	2950
29	1990	4270	22900	1210	900	2940	1680	1010	4580
30	1760	3270	15500	1200	980	3180	1590	940	4040
31	1730	2810	13100	--	--	--	1480	550	2200
TOTAL	80502	--	5496538	44230	--	189420	48870	--	217550
TOTAL DISCHARGE FOR 1972 WATER YEAR (CFS-DAYS)									443325
TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR 1972 WATER YEAR (TONS)									3797751.9
TOTAL DISCHARGE FOR 1972 CALENDAR YEAR (CFS-DAYS)									515543
TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR 1972 CALENDAR YEAR (TONS)									8458801.1

SAN JUAN RIVER BASIN

09368000 SAN JUAN RIVER AT SHIPROCK, N. MEX.--Continued

INSTANTANEOUS SUSPENDED SEDIMENT AND PARTICLE SIZE, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	TEMPER- ATURE (DEG C) (00010)	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SUS- PENDEO SEDI- MENT (MG/L) (80154)	SUS- PENDEO SEDI- MENT DIS- CHARGE (T/DAY) (80155)	SUS. SED. FALL DIAM. % FINER THAN .002 MM (70337)	SUS. SED. FALL DIAM. % FINER THAN .004 MM (70338)
JAN.							
02...	1615	4.0	2020	1720	9380	6	8
FEB.							
16...	1030	3.0	1860	1750	8790	--	--
MAR.							
21...	0930	7.5	2020	2700	14700	2	3
APR.							
01...	1815	12.0	1110	607	1820	--	--
MAY							
24...	1100	14.5	1220	574	1890	9	11
JUNE							
01...	0630	15.5	2170	2910	17000	18	22
20...	1020	19.0	1210	907	2960	4	6
AUG.							
06...	1730	28.0	304	53500	43900	58	72
20...	0645	17.0	500	53600	72400	57	67
28...	0630	16.0	1600	66900	289000	56	66
30...	1620	20.0	812	4480	9620	59	68
SEP.							
12...	1715	21.5	2710	29100	213000	22	26
26...	1000	14.0	495	866	1160	17	23
OCT.							
07...	1800	15.0	7100	80800	1550000	42	52
20...	1715	11.0	1240	27200	91100	42	52
25...	1330	10.0	3050	7330	60400	33	38
NOV.							
01...	1715	5.0	1760	3460	16400	29	35
29...	1145	2.0	1240	685	2290	--	--
DEC.							
01...	1700	3.5	1210	837	2730	8	9

DATE	SUS. SED. FALL DIAM. % FINER THAN .016 MM (70340)	SUS. SED. FALL DIAM. % FINER THAN .062 MM (70342)	SUS. SED. FALL DIAM. % FINER THAN .125 MM (70343)	SUS. SED. FALL DIAM. % FINER THAN .250 MM (70344)	SUS. SED. FALL DIAM. % FINER THAN .500 MM (70345)	SUS. SED. FALL DIAM. % FINER THAN 1.00 MM (70346)	SUS. SED. FALL DIAM. % FINER THAN 2.00 MM (70347)
JAN.							
02...	9	29	72	95	100	--	--
FEB.							
16...	--	10	24	62	87	99	100
MAR.							
21...	4	9	14	40	83	100	--
APR.							
01...	--	33	84	100	--	--	--
MAY							
24...	16	38	63	91	100	--	--
JUNE							
01...	31	54	79	96	100	--	--
20...	8	16	23	47	74	95	100
AUG.							
06...	96	100	--	--	--	--	--
20...	93	99	99	100	--	--	--
28...	86	95	97	99	100	--	--
30...	81	93	96	98	99	100	--
SEP.							
12...	37	84	94	98	100	--	--
26...	34	69	89	99	100	--	--
OCT.							
07...	65	83	93	99	100	--	--
20...	67	81	91	98	100	--	--
25...	52	74	89	96	100	--	--
NOV.							
01...	45	58	75	89	100	--	--
29...	--	30	55	85	100	--	--
DEC.							
01...	12	29	60	90	100	--	--

GILA RIVER BASIN

225

09430600 MOGOLLON CREEK NEAR CLIFF, N. MEX.
(Hydrologic bench-mark station)

LOCATION.—Lat 33°10'00", long 108°38'57", in SE¼ sec.13, T.13 S., R.18 W., Grant County, at gaging station 12 miles upstream from mouth, and 14.2 miles north of Cliff.

DRAINAGE AREA.—69 sq mi.

PERIOD OF RECORD.—Chemical analyses: February 1967 to current year.
Sediment records: October 1968 to current year.

CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	DIS- CHARGE (CFS) (00060)	DEPTH (FT) (00003)	DIS- SOLVED SILICA (SI02) (MG/L) (00955)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED MAN- GANESE (MN) (UG/L) (01056)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	BICAR- BONATE (HC03) (MG/L) (00440)	CAR- BONATE (C03) (MG/L) (00445)
JAN. 07...	0930	31	--	21	40	0	14	3.0	5.7	1.0	34	0
FEB. 29...	1100	9.4	--	20	20	--	11	2.1	5.2	.8	34	0
APR. 19...	1030	2.9	--	22	40	0	13	2.7	6.4	.8	51	0
JULY 26...	1420	9.0	--	21	10	--	13	2.4	6.2	.8	45	0
SEP. 20...	1100	18	--	23	20	--	14	2.8	6.3	.9	43	0
NOV. 28...	1640	24	--	22	30	0	14	3.2	6.0	1.0	38	0

DATE	DIS- SOLVED SULFATE (S04) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED NITRATE (N) (MG/L) (00618)	DIS- SOLVED NITRITE (N) (MG/L) (00613)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	AMMONIA NITRO- GEN (N) (MG/L) (00610)	DIS- SOLVED AMMONIA NITRO- GEN (N) (MG/L) (00608)	ORGANIC NITRO- GEN (N) (MG/L) (00605)	TOTAL NITRO- GEN (N) (MG/L) (00600)	TOTAL PHOS- PHORUS (P) (MG/L) (00665)	DIS- SOLVED ORTHO. PHOS- PHORUS (P) (MG/L) (00671)
JAN. 07...	26	1.6	.5	--	--	.02	--	--	--	--	--	.00
FEB. 29...	17	2.0	.6	--	--	.01	--	--	--	--	--	.02
APR. 19...	17	2.0	.5	.02	.00	.02	--	.01	.15	.18	.04	.01
JULY 26...	17	1.0	.5	.00	.00	.00	--	.01	.38	.39	.29	.00
SEP. 20...	24	1.5	.4	.00	.00	.00	--	.07	.15	.22	.07	.02
NOV. 28...	25	2.0	.4	.00	.00	.00	.05	.05	.16	.21	.03	.02

DATE	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (70300)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L) (70301)	HARD- NESS (CA,MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AD- SORP- TION RATIO (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	DIS- SOLVED BORON (B) (UG/L) (01020)	DIS- SOLVED COPPER (CU) (UG/L) (01040)	DIS- SOLVED ZINC (ZN) (UG/L) (01090)
JAN. 07...	96	96	47	19	.4	121	7.6	.5	10	--	--
FEB. 29...	74	76	36	8	.4	117	7.9	6.0	20	--	--
APR. 19...	128	90	44	2	.4	118	7.6	12.5	10	--	--
JULY 26...	96	84	42	5	.4	117	7.6	25.0	20	--	--
SEP. 20...	110	94	46	11	.4	141	7.3	14	30	--	--
NOV. 28...	102	92	48	17	.4	120	6.7	4.5	10	--	--

GILA RIVER BASIN

09430600 MOGOLLON CREEK NEAR CLIFF, N. MEX.--Continued

TRACE ELEMENT AND RADIOCHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	DIS-SOLVED ARSENIC (AS) (UG/L) (01000)	DIS-SOLVED BARIUM (BA) (UG/L) (01005)	DIS-SOLVED BORON (B) (UG/L) (01020)	DIS-SOLVED CADMIUM (CD) (UG/L) (01025)	HEXA-VALENT CHROMIUM (CR6) (UG/L) (01032)	DIS-SOLVED COPPER (CU) (UG/L) (01040)	DIS-SOLVED IRON (FE) (UG/L) (01046)	TOTAL LEAD (PB) (UG/L) (01051)	DIS-SOLVED MANGANESE (MN) (UG/L) (01056)	TOTAL MERCURY (HG) (UG/L) (71900)
JAN. 07...	0930	0	0	10	0	0	2	40	8	0	.3
APR. 19...	1030	1	200	10	0	0	1	40	2	0	.1
NOV. 28...	1640	5	0	10	1	0	9	30	2	0	.0

DATE	DIS-SOLVED SILVER (AG) (UG/L) (01075)	DIS-SOLVED SELENIUM (SE) (UG/L) (01145)	DIS-SOLVED ZINC (ZN) (UG/L) (01090)	DIS-SOLVED GROSS ALPHA AS U-NAT. (UG/L) (80030)	SUS-PENDED GROSS ALPHA AS U-NAT. (UG/L) (80040)	DIS-SOLVED GROSS BETA AS CS-137 (PC/L) (03515)	SUS-PENDED GROSS BETA AS CS-137 (PC/L) (03516)	DIS-SOLVED GROSS BETA AS SR90 /Y90 (PC/L) (80050)	SUS-PENDED GROSS BETA AS SR90 /Y90 (PC/L) (80060)	DIS-SOLVED RADON-226 (RADON) (PC/L) (09511)	DIS-SOLVED URANIUM (U) (UG/L) (80020)
JAN. 07...	1	5	50	<.5	<.4	1.9	<.4	1.6	<.4	.03	.05
APR. 19...	1	0	20	--	--	--	--	--	--	--	--
NOV. 28...	0	2	20	<1.3	<.4	1.8	<.4	1.5	<.4	.02	.08

FIELD AND BIOCHEMICAL MEASUREMENTS, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	DIS-CHARGE (CFS) (00060)	SPECIFIC CONDUCTANCE (MICRO-MHOS) (00095)	PH (UNITS) (00400)	TEMPERATURE (DEG C) (00010)	AIR TEMPERATURE (DEG C) (00020)	COLOR (PLATINUM-COBALT UNITS) (00080)	TURBIDITY (JTU) (00070)
JAN. 07...	0930	31	120	7.1	.5	3.0	5	1
FEB. 29...	1100	9.4	95	7.4	6.0	17.5	3	0
APR. 19...	1030	2.9	120	7.6	12.5	14.0	3	7
JULY 26...	1420	9.0	105	7.7	25.0	28.5	10	1
SEP. 20...	1100	18	141	7.6	14.0	19.0	15	1
NOV. 28...	1640	24	120	8.0	4.5	7.0	5	1

DATE	DIS-SOLVED OXYGEN (MG/L) (00300)	CHEMICAL OXYGEN DEMAND (LOW LEVEL) (MG/L) (00335)	BIO-CHEMICAL OXYGEN DEMAND (MG/L) (00310)	IMMEDIATE COLIFORM PER 100 ML (31501)	FECAL COLIFORM PER 100 ML (31616)	STREPTOCOCCI (COLIFORMS) PER 100 ML (31679)	TOTAL ORGANIC CARBON * (C) (00680)
JAN. 07...	12.4	1	.0	4	0	1	--
FEB. 29...	10.8	3	.2	<1	<1	30	--
APR. 19...	8.7	1	.2	18	<18	3	--
JULY 26...	7.4	--	--	--	15	--	6.0
SEP. 20...	7.9	--	--	--	7	--	4.5
NOV. 28...	10.5	--	--	--	2	--	4.5

* Analyzed by New Mexico Environmental Improvement Agency.

GILA RIVER BASIN

227

09430600 MOGOLLON CREEK NEAR CLIFF, N. MEX.--Continued

PESTICIDE ANALYSES, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	TOTAL ORGANIC CARBON (C) (MG/L) (00680)	ALDRIN (UG/L) (39330)	ALDRIN IN BOTTOM DE- POSITS (UG/KG) (39333)	CHLOR- DANE (UG/L) (39350)	CHLOR- DANE IN BOTTOM DE- POSITS (UG/KG) (39351)	DDD (UG/L) (39360)	DDD IN BOTTOM DE- POSITS (UG/KG) (39363)	DDE (UG/L) (39365)	DDE IN BOTTOM DE- POSITS (UG/KG) (39368)	DDT (UG/L) (39370)	DDT IN BOTTOM DE- POSITS (UG/KG) (39373)
JAN. 07...	0930	--	.00	<.2	.0	<1	.00	<.2	.00	<.2	.00	<.2
JULY 26...	1420	13	--	--	--	--	--	--	--	--	--	--
NOV. 28...	1640	--	.00	.0	.0	0	.00	.0	.00	.0	.00	.0

DATE	DI- AZINON (UG/L) (39570)	DI- ELDRIN (UG/L) (39380)	DI- ELDRIN IN BOTTOM DE- POSITS (UG/KG) (39383)	ENDRIN (UG/L) (39390)	ENDRIN IN BOTTOM DE- POSITS (UG/KG) (39393)	HEPTA- CHLOR (UG/L) (39410)	HEPTA- CHLOR IN BOTTOM DE- POSITS (UG/KG) (39413)	HEPTA- CHLOR EPOXIDE (UG/L) (39420)	HEPTA- CHLOR EPOXIDE IN BOT- TOM DE- POSITS (UG/KG) (39423)	LINDANE (UG/L) (39340)	LINDANE IN BOTTOM DE- POSITS (UG/KG) (39343)
JAN. 07...	--	.00	<.2	.00	<.2	.00	<.2	.00	<.2	.00	<.2
JULY 26...	--	--	--	--	--	--	--	--	--	--	--
NOV. 28...	.00	.00	.0	.00	.0	.00	.0	.00	.0	.00	.0

DATE	MALA- THION (UG/L) (39530)	MALA- THION IN BOTTOM DE- POSITS (UG/KG) (39531)	METHYL PARA- THION (UG/L) (39600)	METHYL PARA- THION IN BOT- TOM DE- POSITS (UG/KG) (39601)	PARA- THION (UG/L) (39540)	PARA- THION IN BOTTOM DE- POSITS (UG/KG) (39541)	PCR (UG/L) (39516)	PCR IN BOTTOM DE- POSITS (UG/KG) (39519)	2,4-D (UG/L) (39730)	2,4,5-T (UG/L) (39740)	SILVEX (UG/L) (39760)
JAN. 07...	--	<.2	--	<.2	--	<.2	--	--	.00	.00	.00
JULY 26...	--	--	--	--	--	--	--	--	--	--	--
NOV. 28...	.00	--	.00	--	.00	--	.0	0	.00	.00	.00

INSTANTANEOUS SUSPENDED SEDIMENT AND PARTICLE SIZE, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	TEMPER- ATURE (DEG C) (00010)	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SUS- PENDEO SEDI- MENT (MG/L) (80154)	SUS- PENDEO SEDI- MENT DIS- CHARGE (T/DAY) (80155)
FEB. 29...	1310	--	9.4	1	.03
MAR. 22...	0925	4.5	6.8	31	.57
APR. 12...	1015	12.5	3.1	17	.14
AUG. 11...	1125	20.0	3.2	7	.06
28...	1310	17.0	46	2	.25
SEP. 14...	1410	17.0	135	4	1.5
OCT. 23...	1635	1.0	180	17	8.3
NOV. 22...	1245	9.0	26	4	.28
DEC. 28...	1025	7.0	111	277	83

GILA RIVER BASIN

09431100 MANGAS CREEK BELOW MANGAS SPRINGS, N. MEX.

LOCATION.--Lat 32°50'57, long 108°31'13", in SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec.5, T.17 S., R.16 W., Grant County, 0.1 mile upstream from Blacksmith Canyon and 15 miles southeast of Gila.

DRAINAGE AREA.--177 sq mi.

PERIOD OF RECORD.--Chemical analyses: April 1970 to current year.

CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	DIS- CHARGE (CFS) (00060)	DIS- SOLVED SILICA (SI02) (MG/L) (00955)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED PU- TAS- SIUM (K) (MG/L) (00935)	RICAR- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)
JAN. 12...	1355	1.5	30	20	64	13	29	2.5	249	0	55	13
APR. 03...	0905	1.2	31	--	63	12	25	3.5	235	0	52	11
OCT. 06...	1245	1.5	32	30	72	13	28	4.1	265	0	58	11
NOV. 22...	1430	--	32	--	78	14	31	3.4	272	0	49	12

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	DIS- SOLVED ORTH0. PHOS- PHORUS (P) (MG/L) (00671)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L) (70300)	DIS- SOLVED SOLIDS (SUM OF CONSTIT- TUENTS) (MG/L) (70301)	HARD- NESS (CA, MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AD- SORP- TION RATIO (00931)	SPF- IFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	DIS- SOLVED BORON (B) (UG/L) (01020)
JAN. 12...	.4	4.4	.02	356	349	210	9	.9	533	8.0	16.0	40
APR. 03...	.5	4.5	--	--	333	210	14	.8	522	8.0	15.0	--
OCT. 06...	.5	4.1	--	--	367	230	16	.8	549	7.6	22.0	40
NOV. 22...	.6	4.7	--	--	375	250	29	.9	559	7.5	14.0	--

GILA RIVER BASIN

229

09431500 GILA RIVER NEAR REDROCK, N. MEX.
(Radiochemical network station)

LOCATION: Lat 32°43'37", long 108°40'30", in W₁ sec.23, T.18 S., R.18 W., Grant County, at gaging station 0.2 mile downstream from Copper Canyon, 0.2 mile upstream from lower end of box canyon, 4.7 miles northeast of Redrock, and 14 miles downstream from Mangas Creek.

DRAINAGE AREA.--2,829 sq mi.

PERIOD OF RECORD.--Chemical analyses: July 1967 to current year.

CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	DIS- SOLVED CHARGE (CFS) (00060)	DIS- SOLVED SILICA (SI02) (MG/L) (00955)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NES- SIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)
FEB.								
03...	1035	136	35	10	34	7.0	31	1.7
MAR.								
01...	1400	90	37	10	46	7.6	36	2.3
21...	1230	77	36	--	43	8.7	35	2.3
APR.								
14...	1215	44	35	--	45	9.8	40	3.6
20...	1400	57	34	10	46	10	39	2.3
MAY								
03...	1100	46	35	--	38	9.2	39	3.8
JULY								
18...	1130	105	24	--	39	5.6	25	3.3
AUG.								
22...	1600	88	37	10	42	8.2	36	3.3
SEP.								
01...	1140	377	39	--	33	6.1	25	2.5
OCT.								
16...	1205	296	35	20	34	5.5	22	2.5
21...	1510	10200	31	50	43	6.4	15	2.6
25...	1315	1430	34	40	30	6.0	19	2.3
NOV.								
06...	1355	686	34	20	30	6.9	21	2.1
29...	1645	295	35	40	37	8.0	29	2.3
DEC.								
11...	1150	183	36	--	36	7.6	30	2.1

DATE	BICAR- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	TOTAL PHOS- PHORUS (P) (MG/L) (00665)	DIS- SOLVED ORTHO- PHOS- PHORUS (P) (MG/L) (00671)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L) (70300)
FEB.									
03...	148	0	41	16	2.4	.20	--	.02	266
MAR.									
01...	182	0	39	15	3.8	.11	.02	.02	266
21...	183	0	37	15	2.4	.08	--	--	--
APR.									
14...	212	5	43	18	2.4	.00	--	--	--
20...	206	6	44	17	2.5	.01	--	.01	332
MAY									
03...	195	0	40	16	2.6	.06	--	--	--
JULY									
18...	158	0	30	11	1.9	.28	--	--	--
AUG.									
22...	185	0	34	18	2.3	.22	--	.09	282
SEP.									
01...	138	0	35	12	1.8	.30	--	--	--
OCT.									
16...	144	0	30	8.8	1.6	.46	--	.14	232
21...	155	0	35	4.7	1.1	.38	--	.08	--
25...	115	0	35	6.8	1.2	.22	--	.06	--
NOV.									
06...	119	0	38	7.9	1.4	.18	--	.05	248
29...	167	0	46	12	2.1	.21	--	.05	258
DEC.									
11...	161	0	44	13	2.0	.14	--	--	--

GILA RIVER BASIN

09431500 GILA RIVER NEAR REDROCK, N. MEX.--Continued

CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L) (70301)	HARD- NESS (CA,MG) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AD- SORP- TION RATIO (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	DIS- SOLVED BORON (B) (UG/L) (01020)
FEB.								
03...	242	110	0	1.3	354	7.9	1.0	20
MAR.								
01...	277	150	0	1.3	391	8.2	13.0	20
21...	270	140	0	1.3	420	8.4	14.0	--
APR.								
14...	306	150	0	1.4	473	8.4	11.5	--
20...	303	160	0	1.4	461	8.4	17.0	70
MAY								
03...	280	130	0	1.5	447	8.3	15.5	--
JULY								
18...	219	120	0	1.0	341	7.5	20.0	--
AUG.								
22...	273	140	0	1.3	410	7.8	29.5	60
SEP.								
01...	224	110	0	1.1	322	7.4	21.0	--
OCT.								
16...	213	110	0	.9	308	7.7	18.0	40
21...	217	130	7	.6	314	6.9	14.0	100
25...	192	100	5	.8	277	7.1	14.0	60
NOV.								
06...	201	100	6	.9	288	7.1	11.0	50
29...	255	130	0	1.1	367	7.5	10.0	50
DEC.								
11...	251	120	0	1.2	374	8.0	5.0	--

TRACE ELEMENT AND RADIOCHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	DIS- SOLVED ALUM- INUM (AL) (UG/L) (01106)	DIS- SOLVED ARSENIC (AS) (UG/L) (01000)	DIS- SOLVED BARIUM (BA) (UG/L) (01005)	DIS- SOLVED BERYL- LIUM (BE) (UG/L) (01010)	DIS- SOLVED BISMUTH (BI) (UG/L) (01015)	DIS- SOLVED BORON (B) (UG/L) (01020)	DIS- SOLVED CAD- MIUM (CD) (UG/L) (01025)	DIS- SOLVED CHRO- MIUM (CR) (UG/L) (01030)	DIS- SOLVED COBALT (CO) (UG/L) (01035)
FEB.										
03...	1035	--	5	--	--	--	20	0	--	--
MAR.										
01...	1400	11	5	17	<2	<9	20	0	<9	<6
APR.										
20...	1400	35	0	21	<4	<7	70	0	<14	<14
MAY										
03...	1100	--	--	--	--	--	--	--	--	--
AUG.										
22...	1600	--	0	--	--	--	60	1	--	--
NOV.										
29...	1645	54	0	26	<2	<5	50	0	<5	<5

DATE	DIS- SOLVED COPPER (CU) (UG/L) (01040)	DIS- SOLVED GALLIUM (GA) (UG/L) (01120)	DIS- SOLVED GER- MANIUM (GE) (UG/L) (01125)	DIS- SOLVED IRON (FE) (UG/L) (01046)	TOTAL LEAD (PB) (UG/L) (01051)	DIS- SOLVED LEAD (PB) (UG/L) (01049)	DIS- SOLVED LITHIUM (LI) (UG/L) (01130)	DIS- SOLVED MAN- GANESE (MN) (UG/L) (01056)	TOTAL MERCURY (HG) (UG/L) (71900)
FEB.									
03...	--	--	--	10	8	--	--	--	.1
MAR.									
01...	2	<3	<12	10	8	<6	30	5	.1
APR.									
20...	<2	<7	<14	10	5	<7	30	7	.0
MAY									
03...	--	--	--	--	--	--	--	--	--
AUG.									
22...	--	--	--	10	16	--	--	--	.6
NOV.									
29...	3	<3	<5	40	1	<5	20	26	.1

GILA RIVER BASIN

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09431500 GILA RIVER NEAR REDROCK, N. MEX.--Continued

TRACE ELEMENT AND RADIOCHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	DIS- SOLVED MOLYB- DENUM (MO) (UG/L) (01060)	DIS- SOLVED NICKEL (NI) (UG/L) (01065)	DIS- SOLVED SILVER (AG) (UG/L) (01075)	DIS- SOLVED SELE- NIUM (SE) (UG/L) (01145)	DIS- SOLVED STRON- TIUM (SR) (UG/L) (01080)	DIS- SOLVED TIN (SN) (UG/L) (01100)	DIS- SOLVED TI- TANIUM (TI) (UG/L) (01150)	DIS- SOLVED VANA- DIUM (V) (UG/L) (01085)	DIS- SOLVED ZINC (ZN) (UG/L) (01090)
FEB. 03...	--	--	--	0	--	--	--	--	--
MAR. 01...	3	<6	<1	0	170	<9	<4	5.0	--
APR. 20...	4	<14	<2	2	190	<14	<7	<7.0	<650
MAY 03...	--	--	--	--	--	--	--	--	--
AUG. 22...	--	--	--	0	--	--	--	--	--
NOV. 29...	3	<5	<0	1	140	<5	<5	5.0	<320

DATE	DIS- SOLVED ZIR- CONIUM (ZR) (UG/L) (01160)	DIS- SOLVED GROSS ALPHA AS U-NAT. (UG/L) (80030)	SUS- PENDE GROSS ALPHA AS U-NAT. (UG/L) (80040)	DIS- SOLVED GROSS BETA AS CS-137 (PC/L) (03515)	SUS- PENDE GROSS BETA AS CS-137 (PC/L) (03516)	DIS- SOLVED GROSS BETA AS AS SP90 /Y90 (PC/L) (80050)	SUS- PENDE GROSS BETA AS AS SR90 /Y90 (PC/L) (80060)	DIS- SOLVED RA-226 METHOD (PC/L) (09511)	DIS- SOLVED NATURAL URANIUM (U) (UG/L) (22703)
FEB. 03...	--	--	--	--	--	--	--	--	--
MAR. 01...	--	--	--	--	--	--	--	--	--
APR. 20...	<14	--	--	--	--	--	--	--	--
MAY 03...	--	13	<.4	3.7	.7	3.0	.6	.02	2.5
AUG. 22...	--	--	--	--	--	--	--	--	--
NOV. 29...	<10	--	--	--	--	--	--	--	--

FIELD AND BIOCHEMICAL MEASUREMENTS, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	DIS- CHARGE (CFS) (00060)	SPF- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	AIR TEMPER- ATURE (DEG C) (00020)	DIS- SOLVED OXYGEN (MG/L) (00300)	IMME- DIATE COLI- FORM (COL. PER 100 ML) (31501)	FECAL COLI- FORM (COL. PER 100 ML) (31616)	STREP- TOCOCCI (COL- ONIES PER 100 ML) (31679)
MAR. 01...	1400	90	395	--	13.0	20.0	9.9	--	--	--
APR. 20...	1400	57	460	8.2	17.0	19.0	9.2	<100	<100	<100
AUG. 22...	1600	88	400	--	29.5	37.5	--	--	--	--
NOV. 29...	1645	295	320	--	10.0	12.0	--	--	--	--

GILA RIVER BASIN

09433500 SUNSET CANAL ABOVE NEW MEXICO-ARIZONA STATE LINE, N. MEX.
(Surveillance network station)

LOCATION.--Lat 32°41'42", long 109°02'48", in NW 1/4 sec.31, T.18 S., R.21 W., Hidalgo County, North of U.S. Highway 70 and 2.8 miles west of Virden.

PERIOD OF RECORD.--Chemical analyses: August 1969 to April 1972 (discontinued).

CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	DIS- CHARGE (CFS) (00060)	DIS- SOLVED SILICA (SiO2) (MG/L) (00955)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED PO- SIUM (K) (MG/L) (00935)	BICAR- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)
APR. 20...	1000	.01	48	63	54	170	3.7	288	0	360	50

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	DIS- SOLVED ORTHO- PHOS- PHORUS (P) (MG/L) (00671)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L) (70300)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L) (70301)	HARD- NESS (CA,MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AD- SORP- TION RATIO (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)
APR. 20...	2.3	7.3	.01	864	925	380	140	3.8	1320	6.9	16.0

GILA RIVER BASIN

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09436500 NEW MODEL CANAL ABOVE NEW MEXICO-ARIZONA STATE LINE, N. MEX.
(Surveillance network station)

LOCATION.--Lat 32°40'54", long 109°02'48", in NW¼SW¼ sec.6, T.18 S., R.21 W., Hidalgo County, north of U.S. Highway 70, upstream from New Mexico-Arizona State line, and 2.8 miles west of Virden.

PERIOD OF RECORD.--Chemical analyses: July 1969 to April 1972 (discontinued).
Sediment records: July 1970 to April 1972 (discontinued).

REMARKS.--Bacteria analyzed by the New Mexico Environmental Improvement Agency on samples collected by the U.S. Geological Survey.
Chemical analyses probably represent ground water pumped into canal from nearby irrigation wells.

CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

		DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)			DIS- SOLVED MAG- NE- SIUM (MG) (MG/L) (00925)		DIS- SOLVED SODIUM (NA) (MG/L) (00930)		DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)		BICAR- BONATE (HCO3) (MG/L) (00440)		CAR- BONATE (CO3) (MG/L) (00445)	
DATE	TIME	DIS- CHARGE (CF8) (00060)	DIS- SOLVED SILICA (SiO2) (MG/L) (00955)	DIS- SOLVED IRON (FE) (UG/L) (01046)										
MAR. 01...	1130	1.4	35	20	44	8.6	36	2.9	192					1
APR. 20...	1030	3.0	34	10	47	9.8	46	2.5	225					0
DATE		DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED NITRATE (N) (MG/L) (00618)	DIS- SOLVED NITRITE (N) (MG/L) (00613)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	DIS- SOLVED AMMONIA NITRO- GEN (N) (MG/L) (00608)	ORGANIC NITRO- GEN (N) (MG/L) (00605)	TOTAL NITRO- GEN (N) (MG/L) (00600)	TOTAL PHOS- PHORUS (P) (MG/L) (00665)			
MAR. 01...	45	17	3.0	.04	.00	.04	.06	.01	.11	.09				
APR. 20...	30	18	2.3	.05	.00	.05	.03	.16	.24	.17				
DATE		DIS- SOLVED ORTHO- PHOS- PHORUS (P) (MG/L) (00671)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L) (70300)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L) (70301)	HARD- NESS (CA, MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AD- SORP- TION RATIO (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	DIS- SOLVED BORON (B) (UG/L) (01020)			
MAR. 01...	.02	286	288	150	0	1.3	424	8.4	13.0	160				
APR. 20...	.05	340	301	160	0	1.6	481	8.2	13.0	70				

FIELD AND BIOCHEMICAL MEASUREMENTS, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

		SPE- CIFIC CON- DUCT- ANCE					AIR		COLOR
DATE	TIME	DIS- CHARGE (CF8) (00060)	(MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	TEMPER- ATURE (DEG C) (00020)	INUM- COBALT UNITS) (00080)		
MAR. 01...	1130	1.4	420	8.4	13.0	18.5	3		
APR. 20...	1030	3.0	480	8.3	13.0	16.0	5		

		CHEM- ICAL OXYGEN DEMAND (LOW LEVEL)			IMME- DIATE COLI- FORM (COL. PER 100 ML)		FECAL COLI- FORM (COL. PER 100 ML)		STREP- TOCOCCI (COL- ONIES PER 100 ML)
DATE	TUR- BID- ITY (JTU) (00070)	DIS- SOLVED OXYGEN (MG/L) (00300)	(MG/L) (00335)	(MG/L) (00310)	100 ML (31501)	100 ML (31616)	100 ML (31679)		
MAR. 01...	15	11.0	11	.8	<10	<10	<10		
APR. 20...	20	9.4	1	.4	<100	<100	<100		

GILA RIVER BASIN

09436500 NEW MODEL CANAL ABOVE NEW MEXICO-ARIZONA STATE LINE, N. MEX.--Continued

PESTICIDE ANALYSES, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	ALDRIN (UG/L) (39330)	CHLOR- DANE (UG/L) (39350)	DDD (UG/L) (39360)	DDE (UG/L) (39365)	DDT (UG/L) (39370)	DI- ELDRIN (UG/L) (39380)
MAR. 01...	1130	.00	.0	.00	.00	.00	.00
APR. 20...	1030	.00	.0	.00	.00	.00	.00

DATE	ENDRIN (UG/L) (39390)	HEPTA- CHLOR (UG/L) (39410)	HEPTA- CHLOR EPOXIDE (UG/L) (39420)	LINDANE (UG/L) (39340)	2,4-D (UG/L) (39730)	2,4,5-T (UG/L) (39740)	SILVEX (UG/L) (39760)
MAR. 01...	.00	.00	.00	.00	.00	.00	.00
APR. 20...	.00	.00	.00	.00	.00	.00	.00

INSTANTANEOUS SUSPENDED SEDIMENT AND PARTICLE SIZE, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	TEMPER- ATURE (DEG C) (00010)	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SUS- PENDE SEDI- MENT DIS- CHARGE (MG/L) (80154)	SUS- PENDE SEDI- MENT DIS- CHARGE (T/DAY) (80155)
MAR. 01...	1130	13.0	1.4	40	.15
APR. 20...	1030	13.0	3.0	77	.62

GILA RIVER BASIN

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09438000 GILA RIVER ABOVE NEW MEXICO-ARIZONA STATE LINE, N. MEX.
(Surveillance network station)

LOCATION.--Lat 32°41'12", long 109°02'50", in SE 1/4 NW 1/4 sec. 6, T.19 S., R.21 W., Hidalgo County, at State line, 2.8 miles west of Virden, N. Mex., and 3.5 miles southeast of Duncan, Ariz.

DRAINAGE AREA.--3,349 sq mi.

PERIOD OF RECORD.--Chemical analyses: October 1967 to February 1969, July 1969 to current year.
Sediment records: January 1970 to current year.

REMARKS.--Bacteria analyzed by the New Mexico Environmental Improvement Agency on samples collected by the U.S. Geological Survey. After June 1972, Bacteria analyzed by the U.S. Geological Survey.

CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	DIS- CHARGE (CFS) (00060)	DIS- SOLVED SILICA (SI02) (MG/L) (00955)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	BICAR- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)
MAR. 01...	0945	63	37	20	51	9.4	43	3.0	216	0	41
AUG. 22...	1200	60	36	100	40	6.8	37	4.1	181	0	34
NOV. 29...	1300	280	34	30	42	8.7	33	2.6	178	0	43

DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED NITRATE (N) (MG/L) (00618)	DIS- SOLVED NITRITE (N) (MG/L) (00613)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	AMMONIA NITRO- GEN (N) (MG/L) (00610)	DIS- SOLVED AMMONIA NITRO- GEN (N) (MG/L) (00608)	ORGANIC NITRO- GEN (N) (MG/L) (00605)	TOTAL NITRO- GEN (N) (MG/L) (00600)	TOTAL PHOS- PHORUS (P) (MG/L) (00665)
MAR. 01...	18	4.5	.26	.00	.26	--	.04	.08	.38	.13
AUG. 22...	15	2.4	.25	.00	.25	--	.07	1.7	2.1	1.1
NOV. 29...	14	1.7	.37	.00	.37	.06	.06	.25	.68	.20

DATE	DIS- SOLVED ORTHO- PHOS- PHORUS (P) (MG/L) (00671)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L) (70300)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L) (70301)	HARD- NESS (CA, MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AD- SORP- TION RATIO (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	DIS- SOLVED BORON (B) (UG/L) (01020)
MAR. 01...	.04	324	316	170	0	1.5	475	8.0	10.5	180
AUG. 22...	.12	290	267	130	0	1.4	413	7.7	26.0	80
NOV. 29...	.07	258	270	140	0	1.2	401	7.1	10.0	20

RADIOCHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	DIS- SOLVED GROSS ALPHA AS U-NAT. (UG/L) (80030)	SUS- PENDED GROSS ALPHA AS U-NAT. (UG/L) (80040)	DIS- SOLVED GROSS BETA AS CS-137 (PC/L) (03515)	SUS- PENDED GROSS BETA AS CS-137 (PC/L) (03516)	DIS- SOLVED GROSS BETA AS AS SR90 /Y90 (PC/L) (80050)	SUS- PENDED GROSS BETA AS AS SR90 /Y90 (PC/L) (80060)	DIS- SOLVED RA-226 (RADON METHOD) (PC/L) (09511)	DIS- SOLVED NATURAL URANIUM (U) (UG/L) (22703)
JUNE 05...	0915	18	8.7	5.4	5.6	4.4	4.5	.04	3.0
JULY 10...	1530	12	4.4	5.0	.6	4.0	.5	.04	2.6

GILA RIVER BASIN

09438000 GILA RIVER ABOVE NEW MEXICO-ARIZONA STATE LINE, N. MEX.--Continued
FIELD AND BIOCHEMICAL MEASUREMENTS, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	DIS- CHARGE (CFS) (00060)	SPF- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	AIR TEMPER- ATURE (DEG C) (00020)	COLOR (PLAT- INUM- COBALT UNITS) (00080)	TUR- BID- ITY (JTU) (00070)
MAR. 01...	0945	63	470	8.0	10.5	16.5	5	15
AUG. 22...	1200	60	410	8.0	26.0	32.0	20	380
NOV. 29...	1300	280	405	8.1	10.0	8.5	5	10

DATE	TIME	DIS- SOLVED OXYGEN (MG/L) (00300)	CHEM- ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L) (00335)	BIO- CHEM- ICAL OXYGEN DEMAND (MG/L) (00310)	IMME- DIATE COLI- FORM (COL. PER 100 ML) (31501)	FECAL COLI- FORM (COL. PER 100 ML) (31616)	STREP- TOCOCCI (COL- ONIES PER 100 ML) (31679)	TOTAL ORGANIC CARBON (C) (MG/L) (00680)	*
MAR. 01...	10.1	8	.4	<10	<10	<10	--		
AUG. 22...	7.0	--	--	--	500	--	14		
NOV. 29...	9.8	--	--	--	500	--	4.0		

* Analyzed by New Mexico Environmental Improvement Agency.

PESTICIDE ANALYSES, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	TOTAL ORGANIC CARBON (C) (MG/L) (00680)	ALDRIN (UG/L) (39330)	CHLOR- DANE (UG/L) (39350)	DDD (UG/L) (39360)	DDE (UG/L) (39365)	DDT (UG/L) (39370)	DI- ELDRIN (UG/L) (39380)
MAR. 01...	0945	--	.00	.0	.00	.00	.00	.00
AUG. 22...	1200	22	.00	.0	.00	.00	.00	.00
NOV. 29...	1300	--	.00	.0	.00	.00	.00	.00

DATE	TIME	ENDRIN (UG/L) (39390)	HEPTA- CHLOR (UG/L) (39410)	HEPTA- CHLOR EPOXIDE (UG/L) (39420)	LINDANE (UG/L) (39340)	PCB (UG/L) (39516)	2,4-D (UG/L) (39730)	2,4,5-T (UG/L) (39740)	SILVEX (UG/L) (39760)
MAR. 01...	.00	.00	.00	.00	--	.00	.00	.00	.00
AUG. 22...	.00	.00	.00	.00	--	.00	.00	.00	.00
NOV. 29...	.00	.00	.00	.00	.0	.00	.00	.00	.00

INSTANTANEOUS SUSPENDED SEDIMENT AND PARTICLE SIZE, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	TEMPER- ATURE (DEG C) (00010)	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SUS- PENDED SEDI- MENT (MG/L) (80154)	SUS- PENDED SEDI- MENT CHARGE (T/DAY) (80155)	SUS. SED. FALL DIAM. % FINER THAN .002 MM (70337)	SUS. SED. FALL DIAM. % FINER THAN .004 MM (70338)	SUS. SED. FALL DIAM. % FINER THAN .016 MM (70340)	SUS. SED. FALL DIAM. % FINER THAN .062 MM (70331)
MAR. 01...	0945	10.5	63	51	8.7	--	--	--	--
AUG. 22...	1200	26.0	60	1280	207	63	79	99	100
NOV. 29...	1300	10.0	280	270	204	--	--	--	--

GILA RIVER BASIN

237

09444000 SAN FRANCISCO RIVER NEAR GLENWOOD, N. MEX.

(Surveillance network station)

LOCATION.--Lat 33°14'48", long 108°52'47", in NE¼NW¼ sec.23, T.12 S., R.20 W., Catron County, at gaging station 0.2 mile upstream from hot springs, 5 miles south of Glenwood, 6 miles downstream from Whitewater Creek, and at mile 64.6.

DRAINAGE AREA.--1,653 sq mi.

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

Sediment records: April 1963 to July 1967, July 1970 to current year.

REMARKS.--Bacteria and aquatic biology analyzed by the New Mexico Environmental Improvement Agency on samples collected by the U.S. Geological Survey. After June 1972, Bacteria analyzed by the U.S. Geological Survey.

CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	DIS- CHARGE (CFS) (00060)	DIS- SOLVED SILICA (SIO2) (MG/L) (00955)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	BICAR- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)
JAN. 07...	1500	109	35	--	37	9.3	22	3.6	173	0	20
FEB. 02...	1030	55	36	--	37	9.3	20	1.9	180	0	19
29...	1315	22	40	--	42	10	31	3.3	208	0	16
MAR. 29...	1100	21	37	--	41	10	25	2.7	201	0	14
APR. 19...	1400	23	37	20	38	9.8	24	2.7	188	0	14
MAY 23...	1045	11	37	--	49	11	23	2.7	228	0	15
JUNE 21...	0945	15	38	--	50	12	24	3.0	246	0	18
JULY 26...	1015	51	23	30	31	5.6	13	2.7	131	0	17
AUG. 22...	0730	78	36	10	42	9.2	30	3.1	202	0	15
SEP. 20...	1445	55	37	10	36	8.5	26	2.9	179	0	16
OCT. 18...	0900	68	27	90	28	6.7	18	2.1	132	0	16
NOV. 29...	0800	79	34	20	40	9.9	24	2.2	193	0	20
DEC. 18...	1700	51	35	9	39	9.6	24	2.5	199	0	20

DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED NITRATE (N) (MG/L) (00618)	DIS- SOLVED NITRITE (N) (MG/L) (00613)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	AMMONIA NITRO- GEN (N) (MG/L) (00610)	DIS- SOLVED AMMONIA NITRO- GEN (N) (MG/L) (00608)	ORGANIC NITRO- GEN (N) (MG/L) (00605)	TOTAL NITRO- GEN (N) (MG/L) (00600)	TOTAL PHOS- PHORUS (P) (MG/L) (00665)
JAN. 07...	13	.5	--	--	.32	--	--	--	--	--
FEB. 02...	15	.4	--	--	.38	--	--	--	--	--
29...	22	.3	--	--	.38	--	--	--	--	--
MAR. 29...	14	.4	--	--	.52	--	--	--	--	--
APR. 19...	15	.4	.29	.00	.29	--	.01	.04	.34	.09
MAY 23...	8.4	.4	--	--	.58	--	--	--	--	--
JUNE 21...	9.1	.3	--	--	.58	--	--	--	--	--
JULY 26...	12	.4	.37	.00	.37	--	.08	4.6	5.1	2.3
AUG. 22...	22	.4	.26	.00	.26	--	.05	1.1	1.4	.60
SEP. 20...	17	.4	.00	.00	.00	--	.10	1.5	1.6	.95
OCT. 18...	6.9	.5	.00	.00	.00	--	.14	3.8	3.9	4.4
NOV. 29...	11	.4	.30	.00	.30	--	.13	.16	.59	.14
DEC. 18...	12	.4	.35	.00	.35	.01	.01	.52	.88	.11

GILA RIVER BASIN

09444000 SAN FRANCISCO RIVER NEAR GLENWOOD, N. MEX.--Continued

CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972.

DATE	DIS- SOLVED ORTHO- PHOS- PHORUS (P) (MG/L) (00671)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L) (70300)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L) (70301)	HARD- NESS (CA,MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AD- SORP- TION RATIO (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	DIS- SOLVED BORON (B) (UG/L) (01020)
JAN. 07...	.08	228	227	130	0	.8	339	8.0	8.5	--
FEB. 02...	.05	224	229	130	0	.8	347	8.0	7.0	--
29...	.04	262	269	150	0	1.1	398	8.1	18.5	--
MAR. 29...	.03	244	245	140	0	.9	383	7.9	15.0	--
APR. 19...	.04	270	236	140	0	.9	348	8.1	22.0	40
MAY 23...	.05	276	261	170	0	.8	398	7.7	18.0	--
JUNE 21...	.05	298	278	170	0	.8	426	8.0	20.0	--
JULY 26...	.11	168	173	100	0	.6	274	7.4	20.5	60
AUG. 22...	.10	278	260	140	0	1.1	398	7.7	17.0	50
SEP. 20...	.10	254	232	120	0	1.0	348	7.7	24.0	60
OCT. 18...	.14	174	171	97	0	.8	273	7.4	14.0	30
NOV. 29...	.10	246	240	140	0	.9	356	7.6	5.5	10
DEC. 18...	.10	--	244	140	0	.9	353	8.0	12.0	30

FIELD AND BIOCHEMICAL MEASUREMENTS, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	DIS- CHARGE (CFS) (00060)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	AIR TEMPER- ATURE (DEG C) (00020)	COLOR (PLAT- INUM- COBALT UNITS) (00080)	TUR- BID- ITY (JTU) (00070)
JAN. 07...	1500	109	355	8.0	8.5	12.5	5	30
FEB. 02...	1030	55	350	8.1	7.0	8.5	3	8
29...	1315	22	400	7.9	18.5	22.5	3	10
MAR. 29...	1100	21	380	8.1	15.0	11.5	3	3
APR. 19...	1400	23	360	8.2	22.0	20.5	3	2
MAY 23...	1045	11	395	7.9	18.0	21.5	3	3
JUNE 21...	0945	15	450	8.0	20.0	26.5	3	5
JULY 26...	1015	51	215	7.7	20.5	23.5	15	1600
AUG. 22...	0730	78	415	8.0	17.0	15.0	15	150
SEP. 20...	1445	55	361	8.0	24.0	27.0	20	275
OCT. 18...	0900	68	280	8.0	14.0	13.5	50	2200
NOV. 29...	0800	79	355	7.9	5.5	6.0	5	5
DEC. 18...	1700	51	350	8.0	12.0	10.5	5	5

09444000 SAN FRANCISCO RIVER NEAR GLENWOOD, N. MEX.--Continued
 FIELD AND BIOCHEMICAL MEASUREMENTS, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	DIS- SOLVED OXYGEN (MG/L) (003300)	CHEM- ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L) (00335)	BIO- CHEM- ICAL OXYGEN DEMAND (MG/L) (00310)	IMME- DIATE COLI- FORM (COL. PER 100 ML) (31501)	FECAL COLI- FORM (COL. PER 100 ML) (31616)	STREP- TOCOCCI (COL- ONIES PER 100 ML) (31679)	TOTAL ORGANIC CARBON * (C) (00680)
JAN. 07...	9.2	4	.2	<10	<10	<10	--
FEB. 02...	10.2	6	.6	10	0	0	--
29...	8.1	8	.4	>20	20	<10	--
MAR. 29...	8.6	3	.8	<100	<100	<100	--
APR. 19...	7.9	3	.8	40	<10	10	--
MAY 23...	8.6	4	1.0	5	<100	<100	--
JUNE 21...	8.2	2	1.4	13000	500	700	--
JULY 26...	7.4	--	--	--	11000	--	65
AUG. 22...	7.7	--	--	--	520	--	33
SEP. 20...	7.0	--	--	--	1900	--	7.0
OCT. 18...	--	--	--	--	4700	--	37
NOV. 29...	9.6	--	--	--	400	--	3.0
DEC. 18...	9.5	--	--	--	10	--	2.0

* Analyzed by New Mexico Environmental Improvement Agency.

BIOLOGICAL ANALYSES, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

Date: July 7, 1972
 Method of sampling: Surber (3 square feet)
 Organisms (classification, number)
 Diptera: Chironomidae, 3
 Tabanidae, 4
 Ephemeroptera: Baetidae, *Ephemerella* sp., 5
 Hemiptera: Belostomatidae; *Belostoma* sp. (adult male), 1
 Trichoptera: Helicopsychidae, 1
 Dydropsychidae; *Hydropsyche* sp., 2
 Cheumatopsyche sp., 1
 Leptoceridae, 1
 Rhyacophilidae; *Protophila* sp., 63 larvae, 1 pupae
 Gastropoda: Physidae, *Physa* sp.
 Turbellaria, 10

INSTANTANEOUS SUSPENDED SEDIMENT AND PARTICLE SIZE, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	TEMPER- ATURE (DEG C) (00010)	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SUS- PENDE SEDIM- ENT (MG/L) (80154)	SUS- PENDE SEDIM- ENT (T/DAY) (80155)	SUS. SED. FALL DIAM. % FINER THAN .002 MM (70337)	SUS. SED. FALL DIAM. % FINER THAN .004 MM (70338)	SUS. SED. FALL DIAM. % FINER THAN .016 MM (70340)	SUS. SED. FALL DIAM. % FINER THAN .062 MM (70342)	SUS. SED. FALL DIAM. % FINER THAN .125 MM (70343)	SUS. SED. FALL DIAM. % FINER THAN .250 MM (70344)
JAN. 07...	1500	8.5	67	1	.18	--	--	--	--	--	--
FEB. 02...	1030	7.0	55	133	20	--	--	--	--	--	--
29...	1315	18.5	22	108	6.4	--	--	--	--	--	--
MAR. 29...	1100	15.0	21	345	20	--	--	--	--	--	--
APR. 19...	1400	22.0	23	1	.06	--	--	--	--	--	--
MAY 23...	1045	18.0	11	7	.21	--	--	--	--	--	--
JUNE 21...	0945	20.0	15	26	1.1	--	--	--	--	--	--
JULY 26...	1015	20.5	145	434	170	--	--	--	--	--	--
AUG. 22...	0730	17.0	78	6220	1310	29	40	61	89	96	100
SEP. 20...	1445	24.0	55	1020	151	--	--	--	--	--	--
OCT. 18...	0900	14.0	68	5640	1040	53	62	87	94	98	100
NOV. 29...	0800	5.5	415	156	175	--	--	--	--	--	--
DEC. 18...	1100	12.0	330	8	7.1	--	--	--	--	--	--

REVISIONS: CONCENTRATION UNITS AS SHOWN IN THE COLUMN HEADINGS FOR DISSOLVED ARSENIC (01000), DISSOLVED CADMIUM (01025), HEXAVALENT CHROMIUM (01032), DISSOLVED COBALT (01035), DISSOLVED LEAD (01049), DISSOLVED MERCURY (71890), AND DISSOLVED ZINC (01090) ON PAGE 268 OF THE 1971 EDITION OF THIS REPORT SHOULD BE MICROGRAMS PER LITER (UG/L) INSTEAD OF MILLIGRAMS PER LITER (MG/L).

WATER QUALITY DATA, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	TEMPER- ATURE (DEG C) (00010)	SURFACE AREA (SQUARE MILES) (00049)	DIS- CHARGE (CFS) (00060)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH	ALKA- LITY AS CACO3 (MG/L) (00400)	BICAR- BONATE (MG/L) (00440)	CIN- BONATE (MG/L) (00445)	TOTAL NITRO- GEN (MG/L) (00600)
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08343500 RIO SAN JOSE NEAR GRANTS. N. MEX. (LAT 35°04'27", LONG 107°45'01")

JUNE, 1972										
21...	1400	17.5	--	3.3	1280	7.8	249	364	0	--

08383350 RIO AGUA NEGRA AT MOUTH, NEAR SANTA ROSA, N. MEX. (LAT 34°52'28", LONG 104°28'33")

JAN., 1972									
18...	1210	10.0	--	15	3050	7.7	156	190	--

08385950 PECOS RIVER AT BOB CROSBY BRIDGE, NEAR ACME, N. MEX. (LAT 33°34'10", LONG 104°22'20")

[illegible]

08386070 PECOS RIVER AT TATUM BRIDGE, NEAR ROSWELL, N. MEX. (LAT 33°23'50", LONG 104°23'40")

MAY , 1972									
04...	1315	--	--	--	--	--	--	--	--
17...	1100	--	--	--	--	--	--	--	--
25...	1100	--	--	--	--	--	--	--	--
31...	1150	--	--	--	--	--	--	--	--
JUNE									
07...	1200	--	--	--	--	--	--	--	--
21...	1215	--	--	--	--	--	--	--	--

	TOTAL KJEL- DAHL	DIS- SOLVED NITRITE PLUS NITRATE	DIS- SOLVED ORTHO PHOS- PHATE	TOTAL PHOS- PHORUS	DIS- SOLVED ORTHO. PHOS- PHORUS	HARD- NESS (CA+MG)	NON- CAR- BONATE HARD- NESS	DIS- SOLVED CAL- CIUM (CA)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED NA
DATE	(MG/L) (00625)	(MG/L) (00631)	(MG/L) (00660)	(MG/L) (00665)	(MG/L) (00671)	(MG/L) (00900)	(MG/L) (00915)	(MG/L) (00915)	(MG/L) (00925)	(MG/L) (00930)

08343500 RIO SAN JOSE NEAR GRANTS, N. MEX.--Continued

JUNE, 1972										
21...	--	2.1	--	--	--	400	150	93	41	140

08383350 RIO AGUA NEGRA AT MOUTH. NEAR SANTA ROSA. N. MEX.--Continued

JAN., 1972										
18...	--	.13	.00	--	.00	1500	1300	460	81	170

08385950 PECOS RIVER AT BOB CROSBY BRIDGE, NEAR ACME, N. MEX.--Continued

[illegible]

08386070 PECOS RIVER AT TATUM BRIDGE; NEAR ROSWELL, N. MEX.--Continued

[illegible]

WATER QUALITY DATA, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	SODIUM AD- SORP- TION RATIO (00931)	PERCENT SODIUM (00932)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED SILICA (SiO2) (MG/L) (00955)	DIS- SOLVED BORON (B) (MG/L) (01020)	DIS- SOLVED IRON (FE) (MG/L) (01046)	2,4-D (MG/L) (39730)
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08343500 RIO SAN JOSE NEAR GRANTS, N. MEX.--Continued

JUNE, 1972										
21...	3.0	43	7.1	100	290	.7	30	--	--	--

08383350 - RIO AGUA NEGRA AT MOUTH NR SR, N. MEX. (LAT 34 52 28 LONG 104 28 33)

JAN., 1972										
18...	1.9	20	3.4	270	1300	.8	18	130	30	--

08385950 PECOS RIVER AT BOB CROSBY BRIDGE, NEAR ACME, N. MEX.--Continued

MAY, 1972										
17...	--	--	--	--	--	--	--	--	--	.00
31...	--	--	--	--	--	--	--	--	--	.00
JUNE										
07...	--	--	--	--	--	--	--	--	--	.00

08386070 PECOS RIVER AT TATUM BRIDGE, NEAR ROSWELL, N. MEX.--Continued

MAY, 1972										
04...	--	--	--	--	--	--	--	--	--	.00
17...	--	--	--	--	--	--	--	--	--	.00
25...	--	--	--	--	--	--	--	--	--	.00
31...	--	--	--	--	--	--	--	--	--	.00
JUNE										
07...	--	--	--	--	--	--	--	--	--	.00
21...	--	--	--	--	--	--	--	--	--	--

DATE	2,4-D IN BOTTOM DE- POSITS (UG/KG) (39731)	2,4,5-T IN BOTTOM DE- POSITS (UG/L) (39740)	2,4,5-T IN BOTTOM DE- POSITS (UG/KG) (39741)	SILVEX IN BOTTOM DE- POSITS (UG/L) (39760)	SILVEX IN BOTTOM DE- POSITS (UG/KG) (39761)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L) (70300)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L) (70301)	DIS- SOLVED SOLIDS (TONS PER DAY) (70302)	DIS- SOLVED SOLIDS (TONS PER AC-FT) (70303)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE MSL) (72000)
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08343500 RIO SAN JOSE NEAR GRANTS, N. MEX.--Continued

JUNE, 1972										
21...	--	--	--	--	--	--	861	7.67	1.17	--

08383350 - RIO AGUA NEGRA AT MOUTH NR SR, N. MEX. (LAT 34 52 28 LONG 104 28 33)

JAN., 1972										
18...	--	--	--	--	--	2540	2400	103	3.45	--

08385950 PECOS RIVER AT BOB CROSBY BRIDGE, NEAR ACME, N. MEX.--Continued

MAY, 1972										
17...	A	--	--	.00	--	--	--	--	--	--
31...	A	--	.00	.00	--	--	--	--	--	--
JUNE										
07...	A	--	.00	.04	--	--	--	--	--	--

08386070 PECOS RIVER AT TATUM BRIDGE, NEAR ROSWELL, N. MEX.--Continued

MAY, 1972										
04...	A,B	<1	.00	<1	.00	<1	--	--	--	--
17...	A	--	.00	--	.00	--	--	--	--	--
25...	A	--	.00	--	.00	--	--	--	--	--
31...	C	--	.00	--	.24	--	--	--	--	--
JUNE										
07...	D	--	.00	--	.05	--	--	--	--	--
21...	E	<2	--	<1	--	<1	--	--	--	--

A OTHER VALUES IN MICROGRAMS PER LITER: 2,4 DP, 0.00; DICAMBA, 0.00
 B OTHER VALUES IN MICROGRAMS PER LITER: (BOTTOM DEPOSIT SAMPLE): 2,4 DP, <1.6, DICAMBA, <0.5
 C OTHER VALUES IN MICROGRAMS PER LITER: 2,4 DP, 0.03; DICAMBA, 0.00
 D OTHER VALUES IN MICROGRAMS PER LITER: 2,4 DP, 0.04; DICAMBA, 0.00
 E OTHER VALUES IN MICROGRAMS PER LITER: (BOTTOM DEPOSIT SAMPLE): 2,4 DP, <1.9; DICAMBA, <0.7

QUALITY OF SURFACE WATER DATA AT PARTIAL-RECORD STATIONS OR MISCELLANEOUS SITES

WATER QUALITY DATA, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DENSITY (GM/ML AT 20 C) (71820)
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PECOS RIVER AT FIRST FORD, N. MEX. (LAT 32°10'42", LONG 103°59'50".10)

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DENSITY (GM/ML AT 20 C) (71820)
FEB., 1972				
07...	1040	15900	4600	1.006
MAY				
05...	1515	37500	12950	1.017
JUNE				
16...	1310	56700	21600	1.028
JULY				
25...	1500	9810	2750	--
SEP.				
06...	1410	3930	780	--
NOV.				
06...	1000	11200	3000	1.003

PECOS RIVER AT FISHING ROCK CROSSING, N. MEX. (LAT 32°13'05", LONG 104°00'08".10)

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DENSITY (GM/ML AT 20 C) (71820)
FEB., 1972				
07...	1055	8060	1900	--
MAY				
05...	1530	9860	2400	--
JUNE				
06...	1455	11200	2850	1.003
JULY				
25...	1525	4390	850	--
SEP.				
06...	1440	2830	440	--
NOV.				
06...	1145	5910	1240	--

INSTANTANEOUS SUSPENDED SEDIMENT, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	TUR- BID- ITY (JTU) (00070)	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SUS- PEN- DED SEDIM- ENT DIS- CHARGE (MG/L) (80154)	SUS- PEN- DED SEDIM- ENT DIS- CHARGE (T/DAY) (80155)
------	------	---	---	--	---	--

09343000 RIO BLANCO NEAR PAGOSA SPRINGS, COLO. (LAT 37°12'46", LONG 106°47'38")

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	TUR- BID- ITY (JTU) (00070)	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SUS- PEN- DED SEDIM- ENT DIS- CHARGE (MG/L) (80154)	SUS- PEN- DED SEDIM- ENT DIS- CHARGE (T/DAY) (80155)
NOV., 1972						
06...	0900	145	10	69	37	6.9
06...	1240	160	90	66	505	90
07...	1115	152	15	63	56	9.5
08...	1005	150	15	75	57	12
08...	1215	219	850	64	15800	2730
08...	1425	195	180	45	15400	1870
09...	1040	156	9	61	30	4.9
09...	1155	157	120	53	7240	1040
10...	1230	150	20	45	60	7.3
13...	1015	169	7	39	18	1.9
14...	1045	145	10	45	59	7.2
15...	0900	142	6	4.1	2	2.2

09343300 RIO BLANCO BELOW BLANCO DIVERSION DAM, COLO. (LAT 37°12'11", LONG 106°48'45")

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	TUR- BID- ITY (JTU) (00070)	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SUS- PEN- DED SEDIM- ENT DIS- CHARGE (MG/L) (80154)	SUS- PEN- DED SEDIM- ENT DIS- CHARGE (T/DAY) (80155)
NOV., 1972						
06...	0945	145	10	21	30	1.7
06...	1330	153	30	66	140	25
07...	1100	152	8	63	29	4.9
08...	1010	150	9	19	28	1.4
08...	1225	257	1050	64	32000	5530
08...	1255	168	95	58	2470	387
08...	1455	160	75	45	1320	160
09...	0955	157	240	61	3960	652
09...	1025	156	40	57	1740	268
09...	1225	172	110	53	5290	757
09...	1425	205	220	53	8500	1220
10...	1200	150	45	44	1560	185
13...	1030	169	65	39	1590	167
14...	1055	145	15	45	109	13
15...	0910	142	6	40	79	8.5
20...	1145	142	6	35	23	2.2

QUALITY OF SURFACE WATER DATA AT PARTIAL-RECORD STATIONS OR MISCELLANEOUS SITES

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INSTANTANEOUS SUSPENDED SEDIMENT, CALENDAR YEAR JANUARY 1972 TO DECEMBER 1972

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	TUR- BUD- ITY (JTU) (00070)	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SUS- PENDE SEDI- MENT (MG/L) (80154)	SUS- PENDE SEDI- MENT DIS- CHARGE (T/DAY) (80155)
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09343400 RIO BLANCO AT HIGHWAY 84 BRIDGE, COLO. (LAT 37°08'30", LONG.106°50'24")

NOV., 1972

06...	1430	160	15	22	20	1.2
07...	1145	152	20	61	99	16
08...	0940	150	10	61	46	7.6
08...	1610	159	30	45	181	22
09...	1010	174	20	55	74	11
10...	1115	169	60	43	170	20
13...	0945	177	30	39	124	13
14...	1015	145	15	33	72	6.4
15...	0815	142	10	39	23	2.4

REMARKS: Ground-water sites in this table are segregated by county which appear alphabetically. The sites are then listed in ascending local identifiers (see p. 10). The water-quality data are listed in ascending parameter-code numbers (see p. 16).

BERNALILLO COUNTY										SPECIFIC CONDUCTANCE (MICROMHOS)
LOCAL IDENTIFIER	STATION	NUMBER	DATE OF SAMPLE	TIME	GEOLOGIC UNIT	TEMPERATURE (DEG C) (00010)	INSTANTANEOUS FLOW RATE (GPM) (00059)	TURBIDITY (JTU) (00070)	COLOR (PLATINUM-COBALT UNITS) (00080)	
04E.04.213	350228106312401	72-03-30	0615	--	--	22.5	--	1	0	569
8.212 PROJECTED	350453106445401	72-06-28	0900	--	--	30.0	--	--	--	660
		72-06-28	1100	--	--	30.0	--	--	--	657
1.213 PROJECTED	350507106432501	72-06-28	1200	--	--	30.0	--	--	--	456
2.434 PROJECTED	351219106421601	72-06-28	1500	--	--	21.0	--	--	--	381
02E.09.423	350934106431001	72-06-28	1015	--	--	23.5	--	--	--	361
		72-06-28	1630	--	--	23.5	--	--	--	380

DATE OF SAMPLE	PH	CARBON DIOXIDE (CO2) (MG/L) (00400)	ALKA- LITY AS CACO3 (MG/L) (00410)	BICAR- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	DIS- SOLVED ORTHO PHOS- PHATE (PO4) (MG/L) (00660)	TOTAL PHOS- PHORUS (P) (MG/L) (00665)	DIS- SOLVED ORTHO. PHOS- PHORUS (P) (MG/L) (00671)	HARD- NESS (CA+MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)
72-03-30	7.5	9.6	156	190	0	6.5	.18	--	.06	210	56	65
72-06-28	8.7	--	--	--	--	.73	--	.06	--	--	--	--
72-06-28	8.6	--	--	--	--	.67	--	.06	--	--	--	--
72-06-28	8.8	--	--	--	--	2.5	--	.03	--	--	--	--
72-06-28	8.1	--	--	--	--	.49	--	.03	--	--	--	--
72-06-28	8.2	--	--	--	--	1.6	--	.02	--	--	--	--
72-06-28	8.2	--	--	--	--	1.9	--	.04	--	--	--	--

DATE OF SAMPLE	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L) (00925)	DIS-SOLVED SODIUM (NA) (MG/L) (00930)	SODIUM AD-SORP-TION RATIO (00931)	PERCENT SODIUM (00932)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L) (00935)	DIS-SOLVED CHLO-RIDE (CL) (MG/L) (00940)	DIS-SOLVED SULFATE (SO4) (MG/L) (00945)	DIS-SOLVED FLUO-RIDE (F) (MG/L) (00950)	DIS-SOLVED SILICA (SI02) (MG/L) (00955)	DIS-SOLVED ARSENIC (AS) (UG/L) (01000)	DIS-SOLVED BARIUM (BA) (UG/L) (01005)	DIS-SOLVED BORON (B) (UG/L) (01020)
72-03-30	12	35	1.0	26	3.1	20	82	.7	28	0	0	50
72-06-28	--	--	--	--	--	--	--	1.8	--	70	0	380
72-06-28	--	--	--	--	--	--	--	2.2	--	70	0	360
72-06-28	--	--	--	--	--	--	--	1.2	--	20	0	260
72-06-28	--	--	--	--	--	--	--	.8	--	5	0	70
72-06-28	--	--	--	--	--	--	--	1.0	--	6	0	120
72-06-28	--	--	--	--	--	--	--	1.0	--	10	0	150

DATE OF SAMPLE	DIS- SOLVED CAD- MIUM (CD) (UG/L) (01025)	HEXA- VALENT CHRO- MIUM (CR6) (UG/L) (01032)	DIS- SOLVED COPPER (CU) (UG/L) (01040)	DIS- SOLVED IRON (FE) (UG/L) (01046)	TOTAL LEAD (PB) (UG/L) (01051)	DIS- SOLVED MAN- GANESE (MN) (UG/L) (01056)	DIS- SOLVED SILVER (AG) (UG/L) (01075)	DIS- SOLVED ZINC (ZN) (UG/L) (01090)	DIS- SOLVED SELE- NIUM (SE) (UG/L) (01145)
72-03-30	0	0	1	30	4	20	2	110	1
72-06-28	0	0	1	60	6	20	0	--	1
72-06-28	0	0	1	20	8	10	0	--	0
72-06-28	0	10	1	10	8	0	0	--	1
72-06-28	0	0	1	20	7	0	0	--	0
72-06-28	0	0	0	50	10	0	0	--	0
72-06-28	0	0	1	20	8	0	0	--	0

[illegible]

QUALITY OF GROUND WATER DATA FOR NEW MEXICO

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DEBACA COUNTY

DEBACA COUNTY													SPE-
LOCAL IDENTIFIER	STATION	NUMBER	DATE OF SAMPLE	TIME	GEOLOGIC UNIT	TEMPERATURE (DEG C) (00010)	INSTANTANEOUS FLOW RATE (GPM) (00059)	TURBIDITY (JTU) (00070)	COLOR (PLATINUM-COBALT UNITS) (00080)	CONDUCTANCE (MICRO-MHOS) (00095)	CON-	CIFIC	
03N.26E.02.42443	343038104103401		72-05-16	1703	--	20.0	--	--	--	3290	DUCTANCE		
04N.25E.02.41441	343554104170901		72-05-16	1310	--	19.0	--	--	--	1060			
04N.26E.16.2222	343445104124001		72-05-15	1740	--	18.5	--	--	--	1270			
05N.24E.13.34111	343908104210701		72-05-16	1450	--	19.0	--	--	--	1370			
05N.24E.34.133	343651104232501		72-07-29	1330	--	--	--	--	--	1310			
05N.24E.35.343	343621104221101		72-07-29	1415	--	--	--	--	--	779			
05N.24E.36.112	343708104211101		72-07-29	1400	--	--	--	--	--	780			
05N.26E.30.300	343724104134601		72-05-15	1645	--	20.0	--	--	--	787			
DATE OF SAMPLE	PH (UNITS) (00400)	CARBON DIOXIDE (CO2) (MG/L) (00405)	ALKALINITY AS CAC03 (MG/L) (00410)	BICARBONATE (HCO3) (MG/L) (00440)	CARBONATE (CO3) (MG/L) (00445)	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	DIS-SOLVED ORTHO PHOSPHATE (P04) (MG/L) (00660)	TOTAL PHOSPHORUS (P) (MG/L) (00665)	DIS-SOLVED ORTHO PHOSPHORUS (P) (MG/L) (00671)	HARDNESS (CA+MG) (MG/L) (00900)	NON-CARBONATE HARDNESS (MG/L) (00902)	DIS-SOLVED CALCIUM (CA) (MG/L) (00915)	
72-05-16	8.2	4.3	347	423	0	.34	--	--	--	45	0	10	
72-05-16	7.6	15	313	382	0	.00	--	--	--	310	0	74	
72-05-15	8.0	6.6	340	415	0	.00	--	--	--	100	0	19	
72-05-16	7.8	4.8	157	191	0	1.3	--	--	--	470	310	100	
72-07-29	8.0	2.5	129	157	0	.36	--	--	--	660	530	190	
72-07-29	8.2	1.4	117	143	0	.16	--	--	--	230	110	56	
72-07-29	7.7	4.6	117	143	0	.16	--	--	--	220	110	55	
72-05-15	7.9	6.3	257	313	0	.14	--	--	--	130	0	28	
DATE OF SAMPLE	DIS-SOLVED MAGNESIUM (MG) (00925)	DIS-SOLVED SODIUM (NA) (MG/L) (00930)	SODIUM ADSORPTION RATIO (00931)	PERCENT SODIUM (00932)	DIS-SOLVED POTASSIUM (K) (MG/L) (00935)	DIS-SOLVED CHLORIDE (CL) (MG/L) (00940)	DIS-SOLVED SULFATE (SO4) (MG/L) (00945)	DIS-SOLVED FLUORIDE (F) (MG/L) (00950)	DIS-SOLVED SILICA (SI02) (MG/L) (00955)	DIS-SOLVED ARSENIC (AS) (UG/L) (01000)	DIS-SOLVED BARIUM (BA) (UG/L) (01005)	DIS-SOLVED BORON (B) (UG/L) (01020)	
72-05-16	4.8	700	46	97	2.0	680	310	4.2	9.6	--	--	--	
72-05-16	30	140	3.5	50	1.6	33	210	1.7	23	--	--	--	
72-05-15	13	250	11	84	1.4	69	220	2.8	16	--	--	--	
72-05-16	53	130	2.6	38	2.0	66	500	1.2	21	--	--	--	
72-07-29	44	34	.6	10	3.1	52	550	.4	22	--	--	--	
72-07-29	21	69	2.0	40	1.7	60	180	.8	15	--	--	--	
72-07-29	21	72	2.1	41	1.9	59	190	.7	15	--	--	--	
72-05-15	14	130	5.0	69	.9	41	98	2.1	22	--	--	--	
DATE OF SAMPLE	DIS-SOLVED CADMIUM (CD) (UG/L) (01025)	DIS-SOLVED HEXAVALENT CHROMIUM (CR6) (UG/L) (01032)	DIS-SOLVED COPPER (CU) (UG/L) (01040)	DIS-SOLVED IRON (FE) (UG/L) (01046)	TOTAL LEAD (PB) (UG/L) (01051)	DIS-SOLVED MANGANESE (MN) (UG/L) (01056)	DIS-SOLVED SILVER (AG) (UG/L) (01075)	DIS-SOLVED ZINC (ZN) (UG/L) (01090)	DIS-SOLVED SELENIUM (SE) (UG/L) (01145)				
72-05-16	--	--	--	--	--	--	--	--	--				
72-05-16	--	--	--	--	--	--	--	--	--				
72-05-15	--	--	--	--	--	--	--	--	--				
72-05-16	--	--	--	--	--	--	--	--	--				
72-07-29	--	--	--	--	--	--	--	--	--				
72-07-29	--	--	--	--	--	--	--	--	--				
72-07-29	--	--	--	--	--	--	--	--	--				
72-05-15	--	--	--	--	--	--	--	--	--				
DATE OF SAMPLE	DIS-SOLVED SOLIDS (RESIDUE AT 180 C) (MG/L) (70300)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L) (70301)	DIS-SOLVED SOLIDS (TONS PER AC-FT) (70303)	TOTAL MERCURY (HG) (UG/L) (71900)									
72-05-16	--	1930	2.62	--									
72-05-16	--	701	.95	--									
72-05-15	--	795	1.08	--									
72-05-16	--	973	1.32	--									
72-07-29	--	974	1.32	--									
72-07-29	--	475	.65	--									
72-07-29	--	486	.66	--									
72-05-15	--	491	.67	--									

QUALITY OF GROUND WATER DATA FOR NEW MEXICO

DONA ANA COUNTY													SPE- CIFIC CON- DUCT- ANCE	PH
LOCAL IDENT- IFIER	STATION	NUMBER	DATE OF SAMPLE	TIME	GEO- LOGIC UNIT	DEPTH (FT) (00003)	TEMPER- ATURE (DEG C) (00010)	COLOR (PLAT- INUM- COBALT UNITS) (00080)	(MICRO- MHOS) (00095)	(UNITS) (00400)				
18S.04W.08.422	324523107155301	72-05-15	--	--	--	--	--	--	1860	7.6				
19S.02W.03.122	324133107020201	72-05-12	--	--	--	--	23.0	--	662	7.7				
19S.02W.35.212	323709107004401	72-05-12	--	--	--	--	15.5	--	4230	7.8				
19S.03W.08.414	324011107100701	72-05-12	--	--	--	--	19.0	--	1160	8.0				
19S.04W.34.131	323654107145001	72-05-12	--	--	--	--	--	--	467	8.3				
21S.02W.31.432	322604107044801	72-11-14	1430	120DTIL	--	--	18.5	--	830	8.1				
21S.05E.28.222	322729106243301	72-06-08	1310	--	--	--	23.5	--	774	7.7				
21S.05E.32.222	322635106264401	72-01-07	1440	1108LSN	--	--	25.0	--	495	7.7				
		72-06-07	1455	1108LSN	--	--	25.5	--	495	7.6				
22S.01E.26.214	322635106264401	72-12-12	1450	1108LSN	501	--	24.5	--	512	7.7				
22S.01E.27.411A	322214106483301	72-05-19	--	--	--	--	17.0	--	1410	7.6				
22S.01E.28.140	322158106493401	72-11-13	--	112SNTF	390	--	18.0	--	612	8.1				
	322156106505301	72-05-19	--	--	--	--	17.0	--	586	8.2				
23S.02E.19.242	321748106461101	72-05-26	--	--	--	--	18.0	--	1760	7.7				
23S.02E.32.221	322130106451401	72-05-26	--	--	--	--	25.5	--	1270	8.1				
23S.02E.33.234	321554106442101	72-11-28	--	112SNTF	500	--	13.0	--	498	8.1				
22S.04E.01.431	322503106290801	72-08-09	1415	--	--	--	25.5	--	927	8.1				
22S.04E.11.344	322408106301501	72-06-08	1140	--	--	--	23.5	--	480	7.7				
DATE OF SAMPLE	CARBON DIOXIDE (CO2) (MG/L) (00405)	ALKA- LITY AS CACO3 (MG/L) (00410)	BICAR- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED NITRATE (N) (MG/L) (00618)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	DIS- SOLVED ORTHOPHOS- PHATE (PO4) (MG/L) (00660)	TOTAL PHOS- PHORUS (P) (MG/L) (00665)	DIS- SOLVED ORTHOPHOS- PHORUS (P) (MG/L) (00671)	HARD- NESS (CA+MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)		
72-05-15	6.0	123	150	0	--	.36	--	--	--	600	480	190		
72-05-12	3.8	98	119	0	--	1.6	--	--	--	160	63	43		
72-05-12	3.2	103	126	0	--	.35	--	--	--	1300	1200	400		
72-05-12	3.2	167	203	0	--	.14	--	--	--	320	160	100		
72-05-12	1.8	187	228	0	--	2.0	.09	--	.03	91	0	20		
72-11-14	4.5	292	356	0	--	9.2	--	--	--	52	0	13		
72-06-08	5.0	129	157	0	--	3.5	.03	--	.01	270	140	72		
72-01-07	4.8	122	149	0	--	.96	.00	--	.00	170	47	48		
72-06-07	5.5	112	136	0	--	2.0	.03	--	.01	180	72	52		
72-12-12	4.8	123	150	0	--	2.0	.03	--	.01	180	54	51		
72-05-19	8.4	171	208	0	--	2.1	--	--	--	530	360	170		
72-11-13	2.1	135	165	0	--	.01	.06	--	.02	200	69	67		
72-05-19	1.4	116	141	0	--	.04	--	--	--	190	76	61		
72-05-26	5.4	139	169	0	--	1.7	--	--	--	660	530	210		
72-05-26	1.6	102	124	0	--	.22	--	--	--	300	200	76		
72-11-28	2.0	126	154	0	--	.00	.06	--	.02	140	15	42		
72-08-09	1.6	101	123	0	--	8.5	.03	--	.01	340	240	100		
72-06-08	4.9	126	154	0	--	1.9	.03	--	.01	160	30	46		
DATE OF SAMPLE	DIS- SOLVED MAG- NE- SIUM (MG) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	SODIUM AD- SORP- TION RATIO (00931)	PERCENT SODIUM (00932)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED SILICA (SiO2) (MG/L) (00955)	DIS- SOLVED ARSENIC (AS) (UG/L) (01000)	DIS- SOLVED BORON (B) (UG/L) (01020)	DIS- SOLVED CAD- MIUM (CD) (UG/L) (01025)		
72-05-15	31	230	4.1	45	9.4	190	590	.4	33	--	--	--		
72-05-12	13	66	2.3	45	14	68	110	4.2	45	--	--	--		
72-05-12	66	590	7.2	50	16	580	1400	.3	29	--	--	--		
72-05-12	18	170	4.1	53	6.7	75	300	.7	33	--	--	--		
72-05-12	10	64	2.9	58	7.5	13	26	.9	72	--	--	--		
72-11-14	4.7	170	10	87	1.5	36	55	1.2	24	--	--	--		
72-06-08	21	53	1.4	30	5.6	50	170	1.8	31	--	60	--		
72-01-07	12	34	1.1	30	4.0	26	86	.8	38	--	40	--		
72-06-07	13	32	1.0	27	3.6	27	86	1.2	37	--	40	--		
72-12-12	12	36	1.2	30	3.3	28	80	.9	38	--	50	--		
72-05-19	25	140	2.7	36	7.9	120	410	.6	25	--	--	--		
72-11-13	9.0	47	1.4	33	3.6	67	72	.3	23	--	--	--		
72-05-19	9.5	42	1.3	32	3.6	47	110	.5	24	--	--	--		
72-05-26	34	220	3.7	42	8.3	170	520	.5	33	--	--	--		
72-05-26	26	150	3.8	52	5.2	250	140	.7	31	--	--	--		
72-11-28	8.8	42	1.5	38	6.7	43	58	.6	26	--	--	--		
72-08-09	23	51	1.2	24	3.7	86	200	2.4	23	--	60	--		
72-06-08	10	35	1.2	32	3.7	15	84	.8	35	--	30	--		

QUALITY OF GROUND WATER DATA FOR NEW MEXICO

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DONA ANA COUNTY--Continued

DATE OF SAMPLE	DIS- SOLVED COPPER (CU) (01040)	TOTAL IRON (FE) (01045)	DIS- SOLVED IRON (FE) (01046)	DIS- SOLVED LEAD (PB) (01049)	TOTAL MAN- GANESE (MN) (01055)	DIS- SOLVED MAN- GANESE (MN) (01056)	DIS- SOLVED ZINC (ZN) (01090)	TOTAL ALUM- INUM (AL) (01105)	ALDRIN (UG/L) (39330)	LINDANE (UG/L) (39340)	CHLOR- DANE (UG/L) (39350)	DDD (UG/L) (39360)
72-05-15	--	--	--	--	--	--	--	--	--	--	--	--
72-05-12	--	--	--	--	--	--	--	--	--	--	--	--
72-05-12	--	2200	--	--	--	--	--	--	--	--	--	--
72-05-12	--	--	--	--	--	--	--	--	--	--	--	--
72-05-12	--	--	40	--	--	0	--	--	--	--	--	--
72-11-14	--	--	--	--	--	--	--	--	--	--	--	--
72-06-08	--	--	10	--	--	14	--	--	--	--	--	--
72-01-07	--	--	0	--	--	13	--	--	--	--	--	--
72-06-07	--	--	40	--	--	43	--	--	--	--	--	--
72-12-12	--	--	9	--	--	0	--	--	--	--	--	--
72-05-19	--	--	--	--	--	--	--	--	--	--	--	--
72-11-13	--	230	9	--	--	10	--	--	--	--	--	--
72-05-19	--	--	--	--	--	--	--	--	--	--	--	--
72-05-26	--	--	--	--	--	--	--	--	--	--	--	--
72-05-26	--	--	--	--	--	--	--	--	--	--	--	--
72-11-28	--	110	9	--	30	20	--	--	--	--	--	--
72-08-09	--	--	20	--	--	40	--	--	--	--	--	--
72-06-08	--	--	10	--	--	21	--	--	--	--	--	--

DATE OF SAMPLE	DDE (UG/L) (39365)	DDT (UG/L) (39370)	DI- ELDRIN (UG/L) (39380)	ENDRIN (UG/L) (39390)	HEPTA- CHLOR (UG/L) (39410)	HEPTA- CHLOR EPOXIDE (UG/L) (39420)	2,4-D (UG/L) (39730)	2,4,5-T (UG/L) (39740)	SILVEX (UG/L) (39760)	UIS- SOLIDS (RESI- DUE AT 180 C) (MG/L) (70300)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L) (70301)	DIS- SOLVED SOLIDS (TONS PER AC-FT) (70303)
72-05-15	--	--	--	--	--	--	--	--	--	--	1350	1.84
72-05-12	--	--	--	--	--	--	--	--	--	--	429	.58
72-05-12	--	--	--	--	--	--	--	--	--	--	3140	4.27
72-05-12	--	--	--	--	--	--	--	--	--	--	804	1.09
72-05-12	--	--	--	--	--	--	--	--	--	--	335	.46
72-11-14	--	--	--	--	--	--	--	--	--	--	522	.71
72-06-08	--	--	--	--	--	--	--	--	--	--	497	.68
72-01-07	--	--	--	--	--	--	--	--	--	--	326	.44
72-06-07	--	--	--	--	--	--	--	--	--	--	328	.45
72-12-12	--	--	--	--	--	--	--	--	--	--	332	.45
72-05-19	--	--	--	--	--	--	--	--	--	--	1010	1.37
72-11-13	--	--	--	--	--	--	--	--	--	--	370	.50
72-05-19	--	--	--	--	--	--	--	--	--	--	367	.50
72-05-26	--	--	--	--	--	--	--	--	--	--	1290	1.75
72-05-26	--	--	--	--	--	--	--	--	--	--	741	1.01
72-11-28	--	--	--	--	--	--	--	--	--	--	303	.41
72-08-09	--	--	--	--	--	--	--	--	--	--	587	.80
72-06-08	--	--	--	--	--	--	--	--	--	--	314	.43

DATE OF SAMPLE	DENSITY (GM/ML AT 20 C) (71820)	HY- DROX- IDE (OH) (MG/L) (71830)	TOTAL NITRATE (NO3) (MG/L) (71850)	MAN- GANESE (MN) (UG/L) (71883)	IRON (FE) (UG/L) (71885)	TOTAL MERCURY (MG) (UG/L) (71900)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE MSL) (72000)	TOTAL DEPTH OF HOLE (FT. BELOW LSD) (72001)	DEPTH TO TOP OF WATER- BEARING ZONE (FT) (72002)	TOTAL DEPTH OF WELL (FT) (72008)	DEPTH TO BOT- TOM OF SAMPLE INTER- VAL (FT) (72016)
72-05-15	--	--	--	--	--	--	--	--	--	--	--
72-05-12	--	--	--	--	--	--	--	--	--	--	--
72-05-12	--	--	--	--	--	--	--	--	--	--	--
72-05-12	--	--	--	--	--	--	--	--	--	--	--
72-05-12	--	--	--	--	--	--	--	--	--	--	--
72-11-14	--	--	--	--	--	--	--	--	--	--	--
72-06-08	--	--	--	--	--	--	--	--	--	--	--
72-01-07	--	--	--	--	--	--	--	--	--	--	--
72-06-07	--	--	--	--	--	--	--	--	--	--	--
72-12-12	--	--	--	--	--	--	--	521	--	--	--
72-05-19	--	--	--	--	--	--	--	E390	--	--	--
72-11-13	--	--	--	--	--	--	--	--	--	--	--
72-05-19	--	--	--	--	--	--	--	--	--	--	--
72-05-26	--	--	--	--	--	--	--	--	--	--	--
72-05-26	--	--	--	--	--	--	--	500	--	--	--
72-11-28	--	--	--	--	--	--	--	--	--	--	--
72-08-09	--	--	--	--	--	--	--	--	--	--	--
72-06-08	--	--	--	--	--	--	--	--	--	--	--

E Estimated.

QUALITY OF GROUND WATER DATA FOR NEW MEXICO

DONA ANA COUNTY--Continued

DONA ANA COUNTY--Continued												
LOCAL IDENT- I- FIER	STATION	NUMBER	DATE OF SAMPLE	TIME	GEO- LOGIC UNIT	DEPTH (FT) (000003)	TEMPER- ATURE (DEG C) (00010)	COLOR (PLAT- INUM- COBALT UNITS) (000080)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (000095)	PH (UNITS) (00400)		
22S.04E.11.444	322408106294801		72-06-08	1130	--	--	23.5	--	393	7.8		
22S.04E.14.133	322339106304301		72-12-12	1345	1108LSN	480	22.0	--	421	7.5		
22S.04E.23.214	322250106302501		72-12-12	1325	1108LSN	372	21.0	--	606	7.9		
22S.04W.11.224	322434106295001		72-08-09	1510	--	--	24.5	--	632	8.1		
22S.05E.05.242	322538106264101		72-06-07	1530	--	--	23.5	--	397	8.0		
22S.05E.05.313	321510106274101		72-01-07	1415	1108LSN	--	22.0	--	334	8.0		
			72-06-07	1440	1108LSN	--	25.0	--	343	7.9		
			72-12-12	1420	1108LSN	523	24.0	--	336	8.1		
22S.05E.07.242	322452106274401		72-06-07	1545	--	--	24.0	--	362	8.1		
22S.05E.07.342	322415106281801		72-01-07	1225	1108LSN	--	23.5	--	327	8.1		
			72-06-07	1425	1108LSN	--	27.0	--	548	7.8		
			72-12-12	1225	1108LSN	947	23.0	--	384	7.9		
22S.05E.08.334	322408106273001		72-06-07	1710	--	--	25.0	--	379	7.3		
22S.05E.09.113	322452106263701		72-06-08	1045	--	--	24.0	--	347	7.6		
22S.05E.15.221	321401106245201		72-02-02	1655	1108LSN	--	21.5	--	554	7.6		
			72-06-06	1450	1108LSN	--	23.0	--	488	7.6		
			72-12-12	1105	1108LSN	--	22.5	--	463	7.7		
22S.05F.16.111	322403106263901		72-01-07	1135	1108LSN	--	21.5	--	276	8.0		
			72-06-07	1630	1108LSN	--	25.0	--	280	7.8		
	322405106264401		72-06-07	1635	--	--	24.5	--	372	8.2		
DATE OF SAMPLE	CARBON DIOXIDE (CO2) (MG/L) (00405)	ALKA- LINITY AS CACO3 (MG/L) (00410)	BICAR- BONATE (HCO3) (MG/L) (00440)	CAP- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED NITRATE (N) (MG/L) (00618)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	DIS- SOLVED ORTHO- PHOS- PHATE (PO4) (MG/L) (00660)	TOTAL PHOS- PHORUS (P) (MG/L) (00665)	DIS- SOLVED ORTHO- PHOS- PHORUS (P) (MG/L) (00671)	HARD- NESS (CA+MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)
72-06-08	3.9	125	152	0	--	1.2	.09	--	.03	140	16	42
72-12-12	9.9	160	195	0	--	.04	.03	--	.01	170	8	49
72-12-12	4.2	171	208	0	--	7.7	.12	--	.04	240	68	69
72-08-09	1.6	100	122	0	--	.46	.03	--	.01	210	110	53
72-06-07	2.3	117	143	0	--	1.3	.00	--	.00	140	23	41
72-01-07	2.0	105	128	0	--	.46	.00	--	.00	110	6	31
72-06-07	2.7	108	132	0	--	1.2	.00	--	.00	120	13	36
72-12-12	1.6	104	127	0	--	.98	.03	--	.01	110	6	32
72-06-07	1.8	116	141	0	--	1.8	.00	--	.00	130	16	41
72-01-07	1.5	98	119	0	--	1.3	.03	--	.01	82	0	27
72-06-07	3.0	96	117	0	--	2.2	.00	--	.00	110	15	38
72-12-12	2.3	95	116	0	--	1.6	.03	--	.01	88	0	29
72-06-07	12	118	144	0	--	1.3	.00	--	.00	130	7	39
72-06-08	5.5	112	136	0	--	1.7	.03	--	.01	120	3	37
72-02-02	5.5	112	137	0	--	1.1	.00	--	.00	150	41	51
72-06-06	5.4	111	135	0	--	1.0	.03	--	.01	130	17	42
72-12-12	4.4	112	137	0	--	1.1	.03	--	.01	120	11	41
72-01-07	1.4	71	86	0	--	1.1	.00	--	.00	74	4	23
72-06-07	2.2	70	85	0	--	.93	.00	--	.00	79	10	25
72-06-07	1.3	107	130	0	--	1.1	.00	--	.00	120	12	39
DATE OF SAMPLE	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	SODIUM AD- SORP- TION RATIO (00931)	PERCENT SODIUM (00932)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED SILICA (SI02) (MG/L) (00955)	DIS- SOLVED ARSENIC (AS) (UG/L) (01000)	DIS- SOLVED BORON (B) (UG/L) (01020)	DIS- SOLVED CAD- MIUM (CD) (UG/L) (01025)
72-06-08	8.6	23	.8	26	2.1	10	49	.8	42	--	20	--
72-12-12	11	30	1.0	28	1.9	16	52	.8	33	--	30	--
72-12-12	16	36	1.0	24	2.8	30	66	.5	32	--	20	--
72-08-09	20	45	1.3	31	3.0	37	150	.7	25	--	70	--
72-06-07	9.3	25	.9	27	2.5	14	59	.6	37	--	40	--
72-01-07	8.2	26	1.1	33	2.5	14	61	.5	26	--	30	--
72-06-07	7.7	23	.9	29	2.0	10	49	.5	39	--	20	--
72-12-12	7.3	28	1.2	35	2.0	16	46	.3	35	--	20	--
72-06-07	7.0	23	.9	27	2.1	10	48	.5	40	--	20	--
72-01-07	3.5	36	1.7	48	2.2	12	46	.6	32	--	30	--
72-06-07	3.8	75	3.1	59	3.0	32	120	.6	28	--	40	--
72-12-12	3.8	47	2.2	53	2.2	22	56	.5	30	--	40	--
72-06-07	6.8	26	1.0	31	2.6	10	55	.5	36	--	30	--
72-06-08	5.5	25	1.0	32	2.1	11	48	.5	32	--	20	--
72-02-02	6.3	56	2.0	43	4.8	41	110	.4	53	--	50	--
72-06-06	5.6	47	1.8	43	4.7	27	87	.5	50	--	40	--
72-12-12	5.2	45	1.8	43	4.4	23	79	.4	52	--	40	--
72-01-07	4.1	25	1.3	41	2.7	13	44	.4	24	--	30	--
72-06-07	4.1	24	1.2	39	2.3	11	46	.6	23	--	30	--
72-06-07	5.1	28	1.1	33	2.4	12	57	.6	32	--	30	--

QUALITY OF GROUND WATER DATA FOR NEW MEXICO

DATE OF SAMPLE	DIS-SOLVED COPPER (CU) (UG/L) (01040)	TOTAL IRON (FE) (UG/L) (01045)	DIS-SOLVED IRON (FE) (UG/L) (01046)	DIS-SOLVED LEAD (PB) (UG/L) (01049)	TOTAL MAN-GANESE (MN) (UG/L) (01055)	DIS-SOLVED MAN-GANESE (MN) (UG/L) (01056)	DIS-SOLVED ZINC (ZN) (UG/L) (01090)	TOTAL ALUM-INUM (AL) (UG/L) (01105)	ALDRIN (UG/L) (39330)	LINDANE (UG/L) (39340)	CHLOR-DANE (UG/L) (39350)	DDD (UG/L) (39360)
72-06-08	--	--	10	--	--	0	--	--	--	--	--	--
72-12-12	--	--	60	--	--	310	--	--	--	--	--	--
72-12-12	--	--	9	--	--	10	--	--	--	--	--	--
72-08-09	--	--	30	--	--	0	--	--	--	--	--	--
72-06-07	--	--	10	--	--	0	--	--	--	--	--	--
72-01-07	--	--	40	--	--	0	--	--	--	--	--	--
72-06-07	--	--	20	--	--	14	--	--	--	--	--	--
72-12-12	--	--	50	--	--	40	--	--	--	--	--	--
72-06-07	--	--	20	--	--	21	--	--	--	--	--	--
72-01-07	--	--	0	--	--	0	--	--	--	--	--	--
72-06-07	--	--	10	--	--	14	--	--	--	--	--	--
72-12-12	--	--	40	--	--	10	--	--	--	--	--	--
72-06-07	--	--	10	--	--	21	--	--	--	--	--	--
72-06-08	--	--	10	--	--	7	--	--	--	--	--	--
72-02-02	--	--	40	--	--	0	--	--	--	--	--	--
72-06-06	--	--	50	--	--	29	--	--	--	--	--	--
72-12-12	--	--	9	--	--	0	--	--	--	--	--	--
72-01-07	--	--	10	--	--	0	--	--	--	--	--	--
72-06-07	--	--	50	--	--	0	--	--	--	--	--	--
72-06-07	--	--	10	--	--	29	--	--	--	--	--	--

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QUALITY OF GROUND WATER DATA FOR NEW MEXICO

DONA ANA COUNTY--Continued

DONA ANA COUNTY--Continued												
LOCAL IDENT- IFIER	STATION	NUMBER	DATE OF SAMPLE	TIME	GEO- LOGIC UNIT	DEPTH (FT) (00003)	TEMPER- ATURE (DEG C) (00010)	COLOR (PLAT- INUM- COBALT UNITS) (00080)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)		
22S.05E.16.111	322406106264401		72-06-07	1650	--	--	24.0	--	435	7.2		
	322407106264401		72-06-07	1700	--	--	24.5	--	336	7.7		
	322403106263901		72-12-12	1153	110BLSN	314	22.0	--	303	8.0		
22S.05E.20.100	322311106281801		72-06-07	1725	--	--	25.0	--	374	7.5		
22S.05E.20.111	322311106274101		72-01-07	1330	110BLSN	--	24.5	--	370	8.0		
			72-12-12	1127	110BLSN	332	23.0	--	432	7.9		
22S.05E.23.341A	322231106242001		72-06-08	1000	--	--	23.5	--	478	7.4		
22S.05E.26.312	322158106243301		72-06-08	0950	--	--	23.5	--	314	7.9		
22S.05E.29.400	322153106270201		72-06-07	1400	--	--	24.5	--	313	7.5		
22S.05E.29.412	322155106270201		72-01-07	1015	110BLSN	--	22.5	--	296	7.9		
			72-12-12	1044	110BLSN	555	23.5	--	386	7.9		
22S.05E.33.223	322134106254901		72-06-07	1330	--	--	22.0	--	363	7.6		
22S.05E.33.244	322108106254701		72-01-07	1115	110BLSN	--	23.0	--	909	9.6		
			72-06-07	1325	110BLSN	--	23.5	--	925	7.5		
			72-12-12	1210	110BLSN	424	22.0	--	1040	8.8		
22S.06E.31.422	322103106214001		72-06-08	0930	--	--	23.5	--	1400	7.9		
22S.06W.06.132	322535107051701		72-11-14	--	338LKVL	.3	19.5	--	1930	8.3		
23S.01E.02.413	322003106483301		72-11-09	--	112SNTF	500	19.0	--	494	8.3		
23S.01E.02.441	321956106481601		72-11-08	--	112SNTF	240	18.0	--	545	8.1		
23S.01E.04.144	322015106504601		72-11-07	--	112SNTF	300	16.0	--	720	8.0		
DATE OF SAMPLE	CARBON DIOXIDE (CO2) (MG/L) (00405)	ALKA- LINITY AS CACO3 (MG/L) (00410)	BICAR- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED NITRATE (N) (MG/L) (00618)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	DIS- SOLVED ORTHO PHOS- PHATE (P04) (MG/L) (00660)	TOTAL PHOS- PHORUS (P) (MG/L) (00665)	DIS- SOLVED ORTHO PHOS- PHORUS (P) (MG/L) (00671)	HARD- NESS (CA+MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)
72-06-07	21	168	205	0	--	.01	.00	--	.00	150	0	49
72-06-07	3.4	87	106	0	--	1.7	.00	--	.00	96	9	33
72-12-12	1.4	71	87	0	--	1.1	.03	--	.01	80	9	25
72-06-07	5.7	93	113	0	--	2.7	.03	--	.01	120	26	36
72-01-07	1.8	91	111	0	--	2.9	.00	--	.00	120	24	35
72-12-12	2.2	91	111	0	--	2.7	.03	--	.01	120	31	37
72-06-08	10	129	157	0	--	.00	.00	--	.00	150	20	43
72-06-08	2.6	104	127	0	--	1.4	.00	--	.00	110	9	35
72-06-07	5.8	94	115	0	--	1.0	.00	--	.00	100	7	31
72-01-07	2.2	90	110	0	--	.18	.00	--	.00	93	3	27
72-12-12	2.3	94	115	0	--	.87	.03	--	.01	100	8	31
72-06-07	4.0	81	99	0	--	2.3	.03	--	.01	130	50	42
72-01-07	.0	21	3	11	--	.02	.00	--	.00	120	95	46
72-06-07	1.6	25	31	0	--	.02	.00	--	.00	120	95	48
72-12-12	.0	32	0	19	--	.05	.00	--	.00	110	82	44
72-06-08	4.3	175	213	0	--	.44	.00	--	.00	290	120	81
72-11-14	4.4	446	544	0	--	.04	--	--	--	98	0	16
72-11-09	1.4	139	169	0	--	.00	.03	--	.01	150	11	47
72-11-08	2.2	142	173	0	--	.00	.09	--	.03	180	40	58
72-11-07	2.7	139	170	0	--	.06	--	--	--	230	91	74
DATE OF SAMPLE	DIS- SOLVED MAG- NE- SIUM (MG) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	SODIUM AD- SORP- TION RATIO (00931)	PERCENT SODIUM (00932)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED SILICA (SI02) (MG/L) (00955)	DIS- SOLVED ARSENIC (AS) (UG/L) (01000)	DIS- SOLVED BORON (B) (UG/L) (01020)	DIS- SOLVED CAD- MIUM (CD) (UG/L) (01025)
72-06-07	7.7	30	1.1	29	2.4	11	46	.5	37	--	20	--
72-06-07	3.2	28	1.2	38	2.4	11	55	.6	30	--	30	--
72-12-12	4.3	30	1.5	44	2.4	21	43	.4	24	--	50	--
72-06-07	7.0	27	1.1	33	2.0	16	63	.5	36	--	20	--
72-01-07	6.8	29	1.2	35	2.5	19	64	.4	37	--	20	--
72-12-12	7.1	40	1.6	41	2.2	35	54	.4	35	--	40	--
72-06-08	10	38	1.4	35	5.1	16	88	1.0	22	--	60	--
72-06-08	6.2	17	.7	24	2.8	11	37	.6	44	--	50	--
72-06-07	5.9	22	1.0	31	2.0	8.0	49	.6	38	--	20	--
72-01-07	6.2	25	1.1	36	2.6	11	46	.4	30	--	20	--
72-12-12	6.1	38	1.6	44	2.3	33	46	.4	32	--	50	--
72-06-07	6.4	23	.9	27	2.3	16	64	.5	46	--	20	--
72-01-07	.2	120	4.9	68	6.4	170	130	.9	5.1	--	60	--
72-06-07	.1	130	5.2	69	5.8	170	130	.9	2.9	--	70	--
72-12-12	1.0	140	5.7	71	5.9	210	130	.7	2.3	--	120	--
72-06-08	22	190	4.8	58	7.3	44	480	.8	38	--	170	--
72-11-14	14	390	17	86	28	230	200	3.0	13	--	--	--
72-11-09	7.8	44	1.6	38	5.9	43	51	.5	25	--	--	--
72-11-08	9.1	45	1.5	34	4.3	59	54	.4	25	--	--	--
72-11-07	11	64	1.8	37	3.9	71	120	.4	24	--	--	--

QUALITY OF GROUND WATER DATA FOR NEW MEXICO

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DONA ANA COUNTY--Continued

DATE OF SAMPLE	DIS-SOLVED COPPER (CU) (UG/L) (01040)	TOTAL IRON (FE) (UG/L) (01045)	DIS-SOLVED IRON (FE) (UG/L) (01046)	DIS-SOLVED LEAD (PB) (UG/L) (01049)	TOTAL MAN-GANESE (MN) (UG/L) (01055)	DIS-SOLVED MAN-GANESE (MN) (UG/L) (01056)	DIS-SOLVED ZINC (ZN) (UG/L) (01090)	TOTAL ALUM-INUM (AL) (UG/L) (01105)	ALDRIN (UG/L) (39330)	LINDANE (UG/L) (39340)	CHLOR-DANE (UG/L) (39350)	DDD (UG/L) (39360)
72-06-07	--	--	10	--	--	21	--	--	--	--	--	--
72-06-07	--	--	10	--	--	0	--	--	--	--	--	--
72-12-12	--	--	40	--	--	40	--	--	--	--	--	--
72-06-07	--	--	60	--	--	21	--	--	--	--	--	--
72-01-07	--	--	20	--	--	13	--	--	--	--	--	--
72-12-12	--	--	20	--	--	80	--	--	--	--	--	--
72-06-08	--	--	10	--	--	240	--	--	--	--	--	--
72-06-08	--	--	10	--	--	50	--	--	--	--	--	--
72-06-07	--	--	20	--	--	21	--	--	--	--	--	--
72-01-07	--	--	200	--	--	70	--	--	--	--	--	--
72-12-12	--	--	30	--	--	40	--	--	--	--	--	--
72-06-07	--	--	20	--	--	29	--	--	--	--	--	--
72-01-07	--	--	0	--	--	0	--	--	--	--	--	--
72-06-07	--	--	10	--	--	0	--	--	--	--	--	--
72-12-12	--	--	9	--	--	0	--	--	--	--	--	--
72-06-08	--	--	10	--	--	36	--	--	--	--	--	--
72-11-14	--	--	--	--	--	--	--	--	--	--	--	--
72-11-09	--	70	9	--	--	210	--	--	--	--	--	--
72-11-08	--	70	20	--	--	320	--	--	--	--	--	--
72-11-07	--	--	--	--	--	--	--	--	--	--	--	--

DATE OF SAMPLE	DDE (UG/L) (39365)	DDT (UG/L) (39370)	DI-ELDRIN (UG/L) (39380)	ENDRIN (UG/L) (39390)	HEPTA-CHLOR (UG/L) (39410)	HEPTA-CHLOR EPOXIDE (UG/L) (39420)	2,4-D (UG/L) (39730)	2,4,5-T (UG/L) (39740)	SILVEX (UG/L) (39760)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L) (70300)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L) (70301)	DIS-SOLVED SOLIDS (TONS PER AC-FT) (70303)
72-06-07	--	--	--	--	--	--	--	--	--	--	285	.39
72-06-07	--	--	--	--	--	--	--	--	--	--	223	.30
72-12-12	--	--	--	--	--	--	--	--	--	--	198	.27
72-06-07	--	--	--	--	--	--	--	--	--	--	255	.35
72-01-07	--	--	--	--	--	--	--	--	--	--	261	.36
72-12-12	--	--	--	--	--	--	--	--	--	--	277	.38
72-06-08	--	--	--	--	--	--	--	--	--	--	301	.41
72-06-08	--	--	--	--	--	--	--	--	--	--	222	.30
72-06-07	--	--	--	--	--	--	--	--	--	--	218	.30
72-01-07	--	--	--	--	--	--	--	--	--	--	203	.28
72-12-12	--	--	--	--	--	--	--	--	--	--	249	.34
72-06-07	--	--	--	--	--	--	--	--	--	--	259	.35
72-01-07	--	--	--	--	--	--	--	--	--	--	491	.67
72-06-07	--	--	--	--	--	--	--	--	--	--	503	.68
72-12-12	--	--	--	--	--	--	--	--	--	--	556	.76
72-06-08	--	--	--	--	--	--	--	--	--	--	970	1.32
72-11-14	--	--	--	--	--	--	--	--	--	--	1150	1.58
72-11-09	--	--	--	--	--	--	--	--	--	--	308	.42
72-11-08	--	--	--	--	--	--	--	--	--	--	340	.46
72-11-07	--	--	--	--	--	--	--	--	--	--	452	.61

DATE OF SAMPLE	DENSITY (GM/ML AT 20 C) (71820)	HY-DROX-IDE (OH) (MG/L) (71830)	TOTAL NITRATE (NO3) (MG/L) (71850)	MAN-GANESE (MN) (UG/L) (71883)	IRON (FE) (UG/L) (71885)	TOTAL MERCURY (HG) (UG/L) (71900)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE MSL) (72000)	TOTAL DEPTH OF HOLE (FT. BELOW LSO) (72001)	DEPTH TO TOP OF WATER-BEARING ZONE (FT) (72002)	TOTAL DEPTH OF WELL (FT) (72008)	DEPTH TO BOT-TOM OF SAMPLE INTER-VAL (FT) (72016)
72-06-07	--	--	--	--	--	--	--	--	--	--	--
72-06-07	--	--	--	--	--	--	--	--	--	--	--
72-12-12	--	--	--	--	--	--	--	334	--	--	--
72-06-07	--	--	--	--	--	--	--	--	--	--	--
72-01-07	--	--	--	--	--	--	--	--	--	--	--
72-12-12	--	--	--	--	--	--	--	352	--	--	--
72-06-08	--	--	--	--	--	--	--	--	--	--	--
72-06-08	--	--	--	--	--	--	--	--	--	--	--
72-06-07	--	--	--	--	--	--	--	--	--	--	--
72-01-07	--	--	--	--	--	--	--	--	--	--	--
72-12-12	--	--	--	--	--	--	--	576	--	--	--
72-06-07	--	--	--	--	--	--	--	--	--	--	--
72-01-07	--	--	--	--	--	--	--	--	--	--	--
72-06-07	--	--	--	--	--	--	--	--	--	--	--
72-12-12	--	3	--	--	--	--	--	444	--	--	--
72-06-08	--	--	--	--	--	--	--	--	--	--	--
72-11-14	--	--	--	--	--	--	--	.51	--	--	--
72-11-09	--	--	--	--	--	--	--	500	--	--	--
72-11-08	--	--	--	--	--	--	--	240	--	--	--
72-11-07	--	--	--	--	--	--	--	E300	--	--	--

E Estimated.

QUALITY OF GROUND WATER DATA FOR NEW MEXICO

DONA ANA COUNTY--Continued

DONA ANA COUNTY--Continued											SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)
LOCAL IDENT- IFIER	STATION	NUMBER	DATE OF SAMPLE	TIME	GEO- LOGIC UNIT	DEPTH (FT) (00003)	TEMPER- ATURE (DEG C) (00010)	COLOR (PLAT- INUM- COBAL- UNITS) (00080)				
23S.01E.04.344	321952106504701	72-11-07	--	112SNTF	118	16.0	--	725	7.8			
23S.01E.11.213	321938106483401	72-11-09	--	112SNTF	320	18.0	--	824	8.1			
23S.01E.17.423	321814106512601	72-11-01	--	110AVMB	--	18.0	--	1940	8.0			
23S.01E.20.114	321753106520601	72-11-01	--	112SNTF	565	16.0	--	599	7.9			
3S.01E.20.213A	321750106513801	72-11-10	--	112SNTF	423	19.0	--	702	8.1			
23S.01E.26.242	321652106480701	72-06-09	--	--	--	18.0	--	2050	7.7			
	321842106472201	72-06-09	--	--	--	20.0	--	1110	7.7			
23S.01E.28.223	321658106502301	72-10-31	--	112SNTF	200	16.5	--	579	8.0			
23S.01E.33.422	321525106501601	72-10-30	--	112SNTF	209	18.0	--	742	8.0			
23S.01E.34.411	321542106493601	72-10-25	--	112SNTF	109	18.0	--	1030	7.9			
23S.01E.35.423	321542106481401	72-10-30	--	112SNTF	215	18.0	--	503	8.1			
23S.02E.01.330	321942106474401	72-05-26	--	--	--	18.5	--	1680	7.8			
23S.02E.07.412	321909106461301	72-05-24	--	--	--	19.0	--	494	8.0			
23S.02E.08.434	321857106451801	72-05-24	--	--	--	24.0	--	544	8.1			
23S.02E.16.133	321822106445701	72-05-24	--	--	--	24.0	--	614	7.8			
23S.02E.21.223	321754106441491	72-05-24	--	--	--	25.0	--	1430	7.7			
23S.02E.17.221	321859106451801	72-05-24	--	--	--	--	--	--	--			
23S.02E.19.314A	321726106465601	72-12-06	--	110AVMB	--	13.0	--	--	--			
23S.02E.29.241	321650106451301	72-05-26	--	--	--	20.0	--	500	8.0			
23S.02E.30.211	321654106463301	72-12-06	--	112SNTF	--	15.5	--	493	8.0			
23S.02E.30.343	321621106464701	72-11-24	--	112SNTF	350	17.0	--	507	8.1			
DATE OF SAMPLE	CARBON DIOXIDE (CO2) (MG/L) (00405)	ALKA- LITY AS CACO3 (MG/L) (00410)	BICAR- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED NITRATE (N) (MG/L) (00618)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	DIS- SOLVED ORTHO PHOS- PHATE (PO4) (MG/L) (00660)	TOTAL PHOS- PHORUS (P) (MG/L) (00665)	DIS- SOLVED ORTHO PHOS- PHORUS (P) (MG/L) (00671)	HARD- NESS (CA,MG) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)
72-11-07	4.5	146	178	0	--	.07	--	--	--	260	110	84
72-11-09	2.7	176	214	0	--	.04	.03	--	.01	300	120	94
72-11-01	3.4	174	212	0	--	1.8	--	--	--	640	460	190
72-11-01	4.1	168	205	0	--	.04	--	--	--	150	0	44
72-11-10	2.4	156	190	0	--	.02	.06	--	.02	230	74	74
72-06-09	3.8	98	119	0	--	.38	--	--	--	890	790	290
72-06-09	3.4	89	108	0	--	.04	--	--	--	480	390	160
72-10-31	2.3	116	141	0	--	--	--	--	--	180	68	59
72-10-30	2.9	149	182	0	--	--	--	--	--	250	110	84
72-10-25	4.7	191	233	0	--	.20	--	--	--	270	84	87
72-10-30	2.2	140	171	0	--	.00	.06	--	.02	140	2	45
72-05-26	2.7	89	108	0	--	.14	--	--	--	660	570	210
72-05-24	2.0	104	127	0	--	.00	.03	--	.01	150	48	43
72-05-24	1.7	107	130	0	--	.22	.03	--	.01	140	35	37
72-05-24	4.0	129	157	0	--	.01	--	--	--	170	40	51
72-05-24	--	43	138	0	--	.14	.06	--	.02	450	330	130
72-05-24	--	--	--	--	--	--	--	--	--	--	--	--
72-12-06	--	--	--	--	--	--	--	--	--	--	--	--
72-05-26	2.0	104	127	0	--	.01	--	--	--	170	68	51
72-12-06	2.6	132	161	0	--	.05	.03	--	.01	160	24	50
72-11-24	2.0	130	159	0	--	1.1	.06	--	.02	140	13	47
DATE OF SAMPLE	DIS- SOLVED MAG- NE- SIUM (MG) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	SODIUM AD- SORP- TION RATIO (00931)	PERCENT SODIUM (00932)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED SILICA (SI02) (MG/L) (00955)	DIS- SOLVED ARSENIC (AS) (UG/L) (01000)	DIS- SOLVED BORON (B) (UG/L) (01020)	DIS- SOLVED CAD- MIUM (CD) (UG/L) (01025)
72-11-07	12	50	1.4	29	4.3	62	140	.4	25	--	--	--
72-11-09	15	56	1.4	29	4.0	86	120	.3	24	--	--	--
72-11-01	40	230	4.0	44	7.6	250	580	.7	35	--	--	--
72-11-01	8.6	68	2.5	50	3.4	42	83	.9	27	--	--	--
72-11-10	11	61	1.8	36	3.3	70	110	.4	26	--	--	--
72-06-09	41	200	2.9	32	9.3	180	770	.5	31	--	--	--
72-06-09	20	110	2.2	33	7.2	110	300	.5	33	--	--	--
72-10-31	8.9	--	--	--	--	75	62	--	--	--	--	--
72-10-30	11	--	--	--	--	76	120	--	--	--	--	--
72-10-25	14	110	2.9	46	5.3	87	220	.7	27	--	--	--
72-10-30	7.3	49	1.8	42	3.1	43	58	.4	24	--	--	--
72-05-26	32	170	2.9	36	8.5	180	520	.4	32	--	--	--
72-05-24	11	41	1.4	35	8.2	51	64	.8	26	--	--	80
72-05-24	12	56	2.0	45	6.3	53	76	.9	27	8	110	0
72-05-24	10	55	1.8	40	6.2	64	79	.9	28	--	--	--
72-05-24	30	160	3.3	43	10	270	170	.5	40	--	200	--
72-05-24	--	--	--	--	--	--	--	--	--	--	--	--
72-12-06	--	--	--	--	--	--	--	--	--	--	--	--
72-05-26	11	39	1.3	32	5.6	47	67	1.0	26	--	--	--
72-12-06	7.6	36	1.3	33	3.2	40	56	.5	24	--	--	--
72-11-24	6.4	41	1.5	38	3.1	38	52	.5	24	--	--	--

QUALITY OF GROUND WATER DATA FOR NEW MEXICO

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DONA ANA COUNTY--Continued

DATE OF SAMPLE	DIS- SOLVED COPPER (CU) (01040)	TOTAL IRON (FE) (01045)	DIS- SOLVED IRON (FE) (01046)	DIS- SOLVED LEAD (PB) (01049)	TOTAL MANGANESE (MN) (01055)	DIS- SOLVED MANGANESE (MN) (01056)	DIS- SOLVED ZINC (ZN) (01090)	TOTAL ALUM- INUM (AL) (01105)	ALDRIN (UG/L) (39330)	LINDANE (UG/L) (39340)	CHLOR- DANE (UG/L) (39350)	DDD (UG/L) (39360)
72-11-07	--	--	--	--	--	--	--	--	--	--	--	--
72-11-09	--	50	9	--	--	480	--	--	--	--	--	--
72-11-01	--	--	--	--	--	--	--	--	--	--	--	--
72-11-01	--	--	--	--	--	--	--	--	--	--	--	--
72-11-10	--	30	9	--	--	150	--	--	--	--	--	--
72-06-09	--	--	--	--	--	--	--	--	--	--	--	--
72-06-09	--	--	--	--	--	--	--	--	--	--	--	--
72-10-31	--	40	--	--	--	--	--	--	--	--	--	--
72-10-30	--	--	--	--	--	--	--	--	--	--	--	--
72-10-25	--	--	--	--	--	--	--	--	--	--	--	--
72-10-30	--	2400	9	--	--	30	--	--	--	--	--	--
72-05-26	--	--	--	--	--	--	--	--	--	--	--	--
72-05-24	--	--	50	--	--	--	--	--	--	--	--	--
72-05-24	3	--	10	2	--	0	20	--	--	--	--	--
72-05-24	--	--	--	--	--	--	--	--	--	--	--	--
72-05-24	--	80	20	--	--	--	--	--	--	--	--	--
72-05-24	--	--	--	--	--	--	--	--	.00	.00	.0	.00
72-12-06	--	4000	--	--	1600	--	--	--	--	--	--	--
72-05-26	--	--	--	--	--	--	--	--	--	--	--	--
72-12-06	--	210	50	--	--	200	--	--	--	--	--	--
72-11-24	--	50	9	--	--	0	--	--	--	--	--	--

DATE OF SAMPLE	DDE (UG/L) (39365)	DDT (UG/L) (39370)	DI- ELDRIN (UG/L) (39380)	ENDRIN (UG/L) (39390)	HEPTA- CHLOR (UG/L) (39410)	HEPTA- CHLOR EPOXIDE (UG/L) (39420)	2,4-D (UG/L) (39730)	2,4,5-T (UG/L) (39740)	SILVEX (UG/L) (39760)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L) (70300)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L) (70301)	DIS- SOLVED SOLIDS (TONS PER AC-FT) (70303)
72-11-07	--	--	--	--	--	--	--	--	--	--	466	.63
72-11-09	--	--	--	--	--	--	--	--	--	--	505	.69
72-11-01	--	--	--	--	--	--	--	--	--	--	1450	1.97
72-11-01	--	--	--	--	--	--	--	--	--	--	378	.51
72-11-10	--	--	--	--	--	--	--	--	--	--	449	.61
72-06-09	--	--	--	--	--	--	--	--	--	--	1580	2.15
72-06-09	--	--	--	--	--	--	--	--	--	--	794	1.08
72-10-31	--	--	--	--	--	--	--	--	--	--	--	--
72-10-30	--	--	--	--	--	--	--	--	--	--	--	--
72-10-25	--	--	--	--	--	--	--	--	--	--	666	.91
72-10-30	--	--	--	--	--	--	--	--	--	--	314	.43
72-05-26	--	--	--	--	--	--	--	--	--	--	1210	1.65
72-05-24	--	--	--	--	--	--	--	--	--	334	308	.45
72-05-24	--	--	--	--	--	--	--	--	--	370	333	.50
72-05-24	--	--	--	--	--	--	--	--	--	--	371	.50
72-05-24	--	--	--	--	--	--	--	--	--	892	879	1.21
72-05-24	.00	.00	.00	.00	.00	.00	.00	.00	.00	--	--	--
72-12-06	--	--	--	--	--	--	--	--	--	--	310	.42
72-05-26	--	--	--	--	--	--	--	--	--	--	297	.40
72-12-06	--	--	--	--	--	--	--	--	--	--	295	.40
72-11-24	--	--	--	--	--	--	--	--	--	--	--	--

DATE OF SAMPLE	DENSITY (GM/ML AT 20 C) (71820)	HY- DROX- IDE (OH) (MG/L) (71830)	TOTAL NITRATE (NO3) (MG/L) (71850)	MANGANESE (MN) (UG/L) (71883)	IRON (FE) (UG/L) (71885)	TOTAL MERCURY (MG) (UG/L) (71900)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE MSL) (72000)	TOTAL DEPTH OF HOLE (FT. BELOW LSD) (72001)	DEPTH TO TOP OF WATER- BEARING ZONE (FT) (72002)	TOTAL DEPTH OF WELL (FT) (72008)	DEPTH TO BOT- TOM OF SAMPLE INTER- VAL (FT) (72016)
72-11-07	--	--	--	--	--	--	--	118	--	--	--
72-11-09	--	--	--	--	--	--	--	320	--	--	--
72-11-01	--	--	--	--	--	--	--	565	--	--	--
72-11-01	--	--	--	--	--	--	--	423	--	--	--
72-11-10	--	--	--	--	--	--	--	--	--	--	--
72-06-09	--	--	--	--	--	--	--	--	--	--	--
72-06-09	--	--	--	--	--	--	--	--	--	--	--
72-10-31	--	--	--	--	--	--	--	200	--	--	--
72-10-30	--	--	--	--	--	--	--	209	--	--	--
72-10-25	--	--	--	--	--	--	--	169	--	--	--
72-10-30	--	--	--	--	--	--	--	215	--	--	--
72-05-26	--	--	--	--	--	--	--	--	--	--	--
72-05-24	--	--	--	--	--	--	--	--	--	--	--
72-05-24	--	--	--	--	--	--	--	--	--	--	--
72-05-24	--	--	--	--	--	--	--	--	--	--	--
72-05-24	--	--	--	--	--	--	--	420	--	--	--
72-05-24	--	--	--	--	--	--	--	--	--	--	--
72-12-06	--	--	--	--	--	--	--	85	--	--	--
72-05-26	--	--	--	--	--	--	--	--	--	--	--
72-12-06	--	--	--	--	--	--	--	360	--	--	--
72-11-24	--	--	--	--	--	--	--	350	--	--	--

E Estimated.

QUALITY OF GROUND WATER DATA FOR NEW MEXICO

DONA ANA COUNTY--Continued

DONA ANA COUNTY--Continued												
LOCAL IDENT- IFIER	STATION	NUMBER	DATE OF SAMPLE	TIME	GEO- LOGIC UNIT	DEPTH (FT) (00003)	TEMPER- ATURE (DEG C) (00010)	COLOR (PLAT- INUM- COBALT UNITS) (00080)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)		
22S.02E.31.444	322045106461301		72-05-24	--	--	--	22.5	--	963	8.1		
23S.02E.32.424	321545106451101		72-11-27	--	112SNTF	320	18.0	--	595	8.1		
23S.02E.34.214	321611106431801		72-12-01	--	112SNTF	--	43.0	--	3040	7.6		
23S.02E.34.412	321555106432201		72-12-01	--	112SNTF	486	27.0	--	1110	8.2		
23S.02W.13.314	321819107001501		72-11-14	1320	1108LSN	--	21.0	--	1400	8.0		
23S.05E.01.113	322057106232701		72-06-08	0915	--	--	21.5	--	715	7.9		
24S.02E.03.344	321429106433601		72-10-10	--	112SNTF	240	20.5	--	1620	8.0		
24S.02E.04.211	321520106443401		72-11-28	--	112SNTF	--	18.0	--	--	--		
24S.02E.08.413	321358106453101		72-11-27	--	112SNTF	800	17.0	--	539	8.2		
24S.02E.09.132	321343106442001		72-05-16	--	--	--	--	--	546	8.1		
24S.02E.09.331	321451106445701		72-05-16	--	--	--	18.0	--	1580	7.5		
24S.02E.14.122	321338106423301		72-09-18	--	112SNTF	512	24.0	--	1420	7.8		
24S.02E.18.223	321336106451501		72-10-03	--	112SNTF	90	18.0	--	2760	7.8		
24S.02E.18.244	321319106460601		72-10-03	--	112SNTF	200	18.0	--	639	8.1		
24S.02E.21.122	321240106443701		72-10-05	--	112SNTF	300	18.5	--	502	8.3		
24S.02E.35.114	321052106425101		72-09-06	--	112SNTF	370	19.0	--	538	8.1		
24S.02E.36.313	321030106415501		72-09-06	--	112SNTF	303	20.0	--	1060	8.1		
24S.03E.31.412	321030106402401		72-05-16	--	--	--	29.0	--	3620	7.9		
DATE OF SAMPLE	CARBON DIOXIDE (CO2) (MG/L) (00405)	ALKA- LITY AS CACO3 (MG/L) (00410)	BICAR- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED NITRATE (N) (MG/L) (00618)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	DIS- SOLVED ORTHO PHOS- PHATE (PO4) (MG/L) (00660)	TOTAL PHOS- PHORUS (P) (MG/L) (00665)	DIS- SOLVED ORTHO PHOS- PHORUS (P) (MG/L) (00671)	HARD- NESS (CA+MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)
72-05-24	1.8	113	138	0	--	.02	.03	--	.01	220	110	58
72-11-27	2.3	148	180	0	--	.09	.03	--	.01	210	57	64
72-12-01	28	574	700	0	--	.01	.15	--	.05	610	40	190
72-12-01	2.9	232	283	0	--	.00	.09	--	.03	180	0	55
72-11-14	4.9	249	304	0	--	2.5	--	--	--	110	0	29
72-06-08	2.6	107	131	0	--	4.5	.03	--	.01	190	83	55
72-10-10	3.7	188	229	0	--	2.0	--	--	--	440	250	130
72-11-28	--	--	--	--	--	--	--	--	--	--	--	--
72-11-27	2.0	161	196	0	--	.00	.06	--	.02	180	16	58
72-05-16	2.1	134	163	0	--	.00	.06	--	.02	170	39	51
72-05-16	6.3	102	124	0	--	.29	--	--	--	700	600	220
72-09-18	9.9	320	390	0	--	.37	--	--	--	280	0	87
72-10-03	11	343	418	--	--	.96	--	--	--	950	610	310
72-10-03	2.3	146	178	0	--	.03	--	--	--	220	72	71
72-10-05	1.3	137	167	0	--	.06	.06	--	.02	150	16	48
72-09-06	2.2	141	172	--	--	.01	--	--	--	140	0	39
72-09-06	2.5	162	198	0	--	.00	--	--	--	240	82	73
72-05-16	4.9	198	242	0	--	2.1	--	--	--	740	540	220
DATE OF SAMPLE	DIS- SOLVED MAG- NE- SIUM (MG) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	SODIUM AD- SORP- TION RATIO (00931)	PERCENT SODIUM (00932)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED SILICA (SiO2) (MG/L) (00955)	DIS- SOLVED ARSENIC (AS) (UG/L) (01000)	DIS- SOLVED BORON (B) (UG/L) (01020)	DIS- SOLVED CAD- MIUM (CD) (UG/L) (01025)
72-05-24	19	120	3.5	53	7.1	150	120	.8	28	--	160	--
72-11-27	11	45	1.4	32	3.3	50	81	.4	24	--	--	--
72-12-01	34	450	7.9	59	46	580	250	1.4	58	--	--	--
72-12-01	9.9	160	5.2	64	17	130	140	1.6	38	--	--	--
72-11-14	10	260	11	81	15	97	280	2.7	51	--	--	--
72-06-08	13	74	2.3	45	3.7	62	130	.8	50	--	70	--
72-10-10	27	190	4.0	47	20	230	320	.7	38	--	--	--
72-11-28	--	--	--	--	--	--	--	--	--	--	--	--
72-11-27	7.8	47	1.5	36	3.5	42	56	.4	24	--	--	--
72-05-16	11	40	1.3	33	4.4	50	69	.7	24	--	--	--
72-05-16	36	130	2.1	29	7.8	160	510	.5	30	--	180	--
72-09-18	16	210	5.4	60	20	170	180	1.9	47	--	--	--
72-10-03	44	300	4.2	40	10	250	880	.4	29	--	320	--
72-10-03	10	48	1.4	32	3.8	67	85	.3	25	--	--	--
72-10-05	8.0	47	1.7	40	3.0	44	58	.4	24	--	--	--
72-09-06	10	54	2.0	44	8.0	49	57	.7	29	--	100	--
72-09-06	15	120	3.3	49	22	110	230	1.4	37	--	--	--
72-05-16	47	530	8.5	59	52	760	490	1.4	61	--	--	--

QUALITY OF GROUND WATER DATA FOR NEW MEXICO

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DONA ANA COUNTY--Continued

DATE OF SAMPLE	DIS- SOLVED COPPER (CU) (01040)	TOTAL IRON (FE) (01045)	DIS- SOLVED IRON (FE) (01046)	DIS- SOLVED LEAD (PB) (01049)	TOTAL MAN- GANESE (MN) (01055)	DIS- SOLVED MAN- GANESE (MN) (01056)	DIS- SOLVED ZINC (ZN) (01090)	TOTAL ALUM- INUM (AL) (01105)	ALDRIN (UG/L) (39330)	LINDANE (UG/L) (39340)	CHLOR- DANE (UG/L) (39350)	DDO (UG/L) (39360)
72-05-24	--	60	30	--	--	--	--	--	--	--	--	--
72-11-27	--	260	9	--	--	120	--	--	--	--	--	--
72-12-01	--	2000	9	--	360	350	--	--	--	--	--	--
72-12-01	--	1800	9	--	130	120	--	--	--	--	--	--
72-11-14	--	--	--	--	--	--	--	--	--	--	--	--
72-06-08	--	--	10	--	--	29	--	--	--	--	--	--
72-10-10	--	--	--	--	--	--	--	--	--	--	--	--
72-11-28	--	470	--	--	220	--	--	--	--	--	--	--
72-11-27	--	20	9	--	--	180	--	--	--	--	--	--
72-05-16	--	120	20	--	--	190	--	--	--	--	--	--
72-05-16	--	540	30	--	--	--	--	--	--	--	--	--
72-09-18	--	--	--	--	--	--	--	--	--	--	--	--
72-10-03	--	--	9	--	--	--	--	--	--	--	--	--
72-10-03	--	--	--	--	--	--	--	--	--	--	--	--
72-10-05	--	--	9	--	--	120	--	--	--	--	--	--
72-09-06	--	--	9	--	--	--	--	--	--	--	--	--
72-09-06	--	--	--	--	--	--	--	--	--	--	--	--
72-05-16	--	--	--	--	--	--	--	--	--	--	--	--

DATE OF SAMPLE	UDE (UG/L) (39365)	DDT (UG/L) (39370)	DI- ELDRIN (UG/L) (39380)	ENDRIN (UG/L) (39390)	HEPTA- CHLOR (UG/L) (39410)	HEPTA- CHLOR EPOXIDE (UG/L) (39420)	2,4-D (UG/L) (39730)	2,4,5-T (UG/L) (39740)	SILVEX (UG/L) (39760)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L) (70300)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L) (70301)	DIS- SOLVED SOLIDS (TONS PER AC-FT) (70303)
72-05-24	--	--	--	--	--	--	--	--	--	604	571	.82
72-11-27	--	--	--	--	--	--	--	--	--	--	368	.50
72-12-01	--	--	--	--	--	--	--	--	--	--	1960	2.67
72-12-01	--	--	--	--	--	--	--	--	--	--	691	.94
72-11-14	--	--	--	--	--	--	--	--	--	--	906	1.23
72-06-08	--	--	--	--	--	--	--	--	--	--	473	.64
72-10-10	--	--	--	--	--	--	--	--	--	--	1080	1.47
72-11-28	--	--	--	--	--	--	--	--	--	--	--	--
72-11-27	--	--	--	--	--	--	--	--	--	--	335	.46
72-05-16	--	--	--	--	--	--	--	--	--	--	331	.45
72-05-16	--	--	--	--	--	--	--	--	--	--	1160	1.58
72-09-18	--	--	--	--	--	--	--	--	--	--	925	1.26
72-10-03	--	--	--	--	--	--	--	--	--	--	2030	2.76
72-10-03	--	--	--	--	--	--	--	--	--	--	398	.54
72-10-05	--	--	--	--	--	--	--	--	--	--	315	.43
72-09-06	--	--	--	--	--	--	--	--	--	--	331	.45
72-09-06	--	--	--	--	--	--	--	--	--	--	706	.96
72-05-16	--	--	--	--	--	--	--	--	--	--	2290	3.11

DATE OF SAMPLE	DENSITY (GM/ML AT 20 C) (71820)	HY- DROX- IDE (OH) (71830)	TOTAL NITRATE (NO3) (MG/L) (71850)	MAN- GANESE (MN) (UG/L) (71883)	IRON (FE) (UG/L) (71885)	TOTAL MERCURY (HG) (UG/L) (71900)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE MSL) (72000)	TOTAL DEPTH OF HOLE (FT. BELOW LSD) (72001)	DEPTH TO TOP OF WATER- BEARING ZONE (FT) (72002)	TOTAL DEPTH OF WELL (FT) (72008)	DEPTH TO BOT- TOM OF SAMPLE INTER- VAL (FT) (72016)
72-05-24	--	--	--	--	--	--	--	--	--	--	--
72-11-27	--	--	--	--	--	--	--	320	--	--	--
72-12-01	--	--	--	--	--	--	--	--	--	--	--
72-12-01	--	--	--	--	--	--	--	486	--	--	--
72-11-14	--	--	--	--	--	--	--	--	--	--	--
72-06-08	--	--	--	--	--	--	--	--	--	--	--
72-10-10	--	--	--	--	--	--	--	E240	--	--	--
72-11-28	--	--	--	--	--	--	--	314	--	--	--
72-11-27	--	--	--	--	--	--	--	E800	--	--	--
72-05-16	--	--	--	--	--	--	--	--	--	--	--
72-05-16	--	--	--	--	--	--	--	--	--	--	--
72-09-18	--	--	--	--	--	--	--	512	--	--	--
72-10-03	--	--	--	--	--	--	--	90	--	--	--
72-10-03	--	--	--	--	--	--	--	200	--	--	--
72-10-05	--	--	--	--	--	--	--	300	--	--	--
72-09-06	--	--	--	--	--	--	--	370	--	--	--
72-09-06	--	--	--	--	--	--	--	303	--	--	--
72-05-16	--	--	--	--	--	--	--	--	--	--	--

E Estimated.

QUALITY OF GROUND WATER DATA FOR NEW MEXICO

DONA ANA COUNTY--Continued

LOCAL IDENT- IFIER	STATION	NUMBER	DATE OF SAMPLE	TIME	GEO- LOGIC UNIT	DEPTH (FT) (00003)	TEMPER- ATURE (DEG C) (00010)	COLOR (PLAT- INUM- COBALT UNITS) (00080)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)
25S.02E.10.111	320920106440701	72-05-16	--	--	--	--	--	--	1150	8.8
25S.02E.12.213	320911106412401	72-05-17	--	--	--	--	18.0	--	2000	8.1
25S.02E.25.112	320641106414401	72-09-29	--	112SNTF	120	18.0	--	--	3840	7.8
25S.03E.06.212	321009106401501	72-09-12	--	112SNTF	400	25.0	--	--	4590	7.7
25S.03E.08.214	320909106391701	72-11-01	--	112SNTF	250	31.5	--	--	2870	7.7
25S.03E.12.411	320851106351301	72-09-12	--	112SNTF	560	--	--	--	2090	7.6
26S.03E.04.433	320405106382601	72-05-16	--	--	--	--	19.0	--	3800	8.0
26S.03E.06.441	320414106401101	72-10-05	--	112SNTF	203	18.5	--	--	2690	7.8
26S.03E.06.442	320414106395801	72-10-05	--	112SNTF	610	22.0	--	--	818	8.2
26S.03E.07.144	320341106403401	72-05-17	--	--	--	--	20.0	--	900	8.1
26S.03E.35.144	320017106363501	72-08-09	--	112SNTF	800	--	--	--	777	8.2
26S.03E.36.143	315950106353701	72-05-17	--	--	--	--	24.5	--	1870	8.4
27S.01E.23.130	315420106504801	72-05-26	--	--	--	--	27.0	--	871	8.2

DATE OF SAMPLE	CARBON DIOXIDE (CO2) (MG/L) (00405)	ALKA- LINITY AS CACO3 (MG/L) (00410)	BICAR- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED NITRATE (N) (MG/L) (00618)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	DIS- SOLVED ORTHO PHOS- PHATE (PO4) (MG/L) (00660)	TOTAL PHOS- PHORUS (P) (MG/L) (00665)	DIS- SOLVED PHOS- PHORUS (P) (MG/L) (00671)	HAZD- VESS (CA+MG) (MG/L) (00900)	NON- CAR- BONATE NESS (MG/L) (00902)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)
72-05-16	.7	212	257	1	--	.20	--	--	--	370	150	120
72-05-17	2.3	147	179	0	--	.09	--	--	--	440	300	130
72-09-29	10	326	398	--	--	.43	--	--	--	1200	920	380
72-09-12	19	477	582	0	--	3.1	--	--	--	810	340	230
72-11-01	20	502	612	--	--	1.7	--	--	--	550	46	170
72-09-12	21	422	514	0	--	.72	--	--	--	420	2	130
72-05-16	4.4	225	274	0	--	.91	--	--	--	650	430	170
72-10-05	10	326	398	0	--	.00	--	--	--	850	530	260
72-10-05	3.2	261	318	0	--	.03	.00	--	.00	100	0	26
72-05-17	1.9	124	151	0	--	.08	--	--	--	260	140	80
72-08-09	1.6	132	161	0	--	.02	--	--	--	46	0	18
72-05-17	1.2	161	194	1	--	.92	.09	--	.03	260	100	64
72-05-26	3.6	293	357	0	--	2.3	--	--	--	51	0	7.9

DATE OF SAMPLE	DIS- SOLVED MAG- NE- SIUM (MG) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	SODIUM AD- SORP- TION RATIO (00931)	PERCENT SODIUM (00932)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED SILICA (SI02) (MG/L) (00955)	DIS- SOLVED ARSENIC (AS) (UG/L) (01000)	DIS- SOLVED BORON (B) (UG/L) (01020)	DIS- SOLVED CAD- MIUM (CD) (UG/L) (01025)
72-05-16	16	110	2.5	39	5.6	87	270	.7	26	--	--	--
72-05-17	29	270	5.6	56	19	250	470	1.2	30	--	--	--
72-09-29	73	420	5.2	42	19	600	950	.4	33	--	--	--
72-09-12	58	710	11	63	64	940	510	1.7	62	--	--	--
72-11-01	30	420	7.8	60	40	470	270	1.4	53	--	--	--
72-09-12	24	290	6.1	57	37	320	210	.7	40	--	--	--
72-05-16	56	600	10	65	43	690	720	.9	37	--	--	--
72-10-05	50	310	4.6	44	11	360	710	.2	32	--	--	--
72-10-05	9.1	150	6.5	75	5.6	55	84	1.2	44	--	--	--
72-05-17	15	100	2.7	45	5.6	71	210	1.1	26	--	--	--
72-08-09	.3	150	9.6	86	3.9	67	140	1.2	39	--	240	--
72-05-17	25	260	7.0	67	11	380	180	.9	37	--	--	--
72-05-26	7.7	170	10	84	14	45	73	2.6	57	--	--	--

QUALITY OF GROUND WATER DATA FOR NEW MEXICO

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DONA ANA COUNTY--Continued

DATE OF SAMPLE	DIS- SOLVED COPPER (CU) (UG/L) (01040)	TOTAL IRON (FE) (UG/L) (01045)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED LEAD (PB) (UG/L) (01049)	TOTAL MAN- GANESE (MN) (UG/L) (01055)	DIS- SOLVED MAN- GANESE (MN) (UG/L) (01056)	DIS- SOLVED ZINC (ZN) (UG/L) (01090)	TOTAL ALUM- INUM (AL) (UG/L) (01105)	ALDRIN (UG/L) (39330)	LINDANE (UG/L) (39340)	CHLOR- DANE (UG/L) (39350)	DDD (UG/L) (39360)
72-05-16	--	--	--	--	--	--	--	--	--	--	--	--
72-05-17	--	--	--	--	--	--	--	--	--	--	--	--
72-09-29	--	--	--	--	--	--	--	--	--	--	--	--
72-09-12	--	--	--	--	--	--	--	--	--	--	--	--
72-11-01	--	--	--	--	--	--	--	--	--	--	--	--
72-09-12	--	--	--	--	--	--	--	--	--	--	--	--
72-05-16	--	--	--	--	--	--	--	--	--	--	--	--
72-10-05	--	--	--	--	--	--	--	--	--	--	--	--
72-10-05	--	--	60	--	--	0	--	--	--	--	--	--
72-05-17	--	--	--	--	--	--	--	--	--	--	--	--
72-08-09	--	--	9	--	--	--	--	--	--	--	--	--
72-05-17	--	140	10	--	--	0	--	--	--	--	--	--
72-05-26	--	--	--	--	--	--	--	--	--	--	--	--

DATE OF SAMPLE	DDE (UG/L) (39365)	DDT (UG/L) (39370)	DI- ELDRIN (UG/L) (39380)	ENDRIN (UG/L) (39390)	HEPTA- CHLOR (UG/L) (39410)	HEPTA- CHLOR EPOXIDE (UG/L) (39420)	2,4-D (UG/L) (39730)	2,4,5-T (UG/L) (39740)	SILVEX (UG/L) (39760)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L) (70300)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L) (70301)	DIS- SOLVED SOLIDS (TONS PER AC-FT) (70303)
72-05-16	--	--	--	--	--	--	--	--	--	--	754	1.04
72-05-17	--	--	--	--	--	--	--	--	--	--	1290	1.75
72-09-29	--	--	--	--	--	--	--	--	--	--	2670	3.63
72-09-12	--	--	--	--	--	--	--	--	--	--	2880	3.92
72-11-01	--	--	--	--	--	--	--	--	--	--	1750	2.39
72-09-12	--	--	--	--	--	--	--	--	--	--	1310	1.78
72-05-16	--	--	--	--	--	--	--	--	--	--	2460	3.35
72-10-05	--	--	--	--	--	--	--	--	--	--	1930	2.62
72-10-05	--	--	--	--	--	--	--	--	--	--	531	.72
72-05-17	--	--	--	--	--	--	--	--	--	--	583	.79
72-08-09	--	--	--	--	--	--	--	--	--	--	499	.68
72-05-17	--	--	--	--	--	--	--	--	--	--	1060	1.44
72-05-26	--	--	--	--	--	--	--	--	--	--	563	.77

DATE OF SAMPLE	DENSITY (GM/ML AT 20 C) (71820)	HY- DROX- IDE (OH) (MG/L) (71830)	TOTAL NITRATE (NO3) (MG/L) (71850)	MAN- GANESE (MN) (UG/L) (71883)	IRON (FE) (UG/L) (71885)	TOTAL MERCURY (HG) (UG/L) (71900)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE MSL) (72000)	TOTAL DEPTH OF HOLE (FT. BELOW LSD) (72001)	DEPTH TO TOP OF WATER- BEARING ZONE (FT) (72002)	TOTAL DEPTH OF WELL (FT) (72008)	DEPTH TO BOT- TOM OF SAMPLE INTER- VAL (FT) (72016)
72-05-16	--	--	--	--	--	--	--	--	--	--	--
72-05-17	--	--	--	--	--	--	--	120	--	--	--
72-09-29	--	--	--	--	--	--	--	400	--	--	--
72-09-12	--	--	--	--	--	--	--	E250	--	--	--
72-11-01	--	--	--	--	--	--	--	--	--	--	--
72-09-12	--	--	--	--	--	--	--	560	--	--	--
72-05-16	--	--	--	--	--	--	--	--	--	--	--
72-10-05	--	--	--	--	--	--	--	203	--	--	--
72-10-05	--	--	--	--	--	--	--	610	--	--	--
72-05-17	--	--	--	--	--	--	--	--	--	--	--
72-08-09	--	--	--	--	--	--	--	800	--	--	--
72-05-17	--	--	--	--	--	--	--	--	--	--	--
72-05-26	--	--	--	--	--	--	--	--	--	--	--

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QUALITY OF GROUND WATER DATA FOR NEW MEXICO

EDDY COUNTY

EDDY COUNTY										SPE- CIFIC CON- DUCT- ANCE		PH
LOCAL IDENT- I- FIER	STATION	NUMBER	DATE OF SAMPLE	TIME	GEO- LOGIC UNIT	DEPTH (FT) (00003)	TEMPER- ATURE (DEG C) (00010)	COLOR (PLAT- INUM- COBALT UNITS) (00080)	(MICRO- MHOS) (00095)	(UNITS) (00400)		
20S.31E.13.412	323419103491401		72-09-18	--	110AVMB	30	24.0	--	2230	--		
21S.31E.07.331	322913103492701		72-09-14	--	312RSLR	192	21.0	--	3390	7.7		
21S.31E.18.411	322836103485801		72-09-14	--	312RSLR	--	--	--	2260	7.5		
22S.30E.06.444	322450103544401		72-09-19	--	312RSLR	176	22.0	--	14900	7.3		
22S.30E.05.431	322502103540801		72-09-19	--	312RSLR	225	22.0	--	32600	6.5		
22S.30E.10.311	322418103523201		72-09-12	--	312RSLR	68	20.0	--	2410	7.6		
22S.31E.15.130	322335103461701		72-09-12	--	312DYLK	--	29.0	--	1700	8.0		
23S.30E.02.444A	321937103503701		72-09-20	--	312RSLR	315	24.0	--	4480	7.9		
23S.30E.19.123	321742103552601		72-09-20	--	312RSLR	--	--	--	2630	--		
23S.30E.21.122	321750103531101		72-09-20	--	312RSLR	--	21.5	--	4380	7.7		
23S.31E.07.240A	321913103483701		72-09-20	--	312DYLK	--	23.0	--	1380	8.2		
23S.31E.17.310	321809103481801		72-09-20	--	312DYLK	--	--	--	3300	--		
23S.31E.26.340	321609103445901		72-09-20	--	312DYLK	361	23.0	--	3440	7.9		
23S.31E.29.113	321648103482101		72-09-20	--	312DYLK	--	25.0	--	3540	7.9		
24S.29E.19.222	321234104005401		72-05-12	1335	--	--	--	--	55700	--		
			72-11-14	1535	--	--	--	--	54800	--		
24S.29E.19.421	321209104010401		72-05-10	1455	--	--	--	--	127000	--		
			72-11-13	1135	312CLBR	--	--	--	132000	--		
DATE OF SAMPLE	CARBON DIOXIDE (CO2) (MG/L) (00405)	ALKA- LINITY AS CAC03 (MG/L) (00410)	BICAR- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED NITRATE (N) (MG/L) (00618)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	DIS- SOLVED ORTHO PHOS- PHATE (P04) (MG/L) (00660)	TOTAL PHOS- PHORUS (P) (MG/L) (00665)	DIS- SOLVED ORTHO. PHOS- PHORUS (P) (MG/L) (00671)	HARD- NESS (CA+MG) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)
72-09-18	--	--	--	--	--	--	--	--	--	--	--	--
72-09-14	2.5	63	77	0	--	2.7	.09	--	.03	2300	2300	570
72-09-14	4.1	66	81	0	--	5.0	.12	--	.04	1400	1300	450
72-09-19	9.9	101	123	0	--	35	1.6	--	.52	3200	3100	950
72-09-19	2.0	3	4	0	--	3.5	.18	--	.06	5000	5000	1000
72-09-12	8.6	175	213	0	--	4.1	.49	--	.16	1700	1500	650
72-09-12	3.2	165	201	0	--	.68	.03	--	.01	450	290	75
72-09-20	2.2	91	111	0	--	.88	.09	--	.03	2000	1900	580
72-09-20	--	--	--	--	--	--	--	--	--	--	--	--
72-09-20	5.6	144	176	0	--	4.5	.12	--	.04	2200	2000	620
72-09-20	2.9	238	290	0	--	17	.09	--	.03	470	230	99
72-09-20	--	--	--	--	--	--	--	--	--	--	--	--
72-09-20	2.3	94	115	0	--	1.2	.06	--	.02	1900	1800	500
72-09-20	2.4	97	118	0	--	3.2	.06	--	.02	2100	2000	590
72-05-12	--	--	--	--	--	--	--	--	--	--	--	--
72-11-14	--	--	--	--	--	--	--	--	--	--	--	--
72-05-10	--	--	--	--	--	--	--	--	--	--	--	--
72-11-13	--	--	--	--	--	--	--	--	--	--	--	--
DATE OF SAMPLE	DIS- SOLVED MAG- NE- SIUM (MG) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	SODIUM AD- SORP- TION RATIO (00931)	PERCENT SODIUM (00932)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED SILICA (SI02) (MG/L) (00955)	DIS- SOLVED ARSENIC (AS) (UG/L) (01000)	DIS- SOLVED BORON (B) (UG/L) (01020)	DIS- SOLVED CAD- MIUM (CD) (UG/L) (01025)
72-09-18	--	--	--	--	--	--	--	--	--	--	--	--
72-09-14	220	81	.7	7	4.8	99	2200	.5	37	--	--	--
72-09-14	57	25	.3	4	2.2	220	1000	1.1	55	--	--	--
72-09-19	210	2000	15	56	150	4000	2100	.8	22	--	--	--
72-09-19	600	5600	35	67	810	11000	2300	.6	.1	--	--	--
72-09-12	13	8.0	.1	1	5.4	26	1400	.9	34	--	--	--
72-09-12	64	210	4.3	50	4.2	110	590	1.2	16	--	--	--
72-09-20	130	430	4.2	32	23	510	2100	2.4	30	--	--	--
72-09-20	--	--	--	--	--	--	--	--	--	--	--	--
72-09-20	150	370	3.5	27	9.4	500	2100	2.4	38	--	--	--
72-09-20	53	130	2.6	38	2.8	86	360	2.1	52	--	--	--
72-09-20	--	--	--	--	--	--	--	--	--	--	--	--
72-09-20	160	190	1.9	18	3.7	130	2000	2.1	18	--	--	--
72-09-20	150	150	1.4	13	3.4	350	1800	2.3	24	--	--	--
72-05-12	--	--	--	--	--	20900	--	--	--	--	--	--
72-11-14	--	--	--	--	--	19900	--	--	--	--	--	--
72-05-10	--	--	--	--	--	59400	--	--	--	--	--	--
72-11-13	--	--	--	--	--	62800	--	--	--	--	--	--

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QUALITY OF GROUND WATER DATA FOR NEW MEXICO

EDDY COUNTY--Continued

EDDY COUNTY--Continued										SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	
LOCAL IDENT- I- FIER	STATION	NUMBER	DATE OF SAMPLE	TIME	GEO- LOGIC UNIT	DEPTH (FT) (00003)	TEMPER- ATURE (DEG C) (00010)	COLOR (PLAT- INUM- COBALT UNITS) (00080)				
24S.29E.20.122	321234104002601		72-05-12	1155	--	--	--	--	94400	--		
			72-11-14	1350	--	--	--	--	97200	--		
24S.29E.20.134	320215104004201		72-05-08	1435	--	--	--	--	223000	--		
			72-11-13	1155	312CLBR	--	--	--	223000	--		
24S.29E.20.141	321222104003501		72-05-12	1135	--	--	--	--	226000	--		
24S.29E.20.322	321209104002101		72-05-12	1125	--	--	--	--	214000	--		
			72-11-14	1115	312CLBR	--	--	--	216000	--		
24S.29E.20.412	321210104001501		72-05-12	1105	--	--	--	--	182000	--		
			72-11-14	1055	110AVMB	--	--	--	178000	--		
24S.29E.20.431	321157104001501		72-05-12	0955	--	--	--	--	172000	--		
			72-11-13	1215	312RSLR	--	--	--	176000	--		
24S.29E.20.432A	321157104000601		72-05-12	1040	--	--	--	--	192000	--		
			72-11-14	1040	312RSLR	--	--	--	192000	--		
24S.29E.29.141	321128104003301		72-05-08	1545	--	--	--	--	55800	--		
			72-11-13	1505	312CLBR	--	--	--	53900	--		
24S.29E.29.143	321122104003301		72-05-08	1535	--	--	--	--	63500	--		
			72-05-08	1555	312CLBR	--	--	--	48600	--		
			72-11-13	1510	312CLBR	--	--	--	45000	--		
DATE OF SAMPLE	CARBON DIOXIDE (CO2) (MG/L) (00405)	ALKA- LINITY AS CACO3 (MG/L) (00410)	BICAR- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED NITRATE (N) (MG/L) (00618)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	DIS- SOLVED ORTHO PHOS- PHATE (PO4) (MG/L) (00660)	TOTAL PHOS- PHORUS (P) (MG/L) (00665)	DIS- SOLVED ORTHO PHOS- PHORUS (P) (MG/L) (00671)	HARD- NESS (CA,MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)
72-05-12	--	--	--	--	--	--	--	--	--	--	--	--
72-11-14	--	--	--	--	--	--	--	--	--	--	--	--
72-05-08	--	--	--	--	--	--	--	--	--	--	--	--
72-11-13	--	--	--	--	--	--	--	--	--	--	--	--
72-05-12	--	--	--	--	--	--	--	--	--	--	--	--
72-05-12	--	--	--	--	--	--	--	--	--	--	--	--
72-11-14	--	--	--	--	--	--	--	--	--	--	--	--
72-05-12	--	--	--	--	--	--	--	--	--	--	--	--
72-11-14	--	--	--	--	--	--	--	--	--	--	--	--
72-05-12	--	--	--	--	--	--	--	--	--	--	--	--
72-11-13	--	--	--	--	--	--	--	--	--	--	--	--
72-05-12	--	--	--	--	--	--	--	--	--	--	--	--
72-11-14	--	--	--	--	--	--	--	--	--	--	--	--
72-05-08	--	--	--	--	--	--	--	--	--	--	--	--
72-11-13	--	--	--	--	--	--	--	--	--	--	--	--
72-05-08	--	--	--	--	--	--	--	--	--	--	--	--
72-05-08	--	--	--	--	--	--	--	--	--	--	--	--
72-11-13	--	--	--	--	--	--	--	--	--	--	--	--
DATE OF SAMPLE	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	SODIUM AD- SORP- TION RATIO (00931)	PERCENT SODIUM (00932)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED SILICA (SI02) (MG/L) (00955)	DIS- SOLVED ARSENIC (AS) (UG/L) (01000)	DIS- SOLVED BORON (B) (UG/L) (01020)	DIS- SOLVED CAD- MIUM (CO) (UG/L) (01025)
72-05-12	--	--	--	--	--	38200	--	--	--	--	--	--
72-11-14	--	--	--	--	--	41000	--	--	--	--	--	--
72-05-08	--	--	--	--	--	166000	--	--	--	--	--	--
72-11-13	--	--	--	--	--	169000	--	--	--	--	--	--
72-05-12	--	--	--	--	--	170000	--	--	--	--	--	--
72-05-12	--	--	--	--	--	144000	--	--	--	--	--	--
72-11-14	--	--	--	--	--	149000	--	--	--	--	--	--
72-05-12	--	--	--	--	--	101000	--	--	--	--	--	--
72-11-14	--	--	--	--	--	98000	--	--	--	--	--	--
72-05-12	--	--	--	--	--	91500	--	--	--	--	--	--
72-11-13	--	--	--	--	--	96000	--	--	--	--	--	--
72-05-12	--	--	--	--	--	112000	--	--	--	--	--	--
72-11-14	--	--	--	--	--	112000	--	--	--	--	--	--
72-05-08	--	--	--	--	--	21400	--	--	--	--	--	--
72-11-13	--	--	--	--	--	20000	--	--	--	--	--	--
72-05-08	--	--	--	--	--	24800	--	--	--	--	--	--
72-05-08	--	--	--	--	--	17400	--	--	--	--	--	--
72-11-13	--	--	--	--	--	15900	--	--	--	--	--	--

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DATE OF SAMPLE	DIS-SOLVED MAG-NE-SIUM (MG) (00925)	DIS-SOLVED SODIUM (NA) (MG/L) (00930)	SODIUM AD-SORP-TION RATIO (00931)	PERCENT SODIUM (00932)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L) (00935)	DIS-SOLVED CHLO-RIDE (CL) (MG/L) (00940)	DIS-SOLVED SULFATE (SO4) (MG/L) (00945)	DIS-SOLVED FLUO-RIDE (F) (MG/L) (00950)	DIS-SOLVED SILICA (SI02) (MG/L) (00955)	DIS-SOLVED ARSENIC (AS) (UG/L) (01000)	DIS-SOLVED BORON (B) (UG/L) (01020)	DIS-SOLVED CAD-MIUM (CD) (UG/L) (01025)
72-05-08	--	--	--	--	--	58000	--	--	--	--	--	--
72-11-13	--	--	--	--	--	57800	--	--	--	--	--	--
72-05-08	--	--	--	--	--	54500	--	--	--	--	--	--
72-11-13	--	--	--	--	--	54800	--	--	--	--	--	--
72-05-08	--	--	--	--	--	8750	--	--	--	--	--	--
72-11-13	--	--	--	--	--	8400	--	--	--	--	--	--
72-05-08	--	--	--	--	--	12900	--	--	--	--	--	--
72-11-13	--	--	--	--	--	11400	--	--	--	--	--	--
72-05-10	--	--	--	--	--	15800	--	--	--	--	--	--
72-11-13	--	--	--	--	--	15400	--	--	--	--	--	--
72-05-10	--	--	--	--	--	15400	--	--	--	--	--	--
72-11-13	--	--	--	--	--	15000	--	--	--	--	--	--
72-05-10	--	--	--	--	--	12800	--	--	--	--	--	--
72-05-10	--	--	--	--	--	11600	--	--	--	--	--	--
72-11-13	--	--	--	--	--	12200	--	--	--	--	--	--
72-11-13	--	--	--	--	--	11800	--	--	--	--	--	--

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QUALITY OF GROUND WATER DATA FOR NEW MEXICO

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GRANT COUNTY

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QUALITY OF GROUND WATER DATA FOR NEW MEXICO

LEA COUNTY

LEA COUNTY											SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)
LOCAL IDENT- IFIER	STATION	NUMBER	DATE OF SAMPLE	TIME	GEO- LOGIC UNIT	DEPTH (FT) (00003)	TEMPER- ATURE (DEG C) (00010)	COLOR (PLAT- INUM- COBALT UNITS) (00080)				
19S.33E.26.244	323749103373301	72-09-25	--	110AVMB	101	--	--	--	2490	8.0		
19S.34E.31.232	323712103355001	72-09-25	--	110AVMB	120	--	--	--	2960	8.0		
20S.32E.24.333	323302103433901	72-09-11	--	110AVMB	67	20.5	--	--	750	8.0		
20S.32E.36.214	323204103425701	72-09-18	--	110AVMB	--	19.0	--	--	1930	7.8		
20S.33E.24.124	323348103370801	72-09-22	--	231CHNL	680	--	--	--	1480	8.7		
20S.34E.04.444	323543103332901	72-10-02	--	231CHNL	200	--	--	--	8840	8.0		
20S.34E.14.133	323422103321701	72-10-02	--	231CHNL	230	--	--	--	4120	8.1		
20S.34E.17.334	323359103351501	72-10-02	--	231CHNL	--	--	--	--	4330	8.1		
20S.34E.22.224	323350103322801	72-10-02	--	231CHNL	220	--	--	--	3970	8.2		
20S.34E.34.432	323130103324101	72-10-02	--	110AVMB	96	--	--	--	443	7.9		
21S.31E.01.131	323105103441601	72-08-18	--	110AVMB	30	--	--	--	837	8.0		
21S.32E.06.111	323115103431801	72-09-18	--	110AVMB	54	21.5	--	--	1460	--		
21S.33E.02.420	323022103321001	72-09-22	--	110AVMB	94	21.5	--	--	574	7.5		
21S.33E.04.434	323002103342701	72-10-02	--	231CHNL	147	--	--	--	815	7.8		
21S.33E.18.114	322902103370001	72-09-12	--	110AVMB	150	--	--	--	483	7.6		
DATE OF SAMPLE	CARBON DIOXIDE (CO2) (MG/L) (00405)	ALKA- LINITY AS CACO3 (MG/L) (00410)	BICAR- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED NITRATE (N) (MG/L) (00618)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	DIS- SOLVED ORTHO PHOS- PHATE (P04) (MG/L) (00660)	TOTAL PHOS- PHORUS (P) (MG/L) (00665)	DIS- SOLVED ORTHO PHOS- PHORUS (P) (MG/L) (00671)	HARD- NESS (CA,MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)
72-09-25	3.6	182	222	0	--	14	.15	--	.05	480	300	110
72-09-25	3.3	171	208	0	--	.24	.03	--	.01	220	50	42
72-09-11	5.6	285	348	0	--	.79	.15	--	.05	270	0	52
72-09-18	7.8	251	306	0	--	25	.21	--	.07	660	410	130
72-09-22	1.3	332	374	15	--	.08	.03	--	.01	40	0	7.0
72-10-02	2.2	113	138	0	--	.29	.06	--	.02	1200	1100	260
72-10-02	3.6	232	283	0	--	.69	.03	--	.01	240	6	49
72-10-02	3.6	235	287	0	--	.04	.06	--	.02	370	130	77
72-10-02	2.9	236	288	0	--	.47	.03	--	.01	150	0	30
72-10-02	3.8	157	191	0	--	2.8	.12	--	.04	200	41	56
72-08-18	5.0	257	313	0	--	17	.18	--	.06	390	140	92
72-09-18	--	--	--	--	--	--	--	--	--	--	--	--
72-09-22	10	162	197	0	--	8.0	.03	--	.01	260	95	92
72-10-02	8.6	278	339	0	--	4.5	3.1	--	1.0	260	0	62
72-09-12	4.6	94	115	0	--	23	.06	--	.02	210	120	69
DATE OF SAMPLE	DIS- SOLVED MAG- NESIUM (MG) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	SODIUM AD- SORP- TION RATIO (00931)	PERCENT SODIUM (00932)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED SILICA (SiO2) (MG/L) (00955)	DIS- SOLVED ARSENIC (AS) (UG/L) (01000)	DIS- SOLVED BORON (B) (UG/L) (01020)	DIS- SOLVED CAD- MIUM (CD) (UG/L) (01025)
72-09-25	51	380	7.5	63	4.1	280	640	4.4	54	--	--	--
72-09-25	28	590	17	85	2.1	290	930	1.2	12	--	--	--
72-09-11	34	65	1.7	34	3.1	42	62	1.2	58	--	--	--
72-09-18	81	160	2.7	35	2.5	290	260	2.6	81	--	--	--
72-09-22	5.4	320	22	94	2.4	130	210	2.4	15	--	--	--
72-10-02	130	2000	25	79	5.1	1500	3300	1.2	10	--	--	--
72-10-02	28	860	24	89	3.1	770	800	2.2	11	--	--	--
72-10-02	42	860	20	83	10	480	1300	4.0	12	--	--	--
72-10-02	19	840	30	92	2.9	730	750	2.2	10	--	--	--
72-10-02	14	16	.5	15	4.0	21	33	.9	45	--	--	--
72-08-18	40	18	.4	9	4.8	57	39	1.3	72	--	--	--
72-09-18	--	--	--	--	--	--	--	--	--	--	--	--
72-09-22	6.4	9.7	.3	7	3.9	52	25	.1	19	--	--	--
72-10-02	25	78	2.1	39	8.6	45	76	1.4	42	--	--	--
72-09-12	9.6	5.3	.2	5	3.5	17	24	.4	36	--	--	--

QUALITY OF GROUND WATER DATA FOR NEW MEXICO

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LEA COUNTY--Continued

DATE OF SAMPLE	DIS- SOLVED COPPER (CU) (UG/L) (01040)	TOTAL IRON (FE) (UG/L) (01045)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED LEAD (PB) (UG/L) (01049)	TOTAL MAN- GANESE (MN) (UG/L) (01055)	DIS- SOLVED MAN- GANESE (MN) (UG/L) (01056)	DIS- SOLVED ZINC (ZN) (UG/L) (01090)	TOTAL ALUM- INUM (AL) (UG/L) (01105)	ALDRIN (UG/L) (39330)	LINDANE (UG/L) (39340)	CHLOR- DANE (UG/L) (39350)	DDD (UG/L) (39360)
72-09-25	--	--	9	--	--	0	--	--	--	--	--	--
72-09-25	--	--	9	--	--	40	--	--	--	--	--	--
72-09-11	--	--	9	--	--	10	--	--	--	--	--	--
72-09-18	--	--	9	--	--	0	--	--	--	--	--	--
72-09-22	--	--	9	--	--	0	--	--	--	--	--	--
72-10-02	--	--	30	--	--	240	--	--	--	--	--	--
72-10-02	--	--	20	--	--	50	--	--	--	--	--	--
72-10-02	--	--	9	--	--	10	--	--	--	--	--	--
72-10-02	--	--	9	--	--	20	--	--	--	--	--	--
72-10-02	--	--	50	--	--	0	--	--	--	--	--	--
72-08-18	--	--	9	--	--	20	--	--	--	--	--	--
72-09-18	--	--	--	--	--	--	--	--	--	--	--	--
72-09-22	--	--	9	--	--	0	--	--	--	--	--	--
72-10-02	--	--	20	--	--	0	--	--	--	--	--	--
72-09-12	--	--	30	--	--	0	--	--	--	--	--	--

DATE OF SAMPLE	DDE (UG/L) (39365)	DDT (UG/L) (39370)	DI- ELDRIN (UG/L) (39380)	ENDRIN (UG/L) (39390)	HEPTA- CHLOR (UG/L) (39410)	HEPTA- CHLOR EPOXIDE (UG/L) (39420)	2,4-D (UG/L) (39730)	2,4,5-T (UG/L) (39740)	SILVEX (UG/L) (39760)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L) (70300)	DIS- SOLVED SOLIDS (SUM OF TUENTS) (MG/L) (70301)	DIS- SOLVED SOLIDS (TONS PER AC-FT) (70303)
72-09-25	--	--	--	--	--	--	--	--	--	--	1700	2.31
72-09-25	--	--	--	--	--	--	--	--	--	--	2000	2.72
72-09-11	--	--	--	--	--	--	--	--	--	--	493	.67
72-09-18	--	--	--	--	--	--	--	--	--	--	1270	1.73
72-09-22	--	--	--	--	--	--	--	--	--	--	892	1.21
72-10-02	--	--	--	--	--	--	--	--	--	--	7280	9.90
72-10-02	--	--	--	--	--	--	--	--	--	--	2670	3.63
72-10-02	--	--	--	--	--	--	--	--	--	--	2930	3.98
72-10-02	--	--	--	--	--	--	--	--	--	--	2530	3.44
72-10-02	--	--	--	--	--	--	--	--	--	--	297	.40
72-08-18	--	--	--	--	--	--	--	--	--	--	554	.75
72-09-18	--	--	--	--	--	--	--	--	--	--	--	--
72-09-22	--	--	--	--	--	--	--	--	--	--	341	.46
72-10-02	--	--	--	--	--	--	--	--	--	--	528	.72
72-09-12	--	--	--	--	--	--	--	--	--	--	323	.44

DATE OF SAMPLE	DENSITY (GM/ML AT 20 C) (71820)	HY- DROX- IDE (OH) (MG/L) (71830)	TOTAL NITRATE (NO3) (MG/L) (71850)	MAN- GANESE (MN) (UG/L) (71883)	IRON (FE) (UG/L) (71885)	TOTAL MERCURY (HG) (UG/L) (71900)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE MSL) (72000)	TOTAL DEPTH OF HOLE (FT. BELOW LSD) (72001)	DEPTH TO TOP OF WATER- BEARING ZONE (FT) (72002)	TOTAL DEPTH OF WELL (FT) (72008)	DEPTH TO BOT- TOM OF SAMPLE INTER- VAL (FT) (72016)
72-09-25	--	--	--	--	--	--	--	101	--	--	--
72-09-25	--	--	--	--	--	--	--	120	--	--	--
72-09-11	--	--	--	--	--	--	--	67	--	--	--
72-09-18	--	--	--	--	--	--	--	--	--	--	--
72-09-22	--	--	--	--	--	--	--	680	--	--	--
72-10-02	--	--	--	--	--	--	--	200	--	--	--
72-10-02	--	--	--	--	--	--	--	230	--	--	--
72-10-02	--	--	--	--	--	--	--	220	--	--	--
72-10-02	--	--	--	--	--	--	--	220	--	--	--
72-10-02	--	--	--	--	--	--	--	96	--	--	--
72-08-18	--	--	--	--	--	--	--	30	--	--	--
72-09-18	--	--	--	--	--	--	--	54	--	--	--
72-09-22	--	--	--	--	--	--	--	94	--	--	--
72-10-02	--	--	--	--	--	--	--	147	--	--	--
72-09-12	--	--	--	--	--	--	--	150	--	--	--

QUALITY OF GROUND WATER DATA FOR NEW MEXICO

LEA COUNTY--Continued

LOCAL IDENT- IFIER	STATION NUMBER	DATE OF SAMPLE	TIME	GEO- LOGIC UNIT	DEPTH (FT) (00003)	TEMPER- ATURE (DEG C) (00010)	COLOR (PLAT- INUM- COBALT UNITS) (00080)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)
22S.32E.14.323	322320103384901	72-09-13	--	231SNRS	--	--	--	--	--
		72-09-13	1200	231SNRS	380	--	--	512	8.0
22S.33E.13.231	322330103313101	72-09-21	--	231CHNL	490	21.0	--	2630	8.1
23S.32E.21.241A	321735103402501	72-09-21	--	231SVRS	515	20.5	--	701	8.1
23S.33E.12.312	321903103314901	72-09-21	--	231SVRS	388	20.5	--	1000	--
23S.33E.17.423	321805103352301	72-09-21	--	231SNRS	650	--	--	883	--
23S.33E.26.421A	321627103321601	72-09-21	--	231CHNL	149	--	--	1360	--
25S36E24.31214	320640103135000	72-10-26	1645	231CHNL	500	22.0	--	1020	7.7

DATE OF SAMPLE	CARBON DIOXIDE (CO2) (MG/L) (00405)	ALKA- LINITY AS CACO3 (MG/L) (00410)	BICAR- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED NITRATE (N) (MG/L) (00618)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	DIS- SOLVED ORTHO PHOS- PHATE (PO4) (MG/L) (00660)	TOTAL PHOS- PHORUS (P) (MG/L) (00665)	DIS- SOLVED ORTHO PHOS- PHORUS (P) (MG/L) (00671)	HARD- NESS (CA, MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)
72-09-13	--	--	--	--	--	--	--	--	--	--	--	--
72-09-13	3.9	198	242	0	1.9	.06	--	.02	160	0	28	--
72-09-21	2.4	155	189	0	2.1	.03	--	.01	350	190	66	--
72-09-21	4.0	255	311	0	2.4	.03	--	.01	210	0	29	--
72-09-21	--	--	--	--	--	--	--	--	--	--	--	--
72-09-21	--	--	--	--	--	--	--	--	--	--	--	--
72-09-21	--	--	--	--	--	--	--	--	--	--	--	--
72-10-26	12	300	366	0	.01	--	--	--	230	0	34	--

DATE OF SAMPLE	DIS- SOLVED MAG- NE- SIUM (MG) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	SODIUM AD- SORP- TION RATIO (00931)	PERCENT SODIUM (00932)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED SILICA (SiO2) (MG/L) (00955)	DIS- SOLVED ARSENIC (AS) (UG/L) (01000)	DIS- SOLVED BORON (B) (UG/L) (01020)	DIS- SOLVED CAD- MIUM (CD) (UG/L) (01025)
72-09-13	--	--	--	--	--	--	--	--	--	--	--	--
72-09-13	21	54	1.9	42	4.7	7.1	60	2.4	25	--	--	--
72-09-21	44	440	10	73	4.2	260	810	1.9	14	--	--	--
72-09-21	34	75	2.2	43	2.0	15	89	1.8	17	--	--	--
72-09-21	--	--	--	--	--	--	--	--	--	--	--	--
72-09-21	--	--	--	--	--	--	--	--	--	--	--	--
72-09-21	--	--	--	--	--	--	--	--	--	--	--	--
72-10-26	36	130	3.7	54	6.1	47	170	2.9	9.4	--	--	--

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QUALITY OF GROUND WATER DATA FOR NEW MEXICO

LUNA COUNTY 1/

LOCAL IDENT- IFIER	STATION	NUMBER	DATE OF SAMPLE	TIME	GEO- LOGIC UNIT	DEPTH (FT) (00003)	TEMPER- ATURE (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	CARBON DIOXIDE (CO2) (MG/L) (00405)
20S.05W.19.323	323300107240001	71-09-09	1310	1108LSN	620	26.0	393	8.0	2.3	
		71-09-09	1320	1108LSN	550	26.0	454	7.9	4.4	
20S.05W.26.142	323230107184501	71-09-09	1125	1108LSN	640	23.0	448	7.9	4.5	
20S.06W.24.314	323300107250001	71-09-09	1310	1108LSN	--	26.0	393	8.0	2.3	
21S.05W.08.144	323000107220001	71-09-09	1300	1108LSN	165	--	954	7.9	3.5	
21S.05W.20.422	322800107220001	71-09-09	1335	1108LSN	500	23.0	515	8.0	2.9	
20S.05W.31.344	323100107233601	71-09-09	1150	--	585	24.0	450	7.8	5.2	
21S.05W.34.444	322500107200001	71-09-09	1400	1108LSN	300	24.0	508	7.9	4.2	

DATE OF SAMPLE	ALKA- LITY AS CACO3 (MG/L) (00410)	BICAR- BONATE (MG/L) (00440)	CAR- BONATE (MG/L) (00445)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	DIS- SOLVED ORTHO PHOS- PHATE (P04) (MG/L) (00660)	DIS- SOLVED ORTHO PHOS- PHORUS (P) (MG/L) (00671)	HARD- NESS (CA+MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	SODIUM AD- SORP- TION RATIO (00931)
71-09-09	119	145	0	4.7	--	--	72	0	16	7.7	50	2.6
71-09-09	177	216	0	3.5	.15	.05	90	0	24	7.4	61	2.8
71-09-09	181	221	0	3.1	--	--	130	0	34	11	44	1.7
71-09-09	119	145	0	4.7	--	--	72	0	16	7.7	50	2.6
71-09-09	141	172	0	19	--	--	290	150	75	26	80	2.0
71-09-09	148	180	0	10	.18	.06	120	0	30	12	54	2.1
71-09-09	168	205	0	3.8	--	--	98	0	24	9.3	57	2.5
71-09-09	169	206	0	9.7	--	--	130	0	28	15	51	1.9

DATE OF SAMPLE	PERCENT SODIUM (00932)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED SILICA (SI02) (MG/L) (00955)	DIS- SOLVED BORON (B) (UG/L) (01020)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L) (70300)
71-09-09	56	10	17	34	1.1	81	--	--	--
71-09-09	56	9.5	12	29	1.2	81	120	9	361
71-09-09	40	8.9	10	25	1.1	45	--	--	--
71-09-09	56	10	17	34	1.1	81	--	--	--
71-09-09	36	7.3	69	160	1.5	74	--	--	--
71-09-09	47	6.3	21	35	1.6	59	110	9	392
71-09-09	53	7.8	14	29	1.2	39	--	--	--
71-09-09	44	6.4	15	31	1.5	77	--	--	--

DATE OF SAMPLE	DIS- SOLVED SOLIDS (SUM OF CONSTIT- TUENTS) (MG/L) (70301)	DIS- SOLVED SOLIDS (TONS PER AC-FT) (70303)	TOTAL DEPTH OF HOLE (FT. BELOW LSD) (72001)
71-09-09	309	.42	620
71-09-09	347	.49	550
71-09-09	302	.41	640
71-09-09	309	.42	--
71-09-09	662	.90	165
71-09-09	352	.53	500
71-09-09	299	.41	--
71-09-09	369	.50	300

1/ Chemical analyses for 1971 calendar year which were not published.

QUALITY OF GROUND WATER DATA FOR NEW MEXICO

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LUNA COUNTY--Continued

LOCAL IDENT- IFIER	STATION	NUMBER	DATE OF SAMPLE	TIME	GEO- LOGIC UNIT	DEPTH (FT) (00003)	TEMPER- ATURE (DEG C) (00010)	COLOR (PLAT- INUM- COBALT UNITS) (00080)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)
20S.06W.05.42111	323551107282801	72-01-04	1300	--	--	--	28.0	--	388	7.8
20S.08W.06.44414	323602107414501	72-02-07	--	--	--	--	20.0	--	472	7.2
20S.08W.29.31441	323210107411201	72-02-14	1400	--	--	--	19.0	--	797	7.1
20S.09W.24.42344	323305107430501	72-02-14	--	--	--	--	12.0	--	656	7.2
21S.11W.35.133	322613107571901	72-01-04	1440	--	--	--	15.9	--	384	7.2
22S.11W.24.41111	322241107555001	72-01-04	1535	--	--	--	17.6	--	275	8.3
23S.11W.14.24411	321824107562701	72-02-10	1155	--	--	--	18.8	--	374	7.9
25S.07W.31.13221	320605107361001	72-03-09	--	--	--	--	20.2	--	514	7.7

DATE OF SAMPLE	CARBON DIOXIDE (CO2) (MG/L) (00405)	ALKA- LITY AS CACO3 (MG/L) (00410)	BICAR- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED NITRATE (N) (MG/L) (00618)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	DIS- SOLVED ORTHO PHOS- PHATE (PO4) (MG/L) (00660)	TOTAL PHOS- PHORUS (P) (MG/L) (00665)	DIS- SOLVED ORTHO PHOS- PHORUS (P) (MG/L) (00671)	HARD- NESS (CA+MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)
72-01-04	4.8	155	189	0	--	.95	--	--	--	51	0	14
72-02-07	25	202	246	0	--	.15	.03	--	.01	170	0	41
72-02-14	39	249	304	0	--	.37	--	--	--	370	120	110
72-02-14	29	238	290	0	--	.57	--	--	--	330	95	92
72-01-04	20	167	203	0	--	1.4	--	--	--	160	0	45
72-01-04	1.2	121	147	0	--	.26	--	--	--	100	0	27
72-02-10	3.9	160	195	0	--	.83	--	--	--	140	0	40
72-03-09	8.7	222	271	0	--	1.6	--	--	--	240	19	75

DATE OF SAMPLE	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	SODIUM AD- SORP- TION RATIO (00931)	PERCENT SODIUM (00932)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED SILICA (SiO2) (MG/L) (00955)	DIS- SOLVED ARSENIC (AS) (UG/L) (01000)	DIS- SOLVED BORON (B) (UG/L) (01020)	DIS- SOLVED CAD- MIUM (CD) (UG/L) (01025)
72-01-04	3.9	65	4.0	72	3.8	11	27	1.4	61	--	140	--
72-02-07	17	27	.9	25	.6	14	33	.6	49	--	20	--
72-02-14	22	19	.4	10	1.8	9.4	170	1.8	15	--	60	--
72-02-14	25	14	.3	8	.3	9.6	110	.3	21	--	60	--
72-01-04	12	19	.7	20	2.0	7.8	19	.6	38	--	60	--
72-01-04	8.7	17	.7	26	1.8	7.7	14	.6	40	--	20	--
72-02-10	8.7	26	1.0	29	2.8	9.1	21	.7	37	--	120	--
72-03-09	13	13	.4	10	1.0	6.7	39	.6	27	--	30	--

QUALITY OF GROUND WATER DATA FOR NEW MEXICO

LUNA COUNTY--Continued

[illegible][illegible][illegible]

QUALITY OF GROUND WATER DATA FOR NEW MEXICO

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SANDOVAL COUNTY

SANDOVAL COUNTY												SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)
LOCAL IDENT- I- FIER	STATION	NUMBER	DATE OF SAMPLE	TIME	GEO- LOGIC UNIT	TEMPER- ATURE (DEG C) (00010)	INSTAN- TANEOUS FLOW RATE (GPM) (00059)	TUR- BID- ITY (JTU) (00070)	COLOR (PLAT- INUM- COBALT UNITS) (00080)			
12N.02E.24.234 PROJECTED	351434106403701		72-06-30	0945	--	21.0	--	--	--	488		
12N.03E.30.1218 PROJECTED	351446106401001		72-06-30	0900	--	19.0	--	--	--	350		
13N.03E.18.330	352058106401001		72-08-26	1610	--	32.0	--	--	--	3140		
DATE OF SAMPLE	PH (UNITS) (00400)	CARBON DIOXIDE (CO2) (MG/L) (00405)	ALKA- LINITY AS CACO3 (MG/L) (00410)	BICAR- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	DIS- SOLVED ORTHO PHOS- PHATE (PO4) (MG/L) (00660)	TOTAL PHOS- PHORUS (P) (MG/L) (00665)	DIS- SOLVED ORTHO. PHOS- PHORUS (P) (MG/L) (00671)	HARD- NESS (CA+MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)
72-06-30	8.1	--	--	--	--	3.2	--	.02	--	--	--	--
72-06-30	7.9	--	--	--	--	.79	--	.03	--	--	--	--
72-08-26	9.5	.4	65.	334	226	.00	.52	--	.17	4	0	1.2
DATE OF SAMPLE	DIS- SOLVED MAG- NE- SIUM (MG) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	SODIUM AD- SORP- TION RATIO (00931)	PERCENT SODIUM (00932)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED SILICA (SIO2) (MG/L) (00955)	DIS- SOLVED ARSENIC (AS) (UG/L) (01000)	DIS- SOLVED BARIUM (BA) (UG/L) (01005)	DIS- SOLVED BORON (B) (UG/L) (01020)
72-06-30	--	--	--	--	--	--	--	1.0	--	10	0	290
72-06-30	--	--	--	--	--	--	--	.5	--	5	0	80
72-08-26	.3	740	157	98	22	97	49	3.4	24	110	--	2200
DATE OF SAMPLE	DIS- SOLVED CAD- MIUM (CD) (UG/L) (01025)	HEXA- VALENT CHRO- MIUM (CR6) (UG/L) (01032)	DIS- SOLVED COPPER (CU) (UG/L) (01040)	DIS- SOLVED IRON (FE) (UG/L) (01046)	TOTAL LEAD (PB) (UG/L) (01051)	DIS- SOLVED MAN- GANESE (MN) (UG/L) (01056)	DIS- SOLVED SILVER (AG) (UG/L) (01075)	DIS- SOLVED ZINC (ZN) (UG/L) (01090)	DIS- SOLVED SELE- NIUM (SE) (UG/L) (01145)			
72-06-30	0	10	1	30	7	10	0	--	1			
72-06-30	0	0	1	20	6	10	0	--	0			
72-08-26	5	--	--	800	3400	--	--	--	0			
DATE OF SAMPLE	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L) (70300)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L) (70301)	DIS- SOLVED SOLIDS (TONS PER AC-FT) (70303)	TOTAL MERCURY (MG) (71900)								
72-06-30	--	--	--	.2								
72-06-30	--	--	--	.0								
72-08-26	2460	1330	3.35	.6								

QUALITY OF GROUND WATER DATA FOR NEW MEXICO

SANTA FE COUNTY

SANTA FE COUNTY													SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)
LOCAL IDENT- 1- FIER	STATION	NUMBER	DATE OF SAMPLE	TIME	GEO- LOGIC UNIT	TEMPER- ATURE (DEG C) (00010)	INSTAN- TANEOUS FLOW RATE (GPM) (00059)	TUR- BID- ITY (JTU) (00070)	COLOR (PLAT- INUM- COBALT UNITS) (00080)				
12N.07E.34.1232	351336106110301	72-07-02	1200	--	--	--	--	--	--	894			
18N.07E.01.2123	354935106085101	72-01-18	1347	--	23.0	440	--	--	--	543			
		72-02-29	1235	--	24.0	--	--	--	--	698			
	354935106085102	72-02-29	1255	--	24.5	--	--	--	--	757			
	354935106085103	72-02-29	1320	--	25.0	--	100	--	--	987			
	354935106085104	72-02-29	1400	--	25.0	--	--	--	--	794			
DATE OF SAMPLE	PH (UNITS) (00400)	CARBON DIOXIDE (CO2) (MG/L) (00405)	ALKA- LINITY AS CACO3 (MG/L) (00410)	BICAR- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	DIS- SOLVED ORTHO PHOS- PHATE (PO4) (MG/L) (00660)	TOTAL PHOS- PHORUS (P) (MG/L) (00665)	DIS- SOLVED ORTHO PHOS- PHORUS (P) (MG/L) (00671)	HARD- NESS (CA+MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	
72-07-02	7.9	4.7	192	234	0	1.6	.03	--	.01	460	260	140	
72-01-18	7.9	3.6	145	177	0	--	--	--	--	--	--	--	
72-02-29	7.4	28	361	440	0	1.3	.12	--	.04	170	0	55	
72-02-29	8.0	7.6	392	478	0	1.2	.12	--	.04	200	0	63	
72-02-29	7.7	20	518	631	0	.69	.03	--	.01	130	0	43	
72-02-29	8.0	8.1	415	506	0	.63	.03	--	.01	170	0	55	
DATE OF SAMPLE	DIS- SOLVED MAG- NE- SIUM (MG) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	SODIUM AD- SORP- TION RATIO (00931)	PERCENT SODIUM (00932)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED SILICA (SI02) (MG/L) (00955)	DIS- SOLVED ARSENIC (AS) (UG/L) (01000)	DIS- SOLVED BARIUM (BA) (UG/L) (01005)	DIS- SOLVED BORON (B) (UG/L) (01020)	
72-07-02	26	16	.3	7	1.4	13	280	.2	20	--	--	--	
72-01-18	--	--	--	--	--	--	--	--	--	--	--	--	
72-02-29	7.9	97	3.2	54	6.9	5.2	24	.4	36	--	--	100	
72-02-29	9.3	110	3.4	54	7.5	13	27	.3	38	--	--	100	
72-02-29	6.5	190	7.1	74	8.7	12	34	.3	42	--	--	290	
72-02-29	7.9	120	4.0	59	7.8	7.2	32	.3	39	--	--	150	
DATE OF SAMPLE	DIS- SOLVED CAD- MIUM (CD) (UG/L) (01025)	HEXA- VALENT CHRO- MIUM (CR6) (UG/L) (01032)	DIS- SOLVED COPPER (CU) (UG/L) (01040)	DIS- SOLVED IRON (FE) (UG/L) (01046)	TOTAL LEAD (PB) (UG/L) (01051)	DIS- SOLVED MAN- GANESE (MN) (UG/L) (01056)	DIS- SOLVED SILVER (AG) (UG/L) (01075)	DIS- SOLVED ZINC (ZN) (UG/L) (01090)	DIS- SOLVED SELE- NIUM (SE) (UG/L) (01145)				
72-07-02	--	--	--	0	--	10	--	--	--				
72-01-18	--	--	--	--	--	--	--	--	--				
72-02-29	--	--	--	10	--	20	--	--	--				
72-02-29	--	--	--	10	--	10	--	--	--				
72-02-29	--	--	--	0	--	190	--	--	--				
72-02-29	--	--	--	10	--	50	--	--	--				
DATE OF SAMPLE	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L) (70300)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L) (70301)	DIS- SOLVED SOLIDS (TONS PER AC-FT) (70303)	TOTAL MERCURY (HG) (UG/L) (71900)									
72-07-02	656	619	.89	--									
72-01-18	--	--	--	--									
72-02-29	470	455	.64	--									
72-02-29	500	509	.68	--									
72-02-29	602	650	.82	--									
72-02-29	484	521	.66	--									

QUALITY OF GROUND WATER DATA FOR NEW MEXICO

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SIERRA COUNTY ^{1/}

SIERRA COUNTY 1/												
LOCAL IDENT- IFIER	STATION	NUMBER	DATE OF SAMPLE	TIME	GEO- LOGIC UNIT	DEPTH (FT) (00003)	TEMPER- ATURE (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	CARBON DIOXIDE (CO2) (MG/L) (00405)		
19S.05W.25.131A	323800	107190001	71-09-09	1010	1108LSN	1012	31.0	1350	8.3	1.4		
DATE OF SAMPLE	ALKA- LINITY AS CACO3 (MG/L) (00410)	BICAR- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	DIS- SOLVED ORTHO PHOS- PHATE (PO4) (MG/L) (00660)	DIS- SOLVED ORTHO. PHOS- PHORUS (P) (MG/L) (00671)	HARD- NESS (CA+MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	SODIUM AD- SORP- TION RATIO (00931)
71-09-09	140	171	0	1.1	.04	.03	16	0	5.9	.2	280	31
DATE OF SAMPLE	PERCENT SODIUM (00932)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED SILICA (SIO2) (MG/L) (00955)	DIS- SOLVED BORON (R) (UG/L) (01020)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L) (70300)			
71-09-09	97	5.1	30	430	5.3	51	1300	250	953			
DATE OF SAMPLE	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L) (70301)	DIS- SOLVED SOLIDS (TONS PER AC-FT) (70303)	TOTAL DEPTH OF HOLE (FT. BELOW LSD) (72001)									
71-09-09	890	1.30	1012									

^{1/} Chemical analyses for 1971 calendar year which were not published.

QUALITY OF GROUND WATER DATA FOR NEW MEXICO

SIERRA COUNTY--continued

LOCAL IDENTIFIER	STATION	NUMBER	DATE OF SAMPLE	TIME	GEO-LOGIC UNIT	TEMPERATURE (DEG C) (00010)	INSTANTANEOUS FLOW RATE (GPM) (00059)	TURBIDITY (JTU) (00070)	COLOR (PLATINUM-COBALT UNITS) (00080)	SPECIFIC CONDUCTANCE (MICRO-MHOS) (00095)
10S.03W.18.223	332643107104601	72-01-26	1545	--		17.0	--	--	--	749
10S.03W.20.114	332517107101901	72-01-28	1340	--		17.5	--	--	--	988
17S.05W.24.312	324857107184601	72-05-15	--	--		17.0	--	--	--	1200

DATE OF SAMPLE	PH (UNITS) (00400)	CARBON DIOXIDE (CO2) (MG/L) (00405)	ALKALINITY AS CAC03 (MG/L) (00410)	BICARBONATE (HCO3) (MG/L) (00440)	CARBONATE (CO3) (MG/L) (00445)	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	DIS-SOLVED ORTHO PHOSPHATE (P04) (MG/L) (00660)	TOTAL PHOSPHORUS (P) (MG/L) (00665)	DIS-SOLVED ORTHO PHOSPHORUS (P) (MG/L) (00671)	HARDNESS (CA,MG) (MG/L) (00900)	NON-CARBONATE HARDNESS (MG/L) (00902)	DIS-SOLVED CALCIUM (CA) (MG/L) (00915)
72-01-26	7.5	4.8	77	94	0	1.7	--	--	--	240	170	86
72-01-28	7.8	7.3	237	289	0	.09	--	--	--	310	75	97
72-05-15	7.9	--	103	126	0	.37	--	--	--	430	330	140

DATE OF SAMPLE	DIS-SOLVED MAGNESIUM (MG) (MG/L) (00925)	DIS-SOLVED SODIUM (NA) (MG/L) (00930)	SODIUM ADSORPTION RATIO (00931)	PERCENT SODIUM (00932)	DIS-SOLVED POTASSIUM (K) (MG/L) (00935)	DIS-SOLVED CHLORIDE (CL) (MG/L) (00940)	DIS-SOLVED SULFATE (SO4) (MG/L) (00945)	DIS-SOLVED FLUORIDE (F) (MG/L) (00950)	DIS-SOLVED SILICA (SI02) (MG/L) (00955)	DIS-SOLVED ARSENIC (AS) (UG/L) (01000)	DIS-SOLVED BARIUM (BA) (UG/L) (01005)	DIS-SOLVED BORON (B) (UG/L) (01020)
72-01-26	6.8	46	1.3	28	7.8	84	150	.2	23	--	--	--
72-01-28	17	100	2.5	41	3.3	66	180	1.0	20	--	--	--
72-05-15	20	140	2.9	41	4.3	97	350	1.1	33	--	--	220

DATE OF SAMPLE	DIS-SOLVED CADMIUM (CD) (UG/L) (01025)	HEXA-VALENT CHROMIUM (CR6) (UG/L) (01032)	DIS-SOLVED COPPER (CU) (UG/L) (01040)	DIS-SOLVED IRON (FE) (UG/L) (01046)	TOTAL LEAD (PB) (UG/L) (01051)	DIS-SOLVED MANGANESE (MN) (UG/L) (01056)	DIS-SOLVED SILVER (AG) (UG/L) (01075)	DIS-SOLVED ZINC (ZN) (UG/L) (01090)	DIS-SOLVED SELENIUM (SE) (UG/L) (01145)
72-01-26	--	--	--	--	--	--	--	--	--
72-01-28	--	--	--	--	--	--	--	--	--
72-05-15	--	--	--	90	--	--	--	--	--

DATE OF SAMPLE	DIS-SOLVED SOLIDS (RESIDUE AT 180 C) (MG/L) (70300)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L) (70301)	DIS-SOLVED SOLIDS (TONS PER AC-FT) (70303)	TOTAL MERCURY (MG) (UG/L) (71900)
72-01-26	--	458	.62	--
72-01-28	--	627	.85	--
72-05-15	--	849	1.15	--

QUALITY OF GROUND WATER DATA FOR NEW MEXICO

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VALENCIA COUNTY

VALENCIA COUNTY												
LOCAL IDENT- IFIER	STATION	NUMBER	DATE OF SAMPLE	TIME	GEO- LOGIC UNIT	TEMPER- ATURE (DEG C) (00010)	INSTAN- TANEOUS FLOW RATE (GPM) (00059)	TUR- BID- ITY (JTU) (00070)	COLOR (PLAT- INUM- COBALT UNITS) (00080)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)		
05N.02E.00.000 PROJECTED	343920106442801		72-09-25	0730	--	--	--	--	--	470		
DATE OF SAMPLE	PH (UNITS) (00400)	CARBON DIOXIDE (CO2) (MG/L) (00405)	ALKA- LITY AS CACO3 (MG/L) (00410)	BICAR- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	DIS- SOLVED ORTHO PHOS- PHATE (P04) (MG/L) (00660)	TOTAL PHOS- PHORUS (P) (MG/L) (00665)	DIS- SOLVED ORTHO- PHOS- PHORUS (P) (MG/L) (00671)	HARD- NESS (CA+MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)
72-09-25	7.6	6.4	130	158	0	.01	.06	--	.02	160	34	44
DATE OF SAMPLE	DIS- SOLVED MAG- NE- SIUM (MG) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	SODIUM AD- SORP- TION RATIO (00931)	PERCENT SODIUM (00932)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED SILICA (SiO2) (MG/L) (00955)	DIS- SOLVED ARSENIC (AS) (UG/L) (01000)	DIS- SOLVED BARIUM (BA) (UG/L) (01005)	DIS- SOLVED BORON (B) (UG/L) (01020)
72-09-25	13	31	1.1	28	6.0	36	71	.6	.1	--	--	--
DATE OF SAMPLE	DIS- SOLVED CAD- MIUM (CD) (UG/L) (01025)	HEXA- VALENT CHRO- MIUM (CR6) (UG/L) (01032)	DIS- SOLVED COPPER (CU) (UG/L) (01040)	DIS- SOLVED IRON (FE) (UG/L) (01046)	TOTAL LEAD (PB) (UG/L) (01051)	DIS- SOLVED MAN- GANESE (MN) (UG/L) (01056)	DIS- SOLVED SILVER (AG) (UG/L) (01075)	DIS- SOLVED ZINC (ZN) (UG/L) (01090)	DIS- SOLVED SELE- NIUM (SE) (UG/L) (01145)			
72-09-25	--	--	--	60	--	9	--	--	--			
DATE OF SAMPLE	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L) (70300)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L) (70301)	DIS- SOLVED SOLIDS (TONS PER AC-FT) (70303)	TOTAL MERCURY (HG) (UG/L) (71900)								
72-09-25	--	280	.38	--								

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