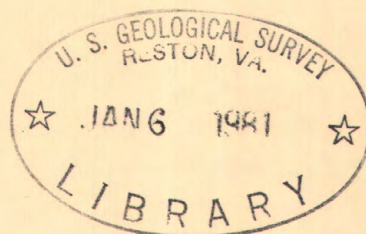


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1973  
pt. 2

# 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

# CALENDAR FOR 1973

## JANUARY 1973

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			

## FEBRUARY 1973

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			

## MARCH 1973

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

## APRIL 1973

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					

## MAY 1973

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		

## JUNE 1973

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

## JULY 1973

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				

## AUGUST 1973

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 1973

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						

## OCTOBER 1973

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 1973

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	

## DECEMBER 1973

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					



**1973**

**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

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

1. Water Resources Data for New Mexico  
Part 1: Surface Water Records
2. Water Resources Data for New Mexico  
Part 2: Water Quality 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, IN DOWNSTREAM ORDER,  
FOR WHICH RECORDS ARE PUBLISHED

V

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

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## WATER RESOURCES DATA FOR NEW MEXICO, 1973

### 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 1973 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 U.S. Geological Survey's 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 are listed in alphabetical order: Rosemary S. Ames, mathematical technician; Linda V. Beal, card punch operator; Alice J. Brown, hydrologic aid; Barbara L. Christy, hydrologic aid; Charles L. Coon, hydrologic aid; Bruce M. Delaney, engineering technician; Jack D. Dewey, supervisory hydraulic engineer; Trancito Diaz, engineering technician; Ceceilia D. Foghorn, hydrologic field assistant; David E. Funderburg, engineering technician; Elizabeth Larkin, hydrologic aid; Richard L. Lepp, biologist; Bruce L. Lewis, hydrologic aid; Miko Lyon, hydrologist; Robert M. McBreen, physical science technician; Joseph E. O'Neill, chemist; Kim Ong, supervisory chemist; Emilo Pargas, engineering aid; John A. Sanchez, hydrologic aid; Christian S. Smith, hydrologic aid; Gerald Young, hydrologic aid; Edward D. Villanueva, hydrologic technician. 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 contain 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 or will be published on a calendar basis. Records for the 1964 through 1970 reports are or will be published in Geological Survey Water-Supply Papers. The 1971 and subsequent reports may be published on a yet-to-be-established publication series.

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" and table 5, p. 22 "Factors for converting English units to International System (SI) units" 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 below. See also table for converting English units to International System of units (SI) on page 22.

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

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.

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.

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 ( $\text{CaCO}_3$ ).

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 ( $1 \times 10^{-12}$ ) of the amount of radioactivity represented by a curie (C or Ci). A curie is the amount of radioactivity that yields  $3.7 \times 10^{10}$  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 concen- tration in 1000 mg/l	Di- vide by	Range of concen- tration in 1000 mg/l	Di- vide by	Range of concen- tration in 1000 mg/l	Di- vide by	Range of concen- tration 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.

Water year in Geological Survey reports dealing with surface water supply is the 12-month period, October 1 through September 30. The water year is designated by the calendar year in which it ends and which includes 9 of the 12 months. Thus, the year ending September 30, 1973, is called "the 1973 water year."

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 eight-digit downstream numbers are identified by using the latitude and longitude locations of the sites as the station numbers. These are 15-digit numbers consisting of the latitude and longitude coordinates in degrees, minutes and seconds plus a 2-digit sequence number. For example, the station number for a miscellaneous surface water site located at north latitude 32°11'05", west longitude 104°17'05" and a sequence number assignment of "10" would be 321105104170510.



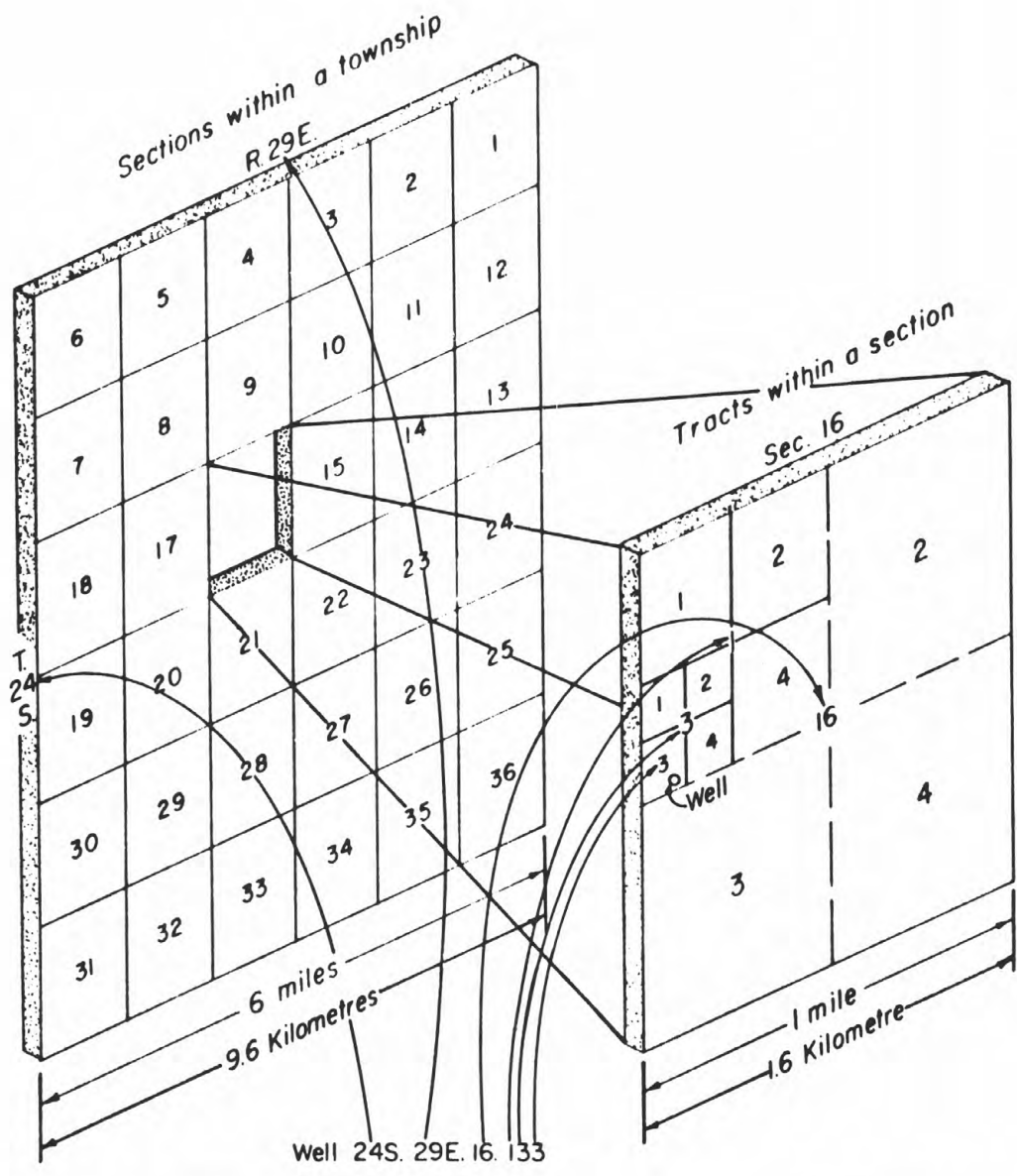


Figure 1.--System of numbering wells and springs in New Mexico.

## 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 station numbers which are essentially the latitudes and the longitudes locating the wells or the springs. These station numbers are the principal identifiers of wells and springs in the U.S. Geological Survey's National Water Data System. For example, the well illustrated in Figure 1, page 11 is also located in north latitude  $32^{\circ}13'05''$  and west longitude  $103^{\circ}59'51''$ . It has been assigned a sequence number "01" so its station identification number is 321305103595101.

## 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, 1973, Part 1. Surface Water Records." These discharge records are used in conjunction with the computations of the chemical constituents and sediment loads where they are applicable 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 surface water stations where quality of water data are collected on a systematic basis 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 (1970). The method for determining elemental constituents by emission spectrographic techniques is described by Barnett and Mallory (1971). Analysis of pesticides, herbicides, and organic substances in water are described by Goerlitz and Lamar (1967); Lamar, Goerlitz, and Law (1965); and Goerlitz and Brown (1972). Analyses of radioactive substances in water are described by Barker and others (1963, 1964, and 1965).

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 precise 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 using a glass stem thermometer 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 (°C) and degrees Fahrenheit (°F), see table 3, below.

Table 3.--Temperature conversion table, degrees Fahrenheit (°F) and degrees Celsius (°C)\*  
(Temperature reported to nearest 0.5°C)

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

### Sediment

Suspended sediment concepts are described by Guy (1970), and the techniques for sample collection, analyses, and measurement of suspended-sediment are described by Guy and Norman (1970). Methods for computation of fluvial sediment discharges are described by Porterfield (1972). Methods for determining particle sizes of suspended sediment by optical techniques are described by Ritter and Helley (1969). 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. Methods for the collection and analysis of aquatic biological and aquatic microbiological samples are described by Slack and others (1973).

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 rifle 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>Irrigation 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, 2097	2098	----
1969 .....	----	2146, 2147	B2148	----
1970 .....	----	2156, 2157	B2158	----

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.



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- 1961, The single stage samples for suspended sediment: Rept. 13.
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Table 5.--Factors for converting English units to International System (SI) units

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

Multiply English units	By	To obtain Si units
<u>Length</u>		
inches (in)	25.4	millimetres (mm)
	.0254	metres (m)
feet (ft)	.3048	metres (m)
yards (yd)	.9144	metres (m)
rods	5.0292	metres (m)
miles (mi)	1.609	kilometres (km)
<u>Area</u>		
acres	4047	square metres (m <sup>2</sup> )
	.4047	*hectares (ha)
	.4047	square hectometre (hm <sup>2</sup> )
	.004047	square kilometres (km <sup>2</sup> )
square miles (mi <sup>2</sup> )	2.590	square kilometres (km <sup>2</sup> )
<u>Volume</u>		
gallons (gal)	3.785	**litres (l)
	3.785	cubic decimetres (dm <sup>3</sup> )
	3.785x10 <sup>-3</sup>	cubic metres (m <sup>3</sup> )
million gallons (10 <sup>6</sup> gal)	3785	cubic metres (m <sup>3</sup> )
	3.785x10 <sup>-3</sup>	cubic hectometres (hm <sup>3</sup> )
cubic feet (ft <sup>3</sup> )	28.32	cubic decimetres (dm <sup>3</sup> )
	.02832	cubic metres (m <sup>3</sup> )
cfs-day (ft <sup>3</sup> /s-day)	2447	cubic metres (m <sup>3</sup> )
	2.447x10 <sup>-3</sup>	cubic hectometres (hm <sup>3</sup> )
acre-feet (acre-ft)	1233	cubic metres (m <sup>3</sup> )
	1.233x10 <sup>-3</sup>	cubic hectometres (hm <sup>3</sup> )
	1.233x10 <sup>-6</sup>	cubic kilometres (km <sup>3</sup> )
<u>Flow</u>		
cubic feet per second (ft <sup>3</sup> /s)	28.32	litres per second (l/s)
	28.32	cubic decimetres per second (dm <sup>3</sup> /s)
	.02832	cubic metres per second (m <sup>3</sup> /s)
gallons per minute (gpm)	.06309	litres per second (l/s)
	.06309	cubic decimetres per second (dm <sup>3</sup> /s)
	6.309x10 <sup>-5</sup>	cubic metres per second (m <sup>3</sup> /s)
million gallons per day (mgd)	43.81	cubic decimetres per second (dm <sup>3</sup> /s)
	.04381	cubic metres per second (m <sup>3</sup> /s)
<u>Mass</u>		
ton (short)	.9072	tonne (t)

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

\*\*The unit litre is accepted for use with the International System (SI). See NBS Special Bulletin 330, p. 13, 1972 edition.



## WATER-QUALITY STATIONS IN DOWNSTREAM ORDER

23

## 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 mi (2.4 km) upstream from Baker damsite, 1.7 mi (2.7 km) northwest of Valley, 3.0 mi (4.8 km) upstream from Travesser Creek, 12 mi (19 km) north of Guy, 26 mi (42 km) northwest of Kenton, Okla., and at mile 634.5 (1,020.9 km).

DRAINAGE AREA.--545 mi<sup>2</sup> (1,412 km<sup>2</sup>).

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

## CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

DATE	TIME	INSTAN-	DIS-	DIS-	DIS-	DIS-	DIS-	DIS-	BICAR-	CAR-	DIS-	DIS-	
		TANEUS	SOLVED	SOLVED	SOLVED	SOLVED	SOLVED	SOLVED					
		LIS-	SILICA	IRON	CAL-	NE-	LIS-	PO-					
		CHARGE	(SI02)	(FE)	(CA)	(MG)	(NA)	(K)	(HCO3)	(CO3)	(SO4)	CHLO-	
		(LBS)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	
		(00061)	(00955)	(01346)	(00915)	(00925)	(00930)	(00935)	(00440)	(00445)	(00945)	(00940)	
JAN.	18...	1045	2.4	18	--	97	68	130	3.8	305	0	460	21
FEB.	14...	1700	2.7	19	--	92	67	120	4.2	301	0	510	22
MAR.	06...	1415	1.7	16	--	89	73	130	4.7	291	0	550	24
APR.	09...	1540	1.8	12	9	78	67	130	4.1	243	0	500	23
MAY	29...	1345	1.2	10	--	140	59	130	2.9	253	0	640	12
JUNE	20...	1635	.13	15	--	80	69	130	5.6	256	0	550	23
JULY	19...	1150	1.3	15	--	74	76	140	5.6	226	11	580	25
AUG.	17...	1100	.75	14	--	81	72	140	5.8	246	4	580	24
SEP.	25...	0925	2.3	9.5	--	80	72	140	7.0	253	0	530	26
OCT.	16...	0950	.64	11	30	85	69	130	5.2	268	0	490	25
NOV.	06...	1230	1.3	12	--	93	76	140	5.6	301	0	530	26
DEC.	15...	1150	2.6	16	--	100	82	140	6.4	334	0	560	28

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED NITRATE (N) (MG/L) (00631)	DIS- SOLVED ORTHO- PHOS- PHORUS (P) (MG/L) (00671)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L) (70360)	DIS- SOLVED SOLIDS (SUM OF TENTHS) (MG/L) (70361)	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) (MG/L) (01020)
JAN. 18...	.5	1.9	--	--	957	520	270	2.5	1320	8.2	1.0	--
FEB. 14...	.6	.89	--	--	987	510	260	2.3	1350	8.0	6.0	--
MAR. 06...	.5	.44	--	--	1030	520	280	2.5	1430	8.0	15.0	--
APR. 09...	.4	.06	.01	960	935	470	270	2.6	1330	7.9	13.0	160
MAY 29...	.4	.25	--	--	1120	590	390	2.3	1500	7.6	23.0	--
JUNE 20...	.6	.11	--	--	1000	480	270	2.6	1380	8.1	25.0	--
JULY 19...	.5	.09	--	--	1040	500	290	2.7	1410	8.5	27.0	--
AUG. 17...	.6	.13	--	--	1040	500	290	2.7	1430	8.4	24.0	--
SEP. 25...	.5	.05	--	--	990	500	290	2.7	1440	8.0	13.5	--
OCT. 16...	1.0	.01	.00	1030	949	500	280	2.5	1400	8.3	12.0	200
NOV. 06...	.9	.09	--	--	1030	550	300	2.6	1490	8.3	13.0	--
DEC. 15...	.6	.50	--	--	1100	590	310	2.5	1550	8.1	.5	--

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 mi (5.0 km) north of Hebron, 5.0 mi (8.0 km) upstream from Chicorica Creek, and 8.0 mi (12.9 km) south of Raton, and at mile 888.1 (1,429.0 km).

DRAINAGE AREA.--229 mi<sup>2</sup> (593 km<sup>2</sup>).

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

## CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS) (00061)	DIS- SOLVED SILICA (SiO <sub>2</sub> ) (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 <sub>3</sub> ) (MG/L) (00440)	CAR- BONATE (CO <sub>3</sub> ) (MG/L) (00445)	DIS- SOLVED SULFATE (SO <sub>4</sub> ) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)
JAN.												
18...	0830	.05	10	--	260	120	260	4.0	349	0	1400	20
FEB.												
15...	0930	.15	9.1	--	240	120	260	4.4	313	0	1300	19
MAR.												
07...	0910	.15	8.6	--	260	120	270	4.5	315	0	1400	19
APR.												
20...	0810	.83	8.9	20	26	7.1	18	1.4	106	0	40	3.5
MAY												
08...	1210	.81	9.4	--	30	8.7	23	1.9	132	0	41	3.6
30...	0810	.60	12	--	84	70	150	5.4	272	0	520	25
JUNE												
20...	1225	.17	11	--	180	88	190	5.2	222	0	980	16
AUG.												
09...	0810	.17	9.7	--	200	86	190	4.8	249	0	1000	14
29...	1610	.50	--	--	--	--	--	--	--	--	--	--
SEP.												
18...	1250	4.2	5.8	--	52	21	62	2.4	196	0	170	5.7
OCT.												
12...	1150	.10	7.3	10	180	82	200	4.5	250	0	1000	15
30...	0810	.19	8.0	--	160	71	160	3.5	272	0	760	14
NOV.												
19...	1430	3.1	9.1	--	60	26	75	2.1	223	0	240	9.1
DEC.												
04...	1440	.03	8.1	--	140	68	150	3.5	262	0	690	14

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED NITRATE PLUS NITRITE (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 LUNTI- NUENTS) (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.												
18...	.3	.01	--	--	2250	1100	860	3.3	2650	7.7	.0	--
FEB.												
15...	.2	.00	--	--	2110	1100	840	3.4	2520	7.9	.0	--
MAR.												
07...	.3	.01	--	--	2240	1100	890	3.5	2690	7.8	2.0	--
APR.												
20...	.2	.36	.02	170	159	94	7	.8	265	7.6	2.0	40
MAY												
08...	.4	.25	--	--	184	110	2	1.0	310	8.0	15.0	--
30...	.6	.04	--	--	1000	500	270	2.9	1420	8.0	18.0	--
JUNE												
20...	.3	.00	--	--	1580	810	630	2.9	2040	7.9	24.0	--
AUG.												
09...	.3	.02	--	--	1630	850	650	2.8	2070	8.1	14.0	--
29...	--	--	--	--	--	--	--	--	2560	--	18.0	--
SEP.												
18...	.3	.67	--	--	419	220	56	1.8	681	7.9	23.5	--
OCT.												
12...	.6	.07	.01	1690	1610	790	580	3.1	2020	8.0	12.0	80
30...	.8	.00	--	--	1310	690	470	2.6	1760	7.9	4.0	--
NOV.												
19...	.6	1.0	--	--	544	280	94	2.0	835	8.0	6.0	--
DEC.												
04...	.4	.06	--	--	1200	630	410	2.6	1670	7.8	1.0	--

## ARKANSAS RIVER BASIN

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07202000 CHICORICA CREEK NEAR HEBRON, N. MEX.

LOCATION.--Lat 36°46'13", long 104°23'45", in SW $\frac{1}{4}$ SE $\frac{1}{4}$ SW $\frac{1}{4}$  sec.4, T.29 N., R.24 E., Colfax County, at gaging station at highway bridge near east boundary of Maxwell Grant, 300 ft (91 m) downstream from Una de Gato Creek, 4.4 mi (7.1 km) northeast of Hebron, and 9 mi (14.5 km) south of Raton.

DRAINAGE AREA.--381 mi<sup>2</sup> (987 km<sup>2</sup>).

PERIOD OF RECORD.--Chemical analyses: February 1966 to current year.  
Sediment records: October 1949 to September 1950.

## CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

DATE	TIME	INSTANTANEOUS SILICA CONCENTRATION (MG/L)	DIS-SOLVED SILICA (MG/L)	DIS-SOLVED IRON (MG/L)	DIS-SOLVED CALCIUM (MG/L)	DIS-SOLVED MAGNESIUM (MG/L)	DIS-SOLVED SODIUM (MG/L)	DIS-SOLVED POTASSIUM (MG/L)	BICARBONATE (MG/L)	CARBONATE (MG/L)	DIS-SOLVED SULFATE (MG/L)	DIS-SOLVED CHLORIDE (MG/L)
JAN.												
17...	1430	2.5	9.4	--	180	100	250	5.6	277	0	1100	39
FEB.												
14...	1715	2.0	9.4	--	160	95	210	5.1	261	0	970	33
MAR.												
07...	0840	1.5	7.7	--	170	110	240	4.6	264	0	1100	35
APR.												
10...	0900	0.0	9.2	9	120	67	150	3.3	233	0	620	28
20...	0740	20	11	--	46	16	23	2.6	156	0	120	3.6
MAY												
08...	1120	60	12	--	34	10	15	2.3	121	0	51	3.6
30...	0730	20	11	--	43	16	27	2.0	143	0	110	4.3
JUNE												
20...	1315	8.0	12	--	67	36	64	2.6	201	0	290	8.2
JULY												
20...	1315	8.0	14	--	48	21	30	3.2	168	0	140	4.3
AUG.												
09...	0730	3.3	11	--	89	47	89	3.9	224	0	430	12
29...	1100	4.0	--	--	--	--	--	--	--	--	--	--
SEP.												
18...	1210	1.8	5.0	--	170	110	230	6.9	235	0	1100	39
OCT.												
12...	1230	4.0	7.5	10	160	93	180	5.2	283	0	860	30
30...	0740	2.0	6.8	--	160	92	190	5.6	303	0	840	34
DEC.												
04...	1600	4.3	9.8	--	170	100	200	6.4	302	0	910	36

DATE	DIS-SOLVED FLUORIDE (MG/L)	DIS-SOLVED NITRATE (MG/L)	DIS-SOLVED NITRATE (MG/L)	DIS-SOLVED ORPHOS (MG/L)	DIS-SOLVED SOLIDS (MG/L)	DIS-SOLVED SOLIDS (MG/L)	NON-CARBONATE HARDNESS (MG/L)	SODIUM ADSORPTION RATIO	SPE-CIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	TEMPERATURE (DEG C)	DIS-SOLVED BORON (MG/L)
JAN.												
17...	.3	5.7	--	--	1850	860	630	3.7	2160	7.4	.0	--
FEB.												
14...	.4	4.9	--	--	1630	790	580	3.3	2060	7.6	.5	--
MAR.												
07...	.5	.63	--	--	1800	880	660	3.5	2310	8.2	2.0	--
APR.												
10...	.3	1.7	.29	1150	1120	580	380	2.7	1550	7.4	3.0	90
20...	.3	.59	--	--	304	190	61	.7	464	7.4	3.0	--
MAY												
08...	.3	.48	--	--	190	130	27	.6	305	7.6	12.0	--
30...	.3	.06	.04	323	266	180	64	.9	475	8.0	20.0	--
JUNE												
20...	.3	.01	--	--	579	320	150	1.6	849	8.3	22.0	--
JULY												
20...	.3	.26	--	--	345	210	69	.9	543	8.0	19.0	--
AUG.												
09...	.3	.10	--	--	793	420	230	1.9	1110	8.3	14.0	--
29...	--	--	--	--	--	--	--	--	1480	--	15.0	--
SEP.												
18...	.5	.05	--	--	1780	880	680	3.4	2200	8.1	20.0	--
OCT.												
12...	.2	2.5	.72	1650	1490	780	550	2.8	1980	8.0	10.0	150
30...	.9	1.9	--	--	1450	780	530	3.0	2000	8.0	4.0	--
DEC.												
04...	.6	3.0	--	--	1600	840	590	3.0	2120	7.7	--	--

## ARKANSAS RIVER BASIN

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 mi (2.1 km) north of Dawson, 2.3 mi (3.7 km) upstream from Rail Canyon, and at mile 22.5 (36.2 km).

DRAINAGE AREA.—301 mi<sup>2</sup> (780 km<sup>2</sup>).

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 1973 TO DECEMBER 1973

DATE	TIME	INSTANTANEOUS DIS- CHARGE (LFS) (00061)	DIS- SOLVED SILICA (SiO <sub>2</sub> ) (MG/L) (00095)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED MANGANESE (MN) (UG/L) (01056)	DIS- SOLVED CALCIUM (CA) (MG/L) (00915)	DIS- SOLVED MAGNESIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00950)
MAR.								
20...	1411	28	7.6	60	<3	60	16	34
MAY								
31...	1329	103	13	9	<2	36	7.8	15
AUG.								
23...	1332	12	6.2	5	<4	40	13	50
SEP.								
29...	0750	18	--	--	--	--	--	--
OCT.								
12...	--	7.1	--	--	--	--	--	--
NOV.								
20...	0920	2.9	--	--	--	--	--	--

DATE	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	BICARBONATE (HCO <sub>3</sub> ) (MG/L) (00440)	CARBONATE (CO <sub>3</sub> ) (MG/L) (00445)	DIS- SOLVED SULFATE (SO <sub>4</sub> ) (MG/L) (00945)	DIS- SOLVED CHLORIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUORIDE (F) (MG/L) (00950)	DIS- SOLVED NITRATE (N) (MG/L) (00631)	DIS- SOLVED ORTHOPHOSPHORUS (P) (MG/L) (00671)	DIS- SOLVED RESIDUE AT 180 C (MG/L) (70300)
MAR.									
20...	2.2	198	0	110	6.8	.8	.06	.00	358
MAY									
31...	1.5	137	0	42	2.9	.6	.43	.02	217
AUG.									
23...	2.0	159	0	88	3.8	.8	.00	.01	260
SEP.									
29...	--	--	--	--	--	--	--	--	--
OCT.									
12...	--	--	--	--	--	--	--	--	--
NOV.									
20...	--	--	--	--	--	--	--	--	--

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 (B) (UG/L) (01020)
MAR.								
20...	336	220	54	1.0	551	8.3	13.0	20
MAY								
31...	189	120	10	.6	302	7.3	16.5	20
AUG.								
23...	264	150	24	1.1	426	8.3	25.5	17
SEP.								
29...	--	--	--	--	435	--	12.0	--
OCT.								
12...	--	--	--	--	467	--	4.0	--
NOV.								
20...	--	--	--	--	500	--	.5	--



ARKANSAS RIVER BASIN

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

TRACE ELEMENT ANALYSES, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

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 BENYL- 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)
MAR. 20...	1411	190	1	50	<1	<5	20	0	<5	<5
MAY 31...	1329	25	0	58	<2	<4	20	0	<1	<3
AUG. 23...	1332	15	2	93	<2	<6	17	<5	<3	<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)	DIS- SOLVED MOLYB- DENUM (MO) (UG/L) (01060)
MAR. 20...	1	<3	<5	60	<100	<4	<10	<3	--	2
MAY 31...	2	<2	<4	9	<100	<4	3	<2	.2	<2
AUG. 23...	<2	<3	<6	5	<50	<5	5	<4	.0	<3

DATE	DIS- SOLVED NICKEL (NI) (UG/L) (01065)	DIS- SOLVED SILVER (AG) (UG/L) (01075)	DIS- SOLVED SEL- 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)
MAR. 20...	<5	<1	0	700	<4	5	<4.0	<350	<6
MAY 31...	<2	<1	5	240	<4	<3	<2.0	4	<6
AUG. 23...	<5	0	3	500	<5	<4	<3.0	<5	<8

## ARKANSAS RIVER BASIN

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

LOCATION.—Lat 36°17'49", long 104°29'36", in NW¼SE¼ sec.21, T.24 N., R.23 E., Colfax County, at gaging station at head of gorge, 2.0 mi (3.2 km) south of Taylor Springs, 2.3 mi (3.7 km) downstream from Cimarron River, 2.4 mi (3.9 km) upstream from Chico Creek, 7.1 mi (11.4 km) southeast of Springer, and at mile 850.4 (1,368.3 km).

DRAINAGE AREA.—2,850 mi<sup>2</sup> (7,280 km<sup>2</sup>).

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

## CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

		INSTAN- TANEOUS UIS- CHARGE (CFS) (00061)	UIS- SOLVED SILICA (SI02) (MG/L) (00955)	UIS- SOLVED IRON (FE) (UG/L) (01046)	UIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L) (00925)	UIS- 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)	UIS- SOLVED SULFATE (SO4) (MG/L) (00945)
DATE	TIME										
JAN. 30...	1520	20	7.1	40	270	140	250	4.0	278	0	1500
FEB. 14...	1545	12	6.0	20	260	140	240	4.2	245	0	1500
MAR. 21...	1111	5.8	5.7	30	280	160	270	4.5	249	0	1600
APR. 19...	1630	478	8.9	50	59	27	48	2.7	135	0	240
MAY 31...	1543	22	12	9	120	62	100	2.5	192	0	550
JUNE 20...	1725	7.6	9.3	9	240	130	230	5.0	218	0	1300
JULY 17...	1417	13	6.9	50	170	71	160	5.2	146	0	870
AUG. 23...	1610	1.9	6.9	20	230	130	230	5.6	113	0	1400
SEP. 19...	1247	9.4	8.8	30	200	100	190	7.0	218	0	1100
OCT. 16...	1627	9.0	7.1	40	230	120	230	5.5	205	0	1300
NOV. 20...	1727	21	7.5	40	230	130	230	4.9	231	0	1300

DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	UIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED NITRATE (N) (MG/L) (00618)	DIS- SOLVED NITRIE (N) (MG/L) (00619)	TOTAL NITRITE PLUS NITRATE (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)	TOTAL ORGANIC NITRO- GEN (N) (MG/L) (00605)	TOTAL NITRO- GEN (N) (MG/L) (00600)	TOTAL PHOS- PHORUS (P) (MG/L) (00665)
JAN..											
30...	53	.4	.04	.00	--	.04	.04	.04	.38	.46	.06
FEB.											
14...	49	.5	.00	.00	--	.00	.03	--	.26	--	.03
MAR.											
21...	66	.5	.00	.01	.05	.00	.04	--	.26	.35	.01
APR.											
19...	8.5	.5	.44	.00	.45	.44	.09	--	9.9	10	2.2
MAY											
31...	22	.5	.00	.02	.02	.02	.06	--	.44	.52	.07
JUNE											
20...	60	.7	.00	.00	.00	.00	.01	--	.50	.51	.05
JULY											
17...	32	1.0	.18	.00	1.4	.20	.45	--	.45	2.3	.25
AUG.											
23...	91	.7	.00	.04	.04	.04	.11	--	.52	.67	.00
SEP.											
19...	47	.5	.01	.01	.02	.02	.07	--	.46	.55	.12
OCT.											
16...	54	.4	.03	.00	.03	.03	.16	--	.21	.40	.05
NOV.											
20...	47	.6	.01	.00	.01	.01	.06	--	.21	.28	.04

## ARKANSAS RIVER BASIN

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

CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

DATE	DIS- SOLVED URIC ACID PHOS- PHORUS (P) (MG/L) (000671)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L) (70300)	DIS- SOLVED SOLIDS (SUM OF TOLUENES) (MG/L) (70301)	HARD- NESS (CA.MG) (MG/L) (000900)	NON- CAL- BONATE HARD- NESS (MG/L) (000902)	SODIUM AD- SORP- TION RATIO (000931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (000995)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	DIS- SOLVED BORON (B) (UG/L) (01024)
JAN. 30...	.02	2520	2360	1300	1000	3.1	2780	8.1	5.0	120
FEB. 14...	.00	2540	2320	1200	1000	3.0	2710	8.0	9.0	200
MAR. 21...	.01	2680	2510	1400	1200	3.2	2990	8.1	11.5	170
APR. 19...	.01	484	465	260	150	1.3	704	7.7	10.0	70
MAY 31...	.01	1070	964	560	400	1.8	1350	8.0	21.0	50
JUNE 20...	.00	2360	2080	1100	960	3.0	2630	7.7	23.5	200
JULY 17...	.00	1510	1390	720	600	2.6	1800	8.0	25.5	140
AUG. 23...	.00	2340	2150	1100	1000	3.0	2660	8.0	30.0	270
SEP. 19...	.02	1850	1760	910	730	2.7	2346	8.3	23.0	180
OCT. 16...	.03	2260	2050	1100	900	3.1	2600	7.9	17.5	190
NOV. 20...	.03	2200	2060	1100	920	3.0	2490	8.0	3.0	140

## FIELD AND BIOCHEMICAL MEASUREMENTS, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	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) (MG/L) (00680)
JAN. 30...	1520	20	2800	8.2	5.0	16.5	5	20	11.1	5	3.5 *
FEB. 14...	1545	12	2700	8.0	9.0	9.5	5	6	8.4	5	-- *
MAR. 21...	1111	5.8	3000	8.3	11.5	14.5	5	6	7.6	22	6.5 *
APR. 19...	1630	478	675	8.7	10.0	9.0	25	2900	8.5	0	77 *
MAY 31...	1543	22	1350	8.4	21.0	26.0	5	25	8.0	10	6.0 *
JUNE 20...	1725	7.6	2600	8.4	23.5	25.0	3	2	--	10	5.5 *
JULY 17...	1417	13	1600	8.6	25.5	24.5	5	225	--	30	12 *
AUG. 23...	1610	1.9	2650	8.1	30.0	33.5	3	30	6.2	180	10
SEP. 19...	1247	9.4	2240	8.4	23.0	22.0	--	--	7.4	13	4.0
OCT. 16...	1627	9.0	2600	7.9	17.5	18.0	--	--	7.6	3	4.0
NOV. 20...	1727	21	2490	8.0	3.0	3.0	--	--	9.0	39	6.2

\* Analyzed by New Mexico Environmental Improvement Agency.

## ARKANSAS RIVER BASIN

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

INSTANTANEOUS SUSPENDED-SEDIMENT DISCHARGE AND PARTICLE SIZE,  
CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

DATE	TIME	TEMPERATURE (DEG C) (00010)	INSTAN- TANEOUS DIS- CHARGE (CFS) (000061)	SUS- PENDED SEDI- MENT (MG/L) (80154)	SUS- PENDED 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)
JAN.								
30...	1520	5.0	20	83	4.5	--	--	--
FEB.								
14...	1545	9.0	12	134	4.3	--	--	--
MAR.								
21...	1111	11.5	5.8	17	.27	--	--	--
APR.								
19...	1630	10.0	478	8960	11600	41	48	65
MAY								
31...	1543	21.0	22	33	2.0	--	--	--
JUNE								
20...	1725	23.5	7.6	99	2.0	--	--	--
AUG.								
23...	1610	30.0	1.9	301	1.5	--	--	--
SEP.								
19...	1247	23.0	9.4	21	.53	--	--	--
OCT.								
16...	1627	17.5	9.0	23	.56	--	--	--
NOV.								
20...	1727	3.0	21	330	19	--	--	--

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. 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)
JAN.							
30...	--	--	--	95	98	99	100
FEB.							
14...	--	--	--	--	--	--	--
MAR.							
21...	--	--	--	--	--	--	--
APR.							
19...	91	97	100	--	--	--	--
MAY							
31...	--	--	--	--	--	--	--
JUNE							
20...	--	--	--	--	--	--	--
AUG.							
23...	--	--	--	--	--	--	--
SEP.							
19...	--	--	--	--	--	--	--
OCT.							
16...	--	--	--	--	--	--	--
NOV.							
20...	--	--	--	--	--	--	--



## 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 mi (1.6 km) downstream from headgates in Conchas Dam, and 21.5 mi (34.6 km) 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 1973 TO DECEMBER 1973

DATE	TIME	INSTAN-	DIS-	DIS-	DIS-	DIS-	DIS-	DIS-	DIS-	DIS-	DIS-	DIS-
		TANTAN-	SOLVED	SOLVED	SOLVED	SOLVED	SOLVED	SOLVED	SOLVED	SOLVED	SOLVED	SOLVED
		EOUS	SILICA	IRON	CAL-	MAG-	SODIUM	POTAS-	BICAR-	CAR-	SULFATE	CHLO-
		CHARGE	(SiO2)	(FE)	(CA)	(MG)	(NA)	(K)	(HCO3)	(CO3)	(SO4)	RIDE
		(CFS)	(MG/L)	(UG/L)	(MG/L)	(MG)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(CL)
		(00061)	(00955)	(01046)	(00915)	(00925)	(00930)	(00935)	(00440)	(00445)	(00945)	(00940)
MAK.												
09...	1500	.10	4.9	--	63	25	57	4.9	148	0	250	16
APR.												
03...	1745	.12	4.0	--	53	21	64	4.1	146	0	210	14
MAY												
02...	1300	158	6.1	0	68	25	55	4.0	153	0	240	17
JUNE												
04...	1440	255	6.6	--	68	24	56	4.0	160	0	220	15
SEP.												
27...	0740	340	7.5	--	65	24	48	3.9	166	0	200	13
DATE		DIS-	DIS-	DIS-	DIS-	DIS-	NON-	SODIUM	SPE-			DIS-
		SOLVED	SOLVED	SOLVED	SOLVED	SOLVED	CAR-	AD-	CIFIC			SOLVED
		FLUO-	NITRITE	ORTHOPHOS-	SOLIDS	SOLIDS	BONATE	SORP-	CON-			BORON
		RIDE	PLUS	PHOS-	(RESI-	(SUM OF	HARD-	TION	DUCT-			(B)
		(F)	NITRATE	PHORUS	DUE AT	CONSTI-	NESS	HARD-	ANCE			(UG/L)
		(MG/L)	(N)	(P)	180 C)	TUENTS)	(CA,MG)	NESS	RATIO	(MICRO-	PH	TEMPER-
		(00950)	(00631)	(00671)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(00931)	(MHOS)	(UNITS)	ATURE
					(70300)	(70301)	(00900)	(00902)			(00400)	(DEG C)
												(00010)
												(01020)
MAK.												
09...	.4	.11	--	--	495	260	140	1.5	750	8.0	7.0	--
APR.												
03...	.4	.43	--	--	444	220	99	1.9	707	7.7	6.0	--
MAY												
02...	.5	.07	.01	521	491	270	150	1.5	735	7.9	10.0	50
JUNE												
04...	.4	.10	--	--	473	270	140	1.5	736	7.9	17.0	--
SEP.												
27...	.3	.12	--	--	444	260	130	1.3	710	8.1	18.0	--

## ARKANSAS RIVER BASIN

07226800 UTE RESERVOIR NEAR LOGAN, N. MEX.

LOCATION.--Lat 35°20'35", long 103°26'37", in NW¼ 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 mi (4.0 km) southwest of Logan, 3.5 mi (5.6 km) downstream from Ute Creek, and at mile 673.1 (1,083.0 km).

DRAINAGE AREA.--11,140 mi<sup>2</sup> (28,853 km<sup>2</sup>), of which 1,110 mi<sup>2</sup> (2,875 km<sup>2</sup>) is noncontributing, and 7,400 mi<sup>2</sup> (19,000 km<sup>2</sup>) is controlled by Conchas Dam (total area downstream from Conchas Dam is 3,731 mi<sup>2</sup> (9663 km<sup>2</sup>)).

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

REMARKS.--Samples for chemical analyses are collected each year at surface, median, and bottom levels of selected sites.

Site locations are as follows: Site A, 0.4 mi (0.6 km) upstream from Ute Dam; Site B, 0.6 mi (1.0 km) upstream from Ute Dam; Site C, 1.9 mi (3.1 km) upstream from Ute Dam; Site D, on the Ute Creek arm, 5.7 mi (9.2 km) upstream from Ute Dam; Site E, 3.8 mi (6.1 km) upstream from Ute Dam at confluence of Ute Creek and Canadian River arms; Site F, on the Canadian River arm, 9.1 mi (14.6 km) upstream from Ute Dam; Site G, on the Ute Creek arm, 6.9 mi (11.1 km) upstream from Ute Dam; Site H, on the Canadian River arm, 12.8 mi (20.6 km) upstream from Ute Dam; Site I, on the Canadian River arm, upstream from confluence of the Ute Creek arm, 5.5 mi (8.8 km) upstream from Ute Dam.

## CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

DATE	TIME	DEPTH (FT)	DEPTH OF RESER- VOIR (FT)	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED (NA) (MG/L)
07226510								
APR.								
21...	1325	5.0	30	--	--	58	17	--
21...	1340	12	30	4	20	37	17	110
21...	1350	25	30	--	--	35	16	--
OCT.								
03...	1040	20	25	3.8	20	53	17	110

DATE	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS- SOLVED ORTHO- PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)
	(00935)	(00440)	(00445)	(00945)	(00940)	(00950)	(00631)	(00671)	(70300)
APR.									
21...	--	221	0	180	34	--	--	--	--
21...	3.9	221	0	170	33	.8	.08	--	--
21...	--	217	0	170	32	--	--	--	--
OCT.									
03...	4.5	215	3	160	30	.8	.02	10	480

DATE	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH	TEMPER- ATURE (DEG C)	DIS- SOLVED BORON (B) (UG/L)
	(70301)	(00900)	(00902)	(00931)	(00095)	(00400)	(00010)	(01020)
APR.								
21...	--	160	0	--	787	8.2	12.0	--
21...	482	160	0	3.8	797	8.2	12.0	190
21...	--	150	0	--	785	8.1	12.0	--
OCT.								
03...	499	150	0	3.9	766	8.2	16.5	190

## FIELD AND BIOCHEMICAL MEASUREMENTS, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH	TEMPER- ATURE (DEG C)	AIR TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)
OCT.						
03...	1040	766	8.2	16.5	18.5	6.0

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CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

FIELD AND BIOCHEMICAL MEASUREMENTS, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHUS) (000055)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	AIR TEMPER- ATURE (DEG C) (00020)	DIS- SOLVED OXYGEN (MG/L) (00300)
OCT. 03...	1110	764	8.3	17.0	20.0	5.6

## ARKANSAS RIVER BASIN

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

CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

DATE	TIME	DEPTH (FT) (00003)	DEPTH OF RESER- VOIR (FT) (72025)	DIS- SOLVED SILICA (SiO <sub>2</sub> ) (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 <sub>3</sub> ) (MG/L) (00440)	CAR- BONATE (CO <sub>3</sub> ) (MG/L) (00445)	DIS- SOLVED SULFATE (SO <sub>4</sub> ) (MG/L) (00945)
07226530 UTE RESERVOIR AT SITE D (LAT 35°22'20", LONG 103°29'47")												
JAN.												
02...	1220	5.0	45	--	--	30	13	--	--	189	0	140
02...	1230	20	45	3.0	--	29	13	93	3.8	191	0	130
02...	1240	40	45	--	--	29	13	--	--	194	0	130
APR.												
21...	1455	5.0	25	--	--	32	15	--	--	207	0	150
21...	1505	10	25	2.1	20	32	15	93	4.1	210	0	150
21...	1520	20	25	--	--	32	15	--	--	207	0	150

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 (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.											
02...	24	--	--	--	130	0	--	640	8.0	6.5	--
02...	23	.7	.09	390	130	0	3.6	613	8.0	6.5	--
02...	23	--	--	--	130	0	--	634	8.0	6.5	--
APR.											
21...	26	--	--	--	140	0	--	711	8.2	13.0	--
21...	26	.8	.08	427	140	0	3.4	708	8.2	12.0	160
21...	27	--	--	--	140	0	--	715	8.1	12.0	--

DATE	TIME	DEPTH (FT) (00003)	DEPTH OF RESER- VOIR (FT) (72025)	DIS- SOLVED SILICA (SiO <sub>2</sub> ) (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 <sub>3</sub> ) (MG/L) (00440)	CAR- BONATE (CO <sub>3</sub> ) (MG/L) (00445)	DIS- SOLVED SULFATE (SO <sub>4</sub> ) (MG/L) (00945)
------	------	--------------------------	--------------------------------------------------	----------------------------------------------------------------------	-----------------------------------------------------	-------------------------------------------------------------	--------------------------------------------------------------------	-------------------------------------------------------	-------------------------------------------------------------------	--------------------------------------------------------------	-----------------------------------------------------------	----------------------------------------------------------------------

07226540 UTE RESERVOIR AT SITE E (LAT 35°21'16", LONG 103°29'29")

JAN.												
02...	1305	5.0	25	--	--	30	14	--	--	197	0	150
02...	1310	10	25	3.6	--	31	14	94	4.4	195	0	140
02...	1320	20	25	--	--	30	13	--	--	197	0	140
APR.												
21...	1410	5.0	50	--	--	32	14	--	--	201	0	140
21...	1425	22	50	1.5	20	32	14	89	4.0	201	0	140
21...	1435	45	50	--	--	31	14	--	--	204	0	140

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 (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.											
02...	25	--	--	--	130	0	--	663	8.0	7.5	--
02...	25	.7	.13	409	140	0	3.5	664	7.9	7.5	--
02...	23	--	--	--	130	0	--	665	7.8	7.5	--
APR.											
21...	25	--	--	--	140	0	--	683	8.2	12.0	--
21...	25	.8	.06	406	140	0	3.3	679	8.0	11.0	160
21...	25	--	--	--	140	0	--	685	8.2	11.0	--



## ARKANSAS RIVER BASIN

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

CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

DATE	TIME	DEPTH (FT) (00003)	DEPTH OF RESER- VOIR (FT) (72025)	DIS- SOLVED SILICA (SiO <sub>2</sub> ) (MG/L) (00955)	DIS- SOLVED IRON (FE) (MG/L) (01046)	DIS- SOLVED MANG- NESE (MN) (MG/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 PU- RAS- SIUM (K) (MG/L) (00935)	BICAR- BONATE (HCO <sub>3</sub> ) (MG/L) (00440)	CAR- BONATE (CO <sub>3</sub> ) (MG/L) (00445)
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07226560 UTE RESERVOIR AT SITE B (LAT 35°20'32", LONG 103°27'16")

JAN.												
02...	1630	5.0	55	--	--	--	28	13	--	--	185	0
02...	1045	25	55	2.6	--	--	29	13	88	4.5	187	0
02...	1100	50	55	--	--	--	29	13	--	--	185	0
APR.												
21...	1610	5.0	65	--	--	--	30	13	--	--	200	0
21...	1620	50	65	1.7	--	--	29	13	86	5.9	202	0
21...	1635	60	65	--	--	--	30	14	--	--	201	0
OCT.												
03...	1300	5.0	57	3.4	0	--	31	16	110	4.8	213	6
03...	1330	52	57	3.5	<9	<7	32	16	110	4.9	217	2

DATE	DIS- SOLVED SULFATE (SO <sub>4</sub> ) (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) (00610)	DIS- SOLVED NITRATE (N) (MG/L) (00613)	TOTAL NITRITE PLUS NITRATE (N) (MG/L) (00630)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	AMMONIA GEN (N) (MG/L) (00610)	TOTAL ORGANIC NITRO- GEN (N) (MG/L) (00605)	TOTAL NITRO- GEN (N) (MG/L) (00600)	TOTAL PHOS- PHORUS (P) (MG/L) (00665)	DIS- SOLVED ORTHOPHOS- PHORUS (P) (MG/L) (00671)
JAN.												
02...	130	23	--	--	--	--	--	--	--	--	--	--
02...	140	23	.7	--	--	--	.12	--	--	--	--	--
02...	130	23	--	--	--	--	--	--	--	--	--	--
APR.												
21...	140	25	--	--	--	--	--	--	--	--	--	--
21...	130	24	.7	--	--	--	.06	--	--	--	--	--
21...	140	25	--	--	--	--	--	--	--	--	--	--
OCT.												
03...	160	30	.8	.01	.00	.06	.01	.05	.26	.37	.02	.00
03...	160	30	.8	.02	.00	.02	.02	.04	.34	.40	.02	.00

DATE	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (70300)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (70301)	HARD- NESS (CA.MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AU- SORP- TION RATIO (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	DIS- SOLVED BORON (B) (MG/L) (01020)	DIS- SOLVED COPPER (CU) (MG/L) (01040)	DIS- SOLVED ZINC (ZN) (MG/L) (01090)
JAN.											
02...	--	--	120	0	--	627	7.6	6.5	--	--	--
02...	--	394	130	0	3.4	623	8.0	6.0	--	--	--
02...	--	--	130	0	--	629	8.0	6.0	--	--	--
APR.											
21...	--	--	130	0	--	658	8.2	12.0	--	--	--
21...	--	388	130	0	3.3	663	8.2	--	--	--	--
21...	--	--	130	0	--	658	8.2	11.0	--	--	--
OCT.											
03...	482	467	140	0	4.0	766	8.2	20.0	180	--	--
03...	478	467	150	0	4.0	780	8.4	18.0	110	2	<5

## ARKANSAS RIVER BASIN

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

## TRACE ELEMENT AND RADIOCHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

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)
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## 07226560 UTE RESERVOIR AT SITE B--Continued

OCT.										
03...	1300	--	0	--	--	--	180	0	--	--
03...	1330	20	6	130	<3	<9	110	1	<5	<9

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)
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OCT.										
03...	--	--	--	0	<50	--	--	--	.0	
03...	2	<5	<9	<9	<50	<9	17	<7	.0	

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 TAN- IUM (TI) (UG/L) (01150)	DIS- SOLVED VANA- DIUM (V) (UG/L) (01085)	DIS- SOLVED ZINC (ZN) (UG/L) (01090)
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OCT.				4	--	--	--	--	--	
03...	5	<9	<2	0	700	<9	<7	10	<5	

DATE	DIS- SOLVED ZIR- CONIUM (ZR) (UG/L) (01160)	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)
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OCT.										
03...	--	--	--	--	--	--	--	--	--	--
03...	<15	33	.7	9.9	2.4	8.0	2.2	.10	6.9	

## FIELD AND BIOCHEMICAL MEASUREMENTS, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

DATE	TIME	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)	FECAL COLI- FORM (COL. PER 100 ML) (31616)	TOTAL ORGANIC CARBON (C) (MG/L) (00680)
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OCT.										
03...	1300	766	8.2	20.0	26.0	8.2	0	4.0		
03...	1330	780	8.4	18.0	--	6.4	1	5.0		

## PESTICIDE ANALYSES, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

DATE	HEPTA- CHLOR EPOXIDE (39420)	LINANE (39340)	MALA- THION (UG/L) (39530)	METHYL PARA- THION (UG/L) (39600)	PARA- THION (UG/L) (39540)	PCB (39516)	TOX- APHENE (39400)	2,4-D (39730)	2,4,5-T (39740)	SILVEX (39760)
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OCT.										
03...	--	--	--	--	--	--	--	--	--	--
03...	.00	.00	.00	.00	.00	.0	0	.00	.02	.00

DATE	TIME	TOTAL ORGANIC CARBON (C) (MG/L) (00680)	ALDRIN (UG/L) (39330)	CHLOR- DANE (UG/L) (39350)	DDU (UG/L) (39360)	DDE (UG/L) (39365)	DDT (UG/L) (39370)	DI- AZINON (UG/L) (39570)	DI- ELDRIN (UG/L) (39380)	ENDRIN (UG/L) (39390)	HEPTA- CHLOR (39410)
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OCT.											
03...	1300	4.0	--	--	--	--	--	--	--	--	--
03...	1330	5.0	.00	.0	.00	.00	.00	.00	.00	.00	.00

ARKANSAS RIVER BASIN

37

07227100 REVUELTO CREEK NEAR LOGAN, N. MEX.

LOCATION.--Lat 35°20'28", long 103°23'40", in SW¼NW¼ sec.24, T.13 N., R.33 E., Quay County, at gaging station 0.3 mi (0.5 km) upstream from bridge on State Highway 39, 1.9 mi (3.1 km) southeast of Logan, and at mile 2.3 (3.7 km).

DRAINAGE AREA.--786 mi<sup>2</sup> (2,036 km<sup>2</sup>).

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 1973 TO DECEMBER 1973

DATE	TIME	INSTANTANEOUS CHARGE (CFS) (000001)	DIS-SOLVED SILICA (SI02) (MG/L) (00955)	DIS-SOLVED IRON (FE) (UG/L) (01046)	DIS-SOLVED CALCIUM (CA) (MG/L) (00915)	DIS-SOLVED MAGNESIUM (MG) (MG/L) (00925)	DIS-SOLVED SODIUM (NA) (MG/L) (00930)	DIS-SOLVED POTASSIUM (K) (MG/L) (00935)	BICARBONATE (HCO3) (MG/L) (00440)	CARBONATE (CO3) (MG/L) (00445)	DIS-SOLVED SULFATE (SO4) (MG/L) (00945)	DIS-SOLVED CHLORIDE (CL) (MG/L) (00940)
JAN.												
15...	1430	30	8.0	--	72	46	310	3.0	270	0	630	89
MAR.												
05...	1405	1.8	8.7	--	74	60	430	4.1	273	0	840	210
26...	1740	5.2	8.5	--	76	55	430	3.6	369	0	850	150
APR.												
27...	1100	11	7.0	--	36	26	300	2.8	243	0	550	89
MAY												
24...	1505	28	9.2	--	71	34	190	6.2	217	0	450	58
JUNE												
14...	1210	277	13	--	28	13	190	3.5	247	0	290	21
AUG.												
14...	0750	115	10	--	68	31	180	6.0	224	0	460	47
SEP.												
06...	0750	20	9.4	--	75	33	120	7.0	219	0	340	40
26...	0800	8.9	--	--	--	--	--	--	--	--	--	--
OCT.												
17...	1325	24	7.0	40	73	40	150	6.5	218	0	390	51
NOV.												
08...	0940	1.2	8.3	--	67	41	340	4.8	258	0	510	240
DEC.												
06...	0800	6.4	7.1	--	44	25	250	3.8	258	0	460	68

DATE	DIS-SOLVED FLUORIDE (F) (MG/L) (00950)	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	DIS-SOLVED ORTHO. PHOSPHORUS (P) (MG/L) (00671)	DIS-SOLVED SOLIUS (RESIDUE AT 180 C) (MG/L) (70300)	DIS-SOLVED SOLIUS (SUM OF CONSTITUENTS) (MG/L) (70301)	HARDNESS (CA,MG) (MG/L) (00900)	NON-CARBONATE HARDNESS (MG/L) (00902)	SODIUM ADSORPTION RATIO (00931)	SPECIFIC CONDUCTANCE (MICROMHOS) (00095)	PH (UNITS) (00400)	TEMPERATURE (DEG C) (00010)	DIS-SOLVED BORON (B) (UG/L) (01020)
JAN.												
15...	.7	.71	--	--	1300	370	150	7.0	1850	8.2	8.0	--
MAR.												
05...	.8	.21	--	--	1760	430	210	9.0	2570	8.2	14.0	--
26...	.9	.47	--	--	1740	420	140	9.2	2420	8.1	15.0	--
APR.												
27...	.7	.19	--	--	1130	200	0	9.3	1730	8.2	15.0	--
MAY												
24...	.7	.63	--	--	929	320	140	4.6	1430	7.5	28.0	--
JUNE												
14...	.6	.79	--	--	684	120	0	7.4	1070	8.1	23.0	--
AUG.												
14...	.6	.17	--	--	914	300	110	4.5	1350	7.7	19.0	--
SEP.												
06...	.6	.04	--	--	733	320	140	2.9	1130	8.0	14.0	--
26...	--	--	--	--	--	--	--	--	1300	--	13.0	--
OCT.												
17...	1.0	.15	.02	930	827	350	170	3.5	1280	8.1	20.0	220
NOV.												
08...	1.1	.02	--	--	1340	340	120	8.1	2100	8.2	12.0	--
DEC.												
06...	.7	.66	--	--	993	230	18	7.2	1550	8.0	.0	--

## ARKANSAS RIVER BASIN

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

INSTANTANEOUS SUSPENDED-SEDIMENT DISCHARGE AND PARTICLE SIZE, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

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)
JAN.								
15...	1430	8.0	30	339	27	--	--	--
FEB.								
17...	1515	9.5	4.3	11	.13	--	--	--
MAR.								
05...	1405	14.0	1.8	64	.31	--	--	--
26...	1740	15.0	5.2	352	4.9	--	--	--
APR.								
27...	1100	15.0	11	7050	209	--	--	--
MAY								
24...	1535	28.0	28	2200	166	--	--	--
JUNE								
14...	1210	23.0	277	28900	21600	47	54	83
JULY								
18...	0855	22.0	11	4240	126	--	--	--
AUG.								
14...	0750	19.0	115	12800	3970	--	--	--
SEP.								
06...	0750	14.0	20	241	13	--	--	--
26...	0800	13.0	8.9	316	7.6	--	--	--
OCT.								
17...	1325	20.0	24	298	19	--	--	--
NOV.								
08...	0940	12.0	1.2	92	.30	--	--	--
DEC.								
06...	0800	.0	6.4	1240	21	62	74	79

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. 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)
JAN.							
15...	--	--	--	--	--	--	--
FEB.							
17...	--	--	--	--	--	--	--
MAR.							
05...	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--
APR.							
27...	--	--	--	--	--	--	--
MAY							
24...	--	--	--	--	--	--	--
JUNE							
14...	97	99	100	--	--	--	--
JULY							
18...	--	--	--	--	--	--	--
AUG.							
14...	--	--	--	--	--	--	--
SEP.							
06...	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--
OCT.							
17...	--	--	--	--	--	--	--
NOV.							
08...	--	--	--	--	--	--	--
DEC.							
06...	--	--	--	81	92	97	100

## ARKANSAS RIVER BASIN

39

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 mi (0.2 km) upstream from New Mexico-Texas State line, 5.5 mi (8.8 km) downstream from Rana Canyon, and 14.7 mi (23.7 km) north of Glenrio.

DRAINAGE AREA.—12,616 mi<sup>2</sup> (32,675 km<sup>2</sup>).

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 1973 TO DECEMBER 1973

DATE	TIME	INSTANTANEOUS DISELVE CHARGE (CFS) (00061)	DISELVE SILICA (SI02) (MG/L) (00955)	DISELVE IRON (FE) (UG/L) (01046)	DISELVE CAL- CIUM (CA) (MG/L) (00915)	DISELVE MAG- NE- SIUM (MG) (MG/L) (00925)	DISELVE SODIUM (NA) (MG/L) (00930)	DISELVE PO- TAS- SIUM (K) (MG/L) (00935)	BICAR- BONATE (HCO3) (MG/L) (00440)	CAK- BONATE (CO3) (MG/L) (00445)	DISELVE SULFATE (SO4) (MG/L) (00945)
JAN.											
08...	1400	9.2	12	40	140	74	1300	6.9	404	0	590
FEB.											
20...	1245	14	12	30	130	74	1300	9.3	336	0	530
APR.											
06...	1030	47	7.2	20	62	31	580	3.8	268	0	320
30...	0920	15	9.1	9	110	74	1400	7.5	296	0	560
MAY											
21...	1230	58	7.3	40	88	57	850	8.7	237	0	530
JUNE											
11...	1300	6.2	11	9	86	70	980	9.9	237	0	570

DATE	DISELVE CHLO- RIDE (CL) (MG/L) (00940)	DISELVE FLUO- RIDE (F) (MG/L) (00950)	DISELVE NITRATE (N) (MG/L) (00618)	DISELVE NITRATE (N) (MG/L) (00613)	TOTAL NITRATE (N) (MG/L) (00630)	DISELVE NITRATE PLUS NITRATE (N) (MG/L) (00631)	AMMONIA NITRO- GEN (N) (MG/L) (00610)	DISELVE AMMONIA NITRO- GEN (N) (MG/L) (00608)	TOTAL ORGANIC NITRO- GEN (N) (MG/L) (00605)	TOTAL NITRO- GEN (N) (MG/L) (00600)	TOTAL PHOS- PHORUS (P) (MG/L) (00665)
JAN.											
08...	1800	.7	.50	.00	--	.50	.10	.10	.07	.67	.10
FEB.											
20...	2200	.6	.45	.01	.46	.46	.06	--	.10	.62	.01
APR.											
06...	720	.3	.75	.01	.76	.76	.01	--	.81	1.6	.63
30...	2000	.6	.02	.00	.04	.02	.12	--	.25	.41	.03
MAY											
21...	1100	.8	.00	.01	.00	.00	.07	--	.72	.79	.17
JUNE											
11...	1400	.8	.01	.00	.01	.01	.03	--	.49	.53	.05

DATE	DISELVE ORTHU- PHOS- PHORUS (P) (MG/L) (00671)	DISELVE SOLIDS (RESI- DUE AT 180 C) (MG/L) (70300)	DISELVE 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)	DISELVE BORON (B) (UG/L) (01020)
JAN.										
08...	.01	4040	4130	650	320	22	6660	8.2	.0	380
FEB.										
20...	.01	4480	4630	630	350	26	7550	7.9	10.0	360
APR.										
06...	.02	1760	1860	280	63	15	3080	8.1	10.5	280
30...	.01	4440	4310	580	340	25	6480	8.1	16.5	380
MAY										
21...	.01	2890	2760	450	260	17	4260	7.9	25.5	330
JUNE										
11...	.01	3490	3240	500	310	19	5250	7.8	30.0	40



## ARKANSAS RIVER BASIN

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

FIELD AND BIOCHEMICAL MEASUREMENTS, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	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- CUBALT 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) (MG/L) (00680)
JAN. 08...	1400	9.2	6750	8.3	.0	-6.0	5	10	12.8	1	2.1
FEB. 20...	1245	14	--	8.4	10.0	15.0	5	6	10.2	0	--
APR. 06...	1030	47	3400	8.5	10.5	17.0	5	700	9.8	300	5.0
30...	0920	15	--	8.3	16.5	27.0	5	15	9.2	37	2.5
MAY 21...	1230	58	4750	8.4	25.5	28.0	5	95	8.2	120	7.5
JUNE 11...	1300	6.2	6000	8.3	30.0	34.0	5	45	6.9	1	--

\* Analyzed by New Mexico Environmental Improvement Agency.

## BIOLOGICAL ANALYSES, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

Date: April 30, 1973  
 Method of sampling: Surber (3 square feet)  
 No macroinvertebrates in sample

## INSTANTANEOUS SUSPENDED-SEDIMENT DISCHARGE AND PARTICLE SIZE, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

DATE	TIME	TEMPER- ATURE (DEG C) (00010)	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SUS- PENDED SEDIM- ENT DIS- CHARGE (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)	SUS. SED. FALL DIAM. % FINER THAN .062 MM (70351)	SUS. SED. FALL DIAM. % FINER THAN .125 MM (70332)	SUS. SED. FALL DIAM. % FINER THAN .250 MM (70333)
FEB. 20...	1245	10.0	14	28	1.1	--	--	--	--	--	--
APR. 06...	1030	10.5	47	1060	135	71	85	97	97	98	100
MAY 21...	1230	25.5	58	424	66	--	--	--	--	--	--
JUNE 11...	1300	30.0	6.2	215	3.6	--	--	--	--	--	--

## PART 8. WESTERN GULF OF MEXICO BASINS

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## 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 mi (10 km) north of Colorado-New Mexico State line, 7 mi (11 km) downstream from Culebra Creek, 10 mi (16 km) east of Lobatos, 14 mi (23 km) east of Antonito, and at mile 1,722.1 (2,770.9 km).

DRAINAGE AREA.--7,700 mi<sup>2</sup> (19,900 km<sup>2</sup>), approximately, including 2,940 mi<sup>2</sup> (7,610 km<sup>2</sup>) 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 1973 TO DECEMBER 1973

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (LFS) (000611)	DIS- SOLVED SILICA (SIO <sub>2</sub> ) (MG/L) (000955)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED MANG- NESE (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 (HCO <sub>3</sub> ) (MG/L) (00440)	CAR- BONATE (CO <sub>3</sub> ) (MG/L) (00445)	DIS- SOLVED SULFATE (SO <sub>4</sub> ) (MG/L) (00945)
JAN. 25...	1130	275	31	60	0	21	3.9	11	3.0	85	0	22
FEB. 23...	1130	295	29	50	10	19	3.6	11	2.6	88	0	20
MAR. 30...	0945	587	25	50	40	35	5.6	19	3.3	102	0	46
APR. 27...	1130	514	22	90	130	26	5.0	16	3.3	89	0	47
MAY 24...	1200	3140	21	20	60	20	3.5	11	3.2	64	0	33
JULY 07...	0945	1330	20	100	100	30	5.8	20	1.7	88	0	51
AUG. 02...	0925	776	18	40	100	26	5.4	19	3.1	90	0	51
SEP. 13...	1000	355	24	80	30	26	5.1	17	3.3	91	0	50

DATE	DIS- SOLVED CHLO- RIDE (CL) (00940)	DIS- SOLVED FLUO- RIDE (F) (00950)	DIS- SOLVED NITRATE PLUS NITRATE (N) (00631)	DIS- SOLVED ORTHU- PHOS- PHORUS (P) (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- DUCTI- VANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)
JAN. 25...	3.2	.3	.20	.07	138	68	0	.6	191	7.3	.0
FEB. 23...	3.5	.3	.18	.06	133	62	0	.6	190	7.4	.0
MAR. 30...	7.0	.3	.10	.03	192	110	27	.8	289	7.6	.5
APR. 27...	5.9	.2	.03	.06	170	86	13	.8	250	8.0	14.0
MAY 24...	4.3	.3	.04	.07	128	64	12	.6	189	7.8	15.0
JULY 07...	5.2	.3	.00	.05	178	99	27	.9	286	7.3	19.5
AUG. 02...	5.3	.3	.00	.04	173	87	13	.9	275	7.8	18.0
SEP. 13...	4.8	.2	.02	.08	176	86	11	.8	259	8.2	15.0

## RIO GRANDE BASIN

08251500 RIO GRANDE NEAR LOBATOS, COLO.--Continued

## TRACE ELEMENT AND RADIOCHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

DATE	TIME	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED MANGANESE (MN) (UG/L) (01056)	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 (RADON METHOD) (PC/L) (09511)	DIS- SOLVED NATURAL URANIUM (U) (UG/L) (22703)	DIS- SOLVED URANIUM (U) (UG/L) (80020)
MAR. 30...	0945	50	40	4.9	1.2	4.3	1.2	3.5	1.0	.02	1.2	--
APR. 27...	1150	90	130	2.3	3.3	6.3	1.4	5.0	1.2	.03	.6	--
MAY 24...	1200	20	60	<2.0	3.7	4.1	3.6	3.3	3.1	.04	--	.18
JULY 07...	0945	100	100	<2.5	1.7	5.4	1.8	4.4	1.5	.03	--	.49
AUG. 02...	0925	40	100	<3.0	1.3	4.3	1.2	3.4	1.0	.03	.6	--
NOV. 09...	1000	--	--	<2.3	<.4	4.2	.5	3.3	.5	.04	1.0	--
DEC. 12...	1340	--	--	5.1	1.0	4.5	1.0	3.6	.9	.02	1.0	--

## FIELD AND BIOCHEMICAL MEASUREMENTS, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (MICKU- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	DIS- SOLVED OXYGEN (MG/L) (00300)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L) (00310)	IMME- DIATE COLI- FORM (COL. PER 100 ML) (31501)	FECAL COLI- FORM (COL. PER 100 ML) (31616)
JAN. 25...	1130	160	6.6	.0	8.0	1.6	78	8
FEB. 25...	1130	175	7.2	.0	8.5	1.3	40	2
MAR. 30...	0945	270	8.1	.5	12.4	2.0	14	0
APR. 27...	1130	240	8.2	14.0	11.2	--	3000	0
MAY 24...	1200	180	7.3	15.0	7.2	.5	170	20
JULY 07...	0945	280	--	19.5	7.0	.7	--	22
AUG. 02...	0925	260	7.9	18.0	7.4	1.3	280	12

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 (21 m) downstream from bridge on State Highway 196, 0.5 mi (0.8 km) upstream from diversion dam, and 1.6 mi (2.6 km) southeast of Costilla, and at mile 15.9 (25.6 km).

DRAINAGE AREA.—195 mi<sup>2</sup> (505 km<sup>2</sup>).

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

Sediment records: July 1973 to current year.

CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	DIS- SOLVED SILICA (MG/L) (00955)	DIS- SOLVED CAL- CIUM (MG/L) (00915)	DIS- SOLVED MAG- NE- SIUM (MG/L) (00925)	DIS- SOLVED SODIUM (MG/L) (00930)	DIS- SOLVED PO- TAS- SIUM (MG/L) (00935)	BICAK- BONATE (MG/L) (00440)	CAR- BONATE (MG/L) (00445)	DIS- SOLVED SULFATE (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (MG/L) (00940)
JAN. 31...	1225	6.5	--	--	--	--	--	--	--	--	--
MAY 31...	1015	175	15	13	2.3	4.3	.9	49	0	8.5	1.3

DATE	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)	NON- CAR- BONATE HARD- NESS (CA, MG) (MG/L) (00900)	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. 31...	--	--	--	--	--	180	--	.0	5	1
MAY 31...	.5	.07	70	42	2	.3	105	7.0	6.0	--

INSTANTANEOUS, SUSPENDED-SEDIMENT DISCHARGE AND PARTICLE SIZE, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

DATE	TIME	TEMPER- ATURE (DEG C) (00010)	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SUS- PEN- DED SED- IMENT (MG/L) (80154)	SUS- PEN- DED 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)	SUS. SED. SIEVE DIAM. % FINER THAN 2.00 MM (70336)
JULY 12...	1200	--	162	146	64	45	60	81	100	--	--
12...	1215	--	162	521	228	13	20	35	38	54	69
12...	1245	--	162	420	184	15	22	31	63	79	90
AUG. 22...	1024	16.0	132	140	50	--	--	--	--	--	--
SEP. 14...	1235	15.0	14	39	1.5	--	--	--	--	--	--
OCT. 04...	1515	7.0	9.3	4	.10	--	--	--	--	--	--
29...	1550	9.5	8.2	345	7.6	--	--	--	--	--	--
NOV. 20...	1620	2.5	7.8	6	.13	--	--	--	--	--	--
DEC. 13...	1130	.5	4.2	8	.09	--	--	--	--	--	--

## RIO GRANDE BASIN

08255500 COSTILLA CREEK NEAR COSTILLA, N. MEX.--Continued

PARTICLE SIZE OF SURFACE BED MATERIAL, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS) (00061)	SUS- PENDED SEDIMENT CHARGE (MG/L) (80154)	SUS- PENDED SEDIMENT DIS- CHARGE (T/DAY) (80155)	BED MAT. SIEVE DIAM. % FINER THAN .062 MM (80164)	BED MAT. SIEVE DIAM. % FINER THAN .125 MM (80165)	BED MAT. SIEVE DIAM. % FINER THAN .250 MM (80166)
JULY 12...	1245	162	420	184	--	--	1
AUG. 22...	1024	132	140	50	--	7	33
SEP. 14...	1235	14	39	1.5	4	10	26
OCT. 04...	1515	9.3	4	.10	2	3	23
NOV. 29...	1550	8.2	345	7.6	3	9	33
NOV. 20...	1620	7.8	6	.13	--	4	20

DATE	BED MAT. SIEVE DIAM. % FINER THAN .500 MM (80167)	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM (80168)	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM (80169)	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM (80170)	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM (80171)	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM (80172)	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM (80173)
JULY 12...	4	9	14	23	35	66	100
AUG. 22...	50	68	72	80	89	95	100
SEP. 14...	78	97	100	--	--	--	--
OCT. 04...	78	97	100	--	--	--	--
NOV. 29...	81	98	100	--	--	--	--
NOV. 20...	54	70	73	81	89	95	100



## 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 mi (5.6 km) upstream from mouth, and 4 mi (6.4 km) southwest of Questa.

DRAINAGE AREA.—185 mi<sup>2</sup> (479 km<sup>2</sup>), 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, 430 mg/l Feb. 7-21, 26-28; minimum, 56 mg/l Apr. 27-30.

Specific conductance: Maximum daily, 1,130 micromhos Feb. 20; minimum daily, 172 micromhos May 20.

Water temperatures: Maximum, 15.0°C on several days during August; minimum, 3.0°C Dec. 6, 31.

Period of record:

Hardness: Maximum, 640 mg/l June 30, 1971; minimum, 56 mg/l Apr. 27-30, 1973.

Specific conductance: Maximum daily, 1,320 micromhos Dec. 13, 1972; minimum daily, 172 micromhos May 21, 1968, May 20, 1973.

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 to 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 1973 TO DECEMBER 1973

DATE	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) (K) (MG/L) (00930)	DIS- SOLVED PO- 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)	DIS- SOLVED NITRATE PLUS NITRATE (N) (MG/L) (00631)
JAN.												
01-04	32	--	42	7.9	--	--	101	0	--	--	--	.17
05-06	34	--	97	11	--	--	92	0	--	--	--	.36
07-12	32	--	59	8.6	--	--	101	0	--	--	--	.23
13-17	34	--	95	10	--	--	91	0	--	--	--	.46
18-31	31	--	44	7.8	--	--	101	0	--	--	--	.21
FEB.												
01-06	29	--	40	8.0	--	--	91	0	--	--	--	.03
07-21	33	--	150	14	--	--	82	0	--	--	--	.36
22-25	31	--	44	8.2	--	--	90	0	--	--	--	.06
26-28	39	--	150	13	--	--	77	0	--	--	--	.16
MAR.												
01-04	44	--	140	12	--	--	83	0	--	--	--	.34
05-..	41	--	16	4.5	--	--	102	0	--	--	--	.10
06-31	38	--	110	12	--	--	79	0	--	--	--	.36
APR.												
01-06	39	--	100	13	--	--	30	0	--	--	--	.14
07-..	39	--	52	9.1	--	--	18	4	--	--	--	.00
08-11	38	--	97	13	--	--	11	5	--	--	--	.00
12-22	43	--	62	9.4	--	--	40	2	--	--	--	.01
23-26	54	--	52	8.1	--	--	21	3	--	--	--	.03
27-30	77	--	16	3.8	--	--	31	5	--	--	--	.01
MAY												
01-06	96	--	43	6.2	--	--	64	0	--	--	--	.27
07-09	115	--	51	6.6	--	--	57	0	--	--	--	.34
10-18	255	--	30	4.2	--	--	49	0	--	--	--	.21
19-23	420	--	24	3.5	--	--	43	0	--	--	--	.19
24-..	378	--	34	6.9	--	--	118	0	--	--	--	.62
25-31	336	--	29	4.1	--	--	57	0	--	--	--	.20
JUNE												
01-09	309	--	28	3.9	--	--	59	0	--	--	--	.21
10-18	367	--	27	3.8	--	--	65	0	--	--	--	.18
19-30	248	--	33	4.2	--	--	68	0	--	--	--	.22
JULY												
21-31	111	--	48	6.4	--	--	80	0	--	--	--	.31
AUG.												
01-04	90	--	47	6.7	--	--	79	0	--	--	--	.32
05-15	62	--	38	6.6	--	--	85	--	--	--	--	.21
16-31	50	--	43	7.0	--	--	90	0	--	--	--	.24
SEP.												
13-21	47	--	55	8.0	--	--	91	0	--	--	--	.40
25-30	46	--	64	8.6	--	--	86	0	--	--	--	.43
OCT.												
01-02	48	--	64	8.9	--	--	91	0	--	--	--	.48
03-10	41	--	43	7.9	--	--	97	0	--	--	--	.21
11-27	53	--	55	8.3	--	--	92	0	--	--	--	.05
28-31	48	--	83	9.8	16	--	89	0	--	--	--	.13
NOV.												
01-13	45	--	81	9.3	--	--	87	0	--	--	--	.19
14-19	40	--	67	8.7	--	--	93	0	--	--	--	.23
20-30	41	--	130	12	--	--	88	0	--	--	--	.22
DEC.												
01-07	40	--	130	12	--	--	83	0	--	--	--	.26
08-14	34	--	58	8.5	--	--	93	0	--	--	--	.14
15-31	40	--	140	12	--	--	83	0	--	--	--	.35
CALENDAR YEAR												
WTD. AVG.	--	--	48	6.2	--	--	68	0	--	--	--	.22
TIME WTD.												
AVG.	89	--	71	8.6	--	--	77	0	--	--	--	.23
TOT. LOAD (TONS)	--	--	3830	493	--	--	5420	11	--	--	--	18
WATER YEAR												
WTD. AVG.	--	--	51	6.2	--	--	66	0	--	--	--	.22
TIME WTD.												
AVG.	93	--	81	8.9	--	--	74	0	--	--	--	.23
TOT. LOAD (TONS)	--	--	3790	459	--	--	4900	13	--	--	--	17

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

## CHEMICAL ANALYSES, COMPOSITES OF DAILY SAMPLES, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

[illegible]

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

CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS) (00061)	DIS- SOLVED SILICA (SI02) (MG/L) (00955)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED MANGANESE (MN) (UG/L) (01056)	DIS- SOLVED CALCIUM (CA) (MG/L) (00915)	DIS- SOLVED MAGNESIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED POTASSIUM (K) (MG/L) (00935)	BICARBONATE (HCO3) (MG/L) (00440)
FEB.										
01...	0940	34	--	--	--	--	--	--	--	--
21...	0920	33	--	--	--	--	--	--	--	--
28...	--	43	--	--	--	140	13	--	--	58
MAR.										
20...	0928	33	22	20	110	72	9.3	20	4.3	89
21...	0940	42	--	--	--	--	--	--	--	--
APR.										
17...	1100	47	--	--	--	--	--	--	--	--
MAY										
31...	1232	318	12	50	4	31	4.5	6.0	1.8	64
JUNE										
19...	0740	295	--	--	--	--	--	--	--	--
AUG.										
07...	1140	60	18	--	--	33	6.0	13	1.7	95
22...	1416	35	21	10	50	32	6.5	14	1.8	103
SEP.										
18...	1140	49	--	--	--	--	--	--	--	--
NOV.										
05...	1250	45	--	--	--	--	--	--	--	--
20...	1150	40	--	--	--	--	--	--	--	--

DATE	CARBONATE (CO3) (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLORIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUORIDE (F) (MG/L) (00950)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	DIS- SOLVED ORTHOPHOSPHORUS (P) (MG/L) (00671)	DIS- SOLVED SOLIDS (RESIDUE AT 180 C) (MG/L) (70300)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L) (70301)	HARDNESS (CA+MG) (MG/L) (00900)	NON-CARBONATE HARDNESS (MG/L) (00902)
FEB.										
01...	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--
28...	0	--	--	--	.12	--	--	--	400	360
MAR.										
20...	0	170	6.8	1.2	.24	.02	366	352	220	150
21...	--	--	--	--	--	--	--	--	--	--
APR.										
17...	--	--	--	--	--	--	--	--	--	--
MAY										
31...	0	54	2.6	.6	.11	.01	165	145	96	43
JUNE										
19...	--	--	--	--	--	--	--	--	--	--
AUG.										
07...	0	54	4.3	.8	.24	--	--	179	110	29
22...	0	50	4.8	.9	.14	.01	208	183	110	22
SEP.										
18...	--	--	--	--	--	--	--	--	--	--
NOV.										
05...	--	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--	--

DATE	SODIUM AD- SORP- TION RATIO (00931)	SPECIFIC CONDUCTANCE (MICROMHOS) (00095)	PH (UNITS) (00400)	TEMPERATURE (DEG C) (00010)	COLOR (PLATINUM- COBALT UNITS) (00080)	TURBIDITY (JTU) (00070)	DIS- SOLVED BORON (B) (UG/L) (01020)	DIS- SOLVED COPPER (CU) (UG/L) (01040)	DIS- SOLVED ZINC (ZN) (UG/L) (01090)
FEB.									
01...	--	298	--	8.0	3	6	--	--	--
21...	--	451	--	10.0	8	7	--	--	--
28...	--	851	8.3	--	2	--	--	9	10
MAR.									
20...	.6	535	7.8	9.5	2	3	25	3	<410
21...	--	519	--	9.0	3	4	--	--	--
APR.									
17...	--	354	--	12.5	0	9	--	--	--
MAY									
31...	.3	232	7.4	10.0	12	15	0	2	2
JUNE									
19...	--	182	--	--	3	35	--	--	--
AUG.									
07...	.5	282	7.9	15.5	--	--	--	--	--
22...	.6	288	7.9	16.5	1	2	20	2	<6
SEP.									
18...	--	385	--	14.0	--	--	--	--	--
NOV.									
05...	--	495	--	11.0	--	--	--	--	--
20...	--	505	--	9.0	--	--	--	--	--

## RIO GRANDE BASIN

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

TRACE ELEMENT ANALYSES, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

DATE	TIME	DIS- SOLVED ALUM- (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)
MAR. 20...	0928	51	3	35	<2	<6	25	0	<6	<6
MAY 31...	1232	170	10	25	<1	<3	6	0	<1	<2
AUG. 22...	1416	100	0	30	<2	<4	20	<6	<2	<4

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) (01190)	DIS- SOLVED MOLYB- DENUM (MO) (UG/L) (01060)
MAR. 20...	3	<3	<6	20	<100	<5	20	110	--	220
MAY 31...	2	<2	<3	50	<100	<3	4	4	.3	52
AUG. 22...	2	<2	--	10	<50	<4	13	50	.0	50

DATE	DIS- SOLVED NICKEL (NI) (UG/L) (01065)	DIS- SOLVED SILVER (AG) (UG/L) (01075)	DIS- SOLVED SIL- VER (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)
MAR. 20...	7	<1	3	800	<5	<3	4.0	<410	<7
MAY 31...	1	<1	8	240	<3	4	<2.0	2	<8
AUG. 22...	<4	0	2	210	<4	<2	3.0	<6	<6

FIELD AND BIOCHEMICAL MEASUREMENTS, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	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)
MAR. 20...	0928	33	515	--	9.5	7.0	--
MAY 31...	1232	318	220	--	10.0	18.0	--
AUG. 22...	1416	35	289	7.9	16.5	26.5	7.2

## RIO GRANDE BASIN

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

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973  
(ONCE-DAILY)

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	354	323	922	725	324	180	---	348	---	460	609	869
2	355	325	915	698	343	175	---	337	---	466	470	781
3	351	359	626	771	342	176	---	348	---	348	390	783
4	348	345	759	781	310	212	---	338	---	327	391	917
5	606	343	219	788	285	211	---	300	---	327	656	697
6	673	351	770	621	317	214	---	292	---	327	658	701
7	488	686	785	455	395	214	---	284	---	325	703	781
8	457	882	811	753	398	211	---	270	---	325	589	492
9	455	839	799	770	314	189	---	270	---	330	545	510
10	484	1030	906	674	248	200	---	271	---	318	581	576
11	393	890	814	602	222	200	---	269	---	470	635	401
12	479	854	817	385	198	210	---	269	---	450	581	361
13	603	795	715	543	196	181	---	270	412	452	548	351
14	677	789	809	429	210	176	---	270	412	415	517	361
15	705	820	591	441	232	238	---	284	412	400	489	697
16	640	1070	588	400	258	176	---	309	412	586	487	890
17	541	807	608	459	237	180	---	318	404	363	502	790
18	460	921	608	428	208	183	---	338	439	376	431	768
19	458	1090	637	489	190	180	---	318	412	370	421	865
20	389	1130	699	568	172	234	---	---	396	400	604	863
21	376	991	673	497	179	233	252	---	412	372	667	839
22	401	390	713	504	178	255	---	---	---	366	673	992
23	379	355	650	332	190	216	353	---	---	400	899	899
24	367	350	699	474	327	291	342	---	---	400	871	838
25	351	345	637	467	210	213	339	---	486	432	867	860
26	356	929	748	396	257	264	463	---	465	493	682	603
27	340	860	718	223	201	219	365	---	486	433	689	741
28	352	852	718	216	221	191	353	---	465	514	763	847
29	323	---	754	352	232	191	241	337	465	568	875	968
30	344	---	770	283	227	185	342	---	446	568	865	984
31	339	---	798	---	196	---	331	---	---	635	---	905
MONTH	446	704	719	516	252	207	---	---	---	413	622	740

TEMPERATURE (DEG. C) OF WATER, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973  
(ONCE-DAILY)

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	5.0	5.0	4.5	5.0	5.0	6.5	---	14.0	14.0	9.0	7.0	5.0
2	4.0	5.0	4.0	4.5	5.0	5.5	---	14.0	13.0	9.0	7.5	5.0
3	5.0	5.0	5.5	6.0	4.5	6.0	---	14.0	12.5	8.0	9.0	4.5
4	6.0	5.0	4.5	5.5	8.5	6.0	---	14.0	12.0	9.0	9.5	5.0
5	5.0	5.0	4.5	5.0	8.5	6.5	---	14.0	14.0	9.0	5.5	3.5
6	5.0	5.5	5.5	5.0	5.0	6.5	---	14.5	14.0	9.0	---	3.0
7	5.0	6.0	5.5	9.0	4.5	6.5	---	13.5	14.0	9.0	6.0	4.0
8	5.0	6.0	5.0	5.0	6.0	7.5	---	13.0	14.0	7.5	6.5	4.5
9	5.0	5.0	5.5	5.0	5.5	7.5	---	14.0	14.0	10.0	6.5	4.0
10	6.0	5.5	5.0	5.5	5.0	7.5	---	13.5	13.0	9.0	6.0	---
11	6.0	5.0	5.0	8.5	5.0	8.5	---	13.5	13.5	9.0	6.0	5.0
12	6.0	5.0	4.5	9.0	6.5	8.0	---	12.5	13.0	7.5	6.5	5.5
13	4.5	4.5	5.5	6.0	6.5	7.5	---	14.5	12.0	7.0	7.0	5.5
14	4.5	4.0	4.5	8.0	5.5	7.5	---	14.5	11.0	7.5	8.0	5.5
15	4.0	5.0	5.0	6.0	5.5	9.0	---	14.5	11.0	7.0	5.0	4.5
16	5.0	5.0	5.0	5.0	5.5	7.5	---	14.0	11.0	8.0	4.5	4.5
17	5.0	4.5	5.0	6.0	6.0	7.5	---	14.5	13.5	8.0	5.0	5.0
18	5.0	4.5	5.5	7.5	6.0	7.0	---	14.0	13.5	7.5	4.5	5.0
19	5.0	4.0	6.0	6.5	6.0	6.0	---	14.0	10.5	7.5	6.0	5.0
20	5.0	4.5	5.5	5.5	6.0	6.5	---	15.0	10.5	7.5	6.0	3.5
21	5.0	4.5	7.0	5.0	5.5	7.5	11.0	15.0	10.0	7.0	5.0	3.5
22	5.0	5.5	5.0	7.0	5.0	8.5	---	15.0	10.0	8.0	5.0	3.5
23	5.0	6.0	5.0	7.0	5.0	8.0	10.5	15.0	10.0	6.0	5.0	3.5
24	5.0	6.5	5.0	6.5	10.5	8.0	10.5	15.0	10.0	6.0	6.0	3.5
25	5.0	6.0	5.5	7.0	6.5	8.0	11.0	15.0	9.0	6.0	5.0	4.0
26	5.0	5.0	5.0	8.5	6.5	8.0	12.0	15.0	9.0	6.0	6.0	4.0
27	5.0	4.5	6.0	6.0	6.5	11.0	11.0	15.0	8.5	6.0	4.0	4.0
28	5.0	4.5	6.0	10.0	5.5	9.5	13.5	15.0	8.5	7.0	5.0	5.0
29	5.0	---	6.0	10.0	5.5	9.5	14.0	15.0	8.5	7.5	5.0	5.0
30	5.0	---	5.0	8.0	7.0	9.0	14.0	15.0	9.0	7.0	5.0	5.0
31	5.0	---	4.5	---	7.0	---	14.0	14.0	---	6.0	---	3.0
MONTH	5.0	5.0	5.0	6.5	6.0	7.5	---	14.5	11.5	7.5	6.0	4.5



## RIO GRANDE BASIN

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

INSTANTANEOUS SUSPENDED-SEDIMENT DISCHARGE, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

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)
JAN.					
09...	0900	8.5	33	11	.98
FEB.					
01...	0940	8.0	34	8	.73
21...	0920	10.0	33	17	1.5
MAR.					
20...	0928	9.5	33	9	.80
21...	0940	9.0	42	12	1.4
APR.					
17...	1100	12.5	47	25	3.2
MAY					
17...	0935	4.0	250	470	317
JUNE					
19...	0740	--	295	203	162
AUG.					
07...	1140	15.5	60	20	3.2
22...	1416	16.5	35	25	2.4
29...	0845	8.8	53	7	1.0
SEP.					
18...	1140	14.0	49	44	5.8
NOV.					
05...	1250	11.0	45	1030	125
20...	1150	9.0	40	6	.65
DEC.					
05...	1200	9.0	33	7	.62

## 08279000 EMBUDO CREEK AT DIXON, N. MEX.

LOCATION (revised).—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, 750 ft (230 m) upstream from U.S. Highway 64, 0.5 mi (0.8 km) upstream from mouth, 0.5 mi (0.8 km) east of Embudo Post Office, and 1.7 mi (2.7 km) northwest of Dixon. Prior to Sept. 2, 1971, at site 750 ft (230 m) downstream.

**DRAINAGE AREA.**--305 mi<sup>2</sup> (790 km<sup>2</sup>).

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

## CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS) (000061)	DIS- SOLVED SILICA (SiO <sub>2</sub> ) (MG/L) (009555)	DIS- SOLVED IRON (FE) (UG/L) (010466)	DIS- SOLVED MAN- GANESE (MN) (UG/L) (010566)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (009155)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L) (009255)	DIS- SOLVED SODIUM (NA) (MG/L) (009300)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (009355)
JAN. 23...	1050	19	15	--	--	64	7.1	9.6	1.2
FEB. 09...	1510	21	14	--	--	61	7.0	8.9	1.3
MAR. 19...	1542	27	11	30	8	50	6.3	7.3	1.1
22...	1435	54	--	--	--	--	--	--	--
APR. 09...	1150	58	12	--	--	56	6.9	8.7	1.2
17...	1010	198	12	--	--	40	5.2	5.4	1.3
MAY 21...	1345	1360	8.6	--	--	31	3.4	2.7	1.1
25...	1110	969	7.4	--	--	28	3.1	2.4	.8
30...	1111	550	7.5	30	<1	28	3.5	2.5	.8
JUNE 05...	1335	579	7.6	--	--	27	3.4	3.0	.7
JULY 11...	1530	165	10	--	--	45	5.4	5.4	1.0
25...	1100	99	13	--	--	53	6.3	6.9	1.2
AUG. 15...	--	31	16	--	--	66	7.8	11	1.5
22...	1032	21	17	10	15	77	7.6	13	1.6
SEP. 05...	1500	15	17	--	--	72	7.4	14	1.7
21...	1510	23	--	--	--	--	--	--	--
NOV. 09...	1200	30	16	--	--	69	7.9	11	3.5
DEC. 03...	1500	34	14	--	--	64	7.3	8.8	1.3
19...	1145	20	--	--	--	--	--	--	--

[illegible]

## RIO GRANDE BASIN

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

## CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

DATE	HARD- NESS (CA, MG) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AU- SORP- TION RATIO (00941)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	COLOK (PLAT- INUM- COBALT UNITS) (00080)	TUR- BID- ITY (JTU) (00070)	DIS- SOLVED BORON (B) (UG/L) (01020)
JAN.									
23...	190	5	.3	397	8.1	2.5	--	--	--
FEB.									
09...	180	11	.3	369	8.3	7.0	--	--	--
MAR.									
19...	150	18	.3	324	8.1	10.0	--	--	12
22...	--	--	--	291	--	5.0	8	25	--
APR.									
09...	170	22	.3	356	7.9	9.0	--	--	--
17...	120	20	.2	263	7.4	5.0	--	--	--
MAY									
21...	91	14	.1	184	8.0	8.0	--	--	--
25...	83	11	.1	168	7.9	8.0	--	--	--
30...	84	11	.1	173	7.4	13.5	--	--	10
JUNE									
05...	81	7	.1	171	8.1	10.0	--	--	--
JULY									
11...	130	9	.2	281	8.1	18.5	--	--	--
25...	160	7	.2	335	8.2	16.5	--	--	--
AUG.									
15...	200	3	.3	417	8.1	19.5	--	--	--
22...	220	18	.4	441	7.9	18.0	--	--	50
SEP.									
05...	210	8	.4	449	7.9	22.0	--	--	--
21...	--	--	--	429	--	19.0	--	--	--
NOV.									
09...	200	17	.3	412	8.2	7.0	--	--	--
DEC.									
03...	190	14	.3	390	8.1	6.0	--	--	--
19...	--	--	--	395	--	4.0	--	--	--

## TRACE ELEMENT ANALYSES, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

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)
MAR.										
19...	1542	160	2	90	<1	<5	12	0	<5	<5
MAY										
30...	1111	75	0	32	<1	<3	10	0	<1	<2
AUG.										
22...	1032	--	7	--	--	--	50	<10	<5	<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)	DIS- SOLVED 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)	DIS- SOLVED TOTAL MERCURY (HG) (UG/L) (01060)	DIS- SOLVED MOLYB- DENUM (MO) (UG/L) (01060)
MAR.										
19...	2	<2	<5	30	<100	<3	10	8	--	<1
MAY										
30...	2	<1	<3	30	<100	<3	1	<1	.2	<1
AUG.										
22...	<2	<4	--	10	<50	<6	13	15	.0	<1

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)
MAR.									
19...	<5	<1	0	230	<3	2	<3.0	<300	<5
MAY									
30...	<1	<1	5	84	<3	<2	<1.0	3	<4
AUG.									
22...	<6	<1	2	330	<6	<5	<3.0	<10	<12

RIO GRANDE BASIN

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08286500 RIO CHAMA ABOVE ABIQUIU RESERVOIR, N. MEX.

LOCATION.—Lat 36°19'06", long 106°35'50", Rio Arriba County, at gaging station, 40 ft (12 m) downstream from site of former bridge, 7.7 mi (12.4 km) downstream from Rio Gallina, 9 mi (14 km) northwest of Youngsville, 15.6 mi (25.1 km) upstream from Abiquiu Dam, 30.3 mi (48.8 km) downstream from El Vado Dam, and at mile 47.4 (76.3 km).

DRAINAGE AREA.—1,600 mi<sup>2</sup> (4,144 km<sup>2</sup>), of which 100 mi<sup>2</sup> (260 km<sup>2</sup>) 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, 1,320 micromhos Apr. 1; minimum daily, 174 micromhos Aug. 31.

Water temperatures: Maximum daily, 22.0°C July 3; minimum, freezing point on many days during February and November.

Sediment concentrations: Maximum daily, 35,100 mg/l Apr. 14; minimum daily, 20 mg/l on several days during June, July, October, and November.

Sediment discharge: Maximum daily, 58,900 tons (53,400 tonnes) Apr. 14; minimum daily, 2.2 tons (1.9 tonnes) Nov. 13.

Period of record:

Specific conductance: Maximum daily, 1,320 micromhos Apr. 1, 1973; 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 (208,000 tonnes) Aug. 11, 1967; minimum daily, .81 ton (.73 tonne) July 4, 1972.

REMARKS.—Records furnished by the Corps of Engineers, Albuquerque, District. Suspended sediment particle-size analyses for 1963 to current year determined by method established by the Corps of Engineers.

SPECIFIC CONDUCTANCE (MICROMHUS/CM AT 25 DEG. C), CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973  
(ONCE-DAILY)

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	---	---	833	1020	461	248	254	228	178	217	444	---
2	---	---	769	962	505	213	261	333	192	217	442	---
3	---	---	952	962	532	203	280	337	180	226	438	---
4	---	---	820	952	481	212	272	328	176	218	435	---
5	---	---	855	934	472	213	305	326	175	483	440	---
6	---	---	855	1010	483	208	263	326	183	483	368	---
7	---	---	813	952	431	189	263	325	---	---	---	---
8	---	---	813	980	397	229	521	333	---	---	---	---
9	---	---	800	952	360	221	495	328	182	333	368	---
10	---	380	833	971	369	217	476	187	186	341	357	---
11	---	385	833	704	180	222	465	191	197	333	469	---
12	---	408	870	709	366	185	495	192	192	330	465	---
13	---	408	865	704	329	191	191	186	197	337	460	---
14	---	380	893	794	334	195	196	185	186	355	472	---
15	---	370	885	787	278	196	395	197	---	---	---	---
16	---	374	893	725	294	199	185	196	---	---	---	---
17	---	385	1000	741	269	208	222	218	182	294	532	---
18	---	373	1640	680	271	191	208	223	184	268	549	---
19	---	408	1650	694	231	192	207	326	184	276	540	---
20	---	413	1080	694	226	189	209	231	180	279	543	---
21	---	413	1070	685	228	189	211	222	182	255	535	---
22	---	556	962	704	221	195	214	204	201	240	540	---
23	---	556	971	617	227	191	214	190	---	---	---	---
24	---	617	990	625	242	256	219	178	---	---	---	---
25	---	613	1130	625	232	270	211	193	196	244	465	---
26	---	690	1100	645	213	260	223	199	188	342	465	---
27	---	676	1100	649	230	256	261	188	185	333	465	---
28	---	833	1080	671	228	261	231	181	180	417	472	---
29	---	---	1290	658	229	262	227	178	183	326	465	---
30	---	---	1300	493	247	260	221	183	186	322	488	---
31	---	---	---	---	268	---	226	174	---	---	---	---
MONTH	---	---	999	787	317	217	276	235	186	---	467	---

## RIO GRANDE BASIN

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

TEMPERATURE (DEG. C) OF WATER, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973  
(ONCE-DAILY)

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

SUSPENDED-SEDIMENT DISCHARGE, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

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	98	100	26	93	210	53	86	460	107
2	96	110	29	97	220	58	179	4560	2250
3	98	120	32	93	190	48	230	4930	3130
4	93	40	10	106	130	37	187	1950	1170
5	98	100	26	102	190	52	151	1220	488
6	91	150	37	104	90	25	86	1350	313
7	96	100	26	111	60	18	94	3750	952
8	100	200	54	113	80	24	127	4700	1610
9	109	200	59	118	200	64	129	4810	1640
10	106	130	37	113	240	73	136	3390	1240
11	106	200	57	114	240	74	116	3580	1120
12	93	200	50	99	750	200	96	2430	628
13	97	350	92	130	560	197	239	2930	2180
14	106	240	69	142	500	192	104	2090	587
15	106	250	72	140	490	185	102	9980	2750
16	108	260	76	140	450	170	89	8390	2020
17	106	170	49	108	390	114	119	12400	4060
18	97	190	50	101	470	128	206	12900	7290
19	99	200	53	97	460	120	226	13200	8160
20	97	180	47	101	430	117	250	13200	9010
21	94	220	56	68	420	77	408	13400	15100
22	91	150	37	46	170	21	179	5420	3160
23	93	170	43	42	210	24	134	2280	838
24	127	420	144	42	210	24	115	3150	978
25	129	200	70	43	140	16	97	4230	1110
26	134	210	76	43	120	14	116	5210	1630
27	121	150	49	47	190	24	132	5400	1920
28	109	150	44	55	450	64	108	5910	1720
29	106	200	57	--	--	--	114	17300	5320
30	96	250	65	--	--	--	121	17100	5590
31	68	190	35	--	--	--	127	17100	5860
TOTAL	3168	--	1627	2608	--	2213	4603	--	93971



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

## SUSPENDED-SEDIMENT DISCHARGE, CALENDAR YEAR, JANUARY 1973 TO DECEMBER, 1973

DAY	APRIL			MAY			JUNE		
	PLAN 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	104	16600	4660	319	9760	8410	759	1780	3860
2	100	26800	7240	254	7790	5340	1230	1210	4020
3	94	34100	8650	426	7680	8830	1220	690	2270
4	96	32100	8320	506	6380	8720	1210	930	3040
5	98	28100	7440	780	4700	9900	1200	910	2950
6	101	14500	3950	800	4580	9890	1230	1050	3580
7	210	13900	8180	770	5160	10700	1380	1720	6640
8	118	10500	3350	868	4250	9960	1760	1100	5230
9	88	8310	1970	952	3640	9360	1740	750	3520
10	120	13200	4560	1100	3100	9210	1720	660	3070
11	281	30100	23200	1740	3090	14200	1920	1230	6910
12	416	29600	33700	3240	2880	24900	2230	1060	6380
13	548	34800	52300	4530	2060	25200	2230	450	2710
14	604	35100	58900	4680	1850	23400	2160	390	2270
15	556	29700	47000	4680	1230	15500	2120	480	2750
16	240	22400	14500	4530	1370	16800	1580	600	2560
17	284	23600	18300	4640	1590	19900	1200	740	2400
18	447	30700	37300	4960	2330	31200	1110	260	779
19	275	28400	21100	5650	1070	16300	1100	80	238
20	185	26000	13000	6180	880	14700	1100	100	297
21	150	24500	9920	6180	1310	21900	1000	110	297
22	158	18900	8060	5560	2650	39800	900	120	292
23	274	7700	5700	4500	2960	32300	740	110	220
24	316	6070	5180	2900	1730	13500	720	90	175
25	361	4490	4380	2900	980	7670	720	60	117
26	375	2840	2880	2930	900	7120	720	30	58
27	389	3070	3220	2900	820	6420	720	20	39
28	426	3990	4590	2870	820	6350	720	30	58
29	400	3950	4270	2380	990	6360	720	20	39
30	382	6120	6510	1680	1170	5310	720	40	78
31	--	--	--	1040	1290	3620	--	--	--
TOTAL	8196	--	432130	87445	--	442770	37875	--	66847

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	700	50	57	258	550	583	620	410	686
2	610	40	66	244	180	119	630	1550	2640
3	380	240	246	244	90	59	630	580	987
4	360	340	330	246	40	27	630	170	289
5	240	1150	745	244	40	26	620	210	352
6	164	20	8.9	239	40	26	610	220	362
7	161	180	78	234	30	19	608	280	460
8	159	990	425	157	50	21	598	280	452
9	159	1090	468	147	280	111	598	110	178
10	166	1080	488	98	1190	315	583	290	456
11	155	1030	431	84	810	184	442	1230	1470
12	159	1140	493	84	1200	272	153	780	322
13	179	571	284	83	670	150	174	400	188
14	161	90	39	83	1000	224	593	310	496
15	160	146	65	82	1190	263	598	150	242
16	170	197	96	253	1040	710	598	190	307
17	190	660	339	490	1050	1390	557	80	120
18	220	210	125	618	790	1320	425	70	80
19	250	120	81	622	900	1510	422	70	80
20	250	130	88	632	1080	1840	422	80	91
21	250	140	95	613	820	1360	422	90	103
22	250	180	122	632	730	1250	425	300	384
23	249	180	121	632	400	683	425	60	69
24	249	140	94	637	520	894	422	70	80
25	249	140	94	683	500	922	425	80	92
26	249	110	74	637	510	877	425	60	69
27	246	30	20	627	440	745	422	80	91
28	246	250	166	627	320	542	418	60	68
29	246	180	120	632	240	410	418	100	113
30	246	190	126	637	400	688	418	200	226
31	256	700	484	580	300	470	--	--	--
TOTAL	7729	--	6468.9	12079	--	17810	14731	--	11513



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LOCATION.—Lat 36°14'12", long 106°24'59", in SE<sup>1</sup>SE<sup>4</sup> sec.8, T.23 N., R.5 E., Rio Arriba County, at gaging station 0.8 mi (1.3 km) downstream from Abiquiú Dam, 5.9 mi (9.5 km) northwest of Abiquiú, and at mile 31.3 (50.4 km).

Sediment records: October 1962 to current year.

Sediment discharge: Maximum daily, 48,400 tons (43,900 tonnes) Apr. 13; minimum daily, 1.1 tons (1.0 tonne) Oct. 27-28.

Sediment discharge: Maximum daily, 214,000 tons (194,000 tonnes) Aug. 1, 1969; minimum daily, .54 ton (.50 tonne) Sept. 19, 1972.

[illegible]

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

TEMPERATURE (DEG. C) OF WATER, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973  
(ONCE-DAILY)

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

## SUSPENDED SEDIMENT DISCHARGE, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

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	51	10	1.4	104	30	8.4	59	20	3.2
2	100	20	5.4	76	20	4.1	152	30	12
3	90	20	4.9	76	20	4.1	253	40	27
4	88	30	7.1	132	20	7.1	239	40	26
5	100	20	5.4	127	10	3.4	158	20	8.5
6	69	10	1.9	109	70	21	114	20	6.2
7	97	30	7.9	118	60	19	71	30	5.8
8	93	30	7.5	132	50	18	80	40	8.6
9	75	20	4.1	109	40	12	134	50	18
10	94	30	7.6	109	30	8.8	133	50	18
11	94	30	7.6	139	30	11	163	60	26
12	78	20	4.2	130	30	11	129	610	212
13	87	20	4.7	110	30	8.9	190	1110	569
14	135	30	11	124	30	10	303	300	245
15	101	30	8.2	134	30	11	303	100	82
16	85	20	4.6	138	30	11	307	100	83
17	106	30	8.6	165	30	13	165	150	67
18	106	30	8.6	117	30	9.5	210	2900	1640
19	95	30	7.7	66	20	3.6	280	4900	3700
20	102	30	8.3	105	30	8.5	263	1710	1210
21	132	30	11	102	30	8.3	389	4340	4560
22	90	30	7.3	41	20	2.2	309	2100	1750
23	69	20	3.7	72	30	5.8	156	180	76
24	92	30	7.5	84	30	6.8	178	140	67
25	79	20	4.3	45	40	4.9	119	100	32
26	112	30	9.1	33	30	2.7	150	40	16
27	133	30	11	33	20	1.8	177	450	215
28	133	30	11	39	20	2.1	174	860	404
29	132	30	11	---	---	---	145	1290	505
30	106	30	8.6	---	---	---	184	670	333
31	94	30	7.6	---	---	---	195	600	316
TOTAL	3018	--	218.8	2769	--	238.0	5882	--	16241.3

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

## SUSPENDED-SEDIMENT DISCHARGE, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

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	134	530	192	890	550	1320	806	140	305
2	43	460	53	701	490	927	806	140	305
3	36	380	37	722	830	1620	806	140	305
4	79	490	105	956	2350	6070	806	140	305
5	132	60	21	1070	2130	6150	806	140	305
6	152	60	25	1070	2000	5780	806	140	305
7	216	60	55	1220	160	527	806	140	305
8	223	60	56	1310	130	460	806	140	305
9	148	60	24	823	210	467	807	130	283
10	117	60	19	1140	300	923	813	120	263
11	242	13600	8890	1090	430	1270	813	110	241
12	493	14000	18600	1150	550	1710	813	100	220
13	666	26900	48400	875	680	1610	303	80	65
14	780	8550	18000	24	770	50	64	80	14
15	931	2660	6690	24	470	30	66	70	12
16	610	2380	3920	25	400	27	66	70	12
17	323	5990	5220	25	330	22	66	70	12
18	638	3660	6300	44	270	32	66	60	11
19	517	1470	2050	72	230	45	96	60	16
20	265	450	322	74	180	36	114	50	15
21	225	550	211	76	140	29	322	50	43
22	248	200	134	76	160	33	993	60	161
23	374	160	162	78	180	38	1080	50	146
24	526	150	213	137	210	78	1080	40	117
25	631	210	358	413	220	245	1260	40	136
26	763	260	494	501	190	257	1310	40	141
27	761	480	986	508	170	233	1700	40	184
28	857	420	972	508	150	206	1930	40	208
29	890	360	865	681	130	239	2020	40	218
30	940	460	1170	799	140	302	2020	40	218
31	--	--	--	805	140	304	--	--	--
TOTAL	12898	--	124504	17887	--	31040	24250	--	5176

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	2020	50	273	1560	20	84	650	70	123
2	2020	50	273	1560	20	84	631	70	119
3	1960	40	212	1560	10	42	611	70	115
4	1930	40	208	1550	10	42	589	60	95
5	1920	40	207	1550	10	42	603	100	163
6	1930	40	208	1570	20	85	638	90	155
7	1940	30	157	1600	20	86	660	80	143
8	1940	30	157	1600	20	86	667	80	144
9	1940	30	157	1600	20	86	654	70	124
10	1930	30	156	1600	20	86	631	70	119
11	1920	30	156	1580	20	85	584	60	95
12	1920	30	156	1580	20	85	319	60	52
13	1410	20	76	1670	20	90	141	70	27
14	155	20	8.4	1730	20	93	418	70	79
15	155	20	8.4	942	30	76	688	50	93
16	420	30	34	281	30	23	676	60	110
17	902	90	219	486	30	39	609	50	82
18	111	130	39	643	30	52	450	50	61
19	109	960	283	702	30	57	398	60	64
20	244	2060	1360	721	30	58	423	40	46
21	1020	1110	3060	715	40	77	425	50	57
22	1480	660	2640	688	50	93	422	50	57
23	1710	20	92	661	70	125	406	40	44
24	1900	90	462	665	60	108	433	40	47
25	1900	90	462	667	60	108	427	40	46
26	1900	70	559	685	70	129	405	50	55
27	1900	20	103	703	80	152	437	50	59
28	1900	20	103	703	80	152	457	50	62
29	1900	20	103	696	70	132	469	50	63
30	1900	20	103	677	60	110	445	50	60
31	1740	20	94	661	70	125	--	--	--
TOTAL	46126	--	11928.8	33606	--	2692	15368	--	2559



## RIO GRANDE BASIN

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

SUSPENDED-SEDIMENT DISCHARGE, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

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	415	40	45	25	20	1.4	1010	20	55
2	359	30	29	25	20	1.4	1010	20	55
3	330	40	36	25	20	1.4	1000	20	54
4	325	30	26	25	20	1.4	1000	20	54
5	312	40	34	25	20	1.4	1020	10	28
6	312	40	34	25	20	1.4	1060	10	29
7	324	50	44	25	20	1.4	1060	20	57
8	372	60	60	25	20	1.4	1080	20	58
9	362	60	59	26	20	1.4	1070	20	58
10	283	50	38	25	20	1.4	1070	20	58
11	244	50	33	25	20	1.4	1060	20	57
12	155	50	21	26	20	1.4	1070	20	58
13	124	40	13	25	20	1.4	1070	20	58
14	76	30	6.2	25	20	1.4	1010	10	27
15	59	30	4.8	25	20	1.4	969	10	26
16	42	40	4.5	25	20	1.4	971	10	26
17	44	40	4.8	25	20	1.4	1000	10	27
18	54	40	5.8	130	20	7.0	1060	20	57
19	39	40	4.2	545	20	29	1080	30	87
20	140	50	19	721	20	39	1080	30	87
21	190	50	26	716	20	39	1080	30	87
22	186	50	25	715	20	39	1080	30	87
23	130	50	18	730	20	39	1070	30	87
24	78	40	8.4	755	20	41	1070	30	87
25	85	40	9.2	748	20	40	1060	30	86
26	43	30	3.5	800	20	43	1100	30	89
27	20	20	1.1	836	20	45	1130	30	92
28	20	20	1.1	883	20	48	1130	20	61
29	45	20	2.4	924	20	50	1120	20	60
30	64	20	3.5	980	20	53	1120	20	60
31	50	20	2.7	--	--	--	1110	20	60
TOTAL	5282	--	622.2	9910	--	535.8	32820	--	1872

CAL YR 1973 TOTAL WATER DISCHARGE (CFS-DAYS)  
 CAL YR 1973 TOTAL SUSPENDED-SEDIMENT DISCHARGE (TONS)

209816  
 197627.9

WTR YR 1973 TOTAL WATER DISCHARGE (CFS-DAYS)  
 WTR YR 1973 TOTAL SUSPENDED-SEDIMENT DISCHARGE (TONS)

179857  
 326066.6

INSTANTANEOUS SUSPENDED-SEDIMENT DISCHARGE AND PARTICLE SIZE, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

DATE	TIME	TEMPERATURE (DEG C) (70010)	INSTAN- TANEOUS DIS- CHARGE (CFS) (70061)	SUS- PENDED SEDI- MENT CHARGE (MG/L) (80154)	SUS- PENDED SEDI- MENT CHARGE (T/DAY) (80155)	SUS. SED. FALL DIAM. % FINER THAN (70337)	SUS. SED. FALL DIAM. % FINER THAN (70338)
APR.							
02...	0800	3.9	32	3990	345	--	76
MAY							
14...	0800	8.3	24	780	51	62	73
DATE			SUS. SED. FALL DIAM. % FINER THAN (70339)	SUS. SED. FALL DIAM. % FINER THAN (70340)	SUS. SED. FALL DIAM. % FINER THAN (70341)	SUS. SED. FALL DIAM. % FINER THAN (70342)	SUS. SED. FALL DIAM. % FINER THAN (70343)
APR.							
02...			92	97	99	100	--
MAY							
14...			87	96	97	98	99

RIO GRANDE BASIN

61

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 mi (0.8 km) west of Chamita, 2.5 mi (4.0 km) northwest of San Juan Pueblo, and at mile 2.8 (4.5 km).

DRAINAGE AREA.--3,144 mi<sup>2</sup> (8,143 km<sup>2</sup>) of which about 100 mi<sup>2</sup> (260 km<sup>2</sup>) 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, 746 micromhos Mar. 12; minimum daily, 175 micromhos May 12, 14.

Water temperatures: Maximum, 21.5°C Aug. 13, Sept. 2; minimum, 0.5°C Jan. 20, 29.

Sediment concentrations: Maximum daily, 10,000 mg/l July 30; minimum daily, 30 mg/l Jan. 10-11.

Sediment discharge: Maximum daily, 46,400 tons (42,100 tonnes) July 30; minimum daily, 7.1 tons (6.4 tonnes) Oct. 29.

Period of record:

Specific conductance (1969-73): Maximum daily, 1,010 micromhos July 25, 1970; minimum daily, 175 micromhos May 12, 14, 1973.

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 (308,000 tonnes) Aug. 9, 1967; minimum daily, 0 tons (0 tonnes) 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 1963 to current year determined by method established by the Corps of Engineers.

CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

DATE	TIME	INSTAN- TANEOUS CHARGE (CFS) (00061)	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)
JAN.									
30...	1240	118	19	--	--	53	10	34	2.8
FEB.									
07...	1435	161	20	--	--	52	10	34	2.7
25...	1510	119	--	--	--	--	--	--	--
MAR.									
19...	1437	360	12	40	<4	72	16	61	3.7
APR.									
09...	1530	247	15	--	--	70	18	65	3.6
27...	1615	1370	15	--	--	46	7.3	16	2.8
MAY									
03...	1615	1160	16	--	--	41	6.0	12	2.6
29...	1110	883	16	--	--	26	4.7	11	1.9
30...	1006	1180	15	50	<1	28	5.1	11	2.0
JUNE									
12...	1100	907	14	--	--	30	5.1	11	2.0
JULY									
09...	1610	1780	13	--	--	28	4.7	8.8	1.8
26...	0930	1740	14	--	--	35	5.0	11	2.1
AUG.									
14...	1645	1650	13	--	--	37	6.2	14	2.2
21...	1319	530	14	20	3	39	6.8	15	2.3
SEP.									
06...	1430	517	--	--	--	--	--	--	--
15...	1410	647	15	--	--	34	5.2	12	2.0
29...	1520	448	--	--	--	--	--	--	--
OCT.									
16...	1610	80	16	--	--	55	10	37	3.2
NOV.									
06...	1145	56	18	--	--	60	14	50	3.8

## RIO GRANDE BASIN

08290000 RIO CHAMA NEAR CHAMITA, N. MEX.--Continued  
 CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

DATE	BICARBONATE (HCO <sub>3</sub> ) (MG/L) (00440)	CARBONATE (CO <sub>3</sub> ) (MG/L) (00445)	DISSOLVED SULFATE (SO <sub>4</sub> ) (MG/L) (00945)	DISSOLVED CHLORIDE (CL) (MG/L) (00940)	DISSOLVED FLUORIDE (F) (MG/L) (00950)	DISSOLVED NITRITE PLUS NITRATE (N) (MG/L) (00651)	DISSOLVED URTHO. PHOSPHORUS (P) (MG/L) (00671)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L) (70500)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L) (70501)
JAN.									
JAN. 30...	161	0	110	11	.2	.04	--	--	320
FEB.									
FEB. 07...	163	0	96	11	.3	.06	--	--	307
FEB. 25...	--	--	--	--	--	--	--	--	--
MAR.									
MAR. 19...	159	0	230	10	.5	.24	.01	513	486
APR.									
APR. 09...	168	0	240	11	.4	.26	--	--	507
APR. 27...	102	0	87	4.2	.3	.09	--	--	229
MAY									
MAY 03...	98	0	63	4.1	.3	.13	--	--	194
MAY 29...	83	0	36	4.0	.3	.06	--	--	141
MAY 30...	96	0	38	3.7	.5	.10	.03	175	152
JUNE									
JUNE 12...	94	0	41	3.1	.3	.09	--	--	153
JULY									
JULY 09...	84	0	41	2.1	.2	.22	--	--	142
JULY 26...	109	0	47	2.5	.2	.14	--	--	171
AUG.									
AUG. 14...	100	0	70	3.0	.2	.12	--	--	195
AUG. 21...	101	0	78	4.0	.2	.13	.00	232	210
SEP.									
SEP. 06...	--	--	--	--	--	--	--	--	--
SEP. 15...	96	0	47	3.1	.1	.06	--	--	166
SEP. 29...	--	--	--	--	--	--	--	--	--
OCT.									
OCT. 16...	173	0	87	14	.3	.07	--	--	308
NOV.									
NOV. 06...	221	0	100	21	.5	.06	--	--	377

DATE	HARDNESS (CA, MG) (MG/L) (00900)	NON-CARBONATE HARDNESS (MG/L) (00902)	SODIUM ADSORPTION RATIO (00931)	SPECIFIC CONDUCTANCE (MICROPHUS) (00095)	PH (UNITS) (00400)	TEMPERATURE (DEG C) (00010)	COLOR (PLATINUM-COBALT UNITS) (00060)	TURBIDITY (JTU) (00070)	DISSOLVED BORON (B) (MG/L) (01020)
JAN.									
JAN. 30...	170	41	1.1	494	8.0	1.5	20	30	--
FEB.									
FEB. 07...	170	37	1.1	485	8.1	6.0	10	60	--
FEB. 25...	--	--	--	533	--	7.0	5	30	--
MAR.									
MAR. 19...	250	120	1.7	752	7.9	--	30	0	50
APR.									
APR. 09...	250	110	1.8	757	8.0	12.0	20	0	--
APR. 27...	150	61	.6	363	7.7	14.0	30	200	--
MAY									
MAY 03...	130	47	.5	303	7.7	7.0	40	100	--
MAY 29...	84	16	.5	220	7.5	12.0	50	70	--
MAY 30...	91	12	.5	233	7.3	10.0	50	40	20
JUNE									
JUNE 12...	96	19	.5	247	7.7	15.0	--	--	--
JULY									
JULY 09...	89	20	.4	226	8.2	16.0	50	50	--
JULY 26...	110	19	.5	272	7.9	14.0	--	--	--
AUG.									
AUG. 14...	120	36	.6	313	8.1	21.5	--	--	--
AUG. 21...	130	43	.6	335	8.1	19.5	30	50	40
SEP.									
SEP. 06...	--	--	--	283	--	21.0	20	64	--
SEP. 15...	110	28	.5	267	8.0	18.0	--	--	--
SEP. 29...	--	--	--	294	--	17.5	--	--	--
OCT.									
OCT. 16...	180	37	1.2	498	8.2	19.0	--	--	--
NOV.									
NOV. 06...	210	26	1.5	608	8.3	7.0	--	--	--

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

## TRACE ELEMENT ANALYSES, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

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)
MAR. 19...	1437	43	4	86	<2	<9	50	0	<9	<9
MAY 30...	1006	77	3	44	<1	<3	20	0	<1	<2
AUG. 21...	1319	20	0	70	<2	<3	40	0	<3	<4

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)
MAR. 19...	5	<4	<9	40	200	<6	50	<4	--	3
MAY 30...	2	<1	<3	50	<100	<3	11	<1	.3	1
AUG. 21...	4	<2	--	20	<50	<4	20	3	.0	<2

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 (ZK) (UG/L) (01160)
MAR. 19...	<9	<1	5	620	<6	<4	<6.0	<580	<10
MAY 30...	2	<1	5	200	<3	<2	3.0	13	<4
AUG. 21...	<4	0	6	250	<4	<3	2.0	<7	<7

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973  
(ONCE-DAILY)

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	---	606	704	---	242	303	---	---	306	478	370	355
2	---	556	725	333	233	300	263	361	303	480	360	395
3	---	556	714	345	205	---	287	366	308	486	370	519
4	---	606	714	326	181	308	339	364	316	463	440	515
5	---	588	714	337	178	---	336	---	316	480	500	511
6	---	645	704	441	183	232	258	---	303	---	435	508
7	---	625	725	---	249	232	269	345	306	---	400	561
8	---	645	725	469	238	232	---	333	291	486	417	571
9	480	625	704	458	237	232	---	333	303	488	417	571
10	500	625	704	395	239	230	---	333	300	---	417	572
11	500	625	694	376	176	227	---	357	293	---	400	582
12	500	625	746	370	175	232	---	357	303	---	500	574
13	488	625	704	345	176	244	---	385	308	476	421	569
14	488	645	714	370	175	244	---	370	313	500	476	565
15	488	625	701	---	234	244	---	370	312	482	412	571
16	488	625	---	368	228	241	---	400	292	488	489	571
17	488	556	714	382	239	---	---	357	286	488	---	580
18	476	606	345	354	252	---	247	337	275	444	---	574
19	488	571	333	340	246	262	258	---	275	500	---	569
20	500	556	357	322	248	259	283	343	278	506	---	572
21	526	588	323	---	258	262	269	309	272	476	---	614
22	513	606	357	---	244	255	270	304	272	526	407	588
23	513	588	---	306	205	267	263	304	272	506	395	577
24	513	625	---	305	216	261	257	298	263	526	412	577
25	513	606	---	315	219	268	268	317	272	533	446	722
26	---	625	322	311	248	274	260	297	275	506	493	---
27	488	704	652	304	---	255	253	297	273	345	368	---
28	513	704	735	328	---	268	264	300	474	465	360	---
29	500	---	719	316	268	280	357	306	469	526	348	---
30	526	---	728	341	252	---	313	297	488	526	353	---
31	513	---	728	---	259	---	309	348	---	519	---	---
Month	---	614	630	534	224	256	---	337	311	488	416	555

## RIO GRANDE BASIN

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

TEMPERATURE (DEG. C) OF WATER, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973  
(ONCE-DAILY)

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

## SUSPENDED SEDIMENT DISCHARGE, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

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	87	600	141	170	140	64	109	230	68
2	82	590	131	124	190	64	136	220	81
3	131	480	170	121	200	65	319	210	181
4	95	4170	1070	142	150	58	339	210	192
5	127	5460	1870	218	100	59	299	200	161
6	85	3640	835	152	70	29	189	200	102
7	111	4720	1410	151	80	33	184	230	114
8	120	1400	454	155	80	33	130	250	88
9	96	400	104	176	90	43	203	220	121
10	124	30	10	139	90	34	196	260	138
11	122	30	9.9	184	110	55	208	300	168
12	109	40	12	206	100	56	229	2330	1440
13	104	70	20	171	100	46	178	2890	1390
14	153	70	29	158	110	47	347	1510	1410
15	146	80	32	183	100	49	153	1270	925
16	110	70	21	180	100	49	140	1270	480
17	148	50	20	201	110	60	144	420	163
18	142	40	15	226	140	85	192	160	83
19	138	40	15	127	120	41	338	120	110
20	125	70	24	119	190	61	345	150	140
21	157	70	30	185	170	85	414	140	156
22	150	80	32	138	170	63	615	140	232
23	101	80	22	104	130	37	278	120	90
24	127	100	34	146	140	55	356	120	115
25	132	120	43	133	140	50	208	120	67
26	130	110	39	94	140	36	176	370	176
27	174	110	52	91	140	34	244	1250	824
28	168	100	45	96	210	54	296	1580	1260
29	163	120	53	---	---	---	221	1950	1160
30	171	210	97	---	---	---	285	1920	1480
31	139	110	41	---	---	---	289	1750	1370
TOTAL	3967	--	6880.9	4290	--	1445	7760	--	14085



## RIO GRANDE BASIN

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

## SUSPENDED SEDIMENT DISCHARGE, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

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	275	1800	1340	1680	700	3180	1140	300	923
2	149	1830	736	1440	670	2600	1130	200	610
3	343	1910	1770	1260	700	2380	1080	400	1170
4	124	1710	573	1660	460	2060	1060	700	2000
5	152	1820	747	1890	510	2600	991	600	1610
6	245	1680	1110	1830	460	2270	944	200	510
7	240	1700	1100	1760	600	2850	936	200	505
8	348	1920	1800	1880	700	3550	929	200	502
9	239	1610	1040	1750	950	4490	916	90	223
10	195	1510	690	2390	1000	6450	918	100	248
11	214	1090	630	2710	2630	19200	916	100	247
12	589	1290	2050	2840	790	6060	877	120	284
13	827	1620	3620	2930	850	6720	695	90	169
14	1150	1030	3200	1550	400	1670	216	70	41
15	1360	1300	4770	1250	710	2400	159	70	30
16	1210	1220	3990	1260	1140	3880	123	70	23
17	538	1130	1640	1290	1230	4280	108	70	20
18	975	1700	4480	1260	910	3100	98	70	19
19	1050	1810	5130	1490	930	3740	73	600	118
20	571	1860	2870	1420	1020	3910	72	1000	194
21	496	1620	2170	1370	960	3550	76	920	189
22	463	1590	1990	1100	800	2380	715	1290	2400
23	586	2220	3510	877	740	1750	1020	930	2560
24	922	2010	3000	844	1010	2300	1040	900	2530
25	1140	2100	6460	933	800	2020	1110	870	2610
26	1340	2280	8250	1150	900	2790	1130	920	2810
27	1440	2200	8550	1170	1300	4110	1440	850	3300
28	1640	1890	8570	952	1000	2570	1610	800	3480
29	1750	1690	7990	971	800	2100	1730	770	3600
30	1870	1490	7520	1200	750	2430	1800	850	4130
31	--	--	--	1180	700	2230	--	--	--
TOTAL	22441	--	103096	47287	--	115620	25052	--	37145
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	1850	950	4750	1450	3430	13400	646	130	227
2	1860	1190	5980	1460	900	3550	608	140	230
3	1820	7900	38800	1450	500	1960	587	130	206
4	1750	5060	23900	1430	470	1810	542	130	190
5	1740	3400	18000	1420	470	1800	533	410	590
6	1780	1300	6250	1420	400	1530	555	210	315
7	1810	890	4350	1450	210	822	588	150	238
8	1820	620	3050	1440	150	583	588	130	206
9	1780	230	1110	1440	160	622	617	120	200
10	1750	190	898	1490	180	724	638	120	207
11	1750	150	709	1490	240	966	924	300	748
12	1870	380	1920	1490	380	1530	472	120	163
13	1580	280	1190	1520	350	1440	226	120	73
14	260	190	133	1610	380	1650	228	140	86
15	244	350	251	1330	210	754	645	490	853
16	155	150	63	241	220	143	746	120	242
17	810	950	2080	339	420	384	663	160	286
18	297	1650	1320	526	320	454	502	180	244
19	219	1040	615	594	340	545	355	150	144
20	110	850	252	672	290	526	398	140	150
21	518	1130	1580	662	180	322	403	190	207
22	1270	950	3260	652	150	264	391	170	179
23	1410	2130	8110	615	140	232	368	140	139
24	1690	530	2420	630	150	255	384	140	145
25	1680	850	3860	680	300	551	430	120	139
26	1850	890	4450	673	240	436	395	140	149
27	1780	300	1440	686	160	296	410	240	266
28	1750	500	2360	683	150	277	432	210	245
29	1750	7390	34900	677	140	256	456	110	135
30	1720	10000	46400	710	150	288	449	110	133
31	1690	7510	34300	678	140	256	--	--	--
TOTAL	42363	--	256681	31608	--	38626	15179	--	7325



## RIO GRANDE BASIN

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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 SW¼SW¼ sec.18, T.19 N., R.8 E., Santa Fe County, in San Ildefonso Pueblo Grant at gaging station, 400 ft (120 m) downstream from bridge on State Highway 4, 1.8 mi (2.9 km) southwest of San Ildefonso Pueblo, 2.5 mi (4.0 km) downstream from Pojoaque River, and 6.8 mi (10.9 km) west of Pojoaque, and at mile 1,614.2 (2,597.2 km).

DRAINAGE AREA.--14,300 mi<sup>2</sup> (37,040 km<sup>2</sup>), approximately, including 2,940 mi<sup>2</sup> (7,610 km<sup>2</sup>) 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, 301 mg/l Apr. 12-16; minimum, 137 mg/l May 14-31.

Hardness: Maximum, 150 mg/l Mar. 19; minimum, 86 mg/l May 29.

Specific conductance: Maximum daily, 484 micromhos Apr. 14; minimum daily, 189 micromhos May 16.

Water temperatures: Maximum, 26.0°C July 24; minimum, freezing point on many days during January, February, and December.

Sediment concentrations: Maximum daily, 6,320 mg/l May 11; minimum daily, 35 mg/l Nov. 10.

Sediment discharge: Maximum daily, 126,000 tons (114,000 tonnes) May 13; minimum daily, 61 tons (55 tonnes) Nov. 10.

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; minimum daily, 11 mg/l July 27, 1963.

Sediment discharge: Maximum daily, 366,000 tons (332,000 tonnes) Aug. 23, 1961; minimum daily, 3 tons (2.7 tonnes) July 27, 1963.

REMARKS.--Daily mean temperature is computed by averaging the maximum and minimum temperatures for each day.

## CHEMICAL ANALYSES, COMPOSITES OF DAILY SAMPLES, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

DATE	DIS- CHARGE (CFS) (00060)	DIS- SOLVED SILICA (SI02) (MG/L) (00955)	DIS- SOLVED IRON (FE) (MG/L) (01046)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED NE- SIUM (NA) (MG/L) (00925)	DIS- SOLVED SIUM (SI) (MG/L) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	BICAK- 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	685	25	--	36	6.5	20	2.6	142	0	49	7.0	.5
FEB.												
01-28	693	25	--	36	6.5	20	2.5	129	0	46	6.4	.5
MAR.												
01-02	872	26	--	40	6.6	19	3.1	131	0	47	6.0	.5
03-18	1060	22	--	41	7.8	24	3.2	127	0	74	6.9	.4
19-31	1330	21	--	42	8.4	29	3.1	136	0	81	7.4	.4
APR.												
01-11	1130	18	--	31	8.3	31	2.9	108	9	93	9.0	.6
12-16	2170	17	--	40	9.3	30	2.9	145	0	120	7.0	.5
17-19	2260	19	--	45	6.6	19	2.7	120	0	68	5.5	.5
20-24	1670	--	--	39	6.6	--	--	120	2	--	--	--
25-30	2860	16	--	46	6.5	15	2.8	124	0	64	5.3	.4
MAY												
01-10	3560	11	--	37	5.3	12	2.3	106	3	48	4.2	.3
11-13	6530	14	--	40	4.7	12	2.5	121	0	42	4.3	.3
14-31	6430	12	--	29	3.7	9.7	2.4	81	7	29	3.5	.3
JUNE												
01-30	4910	17	--	29	4.4	11	2.3	92	0	35	4.0	.3
JULY												
01-13	3770	16	--	30	5.1	12	2.4	87	0	47	3.4	.3
14-31	2660	19	--	35	5.9	17	3.1	103	0	54	4.5	.4
AUG.												
01-15	2230	17	--	36	5.9	16	2.5	108	0	56	4.3	.2
16-31	1050	18	--	38	6.5	18	2.9	120	0	61	5.2	.3
SEP.												
01-30	1030	20	--	36	5.8	17	2.8	115	0	47	5.1	.3
OCT.												
01-31	845	23	--	34	6.0	18	2.8	123	0	45	5.8	.4
NOV.												
01-19	665	26	--	38	7.1	21	3.0	137	0	45	5.9	.7
20-30	1370	21	--	42	7.3	19	2.6	126	0	51	6.6	.9
DEC.												
01-31	1680	20	--	42	7.3	19	2.7	120	0	64	5.3	.7
CALENDAR YEAR												
WTD. AVG.	--	17	--	34	5.6	15	2.6	106	1	48	4.7	.4
TIME WTD. AVG.	2010	20	--	36	6.3	18	2.7	117	1	53	5.5	.4
TOT. LOAD (TUNS)	--	34100	--	68000	11000	29800	5060	210000	2820	94000	9300	750
WATER YEAR												
WTD. AVG.	--	17	--	34	5.5	15	2.6	107	1	49	4.8	.4
TIME WTD. AVG.	1930	20	--	37	6.4	19	2.8	122	1	57	5.7	.4
TOT. LOAD (TUNS)	--	32700	--	65000	10500	28900	4860	202000	2820	91800	8970	665

## RIO GRANDE BASIN

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

## CHEMICAL ANALYSES, COMPOSITES OF DAILY SAMPLES, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

DATE	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	DIS- SOLVED NITRO- PHOS- (P) (MG/L) (00671)	DIS- SOLVED BORON (B) (MG/L) (01020)	DIS- SOLVED (RESI- DUE AT 180 C) (MG/L) (70300)	DIS- SOLVED (SUM OF CONSTI- TUENTS) (MG/L) (70301)	DIS- SOLVED (TONS PER AC-F-T) (70303)	DIS- SOLVED (TONS PER DAY) (70302)	HARD- NESS (CA, MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AU- SURP- TION RATIO (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)
JAN.												
01-31	.54	--	--	--	219	.30	405	120	0	.8	324	8.1
FEB.												
01-28	.12	--	--	--	207	.28	387	120	11	.8	324	8.1
MAR.												
01-02	.45	--	--	--	215	.29	506	130	20	.7	336	7.9
03-18	.29	--	--	--	243	.33	695	130	30	.9	376	8.1
19-31	.14	--	--	--	260	.35	934	140	28	1.1	400	7.9
APR.												
01-11	.03	--	--	--	256	.35	781	110	8	1.3	414	8.6
12-16	.63	--	--	--	301	.41	1760	140	19	1.1	470	8.1
17-19	.32	--	--	--	227	.31	1390	140	41	.7	353	7.9
20-24	.09	--	--	--	--	--	--	120	23	--	326	8.4
25-30	.22	--	--	--	218	.30	1680	140	40	.5	347	8.0
MAY												
01-10	.02	--	--	--	175	.24	1680	110	22	.5	269	8.9
11-13	.25	--	--	--	181	.25	3190	120	20	.5	287	8.2
14-31	.00	--	--	--	137	.19	2380	88	10	.5	217	8.4
JUNE												
01-30	.12	--	--	--	149	.20	1980	91	15	.5	238	8.2
JULY												
01-13	.15	--	--	--	160	.22	1630	96	25	.5	258	8.0
14-31	.21	--	--	--	191	.26	1370	110	27	.7	306	7.9
AUG.												
01-15	.08	--	--	--	192	.26	1160	110	26	.7	294	8.0
16-31	.15	--	--	--	210	.29	584	120	23	.7	326	8.0
SEP.												
01-30	.24	--	--	--	192	.26	534	110	19	.7	307	8.0
OCT.												
01-31	.13	--	--	--	196	.27	447	110	9	.7	301	8.1
NOV.												
01-19	.08	--	--	--	215	.29	386	120	12	.8	343	8.0
20-30	.11	--	--	--	213	.29	788	140	32	.7	355	8.0
DEC.												
01-31	.17	--	--	--	221	.30	1000	140	37	.7	355	8.0
CALENDAR YEAR												
WTU. AVG.	.14	--	--	--	182	.25	--	108	20	.6	288	8.2
TIME WTD. AVG.	.18	--	--	--	202	.28	--	116	19	.7	317	8.1
TOT. LOAD (TONS)	281	--	--	--	357000	--	--	--	--	--	--	--
WATER YEAR												
WTU. AVG.	.15	--	--	--	184	.25	--	108	19	.6	289	8.2
TIME WTD. AVG.	.19	--	--	--	211	.29	--	118	18	.8	327	8.1
TOT. LOAD (TONS)	277	--	--	--	343000	--	--	--	--	--	--	--

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

## CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS) (000061)	DIS- SOLVED SILICA (SIO2) (MG/L) (000955)	DIS- SOLVED IRON (FE) (MG/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)
JAN.											
31...	1319	776	25	30	35	6.3	21	2.6	136	0	51
FEB.											
15...	1158	769	23	20	38	6.8	21	2.8	136	0	63
MAR.											
19...	1305	1090	20	30	45	8.3	28	3.3	128	0	110
APR.											
20...	1100	1700	18	40	37	6.6	18	2.3	112	0	60
MAY											
29...	1535	5490	17	40	27	4.5	11	2.4	87	0	39
JUNE											
21...	1052	3700	17	50	28	4.6	13	2.6	83	0	41
JULY											
16...	1203	1670	20	30	37	6.4	22	3.3	126	0	57
AUG.											
21...	1530	1140	18	30	39	6.6	18	2.7	109	0	67
SEP.											
18...	1311	1020	19	40	34	5.5	16	2.5	112	0	47
OCT.											
17...	1003	797	23	30	34	6.2	19	2.8	126	0	43
NOV.											
21...	1345	1320	20	10	38	6.7	19	2.6	121	0	55

DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00540)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED NITRATE (N) (MG/L) (00618)	DIS- SOLVED NITRATE (N) (MG/L) (00613)	TOTAL NITRATE (N) (MG/L) (00630)	DIS- SOLVED NITRATE (N) (MG/L) (00631)	AMMONIA NITRO- GEN (N) (MG/L) (00610)	DIS- SOLVED AMMONIA NITRO- GEN (N) (MG/L) (00608)	TOTAL ORGANIC NITRO- GEN (N) (MG/L) (00605)	TOTAL NITRO- GEN (N) (MG/L) (00600)	TOTAL PHOS- PHORUS (P) (MG/L) (00665)
JAN.											
31...	6.4	.5	.08	.00	--	.08	.04	.04	.22	.34	.08
FEB.											
15...	7.3	.5	.05	.01	--	.06	.03	--	.20	--	.09
MAR.											
19...	7.4	.3	.15	.00	.16	.15	.11	--	.46	.73	.23
APR.											
20...	5.6	.2	.18	.01	.20	.19	.59	--	.34	1.1	.39
MAY											
29...	3.4	.4	.05	.00	.05	.05	.15	--	.68	.88	.23
JUNE											
21...	4.4	.4	.04	.00	.04	.04	.12	--	.47	.63	.17
JULY											
16...	6.2	.7	.09	.00	.09	.09	.19	--	.91	1.2	.35
AUG.											
21...	4.9	.4	.05	.00	.04	.05	.09	--	.54	.67	.52
SEP.											
18...	4.8	.4	.00	.01	.08	.00	.11	--	.40	.59	.29
OCT.											
17...	6.8	.5	.05	.00	.05	.05	.08	--	.26	.39	.12
NOV.											
21...	5.9	.4	.08	.00	.10	.08	.16	--	.21	.47	.08

DATE	DIS- SOLVED GRTHO. 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) (MG/L) (01020)
JAN.										
31...	.03	226	216	110	2	.9	324	8.2	2.5	30
FEB.										
15...	.02	248	240	120	11	.8	349	8.3	8.0	50
MAR.										
19...	.03	276	267	150	42	1.0	415	7.8	8.0	50
APR.										
20...	.04	208	205	120	28	.7	316	7.7	5.0	50
MAY										
29...	.02	170	148	86	15	.5	229	7.8	14.5	--
JUNE										
21...	.02	176	152	89	21	.6	238	8.0	15.5	40
JULY										
16...	.37	231	216	120	15	.9	324	8.0	23.0	70
AUG.										
21...	.00	236	211	120	35	.7	339	7.9	22.0	60
SEP.										
18...	.04	187	185	110	16	.7	282	8.0	19.0	30
OCT.										
17...	.07	228	198	110	7	.8	305	8.2	11.5	90
NOV.										
21...	.08	215	208	120	23	.7	333	8.1	6.0	50



## RIO GRANDE BASIN

08313000 RIO GRANDE AT OTOWI BRIDGE, NEAR SAN ILDEFONSO, N. MEX.--Continued  
FIELD AND BIOCHEMICAL MEASUREMENTS, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

DATE	TIME	INSTANTANEOUS DISE- CHARGE (CFS) (00061)	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- CUBALT 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) (MG/L) (00680)
JAN.											
31...	1319	776	305	8.4	2.5	11.5	10	25	11.2	3	2.8 *
FEB.											
15...	1158	769	320	8.4	8.0	10.5	5	15	10.2	80	--
MAR.											
19...	1305	1090	397	8.3	8.0	18.5	10	90	8.8	130	6.5 *
APR.											
20...	1100	1780	320	8.5	5.0	8.5	50	140	8.6	830	11.5 *
MAY											
29...	1535	5490	220	8.4	14.5	24.5	25	85	8.4	210	10 *
JUNE											
21...	1052	3700	245	8.0	15.5	27.5	15	40	--	35	6.3 *
JULY											
16...	1203	1670	315	7.9	23.0	25.0	10	160	--	270	20 *
AUG.											
21...	1530	1140	330	8.4	22.0	28.0	5	90	7.8	8200	4.5
SEP.											
18...	1311	1020	282	8.3	19.0	26.5	--	--	7.4	48	5.0
OCT.											
17...	1003	797	305	8.2	11.5	15.0	--	--	9.1	600	4.0
NOV.											
21...	1345	1320	333	8.1	6.0	7.0	--	--	9.4	340	6.0

\* Analyzed by New Mexico Environmental Improvement Agency.

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973  
(ONCE-DAILY)

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	315	306	315	387	282	251	232	285	328	293	306	344
2	318	294	331	354	276	247	229	284	318	293	308	344
3	333	299	360	459	262	319	234	282	300	293	312	347
4	307	303	358	357	258	234	238	219	299	297	307	342
5	320	316	355	371	252	230	237	217	292	294	309	347
6	324	310	339	408	249	238	248	279	280	300	312	341
7	318	305	358	415	267	244	255	281	276	298	322	341
8	327	305	349	470	251	248	267	283	281	296	322	340
9	310	318	376	435	224	255	254	285	281	294	322	347
10	322	323	367	402	285	244	261	287	279	292	322	346
11	309	323	379	397	304	225	267	294	318	303	328	357
12	316	323	379	479	287	218	275	300	315	295	337	359
13	319	320	350	478	253	209	275	298	350	306	343	359
14	318	318	419	484	203	208	286	310	318	291	350	347
15	315	319	354	430	199	204	319	314	284	293	350	341
16	318	316	357	436	189	199	327	350	288	303	350	349
17	324	316	350	334	204	202	300	353	276	302	348	354
18	318	320	346	341	214	207	332	339	283	294	348	355
19	312	305	403	365	216	206	339	340	291	292	355	351
20	301	313	416	320	207	235	308	333	296	287	331	351
21	308	332	387	312	220	244	316	331	292	294	328	348
22	301	324	434	320	198	246	286	317	292	281	334	343
23	300	315	350	311	200	235	279	305	285	281	371	343
24	297	316	366	328	195	240	273	303	288	279	348	329
25	303	313	355	354	204	229	286	298	288	286	343	329
26	303	298	363	349	210	228	319	299	300	293	350	322
27	310	298	376	338	219	224	296	300	302	289	336	317
28	305	317	402	332	---	229	292	300	302	290	341	322
29	309	---	333	323	238	222	281	316	302	297	330	320
30	319	---	385	326	244	222	281	342	292	302	338	326
31	308	---	393	---	256	---	274	333	---	310	---	326
TOTAL	313	313	370	381	236	231	280	306	297	294	333	342

## RIO GRANDE BASIN

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

TEMPERATURE (DEG. C) OF WATER, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973  
(RECORDER MAXIMUM, MINIMUM, AND MEAN)

DAY	JANUARY			FEBRUARY			MARCH			APRIL		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	0.0	0.0	0.0	5.5	2.0	4.0	11.0	6.5	9.0	9.5	5.0	7.0
2	0.0	0.0	0.0	5.0	1.0	3.0	11.0	6.5	9.0	7.0	5.5	6.0
3	0.0	0.0	0.0	3.0	1.0	2.0	9.0	6.5	8.0	8.5	4.0	6.0
4	1.0	0.0	0.5	4.5	0.0	2.0	8.0	4.0	6.0	10.5	4.5	7.5
5	2.0	0.0	1.0	6.0	1.0	3.5	8.0	4.5	6.0	11.0	5.0	8.0
6	0.5	0.0	0.0	5.0	2.0	3.5	8.0	3.5	6.0	12.0	6.0	9.0
7	2.0	0.0	1.0	5.5	3.5	4.5	8.0	4.0	6.0	11.0	7.0	9.0
8	1.0	0.0	0.5	4.5	1.0	3.0	8.0	5.0	6.5	7.5	2.5	5.0
9	2.0	0.0	1.0	4.0	0.0	2.0	7.0	5.5	6.0	10.5	3.5	7.0
10	4.0	0.5	2.0	5.0	0.0	2.5	9.0	4.5	7.0	11.5	6.0	9.0
11	2.0	0.0	1.0	3.5	2.0	3.0	9.5	4.5	7.0	12.0	7.5	10.0
12	1.0	0.0	0.5	5.5	2.0	4.0	10.5	5.0	8.0	12.0	8.0	10.0
13	2.0	0.0	1.0	5.5	2.0	4.0	9.0	5.5	7.0	12.5	8.0	10.0
14	5.0	1.0	3.0	6.0	2.0	4.0	7.0	3.5	5.0	12.5	8.0	10.0
15	5.5	2.0	4.0	6.0	2.0	4.0	8.0	3.5	6.0	10.0	8.0	9.0
16	6.0	2.0	4.0	4.5	2.0	3.0	9.5	4.0	7.0	10.0	5.5	9.0
17	5.5	3.0	4.0	6.0	2.0	4.0	9.0	4.5	7.0	13.5	6.0	10.0
18	7.0	3.0	5.0	5.5	1.0	3.0	11.5	7.5	9.5	11.5	8.0	10.0
19	6.0	2.5	4.0	7.0	1.0	4.0	12.5	7.5	10.0	9.0	5.5	7.0
20	6.0	3.0	4.5	4.5	2.0	3.0	12.5	8.0	10.0	7.0	4.0	5.5
21	3.5	0.5	2.0	4.5	2.0	3.0	12.0	9.0	10.5	10.5	4.0	7.0
22	3.5	0.5	2.0	5.0	2.0	3.5	11.5	7.0	9.0	13.5	5.5	9.5
23	3.0	0.5	2.0	6.0	3.0	4.5	9.5	6.5	8.0	14.0	8.0	11.0
24	3.0	0.5	2.0	8.0	3.0	5.5	10.0	4.5	7.0	13.5	8.5	11.0
25	3.5	0.5	2.0	10.0	4.5	7.0	10.0	4.5	7.0	14.5	10.0	12.0
26	3.0	0.5	2.0	10.0	5.0	7.5	10.0	5.0	7.5	13.5	9.0	11.0
27	4.0	0.5	2.0	10.5	5.5	8.0	9.5	7.0	8.0	14.5	8.0	11.0
28	3.0	1.0	2.0	9.5	6.5	8.0	9.5	5.5	7.5	13.5	9.0	11.0
29	2.0	1.0	1.5	---	---	---	8.0	5.5	7.0	11.5	8.0	10.0
30	2.0	1.0	1.5	---	---	---	5.5	4.5	5.0	11.0	8.0	9.5
31	5.0	1.5	3.0	---	---	---	9.5	4.0	7.0	---	---	---
MONTH	7.0	0.0	2.0	10.5	0.0	4.0	12.5	3.5	7.5	14.5	2.5	9.0
DAY	MAY			JUNE			JULY			AUGUST		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	10.5	7.0	9.0	15.0	13.0	14.0	21.0	15.5	18.0	22.0	17.0	19.5
2	12.5	6.5	9.5	14.0	12.0	13.0	21.0	17.0	19.0	22.0	17.0	19.5
3	13.0	7.0	10.0	15.5	10.5	13.0	21.0	17.0	19.0	22.0	17.0	19.5
4	13.0	9.0	11.0	16.0	12.0	14.0	22.0	17.0	19.5	20.5	16.0	18.0
5	12.0	9.0	10.5	16.5	11.5	14.0	22.0	17.0	19.5	22.0	17.0	19.5
6	11.0	8.0	9.5	18.0	13.0	15.5	20.5	17.0	19.0	21.0	18.0	19.5
7	13.5	7.0	10.0	19.0	14.0	16.5	21.0	16.0	18.5	22.0	17.0	19.5
8	14.5	9.0	12.0	19.5	14.5	17.0	21.0	18.0	19.5	22.0	17.0	19.5
9	16.0	10.0	13.0	20.0	15.0	17.5	21.5	18.0	20.0	21.0	18.0	19.5
10	17.0	10.5	14.0	20.0	16.0	18.0	21.0	17.0	19.0	23.5	17.0	20.0
11	15.5	11.0	13.0	20.0	15.5	18.0	21.5	17.0	19.0	22.0	18.0	20.0
12	14.5	12.0	13.0	19.5	15.0	17.0	22.0	18.0	20.0	22.0	17.0	19.5
13	13.0	10.0	11.5	18.0	16.0	17.0	21.5	16.5	19.0	23.0	17.0	20.0
14	12.0	9.0	10.5	18.0	15.0	16.5	22.0	19.0	20.5	23.0	18.0	20.5
15	14.5	9.5	12.0	18.0	14.0	16.0	22.0	18.5	20.0	22.0	17.0	19.5
16	15.5	10.5	13.0	18.0	14.0	16.0	23.5	19.0	21.0	25.0	18.0	21.5
17	15.5	11.0	13.0	18.0	13.5	17.0	21.0	19.0	20.0	25.5	19.0	22.0
18	17.0	12.0	14.5	19.0	14.0	18.0	22.0	18.0	20.0	25.5	19.0	22.0
19	17.0	13.0	15.0	18.5	14.0	18.0	23.0	18.0	20.5	24.0	18.5	21.0
20	16.0	13.5	15.0	19.0	14.0	18.0	24.5	16.5	21.5	26.5	19.5	21.5
21	16.0	12.0	14.0	19.5	14.5	18.0	22.0	18.0	20.0	23.5	19.5	21.5
22	13.5	12.0	13.0	20.0	15.0	17.5	25.0	20.0	22.5	24.0	19.5	22.0
23	15.5	11.0	13.0	20.0	15.5	18.0	24.0	20.5	22.0	25.0	19.0	22.0
24	15.5	12.0	14.0	20.5	15.5	18.0	26.0	25.0	25.5	24.5	20.0	22.0
25	16.0	13.0	14.5	21.0	16.0	18.5	25.0	20.5	23.0	24.0	18.5	21.0
26	15.0	12.0	13.5	22.0	17.0	19.5	25.0	20.5	23.0	23.5	18.0	21.0
27	14.0	10.0	12.0	21.0	18.0	19.5	25.5	20.5	23.0	23.5	18.0	21.0
28	15.0	10.0	12.5	21.0	17.0	19.0	24.5	21.0	23.0	23.5	18.0	21.0
29	16.0	11.0	13.5	21.0	17.0	19.0	22.0	15.5	19.0	22.0	18.0	20.0
30	16.0	12.0	14.0	21.0	15.5	18.0	20.0	16.0	18.0	20.5	17.0	19.0
31	15.5	13.5	14.5	---	---	---	20.0	16.0	18.0	20.5	16.0	18.0
MONTH	17.0	6.5	12.5	22.0	10.5	17.0	26.0	15.5	20.5	25.5	16.0	20.5

## RIO GRANDE BASIN

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

TEMPERATURE (DEG. C) OF WATER, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973  
(RECORDER MAXIMUM, MINIMUM, AND MEAN)

SEPTEMBER				OCTOBER			NOVEMBER			DECEMBER		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	21.0	16.0	18.5	19.0	13.5	16.0	10.0	6.0	8.0	7.0	3.5	5.0
2	22.0	16.0	19.0	18.5	13.0	16.0	11.0	7.0	9.0	7.0	3.5	5.0
3	21.0	15.0	18.0	17.0	12.0	14.5	10.0	6.0	8.0	6.0	3.5	5.0
4	21.0	15.0	18.0	18.0	13.5	16.0	10.5	8.5	9.5	6.0	3.5	5.0
5	22.0	17.0	19.5	16.0	12.0	14.0	10.5	6.0	8.0	4.5	2.0	3.0
6	23.0	17.0	20.0	15.5	12.0	14.0	10.5	6.0	8.0	4.5	2.0	3.0
7	22.0	16.0	19.0	17.0	14.5	16.0	10.5	6.0	8.5	5.0	2.0	3.5
8	22.0	17.0	19.5	17.0	12.0	14.5	11.5	6.5	9.0	5.5	2.0	4.0
9	21.0	17.0	19.0	15.0	12.0	13.5	10.5	6.5	8.5	5.5	2.0	4.0
10	21.0	17.0	19.0	13.5	10.5	12.0	10.5	6.0	8.0	5.0	2.0	3.5
11	20.5	17.0	19.0	13.5	9.0	11.0	11.0	6.0	8.5	5.0	2.0	3.5
12	20.5	15.5	18.0	14.5	9.5	12.0	11.0	7.0	9.0	5.5	2.0	4.0
13	22.0	16.0	19.0	14.5	9.5	12.0	11.0	7.0	9.0	5.5	2.0	4.0
14	22.0	17.0	19.5	15.5	10.0	13.0	12.0	8.5	10.0	5.0	3.5	4.0
15	21.0	17.0	19.0	15.5	10.0	13.0	10.0	5.5	7.5	4.5	2.0	3.0
16	20.0	17.0	18.5	16.0	11.0	13.5	8.0	3.5	6.0	4.5	1.0	3.0
17	20.0	15.5	18.0	16.0	11.0	13.5	8.5	3.5	6.0	5.0	2.0	3.5
18	20.0	15.5	18.0	15.5	11.0	13.0	9.0	4.5	7.0	4.0	2.0	3.0
19	22.0	16.0	19.0	15.5	10.5	13.0	6.5	5.0	6.0	4.0	1.0	2.5
20	20.5	15.0	18.0	14.5	10.5	12.5	9.0	4.0	6.5	3.5	0.5	2.0
21	21.0	15.0	18.0	15.0	10.0	12.5	8.0	5.0	6.5	3.5	0.5	2.0
22	20.0	14.5	17.0	14.5	10.0	12.0	9.0	5.5	7.0	2.0	0.0	1.0
23	20.0	15.5	18.0	14.5	10.0	12.0	8.0	5.5	7.0	2.0	0.5	1.0
24	19.0	14.5	17.0	14.5	10.0	12.0	7.0	5.0	6.0	3.0	1.0	2.0
25	17.0	13.0	15.0	13.0	8.5	11.0	5.5	4.0	5.0	2.0	0.0	1.0
26	15.0	12.0	13.5	12.0	8.0	10.0	5.5	4.5	5.0	2.0	0.0	1.0
27	15.5	11.0	13.0	12.0	8.5	10.0	5.0	3.5	4.0	2.0	0.0	1.0
28	18.0	12.0	15.0	11.0	8.0	9.5	5.0	2.0	3.5	3.5	1.0	2.0
29	17.0	12.0	14.5	11.0	7.0	9.0	6.0	3.0	4.5	4.5	2.0	3.0
30	19.0	17.0	18.0	10.0	6.0	8.0	6.0	3.5	5.0	5.5	3.5	4.5
31	---	---	---	11.0	6.0	8.5	---	---	---	2.0	0.0	1.0
MONTH	23.0	11.0	18.0	19.0	6.0	12.5	12.0	2.0	7.0	7.0	0.0	3.0

SUSPENDED SEDIMENT DISCHARGE, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

	JANUARY			FEBRUARY			MARCH		
DAY	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	664	622	1120	689	559	1040	797	630	1360
2	677	92	168	633	443	757	946	1310	3350
3	696	356	669	610	365	601	1210	2290	7480
4	709	689	1320	645	432	752	1180	1240	3950
5	722	653	1270	715	734	1420	1090	1130	3330
6	689	445	828	677	575	1050	946	780	1990
7	657	339	601	696	577	1080	922	750	1870
8	677	411	751	709	409	783	922	600	1490
9	689	388	722	715	461	890	970	660	1730
10	709	519	994	677	584	1070	1000	730	1970
11	683	492	907	709	549	1050	994	770	2070
12	645	360	627	756	459	937	1040	710	1990
13	645	530	923	715	394	761	1080	800	2330
14	683	560	1030	715	396	764	1220	2890	9520
15	715	802	1550	729	430	846	1030	1400	3890
16	664	600	1080	729	399	785	1070	990	2860
17	702	560	1060	763	656	1350	1130	900	2750
18	709	459	879	776	689	1440	1170	960	3030
19	696	462	868	696	409	769	1310	920	3250
20	709	561	1070	645	705	1230	1370	1860	6880
21	715	487	940	715	1340	2590	1440	1940	7540
22	696	427	802	702	320	986	1640	4710	20900
23	651	429	754	639	265	457	1360	1540	5650
24	633	460	786	664	465	834	1380	1360	5070
25	683	546	1010	677	500	914	1260	908	3090
26	670	485	877	645	663	1150	1190	718	2310
27	715	590	1140	657	540	958	1220	795	2620
28	696	503	945	696	470	883	1240	855	2860
29	683	500	922	--	--	--	1240	1110	3720
30	651	371	652	--	--	--	1310	950	3360
31	709	547	1050	--	--	--	1310	946	3350
TOTAL	21242	--	28315	19394	--	28147	35987	--	127560

## 00315000 RIO GRANDE AT OTOWI BRIDGE, NEAR SAN ILDEFONSO, N. MEX.--Continued

SUSPENDED SEDIMENT DISCHARGE, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

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	1300	857	3010	3650	3230	31800	5560	2400	36000
2	1170	820	2590	3330	3340	30000	5850	2370	37400
3	1250	1440	4860	2860	3100	23900	5940	2210	35400
4	1050	880	2490	3070	2950	24500	5920	2240	35800
5	1030	910	2530	3560	4220	40600	5500	2490	37000
6	1080	1000	2920	3730	4550	45800	5030	2840	38600
7	1110	2200	6590	3570	3990	38500	4790	2720	35200
8	1200	4410	14300	3750	4000	40500	4670	1710	21600
9	1060	1850	5290	3570	4020	38700	4660	1390	17500
10	1070	2080	6010	4470	5400	65200	4970	1210	16200
11	1100	1220	3620	5450	6320	93000	5310	1340	19200
12	1400	3380	12800	6530	6290	111000	5620	1460	22200
13	1830	4950	24500	7620	6100	126000	5810	1420	22300
14	2290	5010	31000	7010	5060	95800	5600	1480	22400
15	2720	6100	44800	5860	4230	66900	5580	1480	22300
16	2610	4450	31400	5530	3760	56100	5290	1790	25600
17	1940	2680	14000	5330	3520	50700	4850	1330	17400
18	2290	2850	17600	5410	3510	51300	4520	1590	19400
19	2550	2800	19300	6130	3500	57900	4450	1320	15900
20	1770	2430	11600	6960	3100	58300	3960	1350	14400
21	1620	1930	8440	7620	3550	73000	3560	1400	13500
22	1520	1720	7060	8000	3170	68500	3830	1100	11400
23	1550	2010	8410	7720	2580	53800	4190	1310	14800
24	1870	2230	11300	7320	1880	37200	4150	1200	13400
25	2130	2650	15200	6920	2520	47100	4190	1150	13000
26	2390	2650	17100	6510	2520	44300	4230	1200	13700
27	2600	2500	17600	6600	1610	28700	4620	1180	14700
28	2990	3430	27700	6220	1300	21800	4870	1170	15400
29	3390	4440	40600	5880	1210	19200	4990	940	12700
30	3650	4110	40500	5480	1290	19100	4750	950	12200
31	--	--	--	5270	1400	19900	--	--	--
TOTAL	55530	--	455120	170930	--	1579100	147260	--	646600
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	4620	1100	13700	2660	1630	11700	1070	2210	6380
2	4560	1420	17500	2590	1610	11300	1040	2340	6570
3	4320	1070	12500	2560	1310	9050	1060	2170	6210
4	4170	950	10700	2450	1630	10800	1120	1800	5440
5	3920	1140	12100	2340	1700	10700	1100	1990	4130
6	3580	1150	11100	2240	1460	8830	1070	1760	5040
7	3510	1250	11700	2240	1760	10600	1060	1880	5340
8	3590	1280	12400	2180	1460	8590	1040	2360	6630
9	3460	1200	11200	2130	1530	8800	1040	1640	4610
10	3330	990	8900	2090	1360	7670	1090	1400	4120
11	3220	1060	9220	2030	1140	6250	1670	5920	29100
12	3310	820	7330	2010	1150	6240	1190	3500	11200
13	3440	1590	14800	2030	1260	6910	796	1400	3010
14	2080	870	4890	2070	1620	9050	738	1020	2030
15	1970	1310	6970	1860	1330	6680	1240	1400	4690
16	1740	1150	5400	763	790	1630	1360	1180	4330
17	2340	1750	11100	696	940	1770	1250	970	3270
18	2150	4030	23400	908	1750	4290	1130	770	2350
19	2080	3500	19700	1010	1050	2860	922	850	2120
20	1780	1450	6970	1100	2400	7130	943	910	2320
21	2290	1650	10200	1240	1650	6010	964	1690	4400
22	3160	2100	17900	1110	1180	3540	936	960	2430
23	3200	1750	15100	1010	780	2130	887	800	1920
24	3270	1710	15100	1040	870	2440	867	1780	4170
25	3080	1710	14200	1040	890	2500	915	1200	2960
26	3390	3050	27900	1050	1000	2840	854	860	1980
27	3170	2040	17500	1060	1440	4120	854	900	2080
28	3100	2000	16700	1030	1250	3480	901	630	1530
29	3060	1810	15000	1040	1110	3120	929	380	953
30	3050	1980	16300	1300	4030	17600	950	480	1230
31	2940	1900	15100	1110	2700	8090	--	--	--
TOTAL	96880	--	412580	49987	--	206720	30986	--	142623

## RIO GRANDE BASIN

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

SUSPENDED-SEDIMENT DISCHARGE, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

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	908	700	1720	789	382	814	1630	1250	5500
2	874	1310	3090	756	215	439	1640	1630	1220
3	776	850	1780	708	210	401	1720	1490	6920
4	782	1090	2300	732	195	385	1730	1260	5890
5	750	680	1380	744	156	313	1710	1310	6050
6	789	1320	2810	732	280	553	1720	1230	5710
7	770	740	1540	720	180	350	1630	940	4140
8	796	920	1980	708	80	153	1660	1010	4530
9	874	680	1600	684	112	207	1690	860	3920
10	908	430	1100	648	35	61	1670	880	3970
11	950	1170	3000	624	87	147	1690	740	3380
12	894	1160	2800	597	349	563	1690	840	3830
13	960	940	2180	586	130	206	1710	880	4060
14	841	600	1360	575	40	62	1720	1120	5200
15	789	490	1040	564	101	154	1650	1070	4770
16	789	520	1110	564	230	350	1670	925	4170
17	776	680	1420	570	124	191	1660	860	3850
18	756	325	663	575	180	279	1680	880	3990
19	841	290	659	750	175	354	1730	980	4580
20	660	300	697	1270	1320	4530	1710	1210	5590
21	950	260	667	1290	1000	3480	1650	990	4410
22	992	290	777	1290	1850	6440	1670	960	4330
23	985	440	1170	1300	1360	4770	1700	1050	4820
24	929	410	1030	1360	1110	4140	1650	1070	4770
25	860	380	882	1340	1200	4340	1620	1210	5290
26	874	220	519	1360	700	2570	1620	1580	6910
27	848	600	1370	1440	1380	5370	1670	1260	5680
28	789	550	1170	1380	900	3350	1670	1500	6760
29	776	270	366	1480	1230	4920	1710	1100	5080
30	796	141	303	1500	1390	5630	1720	1100	5110
31	828	299	668	--	--	--	1710	1140	5260
TOTAL	26210	--	43351	27656	--	55522	52100	--	155690

CAL YR 1973	TOTAL WATER DISCHARGE (CFS-DAYS)	734162
CAL YR 1973	TOTAL SUSPENDED-SEDIMENT DISCHARGE (TONS)	3881328
WTR YR 1973	TOTAL WATER DISCHARGE (CFS-DAYS)	702941
WTR YR 1973	TOTAL SUSPENDED-SEDIMENT DISCHARGE (TONS)	3997338

INSTANTANEOUS SUSPENDED-SEDIMENT DISCHARGE AND PARTICLE SIZE, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

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...	1300	4.0	677	678	1240	--	--
15...	1530	4.5	657	2110	3740	--	--
31...	1319	2.5	776	507	1060	--	--
FEB.							
01...	1445	4.0	702	584	1110	--	--
MAR.							
14...	1520	6.5	1260	4230	14400	55	64
APR.							
08...	1450	7.0	1230	5150	17100	54	70
15...	1630	10.0	2730	4590	33800	29	33
MAY							
01...	1515	11.5	3670	3160	31300	10	12
13...	1630	10.0	8250	5340	119000	12	14
29...	1535	14.5	5490	1110	16500	9	12
JUNE							
01...	1815	14.0	5690	2960	45500	5	6
15...	1600	18.5	5600	1430	21600	9	10
JULY							
01...	1600	21.0	4640	1100	13800	--	--
15...	1500	22.0	1880	1280	6500	30	38
AUG.							
01...	1540	22.0	2600	1570	11000	14	16
SEP.							
11...	1545	20.0	1310	4280	15100	33	40
18...	1311	19.0	1020	323	890	--	--
OCT.							
06...	1530	15.5	750	1350	2730	29	34
NOV.							
01...	1200	10.5	815	405	891	--	--
20...	1500	7.5	1270	1470	5040	--	--
21...	1345	6.0	1320	466	1660	--	--
DEC.							
01...	1515	7.0	1590	1130	4850	--	--
15...	1420	4.5	1620	1120	4900	--	--



## RIO GRANDE BASIN

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

INSTANTANEOUS SUSPENDED-SEDIMENT DISCHARGE AND PARTICLE SIZE, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

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.							
01...	--	10	29	69	98	100	--
15...	--	4	9	19	55	94	100
31...	--	21	46	86	100	--	--
FEB.							
01...	--	18	37	73	92	100	--
MAR.							
14...	73	77	87	96	100	--	--
APR.							
08...	84	85	89	97	100	--	--
15...	43	63	84	96	100	--	--
MAY							
01...	17	34	66	94	98	100	--
13...	21	41	71	94	100	--	--
29...	15	30	54	87	100	--	--
JUNE							
01...	7	15	34	75	98	100	--
15...	14	24	41	82	100	--	--
JULY							
01...	--	19	33	75	100	--	--
15...	51	58	66	83	93	100	--
AUG.							
01...	17	28	56	89	98	100	--
SEP.							
11...	53	64	79	93	100	--	--
18...	--	55	100	--	--	--	--
OCT.							
06...	40	44	48	71	95	100	--
NOV.							
01...	--	7	12	75	99	100	--
20...	--	21	48	88	100	--	--
21...	--	31	73	99	100	--	--
DEC.							
01...	--	13	38	83	100	--	--
15...	--	5	13	66	99	100	--

## RIO GRANDE BASIN

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

LOCATION (revised).—Lat 35°37'04", long 106°19'26", in SW 1/4 sec. 17, T.16 N., R.6 E., Sandoval County, in Pueblo de Cochiti Grant, at gaging station, 1,000 ft (300 m) downstream from Cochiti Dam, 1.4 mi (2.3 km) northeast of Cochiti Pueblo, and at mile 1,589.0 (2,556.7 km). Prior to Nov. 14 at site 2.4 mi (3.9 km) downstream.

DRAINAGE AREA.—14,900 mi<sup>2</sup> (38,590 km<sup>2</sup>) approximately, including 2,940 mi<sup>2</sup> (7,610 km<sup>2</sup>) 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.

REMARKS.—Temperature recorder inoperative from November 19 to December 20.

## RADIOCHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

DATE	TIME	DIS- SOLVED GROSS ALPHA AS	SUS- PENDED GROSS ALPHA AS	DIS- SOLVED GROSS BETA AS	SUS- PENDED GROSS BETA AS	DIS- SOLVED GROSS BETA AS SR90	SUS- PENDED GROSS BETA AS SR90	DIS- SOLVED RA-226 (RAUON METHOD)	DIS- SOLVED NATURAL URANIUM (U)
		U-NAT. (UG/L) (80030)	U-NAT. (UG/L) (80040)	CS-137 (PC/L) (03515)	CS-137 (PC/L) (03516)	/Y90 (PC/L) (80050)	/Y90 (PC/L) (80060)	(PC/L) (09511)	(UG/L) (22703)
APR. 20...	0900	6.2	58	6.1	29	5.0	24	.08	2.1
NOV. 21...	1724	9.3	2.8	4.2	2.4	3.5	2.1	.04	2.5

TEMPERATURE (DEG. C) OF WATER, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973  
(RECORDER MAXIMUM, MINIMUM, AND MEAN)

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

RIO GRANDE BASIN

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

TEMPERATURE (DEG. C) OF WATER, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

(RECORDER MAXIMUM, MINIMUM, AND MEAN)

DAY	MAY			JUNE			JULY			AUGUST		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	11.5	9.5	10.5	15.0	14.0	14.5	20.0	18.5	19.5	19.5	19.0	19.5
2	12.0	9.5	10.0	15.0	14.5	15.0	19.5	19.0	19.5	20.0	19.5	20.0
3	13.5	11.0	12.0	14.5	14.0	14.0	19.5	18.5	19.5	20.0	20.0	20.0
4	14.0	12.0	13.0	15.0	14.0	14.5	20.0	19.0	19.5	20.0	19.5	19.5
5	13.5	12.0	12.5	15.5	15.0	15.0	20.0	19.5	19.5	20.0	19.0	19.5
6	12.0	9.5	10.0	16.0	15.5	15.5	20.0	19.5	19.5	21.0	20.0	20.5
7	11.5	8.5	10.0	16.5	16.0	16.0	19.5	19.0	19.5	20.5	20.0	20.5
8	13.5	11.0	12.0	17.0	16.5	16.5	19.5	19.0	19.5	20.5	20.0	20.0
9	14.5	12.0	13.5	17.5	17.0	17.5	19.5	19.0	19.0	21.0	20.0	20.5
10	15.0	13.0	14.5	18.0	17.5	18.0	19.0	18.5	19.0	20.5	19.5	20.0
11	15.0	13.5	14.5	18.0	17.5	18.0	19.5	18.5	19.0	21.0	20.0	20.5
12	15.0	13.0	13.5	18.0	17.5	17.5	19.5	19.0	19.5	21.0	19.5	20.5
13	15.0	10.5	12.0	18.0	17.0	17.5	19.5	18.5	19.0	21.0	19.5	20.5
14	12.5	10.0	10.5	18.0	16.0	17.0	19.5	19.0	19.0	21.0	20.0	20.5
15	14.5	10.5	12.0	17.5	16.0	17.0	20.5	19.0	19.5	20.5	20.0	20.5
16	15.0	12.0	14.0	17.5	15.5	16.5	21.0	20.5	20.5	22.0	19.5	21.0
17	15.0	12.5	14.0	17.5	15.5	16.5	21.0	20.5	21.0	23.0	20.0	21.5
18	16.5	13.5	15.0	17.5	16.0	17.0	20.5	19.5	20.0	23.5	20.5	22.0
19	17.0	14.5	16.0	17.5	15.5	16.5	21.0	20.0	20.5	23.0	21.5	22.5
20	16.5	14.5	15.5	17.5	16.0	17.0	21.5	20.5	21.0	23.0	20.5	22.0
21	16.0	14.0	15.0	18.0	16.5	17.0	21.5	20.5	21.0	23.0	20.5	22.0
22	15.5	13.0	14.0	18.5	17.0	17.5	20.5	19.0	19.5	23.0	20.5	22.0
23	15.5	12.5	14.0	18.5	17.5	18.0	19.5	19.0	19.5	23.5	20.5	22.0
24	15.5	13.5	15.0	19.0	17.5	18.0	19.5	19.0	19.5	23.5	21.0	22.0
25	15.5	14.0	15.0	19.5	18.5	19.0	19.5	19.0	19.5	22.5	20.0	21.5
26	15.5	13.5	14.0	20.0	18.5	19.5	19.0	17.5	18.5	22.0	19.5	20.5
27	14.0	12.0	13.0	20.5	20.0	20.0	19.0	18.5	18.5	22.5	20.0	21.0
28	13.5	12.0	13.0	20.0	19.0	19.5	19.0	18.5	19.0	22.5	20.0	21.0
29	14.0	13.5	13.5	19.5	18.5	19.0	19.5	18.5	19.0	22.5	20.0	21.0
30	13.5	13.5	13.5	19.5	18.5	19.0	19.5	19.0	19.0	21.5	19.5	20.0
31	14.0	13.5	14.0	---	---	---	19.0	18.5	19.0	20.5	19.0	19.5
MONTH	17.0	8.5	13.0	20.5	14.0	17.0	21.5	17.5	19.5	23.5	19.0	21.0

DAY	SEPTEMBER			OCTOBER			NOVEMBER			DECEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	20.5	18.5	19.5	17.5	15.5	16.5	10.0	8.5	9.5	---	---	---
2	20.5	18.5	19.5	17.5	15.5	16.5	10.0	8.5	9.5	---	---	---
3	20.0	18.0	19.0	17.0	15.0	16.0	10.0	8.5	9.5	---	---	---
4	20.0	17.5	19.0	17.0	14.0	15.5	10.0	9.5	9.5	---	---	---
5	20.5	18.0	19.5	16.5	14.5	15.5	10.5	9.0	9.5	---	---	---
6	21.0	18.5	19.5	16.5	14.0	15.0	10.5	8.5	9.5	---	---	---
7	20.5	18.0	19.5	16.5	14.0	15.0	10.5	9.0	9.5	---	---	---
8	21.0	19.0	20.0	16.5	14.5	15.5	10.5	9.0	10.0	---	---	---
9	21.0	19.0	20.0	15.5	14.0	14.5	10.5	9.0	9.5	---	---	---
10	20.5	19.0	19.5	14.0	11.0	13.0	10.0	8.5	9.5	---	---	---
11	19.5	18.0	18.5	13.5	10.0	11.5	10.0	8.0	9.0	---	---	---
12	19.5	17.5	18.5	13.5	10.5	12.0	10.5	8.0	9.0	---	---	---
13	20.0	18.0	18.5	14.0	11.5	12.5	10.5	8.5	9.5	---	---	---
14	20.0	18.5	19.5	14.5	12.0	13.5	10.5	9.0	10.0	---	---	---
15	20.0	19.0	19.5	15.0	12.5	13.5	10.0	8.5	9.0	---	---	---
16	20.0	18.5	19.0	15.0	13.0	14.0	9.5	8.5	9.0	---	---	---
17	19.5	17.5	18.5	15.5	13.0	14.0	9.0	8.0	8.5	---	---	---
18	19.5	17.5	18.5	15.0	13.0	14.0	8.5	7.5	8.0	---	---	---
19	20.0	17.5	18.5	14.5	13.0	14.0	---	---	---	---	---	---
20	19.5	17.0	18.5	14.5	13.0	13.5	---	---	---	---	---	---
21	19.5	17.5	18.5	14.0	12.0	13.0	---	---	---	2.5	2.0	2.5
22	19.5	17.5	18.5	14.0	12.0	13.0	---	---	---	2.5	2.0	2.0
23	19.5	17.5	18.5	13.5	12.0	13.0	---	---	---	2.0	1.5	2.0
24	18.5	16.5	17.5	13.5	11.5	12.5	---	---	---	1.5	1.5	1.5
25	17.0	15.0	16.0	12.5	11.0	12.0	---	---	---	2.0	1.5	1.5
26	15.0	13.5	14.0	12.0	10.0	11.0	---	---	---	2.0	1.5	1.5
27	15.5	12.5	14.0	12.0	10.0	11.0	---	---	---	1.5	1.0	1.0
28	16.5	13.0	14.5	11.5	9.5	10.5	---	---	---	1.5	1.0	1.0
29	16.5	14.5	15.5	11.0	9.5	10.5	---	---	---	2.0	1.0	1.5
30	17.5	15.0	16.5	10.5	8.5	9.5	---	---	---	3.0	2.0	2.5
31	---	---	---	10.0	8.5	9.5	---	---	---	3.0	2.5	3.0
MONTH	21.0	12.5	18.0	17.5	8.5	13.5	---	---	---	---	---	---

LOCATION.—Lat 35°27'56", long 106°12'57", in SE<sub>4</sub>SE<sub>4</sub> sec.5, T.14 N., R.7 E., Santa Fe County, in Mesita de Juana Lopez Grant, at gaging station, 0.6 mi (1.0 km) downstream from Galisteo Dam, 5.5 mi (8.8 km) northwest of Cerrillos, and at mile 11.2 (18.0 km).

PERIOD OF RECORD.--Specific conductance: July 1971 to current year.

Water temperatures: July 1971 to current year.

Sediment records: July 1971 to current year.

Current year:

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

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

Sediment concentrations: Maximum daily, 50,300 mg/l July 26; minimum daily, no flow on many days.

Sediment discharge: Maximum daily, 39,000 tons (35,400 tonnes) Sept. 11; minimum daily, 0 tons (0 tonnes) 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 each year.

Sediment discharge: Maximum daily 111,000 tons (101,000 tonnes) July 17; minimum daily, 0 tons (0 tonnes) on many days each year.

REMARKS.--No flow June 5-13, June 16 to July 8, 12, 15, 21-25, 28-30, Aug. 3, 7-30, Sept. 2-8, Sept. 15 to Oct. 4, 9, 16-28, 30, Nov. 2. 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

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

TEMPERATURE (DEG. C) OF WATER, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973  
(ONCE-DAILY)

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	---	---	---	---	17.5	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	18.5	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	2.0
5	---	---	---	7.5	---	---	---	---	---	---	---	---
6	---	---	---	17.0	---	---	---	---	---	---	---	---
7	---	---	---	---	14.0	---	---	---	---	---	---	---
8	---	---	13.0	---	---	---	---	---	---	---	---	---
9	---	---	---	17.0	---	---	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---	---	---	---
11	---	---	---	10.5	---	---	---	---	15.5	---	---	---
12	---	---	---	14.5	---	---	---	---	25.0	---	---	---
13	---	9.0	6.0	---	---	---	---	---	24.5	---	---	---
14	---	---	---	---	---	27.0	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	10.5	---	---	---	---	---	---	---	---	---
17	---	---	---	---	25.0	---	---	---	---	---	---	---
18	---	---	---	14.0	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	---	---	---	6.5	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	---	---	---
22	---	---	---	---	26.0	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	---	---
24	---	---	---	18.0	---	---	---	---	---	---	---	---
25	---	---	---	---	23.5	---	---	---	---	---	---	---
26	---	---	16.0	---	---	---	---	---	---	---	---	---
27	---	---	---	22.5	---	---	---	---	---	---	---	---
28	---	---	---	---	---	---	---	---	---	---	---	---
29	---	---	---	---	---	---	---	---	---	---	---	---
30	---	---	8.5	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	26.5	---	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

## SUSPENDED SEDIMENT DISCHARGE, CALENDAR YEAR, JANUARY 1973 TO DECEMBER 1973

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	1.4	300	1.1	1.7	400	1.8	11	1660	49
2	1.3	270	.95	1.7	400	1.8	10	1500	41
3	1.2	230	.75	1.8	430	2.1	9.0	1440	35
4	1.2	230	.75	2.0	500	2.7	8.0	1300	28
5	1.2	230	.75	2.5	670	4.5	7.0	1200	23
6	1.3	270	.95	3.2	800	6.9	6.0	1100	18
7	1.3	270	.95	3.5	900	8.5	5.0	1000	14
8	1.3	270	.95	4.0	1070	12	4.2	1180	13
9	1.2	230	.75	4.5	1100	13	4.0	900	9.7
10	1.2	230	.75	4.8	1100	14	3.6	900	8.7
11	1.3	270	.95	4.8	1000	13	3.2	960	8.3
12	1.2	230	.75	4.8	950	12	3.0	960	7.8
13	1.2	230	.75	4.8	890	12	3.7	850	8.5
14	1.3	270	.95	4.2	1160	13	2.6	940	6.6
15	1.3	270	.95	3.0	1270	10	3.2	1140	9.8
16	1.4	300	1.1	3.7	1330	13	2.1	1080	6.1
17	1.4	300	1.1	4.8	1060	14	1.7	930	4.3
18	1.4	300	1.1	3.4	1190	11	1.7	610	2.8
19	1.3	270	.95	2.4	1300	8.4	1.8	860	4.2
20	1.2	230	.75	2.2	1200	7.1	2.6	2500	18
21	1.2	230	.75	2.1	1090	6.2	2.8	2610	20
22	1.1	200	.59	3.0	1230	10	3.4	2710	25
23	1.1	200	.59	3.9	1300	14	3.4	4620	42
24	1.2	230	.75	3.2	1110	9.6	3.2	4780	41
25	1.3	270	.95	3.7	890	8.9	2.4	3390	22
26	1.4	300	1.1	8.0	1310	37	3.7	5300	53
27	1.5	350	1.3	7.5	1390	28	5.1	5800	80
28	1.4	300	1.1	12	1580	51	4.2	5520	63
29	1.4	300	1.1	--	--	--	10	7500	203
30	1.5	330	1.3	--	--	--	12	6910	224
31	1.7	400	1.8	--	--	--	11	6900	205
TOTAL	40.4	--	29.33	111.2	--	345.5	154.6	--	1293.8



## RIO GRANDE BASIN

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

## SUSPENDED SEDIMENT DISCHARGE, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

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	11	6450	192	23	5300	329	3.0	500	4.1
2	14	7100	268	18	3990	194	3.0	460	3.7
3	15	4350	176	11	3110	92	1.6	340	1.5
4	13	2530	89	8.0	2400	52	.52	360	.51
5	11	2440	82	11	2850	85	0	0	0
6	10	2970	80	25	4700	317	0	0	0
7	14	3130	118	20	3600	194	0	0	0
8	25	3770	303	13	2450	86	0	0	0
9	30	4910	401	11	2080	62	0	0	0
10	25	4900	331	11	2000	59	0	0	0
11	27	6000	437	17	2610	120	0	0	0
12	35	8010	757	22	3150	187	0	0	0
13	43	5000	581	35	4490	424	0	0	0
14	55	7600	1130	39	6250	658	7.5	6310	14.7
15	57	9000	1390	31	4900	410	1.3	1100	3.9
16	55	8400	1250	22	3590	213	0	0	0
17	40	6000	648	17	2400	110	0	0	0
18	32	5000	432	14	2300	87	0	0	0
19	28	3900	295	13	2150	75	0	0	0
20	24	4800	311	12	2050	66	0	0	0
21	17	3600	165	11	1750	52	0	0	0
22	14	2320	88	10	1750	47	0	0	0
23	13	2100	74	7.5	1700	34	0	0	0
24	13	2310	81	5.1	1350	19	0	0	0
25	11	1900	56	4.5	1450	18	0	0	0
26	13	3350	118	3.9	850	9.0	0	0	0
27	13	2950	104	3.2	720	6.2	0	0	0
28	16	2860	124	2.8	750	5.7	0	0	0
29	20	4260	230	2.6	710	5.0	0	0	0
30	21	4990	283	1.8	630	3.1	0	0	0
31	--	--	--	1.3	570	2.0	--	--	--
TOTAL	715	--	10594	426.7	--	4021.0	16.92	--	160.71

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	20	8000	432	.60	2900	4.7
2	0	0	0	.98	1000	2.6	0	0	0
3	0	0	0	0	0	0	0	0	0
4	0	0	0	16	23900	1940	0	0	0
5	0	0	0	37	38900	7850	0	0	0
6	0	0	0	2.0	1000	5.4	0	0	0
7	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0
9	.58	3670	14	0	0	0	1.5	7500	24.3
10	1.3	3460	28	0	0	0	63	47100	1540.0
11	.10	1420	.65	0	0	0	267	40900	3900.0
12	0	0	0	0	0	0	9.2	3750	111
13	3.1	3820	66	0	0	0	1.4	200	.76
14	1.0	1100	3.0	0	0	0	.20	180	.10
15	0	0	0	0	0	0	0	0	0
16	3.8	10800	417	0	0	0	0	0	0
17	71	32500	20000	0	0	0	0	0	0
18	203	43500	29100	0	0	0	0	0	0
19	49	18700	4440	0	0	0	0	0	0
20	1.0	500	1.4	0	0	0	0	0	0
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	151	50300	33400	0	0	0	0	0	0
27	11	1500	45	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	0	0	0	0	0	0
31	11	9170	3390	3.4	9530	126	--	--	--
TOTAL	506.88	--	90905.05	79.38	--	10356.0	342.90	--	54759.56

RIO GRANDE BASIN

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

SUSPENDED-SEDIMENT DISCHARGE, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

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	.01	55	.01	1.3	330	1.2
2	0	0	0	0	0	0	1.3	330	1.2
3	0	0	0	.05	167	.07	1.3	330	1.2
4	0	0	0	.28	340	.37	1.2	320	1.0
5	1.3	444	12	.61	340	.56	1.1	310	.92
6	4.1	1790	25	.23	240	.15	1.1	310	.92
7	1.8	970	4.7	.31	230	.19	1.2	320	1.0
8	.40	670	.72	.23	220	.14	1.3	330	1.2
9	0	0	0	.16	210	.09	1.3	330	1.2
10	.30	425	.83	.23	220	.14	1.3	330	1.2
11	2.4	1730	13	.23	220	.14	1.3	330	1.2
12	1.1	850	2.5	.50	250	.34	1.4	340	1.3
13	.23	510	.32	.72	270	.52	1.4	340	1.3
14	.03	225	.06	.61	260	.43	1.4	340	1.3
15	.01	142	.02	.40	240	.26	1.3	330	1.2
16	0	0	0	.53	250	.36	1.2	320	1.0
17	0	0	0	.57	260	.40	1.3	330	1.2
18	0	0	0	.70	270	.51	1.4	340	1.3
19	0	0	0	1.0	300	.81	1.4	340	1.3
20	0	0	0	.98	300	.79	1.4	340	1.3
21	0	0	0	.60	260	.42	1.4	340	1.3
22	0	0	0	.60	260	.42	1.5	350	1.4
23	0	0	0	1.0	300	.81	1.6	360	1.6
24	0	0	0	1.1	310	.92	1.5	350	1.4
25	0	0	0	1.1	310	.92	1.4	340	1.3
26	0	0	0	1.3	330	1.2	1.3	330	1.2
27	0	0	0	1.1	310	.92	1.4	340	1.3
28	0	0	0	1.0	300	.81	1.5	350	1.4
29	.02	.02	.02	1.1	310	.92	1.6	360	1.6
30	0	0	0	1.2	320	1.0	1.5	350	1.4
31	.01	.34	.01	--	--	--	.60	280	.60
TOTAL	11.70	--	59.18	18.45	--	14.62	41.40	--	37.94

CAL YR 1973 TOTAL WATER DISCHARGE (CFS-DAYS)

2465.53

CAL YR 1973 TOTAL SUSPENDED-SEDIMENT DISCHARGE (TONS)

172576.69

WTR YR 1973 TOTAL WATER DISCHARGE (CFS-DAYS)

3022.02

WTR YR 1973 TOTAL SUSPENDED-SEDIMENT DISCHARGE (TONS)

215644.4

INSTANTANEOUS SUSPENDED-SEDIMENT DISCHARGE AND PARTICLE SIZE, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

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 .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)
MAR.												
30...	1200	7.5	9.3	6370	160	35	43	60	95	100	--	--
APR.												
05...	1030	7.5	20	5210	281	31	35	46	81	97	100	--
13...	1120	--	43	44700	5190	41	49	63	91	98	100	--
13...	1135	--	48	4950	642	35	47	66	92	98	99	100
MAY												
14...	1345	16.0	38	6300	646	24	29	41	88	98	100	--
22...	1515	26.0	9.3	4650	117	33	42	53	87	93	96	100
AUG.												
31...	1500	26.5	5.3	14600	209	67	92	99	100	--	--	--
SEP.												
11...	1500	--	79	36800	7850	49	59	78	96	100	--	--

## RIO GRANDE BASIN

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 mi (1.3 km) downstream from Jemez Canyon Dam, 2.0 mi (3.2 km) (revised) upstream from mouth, and 6 mi (9.6 km) north of Bernalillo.

DRAINAGE AREA.—1,038 mi<sup>2</sup> (2,688 km<sup>2</sup>).

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

REMARKS.—Daily specific conductance records computed from records furnished by the U.S. Corps of Engineers.

## CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS) (00061)	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)
JAN.									
22...	1440	28	31	--	67	8.6	210	11	263
29...	1315	8.0	35	--	65	9.0	200	10	277
FEB.									
05...	1150	40	35	--	69	8.5	210	12	262
21...	1340	17	--	--	--	--	--	--	--
26...	1330	30	--	--	--	--	--	--	--
MAR.									
26...	1400	121	29	--	60	7.4	160	11	214
APR.									
16...	1540	394	23	20	55	6.1	73	6.2	135
MAY									
09...	1445	1660	21	--	33	3.7	32	4.1	102
21...	1630	26	20	--	33	3.5	35	4.1	119
31...	1200	2040	21	--	29	3.0	26	4.0	104
JUNE									
05...	1130	1790	21	--	30	3.2	32	4.1	117
08...	1030	1070	22	--	31	3.5	33	4.1	123
25...	1145	82	28	--	60	6.9	94	7.3	230
JULY									
02...	1100	11	27	--	100	12	190	9.9	310
23...	1415	34	--	--	--	--	--	--	--
30...	1155	15	31	--	68	9.2	190	11	277
AUG.									
06...	1245	47	28	--	89	9.1	170	10	230
13...	1345	1.9	35	--	92	15	270	16	275
OCT.									
09...	1125	1.2	39	20	80	14	330	16	348
15...	1015	9.8	33	--	62	9.6	240	12	293
23...	1100	5.8	--	--	--	--	--	--	--
29...	1020	7.6	--	--	--	--	--	--	--
NOV.									
05...	1120	16	34	--	59	11	250	17	316
19...	1140	5.8	--	--	--	--	--	--	--
26...	1220	7.0	--	--	--	--	--	--	--
DEC.									
03...	1115	11	38	--	73	12	250	13	295
11...	1225	9.6	--	--	--	--	--	--	--
17...	1355	36	--	--	--	--	--	--	--
27...	1300	8.4	--	--	--	--	--	--	--

RIO GRANDE BASIN

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08329000 JEMEZ RIVER BELOW JEMEZ CANYON DAM, N. MEX.--Continued  
CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

DATE	CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLOR- IDE (CL) (MG/L) (00944)	DIS- SOLVED FLUOR- IDE (F) (MG/L) (00950)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	DIS- SOLVED AMMONI- UM 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.									
22...	0	180	190	.1	.16	--	--	829	200
29...	0	170	180	.9	.12	--	--	807	200
FEB.									
05...	0	180	190	1.2	.20	--	--	836	210
21...	--	--	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--	--	--
MAR.									
26...	0	190	120	.9	.13	--	--	684	180
APR.									
16...	0	140	51	.6	.13	.02	451	422	160
MAY									
09...	0	56	27	.2	.01	--	--	227	98
21...	0	47	24	.5	.02	--	--	226	97
31...	0	34	19	.4	.02	--	--	188	85
JUNE									
05...	0	32	22	.4	.01	--	--	202	88
08...	0	33	26	.5	.03	--	--	214	92
25...	0	82	89	.9	.09	--	--	482	180
JULY									
02...	0	220	160	.9	.38	--	--	874	300
23...	--	--	--	--	--	--	--	--	--
30...	0	180	180	1.2	.10	--	--	807	210
AUG.									
06...	0	270	140	.4	.01	--	--	831	260
13...	0	360	230	1.0	.09	--	--	1160	290
SEPT.									
09...	0	290	280	1.6	.02	.10	--	1220	260
15...	0	180	230	1.5	.20	--	--	913	190
23...	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--
NOV.									
05...	0	150	240	1.3	.07	--	--	918	190
19...	--	--	228	--	--	--	--	--	--
26...	--	--	235	--	--	--	--	--	--
DEC.									
03...	0	190	240	1.6	.10	--	--	963	230
11...	--	--	242	--	--	--	--	--	--
17...	--	--	235	--	--	--	--	--	--
27...	--	--	315	--	--	--	--	--	--

DATE	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AD- SORP- TION RATIO (00931)	SPE- CIFIC CON- DUCTI- VITY (MICRO- MHUS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	COLOR (PLAT- INUM- COBALT UNITS) (00080)	TUR- BID- ITY (JTU) (00070)	DIS- SOLVED SOLIDS (B) (MG/L) (01020)
JAN.								
22...	0	6.4	1340	8.1	1.5	--	--	--
29...	0	6.2	1310	8.0	1.0	--	--	--
FEB.								
05...	0	6.3	1350	8.1	9.0	--	--	--
21...	--	--	1210	--	4.5	8	270	--
26...	--	--	1320	--	17.0	10	200	--
MAR.								
26...	5	5.2	1060	8.1	18.0	--	--	--
APR.								
16...	52	2.5	663	8.0	9.0	--	--	380
MAY								
09...	14	1.4	353	7.7	13.0	--	--	--
21...	0	1.5	374	7.4	12.0	--	--	--
31...	0	1.2	305	7.5	16.0	--	--	--
JUNE								
05...	0	1.5	330	7.9	24.0	--	--	--
08...	0	1.5	354	7.5	14.0	--	--	--
25...	0	3.1	808	7.9	22.0	--	--	--
JULY								
02...	45	4.8	1390	7.6	--	--	--	--
23...	--	--	339	--	29.5	10	1900	--
30...	0	5.7	1290	8.0	26.5	--	--	--
AUG.								
06...	71	4.6	1280	8.2	26.0	--	--	850
13...	66	6.9	1870	8.0	--	--	--	--
SEPT.								
09...	0	9.0	1950	8.1	12.0	--	--	2200
15...	0	7.5	1480	8.0	8.0	--	--	--
23...	--	--	1570	--	10.0	--	--	--
29...	--	--	1590	--	16.0	--	--	--
NOV.								
05...	0	7.8	1510	8.2	10.5	--	--	--
19...	--	--	1490	--	5.5	--	--	--
26...	--	--	1540	--	3.0	--	--	--
DEC.								
03...	0	7.1	1622	8.2	1.5	--	--	--
11...	--	--	1600	--	4.0	--	--	--
17...	--	--	1540	--	5.0	--	--	--
27...	--	--	2050	--	.0	--	--	--

## 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 mi (0.5 km) east of intersection of State Highways 44 and 422, and 1.5 mi (2.4 km) northeast of Bernalillo.

DRAINAGE AREA.--4.1 mi<sup>2</sup> (10.6 km<sup>2</sup>), of which 2.0 mi<sup>2</sup> (5.2 km<sup>2</sup>) has contouring, pitting and small dams to reduce surface runoff.

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

REVISIONS.--Revised figures for suspended sediment for calendar year 1972 superseding those previously published are given herewith:

## 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 24, 1972	28	7.50	.85	5930	10
Oct. 19, 1972	29	.75	.20	10200	.17
Oct. 25, 1972	30	10.75	.45	5040	4.8

## SUSPENDED SEDIMENT, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

Date	Flow event no.	flow duration (hours)	Mean Discharge for event (cfs)	Mean concentration (mg/l)	Outflow sediment discharge (tons)
Aug. 2,3, 1973	31	12	1.22	7080	24
Aug. 22, 1973	32	2	.25	3300	.19
Sep. 11, 1973	33	15	4.52	7990	100

## Instantaneous suspended sediment and particle size, Calendar year January 1973 to December 1973

(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	
Aug. 22, 1973	1930	23.0	1.4	5160	20	81	98	--	100	--	--	--	--	PWC
Sep. 11, 1973	1045	--	1.96	1740	9.2	95	98	--	98	--	100	--	--	SPWC
Sep. 11, 1973	1505	--	1.32	1170	4.2	94	97	--	100	--	--	--	--	PEC



RIO GRANDE BASIN

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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, and at mile 1,540.0 (2,477.9 km).

DRAINAGE AREA.--17,440 mi<sup>2</sup> (45,170 km<sup>2</sup>), approximately, including 2,940 mi<sup>2</sup> (7,610 km<sup>2</sup>) 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, 602 micromhos Aug. 26; minimum daily, 168 micromhos May 19.

Water temperatures: Maximum, 26.5 Aug. 11, 14; minimum, 1.0°C Jan. 1, 3-4, Dec. 25.

Sediment concentrations: Maximum daily, 22,500 mg/l Sept. 12; minimum daily, 17 mg/l Nov. 15.

Sediment discharge: Maximum daily, 185,000 tons (168,000 tonnes) May 14; minimum daily, 5.2 tons (4.7 tonnes) Nov. 15.

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 (249,000 tonnes) July 27, 1971; minimum daily; 0 tons (0 tonnes) on many days in 1971 and 1972.

REMARKS.--Additional sediment total discharge determination were made bi-weekly when needed.

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973  
(ONCE-DAILY)

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	394	352	351	470	328	276	238	300	392	345	372	378
2	382	425	385	453	323	276	243	406	375	346	377	384
3	370	410	375	458	324	270	240	365	373	341	420	383
4	429	412	358	392	330	266	240	349	369	350	415	375
5	425	435	385	601	314	265	250	326	353	352	415	382
6	374	372	345	467	301	273	259	315	350	355	423	380
7	423	409	396	481	297	267	262	324	332	349	421	378
8	411	468	364	480	301	270	267	306	324	347	419	375
9	394	402	374	453	308	268	272	307	324	355	417	376
10	400	411	453	480	308	268	266	301	230	353	432	379
11	478	355	386	488	297	261	276	302	303	338	432	382
12	431	443	453	462	296	262	282	310	479	367	430	390
13	402	268	400	435	266	256	290	324	409	372	438	385
14	415	340	412	470	264	243	296	316	377	354	470	397
15	423	384	360	475	253	234	300	322	377	360	460	385
16	430	383	420	443	246	228	302	326	381	344	485	385
17	435	392	400	438	266	227	346	354	336	350	460	383
18	421	372	425	420	234	232	356	372	325	355	465	386
19	331	385	342	468	168	235	406	385	320	362	458	394
20	426	405	397	380	248	236	434	359	338	353	422	392
21	433	342	428	392	243	244	367	368	336	347	430	385
22	403	397	425	377	234	265	336	366	334	347	406	362
23	443	400	433	393	232	266	304	351	337	321	401	372
24	443	358	453	368	238	260	296	347	360	327	391	368
25	390	371	411	370	231	264	284	339	337	333	387	375
26	409	395	413	382	228	255	288	602	342	342	385	379
27	409	350	400	383	239	248	333	352	339	351	390	364
28	411	361	406	340	246	247	302	345	335	346	391	370
29	420	---	438	331	257	243	304	339	349	353	394	366
30	430	---	456	320	259	242	292	276	352	358	378	391
31	427	---	525	---	269	---	298	358	---	355	---	374
MONTH	416	386	405	429	270	255	296	346	350	349	419	380

## RIO GRANDE BASIN

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

TEMPERATURE (DEG. C) OF WATER, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973  
(ONCE-DAILY)

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

SUSPENDED-SEDIMENT DISCHARGE, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

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	785	4430	9390	715	2850	5500	797	2200	4730
2	720	2920	5680	564	2610	3970	837	2400	5420
3	650	1990	3490	600	2210	3580	976	1610	4240
4	686	2200	4070	594	1760	2820	1140	3400	10500
5	693	2130	3990	607	2570	4210	944	3090	7880
6	613	2590	4290	673	3100	5630	927	2750	6880
7	591	2200	3510	717	2550	4940	865	2340	5470
8	614	2300	3810	705	2500	4760	904	2100	5130
9	582	2210	3470	748	3100	6260	964	2200	5730
10	669	2290	4140	750	2800	5670	1140	2860	8800
11	690	2710	5050	770	2320	4820	1020	2650	7300
12	616	2160	3590	756	2200	4490	1070	3210	9270
13	514	2690	3730	754	2560	5210	1220	3840	12600
14	585	2220	3310	695	2840	5330	1170	2740	8660
15	643	2220	3850	718	2180	4230	1260	2830	9630
16	705	2610	4970	776	2520	5280	972	2800	7350
17	719	2620	5090	824	2400	5340	1110	2540	7610
18	664	2440	4370	876	2270	5370	1120	2660	8040
19	732	2550	5040	894	2510	6060	1080	3400	9910
20	785	2580	5470	876	2650	6270	1190	3840	12300
21	785	2360	5000	778	3440	7230	1280	3700	12800
22	720	2600	5050	768	3340	6930	1320	4290	13300
23	720	2010	3910	699	3120	5890	1390	6430	24100
24	733	2050	4060	605	1800	2940	1410	4940	18800
25	733	1850	3660	627	2100	3560	1400	3500	13200
26	746	1900	3830	697	2100	3950	1140	2990	9200
27	720	1810	3520	778	2700	5670	1160	2980	9330
28	759	2700	5530	771	2280	4750	1200	3250	10500
29	707	2800	5340	---	---	---	1250	3450	11600
30	632	2110	3600	---	---	---	1290	4980	17300
31	702	2740	5190	---	---	---	1360	3840	14100
TOTAL	21215	--	139200	20335	--	140660	34906	--	313680

RIO GRANDE BASIN

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

SUSPENDED SEDIMENT DISCHARGE, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

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	1210	3290	10700	5080	8340	114000	6300	3730	63400
2	1320	3920	14000	4980	5750	77300	6900	3900	72700
3	1380	3590	13400	4560	4500	55400	7260	3740	73300
4	1450	3400	13300	4480	4900	59300	7240	3900	76200
5	1230	2380	7900	5490	5200	77100	7260	4300	84300
6	1140	2140	6590	5930	6000	96100	6160	3830	63700
7	1260	2000	6800	4520	4600	56100	5920	3250	51900
8	1380	2800	10400	4840	5100	66600	5700	3230	49700
9	1330	3820	13700	4900	4200	55600	4990	2980	40100
10	1280	4490	15500	4660	4950	62300	5070	2610	35700
11	1300	3240	11400	4840	5250	68600	5630	3030	46100
12	1480	2790	11100	5810	6600	104000	6050	3800	62100
13	1870	3900	19700	6730	7350	134000	6620	4330	77400
14	1910	6400	33000	8040	8500	185000	6150	3580	59400
15	2440	11200	73800	7490	5450	110000	5980	3370	54400
16	2940	10400	82600	6570	5730	102000	5760	3840	59700
17	2710	8250	60400	6610	4900	87500	5360	3950	57200
18	2440	5650	37200	6690	4950	89400	4860	2770	36300
19	2950	6190	49300	6940	5800	109000	4720	2530	32200
20	2930	6590	52100	7690	5650	117000	4310	2580	30000
21	2320	4000	25100	7440	4850	97400	3640	2250	22100
22	2090	4600	26000	7740	5780	121000	3140	2260	19200
23	1860	3700	18600	7790	5300	111000	3710	2600	26000
24	1680	3900	15900	7990	4890	105000	3810	2240	23000
25	2150	4150	24100	7590	4940	101000	3910	2490	26300
26	2530	4900	33500	6990	4250	80200	3920	2610	27600
27	2800	5250	39700	6610	4300	76700	3990	3370	36300
28	2510	3990	27000	6570	5140	91200	4400	3790	45000
29	3160	5190	44300	6530	4400	77600	4820	3320	43200
30	3970	6000	64300	6490	4600	80600	4940	3580	47800
31	--	--	--	6410	3800	65800	--	--	--
TOTAL	61020	--	861390	195000	--	2633800	158520	--	1442300
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	4610	2490	31000	3010	2430	19700	813	1230	2700
2	4480	2500	30200	2610	3500	24700	714	1190	2290
3	4360	2250	26500	2460	2790	18500	629	770	1310
4	3970	2100	22500	2190	2600	15400	600	720	1170
5	3700	2500	25000	2170	2230	13100	634	730	1250
6	3430	2400	22200	2050	2400	13300	651	710	1250
7	3100	3650	30600	1810	1240	6060	549	510	756
8	3060	1950	16100	1700	1340	6150	532	470	673
9	3110	3000	25200	1730	1230	5750	496	500	670
10	3140	1790	15200	1670	1000	4510	1010	2530	8870
11	2960	1770	14100	1700	1000	4590	2040	20200	151000
12	2860	1600	12400	1590	1000	4290	1650	22500	100000
13	3070	3000	24900	1580	1520	6480	872	12300	29000
14	3150	2940	25000	1690	1030	4700	552	3800	5660
15	1940	1520	7960	1960	5040	26700	398	1280	1380
16	1670	1520	6850	1990	1900	10200	620	1220	2040
17	1760	3410	16200	800	480	1040	1060	2010	5750
18	2480	5030	36200	267	270	195	1070	1350	3900
19	2170	4990	29200	237	500	320	916	900	2230
20	1980	3760	20100	540	770	1120	694	610	1140
21	1590	3250	15900	610	710	1170	552	550	820
22	2430	5470	41200	669	760	1370	563	510	775
23	3110	4470	37500	823	820	1820	590	480	765
24	2960	2130	17000	542	560	820	541	580	847
25	2580	2130	14800	510	580	799	467	470	593
26	3820	12400	143000	584	1850	2920	473	500	639
27	3260	8100	71300	588	640	1020	504	500	680
28	3060	2870	23700	578	830	1300	453	450	550
29	3230	2300	20100	603	510	830	408	400	441
30	3310	2270	20300	888	1580	4120	450	410	498
31	3100	2620	21900	1190	1800	5780	--	--	--
TOTAL	93450	--	862110	41339	--	208754	21501	--	329649

## RIO GRANDE BASIN

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

## SUSPENDED-SEDIMENT DISCHARGE, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

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	455	380	467	932	1000	2520	1350	1660	6050
2	428	470	543	910	1270	3120	1460	1810	7140
3	390	370	390	836	820	1850	1630	3600	15800
4	352	430	409	819	590	1300	1640	2100	9300
5	295	320	255	846	650	1480	1690	2350	10700
6	330	230	205	870	500	1170	1740	1980	9300
7	342	300	277	862	350	815	1630	2020	8890
8	377	830	845	875	440	1040	1560	1640	6910
9	364	480	472	909	470	1150	1620	2450	10700
10	416	490	550	916	430	1060	1690	2100	9580
11	625	860	1450	895	380	918	1710	2350	10800
12	658	640	1140	840	380	862	1720	2510	11700
13	675	660	1200	634	137	345	1780	2380	11400
14	534	540	779	161	62	27	1840	1990	9890
15	556	590	886	113	17	5.2	1900	2010	10300
16	459	350	434	226	185	118	1760	1860	8840
17	416	380	427	354	108	103	1750	2150	10200
18	412	400	445	394	90	96	1670	2490	11200
19	366	300	296	456	195	240	1660	2140	9590
20	367	360	357	501	270	365	1730	2910	13600
21	391	360	380	850	930	2130	1660	2670	12000
22	443	390	466	1150	1410	4380	1620	1810	7920
23	519	540	757	1210	1670	5460	1650	2370	10600
24	525	480	680	1160	2350	7360	1610	2360	10300
25	539	490	713	1240	1800	6030	1650	2270	10100
26	429	480	556	1200	1510	4890	1670	2610	11800
27	416	480	539	1220	1550	5110	1660	2990	13400
28	450	600	729	1290	1500	5220	1650	2930	13100
29	452	530	647	1350	1420	5180	1780	2020	9710
30	403	490	533	1460	1330	5240	1880	2470	12500
31	454	630	772	--	--	--	1750	3690	17400
TOTAL	13638	--	18599	25479	--	69584.2	52110	--	330720

CAL YR 1973 TOTAL WATER DISCHARGE (CFS-DAYS) 738711  
 CAL YR 1973 TOTAL SUSPENDED-SEDIMENT DISCHARGE (TONS) 7550446.2

WTR YR 1973 TOTAL WATER DISCHARGE (CFS-DAYS) 716305  
 WTR YR 1973 TOTAL SUSPENDED-SEDIMENT DISCHARGE (TONS) 8017443

## INSTANTANEOUS SUSPENDED-SEDIMENT DISCHARGE AND PARTICLE SIZE, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

DATE	TIME	TEMPER- ATURE (DEG C) (00010)	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SUS- PENDE DIS- CHARGE (MG/L) (00154)	SUS- PENDE 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...	1545	5.0	669	2080	3760	6	7
15...	1500	6.0	683	1790	3300	11	12
29...	1630	6.0	700	2140	4040	9	11
FEB.							
20...	1500	8.5	925	2400	5990	6	8
MAR.							
02...	1445	13.5	900	2170	5270	19	26
19...	1100	7.0	1130	2780	8480	10	12
APR.							
09...	1130	15.0	1360	2900	10700	7	8
23...	1600	14.5	1660	3790	17000	10	11
30...	1800	15.0	3540	5750	55000	17	20
MAY							
14...	2000	13.0	8730	6750	169000	11	12
17...	1315	16.5	6930	4670	87400	10	12
29...	1200	15.0	6670	3680	66300	6	7
JUNE							
07...	1130	16.0	6000	2670	43300	5	6
14...	1200	18.0	5610	2990	45300	8	9
21...	0900	16.0	3430	2400	22200	4	5
28...	1500	23.0	4490	3060	37100	8	9
JULY							
18...	0900	17.0	2240	5550	33600	51	66
30...	1030	21.0	3270	2570	22700	8	9
AUG.							
06...	1030	21.5	2160	3550	20700	19	23
13...	1030	21.0	1720	2280	10600	25	29
27...	1100	22.0	607	574	941	39	46
SEP.							
10...	1400	22.0	2000	3850	20800	21	31
24...	1000	--	553	737	1100	19	23
OCT.							
09...	1430	16.5	364	475	467	39	45
23...	1330	15.0	543	575	843	23	28
NOV.							
05...	1540	19.0	861	772	1790	13	15
DEC.							
03...	1200	7.0	1680	5630	25500	2	3
17...	1515	--	1870	2280	11500	3	4

RIO GRANDE BASIN

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

INSTANTANEOUS SUSPENDED-SEDIMENT DISCHARGE AND PARTICLE SIZE, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

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)	SUS. SED. FALL DIAM. % FINER THAN (70347)
JAN.							
02...	11	43	73	97	100	--	--
15...	20	64	92	99	100	--	--
29...	18	50	82	95	99	100	--
FEB.							
20...	12	33	59	76	95	100	--
MAR.							
02...	31	63	86	98	100	--	--
19...	17	42	75	97	100	--	--
APR.							
09...	11	41	70	97	100	--	--
23...	14	37	57	79	98	100	--
30...	26	50	75	94	99	100	--
MAY							
14...	17	32	59	83	96	100	--
17...	15	30	60	84	98	100	--
29...	9	24	49	80	96	100	--
JUNE							
07...	9	20	44	66	92	100	--
14...	11	25	47	79	97	100	--
21...	8	17	41	82	100	--	--
28...	12	23	38	67	95	100	--
JULY							
18...	78	85	92	100	--	--	--
30...	13	27	45	73	86	99	100
AUG.							
06...	29	35	49	72	89	98	100
13...	41	51	63	89	99	100	--
27...	55	64	74	97	100	--	--
SEP.							
10...	41	55	63	79	98	100	--
24...	30	38	46	61	89	99	100
OCT.							
09...	58	70	80	99	100	--	--
23...	42	61	75	99	100	--	--
NOV.							
05...	21	36	54	95	100	--	--
DEC.							
03...	4	13	26	66	84	97	100
17...	5	34	80	98	100	--	--

PARTICLE SIZE OF SURFACE BED MATERIAL, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

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.										
02...	1545	669	2080	3760	4	18	73	99	100	--
15...	1500	683	1790	3300	8	30	75	95	99	100
29...	1630	700	2140	4040	2	12	73	96	99	100
FEB.										
20...	1500	925	2400	5990	5	26	85	99	100	--
MAR.										
02...	1445	900	2170	5270	9	17	57	90	99	100
19...	1100	1130	2780	8480	2	13	66	95	100	--
APR.										
09...	1130	1360	2900	10700	1	9	78	99	100	--
23...	1600	1660	3790	17000	1	5	45	88	96	100
30...	1800	3540	5750	55000	1	5	60	96	98	100
JULY										
30...	1030	3270	2570	22700	1	6	43	86	98	100
AUG.										
06...	1030	2160	3550	20700	1	9	63	95	100	--
13...	1030	1720	2280	10600	1	7	43	86	96	100
27...	1100	607	574	941	1	5	66	94	98	100
SEP.										
10...	1400	2000	3850	20800	1	2	20	83	98	100
OCT.										
23...	1330	543	575	843	2	12	59	93	99	100



## RIO GRANDE BASIN

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

TOTAL SEDIMENT DISCHARGE, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

DATE	TIME	TEMPER- ATURE (DEG C) (00010)	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SUS- PENED SEDIM- ENT (MG/L) (80154)	SUS- PENED 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.									
02...	1545	5.0	669	2080	3760	6250	190	1.2	2.9
15...	1500	6.0	683	1790	3300	5050	230	1.1	2.6
29...	1630	6.0	700	2140	4040	5860	266	1.2	2.2
FEB.									
20...	1500	8.5	925	2400	5990	7650	265	1.3	2.8
MAR.									
02...	1445	13.5	900	2170	5270	6850	261	1.5	2.4
19...	1100	7.0	1130	2780	8480	12000	260	1.6	2.8
APR.									
09...	1130	15.0	1360	2900	10700	11500	260	1.7	3.1
23...	1600	14.5	1660	3790	17000	21700	263	2.0	3.1
30...	1800	15.0	3540	5750	55000	64700	295	3.1	3.9
MAY									
14...	2000	13.0	8730	6750	159000	194000	505	4.2	4.2
17...	1315	16.5	6930	4670	87400	110000	305	4.9	4.7
29...	1200	15.0	6670	3680	66300	83700	300	5.3	4.2
JUNE									
07...	1130	16.0	6000	2670	43300	56800	299	5.0	4.0
28...	1500	23.0	4490	3060	37100	53000	300	3.3	4.6
JULY									
30...	1030	21.0	3270	2570	22700	28700	300	2.9	3.8
AUG.									
06...	1030	21.5	2160	3550	20700	25100	300	2.3	3.1
13...	1030	21.0	1720	2280	10600	15600	300	1.9	3.0
27...	1100	22.0	607	574	941	1420	280	1.2	1.8
SEP.									
10...	1400	22.0	2000	3850	20800	30100	300	1.9	3.5
24...	1000	--	553	737	1100	1800	290	1.1	1.8
OCT.									
09...	1430	16.5	364	475	467	641	264	.91	1.5
23...	1330	15.0	543	575	843	1700	234	1.1	2.2
NOV.									
05...	1540	19.0	861	772	1790	3120	283	1.4	2.3
DEC.									
03...	1200	7.0	1680	5630	25500	36100	285	1.8	3.4
17...	1515	--	1670	2280	11500	17800	300	1.9	3.4

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

LOCATION.—Lat 34°54'21", long 106°41'04", in NE¼SW¼ sec.24, T. 08 N., R. 02 E., Valencia County, 50 feet (15 m) upstream from diversion dam, 50 feet (15 m) downstream from bridge on State Highway 147, at Isleta.

DRAINAGE AREA.—18,100 mi<sup>2</sup> (46,900 km<sup>2</sup>) (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 1973 TO DECEMBER 1973

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	DIS- SOLVED SILICA (SI02) (MG/L) (00955)	DIS- SOLVED IRON (FE) (MG/L) (01046)	DIS- SOLVED MANG- NESE (MN) (MG/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)
FEB.											
23...	1430	720	25	40	--	48	8.2	36	3.9	174	0
APR.											
11...	1445	1400	24	9	--	52	9.0	42	4.5	161	0
MAY											
03...	1400	4360	19	50	--	37	5.8	24	3.5	115	0
24...	1345	7590	16	110	--	29	4.4	13	2.8	103	0
JUNE											
14...	1350	5970	18	90	--	29	4.6	16	2.7	104	0
JULY											
18...	1400	1800	22	10	--	41	6.4	26	3.9	141	0
AUG.											
08...	1355	1690	20	10	16	37	5.9	22	3.3	118	0
SEP.											
06...	1400	733	23	30	--	43	6.4	27	4.0	142	0
OCT.											
05...	1415	508	26	20	--	43	6.9	30	4.6	148	0
NOV.											
08...	1400	886	27	2000	--	44	7.1	30	4.0	153	0
DEC.											
06...	1415	1860	23	20	--	46	7.5	26	3.4	141	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 NITRATE (N) (MG/L) (00613)	TOTAL NITRATE PLUS NITRATE (N) (MG/L) (00630)	DIS- SOLVED NITRATE PLUS NITRATE (N) (MG/L) (00631)	AMMONIA NITRO- GEN (N) (MG/L) (00610)	TOTAL ORGANIC NITRO- GEN (N) (MG/L) (00605)	TOTAL NITRO- GEN (N) (MG/L) (00600)	TOTAL PHOS- PHORUS (P) (MG/L) (00665)
FEB.											
23...	81	23	.6	.09	.01	.13	.10	1.5	.70	2.3	1.1
APR.											
11...	110	20	.6	.17	.04	.21	.21	1.0	1.0	2.2	1.4
MAY											
03...	60	14	.4	.17	.00	.20	.17	.87	1.4	2.5	1.1
24...	40	6.4	.4	.11	.01	.12	.12	.14	1.6	1.9	.75
JUNE											
14...	39	8.6	.3	.16	.00	.16	.16	.27	1.2	1.7	.64
JULY											
18...	61	14	.4	.19	.00	1.8	.21	1.3	1.3	1.8	2.4
AUG.											
08...	59	7.6	.5	.07	.02	.19	.09	.48	.38	1.1	.50
SEP.											
06...	70	12	.4	.34	.04	2.4	.38	.36	.31	3.1	1.0
OCT.											
05...	65	13	.5	.14	.05	.23	.19	1.2	.80	2.2	1.2
NOV.											
08...	64	14	.2	.27	.03	.32	.30	.50	.36	1.2	.64
DEC.											
06...	64	12	.4	.16	.01	.19	.17	.32	.68	1.2	.78

DATE	DIS- SOLVED URIC ACID PHOS- PHORUS (P) (MG/L) (00671)	DIS- SOLVED SOLIDS (RESI- DUE AT 160 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	TEMPER- ATURE (DEG C) (00010)	DIS- SOLVED BORON (B) (MG/L) (01020)
FEB.										
23...	.46	280	316	150	11	1.3	487	7.8	6.5	130
APR.										
11...	.46	365	345	170	35	1.4	527	7.8	14.5	110
MAY										
03...	.12	232	222	120	22	1.0	353	7.9	13.5	100
24...	.07	181	166	91	6	.6	250	6.8	17.0	60
JUNE										
14...	.08	183	171	91	6	.7	264	8.0	18.5	20
JULY										
18...	.43	249	248	130	13	1.1	384	7.7	23.0	120
AUG.										
08...	.16	231	215	120	20	.9	344	7.6	24.0	60
SEP.										
06...	.42	238	259	130	17	1.0	395	7.5	22.0	90
OCT.										
05...	.87	264	266	140	14	1.1	416	7.6	19.0	60
NOV.										
08...	.50	251	271	140	14	1.1	419	7.7	14.0	90
DEC.										
06...	.56	269	254	150	30	.9	404	7.7	5.0	80

## RIO GRANDE BASIN

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

## TRACE ELEMENT ANALYSES, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

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 (BL) (UG/L) (01010)	DIS- SOLVED BISMUTH (BI) (UG/L) (01015)	DIS- SOLVED BORON (B) (UG/L) (01020)	DIS- SOLVED CAL- MIUM (CD) (UG/L) (01025)	DIS- SOLVED CHRO- MIUM (CK) (UG/L) (01030)	DIS- SOLVED COBAL- T (CO) (UG/L) (01035)
AUG. 06...	1335	110	4	60	<2	<5	60	1	<3	<4
DATE	TIME	DIS- SOLVED COPPER (CU) (UG/L) (01040)	DIS- SOLVED GALLIUM (GA) (UG/L) (01120)	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) (01060)	DIS- SOLVED MOLYB- DENUM (MO) (UG/L) (01060)
AUG. 08...		4	<2	10	<50	<4	20	16	.0	6
DATE	TIME	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) (01160)	DIS- SOLVED TAN- IUM (TI) (UG/L) (01150)	DIS- SOLVED VANA- DIUM (V) (UG/L) (01065)	DIS- SOLVED ZINC (ZN) (UG/L) (01090)	DIS- SOLVED ZIR- CONIUM (ZK) (UG/L) (01160)
AUG. 08...		<4	0	4	260	<4	6	5.0	<7	<7

## FIELD AND BIOCHEMICAL MEASUREMENTS, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SPE- CIFIC CON- DUCTI- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	AIR TEMPER- ATURE (DEG C) (00020)	COLOR (PLAT- INUM- CUBALT 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) (MG/L) (00680)
FEB. 23...	1430	720	485	7.9	6.5	10.5	15	220	9.6	38	11 *
APR. 11...	1445	1400	520	7.9	14.5	21.0	10	580	8.1	50	13 *
MAY 03...	1400	4360	350	8.0	13.5	20.0	25	480	8.8	1300	11 *
24...	1345	7590	245	7.7	17.0	24.5	40	510	7.2	1200	18 *
JUNE 14...	1350	5970	260	7.7	18.5	24.0	40	285	7.1	1000	--
JULY 18...	1400	1800	380	7.7	23.0	26.0	10	1800	6.5	7000	--
AUG. 08...	1335	1690	340	7.7	24.0	32.0	5	110	6.6	1900	9.5
SEP. 06...	1400	733	400	7.7	22.0	25.0	15	150	6.6	15200	10
OCT. 05...	1415	508	416	7.6	19.0	27.0	--	--	7.0	1400	7.5
NOV. 08...	1400	886	419	7.7	14.0	24.0	--	--	7.5	2100	6.3
DEC. 06...	1415	1860	404	7.7	5.0	13.5	--	--	10.3	280	9.5

\* Analyzed by New Mexico Environmental Improvement Agency.

## 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 mi (0.3 km) south of U.S. Highway 60, 1.8 mi (2.9 km) east of Bernardo, about 3 mi (5 km) upstream from floodway, and 4 mi (6 km) 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, 724 micromhos Aug. 22; minimum daily, 293 micromhos June 16.

Water temperatures: Maximum 31.5°C July 4; Aug. 7; minimum, 1.5°C Jan. 1, 7.

Sediment concentrations: Maximum 9,900 mg/l Sept. 12; minimum daily, 178 mg/l Aug. 20.

Sediment discharge: Maximum daily, 45,200 tons (41,000 tonnes) Sept. 12; minimum daily, 67 tons (61 tonnes) Aug. 20.

Period of record:

Specific conductance (1964-73): Maximum daily, 2,250 micromhos Aug. 4, 1966; minimum daily, 220 micromhos Aug. 29, 1972.

Water temperatures (1964-73): Maximum, 39.0°C July 13, 1968; minimum, freezing point on several days during 1967, 1970-1972.

Sediment concentrations (1964-73): Maximum daily, 47,900 mg/l Aug. 4, 1966; minimum daily, no flow on many days in 1964, 1966-72.

Sediment discharge (1964-73): Maximum daily, 150,000 tons (136,000 tonnes) Aug. 3, 1966; minimum daily, 0 tons (0 tonnes) 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.

## CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

DATE	TIME	INSTANTANEOUS SILICA CHANGE (U/L)	UIS- SOLVED SILICA (MG/L)	UIS- SOLVED IRON (U/L)	UIS- SOLVED CAL- CIUM (MG/L)	UIS- SOLVED MAG- NE- SIUM (MG/L)	DIS- SOLVED SODIUM (MG/L)	UIS- SOLVED PO- SIUM (MG/L)	BICAR- BONATE (MG/L)	CAN- BONATE (MG/L)	UIS- SOLVED SULFATE (MG/L)	UIS- SOLVED CHLO- RIDE (MG/L)
JAN.												
04...	1400	662	27	--	59	8.8	43	4.0	185	0	95	22
16...	1430	807	27	--	59	8.9	49	4.7	200	0	94	27
24...	1130	717	26	--	56	9.0	44	4.5	183	0	100	24
FEB.												
06...	1430	742	26	--	57	9.2	45	4.3	180	0	88	25
12...	1130	724	26	--	62	11	67	4.6	196	0	120	44
14...	1110	873	24	--	56	8.8	45	4.3	181	0	91	24
MAR.												
06...	1000	698	25	--	58	8.8	40	5.0	177	0	88	21
MAY												
10...	1300	1260	20	--	43	6.3	27	3.9	121	0	74	15
24...	1215	1410	18	9	37	5.5	21	3.2	121	0	49	9.0
JUNE												
21...	1215	1620	20	--	34	5.3	23	3.1	115	0	49	10
AUG.												
06...	1000	1760	22	--	54	8.8	42	4.5	162	0	96	20
SEP.												
20...	1300	599	30	--	56	8.1	43	4.6	170	0	98	17
27...	1130	208	32	--	69	11	59	5.3	212	0	130	24
OCT.												
11...	1100	363	27	170	63	10	50	5.1	202	0	110	25
DEC.												
12...	1200	1640	24	10	49	8.3	33	3.5	158	0	71	16
DATE		UIS- SOLVED FLUO- RIDE (MG/L)	UIS- SOLVED NITRATE (MG/L)	UIS- SOLVED NITRATE (MG/L)	UIS- SOLVED NITRATE (MG/L)	UIS- SOLVED NITRATE (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AU- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH	TEMPER- ATURE (DEG C)	UIS- SOLVED BORON (MG/L)
JAN.												
04...	.5	1.3	--	--	356	180	32	1.4	557	7.7	2.0	--
16...	.6	1.3	--	--	375	180	20	1.6	573	7.7	2.0	--
24...	.3	1.1	--	--	359	180	27	1.4	547	7.5	4.5	--
FEB.												
06...	.5	.93	--	--	348	180	33	1.5	552	7.5	4.5	--
12...	.6	.96	--	--	436	200	39	2.1	683	7.7	--	--
14...	.6	.88	--	--	347	180	28	1.5	545	7.8	4.5	--
MAR.												
06...	.6	1.2	--	--	339	180	36	1.3	524	7.6	7.0	--
MAY												
10...	.2	.00	--	--	249	130	34	1.0	389	7.6	16.0	--
24...	.4	.00	.07	209	203	120	16	.9	324	7.7	17.0	30
JUNE												
21...	.4	.06	--	--	202	110	12	1.0	319	7.6	18.5	--
AUG.												
06...	.4	.62	--	--	330	170	38	1.4	524	7.8	23.0	--
SEP.												
20...	.5	.42	--	--	343	170	34	1.4	520	7.9	20.5	--
27...	.5	.70	--	--	438	220	44	1.7	665	7.8	14.0	--
OCT.												
11...	.4	.81	.57	399	394	200	33	1.5	614	7.9	9.5	120
DEC.												
12...	.5	.65	.32	293	287	160	27	1.1	468	7.7	5.0	100

## RIO GRANDE BASIN

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

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973  
(UNCE-DAILY)

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	455	462	500	545	595	538	512	574	535	625	587	472
2	---	530	513	530	598	599	514	585	533	617	542	478
3	---	497	500	495	401	539	507	453	550	600	587	464
4	447	513	501	525	592	542	517	457	555	600	545	465
5	527	527	509	558	522	547	521	434	585	632	543	451
6	505	479	496	622	400	522	553	416	590	638	540	460
7	536	453	470	577	599	522	552	412	565	645	563	470
8	535	480	432	543	401	522	554	408	590	646	---	448
9	560	480	502	538	591	531	540	411	645	633	530	467
10	490	450	475	547	---	537	561	411	543	645	530	463
11	530	525	439	558	576	533	554	402	423	560	537	462
12	520	490	530	557	554	526	570	427	485	553	539	467
13	535	500	505	542	559	507	570	410	508	553	547	450
14	530	493	480	525	557	515	564	410	542	540	563	460
15	535	443	510	549	548	297	574	439	523	569	647	464
16	530	505	485	514	542	293	403	419	563	575	680	458
17	525	530	435	501	506	507	400	445	585	585	687	468
18	545	535	440	509	536	500	430	496	486	530	630	458
19	525	495	510	469	528	504	450	675	485	611	623	458
20	---	530	485	432	528	---	472	715	516	613	595	458
21	445	522	475	458	528	508	498	716	541	612	577	457
22	592	510	490	459	511	530	458	724	630	615	580	469
23	527	457	497	454	524	537	417	615	646	604	500	455
24	520	525	475	469	524	534	597	575	665	605	484	414
25	537	545	495	456	508	508	560	610	686	582	491	452
26	528	500	490	451	512	510	560	670	675	560	478	448
27	471	532	492	426	510	517	482	695	650	600	485	450
28	540	552	493	429	529	506	407	465	653	620	480	443
29	525	---	495	412	519	505	587	700	658	633	475	437
30	485	---	450	401	529	505	576	608	700	628	478	445
31	479	---	480	---	568	---	583	515	---	634	---	450
MONTH	516	497	485	502	450	522	580	513	577	596	553	457

TEMPERATURE (DEG. C) OF WATER, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973  
(UNCE-DAILY)

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



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

## SUSPENDED-SEDIMENT DISCHARGE, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

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	775	3170	6630	811	3700	8100	641	2400	4150
2	703	3060	5810	743	3310	6640	555	2260	3390
3	662	3020	5400	695	3210	6020	735	2360	4680
4	654	2870	5070	667	2970	5350	958	3310	8560
5	695	2600	4880	603	2730	4440	1330	3420	2100
6	732	3220	6360	635	2890	4950	964	3770	9810
7	770	3590	7460	792	3380	7230	880	3730	8860
8	738	3350	6660	736	2940	5060	671	2690	4870
9	734	3130	6200	762	3460	7120	587	2430	3850
10	777	3170	6630	787	3400	7220	1170	3420	1780
11	796	3670	7890	765	3340	6900	1200	4070	1320
12	804	3500	7160	763	3460	7130	698	3200	6030
13	759	2910	4730	769	3410	7080	762	2910	5990
14	687	2660	4930	639	2860	6480	1110	3800	1140
15	726	3010	5920	775	3300	6910	898	3270	7930
16	793	2520	5400	767	2930	6070	1000	3700	9990
17	815	3260	7170	808	3670	8010	717	3200	6190
18	785	2970	6290	796	3500	7520	821	3100	6870
19	777	2970	6230	777	3360	7050	854	2600	6000
20	814	3220	7060	809	3190	6970	929	2820	7070
21	756	3340	6840	766	3020	6250	1070	3220	9300
22	756	3140	6430	758	3020	6180	1200	5330	1730
23	751	2990	6060	649	3260	7470	1430	6250	2410
24	712	2670	5130	823	3220	7160	1550	6590	2760
25	691	3500	6530	687	3270	6070	1440	5700	2220
26	680	3470	6370	671	2660	4820	1200	4530	1470
27	732	2780	5490	744	2860	5750	1060	3810	1090
28	675	2700	4920	719	2190	4250	997	3300	8880
29	732	3250	6420	--	--	--	1080	3530	1030
30	714	3110	6000	--	--	--	1470	4470	1770
31	734	2810	5570	--	--	--	1510	4630	1890
TOTAL	22935	--	169700	2118	--	180200	31487	--	349520

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	1330	3900	14000	1620	6570	28700	1180	1880	5990
2	1390	4000	15000	1480	6700	26800	965	2130	5600
3	1620	4720	20600	1200	6610	21400	1200	2490	8070
4	1350	5090	18600	1080	6390	18600	1680	2850	12900
5	1330	4730	17000	785	5360	11400	1940	3990	20900
6	900	3140	7700	748	5100	10300	1770	3730	17800
7	771	2930	6100	960	4690	12400	1750	2990	14100
8	1130	3340	10200	1060	4190	12000	1800	2980	14500
9	1270	3740	12800	1290	4200	14600	1750	2760	13000
10	612	3000	6500	1210	3830	12500	1680	2330	10600
11	651	3860	8670	976	3790	9990	1870	2510	12700
12	677	3100	5100	1210	4510	14700	1900	2500	12800
13	821	2400	5320	1300	6090	24700	1870	2470	12500
14	1450	4220	17400	1360	4060	17100	1740	2640	12400
15	1940	6000	31400	1510	4700	19200	1700	2560	11800
16	1640	9260	41000	1450	4360	17100	1760	2680	12700
17	1620	9370	41000	1410	3770	14400	1820	2220	10900
18	1350	7350	27600	1400	3530	13300	1680	2020	9160
19	1490	6200	24900	1260	2700	9190	1330	2130	7650
20	1490	5950	23900	1330	2340	8400	1240	1990	6660
21	1170	4900	13500	1290	2220	7730	1600	1800	7780
22	1060	3660	10500	1250	2360	7970	1850	1780	8790
23	1080	3150	9190	1080	2290	6680	1910	1590	8200
24	949	3210	6220	1060	2250	6060	1870	2260	11400
25	1070	3980	11500	1140	1820	5660	1660	2240	10060
26	1310	4530	16000	1370	2300	8510	1650	1880	8380
27	1360	4920	19900	1390	2460	9310	1620	2250	9840
28	1410	4410	16800	1320	2220	9110	1600	2050	8860
29	1340	4050	14700	1310	2000	8150	1820	2310	11400
30	1340	5010	20800	1320	1670	6660	1750	3190	13100
31	--	--	--	1090	1640	5420	--	--	--
TOTAL	37699	--	498100	39019	--	398000	49935	--	332480

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

SUSPENDED-SEDIMENT DISCHARGE, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

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	1540	5380	14100	1950	2490	15100	797	1920	4130
2	1500	2500	10100	2050	3560	19700	686	1820	3370
3	1470	2460	9760	2010	3450	18700	596	1520	2450
4	1460	2500	9860	1890	2600	15500	532	1090	1570
5	1560	2530	10200	1870	2510	12700	420	750	851
6	1570	2480	10500	1760	2300	10900	406	640	702
7	1560	2090	8800	1630	2170	9550	418	560	632
8	1520	1910	7840	1460	1690	6660	294	405	321
9	1650	1900	8460	1200	2030	6580	223	315	190
10	1680	1520	6700	1140	1760	5420	499	2000	2690
11	1910	1990	10300	1050	1550	4390	1300	5390	21800
12	1790	2630	12700	956	1760	4540	1690	9900	45200
13	1790	1960	9470	961	1890	4900	1480	9230	36900
14	1830	2040	10100	993	1790	4800	1180	7550	24100
15	1760	2490	11800	896	1900	4600	833	4950	11100
16	1620	2900	12700	1040	1770	4970	642	2430	4210
17	1690	2620	12000	998	1300	3500	558	1580	2380
18	1710	3600	16600	492	500	664	809	2950	6440
19	1800	4320	21000	196	223	118	741	2130	4260
20	1570	4490	19000	139	178	67	629	1340	2280
21	1350	3960	14400	139	196	74	455	800	983
22	1300	3110	10900	229	241	149	269	490	356
23	1490	4110	16500	273	345	254	200	369	199
24	1690	3300	13100	375	440	446	194	392	205
25	1770	2190	10500	281	346	263	177	322	154
26	1940	2080	10900	168	224	114	191	264	136
27	1990	3590	19300	181	230	112	219	336	193
28	1930	4570	24800	214	470	272	245	328	217
29	2010	2750	14900	162	376	164	233	308	194
30	1900	2220	11400	313	690	583	188	211	107
31	1910	2450	12600	551	1140	1700	--	--	--
TOTAL	52400	--	392290	27587	--	153290	17104	--	178326
OCTOBER									
DAY	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	232	263	165	658	1920	3410	1490	2980	12000
2	262	324	229	879	2910	6910	1490	3270	13200
3	231	312	195	855	2710	6260	1540	3470	14400
4	257	323	224	875	2240	5290	1590	3490	15000
5	236	290	185	668	2100	4920	1610	3050	13300
6	276	350	261	780	2650	5580	1630	2720	12000
7	265	380	272	800	2340	5050	1600	3560	15400
8	278	373	280	871	1870	4400	1590	3750	16100
9	318	638	548	824	1620	3600	1550	2620	11000
10	287	508	394	785	1960	4150	1530	3000	12400
11	369	570	568	761	2240	4600	1520	2900	11900
12	535	1140	1650	760	2300	4720	1550	2890	12100
13	604	1410	2300	748	2050	4140	1550	2900	12100
14	539	1090	1590	668	1560	2810	1580	3100	13200
15	483	1020	1330	695	1390	1480	1640	3490	15500
16	419	800	905	311	1870	1570	1680	3090	14000
17	389	550	578	308	1600	1330	1680	2740	12400
18	332	490	439	521	1490	2100	1730	3010	14100
19	306	483	399	547	2350	3470	1710	2820	13000
20	290	402	315	609	2250	3700	1680	3090	14000
21	245	379	251	627	1770	3000	1620	2960	12900
22	260	355	249	839	2200	4980	1510	3000	12200
23	285	451	347	1190	3820	12300	1510	3190	13000
24	305	511	421	1260	3910	13300	1510	2820	11500
25	346	725	677	1330	3520	12600	1480	4400	17600
26	352	890	846	1360	3090	11300	1440	3700	14400
27	270	630	459	1400	3330	12600	1510	3580	13800
28	225	336	217	1460	3480	13700	1640	3100	13700
29	265	608	435	1460	3420	13500	1590	2890	12400
30	265	598	428	1460	3150	12400	1590	2850	12200
31	260	551	387	--	--	--	1600	4340	18700
TOTAL	9986	--	17544	26209	--	189170	48940	--	419500
CAL YR 1973	TOTAL WATER DISCHARGE (CFS-DAYS)								
CAL YR 1973	TOTAL SUSPENDED-SEDIMENT DISCHARGE (TONS)						3298120		
WTR YR 1973	TOTAL WATER DISCHARGE (CFS-DAYS)						371264		
WTR YR 1973	TOTAL SUSPENDED-SEDIMENT DISCHARGE (TONS)						3664014.98		

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

INSTANTANEOUS SUSPENDED-SEDIMENT DISCHARGE AND PARTICLE SIZE, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

DATE	TIME	TEMPER- ATURE (DEG C) (00010)	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SUS- PENDED SEDIM- ENT CHARGE (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)	SUS. SED. FALL DIAM. % FINER THAN .062 MM (70342)
JAN.									
02...	1700	2.5	696	3210	6030	14	17	28	45
16...	1700	7.0	829	3320	7430	15	18	30	48
27...	1600	7.0	717	2110	4080	23	24	45	66
FEB.									
16...	1015	5.5	815	3260	7170	11	15	23	47
28...	1730	13.5	759	2390	4900	12	17	27	53
MAR.									
13...	1730	10.0	710	2590	4970	14	18	26	44
27...	1700	12.5	1020	3520	9140	19	21	33	55
APR.									
08...	1630	13.0	1260	3380	11500	15	17	27	53
27...	1800	17.5	1610	5280	23000	20	26	41	78
MAY									
11...	1700	22.0	1090	4210	12400	16	19	24	55
24...	1800	21.0	990	1970	5270	17	21	32	60
JUNE									
07...	1800	23.5	1810	2910	14200	8	9	13	30
23...	1800	25.0	1980	1470	7860	10	13	19	37
JULY									
06...	1730	30.0	1370	2410	10200	8	9	11	22
21...	1600	23.0	1300	3860	13500	36	45	56	60
AUG.									
06...	1800	30.5	1700	2080	9550	20	25	31	45
19...	1830	27.5	182	182	89	55	65	86	--
SEP.									
04...	1730	24.0	500	973	1310	47	60	72	79
13...	1800	23.0	1410	9020	34300	55	70	82	88
19...	1830	23.5	626	1830	3090	36	45	57	63
OCT.									
06...	1800	18.5	285	372	286	22	26	31	44
24...	1900	16.5	310	522	437	20	24	25	34
NOV.									
02...	1700	16.0	934	3020	7620	18	23	36	44
18...	1630	12.0	542	1470	2150	9	11	13	18
DEC.									
05...	1800	5.5	1610	2730	11900	9	12	19	33
19...	1430	5.5	1690	2710	12400	6	8	12	28

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 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)
JAN.									
02...	61	87	99	100	--	--	--	--	--
16...	66	89	100	--	--	--	--	--	--
27...	82	95	100	--	--	--	--	--	--
FEB.									
16...	67	96	100	--	--	--	--	--	--
28...	69	85	99	100	--	--	--	--	--
MAR.									
13...	63	87	100	--	--	--	--	--	--
27...	72	88	99	100	--	--	--	--	--
APR.									
08...	74	87	99	100	--	--	--	--	--
27...	90	96	100	--	--	--	--	--	--
MAY									
11...	72	86	96	100	--	--	--	--	--
24...	84	94	100	--	--	--	--	--	--
JUNE									
07...	58	88	100	--	--	--	--	--	--
23...	64	84	93	97	100	--	--	--	--
JULY									
06...	38	84	100	--	--	--	--	--	--
21...	68	86	98	100	--	--	--	--	--
AUG.									
06...	60	84	99	100	--	--	--	--	--
19...	--	--	--	--	--	96	98	99	100
SEP.									
04...	91	99	100	--	--	--	--	--	--
13...	92	97	100	--	--	--	--	--	--
19...	75	94	99	100	--	--	--	--	--
OCT.									
06...	70	100	--	--	--	--	--	--	--
24...	48	93	100	--	--	--	--	--	--
NOV.									
02...	59	87	98	100	--	--	--	--	--
18...	33	76	97	100	--	--	--	--	--
DEC.									
05...	49	85	99	100	--	--	--	--	--
19...	55	84	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 mi (8 km) downstream from heading of conveyance channel, and 2 mi (3 km) east of Bernardo, and at mile 1,487.2 (2,392.9 km).

DRAINAGE AREA.—19,230 mi<sup>2</sup> (49,810 km<sup>2</sup>), approximately, including 2,940 mi<sup>2</sup> (7,610 km<sup>2</sup>) 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, 531 micromhos Apr. 17; minimum daily, 271 micromhos June 17.

Water temperatures: Maximum, 31.5°C July 4; minimum, 4.5°C Dec. 5.

Sediment concentrations: Maximum daily, 12,600 mg/l Sept. 12; minimum daily, no flow on many days.

Sediment discharge: Maximum daily, 79,700 tons (72,300 tonnes) May 17; minimum daily, 0 tons (0 tonnes) on many days.

Period of record:

Specific conductance (1964 to 1973): Maximum daily, 1,330 micromhos Aug. 10, 1967; minimum daily, 271 micromhos June 17, 1973.

Water temperatures (1964 to 1973): Maximum, 31.5°C July 4, 1973; minimum, freezing point Feb. 23, 1971, and Feb. 3, 1972.

Sediment concentrations (1964 to 1973): Maximum daily, not determined; minimum daily, no flow on many days each year.

Sediment discharge (1964 to 1973): Maximum daily, 356,000 tons (323,000 tonnes) Aug. 11, 1967; minimum daily, 0 tons (0 tonnes) 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. 1 to Apr. 14, Aug. 7 to Sept. 10, Sept. 15 to Nov. 24, 28. Sediment table omitted for period of no flow January to March.

## CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS) (000061)	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 POT- AS- SIUM (K) (MG/L) (00935)	BILAK- BONATE (MG03) (MG/L) (00440)	CAK- BONATE (CU3) (MG/L) (00445)	DIS- SOLVED SULFATE (SU4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)
MAY												
10...	1035	3120	20	--	41	6.0	25	3.8	123	0	74	14
24...	0950	7290	18	20	38	5.2	16	3.1	118	0	41	7.6
JUNE												
21...	1045	1830	20	--	33	5.0	20	2.9	111	0	43	9.3
JULY												
02...	1145	2300	19	--	35	5.1	17	3.0	111	0	49	6.4
20...	1030	385	20	--	46	7.3	32	3.8	136	0	90	14
AUG.												
05...	1300	77	24	--	55	8.5	33	3.8	161	0	86	16
12...	1300	93	24	10	50	8.5	32	3.5	154	0	71	15

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED NITRIL PLUS NITRATE (N) (MG/L) (00651)	DIS- SOLVED URTHO- PHOS- PHORUS (P) (MG/L) (00671)	DIS- SOLVED RESI- DUE AT CONSTIT- UENTS (MG/L) (70300)	DIS- SOLVED SULFUR (S) (MG/L) (70301)	DIS- SOLVED HARD- NESS (CA, MG) (MG/L) (00900)	DIS- SOLVED NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AUX- SODIUM RATIO (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH	TEMPER- ATURE (DEG C) (00010)	DIS- SOLVED BORON (B) (MG/L) (01020)
MAY												
10...	.3	.00	--	--	245	130	26	1.0	369	7.7	18.5	--
24...	.4	.21	.12	225	189	120	20	.6	311	8.0	17.0	20
JUNE												
21...	.4	.05	--	--	189	100	12	.9	300	7.3	19.5	--
JULY												
02...	.4	.46	--	--	192	110	17	.7	298	7.9	24.0	--
20...	.2	.11	--	--	281	150	33	1.2	436	8.1	21.0	--
AUG.												
05...	.7	.81	--	--	310	170	40	1.1	482	7.7	4.5	--
12...	.5	.55	.33	285	284	160	34	1.1	460	7.7	7.0	80

## RIO GRANDE BASIN

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

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973  
(ONCE-DAILY)

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	---	---	---	---	398	315	286	344	---	---	---	---
2	---	---	---	---	390	321	285	347	---	---	---	---
3	---	---	---	---	391	313	281	444	---	---	---	---
4	---	---	---	---	386	313	287	430	---	---	---	---
5	---	---	---	---	389	305	298	415	---	---	---	456
6	---	---	---	---	388	302	303	399	---	---	---	---
7	---	---	---	---	389	311	300	---	---	---	---	---
8	---	---	---	---	385	315	323	---	---	---	---	---
9	---	---	---	---	379	316	327	---	---	---	---	---
10	---	---	---	---	383	313	326	---	---	---	---	---
11	---	---	---	---	361	312	324	---	---	---	---	---
12	---	---	---	---	338	290	336	---	497	---	---	---
13	---	---	---	---	345	288	341	---	500	---	---	---
14	---	---	---	---	361	282	330	---	---	---	---	---
15	---	---	---	---	353	284	342	---	---	---	---	---
16	---	---	---	---	511	327	291	374	---	---	---	---
17	---	---	---	---	531	360	271	392	---	---	---	---
18	---	---	---	---	510	319	279	398	---	---	---	---
19	---	---	---	---	478	319	291	402	---	---	---	---
20	---	---	---	---	438	310	284	452	---	---	---	---
21	---	---	---	---	461	305	287	462	---	---	---	---
22	---	---	---	---	459	292	290	449	---	---	---	---
23	---	---	---	---	459	291	315	394	---	---	---	---
24	---	---	---	---	481	292	312	352	---	---	---	---
25	---	---	---	---	454	285	308	346	---	---	---	---
26	---	---	---	---	432	285	301	324	---	---	---	---
27	---	---	---	---	422	289	301	409	---	---	---	---
28	---	---	---	---	409	297	293	392	---	---	---	---
29	---	---	---	---	403	303	287	364	---	---	---	---
30	---	---	---	---	389	303	287	356	---	---	---	---
31	---	---	---	---	305	---	349	---	---	---	---	---
MONTH	---	---	---	---	339	299	352	---	---	---	---	---

TEMPERATURE (DEG. C) OF WATER, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973  
(ONCE-DAILY)

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	---	---	---	---	14.5	19.0	27.5	29.5	---	---	---	---
2	---	---	---	---	16.0	19.0	19.0	27.5	---	---	---	---
3	---	---	---	---	17.0	20.5	30.0	28.0	---	---	---	---
4	---	---	---	---	17.0	20.0	31.5	26.5	---	---	---	---
5	---	---	---	---	15.0	21.0	30.0	27.0	---	---	---	4.5
6	---	---	---	---	14.0	21.5	30.0	30.5	---	---	---	---
7	---	---	---	---	16.0	23.5	31.0	---	---	---	---	---
8	---	---	---	---	17.0	25.0	27.5	---	---	---	---	---
9	---	---	---	---	17.5	25.0	30.0	---	---	---	---	---
10	---	---	---	---	20.0	24.5	28.0	---	---	---	---	---
11	---	---	---	---	22.0	25.0	26.5	---	---	---	---	---
12	---	---	---	---	19.5	24.0	29.0	---	24.0	---	---	---
13	---	---	---	---	15.0	21.0	28.0	---	23.0	---	---	---
14	---	---	---	---	14.5	18.0	26.5	---	---	---	---	---
15	---	---	---	---	16.5	16.0	28.0	---	---	---	---	---
16	---	---	---	---	12.5	18.5	24.0	27.0	---	---	---	---
17	---	---	---	---	15.5	19.5	23.0	25.5	---	---	---	---
18	---	---	---	---	12.5	15.0	21.0	24.0	---	---	---	---
19	---	---	---	---	9.5	16.0	23.0	27.0	---	---	---	---
20	---	---	---	---	8.5	16.0	23.0	28.0	---	---	---	---
21	---	---	---	---	11.0	20.5	23.5	23.0	---	---	---	---
22	---	---	---	---	8.0	19.5	25.0	26.0	---	---	---	---
23	---	---	---	---	16.0	21.0	25.0	26.5	---	---	---	---
24	---	---	---	---	16.5	16.0	26.0	30.0	---	---	---	---
25	---	---	---	---	16.5	19.5	28.0	27.0	---	---	---	---
26	---	---	---	---	18.0	17.5	29.0	28.5	---	---	---	---
27	---	---	---	---	17.5	16.0	26.0	24.0	---	---	---	---
28	---	---	---	---	16.5	18.0	26.0	22.0	---	---	---	---
29	---	---	---	---	14.0	20.0	26.0	28.5	---	---	---	---
30	---	---	---	---	16.0	20.0	28.0	26.0	---	---	---	---
31	---	---	---	---	18.5	---	25.5	---	---	---	---	---
MONTH	---	---	---	---	17.5	23.5	27.0	---	---	---	---	---



## RIO GRANDE BASIN

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

SUSPENDED-SEDIMENT DISCHARGE, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

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	1910	6820	35200	5790	2070	52400
2	0	0	0	2440	7070	46600	6200	2300	38500
3	0	0	0	2440	5650	37200	6140	1900	31500
4	0	0	0	2470	5360	35900	6380	2530	43600
5	0	0	0	2820	5310	40400	5420	1840	26900
6	0	0	0	3940	5010	53300	5190	1710	24000
7	0	0	0	4420	4250	50700	4440	1950	23400
8	0	0	0	2900	3160	24700	4140	1420	15900
9	0	0	0	2960	2940	23000	3640	2400	23600
10	0	0	0	3050	3600	29600	3100	1720	14400
11	0	0	0	3050	3580	29500	3100	1870	15700
12	0	0	0	2900	4080	31900	3250	2190	19200
13	0	0	0	3400	4560	41900	3940	1920	20400
14	0	0	0	4860	3500	45900	5050	1580	21500
15	160	2630	3400	6800	2760	50700	4510	1640	20000
16	680	6600	12100	6100	3120	51400	4040	1830	20000
17	865	6200	14500	5320	5550	79700	3780	2160	22000
18	581	5100	3000	5350	4430	64000	3510	1690	16000
19	800	4850	10500	5680	3360	51500	3400	1980	18200
20	1100	5140	15300	5980	2480	40000	2700	1860	13600
21	904	4030	9840	6050	3840	62700	1850	1570	7840
22	561	2890	4380	6190	2990	50000	1200	1730	5610
23	432	2380	2780	6460	3300	57600	1090	1820	5360
24	97	2350	615	6630	2850	51000	1470	4530	18000
25	233	2950	1860	6190	2490	41600	1530	2350	9710
26	588	4280	6790	5570	2600	39100	1470	1550	6150
27	1290	4990	17400	5560	2090	31400	1570	1770	7500
28	1160	4050	12700	5780	1750	27300	1850	2030	10100
29	1260	4780	16300	5580	2490	37500	2150	3640	21100
30	1590	5510	23700	5670	2420	37000	2410	8600	56000
31	--	--	--	5900	3200	51000	--	--	--
TOTAL	12301	--	160165	144310	--	1549560	104310	--	608170
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	2410	3400	22100	392	1290	1370	0	0	0
2	2290	2300	14200	543	1540	2260	0	0	0
3	2350	1880	11900	238	1350	868	0	0	0
4	2350	1210	7680	128	1250	432	0	0	0
5	2180	2370	13900	74	880	176	0	0	0
6	1830	2830	14000	5.0	660	8.9	0	0	0
7	1410	1510	5750	0	0	0	0	0	0
8	1370	1310	4850	0	0	0	0	0	0
9	1170	1500	4740	0	0	0	0	0	0
10	1030	1540	4280	0	0	0	0	0	0
11	982	1170	3100	0	0	0	81	1080	5700
12	728	1660	3260	0	0	0	1010	12600	41000
13	904	2100	5130	0	0	0	227	4370	3710
14	1030	1750	4870	0	0	0	1.0	400	1.1
15	865	1680	3920	0	0	0	0	0	0
16	160	1100	475	0	0	0	0	0	0
17	182	1430	703	0	0	0	0	0	0
18	260	1560	1100	0	0	0	0	0	0
19	839	3000	6800	0	0	0	0	0	0
20	440	2900	3450	0	0	0	0	0	0
21	120	2500	810	0	0	0	0	0	0
22	94	1640	416	0	0	0	0	0	0
23	620	2600	4350	0	0	0	0	0	0
24	680	2110	3870	0	0	0	0	0	0
25	603	1210	1970	0	0	0	0	0	0
26	791	2810	10400	0	0	0	0	0	0
27	954	5010	13500	0	0	0	0	0	0
28	368	3570	3550	0	0	0	0	0	0
29	352	1530	1450	0	0	0	0	0	0
30	254	1500	1030	0	0	0	0	0	0
31	314	1200	1020	0	0	0	--	--	--
TOTAL	29930	--	178574	1380.0	--	5114.9	1319.0	--	50411.1

RIO GRANDE BASIN

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

INSTANTANEOUS SUSPENDED-SEDIMENT DISCHARGE AND PARTICLE SIZE, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

SUSPENDED-SEDIMENT DISCHARGE, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

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	5.0	350	4.7
2				0	0	0	10	400	11
3				0	0	0	46	600	75
4				0	0	0	37	500	50
5				0	0	0	74	655	131
6				0	0	0	32	400	35
7				0	0	0	56	600	91
8				0	0	0	60	600	97
9				0	0	0	50	550	74
10				0	0	0	50	550	74
11				0	0	0	52	550	77
12				0	0	0	82	800	177
13				0	0	0	36	500	49
14				0	0	0	44	500	59
15				0	0	0	32	450	39
16				0	0	0	58	600	94
17				0	0	0	40	550	59
18				0	0	0	44	550	65
19				0	0	0	56	600	91
20				0	0	0	30	450	36
21				0	0	0	85	850	195
22				0	0	0	336	2000	1810
23				0	0	0	344	1500	1390
24				0	0	0	368	1500	1490
25				27	500	36	384	2000	2070
26				48	600	78	448	2500	3020
27				30	500	41	172	1200	557
28				0	0	0	90	900	219
29				2.0	300	1.6	110	1000	297
30				2.5	300	2.0	174	1200	564
31							232	1300	814
TOTAL	0	--	0	109.5	--	158.6	3637.0	--	13814.7

CAL YR 1973	TOTAL WATER DISCHARGE (CFS-DAYS)	297296.50
CAL YR 1973	TOTAL SUSPENDED-SEDIMENT DISCHARGE (TONS)	2365708.30
WTR YR 1973	TOTAL WATER DISCHARGE (CFS-DAYS)	293959.70
WTR YR 1973	TOTAL SUSPENDED-SEDIMENT DISCHARGE (TONS)	2372379.40

INSTANTANEOUS SUSPENDED-SEDIMENT DISCHARGE AND PARTICLE SIZE, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

DATE	TIME	TEMPER- ATURE (DEG C) (00010)	INSTAN- TANEOUS DIS- CHARGE (CFS) (00001)	SUS- PENDED SEDIM- ENT (MG/L) (80154)	SUS- PENDED SEDIM- ENT (T/DAY) (80155)	SUS- PENDED SEDIM- ENT % FINER THAN (70637)	SUS- PENDED SEDIM- ENT % FINER THAN (70638)	SUS- PENDED SEDIM- ENT % FINER THAN (70640)
APR.								
17...	1700	15.5	788	5860	12500	49	57	76
MAY								
10...	1035	18.5	3120	3510	29600	21	24	32
15...	1700	16.5	4800	2290	42000	30	35	43
21...	1300	20.5	6160	5130	85300	10	12	16
28...	1800	18.0	5780	1450	22600	28	29	40
JUNE								
04...	1200	18.0	6970	5250	98600	5	6	8
21...	1045	19.5	1830	698	2830	26	31	42
JULY								
02...	1145	24.0	2300	3700	23000	8	9	12
09...	1100	21.0	1240	1790	5990	8	10	13
20...	1030	21.0	385	2450	2550	54	67	87
AUG.								
04...	1800	26.5	117	1130	357	59	70	82
SEP.								
13...	1730	23.0	90	1970	479	76	89	98
DEC.								
05...	1300	4.5	77	655	106	52	62	83

## RIO GRANDE BASIN

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

INSTANTANEOUS SUSPENDED-SEDIMENT DISCHARGE AND PARTICLE SIZE, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

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 (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)
APR. 17...	96	99	100	--	--	--	--	--
MAY 10...	71	86	97	100	--	--	--	--
15...	61	94	98	100	--	--	--	--
21...	42	80	100	--	--	--	--	--
28...	83	97	100	--	--	--	--	--
JUNE 04...	22	54	89	99	100	--	--	--
21...	75	98	100	--	--	--	--	--
JULY 02...	28	59	91	99	100	--	--	--
09...	33	80	100	--	--	--	--	--
20...	92	98	100	--	--	--	--	--
AUG. 04...	91	94	100	--	--	--	--	--
SEP. 13...	--	--	--	--	--	99	99	100
DEC. 05...	--	--	--	--	--	91	96	100

PARTICLE SIZE OF SURFACE BED MATERIAL, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SUS- PENDED SEDI- MENT DIS- CHARGE (MG/L) (80134)	SUS- PENDED SEDI- MENT DIS- CHARGE (T/DAY) (80135)	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)
MAY 10...	1035	3120	3510	29600	3	15	77	99	100
21...	1300	6160	5130	85300	9	54	96	99	100
JUNE 04...	1200	6970	5250	98800	92	99	99	99	100
21...	1045	1830	698	2830	23	73	98	100	--
JULY 02...	1145	2300	3700	23000	17	77	99	100	--
20...	1030	385	2450	2550	2	17	87	100	--
DEC. 05...	1300	77	655	106	7	53	100	--	--

TOTAL-SEDIMENT DISCHARGE, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

DATE	TIME	TEMPER- ATURE (DEG C) (00010)	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SUS- PENDED SEDI- MENT DIS- CHARGE (MG/L) (80134)	SUS- PENDED SEDI- MENT DIS- CHARGE (T/DAY) (80155)	TOTAL SEDI- MENT DIS- CHARGE (T/DAY) (80156)	STREAM WIDTH (FT) (00004)	MEAN DEPTH (FT) (00064)	STREAM VELOC- ITY (FPS) (00055)
MAY 10...	1035	18.5	3120	3510	29600	48300	301	1.5	7.0
21...	1300	20.5	6160	5130	85300	102000	246	4.9	5.1
JUNE 04...	1200	18.0	6970	5250	98800	116000	690	2.1	4.8
21...	1045	19.5	1830	698	2830	7310	310	1.5	4.0
JULY 02...	1145	24.0	2300	3700	23000	25200	320	1.6	4.5
20...	1030	21.0	385	2450	2550	2850	155	1.4	1.8
DEC. 05...	1300	4.5	77	655	106	180	56	.84	1.6

RIO GRANDE BASIN

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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 mi (0.3 km) upstream from Interstate Highway 25, 1.2 mi (1.9 km) southwest of Bernardo, 3 mi (4.8 km) upstream from mouth, and 18 mi (29 km) south of Belen.

DRAINAGE AREA.—7,350 mi<sup>2</sup> (19,040 km<sup>2</sup>), approximately, of which at least 1,130 mi<sup>2</sup> (2,930 km<sup>2</sup>) 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, 3,400 micromhos Sept. 1; minimum daily, 1,280 micromhos Aug. 4.  
Water temperatures: Maximum, 28.5°C June 22, Aug. 7; minimum, 1.5°C Jan. 21.  
Sediment concentrations: Maximum daily, 216,000 mg/l July 16; minimum daily, no flow on many days.  
Sediment discharge: Maximum daily, 229,000 tons (208,000 tonnes) July 18; minimum daily, 0 tons (0 tonnes) on many days.

Period of record:

Specific conductance: Maximum daily, 11,400 micromhos June 10, 1968; minimum daily, 238 micromhos July 30, 1969.  
Water temperatures: 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 (2,030,000 tonnes) Aug. 7, 1957; minimum daily, 0 tons (0 tonnes) on many days of each year.

REMARKS.—Chemical analyses are run on composite samples collected during the day or period indicated. No flow Jan. 1-18, Jan. 25 to Feb. 11, June 23 to July 2, 5-15, July 27 to Aug. 1, 9-11, 13-29, Sept. 5-9, Sept. 17 to Dec. 31. Averages are computed on flow periods analyzed.

CHEMICAL ANALYSES, COMPOSITES OF DAILY SAMPLES, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

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) (00913)	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)	BICAK- (HCO3) (00440)	CAR- (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.												
19-24	2.8	13	40	210	80	440	8.1	262	0	1200	290	1.0
FEB.												
13-16	9.6	10	--	180	63	400	9.3	236	0	1100	170	1.1
17-28	23	10	--	180	57	390	8.3	234	0	1100	180	.9
MAR.												
01-02	160	9.7	--	180	42	290	7.4	205	0	1000	64	.8
03-08	197	9.4	--	110	23	210	6.0	184	0	630	40	.7
09-14	39	10	--	120	28	250	5.8	194	0	710	69	.9
15-31	126	9.2	--	140	31	230	5.9	184	0	750	66	.8
APR.												
01-22	145	8.7	--	140	31	230	5.9	158	0	740	39	.9
23-30	273	10	--	130	30	210	5.4	140	0	710	56	1.0
MAY												
01-20	221	9.3	--	160	35	220	5.6	122	0	850	42	1.0
21-31	175	9.1	--	150	36	220	5.4	117	0	860	38	1.0
JUNE												
01-22	57	9.2	--	160	37	230	5.6	115	0	880	45	1.1
JULY												
16-..	10	13	--	240	56	320	7.5	162	0	1300	71	1.0
17-23	219	10	--	140	29	230	6.5	126	0	800	46	1.3
AUG.												
03-04	79	14	--	130	24	150	7.2	191	0	540	43	.7
SEPT.												
01-04	99	13	--	240	46	310	10	208	0	1100	57	.6
12-16	144	11	--	160	30	190	11	160	0	700	65	.7
CALENDAR YEAR												
WTU. AVG.	--	9.5	--	148	33	229	6.1	147	0	795	53	.9
TIME WTU.												
AVG.	129	9.7	--	155	37	255	6.5	162	0	847	74	.9
TOT. LOAD (TONS)	--	513	--	7970	1770	12400	330	7940	0	42900	2860	51
WATER YEAR												
WTU. AVG.	--	9.4	--	144	31	213	6.3	148	0	741	52	.9
TIME WTU.												
AVG.	146	9.7	--	153	37	254	6.6	168	0	823	82	.9
TOT. LOAD (TONS)	--	750	--	11500	2470	17000	500	11800	0	59100	4180	71

## RIO GRANDE BASIN

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

CHEMICAL ANALYSES, COMPOSITES OF DAILY SAMPLES, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

DATE	DIS-SOLVED NITRATE (N) (MG/L) (00631)	DIS-SOLVED NITRATE (P) (MG/L) (00671)	DIS-SOLVED NITRATE (B) (UG/L) (01020)	DIS-SOLVED NITRATE (RES- DUE AT 180 L) (MG/L) (70300)	DIS-SOLVED NITRATE (SUM OF CONSI- DUE AT (MG/L) (70301)	DIS-SOLVED NITRATE (IONS PER AC-FT) (70303)	DIS-SOLVED NITRATE (IONS PER DAY) (70302)	HAZU- NESS (LA+MG) (MG/L) (00900)	NUN- CAR- BONATE HAZU- NESS (MG/L) (00902)	SODIUM AU- SUMP- TION RATIO (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHUS) (00095)	pH (UNITS) (00400)
JAN. 19-24	1.1	.02	570	2590	2380	3.24	18.0	850	640	6.6	3210	7.9
FEB. 13-16	.98	--	--	--	2050	2.79	53.1	710	520	6.5	2810	8.0
17-28	.66	--	--	--	2040	2.77	127	680	490	6.5	2620	8.1
MAR. 01-02	.50	--	--	--	1700	2.31	734	620	450	5.1	2260	7.9
03-06	.69	--	--	--	1120	1.52	596	370	220	4.8	1570	7.7
09-14	1.1	--	--	--	1290	1.75	136	420	260	5.3	1760	7.5
15-31	.98	--	--	--	1350	1.84	459	480	330	5.0	1760	8.0
APR. 01-22	1.3	--	--	--	1300	1.77	509	480	350	4.6	1760	8.0
23-30	1.1	--	--	--	1230	1.67	907	450	330	4.3	1640	7.9
MAY 01-20	1.2	--	--	--	1390	1.89	829	540	440	4.1	1810	7.7
21-31	.88	--	--	--	1380	1.88	652	520	430	4.2	1810	8.1
JUNE 01-22	.88	--	--	--	1430	1.94	220	550	460	4.3	1900	7.8
JULY 16-..	1.3	--	--	--	2090	2.84	56.4	830	700	4.8	2640	7.8
17-23	2.0	--	--	--	1330	1.81	786	470	370	4.6	1830	7.6
AUG. 03-04	.71	--	--	--	1010	1.37	215	420	270	3.2	1400	7.7
SEP. 01-04	.81	--	--	--	1880	2.56	503	790	620	4.8	2490	7.8
12-16	1.1	--	--	--	1250	1.70	486	520	390	3.6	1760	7.8
CALENDAR YEAR WTU. AVG.	1.1	--	--	--	1350	1.84	--	503	383	4.5	1800	7.8
TIME WTU. AVG.	1.1	--	--	--	1470	2.00	--	540	409	4.8	1960	7.9
TOT. LOAD (TONS)	61	--	--	--	73000	--	--	--	--	--	--	--
WATER YEAR WTU. AVG.	1.1	--	--	--	1280	1.74	--	486	366	4.2	1720	7.7
TIME WTU. AVG.	1.1	--	--	--	1450	1.98	--	534	397	4.8	1960	7.8
TOT. LOAD (TONS)	89	--	--	--	102000	--	--	--	--	--	--	--

SPECIFIC CONDUCTANCE (MICROMHUS/CM AT 25 DEG. C.) CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973  
(ONCE-DAILY)

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	---	---	2220	1910	1650	1870	---	---	3400	---	---	---
2	---	---	2160	1910	1740	1880	---	---	2440	---	---	---
3	---	---	1660	1770	1730	1800	---	1420	2100	---	---	---
4	---	---	1490	2070	1770	1890	---	1280	2180	---	---	---
5	---	---	1440	1830	1880	1890	---	---	---	---	---	---
6	---	---	1470	2000	1890	1910	---	---	---	---	---	---
7	---	---	1500	2040	1870	1930	---	3000	---	---	---	---
8	---	---	1510	2010	1810	1890	---	---	---	---	---	---
9	---	---	1630	2060	1820	1960	---	---	---	---	---	---
10	---	---	1690	2010	1880	1980	---	---	---	---	---	---
11	---	---	1730	2010	1980	1950	---	---	---	---	---	---
12	---	---	1790	2080	1960	1970	---	3050	2060	---	---	---
13	---	2600	1890	1790	1930	1960	---	---	1700	---	---	---
14	---	2520	1870	1830	1860	1940	---	---	1590	---	---	---
15	---	2700	1790	1660	1930	1850	---	---	1640	---	---	---
16	---	2520	1850	1570	1940	1870	2640	---	1830	---	---	---
17	---	2510	1850	1670	1830	1900	2300	---	---	---	---	---
18	---	2700	1830	1690	1940	1890	1860	---	---	---	---	---
19	3100	2520	2180	1630	1930	1890	2170	---	---	---	---	---
20	2260	2360	1980	1530	1940	1970	2060	---	---	---	---	---
21	3200	2280	1830	1570	1920	2000	1800	---	---	---	---	---
22	2340	2400	1740	1640	1880	2080	1830	---	---	---	---	---
23	2490	2450	1630	1660	1820	---	1920	---	---	---	---	---
24	2800	2480	1630	1710	1820	---	---	---	---	---	---	---
25	---	2260	1620	1930	1920	---	---	---	---	---	---	---
26	---	2540	1650	1590	1690	---	---	---	---	---	---	---
27	---	2500	1740	1590	1880	---	---	---	---	---	---	---
28	---	2400	2040	1560	1870	---	---	---	---	---	---	---
29	---	---	2030	1610	1770	---	---	---	---	---	---	---
30	---	---	1970	1590	1860	---	---	3070	---	---	---	---
31	---	---	1950	---	1870	---	---	2250	---	---	---	---
MONTH	---	---	1780	1790	1860	---	---	---	---	---	---	---

RIO GRANDE BASIN

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

TEMPERATURE (DEG. C) OF WATER, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973  
(ONCE-DAILY)

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

SUSPENDED-SEDIMENT DISCHARGE, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

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	0	0	0	189	142000	76800
2	0	0	0	0	0	0	130	133000	46700
3	0	0	0	0	0	0	272	157000	131000
4	0	0	0	0	0	0	346	147000	150000
5	0	0	0	0	0	0	200	101000	54500
6	0	0	0	0	0	0	150	76000	30800
7	0	0	0	0	0	0	140	74000	28000
8	0	0	0	0	0	0	74	56500	11300
9	0	0	0	0	0	0	47	58500	7420
10	0	0	0	0	0	0	50	46500	6280
11	0	0	0	0	0	0	40	43500	4700
12	0	0	0	4.4	6700	211	40	51500	5560
13	0	0	0	10	16200	437	30	44500	3600
14	0	0	0	12	20400	661	25	41500	2800
15	0	0	0	10	31400	848	70	77000	14600
16	0	0	0	6.4	29500	510	80	62000	13400
17	0	0	0	7.2	25300	492	100	56500	15300
18	0	0	0	9.5	24900	639	110	52400	15600
19	3.7	1010	25	8.5	27300	627	120	62000	20100
20	6.8	2220	41	8.0	28300	611	140	74500	28200
21	4.5	2270	26	10	28900	760	160	71500	30900
22	1.5	1600	6.5	15	29000	1170	168	68500	31100
23	.52	650	.91	18	30700	1500	183	90100	47200
24	.08	900	.13	19	37500	1920	180	83500	40600
25	0	0	0	18	30800	1500	170	74000	34000
26	0	0	0	12	30000	972	160	58500	25300
27	0	0	0	13	35800	1260	155	49000	20500
28	0	0	0	133	125000	44900	150	53500	21700
29	0	0	0	--	--	--	90	67500	16400
30	0	0	0	--	--	--	50	82000	11100
31	0	0	0	--	--	--	50	79000	10700
TOTAL	17.10	--	101.60	314.0	--	59038	3874	--	956160



## RIO GRANDE BASIN

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

## SUSPENDED-SEDIMENT DISCHARGE, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

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	50	70000	9450	250	92000	62100	100	100000	27000
2	50	74000	9990	215	85000	49300	120	118000	38200
3	50	67000	9050	218	85500	50300	140	123000	46500
4	50	65500	8570	200	72500	39200	130	100000	35100
5	53	57500	8230	188	63800	32400	120	116000	37600
6	55	65000	9650	178	66500	32000	100	92000	24800
7	55	63500	9430	192	95400	49500	90	81000	19700
8	50	53500	7220	100	97000	26200	80	83400	18000
9	63	90000	20200	70	92300	17400	70	103000	19500
10	25	67000	4520	51	77000	10600	60	91000	14700
11	20	64500	3480	72	88000	17100	50	103000	13900
12	20	77500	4190	116	108000	34400	45	96500	11700
13	128	68000	30400	329	143000	154000	40	92000	9940
14	248	113000	75700	348	126000	118000	35	94000	8800
15	363	134000	139000	320	183000	158000	30	88500	7170
16	410	95500	106000	370	183000	183000	20	113000	6100
17	299	99000	79900	344	129000	120000	10	91500	2470
18	270	85000	62000	308	121000	101000	7.0	87500	1650
19	266	60000	57500	302	112000	91300	5.0	89400	1210
20	250	94500	63800	254	114000	78200	3.5	94000	880
21	200	70400	38000	239	124000	80000	2.5	98500	665
22	170	63000	28900	225	125000	75900	1.0	93400	252
23	150	46500	18800	212	123000	70400	0	0	0
24	170	49000	22500	212	120000	68700	0	0	0
25	180	51400	25000	198	117000	62500	0	0	0
26	272	73500	54000	192	120000	62200	0	0	0
27	327	87000	76800	178	115000	55300	0	0	0
28	394	107000	114000	150	112000	45400	0	0	0
29	355	102000	97800	124	102000	34100	0	0	0
30	338	92500	84400	105	99000	28100	0	0	0
31	--	--	--	88	90500	21500	--	--	--
TOTAL	5371	--	1278480	6350	--	2028100	1259.0	--	345925
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	276	149000	155000
2	0	0	0	200	119000	64300	100	132000	35600
3	22	31500	7480	108	99700	36500	20	99000	5350
4	20	55700	3010	50	56000	7560	1.0	96000	259
5	0	0	0	40	49500	5350	0	0	0
6	0	0	0	30	47000	3810	0	0	0
7	0	0	0	10	70000	1890	0	0	0
8	0	0	0	5.0	47500	641	0	0	0
9	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	60	90000	14600
11	0	0	0	0	0	0	82	85800	26300
12	0	0	0	1.0	80500	217	480	146000	201000
13	0	0	0	0	0	0	200	68000	36700
14	0	0	0	0	0	0	30	50000	4050
15	0	0	0	0	0	0	10	39500	1070
16	10	216000	5830	0	0	0	1.0	60000	162
17	318	47500	158000	0	0	0	0	0	0
18	569	125000	229000	0	0	0	0	0	0
19	231	106000	66100	0	0	0	0	0	0
20	290	153000	137000	0	0	0	0	0	0
21	80	110000	23800	0	0	0	0	0	0
22	30	81500	6600	0	0	0	0	0	0
23	16	81300	3510	0	0	0	0	0	0
24	10	79800	2150	0	0	0	0	0	0
25	5.0	67000	905	0	0	0	0	0	0
26	1.0	50000	135	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	1.0	93400	252	0	0	0
30	0	0	0	5.0	111000	1500	--	--	--
31	0	0	0	0	0	0	--	--	--
TOTAL	1600.0	--	643520	450.0	--	122020	1260.0	--	480091

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

## SUSPENDED-SEDIMENT DISCHARGE, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

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									
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

CAL YR 1973 TOTAL WATER DISCHARGE (CFS-DAYS)  
 CAL YR 1973 TOTAL SUSPENDED-SEDIMENT DISCHARGE (TONS)

20495.10  
 5913435.6

WTR YR 1973 TOTAL WATER DISCHARGE (CFS-DAYS)  
 WTR YR 1973 TOTAL SUSPENDED-SEDIMENT DISCHARGE (TONS)

30405.60  
 7958370.6

## INSTANTANEOUS SUSPENDED-SEDIMENT DISCHARGE AND PARTICLE SIZE, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

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 .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 .031 MM (70341)	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)
FEB.												
14...	1630	10.0	15	21600	875	80	93	99	100	--	--	--
27...	1800	13.0	13	37500	1320	83	97	100	--	--	--	--
MAR.												
15...	1700	9.5	153	76400	31600	56	63	79	--	92	98	100
27...	1630	13.0	69	47700	8890	83	99	86	--	100	--	--
APR.												
14...	0700	9.0	290	107000	83800	50	56	72	--	95	100	--
26...	0630	8.0	293	71200	56300	48	55	72	--	94	99	100
MAY												
13...	1900	15.0	935	240000	606000	26	30	42	--	78	97	100
24...	1445	20.0	210	114000	64600	50	56	68	--	91	98	100
JUNE												
04...	1700	21.5	130	105000	36900	50	61	74	--	93	99	100
14...	1730	23.5	40	95700	10300	70	80	95	--	100	--	--
JULY												
18...	1430	24.0	245	128000	81400	51	58	70	--	93	99	100
AUG.												
12...	0800	19.5	1.0	135000	365	75	92	100	--	--	--	--
31...	1830	22.0	5.0	112000	1510	73	84	99	--	100	--	--
SEP.												
13...	1700	22.0	200	59500	32100	58	75	89	--	95	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 mi (0.5 km) upstream from bridge on Interstate Highway 25, 3.1 mi (5.0 km) upstream from mouth, 2.9 mi (4.7 km) north of San Acacia, and 15 mi (24 km) north of Socorro.

DRAINAGE AREA.—1,380 mi<sup>2</sup> (3,570 km<sup>2</sup>), 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.

INSTANTANEOUS SUSPENDED SEDIMENT, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

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)
JULY 27...	1200	25.5	67	73300	13300

## 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 (30 m) downstream from gaging station, at downstream side of railway crossing, 0.5 mi (0.8 km) south of San Acacia, and 1.2 mi (1.9 km) 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, 930 micromhos Feb. 23; minimum daily, 266 micromhos May 28.  
Water temperatures: Maximum, 31.0°C July 4; minimum, freezing point Jan. 1, 5.  
Sediment concentrations: Maximum daily, 40,000 mg/l Mar. 4; minimum daily, 680 mg/l Sept. 9.  
Sediment discharge: Maximum daily, 145,000 tons (132,000 tonnes) July 16; minimum daily, 66 tons (60 tonnes) Aug. 21.

## 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, 1972, and 1973.  
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 (479,000 tonnes) Aug. 28, 1972; minimum daily, 0 tons (0 tonnes) on many days during most years.

## CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS) (00061)	SPE- CIFIC CONDUCTANCE (MICROMHOS) (00095)	TEMPERATURE (DEG C) (00010)	TOTAL ORGANIC CARBON (C) (MG/L) (00680)	PHENOLS (UG/L) (32730)	OIL AND GREASE (MG/L) (00550)
MAR. 03...	1745	660	1240	10.0	201 *	8 *	14 *

\* Analyzed to determine stream condition because of recent accidental waste spill upstream.

## SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973 (ONCE-DAILY)

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	618	550	900	700	517	371	331	382	635	659	655	517
2	615	595	920	725	504	375	328	384	640	625	624	510
3	610	593	880	598	512	391	339	396	640	653	608	505
4	623	593	865	603	479	375	334	416	630	655	610	507
5	623	590	790	647	477	362	379	405	625	656	610	504
6	645	600	663	762	453	369	378	402	630	670	616	497
7	612	580	625	727	488	370	359	471	638	670	613	497
8	617	555	613	637	488	375	369	455	625	695	614	497
9	630	547	668	738	437	374	368	445	660	708	615	495
10	600	545	608	721	428	375	377	445	670	695	610	495
11	612	590	575	666	440	366	370	493	670	647	609	495
12	612	580	697	703	445	370	386	456	815	645	621	493
13	635	580	670	836	451	351	390	442	700	596	630	507
14	610	608	594	901	501	336	382	453	638	620	727	505
15	610	625	798	795	525	346	393	480	639	595	641	507
16	618	610	612	709	496	355	920	470	620	615	805	500
17	597	592	628	646	446	348	780	500	634	620	804	500
18	568	531	612	664	423	336	650	555	560	640	744	505
19	585	615	596	635	417	344	580	660	550	650	714	501
20	620	585	718	607	415	341	760	710	570	655	703	508
21	585	565	708	571	412	344	590	693	595	662	673	500
22	603	595	641	585	408	349	530	658	625	680	654	497
23	555	930	710	546	405	367	450	653	705	672	556	501
24	585	535	797	567	391	362	414	640	695	675	534	495
25	600	635	614	626	378	361	386	680	695	645	526	492
26	620	633	593	626	377	365	398	671	675	640	533	491
27	580	580	620	608	377	360	450	695	668	650	535	496
28	605	890	671	644	266	356	422	692	663	686	538	495
29	590	---	564	597	373	339	406	725	647	673	530	487
30	535	---	604	576	356	328	400	675	690	655	513	495
31	585	---	640	---	381	---	400	672	---	668	---	503
MONTH	603	608	664	666	434	359	452	544	648	654	626	500

## RIO GRANDE BASIN

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

TEMPERATURE (DEG. C) OF WATER, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973  
(ONCE-DAILY)

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

SUSPENDED SEDIMENT DISCHARGE, CALENDAR YEAR, JANUARY 1973 TO DECEMBER 1973

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	846	7700	17600	918	5950	14700	174	7540	6500
2	786	8400	17800	911	4830	11900	106	17000	4870
3	744	9900	19900	828	5200	11600	606	39800	65100
4	729	8740	17200	828	6600	14800	1020	40000	110000
5	708	9400	18000	735	5550	11000	1470	26200	104000
6	771	8550	17800	756	5400	11000	1280	25500	88100
7	807	7700	16800	864	5230	12200	1120	20500	62000
8	774	7300	15700	912	6700	16500	864	14700	34300
9	786	7650	16200	924	4700	11700	750	12500	25300
10	816	6550	14400	921	6300	15700	1070	13500	39000
11	849	6450	14800	854	6000	13800	1400	15100	57100
12	866	6800	15900	833	6320	14200	774	6900	14400
13	831	7300	16400	845	5950	13600	752	6100	12400
14	757	7600	15500	889	5200	12500	1110	5280	15800
15	771	6550	13600	860	4800	11100	1110	7600	22800
16	827	6400	14300	830	4500	10100	1090	6350	18700
17	867	5200	12200	851	5000	11500	857	4460	10300
18	852	5900	13600	878	5560	13200	823	3650	8110
19	828	6700	15000	832	5100	11500	919	4940	12300
20	875	7300	17200	845	5370	12300	989	7630	20400
21	854	5700	13100	844	5600	12800	1080	5400	15700
22	861	6050	14100	829	6080	13600	1270	7400	25400
23	836	6000	13500	904	5900	14400	1520	13600	55800
24	852	6760	15600	934	5700	14400	1620	14700	64300
25	830	5950	13300	784	5400	11400	1450	13900	54400
26	785	5440	11500	716	5380	10400	1260	8800	29900
27	839	6300	14300	700	4300	8130	982	7100	18800
28	793	5360	11500	633	6650	10600	1000	7420	20000
29	820	5850	13000	--	--	--	1070	7000	20200
30	837	5900	13300	--	--	--	1350	10200	37200
31	857	6050	14000	--	--	--	1550	14700	61500
TOTAL	25254	--	467100	23458	--	350630	32436	--	1134680

RIO GRANDE BASIN

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08354800 RIO GRANDE CONVEYANCE CHANNEL AT SAN ACACIA, N. MEX.--Continued  
SUSPENDED-SEDIMENT DISCHARGE, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

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	1290	13400	46700	1410	17100	65100	1470	6200	24600
2	1300	10800	37900	1410	16000	60900	1460	7200	28400
3	1600	8650	37400	1360	16300	59900	1470	7250	28800
4	1340	6000	21700	1400	15100	57100	1460	6500	25600
5	1290	5750	20000	1490	15000	60300	1460	5850	23100
6	1020	7350	20200	1450	15600	61100	1470	5960	23700
7	741	5620	11200	1540	21000	87300	1430	6450	24900
8	965	4550	11900	1470	15500	61500	1440	9540	37100
9	1360	12300	46600	1460	9500	37400	1430	9040	34900
10	848	7400	16900	1420	8000	30700	1460	8130	32000
11	848	5700	13100	1400	9400	35500	1440	5360	20800
12	651	5850	10300	1400	13600	51400	1430	6000	23200
13	766	11000	22800	1400	15400	58200	1430	6700	25900
14	1250	23800	90100	1470	17000	67500	1420	9200	35300
15	1650	27000	120000	1470	21600	85700	1370	8100	30000
16	1380	23500	87600	1430	18900	73000	1400	7400	28000
17	1400	32500	123000	1440	13500	52500	1450	7100	27800
18	1400	20300	76700	1470	13700	54400	1500	6800	27500
19	1460	13500	53200	1440	13700	53300	1450	7150	28000
20	1490	16800	67600	1470	10800	42900	1470	7060	28000
21	1460	13100	51600	1450	12400	48500	1480	5800	23200
22	1390	10100	37900	1420	11800	45200	1460	4360	17200
23	1380	8580	32000	1470	12200	48400	1500	3680	14900
24	1340	7550	27300	1490	11600	46700	1520	3600	14800
25	1330	7900	28400	1480	8400	33600	1500	3600	14600
26	1470	21100	83700	1460	10300	40600	1480	4040	16100
27	1450	17600	68900	1460	8900	35100	1480	4100	16400
28	1420	18700	71700	1480	8650	34600	1440	4600	17900
29	1460	17900	70600	1460	9400	37100	1440	4200	16300
30	1430	16300	62900	1470	7150	28400	1470	3900	13500
31	--	--	--	1480	6000	24000	--	--	--
TOTAL	38179	--	1469900	44920	--	1577900	43680	--	724500
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	1460	3900	15400	1600	3700	16000	880	13300	31600
2	1440	3760	14600	1600	9250	40000	830	12200	27300
3	1430	4500	17400	1600	8300	35900	626	9600	16200
4	1440	4800	18700	1590	5900	25300	511	6200	8550
5	1450	5000	19600	1580	4000	17100	352	3500	3330
6	1440	5700	22200	1600	3820	16500	220	2550	1510
7	1440	5150	20000	1610	4940	21500	245	1600	1060
8	1500	4170	16900	1430	4400	17000	172	850	395
9	1520	3400	14000	1240	4400	14700	52	680	95
10	1530	3150	13000	1140	3950	12200	133	1440	1010
11	1520	3750	15400	1050	4400	12500	777	13100	33300
12	1510	3850	15600	988	4780	12800	1430	28400	110000
13	1510	3580	14600	1040	3700	10400	1450	21000	82200
14	1530	3550	14700	1050	2900	8220	978	12500	33000
15	1530	3500	14500	981	3610	9560	678	7600	13900
16	1420	37800	145000	1030	3350	9320	513	5550	7690
17	1430	23000	88800	987	2900	7730	420	3950	4480
18	1460	19900	78400	585	2300	3630	716	4830	9760
19	1520	14700	60300	172	1800	836	711	4070	7810
20	1490	21700	87300	92	1850	460	619	3490	5830
21	1410	14900	56700	31	790	66	460	1080	1340
22	1340	8500	30800	102	910	251	317	1240	1060
23	1420	7800	29900	148	1410	563	185	1040	519
24	1440	6300	24500	181	2190	1070	143	1260	486
25	1670	5000	22500	225	3980	2420	145	1550	607
26	1600	5000	21600	90	2130	518	157	1970	835
27	1500	6900	27900	50	850	115	182	1440	708
28	1470	5500	21800	85	11200	2570	228	1270	782
29	1500	3060	12400	55	960	143	226	2120	1290
30	1690	3820	17400	240	3050	2590	192	1690	876
31	1640	4300	19000	484	5130	7520	--	--	--
TOTAL	46250	--	990900	24656	--	309482	14548	--	407523



## RIO GRANDE BASIN

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

SUSPENDED-SEDIMENT DISCHARGE, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

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	149	1250	503	675	1520	2770	1520	5470	22400
2	215	1320	766	975	5880	15500	1500	2900	11700
3	215	1080	627	1020	4900	13500	1610	2190	9520
4	250	1490	1010	945	4800	12200	1700	3950	18100
5	232	1250	783	873	4000	9430	1730	4100	19200
6	265	1080	773	760	4510	9250	1760	4180	19900
7	232	1130	708	899	4500	10900	1760	5090	24200
8	238	1790	1150	909	4500	11000	1750	4660	22000
9	167	1170	528	904	4470	10900	1720	4180	19400
10	174	790	371	914	4430	10900	1710	3830	17700
11	250	1410	952	912	4470	11000	1730	3330	15600
12	333	1060	953	905	4500	11000	1750	3490	16500
13	498	2110	2840	868	4570	10700	1740	3540	16600
14	465	2440	3060	828	4730	10600	1770	4110	19600
15	465	3020	3790	519	6330	8870	1790	5650	27300
16	390	1880	1980	390	4570	4810	1830	4770	23600
17	374	1450	1460	354	5300	5070	1800	3950	19200
18	354	1110	1060	480	21200	27500	1790	3070	14800
19	310	1400	1170	582	10500	16500	1780	2790	13400
20	278	1610	1210	657	6000	10600	1740	3700	17400
21	246	1200	797	678	6000	11000	1750	3700	17500
22	267	1010	728	813	6100	13400	1770	2830	13500
23	265	1140	816	1280	6400	22100	1780	2500	12000
24	267	1560	1120	1340	5470	19800	1730	2320	10800
25	324	1830	1600	1400	5940	22500	1720	2800	13000
26	315	2310	1960	1420	7100	27200	1740	2870	13500
27	288	2960	2300	1440	6590	25600	1740	2120	9960
28	230	2190	1360	1480	7700	30800	1740	4100	19300
29	250	1470	992	1510	5610	22900	1730	3610	16900
30	300	1940	1570	1490	5430	21800	1770	3380	16200
31	372	1790	1800	--	--	--	1780	2770	13300
TOTAL	8978	--	40737	28220	--	440100	53730	--	524080
CAL YR 1973	TOTAL WATER DISCHARGE (CFS-DAYS)								384309
CAL YR 1973	TOTAL SUSPENDED-SEDIMENT DISCHARGE (TONS)								8437532
WTR YR 1973	TOTAL WATER DISCHARGE (CFS-DAYS)								376958.3
WTR YR 1973	TOTAL SUSPENDED-SEDIMENT DISCHARGE (TONS)								11901361

INSTANTANEOUS SUSPENDED-SEDIMENT DISCHARGE AND PARTICLE SIZE, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

DATE	TIME	TEMPERATURE (DEG F) (00010)	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SUS- PENDED SEDIMENT (MG/L) (80154)	SUS- PENDED SEDIMENT DIS- CHARGE (T/DAY) (80155)	SUS. SED. FALL DIAM. % FINER THAN .002 MM (70331)	SUS. SED. FALL DIAM. % FINER THAN .004 MM (70338)
JAN.							
14...	1625	7.0	735	7990	15900	6	7
FEB.							
09...	1800	5.5	984	4720	12500	12	15
26...	1610	4.0	765	6400	13200	18	21
MAR.							
05...	1725	9.0	1670	24500	110000	38	43
21...	1620	12.5	1240	5060	16900	68	79
APR.							
17...	1815	14.0	1400	38600	146000	33	37
MAY							
23...	0900	18.0	1490	11000	44300	29	34
JUNE							
08...	1950	24.0	1490	7840	31500	23	26
25...	0830	20.5	1510	3680	15000	8	9
JULY							
05...	2010	27.0	1410	5000	19000	6	7
16...	1400	24.5	1320	54200	193000	41	50
AUG.							
25...	1905	25.0	156	4390	1850	44	53
SEP.							
04...	1840	24.0	504	5200	7080	41	46
14...	1825	23.5	912	9840	24200	48	59
OCT.							
01...	1810	20.0	174	1410	662	--	13
20...	1805	19.0	275	1570	1170	7	8
NOV.							
30...	1600	8.0	1480	6390	25500	8	9
DEC.							
13...	1615	8.0	1720	3580	16600	10	12
31...	1610	4.0	1790	2590	12500	11	13

RIO GRANDE BASIN

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

INSTANTANEOUS SUSPENDED-SEDIMENT DISCHARGE AND PARTICLE SIZE,  
CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

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. 14...	11	19	36	84	100	--
FEB. 09...	22	40	59	86	99	100
26...	26	42	66	89	99	100
MAR. 05...	58	90	98	99	100	--
21...	97	100	--	--	--	--
APR. 17...	47	75	89	98	100	--
MAY 23...	42	68	87	96	99	100
JUNE 08...	31	58	85	97	100	--
25...	12	29	68	96	100	--
JULY 05...	9	24	59	93	100	--
16...	69	86	92	99	100	--
AUG. 25...	63	66	71	98	100	--
SEP. 04...	57	67	79	98	100	--
14...	65	75	87	97	100	--
OCT. 01...	14	21	39	91	100	--
20...	12	21	35	79	98	100
NOV. 30...	13	27	57	92	100	--
DEC. 13...	17	39	72	93	100	--
31...	18	39	77	96	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 mi (0.3 km) below San Acacia diversion dam, 0.3 mi (0.5 km) east of San Acacia, and 2 mi (3 km) downstream from Rio Salado, and at mile 1,472.6 (2,369.4 km).

DRAINAGE AREA.—26,770 mi<sup>2</sup> (69,330 km<sup>2</sup>), approximately, including 2,940 mi<sup>2</sup> (7,610 km<sup>2</sup>) 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, 1,310 micromhos July 16; minimum daily, 321 micromhos June 30.

Water temperatures: Maximum, 31.0°C July 4; minimum, 2.0°C Dec. 27-28.

Sediment concentrations: Maximum daily, 37,000 mg/l Mar. 4; minimum daily, 81 mg/l Feb. 24.

Sediment discharge: Maximum daily, 345,000 tons (313,000 tonnes) May 15; minimum daily, 0.25 tons (0.23 tonnes) Jan. 4.

Period of record:

Specific conductance (1937, 1939-56, 1964-73): 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, 1964-73), 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 (1,600,000 tonnes) Aug. 12, 1955, minimum daily, 0 tons (0 tonnes) on many days of most years.

REMARKS.—Additional sediment total discharge determinations were made bi-weekly when needed.

## CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS) (00061)	SPL-LIFIC CONDUCTANCE (MICRO-MHOS) (00095)	TEMPERATURE (DEG C) (00010)	TOTAL ORGANIC CARBON (C) (MG/L) (00680)	PHENOLS (UG/L) (32730)	OIL AND GREASE (MG/L) (00550)
MAR. 01...	0915	845	980	7.0	88 *	4 *	6 *

\* Analyzed to determine stream condition because of recent accidental waste spill upstream in the drainage basin.

## SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973 (ONCE-DAILY)

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	765	900	980	705	509	388	324	382	670	680	686	630
2	765	925	880	915	497	385	324	406	665	665	640	510
3	675	953	815	885	474	386	325	484	663	682	670	623
4	725	915	855	915	472	378	326	397	650	690	650	648
5	665	875	780	900	455	368	331	402	648	695	760	583
6	595	845	735	952	450	359	346	381	660	710	635	555
7	660	845	585	980	480	359	359	466	695	735	647	562
8	720	710	688	845	464	358	374	497	610	740	665	563
9	785	930	729	824	439	385	349	491	700	720	664	564
10	670	925	692	816	427	367	376	480	653	700	680	560
11	808	960	605	815	427	376	378	456	530	665	685	575
12	820	880	750	794	427	363	390	468	780	643	710	513
13	882	925	706	950	442	340	386	465	663	615	723	525
14	720	965	635	824	479	334	383	460	690	650	773	535
15	640	955	810	785	505	348	388	477	710	619	755	563
16	780	980	642	700	492	342	1310	469	665	620	830	565
17	908	880	665	641	444	386	770	535	632	628	830	550
18	423	895	639	658	428	322	635	560	620	637	810	567
19	496	955	615	634	416	326	600	632	563	650	780	543
20	930	885	742	585	416	337	780	700	570	665	745	573
21	895	923	650	568	414	329	605	735	563	672	680	555
22	880	886	760	580	401	341	545	670	640	678	705	517
23	840	592	880	547	389	364	448	670	713	677	620	523
24	805	950	620	630	379	351	423	640	695	670	703	580
25	920	920	875	669	372	346	395	655	713	649	591	570
26	940	660	778	662	369	345	388	665	705	653	593	575
27	890	615	882	601	375	345	450	660	725	660	634	555
28	940	910	825	629	367	344	429	668	682	670	590	516
29	920	---	712	591	365	337	408	725	678	667	665	580
30	925	---	736	541	383	321	406	660	728	648	625	540
31	975	---	950	---	373	---	392	675	---	673	---	510
MONTH	786	877	749	738	430	354	463	550	663	669	691	559

08354900 RIO GRANDE FLOODWAY AT SAN ACACIA, N. MEX.--Continued  
 TEMPERATURE (DEG. C) OF WATER, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973  
 (ONCE-DAILY)

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

SUSPENDED-SEDIMENT DISCHARGE, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

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	1.2	82	.27	3.2	200	1.7	612	18600	29900
2	1.1	108	.32	3.1	185	1.5	657	19300	34200
3	1.1	121	.36	3.0	190	1.5	542	25400	44100
4	.97	95	.25	2.8	170	1.3	363	37000	36300
5	3.1	453	5.4	3.1	246	2.1	244	23600	15500
6	2.9	643	5.0	2.8	190	1.4	168	15100	6850
7	2.8	639	4.8	2.8	139	1.1	23	9000	559
8	3.1	620	5.2	2.6	140	.98	11	4800	143
9	3.6	529	5.1	2.6	139	.98	7.8	2790	59
10	4.3	482	5.6	2.4	140	.91	7.6	2400	49
11	4.5	467	5.7	2.3	135	.84	18	1900	92
12	4.4	462	5.5	2.4	139	.90	28	3200	242
13	4.4	531	6.3	2.2	100	.59	34	3140	288
14	4.3	360	4.2	2.2	87	.52	38	2470	253
15	4.7	310	3.9	2.2	142	.84	37	3830	476
16	4.6	310	3.9	2.0	98	.53	39	3150	332
17	4.4	341	4.1	2.1	148	.84	37	2200	220
18	4.1	285	3.2	2.1	198	1.1	40	2520	272
19	4.0	286	3.1	2.0	159	.86	48	3360	558
20	4.0	283	3.1	2.1	248	1.4	25	4750	321
21	3.9	260	2.7	2.0	160	.86	32	9530	1040
22	3.7	267	2.7	2.1	95	.54	11	4380	130
23	3.6	273	2.7	2.1	130	.74	15	6770	348
24	3.5	227	2.1	2.2	81	.48	7.2	4100	80
25	3.4	193	1.8	2.1	99	.56	14	903	36
26	3.4	220	2.0	35	2390	473	5.6	675	10
27	3.2	220	1.9	112	2650	801	4.1	834	9.2
28	3.1	179	1.5	243	6970	8270	10	1360	33
29	3.1	166	1.4	--	--	--	20	3030	198
30	3.2	175	1.5	--	--	--	9.0	2300	56
31	3.4	222	2.0	--	--	--	2.3	900	5.6
TOTAL	105.07	--	97.60	450.5	--	9569.07	3109.6	--	172659.8

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

## SUSPENDED-SEDIMENT DISCHARGE, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

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	17	6940	400	1790	11500	55600	5480	5580	82600
2	10	3300	89	2580	10700	74500	5560	6150	92300
3	20	702	44	2780	9190	69000	5860	5400	85400
4	10	814	22	2290	8000	49500	6160	5150	85700
5	10	505	14	2030	8200	44900	5950	4800	77100
6	5.7	500	7.7	2920	9000	71000	5570	5550	83500
7	6.2	850	14	3570	10500	101000	4400	4800	57000
8	21	629	40	3010	7800	63400	4130	4000	44600
9	44	1360	181	2660	7500	53900	4020	5600	60800
10	18	527	28	2890	6000	46800	3430	4150	38400
11	12	285	9.2	2710	5350	39100	3390	3350	30700
12	5.5	340	5.0	2660	8600	61800	3520	3500	33300
13	4.5	566	7.2	3610	10700	104000	3720	3060	30700
14	31	5890	914	4940	13200	176000	4580	3820	47200
15	376	15800	22700	6520	19600	345000	4100	4700	52000
16	1500	23800	96400	7140	15800	305000	3660	4790	47300
17	1440	17600	68400	6020	14000	228000	3050	4450	36600
18	787	14100	30000	5800	9700	152000	2480	3200	21400
19	632	12200	20800	5580	8700	131000	2340	2650	16700
20	1320	12900	46000	5720	8100	125000	2010	2200	11900
21	1050	9400	26600	5820	9000	141000	1640	1710	7570
22	320	5500	4750	6110	8000	132000	1260	1600	5440
23	164	3400	1510	6080	9000	148000	965	1160	3020
24	34	2250	207	5800	8500	133000	1350	1450	5290
25	18	1890	148	5400	7600	111000	1460	1400	5520
26	216	7370	4350	5640	8000	122000	1500	1180	4780
27	787	10600	22500	5780	9200	144000	1540	1240	5160
28	1120	12400	37500	6160	8500	141000	1880	1370	6950
29	666	11800	21900	5900	5900	94000	2160	2050	12000
30	1220	10900	35900	5840	5400	85100	2220	1910	11400
31	--	--	--	5440	5100	74900	--	--	--
TOTAL	11884.9	--	441440.1	141190	--	3622500	99385	--	1102330
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	2300	1460	9070	534	1680	2420	63	2090	356
2	2100	1380	7820	1040	6230	17500	18	6100	296
3	1860	1490	7480	885	7450	17800	24	5980	368
4	1480	1260	5030	461	3500	4360	22	3640	216
5	1250	1100	3710	378	1410	1440	26	1650	116
6	1060	990	2830	237	1200	768	31	1030	86
7	878	945	2240	96	1630	422	34	640	59
8	864	1010	2360	33	1470	131	29	500	39
9	1000	990	2670	23	1620	101	44	580	69
10	1200	940	3050	24	1150	75	48	2570	323
11	1380	1030	3840	31	850	71	88	2040	650
12	972	960	2520	32	1430	124	1740	23600	126000
13	1160	890	2790	35	675	64	362	10700	10500
14	1450	980	3840	28	334	25	25	3870	261
15	1590	1930	8290	26	542	38	30	1970	160
16	868	23800	74300	31	680	57	25	1760	119
17	882	22000	52400	26	642	45	22	2000	119
18	958	18500	47900	26	525	37	118	2130	905
19	1610	12500	54300	19	500	26	44	2000	238
20	1300	15800	53500	21	500	28	42	1300	147
21	752	9660	19600	20	330	18	47	1580	201
22	684	4500	8310	21	240	14	26	698	49
23	982	3400	9010	22	360	21	81	294	64
24	1280	4100	14200	39	555	58	127	487	215
25	1120	2300	6960	49	1280	169	22	412	24
26	1210	1750	5720	48	950	123	17	380	17
27	2360	3850	24500	45	1190	145	15	355	14
28	1020	2860	7880	49	1040	138	13	455	16
29	800	2600	5620	52	480	67	13	401	14
30	615	850	1410	152	1460	1810	11	255	7.5
31	589	1620	2580	74	3140	627	--	--	--
TOTAL	37574	--	457730	4557	--	48722	3207	--	141678.5



RIO GRANDE BASIN

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

SUSPENDED-SEDIMENT DISCHARGE, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

OCTOBER				NOVEMBER			DECEMBER		
DAY	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	12	880	29	18	450	22	3.9	570	6.0
2	16	420	18	44	1460	173	3.0	655	5.3
3	11	699	21	16	740	32	3.0	2000	16
4	11	4110	122	11	490	15	3.0	870	7.0
5	15	760	31	24	650	42	3.9	760	8.0
6	18	250	12	134	1510	687	6.2	1010	17
7	15	240	9.7	22	920	55	6.5	790	14
8	15	195	7.9	19	710	36	7.1	640	12
9	20	340	18	17	560	26	7.4	750	15
10	21	340	19	13	410	14	7.7	690	14
11	23	293	18	11	340	10	7.3	1250	25
12	32	470	41	9.4	310	7.9	9.9	1210	32
13	21	700	40	8.0	340	7.3	12	1200	39
14	21	619	35	6.6	315	5.6	12	940	30
15	26	467	33	8.3	475	11	9.8	640	17
16	22	435	26	6.3	270	4.6	9.2	520	13
17	26	410	29	5.5	210	3.1	9.1	720	18
18	31	381	32	5.1	470	6.5	10	550	15
19	34	355	33	5.8	355	5.6	11	720	21
20	35	180	17	6.2	350	5.9	11	545	16
21	37	200	20	15	699	49	14	680	26
22	30	265	21	7.4	1170	23	26	850	60
23	26	278	20	6.9	990	18	17	840	39
24	26	358	25	5.8	970	15	12	540	17
25	26	300	21	4.3	1420	16	14	500	19
26	26	309	22	5.7	1070	16	16	530	23
27	26	305	21	5.5	674	10	27	940	69
28	27	320	23	4.6	730	9.1	23	870	54
29	28	439	33	3.9	550	5.8	22	490	29
30	25	213	14	3.9	574	6.0	25	460	31
31	25	119	8.0	--	--	--	25	520	35
TOTAL	727	--	819.6	453.2	--	1337.4	374.0	--	742.3

CAL YR 1973 TOTAL WATER DISCHARGE (CFS-DAYS)  
 CAL YR 1973 TOTAL SUSPENDED-SEDIMENT DISCHARGE (TONS)  
 WTR YR 1973 TOTAL WATER DISCHARGE (CFS-DAYS)  
 WTR YR 1973 TOTAL SUSPENDED-SEDIMENT DISCHARGE (TONS)

303017.27  
 5999626.37  
 312336.51  
 7576708.26

INSTANTANEOUS SUSPENDED-SEDIMENT DISCHARGE AND PARTICLE SIZE, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

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. DIAM. % FINER THAN .002 MM (70337)	SUS. SED. DIAM. % FINER THAN .004 MM (70338)	SUS. SED. DIAM. % FINER THAN .016 MM (70340)
JAN.								
29...	1645	5.0	3.2	165	1.4	63	78	92
FEB.								
26...	1625	14.0	54	4910	716	27	34	53
MAR.								
02...	1825	14.0	616	17800	29600	67	76	94
21...	1635	12.5	22	10600	630	41	48	59
APR.								
18...	1740	11.5	496	13500	17800	48	63	75
MAY								
04...	1825	17.0	2120	7680	44000	38	44	55
08...	1130	14.5	3100	6300	52700	44	52	66
11...	0930	14.0	2910	4460	35000	41	54	67
16...	0640	13.0	7380	16000	319000	36	40	51
22...	1045	17.0	6010	7980	129000	40	48	58
JUNE								
05...	1100	18.0	6000	4480	72600	28	33	43
19...	0750	17.0	2260	2530	13400	24	30	38
JULY								
03...	1000	24.0	1820	1540	7570	20	24	32
16...	1415	24.5	992	46700	125000	49	58	77
AUG.								
07...	0900	23.0	114	1660	511	68	81	96
25...	1920	25.0	52	1740	244	58	70	84
SEP.								
04...	1855	24.0	18	2520	122	70	83	98
19...	1930	23.0	37	1930	193	52	68	89
OCT.								
07...	1745	18.0	12	263	8.5	35	41	48
NOV.								
06...	1050	12.0	207	1630	911	19	24	35
DEC.								
07...	1645	5.0	7.4	705	14	43	54	68
31...	1625	4.0	97	597	156	46	50	65



## RIO GRANDE BASIN

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

INSTANTANEOUS SUSPENDED-SEDIMENT DISCHARGE AND PARTICLE SIZE,  
CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

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 (70345)	SUS. SED. FALL DIAM. % FINER THAN (70331)	SUS. SED. FALL DIAM. % FINER THAN (70332)	SUS. SED. FALL DIAM. % FINER THAN (70333)
JAN.							
29...	--	--	--	--	96	99	100
FEB.							
26...	83	98	100	--	--	--	--
MAR.							
02...	100	--	--	--	--	--	--
21...	86	97	99	100	--	--	--
APR.							
18...	98	100	--	--	--	--	--
MAY							
04...	90	99	100	--	--	--	--
08...	96	99	100	--	--	--	--
11...	97	100	--	--	--	--	--
16...	90	99	100	--	--	--	--
22...	89	99	100	--	--	--	--
JUNE							
05...	73	94	100	--	--	--	--
19...	64	94	100	--	--	--	--
JULY							
03...	64	95	100	--	--	--	--
16...	98	100	--	--	--	--	--
AUG.							
07...	--	--	--	--	99	100	--
25...	96	100	--	--	--	--	--
SEP.							
04...	100	--	--	--	--	--	--
19...	--	--	--	--	99	99	100
OCT.							
07...	50	71	100	--	--	--	--
NOV.							
06...	63	92	100	--	--	--	--
DEC.							
07...	84	89	100	--	--	--	--
31...	--	--	--	--	94	99	100

PARTICLE SIZE OF SURFACE BED MATERIAL, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS) (000061)	SUS- PENDED SEDIM- ENT DIS- CHARGE (MG/L) (80154)	SUS- PENDED SEDIM- ENT DIS- CHARGE (T/DAY) (80155)	BED 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)
MAY									
08...	1130	3100	6300	52700	51	89	99	100	--
11...	0930	2910	4460	35000	7	26	89	100	--
22...	1045	6010	7980	129000	47	94	99	100	--
JUNE									
05...	1100	6000	4480	72600	28	88	100	--	--
JULY									
03...	1000	1820	1540	7570	4	26	93	100	--
AUG.									
07...	0900	114	1660	511	38	88	99	100	--
NOV.									
06...	1050	207	1630	911	1	25	95	99	100

TOTAL-SEDIMENT DISCHARGE, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

DATE	TIME	TEMPER- ATURE (DEG C) (00010)	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SUS- PENDED SEDIM- ENT DIS- CHARGE (MG/L) (80154)	SUS- PENDED 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)
MAR.									
21...	1635	12.5	22	10600	630	677	28	.53	1.5
MAY									
08...	1130	14.5	3100	6300	52700	56900	195	2.9	5.4
11...	0930	14.0	2910	4460	35000	38100	187	3.0	5.2
22...	1045	17.0	6010	7980	129000	144000	225	3.8	6.9
JUNE									
05...	1100	18.0	6000	4480	72600	81000	220	4.0	6.9
19...	0750	17.0	2260	2530	15400	19700	200	3.1	3.7
JULY									
03...	1000	24.0	1820	1540	7570	10200	195	2.5	3.8
AUG.									
07...	0900	23.0	114	1660	511	840	70	.70	2.3
NOV.									
06...	1050	12.0	207	1630	911	1250	72	1.4	2.1

RIO GRANDE BASIN

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08358300 RIO GRANDE CONVEYANCE CHANNEL AT SAN MARCIAL, N. MEX.  
(Irrigation, surveillance, and radiochemical network station)

LOCATION.—Lat 33°41'07", long 106°59'40", Socorro County, in Pedro Armendaris Grant No. 34, at gaging station 0.4 mi (0.6 km) northwest of Atchison, Topeka and Santa Fe Railway Co. bridge over floodway channel, 1.0 mi (1.6 km) southwest of former site of San Marcial, 3.5 mi (5.6 km) downstream from railroad bridge near Tiffany siding, and 51 mi (82 km) downstream from heading at San Acacia.

PERIOD OF RECORD.—Chemical analyses: March 1954 to current year.

Specific conductance: March 1954 to current year.

Water temperatures: March 1954 to current year.

Sediment records: March 1954 to current year.

EXTREMES:

Current year:

Specific conductance: Maximum daily, 1,300 micromhos Sept. 2; minimum daily, 357 micromhos July 9.

Water temperatures: Maximum, 27.0°C July 9; minimum, 1.0°C Dec. 21-22, 27.

Sediment concentrations: Maximum daily, 39,400 mg/l Sept. 14; minimum daily, 490 mg/l Aug. 29.

Sediment discharge: Maximum daily, 150,000 tons (136,000 tonnes) Apr. 15; minimum daily, 394 tons (357 tonnes) Aug. 29.

Period of 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 (579,000 tonnes) Aug. 28 1972; minimum daily, 0 tons (0 tonnes) on many days during 1956, 1958, 1963, 1964, 1968, 1969, 1971, and 1972.

REMARKS.—Additional sediment total discharge determinations were made bi-weekly when needed.

CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	DIS- SOLVED SILICA (SiO <sub>2</sub> ) (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 <sub>3</sub> ) (MG/L) (00440)	CAR- BONATE (CO <sub>3</sub> ) (MG/L) (00445)	DIS- SOLVED SULFATE (SO <sub>4</sub> ) (MG/L) (00445)
JAN.												
02...	1100	724	--	--	--	--	--	--	--	--	--	--
08...	1230	813	--	--	--	--	--	--	--	--	--	--
15...	0900	702	--	--	--	--	--	--	--	--	--	--
22...	1100	766	--	--	--	--	--	--	--	--	--	--
23...	1630	690	27	40	--	62	11	66	5.3	196	0	130
FEB.												
05...	1115	692	--	--	--	--	--	--	--	--	--	--
21...	1400	922	26	140	--	63	11	69	4.8	201	0	130
MAR.												
19...	1020	990	--	--	--	--	--	--	--	--	--	--
20...	1330	1010	22	20	--	60	12	73	4.5	172	0	170
APR.												
02...	0915	1320	--	--	--	--	--	--	--	--	--	--
10...	1245	1040	23	9	--	63	13	78	4.7	179	0	170
16...	1110	1510	--	--	--	--	--	--	--	--	--	--
24...	1530	1460	22	20	0	52	9.8	53	4.4	159	0	120
MAY												
09...	1115	1580	--	--	--	--	--	--	--	--	--	--
21...	1215	1770	19	20	--	44	8.2	39	3.2	136	0	100
JUNE												
25...	1400	1610	20	40	--	41	7.0	29	3.7	127	0	76
JULY												
06...	1200	1570	20	--	--	42	6.9	31	3.7	133	0	78
11...	1200	1540	--	--	--	--	--	--	--	--	--	--
16...	1100	1690	--	--	--	--	--	--	--	--	--	--
30...	1530	1820	21	30	--	46	7.8	36	3.9	139	0	92
AUG.												
29...	1217	502	23	0	--	79	14	72	5.3	214	0	190
SEP.												
04...	0930	717	--	--	--	--	--	--	--	--	--	--
17...	1005	662	--	--	--	--	--	--	--	--	--	--
24...	0930	530	--	--	--	--	--	--	--	--	--	--
25...	1232	534	25	0	--	74	13	75	5.1	227	0	160
OCT.												
01...	1105	262	25	20	--	65	12	68	5.7	194	0	150
24...	1500	481	27	10	--	71	13	71	6.1	214	0	150
NOV.												
19...	1200	139	30	480	--	67	13	82	5.7	225	0	150
DEC.												
10...	1015	1690	--	--	--	--	--	--	--	--	--	--
12...	1100	1700	25	20	0	54	9.3	43	4.6	163	0	98

## CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

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)	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)	TOTAL ORGANIC NITRO- GEN (N) (MG/L) (00605)	TOTAL NITRO- GEN (N) (MG/L) (00600)	TOTAL PHOS- PHORUS (P) (MG/L) (00665)	DIS- SOLVED ORTHOPHOS- PHORUS (P) (MG/L) (00671)
JAN.												
02...	--	--	--	--	--	--	--	--	--	--	--	--
08...	--	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--	--	--	--
23...	42	.6	.27	.00	--	.27	.49	.49	1.6	2.4	1.3	.44
FEB.												
05...	--	--	--	--	--	--	--	--	--	--	--	--
21...	40	.5	2.0	.03	2.0	2.0	.10	--	1.2	3.3	.93	.39
MAR.												
19...	--	--	--	--	--	--	--	--	--	--	--	--
20...	37	.6	2.1	.03	2.1	2.1	.11	--	3.6	5.8	1.9	.23
APR.												
02...	--	--	--	--	--	--	--	--	--	--	--	--
10...	38	.6	--	--	--	.57	--	--	--	--	--	.20
16...	--	--	--	--	--	--	--	--	--	--	--	--
24...	28	.3	.53	.02	.55	.55	.11	--	2.7	3.4	1.5	.17
MAY												
09...	--	--	--	--	--	--	--	--	--	--	--	--
21...	20	.6	.98	.02	1.0	1.0	.11	--	3.7	4.8	1.7	.04
JUNE												
25...	15	.5	.18	.00	.28	.18	.00	--	1.1	1.4	.65	.13
JULY												
06...	15	.4	--	--	--	.25	--	--	--	--	--	--
11...	--	--	--	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	--	--	--
30...	17	.4	.31	.00	6.4	.31	6.0	--	.00	12	.87	.46
AUG.												
29...	41	.5	.02	.00	.02	.02	.10	--	.04	.16	.16	.13
SEP.												
04...	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--	--
25...	41	.6	.01	.01	.20	.02	.06	--	1.3	1.6	.76	.21
OCT.												
01...	40	.5	--	--	--	.12	--	--	--	--	--	.25
24...	41	.6	.25	.01	.27	.26	.06	--	.63	.96	.52	.37
NOV.												
19...	53	.5	.43	.02	.54	.45	.63	--	.77	1.9	.79	.50
DEC.												
10...	--	--	--	--	--	--	--	--	--	--	--	--
12...	24	.6	.28	.01	.38	.29	.05	--	1.5	1.9	1.0	.24

DATE	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 HARU- 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)
JAN.											
02...	--	--	--	--	--	640	--	.0	10	500	--
08...	--	--	--	--	--	639	--	4.0	10	320	--
15...	--	--	--	--	--	675	--	4.0	10	360	--
22...	--	--	--	--	--	675	--	4.0	10	360	--
23...	444	445	200	39	2.0	699	8.1	4.5	--	--	150
FEB.											
05...	--	--	--	--	--	687	--	7.0	20	450	--
21...	450	462	200	38	2.1	702	7.9	5.5	--	--	140
MAR.											
19...	--	--	--	--	--	638	--	10.0	2	825	--
20...	503	483	200	58	2.3	739	7.6	11.0	--	--	110
APR.											
02...	--	--	--	--	--	707	--	9.0	4	850	--
10...	506	482	210	64	2.3	749	7.9	15.0	--	--	140
16...	--	--	--	--	--	722	--	10.5	4	650	--
24...	382	371	170	40	1.8	579	7.7	15.0	--	--	120
MAY											
09...	--	--	--	--	--	479	--	17.0	33	1600	--
21...	317	310	140	32	1.4	475	7.7	18.0	--	--	90
JUNE											
25...	281	257	130	27	1.1	420	7.5	24.0	--	--	60
JULY											
06...	--	264	130	24	1.2	409	7.9	25.0	--	--	--
11...	--	--	--	--	--	341	--	24.0	7	180	--
16...	--	--	--	--	--	116	--	22.0	5	350	--
30...	313	296	150	33	1.3	458	7.9	24.5	--	--	70
AUG.											
29...	532	531	260	79	2.0	806	8.2	26.0	--	--	150
SEP.											
04...	--	--	--	--	--	720	--	19.0	15	--	--
17...	--	--	--	--	--	696	--	20.0	12	--	--
24...	--	--	--	--	--	766	--	17.5	--	180	--
25...	528	507	240	52	2.1	786	7.8	18.5	--	--	170
OCT.											
01...	482	463	210	53	2.0	737	7.7	14.5	--	--	140
24...	490	488	230	55	2.0	762	8.1	10.0	--	--	130
NOV.											
19...	526	516	220	36	2.4	822	8.4	7.0	--	--	130
DEC.											
10...	--	--	--	--	--	682	--	3.0	10	500	--
12...	349	341	170	39	1.4	535	7.9	3.5	--	--	110

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 1973 TO DECEMBER 1973

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 (CU) (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)
APR. 24...	1530	4	0	120	0	0	13	20	100	0	.3
DEC. 12...	1100	9	0	110	0	0	0	20	<100	0	.0

DATE	DIS-	DIS-	DIS-	DIS-	SUS-	DIS-	SUS-	DIS-	SUS-	DIS-	DIS-
	SOLVED	SOLVED	SOLVED	SOLVED	PENDED	SOLVED	PENDED	SOLVED	PENDED	SOLVED	SOLVED
	SILVER	SELE-	ZINC	ALPHA	GROSS	GROSS	GROSS	BETA	GROSS	BETA	RA-226
	(AG)	NIUM	(ZN)	AS	AS	AS	AS	AS SR90	AS SR90	(RADON	NATURAL
(UG/L)	(SE)	(UG/L)	(UG/L)	U-NAI	U-NAT.	CS-137	CS-137	/Y90	/Y90	METHOD)	(U)
(01075)	(UG/L)	(01145)	(01090)	(UG/L)	(UG/L)	(PC/L)	(PC/L)	(PC/L)	(PC/L)	(PC/L)	(UG/L)
(01075)	(01145)	(01090)	(80030)	(80040)	(03515)	(04516)	(80050)	(80060)	(09511)	(22703)	
APR.											
24...	0	4	10	15	160	7.1	77	5.8	62	.07	3.1
DEC.											
12...	0	2	0	5.0	160	5.7	76	4.7	62	.10	2.1

FIELD AND BIOCHEMICAL MEASUREMENTS, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

DATE	TIME	INSTANTANEOUS DIS-CHARGE (CFS) (00061)	SPECIFIC CONDUCTANCE (MICROMHOS) (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)	FECAL COLIFORM (COL. PER 100 ML) (31616)	TOTAL ORGANIC CARBON (C) (MG/L) (00680)
JAN. 23...	1630	690	655	8.7	4.5	7.5	15	400	9.2	--	9.5 *
FEB. 21...	1400	922	680	8.2	5.5	3.5	20	370	9.8	3300	--
MAR. 20...	1330	1010	720	8.2	11.0	18.0	15	3200	8.0	1100	33 *
APR. 24...	1530	1460	560	8.1	15.0	24.0	15	4100	--	380	23 *
MAY 21...	1215	1770	470	7.6	18.0	25.0	10	2100	7.8	360	31 *
JUNE 25...	1400	1610	410	7.6	23.5	32.5	25	260	7.2	140	10 *
JULY 30...	1530	1820	460	7.9	24.5	32.0	16	300	6.9	1500	17
AUG. 29...	1217	502	760	7.6	26.0	31.0	15	95	7.4	310	8.0
SEP. 25...	1232	534	770	8.3	18.5	27.5	--	--	8.3	150	9.5
OCT. 24...	1500	481	762	8.1	10.0	25.0	--	--	10.6	230	1.0
NOV. 19...	1200	639	822	8.4	7.0	9.5	--	--	10.2	1800	10
DEC. 12...	1100	1700	535	7.9	3.5	17.0	--	--	11.0	1800	14

\* Analyzed by New Mexico Environmental Improvement Agency.

## RIO GRANDE BASIN

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

PESTICIDE ANALYSES, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

DATE	TIME	TOTAL ORGANIC CARBON (C) (UG/L) (39360)	ALDRIN (UG/L) (39330)	ALDRIN IN BOTTOM DE- POSITS (UG/KG) (39333)	CHLOR- DANE IN BOTTOM DE- POSITS (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)
APR. 24...	1530	--	.00	.0	.0	0	.00	.0	.01	.0	.00
JULY 30...	1530	17	.00	.0	.0	0	.00	.0	.01	.0	.00

DATE	DDT IN BOTTOM DE- POSITS (UG/KG) (39373)	DI- AZINON (UG/L) (39370)	DI- ELURIN (UG/L) (39380)	DI- ELURIN 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 IN BOT- TOM DE- POSITS (UG/KG) (39423)
APR. 24...	.0	.00	.00	.0	.00	.0	.00	.0	.00	.0
JULY 30...	.0	.02	.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) (39350)	METHYL PARA- THION (UG/L) (39360)	PARA- THION (UG/L) (39340)	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)
APR. 24...	.00	.0	.00	.00	.00	.0	0	.00	.00	.00
JULY 30...	.00	.0	.00	.00	.00	.0	0	.00	.00	.00

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973  
(ONCE-DAILY)

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	---	---	---	---	---	443	---	446	695	760	740	523
2	---	---	---	706	---	---	---	447	1300	760	712	543
3	---	---	---	---	---	---	416	478	387	725	640	536
4	---	---	---	---	---	445	---	535	765	745	648	530
5	---	630	1000	---	---	441	408	525	705	705	656	523
6	---	---	---	---	---	436	401	490	710	690	665	518
7	---	---	---	---	469	431	---	474	704	710	650	524
8	---	---	---	---	530	---	---	518	680	725	648	524
9	---	665	---	---	488	---	357	514	700	755	645	523
10	---	---	---	741	500	---	412	518	775	768	635	522
11	---	---	---	---	486	---	423	535	640	760	645	522
12	---	---	---	---	---	420	---	531	745	705	640	527
13	---	---	---	---	---	433	---	516	785	703	655	530
14	---	605	---	---	716	432	---	507	775	635	665	520
15	---	---	---	---	563	---	---	503	715	660	700	527
16	---	---	---	741	585	---	456	504	660	660	770	520
17	---	---	---	---	497	---	---	501	685	675	830	523
18	---	---	---	---	479	---	---	560	653	660	850	524
19	---	---	660	---	---	412	---	655	587	682	795	520
20	---	671	705	---	---	401	707	720	580	690	768	523
21	---	580	---	---	468	427	---	780	610	700	735	530
22	---	---	---	---	---	---	---	830	615	720	710	523
23	650	615	---	---	479	---	570	830	703	735	635	530
24	---	---	---	549	451	---	491	770	770	735	590	529
25	---	---	---	---	418	412	465	750	770	721	570	523
26	---	635	626	---	---	407	---	780	773	708	570	533
27	---	---	---	---	452	415	---	785	750	720	563	530
28	---	---	---	---	---	412	---	795	755	740	553	525
29	---	---	680	---	---	430	---	795	745	758	552	523
30	---	---	---	574	423	---	454	780	740	750	546	517
31	---	---	---	---	444	---	458	825	---	761	---	523
MONTH	---	---	---	---	---	---	---	619	716	717	666	525



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

TEMPERATURE (DEG. C) OF WATER, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973  
(ONCE-DAILY)

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

## SUSPENDED SEDIMENT DISCHARGE, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

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	826	3500	7810	922	3500	8710	246	3300	2190
2	794	4300	9220	942	3200	8140	214	8600	4970
3	734	3700	7330	810	2500	5470	362	19300	18900
4	738	3300	6580	854	2600	6000	686	37900	70200
5	726	2700	5290	762	2400	4940	1310	33200	117000
6	830	3500	7840	766	2000	4140	1310	32300	114000
7	826	3200	7140	846	2800	6400	858	22900	53100
8	854	3000	6920	998	4500	12100	758	15700	32100
9	814	2500	5490	862	3000	6980	618	12000	20000
10	834	2700	6080	922	3300	8220	762	10100	20800
11	870	3500	8220	922	3200	7970	1350	11800	43000
12	854	3300	7610	858	2800	6490	714	7700	14800
13	850	3200	7340	870	2800	6580	694	6110	11400
14	798	3100	6680	898	2800	6790	870	7700	18100
15	742	2500	5010	914	2800	6910	1210	9100	29700
16	806	2800	6090	842	2700	6140	990	6400	17100
17	858	3200	7410	858	2800	6490	1010	6100	16600
18	818	3000	6630	918	3000	7440	806	4600	10000
19	782	2600	5490	826	2800	6240	1020	6100	16800
20	822	2800	6210	862	2800	6520	1070	8100	25400
21	818	3000	6630	902	2800	6820	1190	4800	15400
22	782	2600	5490	822	2800	6210	1500	4500	18200
23	762	3400	7000	887	2800	6710	1610	10100	43900
24	818	3200	7070	970	3500	9170	1700	16200	74400
25	766	3200	6620	774	2800	5850	1690	13800	63000
26	750	3100	6280	710	2500	4790	1460	8200	32300
27	798	4000	8620	662	2000	3570	1230	7750	25700
28	794	2600	5570	694	3700	6930	1220	7500	24700
29	822	2500	5550	---	---	---	1230	7700	25600
30	882	3200	7620	---	---	---	1460	9250	36500
31	822	2800	6210	---	---	---	1830	10000	49400
TOTAL	24990	--	209050	23873	--	188720	32978	--	1063260



## RIO GRANDE BASIN

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

SUSPENDED SEDIMENT DISCHARGE CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

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	1490	8000	32200	1480	15000	59900	1750	4910	23200
2	1440	8000	31100	1400	12500	47300	1770	4350	20800
3	1590	10100	43400	1370	10700	39600	1790	4190	20300
4	1720	10700	49700	1450	11100	43500	1790	4250	20500
5	1430	7350	28400	1460	10800	42600	1770	5300	25300
6	1240	6900	23100	1490	9400	37800	1670	4950	22300
7	926	7500	18800	1570	9300	39400	1650	6100	26800
8	1080	4950	14400	1580	9650	41200	1580	7000	29900
9	1620	7050	30800	1550	9150	38300	1570	7700	32600
10	1150	10200	31700	1570	7900	33500	1550	7380	30900
11	1020	6600	18200	1450	8400	32900	1500	6330	25600
12	930	6700	16800	1590	11800	50700	1540	5430	22600
13	906	5900	14400	1620	17300	75700	1570	5050	21400
14	1230	9050	30100	1690	24000	110000	1600	3590	15500
15	1920	28900	150000	1720	18800	87300	1580	3410	14500
16	1450	24700	96700	1650	15000	66800	1630	3720	16400
17	1490	25800	104000	1590	12000	51500	1700	3500	16100
18	1450	33400	131000	1650	9600	42800	1790	3150	15200
19	1540	15500	64400	1600	12800	55300	1740	3800	17900
20	1590	13900	59700	1590	12000	51500	1690	2880	13100
21	1500	13700	55500	1730	9500	44400	1670	2770	12500
22	1420	10000	38300	1750	8750	41300	1630	2370	10400
23	1420	8300	31800	1700	9000	41300	1630	2570	11300
24	1350	6900	25200	1710	8900	41100	1650	2000	8910
25	1250	7000	23600	1710	6900	31900	1620	1890	6950
26	1540	17000	70700	1700	6150	28200	1610	2920	12700
27	1470	19100	75800	1640	5950	26300	1620	2890	12600
28	1450	18000	70500	1670	5650	25500	1600	1790	7730
29	1480	16200	64700	1690	5500	25100	1620	1750	7650
30	1470	13800	54800	1700	5580	25600	1690	2150	9810
31	--	--	--	1740	5650	26500	--	--	--
TOTAL	41562	--	1499800	49810	--	1404800	49550	--	531450
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	1730	2080	9720	1710	2750	12700	794	4580	10000
2	1750	2010	9500	1770	2700	12900	1030	23300	65600
3	1700	1590	7300	1780	4550	21900	790	14500	30900
4	1790	1670	8070	1790	5200	25100	730	8000	15800
5	1750	1570	7420	1810	3050	14900	622	4780	8030
6	1730	1690	7890	1850	1990	9940	482	2400	3120
7	1710	1800	8310	1810	2300	11200	530	1810	2590
8	1720	1950	9060	1660	3450	15500	462	1770	2210
9	1770	1990	9510	1450	2550	9980	370	1410	1410
10	1800	2390	11600	1350	1700	6200	410	1520	1680
11	1810	1900	9290	1250	1450	4890	722	5370	11900
12	1740	2100	9870	1170	1330	4200	1490	29800	123000
13	1730	2340	10900	1170	1270	4010	1570	23800	101000
14	1730	2390	11200	1120	1390	4200	1210	39400	134000
15	1770	2430	11600	1080	1320	3850	930	13900	34900
16	1640	20500	90800	1030	1490	4140	718	8800	17100
17	1530	27000	112000	1050	1450	4110	658	3900	6930
18	1570	21500	91100	862	1660	3860	682	2440	4490
19	1680	15500	70300	538	1330	1930	874	3210	7600
20	1650	12600	56100	446	895	1080	770	2360	4910
21	1590	15200	65300	310	900	753	674	2140	3890
22	1550	8700	36400	282	1190	906	658	2270	4030
23	1550	5990	24900	378	1320	1350	570	1600	2460
24	1620	5290	23000	362	1610	1570	538	1260	1830
25	1640	3550	15700	414	1960	2190	498	1440	1940
26	1610	3400	14800	282	1990	1320	442	1350	1610
27	1680	4150	18800	262	810	573	466	1470	1850
28	1670	4200	18900	258	610	425	462	1330	1640
29	1690	4350	19800	298	490	394	418	1420	1600
30	1730	3990	18600	366	550	544	366	1820	1800
31	1750	3300	15600	646	4070	8600	--	--	--
TOTAL	52380	--	833340	30554	--	195415	20936	--	609840

SUSPENDED-SEDIMENT DISCHARGE, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

[illegible]

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

INSTANTANEOUS SUSPENDED-SEDIMENT DISCHARGE AND PARTICLE SIZE, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

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)
JAN.								
23...	1430	4.5	690	3460	6450	15	19	27
29...	1115	4.0	698	2370	4470	19	25	37
FEB.								
20...	1100	4.5	821	2600	5760	29	36	49
MAR.								
05...	0900	7.0	1490	36700	148000	57	66	82
20...	1730	11.0	1020	8510	23400	48	57	72
APR.								
02...	0915	9.0	1320	8240	22200	39	49	58
24...	1530	15.0	1460	6360	25100	30	32	45
MAY								
14...	1100	10.0	1680	26400	120000	39	43	57
23...	1115	18.0	1710	8860	40900	36	40	51
JUNE								
06...	1320	19.5	1830	4510	22300	20	24	30
20...	1200	19.5	1790	3220	15600	21	26	31
JULY								
06...	1200	25.0	1570	2010	8520	13	16	20
16...	1100	22.0	1690	2910	13300	17	19	24
AUG.								
04...	0920	--	1830	5600	27700	42	48	57
06...	1000	23.0	1830	1930	9540	26	31	40
26...	0710	19.0	294	2390	1900	55	66	80
SEP.								
04...	0930	19.0	717	7010	13600	63	72	86
11...	1812	22.5	674	4620	8410	44	52	62
25...	1232	18.5	534	1450	2090	25	26	37
OCT.								
15...	1100	15.0	539	1050	1530	35	41	53
29...	0900	10.0	481	304	395	40	48	61
NOV.								
19...	1040	7.0	639	1120	1930	21	25	34
19...	1200	7.0	639	2100	3620	10	12	17
26...	1130	5.0	1360	3280	12000	15	18	24
DEC.								
03...	1130	4.0	1460	2540	10000	16	19	28
31...	1720	3.0	1770	3770	18000	8	8	12

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 1.00 MM (70346)	SUS. SED. FALL DIAM. % FINER THAN .062 MM (70351)	SUS. SED. FALL DIAM. % FINER THAN .125 MM (70352)	SUS. SED. FALL DIAM. % FINER THAN .250 MM (70353)
JAN.								
23...	52	86	100	--	--	--	--	--
29...	69	95	100	--	--	--	--	--
FEB.								
20...	76	96	100	--	--	--	--	--
MAR.								
05...	97	99	100	--	--	--	--	--
20...	89	97	99	100	--	--	--	--
APR.								
02...	82	97	100	--	--	--	--	--
24...	66	94	100	--	--	--	--	--
MAY								
14...	90	98	100	--	--	--	--	--
23...	83	98	100	--	--	--	--	--
JUNE								
06...	64	95	100	--	--	--	--	--
20...	53	92	100	--	--	--	--	--
JULY								
06...	50	93	100	--	--	--	--	--
16...	40	74	98	100	--	--	--	--
AUG.								
04...	72	89	99	100	--	--	--	--
06...	67	96	100	--	--	--	--	--
26...	89	98	100	--	--	--	--	--
SEP.								
04...	96	100	--	--	--	--	--	--
11...	75	91	100	--	--	--	--	--
25...	55	88	100	--	--	--	--	--
OCT.								
15...	81	98	99	100	--	--	--	--
29...	--	--	--	--	--	88	99	100
NOV.								
19...	78	99	100	--	--	--	--	--
19...	42	82	98	100	--	--	--	--
26...	55	93	100	--	--	--	--	--
DEC.								
03...	54	88	100	--	--	--	--	--
31...	29	61	94	99	100	--	--	--

## RIO GRANDE BASIN

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

PARTICLE SIZE OF SURFACE BED MATERIAL, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS) (00061)	SUS- PENDE SEDIMENT CHARGE (MG/L) (80154)	SUS- PENDE SEDIMENT 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.										
15...	1040	670	--	--	18	59	88	93	96	100
29...	1115	698	2370	4470	2	7	64	95	99	100
FEB.										
20...	1100	821	2600	5760	32	88	100	--	--	--
APR.										
10...	1245	1040	--	--	20	74	98	100	--	--
MAY										
14...	1100	1680	26400	120000	39	87	99	100	--	--
JULY										
16...	1100	1690	2910	13300	1	13	77	100	--	--
AUG.										
06...	1000	1830	1930	9540	17	79	100	--	--	--
SEP.										
04...	0930	717	7010	13600	3	29	91	99	100	--
OCT.										
15...	1100	539	1050	1530	38	84	99	100	--	--
29...	0900	481	304	395	1	5	55	98	100	--
NOV.										
19...	1040	639	1120	1930	50	94	98	98	100	--
26...	1130	1360	3280	12000	15	40	69	97	100	--
DEC.										
03...	1130	1460	2540	10000	1	5	94	100	--	--

TOTAL SEDIMENT DISCHARGE, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

DATE	TIME	TEMPER- ATURE (DEG C) (00010)	INSTANTANEOUS DIS- CHARGE (CFS) (00061)	SUS- PENDE SEDIMENT CHARGE (MG/L) (80154)	SUS- PENDE SEDIMENT CHARGE (T/DAY) (80155)	TOTAL SEDIMENT DIS- CHARGE (T/DAY) (80156)	STREAM WIDTH (FT) (00004)	MEAN DEPTH (FT) (00064)	STREAM VELOC- ITY (FPS) (00055)
JAN.									
29...	1115	4.0	698	2370	4470	6080	64	2.4	4.6
FEB.									
20...	1100	4.5	821	2600	5760	7430	65	2.6	4.9
MAR.									
05...	0900	7.0	1490	36700	148000	152000	68	3.8	5.8
APR.									
02...	0915	9.0	1320	8240	22200	33900	64	3.6	5.8
24...	1530	15.0	1460	6360	25100	31200	66	3.7	6.0
MAY									
14...	1100	10.0	1680	26400	120000	124000	66	3.9	6.5
JULY									
16...	1100	22.0	1690	2910	13300	18200	69	3.9	6.2
AUG.									
06...	1000	23.0	1830	1930	9540	12700	66	4.2	6.5
SEP.									
04...	0930	19.0	717	7010	13600	14800	66	2.4	4.5
OCT.									
15...	1100	13.0	539	1050	1530	2280	70	1.9	4.0
29...	0900	10.0	481	304	395	820	64	1.8	4.2
NOV.									
19...	1040	7.0	639	1120	1930	2940	69	2.2	4.3
26...	1130	5.0	1360	3280	12000	15200	66	3.7	5.6
DEC.									
03...	1130	4.0	1460	2540	10000	13600	66	3.7	5.9

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 mi (1.8 km) downstream from former site of San Marcial, and 18.5 mi (29.8 km) southwest of San Antonio, and at mile 1,425.2 (2,293.1 km).

DRAINAGE AREA.—27,700 mi<sup>2</sup> (71,740 km<sup>2</sup>), approximately, including 2,940 mi<sup>2</sup> (7,610 km<sup>2</sup>) 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, 912 micromhos Mar. 5; minimum daily, 337 micromhos June 20, July 5.

Water temperatures: Maximum, 29.0°C July 5; minimum, 7.0°C Mar. 16.

Sediment concentrations: Maximum daily, 33,500 mg/l May 14; minimum daily, no flow on many days.

Sediment discharge: Maximum daily, 344,000 tons (312,000 tonnes) May 14; minimum daily, 0 tons (0 tonnes) 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: Maximum, 36.0°C Aug. 11, 1951; minimum, 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 (876,000 tonnes) Oct. 22, 1957; minimum daily, 0 tons (0 tonnes) 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. 28, Mar. 12, Mar. 25 to Apr. 15, Aug. 8 to Sept. 11, Sept. 16 to Dec. 31. Additional sediment total load determinations were made bi-weekly when needed.

CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

DATE	TIME	INSTAN-	DIS-	DIS-	DIS-	DIS-	DIS-	DIS-	DIS-	BICAR-	CAR-	
		TANE- OUS DIS- CHARGE (LFS) (00061)	SOLVED SILICA (SI02) (MG/L) (00955)	SOLVED IRON (FE) (UG/L) (01046)	SOLVED MAN- GANESE (MN) (UG/L) (01056)	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)
MAR.												
19...	1200	16	23	9	--	66	13	75	4.6	189	0	
20...	1140	14	23	9	--	67	12	72	5.0	189	0	
APR.												
16...	1200	912	15	9	--	57	13	72	4.6	132	0	
24...	1800	81	21	9	0	55	9.7	52	4.2	155	0	
MAY												
09...	0915	2510	18	--	--	47	8.3	38	4.1	131	0	
23...	1145	4810	17	20	--	47	8.2	34	3.7	142	0	
JUNE												
06...	0940	4960	19	--	--	42	7.2	30	4.2	138	0	
20...	1300	1850	20	9	--	36	6.1	25	3.1	124	0	
JULY												
06...	0940	1200	19	--	--	39	6.1	24	3.4	125	0	
11...	0920	888	16	--	--	27	5.1	25	3.3	105	8	
16...	1430	560	17	--	--	39	6.3	26	3.3	132	0	
23...	1000	42	19	--	--	57	11	63	4.5	154	0	
30...	1400	508	20	20	--	42	7.4	31	3.7	131	0	
AUG.												
06...	0900	124	21	10	--	56	8.9	40	4.6	165	0	
SEP.												
13...	0900	604	19	30	--	87	15	51	5.7	155	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)	TOTAL NITRITE PLUS NITRATE (N) (MG/L) (00630)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	AMMONIA NITRO- GEN (N) (MG/L) (00610)	TOTAL ORGANIC NITRO- GEN (N) (MG/L) (00605)	TOTAL NITRO- GEN (N) (MG/L) (00600)	TOTAL PHOS- PHORUS (P) (MG/L) (00665)
MAR.												
19...	160	38	.7	--	--	--	.65	--	--	--	--	--
20...	160	38	.6	.76	.03	.79	.79	1.5	.10	2.4	.87	
APR.												
16...	200	25	.7	--	--	--	.05	--	--	--	--	--
24...	130	25	.4	.45	.01	.74	.46	.19	5.1	6.0	2.4	
MAY												
09...	110	18	.4	--	--	--	.13	--	--	--	--	--
23...	100	13	.6	--	--	--	.23	--	--	--	--	--
JUNE												
06...	78	14	.5	--	--	--	.13	--	--	--	--	--
20...	54	11	.4	--	--	--	.13	--	--	--	--	--
JULY												
06...	63	9.7	.4	--	--	--	.29	--	--	--	--	--
11...	67	11	.4	--	--	--	.00	--	--	--	--	--
16...	70	12	.4	--	--	--	.00	--	--	--	--	--
23...	170	23	.7	--	--	--	.60	--	--	--	--	--
30...	88	13	.5	.45	.01	.53	.46	--	--	--	1.8	--
AUG.												
06...	100	20	.4	--	--	--	.79	--	--	--	--	--
SEP.												
13...	220	18	.5	--	--	--	.34	--	--	--	--	--

## CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

DATE	DIS-	DIS-	DIS-	HARD- NESS (CA+MG) (MG/L) (00900)	NON-	SODIUM	SPE-	PH	TEMPER- ATURE (DEG C) (00010)	DIS- SOLVED BORON (B) (UG/L) (01020)
	SOLVED	SOLVED	SOLVED		CAR-	AD-	CIFIC			
	CRIMU.	SOLIDS	SOLIDS		BONATE	SCRIP-	CON-			
	PHOS- PHORUS (F) (MG/L) (00071)	RESI- DUE AL 100 C (MG/L) (70000)	(SUM OF CONSTI- TUENTS) (MG/L) (70001)		NESS HARD- NESS (MG/L) (00902)	TION RATIO (00931)	DUCT- ANCE (MICRO- PHUS) (00095)			
MAR.										
19...	.23	308	477	220	63	2.2	683	8.0	11.0	140
20...	.24	496	479	220	62	2.1	753	8.0	12.5	120
APR.										
16...	.05	492	453	200	88	2.2	702	8.0	11.0	130
24...	.14	390	376	180	50	1.7	579	7.8	15.0	110
MAY										
09...	--	--	309	150	44	1.3	487	7.4	15.0	--
23...	.04	310	295	150	35	1.2	454	7.5	18.5	60
JUNE										
06...	--	--	264	130	21	1.1	413	7.7	16.5	--
26...	.06	232	218	120	13	1.0	346	7.6	20.5	30
JULY										
01...	--	--	228	120	20	.9	355	7.8	23.5	--
11...	--	--	215	88	0	1.2	314	8.5	22.5	--
16...	--	--	209	120	15	1.0	373	8.0	22.0	--
23...	--	--	427	190	61	2.0	678	7.7	19.5	--
30...	.11	293	274	140	28	1.2	437	7.7	28.0	60
AUG.										
06...	.20	347	336	180	41	1.3	517	7.8	22.0	90
SEP.										
13...	.09	542	495	280	150	1.3	760	7.7	18.5	110

TRACE ELEMENT ANALYSES, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

		DIS- SOLVED ARSENIC (AS) (UG/L) (01000)	DIS- SOLVED BARIUM (BA) (UG/L) (01005)	DIS- SOLVED BORON (B) (UG/L) (01020)	DIS- SOLVED MIUM (CU) (UG/L) (01025)	HEXA- VALENT CHRO- MIUM (CR6) (UG/L) (01032)	DIS- SOLVED COPPER (CU) (UG/L) (01040)	
APR. 24...	1800	2	0	110	0	0	20	
		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)	DIS- SOLVED SILVER (AG) (UG/L) (01075)	DIS- SOLVED SELE- NIUM (SE) (UG/L) (01145)	DIS- SOLVED ZINC (ZN) (UG/L) (01090)
APR. 24...	9	200	0	.3	0	0	10	

## FIELD AND BIOCHEMICAL MEASUREMENTS, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

DATE	TIME	INSTANTANEOUS DIS- CHARGE (LFS) (00061)	SPECIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH  (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	AIR TEMPER- ATURE (DEG C) (00020)	COLOR (PLAT- INUM- CUBALT 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) (MG/L) (00680)
MAR. 20...	1140	14	710	8.3	12.0	17.5	E15	E3200	8.0	56	11 *
APR. 24...	1800	81	570	8.1	15.0	20.5	20	3100	--	90	56 *
MAY 21...	1415	4340	470	7.6	19.0	27.0	E10	E2100	7.8	--	--
JUNE 25...	1330	1220	410	7.6	23.5	32.5	E25	E260	7.2	--	--
JULY 30...	1400	508	450	8.0	28.0	30.0	15	700	6.9	2600	21

\* Analyzed by New Mexico Environmental Improvement Agency.



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

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973  
(ONCE-DAILY)

[illegible]

TEMPERATURE (DEG. C) OF WATER, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973  
(GNCE-DAILY)

[illegible]

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

## SUSPENDED-SEDIMENT DISCHARGE, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

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							298	11700	19100
2							495	23400	33200
3							500	23200	31300
4							490	30400	41600
5							272	27700	20300
6							110	21200	6300
7							45	12700	1540
8							15	7500	304
9							9.8	3400	90
10							4.2	1600	18
11							1.2	900	2.9
12							0	0	0
13							1.7	591	15
14							11	3300	98
15							13	2970	104
16							11	2650	79
17							14	2340	88
18							13	2380	84
19							13	3720	131
20							14	2100	79
21							11	18300	544
22							4.2	7800	88
23							5.9	5600	89
24							2.6	1200	8.4
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	0	--	0	0	--	0	2354.6	--	155162.3
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	1040	10900	30600	4700	14500	184000
2	0	0	0	1510	20300	82800	5110	16400	226000
3	0	0	0	1770	24800	119000	5360	15500	224000
4	0	0	0	1820	23000	113000	5970	17500	282000
5	0	0	0	1710	18800	86800	5660	18000	275000
6	0	0	0	2030	18100	99200	4940	15000	200000
7	0	0	0	2620	19700	139000	4410	13000	155000
8	0	0	0	2640	20200	144000	3540	12700	121000
9	0	0	0	2490	17100	115000	3080	11200	93100
10	0	0	0	2580	16400	114000	2420	9000	58800
11	0	0	0	2700	17600	128000	2400	7400	48000
12	0	0	0	2630	19000	135000	2550	9000	62000
13	0	0	0	2920	22000	173000	2830	7900	60400
14	0	0	0	3800	33500	344000	3370	6400	76400
15	0	0	0	4190	26600	301000	3960	10100	108000
16	765	23300	53400	4460	23500	283000	3430	9500	88000
17	990	26100	69800	4630	15800	198000	3180	9500	81600
18	900	22300	54200	4180	18300	207000	2810	9200	69800
19	528	18400	26200	4160	21000	236000	2270	7500	46000
20	950	26800	68700	4010	22100	239000	1870	4800	24200
21	990	25000	66800	3970	23100	248000	1570	3800	16100
22	424	17600	20100	4460	19100	230000	1100	2550	7570
23	154	11600	4820	4790	21400	277000	726	1950	3820
24	74	7800	1560	5220	15200	214000	840	2800	6350
25	11	4000	119	5740	13700	212000	1270	3350	11500
26	.60	2400	3.9	5740	13700	212000	1090	3000	8830
27	339	15300	17500	5380	15300	222000	903	2860	6970
28	865	19100	44600	5110	16500	228000	889	3400	8160
29	516	14000	19500	5100	17600	242000	1320	4900	17500
30	795	10800	23200	4860	14900	196000	1650	5200	23200
31	--	--	--	4640	14000	175000	--	--	--
TOTAL	8301.60	--	470502.9	112900	--	5743400	85218	--	2593300

## RIO GRANDE BASIN

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

## SUSPENDED-SEDIMENT DISCHARGE, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

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	1770	5550	26500	380	3150	3230	0	0	0
2	1640	5200	25000	545	8250	12100	0	0	0
3	1500	2750	11100	726	9200	18000	0	0	0
4	1490	2990	12000	455	6600	8110	0	0	0
5	1270	4390	15100	205	4400	2440	0	0	0
6	1180	3350	10700	120	2350	761	0	0	0
7	1000	2600	7020	39	1580	166	0	0	0
8	744	2450	4920	0	0	0	0	0	0
9	702	2990	5670	0	0	0	0	0	0
10	910	5200	12800	0	0	0	0	0	0
11	875	3600	8980	0	0	0	0	0	0
12	792	3400	7270	0	0	0	265	8070	25300
13	590	2650	4220	0	0	0	475	22000	28200
14	636	2900	4980	0	0	0	102	15500	4270
15	834	3900	8780	0	0	0	1.7	8700	40
16	644	3980	8100	0	0	0	0	0	0
17	585	5520	8720	0	0	0	0	0	0
18	624	5300	8930	0	0	0	0	0	0
19	460	6100	7910	0	0	0	0	0	0
20	980	13600	36000	0	0	0	0	0	0
21	618	19600	32700	0	0	0	0	0	0
22	154	16200	6740	0	0	0	0	0	0
23	34	11100	1020	0	0	0	0	0	0
24	531	10100	15200	0	0	0	0	0	0
25	540	5500	8020	0	0	0	0	0	0
26	545	4450	6550	0	0	0	0	0	0
27	1350	15100	80400	0	0	0	0	0	0
28	1280	11500	39700	0	0	0	0	0	0
29	618	5000	8540	0	0	0	0	0	0
30	505	3500	4770	0	0	0	0	0	0
31	405	3300	3610	0	0	0	--	--	--
TOTAL	25826	--	439750	2470	--	44807	843.7	--	57810

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									
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

CAL YR 1973 TOTAL WATER DISCHARGE (CFS-DAYS) 237913.90  
 CAL YR 1973 TOTAL SUSPENDED-SEDIMENT DISCHARGE (TONS) 9504732.2  
 WTR YR 1973 TOTAL WATER DISCHARGE (CFS-DAYS) 245093.70  
 WTR YR 1973 TOTAL SUSPENDED-SEDIMENT DISCHARGE (TONS) 10561148.9

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

INSTANTANEOUS SUSPENDED-SEDIMENT DISCHARGE AND PARTICLE SIZE, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

DATE	TIME	TEMPER- ATURE (DEG C) (00010)	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SUS- PENDEU SEDIM- ENT (MG/L) (80154)	SUS- PENDEU SEDIM- ENT (T/DAY) (80155)	SUS. SED. FALL DIAM. % FINE THAN .002 MM (70337)	SUS. SED. FALL DIAM. % FINE THAN .004 MM (70338)	SUS. SED. FALL DIAM. % FINE THAN .016 MM (70340)	SUS. SED. FALL DIAM. % FINE THAN .062 MM (70342)	SUS. SED. FALL DIAM. % FINE THAN .125 MM (70343)	SUS. SED. FALL DIAM. % FINE THAN .250 MM (70344)
MAR.											
05...	1215	8.9	286	27900	21500	64	80	93	100	--	--
20...	1140	12.5	14	1740	66	91	98	100	--	--	--
APR.											
16...	1200	11.0	912	25100	33900	51	60	88	100	--	--
24...	1800	15.0	81	6470	1410	67	89	93	95	98	100
MAY											
07...	1500	17.0	2540	20300	139000	31	35	50	82	96	100
09...	0900	15.0	2510	17200	117000	34	37	54	93	100	--
14...	1330	10.0	3950	36000	384000	8	10	12	97	100	--
23...	1145	18.5	4810	22500	292000	26	30	41	78	95	100
JUNE											
06...	0940	16.5	4960	15300	205000	19	23	31	72	96	100
20...	1300	20.5	1850	4460	22300	31	34	49	84	99	100
JULY											
06...	0940	23.5	1200	3130	10100	23	26	41	83	98	100
16...	1430	22.0	560	2900	4380	37	42	52	76	96	100
AUG.											
06...	0900	22.0	124	3180	1140	57	62	69	80	97	100
SEPT.											
13...	0900	18.5	604	22000	29700	65	81	95	99	100	--
13...	1812	23.0	318	21900	18800	68	83	93	96	99	100

PARTICLE SIZE OF SURFACE BED MATERIAL, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SUS- PENDEU SEDIM- ENT (MG/L) (80154)	SUS- PENDEU SEDIM- ENT (T/DAY) (80155)	BED MAT. FALL DIAM. % FINE THAN .062 MM (80158)	BED MAT. FALL DIAM. % FINE THAN .125 MM (80159)	BED MAT. FALL DIAM. % FINE THAN .250 MM (80160)	BED MAT. FALL DIAM. % FINE THAN .500 MM (80161)
MAY								
07...	1500	2540	20300	139000	26	57	92	100
23...	1145	4810	22500	292000	55	96	99	100
JUNE								
06...	0940	4960	15300	205000	69	97	99	100
20...	1300	1850	4460	22300	14	59	97	100
JULY								
06...	0940	1200	3130	10100	7	43	100	--
16...	1430	560	2900	4380	3	23	91	100
AUG.								
06...	0900	124	3180	1140	2	35	98	100
SEPT.								
13...	0900	604	22000	29700	14	43	99	100

TOTAL-SEDIMENT DISCHARGE, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

DATE	TIME	TEMPER- ATURE (DEG C) (00010)	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SUS- PENDEU SEDIM- ENT (MG/L) (80154)	SUS- PENDEU SEDIM- ENT (T/DAY) (80155)	TOTAL SEDIM- ENT DIS- CHARGE (T/DAY) (80156)	STREAM WIDTH (FT) (00004)	MEAN DEPTH (FT) (00064)	STREAM VELOC- ITY (FPS) (00055)
MAR.									
05...	1215	8.9	286	27900	21500	21700	68	1.6	2.7
APR.									
16...	1200	11.0	912	25100	33900	62000	114	2.5	3.2
MAY									
07...	1500	17.0	2540	20300	139000	150000	123	3.4	6.1
09...	0900	15.0	2510	17200	117000	126000	125	3.2	6.3
14...	1330	10.0	3950	36000	384000	397000	140	4.0	7.0
23...	1145	18.5	4810	22500	292000	300000	180	4.0	6.7
JUNE									
06...	0940	16.5	4960	15300	205000	216000	180	4.2	6.5
20...	1300	20.5	1850	4460	22300	27200	130	2.5	5.7
JULY									
06...	0940	23.5	1200	3130	10100	12400	125	2.1	4.6
16...	1430	22.0	560	2900	4380	5660	110	1.4	3.5
AUG.									
06...	0900	22.0	124	3180	1140	1370	52	1.1	2.2
SEPT.									
13...	0900	18.5	604	22000	29700	38200	130	1.2	3.8

## RIO GRANDE BASIN

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, 30 ft (9 m) downstream from flood detention dam, 1.2 mi (1.9 km) northeast of New Mexico State University, and 3.3 mi (5.3 km) southeast of Las Cruces.

DRAINAGE AREA.--20.7 mi<sup>2</sup> (53.6 km<sup>2</sup>).

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 1973 TO DECEMBER 1973

Date	Flow event no.	Flow duration (hours)	Mean Discharge for event (cfs)	Mean concentration (mg/l)	Outflow sediment discharge (tons)
Jul. 14, 15, 1973	54	11	.195	2000	.48
Jul. 25, 1973	55	5	.716	2500	1.0

RIO GRANDE BASIN

135

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

LOCATION.—Lat 35°46'38", long 105°39'27", in ENE 1/4 sec. 22, T.18 N., R.12 E., San Miguel County, in Santa Fe National Forest, at gaging station 450 ft (140 m) upstream from bridge on State Highway 63, 600 ft (180 m) upstream from mouth, and 2.6 mi (4.2 km) north of Terrero.

DRAINAGE AREA.—53.2 mi<sup>2</sup> (137.8 km<sup>2</sup>).

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

CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS) (00061)	DIS- SOLVED SILICA (SIU2) (MG/L) (00955)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED MANGANESE (MN) (UG/L) (01056)	DIS- SOLVED CALCIUM (CA) (MG/L) (00915)	DIS- SOLVED MAGNESIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	BICARBONATE (HCO3) (MG/L) (00440)	CARBONATE (CO3) (MG/L) (00445)
MAR. 22...	1031	22	6.4	9	--	19	2.0	1.5	.6	61	0
APR. 19...	1100	48	7.6	50	--	21	2.0	1.6	.7	59	0
JUNE 21...	1616	127	5.5	20	0	11	.9	.7	.5	36	0
JULY 16...	1907	74	6.4	30	--	14	1.3	1.0	.6	43	0
SEP. 19...	1632	11	6.5	20	--	18	1.8	2.1	.5	60	0
NOV. 20...	1306	5.1	6.5	--	--	20	2.0	1.8	.5	64	0

DATE	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLORIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUORIDE (F) (MG/L) (00950)	DIS- SOLVED NITRATE (N) (MG/L) (00618)	DIS- SOLVED NITRITE (N) (MG/L) (00613)	TOTAL NITRITE PLUS NITRATE (N) (MG/L) (00630)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	AMMONIA NITRO- GEN (N) (MG/L) (00610)	TOTAL ORGANIC NITRO- GEN (N) (MG/L) (00605)	TOTAL NITRO- GEN (N) (MG/L) (00600)	TOTAL PHOS- PHORUS (P) (MG/L) (00665)
MAR. 22...	12	1.1	.2	.04	.00	.06	.04	.02	.09	.17	.01
APR. 19...	14	1.2	.2	.05	.00	.04	.05	.03	.53	.60	.03
JUNE 21...	8.5	.9	.1	.00	.00	.00	.00	.02	.16	.18	.02
JULY 16...	6.7	.7	.3	.00	.01	.04	.00	.03	.07	.14	.00
SEP. 19...	8.0	1.0	.2	.00	.01	.01	.01	.04	.22	.27	.08
NOV. 20...	10	.7	.3	--	--	.01	--	--	--	--	.01

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 CONSTI- TUENTS) (MG/L) (70301)	NON- CARBONATE HARD- NESS (CA+MG) (MG/L) (00900)	NON- CARBONATE 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)
MAR. 22...	.01	89	73	56	6	.1	118	7.8	.5	10
APR. 19...	.01	91	78	61	12	.1	126	7.6	1.0	60
JUNE 21...	.00	68	46	31	2	.1	67	8.2	12.5	40
JULY 16...	.00	66	52	40	5	.1	88	8.1	12.5	20
SEP. 19...	.01	72	68	52	3	.1	117	8.0	14.0	30
NOV. 20...	--	68	73	58	6	.1	127	8.0	.5	--



## RIO GRANDE BASIN

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

TRACE ELEMENT AND RADIOCHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

DATE	TIME	TOTAL ARSENIC (AS) (UG/L) (01002)	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)
JUNE 21...	1616	--	4	0	40	0	0	3
NOV. 20...	1306	1	--	--	--	--	--	--

DATE	TOTAL IRON (FE) (UG/L) (01045)	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)	DIS- SOLVED SILVER (AG) (UG/L) (01075)	TOTAL SELE- NIUM (SE) (UG/L) (01147)	DIS- SOLVED SELE- NIUM (SE) (UG/L) (01145)	DIS- SOLVED ZINC (ZN) (UG/L) (01090)
JUNE 21...	--	20	<100	0	.0	0	--	0	0
NOV. 20...	60	--	<100	--	.2	--	2	--	--

DATE	DIS- SOLVED GROSS ALPHA AS U-NAT. (UG/L) (80030)	SUS- PENDEED GROSS ALPHA AS U-NAT. (UG/L) (80040)	DIS- SOLVED GROSS BETA AS CS-137 (PC/L) (03515)	SUS- PENDEED GROSS BETA AS CS-137 (PC/L) (03516)	DIS- SOLVED GROSS BETA AS SR90 /Y90 (PC/L) (80050)	SUS- PENDEED GROSS BETA AS SR90 /Y90 (PC/L) (80060)	DIS- SOLVED RA-226 (RADON METHOD) (PC/L) (09511)	DIS- SOLVED URANIUM (U) (UG/L) (80020)
JUNE 21...	--	--	--	--	--	--	--	--
NOV. 20...	3.1	<.4	1.5	<.4	1.2	<.4	.05	.37

FIELD AND BIOCHEMICAL MEASUREMENTS, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SPL- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	AIR TEMPER- ATURE (DEG C) (00020)	COLOR (PLAT- INUM- CUBALT 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) (MG/L) (00680)
MAR. 22...	1031	22	113	8.2	.5	.0	5	5	9.3	3	3.5 *
APR. 19...	1100	48	125	8.5	1.0	4.0	35	10	9.6	0	5.0 *
JUNE 21...	1616	127	70	7.6	12.5	21.0	5	4	--	0	3.0 *
JULY 16...	1907	74	102	7.6	12.5	15.0	10	2	--	3	5.0 *
SEP. 19...	1632	11	116	8.0	14.0	22.0	--	--	7.8	3	--
NOV. 20...	1306	5.1	127	8.0	.5	-8.5	--	--	10.1	0	3.5

\* Analyzed by New Mexico Environmental Improvement Agency.

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

## PESTICIDE ANALYSES, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

DATE	TIME	TOTAL ORGANIC CARBON (C) (MG/L) (39680)	ALDRIN IN BOTTOM DE- POSIT (UG/L) (39330)	ALDRIN IN BOTTOM DE- POSIT (UG/KG) (39330)	CHLOR- DANE IN BOTTOM DE- POSIT (UG/L) (39350)	CHLOR- DANE IN BOTTOM DE- POSIT (UG/KG) (39351)	DDD IN BOTTOM DE- POSIT (UG/L) (39360)	DDD IN BOTTOM DE- POSIT (UG/KG) (39363)	DDE IN BOTTOM DE- POSIT (UG/L) (39365)	DDE IN BOTTOM DE- POSIT (UG/KG) (39368)	DUT IN BOTTOM DE- POSIT (UG/L) (39370)
SEP. 17...	1632	.5	--	--	--	--	--	--	--	--	--
NOV. 20...	1306	3.5	.00	.0	.0	0	.00	2.2	.00	1.3	.00

DATE	TIME	DUT IN BOTTOM DE- POSIT (UG/KG) (39373)	DI- AZINON (UG/L) (39376)	DI- ELURIN (UG/L) (39380)	DI- ELURIN IN BOTTOM DE- POSIT (UG/KG) (39383)	ENDRIN IN BOTTOM DE- POSIT (UG/L) (39390)	ENDRIN IN BOTTOM DE- POSIT (UG/KG) (39393)	HEPTA- CHLOR IN BOTTOM DE- POSIT (UG/L) (39410)	HEPTA- CHLOR IN BOTTOM DE- POSIT (UG/L) (39413)	HEPTA- CHLOR EPOXIDE IN BOT- TOM DE- POSIT (UG/L) (39420)	HEPTA- CHLOR EPOXIDE IN BOT- TOM DE- POSIT (UG/KG) (39423)
SEP. 19...		--	--	--	--	--	--	--	--	--	--
NOV. 20...		1.2	.00	.00	.0	.00	.0	.00	.0	.00	.0

DATE	TIME	LINDANE IN BOTTOM DE- POSIT (UG/L) (39340)	LINDANE IN BOTTOM DE- POSIT (UG/KG) (39343)	MALA- THION (UG/L) (39350)	METHYL PARA- THION (UG/L) (39360)	PARA- THION (UG/L) (39340)	PCB IN BOTTOM DE- POSIT (UG/L) (39316)	PCB IN BOTTOM DE- POSIT (UG/KG) (39319)	2,4-D (UG/L) (39730)	2,4,5-T (UG/L) (39740)	SILVEX (UG/L) (39760)
SEP. 19...		--	--	--	--	--	--	--	--	--	--
NOV. 20...		.00	.0	.00	.00	.00	.0	0	.00	.00	.00

## INSTANTANEOUS SUSPENDED-SEDIMENT DISCHARGE, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

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.					
05...	0955	.5	9.5	0	.00
20...	1215	.5	8.9	9	.22
FEB.					
20...	1125	.0	8.2	3	.07
MAR.					
09...	1130	.0	7.4	3	.06
22...	1031	.5	22	8	.48
26...	1045	.5	17	3	.14
APR.					
19...	1100	1.0	48	7	.91
20...	1000	.0	41	8	.89
MAY					
03...	1030	2.0	91	24	5.9
08...	1535	--	122	13	4.3
14...	1200	3.5	350	23	22
21...	1115	5.0	540	58	85
JUNE					
04...	1130	6.5	333	12	11
19...	1040	5.5	186	4	2.0
21...	1616	12.5	127	609	209
JULY					
13...	1020	9.0	49	3	.40
16...	1907	12.5	74	5	1.0
AUG.					
23...	1015	10.5	16	463	20
SEP.					
12...	1035	9.0	15	3	.12
19...	1632	14.0	11	1	.03
OCT.					
09...	1520	6.0	8.2	502	11
NOV.					
16...	1240	5.0	3.8	116	1.2
20...	1306	.5	5.1	246	3.4
DEC.					
05...	1400	.0	5.5	96	1.4

## RIO GRANDE BASIN

08378500 PECOS RIVER NEAR PECOS, N. MEX.

LOCATION. —Lat 35°42'30", long 105°40'55", in NE 1/4 sec. 17, T. 17 N., R. 12 E., San Miguel County, in Santa Fe National Forest, at gaging station, at downstream side of bridge on private road, 300 ft (91 m) upstream from Indian Creek, 2.4 mi (3.9 km) downstream from Holy Ghost Creek, and 9.0 mi (14.5 km) north of Pecos, and at mile 896.6 (1,422.6 km).

DRAINAGE AREA.—189 mi<sup>2</sup> (490 km<sup>2</sup>).

PERIOD OF RECORD.—Chemical analyses: July 1970 to September 1973 (discontinued).

## CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS) (000061)	SPECIFIC CONDUCTANCE (MICROMHOS) (000075)	TEMPERATURE (DEG C) (000010)	COLON (PLATINUM-COBALT) UNITS (000080)	TURBIDITY (JTU) (000070)
JAN.						
05...	1300	44	186	.5	9	1
20...	1440	37	186	.0	5	1
FEB.						
20...	1320	54	198	.0	5	1
MAR.						
09...	1345	35	204	.5	5	0
26...	1210	78	213	2.0	8	4
APR.						
20...	1155	140	246	.0	5	6
MAY						
03...	1230	296	195	7.0	10	10
09...	1235	481	161	7.0	20	15
14...	1420	844	144	5.0	40	20
21...	1410	1250	123	8.0	17	30
JUNE						
04...	1440	730	118	8.0	5	15
19...	1300	616	340	7.5	3	4
JULY						
13...	1225	225	155	10.5	4	2
AUG.						
22...	1135	66	195	15.5	0	1
SEP.						
09...	1205	73	182	11.0	--	--

RIO GRANDE BASIN

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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 mi (3.4 km) upstream from Canon Blanco, 2.3 mi (3.7 km) southeast of Anton Chico, 9.7 mi (15.6 km) downstream from Tecolote Creek, and at mile 816.8 (1,314.2 km).

DRAINAGE AREA.—1,050 mi<sup>2</sup> (2,720 km<sup>2</sup>), approximately (contributing area).

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

CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

DATE	TIME	INSTAN- TANEOUS UIS- CHARGE (CFS) (00061)	UIS- SOLVED SILICA (SIO2) (MG/L) (00955)	UIS- SOLVED IRON (FE) (UG/L) (01046)	UIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	UIS- SOLVED MAG- NE- SIUM (MG) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	UIS- SOLVED PU- SIUM (K) (MG/L) (00935)	BICAR- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	UIS- SOLVED SULFATE (SO4) (MG/L) (00945)	UIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)
JAN.												
05...	1220	32	7.8	--	53	6.3	6.0	.9	176	0	22	2.6
MAR.												
12...	1415	64	8.3	--	46	5.2	6.1	1.1	154	0	25	3.8
28...	1350	195	11	--	42	4.7	6.0	.9	144	0	22	2.8
JUNE												
07...	1350	913	7.1	--	30	2.3	1.9	.6	94	0	16	1.4
AUG.												
06...	1350	112	11	--	46	4.2	3.9	1.5	153	0	18	2.1
SEP.												
13...	1445	67	9.3	--	43	4.9	4.9	1.7	142	0	22	1.4
28...	1010	11	9.0	--	56	8.3	5.9	1.2	201	0	21	1.4
DEC.												
18...	1400	21	8.5	0	59	7.1	6.3	1.0	185	0	27	1.8

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	UIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	UIS- SOLVED URTHO. PHOS- PHURUS (P) (MG/L) (00671)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L) (70300)	DIS- SOLVED SOLIDS (SUM OF CONSI- NUENTS) (MG/L) (70301)	HARD- NESS (CA+MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AD- SOMP- TION RATIO (MG/L) (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	UIS- SOLVED BORON (B) (UG/L) (01020)
JAN.												
05...	.2	.05	--	--	186	160	14	.2	326	8.3	.0	--
MAR.												
12...	.2	.04	--	--	172	140	10	.2	295	8.0	17.0	--
28...	.1	.13	--	--	161	120	6	.2	268	7.7	13.0	--
JUNE												
07...	.2	.00	--	--	106	84	7	.1	173	7.8	16.0	--
AUG.												
06...	.2	.49	--	--	165	130	7	.1	274	7.7	26.0	--
SEP.												
13...	.2	.32	--	--	159	130	11	.2	279	7.9	25.5	--
28...	.2	.14	--	--	203	170	9	.2	365	8.0	12.5	--
DEC.												
18...	.4	.04	.00	204	203	180	25	.2	350	8.1	7.0	40

## RIO GRANDE BASIN

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 mi (1.0 km) downstream from gaging station, which is 0.6 mi (1.0 km) upstream from bridge on U.S. Highway 66, in Santa Rosa, 1.9 mi (3.1 km) upstream from El Rito Creek, and at mile 756.56 (1,217.2 km).

DRAINAGE AREA.—2,650 mi<sup>2</sup> (6,860 km<sup>2</sup>), 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, 2,100 micromhos Jan. 16, Aug. 26; minimum daily, 173 micromhos May 22.

Water temperatures: Maximum, 31.5°C Aug. 15; minimum, freezing point Jan. 11, 20.

Sediment concentrations: Maximum daily, 13,200 mg/l July 23; minimum daily, 4 mg/l Feb. 20.

Sediment discharge: Maximum daily, 32,900 tons (29,800 tonnes) May 12; minimum daily, .18 ton (.16 tonne) Feb. 20.

Period of record:

Specific conductance: Maximum daily, 2,480 micromhos Sept. 18, 1969; minimum daily, 173 micromhos May 22, 1973.

Water temperatures: Maximum (1958-63, 1964-73), 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 (312,000 tonnes) July 30, 1971; minimum daily, .09 ton (.08 tonne) Apr. 30, 1972.

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973  
(ONCE-DAILY)

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	1480	1510	1670	605	287	231	347	540	1200	1260	1270	1340
2	1570	1550	1670	593	226	249	355	431	1210	1280	1350	1340
3	1750	1660	1630	483	237	278	371	422	1240	1280	1300	1340
4	1800	1610	1630	448	238	270	403	580	1220	1250	1320	1330
5	1420	1670	1680	532	235	263	422	572	1270	1200	1300	1330
6	1830	1660	1660	494	213	261	426	550	1180	1200	1290	1310
7	1400	1570	1580	502	209	263	478	603	1180	1270	1300	1620
8	1590	1630	1620	434	218	267	569	800	1210	1260	1270	1410
9	1580	1700	1620	440	228	252	624	865	1190	1280	1290	1360
10	1840	1690	1540	446	221	246	668	980	1230	1290	1300	1340
11	1270	1610	1600	506	216	234	701	1000	1200	1180	1300	1390
12	1220	1600	1680	481	204	228	747	1000	1070	1260	---	1410
13	1370	1650	1690	467	193	228	662	1010	1200	---	1290	1430
14	1730	1500	1630	454	186	227	755	1010	965	1280	1290	1380
15	1410	1640	1670	470	198	233	917	1100	935	1250	1300	1450
16	2100	1570	1670	382	215	247	662	1150	1150	1280	1300	1490
17	1490	1500	1430	364	207	244	721	1090	---	1250	1290	1390
18	1630	1730	1580	368	209	264	372	1080	1240	1280	1320	1410
19	1470	1610	1540	410	211	261	268	1170	1250	1260	1320	1390
20	1590	1560	1640	392	187	270	325	1200	1270	1290	1330	1490
21	1510	1630	1610	394	183	281	375	1200	1290	1250	1330	1480
22	1490	1620	1430	414	173	286	435	1200	1260	1340	1320	1280
23	1610	1580	1070	444	214	298	347	1570	1270	---	1290	1470
24	1570	1580	920	443	213	314	355	1080	1260	1320	1290	1400
25	1480	1570	735	432	225	326	435	2040	1310	1320	1360	1380
26	1430	1520	710	418	232	329	535	2100	1290	1360	1310	1560
27	1570	1670	895	379	234	340	390	1500	1260	1330	1310	1540
28	1770	1610	900	367	242	342	385	1200	1290	1320	1310	1330
29	1530	---	730	348	255	838	495	1200	1260	1270	1320	1270
30	1610	---	570	314	262	836	385	1260	1280	1290	1310	1430
31	1460	---	533	---	264	---	453	1100	---	1220	---	1470
MONTH	1570	1610	1370	443	220	307	496	1050	1210	1270	1300	1420

## RIO GRANDE BASIN

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08383000 PECOS RIVER AT SANTA ROSA, N. MEX.--Continued

TEMPERATURE (DEG. C) OF WATER, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973  
(ONCE-DAILY)

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

SUSPENDED-SEDIMENT DISCHARGE, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

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	17	26	1.2	19	14	.72	17	15	.69
2	19	24	1.2	16	13	.56	16	24	1.0
3	20	32	1.7	16	57	2.5	16	15	.65
4	25	26	1.8	17	7	.32	16	14	.60
5	31	38	3.2	17	10	.46	16	25	1.1
6	25	22	1.5	17	9	.41	16	10	.43
7	27	20	1.5	19	18	.92	17	9	.41
8	20	38	2.1	15	10	.41	19	15	.77
9	10	12	.32	15	10	.41	19	10	.51
10	12	33	1.1	17	9	.41	22	18	1.1
11	17	15	.69	17	9	.41	20	7	.38
12	14	36	1.4	17	11	.50	17	18	.83
13	17	19	.87	16	17	.73	16	14	.60
14	14	14	.53	17	7	.32	16	11	.48
15	14	17	.64	16	6	.26	16	8	.35
16	14	12	.45	17	13	.60	17	11	.50
17	13	9	.32	20	7	.38	19	12	.62
18	12	14	.45	17	12	.55	20	13	.70
19	11	12	.36	17	8	.37	17	15	.69
20	12	13	.42	17	4	.18	16	9	.39
21	12	8	.26	17	9	.41	17	8	.37
22	13	10	.35	16	16	.78	22	24	1.4
23	15	12	.49	21	12	.66	35	61	5.8
24	17	8	.37	20	13	.70	66	411	73
25	20	11	.59	17	9	.41	75	578	117
26	19	15	.77	17	30	1.4	69	508	95
27	17	14	.64	17	12	.55	54	295	43
28	13	11	.39	17	11	.50	51	204	28
29	19	15	.77	--	--	--	94	1050	266
30	17	19	.87	--	--	--	156	2260	952
31	19	14	.72	--	--	--	156	1760	741
TOTAL	525	--	27.97	483	--	16.85	1143	--	2335.37



## RIO GRANDE BASIN

08383000 PECOS RIVER AT SANTA ROSA, N. MEX.--Continued

## SUSPENDED-SEDIMENT DISCHARGE, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

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	173	1040	486	1180	2660	8470	1280	7940	28900
2	320	3100	4000	1050	2350	6660	1060	3100	8870
3	450	4650	5650	891	2100	5050	1010	2060	5620
4	380	2600	2670	837	2100	4750	882	1370	3260
5	340	2460	2260	1000	2200	5940	819	1410	3120
6	330	2010	1790	1250	2590	8740	774	1150	2400
7	560	3500	5290	1230	2450	8140	729	1090	2150
8	600	4750	7700	990	2100	5610	729	950	1670
9	560	3100	4850	910	1720	4230	686	900	1670
10	440	2300	2730	1100	1870	5550	738	950	1890
11	480	2870	3720	1590	3520	15100	792	940	2010
12	669	3070	5550	2030	6000	32900	819	1570	3470
13	747	3430	6920	2200	5480	32600	900	1210	2940
14	1070	4940	14300	2050	4270	23600	882	1040	2480
15	1330	5710	20500	1910	3600	18600	920	1100	2730
16	1210	4650	15200	1850	3270	14600	783	1010	2140
17	882	2950	7030	1450	2650	10400	694	945	1770
18	765	2310	4770	1300	2220	7790	627	800	1350
19	873	2450	5770	1400	2170	8200	579	960	1500
20	747	2230	4500	1670	2620	11800	517	855	1190
21	611	1950	3220	1890	3370	17200	465	775	973
22	494	1650	2200	1940	4450	23300	408	590	650
23	458	1410	1740	1910	3710	19100	368	645	641
24	494	1280	1710	1610	2590	11300	330	550	490
25	547	1090	1610	1380	2060	7680	305	580	478
26	627	1300	2200	1300	1860	6530	281	393	298
27	686	1520	2820	1290	1750	6100	259	356	249
28	627	1500	2540	1110	1450	4350	270	325	237
29	792	1500	3210	920	1610	4000	270	443	323
30	1030	2360	6560	837	1400	3160	259	397	278
31	--	--	--	855	1740	4020	--	--	--
TOTAL	19312	--	153496	42730	--	345470	19435	--	85947
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	248	338	226	319	7110	6810	33	90	8.0
2	232	501	189	252	8300	5650	31	78	6.5
3	226	556	339	138	5500	2050	29	84	6.6
4	187	520	263	147	5100	2020	29	43	3.4
5	177	380	182	156	3700	1560	27	62	4.5
6	168	327	148	166	4600	2060	27	42	3.1
7	138	187	70	116	2100	658	31	41	3.4
8	108	155	45	78	1350	284	29	40	3.1
9	91	169	42	64	1200	207	27	54	3.9
10	82	82	18	46	510	63	29	39	3.1
11	85	76	17	41	300	33	31	83	6.9
12	97	112	29	41	570	63	40	210	23
13	88	113	27	33	233	21	31	50	4.2
14	72	127	25	33	180	16	76	940	193
15	69	110	20	33	176	16	56	1120	169
16	101	268	73	33	153	14	33	380	34
17	196	2340	2390	46	300	37	29	207	16
18	440	5400	9650	35	278	26	29	149	12
19	885	8550	21700	31	121	10	27	111	8.1
20	342	5150	4760	31	124	10	27	86	6.3
21	248	3180	2130	31	123	10	27	64	4.7
22	187	1300	656	31	166	14	27	63	4.6
23	660	13200	26300	31	116	9.7	29	103	8.1
24	293	6600	5220	31	109	9.1	29	60	4.7
25	156	4000	1680	27	81	5.9	29	45	3.5
26	247	4920	8650	27	72	5.2	31	58	4.9
27	431	9600	11200	29	54	4.2	31	80	6.7
28	215	6200	3600	29	80	6.3	31	37	3.1
29	164	4400	1950	29	72	5.6	33	43	3.8
30	226	5380	3960	33	75	6.7	29	39	3.1
31	156	3370	1130	39	112	12	--	--	--
TOTAL	7015	--	106689	2176	--	21696.7	967	--	565.3

RIO GRANDE BASIN

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08383000 PECOS RIVER AT SANTA ROSA, N. MEX.--Continued

SUSPENDED-SEDIMENT DISCHARGE, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

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	29	55	4.3	25	27	1.8	24	29	1.9
2	27	72	5.2	25	25	1.7	25	41	2.8
3	27	59	4.3	25	21	1.4	24	46	3.0
4	29	63	4.9	25	24	1.6	22	41	2.4
5	29	60	4.7	25	24	1.6	21	86	4.9
6	33	74	6.6	27	23	1.7	18	46	2.2
7	29	53	4.1	27	37	2.7	22	41	2.4
8	25	59	4.0	27	38	2.8	25	36	2.4
9	25	58	3.9	27	34	2.5	27	45	3.3
10	31	41	3.4	29	87	6.8	25	34	2.3
11	33	58	5.2	29	49	3.8	25	38	2.6
12	27	52	3.8	29	45	3.5	24	61	4.0
13	25	44	3.0	27	40	2.9	24	80	5.2
14	25	36	2.4	27	36	2.6	25	33	2.2
15	24	93	6.0	27	28	2.0	24	37	2.4
16	24	41	2.7	27	27	2.0	27	92	6.7
17	25	43	2.9	27	57	4.2	27	37	2.7
18	25	18	1.2	27	23	1.7	25	150	10
19	24	41	2.7	27	31	2.3	19	41	2.1
20	22	25	1.5	27	35	2.6	17	39	1.8
21	22	27	1.6	25	25	1.7	28	48	3.6
22	22	23	1.4	24	27	1.7	29	40	3.1
23	22	17	1.0	24	34	2.2	25	31	2.1
24	24	21	1.4	24	30	1.9	25	34	2.3
25	24	21	1.4	25	19	1.3	18	34	1.7
26	27	23	1.7	27	33	2.4	17	42	1.9
27	27	18	1.3	25	39	2.6	15	55	2.2
28	27	19	1.4	24	57	3.7	23	53	3.3
29	29	22	1.7	27	34	2.5	24	34	2.2
30	31	27	2.3	25	31	2.1	22	30	1.8
31	29	34	2.7	--	--	--	20	28	1.5
TOTAL	822	--	94.7	786	--	74.3	716	--	93.0

CAL YR 1973	TOTAL WATER DISCHARGE (CFS-DAYS)	96110
CAL YR 1973	TOTAL SUSPENDED-SEDIMENT DISCHARGE (TONS)	716506.19
WTR YR 1973	TOTAL WATER DISCHARGE (CFS-DAYS)	100433
WTR YR 1973	TOTAL SUSPENDED-SEDIMENT DISCHARGE (TONS)	758850.05

INSTANTANEOUS SUSPENDED-SEDIMENT DISCHARGE AND PARTICLE SIZE, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

DATE	TIME	TEMPER- ATURE (DEG C) (00010)	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SUS- PENDED SEDIM- ENT DIS- CHARGE (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)	SUS. SED. FALL DIAM. % FINER THAN .062 MM (70342)
APR.									
05...	1330	10.5	340	2170	1990	20	23	30	60
16...	0735	9.0	1280	5050	17500	36	43	57	82
MAY									
01...	1345	12.5	1170	9100	28700	10	14	20	39
03...	0725	10.0	950	2210	5670	19	26	37	70
15...	0740	8.0	1960	3490	18500	15	19	29	62
22...	1245	16.0	1850	4800	24000	10	14	23	46
JUNE									
01...	1730	18.0	1060	8480	24300	39	46	70	92
12...	1130	20.5	828	1150	2570	18	24	31	62
JULY									
17...	1400	27.0	94	314	80	71	83	90	--
27...	0735	20.5	451	9050	11000	47	54	82	98
AUG.									
07...	1445	26.5	104	1720	483	50	64	90	--
SEP.									
14...	0735	14.5	88	1050	249	40	47	73	--

## RIO GRANDE BASIN

08383000 PECOS RIVER AT SANTA ROSA, N. MEX.--Continued

INSTANTANEOUS SUSPENDED-SEDIMENT DISCHARGE AND PARTICLE SIZE, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

DATE	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)	SUS. SED. SIEVE DIAM. % FINER THAN (70331)	SUS. SED. SIEVE DIAM. % FINER THAN (70332)	SUS. SED. SIEVE DIAM. % FINER THAN (70333)	SUS. SED. SIEVE DIAM. % FINER THAN (70334)
APR.								
05...	82	96	100	--	--	--	--	--
16...	96	98	100	--	--	--	--	--
MAY								
01...	58	81	97	100	--	--	--	--
03...	90	97	100	--	--	--	--	--
15...	85	97	100	--	--	--	--	--
22...	67	90	100	--	--	--	--	--
JUNE								
01...	98	100	--	--	--	--	--	--
12...	82	96	100	--	--	--	--	--
JULY								
17...	--	--	--	--	91	94	98	100
27...	99	100	--	--	--	--	--	--
AUG.								
07...	--	--	--	--	96	97	99	100
SEP.								
14...	--	--	--	--	98	100	--	--

08383500 PECOS RIVER NEAR PUERTO DE LUNA, N. MEX.  
(Surveillance network station)

LOCATION.—Lat 34°43'48", long 104°31'28", in NE¼SE¼NW¼ sec.20, T.6 N., R.23 E., Guadalupe County, at gaging station 9 mi (14.5 km) southeast of Puerto de Luna, 15.8 mi (25.4 km) upstream from Alamogordo Dam, and at mile 726.2 (1,168.5 km).

DRAINAGE AREA.—3,970 mi<sup>2</sup> (10,280 km<sup>2</sup>), 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 mi (14.5 km) northwest of the gaging station. Samples for Jan. 9 and April 5 were collected at bridge in village of Puerto de Luna.

CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS) (00061)	DIS- SOLVED SILICA (SiO <sub>2</sub> ) (MG/L) (00955)	DIS- SOLVED IRON (Fe) (UG/L) (01046)	DIS- SOLVED MANGANESE (Mn) (UG/L) (01056)	DIS- SOLVED CALCIUM (Ca) (MG/L) (00915)	DIS- SOLVED MAGNESIUM (Mg) (MG/L) (00925)	DIS- SOLVED SODIUM (Na) (MG/L) (00930)	DIS- SOLVED POTASSIUM (K) (MG/L) (00935)	BICARBONATE (HCO <sub>3</sub> ) (MG/L) (00440)	CARBONATE (CO <sub>3</sub> ) (MG/L) (00445)
JAN.											
09...	0945	108	14	20	--	510	70	86	2.1	189	0
FEB.											
21...	0900	88	13	20	6	540	68	92	2.4	164	0
APR.											
05...	1045	541	11	30	--	150	27	43	1.7	141	0
MAY											
01...	0900	1230	11	20	<5	85	10	14	1.3	131	0
22...	0845	2030	9.4	40	--	57	6.0	7.4	1.2	108	0
JUNE											
12...	0900	1010	8.5	9	--	89	10	12	1.0	104	0
JULY											
17...	1010	132	13	30	--	350	41	51	1.8	135	0
AUG.											
07...	1030	314	12	20	<10	270	32	43	2.3	153	0
SEP.											
05...	1030	82	14	20	--	480	57	77	2.3	135	0
OCT.											
02...	1245	92	14	--	--	490	61	78	2.5	129	0
NOV.											
07...	1015	92	14	10	--	510	62	83	2.3	143	0
DEC.											
05...	1100	113	14	0	--	470	59	80	2.3	147	0

DATE	DIS- SOLVED SULFATE (SO <sub>4</sub> ) (MG/L) (00945)	DIS- SOLVED CHLORIDE (Cl) (MG/L) (00940)	DIS- SOLVED FLUORIDE (F) (MG/L) (00950)	DIS- SOLVED NITRATE (N) (MG/L) (00618)	DIS- SOLVED NITRITE (N) (MG/L) (00613)	TOTAL NITRITE PLUS NITRATE (N) (MG/L) (00630)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	AMMONIA NITROGEN (N) (MG/L) (00610)	DIS- SOLVED AMMONIA NITROGEN (N) (MG/L) (00608)	TOTAL ORGANIC NITROGEN (N) (MG/L) (00605)	TOTAL NITROGEN (N) (MG/L) (00600)
JAN.											
09...	1400	150	.9	.07	.00	--	.07	.05	.05	.07	.19
FEB.											
21...	1500	140	.7	.04	.00	.01	.04	.02	--	.17	.20
APR.											
05...	410	42	.2	.30	.00	.21	.30	.03	--	1.6	1.8
MAY											
01...	160	15	.3	.12	.00	.11	.12	.60	--	2.3	3.0
22...	95	8.1	.3	.06	.00	.08	.06	.03	--	2.5	2.6
JUNE											
12...	160	15	.3	.05	.00	.04	.05	.01	--	.72	.77
JULY											
17...	920	75	.5	.00	.01	.01	.01	.06	--	.14	.21
AUG.											
07...	650	54	.2	.21	.00	.24	.21	.05	--	6.9	7.2
SEP.											
05...	1300	110	.6	.03	.02	.02	.05	.01	--	.18	.21
OCT.											
02...	1300	130	.7	.01	.00	.01	.01	.02	--	.09	.12
NOV.											
07...	1300	120	.6	.01	.01	.02	.02	.01	--	.30	.33
DEC.											
05...	1300	120	.6	.11	.00	.11	.11	.01	--	.12	.24

## RIO GRANDE BASIN

08383500 PECOS RIVER NEAR PUERTO DE LUNA, N. MEX.--Continued

CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

DATE	TOTAL PHOS- PHORUS (P) (MG/L) (00665)	DIS- SOLVED PHOS- PHORUS (P) (MG/L) (00671)	DIS- SOLVED (RESI- DUE AT 180 C) (MG/L) (70360)	DIS- SOLVED (SUM OF TWOENIS) (MG/L) (70301)	HARD- NESS (CA+MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AD- SURP- 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. 09...	.09	.02	2440	2330	1600	1400	1.0	2730	8.2	2.0	120
FEB. 21...	.03	.01	2460	2440	1600	1500	1.0	2790	7.9	3.5	120
APR. 05...	.56	.06	745	757	490	370	.9	1060	8.0	10.0	90
MAY 01...	.85	.02	402	363	250	150	.4	566	8.1	11.0	40
22...	.67	.01	257	236	170	78	.3	375	7.2	15.5	40
JUNE 12...	.32	.01	398	368	260	180	.3	577	8.1	19.0	30
JULY 17...	.09	.01	1580	1520	1000	930	.7	1820	7.8	23.0	110
AUG. 07...	1.3	.02	1240	1140	810	680	.7	1490	8.0	22.0	90
SEP. 05...	.11	.02	2140	2110	1400	1300	.9	2418	7.8	19.0	90
OCT. 02...	.04	.03	2220	2140	1500	1400	.9	2480	8.2	20.5	--
NOV. 07...	.07	.04	2330	2160	1500	1400	.9	2520	7.8	9.5	100
DEC. 05...	.07	.04	2290	2120	1400	1300	.9	2450	7.8	4.5	100

## TRACE ELEMENT ANALYSES, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

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. 21...	0900	65	1	<80	<1	<2	120	0	<1	<3
MAY 01...	0900	62	2	79	<3	<7	40	0	<7	<7
AUG. 07...	1030	20	6	200	<6	<20	90	0	<10	<20
OCT. 02...	1245	--	0	--	--	--	--	0	--	--

DATE	DIS- SOLVED COPPER (CU) (UG/L) (01040)	DIS- SOLVED GALLIUM (GA) (UG/L) (01120)	DIS- SOLVED GER- MANIUM (GE) (UG/L) (01125)	TOTAL IRON (FE) (UG/L) (01045)	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. 21...	20	<8	<54	--	20	<100	<10	30	6	.2
MAY 01...	2	<3	<7	--	20	200	<7	<10	<5	.2
AUG. 07...	<4	<9	--	--	20	350	<20	15	<10	.1
OCT. 02...	--	--	--	<30	--	<30	--	--	--	.0

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 SELLE- 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)
FEB. 21...	2	<5	<1	1	6700	<36	<10	<36	<10	<1
MAY 01...	<3	<7	<1	1	810	<7	<7	<7.0	<450	<14
AUG. 07...	<9	<20	<2	6	2700	<20	<15	8.0	<20	<30
OCT. 02...	--	--	--	3	--	--	--	--	--	--

RIO GRANDE BASIN

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08383500 PECOS RIVER NEAR PUERTO DE LUNA, N. MEX.--Continued

FIELD AND BIOCHEMICAL MEASUREMENTS, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

DATE	TIME	INSTANTANEOUS DIS- CHARGE (LFS) (00061)	SPL- CLIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	AIR TEMPER- ATURE (DEG C) (00020)	COLOR (PLAT- INUM- CUBALT 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) (MG/L) (00680)
JAN. 09...	0945	108	2800	8.0	2.0	-6.5	5	7	10.8	2300	1.4 *
FEB. 21...	0900	88	2900	8.3	3.5	2.0	5	10	11.6	13	--
APR. 05...	1045	541	1050	8.1	10.0	9.5	10	400	9.8	1200	16 *
MAY 01...	0900	1230	560	8.2	11.0	11.0	10	570	9.2	2200	34 *
22...	0845	2030	375	8.0	15.5	18.5	10	500	8.4	930	29 *
JUNE 12...	0900	1010	570	8.0	19.0	28.0	5	200	7.7	1700	--
JULY 17...	1010	132	1900	8.1	23.0	28.0	2	45	7.6	100	3.0 *
AUG. 07...	1030	314	1450	8.2	22.0	28.5	1	850	7.4	5800	4.0
SEP. 05...	1030	82	2600	8.2	19.0	24.0	0	35	8.7	100	2.0
OCT. 02...	1245	92	2460	8.2	20.5	30.0	--	--	8.8	57	3.0
NOV. 07...	1015	92	2520	7.8	9.5	22.0	--	--	9.9	4	2.9
DEC. 05...	1100	113	2450	7.8	4.5	6.0	--	--	11.7	14	2.0

\* Analyzed by New Mexico Environmental Improvement Agency.



## RIO GRANDE BASIN

08384500 PECOS RIVER BELOW ALAMOGORDO DAM, N. MEX.

LOCATION.—Lat 34°36'15", long 104°23'14", in lot 1, sec.2, T.4 N., R.24 E., De Baca County, at gaging station 1,200 ft (366 m) downstream from Alamogordo Dam, 2.9 mi (4.7 km) upstream from Salada Creek, 4.6 mi (7.4 km) northeast of Guadalupe, 12.2 (19.6 km) northwest of Fort Sumner, and at mile 710.7 (1,143.5 km).

DRAINAGE AREA.—4,390 mi<sup>2</sup> (11,370 km<sup>2</sup>), 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 1973

DATE	TIME	CONDUCTIVITY (MICROMHOS)	TEMPERATURE (C°)	DISCHARGE (CFS)	CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	RES. LEVEL (FEET)	CONTENTS (ACRE/FEET)
March								
26	1700	1606	--	78	58	12	4270.9	93,060
27	0800	1650	--	78	29	6.1	4270.9	93,060
28	0800	1640	--	78	38	8.0	4270.9	93,060
	1636	1600	--	78	38	8.0	4270.9	93,060
29	0800	1610	--	82	44	9.7	4270.9	93,060
30	0800	1670	--	86	37	8.6	4271.0	93,460
	1700	1630	--	86	54	13	4271.0	93,460
31	0800	1605	--	88	85	20	4271.1	93,870
April								
1	0815	1585	--	88	141	34	4271.2	94,280
	1700	1600	--	88	49	12	4271.2	94,280
2	0600	1620	--	88	106	25	4271.3	94,690
30	0925	1430	--	1230	18	60	4272.5	99,680
May								
1	1100	1490	17.5	1230	10	33	4272.4	99,260
12	0800	1180	14.0	1300	10	35	4272.2	98,410
14	1600	1410	12.0	1990	7	38	4273.2	102,700
	1630	1280	13.0	1990	23	124	4273.2	102,700
22	1100	826	18.0	1530	2	8.3	4273.0	101,800
28	0900	780	16.5	1610	20	87	4273.4	103,500
June								
7	1000	820	18.0	518	125	175	4274.8	109,800
18	1000	840	20.5	680	58	107	4275.0	110,700
21	1600	900	19.0	490	82	109	4274.8	109,800
23	1230	760	21.0	372	55	55	4274.8	109,800
July								
2	1700	895	19.0	214	33	19	4275.1	111,100
10	1530	807	20.5	117	42	13	4275.1	111,100
16	1000	850	19.5	118	33	11	4275.0	110,700
17	1200	822	19.0	118	73	23	4275.0	110,700
25	1700	825	20.0	412	37	41	4275.4	112,400
August								
1	1500	830	21.0	147	81	32	4275.2	111,600
6	1130	387	22.0	132	19	6.8	4275.0	110,700
7	1305	386	22.0	131	38	13	4275.0	110,700
14	0800	865	21.0	99	38	10	4274.9	110,200
21	0800	860	22.0	106	55	16	4274.6	108,900
28	1000	910	21.0	103	24	6.7	4274.4	108,000
September								
4	0800	930	22.0	101	69	19	4274.7	109,300
5	1240	965	23.0	93	29	7.3	4274.6	108,900
15	0800	998	28.5	88	17	4.0	4274.5	108,400
18	1750	1260	22.0	90	424	103	4274.4	108,000
19	0750	1250	21.0	91	77	19	4274.4	108,000
20	0740	1230	20.5	92	63	16	4274.4	108,000
22	1730	1000	21.0	91	7	1.7	4274.4	108,000
28	0900	1020	18.0	88	13	3.1	4274.3	107,500
October								
1	1600	1035	18.5	1200	35	113	4274.2	107,100
2	1430	1035	18.5	1230	27	90	4273.8	105,300
8	0830	107	17.0	1130	9	28	4270.8	92,660
15	0930	106	17.5	93	4	1.0	4269.3	86,810
18	1000	1300	0.2	93	94	24	4269.3	86,810
22	0830	106	16.0	97	8	2.1	4269.2	86,420
29	0800	114	15.0	95	14	3.6	4269.2	86,420
November								
7	1240	116	15.0	17	13	0.6	4269.3	86,810
8	0800	1190	12.5	16	16	0.69	4269.3	86,810
12	0830	1192	12.0	17	17	0.78	4269.4	87,190
20	1300	1195	12.0	11	12	0.36	4269.7	88,340
26	1000	1187	10.0	11	14	0.42	4269.9	89,100
December								
3	1400	1304	8.0	11	17	0.5	4270.1	89,880
5	1330	1297	9.5	11	7	0.21	4270.2	90,280
10	1400	1480	8.5	11	27	0.8	4270.4	91,080
17	1130	1350	9.5	6.5	9	0.16	4270.7	92,270
24	0940	1330	5.0	5.8	29	0.45	4271.0	93,460
31	0925	1320	5.0	5.2	30	0.42	4271.2	94,280

## 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 mi (4.8 km) downstream from U.S. Highway 70, 3.7 mi (6.0 km) downstream from Salt Creek, 4.7 mi (7.6 km) southwest of Acme, 14 mi (22.5 km) northeast of Roswell, and at mile 591.2 (951.2 km).

DRAINAGE AREA.--11,380 mi<sup>2</sup> (29,470 km<sup>2</sup>), 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 1973 TO DECEMBER 1973

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS) (00061)	DIS- SOLVED SILICA (SiO <sub>2</sub> ) (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 (HCO <sub>3</sub> ) (MG/L) (00440)	CAR- BONATE (CO <sub>3</sub> ) (MG/L) (00445)	DIS- SOLVED SULFATE (SO <sub>4</sub> ) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)
JAN.												
08...	1100	35	9.4	--	400	99	380	3.4	134	0	1300	540
11...	1110	14	11	--	490	130	500	3.9	164	0	1600	700
29...	1110	11	9.4	--	510	130	560	4.2	151	0	1700	760
FEB.												
05...	1500	16	8.1	--	470	120	470	4.7	127	0	1700	690
27...	1110	26	6.8	--	420	110	440	4.5	120	0	1500	670
MAR.												
19...	1100	22	7.5	--	530	140	580	5.2	120	0	1900	880
APR.												
09...	1110	37	9.7	9	380	87	280	3.9	114	0	1300	350
AUG.												
17...	1440	28	14	--	340	75	220	5.2	96	0	1100	290
SEP.												
07...	0945	2.4	10	--	300	69	230	5.0	96	0	970	290
17...	1100	25	11	--	240	57	160	4.6	105	0	870	180
21...	0945	35	13	--	300	70	150	4.6	91	0	930	190
OCT.												
03...	1010	15	13	--	390	74	280	5.3	96	0	1300	390
15...	1010	137	11	10	210	31	53	2.7	130	0	570	62
18...	1055	80	--	--	--	--	--	--	--	--	--	--
DEC.												
06...	1025	21	13	--	400	92	280	3.9	137	0	1300	420

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	DIS- SOLVED URTHO. PHOS- PHORUS (P) (MG/L) (00671)	DIS- SOLVED (RESI- DUE AT 180 C) (MG/L) (70300)	DIS- SOLVED (SUM OF IUE NIS) (MG/L) (70301)	HARD- NESS (CA+MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AD- SOMP- 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.												
08...	.6	.29	--	--	2800	1400	1300	4.4	3680	7.7	2.0	--
11...	.7	.42	--	--	3520	1800	1600	5.2	4350	7.6	.0	--
29...	.7	.16	--	--	3750	1800	1700	5.7	4590	8.0	1.5	--
FEB.												
05...	.6	.14	--	--	3530	1700	1600	5.0	4260	8.1	14.0	--
27...	.6	.07	--	--	3210	1500	1400	4.9	4070	8.0	9.0	--
MAR.												
19...	.6	.02	--	--	4100	1900	1800	5.8	4870	8.1	13.0	--
APR.												
09...	.7	.80	--	--	2470	1300	1200	3.4	3080	7.6	10.5	220
AUG.												
17...	.5	.03	--	--	2090	1200	1100	2.8	2800	7.9	31.5	--
SEP.												
07...	.5	.01	--	--	1920	1000	950	3.1	2720	7.8	16.5	--
17...	.5	.35	--	--	1580	830	750	2.4	2134	8.0	17.5	--
21...	.5	.18	--	--	1700	1000	960	2.0	2310	7.8	20.5	--
OCT.												
03...	.4	.08	--	--	2500	1300	1200	3.4	3267	8.0	17.0	--
15...	.4	.17	.01	1060	1010	650	550	.9	1380	8.0	14.5	70
18...	--	--	--	--	--	--	--	--	1910	--	15.5	--
DEC.												
06...	.5	.36	--	--	2580	1400	1300	3.3	3320	7.9	2.0	--

## RIO GRANDE BASIN

08396500 PECOS RIVER NEAR ARTESIA, N. MEX.  
(Irrigation, pesticide and surveillance network station)

LOCATION.--Lat 32°50'25", long 104°19'23", in NW¼ sec.18, T.17 S., R.27 E., Eddy County, at gaging station at bridge on State Highway 83, 4.3 mi (6.9 km) east of Artesia, 7.0 mi (11.3 km) north of mouth of Rio Penasco, 17 mi (27.4 km) north of McMillan Dam, and at mile 507.1 (815.9 km).

DRAINAGE AREA.--15,300 mi<sup>2</sup> (39,630 km<sup>2</sup>), 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, 11,500 mg/l Sept. 10; minimum, 939 mg/l May 23-31.

Hardness: Maximum, 3,100 mg/l Sept. 10; minimum, 540 mg/l July 28-31, Aug. 1-4.

## CHEMICAL ANALYSES, COMPOSITES OF DAILY SAMPLES, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

DATE	DIS- CHANGE (CFS) (00060)	DIS- SOLVED SILICA (SiO <sub>2</sub> ) (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 <sub>3</sub> ) (MG/L) (00440)	CAR- BONATE (CO <sub>3</sub> ) (MG/L) (00445)	DIS- SOLVED SULFATE (SO <sub>4</sub> ) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)
JAN.												
01-31	83	10	--	500	170	990	7.9	199	0	1500	1800	.9
FEB.												
01-24	60	5.9	--	570	210	1300	7.9	163	0	1900	2200	.9
25-28	86	6.4	--	530	190	1200	7.4	180	0	1700	2000	1.0
MAR.												
01-25	61	6.9	--	550	200	1300	10	154	0	1900	2200	1.0
26-31	34	11	--	700	280	2200	15	186	0	2400	3400	1.1
APR.												
01-09	28	11	--	730	290	2100	8.2	184	0	2500	3600	.8
10-19	49	11	--	600	200	1300	9.9	163	0	2100	2000	.8
20-30	881	13	--	340	51	140	4.1	143	0	970	190	.5
MAY												
01-22	1250	14	--	270	38	82	3.2	149	0	750	110	.7
23-31	1220	14	--	200	25	56	2.4	131	0	500	75	.7
JUNE												
01-04	504	13	--	210	29	90	2.7	141	0	550	140	.5
05-12	337	15	--	230	35	120	2.9	155	0	590	180	.6
13-26	500	14	--	210	30	90	2.9	141	0	540	130	.5
27-30	152	13	--	220	41	170	3.5	129	0	620	280	.5
JULY												
01-02	54	14	--	280	65	360	5.4	120	0	830	590	.4
03-04	35	14	--	330	86	540	6.5	115	0	1000	880	.4
05-10	20	19	--	500	140	1100	13	147	0	1600	1800	.5
11-13	54	16	--	410	120	730	9.4	122	0	1300	1200	.5
14-17	53	15	--	350	92	540	7.5	111	0	1200	870	.5
18-21	30	18	--	420	130	890	11	130	0	1408	1500	.5
22-24	213	13	--	260	62	400	6.3	121	0	780	650	.3
25-27	609	15	--	200	37	160	3.6	130	0	580	220	.4
28-31	631	14	--	170	28	110	3.2	118	0	460	140	.4
AUG.												
01-04	479	16	--	170	29	100	3.5	125	0	480	140	1.2
05-12	177	14	--	220	45	200	4.5	132	0	640	300	1.0
13-17	29	11	--	300	81	560	7.4	115	0	940	860	.4
18-31	6.7	18	--	550	210	2000	23	167	0	2100	3100	.5
SEP.												
01-13	17	15	--	710	300	2900	37	165	0	2400	4800	.8
14-17	99	15	--	310	66	290	5.7	156	0	950	440	.5
18-20	22	14	--	350	97	630	9.7	124	0	1100	1000	.5
21-30	18	13	--	540	190	1400	9.8	136	0	1800	2300	.8
OCT.												
01-04	15	17	--	620	250	1700	17	163	0	2100	2800	.8
05-16	635	14	--	230	45	130	4.0	145	0	670	180	.5
17-31	80	15	--	350	92	420	6.2	132	0	1000	700	.6
NOV.												
01-30	50	15	--	500	160	870	9.2	166	0	1600	1500	.7
DEC.												
01-31	45	12	--	550	190	1000	9.4	200	0	1800	1700	.8
CALENDAR YEAR												
WTU. AVG.	--	14	--	285	57	239	4.1	146	0	819	379	.6
TIME WTU.												
AVG.	245	13	--	442	141	902	8.9	158	0	1420	1500	.7
ICI. LOAD (TONS)	--	3270	--	68700	13700	57700	999	35100	0	197000	91400	156
WATER YEAR												
WTU. AVG.	--	14	--	299	62	288	4.3	147	0	870	455	.7
TIME WTU.												
AVG.	232	13	--	458	148	980	9.1	161	0	1490	1600	.8
ICI. LOAD (TONS)	--	3100	--	68400	14300	65800	990	33700	0	199000	104000	155

## 08396500 PECOS RIVER NEAR ARTESIA, N. MEX.--Continued

## EXTREMES: Current year--Continued

Specific conductance: Maximum daily, 25,400 micromhos Sept. 6; minimum daily, 1,130 micromhos May 30.  
 Water temperatures: Maximum, 32.0°C July 2-3; minimum, freezing point Jan. 10-11, Dec. 21-22.  
 Sediment concentrations: Maximum daily, 11,300 mg/l Sept. 14; minimum daily, 1 mg/l Jan. 24-26, 28.  
 Sediment discharge: Maximum daily, 42,000 tons (38,100 tonnes) May 20; minimum daily, .19 ton (.17 tonne) Jan. 26, 28.

## 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: Maximum, 36.0°C July 27, 1966, July 25, 1969; minimum, freezing point on many days during winter period.  
 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 (166,000 tonnes) Sept. 26, 1955; minimum daily, 0 tons (0 tonnes) on many days during July 1953, July and August 1954, July 1957, July to October 1964.

## CHEMICAL ANALYSES, COMPOSITES OF DAILY SAMPLES, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

DATE	DIS- SOLVED NITRATE PLUS NITRATE (N) (MG/L) (00651)	DIS- SOLVED NITRO- PHOS- PHORUS (P) (MG/L) (00671)	DIS- SOLVED BORON (B) (MG/L) (01020)	DIS- SOLVED (RESI- DUE AT 180 C) (MG/L) (70300)	DIS- SOLVED (SUM OF DUE TO) (MG/L) (70301)	DIS- SOLVED (IONS PER AC-F) (MG/L) (70303)	DIS- SOLVED (IONS PER DAY) (MG/L) (70302)	HARD- NESS (CA, MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AU- SUMP- TION KATIO (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00099)	PH (UNITS) (00400)
JAN.												
01-31	1.0	--	--	--	5080	6.91	1140	1900	1800	9.8	6720	7.4
FEB.												
01-24	.18	--	--	--	6280	8.54	1020	2300	2200	12	8380	7.6
25-26	.19	--	--	--	5720	7.78	1330	2100	2000	11	7180	7.7
MAR.												
01-25	.11	--	--	--	6240	8.49	1030	2200	2100	12	7830	7.2
26-31	.00	--	--	--	9100	12.4	835	2900	2700	18	13100	7.4
APR.												
01-09	.37	--	--	--	9330	12.7	705	3000	2900	17	13100	7.4
10-19	.29	--	--	--	6300	8.57	833	2300	2200	12	8660	7.3
20-30	.38	--	--	--	1780	2.42	4230	1100	940	1.9	2180	7.4
MAY												
01-22	.54	--	--	--	1340	1.82	4520	830	710	1.2	1750	7.7
23-31	.36	--	--	--	939	1.28	3090	600	500	1.0	1280	7.7
JUNE												
01-04	.38	--	--	--	1110	1.51	1510	640	530	1.5	1530	7.7
05-12	.27	--	--	--	1250	1.70	1140	720	590	1.9	1740	7.2
13-26	.50	--	--	--	1090	1.48	1470	650	530	1.5	1500	7.7
27-30	.21	--	--	--	1410	1.92	579	720	610	2.8	2030	7.7
JULY												
01-02	.26	--	--	--	2210	3.01	322	970	870	5.0	3110	7.7
03-04	.29	--	--	--	2910	3.96	275	1200	1100	6.8	4420	7.5
05-10	.55	--	--	--	5250	7.14	284	1800	1700	11	7570	7.5
11-13	.51	--	--	--	3850	5.24	561	1500	1400	8.2	5790	7.6
14-17	.51	--	--	--	3130	4.26	448	1300	1200	6.6	4530	7.3
18-21	.40	--	--	--	4440	6.04	360	1600	1500	9.7	6620	7.5
22-24	.72	--	--	--	2230	3.03	1280	900	810	5.8	3230	7.6
25-27	1.0	--	--	--	1280	1.74	2100	650	550	2.7	1820	7.5
28-31	.71	--	--	--	987	1.34	1680	540	440	2.1	1410	7.7
AUG.												
01-04	.40	--	--	--	1000	1.36	1290	540	440	1.9	1490	7.8
05-12	.42	--	--	--	1490	2.03	712	730	630	3.2	2260	7.5
13-17	.16	--	--	--	2820	3.84	221	1100	990	7.4	4530	7.7
18-31	.33	--	--	--	8090	11.0	146	2200	2100	18	12000	7.5
SEP.												
01-13	.29	--	--	--	11200	15.2	514	3000	2900	23	16600	7.5
14-17	.48	--	--	--	2160	2.94	577	1000	920	3.9	3020	7.5
18-20	.82	--	--	--	3270	4.45	194	1300	1200	7.7	4880	7.8
21-30	.49	--	--	--	6320	8.60	307	2100	2000	13	9470	7.5
OCT.												
01-04	.67	--	--	--	7590	10.3	307	2600	2400	15	11000	7.6
05-16	.43	--	--	--	1350	1.84	2310	760	640	2.1	1920	7.6
17-31	.63	--	--	--	2650	3.60	572	1300	1100	5.2	3740	7.6
NOV.												
01-30	.66	--	--	--	4740	6.45	640	1900	1800	8.7	6780	7.7
DEC.												
01-31	1.2	--	--	--	5370	7.30	652	2200	2000	9.4	7660	7.7
CALENDAR YEAR												
WTU. AVG.	.49	--	--	--	1870	2.54	--	948	828	2.8	2520	7.6
TIME WTD. AVG.	.52	--	--	--	4510	6.13	--	1690	1570	8.6	6300	7.5
TOT. LOAD (TONS)	118	--	--	--	451000	--	--	--	--	--	--	--
WATER YEAR												
WTU. AVG.	.52	--	--	--	2070	2.81	--	1000	885	3.2	2780	7.6
TIME WTD. AVG.	.53	--	--	--	4780	6.50	--	1750	1630	9.2	6640	7.5
TOT. LOAD (TONS)	118	--	--	--	473000	--	--	--	--	--	--	--

08396500 PECOS RIVER NEAR ARTESIA, N. MEX.--Continued

## CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

DATE	TIME	INSTAN-	DIS-	DIS-	DIS-	DIS-	DIS-	DIS-	BICAR-	CAR-	DIS-	
		TANE- OUS DIS- CHARGE (CFS) (00061)	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)			BONATE (HCO3) (MG/L) (00440)	BONATE (CO3) (MG/L) (00445)
JAN. 09...	1500	111	8.9	30	470	160	800	7.4	209	0	1500	
FEB. 05...	1530	53	4.1	40	600	220	1400	11	170	0	2100	
MAR. 05...	1500	55	2.9	40	580	210	1300	14	178	0	1900	
APR. 10...	1500	73	8.4	50	640	220	1300	9.8	176	0	2300	
MAY 07...	1640	911	10	20	300	42	88	3.3	140	0	790	
JUNE 04...	1700	344	11	9	220	33	120	2.8	145	0	560	
JULY 09...	1630	15	16	20	530	140	910	11	159	0	1700	
AUG. 13...	1700	59	9.5	10	260	68	390	5.9	108	0	820	
SEP. 10...	1700	8.3	12	10	760	290	2900	30	196	0	2500	
OCT. 17...	1445	128	10	70	250	46	150	3.4	137	0	670	
NOV. 07...	1500	66	15	10	490	150	780	7.8	152	0	1600	
DEC. 05...	1330	39	9.6	30	540	190	1000	9.8	186	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) (00619)	TOTAL NITRITE PLUS NITRATE (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)	TOTAL ORGANIC NITRO- GEN (N) (MG/L) (00605)	TOTAL NITRO- GEN (N) (MG/L) (00600)	TOTAL PHOS- PHORUS (P) (MG/L) (00665)
JAN. 09...	1400	.8	.73	.01	--	.74	.20	.20	.38	1.3	.09	
FEB. 05...	2300	1.0	.04	.00	--	.04	.11	.11	.41	.56	.08	
MAR. 05...	2200	1.0	1.1	.08	.15	1.2	.11	--	.89	1.2	.07	
APR. 10...	2200	1.1	.01	.00	.00	.01	.32	--	.60	.92	.13	
MAY 07...	120	.6	.26	.01	.19	.27	.07	--	1.1	1.4	.64	
JUNE 04...	160	.6	.20	.00	.11	.20	.04	--	1.1	1.2	.51	
JULY 09...	1500	.7	.02	.00	.03	.02	.10	--	.74	.87	.06	
AUG. 13...	640	.6	.12	.00	.12	.12	.05	--	.90	1.1	.08	
SEP. 10...	4700	.8	.00	.22	.03	.03	.29	--	.00	.18	.06	
OCT. 17...	260	.5	.26	.01	.33	.27	.05	--	.77	1.2	.27	
NOV. 07...	1300	.6	.36	.02	.42	.38	.11	--	.28	.81	.30	
DEC. 05...	1700	.8	.54	.05	.57	.59	.03	--	.39	.99	.04	
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)	DENSITY (GM/ML AT 20 C) (71820)	DIS- SOLVED BORON (B) (MG/L) (01020)
JAN. 09...	.03	4780	4460	1800	1700	8.1	6470	8.0	1.0	--	360	
FEB. 05...	.03	6780	6720	2400	2300	12	10900	8.3	14.0	--	540	
MAR. 05...	.01	6660	6310	2300	2200	12	9190	8.3	12.5	--	500	
APR. 10...	.02	7010	6770	2500	2400	11	9300	7.5	18.0	--	590	
MAY 07...	.01	1520	1430	920	810	1.3	1840	7.6	18.0	--	90	
JUNE 04...	.01	1250	1180	690	570	2.0	1680	8.2	24.5	--	60	
JULY 09...	.02	5190	4890	1900	1800	9.1	7190	7.5	32.0	--	580	
AUG. 13...	.00	2200	2250	930	840	5.6	3090	7.5	31.0	--	280	
SEP. 10...	.07	11500	11300	3100	2900	23	15300	7.7	24.0	1.010	1000	
OCT. 17...	.04	1490	1460	810	700	2.3	2140	7.8	18.5	--	140	
NOV. 07...	.05	4510	4420	1800	1700	7.9	6605	8.1	16.0	--	400	
DEC. 05...	.04	5490	5250	2100	2000	9.4	6890	8.1	8.0	--	480	



RIO GRANDE BASIN  
08396500 PECOS RIVER NEAR ARTESIA, N. MEX.--Continued

FIELD AND BIOCHEMICAL MEASUREMENTS, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	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) (00500)	FECAL COLI- FORM (COL. PER 100 ML) (31616)	TOTAL ORGANIC CARBON (C) (00680)
JAN. 09...	1500	111	6600	8.4	1.0	-5.5	5	4	12.4	300	5.2 *
FEB. 05...	1530	53	9900	8.3	14.0	22.0	5	3	9.5	0	--
MAR. 05...	1500	55	9400	8.4	12.5	17.0	10	4	12.0	0	7.2 *
APR. 10...	1500	73	9200	8.0	18.0	20.0	10	8	4.8	0	--
MAY 07...	1640	911	1900	8.0	18.0	26.0	3	500	8.0	14	5.0 *
JUNE 04...	1700	344	1650	8.0	24.5	33.5	3	350	7.6	18	13 *
JULY 09...	1630	15	7400	7.8	32.0	34.5	5	30	6.0	100	9.5
AUG. 13...	1700	59	3200	7.9	31.0	33.5	5	55	6.4	120	7.0
SEP. 10...	1700	8.3	15000	8.0	24.0	22.0	--	--	7.6	100	5.0
OCT. 17...	1445	128	2140	7.6	18.5	24.5	--	--	8.4	73	7.0
NOV. 07...	1500	66	6605	8.1	16.0	28.0	--	--	10.4	8	5.0
DEC. 05...	1330	39	6890	8.1	8.0	10.0	--	--	11.5	0	3.8

\* Analyzed by New Mexico Environmental Improvement Agency.

PESTICIDE ANALYSES, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

DATE	TIME	TOTAL ORGANIC CARBON (C) (00680)	2,4-D (UG/L) (39730)	2,4,5-T (UG/L) (39740)	SILVEX (UG/L) (39760)
APR. 30...	A 1400	--	.00	.00	.00
MAY 09...	A 1000	--	.00	.00	.00
17...	A 1000	--	.00	.00	.01
23...	A 0930	--	.00	.00	.01

A OTHER VALUES IN MICROGRAMS PER LITER FOR EACH DATE:  
(2,4-DP), 0.00; DICAMBA, 0.00

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973  
(UNCE-DAILY)

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	7720	8750	8460	13200	1900	1440	2900	1530	16300	11100	6330	7430
2	7720	9050	8670	13600	1880	1440	3730	1310	16500	12400	6420	7630
3	7890	9460	8670	13600	1880	1630	4390	1340	15500	10800	6480	7760
4	7660	9540	8670	13800	1870	1650	4380	1650	13900	9720	6560	7650
5	7050	9460	8970	13500	1870	1750	5220	1940	20200	5100	6520	7540
6	6730	9460	9370	13400	1890	1770	5700	2390	25400	2090	6480	7480
7	6400	9210	9290	12500	1860	1760	8600	2430	17800	1740	6180	7430
8	6910	8970	9810	12400	1820	1780	5840	2160	10800	1630	5750	7480
9	6480	9130	10100	11700	1810	1750	6950	1970	13600	1580	5720	7380
10	6330	9300	9810	9640	1820	1720	8770	1940	15400	1570	5940	7430
11	6910	8750	9810	8050	1760	1720	6450	2140	18600	1490	6280	7430
12	6560	8750	8600	7540	1730	1720	5770	2570	18400	1430	6390	7380
13	6910	9300	7540	7680	1650	1520	5380	3320	19500	1400	6390	7430
14	6910	9140	8460	8410	1670	1670	4390	4490	3820	1480	6580	7580
15	7140	9140	8060	8490	1610	1570	4070	4590	2530	1640	6480	7320
16	7290	8760	8000	8490	1690	1510	4720	5570	2140	1820	6410	7270
17	7240	8910	8150	8990	1720	1540	4810	6840	2820	2030	6480	7220
18	7550	9060	8670	9470	1680	1500	6540	7660	3820	2370	6640	7220
19	7610	9300	8890	9060	1670	1430	5750	8480	5100	2720	6860	7540
20	7720	9060	9450	3840	1680	1430	6700	8890	4040	3000	6990	7700
21	7610	8820	10100	2640	1660	1410	7560	10400	10100	3240	7090	7820
22	7840	8970	10800	2450	1690	1490	4670	9200	7070	3600	7200	7820
23	8140	8610	11800	2270	1400	1470	2610	9950	7310	3960	7250	8120
24	8610	8830	11800	2160	1410	1440	2440	12200	8830	4090	7300	8390
25	8470	8090	11200	2100	1380	1570	1820	13400	9640	4580	7230	8320
26	8540	7910	12100	2030	1320	1660	1860	14700	10100	4590	7130	8290
27	8540	8480	12200	1980	1290	1910	1800	14500	10500	4910	7040	8460
28	8680	8480	12400	1940	1240	1970	1410	15700	12300	5250	7090	8190
29	8820	---	13000	1860	1220	2110	1420	16700	14100	5560	7040	7940
30	8540	---	14500	1830	1136	2300	1330	7080	10500	5930	7130	7590
31	8610	---	13700	---	1200	---	1500	13100	---	6140	---	7570
MONTH	7580	8950	10030	7620	1630	1650	4500	6780	11550	4150	6650	7660



## RIO GRANDE BASIN

08396500 PECOS RIVER NEAR ARTESIA, N. MEX.--Continued

TEMPERATURE (DEG. C) OF WATER, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973  
(ONCE-DAILY)

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

SUSPENDED-SEDIMENT DISCHARGE, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

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	68	304	56	57	3	.46	68	9	1.7
2	69	7	1.3	56	62	9.4	68	30	5.5
3	78	6	1.3	56	5	.76	70	6	1.1
4	83	7	1.6	54	3	.44	64	18	3.1
5	92	12	3.0	54	4	.58	58	17	2.7
6	92	21	5.2	56	345	52	57	11	1.7
7	97	139	36	54	3	.44	51	8	1.1
8	96	11	2.9	58	4	.63	42	3	.34
9	90	9	2.2	56	4	.60	40	71	7.7
10	85	7	1.6	58	43	6.7	60	6	.97
11	87	18	4.2	60	11	1.8	63	4	.68
12	89	13	3.1	64	10	1.7	97	6	1.6
13	97	7	1.8	63	16	2.7	116	35	11
14	90	2	.49	67	7	1.3	100	92	25
15	88	6	1.4	63	5	.85	90	27	6.6
16	92	4	.99	59	9	1.4	70	9	1.7
17	92	9	2.2	57	10	1.5	58	88	14
18	92	3	.75	56	4	.60	52	10	1.4
19	98	4	1.1	53	14	2.0	48	8	1.0
20	96	4	1.0	53	12	1.7	41	7	.77
21	87	5	1.2	56	8	1.2	40	9	.97
22	81	3	.66	69	13	2.4	38	15	1.5
23	77	4	.83	74	8	1.6	41	14	1.5
24	76	1	.21	80	27	5.8	42	14	1.6
25	73	1	.20	96	6	1.6	40	31	3.3
26	70	1	.19	88	6	1.4	38	6	.62
27	69	3	.56	83	13	2.9	37	75	7.5
28	69	1	.19	78	44	9.3	33	62	5.5
29	68	11	2.0	--	--	--	30	34	2.8
30	67	69	12	--	--	--	32	6	.52
31	65	3	.53	--	--	--	32	6	.52
TOTAL	2573	--	146.70	1778	--	113.76	1716	--	115.99

08396500 PECOS RIVER NEAR ARTESIA, N. MEX.--Continued

## SUSPENDED SEDIMENT DISCHARGE, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

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	30	6	.49	998	2850	7680	697	2420	4550
2	27	11	.80	995	3200	8600	508	1760	2410
3	24	129	8.4	980	2900	7670	420	1110	1260
4	25	31	2.1	966	3500	9130	389	810	851
5	25	11	.74	952	3980	10200	331	700	626
6	21	19	1.1	995	3410	9160	315	620	527
7	25	10	.68	1030	3310	9210	313	590	499
8	30	47	3.8	1070	3500	10100	313	890	752
9	47	201	26	1020	3580	9860	331	1400	1250
10	60	60	9.7	1010	3100	8450	322	650	565
11	58	53	8.3	995	3450	9270	324	580	507
12	56	66	10	1020	4200	11600	445	1250	1500
13	51	15	2.1	1160	3900	12200	470	1880	2390
14	49	12	1.6	1250	5580	18200	570	2390	3680
15	48	13	1.7	1190	5810	18700	580	2240	3510
16	46	16	2.0	1430	5750	22200	470	1950	2470
17	40	14	1.5	1920	7800	40400	532	2030	2920
18	44	14	1.7	2020	6900	37600	736	3890	7730
19	41	350	39	2020	6650	36300	684	4360	8050
20	718	5750	11100	1850	8400	42000	648	3200	5600
21	809	5550	12100	1400	5580	21100	515	2160	3000
22	833	4600	10300	1310	6370	22500	413	1200	1340
23	882	4300	10200	1250	6100	20600	408	1300	1430
24	879	4000	9490	1230	3850	12800	406	1120	1230
25	882	3850	9170	1210	3300	10800	322	800	696
26	890	3500	8410	1220	3100	10200	243	600	394
27	930	3500	8790	1240	3800	12700	192	400	207
28	941	3960	10100	1230	4000	13300	169	370	169
29	949	3420	8760	1220	2990	9850	150	290	117
30	980	4130	10900	1230	2380	7900	98	200	53
31	--	--	--	1110	2610	7820	--	--	--
TOTAL	10440	--	109441.71	38521	--	488100	12314	--	60283
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	57	200	31	842	7800	17700	18	137	6.7
2	50	94	13	595	5000	8030	12	308	10
3	44	51	6.1	282	3800	2890	6.8	218	4.0
4	26	54	3.8	197	2400	1280	7.6	211	4.3
5	16	89	3.8	160	1880	812	13	202	7.1
6	12	233	7.5	148	1280	511	9.0	131	3.2
7	37	81	8.1	220	1470	873	10	110	3.0
8	22	48	2.9	228	1520	936	11	69	2.0
9	9.8	59	1.6	217	1280	750	10	40	1.1
10	26	89	6.2	208	1070	601	8.3	54	1.2
11	42	81	9.2	146	780	307	10	223	6.0
12	48	76	9.8	90	450	109	10	450	12
13	71	73	14	62	270	45	101	7020	4600
14	69	55	10	45	147	18	156	11300	4760
15	55	38	5.6	20	56	3.0	112	3850	1160
16	50	46	6.2	11	48	1.4	84	2600	590
17	39	37	3.9	6.8	130	2.4	44	850	101
18	43	174	20	4.8	220	2.9	24	1230	80
19	36	110	11	4.8	178	2.3	21	430	24
20	28	105	7.9	4.6	70	.87	20	1060	57
21	15	233	9.4	4.4	135	1.6	17	165	7.6
22	176	1440	827	4.6	129	1.6	30	228	18
23	191	2300	1720	4.4	92	1.1	32	330	29
24	272	4750	3490	6.6	100	1.8	22	466	28
25	265	7000	5010	5.3	74	1.1	20	503	27
26	352	5790	5990	5.0	102	1.4	11	322	9.6
27	1210	8420	28100	4.6	333	4.1	10	267	7.2
28	839	7560	16200	4.8	260	3.4	18	345	17
29	532	8150	11700	5.3	165	2.4	13	352	12
30	568	6150	9430	21	127	7.2	12	407	13
31	585	4670	7900	13	145	5.1	--	--	--
TOTAL	5785.8	--	90558.0	3571.0	--	34905.67	872.7	--	11601.0

## RIO GRANDE BASIN

08396500 PECOS RIVER NEAR ARTESIA, N. MEX.--Continued

## SUSPENDED SEDIMENT DISCHARGE, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

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	10	457	12	52	270	38	36	270	26
2	22	430	26	53	180	26	35	4	.38
3	14	563	21	51	160	22	39	34	3.6
4	14	415	16	51	190	26	40	16	1.7
5	348	4860	7970	51	135	19	40	20	2.2
6	736	5950	11800	56	279	42	39	10	1.1
7	788	4390	9340	64	150	26	38	11	1.1
8	785	4440	9410	61	54	8.9	41	34	3.8
9	791	3740	7990	54	105	15	46	18	2.2
10	788	5450	11600	53	40	5.7	47	22	2.8
11	806	4190	9120	49	48	6.4	49	13	1.7
12	836	3400	7670	52	164	23	48	36	4.7
13	825	3700	8240	52	85	12	48	14	1.8
14	458	2100	2600	52	28	3.9	50	10	1.4
15	274	1190	880	52	16	2.2	50	9	1.2
16	187	850	429	51	16	2.2	49	7	.93
17	137	940	348	51	12	1.7	49	9	1.2
18	112	845	256	49	28	3.7	48	18	2.3
19	106	440	126	44	24	2.9	45	12	1.5
20	93	250	63	46	8	.99	44	23	2.7
21	82	290	64	47	58	7.4	46	13	1.6
22	80	143	31	47	9	1.1	48	14	1.8
23	82	54	12	47	65	8.2	45	11	1.3
24	80	148	32	47	5	.63	44	24	2.9
25	77	446	93	49	11	1.5	47	6	.76
26	67	202	37	51	16	2.2	47	11	1.4
27	62	320	54	50	13	1.8	48	11	1.4
28	59	148	24	48	13	1.7	50	11	1.5
29	57	124	19	42	13	1.5	53	27	3.9
30	54	141	21	37	9	.90	48	10	1.3
31	53	199	28	--	--	--	49	8	1.1
TOTAL	8883	--	88352	1509	--	314.52	1406	--	83.27

CAL YR 1973 TOTAL WATER DISCHARGE (CFS-DAYS)  
 CAL YR 1973 TOTAL SUSPENDED-SEDIMENT DISCHARGE (TONS)

89369.5  
 883995.62

WTR YR 1973 TOTAL WATER DISCHARGE (CFS-DAYS)  
 WTR YR 1973 TOTAL SUSPENDED-SEDIMENT DISCHARGE (TONS)

84791.5  
 801944.03

## INSTANTANEOUS SUSPENDED-SEDIMENT DISCHARGE AND PARTICLE SIZE, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

DATE	TIME	TEMPER- ATURE (DEG C) (00010)	INSTAN- TANEOUS DIS- CHARGE (CFS) (000061)	SUS- PENDED SEDI- MENT (MG/L) (80154)	SUS- PENDED 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)
APR.								
21...	1530	16.0	815	5200	11400	52	66	90
29...	1715	18.0	955	3180	8200	40	47	66
MAY								
07...	1640	18.0	911	2960	7280	25	37	49
14...	1215	15.5	1210	5120	16700	33	39	56
19...	1550	23.5	2010	6530	35400	29	34	47
JUNE								
02...	1115	21.5	495	1810	2420	32	41	53
04...	1700	24.5	344	843	783	35	49	62
13...	0800	23.5	438	1770	2090	29	36	52
27...	1720	28.5	185	386	193	54	59	76
JULY								
24...	1525	28.0	289	4310	3360	58	71	91
AUG.								
01...	0830	24.5	847	8080	18500	44	53	76
SEP.								
14...	0915	23.0	161	12800	5560	57	76	100
OCT.								
05...	1545	12.0	608	9660	15900	51	61	86
13...	1145	15.0	852	3760	8650	27	33	47
17...	1445	18.5	128	650	225	43	55	63

RIO GRANDE BASIN

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08396500 PECOS RIVER NEAR ARTESIA, N. MEX.--Continued

INSTANTANEOUS SUSPENDED-SEDIMENT DISCHARGE AND PARTICLE SIZE,  
CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

WATER QUALITY DATA, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

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)
APR.							
21...	--	--	--	99	100	--	--
29...	94	100	--	--	--	--	--
MAY							
07...	82	93	100	--	--	--	--
14...	95	100	--	--	--	--	--
19...	89	99	100	--	--	--	--
JUNE							
02...	82	98	100	--	--	--	--
04...	92	99	100	--	--	--	--
13...	89	98	100	--	--	--	--
27...	--	--	--	93	98	100	--
JULY							
24...	--	--	--	99	100	--	--
AUG.							
01...	98	100	--	--	--	--	--
SEP.							
14...	--	--	--	--	--	--	--
OCT.							
05...	97	100	--	--	--	--	--
13...	79	98	100	--	--	--	--
17...	--	--	--	67	79	99	100

## RIO GRANDE BASIN

08405000 PECOS RIVER AT CARLSBAD, N. MEX.

LOCATION.—Lat 32°24'42", long 104°13'17", in SE<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub> sec. 7, T.22 S., R.27 E., Eddy County, immediately downstream from Lower Tansil Dam, which is approximately 0.2 mi (0.3 km) upstream from Dark Canyon, and 0.5 mi (0.8 km) downstream from the Greene Street Bridge on U.S. Highway 62-180 in Carlsbad.

DRAINAGE AREA.—18,100 mi<sup>2</sup> (46,900 km<sup>2</sup>), 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, 3,140 mg/l May 1-6; Minimum, 1,600 mg/l June 1-7.  
Hardness maximum, 1,600 mg/l May 1-6; minimum, 930 mg/l May 22-31.  
Specific conductance: Maximum daily, 4,410 micromhos May 8; minimum daily, 1,930 micromhos May 30.  
Water temperatures: Maximum, 29.5°C Sept. 13; minimum, 4.0°C Jan. 9-10.

## 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: 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 1973 TO DECEMBER 1973

DATE	DIS- CHARGE (CFS) (00060)	DIS- SOLVED SILICA (SiO <sub>2</sub> ) (MG/L) (00955)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NE- SIUM (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	BICAR- BONATE (HCO <sub>3</sub> ) (MG/L) (00440)	CAR- BONATE (CO <sub>3</sub> ) (MG/L) (00445)	DIS- SOLVED SULFATE (SO <sub>4</sub> ) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)
JAN.												
01-31	24	16	--	320	110	300	4.5	191	0	1100	990	.7
FEB.												
01-28	26	16	--	360	110	310	4.4	185	0	1100	980	.8
MAR.												
01-31	31	15	--	380	110	320	5.0	190	0	1200	500	.7
APR.												
01-30	25	15	--	410	120	360	4.7	172	0	1300	600	.6
MAY												
01-06	22	16	--	410	130	400	5.3	174	0	1400	690	.9
07-13	613	13	--	400	94	400	5.8	141	0	1400	636	.6
14-17	992	12	--	350	67	250	4.9	135	0	1000	390	.7
18-21	1320	11	--	320	57	190	4.3	127	0	910	280	.7
22-31	808	13	--	290	51	160	4.2	135	0	860	220	.9
JUNE												
01-07	43	15	--	300	55	140	3.6	136	0	800	220	.7
08-14	27	16	--	340	80	230	3.8	152	0	1000	360	.7
19-21	25	20	--	370	100	290	3.9	185	0	1200	480	.9
22-25	115	19	--	390	110	310	4.6	163	0	1200	520	1.0
26-30	34	17	--	330	74	220	4.6	163	0	980	360	1.0
JULY												
01-31	27	21	--	350	100	300	5.6	175	0	1100	980	1.9
AUG.												
01-31	17	22	--	390	120	370	5.1	163	0	1300	600	1.0
SEP.												
01-30	21	20	--	360	120	340	6.0	165	0	1200	570	.8
OCT.												
01-31	17	20	--	380	120	350	5.2	176	0	1200	570	.6
NOV.												
01-30	15	19	--	360	120	350	5.0	178	0	1200	560	1.1
DEC.												
01-31	14	18	--	350	110	320	5.3	187	0	1100	530	.6
CALENDAR YEAR												
WTU. AVG.	--	14	--	339	76	254	4.7	143	0	1050	392	.8
TIME WTU. AVG.	81	18	--	363	108	319	5.0	174	0	1160	516	.9
TOT. LOAD (TONS)	--	1100	--	27200	6090	20400	379	11600	0	83800	31400	.66
WATER YEAR												
WTU. AVG.	--	14	--	338	76	254	4.7	147	0	1040	390	.8
TIME WTU. AVG.	83	17	--	357	105	310	4.9	176	0	1140	497	.9
TOT. LOAD (TONS)	--	1120	--	27600	6210	20700	385	12000	0	85000	31800	.67

RIO GRANDE BASIN

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08405000 PECOS RIVER AT CARLSBAD, N. MEX.--Continued

CHEMICAL ANALYSES, COMPOSITES OF DAILY SAMPLES, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

DATE	DIS- SOLVED 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 CONSTITUENTS) (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- SURP- TION RATIO (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)
JAN.												
01-31	1.2	--	--	--	2440	3.32	158	1300	1100	3.7	3230	7.9
FEB.												
01-28	.88	--	--	--	2480	3.37	174	1400	1200	3.7	3430	7.9
MAR.												
01-31	1.0	--	--	--	2630	3.58	220	1400	1200	3.7	3480	7.5
APR.												
01-30	.78	--	--	--	2900	3.94	196	1500	1400	4.0	3610	7.5
MAY												
01-06	.79	--	--	--	3140	4.27	187	1600	1400	4.4	4020	7.5
07-13	.47	--	--	--	3020	4.11	5000	1400	1300	4.7	3730	7.5
14-17	.31	--	--	--	2140	2.91	5730	1200	1000	3.2	2970	7.7
18-21	.23	--	--	--	1840	2.50	6560	1000	930	2.6	2430	7.6
22-31	.54	--	--	--	1670	2.27	3640	930	820	2.3	2190	7.7
JUNE												
01-07	.52	--	--	--	1600	2.18	186	980	860	2.0	2170	7.3
08-14	.69	--	--	--	2110	2.87	154	1200	1100	2.9	2760	7.6
15-21	.84	--	--	--	2560	3.48	173	1300	1200	3.5	3280	7.8
22-25	.96	--	--	--	2640	3.59	820	1400	1300	3.6	3340	7.6
26-30	.82	--	--	--	2070	2.82	190	1100	1000	2.9	2760	7.6
JULY												
01-31	.95	--	--	--	2450	3.33	179	1300	1100	3.6	3480	7.4
AUG.												
01-31	.99	--	--	--	2890	3.93	133	1500	1300	4.2	3940	7.5
SEP.												
01-30	.95	--	--	--	2700	3.67	153	1400	1300	4.0	3700	7.6
OCT.												
01-31	1.2	--	--	--	2740	3.73	126	1400	1300	4.0	3670	7.6
NOV.												
01-30	1.1	--	--	--	2710	3.69	110	1400	1200	4.1	3580	7.7
DEC.												
01-31	1.1	--	--	--	2530	3.44	95.6	1300	1200	3.8	3440	7.9
CALENDAR YEAR												
WTU. AVG.	.56	--	--	--	2200	3.00	--	1160	1040	3.2	2900	7.6
TIME WTU.												
AVG.	.95	--	--	--	2580	3.51	--	1360	1200	3.8	3450	7.6
TOT. LOAD (TONS)	45	--	--	--	176000	--	--	--	--	--	--	--
WATER YEAR												
WTU. AVG.	.57	--	--	--	2200	2.99	--	1160	1040	3.2	2890	7.6
TIME WTU.												
AVG.	.95	--	--	--	2520	3.43	--	1330	1180	3.7	3370	7.7
TOT. LOAD (TONS)	46	--	--	--	179000	--	--	--	--	--	--	--



## RIO GRANDE BASIN

08405000 PECOS RIVER AT CARLSBAD, N. MEX.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C.) CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973  
(ONCE-DAILY)

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	3330	3410	3400	3870	4030	2060	2880	3480	3930	3700	3820	3600
2	3310	3410	3470	4040	4110	2090	3010	3660	3890	3710	3820	3580
3	3290	3410	3480	3980	4090	2080	3010	3660	3880	3740	3810	3580
4	3290	3420	3490	3980	4160	2250	3050	3660	3870	3770	3780	3600
5	3230	3430	3500	---	4180	2330	3120	3720	3870	3550	3760	3600
6	3290	3410	3520	---	4240	2260	3250	3780	3840	3690	3770	3600
7	3290	3400	3540	---	4320	2350	3270	3780	3590	3550	3750	3600
8	3210	3180	3550	3910	4418	2520	3290	3820	3610	3560	3730	3580
9	3210	3220	3550	3910	4030	2690	3370	3830	3630	3590	3710	3560
10	3210	3220	3320	3880	3650	2810	3380	3850	3610	3620	3710	3570
11	3220	3310	3370	3890	3600	2910	3390	3880	3340	3670	3730	3560
12	3260	3410	3450	3850	3500	3010	3470	3870	3530	3690	3710	3550
13	3290	3390	3500	3830	3350	2980	3620	3870	3580	3710	3700	3580
14	3260	3420	3570	3850	3080	3030	3570	3870	3580	3740	3730	3550
15	3270	3430	3560	3860	3100	3260	3570	3870	3380	3740	3710	3520
16	3280	3420	3570	3820	2900	3280	3640	3880	3480	3740	3700	3510
17	3270	3430	3570	3800	2810	3390	3610	3870	3540	3740	3700	3510
18	3280	3440	3580	3800	2650	3490	3640	3890	3540	3750	3670	3520
19	3310	3440	3580	3870	2560	3510	3650	3940	3600	3740	3690	3500
20	3270	3450	3600	3860	2490	3510	3690	3880	3710	3740	3690	3500
21	3290	3420	3630	3850	2390	3570	3690	3880	3690	3770	3670	3500
22	3280	3070	3600	3850	2310	3660	3640	3910	3670	3770	3670	3450
23	3290	3190	3740	3860	2300	3750	3640	3950	3720	3780	3660	3480
24	3290	3310	3750	3840	2390	3770	3680	3950	3720	3800	3640	3480
25	3320	3420	3750	3840	2360	3150	3690	3950	3700	3810	3620	3470
26	3350	3400	3820	3820	2400	2910	3760	3950	3710	3810	3650	3490
27	3410	3400	3820	3820	2300	2810	3760	3970	3700	3870	3650	3480
28	3370	3410	3820	3880	2300	2900	3760	3960	3720	3840	3650	3480
29	3430	---	3930	3870	2050	2770	3540	3990	3720	3820	3650	3470
30	3390	---	3830	3940	1930	2830	3290	4000	3720	3840	3640	3470
31	3400	---	3880	---	2000	---	3440	4000	---	3840	---	3470
MONTH	3300	3370	3600	3870	3100	2930	3460	3860	3670	3730	3710	3530

TEMPERATURE (DEG. C) OF WATER, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973  
(ONCE-DAILY)

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

RIO GRANDE BASIN

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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 (210 m) downstream from mouth of Dark Canyon, 0.3 mi (0.5 km) downstream from lower Tansil Dam and Bataan recreational area, and 0.8 mi (1.3 km) downstream from bridge on U.S. Highway 62-180 in Carlsbad, and at mile 459.0 (738.5 km).

DRAINAGE AREA.—18,550 mi<sup>2</sup> (48,040 km<sup>2</sup>), approximately (contributing area).

PERIOD OF RECORD.—Chemical analyses: February 1972 to current year.

REMARKS.—Samples collected at this station for comparison with those collected at 08405000 Pecos River at Carlsbad, N. Mex.

CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS) (000061)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (000095)	AIR TEMPER- ATURE (DEG C) (000020)	TEMPER- ATURE (DEG C) (000010)	COLOR (PLAT- INUM- COBALT UNITS) (000080)	TUR- BID- ITY (JTU) (000070)
JAN.							
09 ...	1300	23	2980	-4.5	3.5	--	--
FEB.							
05 ...	1800	16	3450	21.0	13.5	--	--
MAR.							
05 ...	1800	16	3540	14.5	15.0	8	8
APR.							
10 ...	1715	26	3880	20.0	16.0	--	--
MAY							
07 ...	1930	345	4240	23.5	21.0	6	8
JUNE							
05 ...	1615	66	2400	31.5	27.5	--	--
JULY							
10 ...	1615	29	3040	20.0	27.0	--	--
AUG.							
14 ...	1430	22	3900	34.5	30.0	--	--
SEP.							
09 ...	1420	25	3380	29.0	26.0	--	--
OCT.							
10 ...	0850	16	3740	--	16.0	--	--
NOV.							
07 ...	1720	25	3890	17.0	16.0	--	--
DEC.							
06 ...	1300	15	3580	--	9.0	--	--

## RIO GRANDE BASIN

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 mi (4.0 km) upstream from gaging station near Malaga, which is 3.1 mi (5.0 km) southeast of Malaga, 4.3 mi (6.9 km) downstream from Black River, and at mile 432.0 (695.1 km).

DRAINAGE AREA.--19,190 mi<sup>2</sup> (49,700 km<sup>2</sup>), approximately (contributing area).

PERIOD OF RECORD.--Chemical analyses: July 1937 to current year.

Water temperatures: February 1959 to current year.

Sediment records: July 1969 to August 1972 (discontinued).

## EXTREMES:

Current year:

Dissolved solids: Maximum, 5,680 mg/l Apr. 11; minimum, 1,720 mg/l June 1.

Hardness: Maximum, 2,100 mg/l on many days during April, November, and December; minimum, 960 mg/l June 1.

Specific conductance: Maximum daily, 8,330 micromhos Apr. 8; minimum daily, 2,300 micromhos May 31.

Water temperatures: Maximum, 31.0°C June 29; minimum, 3.5°C Jan. 10.

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: Maximum, 34.0°C June 25, 1964; minimum, 3.0°C Jan. 13, 1963.

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 1973 TO DECEMBER 1973

DATE	DIS- CHARGE (CFS) (00060)	DIS- SOLVED SILICA (SiO <sub>2</sub> ) (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- BONATE (HCO <sub>3</sub> ) (MG/L) (00440)	CAR- BONATE (CO <sub>3</sub> ) (MG/L) (00445)	DIS- SOLVED SULFATE (SO <sub>4</sub> ) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)
JAN.												
01-31	42	14	--	460	160	720	19	197	0	1900	1200	1.0
FEB.												
01-28	36	3.8	--	480	180	880	21	152	0	1700	1400	1.0
MAR.												
01-31	47	12	--	450	160	740	18	147	0	1700	1200	1.0
APR.												
01-30	30	14	--	520	190	890	27	146	0	1700	1700	1.1
MAY												
01-08	58	12	10	490	180	760	15	142	0	1800	1900	1.0
09-10	790	14	--	420	140	470	5.9	161	0	1400	750	1.1
11-15	743	15	--	390	88	370	5.9	144	0	1200	590	.7
16-19	1420	14	--	360	70	260	5.1	137	0	1000	410	.6
20-23	1400	14	--	310	60	200	4.5	136	0	940	310	.9
24-31	836	15	--	310	59	180	4.6	143	0	930	280	.6
JUNE												
01...	639	14	--	300	52	160	4.4	141	0	860	260	.6
02-04	140	15	--	350	77	370	10	144	0	1100	610	.7
05-09	81	18	--	370	94	460	12	143	0	1100	750	.8
10-18	53	19	--	510	130	640	17	145	0	1400	1100	.9
19-24	48	21	--	460	140	720	18	153	0	1500	1200	1.0
25-27	165	15	--	440	140	500	9.2	133	0	1500	880	.9
28-30	51	15	--	440	140	590	15	139	0	1500	1000	.9
JULY												
01-31	46	21	--	500	150	720	18	120	0	1600	1200	.8
AUG.												
01-31	38	22	--	500	170	810	21	151	0	1800	1400	1.0
SEP.												
01-30	46	19	--	520	180	820	23	163	0	1600	1400	1.1
OCT.												
01-31	50	18	--	500	190	830	13	168	0	1700	1400	.8
NOV.												
01-30	50	18	--	530	180	790	19	170	0	1700	1400	.9
DEC.												
01-31	46	14	--	530	190	840	18	175	0	1700	1400	.9
CALENDAR YEAR												
WTU. AVG.	--	15	--	400	109	454	10	147	0	1260	753	.9
TIME WTU.												
AVG.	109	16	--	484	164	748	18	156	0	1610	1270	.9
TOT. LOAD (TUNS)	--	1610	--	42900	11700	48700	1100	15800	0	135000	80800	.93
WATER YEAR												
WTU. AVG.	--	15	--	392	105	440	10	145	0	1240	724	.9
TIME WTU.												
AVG.	107	15	--	470	156	731	18	151	0	1580	1230	1.0
TOT. LOAD (TUNS)	--	1550	--	41300	11000	46400	1080	15300	0	131000	76900	.92

RIO GRANDE BASIN

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08406500 PECOS RIVER NEAR MALAGA, N. MEX.--Continued

CHEMICAL ANALYSES, COMPOSITES OF DAILY SAMPLES, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

DATE	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00651)	DIS- SOLVED ORTHU. PHOS- PHORUS (P) (MG/L) (00671)	DIS- SOLVED BORON (B) (UG/L) (01020)	DIS- SOLVED RESI- DUE AT 180 C) (MG/L) (70300)	DIS- SOLVED SUM OF IONS IN (MG/L) (70301)	DIS- SOLVED SOLIDS (TONS PER DAY) (70303)	DIS- SOLVED SOLIDS (TONS PER DAY) (70302)	HAZ- ARD- NESS (CA+MG) (MG/L) (00900)	NON- HAZ- ARD- NESS (MG/L) (00902)	SODIUM AU- TION RATIO (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHUS) (00095)	pH (UNITS) (00400)
JAN.												
01-31	1.4	--	--	--	4180	5.68	474	1800	1600	7.4	5560	7.4
FEB.												
01-28	1.1	--	--	--	4750	6.46	462	1900	1800	8.7	6310	7.9
MAR.												
01-31	1.5	--	--	--	4360	5.93	553	1800	1700	7.6	5510	7.3
APR.												
01-30	1.2	--	--	--	5120	6.96	415	2100	2000	8.5	6840	7.2
MAY												
01-08	1.3	.25	380	4870	4640	6.31	727	2000	1800	7.5	6310	7.3
09-10	.16	--	--	--	3280	4.46	7000	1600	1500	5.1	4530	7.8
11-15	.54	--	--	--	2730	3.71	5480	1300	1200	4.4	3630	7.6
16-19	.46	--	--	--	2190	2.98	8400	1200	1100	3.3	2940	7.6
20-23	.38	--	--	--	1910	2.60	7220	1000	910	2.7	2580	7.6
24-31	.40	--	--	--	1850	2.52	4180	1000	900	2.5	2490	7.7
JUNE												
01-01	.48	--	--	--	1720	2.34	2970	960	850	2.2	2340	7.7
02-04	.71	--	--	--	2610	3.55	987	1200	1100	4.7	3320	7.6
05-09	.82	--	--	--	2880	3.92	630	1300	1200	5.5	3900	7.5
10-18	1.1	--	--	--	3890	5.29	557	1800	1700	6.5	5390	7.7
19-24	1.1	--	--	--	4140	5.63	537	1700	1600	7.5	5280	7.6
25-27	.92	--	--	--	3550	4.83	1580	1700	1600	5.3	4460	7.7
28-30	.83	--	--	--	3770	5.13	519	1700	1600	6.3	4900	7.7
JULY												
01-31	1.2	--	--	--	4270	5.81	530	1900	1800	7.3	6100	7.4
AUG.												
01-31	1.6	--	--	--	4810	6.54	494	1900	1800	8.0	6620	7.4
SEP.												
01-30	1.7	--	--	--	4650	6.32	578	2000	1900	7.9	6630	7.4
OCT.												
01-31	1.7	--	--	--	4740	6.45	640	2000	1900	8.0	6160	7.5
NOV.												
01-30	2.0	--	--	--	4730	6.43	639	2100	1900	7.6	6810	7.5
DEC.												
01-31	2.1	--	--	--	4790	6.51	595	2100	2000	8.0	6750	7.5
CALENDAR YEAR												
WTU. AVG.	.84	--	--	--	3080	4.19	--	1440	1330	4.9	4170	7.6
TIME WTU.												
AVG.	1.4	--	--	--	4390	5.98	--	1880	1760	7.4	5980	7.5
TOT. LOAD (TONS)	90	--	--	--	330000	--	--	--	--	--	--	--
WATER YEAR												
WTU. AVG.	.77	--	--	--	3000	4.09	--	1400	1300	4.9	4060	7.6
TIME WTU.												
AVG.	1.3	--	--	--	4280	5.82	--	1810	1690	7.4	5810	7.6
TOT. LOAD (TONS)	81	--	--	--	316000	--	--	--	--	--	--	--

## RIO GRANDE BASIN

08406500 PECOS RIVER NEAR MALAGA, N. MEX.--Continued

CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS) (00061)	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)
JAN.											
09...	0900	52	9.2	9	480	170	700	18	203	0	1500
FEB.											
06...	0900	33	7.9	30	490	180	920	27	152	0	1700
MAR.											
06...	0930	44	9.3	20	470	170	820	20	163	0	1700
APR.											
11...	1030	36	12	9	520	190	1000	29	143	0	1900
MAY											
06...	0740	51	10	30	510	170	730	15	150	0	1700
JUNE											
05...	1230	90	13	30	350	87	480	12	131	0	1100
JULY											
10...	1030	29	16	30	480	160	760	21	144	0	1700
AUG.											
14...	0830	48	15	10	470	150	670	15	144	0	1600
SEP.											
11...	0910	41	15	20	470	140	700	17	159	0	1500
OCT.											
16...	0930	66	14	30	500	170	790	17	166	0	1600
NOV.											
08...	0830	52	16	10	530	190	840	19	168	0	1800
DEC.											
06...	0900	49	15	10	520	180	760	18	184	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) (00614)	TOTAL NITRITE PLUS NITRATE (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)	TOTAL ORGANIC NITRO- GEN (N) (MG/L) (00605)	TOTAL NITRO- GEN (N) (MG/L) (00600)	TOTAL PHOS- PHORUS (P) (MG/L) (00665)
JAN.											
09...	1200	.9	1.6	.01	--	1.6	.20	--	.67	2.5	.13
FEB.											
06...	1500	1.0	.81	.06	--	.87	.37	.37	1.2	2.5	.15
MAR.											
06...	1400	1.0	1.2	.04	1.1	1.2	.30	--	.80	2.2	.09
APR.											
11...	1700	1.0	.69	.00	.63	.69	.23	--	1.2	2.0	.10
MAY											
08...	1200	.9	.83	.02	.95	.85	.26	--	.74	2.0	.10
JUNE											
05...	700	.8	.10	.00	.16	.10	.07	--	.93	1.2	.07
JULY											
10...	1300	1.0	.40	.02	.61	.42	.14	--	1.2	1.9	.06
AUG.											
14...	1100	.8	.84	.01	1.1	.85	.13	--	.97	2.2	.07
SEP.											
11...	1200	.7	1.4	.06	1.6	1.5	.15	--	.08	1.8	.07
OCT.											
16...	1300	1.0	1.2	.03	1.3	1.2	.11	--	.89	2.3	.07
NOV.											
08...	1400	.9	1.5	.02	1.5	1.5	.08	--	.35	1.9	.08
DEC.											
06...	1300	1.0	1.6	.04	1.6	1.6	.17	--	.93	2.7	.06

DATE	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 (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.										
09...	.02	4560	4190	1900	1700	7.0	5830	7.8	4.5	390
FEB.										
06...	.04	5380	4910	2000	1800	9.0	7620	7.5	10.5	460
MAR.										
06...	.03	4880	4680	1900	1700	8.2	6540	7.9	13.5	440
APR.										
11...	.02	5680	5430	2100	2000	9.5	6830	7.6	16.5	460
MAY										
08...	.02	4440	4420	2000	1900	7.2	5700	7.4	18.0	380
JUNE										
05...	.01	2930	2810	1200	1100	6.0	3720	8.1	24.0	210
JULY										
10...	.01	4770	4510	1900	1700	7.7	6440	7.4	25.5	440
AUG.										
14...	.02	4040	4100	1800	1700	6.9	5710	7.6	25.0	420
SEP.										
11...	.05	4080	4130	1800	1600	7.3	5310	7.5	22.0	390
OCT.										
18...	.05	4710	4480	1900	1800	7.8	6760	7.8	17.0	420
NOV.										
08...	.06	5030	4890	2100	2000	8.0	7208	8.0	14.0	460
DEC.										
06...	.05	4780	4590	2000	1900	7.3	6600	7.6	7.5	400

RIO GRANDE BASIN

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08406500 PECOS RIVER NEAR MALAGA, N. MEX.--Continued

FIELD AND BIOCHEMICAL MEASUREMENTS, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

DATE	TIME	INSTANTANEOUS WIS- CHARGE (CFS) (00061)	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- CUBALT 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) (MG/L) (00680)
JAN.											
09...	0900	52	5900	8.3	4.5	-4.0	5	5	12.1	250	6.9 *
FEB.											
06...	0900	33	7250	8.3	10.5	9.0	20	15	10.0	0	--
MAR.											
06...	0930	44	6800	8.3	13.5	12.5	10	9	12.8	15	11 *
APR.											
11...	1030	36	7700	8.4	16.5	19.0	20	40	5.7	0	--
MAY											
08...	0740	51	6300	8.0	18.0	16.0	5	40	6.7	0	7.0 *
JUNE											
05...	1230	90	3800	8.2	24.0	27.0	3	35	9.3	30	6.5 *
JULY											
10...	1030	29	6400	7.9	25.5	25.5	5	20	7.1	15	9.5 *
AUG.											
14...	0830	48	5500	7.8	25.0	23.5	5	35	6.9	80	7.5
SEP.											
11...	0910	41	5900	7.9	22.0	21.0	--	--	6.2	9000	7.0
OCT.											
18...	0930	66	6760	7.8	17.0	16.0	--	--	8.8	6	6.0
NOV.											
08...	0830	52	7208	8.0	14.0	13.0	--	--	9.2	21	6.6
DEC.											
06...	0900	49	6600	7.6	7.5	3.0	--	--	10.4	9	5.3

\* Analyzed by New Mexico Environmental Improvement Agency.

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973  
(ONCE-DAILY)

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	5760	5980	6270	6360	7110	2390	6320	5690	5690	6750	6860	6500
2	5790	6030	6390	6860	7320	3300	6100	6240	5600	5880	7000	6460
3	6130	6400	6420	7410	7480	3730	6010	6460	6650	5940	6950	6420
4	6090	6820	6350	7080	6270	3900	5670	6150	6950	6750	6860	6420
5	6060	6860	6390	7170	6120	3950	6150	6480	7090	6750	6820	6420
6	6020	7900	6460	8030	6050	4000	6480	6480	7430	6800	6770	6340
7	6020	7900	6290	8130	6270	4100	6010	6440	6690	6670	6730	6420
8	6090	6910	6290	8330	6350	4350	5790	6290	6690	6580	6770	6340
9	5990	6690	6360	8270	4760	4670	5680	6450	6730	6540	6650	6580
10	5990	6520	6310	7910	4390	5080	6210	6510	6730	6520	6600	6710
11	5760	6480	6060	7030	4190	5180	6420	6610	5660	6580	6480	6750
12	6130	6730	5790	6530	---	5260	6500	6680	6520	6620	6480	6890
13	6090	6910	5610	6450	3880	5290	6480	6210	7090	6800	6400	6840
14	6090	6910	5580	7640	3660	5400	6750	5650	7430	6890	6480	6840
15	6130	6820	5760	7790	3610	5370	6010	5810	4780	6300	6480	6840
16	6090	6910	5700	7520	3190	5430	5750	5980	4860	6190	6520	6800
17	6060	7090	5790	7680	3340	5430	5990	6480	6990	6300	6400	6840
18	6130	7190	5820	7310	2890	5490	6620	6650	6650	6400	6480	6930
19	6240	7140	5930	7470	2880	5620	6650	6790	6520	6500	6440	6890
20	6060	7190	6030	7680	2680	5560	6520	6950	7130	6650	6400	6840
21	6240	7090	5380	6630	2630	5680	6540	7060	7130	6800	6560	6840
22	6420	6950	5300	7060	2520	5680	6560	7000	6990	6980	6480	6890
23	6460	6820	5730	7250	2530	6020	6420	7020	7130	6960	6480	7030
24	6460	6250	6020	6990	2580	6020	6280	7010	7130	6910	6600	7030
25	6130	6210	5990	7040	2480	5100	6260	6870	6820	6750	6560	6890
26	5960	6290	5520	7110	2540	4740	6610	6160	6690	6780	6520	6890
27	6200	6250	5790	7010	2580	4780	6710	6330	6690	6820	6520	6930
28	5860	6290	5300	7080	2540	5180	6700	6690	6770	6820	6400	6980
29	5960	---	5200	7110	2540	5410	6610	7070	6730	6820	6440	6890
30	5790	---	5960	7090	2500	5770	4280	7050	6690	6870	6400	6910
31	5920	---	6060	---	2300	---	5450	6680	---	6870	---	6890
MONTH	6070	6770	5930	7300	4010	4930	6210	6520	6620	6640	6580	6750



## RIO GRANDE BASIN

08406500 PECOS RIVER NEAR MALAGA, N. MEX.--Continued

TEMPERATURE (DEG. C) OF WATER, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973  
(ONCE-DAILY)

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

## 08407000 PECOS RIVER AT PIERCE CANYON CROSSING, NEAR MALAGA, N. MEX.

LOCATION (revised).--Lat 32°11'19", long 103°58'43", in SW 1/4 sec. 27, T. 24 S., R. 29 E., Eddy County, 0.2 mi (0.3 km) downstream from gaging station, which is 550 ft (168 m) upstream from Pierce Canyon Crossing, and 6 mi (9.7 km) southeast of Malaga.

DRAINAGE AREA.--19,260 mi (49,880 km<sup>2</sup>), 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, 21,000 mg/l Feb 15-16; minimum, 1,870 mg/l June 1.  
Hardness: Maximum, 2,600 mg/l Jan. 1, Feb. 15-16; minimum, 940 mg/l June 1.  
Specific conductance: Maximum daily, 36,800 micromhos Feb. 15; minimum daily, 2,560 micromhos June 1.  
Water temperatures: Maximum, 30.5°C Aug. 16; minimum, 2.0°C Jan. 10.

## 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: Maximum 35.0°C July 6, 1968; minimum, 2.0°C Jan. 13, 1963, Jan. 6, 1971, Jan. 5, 1972, and Jan. 10, 1973.

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 1973 TO DECEMBER 1973

DATE	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 (HCO3) (00440)	CAR- BONATE (CO3) (00445)	DIS- SOLVED SULFATE (SO4) (00945)	DIS- SOLVED CHLO- RIDE (CL) (00940)	DIS- SOLVED FLUO- RIDE (F) (00950)
JAN.												
01...	51	13	--	530	320	6500	260	225	0	2600	9600	1.1
02-15	48	11	--	470	200	2200	82	194	0	1800	3300	1.1
16-31	39	11	--	480	220	2700	97	187	0	1800	4000	.9
FEB.												
01-14	37	9.7	--	480	210	2400	98	160	0	2100	4100	.9
15-16	31	7.9	--	510	330	6300	270	160	0	2500	11000	.9
17-28	40	5.2	--	480	240	3100	130	154	0	2000	5100	.9
MAR.												
01-31	49	10	--	470	220	2400	89	143	0	2000	3900	1.1
APR.												
01-03	25	11	--	470	190	1900	65	155	0	1800	3100	1.1
04-30	30	11	--	540	240	3000	110	146	0	2300	4900	1.1
MAY												
01-09	120	11	--	520	230	2700	81	137	0	2000	4200	1.2
10-11	814	13	--	440	140	800	34	162	0	1600	1300	.9
12-15	761	12	--	400	94	530	11	144	0	1300	830	1.0
16-19	1390	12	--	350	74	320	6.3	137	0	1100	460	.9
20-23	1400	13	20	320	61	240	6.0	134	0	960	370	.7
24-31	817	14	--	320	62	270	7.2	133	0	950	400	.9
JUNE												
01...	690	14	--	290	53	210	6.1	143	0	890	330	.6
02...	251	13	--	300	61	350	11	147	0	940	590	.6
03-04	132	15	--	330	81	630	20	139	0	1100	1000	.6
05-09	88	16	--	360	100	860	28	138	0	1200	1400	.6
10-12	52	18	--	380	120	1000	35	132	0	1300	1700	.7
13-19	54	18	--	400	140	1300	43	123	0	1600	2100	.6
20-24	46	19	--	440	160	1600	14	146	0	1700	2500	.9
25-26	138	19	--	450	170	1700	55	145	0	1700	2800	.9
27...	196	15	--	430	150	1000	34	126	0	1500	1800	.6
28-30	64	12	--	430	150	860	19	125	0	1500	1900	.6
JULY												
01-04	40	15	--	470	170	1500	50	121	0	1700	2300	.8
05-29	41	18	--	510	190	2100	79	111	0	1800	3400	.9
30...	145	18	--	520	240	--	110	111	0	1900	4700	--
31...	93	19	--	510	170	1600	55	128	0	2000	2500	.9
AUG.												
01-04	46	18	--	440	160	1500	55	142	0	1500	2300	.9
05-31	42	19	--	520	210	2400	86	144	0	1900	3600	1.1
SEP.												
01-30	50	18	--	520	220	2100	87	156	0	1900	3300	1.0
OCT.												
01-31	54	16	--	540	220	1900	63	168	0	1700	3000	.9
NOV.												
01-30	52	18	--	540	220	1800	48	177	0	1900	3100	.9
DEC.												
01-31	48	14	--	540	220	1900	43	176	0	1900	3100	1.0
CALENDAR YEAR												
WTU. AVG.	--	14	--	410	130	1090	36	145	0	1400	1740	.9
TIME WTU.												
AVG.	110	14	--	493	202	2080	72	154	0	1830	3330	1.0
TOT. LOAD												
(TONS)	--	1480	--	44600	14100	118000	3910	15700	0	133000	189000	98
WATER YEAR												
WTU. AVG.	--	14	--	402	126	1110	38	143	0	1400	1770	.9
TIME WTU.												
AVG.	108	14	--	478	196	2170	78	150	0	1830	3480	1.0
TOT. LOAD												
(TONS)	--	1460	--	42900	13500	118000	4050	15200	0	149000	189000	96

## 08407000 PECOS RIVER AT PIERCE CANYON CROSSING, NEAR MALAGA, N. MEX.--Continued

## CHEMICAL ANALYSES, COMPOSITES OF DAILY SAMPLES, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

DATE	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (000631)	DIS- SOLVED NITRO- GENE PHOS- PHORUS (P) (MG/L) (000671)	DIS- SOLVED BORON (B) (UG/L) (01020)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L) (70300)	DIS- SOLVED SOLIDS (SUM OF TUNES) (MG/L) (70301)	DIS- SOLVED SOLIDS (TONS PER AC-FT) (70303)	DIS- SOLVED SOLIDS (TONS PER DAY) (70302)	HAZU- NESS (CA+MG) (MG/L) (00090)	NON- CAR- BONATE HAZU- NESS (MG/L) (000902)	SODIUM AU- SURF- TION RATIO (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	pH (UNITS) (00400)
JAN.												
01-01	1.8	--	--	--	19900	27.1	2740	2600	2500	55	29300	7.7
02-15	1.6	--	--	--	8170	11.1	1060	2000	1800	21	13000	7.5
16-31	1.5	--	--	--	9410	12.8	991	2100	2000	26	14900	7.3
FEB.												
01-14	.97	--	--	--	9480	12.9	947	2100	1900	23	13900	8.0
15-16	1.5	--	--	--	21000	28.6	1760	2600	2500	55	29100	8.0
17-28	.79	--	--	--	11100	15.1	1200	2200	2100	29	16400	8.1
MAR.												
01-31	1.1	--	--	--	9170	12.5	1210	2100	2000	23	14300	7.3
APR.												
01-03	1.0	--	--	--	7620	10.4	514	2000	1800	19	12000	6.9
04-30	.80	--	--	--	11200	15.2	907	2300	2200	27	16100	7.2
MAY												
01-09	1.0	--	--	--	9820	13.4	3180	2200	2100	25	13800	7.5
10-11	1.3	--	--	--	4410	6.00	9690	1700	1500	8.5	6080	7.5
12-15	.56	--	--	--	3250	4.42	6680	1400	1300	6.2	4430	7.6
16-19	.42	--	--	--	2390	3.25	8970	1200	1100	4.1	3260	7.6
20-23	.38	.05	140	2140	2040	2.77	7710	1100	940	3.2	2740	7.4
24-31	.40	--	--	--	2090	2.84	4610	1100	950	3.6	2890	7.8
JUNE												
01-01	.39	--	--	--	1870	2.54	3480	940	830	3.0	2650	7.7
02-01	.42	--	--	--	2340	3.18	1590	1000	880	4.8	5190	7.8
03-04	.48	--	--	--	3250	4.42	1160	1200	1000	8.1	4600	8.1
05-09	.50	--	--	--	4030	5.48	958	1300	1200	10	6080	7.6
10-12	.46	--	--	--	4620	6.28	649	1400	1300	11	7080	7.5
13-19	.58	--	--	--	5670	7.71	827	1600	1500	14	8570	7.4
20-24	.87	--	--	--	6510	8.85	809	1800	1600	17	9820	7.8
25-26	.69	--	--	--	6970	9.48	2600	1800	1700	17	10300	7.8
27-30	.62	--	--	--	4990	6.79	2640	1700	1600	11	7240	7.7
30-30	.39	--	--	--	4540	6.17	785	1700	1600	9.1	6840	7.6
JULY												
01-04	.37	--	--	--	6270	8.53	677	1900	1800	15	9360	7.4
05-29	.80	--	--	--	8160	11.1	903	2100	2000	20	12200	7.3
30-31	1.1	--	--	--	--	--	--	2300	2200	--	15400	7.6
31-31	1.6	--	--	--	6930	9.42	1740	2000	1900	16	9600	7.8
AUG.												
01-04	.57	--	--	--	6050	8.23	751	1800	1600	16	10700	7.3
05-31	.76	--	--	--	8810	12.0	999	2200	2000	22	13200	7.2
SEP.												
01-30	1.2	--	--	--	8230	11.2	1110	2200	2100	19	12600	7.5
OCT.												
01-31	--	--	--	--	7660	10.4	1120	2300	2100	17	10260	7.4
NOV.												
01-30	1.7	--	--	--	7720	10.5	1080	2300	2100	17	11800	7.5
DEC.												
01-31	1.7	--	--	--	7810	10.6	1010	2300	2100	17	11900	7.5
CALENDAR YEAR												
WTU. AVG.	0.7	--	--	--	4880	6.64	--	1580	1440	11	7140	7.6
TIME WTU.	1.1	--	--	--	8110	11.0	--	2080	1930	19	12100	7.5
TOT. LOAD (TONS)	76	--	--	--	530000	--	--	--	--	--	--	--
WATER YEAR												
WTU. AVG.	.72	--	--	--	4920	6.69	--	1540	1410	11	7250	7.6
TIME WTU.	1.0	--	--	--	8330	11.3	--	2010	1890	21	12600	7.5
TOT. LOAD (TONS)	77	--	--	--	524000	--	--	--	--	--	--	--

## RIO GRANDE BASIN

08407000 PECOS RIVER AT PIERCE CANYON CROSSING, NEAR MALAGA, N. MEX.--Continued

CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

DATE	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	DIS- SOLVED SILICA (SiO <sub>2</sub> ) (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 (HCO <sub>3</sub> ) (MG/L) (00440)	CAR- BONATE (CO <sub>3</sub> ) (MG/L) (00445)	DIS- SOLVED SULFATE (SO <sub>4</sub> ) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)
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MAY	09...	845	14	490	290	5100	150	159	0	2300	8800
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DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED NITRATE PLUS (N) (MG/L) (00631)	DIS- SOLVED SOLIDS (SUM OF TWOES) (MG/L) (70301)	HARD- NESS (CA, MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AD- SURP- TION RATIO (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	DENSITY (GM/ML AT 20 C) (71820)
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MAY	09...	1.3	.06	17200	2400	2300	45	25400	7.5	1.010
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SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973 (ONCE-DAILY)

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	29800	16900	14600	11500	17300	2560	7640	7960	15100	11600	11600	10000
2	10300	13200	15300	11500	17500	3450	8830	8830	15900	12000	12100	10100
3	11300	12100	13300	11700	---	4550	9150	10600	12400	12100	12100	10900
4	12400	11300	16000	16100	17100	5310	10400	10500	13000	11300	11400	11100
5	11800	11800	13300	14000	15500	5740	11200	11600	11900	10900	12100	10700
6	14000	15700	16100	13000	13900	5840	11100	11600	13200	10600	11800	10800
7	12800	13000	15000	14300	11100	6140	11100	12400	15500	11200	11600	10700
8	15200	13200	12300	16700	11100	6380	12000	12900	13400	11600	11900	10200
9	12400	12400	16200	19500	25800	6300	11200	12600	12200	11100	12200	10600
10	11700	13300	13300	19000	6850	6670	11100	12700	11500	11400	12500	10600
11	10900	12700	15500	19700	5340	7290	11100	12100	11700	12400	11600	10600
12	11400	14500	14500	17400	4930	7610	11700	12600	12400	11400	12100	11600
13	12200	18500	14400	16800	4790	8100	12200	12600	12300	11000	11700	11800
14	11900	17500	14800	15900	4380	8150	12000	13000	12700	11000	11600	12000
15	11900	36800	13300	18000	4000	8630	12300	12700	14700	11400	12000	11200
16	15000	22700	11500	18000	3570	8630	13100	11800	14900	11800	11100	11600
17	13400	13600	12200	16300	3310	8560	12200	11700	11400	11400	10800	11000
18	15700	13100	12200	19800	3300	8490	11700	11900	10600	11000	10700	12300
19	16200	14100	13000	19600	3020	8870	11800	12700	9730	10700	10800	15500
20	12400	20500	15000	18900	2870	10200	11200	12800	11500	10700	13000	13300
21	13000	14700	15800	17500	2820	9440	12700	13300	11600	10900	10600	10800
22	13000	15700	12800	17000	2720	9270	13500	13600	12000	11500	10900	11400
23	11900	15300	12800	16600	2740	9900	12800	13600	12500	11600	10700	11100
24	12600	19000	13600	16000	3180	10000	12500	14800	13100	11500	11000	13500
25	12200	18000	12200	16600	2760	11700	12300	15300	12500	11600	10900	13000
26	13200	17800	12600	17900	2800	9530	12000	14400	12500	11700	10900	11700
27	17900	19100	12000	16200	2950	7540	12900	13900	13400	11700	10800	11600
28	16200	17300	13800	15400	2870	6560	12300	13900	12500	12800	11500	11300
29	13600	---	11800	15200	2850	6920	12300	14100	11300	11800	10800	13400
30	12600	---	11800	16400	---	7060	15400	14700	11400	11700	10200	11800
31	12000	---	11300	---	2750	---	9600	13800	---	12900	---	14400
MONTH	13580	16210	13620	16420	7040	7510	11660	12620	12620	11490	11430	11630

## RIO GRANDE BASIN

08407000 PECOS RIVER AT PIERCE CANYON CROSSING, NEAR MALAGA, N. MEX.--Continued

TEMPERATURE (DEG. C) OF WATER, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973  
(ONCE-DAILY)

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

RIO GRANDE BASIN

08407500 PECOS RIVER AT RED BLUFF, N. MEX.  
(Surveillance network station)

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LOCATION (revised).--Lat 32°04'30", long 104°02'21", in SW 1/4 sec.1, T.26 S., R.28 E., Eddy County, 2 mi (3.2 km) downstream from gaging station which is at Red Bluff, 0.2 mi (0.3 km) downstream from Red Bluff Draw, 1.6 mi (2.6 km) northwest of the El Paso Natural Gas (Pecos River) compressor station, 5.2 mi (8.4 km) north of the New Mexico-Texas state line, 5.5 mi (8.8 km) upstream from Delaware River, and at mile 411.3 (661.8 km).

DRAINAGE AREA.--19,540 mi<sup>2</sup> (50,600 km<sup>2</sup>), approximately (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, 20,800 micromhos Apr. 15; minimum daily, 2,590 micromhos June 1.

Water temperatures: Maximum, 32.5°C Aug. 12; minimum, 1.5°C Jan. 10.

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: 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.

Monthly samples for chemical analyses collected at gaging station.

CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	DIS- SOLVED SILICA (SiO <sub>2</sub> ) (MG/L) (00955)	DIS- SOLVED IRON (FE) (MG/L) (01046)	DIS- SOLVED MAN- GANESE (MN) (MG/L) (01056)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L) (00925)	DIS- SOLVED TAS- SIUM (K) (MG/L) (00935)	BICAR- BONATE (HCO <sub>3</sub> ) (MG/L) (00440)	CAR- BONATE (CO <sub>3</sub> ) (MG/L) (00445)	DIS- SOLVED SULFATE (SO <sub>4</sub> ) (MG/L) (00945)
JAN.											
09...	1100	59	5.4	20	40	470	200	2000	81	178	0 1700
FEB.											
06...	1100	33	6.3	40	--	500	210	2500	100	165	0 1800
MAR.											
06...	1200	45	2.9	40	--	480	240	3100	110	111	0 1900
APR.											
11...	1300	28	2.9	20	--	520	230	3300	130	116	0 2100
MAY											
08...	1200	60	7.7	50	--	540	250	3000	110	136	0 2000
JUNE											
05...	1030	96	10	9	40	350	89	--	29	130	0 1100
JULY											
10...	1300	41	14	20	--	510	200	2000	72	106	0 1900
AUG.											
14...	1200	61	12	10	--	520	220	2300	4.8	110	0 1900
SEP.											
11...	1130	40	13	70	--	450	190	2200	79	189	0 1600
UCT.											
18...	1500	59	9.9	20	13	510	220	2100	75	141	0 1800
NOV.											
08...	1130	59	13	40	--	550	230	2000	80	165	0 1800
DEC.											
06...	1200	50	14	10	--	550	220	1900	74	187	0 1900

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) (00619)	TOTAL NITRATE PLUS NITRITE (N) (MG/L) (00650)	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)	TOTAL ORGANIC NITRO- GEN (N) (MG/L) (00605)	TOTAL NITRO- GEN (N) (MG/L) (00600)	TOTAL PHOS- PHORUS (P) (MG/L) (00665)
JAN.											
09...	3400	.9	.93	.01	--	.94	.07	.07	.61	1.6	.05
FEB.											
06...	4200	1.0	.65	.03	--	.68	.10	.10	.77	1.6	.05
MAR.											
06...	4900	1.0	.23	.04	.27	.27	.07	--	1.2	1.6	.06
APR.											
11...	5400	.6	.01	.00	.01	.01	.15	--	.84	.84	.07
MAY											
08...	4700	1.1	.03	.01	.04	.04	.24	--	.96	1.2	.07
JUNE											
05...	1300	.7	.01	.00	.01	.01	.03	--	.83	.87	.05
JULY											
10...	3300	1.0	.00	.00	.00	.00	.11	--	1.1	1.2	.10
AUG.											
14...	3700	.9	.04	.00	.06	.04	.13	--	1.3	1.5	.11
SEP.											
11...	3300	.9	.22	.02	.24	.24	.36	--	.13	.73	.06
UCT.											
18...	3500	1.0	.56	.03	.64	.59	.15	--	.95	1.7	.08
NOV.											
08...	3300	1.0	1.1	.04	1.1	1.1	.09	--	.41	1.6	.29
DEC.											
06...	3000	.9	1.4	.04	1.4	1.4	.14	--	.55	2.1	.06



## RIO GRANDE BASIN

08407500 PECOS RIVER AT RED BLUFF, N. MEX.--Continued

## CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

DATE	DIS- SOLVED ORTHOPHOS- PHORUS (P) (MG/L) (00671)	DIS- SOLVED SILICUS (KESI- DUE AT 180 C) (MG/L) (70300)	DIS- SOLVED SILICUS (SUM OF CONSTI- TUTNIS) (MG/L) (70301)	HARD- NESS (LA.MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AU- 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)
JAN. 09...	.02	8800	7950	2000	1900	19	12500	6.2	3.0	1.004	670
FEB. 06...	.05	10100	9400	2100	2000	24	16300	6.2	10.0	1.006	860
MAR. 06...	.02	11000	10800	2200	2100	29	16100	6.1	15.0	1.006	890
APR. 11...	.03	12500	11700	2200	2200	30	18300	7.7	15.5	--	920
MAY 08...	.05	11700	10700	2400	2300	27	15700	7.5	20.0	1.007	860
JUNE 05...	.01	4010	--	1200	1100	--	5880	7.8	24.0	--	360
JULY 10...	.03	8880	8050	2100	2000	19	12400	7.5	29.0	1.004	720
AUG. 14...	.03	9040	8710	2200	2100	21	11900	7.6	28.0	1.003	800
SEP. 11...	.05	8020	7930	1900	1800	22	11500	7.9	24.5	1.010	700
OCT. 18...	.05	8480	8290	2200	2100	20	13000	6.0	20.0	1.010	650
NOV. 08...	.06	8410	8060	2300	2200	18	12800	7.8	14.5	--	710
DEC. 06...	.06	7870	7760	2300	2100	17	11700	7.8	7.5	1.003	650

## TRACE ELEMENT AND RADIOCHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

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 CAU- MIUM (CU) (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)
JAN. 09...	1100	4	0	670	1	0	8	20	0	40	3.3
MAY 08...	1200	--	--	860	--	--	--	50	--	--	--
JUNE 05...	1030	3	100	360	0	0	4	9	100	40	.2
OCT. 18...	1500	2	0	650	0	0	3	20	50	13	.0

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- PENDED GROSS ALPHA AS (UG/L) (80040)	DIS- SOLVED GROSS BETA AS (PC/L) (03515)	SUS- PENDED GROSS BETA AS (PC/L) (04516)	DIS- SOLVED GROSS BETA AS SR90 /Y90 (PC/L) (80050)	SUS- PENDED GROSS BETA AS SR90 /Y90 (PC/L) (80060)	DIS- SOLVED RA-226 (RADON METHOD) (PC/L) (09511)	DIS- SOLVED URANIUM (U) (UG/L) (80020)
JAN. 09...	0	4	20	--	--	--	--	--	--	--	--
MAY 08...	--	--	--	100	.4	140	1.3	120	1.1	.12	5.4
JUNE 05...	1	0	20	--	--	--	--	--	--	--	--
OCT. 18...	0	3	40	--	--	--	--	--	--	--	--

RIO GRANDE BASIN

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08407500 PECOS RIVER AT RED BLUFF, N. MEX.--Continued

FIELD AND BIOCHEMICAL MEASUREMENTS, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS) (00061)	SPL- 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. PLK 100 ML) (31616)	TOTAL ORGANIC CARBON (C) (MG/L) (00680)
JAN. 09...	1100	59	12500	8.3	3.0	-5.0	10	5	12.0	280	7.1 *
FEB. 06...	1100	33	--	8.3	10.0	14.0	10	6	10.3	0	--
MAR. 06...	1200	45	16200	8.8	15.0	16.0	40	10	13.2	10	10 *
APR. 11...	1300	28	18600	8.5	15.5	22.5	20	10	5.9	0	--
MAY 08...	1200	60	16000	8.3	20.0	26.0	5	6	9.0	0	9.0 *
JUNE 05...	1030	96	5500	8.9	24.0	25.0	5	15	8.6	4	8.5 *
JULY 10...	1300	41	12100	8.0	29.0	26.5	5	30	6.8	3	11 *
AUG. 14...	1200	61	13000	8.3	--	--	--	--	6.8	--	7.0
SEP. 11...	1130	40	12000	8.4	24.5	25.0	--	--	7.4	2800	7.0
OCT. 18...	1500	59	13000	8.0	20.0	29.5	--	--	8.4	5	8.0
NOV. 08...	1130	59	12800	7.8	14.5	23.5	--	--	10.2	25	5.2
DEC. 06...	1200	50	11700	7.8	1.5	11.0	--	--	11.6	1	5.0

\* Analyzed by New Mexico Environmental Improvement Agency.

PESTICIDE ANALYSES, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

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)	DDT (UG/L) (39360)	DDT IN BOTTOM DE- POSITS (UG/KG) (39363)	DDT (UG/L) (39365)	DDT IN BOTTOM DE- POSITS (UG/KG) (39368)	DDT (UG/L) (39370)
OCT. 18...	1500	8.0	.00	.0	.0	0	.00	.0	.00	.4	.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 EPOXIDE (UG/L) (39420)	HEPTA- CHLOR EPOXIDE IN BOT- TOM DE- POSITS (UG/KG) (39423)
OCT. 18...	.0	.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)
OCT. 18...	.00	.0	.00	.00	.00	.0	0	.00	.00	.00

## RIO GRANDE BASIN

08407500 PECOS RIVER AT RED BLUFF, N. MEX.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973  
(ONCE-DAILY)

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	14300	17300	17000	13700	17700	2590	7690	13700	6730	13400	11900	11300
2	18600	15300	18500	13800	17300	3070	8710	11500	12600	12100	12000	11500
3	14000	16500	19000	13300	16900	5250	8960	10300	15500	12000	12600	10500
4	14600	16400	17400	14400	17000	5300	9360	9230	15500	12300	12100	10500
5	11800	16500	16300	14400	18500	5760	10100	9570	14900	12600	12400	11000
6	11700	13600	17400	14400	17700	6460	10400	10600	14400	11800	12100	11600
7	12100	13600	17600	14600	16400	7160	11200	11400	13500	11400	11800	11200
8	12600	13500	16300	14700	15100	7160	12600	12100	13200	11000	12100	11000
9	13100	13100	16400	14800	12400	7360	12300	11200	14000	11200	12000	10900
10	13200	16400	17900	17400	5530	7570	11600	11300	12800	11900	11900	10800
11	13400	15800	15300	17700	4550	8350	13000	8930	11300	11800	12100	10600
12	13000	14500	14900	16600	4470	8620	12800	13100	10600	11400	12400	11000
13	12100	13800	14600	18500	4470	8980	7460	13100	11800	12000	12200	11100
14	11200	14100	14600	20500	4470	9380	10500	13000	12500	12100	11800	11700
15	11600	14500	15900	20800	4130	9640	9360	13600	13100	12000	12300	11700
16	12000	15000	16100	19400	3750	10100	12800	13200	12400	11600	11900	12100
17	12500	16400	15300	20300	3310	10100	12800	13600	14200	11200	11900	11700
18	12500	18600	14900	20200	3500	10100	13000	13500	14800	12400	11800	11900
19	13100	17500	13600	19800	3020	10200	13000	13600	13200	12200	11400	11900
20	14200	18800	12700	19700	3000	10400	13500	13200	11300	11800	11000	11400
21	14500	18900	13500	19000	2960	10400	11200	12900	10900	11400	11200	11600
22	15000	15500	15200	18900	2890	10400	11300	13100	10300	11100	11200	14100
23	15400	15300	14000	20300	2770	11000	8430	13600	11400	11200	12600	14000
24	14300	18000	15700	20200	3000	11200	12300	13700	12200	11600	11000	11500
25	14900	16700	14600	19600	2850	11200	13800	13900	12400	12000	10800	11500
26	14400	16500	14600	18600	2850	11600	14200	14400	12600	12000	10700	13800
27	13600	18200	14800	14400	3000	9910	13700	14900	13500	12200	11300	13800
28	13800	17300	13900	17900	3000	8760	13300	15300	13000	12200	11200	13000
29	14300	---	14100	17900	3000	7850	13300	15600	13000	12500	10800	11900
30	13800	---	12900	17800	2900	7790	4020	15400	13600	12100	11200	11700
31	18400	---	13700	---	2690	---	8430	12600	---	13300	---	11900
MONTH	13670	15970	15430	17450	7270	8460	11130	12750	12700	11940	11720	11750

TEMPERATURE (DEG. C) OF WATER, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973  
(ONCE-DAILY)

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

RIO GRANDE BASIN

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08407500 PECOS RIVER AT RED BLUFF, N. MEX.--Continued

INSTANTANEOUS SUSPENDED-SEDIMENT DISCHARGE, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

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/DAT) (80155)
FEB. 06...	1100	10.0	33	12	1.1
MAR. 06...	1200	15.0	45	16	1.9
APR. 11...	1300	15.5	28	24	1.8
MAY 08...	1200	20.0	60	86	14
JUNE 05...	1030	24.0	96	17	4.4
AUG. 14...	1200	28.0	61	310	51
OCT. 18...	1500	20.0	59	47	7.5
NOV. 08...	1130	14.5	59	271	43
DEC. 06...	1200	7.5	50	22	3.0

## TULAROSA VALLEY BASIN

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., Otero County (revised), at gaging station 50 ft (15 m) downstream from bridge on U.S. highway 70, 2.6 mi (4.2 km) west of Bent, and 8.5 mi (13.7 km) northeast of Tularosa.

DRAINAGE AREA.—120 mi<sup>2</sup> (310 km<sup>2</sup>), approximately.

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

## CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	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)
JAN.									
05...	1030	11	14	--	220	64	52	1.5	245
22...	1310	10	13	--	220	64	53	1.2	251
FEB.									
13...	1230	11	13	--	240	69	53	1.4	249
MAR.									
08...	1605	9.6	14	9	220	66	59	1.4	224
26...	1315	11	--	--	--	--	--	--	--
APR.									
17...	0955	8.5	14	9	220	68	52	1.3	220
MAY									
15...	1645	10	15	--	230	69	52	1.5	224
JUNE									
04...	1650	3.2	15	--	250	79	67	1.5	197
25...	1620	7.1	15	--	230	66	46	1.5	211
AUG.									
09...	1040	9.6	16	--	250	61	46	1.7	235
28...	1430	5.4	15	--	230	62	49	2.0	220
SEP.									
19...	1620	9.7	15	--	280	62	44	2.3	229
OCT.									
16...	1540	9.0	15	0	200	62	43	1.8	225
NOV.									
13...	1035	8.7	15	--	200	60	43	1.5	242
DEC.									
10...	1550	9.9	15	--	210	60	44	1.4	246

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- RIE (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.									
05...	0	600	65	.5	.50	--	--	1140	810
22...	0	600	70	.5	.69	--	--	1150	810
FEB.									
13...	0	690	73	.4	.69	--	--	1270	880
MAR.									
08...	0	640	72	.4	.45	.00	1260	1190	820
26...	--	--	--	--	--	--	--	--	--
APR.									
17...	0	630	72	.6	.62	--	--	1170	830
MAY									
15...	0	660	70	.6	.58	--	--	1210	860
JUNE									
04...	0	780	86	.5	.24	--	--	1380	950
25...	0	660	68	.5	.35	--	--	1190	850
AUG.									
09...	0	710	65	.4	.42	--	--	1270	880
28...	0	610	65	.5	.31	--	--	1140	830
SEP.									
19...	0	730	59	.4	.50	--	--	1310	950
OCT.									
16...	0	550	59	.4	.36	.02	1040	1040	750
NOV.									
13...	0	540	61	.4	.36	--	--	1040	750
DEC.									
10...	0	540	57	.7	.33	--	--	1050	770

RIO GRANDE BASIN

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08481500 RIO TULAROSA NEAR BENT, N. MEX.--Continued

CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

DATE	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AU- SOLP- TION RATIO (00931)	SPE- CIFIC CON- DUCTI- 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 SOLID (G) (01020)
JAN.								
05...	610	.8	1530	7.7	5.5	--	--	--
22...	610	.8	1490	7.8	6.0	--	--	--
FEB.								
15...	680	.8	1620	7.9	8.5	--	--	--
MAR.								
08...	640	.9	1550	7.9	12.0	--	--	70
26...	--	--	1560	--	14.5	2	22	--
APR.								
17...	650	.8	1590	7.3	11.0	--	--	30
MAY								
15...	670	.8	1610	7.6	17.0	--	--	--
JUNE								
04...	790	.9	1790	7.8	23.5	--	--	--
25...	670	.7	1570	7.7	24.0	--	--	--
AUG.								
09...	680	.7	1630	7.8	--	--	--	--
28...	650	.7	1580	7.8	17.5	--	--	--
SEP.								
19...	770	.6	1730	8.0	21.0	--	--	--
OCT.								
16...	570	.7	1460	7.9	--	--	--	40
NOV.								
13...	550	.7	1460	7.9	10.5	--	--	--
DEC.								
10...	570	.7	1460	7.8	7.0	--	--	--



## 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 NW 1/4 sec. 24, T.32 N., R.1 W., Archuleta County, at gaging station, 290 ft (88 ft) downstream from highway bridge, 0.2 mi (0.3 km) southeast of Edith, 0.5 mi (0.8 km) upstream from Colorado-New Mexico State line, and 1.3 mi (2.1 km) upstream from Coyote Creek.

DRAINAGE AREA.—172 mi<sup>2</sup> (445 km<sup>2</sup>).

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

Sediment records: October 1969 to current year.

## CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	DIS- SOLVED SILICA (SIU2) (MG/L) (00955)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED MANG- NESE (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)	CAN- BONATE (CU3) (MG/L) (00445)
APR.											
03...	1500	66	18	50	--	41	13	16	2.0	95	12
MAY											
03...	1730	100	16	180	20	36	11	14	2.9	118	0
16...	1400	250	--	--	--	--	--	--	--	--	--
31...	1320	250	--	--	--	--	--	--	--	--	--
JUNE											
25...	1545	650	--	--	--	--	--	--	--	--	--
26...	1520	650	--	--	--	--	--	--	--	--	--
AUG.											
27...	1545	57	25	10	--	29	7.2	10	2.4	80	8
SEP.											
05...	1550	60	26	10	--	29	6.8	9.7	2.0	90	2
NOV.											
26...	1700	35	24	20	--	32	7.2	11	1.8	87	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 NITRAIE (N) (MG/L) (00618)	DIS- SOLVED NITRITE (N) (MG/L) (00613)	TOTAL NITRITE PLUS NITRATE (N) (MG/L) (00630)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	AMMONIA NITRO- GEN (N) (MG/L) (00610)	TOTAL ORGANIC NITRO- GEN (N) (MG/L) (00605)	TOTAL NITRO- GEN (N) (MG/L) (00600)	TOTAL PHOS- PHORUS (P) (MG/L) (00665)
APR.											
03...	90	2.1	.2	.00	.00	.00	.00	.01	.33	.34	.09
MAY											
03...	66	1.9	.3	--	--	--	.15	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--	--	--
JUNE											
25...	--	--	--	--	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--	--	--	--	--
AUG.											
27...	56	1.3	.2	.00	.00	.00	.00	.04	.21	.25	.35
SEP.											
05...	46	.7	.2	--	--	--	.00	--	--	--	--
NOV.											
26...	46	1.4	.2	.03	.00	.03	.03	.00	.11	.14	.08

DATE	DIS- SOLVED ORTHO- PHOS- PHORUS (P) (MG/L) (00671)	DIS- SOLVED SILIC- ATE (RESI- DUE AT 180 C) (MG/L) (70300)	DIS- SOLVED SILIC- ATE (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) (00460)	TEMPER- ATURE (DEG C) (00010)	TUR- BID- ITY (JTU) (00070)	DIS- SOLVED BORON (B) (UG/L) (01020)
APR.											
03...	.01	248	241	160	58	.6	360	8.9	4.5	--	40
MAY											
03...	.04	249	207	140	38	.5	320	6.0	14.0	--	70
16...	--	--	--	--	--	--	138	--	12.0	80	--
31...	--	--	--	--	--	--	157	--	11.0	65	--
JUNE											
25...	--	--	--	--	--	--	119	--	14.0	100	--
26...	--	--	--	--	--	--	107	--	15.0	70	--
AUG.											
27...	.02	200	179	100	23	.4	266	8.8	21.5	--	50
SEP.											
05...	.07	179	167	100	23	.4	249	8.4	21.0	--	20
NOV.											
26...	.08	180	167	110	38	.5	385	8.0	.0	--	20

TRACE ELEMENT ANALYSES, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

FIELD AND BIOCHEMICAL MEASUREMENTS, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS) (00061)	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- CUBALT 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) (MG/L) (00680)
APR. 03...	1500	66	387	9.1	4.5	6.0	20	15	10.0	1	--
MAY 03...	1730	100	323	8.1	14.0	19.0	50	80	8.5	30	--
AUG. 27...	1545	57	265	8.5	21.5	29.5	5	8	7.1	49	3.0
NOV. 26...	1700	35	385	8.0	.0	-6.5	--	--	11.2	5	1.9

INSTANTANEOUS SUSPENDED-SEDIMENT DISCHARGE AND PARTICLE SIZE, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

[illegible]

## SAN JUAN RIVER BASIN

09346400 SAN JUAN RIVER NEAR CARRACAS, COLO.  
(Surveillance network station)

LOCATION.—Lat 37°00'49", long 107°18'42", in SE¼SW¼ sec.17, T.32 N., R.4 W., Archuleta County, at gaging station just upstream from flow line of Navajo Reservoir, 3 mi (5 km) northwest of Carracas, 7.2 mi (11.6 km) upstream from Piedra River, and at mile 332.8 (535.5 km) (revised).

DRAINAGE AREA.—1,230 mi<sup>2</sup> (3,190 km<sup>2</sup>), approximately.

PERIOD OF RECORD.—Chemical analyses: July 1969 to August 1973. (discontinued).  
Sediment records: July 1970 to August 1973 (discontinued).

## CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS) (000061)	UIS- SOLVED SILICA (SI02) (MG/L) (00955)	UIS- SOLVED IRON (FE) (MG/L) (01046)	UIS- SOLVED MAN- GANESE (MN) (MG/L) (01056)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	UIS- SOLVED MAG- NE- SIUM (MG) (00925)	DIS- SOLVED TAS- SODIUM (NA) (MG/L) (00954)	UIS- SOLVED PO- SIUM (K) (MG/L) (00955)	BICAR- BONATE (HCO3) (MG/L) (00440)	CAH- BONATE (CO3) (MG/L) (00445)
MAY 03...	1300	1780	13	70	6	32	11	15	2.0	103	0
AUG. 28...	1330	218	17	0	--	33	9.3	16	2.4	113	4

DATE	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS-	DIS-	DIS-	DIS-	TOTAL	UIS-		TOTAL		TOTAL
		SOLVED	SOLVED	SOLVED	SOLVED	NITRITE	SOLVED		ORGANIC		PHOS-
		CHLO-	FLUO-	NITRAI	NITRAI	PLUS	NITRITE	AMMONIA	NITRO-	NITRO-	PHORUS
		RIDE	RIDE	NITRAI	NITRAI	NITRATE	NITRATE	GEN	GEN	GEN	PHORUS
	(CL)	(F)	(N)	(N)	(N)	(N)	(N)	(N)	(N)	(N)	(P)
	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)
	(00945)	(00940)	(00950)	(00618)	(00613)	(00630)	(00631)	(00610)	(00605)	(00600)	(00665)
MAY											
03...	63	2.2	.2	.18	.00	.18	.16	.29	.62	1.1	.33
AUG.											
28...	64	2.3	.2	.01	.00	.01	.01	.03	.30	.34	.09

DATE	TIME	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 (MG/L) (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (MG/L) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	UIS- SOLVED BROM- (B) (MG/L) (01020)
MAY 03...		.02	224	191	130	41	.6	302	7.7	8.5	60
AUG. 28...		.01	214	206	120	21	.7	327	8.9	22.0	50

## TRACE ELEMENT ANALYSES, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

	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)
MAY 03...	1300	110	39	<2	<4	60	<57	<4

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)	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)
MAY 03...	<4	2	<2	<4	70	<4	10	6	<2

DATE	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 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 (ZK) (UG/L) (01160)
MAY 03...	<4	<1	290	<4	<4	<4.0	<260	<9

## SAN JUAN RIVER BASIN

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09346400 SAN JUAN RIVER NEAR CARRACAS, COLO.--Continued

FIELD AND BIOCHEMICAL MEASUREMENTS, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	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- CUBALT 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) (MG/L) (00680)
MAY 03...	1300	1780	307	8.0	8.5	17.0	40	130	10.1	90	9.5 *
AUG. 28...	1330	218	319	8.4	22.0	30.0	10	40	7.1	67	4.0

\* Analyzed by New Mexico Environmental Improvement Agency.

INSTANTANEOUS SUSPENDED-SEDIMENT DISCHARGE AND PARTICLE SIZE, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

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 .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)
MAY 03...	1300	8.5	1780	607	2920	29	37	48	71	84	93	100
AUG. 28...	1330	22.0	218	103	61	--	--	--	--	--	--	--

## 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 mi (5 km) downstream from Ignacio Creek, 5.2 mi (8.4 km) northeast of Arboles Post Office, 8 mi (13 km) upstream from mouth.

DRAINAGE AREA.—629 mi<sup>2</sup> (1,630 km<sup>2</sup>)

PERIOD OF RECORD.—Chemical analyses: July 1969 to August 1973 (discontinued).  
Sediment records: July 1970 to August 1973 (discontinued).

## CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS) (00061)	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 TAS- SIUM (K) (MG/L) (00935)	BICAR- BONATE (HCO3) (MG/L) (00440)	CAN- BONATE (CO3) (MG/L) (00445)
MAY 03...	1100	1930	9.5	20	6	33	6.1	5.7	1.8	102	0
AUG. 28...	1100	145	15	0	--	47	6.9	15	2.2	129	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)	TOTAL NITRITE PLUS NITRATE (N) (MG/L) (00630)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	AMMONIA NITRO- GEN (N) (MG/L) (00610)	TOTAL ORGANIC NITRO- GEN (N) (MG/L) (00605)	TOTAL NITRO- GEN (N) (MG/L) (00600)	TOTAL PHOS- PHORUS (P) (MG/L) (00665)
MAY 03...	35	1.6	.2	.17	.00	.17	.17	.16	.78	1.1	.25
AUG. 28...	73	2.2	.3	.01	.00	.01	.01	.02	.22	.25	.02

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)	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 BORON (B) (UG/L) (01020)
MAY 03...	.01	175	145	110	24	.2	237	7.8	5.0	40
AUG. 28...	.00	244	225	150	40	.5	358	8.3	17.0	40

## TRACE ELEMENT ANALYSES, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

DATE	TIME	DIS- SOLVED ALUM- INIUM (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 BOMON (B) (UG/L) (01020)	DIS- SOLVED CAD- MIUM (CD) (UG/L) (01025)	DIS- SOLVED CHRO- MIUM (CR) (UG/L) (01030)
MAY 03...	1100	140	61	<1	<4	40	<48	<4

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)	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)
MAY 03...	<4	2	<2	<4	20	<4	<10	6	<2

DATE	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 TAN- 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)
MAY 03...	<4	<1	340	<4	<4	<4.0	<220	<7

RIO GRANDE BASIN

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09349800 PIEDRA RIVER NEAR ARBOLES, COLO.--Continued

FIELD AND BIOCHEMICAL MEASUREMENTS, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SPL- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	AIR TEMPER- ATURE (DEG C) (00020)	COLOR (PLAT- INUM- CUBALT 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) (MG/L) (00680)
MAY 03...	1100	1930	242	7.9	5.0	12.5	50	110	10.2	30	5.5 *
AUG. 28...	1100	145	356	8.3	17.0	22.0	3	7	8.1	24	3.0

\* Analyzed by New Mexico Environmental Improvement Agency.

INSTANTANEOUS SUSPENDED-SEDIMENT DISCHARGE AND PARTICLE SIZE, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

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 .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)
MAY 03...	1100	5.0	1930	729	3800	20	27	37	55	68	92	100
AUG. 28...	1100	17.0	145	16	6.3	--	--	--	--	--	--	--



## 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 S $\frac{1}{2}$  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 mi (0.2 km) upstream from Spring Creek, and 13 mi (21 km) upstream from mouth.

DRAINAGE AREA.—510 mi<sup>2</sup> (1,320 km<sup>2</sup>), approximately.

PERIOD OF RECORD.—Chemical analyses: July 1969 to August 1973 (discontinued).  
Sediment records: July 1970 to August 1973 (discontinued).

## CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	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)	BICAK- BONATE (HC03) (MG/L) (00440)	CAN- BONATE (C03) (MG/L) (00445)
MAY 02...	1845	1310	5.5	20	12	26	4.3	6.3	1.3	94	0
AUG. 28...	1600	322	6.9	0	--	29	4.3	11	1.9	105	8

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)	TOTAL NITRITE PLUS NITRATE (N) (MG/L) (00630)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	AMMONIA NITRO- GEN (N) (MG/L) (00610)	TOTAL ORGANIC NITRO- GEN (N) (MG/L) (00605)	TOTAL NITRO- GEN (N) (MG/L) (00600)	TOTAL PHOS- PHORUS (P) (MG/L) (00665)
MAY 02...	16	3.4	.2	.06	.01	.08	.07	.19	.48	.75	.16
AUG. 28...	15	2.4	.2	.01	.00	.01	.01	.03	.32	.36	.05

DATE	TIME	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)
MAY 02...		.01	130	110	83	6	.3	188	8.0	11.0	20
AUG. 28...		.02	134	131	90	0	.5	210	8.9	22.0	30

## TRACE ELEMENT ANALYSES, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

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)
MAY 02...	1845	15	61	<1	<3	20	<38	<3

DATE	TIME	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)	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)
MAY 02...	<3	1	<2	<3	20	<3	<10	12	<2	

DATE	TIME	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)	DIS- SOLVED ZINC (ZN) (UG/L) (01090)	DIS- SOLVED ZIR- CONIUM (ZR) (UG/L) (01160)
MAY 02...	<3	<1	220	<3	<3	<3.0	<170	<6	

SAN JUAN RIVER BASIN

185

09354500 LOS PINOS RIVER AT LA BOCA, COLO.--Continued

FIELD AND BIOCHEMICAL MEASUREMENTS, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	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) (MG/L) (00680)
MAY 02...	1845	1310	194	8.3	11.0	12.5	25	70	9.2	30	60 *
AUG. 28...	1600	322	207	8.7	22.0	28.0	25	20	7.6	83	5.0

\* Analyzed by New Mexico Environmental Improvement Agency.

INSTANTANEOUS SUSPENDED-SEDIMENT DISCHARGE, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

DATE	TIME	TEMPER- ATURE (DEG C) (00010)	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SUS- PENDED SEDI- MENT DIS- CHARGE (MG/L) (80154)	SUS- PENDED SEDI- MENT DIS- CHARGE (T/DAY) (80155)
MAY 02...	1845	11.0	1310	363	1280
AUG. 28...	1600	22.0	322	46	40

## 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 N½ sec.20, T.30 N., R.8 W., San Juan County, at gaging station, 0.5 mi (0.8 km) upstream from Gobernador Canyon, 0.8 mi (1.3 km) northeast of Archuleta, 7.2 mi (11.6 km) downstream from Navajo Dam, and at mile 291.4 (468.9 km) (revised).

DRAINAGE AREA.—3,260 sq mi<sup>2</sup> (8,440 km<sup>2</sup>), 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 1973 TO DECEMBER 1973

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (LFS) (00061)	DIS- SOLVED SILICA (SI02) (MG/L) (00955)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED MANG- NESE (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 (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)
JAN.											
03...	1610	1020	12	20	--	33	6.1	17	2.2	110	0
FEB.											
05...	1530	1530	12	20	--	34	5.8	16	2.1	101	8
MAR.											
05...	1500	444	10	20	--	34	6.3	20	2.0	113	3
MAY											
02...	1700	630	9.3	9	10	35	7.0	25	2.1	85	17
30...	1400	2420	9.7	30	--	35	7.0	19	2.1	98	14
JUNE											
18...	1530	3880	10	9	--	36	7.1	16	2.1	121	0
JULY											
30...	1645	4040	10	20	--	34	7.6	17	2.1	109	0
AUG.											
30...	1300	3480	11	30	--	31	6.3	13	1.8	97	0
SEP.											
25...	1620	1990	11	80	--	29	5.6	13	1.6	88	0
OCT.											
29...	1700	1990	11	40	0	27	5.4	12	1.8	91	--
NOV.											
27...	1030	1980	12	10	--	27	5.2	11	1.7	89	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)	TOTAL NITRITE PLUS NITRATE (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)	TOTAL ORGANIC NITRO- GEN (N) (MG/L) (00605)	TOTAL NITRO- GEN (N) (MG/L) (00600)
JAN.											
03...	51	3.5	.4	.05	.00	--	.05	.07	.07	.26	.38
FEB.											
05...	46	3.7	.3	.02	.00	--	.02	.02	.02	.49	.53
MAR.											
05...	65	4.2	.4	.00	.01	.01	.01	.05	--	.26	.32
MAY											
02...	70	5.9	.3	.00	.00	.00	.00	.02	--	.34	.36
30...	61	3.5	.3	.00	.00	.01	.00	.03	--	.38	.42
JUNE											
18...	57	4.1	.3	.08	.00	.08	.08	.02	--	.35	.45
JULY											
30...	57	4.0	.3	.07	.00	.08	.07	.06	--	3.7	3.8
AUG.											
30...	41	2.5	.2	.13	.00	.13	.13	.04	--	.18	.35
SEP.											
25...	43	1.9	.1	.02	.01	.08	.03	.06	--	.21	.35
OCT.											
29...	42	2.1	.1	.13	.00	.13	.13	.10	--	.16	.39
NOV.											
27...	40	3.0	.2	.15	.01	.18	.16	.03	--	.29	.50

## 09355500 SAN JUAN RIVER NEAR ARCHULETA, N. MEX.--Continued

## CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

DATE	TOTAL PHOSPHORUS (P) (00665)	DIS-SOLVED ORTHO-PHOSPHORUS (P) (00671)	DIS-SOLVED SOLIUS (RESIDUE AT 100 C) (70300)	DIS-SOLVED SOLIUS (SUM OF TRENIS) (70301)	HARDNESS (CA+MG) (00900)	NON-CARBONATE HARDNESS (MG/L) (00902)	SODIUM AU-SURF-IION RATIO (00931)	SPE-CIFIC CONDUCTANCE (MICRO-MHOS) (00095)	PH (UNITS) (00400)	TEMPERATURE (DEG C) (00010)	DIS-SOLVED BORON (B) (01020)
JAN. 03...	.07	.02	202	100	110	17	.7	291	8.3	5.0	30
FEB. 05...	.04	.00	186	178	110	13	.7	278	8.6	6.0	40
MAR. 05...	.04	.01	218	201	110	13	.8	315	8.6	5.0	20
MAY 02...	.04	.00	234	214	120	18	1.0	340	9.0	11.0	20
30...	.03	.00	228	200	120	12	.8	314	8.6	9.0	--
JUNE 18...	.05	.00	205	195	120	20	.7	316	8.3	8.5	10
JULY 30...	.05	.01	208	186	120	27	.7	304	8.2	10.0	30
AUG. 30...	.07	.04	162	155	100	24	.6	267	8.0	9.0	30
SEP. 25...	.09	.04	161	149	95	23	.6	248	8.1	10.0	60
OCT. 29...	.05	.05	147	--	90	--	.6	227	8.5	10.5	40
NOV. 27...	.04	.04	149	145	89	16	.5	232	8.1	8.0	30

## TRACE ELEMENT ANALYSES, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

DATE	TIME	DIS-SOLVED ARSENIC (AS) (01000)	DIS-SOLVED BARIUM (BA) (01005)	DIS-SOLVED BORON (B) (01020)	DIS-SOLVED CADMIUM (CD) (01025)	HEXA-VALENT CHROMIUM (CR6) (01032)	DIS-SOLVED COPPER (CU) (01040)
MAY 02...	1700	1	0	20	0	0	8
OCT. 29...	1700	1	0	40	0	0	1

DATE	DIS-SOLVED IRON (FE) (01046)	TOTAL LEAD (PB) (01051)	DIS-SOLVED MANGANESE (MN) (01056)	TOTAL MERCURY (HG) (71900)	DIS-SOLVED SILVER (AG) (01075)	DIS-SOLVED SELENIUM (SE) (01145)	DIS-SOLVED ZINC (ZN) (01090)
MAY 02...	9	<100	10	.3	1	0	10
OCT. 29...	40	<50	0	.0	0	8	20

## FIELD AND BIOCHEMICAL MEASUREMENTS, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

DATE	TIME	INSTANTANEOUS DIS-CHARGE (CFS) (00061)	SPE-CIFIC CONDUCTANCE (MICRO-MHOS) (00095)	PH (UNITS) (00400)	TEMPERATURE (DEG C) (00010)	AIR TEMPERATURE (DEG C) (00020)	TURBIDITY (JTU) (00070)	DIS-SOLVED OXYGEN (MG/L) (00300)	FECAL COLIFORM (COL. PER 100 ML) (31616)	TOTAL ORGANIC CARBON (C) (00680)
JAN. 03...	1610	1020	299	8.4	5.0	.0	--	12.2	--	2.9 *
FEB. 05...	1530	1530	204	8.5	6.0	11.0	--	13.4	--	--
MAR. 05...	1500	444	316	8.6	5.0	4.5	--	11.2	--	3.4 *
MAY 02...	1700	630	339	8.9	11.0	16.5	--	12.8	--	3.5 *
30...	1400	2420	312	8.9	9.0	26.5	--	12.9	--	3.5 *
JUNE 18...	1530	3880	319	8.4	8.5	23.5	--	12.3	--	4.5 *
JULY 30...	1645	4040	296	8.6	10.0	22.0	--	11.0	0	5.0
AUG. 30...	1300	3480	278	8.4	9.0	15.0	8	10.4	--	4.0
SEP. 25...	1620	1990	244	8.4	10.0	12.5	--	10.4	--	5.0
OCT. 29...	1700	1990	227	8.5	10.5	14.0	--	10.2	--	4.0
NOV. 27...	1030	1980	232	8.1	8.0	.0	--	10.1	--	4.2

\* 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 NE 1/4 sec. 20, T.29 N., R.13 W., San Juan County, 100 ft (30 m) upstream from mouth of Animas River, at south edge of Farmington, and at mile 99 (159 km).

DRAINAGE AREA.--5,800 mi<sup>2</sup> (15,000 km<sup>2</sup>), 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 1973 TO DECEMBER 1973

		INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	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)	BICAR- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLOR- IDE (CL) (MG/L) (00940)
DATE	TIME											
JAN. 04...	1340	1120	12	--	44	7.4	32	2.4	122	0	110	4.3
FEB. 06...	1615	1590	11	--	42	7.0	30	2.1	120	0	100	5.4
MAR. 06...	1430	982	8.8	--	50	6.8	78	2.3	145	0	190	5.9
MAY 01...	1500	464	9.2	9	58	10	61	2.2	139	0	190	8.5
31...	0900	2410	9.0	--	42	7.7	24	2.1	121	0	77	3.3
JUNE 19...	0930	4440	10	--	39	7.5	21	2.1	123	0	66	4.1
JULY 31...	0930	2940	11	--	46	7.8	20	2.0	123	0	73	12
AUG. 29...	1130	3070	11	--	37	7.2	18	2.1	114	0	65	4.5
SEP. 24...	1530	2000	12	--	40	7.2	21	1.9	110	0	75	3.7
OCT. 30...	1545	2060	11	--	38	6.6	22	1.8	105	0	67	4.4
NOV. 27...	1245	1990	12	--	37	6.6	22	1.9	102	0	67	4.3

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED NITRATE 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 SOLIDS) (MG/L) (70301)	HARD- NESS (CA+MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AUX- 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. 04...	.4	.21	--	--	273	140	40	1.2	427	8.0	4.5	40
FEB. 06...	.3	.18	--	--	258	130	35	1.1	409	7.9	4.0	--
MAR. 06...	.4	.26	--	--	415	150	34	2.7	660	7.8	6.0	40
MAY 01...	.3	.13	.01	437	408	190	72	1.9	625	8.0	12.0	60
31...	.4	.02	--	--	225	140	37	.9	373	7.6	9.0	30
JUNE 19...	.6	.09	--	--	211	130	27	.8	346	7.0	7.5	30
JULY 31...	.5	.18	--	--	234	150	46	.7	348	7.3	10.5	40
AUG. 29...	1.4	.12	--	--	203	120	29	.7	334	8.0	12.0	50
SEP. 24...	.3	.08	--	--	216	130	39	.8	353	7.9	13.0	20
OCT. 30...	.2	.20	--	--	204	120	36	.9	341	8.2	10.0	40
NOV. 27...	.1	.24	--	--	202	120	36	.9	337	8.1	5.0	30

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 mi (1.3 km) downstream from Florida River, 2.5 mi (4.0 km) upstream from Colorado-New Mexico State line, and 8.5 mi (13.7 km) north of Cedar Hill.

DRAINAGE AREA.--1,090 mi<sup>2</sup> (2,820 km<sup>2</sup>), approximately.

PERIOD OF RECORD.--Chemical analyses: July 1969 to August 1973 (discontinued).  
Sediment records: July 1970 to May 1973 (discontinued).

## CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS) (00061)	DIS- SOLVED SILICA (SI02) (MG/L) (00955)	DIS- SOLVED IRON (FE) (MG/L) (01046)	DIS- SOLVED MANGANESE (MN) (MG/L) (01056)	DIS- SOLVED CALCIUM (CA) (MG/L) (00915)	DIS- SOLVED MAGNESIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED POTASSIUM (K) (MG/L) (00935)	BICARBONATE (HCO3) (MG/L) (00440)	CARBONATE (CO3) (MG/L) (00445)
MAY 01...	1130	2700	6.5	9	23	47	9.7	7.9	1.3	136	0
AUG. 28...	1830	746	7.9	0	--	58	9.2	19	2.6	131	5

		DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLORIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUORIDE (F) (MG/L) (00950)	DIS- SOLVED NITRATE (N) (MG/L) (00610)	DIS- SOLVED NITRITE (N) (MG/L) (00613)	TOTAL NITRITE PLUS NITRATE (N) (MG/L) (00630)	DIS- SOLVED NITRATE PLUS NITRITE (N) (MG/L) (00631)	AMMONIA NITROGEN (N) (MG/L) (00610)	TOTAL ORGANIC NITROGEN (N) (MG/L) (00605)	TOTAL NITROGEN (N) (MG/L) (00600)	TOTAL PHOSPHORUS (P) (MG/L) (00665)
DATE												
PAY												
01...	62	4.9	.1	.19	.00	.19	.19	.06	.59	.84	.24	
AUG.												
28...	96	15	.4	.04	.00	.04	.04	.02	.24	.30	.01	

DATE	DIS- SOLVED URIC ACID 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- CALC- 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)
MAY 01...	.00	214	209	160	45	.3	342	8.0	5.0	20
AUG. 28...	.01	263	278	180	67	.6	446	8.6	20.0	60

## TRACE ELEMENT AND RADIOCHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

DATE	TIME	DIS- SOLVED ALUMINUM (AL) (MG/L) (01106)	DIS- SOLVED BARIUM (BA) (MG/L) (01005)	DIS- SOLVED BERYLLIUM (BE) (MG/L) (01010)	DIS- SOLVED BISMUTH (BI) (MG/L) (01015)	DIS- SOLVED BORON (B) (MG/L) (01020)	DIS- SOLVED CADMIUM (CD) (MG/L) (01025)	DIS- SOLVED CHROMIUM (CR) (MG/L) (01030)	DIS- SOLVED COBALT (CO) (MG/L) (01035)	DIS- SOLVED COPPER (CU) (MG/L) (01040)	DIS- SOLVED GALLIUM (GA) (MG/L) (01120)
MAY 01...	1130	110	83	<2	<5	20	<66	<5	<5	2	<2

	DIS- SOLVED GER- MANIUM (GE) 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)
MAY 01...	<5	9	<5	10	23	<2	<5	<1	440	<5	<5

DATE	DIS- SOLVED	DIS- SOLVED	DIS- SOLVED	SUS- PENDED	DIS- SOLVED	SUS- PENDED	DIS- SOLVED	SUS- PENDED	DIS- SOLVED	DIS- SOLVED	
	VANADIUM	ZINC	ZIRCONIUM	ALPHA	BETA	BETA	BETA	BETA	RA-226	NATURAL	
	(V)	(ZN)	(ZR)	U-NAT.	U-NAT.	CS-137	CS-137	/Y90	METHOD	(U)	
	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(PC/L)	(PC/L)	(PC/L)	(PC/L)	(UG/L)	
	(01085)	(01090)	(01160)	(80030)	(80040)	(03515)	(03516)	(80050)	(80060)	(09511)	(22703)
MAY 01...	<5.0	<300	<10	5.5	26	3.7	21	2.9	17	.06	1.4



FIELD AND BIOCHEMICAL MEASUREMENTS, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

\* Analyzed by New Mexico Environmental Improvement Agency.

INSTANTANEOUS SUSPENDED-SEDIMENT DISCHARGE AND PARTICLE SIZE, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

		SUS- PENDU SED. FALL	SUS- PENDU SED. FALL	SUS- PENDU SED. FALL	SUS- PENDU SED. FALL	SUS- PENDU SED. FALL	SUS- PENDU SED. FALL
		DIAM.	DIAM.	DIAM.	DIAM.	DIAM.	DIAM.
		% FINER THAN .002 MM (70337)	% FINER THAN .004 MM (70338)	% FINER THAN .006 MM (70339)	% FINER THAN .008 MM (70340)	% FINER THAN .010 MM (70341)	% FINER THAN .015 MM (70342)
DATE	TIME	TEMPERATURE (DEG C) (V001V)	INSTANTANEOUS DISCHARGE (CFS) (00061)	PENDEDDISCHARGE (MG/L) (80154)	PENDEDDISCHARGE (T/DAY) (80155)	PENDEDDISCHARGE (T/DAY) (80156)	PENDEDDISCHARGE (T/DAY) (80157)
MAY 01...	1130	5.0	2700	810	5900	16	18
		SUS. SED. FALL DIAM. % FINER THAN .016 MM (70340)	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)
MAY 01...	22	41	53	67	85	93	100

## SAN JUAN RIVER BASIN

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09364500 ANIMAS RIVER AT FARMINGTON, N. MEX.  
(Radiochemical network station)

LOCATION (revised).--Lat 36°43'17", long 108°12'05", in SW¼SW¼ sec. 15, T.29 N., R.13 W., San Juan County, at gaging station, in Boyd City Park, 900 ft (274 m) upstream from bridge on former State Highway 17, 0.4 mi (0.6 km) downstream from bridge on State Highway 17, and 1.5 mi (2.4 km) upstream from mouth. Prior to Nov. 1, 1973 at site 900 ft (274 m) downstream.

DRAINAGE AREA.--1,360 mi<sup>2</sup> (3,520 km<sup>2</sup>), 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, 865 micromhos Nov. 24; minimum daily, 190 micromhos July 1.

Water temperatures: Maximum, 26.0°C Aug. 19; minimum, freezing point on several days during January and February.

Sediment concentrations: Maximum daily, 6,400 mg/l Mar. 31; minimum daily, 8 mg/l Oct. 3-4.

Sediment discharge: Maximum daily, 55,000 tons (49,900 tonnes) May 20; minimum daily, 6.4 tons (5.8 tonnes) Oct. 4.

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 (306,000 tonnes) July 23, 1954; minimum daily, less than .50 ton (.45 tonne) on many days during 1955-57, 1959, 1960, 1963, and 1972.

## CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	DIS- SOLVED SILICA (SI02) (MG/L) (00955)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED MANG- NESE (MN) (UG/L) (01056)	DIS- SOLVED CUM- (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)	BICAK- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)
JAN.											
04...	1600	456	8.8	20	--	90	14	31	2.6	206	0
FEB.											
06...	1715	408	8.0	40	--	90	14	30	2.9	202	0
MAR.											
06...	1730	526	7.9	30	--	81	16	35	2.9	206	0
MAY											
01...	1730	3100	6.4	30	10	49	9.7	10	1.4	140	0
31...	1000	3490	6.3	50	--	43	6.7	6.8	1.1	121	0
JUNE											
19...	1030	3610	5.6	60	--	36	5.1	6.4	1.0	96	0
JULY											
31...	1050	600	6.3	20	--	64	9.8	20	2.1	142	0
AUG.											
29...	1245	890	8.5	0	--	81	12	28	2.8	178	0
SEP.											
24...	1800	247	8.2	20	--	85	14	36	3.2	169	0
OCT.											
30...	1645	247	7.0	50	20	100	17	43	3.8	202	0
NOV.											
27...	1600	212	8.8	10	--	110	18	48	3.9	204	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)	TOTAL NITRITE PLUS NITRATE (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)	TOTAL ORGANIC NITRO- GEN (N) (MG/L) (00605)	TOTAL NITRO- GEN (N) (MG/L) (00600)
JAN.											
04...	150	20	.5	.21	.00	--	.21	.06	.06	.22	.49
FEB.											
06...	150	20	.5	.09	.00	--	.09	.03	.03	.44	.56
MAR.											
06...	160	19	.4	.28	.01	.32	.29	.54	--	.17	1.0
MAY											
01...	68	4.4	.2	.20	.00	.24	.20	.05	--	.80	1.1
31...	51	3.7	.2	.09	.00	.09	.09	.06	--	.42	.57
JUNE											
19...	47	3.8	.2	.11	.00	.10	.11	.05	--	.29	.44
JULY											
31...	120	13	.4	.00	.00	.05	.00	.11	--	4.2	4.4
AUG.											
29...	140	17	.4	.10	.01	.13	.11	.06	--	.25	.44
SEP.											
24...	170	21	.4	.00	.01	.01	.01	.03	--	.13	.17
OCT.											
30...	200	26	.4	.01	.00	.03	.01	.03	--	.26	.32
NOV.											
27...	220	32	.5	.15	.01	.22	.16	.01	--	.16	.39

## SAN JUAN RIVER BASIN

09364500 ANIMAS RIVER AT FARMINGTON, N. MEX. --Continued

## CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

DATE	TOTAL PHOSPHORUS (P) (MG/L) (00665)	DIS-SOLVED ORTHO-PHOSPHORUS (P) (MG/L) (00671)	DIS-SOLVED SOLIDS (RESIDUE AT 180 C) (MG/L) (70300)	DIS-SOLVED SOLIDS (SUM OF TUEENTS) (MG/L) (70301)	HARDNESS (CA+MG) (MG/L) (00900)	NON-CARBONATE HARDNESS (MG/L) (00902)	SODIUM ADSORPTION RATIO (00931)	SPECIFIC CONDUCTANCE (MICROMOS) (00095)	PH (UNITS) (00400)	TEMPERATURE (DEG C) (00010)	DIS-SOLVED BORON (B) (UG/L) (01020)
JAN. 04...	.10	.02	462	420	280	110	.8	666	7.9	2.0	70
FEB. 06...	.10	.01	454	416	280	120	.8	669	8.0	2.0	80
MAR. 06...	.28	.02	450	426	270	99	.9	671	8.2	6.0	60
MAY 01...	.41	.00	230	232	160	47	.3	360	8.1	7.5	--
31...	.08	.00	197	179	140	36	.3	295	7.9	9.5	--
JUNE 19...	.09	.00	160	154	110	32	.3	255	8.0	9.5	30
JULY 31...	.06	.00	314	306	200	84	.6	483	8.2	17.0	30
AUG. 29...	.05	.01	393	378	250	110	.8	607	8.3	20.5	70
SEP. 24...	.03	.01	410	421	270	130	1.0	676	7.9	17.0	110
OCT. 30...	.03	.03	460	497	320	150	1.0	785	8.3	10.5	80
NOV. 27...	.02	.02	505	543	350	180	1.1	831	8.0	3.0	100

## TRACE ELEMENT AND RADIOCHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

TIME	DIS-SOLVED ARSENIC (AS) (UG/L) (01000)	DIS-SOLVED BARIUM (BA) (UG/L) (01005)	DIS-SOLVED BORON (B) (UG/L) (01024)	DIS-SOLVED CAU-MIUM (CU) (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. 04...	1100	--	--	--	--	--	--	--	--	--
MAY 01...	1730	0	0	--	0	10	30	100	10	.1
OCT. 30...	1645	0	0	80	0	0	2	50	<50	20

DATE	DIS-SOLVED SILVER (AG) (UG/L) (01075)	DIS-SOLVED SELENIUM (SE) (UG/L) (01145)	DIS-SOLVED ZINC (ZN) (UG/L) (01090)	DIS-SOLVED ALPHA AS (U-NAT.) (UG/L) (80030)	SUS-PENDED GROSS ALPHA AS (U-NAT.) (UG/L) (80040)	DIS-SOLVED BETA AS (CS-137) (PC/L) (03515)	SUS-PENDED GROSS BETA AS (CS-137) (PC/L) (03516)	DIS-SOLVED BETA AS (Y90) (PC/L) (80050)	SUS-PENDED GROSS BETA AS (Y90) (PC/L) (80060)	DIS-SOLVED RA-226 (RADON METHOD) (PC/L) (09511)	DIS-SOLVED NATURAL URANIUM (U) (UG/L) (22703)
JAN. 04...	--	--	--	<7.4	2.6	6.2	2.1	5.7	1.7	.06	2.2
MAY 01...	1	22	20	6.4	25	4.0	26	3.2	22	.10	1.4
OCT. 30...	0	8	30	12	<.4	5.1	.6	4.2	.5	.08	3.1

## FIELD AND BIOCHEMICAL MEASUREMENTS, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

DATE	TIME	INSTANTANEOUS DIS-CHARGE (CFS) (00061)	SPECIFIC CONDUCTANCE (MICROMOS) (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)	TOTAL ORGANIC CARBON (C) (MG/L) (00680)
JAN. 04...	1600	456	640	8.8	2.0	3.0	2	10	10.4	1.9 *
FEB. 06...	1715	408	672	8.4	2.0	3.0	--	--	9.9	--
MAR. 06...	1730	528	660	8.2	6.0	6.5	--	--	8.6	5.5 *
MAY 01...	1730	3100	355	8.3	7.5	10.5	3	150	10.0	8.5 *
31...	1000	3490	299	8.3	9.5	18.5	--	--	9.7	5.5 *
JUNE 19...	1030	3610	255	8.0	9.5	15.0	--	--	9.3	--
JULY 31...	1030	600	481	8.3	17.0	22.5	--	--	7.6	3.0
AUG. 29...	1245	890	578	8.4	20.5	26.0	--	--	7.9	3.5
SEP. 24...	1800	306	650	8.1	17.0	19.0	--	--	8.5	1.5
OCT. 30...	1645	247	785	8.3	10.5	12.5	--	--	9.2	2.5
NOV. 27...	1600	212	831	8.0	3.0	.0	--	--	12.8	2.1

\* Analyzed by New Mexico Environmental Improvement Agency.

## SAN JUAN RIVER BASIN

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09364500 ANIMAS RIVER AT FARMINGTON, N. MEX.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973  
(ONCE-DAILY)

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	420	561	625	560	358	273	190	482	600	651	745	740
2	605	651	620	600	388	264	191	479	560	620	775	760
3	540	640	620	605	408	278	197	480	590	630	690	753
4	482	563	595	640	412	308	214	493	608	636	650	755
5	555	500	600	598	380	305	224	493	583	630	733	735
6	607	635	600	640	382	314	218	481	610	622	730	770
7	618	595	610	612	384	298	222	481	585	645	745	775
8	645	630	605	585	404	257	262	595	655	673	720	810
9	631	690	625	592	386	245	262	502	615	680	750	825
10	631	495	605	600	383	241	250	518	665	679	725	780
11	563	685	595	---	380	221	262	540	690	670	726	780
12	560	660	590	561	364	216	255	535	580	665	760	776
13	650	660	600	500	318	204	262	563	550	659	770	785
14	650	590	590	541	294	205	292	580	563	660	761	775
15	570	680	585	458	296	216	302	600	570	700	782	790
16	580	705	630	493	317	248	320	604	581	683	775	825
17	590	590	580	542	297	270	328	635	590	673	750	792
18	587	450	585	475	293	261	361	650	570	680	775	780
19	693	570	595	508	312	256	342	650	615	698	805	786
20	620	705	515	535	257	253	318	645	620	690	776	775
21	583	655	465	539	287	242	323	628	625	707	778	805
22	630	630	475	533	279	230	332	645	610	683	855	770
23	650	680	540	517	296	232	380	632	628	680	800	770
24	675	392	535	503	282	211	404	615	650	695	865	781
25	668	627	580	469	284	203	405	628	610	725	770	743
26	555	660	530	450	276	198	416	630	625	727	783	773
27	640	635	550	427	284	212	433	540	625	740	795	810
28	628	670	545	393	303	196	443	560	618	715	817	840
29	600	---	590	362	331	191	466	596	627	715	727	805
30	635	---	600	366	324	195	470	608	657	715	755	740
31	625	---	535	---	291	---	482	630	---	750	---	735
MONTH	603	614	578	524	331	241	317	571	609	681	763	779

TEMPERATURE (DEG. C) OF WATER, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973  
(ONCE-DAILY)

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

## SAN JUAN RIVER BASIN

09364500 ANIMAS RIVER AT FARMINGTON, N. MEX.--Continued

## SUSPENDED-SEDIMENT DISCHARGE, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

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	424	130	149	424	77	88	568	1200	1840
2	440	87	103	400	76	82	592	1010	1610
3	448	64	77	393	61	65	664	2560	4590
4	456	84	103	400	64	69	729	1810	5560
5	456	67	82	432	120	140	672	640	1160
6	440	53	63	424	113	129	608	540	886
7	432	85	99	464	134	168	592	750	1200
8	424	55	63	456	174	214	640	670	1160
9	432	62	72	424	139	159	688	620	1150
10	456	81	100	408	122	134	640	690	1190
11	464	113	142	408	104	115	648	2330	4080
12	416	59	66	424	173	198	616	990	1650
13	416	76	85	424	132	151	712	770	1480
14	432	71	83	408	245	270	688	700	1300
15	424	29	33	393	93	99	664	620	1110
16	448	61	74	393	74	79	672	1030	1870
17	448	60	73	400	74	80	738	1600	3190
18	440	54	64	400	87	94	846	1730	3950
19	432	72	84	393	85	90	873	1310	3090
20	440	80	95	393	83	88	1000	2500	6750
21	432	119	139	386	82	85	1480	5070	20300
22	416	90	101	408	95	105	1120	2700	8160
23	393	65	69	416	56	63	930	1190	2990
24	400	68	73	416	108	121	855	680	1570
25	424	64	73	424	110	126	900	860	2090
26	448	89	108	448	385	466	1000	1060	2860
27	456	85	105	472	575	733	1130	2020	6160
28	432	61	71	496	795	1060	1060	2000	5720
29	408	61	67	--	--	--	1070	2030	5860
30	416	52	58	--	--	--	1010	2950	8040
31	440	65	77	--	--	--	1210	6400	20900
TOTAL	13433	--	2651	11727	--	5271	25615	--	131466
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	1170	3590	11300	3400	2030	18100	4130	840	9370
2	1070	1210	3500	2770	1790	13400	4190	600	6790
3	1070	1240	4550	2400	1100	7130	3710	440	4410
4	940	880	2230	2730	1060	7810	3650	540	5320
5	920	670	1660	2960	1320	10500	3280	443	3920
6	1060	1030	2950	3120	1210	10200	3060	320	2640
7	1370	2310	8540	2660	790	5670	3300	417	3720
8	1100	1130	3360	2490	640	4300	4260	730	8400
9	1010	770	2100	2730	840	6190	5240	1250	17700
10	1090	675	1990	3280	1900	16800	6680	1560	28100
11	1290	1810	6300	4570	3260	40200	7850	1770	37500
12	1450	2320	9080	5490	3150	46700	7760	1570	32900
13	1570	3560	15100	5590	2450	37000	7350	1390	27600
14	1670	3470	15600	5240	2200	31100	7320	1340	26500
15	1790	3200	15900	5450	2040	30000	7290	1200	23600
16	1490	1300	5230	5570	1710	25700	5380	790	11500
17	1450	1220	4780	5690	1570	24100	3830	530	5480
18	1590	1550	6650	5980	1630	26300	3770	440	4480
19	1550	1100	4600	6810	2700	49600	3830	441	4560
20	1330	600	2150	7540	2700	55000	3790	405	4140
21	1250	595	2010	7620	1900	39100	3890	439	4610
22	1250	670	2260	6660	1470	26400	4090	473	5220
23	1400	650	2460	5450	1140	16800	4320	500	5830
24	1720	1020	4740	4860	1010	13300	4640	650	8140
25	1900	1100	5640	4810	870	11300	4810	635	8250
26	2100	1500	8510	5010	880	11900	5080	670	9190
27	2400	2850	18500	4860	800	10500	5780	920	14400
28	2870	2680	20800	3770	630	6410	6550	1130	20000
29	3130	2850	24100	3210	490	4250	6580	1040	18500
30	3420	2630	24300	3170	525	4490	6150	930	15400
31	--	--	--	3670	720	7130	--	--	--
TOTAL	47420	--	239490	139460	--	617380	151560	--	378170



## SAN JUAN RIVER BASIN

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09364500 ANIMAS RIVER AT FARMINGTON, N. MEX.--Continued

## SUSPENDED-SEDIMENT DISCHARGE, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

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	5900	1500	23900	882	85	202	801	900	1950
2	5490	1300	19300	910	71	174	672	224	406
3	5010	640	8660	980	240	635	600	98	159
4	4460	970	11700	950	118	303	520	124	174
5	4190	465	5260	1020	74	204	496	81	108
6	3830	285	2950	960	61	158	416	65	73
7	3400	248	2280	950	63	162	386	56	58
8	3090	245	2040	910	56	138	393	59	63
9	3000	217	1760	828	69	154	379	45	46
10	3080	261	2170	747	78	157	544	550	808
11	3110	270	2270	688	55	102	920	1410	3500
12	3170	248	2120	624	38	64	1040	1350	3790
13	3020	205	1670	544	38	56	910	310	762
14	2660	143	1030	496	60	80	845	95	217
15	2490	198	1330	424	86	92	756	81	165
16	2380	169	1090	480	80	104	688	66	123
17	2180	145	853	488	97	128	656	46	81
18	2020	245	1280	440	64	76	592	36	58
19	2240	364	2200	440	70	83	496	37	50
20	2430	208	1360	456	116	143	448	27	33
21	2220	140	839	528	121	172	432	22	26
22	1910	84	433	600	237	384	393	28	30
23	1620	64	280	624	176	297	358	18	17
24	1460	59	233	632	170	290	351	12	11
25	1310	53	187	624	177	298	358	15	14
26	1170	48	152	576	465	723	432	61	71
27	1040	46	129	720	416	809	464	37	46
28	1050	45	128	584	299	471	432	50	58
29	1040	51	143	488	151	199	440	35	42
30	930	36	90	520	560	786	358	12	12
31	900	90	219	738	1690	3370	--	--	--
TOTAL	81800	--	98056	20851	--	11014	16576	--	12951

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	312	10	8.4	325	15	13	278	37	28
2	324	15	13	325	18	16	278	31	23
3	300	8	6.5	318	20	17	260	56	39
4	294	8	6.4	284	13	10	254	41	28
5	282	22	17	266	15	11	242	40	26
6	282	28	21	272	9	6.6	200	70	38
7	276	12	8.9	266	15	11	190	50	26
8	260	11	7.7	278	14	11	195	50	26
9	260	16	11	272	9	6.6	220	88	52
10	306	44	36	272	15	11	278	77	58
11	372	24	24	266	14	10	272	120	88
12	330	18	16	260	39	27	278	180	135
13	324	14	12	260	31	22	304	150	123
14	306	12	9.9	254	42	29	311	79	66
15	288	9	7.0	220	29	17	297	55	44
16	288	10	7.8	215	27	16	272	74	54
17	288	10	7.8	215	19	11	278	120	90
18	276	11	8.2	215	16	9.3	290	150	117
19	265	10	7.2	215	12	7.0	311	130	109
20	265	11	7.9	230	13	8.1	311	80	67
21	260	12	8.4	236	27	17	248	90	60
22	270	15	11	225	16	9.7	260	75	53
23	250	13	8.8	242	23	15	297	87	70
24	245	11	7.3	230	31	19	311	70	59
25	265	11	7.9	248	25	17	278	100	75
26	294	17	13	272	22	16	260	98	69
27	300	44	36	260	59	41	215	110	64
28	337	22	20	254	78	53	220	70	42
29	300	13	11	254	50	34	332	61	55
30	318	19	16	266	30	22	353	100	95
31	324	22	19	--	--	--	290	120	94
TOTAL	9061	--	402.1	7715	--	513.3	8383	--	1973

CAL YR 1973 TOTAL WATER DISCHARGE (CFS-DAYS)  
 CAL YR 1973 TOTAL SUSPENDED-SEDIMENT DISCHARGE (TONS)

533601  
 1499337.4

WTR YR 1973 TOTAL WATER DISCHARGE (CFS-DAYS)  
 WTR YR 1973 TOTAL SUSPENDED-SEDIMENT DISCHARGE (TONS)

592740  
 2387648



## SAN JUAN RIVER BASIN

09364500 ANIMAS RIVER AT FARMINGTON, N. MEX.--Continued

INSTANTANEOUS SUSPENDED-SEDIMENT DISCHARGE AND PARTICLE SIZE, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

DATE	TIME	TEMPER- ATURE (DEG C) (00010)	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SUS- PENDED SEDIMENT DIS- CHARGE (MG/L) (80154)	SUS- PENDED SEDIMENT 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)
FEB.									
06...	1715	2.0	408	110	121	36	47	58	--
MAR.									
01...	0740	5.5	608	1420	2330	56	61	82	--
06...	1730	6.0	528	633	902	47	54	73	86
20...	1130	8.5	1110	3810	11400	38	46	69	86
APR.									
14...	1130	9.0	1780	3540	17000	39	44	65	90
27...	1100	11.5	2460	4550	30200	10	13	20	32
MAY									
01...	0735	6.0	3470	2230	20900	13	17	27	47
21...	0745	9.0	7570	2080	42500	12	17	26	46
31...	1000	9.5	3490	483	4550	10	13	19	45
JUNE									
11...	1700	14.5	7620	1690	34800	11	13	23	39
19...	1030	9.5	3610	365	3560	8	9	17	36
JULY									
18...	1910	17.0	1900	620	3180	38	40	59	--
AUG.									
29...	1245	20.5	890	129	310	20	27	51	75
SEP.									
11...	1545	16.0	927	1130	2830	40	48	76	--
24...	1800	17.0	247	8	5.3	--	--	--	--
DATE		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)	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)
FEB.									
06...	--	--	--	--	72	75	80	97	100
MAR.									
01...	--	--	--	--	95	96	98	99	100
06...	89	93	99	100	--	--	--	--	--
20...	91	94	100	--	--	--	--	--	--
APR.									
14...	98	100	--	--	--	--	--	--	--
27...	41	50	68	100	--	--	--	--	--
MAY									
01...	65	89	100	--	--	--	--	--	--
21...	59	76	96	100	--	--	--	--	--
31...	62	83	100	--	--	--	--	--	--
JUNE									
11...	51	70	96	100	--	--	--	--	--
19...	52	78	99	100	--	--	--	--	--
JULY									
18...	--	--	--	--	89	92	97	100	--
AUG.									
29...	79	83	100	--	--	--	--	--	--
SEP.									
11...	--	--	--	--	97	98	99	100	--
24...	--	--	--	--	90	97	100	--	--

## SAN JUAN RIVER BASIN

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, 360 ft (110 m) downstream from highway bridge, 4,000 ft (1,200 m) downstream from Animas River, and 1 mi (1.6 km) west of Farmington, and at mile 251.4 (404.5 km) (revised).

DRAINAGE AREA.—7,240 mi<sup>2</sup> (18,750 km<sup>2</sup>), approximately.

PERIOD OF RECORD.—Chemical analyses: May 1962 to current year.  
Water temperatures: June 1962 to current year.

## EXTREMES:

## Current year:

Dissolved solids: Maximum, 444 mg/l Mar. 6; minimum, 155 mg/l July 1-3.  
Hardness: Maximum, 230 mg/l Apr. 1-12; minimum, 100 mg/l June 28-30, July 1-3.  
Specific conductance: Maximum daily, 752 micromhos Mar. 24; minimum daily, 253 micromhos June 28.  
Water temperatures: Maximum, 19.5°C July 14; minimum, freezing point Jan. 2, 7, Feb. 2.

## 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.

## CHEMICAL ANALYSES, COMPOSITES OF DAILY SAMPLES, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

DATE	DIS- CHARGE (CFS) (00060)	DIS- SOLVED SILICA (SiO <sub>2</sub> ) (00955)	DIS- SOLVED IRON (FE) (01046)	DIS- SOLVED CAL- CIUM (CA) (00915)	DIS- SOLVED MAG- NESIUM (MG) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	BICAK- BONATE (HCO <sub>3</sub> ) (MG/L) (00440)	CAR- BONATE (CO <sub>3</sub> ) (MG/L) (00445)	DIS- SOLVED SULFATE (SO <sub>4</sub> ) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)
JAN.												
01-31	1600	12	--	57	9.0	32	2.4	144	0	120	9.3	.4
FEB.												
01-25	2150	8.3	--	53	8.8	33	2.4	134	0	110	7.4	.3
26-28	3070	8.4	--	52	7.8	47	2.6	144	0	130	8.0	.3
MAR.												
01-31	1690	9.6	--	71	11	58	3.2	179	0	180	14	.4
APR.												
01-12	1550	9.2	--	70	13	45	3.0	174	0	170	13	.4
13-26	2020	8.1	--	62	12	32	2.5	162	0	140	9.5	.4
27-30	3120	7.3	--	53	9.9	17	2.0	145	0	89	5.5	.3
MAY												
01-09	3830	8.4	--	49	9.3	19	1.9	148	0	71	6.0	.4
10-17	6720	7.6	--	47	7.3	13	1.8	133	0	50	4.4	.3
18-23	9460	7.2	--	42	6.5	12	1.7	122	0	46	4.7	.4
24-31	6300	5.4	--	44	7.0	14	1.6	116	0	50	8.0	.4
JUNE												
01-07	5160	7.5	--	46	7.1	15	1.4	126	0	72	5.2	.2
08-16	8550	7.2	--	37	5.3	11	1.3	113	0	51	3.4	.2
17-27	7530	8.6	--	38	6.0	13	1.5	109	0	62	5.2	.2
28-30	10600	7.5	--	32	5.1	11	1.4	99	0	50	3.1	.2
JULY												
01-03	10200	7.3	--	32	4.9	12	1.4	92	0	48	2.9	.5
04-13	7430	8.4	--	36	6.0	15	1.6	102	0	56	4.0	.5
14-31	5010	9.4	--	41	7.4	19	1.8	114	0	70	5.5	.5
AUG.												
01-31	3770	12	--	41	7.9	21	2.2	118	0	75	5.3	.2
SEP.												
01-30	2990	11	--	42	7.6	22	2.1	115	0	77	5.6	.3
OCT.												
01-23	2130	11	--	40	7.2	23	2.1	108	0	79	4.6	.1
24-26	720	11	--	64	11	48	2.5	135	0	170	10	.2
25-31	2010	12	--	38	7.0	22	1.9	104	0	84	4.7	.1
NOV.												
01-30	2090	12	--	41	7.0	23	1.8	106	--	87	5.2	.3
DEC.												
01-31	2140	13	--	39	7.1	23	2.1	107	0	82	4.6	.3
CALENDAR YEAR												
WTD. AVG.	--	9.4	--	44	7.5	21	1.9	121	0	79	5.9	.3
TIME WTD.												
AVG.	3400	10	--	48	8.2	26	2.1	127	0	95	6.8	.3
TOT. LOAD (TONS)	--	31600	--	148000	25000	71300	6490	406000	0	264000	19600	1060
WATER YEAR												
WTD. AVG.	--	9.0	--	48	7.8	24	2.0	131	0	88	6.6	.3
TIME WTD.												
AVG.	3330	9.7	--	55	8.9	31	2.3	143	0	113	8.3	.3
TOT. LOAD (TONS)	--	29600	--	158000	25700	77700	6690	428000	0	289000	21700	1100

## SAN JUAN RIVER BASIN

09365000 SAN JUAN RIVER AT FARMINGTON, N. MEX.--Continued

CHEMICAL ANALYSES, COMPOSITES OF DAILY SAMPLES, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

DATE	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00651)	DIS- SOLVED ORTHU. 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 CONSTITU- ENTS) (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 AU- SURP- TION RATIO (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHUS) (00095)	pH (UNITS) (00400)
JAN.												
01-31	.51	--	50	--	315	.43	1360	180	61	1.0	487	8.0
FEB.												
01-25	.03	--	30	--	289	.59	1680	170	59	1.1	468	7.8
26-28	.00	--	60	--	327	.44	2710	160	44	1.6	521	8.1
MAR.												
01-31	.15	--	50	--	436	.59	1990	220	76	1.7	675	7.7
APR.												
01-12	.29	--	50	--	411	.56	1720	230	86	1.3	630	7.7
13-26	.34	--	40	--	348	.47	1900	200	71	1.0	543	7.7
27-30	.23	--	40	--	257	.35	2170	170	54	.6	420	7.6
MAY												
01-09	.22	--	10	--	239	.33	2470	160	39	.7	409	7.7
10-17	.15	--	60	--	198	.27	3590	150	38	.5	343	7.7
18-23	.15	--	30	--	181	.25	4620	130	32	.5	316	7.9
24-31	.09	--	10	--	188	.26	3200	140	44	.5	335	7.9
JUNE												
01-07	.12	--	50	--	217	.30	3020	140	41	.5	355	8.0
08-16	.13	--	--	--	173	.24	3990	110	22	.4	284	7.9
17-27	.14	--	30	--	189	.26	3840	120	30	.5	300	7.9
28-30	.11	--	60	--	160	.22	4580	100	20	.5	265	8.0
JULY												
01-03	.08	--	20	--	155	.21	4270	100	25	.5	263	7.6
04-13	.09	--	30	--	178	.24	3570	110	31	.6	306	7.5
14-31	.11	--	40	--	211	.29	2850	130	39	.7	355	7.4
AUG.												
01-31	.50	--	50	--	225	.31	2290	140	38	.8	369	7.8
SEP.												
01-30	.28	--	40	--	226	.31	1820	140	42	.8	376	7.8
OCT.												
01-23	.19	--	30	--	221	.30	1270	130	41	.9	366	7.9
24-..	.48	--	50	--	385	.52	748	210	94	1.5	615	8.1
25-31	.25	--	30	--	222	.30	1200	120	38	.9	353	8.0
NOV.												
01-30	.28	--	--	--	231	.31	1300	130	44	.9	355	7.9
DEC.												
01-31	.16	--	70	--	225	.31	1300	130	39	.9	366	8.0
CALENDAR YEAR												
WTU. AVG.	.20	--	40	--	230	.31	--	141	41	.8	376	7.8
TIME WTU.												
AVG.	.22	--	43	--	260	.36	--	153	48	.9	418	7.8
TOT. LOAD												
(TONS)	660	--	119	--	771000	--	--	--	--	--	--	--
WATER YEAR												
WTU. AVG.	.21	--	41	--	251	.34	--	153	46	.8	409	7.8
TIME WTU.												
AVG.	.25	--	45	--	300	.41	--	174	57	1.0	478	7.8
TOT. LOAD												
(TONS)	693	--	126	--	824000	--	--	--	--	--	--	--

09365000 SAN JUAN RIVER AT FARMINGTON, N. MEX.--Continued

CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

DATE	TIME	CROSS SECTION LOC- ATION (FT) (000001)	INSTAN- TANEOUS DIS- CHARGE (CFS) (000061)	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)
JAN. 04...	1500	20	1580	11	20	50	8.1	32	2.5	131	0
FEB. 06...	1500	20	2000	12	30	46	7.0	30	2.3	125	0
MAR. 06...	1600	20	1510	8.5	20	62	9.7	62	2.6	171	0
MAY 01...	1630	20	3430	6.8	50	51	9.5	17	1.7	140	0
31...	1400	20	5900	8.1	40	42	7.3	17	1.8	125	0
JUNE 19...	1420	20	7890	8.6	50	37	6.8	17	1.8	115	0
JULY 31...	1400	20	3360	10	20	37	7.9	20	2.1	113	0
AUG. 29...	1600	20	3720	11	20	35	7.0	18	2.0	104	0
SEP. 24...	1700	20	2210	11	40	36	6.7	21	1.9	100	0
OCT. 30...	1500	20	2100	11	40	34	6.1	20	1.9	98	0
NOV. 27...	1445	20	2100	12	20	34	6.2	21	1.9	97	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)	TOTAL NITRITE PLUS NITRATE (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)	TOTAL ORGANIC NITRO- GEN (N) (MG/L) (00605)	TOTAL NITRO- GEN (N) (MG/L) (00600)
JAN. 04...	110	6.4	.4	.21	.00	--	.21	.22	.22	.04	.47
FEB. 06...	90	5.6	.4	.10	.00	--	.10	.04	.04	.44	.58
MAR. 06...	180	11	.5	.28	.01	.29	.29	.22	--	2.3	2.8
MAY 01...	85	4.3	.2	.21	.00	.18	.21	.08	--	.85	1.1
31...	66	3.5	--	.04	.00	.03	.04	.05	--	.36	.44
JUNE 19...	60	4.4	.3	.09	.00	.10	.09	.05	--	.34	.49
JULY 31...	71	4.3	.3	.08	.00	.10	.08	.02	--	3.9	4.0
AUG. 29...	54	2.9	.2	.13	.01	.15	.14	.04	--	.18	.37
SEP. 24...	74	2.6	.2	.05	.01	.09	.06	.05	--	.18	.32
OCT. 30...	59	2.5	.1	.16	.01	.21	.17	.08	--	.22	.51
NOV. 27...	56	3.0	.2	.21	.00	.25	.21	.03	--	.19	.47

DATE	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)	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 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. 04...	.25	.02	310	287	160	51	1.1	450	7.9	4.5	50
FEB. 06...	.15	.01	258	256	140	41	1.1	407	7.9	3.0	50
MAR. 06...	1.2	.02	444	423	190	55	1.9	655	8.1	6.5	50
MAY 01...	.36	.00	253	246	170	52	.6	395	8.0	8.5	30
31...	.07	.00	230	208	140	32	.6	340	8.1	13.0	0
JUNE 19...	.10	.01	207	193	120	26	.7	316	7.4	11.0	10
JULY 31...	.07	.00	233	209	130	32	.8	339	8.0	14.0	30
AUG. 29...	.06	.04	192	182	120	31	.7	318	8.1	14.0	40
SEP. 24...	.10	.03	204	203	120	35	.8	331	8.2	14.0	50
OCT. 30...	.05	.04	199	184	110	30	.8	308	8.3	9.5	30
NOV. 27...	.06	.06	203	183	110	31	.9	318	8.2	5.0	30

## SAN JUAN RIVER BASIN

09365000 SAN JUAN RIVER AT FARMINGTON, N. MEX.--Continued

FIELD AND BIOCHEMICAL MEASUREMENTS, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

DATE	TIME	CROSS SECTION LOC- ATION (FT) (00001)	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	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) (MG/L) (00680)
JAN.												
04...	1415	60	1580	590	8.3	3.0	3.5	25	30	9.9	18000	3.5 *
04...	1500	20	1580	448	8.3	4.5	3.5	15	10	9.5	27	4.0 *
FEB.												
06...	1430	60	2000	539	8.4	3.0	4.0	60	10	9.5	15000	--
06...	1500	20	2000	408	8.2	3.0	4.0	10	130	9.4	170	--
MAR.												
06...	1520	60	1510	645	8.1	7.0	7.0	20	900	8.5	26000	15 *
06...	1600	20	1510	640	8.2	6.5	7.0	20	2000	8.7	680	22 *
MAY												
01...	1600	60	3430	400	8.3	8.0	9.5	4	160	10.1	7300	4.5 *
01...	1630	20	3430	390	8.2	8.5	9.5	3	150	10.2	580	4.0 *
31...	1315	60	5900	316	8.1	12.0	24.5	5	35	10.4	5400	4.0 *
31...	1400	20	5900	326	8.1	13.0	24.5	5	35	10.8	100	5.5 *
JUNE												
19...	1300	60	7890	294	7.9	11.0	18.0	10	40	9.4	1900	4.5 *
19...	1420	20	7890	317	8.1	11.0	18.0	10	50	9.7	37	4.5 *
JULY												
31...	1320	60	3360	406	8.3	17.0	26.0	5	10	8.2	7600	5.0
31...	1400	20	3360	323	8.1	14.0	26.0	8	10	8.9	23	5.0
AUG.												
29...	1515	60	3720	469	8.2	18.0	27.5	5	20	8.4	22000	4.0
29...	1600	20	3720	318	8.0	14.0	27.5	10	15	9.1	15	4.0
SEP.												
24...	1620	60	2210	484	8.2	16.0	19.0	--	--	8.7	20000	3.0
24...	1700	20	2210	316	8.3	14.0	19.0	--	--	9.2	37	4.0
OCT.												
30...	1400	60	2100	444	8.2	10.0	13.5	--	--	9.7	28000	7.5
30...	1500	20	2100	308	8.3	9.5	13.5	--	--	9.7	10	5.0
NOV.												
27...	1400	60	2100	--	8.4	5.0	.5	--	--	11.6	5800	4.2
27...	1445	20	2100	318	8.2	5.0	.5	--	--	11.6	23	4.1

\* Analyzed by New Mexico Environmental Improvement Agency.

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973  
(ONCE-DAILY)

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	465	438	702	577	415	322	255	374	520	360	406	357
2	473	421	731	629	425	332	259	362	375	354	379	375
3	473	427	697	644	455	341	254	362	375	360	379	373
4	478	438	684	621	429	377	281	372	351	354	370	459
5	473	447	702	636	387	365	282	373	350	348	324	358
6	473	457	671	625	374	376	277	366	339	372	331	338
7	480	461	627	600	387	347	293	358	335	360	326	348
8	471	488	684	629	392	312	299	359	344	360	341	350
9	471	463	679	587	387	297	301	348	339	360	333	348
10	482	473	721	580	367	285	302	360	350	360	367	356
11	469	482	663	590	344	270	302	360	502	386	317	356
12	471	491	675	621	332	264	298	344	375	360	333	353
13	484	491	675	607	327	255	304	344	362	360	326	362
14	448	473	747	577	356	270	334	348	333	360	314	367
15	493	471	658	507	338	273	324	344	362	360	319	373
16	486	475	624	538	331	307	328	357	361	360	323	358
17	471	438	606	544	314	322	335	344	361	348	333	362
18	482	424	609	493	323	316	354	337	375	---	327	363
19	522	431	642	544	309	325	357	343	375	400	327	360
20	519	442	616	550	308	322	325	479	371	360	330	350
21	525	444	589	550	295	311	337	367	371	348	333	350
22	517	444	646	538	297	293	334	412	359	348	330	349
23	459	451	671	520	315	288	349	350	372	349	347	352
24	446	442	752	510	380	273	352	349	368	600	343	341
25	437	436	646	482	306	273	351	364	385	332	352	357
26	448	488	631	482	311	269	348	364	385	336	346	351
27	428	517	579	441	323	273	344	374	385	334	342	330
28	421	525	627	418	336	253	349	343	385	337	348	331
29	426	---	624	389	344	260	349	358	371	350	---	346
30	428	---	693	375	337	263	351	452	371	360	---	356
31	439	---	596	---	336	---	348	547	---	348	---	348
MONTH	470	460	660	547	351	301	319	371	374	364	341	357

## SAN JUAN RIVER BASIN

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09365000 SAN JUAN RIVER AT FARMINGTON, N. MEX.--Continued

TEMPERATURE (DEG. C) OF WATER, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973  
(ONCE-DAILY)

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	3.0	3.0	4.0	8.0	6.5	12.0	15.5	14.5	11.0	15.0	11.0	8.0
2	0.0	0.0	4.0	5.0	6.0	12.0	15.5	14.5	11.0	15.0	9.0	8.0
3	3.0	3.0	5.0	5.0	9.0	10.0	15.5	14.5	13.0	14.0	11.0	7.5
4	4.0	5.5	6.0	4.0	9.0	13.0	17.0	15.0	10.0	13.5	10.0	5.5
5	3.5	6.0	3.0	4.5	8.0	14.0	16.5	12.5	14.0	12.0	11.0	6.0
6	2.0	3.5	3.0	6.0	5.5	16.5	16.0	14.5	14.0	13.0	11.5	7.0
7	0.0	5.5	4.0	7.0	11.5	17.5	14.5	16.0	14.5	14.0	8.5	7.0
8	3.0	4.0	3.5	8.0	9.0	17.5	16.5	15.0	11.0	13.0	11.0	5.5
9	3.0	1.5	5.0	3.0	9.0	15.5	16.0	15.0	12.5	11.5	11.0	5.5
10	3.0	5.0	7.0	5.0	9.0	13.5	15.5	14.5	12.0	10.0	11.5	7.0
11	2.5	4.5	6.0	6.5	9.5	15.5	17.0	12.0	13.0	12.0	11.0	7.5
12	2.0	5.5	9.5	8.0	9.0	14.0	15.0	15.5	15.0	13.0	12.0	8.0
13	2.0	5.0	5.0	8.0	8.0	12.5	16.0	14.5	12.0	10.0	12.0	7.0
14	3.0	6.0	3.5	9.0	8.0	12.0	19.5	15.0	14.0	13.0	10.5	8.0
15	3.0	6.5	3.0	7.0	8.0	14.0	17.0	14.5	15.0	14.0	10.0	6.5
16	3.0	3.5	8.0	5.0	9.0	13.5	14.0	14.5	15.0	14.0	9.0	6.5
17	3.0	6.0	6.0	9.0	7.5	13.0	14.0	14.5	15.0	13.0	9.0	7.5
18	6.0	5.0	7.5	8.0	14.0	13.5	12.5	14.5	15.0	14.0	8.0	5.5
19	1.5	5.0	9.0	7.0	9.0	12.5	15.0	15.0	15.5	14.0	8.5	6.0
20	3.0	2.5	8.0	5.5	10.0	13.5	15.0	14.0	15.0	10.5	8.5	6.0
21	3.0	3.0	6.0	5.0	8.5	13.5	15.0	13.5	15.5	13.0	7.0	5.5
22	3.0	3.0	3.0	6.0	8.0	13.5	11.0	14.0	12.0	12.0	8.0	5.0
23	2.0	5.0	3.5	7.0	13.0	14.0	13.0	15.0	13.0	13.0	8.0	4.5
24	3.0	7.0	4.0	9.0	8.5	13.5	14.5	14.0	14.0	13.0	7.0	4.5
25	3.5	7.0	8.0	9.0	9.0	13.5	14.5	13.0	11.5	11.0	8.0	5.0
26	2.0	4.5	4.0	8.0	10.0	14.5	12.0	14.5	14.0	11.0	8.0	4.0
27	2.5	4.0	5.5	9.0	11.0	15.5	10.5	14.5	14.0	12.0	6.0	3.0
28	3.0	5.0	5.5	9.0	7.5	14.5	15.0	14.5	14.0	11.5	7.0	4.5
29	1.5	---	5.0	8.5	14.0	14.5	10.0	14.5	11.5	11.0	8.0	5.0
30	3.5	---	3.5	8.5	14.0	15.5	14.5	12.0	15.0	10.0	9.0	5.5
31	4.0	---	6.5	---	13.0	---	14.5	10.0	---	12.5	---	2.5
MONTH	2.5	4.5	5.5	7.0	9.5	14.0	15.0	14.0	13.5	12.5	9.5	6.0



## SAN JUAN RIVER BASIN

## 09366500 LA PLATA RIVER AT COLORADO-NEW MEXICO STATE LINE

LOCATION.--Lat 36°59'51", long 108°11'17", in NW 1/4 sec. 10, T.32 N., R.13 W., La Plata County, Colorado, at gaging station at Colorado-New Mexico State line, 0.2 mi (0.3 km) downstream from Ponds Arroyo, and 4.8 mi (7.7 km) north of La Plata, and at mile 21.0 (33.8 km).

DRAINAGE AREA.--331 mi<sup>2</sup> (857 km<sup>2</sup>).

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 1973 TO DECEMBER 1973

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	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- IAS- SIUM (K) (MG/L) (00935)	BICAK- BONATE (HCO3) (MG/L) (00440)	CAK- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)
JAN.											
08...	1400	15	--	--	--	--	--	--	--	--	--
FEB.											
13...	1315	34	11	120	63	42	1.8	271	0	410	19
14...	0900	30	--	--	--	--	--	--	--	--	--
MAR.											
06...	0830	30	--	--	--	--	--	--	--	--	--
APR.											
12...	0915	161	--	--	--	--	--	--	--	--	--
MAY											
07...	0820	385	8.6	60	27	16	2.0	167	0	160	6.4
07...	0900	300	--	--	--	--	--	--	--	--	--
JUNE											
08...	0900	230	--	--	--	--	--	--	--	--	--
JULY											
10...	0800	26	--	--	--	--	--	--	--	--	--
AUG.											
07...	0900	15	--	--	--	--	--	--	--	--	--

DATE	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	DIS- SOLVED URTHO- PHOS- PHORUS (P) (MG/L) (00671)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L) (70301)	HARD- NESS (CA, MG) (MG/L) (00900)	NON- CAK- 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.											
08...	--	--	--	--	--	--	1140	--	0.0	3	1
FEB.											
13...	22	00	801	560	340	0.8	1140	8.3	1.0	--	--
14...	--	--	--	--	--	--	1160	--	0.0	5	5
MAR.											
06...	--	--	--	--	--	--	1200	--	3.0	8	40
APR.											
12...	--	--	--	--	--	--	785	--	5.0	15	2000
MAY											
07...	07	00	363	260	120	0.4	581	7.8	5.0	--	--
07...	--	--	--	--	--	--	560	--	5.0	3	110
JUNE											
08...	--	--	--	--	--	--	354	--	11.0	5	250
JULY											
10...	--	--	--	--	--	--	658	--	15.0	5	65
AUG.											
07...	--	--	--	--	--	--	1080	--	18.0	0	6

## FIELD AND BIOCHEMICAL MEASUREMENTS, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	DIS- SOLVED OXYGEN (MG/L) (00300)
FEB.						
13...	1315	34	800	8.5	1.0	9.0
MAY						
07...	0820	385	400	8.1	5.0	12.1

## 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 (400 m) upstream from bridge on U.S. Highway 550, 1,800 ft (550 m) upstream from mouth, and 2.5 mi (4.0 km) northwest of Farmington.

DRAINAGE AREA.—583 mi<sup>2</sup> (1,510 km<sup>2</sup>).

PERIOD OF RECORD.—Chemical analyses: July 1970 to January 1973 (discontinued).

## CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	DIS- SOLVED SILICA (SI02) (MG/L) (00955)	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) (MG/L) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00945)	BICAR- BONATE (HC03) (MG/L) (00440)
JAN. 04...	1310	56	10	130	150	75	120	2.4	255

DATE	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)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	DIS- SOLVED NITRO- GEN (P) (MG/L) (00671)	DIS- SOLVED PHOS- PHORUS (P) (MG/L) (70300)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L) (70301)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L) (00900)	HARD- NESS (CA+MG) (MG/L)
JAN. 04...	0	660	34	.3	.37	.01	1300	1180	680	

DATE	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AD- SORP- TION RATIO (00931)	SPE- CIFIC CON- DUCTI- 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)
JAN. 04...	470	2.0	1530	8.0	3.0	10	95	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 NW¼ sec.27, T.30 N., R.18 W., San Juan County, at gaging station 3 mi (5 km) west of Shiprock, 6 mi (10 km) downstream from Chaco River, and at mile 215.0 (345.9 km) (revised).

DRAINAGE AREA.--12,900 mi<sup>2</sup> (33,400 km<sup>2</sup>), 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, 530 mg/l Mar. 6; minimum, 170 mg/l June 11-16, July 1-7.

Hardness: Maximum, 260 mg/l Apr. 1-12; minimum, 110 mg/l June 11-16, 27-30, July 1-7.

Specific conductance: Maximum daily, 884 micromhos Mar. 2, 10; minimum daily, 257 micromhos June 14.

Water temperatures: Maximum, 22.0°C Aug. 15; minimum, freezing point on several days during January.

Sediment concentrations: Maximum daily, 27,200 mg/l Mar. 4; minimum daily, 35 mg/l Nov. 10.

Sediment discharge: Maximum daily, 187,000 tons (170,000 tonnes) Mar. 1; minimum daily, 207 tons (188 tonnes) Nov. 10.

## Period of record:

Dissolved solids (1941-45, 1957-73): Maximum, 2,980 mg/l July 30, 31, 1959; minimum, 115 mg/l June 21-28, 30, 1944.

Hardness (1941-45, 1957-73): Maximum, 1,100 mg/l July 30, 31, 1959; minimum, 70 mg/l June 21-28, 30, 1944.

Specific conductance (1957-73): Maximum daily, 4,360 micromhos July 31, 1959; minimum daily, 188 micromhos June 6, 1958.

Water temperatures: 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 (1,810,000 tonnes) Aug. 11, 1967; minimum daily, 1 ton (.91 tonne) on several days during July and September 1959, September 1962, May and July 1963.

## CHEMICAL ANALYSES, COMPOSITES OF DAILY SAMPLES, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

DATE	DIS- CHARGE (CFS) (000600)	DIS- SOLVED SILICA (SI02) (009555)	DIS- SOLVED IRON (FE) (01046)	DIS- SOLVED CUM (CA) (00915)	DIS- SOLVED MAG- NE- SIUM (MG) (00925)	DIS- SOLVED SODIUM (NA) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (00935)	BICAK- BONATE (HCO3) (00440)	CAR- BONATE (CO3) (00445)	DIS- SOLVED SULFATE (SO4) (00945)	DIS- SOLVED CHLO- RIDE (CL) (00940)	DIS- SOLVED FLUO- RIDE (F) (00950)
JAN.												
01-17	1500	11	--	69	13	43	2.5	155	0	170	14	.4
18-22	1380	10	--	74	15	50	2.7	160	0	200	15	.4
23-31	1910	11	--	57	11	37	2.4	146	0	140	12	.3
FEB.												
01-10	2030	3.3	--	51	12	42	2.7	107	7	150	12	.3
11-16	2100	8.0	--	62	12	57	2.5	145	0	190	13	.4
17-26	2780	7.5	--	55	11	43	2.5	138	0	150	10	.3
27-28	3820	9.4	--	59	8.9	66	3.0	159	0	170	10	.5
MAR.												
01-31	1830	9.6	--	75	13	77	3.1	179	0	210	15	.5
APR.												
01-12	1950	9.1	--	78	17	59	2.9	180	0	210	24	.2
13-30	2940	8.4	--	68	17	35	2.3	162	0	160	12	.2
MAY												
01-11	4600	3.5	10	41	11	21	1.9	118	0	98	6.7	.3
12-19	7560	2.9	--	41	7.3	14	1.6	96	6	66	3.7	.3
20-22	11200	3.8	--	38	6.4	13	1.7	122	0	58	3.6	.3
23-27	7070	3.7	--	38	7.4	14	1.5	106	0	69	5.3	.3
28-31	5440	4.0	--	41	8.1	17	1.7	128	0	77	5.3	.2
JUNE												
01-04	5560	4.0	--	43	8.1	18	1.6	113	3	85	5.8	.2
05-08	4160	3.5	--	50	9.6	20	1.6	122	3	110	7.1	.4
09-10	7640	6.1	--	38	6.6	13	1.5	109	0	65	4.3	.3
11-16	10000	4.2	--	35	5.9	11	1.5	94	2	60	3.7	.7
17-26	7190	7.2	--	37	6.7	16	1.6	100	0	72	4.5	.7
27-30	10500	7.1	--	34	5.6	14	1.7	95	0	63	4.4	.2
JULY												
01-07	10100	7.5	--	34	5.9	14	1.5	95	0	56	3.4	.5
08-14	6520	8.3	--	37	7.0	17	1.7	113	0	69	4.5	.5
15-31	4750	9.1	--	43	8.1	21	2.1	126	1	86	5.6	.5
AUG.												
01-31	3700	10	--	47	9.3	26	2.3	123	0	96	6.3	.2
SEP.												
01-09	3410	14	--	44	8.7	24	2.3	119	0	90	5.7	.2
10-12	3760	14	--	62	8.0	53	3.5	145	0	160	10	.3
13-30	2320	12	--	48	9.6	28	2.4	121	0	110	7.1	.2
OCT.												
01-23	2040	10	--	49	10	31	2.2	120	0	120	8.0	.2
24-25	1310	9.4	--	76	15	54	2.7	152	0	210	16	.2
26-31	1930	10	--	50	10	30	2.2	120	0	120	8.2	.2
NOV.												
01-30	2150	11	--	50	10	32	2.0	120	0	120	9.7	.3
DEC.												
01-31	2050	11	--	52	11	30	2.5	124	0	120	10	.3
CALENDAR YEAR												
WTD. AVG.	--	8.0	--	47	9.3	27	2.1	122	1	105	7.5	.4
TIME WTD. AVG.	3470	9.0	--	53	11	34	2.3	131	0	126	9.4	.3
TOT. LOAD (TONS)	--	27300	--	162000	31800	92700	7100	417000	2220	358000	25600	1210
WATER YEAR												
WTD. AVG.	--	8.0	--	51	9.6	31	2.3	131	1	117	8.1	.4
TIME WTD. AVG.	3420	9.0	--	60	11	41	2.5	145	0	150	11	.4
TOT. LOAD (TONS)	--	26900	--	173000	32500	106000	7600	441000	2220	395000	27300	1290

## SAN JUAN RIVER BASIN

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09368000 SAN JUAN RIVER AT SHIPROCK, N. MEX.--Continued

CHEMICAL ANALYSES, COMPOSITES OF DAILY SAMPLES, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

DATE	DIS- SOLVED NITRATE PLUS NITRATE (N) (MG/L) (00631)	DIS- SOLVED NITRATE 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 CONSI- DUE IS) (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 NESS (MG/L) (00902)	SODIUM AU- SUMP- TION RATIO (00931)	SPL- LITIL CON- DUCT- ANCE (MICRO- MHUS) (00095)	PH (UNITS) (00400)
JAN.												
01-17	.51	--	100	--	402	.55	1630	230	99	1.2	636	7.9
18-22	.64	--	110	--	449	.61	1670	250	120	1.4	703	7.7
23-31	.41	--	50	--	345	.47	1780	190	68	1.2	561	8.2
FEB.												
01-10	.00	--	80	--	333	.45	1830	180	77	1.4	529	8.5
11-16	.08	--	110	--	417	.57	2360	200	85	1.7	644	8.3
17-26	.04	--	60	--	348	.47	2610	180	69	1.4	537	8.3
27-28	.58	--	70	--	408	.55	4210	180	54	2.1	635	7.9
MAR.												
01-31	.46	--	90	--	494	.67	2440	240	94	2.2	782	8.0
APR.												
01-12	.32	--	--	--	490	.67	2580	260	120	1.6	741	7.8
13-30	.40	--	--	--	385	.52	3060	240	110	1.0	597	7.7
MAY												
01-11	.04	.00	40	252	242	.33	3010	150	51	.8	387	8.1
12-19	.00	--	50	--	190	.26	3880	130	44	.5	307	8.4
20-22	.31	--	40	--	186	.25	5620	120	21	.5	307	8.4
23-27	.01	--	50	--	192	.26	3670	130	38	.5	312	8.4
28-31	.01	--	--	--	217	.30	4190	140	31	.6	348	8.4
JUNE												
01-04	.00	--	--	--	224	.30	3360	140	43	.7	353	8.4
05-08	.00	--	60	--	265	.36	2980	160	59	.7	415	8.4
09-10	.05	--	40	--	189	.26	3900	120	33	.5	302	8.2
11-16	.00	--	30	--	170	.23	4590	110	31	.5	278	8.5
17-26	.05	--	30	--	195	.27	3790	120	38	.6	319	8.3
27-30	.05	--	40	--	177	.24	5020	110	30	.6	284	8.2
JULY												
01-07	.04	--	30	--	170	.23	4640	110	31	.6	289	7.5
08-14	.09	--	30	--	201	.27	3540	120	29	.7	328	7.5
15-31	.08	--	40	--	239	.33	3070	140	36	.8	391	8.4
AUG.												
01-31	.28	--	50	--	259	.35	2590	160	55	.9	422	8.0
SEP.												
01-09	.70	--	40	--	251	.34	2310	150	48	.9	406	8.1
10-12	.05	--	50	--	383	.52	3890	190	69	1.7	615	7.9
13-30	.74	--	40	--	280	.38	1750	160	60	1.0	451	8.1
OCT.												
01-23	.28	--	30	--	291	.40	1600	160	65	1.1	468	8.3
24-25	.48	--	100	--	460	.63	1630	250	130	1.5	718	8.2
26-31	.25	--	50	--	291	.40	1520	170	68	1.0	470	8.3
NOV.												
01-30	.48	--	--	--	296	.40	1720	170	68	1.1	470	8.1
DEC.												
01-31	.30	--	60	--	299	.41	1660	180	73	1.0	475	8.3
CALENDAR YEAR												
WTU. AVG.	.21	--	48	--	268	.37	--	157	56	.9	430	8.1
TIME WTU.												
AVG.	.30	--	57	--	311	.42	--	177	68	1.1	495	8.1
TOT. LOAD (TUNS)	732	--	140	--	917000	--	--	--	--	--	--	--
WATER YEAR												
WTU. AVG.	.24	--	55	--	294	.40	--	168	60	1.0	466	8.1
TIME WTU.												
AVG.	.33	--	70	--	358	.49	--	199	79	1.2	561	8.0
TOT. LOAD (TUNS)	805	--	165	--	993000	--	--	--	--	--	--	--

## SAN JUAN RIVER BASIN

09368000 SAN JUAN RIVER AT SHIPROCK, N. MEX.--Continued

CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS) (00061)	DIS- SOLVED SILICA (SI02) (MG/L) (00955)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED MANGANESE (MN) (UG/L) (01056)	DIS- SOLVED CALCIUM (CA) (MG/L) (00915)	DIS- SOLVED MAGNESIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED POTASSIUM (K) (MG/L) (00935)	BICARBONATE (HC03) (MG/L) (00440)	CARBONATE (C03) (MG/L) (00445)	DIS- SOLVED SULFATE (S04) (MG/L) (00445)
JAN. 04...	0945	1550	11	9	--	69	14	45	2.4	159	0	170
FEB. 06...	1120	1970	11	90	--	61	12	41	2.7	158	0	150
MAR. 06...	1030	1540	8.6	30	--	71	13	77	3.0	187	0	230
MAY 02...	1000	3530	7.2	9	<4	53	13	24	1.9	149	0	110
31...	1600	5490	7.6	40	--	45	8.4	17	1.7	121	0	77
JUNE 19...	1640	7450	7.9	50	--	38	7.3	17	1.7	113	0	66
JULY 31...	1600	5100	9.4	20	--	43	8.9	24	2.2	122	0	94
AUG. 29...	1820	4130	11	10	--	45	8.8	23	2.1	120	0	87
SEP. 25...	1115	2040	11	30	--	49	10	30	2.1	122	0	120
OCT. 30...	1000	2060	10	30	--	51	10	32	2.3	128	0	120
NOV. 28...	1130	2140	12	20	--	50	10	32	2.2	122	0	110

DATE	DIS- SOLVED CHLORIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUORIDE (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 NITRATE (N) (MG/L) (00631)	AMMONIA NITROGEN (N) (MG/L) (00610)	DIS- SOLVED NITROGEN (N) (MG/L) (00608)	TOTAL ORGANIC NITROGEN (N) (MG/L) (00605)	TOTAL NITROGEN (N) (MG/L) (00600)	TOTAL PHOSPHORUS (P) (MG/L) (00665)	DIS- SOLVED ORTHOPHOSPHORUS (P) (MG/L) (00671)
JAN. 04...	13	.4	.46	.00	--	.46	.06	.06	.44	.96	.33	.03
FEB. 06...	12	.5	.31	.01	--	.32	.06	.06	.66	1.0	.23	.03
MAR. 06...	17	.7	.62	.01	.68	.63	.09	--	3.4	4.2	1.4	.04
MAY 02...	6.3	.3	.33	.00	.31	.33	.03	--	1.6	1.9	.64	.01
31...	4.8	.3	.10	.00	.11	.10	.10	--	.33	.54	.10	.00
JUNE 19...	4.9	.4	.12	.00	.13	.12	.06	--	.39	.58	.13	.01
JULY 31...	5.9	.3	.11	.00	.15	.11	.51	--	4.1	4.8	.10	.00
AUG. 29...	5.8	.2	.21	.00	.23	.21	.06	--	.22	.51	.10	.05
SEP. 25...	7.7	.2	.17	.01	.24	.18	.07	--	.17	.48	.11	.04
OCT. 30...	8.4	.2	.32	.01	.33	.33	.05	--	.23	.61	.07	.07
NOV. 28...	8.8	.3	.35	.00	.37	.35	.03	--	.25	.65	.07	.06

DATE	DIS- SOLVED SOLIDS (RESIDUE AT 180 C) (MG/L) (70300)	DIS- SOLVED SOLIDS (SUM OF TENTHS) (MG/L) (70301)	HARD- NESS (CA+MG) (MG/L) (00900)	NON- CARBONATE HARD- NESS (MG/L) (00902)	SODIUM ADSORPTION RATIO (00931)	SPECIFIC CONDUCTANCE (MICROMHOS) (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. 04...	418	407	230	99	1.3	611	8.1	1.0	90	--	--
FEB. 06...	416	371	200	72	1.3	583	7.9	3.0	90	--	--
MAR. 06...	530	518	230	77	2.2	788	7.9	5.0	70	--	--
MAY 02...	303	292	190	64	.8	465	8.1	7.0	40	2	<380
31...	249	222	150	48	.6	366	7.6	14.0	--	--	--
JUNE 19...	221	200	130	32	.7	328	7.5	13.0	20	--	--
JULY 31...	266	248	140	44	.9	398	8.2	18.0	30	--	--
AUG. 29...	240	243	150	50	.8	392	8.2	18.0	30	--	--
SEP. 25...	292	291	160	63	1.0	465	8.0	12.0	70	--	--
OCT. 30...	308	299	170	64	1.1	474	8.4	8.0	70	--	--
NOV. 28...	305	287	170	66	1.1	472	8.0	3.0	60	--	--

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 1973 TO DECEMBER 1973

DATE	TIME	DIS-SOLVED ALUMINUM (AL) (UG/L) (01106)	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)	DIS-SOLVED COPPER (CU) (UG/L) (01040)	DIS-SOLVED GALLIUM (GA) (UG/L) (01120)
MAY 02...	1000	27	67	<2	<6	40	<83	<6	<6	2	<3
OCT. 30...	1000	--	--	--	--	70	--	--	--	--	--

DATE	DIS-SOLVED GERMANIUM (GE) (UG/L) (01125)	DIS-SOLVED IRON (FE) (UG/L) (01046)	DIS-SOLVED LEAD (PB) (UG/L) (01049)	DIS-SOLVED LITHIUM (LI) (UG/L) (01130)	DIS-SOLVED MANGANESE (MN) (UG/L) (01056)	DIS-SOLVED MOLYBDENUM (MO) (UG/L) (01060)	DIS-SOLVED NICKEL (NI) (UG/L) (01065)	DIS-SOLVED SILVER (AG) (UG/L) (01075)	DIS-SOLVED STRONTIUM (SR) (UG/L) (01080)	DIS-SOLVED TIN (SN) (UG/L) (01100)	DIS-SOLVED TITANIUM (TI) (UG/L) (01150)
MAY 02...	<6	9	<6	10	<4	<3	<6	<1	620	<6	<6
OCT. 30...	--	30	--	--	--	--	--	--	--	--	--

DATE	DIS-SOLVED VANADIUM (V) (UG/L) (01085)	DIS-SOLVED ZINC (ZN) (UG/L) (01090)	DIS-SOLVED ZIRCONIUM (ZR) (UG/L) (01160)	SUS-PENDED GROSS ALPHA (U-NAT) (UG/L) (80030)	SUS-PENDED GROSS BETA (U-NAT) (UG/L) (80040)	DIS-SOLVED GROSS BETA (CS-137) (PC/L) (03515)	SUS-PENDED GROSS BETA (CS-137) (PC/L) (03516)	DIS-SOLVED GROSS BETA (Y90) (PC/L) (80050)	SUS-PENDED GROSS BETA (Y90) (PC/L) (80060)	DIS-SOLVED RA-226 (RADON METHOD) (PC/L) (09511)	DIS-SOLVED NATURAL URANIUM (U) (UG/L) (22703)
MAY 02...	<6.0	<380	<12	7.0	110	5.0	59	4.0	47	.07	1.8
OCT. 30...	--	--	--	6.3	1.5	3.7	1.7	3.0	1.5	.03	1.4

FIELD AND BIOCHEMICAL MEASUREMENTS, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS) (00061)	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)	FECAL COLIFORM (COL. PER 100 ML) (31616)	TOTAL ORGANIC CARBON (C) (MG/L) (00680)
JAN. 04...	0945	1550	600	8.3	1.0	1.0	20	65	11.5	1900	2.6 *
FEB. 06...	1120	1970	575	8.3	3.0	3.5	10	160	9.8	3500	--
MAR. 06...	1030	1540	752	8.3	5.0	7.0	25	2600	9.5	5100	33 *
MAY 02...	1000	3530	469	8.3	7.0	12.0	4	350	10.2	2100	7.0 *
MAY 31...	1600	5490	372	8.2	14.0	27.5	5	55	10.5	440	4.5 *
JUNE 19...	1640	7450	321	8.3	13.0	25.0	10	65	9.3	1800	7.5 *
JULY 31...	1600	5100	399	8.6	18.0	32.5	5	25	7.8	720	5.5
AUG. 29...	1820	4130	405	8.2	18.0	27.0	10	25	7.7	220	4.5
SEP. 25...	1115	2040	444	8.2	12.0	17.0	--	--	8.5	2000	3.5
OCT. 30...	1000	2060	474	8.4	8.0	9.5	--	--	10.0	2800	5.5
NOV. 28...	1130	2140	472	8.0	3.0	-1.5	--	--	11.1	1300	3.6

\* Analyzed by New Mexico Environmental Improvement Agency.



## SAN JUAN RIVER BASIN

09368000 SAN JUAN RIVER AT SHIPROCK, N. MEX.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973  
(ONCE-DAILY)

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	602	495	718	732	428	344	271	389	402	428	453	486
2	597	473	884	660	418	340	270	396	402	440	458	479
3	600	482	863	748	418	347	274	393	382	442	437	487
4	610	488	877	759	434	377	283	408	382	440	437	564
5	614	541	764	754	368	435	286	403	381	437	433	635
6	590	558	759	759	350	409	289	402	379	465	440	457
7	593	520	754	723	---	392	293	400	379	465	444	453
8	581	541	733	652	335	383	303	399	393	465	442	401
9	584	520	781	718	396	320	317	401	392	465	437	455
10	571	535	884	704	416	292	321	402	465	465	442	462
11	571	702	843	699	382	281	315	398	713	486	453	470
12	610	639	781	669	---	269	321	392	594	469	442	479
13	603	613	793	639	318	259	320	391	422	486	440	466
14	603	616	764	618	306	257	337	394	408	465	442	480
15	600	608	811	582	297	275	380	411	408	465	429	494
16	600	601	748	557	286	280	347	392	424	476	430	438
17	593	525	759	594	323	311	351	400	412	465	448	465
18	643	552	728	601	314	322	385	403	428	476	448	467
19	667	512	713	572	306	324	416	405	444	465	449	469
20	692	522	748	---	306	318	374	397	444	465	453	453
21	647	514	748	656	306	322	359	427	442	465	451	447
22	658	517	713	645	297	316	362	505	442	463	453	447
23	590	520	695	652	296	307	375	492	442	463	453	447
24	519	507	799	609	298	302	376	422	442	535	451	447
25	509	520	836	557	322	290	380	416	461	764	459	441
26	517	533	743	538	324	289	379	440	465	455	462	450
27	507	581	669	507	321	280	380	428	465	446	470	431
28	507	656	665	484	321	279	381	418	461	465	462	453
29	493	---	699	473	334	280	388	396	465	486	455	451
30	495	---	695	438	352	272	387	406	442	458	---	458
31	527	---	787	---	352	---	383	507	---	512	---	440
MONTH	584	550	766	631	342	316	342	414	439	476	447	467

TEMPERATURE (DEG. C) OF WATER, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973  
(ONCE-DAILY)

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

## SAN JUAN RIVER BASIN

09368000 SAN JUAN RIVER AT SHIPROCK, N. MEX.--Continued

## SUSPENDED SEDIMENT DISCHARGE, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

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	1450	1250	4890	1970	2220	11800	3510	19700	187000
2	1490	1450	5830	1960	3180	16800	2440	23100	152000
3	1490	1410	5670	1880	1990	10100	2520	24700	168000
4	1490	1570	6320	1890	2040	10400	2430	27200	178000
5	1490	1630	6560	1930	2230	11600	1730	15200	71000
6	1470	2100	8330	1990	2350	12600	1510	8500	34700
7	1550	830	3470	2130	2150	12400	1330	6200	22300
8	1520	810	3320	2390	2440	15700	1300	2900	10200
9	1490	850	3420	2180	1840	10800	1410	3800	14500
10	1500	3320	13400	1990	2310	12400	1740	9050	42500
11	1510	2110	8600	2020	2400	13100	1700	10100	46400
12	1510	2040	8320	2050	3100	17200	1730	11300	52800
13	1490	2190	8810	2200	3420	20300	1520	5250	21500
14	1510	1450	5910	2210	2260	13500	1680	5600	25400
15	1460	790	3110	2120	1830	10500	1480	5900	23600
16	1480	810	3240	2030	1850	10100	1430	3150	12200
17	1540	1470	6110	2390	3760	24300	1380	3360	12500
18	1550	1750	7320	2770	3200	23900	1400	2950	11200
19	1410	810	3080	2860	2990	23100	1520	7550	31000
20	1340	520	1880	2750	3050	22600	1620	7950	34800
21	1310	1080	3820	2720	2800	20600	2170	10900	63900
22	1280	450	1560	2730	2320	17100	2720	19400	142000
23	1560	190	800	2870	2370	18400	1700	9400	43100
24	1910	320	1650	2880	2410	18700	1490	5800	23300
25	1980	1830	9780	2860	2200	17000	1560	6500	27400
26	1980	1510	8070	3000	2400	19400	1670	6900	31100
27	1980	1170	6250	3450	6600	61500	1870	6500	32800
28	2040	2740	15100	4190	14000	158000	1880	6300	32000
29	1970	2770	14700	--	--	--	1890	3850	19600
30	1860	1240	6230	--	--	--	2040	4200	23100
31	1920	945	4900	--	--	--	2260	7400	45200
TOTAL	49530	--	190450	68410	--	633900	56630	--	1635100
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	2130	9160	52700	4710	5550	70600	5950	1300	20900
2	1990	3800	20400	3450	3230	30100	6360	1330	22800
3	1870	2800	14100	2970	2800	22500	5350	1090	15700
4	1740	3190	15000	4200	5400	61200	4580	1100	13600
5	1660	2660	11900	5050	4360	59400	4180	800	9030
6	1720	3350	15600	5470	4850	71600	3720	750	7530
7	2060	3350	18600	4710	3550	45100	3820	780	8040
8	2110	6650	37900	4220	2800	31900	4930	1040	13800
9	1850	4400	22000	4380	2450	29000	6340	1450	24800
10	1750	2600	12300	5250	1900	26900	8950	1750	42300
11	2030	2300	12600	6190	2800	46800	10800	1840	53700
12	2510	9100	61700	7250	5000	97900	10700	1880	54300
13	3010	12900	105000	8130	4450	97700	9150	1890	46700
14	3300	14600	130000	7270	3570	70100	9580	1760	45500
15	3630	10600	104000	6730	3050	55400	10800	1600	46700
16	3260	7400	65100	6880	2400	44600	9000	1350	32800
17	2510	5700	38600	7430	2200	44100	6780	1390	25400
18	2660	4100	29400	7910	2100	44800	6260	1300	22000
19	2780	1890	14200	8870	2600	62300	6780	1230	22500
20	2430	1400	9190	11100	2800	83900	6860	950	17600
21	2130	1100	6330	11700	2800	88500	7210	860	16700
22	2050	1200	6640	10900	2000	58900	7470	1160	23400
23	2040	3130	17200	7990	2000	43100	7480	1200	24200
24	2170	4150	24300	6560	1810	32100	7590	1250	25600
25	2460	3950	26200	6560	1650	29200	7760	1240	26000
26	2910	3420	26900	6990	1060	20000	7710	1120	23300
27	3300	3740	33300	7270	1630	32000	8580	1170	27100
28	3720	4650	46700	6180	1330	22200	10400	1590	44600
29	4200	5300	60100	5260	1390	19700	11700	1160	36600
30	4440	5100	61100	5030	900	12200	11400	990	30500
31	--	--	--	5300	1380	19700	--	--	--
TOTAL	76420	--	1099060	201910	--	1473500	228190	--	823700

SAN JUAN RIVER BASIN  
09368000 SAN JUAN RIVER AT SHIPROCK, N. MEX.--Continued

SUSPENDED-SEDIMENT DISCHARGE, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

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	11900	1160	37300	4170	680	7660	4270	1630	18800
2	11400	1240	38200	3750	1110	11200	4040	670	7310
3	10900	1180	34700	4110	880	9770	3850	1100	11400
4	9830	1200	31800	4060	660	7230	3650	625	6160
5	9220	950	23600	4120	1550	17200	3370	500	4350
6	9080	880	21600	4050	2860	31300	3330	460	4140
7	8590	950	22000	4030	860	9360	2940	780	6190
8	7930	780	16700	4060	450	4930	2710	620	4540
9	7550	900	18300	4100	640	7080	2540	1400	9600
10	7100	1030	19700	3950	1890	20200	2770	700	5240
11	6700	900	16300	3820	1150	11900	4630	13100	164000
12	6020	640	10400	3770	1370	13900	3880	5500	57600
13	5860	880	13900	3640	196	1930	3680	6400	63600
14	4470	945	11400	3490	150	1410	3640	5150	50800
15	5000	1190	16100	3070	135	1120	3050	890	7330
16	5650	1190	18200	3220	88	765	2610	710	5000
17	5500	845	12500	3240	100	875	2500	540	3650
18	5300	1390	19900	3170	88	753	2220	430	2580
19	5650	1690	25800	3170	88	753	2000	336	1810
20	5470	900	13300	3120	89	750	1950	295	1550
21	5290	650	9280	3130	700	5920	1920	198	1030
22	5030	700	9510	3670	5570	56300	1890	220	1120
23	4660	660	8300	3460	2800	26200	1890	182	929
24	4340	770	9020	3370	1050	9550	1910	154	794
25	4170	640	7210	3390	1160	10600	1950	241	1270
26	4100	520	5760	3550	980	9390	2090	202	1140
27	4250	720	8260	3880	870	9110	2170	247	1450
28	4050	520	5690	3950	610	6510	2130	243	1400
29	3910	460	4860	3760	780	7920	2140	180	1040
30	4300	560	6500	3820	560	5780	2110	185	1050
31	4000	550	5940	4490	8090	102000	--	--	--
TOTAL	197220	--	502030	114580	--	409366	83830	--	446873

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	2080	160	899	2020	192	1050	2260	252	1540
2	2010	147	798	2030	207	1130	2230	233	1400
3	2060	200	1110	2040	202	1110	2200	143	849
4	2140	269	1550	2150	200	1160	1550	127	531
5	2230	222	1340	2170	199	1170	1330	1140	5650
6	2140	205	1180	2190	213	1260	2010	1700	9230
7	2070	186	1040	2170	178	1040	2000	308	1660
8	1940	141	739	2170	195	1140	2070	239	1340
9	1850	198	989	2190	65	384	2050	250	1380
10	1910	189	975	2190	35	207	2070	577	3220
11	2020	251	1370	2190	40	237	2080	300	1680
12	2000	220	1190	2180	45	265	2050	210	1160
13	2020	162	884	2150	114	662	2050	288	1590
14	2020	112	611	2170	113	662	2130	360	2070
15	2010	80	434	2190	247	1460	2120	340	1950
16	2070	73	408	2100	107	607	2080	269	1510
17	2060	133	740	2110	39	222	2060	268	1490
18	2100	132	748	2100	101	573	2070	300	1680
19	2050	108	598	2150	63	366	2080	637	3530
20	2100	134	760	2150	136	789	2060	340	1890
21	2010	133	722	2110	174	991	2050	270	1490
22	2000	143	772	2160	249	1450	2070	290	1620
23	2000	256	1300	2170	227	1330	2090	398	2250
24	1470	210	946	2160	206	1200	2090	740	4140
25	1150	132	524	2180	199	1170	2080	440	2470
26	1920	90	467	2220	470	2820	2050	585	3240
27	2000	46	248	2230	297	1790	2050	498	2740
28	1960	53	280	2140	206	1190	2060	531	2950
29	1980	80	428	2180	192	1130	2120	478	2740
30	1980	170	909	2250	185	1120	2230	428	2580
31	1740	189	888	--	--	--	2140	550	3040
TOTAL	61090	--	25927	64610	--	29685	63580	--	74740

CAL YR 1973 TOTAL WATER DISCHARGE (CFS-DAYS)  
CAL YR 1973 TOTAL SUSPENDED-SEDIMENT DISCHARGE (TONS)

1265000  
7344331

WTR YR 1973 TOTAL WATER DISCHARGE (CFS-DAYS)  
WTR YR 1973 TOTAL SUSPENDED-SEDIMENT DISCHARGE (TONS)

1250322  
13117487

09368000 SAN JUAN RIVER AT SHIPROCK, N. MEX.--Continued

INSTANTANEOUS SUSPENDED-SEDIMENT DISCHARGE AND PARTICLE SIZE,  
CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

DATE	TIME	TEMPER- ATURE (DEG C) (00014)	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SUS- PENDED SEDI- MENT (MG/L) (80154)	SUS- PENDED SEDI- MENT DIS- CHARGE (T/DAY) (80155)	SUS- SED- IMENT FALL DIAM. % FINER THAN .002 MM (70337)	SUS- SED- IMENT FALL DIAM. % FINER THAN .004 MM (70338)
JAN.							
01...	1700	.5	1370	1890	8010	--	--
21...	1600	2.0	1280	1380	4770	--	--
FEB.							
06...	1120	3.0	1970	1600	8510	17	20
MAR.							
01...	1700	8.0	3250	20800	183000	38	51
06...	1030	5.0	1540	6840	28400	50	56
12...	0800	4.0	1870	15700	79300	45	53
31...	1715	3.5	2310	7960	49600	33	43
APR.							
13...	0615	9.5	2710	12600	92200	34	44
27...	1530	15.0	3380	3310	30200	13	17
MAY							
02...	1000	7.0	3530	3110	29600	20	24
20...	0800	12.0	11000	3180	94400	14	18
JUNE							
15...	0615	11.5	11100	1700	50900	12	14
JULY							
01...	2000	18.0	12200	973	52100	--	--
31...	1600	18.0	5100	1170	16100	--	--
AUG.							
22...	1700	19.5	3840	7530	78100	46	61
29...	1820	18.0	4130	1160	12900	--	--
SEP.							
11...	1700	16.0	4440	21800	261000	46	62
25...	1115	12.0	2040	279	1540	--	--
OCT.							
30...	1000	8.0	2060	716	3980	--	--
NOV.							
28...	1130	3.0	2140	278	1610	--	--

DATE	SUS- SED- IMENT FALL DIAM. % FINER THAN .016 MM (70340)	SUS- SED- IMENT FALL DIAM. % FINER THAN .062 MM (70342)	SUS- SED- IMENT FALL DIAM. % FINER THAN .125 MM (70343)	SUS- SED- IMENT FALL DIAM. % FINER THAN .250 MM (70344)	SUS- SED- IMENT FALL DIAM. % FINER THAN .500 MM (70345)	SUS- SED- IMENT FALL DIAM. % FINER THAN 1.00 MM (70346)	SUS- SED- IMENT FALL DIAM. % FINER THAN 2.00 MM (70347)
JAN.							
01...	--	24	62	90	99	100	--
21...	--	18	48	92	100	--	--
FEB.							
06...	22	39	69	95	99	100	--
MAR.							
01...	61	80	89	97	99	100	--
06...	66	85	93	99	100	--	--
12...	68	87	94	98	100	--	--
31...	56	76	89	98	100	--	--
APR.							
13...	59	77	86	96	100	--	--
27...	24	56	78	92	100	--	--
MAY							
02...	29	31	57	92	100	--	--
20...	28	54	73	92	100	--	--
JUNE							
15...	22	41	56	85	100	--	--
JULY							
01...	--	40	54	89	100	--	--
31...	--	6	9	31	84	100	--
AUG.							
22...	82	95	96	98	100	--	--
29...	--	10	13	22	75	99	100
SEP.							
11...	84	95	99	100	--	--	--
25...	--	32	54	100	--	--	--
OCT.							
30...	--	7	7	13	65	98	100
NOV.							
28...	--	20	68	99	100	--	--

## GILA RIVER BASIN

09430600 MCGILLON 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 mi (19 km) upstream from mouth, and 14.2 mi (23 km) north of Cliff.

DRAINAGE AREA.—69 mi<sup>2</sup> (179 km<sup>2</sup>).

PERIOD OF RECORD.—Chemical analyses: February 1967 to current year.  
Sediment records: October 1968 to current year.

## CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	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. 21...	1300	203	20	50	--	13	3.2	7.0	1.0	31	0
MAY 21...	2000	102	20	20	0	7.9	1.4	4.3	.7	21	0
JUNE 26...	1030	5.8	24	9	--	14	3.2	6.5	--	54	0
JULY 31...	1100	14	22	20	--	14	3.1	6.1	1.2	53	0
NOV. 20...	1130	1.5	20	--	--	19	4.2	8.2	1.4	71	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)	TOTAL NITRITE PLUS NITRATE (N) (MG/L) (00630)	DIS- SOLVED NITRITE (N) (MG/L) (00631)	AMMONIA NITRO- GEN (N) (MG/L) (00610)	TOTAL ORGANIC NITRO- GEN (N) (MG/L) (00605)	TOTAL NITRO- GEN (N) (MG/L) (00600)	TOTAL PHOS- PHORUS (P) (MG/L) (00665)
MAR. 21...	24	1.8	.3	.03	.02	.04	.05	.03	.13	.20	.04
MAY 21...	17	1.5	.2	.29	.14	.03	.43	.02	.13	.18	.01
JUNE 26...	20	1.6	.4	.00	.01	.01	.00	.03	.13	.17	.06
JULY 31...	18	2.1	.4	.04	.00	.00	.04	.00	3.9	3.9	.05
NOV. 20...	21	2.7	.5	--	--	.01	--	--	--	--	.03

DATE	DIS- SOLVED ORTHO- PHOS- PHORUS (P) (MG/L) (00671)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L) (70300)	DIS- SOLVED (SUM OF TUNENTS) (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. 21...	.03	107	86	46	20	.5	136	7.1	6.0	0
MAY 21...	.01	73	67	26	8	.4	75	8.0	12.0	20
JUNE 26...	.02	113	105	48	4	.4	135	7.7	20.0	0
JULY 31...	.01	119	93	48	4	.4	134	8.2	20.0	20
NOV. 20...	--	108	112	65	7	.4	171	7.6	10.0	--

## TRACE ELEMENT AND RADIOCHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

DATE	TIME	TOTAL ARSENIC (AS) (UG/L) (01002)	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)
MAY 21...	2000	--	1	0	20	1	0	9
NOV. 20...	1130	0	--	--	--	--	--	--

DATE	TOTAL IRON (FE) (UG/L) (01045)	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)	DIS- SOLVED SILVER (AG) (UG/L) (01075)	TOTAL SELE- NIUM (SE) (UG/L) (01147)	DIS- SOLVED SELE- NIUM (SE) (UG/L) (01145)	DIS- SOLVED ZINC (ZN) (UG/L) (01090)
MAY 21...	--	20	<100	0	--	1	--	42	0
NOV. 20...	1200	--	<100	--	.0	--	5	--	--



09430600 MOGOLLON CREEK NEAR CLIFF, N. MEX.--Continued

## TRACE ELEMENT AND RADIOCHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

DATE	DIS- SOLVED GROSS ALPHA AS U-NAT. (UG/L) (60030)	SUS- PENDEU GROSS ALPHA AS U-NAT. (UG/L) (80040)	DIS- SOLVED GROSS BETA AS CS-137 (PC/L) (03515)	SUS- PENDEU GROSS BETA AS CS-137 (PC/L) (03516)	DIS- SOLVED GROSS BETA AS SR90 /Y90 (PC/L) (80050)	SUS- PENDEU GROSS BETA AS SR90 /Y90 (PC/L) (80060)	DIS- SOLVED GROSS RA-226 (RADON METHOD) (PC/L) (03511)	DIS- SOLVED GROSS URANIUM (U) (UG/L) (80020)
MAY 21...	--	--	--	--	--	--	--	--
NOV. 20...	1.5	<.4	2.2	<.4	1.8	<.4	.05	.10

## FIELD AND BIOCHEMICAL MEASUREMENTS, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	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- CUBALT 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)
MAR. 21...	1300	203	110	8.0	8.0	8.5	15	5	10.0	1	4.9 *
MAY 21...	2000	102	90	7.1	12.0	15.0	5	2	7.7	0	4.0 *
JUNE 26...	1030	5.8	140	7.3	20.0	15.5	2	1	7.4	5	4.5 *
JULY 31...	1100	14	130	7.8	20.0	24.0	2	1	7.5	3	3.0 *
NOV. 20...	1130	1.5	171	7.6	10.0	5.5	--	--	9.2	45	2.5

\* Analyzed by New Mexico Environmental Improvement Agency.

## PESTICIDE ANALYSES, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

DATE	TIME	TOTAL ORGANIC CARBON (C) (00680)	ALDRIN (UG/L) (39330)	ALDRIN IN BOTTOM DE- POSITS (UG/KG) (39330)	CHLOR- DANE (UG/L) (39330)	CHLOR- DANE IN BOTTOM DE- POSITS (UG/KG) (39331)	DDO (UG/L) (39360)	DDO IN BOTTOM DE- POSITS (UG/KG) (39363)	DDE (UG/L) (39365)	DDE IN BOTTOM DE- POSITS (UG/KG) (39368)	DDT (UG/L) (39370)
JULY 31...	1100	4.0	--	--	--	--	--	--	--	--	--
NOV. 20...	1130	2.5	.00	.0	.0	0	.00	.0	.00	.0	.00

DATE	DDT IN BOTTOM DE- POSITS (UG/KG) (39373)	DI- AZINON (UG/L) (39370)	DI- ELURIN (UG/L) (39380)	DI- ELURIN 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 IN BOT- TOM DE- POSITS (UG/KG) (39423)
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JULY 31...	--	--	--	--	--	--	--	--	--	--
NOV. 20...	.0	.01	.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) (39350)	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)
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JULY 31...	--	--	--	--	--	--	--	--	--	--
NOV. 20...	.00	.0	.00	.00	.00	.0	0	.00	.00	.00



## GILA RIVER BASIN

09430600 MOGOLLON CREEK NEAR CLIFF, N. MEX.--Continued

INSTANTANEOUS SUSPENDED-SEDIMENT DISCHARGE, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

DATE	TIME	TEMPER- ATURE (DEG C) (00010)	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SUS- PENDED SEDIM- ENT DIS- CHARGE (MG/L) (80154)	SUS- PENDED SEDIM- ENT DIS- CHARGE (T/DAY) (80155)
JAN.					
10...	0900	4.0	31	4	.33
FEB.					
13...	1220	3.5	50	3	.40
26...	1340	4.5	197	18	9.6
MAR.					
08...	1010	4.0	86	3	.70
20...	1315	4.0	187	11	5.6
21...	1300	6.0	203	10	5.5
APR.					
10...	0835	4.0	142	5	1.9
MAY					
08...	0835	7.0	144	3	1.2
21...	2000	12.0	102	1	.28
JUNE					
01...	1330	15.0	37	0	.00
21...	1320	20.0	6.4	0	.00
26...	1030	20.0	5.8	1	.02
JULY					
17...	1340	20.0	20	8	.43
26...	1415	22.0	5.4	1	.01
31...	1100	20.0	14	1	.04
AUG.					
23...	1350	25.0	5.7	10	.15
OCT.					
17...	1415	14.0	.29	2	.00
30...	1310	13.0	.70	148	.28
NOV.					
15...	1005	9.0	.91	478	1.2
20...	1150	10.0	1.5	574	2.3
DEC.					
19...	1320	5.0	.64	2	.00

## GILA RIVER BASIN

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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 mi (0.2 km) upstream from Blacksmith Canyon and 15 mi (24 km) southeast of Gila.

DRAINAGE AREA.—177 mi<sup>2</sup> (458 km<sup>2</sup>).

PERIOD OF RECORD.—Chemical analyses: April 1970 to current year.

## CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (00061)	UIS- SOLVED SILICA (S102) (MG/L) (00955)	DIS- SOLVED IRON (FE) (UG/L) (01046)	UIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	UIS- SOLVED MAG- NE- SIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	UIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	BICAR- BONATE (HCO3) (MG/L) (00440)	CAN- BONATE (LOS) (MG/L) (00445)	UIS- SOLVED SULFATE (SO4) (MG/L) (00945)	UIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)
FEB. 14...	0830	2.7	29	9	72	14	29	3.0	263	0	57	12
MAR. 07...	1240	1.9	30	9	77	14	28	2.9	271	0	61	12
MAY 04...	1025	1.6	31	9	75	14	31	2.3	261	0	56	13
JULY 23...	1140	1.3	31	--	67	12	25	3.4	254	0	48	13
SEP. 20...	1330	1.6	33	--	65	12	30	2.9	240	0	45	10
NOV. 07...	1245	1.7	31	10	66	13	28	1.4	244	0	42	11

DATE	UIS- SOLVED FLUO- RIE (F) (MG/L) (00950)	UIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	UIS- SOLVED ORTHOPHOS- PHORUS (P) (MG/L) (00671)	UIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L) (01030)	UIS- SOLVED SOLIDS (SUM OF CONSIST- ENT) (MG/L) (01031)	MAKU- 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)	UIS- SOLVED BORON (B) (UG/L) (01020)
FEB. 14...	.5	4.1	.06	412	365	240	22	.8	544	8.2	5.0	0
MAR. 07...	.6	4.8	.06	372	381	250	28	.8	583	8.0	15.0	210
MAY 04...	.6	4.5	.03	363	372	250	31	.9	558	8.2	18.0	30
JULY 23...	.4	4.2	--	--	344	220	8	.7	538	7.8	26.0	--
SEP. 20...	.4	4.7	--	--	337	210	15	.9	517	8.0	26.0	--
NOV. 07...	.4	4.1	.07	315	332	220	18	.8	526	8.1	19.0	30

LOCATION.—Lat 32°43'37", long 108°40'30", in  $\frac{1}{4}$  sec.23, T.18 S., R.18 W., Grant County, at gaging station 0.2 mi (0.3 km) downstream from Copper Canyon, 0.2 mi (0.3 km) upstream from lower end of box canyon, 4.7 mi (7.6 km) northeast of Redrock, and 14 mi (23 km) downstream from Mangas Creek, and at mile 539.2 (867.6 km).

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

DATE	TIME	INSTAN-	DIS-	DIS-	DIS-	DIS-	DIS-	DIS-	DIS-
		TANEOUS DIS- CHARGE (CFS) (00061)	SOLVED SILICA (SI02) (MG/L) (00955)	SOLVED IRON (FE) (UG/L) (01046)	SOLVED MAN- GANESE (MN) (UG/L) (01056)	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)
JAN.									
09...	1045	317	31	--	--	29	6.5	23	1.6
22...	1210	241	--	--	--	--	--	--	--
FEB.									
14...	1205	551	30	--	--	28	6.3	19	1.4
MAR.									
16...	1230	1100	29	--	--	27	6.3	15	1.9
21...	1130	1870	28	--	--	23	5.3	11	1.8
APR.									
02...	1145	1050	--	--	--	--	--	--	--
13...	1100	1420	--	--	--	--	--	--	--
24...	1800	946	29	80	4	21	4.8	14	1.5
MAY									
18...	1130	1260	30	--	--	22	4.2	13	1.8
JUNE									
22...	1035	108	35	--	--	36	7.5	26	2.1
26...	1600	96	36	9	7	39	8.6	30	2.8
JULY									
09...	1125	70	--	--	--	--	--	--	--
18...	1200	475	30	--	--	40	6.3	16	2.4
24...	1020	128	--	--	--	--	--	--	--
AUG.									
17...	1030	42	36	--	--	46	9.3	37	2.8
SEP.									
19...	1020	22	--	--	--	--	--	--	--
26...	0931	24	34	20	8	43	9.6	40	2.9
OCT.									
11...	1020	25	--	--	--	--	--	--	--
25...	0900	29	34	7	82	47	10	40	2.8
NOV.									
02...	1330	32	32	--	--	41	9.8	38	2.6
14...	1335	61	--	--	--	--	--	--	--

## GILA RIVER BASIN

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09431500 GILA RIVER NEAR REDROCK, N. MEX.--Continued

## CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

DATE	HARD- NESS (CA, MG) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AU- SORP- TION RATIO (00931)	SPE- CIFIC CON- DUCT- ANCE (MICHO- 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)
JAN.									
09...	99	2	1.0	302	8.2	9.0	--	--	--
22...	--	--	--	298	--	6.0	--	--	--
FEB.									
14...	96	8	.8	280	7.7	7.0	--	--	--
MAR.									
16...	93	17	.7	263	7.8	9.0	--	--	--
21...	79	19	.5	213	7.7	15.0	--	--	--
APR.									
02...	--	--	--	221	--	9.0	1	50	--
13...	--	--	--	178	--	12.0	2	90	--
24...	72	9	.7	208	8.0	15.0	--	--	40
MAY									
18...	72	9	.7	200	7.4	17.0	--	--	--
JUNE									
22...	120	0	1.0	354	8.1	18.0	--	--	--
26...	130	0	1.1	386	7.6	26.5	--	--	50
JULY									
09...	--	--	--	412	--	24.0	--	--	--
18...	130	3	.6	335	7.8	23.0	--	--	--
24...	--	--	--	373	--	21.0	--	--	--
AUG.									
17...	150	0	1.3	454	7.9	21.0	--	--	--
SEP.									
19...	--	--	--	422	--	19.0	--	--	--
26...	150	0	1.4	437	8.4	16.0	--	--	80
OCT.									
11...	--	--	--	427	--	16.0	--	--	--
25...	160	0	1.4	472	8.0	10.0	--	--	35
NOV.									
02...	140	0	1.4	425	8.3	14.0	--	--	--
14...	--	--	--	452	--	14.0	--	--	--

## TRACE ELEMENT AND RADIOCHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

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.										
24...	1800	130	0	27	<1	<3	40	0	<2	<3
25...	1030	--	--	--	--	--	--	--	--	--
JUNE										
26...	1600	50	0	42	<2	<6	50	0	<2	<4
SEP.										
26...	0931	17	4	20	<2	<6	80	0	<3	<5
OCT.										
25...	0900	15	0	30	<3	<7	35	<4	<4	<7

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)
APR.									
24...	2	<2	<3	80	<100	<3	10	4	.1
25...	--	--	--	--	--	--	--	--	--
JUNE									
26...	3	<3	<6	9	<50	<6	16	7	--
SEP.									
26...	3	<3	<6	20	<50	<5	17	8	.1
OCT.									
25...	5	<3	<7	7	<50	<7	20	82	.0

## GILA RIVER BASIN

09431500 GILA RIVER NEAR REDROCK, N. MEX.--Continued

## TRACE ELEMENT AND RADIOCHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

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 SIL- NIUM (SE) (UG/L) (01145)	DIS- SOLVED STRON- TIUM (SR) (UG/L) (01080)	DIS- SOLVED IIN (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)
APR. 24...	1	<3	<1	2	100	<3	2	4.0	<120
25...	--	--	--	--	--	--	--	--	--
JUNE 26...	2	<3	<1	0	100	<6	<5	5.0	8
SEP. 26...	3	<5	0	4	170	<6	<5	10	<5
OCT. 25...	3	<7	<1	3	210	<7	<5	<4.0	12

DATE	DIS- SOLVED ZIR- CONIUM (ZR) (UG/L) (01160)	DIS- SOLVED GROSS ALPHA AS U-NAT. (UG/L) (80030)	SUS- PENDEU GROSS ALPHA AS U-NAT. (UG/L) (80040)	DIS- SOLVED GROSS BETA AS CS-137 (PC/L) (03515)	SUS- PENDEU GROSS BETA AS CS-137 (PC/L) (03516)	DIS- SOLVED GROSS BETA AS AS SR90 /Y90 (PC/L) (80050)	SUS- PENDEU GROSS BETA AS AS SR90 /Y90 (PC/L) (80060)	DIS- SOLVED RA-226 (RAUON METHOD) (PC/L) (09511)	DIS- SOLVED NATURAL URANIUM (U) (UG/L) (02703)
APR. 24...	<4	--	--	--	--	--	--	--	--
25...	--	6.5	12	3.6	12	2.8	10	.02	.5
JUNE 26...	<8	--	--	--	--	--	--	--	--
SEP. 26...	<10	--	--	--	--	--	--	--	--
OCT. 25...	<10	5.7	<.4	4.1	.7	3.3	.7	.03	2.5

## FIELD AND BIOCHEMICAL MEASUREMENTS, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SPE- CIFIC CON- DUCTI- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	AIR TEMPER- ATURE (DEG C) (00020)	DIS- SOLVED OXYGEN (MG/L) (00300)	TOTAL ORGANIC CARBON (C) (00680)
APR. 24...	1800	946	200	8.0	15.0	23.0	--	--
JUN. 26...	1600	96	380	7.8	26.5	37.0	--	4.5 *
SEP. 26...	0931	24	430	8.3	16.0	18.5	8.3	--
OCT. 25...	0900	29	460	8.0	10.0	14.5	9.7	--

\* Analyzed by New Mexico Environmental Improvement Agency.

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 sec. 6, T.19 S., R.21 W., Hidalgo County, at State line, 2.8 mi (4.5 km) west of Virden, N. Mex., and 3.5 mi (5.6 km) southeast of Duncan, Ariz.

DRAINAGE AREA.—3,349 mi<sup>2</sup> (8,674 km<sup>2</sup>).

PERIOD OF RECORD.—Chemical analyses: October 1967 to February 1969, July 1969 to June 1973 (discontinued).  
Sediment records: January 1970 to June 1973 (discontinued).

## CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

DATE	TIME	INSTANTANEOUS UIS- CHARGE (CFS) (00061)	DIS- SOLVED SILICA (SiO <sub>2</sub> ) (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 <sub>3</sub> ) (MG/L) (00440)	CAR- BONATE (CO <sub>3</sub> ) (MG/L) (00445)	DIS- SOLVED SULFATE (SO <sub>4</sub> ) (MG/L) (00945)
APR. 25...	1430	870	30	30	23	5.0	17	2.1	95	0	31
JUNE 26...	1400	88	36	9	51	9.9	40	3.7	229	0	49

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)	TOTAL NITRITE PLUS NITRATE (N) (MG/L) (00630)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	AMMONIA GEN (N) (MG/L) (00610)	TOTAL ORGANIC NITRO- GEN (N) (MG/L) (00605)	TOTAL NITRO- GEN (N) (MG/L) (00600)	TOTAL PHOS- PHORUS (P) (MG/L) (00665)
APR. 25...	6.2	1.0	.22	.00	.18	.22	.11	.21	.50	.26
JUNE 26...	16	2.0	.41	.01	.46	.42	.16	.73	1.4	.15

DATE	DIS- SOLVED ORTHU- PHOS- PHORUS (P) (MG/L) (00671)	DIS- SOLVED SOLIDS (KESI- 180 C) (MG/L) (70300)	DIS- SOLVED (SUM OF TUEENTS) (MG/L) (70301)	HAKU- 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	TEMPER- ATURE (DEG C) (00010)	DIS- SOLVED BROMO- (B) (UG/L) (01020)
APR. 25...	.07	182	164	78	0	.8	235	7.9	18.5	40
JUNE 26...	.07	342	324	170	0	1.3	513	7.5	24.5	50

## FIELD AND BIOCHEMICAL MEASUREMENTS, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

DATE	TIME	INSTANTANEOUS UIS- CHARGE (CFS) (00061)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH	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 (31616)	TOTAL ORGANIC CARBON (C) (MG/L) (00680)
APR. 25...	1430	870	240	8.0	18.5	26.0	25	80	--	930	5.5 *
JUNE 26...	1400	88	540	7.7	24.5	35.5	3	15	7.0	64	8.5 *

\* Analyzed by New Mexico Environmental Improvement Agency.

## INSTANTANEOUS SUSPENDED SEDIMENT AND PARTICLE SIZE, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

DATE	TIME	TEMPER- ATURE (DEG C) (00010)	INSTANTANEOUS UIS- 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 (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)
APR. 25...	1430	18.5	870	568	1330	15	20	33	68	87	99	100
JUNE 26...	1400	24.5	88	32	7.6	--	--	--	--	--	--	--



## GILA RIVER BASIN

09444000 SAN FRANCISCO RIVER NEAR GLENWOOD, N. MEX.  
(Surveillance network station)

LOCATION.—Lat 33°14'48", long 108°52'47", in NE¼ sec. 23, T. 12 S., R. 20 W., Catron County, at gaging station 0.2 mi (0.3 km) upstream from hot springs, 5 mi (8 km) south of Glenwood, 6 mi (10 km) downstream from Whitewater Creek, and at mile 511.5 (823.0 km) (revised).

DRAINAGE AREA.—1,653 mi<sup>2</sup> (4,281 km<sup>2</sup>).

PERIOD OF RECORD.—Chemical analyses: April 1963 to current year.  
Sediment records: April 1963 to July 1967, July 1970 to current year.

## CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS) (00061)	DIS- SOLVED SILICA (SiO <sub>2</sub> ) (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 <sub>3</sub> ) (MG/L) (00440)	CAR- BONATE (CO <sub>3</sub> ) (MG/L) (00445)	DIS- SOLVED SULFATE (SO <sub>4</sub> ) (MG/L) (00945)
JAN.											
22...	1300	85	33	30	38	9.5	20	2.2	185	0	22
FEB.											
20...	1800	135	31	30	37	9.1	20	1.9	173	0	23
MAR.											
21...	1500	1190	29	90	25	6.5	12	1.6	101	0	27
APR.											
26...	0800	1070	30	90	22	5.8	12	1.6	96	0	24
MAY											
22...	0800	432	32	50	28	5.8	12	1.5	96	0	25
JUNE											
26...	0730	55	35	9	36	8.9	20	4.0	172	0	18
JULY											
31...	1430	63	34	20	37	8.5	23	2.8	183	0	17
AUG.											
30...	1215	24	37	0	36	9.7	36	3.3	174	9	19
SEP.											
26...	1225	22	40	10	39	10	38	3.0	196	0	15
OCT.											
25...	1400	20	38	10	41	11	28	2.8	206	1	15
NOV.											
20...	1500	32	37	20	38	11	27	2.6	180	11	15
DEC.											
11...	1330	29	38	10	40	10	37	3.4	171	16	14

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)	TOTAL NITRITE PLUS NITRATE (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)	TOTAL ORGANIC NITRO- GEN (N) (MG/L) (00605)	TOTAL NITRO- GEN (N) (MG/L) (00600)	TOTAL PHOS- PHORUS (P) (MG/L) (00665)
JAN.											
22...	6.6	.4	.24	.00	--	.24	.03	.03	.29	.56	.14
FEB.											
20...	4.9	.4	.18	.03	.17	.21	.05	--	.08	.30	.14
MAR.											
21...	3.3	.6	.21	.00	.06	.21	.75	--	.00	.81	.75
APR.											
26...	3.4	.1	.07	.00	.06	.07	.16	--	.39	.61	.79
MAY											
22...	4.5	.3	.02	.02	.07	.04	.10	--	.35	.52	.19
JUNE											
26...	9.5	.4	.20	.00	.29	.20	.00	--	.23	.52	.14
JULY											
31...	10	.5	.27	.00	.30	.27	.08	--	4.4	4.8	.93
AUG.											
30...	32	.4	.06	.00	.06	.07	.05	--	.08	.19	.05
SEP.											
26...	33	.5	.05	.01	.12	.06	.03	--	.05	.20	.12
OCT.											
25...	17	.4	.22	.01	.25	.23	.01	--	.11	.37	.19
NOV.											
20...	14	.4	.12	.00	.12	.12	.05	--	.22	.39	.09
DEC.											
11...	34	.4	.11	.00	.10	.11	.06	--	.26	.42	.09

## GILA RIVER BASIN

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09444000 SAN FRANCISCO RIVER NEAR GLENWOOD, N. MEX.--Continued  
 CHEMICAL ANALYSES, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

DATE	DIS- SOLVED UNTHU- PHOS- PHORUS (P) (00671)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L) (70300)	DIS- SOLVED SOLIDS (SUM OF TUNENTS) (MG/L) (70301)	HAKU- 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 BIRON (B) (0020)
JAN. 22...	.08	250	225	130	0	.8	333	8.1	10.0	50
FEB. 20...	.09	234	215	130	0	.8	326	8.3	8.5	20
MAR. 21...	.10	176	157	89	6	.6	222	7.4	9.0	10
APR. 26...	.12	154	147	79	0	.6	202	8.0	10.0	30
MAY 22...	.09	172	157	94	15	.5	213	7.9	12.0	20
JUNE 26...	.07	232	219	130	0	.8	341	7.6	15.0	10
JULY 31...	.10	243	225	130	0	.9	347	7.7	27.0	30
AUG. 30...	.05	248	269	130	0	1.4	422	8.6	27.5	50
SEP. 26...	.08	288	276	140	0	1.4	445	8.2	22.0	60
OCT. 25...	.16	261	257	150	0	1.0	399	8.4	19.0	9
NOV. 20...	.09	235	246	140	0	1.0	378	9.0	15.5	50
DEC. 11...	.08	256	278	140	0	1.4	403	8.9	15.0	40

## FIELD AND BIOCHEMICAL MEASUREMENTS, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	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) (MG/L) (00680)
JAN. 22...	1300	85	326	--	10.0	10.0	15	10	8.7	5	1.5 *
FEB. 20...	1800	135	320	8.1	8.5	5.0	15	20	10.0	5	--
MAR. 21...	1500	1190	220	8.1	9.0	12.5	35	500	12.0	87	11 *
APR. 26...	0800	1070	200	8.0	10.0	6.5	50	230	--	1000	9.5 *
MAY 22...	0800	432	210	7.6	12.0	15.0	5	35	8.0	25	5.0 *
JUNE 26...	0730	55	340	7.6	15.0	16.0	5	15	7.3	42	4.1 *
JULY 31...	1430	63	340	8.0	27.0	29.0	5	200	6.5	400	14
AUG. 30...	1215	24	410	8.2	27.5	29.0	1	3	9.2	0	5.5
SEP. 26...	1225	22	440	8.3	22.0	21.5	--	--	8.8	14	1.5
OCT. 25...	1400	20	399	8.4	19.0	24.5	--	--	8.5	28	3.5
NOV. 20...	1500	32	378	9.0	15.5	11.0	--	--	8.6	6	2.0
DEC. 11...	1330	29	403	8.9	15.0	19.0	--	--	10.6	1	2.4

\* Analyzed by New Mexico Environmental Improvement Agency.

## GILA RIVER BASIN

09444000 SAN FRANCISCO RIVER NEAR GLENWOD, N. MEX.--Continued

INSTANTANEOUS SUSPENDED-SEDIMENT DISCHARGE AND PARTICLE SIZE, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

DATE	TIME	TEMPER- ATURE (DEG C) (00410)	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SUS- PENDU SEDIM- ENT (MG/L) (00154)	SUS- PENDU SEDIM- ENT DIS- CHARGE (T/UY) (00195)	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)	SUS. SED. FALL DIAM. % FINER THAN (70345)
JAN. 22...	1300	10.0	88	110	25	--	--	--	--	--	--	--
FEB. 09...	1330	15.0	88	9	.80	--	--	--	--	--	--	--
20...	1800	8.5	135	200	73	--	--	--	--	--	--	--
MAR. 21...	1500	9.0	1190	4950	15900	16	19	36	69	86	98	100
APR. 26...	0800	10.0	1970	2200	6360	14	17	28	48	71	96	100
MAY 22...	0800	12.0	432	323	377	--	--	--	--	--	--	--
JUNE 26...	0730	15.0	55	42	6.2	--	--	--	--	--	--	--
JULY 31...	1430	27.0	63	1800	306	28	35	45	68	93	100	--
AUG. 30...	1215	27.5	24	461	30	--	--	--	--	--	--	--
SEP. 20...	1225	22.0	22	13	.77	--	--	--	--	--	--	--
OCT. 25...	1400	19.0	20	12	.65	--	--	--	--	--	--	--
NOV. 20...	1500	15.5	32	409	35	--	--	--	--	--	--	--
DEC. 11...	1330	15.0	29	9	.70	--	--	--	--	--	--	--

QUALITY OF SURFACE WATER DATA AT PARTIAL RECORD STATIONS OR MISCELLANEOUS SITES  
(Formerly published as Miscellaneous Sites)

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EXPLANATION: Partial Record stations or Miscellaneous Sites in this table are listed in downstream order by parts if an eight digit number has been assigned (see page 10). They are followed by Miscellaneous Sites listed in ascending latitude-longitude identification numbers (see page 10).

WATER QUALITY DATA, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

08284150 WILLOW CREEK ABOVE AZOTEA CREEK, NEAR PARK VIEW, N. MEX.  
(LAT 36°48'15", LONG 106°39'39")

DATE	TIME	TEMPER- ATURE (DEG C) (00010)	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	TUR- BID- ITY (JTU) (00070)	SUS- PENDED SEDIM- ENT (MG/L) (80154)	SUS- PENDED SEDIM- ENT CHARGE (T/DAY) (80155)
MAY 31...	1530	10.0	980	110	85	376	995
DATE		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)
MAY 31...	25	33	48	78	88	94	108

08284200 WILLOW CREEK ABOVE HERON RESERVOIR, NEAR PARK VIEW, N. MEX.  
(LAT 36°44'33", LONG 106°37'34")

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	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) (K) (MG/L) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	BICAR- BONATE (HCO3) (MG/L) (00440)	
APR. 26...	0930	620	14	60	0	26	7.8	10	2.1	91	
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 (N) (MG/L) (00631)	DIS- SOLVED ORTH- PHOS- PHORUS (P) (MG/L) (00671)	DIS- SOLVED RESI- DUE AT CONSTI- TUENTS (MG/L) (00300)	DIS- SOLVED SUM OF HARD- NESS (CA,MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	
APR. 26...	0	49	1.4	.2	.29	.03	194	157	97	22	
DATE		SODIUM AU- SORP- TION RATIO (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH	AIR TEMPER- ATURE (DEG C) (00020)	TEMPER- ATURE (DEG C) (00010)	COLOR (PLAT- INUM- COBALI UNITS) (00080)	TUR- BID- ITY (JTU) (00070)	DIS- SOLVED OXYGEN (MG/L) (00300)	FECAL COLI- FORM (COL. PER 100 ML) (31616)	DIS- SOLVED BORON (B) (UG/L) (01020)
APR. 26...	.4	249	7.9	11.0	2.5	60	280	10.8	23	40	
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)			
APR. 26...	0930		0	0	40	0	0	0	8		

## QUALITY OF SURFACE WATER DATA AT PARTIAL-RECORD STATIONS OR MISCELLANEOUS SITES

WATER QUALITY DATA, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

08284200 WILLOW CREEK ABOVE HERON RESERVOIR, NEAR PARK VIEW, N. MEX.--Continued

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)	DIS- SOLVED MANG- NESE (MG/L) (01056)	TOTAL LEAD (PB) (MG/L) (01051)	DIS- SOLVED MANG- NESE (MG/L) (01056)	TOTAL MERCURY (HG) (MG/L) (71900)	DIS- SOLVED SILVER (AG) (MG/L) (01075)	DIS- SOLVED SILVER (AG) (MG/L) (01145)	DIS- SOLVED ZINC (ZN) (MG/L) (01090)
APR. 26...				60	<100	0	.0	0	3	20		
APR. 26... 0930	2.5	620	1120	1070	44	51	70	92	97	99	100	

08284300 HORSE LAKE CREEK ABOVE HERON RESERVOIR, NEAR PARK VIEW, N. MEX.  
LAT 36°42'24", LONG 106°44'42"

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	DIS- SOLVED SILICA (MG/L) (00955)	DIS- SOLVED IRON (FE) (MG/L) (01046)	DIS- SOLVED MANG- NESE (MG/L) (01056)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NESI- UM (MG/L) (00925)	DIS- SOLVED SODIUM (MG/L) (00930)	DIS- SOLVED POT- AS- SIUM (K) (MG/L) (00935)	BICAK- BONATE (HCOS) (MG/L) (00440)
APR. 26...	1300	22	10	50	20	31	14	12	3.8	94
APR. 26...	0	78	3.0	.2	.26	.06	245	200	140	58
DATE	TIME	CAR- BONATE (COS) (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 NITRATE PLUS (N) (MG/L) (00631)	DIS- SOLVED ORTH- PHOS- PHORUS (P) (MG/L) (00671)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L) (70300)	DIS- SOLVED SOLIDS (SUM OF EVENTS) (MG/L) (70301)	NON- CAR- BONATE NESS (MG/L) (00902)
APR. 26...	.5	329	7.5	15.0	12.0	68	150	8.7	19	50

DATE	TIME	DIS- SOLVED ARSENIC (AS) (MG/L) (01000)	DIS- SOLVED BARIUM (BA) (MG/L) (01005)	DIS- SOLVED BORON (B) (MG/L) (01020)	DIS- SOLVED LAD- MIUM (CD) (MG/L) (01025)	DIS- SOLVED VAL- LENT MIUM (CR) (MG/L) (01032)	DIS- SOLVED COPPER (CU) (MG/L) (01040)
APR. 26...	1300	2	0	50	0	0	9
APR. 26...	50	<100	20	.0	0	4	10

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)
APR. 26...	1300	12.0	22	230	14

QUALITY OF SURFACE WATER DATA AT PARTIAL-RECORD STATIONS OR MISCELLANEOUS SITES

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WATER QUALITY DATA, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

08284540 RIO CHAMA BELOW HERON DAM, N. MEX. (LAT 36°39'40", LONG 106°43'07")

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	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)
APR. 25...	1600	700	13	50	10	32	7.6	11	2.2	93

DATE	TIME	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 SUM OF CONSTI- TUENTS (MG/L) (70301)	HARD- NESS (CA,MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)
APR. 25...	0	56	2.2	.2	.20	.01	203	171	110	35	

DATE	TIME	SODIUM AD- SURP- TION RATIO (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	AIR TEMPER- ATURE (DEG C) (00020)	TEMPER- ATURE (DEG C) (00010)	COLGR (PLAT- INUR- COBALI UNITS) (00080)	TUR- BID- ITY (JTU) (00070)	DIS- SOLVED OXYGEN (MG/L) (00300)	FECAL COLI- FORM (COL. PER 100 ML) (31616)	DIS- SOLVED BIRON (B) (UG/L) (01020)
APR. 25...	.5	261	7.8	16.0	7.0	32	50	10.6	10	30	

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 LAV- MIUM (CD) (UG/L) (01025)	HEXA- VALENT CHRO- MIUM (CR6) (UG/L) (01032)	DIS- SOLVED COPPER (CU) (UG/L) (01040)
APR. 25...	1600	0	0	30	0	0	8

DATE	TIME	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)	DIS- SOLVED SILVER (AG) (UG/L) (01075)	DIS- SOLVED SILVER (SE) (UG/L) (01145)	DIS- SOLVED ZINC (ZN) (UG/L) (01090)
APR. 25...	50	<100	10	.0	0	4	10	

DATE	TIME	TEMPER- ATURE (DEG C) (00010)	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SUS- PENDEU SEDI- MENT DIS- CHARGE (T/DAY) (00154)	SUS- PENDEU SEDI- MENT CHARGE (T/DAY) (00155)	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)
APR. 25...	1600	4.0	700	126	238	92	95	98	100



## QUALITY OF SURFACE WATER DATA AT PARTIAL-RECORD STATIONS OR MISCELLANEOUS SITES

WATER QUALITY DATA, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

08285000 EL VADO RESERVOIR NEAR TIERRA AMARILLA, N. MEX. (LAT 36°35'39", LONG 106°44'00")

DATE	TIME	DIS-SOLVED SILICA (SI02) (MG/L) (00955)	DIS-SOLVED IRON (FE) (UG/L) (01046)	DIS-SOLVED CALCIUM (CA) (MG/L) (00915)	DIS-SOLVED MAGNESIUM (MG) (MG/L) (00925)	DIS-SOLVED SODIUM (NA) (MG/L) (00930)	DIS-SOLVED POTASSIUM (K) (MG/L) (00935)	BICARBONATE (HCO3) (MG/L) (00440)	CARBONATE (CO3) (MG/L) (00445)	DIS-SOLVED SULFATE (SO4) (MG/L) (00945)	DIS-SOLVED CHLORIDE (CL) (MG/L) (00940)	DIS-SOLVED SULFIDE (F) (MG/L) (00950)
FEB. 23...	1000	20	9	32	6.5	9.2	2.0	109	0	39	2.3	.2
APR. 03...	1000	14	9	28	5.3	8.1	1.8	90	0	37	2.1	.2
MAY 07...	1245	13	30	41	9.3	31	2.8	96	0	62	32	.2

DATE	DIS-SOLVED NITRATE (N) (MG/L) (00631)	DIS-SOLVED ORTHO-PHOSPHATE (P) (MG/L) (00671)	DIS-SOLVED SOLIDS (RESIDUE AT 180 C) (MG/L) (70300)	DIS-SOLVED SOLIDS (SUM OF TUEENTS) (MG/L) (70301)	HARDNESS (CA+MG) (MG/L) (00900)	CARBONATE HARDNESS (MG/L) (00902)	SODIUM AD-SURF-ION RATIO (00931)	SPECIFIC CONDUCTANCE (MICRO-MHOS) (00095)	PH (UNITS) (00400)	TEMPERATURE (DEG C) (00010)	DIS-SOLVED BORON (B) (UG/L) (01020)
FEB. 23...	.13	.01	181	166	110	17	.4	260	7.6	--	50
APR. 03...	.03	.01	156	141	92	18	.4	223	7.9	--	20
MAY 07...	.03	.00	268	259	140	62	1.1	299	7.9	12.0	40

08285100 RIO CHAMA SEEP BELOW EL VADO DAM, N. MEX. (LAT 36°35'40", LONG 106°44'00")

DATE	TIME	INSTANTANEOUS DIS-CHARGE (CFS) (00061)	DIS-SOLVED SILICA (SI02) (MG/L) (00955)	DIS-SOLVED IRON (FE) (UG/L) (01046)	DIS-SOLVED CALCIUM (CA) (MG/L) (00915)	DIS-SOLVED MAGNESIUM (MG) (MG/L) (00925)	DIS-SOLVED POTASSIUM (K) (MG/L) (00930)	DIS-SOLVED NITRATE (N) (MG/L) (00631)	DIS-SOLVED ORTHO-PHOSPHATE (P) (MG/L) (00671)	DIS-SOLVED SOLIDS (RESIDUE AT 180 C) (MG/L) (70300)	DIS-SOLVED SOLIDS (SUM OF TUEENTS) (MG/L) (70301)
FEB. 23...	1030	.94	13	30	37	7.2	9.9	1.8			
APR. 03...	1000	4.0	15	9	42	8.0	11	12			
MAY 07...	1300	7.6	13	40	40	7.7	14	2.1			
JUNE 11...	0800	11	12	50	22	4.7	5.9	1.4			
JULY 19...	1015	--	15	50	24	5.1	5.6	1.4			
AUG. 29...	1030	10	15	--	23	4.4	5.4	1.5			

DATE	BICARBONATE (HCO3) (MG/L) (00440)	CARBONATE (CO3) (MG/L) (00445)	DIS-SOLVED SULFATE (SO4) (MG/L) (00945)	DIS-SOLVED CHLORIDE (CL) (MG/L) (00940)	DIS-SOLVED FLUORIDE (F) (MG/L) (00950)	DIS-SOLVED NITRATE (N) (MG/L) (00631)	DIS-SOLVED ORTHO-PHOSPHATE (P) (MG/L) (00671)	DIS-SOLVED SOLIDS (RESIDUE AT 180 C) (MG/L) (70300)	DIS-SOLVED SOLIDS (SUM OF TUEENTS) (MG/L) (70301)
FEB. 23...	106	0	58	2.3	.2	.00	.00	192	182
APR. 03...	104	0	75	2.4	.2	.27	.02	223	218
MAY 07...	93	0	85	3.8	.3	.21	.02	226	213
JUNE 11...	64	0	37	1.9	.2	.17	.01	128	118
JULY 19...	59	0	42	1.3	.1	.16	.03	136	124
AUG. 29...	64	0	33	1.5	.0	.09	--	--	116

## WATER QUALITY DATA, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

08285100 RIO CHAMA SEEP BELOW EL VADO DAM, N. MEX.--Continued

DATE	HARD- NESS (CA+MG) (00900)	NON- CAL- BORATE HARD- NESS (MG/L) (00902)	SODIUM AD- SURF- TION RATIO (00901)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (LLG C) (00010)	TUR- BID- ITY (JTU) (00070)	DIS- SOLVED BORON (B) (UG/L) (01020)
FEB. 23...	120	35	.4	209	8.0	--	--	10
APR. 03...	140	53	.4	329	8.0	--	4	20
MAY 07...	130	55	.5	328	7.0	7.0	15	20
JUNE 11...	74	22	.3	184	7.5	9.0	--	10
JULY 13...	81	33	.3	189	8.0	11.0	--	20
AUG. 29...	76	23	.3	183	7.0	12.0	--	--

DATE	TIME	TEMPER- ATURE (DEG C) (00010)	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SUS- PENDED SEDIM- ENT DIS- CHARGE (MG/L) (80154)	SUS- PENDED SEDIM- ENT DIS- CHARGE (T/DAY) (80155)	SUS. SED. SIEVE DIAM. % FINER 0.062 MM (70331)	SUS. SED. SIEVE DIAM. % FINER 0.125 MM (70332)	SUS. SED. SIEVE DIAM. % FINER 0.250 MM (70333)	SUS. SED. SIEVE DIAM. % FINER 0.500 MM (70334)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	TUR- BID- ITY (JTU) (00070)
FEB. 23...	1000	--	1.0	2	.00	--	--	--	--	289	1
MAR. 05...	1000	--	1.2	4	.01	--	--	--	--	274	1
15...	1000	--	1.9	6	.03	--	--	--	--	285	1
23...	1000	--	2.0	5	.03	--	--	--	--	305	1.5
APR. 02...	1000	--	4.0	25	.27	--	--	--	--	318	4
03...	1000	--	4.0	10	.11	--	--	--	--	329	4
13...	1600	--	2.0	5	.03	--	--	--	--	323	2
15...	0800	--	4.3	24	.28	--	--	--	--	298	5
18...	0800	--	5.0	21	.28	--	--	--	--	269	6
23...	0800	6.0	5.2	13	.18	--	--	--	--	300	5
27...	0800	6.0	5.7	10	.15	--	--	--	--	328	4
29...	0800	6.0	6.5	13	.23	--	--	--	--	328	6
MAY 02...	0800	7.0	6.5	16	.28	--	--	--	--	325	8
07...	1300	7.0	7.6	12	.25	--	--	--	--	328	15
11...	0805	7.0	8.0	10	.22	--	--	--	--	304	15
25...	0900	8.0	8.5	22	.50	--	--	--	--	203	12
31...	0800	9.0	8.5	25	.57	--	--	--	--	185	14
JUNE 03...	0800	9.0	8.9	23	.55	--	--	--	--	177	14
19...	1015	11.0	8.9	21	.51	67	82	89	100	187	15

08343000 RIO SAN JOSE AT GRANTS, N. MEX. (LAT 35°09'16", LONG 107°52'11")

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	TEMPER- ATURE (DEG C) (00010)	FECAL COLI- FORM (COL. PER 100 ML) (31616)	TOTAL ORGANIC CARBON (C) (MG/L) (00680)
OCT. 02...	1015	7.2	1210	10.0	8	--
11...	1515	4.6	--	16.0	1	2.0

08385950 PECOS RIVER AT BOB CROSBY BRIDGE, NEAR ACME, N. MEX. (LAT 33°34'10", LONG 104°22'20")

DATE	TIME	2,4-D (UG/L) (39730)	2,4,5-T (UG/L) (39740)	SILVEX (UG/L) (39760)
MAY 30...	A 1115	.00	.00	.01
JUNE 06...	A 1045	.00	.00	.04
12...	A 1215	.00	.00	.00

A OTHER VALUES IN MICROGRAMS PER LITER FOR EACH DATE:  
(2,4-DP), 0.00; DICAMBA, 0.00

## QUALITY OF SURFACE WATER DATA AT PARTIAL-RECORD STATIONS OR MISCELLANEOUS SITES

WATER QUALITY DATA, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

08386070 PECOS RIVER AT TATUM BRIDGE, NEAR ROSWELL, N. MEX. (LAT 33°23'50", LONG 104°23'40")

DATE	TIME	2,4,5-T IN BOTTOM DE- POSITS				SILVEX (UG/L) (39760)
		2,4-D (UG/L) (39730)	2,4,5-T (UG/L) (39740)	2,4,5-T (UG/KG) (39741)	2,4,5-T (UG/L) (39741)	
APR.						
30...	A 1130	.00	.00	--	--	.02
MAY						
09...	A 1100	.00	.00	--	--	.01
17...	A 1115	.00	--	0	0	.00
23...	A 1100	.00	.00	--	--	.00
30...	A 1030	.00	.00	--	--	.01
JUNE						
06...	A 1015	.00	.00	--	--	.00
12...	A 1115	.00	.00	--	--	.00

A OTHER VALUES IN MICROGRAMS PER LITER FOR EACH DATE:  
(2,4-DP), 0.00; DICAMBA, 0.00

09343000 RIO BLANCO NEAR PAGOSA SPRINGS, COLO. (LAT 37°12'46", LONG 106°47'38")

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	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 (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 CHL O- NINE (CL) (MG/L) (00940)	
SEP. 05...	1345	44	24	20	17	2.2	8.4	1.6	85	0	6.6	.4	
DATE	TIME	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED NITRATE PLUS (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 (MG/L) (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	DIS- SOLVED BORON (B) (MG/L) (01020)
SEP. 05...	.2	.00	.07	108	103	52	0	.5	146	8.0	18.5	20	
DATE	TIME	SUS- PENDED SED. FALL DIAM. % FINER THAN (70344)	SUS- PENDED SED. FALL DIAM. % FINER THAN (70345)	SUS- PENDED SED. FALL DIAM. % FINER THAN (70346)	SUS- PENDED SED. FALL DIAM. % FINER THAN (70347)	SUS- PENDED SED. FALL DIAM. % FINER THAN (70351)	SUS- PENDED SED. FALL DIAM. % FINER THAN (70352)	SUS- PENDED SED. FALL DIAM. % FINER THAN (70353)	SUS- PENDED SED. FALL DIAM. % FINER THAN (70354)	SUS- PENDED SED. FALL DIAM. % FINER THAN (70355)	SUS- PENDED SED. FALL DIAM. % FINER THAN (70356)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	TUR- BID- ITY (JTU) (00070)
MAY 02...	1315		9.0	153	127	52	--	--	--	--	--	--	--
15...	1230		8.0	400	700	756	24	29	44	71	84	112	190
16...	1130		6.5	300	958	776	19	24	34	54	66	110	160
31...	1110		7.0	690	527	981	--	--	--	56	66	98	80
JUNE 13...	1000		7.0	820	1560	3450	--	--	--	28	39	80	120
SEP. 05...	1345		18.5	44	3	.36	--	--	--	--	--	140	--

QUALITY OF SURFACE WATER DATA AT PARTIAL-RECORD STATIONS OR MISCELLANEOUS SITES

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WATER QUALITY DATA, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

09343300 RIO BLANCO BELOW BLANCO DIVERSION DAM, NEAR PAGOSA SPRINGS, COLO.  
(LAT 37°12'11", LONG 106°48'45")

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	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 PU- RAS- SIUM (K) (MG/L) (00935)	BICAR- BONATE (HCO3) (MG/L) (00440)
MAY 04...	1500	44	20	20	10	16	2.4	8.5	1.5	17
SEP. 05...	1315	20	24	30	--	18	2.4	8.5	1.6	87

DATE	LAR- 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 NITRATE (N) (MG/L) (00618)	DIS- SOLVED NITRITE (N) (MG/L) (00613)	TOTAL NITRITE PLUS NITRATE (N) (MG/L) (00630)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	AMMONIA NITRO- GEN (N) (MG/L) (00610)	TOTAL ORGANIC NITRO- GEN (N) (MG/L) (00605)
MAY 04...	0	8.0	.8	.1	.14	.00	.14	.14	.06	.23
SEP. 05...	0	6.7	.3	.1	--	--	--	.00	--	--

DATE	TOTAL NITRO- GEN (N) (MG/L) (00600)	TOTAL PHOS- PHORUS (P) (MG/L) (00665)	DIS- SOLVED ORTHU- PHOS- PHORUS (P) (MG/L) (00671)	DIS- SOLVED SOLIDS (RESI- DUE AT 100 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 AU- SORP- TION RATIO (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)
MAY 04...	.45	.12	.02	111	96	50	0	.5	137
SEP. 05...	--	--	.07	111	105	55	0	.5	152

DATE	PH (UNITS) (00400)	AIR TEMPER- ATURE (DEG C) (00020)	TEMPER- ATURE (DEG C) (00010)	COLOR (PLAT- INUM- COBALT (UNITS) (00080)	TUR- BID- IDITY (JTU) (00070)	DIS- SOLVED OXYGEN (MG/L) (00300)	FECAL COLI- FORM (COL. PER 100 ML) (31616)	TOTAL ORGANIC CARBON (C) (MG/L) (00680)	DIS- SOLVED BORON (B) (UG/L) (01020)
MAY 04...	8.0	16.5	7.5	8	30	9.3	1	3.5	40
SEP. 05...	8.1	--	14.5	--	--	--	--	--	10

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)
MAY 04...	1500	0	0	40	0	0	3

DATE	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)	DIS- SOLVED SILVER (AG) (UG/L) (01075)	DIS- SOLVED SELE- NIUM (SE) (UG/L) (01145)	DIS- SOLVED ZINC (ZN) (UG/L) (01090)
MAY 04...	20	300	10	.0	0	3	10

## QUALITY OF SURFACE WATER DATA AT PARTIAL-RECORD STATIONS OR MISCELLANEOUS SITES

WATER QUALITY DATA, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

## 09343300 RIO BLANCO BELOW BLANCO DIVERSION DAM, NEAR PAGOSA SPRINGS, COLO.--Continued

DATE	TIME	TEMPER- ATURE (DEG C) (00010)	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SUS- PENDE MENT (MG/L) (80154)	SUS- PENDE MENT (T/DAY) (80155)	SUS- SED. FALL DIAM. % FINE THAN .002 MM (70337)	SUS- SED. FALL DIAM. % FINE THAN .004 MM (70338)	SUS- SED. FALL DIAM. % FINE THAN .016 MM (70340)	SUS- SED. FALL DIAM. % FINE THAN .062 MM (70342)	SUS- SED. FALL DIAM. % FINE THAN .125 MM (70343)
MAY										
04...	1500	7.5	44	172	20	--	--	--	--	--
15...	1145	7.5	100	1080	292	18	22	32	53	64
16...	1100	3.0	200	8340	4500	2	3	4	9	12
31...	1040	6.5	100	443	120	--	--	--	66	84
JUNE										
13...	1500	8.5	390	2150	2260	--	--	--	26	33
19...	0915	5.0	180	127	62	--	--	--	--	--
SEP.										
05...	1315	14.5	20	5	.27	--	--	--	--	--

DATE	SUS- SED. FALL DIAM. % FINE THAN (70344)	SUS- SED. FALL DIAM. % FINE THAN (70345)	SUS- SED. FALL DIAM. % FINE THAN (70346)	SUS- SED. FALL DIAM. % FINE THAN (70347)	SUS- SED. SIEVE DIAM. % FINE THAN (70331)	SUS- SED. SIEVE DIAM. % FINE THAN (70332)	SUS- SED. SIEVE DIAM. % FINE THAN (70333)	SUS- SED. SIEVE DIAM. % FINE THAN (70334)	SUS- SED. SIEVE DIAM. % FINE THAN (70335)	SUS- SED. SIEVE DIAM. % FINE THAN (70336)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	TUR- BID- ITY (JTU) (00070)
MAY												
04...	--	--	--	--	63	71	82	93	96	98	--	--
15...	84	100	--	--	53	64	84	100	--	--	120	130
16...	38	77	93	100	9	12	38	77	93	100	111	190
31...	98	100	--	--	66	84	98	100	--	--	97	75
JUNE												
13...	50	87	99	100	26	33	50	87	99	100	87	95
19...	--	--	--	--	70	85	96	100	--	--	90	40
SEP.												
05...	--	--	--	--	--	--	--	--	--	--	--	--

09343400 RIO BLANCO AT U.S. HIGHWAY 84, NEAR PAGOSA SPRINGS, COLO.  
(LAT 37°08'30", LONG 106°50'24")

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	DIS- SOLVED SILICA (MG/L) (00955)	DIS- SOLVED IRON (PPM) (01046)	DIS- SOLVED MANG- NESE (PPM) (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)
MAY										
04...	1300	60	14	40	0	24	8.9	9.9	2.1	93
SEP.										
05...	1415	20	22	10	--	22	3.9	9.4	1.8	100

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 NITRATE (N) (MG/L) (00618)	DIS- SOLVED NITRITE (N) (MG/L) (00613)	TOTAL NITRITE PLUS NITRATE (N) (MG/L) (00630)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	AMMONIA NITRO- GEN (N) (MG/L) (00610)	TOTAL ORGANIC NITRO- GEN (N) (MG/L) (00605)
MAY										
04...	0	40	1.4	.2	.11	.00	.11	.11	.20	.52
SEP.										
05...	1	12	.6	.2	--	--	--	.00	--	--

DATE	TOTAL NITRO- GEN (N) (MG/L) (00600)	TOTAL PHOS- PHORUS (P) (MG/L) (00665)	DIS- SOLVED PHOS- PHORUS (P) (MG/L) (00671)	DIS- SOLVED SOLIDS 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 (MG/L) (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)
MAY									
04...	.83	.20	.03	173	148	97	20	.4	230
SEP.									
05...	--	--	.06	131	122	71	0	.5	182





## QUALITY OF SURFACE WATER DATA AT PARTIAL-RECORD STATIONS OR MISCELLANEOUS SITES

WATER QUALITY DATA, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

09344300 NAVAJO RIVER ABOVE CHROMO, COLO. (LAT 37°01'55", LONG 106°43'56")

		INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	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) (K) (MG/L) (00930)	DIS- SOLVED PU- 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 CHL O- RIDE (CL) (MG/L) (00940)	
SEP. 05...	1510	70	27	20	19	3.2	6.4	1.4	53	0	33	.4	
DATE	TIME	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED NITRATE PLUS NITRATE (N) (MG/L) (00951)	DIS- SOLVED URTHO- PHOS- PHORUS (P) (MG/L) (00671)	DIS- SOLVED SOLIDS (RESI- SUM OF DUE AT CONSLI- 180 C) (MG/L) (70500)	DIS- SOLVED SOLIDS (SUM OF DUE AT CONSLI- 180 C) (MG/L) (70501)	NON- CAR- BORATE HARD- NESS (CA+MG) (MG/L) (00900)	SODIUM AD- SORP- TION HARD- NESS (MG/L) (00902)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	DIS- SOLVED MOPON (B) (MG/L) (01020)	
SEP. 05...	.2	.00	.07	126	117	61	17	.4	166	8.0	17.0	10	
DATE	TIME	SUS- SED. FALL DIAM. % FINER THAN 250 MM (70344)	SUS- SED. FALL DIAM. % FINER THAN 500 MM (70345)	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SUS- PENDED SEDI- MENT DIS- CHARGE (MG/L) (80154)	SUS- PENDED 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)	SUS- SED. FALL DIAM. % FINER THAN .125 MM (70343)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	TUR- BID- ITY (JTU) (00070)
MAY 02...	1100		4.0	175	82	39							
16...	1415		12.0	600	1080	1750	--	--	--	--	--		
31...	1430		11.5	590	415	661	--	--	--	--	49	60	
JUNE 25...	1240		9.5	600	305	494	--	--	--	45	50		
26...	1410		12.0	600	696	1130	7	10	15	34	66		
SEP. 05...	1510		17.0	70	12	2.3	--	--	--	--	--		
DATE	TIME	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 .062 MM (70351)	SUS- SED. FALL DIAM. % FINER THAN .125 MM (70352)	SUS- SED. FALL DIAM. % FINER THAN 250 MM (70353)	SUS- SED. FALL DIAM. % FINER THAN 500 MM (70354)	SUS- SED. FALL DIAM. % FINER THAN 1.00 MM (70355)	SUS- SED. FALL DIAM. % FINER THAN 2.00 MM (70356)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	TUR- BID- ITY (JTU) (00070)	
MAY 02...	--	--	--	--	70	82	92	100	--	--	222	35	
16...	--	--	--	--	26	33	43	62	74	82	128	111	
31...	76		95	100	--	--	--	--	--	--	115	55	
JUNE 25...	76		92	100	--	--	--	--	--	--	81	45	
26...	76		100	--	--	--	--	--	--	--	74	60	
SEP. 05...	--	--	--	--	--	--	--	--	--	--	--	--	

09344450 NAVAJO RIVER BELOW OSO DIVERSION DAM, NEAR CHROMO, COLO.  
(LAT 37°31'48", LONG 106°44'16")

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	DIS- SOLVED SILICA (SI02) (MG/L) (00955)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (K) (MG/L) (00930)	DIS- SOLVED PU- 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 CHL O- RIDE (CL) (MG/L) (00940)
MAY 04...	1000	92	19	70	50	19	4.6	7.0	1.4	66	
SEP. 05...	1500	57	27	10	--	19	3.3	6.4	1.4	55	
DATE	TIME	CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED RIDE (CL) (MG/L) (00940)	DIS- SOLVED RIDE (F) (MG/L) (00950)	DIS- SOLVED NITRATE (N) (MG/L) (00616)	DIS- SOLVED NITRITE (N) (MG/L) (00613)	TOTAL NITRITE PLUS NITRATE (N) (MG/L) (00630)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	AMMONIA NITRO- GEN (N) (MG/L) (00610)	TOTAL ORGANIC NITRO- GEN (N) (MG/L) (00605)
MAY 04...		0	32	1.3	.2	.07	.00	.07	.07	.09	.34
SEP. 05...		0	33	.3	.1	--	--	--	.00	--	--

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## 09344450 NAVAJO RIVER BELOW OSO DIVERSION DAM, NEAR CHROMO, COLO.--Continued

[illegible]

## QUALITY OF SURFACE WATER DATA AT PARTIAL-RECORD STATIONS OR MISCELLANEOUS SITES

## WATER QUALITY DATA, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

09345250 LITTLE NAVAJO RIVER BELOW LITTLE OSO DIVERSION DAM, COLO.  
(LAT 37°04'26", LONG 106°49'04")

DATE	TIME	INSTANTANEOUS DIS-CHARGE (CFS) (00061)	TEMPERATURE (DEG C) (00010)	SUSPENDED SEDIMENT (MG/L) (80154)	SUSPENDED SEDIMENT DIS-CHARGE (T/DAY) (80155)	SPECIFIC CONDUCTANCE (MICRO-MHOS) (00095)	TURBIDITY (JTU) (00070)	SUS. SED. FALL DIAM. % FINER THAN .002 MM (70337)	SUS. SED. FALL DIAM. % FINER THAN .004 MM (70338)
MAY 15...	1000	108	4.0	654	191	142	190	38	51
JULY 30	1030	5.8	10.5	8	0.13	145	--	--	--
31	1500	4.0	17.5	21	0.23	150	--	--	--
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)			
MAY 15		64	84	91	96	100			
JULY 30		--	--	--	--	--			
31		--	--	--	--	--			

MONTOYA DRAIN NEAR EL PASO, TEXAS (LAT 31°48'10", LONG 106°32'46")

DATE	TIME	DIS-SOLVED SILICA (SI02) (MG/L) (00955)	DIS-SOLVED IRON (FE) (UG/L) (01046)	DIS-SOLVED CALCIUM (CA) (MG/L) (00915)	DIS-SOLVED MAGNESIUM (MG) (MG/L) (00925)	DIS-SOLVED SODIUM (NA) (MG/L) (00930)	DIS-SOLVED POTASSIUM (K) (MG/L) (00935)	BICARBONATE (HC03) (MG/L) (00440)	CARBONATE (C03) (MG/L) (00445)	DIS-SOLVED SULFATE (S04) (MG/L) (00945)	DIS-SOLVED CHLORIDE (CL) (MG/L) (00940)
SEP. 07...	0905	35	10	140	32	500	9.2	374	0	720	420
DATE	TIME	DIS-SOLVED FLUORIDE (F) (MG/L) (00950)	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	DIS-SOLVED SOLIDS (SUM OF TUENTS) (MG/L) (70301)	HARDNESS (CA, MG) (MG/L) (00900)	NON-CARBONATE HARDNESS (MG/L) (00902)	SODIUM AD-SORPTION RATIO (00931)	SPECIFIC CONDUCTANCE (MICRO-MHOS) (00095)	PH (00400)	TEMPERATURE (DEG C) (00010)	DIS-SOLVED BORON (B) (UG/L) (01020)
SEP. 07...	0905	1.0	.05	2040	480	170	9.9	3060	8.3	13.0	580

WEST SIDE DRAIN NEAR EL PASO, TEXAS (LAT 31°50'47", LONG 106°36'43")

DATE	TIME	DIS-SOLVED SILICA (SI02) (MG/L) (00955)	DIS-SOLVED IRON (FE) (UG/L) (01046)	DIS-SOLVED CALCIUM (CA) (MG/L) (00915)	DIS-SOLVED MAGNESIUM (MG) (MG/L) (00925)	DIS-SOLVED SODIUM (NA) (MG/L) (00930)	DIS-SOLVED POTASSIUM (K) (MG/L) (00935)	BICARBONATE (HC03) (MG/L) (00440)	CARBONATE (C03) (MG/L) (00445)	DIS-SOLVED SULFATE (S04) (MG/L) (00945)	DIS-SOLVED CHLORIDE (CL) (MG/L) (00940)
SEP. 07...	0905	33	20	140	36	350	9.0	412	0	600	250
DATE	TIME	DIS-SOLVED FLUORIDE (F) (MG/L) (00950)	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	DIS-SOLVED SOLIDS (SUM OF TUENTS) (MG/L) (70301)	HARDNESS (CA, MG) (MG/L) (00900)	NON-CARBONATE HARDNESS (MG/L) (00902)	SODIUM AD-SORPTION RATIO (00931)	SPECIFIC CONDUCTANCE (MICRO-MHOS) (00095)	PH (00400)	TEMPERATURE (DEG C) (00010)	DIS-SOLVED BORON (B) (UG/L) (01020)
SEP. 07...		0.9	.09	1620	500	160	6.8	2420	8.0	11.5	510

## WATER QUALITY DATA, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

## DEL RIO DRAIN AT VADO, N. MEX. (LAT 32°06'54", LONG 106°39'56")

DATE	INSTANTANEOUS DIS- CHARGE (CFS) (00061)	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 SIUM (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. 16...	4.0	21	10	120	24	210	8.9	265	0	420	170

DATE	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. 16...	.7	.16	1110	400	180	4.6	1670	7.9	14.0	200

## BLUE SPRINGS NEAR WHITE CITY, N. MEX. (LAT 32°11'05", LONG 104°17'05"10)

DATE	TIME	DIS- SOLVED SILICA (SI02) (MG/L) (00955)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED GANESE (MN) (UG/L) (01056)	DIS- SOLVED CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L) (00925)	DIS- SOLVED PO- TAS- SIUM (NA) (MG/L) (00930)	DIS- SOLVED SODIUM (K) (MG/L) (00935)	BICAR- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)
SEP. 07...	0905	15	10	41	300	41	12	1.3	225	0	730

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 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)
SEP. 07...	11	0.3	.95	.05	1230	920	730	0.2	1430	7.9	18.0

## RIO GRANDE BELOW MESILLA DAM, N. MEX. (LAT 32°13'29", LONG 106°47'48")

DATE	TIME	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)
NOV. 14...	1610	11	10	130	26	190	11	234	0	390	190

DATE	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. 14...	.7	1.1	1070	430	240	4.0	1630	8.0	16.5	240

QUALITY OF SURFACE WATER DATA AT PARTIAL-RECORD STATIONS OR MISCELLANEOUS SITES  
WATER QUALITY DATA, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

RIO GRANDE BELOW LEASBURG DAM, N. MEX. (LAT 32°29'08", LONG 106°55'34")

DATE	TIME	DIS-SOLVED SILICA (SI02) (MG/L) (00955)	DIS-SOLVED IRON (FE) (UG/L) (01046)	DIS-SOLVED CALCIUM (CA) (MG/L) (00915)	DIS-SOLVED MAGNESIUM (MG) (MG/L) (00925)	DIS-SOLVED SODIUM (NA) (MG/L) (00930)	DIS-SOLVED POTASSIUM (K) (MG/L) (00935)	BICARBONATE (HC03) (MG/L) (00440)	CARBONATE (C03) (MG/L) (00445)	DIS-SOLVED SULFATE (S04) (MG/L) (00945)	DIS-SOLVED CHLORIDE (CL) (MG/L) (00940)
NOV. 13...	1130	18	0	130	26	180	9.1	229	0	420	170

DATE	DIS-SOLVED FLUORIDE (F) (MG/L) (00950)	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	DIS-SOLVED SOLIDS (SUM OF TUENTS) (MG/L) (70301)	HARDNESS (CA+MG) (MG/L) (00900)	NON-CARBONATE HARDNESS (MG/L) (00902)	SODIUM ADSORPTION RATIO (00931)	SPECIFIC CONDUCTANCE (MICROMHOS) (00095)	PH (UNITS) (00400)	TEMPERATURE (DEG C) (00010)	DIS-SOLVED BORON (B) (UG/L) (01020)
NOV. 13...	.7	.02	1070	430	240	3.8	1620	7.9	14.0	570

RINCON DRAIN 8 MILES SOUTH OF HATCH, N. MEX. (LAT 32°37'00", LONG 107°00'14")

DATE	TIME	INSTANTANEOUS DIS-CHARGE (CFS) (00061)	DIS-SOLVED SILICA (SI02) (MG/L) (00955)	DIS-SOLVED IRON (FE) (UG/L) (01046)	DIS-SOLVED CALCIUM (CA) (MG/L) (00915)	DIS-SOLVED MAGNESIUM (MG) (MG/L) (00925)	DIS-SOLVED SODIUM (NA) (MG/L) (00930)	DIS-SOLVED POTASSIUM (K) (MG/L) (00935)	BICARBONATE (HC03) (MG/L) (00440)	CARBONATE (C03) (MG/L) (00445)	DIS-SOLVED SULFATE (S04) (MG/L) (00945)
NOV. 13...	0900	2.0	31	10	220	45	290	15	273	0	730

DATE	DIS-SOLVED CHLORIDE (CL) (MG/L) (00940)	DIS-SOLVED FLUORIDE (F) (MG/L) (00950)	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	DIS-SOLVED SOLIDS (SUM OF TUENTS) (MG/L) (70301)	HARDNESS (CA+MG) (MG/L) (00900)	NON-CARBONATE HARDNESS (MG/L) (00902)	SODIUM ADSORPTION RATIO (00931)	SPECIFIC CONDUCTANCE (MICROMHOS) (00095)	PH (UNITS) (00400)	TEMPERATURE (DEG C) (00010)	DIS-SOLVED BORON (B) (UG/L) (01020)
NOV. 13...	270	.9	.59	1740	730	510	4.7	2580	7.7	12.0	470

HATCH DRAIN NEAR ANGOSTURA, N. MEX. (LAT 32°39'09", LONG 107°06'17")

DATE	TIME	INSTANTANEOUS DIS-CHARGE (CFS) (00061)	DIS-SOLVED SILICA (SI02) (MG/L) (00955)	DIS-SOLVED IRON (FE) (UG/L) (01046)	DIS-SOLVED CALCIUM (CA) (MG/L) (00915)	DIS-SOLVED MAGNESIUM (MG) (MG/L) (00925)	DIS-SOLVED SODIUM (NA) (MG/L) (00930)	DIS-SOLVED POTASSIUM (K) (MG/L) (00935)	BICARBONATE (HC03) (MG/L) (00440)	CARBONATE (C03) (MG/L) (00445)	DIS-SOLVED SULFATE (S04) (MG/L) (00945)
NOV. 09...	1030	6.0	13	20	100	22	160	8.1	175	0	390

DATE	DIS-SOLVED CHLORIDE (CL) (MG/L) (00940)	DIS-SOLVED FLUORIDE (F) (MG/L) (00950)	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	DIS-SOLVED SOLIDS (SUM OF TUENTS) (MG/L) (70301)	HARDNESS (CA+MG) (MG/L) (00900)	NON-CARBONATE HARDNESS (MG/L) (00902)	SODIUM ADSORPTION RATIO (00931)	SPECIFIC CONDUCTANCE (MICROMHOS) (00095)	PH (UNITS) (00400)	TEMPERATURE (DEG C) (00010)	DIS-SOLVED BORON (B) (UG/L) (01020)
NOV. 09...	130	.7	.03	910	340	200	3.8	1410	7.9	15.5	250



## WATER QUALITY DATA, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

## GARFIELD DRAIN NEAR HATCH, N. MEX. (LAT 32°41'07", LONG 107°11'45")

		INSTAN- TANEOUS DIS CHARGE (CFS) (00061)	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- SIUM (K) (MG/L) (00935)	BICAR- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	
NOV. 09...	1000	3.0	25	10	160	29	230	10	330	0	520	
DATE	TIME	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 (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. 09...	170	.8	.03	1310	520	250	4.4	1940	7.8	11.0	290	

## RIO GRANDE NEAR DERRY, N. MEX. (LAT 32°48'31", LONG 107°18'09")

DATE	TIME	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- 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)
NOV. 09...	0930	23	10	160	28	180	9.0	344	0	430	150
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. 09...		.6	.56	1150	510	230	3.5	1690	7.7	14.5	240

## CANYON COLORADO AT HIGHWAY 10, N. MEX. (LAT 34°37'15", LONG 106°17'55")

DATE	TIME	INSTAN- TANEOUS DIS CHARGE (CFS) (00061)	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- SIUM (K) (MG/L) (00935)	BICAR- BONATE (HC03) (MG/L) (00440)	CAR- BONATE (C03) (MG/L) (00445)
JUNE 12...	1345	.90	19	9	<2	66	7.1	9.1	.6	226	0
DATE	TIME	DIS- SOLVED SULFATE (S04) (MG/L) (00945)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED NITRATE (N) (MG/L) (00618)	DIS- SOLVED NITRATE (N) (MG/L) (00613)	TOTAL NITRITE PLUS NITRATE (N) (MG/L) (00630)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	AMMONIA NITRO- GEN (N) (MG/L) (00610)	TOTAL ORGANIC NITRO- GEN (N) (MG/L) (00605)	TOTAL NITRO- GEN (N) (MG/L) (00600)	TOTAL PHOS- PHORUS (P) (MG/L) (00665)
JUNE 12...	25	6.6	.3	.00	.00	.00	.00	.01	.22	.23	.04



## QUALITY OF SURFACE WATER DATA AT PARTIAL-RECORD STATIONS OR MISCELLANEOUS SITES

WATER QUALITY DATA, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

## CANYON COLORADO AT HIGHWAY 10, N. MEX.--Continued

DATE	DIS-SOLVED ORTHO-PHOSPHORUS (P) (MG/L) (000671)	DIS-SOLVED SOLIDS (RESIDUE AT 180 C) (MG/L) (70300)	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 (MICROMHOS) (00095)	PH (UNITS) (00400)	TEMPERATURE (DEG C) (00010)	DIS-SOLVED BORON (B) (UG/L) (01020)
JUNE 12...	.01	252	245	190	9	.3	403	8.2	24.0	30

DATE	TIME	DIS-SOLVED ALUMINUM (AL) (UG/L) (01106)	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)
JUNE 12...	1345	6	64	<2	<6	30	<6	<2	<4

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)	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) (71900)	DIS-SOLVED MOLYBDENUM (MO) (UG/L) (01060)
JUNE 12...	<2	<3	<6	9	<6	3	<2	.2	<2

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) (01065)	DIS-SOLVED ZINC (ZN) (UG/L) (01090)	DIS-SOLVED ZIRCONIUM (ZR) (UG/L) (01160)
JUNE 12...	<3	<1	2	140	<6	<5	2.0	5	<8

## CANON PINOS REALES AT MANZANO, N. MEX. (LAT 34°38'38", LONG 106°20'35")

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS) (00061)	DIS-SOLVED SILICA (SI02) (MG/L) (00955)	DIS-SOLVED IRON (FE) (UG/L) (01046)	DIS-SOLVED CALCIUM (CA) (MG/L) (00915)	DIS-SOLVED MAGNESIUM (MG) (MG/L) (00925)	DIS-SOLVED SODIUM (NA) (MG/L) (00930)	DIS-SOLVED POTASSIUM (K) (MG/L) (00935)	BICARBONATE (HCO3) (MG/L) (00440)	CARBONATE (CO3) (MG/L) (00445)	DIS-SOLVED SULFATE (SO4) (MG/L) (00945)	DIS-SOLVED CHLORIDE (CL) (MG/L) (00940)
JUNE 15...	1315	2.5	14	70	98	8.6	7.6	.6	326	0	35	6.0

DATE	TIME	DIS-SOLVED FLUORIDE (F) (MG/L) (00950)	DIS-SOLVED NITRATE (N) (MG/L) (00631)	DIS-SOLVED ORTHO-PHOSPHORUS (P) (MG/L) (00671)	DIS-SOLVED SOLIDS (RESIDUE AT 180 C) (MG/L) (70300)	DIS-SOLVED SOLIDS (SUM OF TUENTS) (MG/L) (70301)	NON-CARBONATE HARDNESS (CA+MG) (MG/L) (00900)	SODIUM ADSORPTION RATIO (00902)	SPECIFIC CONDUCTANCE (MICROMHOS) (00095)	PH (UNITS) (00400)	TEMPERATURE (DEG C) (00010)	DIS-SOLVED BORON (B) (UG/L) (01020)
JUNE 15...	.4	.02	.01	307	331	280	13	.2	554	7.7	15.0	0

## WATER QUALITY DATA, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

## CANON DE BARTOLO AT MANZANO, N. MEX. (LAT 34°38'55", LONG 106°20'37")

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	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 (HC03) (MG/L) (00440)	CAR- BONATE (C03) (MG/L) (00445)	DIS- SOLVED SULFATE (S04) (MG/L) (00945)	DIS- SOLVED CHLOR- IDE (CL) (MG/L) (00440)
JUNE 15...	1345	.80	16	9	75	9.8	9.5	.8	243	0	41	7.7

DATE	TIME	DIS- SOLVED NITRATE (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 TUENTS) (MG/L) (70300)	DIS- SOLVED SOLIDS (SUM OF TUENTS) (MG/L) (70301)	NON- CAR- BONATE HARD- NESS (CA+MG) (MG/L) (00900)	SODIUM AD- SORP- TION RATIO (MG/L) (00902)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH	TEMPER- ATURE (DEG C) (00010)	DIS- SOLVED BORON (B) (MG/L) (01020)
JUNE 15...	.2	.00	.01	284	280	290	28	.3	465	7.9	25.0	0

## CANON DE TORREON AT TORREON, N. MEX. (LAT 34°43'22", LONG 106°17'52")

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	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 (HC03) (MG/L) (00440)	CAR- BONATE (C03) (MG/L) (00445)	DIS- SOLVED SULFATE (S04) (MG/L) (00945)
JUNE 15...	1145	9.9	12	9	87	8.5	6.3	.5	252	0	38

DATE	TIME	DIS- SOLVED CHLOR- IDE (CL) (MG/L) (00940)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED NITRATE (N) (MG/L) (00616)	DIS- SOLVED NITRITE (N) (MG/L) (00613)	TOTAL NITRATE PLUS NITRITE (N) (MG/L) (00630)	DIS- SOLVED NITRATE PLUS NITRITE (N) (MG/L) (00631)	AMMONIA NITRO- GEN (N) (MG/L) (00610)	TOTAL ORGANIC NITRO- GEN (N) (MG/L) (00605)	TOTAL NITRO- GEN (N) (MG/L) (00600)	TOTAL PHOS- PHORUS (P) (MG/L) (00665)
JUNE 15...	7.4	.2	.29	.00	.29	.29	.01	.15	.45	.00	

DATE	TIME	DIS- SOLVED ORTHOPHOS- PHORUS (P) (MG/L) (00671)	DIS- SOLVED SOLIDS (RESI- DUE AT TUENTS) (MG/L) (70300)	DIS- SOLVED SOLIDS (SUM OF TUENTS) (MG/L) (70301)	NON- CAR- BONATE HARD- NESS (CA+MG) (MG/L) (00900)	SODIUM AD- SORP- TION RATIO (MG/L) (00902)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH	TEMPER- ATURE (DEG C) (00010)	DIS- SOLVED BORON (B) (MG/L) (01020)
JUNE 15...	.00	268	267	250	46	.2	463	7.3	16.5	20

## CANON DE TAJIQUE AT TAJIQUE, N. MEX. (LAT 34°45'15", LONG 106°17'14")

DATE	TIME	INSTAN-	DIS-	DIS-	DIS-	DIS-	DIS-	DIS-	DIS-	BICAR-	CAR-	
		TANEOUS	SOLVED	SOLVED	SOLVED	SOLVED	SOLVED	SOLVED	SOLVED			SOLVED
		DIS-	SILICA	IRON	MANG-	CAL-	MAG-	DIS-	PO-			IAS-
		CHARGE	(SI02)	(FE)	(MN)	(CA)	(MG)	(NA)	(K)	(HC03)	(C03)	
		(MG/L)	(MG/L)	(UG/L)	(UG/L)	(UG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	
		(00061)	(00955)	(01046)	(01056)	(00915)	(00925)	(00920)	(00935)	(00440)	(00445)	
JUNE 15...	1045	9.4	10	9	7	83	9.5	6.1	.6	268	0	
DATE	TIME	DIS-	DIS-	DIS-	DIS-	TOTAL	DIS-	AMMONIA	TOTAL	TOTAL	TOTAL	
		SOLVED	SOLVED	SOLVED	SOLVED	NITRATE	SOLVED	NITRO-	ORGANIC	NITRO-	PHOS-	
		SULFATE	CHLOR-	FLUOR-	NITRATE	NITRATE	NITRATE	GEN-	NITRO-	GEN-	PHORUS	
		(S04)	(CL)	(F)	(N)	(N)	(N)	(N)	(N)	(N)	(P)	
		(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	
		(00945)	(00940)	(00950)	(00616)	(00613)	(00630)	(00631)	(00610)	(00605)	(00600)	
JUNE 15...	3d	7.6	.3	.00	.00	.01	.00	.01	.18	.20	.00	

## QUALITY OF SURFACE WATER DATA AT PARTIAL-RECORD STATIONS OR MISCELLANEOUS SITES

WATER QUALITY DATA, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

## CANON DE TAJIQUE AT TAJIQUE, N. MEX.--Continued

DATE	DIS-SOLVED ORTHOPHOS- (P) (MG/L) (00671)	DIS-SOLVED SOLIDS (RESIDUE 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 CONDUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	DIS-SOLVED BORON (B) (MG/L) (01020)
JUNE 15...	.00	272	293	250	27	.2	492	7.5	15.0	60

DATE	TIME	DIS-SOLVED ALUMINUM (AL) (MG/L) (01106)	DIS-SOLVED BARIUM (BA) (MG/L) (01005)	DIS-SOLVED BERYL- LIUM (BE) (MG/L) (01010)	DIS-SOLVED BISMUTH (BI) (MG/L) (01015)	DIS-SOLVED BORON (B) (MG/L) (01020)	DIS-SOLVED CADMIUM (CD) (MG/L) (01025)	DIS-SOLVED CHROMIUM (CR) (MG/L) (01030)	DIS-SOLVED COBALT (CO) (MG/L) (01035)
JUNE 15...	1045	4	80	<3	<7	60	<7	<2	<5

DATE	DIS-SOLVED COPPER (CU) (MG/L) (01040)	DIS-SOLVED GALLIUM (GA) (MG/L) (01120)	DIS-SOLVED GERMANIUM (GE) (MG/L) (01125)	DIS-SOLVED IRON (FE) (MG/L) (01046)	DIS-SOLVED LEAD (PB) (MG/L) (01049)	DIS-SOLVED LITHIUM (LI) (MG/L) (01130)	DIS-SOLVED MANGANESE (MN) (MG/L) (01056)	TOTAL MERCURY (HG) (MG/L) (71900)	DIS-SOLVED MOLYBDENUM (MO) (MG/L) (01060)
JUNE 15...	<2	<3	<7	9	<7	3	7	.0	<2

DATE	DIS-SOLVED NICKEL (NI) (MG/L) (01065)	DIS-SOLVED SILVER (AG) (MG/L) (01075)	TOTAL SELENIUM (SE) (MG/L) (01147)	DIS-SOLVED STRONTIUM (SR) (MG/L) (01080)	DIS-SOLVED TIN (SN) (MG/L) (01100)	DIS-SOLVED TANTALUM (TA) (MG/L) (01150)	DIS-SOLVED VANADIUM (V) (MG/L) (01085)	DIS-SOLVED ZINC (ZN) (MG/L) (01090)	DIS-SOLVED ZIRCONIUM (ZK) (MG/L) (01160)
JUNE 15...	<3	<1	13	220	<7	<6	<3.0	9	<10

## CANON DE LOS JOYOS AT TAJIQUE, N. MEX. (LAT 34°45'24", LONG 106°17'03")

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	DIS-SOLVED SILICA (SIO2) (MG/L) (00955)	DIS-SOLVED IRON (FE) (MG/L) (01046)	DIS-SOLVED CALCIUM (CA) (MG/L) (00915)	DIS-SOLVED MAGNESIUM (MG) (MG/L) (00925)	DIS-SOLVED SODIUM (NA) (MG/L) (00930)	DIS-SOLVED POTASSIUM (K) (MG/L) (00935)	BICARBONATE (HCO3) (MG/L) (00440)	CARBONATE (CO3) (MG/L) (00445)	DIS-SOLVED SULFATE (SO4) (MG/L) (00945)	DIS-SOLVED CHLORIDE (CL) (MG/L) (00940)
JUNE 15...	1040	.01	24	20	130	9.5	10	4.0	371	0	55	25

DATE	DIS-SOLVED FLUORIDE (F) (MG/L) (00950)	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	DIS-SOLVED ORTHOPHOS- PHORUS (P) (MG/L) (00671)	DIS-SOLVED SOLIDS (RESIDUE 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 CONDUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	DIS-SOLVED BORON (B) (MG/L) (01020)
JUNE 15...	.2	.01	.07	484	441	360	59	.2	715	7.9	21.0	20

## WATER QUALITY DATA, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

## CANADA DE PERRA AT STATE HIGHWAY 10, N. MEX. (LAT 34°47'43", LONG 106°14'10")

DATE	TIME	INSTAN-	DIS-	DIS-	DIS-	DIS-	DIS-	DIS-	BICAR-	CAR-	DIS-	DYS-			
		TANEOUS	SOLVED	SOLVED	SOLVED	SOLVED	SOLVED	SOLVED			SOLVED				
		DIS-	SILICA	IRON	CAL-	MAG-	TAS-	PU-			SULFATE				
		CHARGE	(SI02)	(FE)	(CA)	(MG)	(MG/L)	(MG/L)	(K)	(HC03)	(C03)	(S04)	(CL)		
		(CFS)	(MG/L)	(UG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)		
		(00061)	(00955)	(01046)	(00915)	(00925)	(00930)	(00935)	(00440)	(00445)	(00945)	(00940)			
JUNE 15...	1000	2.8	11	9	74	10	17	1.1	245	0	46	17			
DATE	TIME	DIS-	DIS-	DIS-	DIS-	NON-	SODIUM	SPE-	PH	TEMPER-	DYS-				
		SOLVED	SOLVED	SOLVED	SOLVED							CAR-	AD-	CIFIC	SOLVED
		FLUO-	NITRITE	ORTH0.	SOLIDS							BONATE	SORP-	DUCT-	BORON
		RIDE	PLUS	PHOS-	(RESI-	HARD-	ANCE	ANCE		ATURE	(B)				
		(F)	(N)	(P)	180 C)	NESS	NESS	RATIO	(MICRO-	(DEG C)	(UG/L)				
		(MG/L)	(MG/L)	(MG/L)	(MG/L)	(CA+MG)	(MG/L)	(00902)	(00931)	(00095)	(00010)				
JUNE 15...	.2	.21	.00	332	298	230	25	.5	507	7.8	16.5	40			

## ARROYO DE CHILILI AT CHILILI, N. MEX. (LAT 34°53'11", LONG 106°13'50")

DATE	TIME	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)	DIS- SOLVED SULFATE (S04) (MG/L) (00945)
JUNE 13...	1300	15	20	6	73	9.0	14	.7	250	0	39
DATE	TIME	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)	TOTAL NITRITE PLUS NITRATE (N) (MG/L) (00630)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	AMMONIA NITRO- GEN (N) (MG/L) (00610)	TOTAL ORGANIC NITRO- GEN (N) (MG/L) (00605)	TOTAL NITRO- GEN (N) (MG/L) (00600)	TOTAL PHOS- PHORUS (P) (MG/L) (00665)
JUNE 13...	12	.3	.50	.01	.38	.51	.01	.24	.63	.00	
DATE	TIME	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 CONSTI- TUENTS) (CA+MG) (MG/L) (70301)	NON- CAR- BONATE HARD- NESS (CA+MG) (MG/L) (00900)	SODIUM AD- SORP- TION RATIO (MG/L) (00902)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHUS) (00095)	PH	TEMPER- ATURE (DEG C) (00010)	DIS- SOLVED BORON (B) (UG/L) (01020)	
JUNE 13...	.00	287	289	220	15	.4	488	7.7	17.0	11	
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)		
JUNE 13...	1300	7	120	<3	<7	11	<7	<2	<5		
DATE	TIME	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)	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)	
JUNE 13...	<2	<3	<7	20	<7	3	6	.2	<2		
DATE	TIME	DIS- SOLVED NICKEL (NI) (UG/L) (01065)	DIS- SOLVED SILVER (AG) (UG/L) (01075)	DIS- SOLVED SELL- 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)	
JUNE 13...	<3	<1	8	230	<7	<6	<3.0	4	<10		

## QUALITY OF SURFACE WATER DATA AT PARTIAL-RECORD STATIONS OR MISCELLANEOUS SITES

WATER QUALITY DATA, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

## CHILILI TRIBUTARY NEAR CHILILI, N. MEX. (LAT 34°53'51", LONG 106°14'34")

DATE	TIME	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 SIUM (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)
JUNE 13...	1130	12	9	88	10	29	.8	262	0	58	26	.3
DATE	TIME	DIS- SOLVED NITRATE (N) (MG/L) (00631)	DIS- SOLVED ORTH- PHOS- (P) (MG/L) (00671)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L) (70300)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENIS) (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)
JUNE 13...		.03	.00	372	353	260	46	.8	601	7.9	20.5	0

## ESCABOSITA CREEK NEAR ESCABOSA, N. MEX. (LAT 34°54'58", LONG 106°16'57")

		INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	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)
DATE	TIME											
JUNE 13...	1115	.01	25	30	130	19	35	8.5	458	0	48	47
		DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	DIS- SOLVED ORTH- PHOS- PHORUS (P) (MG/L) (00671)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L) (70300)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (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)
JUNE 13...	.4	.01	.13	587	539	400	27	.8	908	7.9	20.0	50

## TORRIETA CREEK AT ESCABOSA, N. MEX. (LAT 34°55'11", LONG 106°17'13")

		INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	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)	
DATE	TIME												
JUNE 13...	1100	.80	19	20	120	13	18	3.2	355	0	49	29	
		DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	DIS- SOLVED ORTH- PHOS- PHORUS (P) (MG/L) (00671)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L) (70300)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENIS) (CA,MG) (MG/L) (70301)	HARD- NESS (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)
DATE	TIME												
JUNE 13...	.3	.74	.01	441	430	350	62	.4	722	8.0	18.5	0	



QUALITY OF SURFACE WATER DATA AT PARTIAL-RECORD STATIONS OR MISCELLANEOUS SITES

243

WATER QUALITY DATA, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

CANADA DE ESCABOSA AT ESCABOSA, N. MEX. (LAT 34°55'32", LONG 106°17'25")

DATE	TIME	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)	DIS- SOLVED SULFATE (S04) (MG/L) (00945)
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JUNE 13...	1000	22	9	22	190	15	38	2.0	529	0	160
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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)	TOTAL NITRITE PLUS NITRATE (N) (MG/L) (00630)	DIS- SOLVED NITRITE PLUS NITRATE (MG/L) (00631)	AMMONIA NITRO- GEN (N) (MG/L) (00610)	TOTAL ORGANIC NITRO- GEN (N) (MG/L) (00605)	TOTAL NITRO- GEN (N) (MG/L) (00600)	TOTAL PHOS- PHORUS (P) (MG/L) (00665)
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JUNE 13...	110	.2	1.2	.04	1.2	1.2	.01	.62	1.8	.02
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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)	NON- CAR- BONATE HARD- NESS (CA,MG) (MG/L) (00900)	SODIUM AD- SORP- TION RATIO (MG/L) (00902)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH	TEMPER- ATURE (DEG C) (00010)	DIS- SOLVED BORON (B) (UG/L) (01020)
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JUNE 13...	.01	802	705	540	270	.7	1150	7.8	16.5	60
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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 MIUM (CO) (UG/L) (01025)	DIS- SOLVED MIUM (CR) (UG/L) (01030)	DIS- SOLVED COBALT (CO) (UG/L) (01035)
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JUNE 13...	1000	<7	86	<5	<15	60	<1	<4	<10
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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)	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)
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JUNE 13...	<4	<7	<15	9	<15	3	22	.1	<5
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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)
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JUNE 13...	<7	<2	10	160	<20	<10	<7.0	17	<23
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## QUALITY OF SURFACE WATER DATA AT PARTIAL-RECORD STATIONS OR MISCELLANEOUS SITES

WATER QUALITY DATA, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

## CANADA ESCABOSA ABOVE ESCABOSA, N. MEX. (LAT 34°55'56", LONG 106°17'42")

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	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 (NA) (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 CHLOR- IDE (CL) (MG/L) (00940)
JUNE 15...	1445	.01	23	30	170	15	38	1.9	301	0	160	110
DATE	TIME	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 (SUM OF DUE AT CONSTI- TUENTS) (MG/L) (70300)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (70301)	DIS- SOLVED MAG- NE- SIUM (NA) (MG/L) (00900)	DIS- SOLVED SODIUM (NA) (MG/L) (00902)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH	TEMPER- ATURE (DEG C) (00010)	DIS- SOLVED BORON (B) (MG/L) (01020)
JUNE 15...	.2	1.9	.01	788	675	490	240	.8	1110	7.7	23.0	40

## LAS HUERTAS CREEK AT HIGHWAY I-25, N. MEX. (LAT 35°21'59", LONG 106°28'52")

		INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	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)	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											
JUNE 12...	0845	16	9.2	9	<2	69	4.8	5.9	.7	185	0	
		DIS- SOLVED SULFATE (SO4) (CL) (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)	TOTAL NITRITE PLUS NITRATE (N) (MG/L) (00630)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	AMMONIA NITRO- GEN (N) (MG/L) (00610)	ORGANIC NITRO- GEN (N) (MG/L) (00605)	TOTAL NITRO- GEN (N) (MG/L) (00600)	TOTAL PHOS- PHORUS (P) (MG/L) (00665)
DATE	TIME											
JUNE 12...	26	10	.3	.44	.00	.38	.44	.01	.21	.60	.06	
		DIS- SOLVED ORTHOPHOS- PHORUS (P) (MG/L) (00671)	DIS- SOLVED SOLIDS (RESI- SUM OF DUE AT CONSTI- TUENTS) (MG/L) (70300)	DIS- SOLVED SOLIDS (SUM OF DUE AT CONSTI- TUENTS) (MG/L) (70301)	HARD- NESS (CA+MG) (MG/L) (00900)	NON- CAK- BONATE HARD- NESS (MG/L) (00902)	SODIUM AD- SORP- TION RATIO (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH	TEMPER- ATURE (DEG C) (00010)	DIS- SOLVED BORON (B) (UG/L) (01020)	
DATE	TIME											
JUNE 12...	.00	229	219	190	41	.2	369	7.8	11.0	30		
		DIS- SOLVED ALUM- INIUM (AL) (UG/L) (01106)	DIS- SOLVED SOLIDS (RESI- SUM OF DUE AT CONSTI- TUENTS) (MG/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 MNIUM (CG) (UG/L) (01025)	DIS- SOLVED CHRO- MIUM (CR) (UG/L) (01030)	DIS- SOLVED COBALT (CO) (UG/L) (01035)	DIS- SOLVED MOLYB- DENUM (MO) (UG/L) (01060)	DIS- SOLVED ZIR- CONIUM (ZR) (UG/L) (01160)	
DATE	TIME											
JUNE 12...	0845	16	92	<2	<6	30	<10	<2	<2	<2		
		DIS- SOLVED COPPER (CU) (UG/L) (01040)	DIS- SOLVED GALLIUM (GA) (UG/L) (01120)	DIS- SOLVED GERM- ANIUM (GE) (UG/L) (01125)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED LEAD (PB) (UG/L) (01049)	DIS- SOLVED LITHIUM (LI) (UG/L) (01130)	DIS- SOLVED MANGANESE (MN) (UG/L) (01056)	TOTAL MERCURY (MG) (71900)	DIS- SOLVED MOLYB- DENUM (MO) (UG/L) (01060)	DIS- SOLVED ZIR- CONIUM (ZR) (UG/L) (01160)	
DATE	TIME											
JUNE 12...	2	<2	<5	9	<4	3	<2	.1	<2			
		DIS- SOLVED NICKEL (NI) (UG/L) (01065)	DIS- SOLVED SILVER (AG) (UG/L) (01075)	DIS- SOLVED SILVER (AG) (UG/L) (01075)	DIS- SOLVED SILVER (AG) (UG/L) (01075)	DIS- SOLVED SILVER (AG) (UG/L) (01075)	DIS- SOLVED SILVER (AG) (UG/L) (01075)	DIS- SOLVED SILVER (AG) (UG/L) (01075)	DIS- SOLVED SILVER (AG) (UG/L) (01075)	DIS- SOLVED SILVER (AG) (UG/L) (01075)	DIS- SOLVED SILVER (AG) (UG/L) (01075)	
DATE	TIME											
JUNE 12...	2	<1	4	140	<6	<4	<4.0	15	<6			

QUALITY OF SURFACE WATER DATA AT PARTIAL-RECORD STATIONS OR MISCELLANEOUS SITES  
WATER QUALITY DATA, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

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JEMEZ RIVER AT HIGHWAY 4, NEAR SAN YSIDRO, N. MEX. (LAT 35°34'27", LONG 106°45'27")

		DIS- SOLVED SILICA (SI02) (MG/L) (00955)	DIS- SOLVED IRON (FE) (MG/L) (01046)	DIS- SOLVED MANGANESE (MNI) (MG/L) (01056)	DIS- SOLVED CALCIUM (CA) (MG/L) (00915)	DIS- SOLVED MAGNESIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED POTASSIUM (K) (MG/L) (00935)	BICARBONATE (HCO3) (MG/L) (00440)	CARBONATE (CO3) (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	
DATE	TIME											
SEP. 07...	0905	44	10	290	71	10	220	20	458	0	50	
		DIS- SOLVED CHLORIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUORIDE (F) (MG/L) (00950)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	DIS- SOLVED ORTHOPHOSPHORUS (P) (MG/L) (00671)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L) (70301)	HARD- NESS (CA+MG) (MG/L) (00900)	NON- CARBONATE HARD- NESS (MG/L) (00902)	SODIUM AD- SORPTION RATIO (00931)	SPECIFIC CONDUCTANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPERATURE (DEG C) (00010)
DATE	TIME											
SEP. 07...	210	2.1	.01	.13	854	220	0	6.5	1410	7.6	15.0	

SANTA FE RIVER BELOW AIRPORT SEWAGE, N. MEX. (LAT 35°37'43", LONG 106°05'33")

		INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	DIS- SOLVED SILICA (SI02) (MG/L) (00955)	DIS- SOLVED IRON (FE) (MG/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)	
DATE	TIME									
JUNE 18...	0915	36	6.9	20	10	27	.9	12	2.1	
JULY 03...	0715	12	5.8	20	10	27	3.3	24	3.7	
		BICAR- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLOR- IDE (CL) (MG/L) (00940)	DIS- SOLVED FLUOR- IDE (F) (MG/L) (00950)	TOTAL NITRITE PLUS NITRATE (N) (MG/L) (00630)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	TOTAL NITRO- GEN (N) (MG/L) (00600)	TOTAL PHOS- PHORUS (P) (MG/L) (00665)
DATE										
JUNE 18...	82	0	18	8.7	.4	.64	.20	5.3	3.5	
JULY 03...	105	0	19	11	.5	2.9	2.7	4.7	5.8	
		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)	
JUNE 18...	1.0	120	71	4	.6	201	8.1	15.0		
JULY 03...	3.5	169	81	0	1.2	272	7.1	17.0		

RIO GUADALUPE ABOVE JEMEZ RIVER, N. MEX. (LAT 35°40'13", LONG 106°44'35")

		DIS- SOLVED SILICA (SI02) (MG/L) (00955)	DIS- SOLVED IRON (FE) (MG/L) (01046)	DIS- SOLVED MANGANESE (MNI) (MG/L) (01056)	DIS- SOLVED CALCIUM (CA) (MG/L) (00915)	DIS- SOLVED MAGNESIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED POTASSIUM (K) (MG/L) (00935)	BICARBONATE (HCO3) (MG/L) (00440)	CARBONATE (CO3) (MG/L) (00445)	DIS- SOLVED SULFATE (SU4) (MG/L) (00945)	
DATE	TIME											
SEP. 07...	1040	26	10	30	63	7.1	18	2.7	260	0	11	
DATE	TIME	DIS- SOLVED CHLORIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUORIDE (F) (MG/L) (00950)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	DIS- SOLVED ORTHOPHOSPHORUS (P) (MG/L) (00671)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (P) (MG/L) (70301)	HARD- NESS (CA+MG) (MG/L) (00900)	NON- CARBONATE HARD- NESS (MG/L) (00902)	SODIUM AD- SORPTION RATIO (00931)	SPECIFIC CONDUCTANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPERATURE (DEG C) (00010)
SEP. 07...	7.4	.7	.03	.06	264	190	0	.6	411	7.9	16.5	

## QUALITY OF SURFACE WATER DATA AT PARTIAL-RECORD STATIONS OR MISCELLANEOUS SITES

WATER QUALITY DATA, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

JEMEZ RIVER ABOVE RIO GUADALUPE, N. MEX. (LAT 35°40'14", LONG 106°44'33")

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	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)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)
SEP. 07...	1145	12	46	140	20	59	6.7	120	18	279	0	17

	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 ORTH0. 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 (MG/L) (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)
SEP. 07...	140	1.3	.01	.14	546	160	0	3.9	878	8.2	17.0

SANTA FE RIVER AT SANTA FE, N. MEX. (LAT 35°41'07", LONG 105°56'27")

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	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 PO- TAS- SIUM (K) (MG/L) (00935)
JUNE 18...	1105	36	11	20	0	8.5	2.1	3.1
JULY 03...	0820	13	12	30	0	13	2.7	4.4

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)	TOTAL NITRITE PLUS NITRATE (N) (MG/L) (00630)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	TOTAL NITRO- GEN (N) (MG/L) (00600)	TOTAL PHOS- PHORUS (P) (MG/L) (00665)
JUNE 18...	32	0	12	2.1	.2	.01	.01	.29	.06
JULY 03...	47	0	13	3.0	.3	.00	.00	.36	.01

DATE	TIME	DIS- SOLVED ORTH0. PHOS- PHORUS (P) (MG/L) (00671)	DIS- SOLVED SOLIDS (SUM OF TUENIS) (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)
JUNE 18...		.01	55	30	4	.2	78	7.5	14.5
JULY 03...		.01	72	44	5	.3	114	7.5	15.5

QUALITY OF SURFACE WATER DATA AT PARTIAL-RECORD STATIONS OR MISCELLANEOUS SITES  
WATER QUALITY DATA, CALENDAR YEAR JANUARY 1973 TO DECEMBER 1973

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SULPHUR CREEK AT LA CUEVA, N. MEX. (LAT 35°51'18", LONG 106°38'18")

DATE	TIME	DIS- SOLVED SILICA (SI02) (MG/L) (00955)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED MANG- NESE (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- SIUM (K) (MG/L) (00935)	BICAR- BORATE (HCO3) (MG/L) (00440)	CAR- BORATE (CO3) (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)
MAY 23...	0915	53	140	160	16	2.1	7.4	3.6	11	0	49	11

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	BROMIDE (BR) (MG/L) (71670)	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- BORATE 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)
MAY 23...	.2	.0	.02	.02	130	54	45	.4	166	7.9	6.5	80

DATE	TIME	DIS- SOLVED ARSENIC (AS) (UG/L) (01000)	DIS- SOLVED BORON (B) (UG/L) (01020)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED MANG- NESE (MN) (UG/L) (01056)
MAY 23...	0915	0	80	140	160

EXPLANATION OF GEOLOGIC UNIT (AQUIFER) CODES (LISTED FROM YOUNGEST TO OLDEST AGE): 000EXRV-Unknown age, Extrusive rocks; 110AVMB-Cenozoic age, Quaternary, alluvium; 110BLSN-Cenozoic age, Quaternary, bolson fill; 112BDLR-Cenozoic age, Pleistocene, Bandelier Rhyolite Tuff of Tewa Group; 112BLSP-Cenozoic age, Pleistocene, Battleship Rock flow; 112SNTF-Cenozoic age, Pleistocene, Santa Fe Group; 112SNTFU-Cenozoic age, Pleistocene, Santa Fe Group, Upper Part; 112VLLS-Cenozoic age, Pleistocene, Valles Rhyolite of Tewa Group; 121GILA-Cenozoic age, Pliocene, Gila Conglomerate (Group); 122SNTFL-Cenozoic age, Miocene, Santa Fe Group, Lower Part; 210MNCN-Mesozoic age, Cretaceous, Mancos Shale; 221WSRC-Mesozoic age, Upper Jurassic, Westwater Canyon Sandstone Member, Morrison Formation; 231CHNL-Mesozoic age, Upper Triassic, Chinle Formation; 318 ABO L-Paleozoic age, Leonard, ABO Sandstone (Lower Tongue); 325MDER-Paleozoic age, Desmoines, Madera Limestone; 400PCMR-Paleozoic age, Precambrian, Precambrian.

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).

BERNALILLO COUNTY												
LOCAL IDENTIFIER	STATION	NUMBER	DATE OF SAMPLE	TIME	GEOLOGIC UNIT	DEPTH (FT) (000003)	FLOW RATE (GPM) (000058)	INSTANTANEOUS FLOW RATE (GPM) (000059)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE MSL) (72000)	TOTAL DEPTH OF HOLE (FT. BELOW LSD) (72001)		
09N.02E.04.213	350217106433501		73-09-17	1000	112SNTF	--	--	--	--	1400		
09N.05E.31.432	365725106264001		73-07-03	1200	400PCMB	690	75	--	--	705		
10N.02E.33.240	350308106433401		73-05-22	1430	112SNTF	1200	--	--	--	1200		
			73-05-23	1645	112SNTF	1200	--	10	--	1200		
			73-05-24	1620	112SNTF	1200	--	15	--	1200		
			73-05-24	2015	112SNTF	1200	--	7.5	--	1200		
			73-08-22	0940	112SNTF	--	--	--	--	--		
			73-08-25	0815	112SNTF	1200	--	--	--	--		
10N.04E.16.241	350537106310601		73-11-14	0745	112SNTF	1411	--	480	5575	1411		
10N.04E.22.344	350529106303801		73-10-04	1700	112SNTF	--	--	345	--	1800		
10N.04E.34.214	350410106302301		73-09-19	0800	112SNTF	1200	--	1050	--	1200		
10N.06E.05.33124	350626106194101		73-02-06	1045	318ABO L	132	--	--	--	163		
DATE OF SAMPLE	PUMP OR FLOW PERIOD TO SAMPLING (MIN) (72004)	DEPTH TO TOP OF SAMPLE INTER-VAL (FT) (72015)	DEPTH TO BOTTOM OF SAMPLE INTER-VAL (FT) (72016)	DEPTH BELOW LAND SURFACE (FT) (72019)	DIS-SOLVED SILICA (SI02) (MG/L) (00955)	DIS-SOLVED IRON (FE) (UG/L) (01046)	DIS-SOLVED MANGANESE (MN) (UG/L) (01056)	DIS-SOLVED CALCIUM (CA) (MG/L) (00915)	DIS-SOLVED MAGNESIUM (MG) (MG/L) (00925)	DIS-SOLVED SODIUM (NA) (MG/L) (00930)	DIS-SOLVED POTASSIUM (K) (MG/L) (00935)	BICARBONATE (HCO3) (MG/L) (00440)
73-09-17	4800	--	--	145	37	50	0	3.5	3	140	9	130
73-07-03	--	--	--	24	9	--	120	26	57	3.9	--	187
73-05-22	--	160	166	154	--	3400	130	--	8.0	--	--	--
73-05-23	375	1103	1109	155	--	530	20	--	6	--	--	--
73-05-24	320	910	916	155	--	2000	80	--	4.0	--	--	--
73-05-24	120	275	281	155	--	380	20	--	1.4	--	--	--
73-08-22	--	--	--	39	10	0	3.5	5	110	1.0	--	139
73-08-25	--	--	--	40	30	20	6.1	4	110	2.0	--	165
73-11-14	--	813	1411	660	34	40	10	19	9	41	1.9	139
73-10-04	--	--	--	685	24	40	0	37	3.3	28	2.4	151
73-09-19	4800	650	1180	--	20	10	0	80	19	27	3.7	254
73-02-06	--	--	--	--	18	50	10	84	28	22	3.9	277
DATE OF SAMPLE	CARBONATE (CO3) (MG/L) (00445)	DIS-SOLVED SULFATE (SO4) (MG/L) (00945)	DIS-SOLVED CHLORIDE (CL) (MG/L) (00940)	DIS-SOLVED FLUORIDE (F) (MG/L) (00950)	TOTAL NITRATE PLUS NITRITE (N) (MG/L) (00630)	DIS-SOLVED NITRATE (N) (MG/L) (00631)	TOTAL NITROGEN (N) (MG/L) (00600)	DIS-SOLVED ORTHOPHOSPHORUS (P) (MG/L) (00671)	DIS-SOLVED SOLIDS (RESIDUE AT 180 C) (MG/L) (70300)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L) (70301)	HARDNESS (CA+MG) (MG/L) (00900)	NON-CARBONATE HARDNESS (MG/L) (00902)
73-09-17	17	120	31	1.2	--	1.9	--	.09	433	424	10	0
73-07-03	0	290	54	2.9	--	2.0	--	.00	696	679	410	250
73-05-22	--	--	--	--	--	--	--	--	--	--	--	--
73-05-23	--	--	--	--	--	--	--	--	--	--	--	--
73-05-24	--	--	--	--	--	--	--	--	--	--	--	--
73-05-24	--	--	--	--	--	--	--	--	--	--	--	--
73-08-22	16	75	14	.9	--	1.9	--	.02	350	337	11	0
73-08-25	5	84	13	1.1	--	1.8	--	.02	340	351	17	0
73-11-14	0	21	5.4	1.0	--	.17	--	.04	187	194	51	0
73-10-04	0	33	6.9	.7	--	.53	--	.05	266	212	110	0
73-09-19	0	100	17	.7	--	2.9	--	.05	369	406	280	70
73-02-06	0	32	36	.3	19	19	19	.01	--	445	330	98
DATE OF SAMPLE	SODIUM ADSORPTION RATIO (00931)	SPECIAL CONDUCTANCE (MICROMHUS) (00095)	PH (UNITS) (00400)	TEMPERATURE (DEG C) (00010)	TOTAL ORGANIC CARBON (C) (MG/L) (00680)	DIS-SOLVED BORON (B) (UG/L) (01020)						
73-09-17	19	638	8.9	28.5	1.0	340						
73-07-03	1.2	1010	7.7	18.0	--	210						
73-05-22	--	--	--	19.5	--	--						
73-05-23	--	--	--	22.0	--	--						
73-05-24	--	--	--	21.5	--	--						
73-05-24	--	--	--	21.0	--	--						
73-08-22	15	512	9.0	--	--	270						
73-08-25	12	524	8.9	30.0	1.5	260						
73-11-14	2.5	283	8.2	25.0	8.1	6						
73-10-04	1.2	339	8.0	24.5	.5	30						
73-09-19	.7	630	7.6	15.5	1.0	50						
73-02-06	.5	725	7.8	--	--	--						

## QUALITY OF GROUND WATER DATA FOR NEW MEXICO

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## BERNALILLO COUNTY--Continued

LOCAL IDENT- IFIER	STATION NUMBER	DATE OF SAMPLE	TIME	DIS- SOLVED ARSENIC (AS) (UG/L) (01000)	DIS- SOLVED BARIUM (BA) (UG/L) (01005)	DIS- SOLVED BORON (B) (UG/L) (01020)	DIS- SOLVED LAD- MIUM (CD) (UG/L) (01025)	HEXA- VALENT CHRO- MIUM (CR6) (UG/L) (01032)	DIS- SOLVED COPPER (CU) (UG/L) (01040)
09N.02E.04.213	350217106433501	73-09-17	1000	35	0	340	0	0	2
10N.02E.33.240	350308106433401	73-05-22	1430	10	--	--	--	--	--
		73-05-23	1645	36	--	--	--	--	--
		73-05-24	1620	14	--	--	--	--	--
		73-05-24	2015	40	--	--	--	--	--
		73-08-22	0940	47	0	270	0	0	6
		73-08-25	0815	45	0	260	0	10	1
10N.04E.16.241	350537106310601	73-11-14	0745	0	0	6	1	0	0
10N.04E.22.344	350529106303801	73-10-04	1700	2	0	30	0	0	2
10N.04E.34.214	350410106302301	73-09-19	0800	0	0	50	0	0	10

DATE OF SAMPLE	TOTAL IRON (FE) (UG/L) (01045)	DIS- SOLVED IRON (FE) (UG/L) (01046)	TOTAL LEAD (PB) (UG/L) (01051)	DIS- SOLVED LEAD (PB) (UG/L) (01049)	DIS- SOLVED MANG- NESE (MN) (UG/L) (01056)	TOTAL MERCURY (HG) (UG/L) (71900)	DIS- SOLVED MERCURY (HG) (UG/L) (71890)	DIS- SOLVED SILVER (AG) (UG/L) (01075)	DIS- SOLVED SIL- NIUM (SE) (UG/L) (01145)	DIS- SOLVED ZINC (ZN) (UG/L) (01090)
73-09-17	110	50	<50	1	0	.0	--	0	8	0
73-05-22	--	3400	--	17	130	--	.5	--	--	--
73-05-23	--	530	--	6	20	--	.2	--	--	--
73-05-24	--	2000	--	5	80	--	.0	--	--	--
73-05-24	--	380	--	15	20	--	.0	--	--	--
73-08-22	--	10	<50	1	0	.0	--	0	4	10
73-08-25	110	30	<50	1	20	--	--	0	2	10
73-11-14	80	40	<100	0	10	.0	--	0	3	10
73-10-04	170	40	7	0	0	.0	--	0	4	10
73-09-19	130	10	<50	12	0	.0	--	9	2	0

## DONA ANA COUNTY

LOCAL IDENT- IFIER	STATION NUMBER	DATE OF SAMPLE	TIME	GEO- LOGIC UNIT	DEPTH (FT) (00005)	TOTAL DEPTH OF HOLE (FT, BELOW LSD) (72001)	DEPTH TO TOP OF SAMPLE INTER- VAL (FT) (72015)	DEPTH TO BOT- TOM OF SAMPLE INTER- VAL (FT) (72016)	DEPTH BELOW LAND SURFACE (FT) (72019)
19S.02W.07.312	324012107051601	73-11-20	--	110AVMB	--	--	--	--	--
19S.04W.12.421	324008107115701	73-06-27	--	112SNTF	--	--	--	--	--
19S.04W.33.244	323652107145301	73-03-19	--	112SNTF	330	330	--	--	--
21S.01W.12.343	322925106540701	73-12-11	--	112SNTF	--	932	--	--	64.00
21S.01W.14.113A	322909106550701	73-12-14	--	110AVMB	--	105	--	--	--

DATE OF SAMPLE	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- NESE (MG) (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)	HY- DROX- IDE (OH) (MG/L) (71830)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)
73-11-20	--	--	--	200	38	--	--	375	0	--	1300	210
73-06-27	45	20	--	420	88	720	8.5	384	0	--	1600	700
73-03-19	73	--	--	9.5	4.1	110	5.2	256	0	--	44	14
73-12-11	4.5	10	--	34	29	710	79	180	0	--	110	1100
73-12-14	33	0	--	100	14	190	15	237	0	--	210	220

DATE OF SAMPLE	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED NITRATE (N) (MG/L) (00631)	DIS- SOLVED PHOS- PHORUS (P) (MG/L) (00671)	DIS- SOLVED RESI- DUE AT 180 C (MG/L) (70300)	DIS- SOLVED 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)
73-11-20	--	--	--	--	--	660	350	--	3120
73-06-27	1.0	.79	--	--	3780	1400	1100	8.3	4610
73-03-19	1.2	1.9	--	--	396	41	0	7.5	536
73-12-11	1.1	.03	--	--	2160	200	57	22	3840
73-12-14	.4	.17	--	--	900	310	110	4.7	1470

DATE OF SAMPLE	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	DIS- SOLVED BORON (B) (UG/L) (01020)
73-11-20	7.8	18.0	--
73-06-27	7.9	2.0	1100
73-03-19	8.2	22.0	--
73-12-11	8.0	23.5	580
73-12-14	7.9	21.0	240



## QUALITY OF GROUND WATER DATA FOR NEW MEXICO

## DONA ANA COUNTY--Continued

LOCAL IDENT- I- FIEN	STATION	NUMBER	DATE OF SAMPLE	TIME	GEO- LOGIC UNIT	DEPTH (FT) (00003)	TOTAL DEPTH OF HOLE (FT) (72001)	DEPTH TO TOP OF SAMPLE INTER- VAL (FT) (72015)	DEPTH TO BOT- TOM OF SAMPLE INTER- VAL (FT) (72016)	DEPTH BELOW LAND SURFACE (FT) (72019)		
21S-03E-19.333	322742	106405501	73-04-10	--	112SNTF	347	347	--	--	--		
21S-03E-19.444	322740	106395701	73-03-21	--	112SNTF	529	529	--	--	--		
21S-03E-31.244	322621	106395801	73-03-27	--	112SNTF	--	460	--	--	--		
21S-03E-33.142	322630	106382301	73-04-10	--	112SNTF	700	700	--	--	--		
21S-05E-32.222	322635	106264401	73-06-20	1200	110BLSN	513	--	--	--	--		
22S-02E-13.411	322342	106422001	73-12-12	1210	110BLSN	--	--	--	--	--		
22S-02E-13.443	322316	106411001	73-03-28	--	112SNTF	430	430	--	--	--		
22S-02E-21.131	322300	106445701	73-03-21	--	112SNTF	850	850	--	--	--		
22S-02E-23.111	322310	106425201	73-03-29	--	112SNTF	1000	1000	--	--	--		
22S-02E-24.422	322246	106405801	73-08-30	--	112SNTF	360	360	--	--	--		
22S-02E-29.424	322148	106450201	73-03-28	--	112SNTF	1175	--	--	--	--		
22S-03E-08.144	322440	106392701	73-08-02	0900	112SNTF	514	514	--	--	--		
22S-03E-08.421	320848	106390801	73-03-02	--	112SNTF	--	--	--	--	--		
22S-03E-09.134	322438	106384201	73-03-27	--	112SNTF	372	372	--	--	--		
						750	750	--	--	--		
DATE OF SAMPLE	DIS- SOLVED SILICA (SI02) (MG/L) (00955)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED MANG- NESE (MN) (UG/L) (01056)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NESE SILUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM SILUM (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)	HY- DROX- IDE (OH) (MG/L) (71830)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)
73-04-10	26	--	--	30	26	50	3.1	161	0	--	130	19
73-03-21	25	--	--	42	43	44	3.0	126	0	--	220	38
73-03-27	42	20	0	43	28	29	3.8	143	0	--	140	19
73-04-10	47	40	0	76	36	46	3.4	150	0	--	270	36
73-06-20	37	20	0	51	12	36	3.5	149	0	--	84	26
73-12-12	39	40	30	51	12	32	3.7	146	0	--	85	27
73-03-28	26	--	--	23	3.5	29	1.7	106	0	--	47	8.1
73-03-28	30	9	0	24	2.2	37	1.7	122	0	--	41	7.4
73-03-21	25	--	--	7.1	1.6	110	2.3	191	0	--	94	13
73-03-29	27	60	0	11	2.1	52	1.7	132	0	--	28	6.3
73-08-30	15	40	50	3.3	.2	130	.9	313	8	--	28	8.3
73-03-28	30	9	0	76	24	140	5.8	184	0	--	140	230
73-08-02	33	10	--	69	13	21	2.2	171	0	--	120	13
73-03-02	46	--	--	160	27	350	39	655	0	--	210	400
73-03-27	33	9	0	76	15	25	2.5	168	0	--	140	14
DATE OF SAMPLE	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED NITR- ATE (N) (MG/L) (00631)	DIS- SOLVED ORTHU- PHOS- PHORUS (P) (MG/L) (00671)	DIS- SOLVED SOLIDS (SUM OF DUE AT CONSTI- TUENTS) (MG/L) (70300)	DIS- SOLVED SOLIDS (SUM OF DUE AT 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)			
73-04-10	.7	.89	--	--	368	180	50	1.6	569			
73-03-21	.8	1.1	--	--	483	280	180	1.1	742			
73-03-27	.9	1.2	.04	--	382	220	110	.8	567			
73-04-10	.9	1.3	.03	--	595	340	220	1.1	850			
73-06-20	.9	1.8	.02	--	332	180	55	1.2	506			
73-12-12	.9	2.0	.06	--	332	180	57	1.0	476			
73-03-28	.8	.01	--	--	191	72	0	1.5	274			
73-03-28	.6	.41	.06	--	206	69	0	1.9	303			
73-03-21	1.1	.25	--	--	349	24	0	9.7	537			
73-03-29	.7	.55	.02	--	196	36	0	3.8	286			
73-08-30	3.5	.13	.04	402	353	9	0	19	564			
73-03-28	.6	.28	.03	--	738	290	140	3.6	1300			
73-08-02	.2	.96	--	--	360	230	86	.6	533			
73-03-02	1.2	.00	--	--	1560	510	0	6.7	2480			
73-03-27	.7	1.2	.03	--	394	250	110	.7	590			
DATE OF SAMPLE	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	DIS- SOLVED BROM (B) (01020)									
73-04-10	7.8	--	--									
73-03-21	7.7	25.0	--									
73-03-27	7.9	--	--									
73-04-10	7.7	--	--									
73-06-20	7.9	23.5	40									
73-12-12	8.0	24.5	50									
73-03-28	7.6	--	--									
73-03-28	8.3	--	--									
73-03-21	8.0	26.0	--									
73-03-29	8.2	--	--									
73-08-30	8.8	28.0	340									
73-03-28	7.9	--	--									
73-08-02	7.8	25.5	30									
73-03-02	7.3	--	--									
73-03-27	7.7	--	--									

## DONA ANA COUNTY--Continued

LOCAL IDENT- 1- FIELD	STATION	NUMBLR	DATE OF SAMPLE	TIME	GEO- LOGIC UNIT	DEPTH (FT) (00003)	TOTAL DEPTH OF HOLE (FT. BELOW LSD)	DEPTH TO TOP OF SAMPLE INTER- VAL (FT) (72015)	DEPTH TO BOT- TOM OF SAMPLE INTER- VAL (FT) (72016)	DEPTH BELOW LAND SURFACE (FT) (72019)		
22S.05L.17.134	322337106394101		73-05-29	--	112SNTF	540	540	--	--	--		
22S.05L.23.143	322250106362901		73-03-28	--	112SNTF	225	225	--	--	--		
22S.05L.05.313	321510106274101		73-06-20	1118	110BLSN	555	--	--	--	--		
			73-12-12	1150	110BLSN	--	--	--	--	--		
22S.05L.07.342	322415106281801		73-06-20	0940	110BLSN	444	--	--	--	--		
			73-06-20	1005	110BLSN	960	--	--	--	--		
			73-12-12	1135	110BLSN	--	--	--	--	--		
22S.05L.15.221	321401106245201		73-06-19	1600	110BLSN	200	--	--	--	--		
			73-06-19	1610	110BLSN	300	--	--	--	--		
			73-12-12	1025	110BLSN	--	--	--	--	--		
22S.05L.16.111	322403106263901		73-06-19	1500	110BLSN	235	328	--	--	--		
			73-06-19	1515	110BLSN	316	328	--	--	--		
			73-12-12	1045	110BLSN	--	--	--	--	--		
22S.05L.20.111	322311106274101		73-06-19	1420	110BLSN	331	--	--	--	--		
			73-12-12	1115	110BLSN	--	--	--	--	--		
DATE OF SAMPLE	DIS- SOLVED SILICA (SI02) (00955)	DIS- SOLVED IRON (FE) (01046)	DIS- SOLVED MAN- GANESE (MN) (01056)	DIS- SOLVED CAL- CIUM (CA) (00915)	DIS- SOLVED MAG- NE- SIUM (MG) (00925)	DIS- SOLVED SODIUM (NA) (00930)	CIS- SOLVED PO- TAS- SIUM (K) (00935)	BICAR- BONATE (HCO3) (00440)	CAR- BONATE (CO3) (00445)	HY- DROX- IDE (OH) (71830)	DIS- SOLVED SULFATE (SO4) (00945)	DIS- SOLVED CHLO- RIDE (CL) (00940)
73-03-29	32	--	--	46	15	38	3.2	168	0	--	100	18
73-03-28	23	--	--	82	27	14	5.7	251	0	--	130	16
73-06-20	36	9	0	32	7.3	30	2.1	128	0	--	51	15
73-12-12	37	20	10	30	7.0	24	2.2	123	0	--	47	12
73-06-20	32	9	0	32	4.2	39	2.1	129	0	--	49	14
73-06-20	29	20	0	30	3.4	66	2.6	119	0	--	83	22
73-12-12	34	10	0	32	3.9	32	2.1	127	0	--	45	12
73-06-19	51	20	10	40	5.1	43	4.4	138	0	--	75	18
73-06-19	9.7	50	0	11	.7	560	6.0	81	20	--	400	560
73-12-12	7.1	40	0	8.1	.4	600	7.0	73	12	--	410	620
73-06-19	19	20	10	23	4.0	26	2.3	83	0	--	43	13
73-06-19	23	30	0	26	4.1	24	2.4	91	0	--	42	13
73-12-12	24	60	0	25	3.7	26	2.4	86	0	--	45	17
73-06-19	36	20	0	37	6.9	30	2.0	114	0	--	58	17
73-12-12	38	5600	90	37	6.8	27	2.2	112	0	--	54	17
DATE OF SAMPLE	DIS- SOLVED FLUO- RIDE (F) (00950)	DIS- SOLVED NITRATE PLUS NITRATE (N) (00631)	DIS- SOLVED NITRATE PLUS PHOS- PHORUS (P) (00671)	DIS- SOLVED ORTHU- PHOS- PHORUS (P) (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) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AD- SORP- TION RATIO (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)		
73-03-29	.8	1.0	--	--	--	340	180	39	1.2	513		
73-03-28	1.1	2.0	--	--	--	422	320	130	.3	647		
73-06-20	.3	.76	.01	--	--	240	110	5	1.2	337		
73-12-12	.4	.95	.06	--	--	225	100	3	1.0	324		
73-06-20	.5	1.5	.01	--	--	243	97	0	1.7	360		
73-06-20	.5	1.7	.02	--	--	303	89	0	3.0	455		
73-12-12	.4	1.5	.05	--	--	231	96	0	1.4	329		
73-06-19	.4	.83	.02	--	--	309	120	8	1.7	430		
73-06-19	.7	.01	.00	--	--	1610	30	0	44	2670		
73-12-12	.6	.05	.01	--	--	1700	22	0	56	2936		
73-06-19	.3	.04	.00	--	--	172	74	6	1.3	267		
73-06-19	.4	.96	.03	--	--	184	82	7	1.2	279		
73-12-12	.3	1.1	.03	--	--	191	78	7	1.3	293		
73-06-19	.4	2.6	.01	--	--	255	120	27	1.2	373		
73-12-12	.3	2.7	.06	--	--	255	120	29	1.1	367		
DATE OF SAMPLE	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	DIS- SOLVED BORON (B) (01020)									
73-03-29	7.6	--	--									
73-03-28	7.7	--	--									
73-06-20	7.9	24.0	30									
73-12-12	8.2	24.5	30									
73-06-20	7.8	24.5	30									
73-06-20	8.0	28.0	20									
73-12-12	8.2	24.0	30									
73-06-19	7.9	23.5	10									
73-06-19	9.4	24.0	110									
73-12-12	9.8	22.5	160									
73-06-19	8.1	23.5	30									
73-06-19	8.2	23.5	40									
73-12-12	8.3	23.5	30									
73-06-19	8.1	24.5	30									
73-12-12	8.2	24.0	30									

## 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) (000003)	TOTAL DEPTH OF HOLE (FT. BELOW LSD) (72001)	DEPTH TO TOP OF SAMPLE INTER- VAL (FT) (72015)	DEPTH TO BOT- TOM OF SAMPLE INTER- VAL (FT) (72016)	DEPTH BELOW LAND SURFACE (FT) (72019)
22S.05E.29.412	522155106270201	73-06-19	1400	110BLSN	570	573	--	--	--	--
22S.05E.33.244	522108106254701	73-12-12	0955	110BLSN	--	--	--	--	--	--
		73-06-19	1315	110BLSN	430	457	--	--	--	--
		73-12-12	0955	110BLSN	--	--	--	--	--	--
23S.02E.18.313	521818106470401	73-03-19	--	112SNTF	170	170	--	--	--	--
23S.02E.18.313A	521818106470402	73-02-19	--	112SNTF	80	80	--	--	--	--
23S.02E.18.313B	521818106470403	73-02-19	--	112SNTF	48	48	--	--	--	--
23S.02E.18.313C	521818106470404	73-02-18	--	112SNTF	35	35	--	--	--	--
23S.02E.28.3312	521629106445801	73-11-28	1200	112SNTF	--	--	--	--	--	--
23S.02E.35.411	521545107005200	73-01-11	--	112SNTF	1050	1050	--	--	--	--

DATE OF SAMPLE	DIS- SOLVED SILICA (SI02) (MG/L) (00935)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED MANGANESE (MN) (UG/L) (01056)	DIS- SOLVED CALCIUM (CA) (MG/L) (00915)	DIS- SOLVED MAGNE- SIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED POTAS- SIUM (K) (MG/L) (00935)	BICAR- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	HY- DROX- IDE (OH) (MG/L) (71830)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)
73-06-19	30	40	20	25	5.6	25	2.0	110	0	--	44	11
73-12-12	29	40	30	26	5.5	23	2.1	103	0	--	45	12
73-06-19	--	30	0	66	.0	140	4.3	0	35	1	140	180
73-12-12	2.4	20	10	44	.3	130	5.7	18	2	--	130	180
73-03-19	25	9	20	98	17	61	5.6	213	0	--	160	82
73-06-19	29	--	--	130	19	140	7.1	343	0	--	320	93
73-06-19	34	--	--	170	23	160	8.3	333	0	--	480	95
73-02-18	29	--	--	170	23	180	8.9	348	0	--	480	100
73-11-28	--	--	--	18	4.5	--	--	123	2	--	940	180
73-01-11	24	20	10	23	.3	460	3.2	47	1	--	610	320

DATE OF SAMPLE	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED 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 (MG/L) (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)
73-06-19	.4	.05	.01	--	198	86	0	1.2	296
73-12-12	.3	.07	.04	--	194	87	2	1.1	289
73-06-19	.9	.00	.01	--	--	160	110	4.7	1010
73-12-12	.6	.03	.00	--	504	110	93	5.4	872
73-03-19	.5	.00	.03	--	555	310	140	1.5	882
73-02-19	.4	.16	--	--	908	400	120	3.0	1300
73-02-19	.6	.29	--	--	1140	520	250	3.1	1590
73-02-18	.7	.31	--	--	1160	520	230	3.4	1640
73-11-28	--	--	--	--	--	63	0	--	2490
73-01-11	6.0	.11	.02	--	1470	50	18	26	2310

DATE OF SAMPLE	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	DIS- SOLVED BORON (B) (UG/L) (01020)
73-06-19	8.1	24.5	10
73-12-12	8.3	25.5	20
73-06-19	10.1	23.5	40
73-12-12	9.0	23.5	60
73-03-19	8.1	17.0	--
73-02-19	8.6	19.0	--
73-02-19	7.7	19.0	--
73-02-18	7.7	15.0	--
73-11-28	8.6	22.0	--
73-01-11	8.6	36.0	--

## DONA ANA COUNTY--Continued

LOCAL IDENTI- FIER	STATION	NUMBER	DATE OF SAMPLE	TIME	GEO- LOGIC UNIT	DEPTH (FT) (00003)	TOTAL DEPTH OF HOLE (FT. BELOW LSD) (72001)	DEPTH TO TOP OF SAMPLE INTER- VAL (FT) (72015)	DEPTH TO BOT- TOM OF SAMPLE INTER- VAL (FT) (72016)	DEPTH BELOW LAND SURFACE (FT) (72019)
24S.02L.00.4130	321354106452501		73-05-08	--	110AVMB	--	147	--	--	--
24S.02L.09.333	321340106445701		73-04-30	--	112SNTF	--	130	--	--	--
24S.02L.16.322	321312106444001		73-05-08	--	112SNTF	--	307	250	307	--
24S.02L.17.422	321308106450801		73-05-02	--	112SNTF	--	400	--	--	11.00
24S.02L.17.423A	321325106451301		73-02-18	--	112SNTF	1200	--	--	--	--
			73-02-27	--	112SNTF	1200	1200	--	--	--
			73-07-25	1400	112SNTF	--	--	--	--	--
24S.02L.20.211A	321241106452501		73-05-02	--	112SNTF	--	--	--	--	--
24S.02L.26.134	321137106424501		73-04-01	--	112SNTF	--	--	--	--	--

DATE OF SAMPLE	DIS- SOLVED SILICA (SI02) (MG/L) (00935)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED MANG- NESE (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)	CIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	BICAR- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	HY- DROX- IDE (OH) (MG/L) (71830)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)
73-05-08	33	9	--	160	25	140	7.4	343	0	--	380	110
73-04-30	30	--	--	200	35	220	8.4	374	0	--	620	160
73-05-08	24	--	--	47	9.1	44	3.1	172	0	--	60	47
73-05-02	23	--	--	48	1.2	41	3.0	174	0	--	50	38
73-02-18	27	9	0	26	5.2	82	6.5	168	0	--	74	50
73-02-27	24	0	10	31	4.2	69	3.6	135	5	--	95	42
73-07-25	24	10	--	46	1.1	40	2.7	162	0	--	54	39
73-05-02	--	--	--	65	10	--	--	175	0	--	78	64
73-04-01	37	9	--	88	18	65	28	186	0	--	170	100

DATE OF SAMPLE	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED NITRATE (N) (MG/L) (00631)	DIS- SOLVED NITRITE PLUS PHOS- PHORUS (P) (MG/L) (00671)	DIS- SOLVED ORTHU. PHOS- PHORUS (P) (MG/L) (70300)	DIS- SOLVED SOLIDS (KESI- LUE AT 180 C) (MG/L) (70301)	DIS- SOLVED SOLIDS (SUM OF CONSTITU- ENTS) (MG/L) (00900)	HARD- NESS (CA, MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00962)	SODIUM AD- SORP- TION RATIO (00931)	SPE- CIAL CON- DUCT- ANCE (MICRO- MHOS) (00095)
73-05-08	.3	.04	--	--	--	1030	500	220	2.7	1450
73-04-30	.6	.31	--	--	--	1460	640	340	3.6	2000
73-05-08	.3	.00	--	--	--	319	150	14	1.5	522
73-05-02	.2	.00	--	--	--	296	150	7	1.5	489
73-02-18	.8	.00	.01	--	--	354	86	0	3.8	576
73-02-27	.5	.11	.02	--	--	341	95	0	3.1	528
73-07-25	.1	.00	--	--	--	293	140	11	1.5	477
73-05-02	--	--	--	--	--	--	200	60	--	651
73-04-01	.8	.00	--	--	--	599	290	140	1.7	955

DATE OF SAMPLE	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	DIS- SOLVED BORON (B) (UG/L) (01020)
73-05-08	7.7	21.0	210
73-04-30	7.5	20.0	--
73-05-08	7.6	21.0	--
73-05-02	7.9	22.0	--
73-02-18	8.1	18.0	--
73-02-27	8.5	18.5	--
73-07-25	8.0	18.5	80
73-05-02	7.7	22.0	--
73-04-01	7.8	25.0	100

## 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) (000003)	TOTAL DEPTH OF HOLE (FT. BELOW LSD) (72001)	DEPTH TO TOP OF SAMPLE INTER- VAL (FT) (72015)	DEPTH TO BOT- TOM OF SAMPLE INTER- VAL (FT) (72016)	DEPTH BELOW LAND SURFACE (FT) (72019)
25S.01E.17.111A	320822106395301		73-07-28	1615	112SNTF	--	--	--	--	--
			73-07-28	1615	112SNTF	--	--	--	--	--
			73-07-28	2020	112SNTF	--	--	--	--	--
			73-07-28	2020	112SNTF	--	--	--	--	--
			73-07-29	1545	112SNTF	--	--	--	--	--
			73-07-29	1545	112SNTF	--	--	--	--	--
			73-07-29	1900	112SNTF	--	--	--	--	--
			73-07-29	1900	112SNTF	--	--	--	--	--
25S.02E.01.133	320946106415101		73-03-28	--	112SNTF	260	260	--	--	--
25S.03E.17.222	320821106390001		73-03-26	--	112SNTF	260	260	--	--	--
25S.03E.18.224	320814106400101		73-03-02	--	110AVR8	--	152	--	--	9.37

DATE OF SAMPLE	DIS- SOLVED SILICA (SI02) (MG/L) (00955)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED MANG- NESE (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)	HY- DROX- IDE (OH) (MG/L) (71830)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)
73-07-28	33	10	10	17	4.6	140	14	261	0	--	100	56
73-07-28	33	10	10	17	4.6	140	14	261	0	--	100	56
73-07-28	36	10	160	59	17	240	26	399	0	--	230	170
73-07-28	36	10	160	59	17	240	26	399	0	--	230	170
73-07-29	54	40	120	150	34	310	7.1	543	0	--	220	390
73-07-29	54	40	120	150	34	310	7.1	543	0	--	220	390
73-07-29	32	20	70	100	30	440	10	471	0	--	370	440
73-07-29	32	20	70	100	30	440	10	471	0	--	370	440
73-03-28	35	60	0	38	4.6	56	19	183	0	--	60	46
73-03-26	51	9	--	300	52	760	66	413	0	--	870	1100
73-03-02	50	9	--	440	79	1100	72	644	0	--	1200	1500

DATE OF SAMPLE	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED NITRATE PLUS NITRATE (N) (MG/L) (00631)	DIS- SOLVED URTHO. 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)
73-07-28	.2	.01	.02	--	494	61	0	7.8	778
73-07-28	.2	.01	.02	--	494	61	0	7.8	778
73-07-28	.1	.00	.01	--	975	220	0	7.1	1520
73-07-28	.1	.00	.01	--	975	220	0	7.1	1520
73-07-29	.2	.04	.12	--	1430	510	69	5.9	2230
73-07-29	.2	.04	.12	--	1430	510	69	5.9	2230
73-07-29	.2	.05	.06	--	1650	370	0	9.9	2590
73-07-29	.2	.05	.06	--	1650	370	0	9.9	2590
73-03-28	1.4	.01	.04	--	355	130	0	2.1	562
73-03-26	1.5	6.7	--	--	3440	960	620	11	4970
73-03-02	1.3	.00	--	--	4760	1400	900	15	7180

DATE OF SAMPLE	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	DIS- SOLVED BORON (B) (UG/L) (01020)
73-07-28	8.2	31.0	60
73-07-28	8.2	31.0	60
73-07-28	7.8	25.0	--
73-07-28	7.8	25.0	--
73-07-29	7.6	27.0	260
73-07-29	7.6	27.0	260
73-07-29	7.8	25.0	--
73-07-29	7.8	25.0	--
73-03-28	7.8	19.0	--
73-03-26	7.6	27.5	2100
73-03-02	7.2	25.0	780

QUALITY OF GROUND WATER DATA FOR NEW MEXICO

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DONA ANA COUNTY--Continued

LOCAL IDENT- IFIER	STATION	NUMBER	DATE OF SAMPLE	TIME	GLO- LOGIC UNIT	DEPTH (FT) (00003)	TOTAL DEPTH OF HOLE (FT. BELOW LSD) (72001)	DEPTH TO TOP OF SAMPLE INTER- VAL (FT) (72015)	DEPTH TO BOT- TOM OF SAMPLE INTER- VAL (FT) (72016)	DEPTH BELOW LAND SURFACE (FT) (72019)		
255.03E.20.112A	320727106394701		73-03-28	--	112SNTF	400	400	--	--	--		
255.03E.20.411A	320706106392501		73-03-23	--	112SNTF	500	500	--	--	--		
265.02E.12.421	320356106411101		73-02-10	--	110AVMB	18	18	--	--	--		
265.02E.12.421B	320356106411103		73-02-10	--	112SNTF	35	--	--	--	--		
265.02E.12.421C	320356106411104		73-02-06	--	110AVMB	86	86	--	--	--		
265.02E.12.421D	320356106411105		73-02-09	--	112SNTF	155	155	--	--	--		
265.03E.02.342	320414106362801		73-03-27	--	112SNTF	560	560	--	--	91.26		
265.03E.03.344	320405106373101		73-02-18	--	112SNTF	26	26	--	--	--		
265.03E.03.344A	320405106373102		73-02-17	1445	110AVMB	36	36	--	--	--		
265.03E.03.344B	320405106373103		73-02-17	--	110AVMB	48	48	--	--	--		
265.03E.03.344C	320405106373104		73-02-16	--	112SNTF	75	75	--	--	--		
265.03E.03.344D	320405106373105		73-03-16	1200	112SNTF	150	150	--	--	--		
265.03E.04.343	320405106383001		73-02-15	1200	112SNTF	135	135	--	--	--		
			73-02-15	1445	110AVMB	135	135	--	--	--		
DATE OF SAMPLE	DIS- SOLVED SILICA (SI02) (MG/L) (00955)	DIS- SOLVED IRON (FE) (MG/L) (01046)	DIS- SOLVED MANG- NESE (MANG) (MG/L) (01056)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED NE- SIUM (NA) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00935)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	BICAR- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	HY- DROX- IDE (OH) (MG/L) (71830)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)
73-03-20	59	270	260	140	29	280	34	652	0	--	220	280
73-03-23	52	20	--	170	34	340	35	696	0	--	220	420
73-02-10	34	9	740	79	14	150	6.4	256	0	--	260	93
73-02-10	35	--	--	100	18	130	5.6	273	0	--	280	89
73-02-06	28	--	--	76	13	110	4.4	196	0	--	210	74
73-02-09	27	9	40	68	14	83	3.8	174	0	--	190	60
73-03-27	21	--	--	59	14	450	18	257	0	--	240	470
73-02-18	31	--	--	100	37	970	24	732	0	--	900	830
73-02-17	48	--	--	160	64	890	60	579	0	--	1000	910
73-02-17	49	--	--	130	50	810	45	452	0	--	710	890
73-02-16	39	--	--	110	41	330	44	483	0	--	210	420
73-03-16	49	9	10	110	43	300	45	466	0	--	210	410
73-02-15	37	40	0	100	37	1000	21	630	0	--	540	1200
73-02-15	46	--	--	270	80	570	48	383	0	--	830	800
DATE OF SAMPLE	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 (MG/L) (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)			
73-03-28	1.1	.01	.06	--	1370	470	0	5.6	2180			
73-03-23	1.1	.02	--	--	1620	560	0	6.2	2560			
73-02-10	1.2	.57	.12	--	767	260	45	4.1	1150			
73-02-10	.7	.01	--	--	793	320	100	3.1	1180			
73-02-06	.5	.00	--	--	613	240	83	3.1	934			
73-02-09	.4	.00	.02	--	532	230	85	2.4	816			
73-03-27	2.4	.04	--	--	1380	160	0	16	2330			
73-02-18	1.2	.02	--	--	3250	400	0	21	4940			
73-02-17	.8	5.7	--	--	3440	660	190	15	4730			
73-02-17	.7	7.4	--	--	2940	530	160	15	4260			
73-02-16	.3	.13	--	--	1430	440	47	6.8	2310			
73-03-16	.3	.09	.03	--	1400	450	70	6.1	2260			
73-02-15	.5	.02	.03	--	3250	400	0	22	4970			
73-02-15	.2	.38	--	--	2630	1000	690	7.8	3920			
DATE OF SAMPLE	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	DIS- SOLVED BORON (B) (MG/L) (01020)									
73-03-28	7.3	24.0	--									
73-03-23	7.2	23.0	360									
73-02-10	7.4	20.0	--									
73-02-10	7.8	18.0	--									
73-02-06	7.4	18.0	--									
73-02-09	7.9	18.0	--									
73-03-27	8.0	27.0	--									
73-02-18	7.4	17.0	--									
73-02-17	7.6	17.0	--									
73-02-17	7.6	16.5	--									
73-02-16	7.4	20.0	--									
73-03-16	7.5	20.0	--									
73-02-15	7.5	15.0	--									
73-02-15	7.4	15.0	--									



## QUALITY OF GROUND WATER DATA FOR NEW MEXICO

## DONA ANA COUNTY--Continued

LOCAL IDENT- 1- FILE	STATION	NUMBER	DATE OF SAMPLE	TIME	GEO- LOGIC UNIT	DEPTH (FT) (00003)	TOTAL DEPTH OF HOLE (FT. BELOW LSD) (72001)	DEPTH TO TOP OF SAMPLE INTER- VAL (FT) (72015)	DEPTH TO BOT- TOM OF SAMPLE INTER- VAL (FT) (72016)	DEPTH BELOW LAND SURFACE (FT) (72019)
26S.03E.07.213	320355106403601		73-02-11	--	112SNTF	120	120	--	--	--
			73-02-11	1200	112SNTF	120	--	--	--	--
26S.03E.08.114	320356106395301		73-02-13	--	112SNTF	135	135	--	--	--
			73-02-13	1140	112SNTF	135	--	--	--	--
			73-02-13	1800	112SNTF	135	--	--	--	--
26S.03E.09.111	320402106385501		73-07-13	0900	112SNTF	--	--	--	--	--
26S.03E.11.111	320403106365301		73-03-28	--	112SNTF	501	501	--	--	--
26S.03E.36.321	320005106354601		73-04-09	--	112SNTF	--	404	--	--	87.00
27S.02W.25.111	315611107002601		73-03-21	--	112SNTF	--	600	--	--	378
28S.03E.34.331	324925106375501		73-02-05	--	112SNTF	1004	1004	--	--	--

DATE OF SAMPLE	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) (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)	HY- DROX- IDE (OH) (MG/L) (71830)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)
73-02-11	27	--	--	210	40	150	7.6	268	0	--	410	280
73-02-11	20	--	--	170	35	95	8.0	142	0	--	150	380
73-02-13	22	--	--	74	15	210	8.7	261	0	--	320	130
73-02-13	33	--	--	110	27	120	14	247	0	--	210	180
73-02-13	30	--	--	220	42	250	10	357	0	--	500	350
73-07-13	41	20	20	39	8.1	200	12	254	0	--	200	110
73-03-28	36	60	0	25	3.6	220	8.1	359	0	--	170	73
73-04-09	36	30	20	54	20	280	28	244	0	--	150	370
73-03-21	81	--	--	130	22	290	42	903	0	--	170	130
73-02-05	35	--	--	71	2.7	360	3.9	48	0	--	360	410

DATE OF SAMPLE	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED NITRUS 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 CONSTIT- UENTS) (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)
73-02-11	.2	.28	--	--	1260	690	470	2.5	1850
73-02-11	.4	.17	--	--	936	570	450	1.7	1650
73-02-13	.9	.27	--	--	910	250	32	5.8	1360
73-02-13	.4	.00	--	--	816	390	180	2.7	1320
73-02-13	.4	.13	--	--	1580	720	430	4.0	2320
73-07-13	.1	.02	.09	--	736	130	0	7.6	1180
73-03-28	1.1	.01	.04	--	714	77	0	11	1120
73-04-09	.6	.00	.03	--	1060	220	17	8.3	1850
73-03-21	1.5	2.7	--	--	1320	420	0	6.2	1940
73-02-05	1.5	.20	--	--	1270	190	150	11	2070

DATE OF SAMPLE	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	DIS- SOLVED BORON (B) (UG/L) (01020)
73-02-11	7.7	15.0	--
73-02-11	7.8	15.0	--
73-02-13	7.9	14.0	--
73-02-13	7.7	17.0	--
73-02-13	7.6	15.0	--
73-07-13	8.2	26.5	--
73-03-28	7.7	31.0	--
73-04-09	7.8	24.0	--
73-03-21	6.8	27.0	--
73-02-05	7.3	31.0	--

## DONA ANA COUNTY--Continued

LOCAL IDENTI- FIER	STATION	NUMBER	DATE OF SAMPLE	TIME	DIS- SOLVED ARSENIC (AS) (UG/L) (01000)	DIS- SOLVED BARIUM (BA) (UG/L) (01005)	DIS- SOLVED BORON (B) (UG/L) (01020)	DIS- SOLVED CAU- MIUM (CU) (UG/L) (01025)	HEXA- VALENT CHRO- MIUM (CR6) (UG/L) (01032)	DIS- SOLVED COPPER (CU) (UG/L) (01040)
21S.03E.31.244	322621106395801	73-03-27	--	--	--	--	--	--	--	--
21S.03E.33.142	322630106382301	73-04-10	--	--	--	--	--	--	--	--
22S.02E.13.443	322316106411004	73-03-28	--	--	--	--	--	--	--	--
22S.02E.23.111	322310106425201	73-03-29	--	--	--	--	--	--	--	--
22S.02E.24.422	322246106405801	73-08-30	--	--	15	0	340	0	0	8
		73-08-30	1200	--	--	--	--	--	--	--
22S.02E.29.424	322148106450201	73-03-28	--	--	--	--	--	--	--	--
22S.03E.09.134	322438106384201	73-03-27	--	--	--	--	--	--	--	--
23S.02E.18.313	321818106470401	73-03-19	--	--	--	--	--	--	--	--
23S.02E.35.411	321545107005200	73-01-11	--	--	--	--	--	--	--	--
24S.02E.17.423A	321325106451301	73-02-18	--	--	--	--	--	--	--	--
		73-02-27	--	--	--	--	--	--	--	--
25S.01E.17.111A	320822106395301	73-07-28	1615	--	--	60	--	--	--	6
		73-07-28	1615	--	--	60	--	--	--	6
		73-07-29	1545	--	--	260	--	--	--	--
		73-07-29	1545	--	--	260	--	--	--	--

DATE OF SAMPLE	TOTAL IRON (FE) (UG/L) (01045)	DIS- SOLVED IRON (FE) (UG/L) (01046)	TOTAL LEAD (PB) (UG/L) (01051)	DIS- SOLVED LEAD (PB) (UG/L) (01049)	TOTAL MANGANESE (MN) (UG/L) (01055)	DIS- SOLVED MANGANESE (MN) (UG/L) (01056)	TOTAL MERCURY (HG) (UG/L) (71900)	DIS- SOLVED SILVER (AG) (UG/L) (01075)	DIS- SOLVED SELE- NIUM (SE) (UG/L) (01145)
73-03-27	210	20	--	--	0	0	--	--	--
73-04-10	70	40	--	--	0	0	--	--	--
73-03-28	40	9	--	--	0	0	--	--	--
73-03-29	100	60	--	--	0	0	--	--	--
73-08-30	--	40	50	5	--	50	.0	0	6
73-08-30	--	--	--	--	--	--	--	--	--
73-03-28	120	9	--	--	0	0	--	--	--
73-03-27	50	9	--	--	0	0	--	--	--
73-03-19	620	9	--	--	450	20	--	--	--
73-01-11	3400	20	--	--	30	10	--	--	--
73-02-18	2900	9	--	--	140	0	--	--	--
73-02-27	5300	0	--	--	230	10	--	--	--
73-07-28	--	10	--	0	--	10	.1	--	--
73-07-28	--	10	--	0	--	10	.1	--	--
73-07-29	--	40	--	--	--	120	.0	--	--
73-07-29	--	40	--	--	--	120	.0	--	--

DATE OF SAMPLE	DIS- SOLVED ZINC (ZN) (UG/L) (01090)	DIS- SOLVED GROSS ALPHA AS U-NAT. (UG/L) (80030)	DIS- SOLVED GROSS BETA AS CS-137 (PC/L) (03515)	DIS- SOLVED GROSS BETA AS SR90 /Y90 (PC/L) (80050)	DIS- SOLVED RA-226 (RADON METHOD) (PC/L) (09511)	DIS- SOLVED URANIUM (U) (UG/L) (80020)
73-03-27	--	--	--	--	--	--
73-04-10	--	--	--	--	--	--
73-03-28	--	--	--	--	--	--
73-03-29	--	--	--	--	--	--
73-08-30	320	--	--	--	--	--
73-08-30	--	2.6	5.0	4.1	.04	9.7
73-03-28	--	--	--	--	--	--
73-03-27	--	--	--	--	--	--
73-03-19	--	--	--	--	--	--
73-01-11	--	--	--	--	--	--
73-02-18	--	--	--	--	--	--
73-02-27	--	--	--	--	--	--
73-07-28	20	--	--	--	--	--
73-07-28	20	--	--	--	--	--
73-07-29	--	--	--	--	--	--
73-07-29	--	--	--	--	--	--

## QUALITY OF GROUND WATER DATA FOR NEW MEXICO

## DONA ANA COUNTY--Continued

LOCAL IDENTIFI- FIER	STATION NUMBER	DATE OF SAMPLE	TIME	DIS- SOLVED ARSENIC (AS) (UG/L) (01000)	DIS- SOLVED BARIUM (BA) (UG/L) (01005)	DIS- SOLVED BORON (B) (UG/L) (01020)	DIS- SOLVED CAU- MIUM (CU) (UG/L) (01025)	HEXA- VALENT CHROMIUM (CR6) (UG/L) (01032)	DIS- SOLVED COPPER (CU) (UG/L) (01040)
25S.02L.01.133	320946106415101	73-03-28	--	--	--	--	--	--	--
25S.03L.20.112A	320727106394701	73-03-28	--	--	--	--	--	--	--
26S.02L.12.421	320366106411101	73-02-10	--	--	--	--	--	--	--
26S.02L.12.421D	320366106411105	73-02-09	--	--	--	--	--	--	--
26S.03L.03.344D	320405106373105	73-03-16	1200	--	--	--	--	--	--
26S.03L.04.343	320405106383001	73-02-15	1200	--	--	--	--	--	--
26S.03L.09.111	320402106385501	73-07-13	0900	--	--	--	--	--	--
26S.03L.11.111	320403106365301	73-03-28	--	--	--	--	--	--	--

DATE OF SAMPLE	TOTAL IRON (FE) (UG/L) (01045)	DIS- SOLVED IRON (FE) (UG/L) (01046)	TOTAL LEAD (PB) (UG/L) (01051)	DIS- SOLVED LEAD (PB) (UG/L) (01049)	TOTAL MANGANESE (MN) (UG/L) (01055)	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)
73-03-28	160	60	--	--	30	0	--	--	--
73-03-28	8000	270	--	--	210	200	--	--	--
73-02-10	12000	9	--	--	1400	740	--	--	--
73-02-09	370	9	--	--	40	40	--	--	--
73-03-16	770	9	--	--	190	10	--	--	--
73-02-15	3300	40	--	--	330	0	--	--	--
73-07-13	--	20	--	--	--	20	--	--	--
73-03-28	150	60	--	--	10	0	--	--	--

DATE OF SAMPLE	DIS- SOLVED ZINC (ZN) (UG/L) (01090)	DIS- SOLVED GROSS ALPHA AS (UG/L) (80030)	DIS- SOLVED GROSS BETA AS (PC/L) (03515)	DIS- SOLVED GROSS BETA AS SR90 /Y90 (PC/L) (80050)	DIS- SOLVED RA-226 (RADON) METHOD (U) (UG/L) (09511)	DIS- SOLVED URANIUM (U) (UG/L) (80020)
73-03-28	--	--	--	--	--	--
73-03-28	--	--	--	--	--	--
73-02-10	--	--	--	--	--	--
73-02-09	--	--	--	--	--	--
73-03-16	--	--	--	--	--	--
73-02-15	--	--	--	--	--	--
73-07-13	--	--	--	--	--	--
73-03-28	--	--	--	--	--	--

QUALITY OF GROUND WATER DATA FOR NEW MEXICO

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GRANT COUNTY

LOCAL IDENT- IFIER	STATION NUMBER	DATE OF SAMPLE	TIME	GEO- LOGIC UNIT	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)
13S.13W.05.430	331130108120001	73-09-22	1111	1216ILA	52	10	10	25	4.6

DATE OF SAMPLE	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	BICAK- BONATE (HCO3) (MG/L) (00440)	CAN- 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)
73-09-22	60	1.6	140	0	46	34	3.5	.28	.06

DATE OF SAMPLE	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L) (70301)	HARD- NESS (CA+MG) (MG/L) (00900)	NON- CAN- BONATE HARD- NESS (MG/L) (00902)	SODIUM AD- SORP- TION RATIO (00931)	SPE- CIFIC CUN- DUCT- ANCE (MICRO- MHOS) (00995)	PH (UNITS) (00400)	DIS- SOLVED BORON (B) (UG/L) (01020)
73-09-22	297	81	0	2.9	439	7.9	60

LOCAL IDENT- IFIER	STATION NUMBER	DATE OF SAMPLE	TIME	DIS- SOLVED BORON (B) (UG/L) (01020)	TOTAL IRON (FE) (UG/L) (01045)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED MAN- GANESE (MN) (UG/L) (01056)
14S.13W.05.430	331130108120001	73-09-22	1111	60	330	10	10

LOS ALAMOS COUNTY

LOCAL IDENT- IFIER	STATION NUMBER	DATE OF SAMPLE	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)
18N.07E.09.422	354813106114801	73-05-11	--	19	39	<2	<4	28	< 51

DATE OF SAMPLE	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)	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)
73-05-11	<4	<4	<1	<2	<4	12	<4	30	<3	<2	<4

DATE OF SAMPLE	DIS- SOLVED SILVER (AG) (UG/L) (01075)	DIS- SOLVED STRON- TIUM (SR) (UG/L) (01080)	DIS- SOLVED TIN (SN) (UG/L) (01100)	DIS- SOLVED TAN- 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)
73-05-11	<1	79	<4	<4	8	<230	<8

## QUALITY OF GROUND WATER DATA FOR NEW MEXICO

## LUNA COUNTY

LOCAL IDENT- I- FIER	STATION	NUMBER	DATE OF SAMPLE	TIME	GEO- LOGIC UNIT	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)
24S.07W.16.142	321322107335001		73-07-10	1420	110BLSN	15	20	.5	67	2.1
24S.07W.16.434	32124810733501		73-07-10	1440	110BLSN	73	1200	140	980	26
24S.07W.21.22434A	321236107332201		73-07-12	1430	110BLSN	54	77	8.0	200	7.0

DATE OF SAMPLE	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)	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)
73-07-10	119	0	55	15	6.0	.01	239	52	0
73-07-10	423	0	200	250	1.5	12	7180	3600	3200
73-07-12	206	0	230	200	3.1	1.8	889	230	56

DATE OF SAMPLE	SODIUM AD- SORP- TION RATIO (00941)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)
73-07-10	4.0	382	8.1
73-07-10	7.1	9870	7.2
73-07-12	5.8	1420	7.7

## McKINLEY COUNTY

LOCAL IDENT- I- FIER	STATION	NUMBER	DATE OF SAMPLE	TIME	GEO- LOGIC UNIT	DEPTH (FT) (00003)	INSTAN- TANEOUS FLOW INTER- VAL (GPM) (00059)	DEPTH TO TOP OF SAMPLE INTER- VAL (FT) (72015)	DEPTH TO BOT- TOM OF SAMPLE INTER- VAL (FT) (72016)	DIS- SOLVED SILICA (SI02) (MG/L) (00955)
17N.16W.35.414	353926108302801		73-11-13	1000	221WSRC	1533	<1.0	--	--	15
	353926108302802		73-11-13	1100	221WSRC	1700	<1.5	--	--	16
	353926108302803		73-11-13	1500	221WSRC	--	<2000	1500	1800	17
17N.16W.35.4142	353930108302701		73-11-13	1600	221WSRC	1800	<1500	--	--	17

DATE OF SAMPLE	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)	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)
73-11-13	10	0	2.1	.0	120	1.1	223	25	33	4.8	.2	.08
73-11-13	40	0	2.4	.0	110	.7	201	32	32	2.5	.2	.33
73-11-13	20	0	2.2	.3	120	1.4	215	31	45	5.2	.2	.21
73-11-13	20	0	11	8.4	130	1.6	220	21	110	3.6	.3	.18

DATE OF SAMPLE	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)
73-11-13	.03	312	5	0	23	508	9.1
73-11-13	.03	296	6	0	20	493	9.2
73-11-13	.04	329	7	0	20	550	9.2
73-11-13	.03	412	62	0	7.2	663	9.0

## McKINLEY COUNTY--Continued

LOCAL IDENT- I- FLIER			STATION	NUMBER	DATE OF SAMPLE	TIME	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED MAN- GANESE (MN) (UG/L) (01056)
17N.16W.35.414			353926108302801	73-11-13	1000	10	0	
			353926108302802	73-11-13	1100	40	0	
			353926108302803	73-11-13	1500	20	0	
DATE OF SAMPLE	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 (RADON METHOD) (UG/L) (09511)	DIS- SOLVED NATURAL URANIUM (U) (UG/L) (22703)
73-11-13	1070	.8	57	4.4	48	4.1	.62	264
73-11-13	110	<.4	12	.9	9.6	.8	.09	31
73-11-13	2000	3000	150	1100	120	860	8.1	1210

## SANDOVAL COUNTY

LOCAL IDENT- I- FIER	STATION	NUMBER	DATE OF SAMPLE	TIME	GEO- LOGIC UNIT	INSTAN- TANEOUS FLOW RATE (GPM) (00059)	TOTAL DEPTH OF WELL (FT) (72008)	DIS- SOLVED SILICA (SI02) (MG/L) (00955)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED MAN- GANESE (MN) (UG/L) (01056)	
CAN SAN DIEGO GR	354946106384601		73-01-17	1115	325MDER	--	--	45	20	80	
	354618106412602		73-02-21	--	110AVMB	--	--	--	--	--	
			73-02-21	1040	110AVMB	--	--	--	160	170	
	354729106411001		73-02-21	1300	325MDER	--	--	--	52	500	
	354946106384601		73-03-08	--	325MDER	--	--	--	--	--	
	354729106411001		73-03-08	1200	325MDER	--	--	--	--	--	
	354946106384601		73-03-08	1400	325MDER	--	--	--	14	40	
			73-05-17	1535	325MDER	--	--	38	20	20	
	354613106413201		73-05-18	1200	110AVMB	--	--	89	1000	360	
	354946106384601		73-06-07	1525	325MDER	--	--	--	--	--	
			73-06-28	1410	325MDER	--	--	--	--	--	
DATE OF SAMPLE	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NE- SIUM (MG) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED PU- 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)	DIS- SOLVED NITRATE PLUS NITRATE (N) (MG/L) (00631)	DIS- SOLVED ORTHO PHOS- PHORUS (P) (MG/L) (00671)
73-01-17	140	13	390	51	761	0	32	470	4.6	.26	.03
73-02-21	--	--	--	--	--	--	43	880	--	1.0	--
73-02-21	--	--	--	--	--	--	--	--	--	--	--
73-02-21	--	--	--	--	--	--	--	--	--	--	--
73-03-08	--	--	--	--	--	--	30	460	--	1.0	--
73-03-08	--	--	--	--	--	--	40	1500	--	.0	--
73-03-08	--	--	--	--	--	--	--	--	--	--	--
73-05-17	96	8.7	180	26	490	0	38	180	2.5	.3	.18
73-05-18	170	9.2	550	68	800	0	49	800	4.6	1.0	.15
73-06-07	--	--	--	--	--	--	36	230	--	1.0	--
73-06-28	48	10	--	--	--	--	34	290	--	1.0	--
DATE OF SAMPLE	DIS- SOLVED SULFUR (SUM OF CONSTITU- TENTS) (MG/L) (70301)	HARD- NESS (CA+MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AU- 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)		
73-01-17	1520	400	0	8.5	2540	6.7	19.0	--	710		
73-02-21	--	--	--	--	--	--	71.0	--	6100		
73-02-21	--	--	--	--	--	--	--	--	6500		
73-02-21	--	--	--	--	--	--	--	--	13000		
73-03-08	--	--	--	--	2300	--	18.5	--	3300		
73-03-08	--	--	--	--	--	--	46.0	--	14000		
73-03-08	--	--	--	--	--	--	--	--	3900		
73-05-17	814	280	0	4.7	1360	6.9	18.4	--	1700		
73-05-18	2140	460	0	11	3550	6.7	49.0	--	6500		
73-06-07	--	--	--	--	--	--	18.5	--	2200		
73-06-28	--	160	--	--	1770	--	18.0	--	2500		



## QUALITY OF GROUND WATER DATA FOR NEW MEXICO

## SANDOVAL COUNTY--Continued

LOCAL IDENT- IFIER	STATION NUMBER	DATE OF SAMPLE	TIME	GEO- LOGIC UNIT	INSTAN- TANEOUS FLOW RATE (GPM) (00059)	TOTAL DEPTH OF WELL (FT) (72008)	DIS- SOLVED SILICA (SI02) (MG/L) (00955)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED MAN- GANESE (MN) (UG/L) (01056)
CAN SAN DIEGO GR	354729106411001	73-06-29	0900	325MDCR	--	--	--	--	--
15N.01E.10.310	354946106384601	73-08-15	1400	325MDCR	--	--	42	60	20
	353236106494901	73-05-02	--	110AVMB	--	--	--	3000	450
		73-05-02	1200	231CHNL	--	--	17	800	740
16N.01E.03.441	353632106490401	73-05-23	1515	318ABO L	--	--	32	30	0
16N.01E.05.244	353649106505701	73-05-23	1430	400PCRB	--	--	26	60	20
16N.01E.06.121	353906106521501	73-10-02	1230	231CHNL	--	--	20	0	13
16N.01E.25.244	353517106463601	73-09-05	0830	231CHNL	2.0	--	9.6	15000	260
16N.01W.01.421	353644106531901	73-06-05	1100	231CHNL	85	--	30	1400	90
		73-06-06	1120	110AVMB	--	--	--	850	28
16N.01W.29.230	353528106573601	73-06-05	1430	210FNCR	2.0	--	3.7	30	20
16N.02E.07.423	353743106454601	73-05-24	1120	325MDCR	--	--	24	40	0
16N.02E.10.424	353744106422901	73-05-24	1445	231CHNL	--	--	15	30	70
16N.02E.11.234	353757106413901	73-05-25	1040	231CHNL	--	--	12	90	80
16N.02E.16.411	353700106435701	73-08-30	0915	110AVMB	--	--	54	540	750
16N.02E.18.214	353750106455401	73-05-24	1230	318ABO L	--	--	35	400	210
16N.02E.20.332	353552106453301	73-05-24	1015	231CHNL	--	--	13	1500	340
16N.02E.29.142	353529106450701	73-08-30	0930	110AVMB	--	--	68	50	1300
16N.02E.30.313	353510106463501	73-09-05	0940	110AVMB	--	--	15	80	630

DATE OF SAMPLE	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NE- SIUM (MG) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED POT- 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)	DIS- SOLVED BROMIDE (BR) (MG/L) (71870)	DIS- SOLVED NITRATE PLUS NITRATE (N) (MG/L) (00631)	DIS- SOLVED ORTHO PHOS- PHORUS (P) (MG/L) (00671)
73-06-29	--	--	--	--	--	--	43	1500	--	9	--	--
73-08-15	130	12	250	35	606	0	32	320	2.3	--	11	03
73-05-02	--	--	--	--	--	--	--	--	--	--	--	--
73-05-02	300	68	2000	81	1970	0	1300	1900	2.7	8.0	09	07
73-05-23	96	15	24	1.7	331	0	72	11	3.0	2	04	02
73-05-23	57	13	28	2.6	217	0	63	9.3	3.1	2	06	03
73-10-02	77	26	100	5.5	335	0	120	82	2.0	4	13	06
73-09-05	210	37	310	14	171	0	990	160	4.0	--	02	02
73-06-05	380	61	3500	88	1410	0	3300	3100	3.4	8.1	02	11
73-06-06	--	--	--	--	--	--	--	--	--	--	--	--
73-06-05	120	9.0	2400	6.6	241	11	4500	580	2.9	4	08	01
73-05-24	88	12	69	4.1	338	0	55	60	1.8	2	11	02
73-05-24	60	11	520	41	788	0	220	290	17	1.0	00	02
73-05-25	21	4.0	87	12	281	0	38	7.2	3.1	3	01	01
73-08-30	73	15	120	15	419	0	40	100	1.3	--	00	05
73-05-24	100	15	120	7.3	416	0	91	96	3.0	6	00	02
73-05-24	110	18	1400	63	1320	0	470	1400	8.6	5.0	00	03
73-08-30	110	21	1500	73	1440	0	270	1200	4.0	5.0	00	11
73-09-05	270	62	420	26	594	0	850	410	3.4	4	02	04

DATE OF SAMPLE	DIS- SOLVED SODIUM (SUM OF CONSTI- TUENTS) (MG/L) (70301)	HARD- NESS (CA+MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AU- SORP- TION RATIO (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHO) (00095)	PH	TEMPER- ATURE (DEG C) (00010)	DENSITY (GM/ML AT 20 C) (71820)	DIS- SOLVED BORON (B) (UG/L) (01020)
73-06-29	--	--	--	--	6500	--	46.0	--	13000
73-08-15	1130	370	0	5.6	1880	6.8	16.0	--	2900
73-05-02	--	--	--	--	--	--	--	--	13000
73-05-02	6650	1000	0	27	9930	6.5	17.0	--	20
73-05-23	418	300	30	6	651	7.6	12.0	--	20
73-05-23	310	200	18	9	487	7.6	15.5	--	50
73-10-02	599	300	25	2.5	960	7.9	26.0	--	290
73-09-05	1840	680	540	5.2	2440	6.4	15.5	--	--
73-06-05	11100	1100	0	45	15700	6.8	52.0	1.007	7500
73-06-06	--	--	--	--	--	--	52.0	--	2600
73-06-05	7760	350	130	57	10100	8.5	21.0	1.005	1800
73-05-24	482	270	0	1.8	788	7.3	16.0	--	170
73-05-24	1570	200	0	16	2550	7.6	25.0	--	3300
73-05-25	324	69	0	4.6	527	7.7	14.0	--	670
73-08-30	628	240	0	3.3	1014	8.0	20.0	--	900
73-05-24	674	310	0	3.0	1070	7.0	19.0	--	320
73-05-24	4150	360	0	33	6420	6.4	15.0	--	5800
73-08-30	3780	360	0	30	5694	8.0	23.0	--	8200
73-09-05	2350	930	440	6.0	3190	7.0	19.0	--	1200

## SANDOVAL COUNTY--Continued

LOCAL IDENTIFIER FILE	STATION NUMBER	DATE OF SAMPLE	TIME	GEO-LOGIC UNIT	INSTANTANEOUS FLOW RATE (GPM) (00059)	TOTAL DEPTH OF WELL (FT) (72008)	DIS-SOLVED SILICA (SI02) (MG/L) (00955)	DIS-SOLVED IRON (FE) (UG/L) (01046)	DIS-SOLVED MANGANESE (MANG) (UG/L) (01056)			
16N.03E.29.344	353454106384701	73-06-08	1015	122SNTFL	--	--	33	20	0			
17N.01E.13.322	354209106471601	73-08-31	1230	318ABO L	--	--	--	--	--			
17N.01E.23.223	354140106475701	73-08-31	0950	318ABO L	--	--	30	60	10			
17N.02E.06.221	354409106455201	73-11-02	1230	400PCMB	--	--	25	60	250			
17N.02E.21.144	354113106441401	73-10-05	1130	110AVMB	--	--	53	90	80			
	354113106441001	73-10-26	1200	318ABO L	--	--	9.6	60	10			
17N.02E.29.311	354019106455301	73-08-21	1610	325PDER	--	--	44	140	80			
17N.02E.36.433	353916106404701	73-06-06	1435	231CHNL	E2.0	--	38	450	380			
17N.03E.16.244	354213106372601	73-10-02	1530	000EXRV	--	--	72	20	8			
17N.03E.24.113	354043106350801	73-09-18	1215	000EXRV	--	--	56	60	0			
	354329106332401	73-09-18	1430	000EXRV	--	--	55	20	130			
17N.04E.06.443	354246106321201	73-08-28	1100	000EXRV	--	--	53	30	70			
17N.04E.29.133	354030106325701	73-08-28	1315	000EXRV	--	--	64	10	0			
18N.01E.01.321	354902106471401	73-10-30	1100	325PDER	--	--	16	10	10			
18N.01E.13.234	354726106465301	73-11-30	1415	112BCLR	--	--	21	20	0			
	354610106464501	73-11-30	1330	112BCLR	--	--	56	60	0			
18N.02E.12.340	354805106405301	73-06-01	--	110AVMB	--	--	--	--	--			
	354808106405001	73-06-21	1500	325PDER	--	--	55	9	20			
18N.02E.26.334	354522106420001	73-10-26	1715	318ABO L	--	--	17	30	60			
18N.02E.34.232	354506106423201	73-09-27	1100	110AVMB	--	--	59	30	0			
DATE OF SAMPLE	DIS-SOLVED CALCIUM (CA) (MG/L) (00915)	DIS-SOLVED MAGNESIUM (MG) (MG/L) (00925)	DIS-SOLVED SODIUM (NA) (MG/L) (00930)	DIS-SOLVED POTASSIUM (K) (MG/L) (00935)	BICARBONATE (HCO3) (MG/L) (00440)	CARBONATE (CO3) (MG/L) (00445)	DIS-SOLVED SULFATE (SO4) (MG/L) (00945)	DIS-SOLVED CHLORIDE (CL) (MG/L) (00940)	DIS-SOLVED FLUORIDE (F) (MG/L) (00950)	BROMIDE (BR) (MG/L) (71670)	DIS-SOLVED NITRATE PLUS NITRITE (N) (MG/L) (00631)	DIS-SOLVED URTHIO. PHOSPHORUS (P) (MG/L) (00271)
73-06-08	31	4.0	46	3.3	211	0	20	3.0	.4	.0	.11	.02
73-06-31	--	--	--	--	--	--	--	--	--	.1	--	--
73-06-31	85	15	11	2.0	326	0	26	4.4	.8	--	.00	.05
73-11-02	50	9.9	38	4.9	263	0	25	5.9	2.6	.0	.05	.07
73-10-05	78	14	120	16	362	0	52	130	1.3	.7	.01	.16
	7.2	2.7	790	7.4	1470	13	97	300	6.2	.8	.02	.12
73-10-26	32	5.7	190	8.2	366	0	120	49	7.6	.2	.00	.04
73-06-06	63	14	37	3.7	216	0	87	11	1.2	.2	.01	.02
73-10-02	27	5.8	14	2.1	129	0	9.8	7.9	.4	.0	.44	.15
73-09-18	19	5.9	7.3	5.9	91	0	17	2.4	.1	--	.00	.27
	18	5.1	7.5	7.0	79	0	16	3.6	.1	--	.03	.42
73-08-28	20	5.9	7.0	5.5	88	0	22	3.7	.1	--	.11	.10
73-08-28	15	4.2	13	1.8	97	0	4.9	2.5	.1	.0	.24	.12
73-10-30	100	11	14	5.8	367	0	21	13	.3	.1	.56	.10
73-11-30	66	4.6	9.1	1.6	238	0	6.5	2.4	.2	.0	.21	.05
	28	3.2	11	1.6	116	0	7.3	3.7	.5	.0	.69	.13
73-06-01	--	--	--	--	--	--	--	13	--	.0	--	--
73-06-21	180	34	75	8.9	844	0	71	14	1.2	.1	.00	.03
73-10-26	12	10	860	8.5	1640	0	250	200	2.4	--	.03	.10
73-09-27	75	13	120	19	387	0	21	120	1.6	.3	.76	.21
DATE OF SAMPLE	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L) (70301)	HARDNESS (CA+MG) (MG/L) (00900)	NON-CARBONATE HARDNESS (MG/L) (00902)	SODIUM ADSORPTION RATIO (00941)	SPECIFIC CONDUCTANCE (MICRO-MHOS) (00095)	PH (UNITS) (00400)	TEMPERATURE (DEG C) (00010)	DENSITY (GM/ML AT 20 C) (71820)	DIS-SOLVED BORON (B) (UG/L) (01020)			
73-06-08	245	94	0	2.1	367	7.5	--	--	50			
73-08-31	--	--	--	--	--	--	15.0	--	40			
73-08-31	335	270	7	.3	549	8.0	14.0	--	--			
73-11-02	292	170	0	1.3	472	8.2	13.0	--	210			
73-10-05	647	250	0	3.3	1090	7.5	28.0	--	1300			
	1960	29	0	64	3200	8.4	16.0	--	1100			
73-08-21	638	100	0	8.1	984	8.0	19.0	--	380			
73-06-06	364	220	36	1.1	571	7.4	18.0	--	60			
73-10-02	205	91	0	.6	241	7.6	15.0	--	20			
73-09-18	159	72	0	.4	182	6.8	12.0	--	--			
	153	66	1	.4	179	6.7	15.0	--	--			
73-08-28	161	74	2	.4	194	7.5	10.5	--	--			
73-08-28	155	55	0	.8	161	7.6	13.0	--	10			
73-10-30	365	300	0	.4	636	7.2	10.5	--	60			
73-11-30	230	180	0	.3	383	7.7	12.5	--	10			
	172	83	0	.5	212	8.2	15.0	--	10			
73-06-01	--	--	--	--	598	--	--	--	--			
73-06-21	856	590	0	1.3	1330	7.2	16.0	--	180			
73-10-26	2170	71	0	44	3210	7.6	16.5	--	--			
73-09-27	626	240	0	3.4	1030	7.5	17.5	--	1200			

## QUALITY OF GROUND WATER DATA FOR NEW MEXICO

## SANDOVAL COUNTY--Continued

LOCAL IDENTI- FIER	STATION	NUMBER	DATE OF SAMPLE	TIME	GEO- LOGIC UNIT	INSTAN- TANEOUS FLOW RATE (GPM) (00059)	TOTAL DEPTH OF WELL (FT) (72008)	DIS- SOLVED SILICA (MG/L) (S102) (00955)	DIS- SOLVED IRON (MG/L) (FE) (01046)	DIS- SOLVED MANGANESE (MG/L) (MN) (01056)
18N.03E.04.321	354912106373601		73-01-16	1400	112VLLS	--	--	56	20	0
			73-03-14	1300	110AVMB	--	--	--	<3	<2
18N.03E.06.321	354816106404901		73-07-13	1345	325MDER	--	--	54	30	10
18N.03E.22.412	354636106361301		73-09-18	1710	000EXRV	--	--	57	110	0
19N.03E.17.431	355226106383101		73-08-14	1230	112BLSP	--	--	63	980	350
			73-08-14	1240	112BLSP	--	--	--	--	--
			73-10-12	0901	112BLSP	--	--	29	--	--
19N.03E.20.331	355130106390201		73-05-31	1525	112BDLR	--	--	58	140	0
19N.03E.29.342	355049106380901		73-06-29	1500	318ABO L	--	--	25	10	0
19N.03E.29.413	355048106382401		73-07-03	1130	318ABO L	--	--	23	100	20
19N.03E.32.324	354952106383401		73-05-25	1335	325MDER	--	--	17	20	0
19N.03E.32.331	354949106385701		73-09-24	1500	318ABO L	--	--	24	30	0
	354949106385601		73-10-24	0800	325MDER	--	155	37	430	880
20N.02E.27.222	355634106421401		73-02-13	1215	112BDLR	--	--	--	21	<2
			73-05-22	1545	112BDLR	--	--	34	260	0
			73-06-28	1036	112BDLR	--	--	--	--	--
20N.03E.29.123	355623106383601		73-05-16	1610	112VLLS	--	--	76	160	0

DATE OF SAMPLE	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NE- SIUM (MG) (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)	DIS- SOLVED BROMIDE (BR) (MG/L) (71870)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	DIS- SOLVED ORTHO- PHOS- PHORUS (P) (MG/L) (00671)
73-01-16	8.7	4.7	19	.9	94	0	6.6	3.8	1.0	--	.42	.05
73-03-14	--	--	--	--	--	--	--	--	--	--	--	--
73-07-13	250	23	67	6.1	937	0	76	12	1.0	.1	.06	.04
73-09-18	18	4.8	9.6	7.8	98	0	12	2.6	.1	.0	.00	.24
73-08-14	32	9.1	170	6.9	604	0	11	5.5	1.2	--	.00	.25
73-08-14	--	--	--	--	--	--	--	--	--	.0	--	--
73-10-12	--	--	--	--	--	--	--	--	--	--	--	--
73-05-31	16	3.7	8.4	6.0	39	0	33	3.4	.4	.0	.58	.14
73-06-29	12	4.7	360	4.6	905	13	59	5.7	2.2	.0	.00	.02
73-07-03	9.8	6.2	470	4.9	1150	25	35	6.6	3.2	.0	1.1	.03
73-05-25	35	46	840	45	1810	0	280	330	6.5	1.0	.02	.02
73-09-24	19	44	720	66	1550	154	150	120	9.1	.3	.01	.09
73-10-24	210	59	570	34	1530	0	290	300	1.6	1.1	.02	.20
73-02-13	--	--	--	--	--	--	--	--	--	--	--	--
73-05-22	13	1.6	8.1	2.2	54	0	10	2.1	.4	.0	.21	.03
73-06-28	--	--	--	--	--	--	7.3	--	--	--	--	--
73-05-16	4.7	.3	23	2.0	61	0	8.8	2.3	.8	.0	.37	.07

DATE OF SAMPLE	DIS- SOLVED SULFATE (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 (00941)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH	TEMPER- ATURE (DEG C) (00010)	DENSITY (GM/ML AT 20 C) (71820)	DIS- SOLVED BORON (B) (MG/L) (01020)
73-01-16	149	41	0	1.3	165	8.0	.0	--	20
73-03-14	--	--	--	--	--	--	--	--	43
73-07-13	952	720	0	1.1	1430	6.6	15.5	--	140
73-09-18	161	65	0	.5	187	7.1	10.0	--	20
73-08-14	599	120	0	6.8	912	7.5	20.0	--	640
73-08-14	--	--	--	--	--	--	20.0	--	--
73-10-12	--	--	--	--	--	--	20.0	--	--
73-05-31	151	55	23	.5	166	7.9	8.5	--	70
73-06-29	933	49	0	22	1470	8.5	17.0	--	490
73-07-03	1160	50	0	29	1780	8.4	21.0	--	750
73-05-25	2500	280	0	22	3660	8.2	14.0	--	4000
73-09-24	2080	230	0	21	3290	8.5	17.0	--	4300
73-10-24	2260	770	0	9.0	3250	6.8	15.0	--	2400
73-02-13	--	--	--	--	--	--	--	--	13
73-05-22	99	39	0	.6	109	7.4	13.0	--	20
73-06-28	--	--	--	--	101	--	13.0	--	--
73-05-16	150	13	0	2.8	122	7.7	40.5	--	40

## SANDOVAL COUNTY--Continued

LOCAL IDENT- I- FIELD	STATION	NUMBER	DATE OF SAMPLE	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)
CAN SAN DIEGO GR	354618106412602	73-02-21	--	--	--	720	--	--	--	6100
		73-02-21	1040	--	130	--	180	0	<1	6500
	354729106411001	73-02-21	1300	--	110	--	340	2	<1	13000
	354946106384601	73-03-08	--	--	--	3	--	--	--	3300
	354729106411001	73-03-08	1200	--	--	1100	--	--	--	14000
	354946106384601	73-03-08	1400	--	86	--	110	<1	<1	3900
		73-05-17	1535	--	--	0	--	--	--	1700
	354613106413201	73-05-18	1200	--	--	550	--	--	--	6500
	354946106384601	73-06-07	1525	--	--	6	--	--	--	2200
		73-08-15	1400	--	--	0	--	--	--	2900
	353238106494901	73-05-02	--	--	650	--	<210	21	<2	13000
		73-05-02	1200	--	--	210	--	--	--	20
15N.01E.10.310		73-05-23	1515	--	--	0	--	--	--	20
16N.01E.03.441	353832106490401	73-05-23	1430	--	--	3	--	--	--	50
16N.01E.05.244	353849106505701	73-10-02	1230	--	--	2	--	--	--	290
16N.01E.06.121	353906106521501	73-09-05	0830	--	--	2	--	--	--	--
16N.01E.25.244	353517106463601	73-06-05	1100	--	--	360	--	--	--	7500
16N.01W.01.421	353844106531901	73-06-06	1120	--	1400	--	<35	<1	<1	2600
16N.01W.29.230	353528106573601	73-06-05	1430	--	100	0	<25	<1	<1	1800
16N.02E.07.423	353743106454801	73-05-24	1120	--	--	0	--	--	--	170

DATE OF SAMPLE	DIS- SOLVED CAU- MIUM (CU) (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)	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)
73-02-21	--	--	--	--	--	--	--	--	--	--	--	--
73-02-21	<10	<1	<1	<8	<16	<34	160	<3	83000	170	<1	<2
73-02-21	<10	1	<1	<13	<27	<58	52	<3	110000	500	<1	<2
73-03-08	--	--	--	--	--	--	--	--	--	--	--	--
73-03-08	--	--	--	--	--	--	--	--	--	--	--	--
73-03-08	<10	<1	<1	<6	<11	<24	14	<3	42000	40	2	<2
73-05-17	--	--	--	--	--	--	20	--	--	20	--	--
73-05-18	--	--	--	--	--	--	1000	--	--	360	--	--
73-06-07	--	--	--	--	--	--	--	--	--	--	--	--
73-08-15	--	--	--	--	--	--	60	--	--	20	--	--
73-05-02	<10	<3	<17	20	<44	<95	3000	2	7500	450	<2	<56
73-05-02	--	--	--	--	--	--	800	--	--	740	--	--
73-05-23	--	--	--	--	--	--	30	--	--	0	--	--
73-05-23	--	--	--	--	--	--	60	--	--	20	--	--
73-10-02	--	--	--	--	--	--	0	--	210	13	--	--
73-09-05	--	--	--	--	--	--	15000	--	640	260	--	--
73-06-05	--	--	--	--	--	--	1400	--	--	90	--	--
73-06-06	<12	<2	<2	<27	<70	<170	850	<3	>740	28	<7	<3
73-06-05	<12	<1	<1	<25	<50	<130	30	<3	1200	20	11	<2
73-05-24	--	--	--	--	--	--	40	--	--	0	--	--

DATE OF SAMPLE	DIS- SOLVED SILVER (AG) (UG/L) (01075)	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)
73-02-21	--	--	--	--	--	--	--
73-02-21	<1	870	<34	<5	<34	<22	<1
73-02-21	<1	2200	<58	<5	<58	<22	<1
73-03-08	--	--	--	--	--	--	--
73-03-08	--	--	--	--	--	--	--
73-03-08	<1	1200	<24	<5	<24	<22	<1
73-05-17	--	--	--	--	--	--	--
73-05-18	--	--	--	--	--	--	--
73-06-07	--	--	--	--	--	--	--
73-08-15	--	--	--	--	--	--	--
73-05-02	<3	7600	<95	<26	--	<560	<13
73-05-02	--	--	--	--	--	--	--
73-05-23	--	--	--	--	--	--	--
73-05-23	--	--	--	--	--	--	--
73-10-02	--	--	--	--	--	--	--
73-09-05	--	--	--	--	--	--	--
73-06-05	--	--	--	--	--	--	--
73-06-06	<2	10000	<170	<2	<35	<25	<3
73-06-05	<1	8500	<130	2	<25	<25	3
73-05-24	--	--	--	--	--	--	--

## QUALITY OF GROUND WATER DATA FOR NEW MEXICO

## SANDOVAL COUNTY--Continued

LOCAL WELL- 1- FIELD	STATION NUMBER	DATE OF SAMPLE	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)
16N.02E.10.424	353744106422901	73-05-24	1445	--	20	--	--	--	3300
16N.02E.11.234	353757106413901	73-05-25	1040	--	43	--	--	--	670
16N.02E.16.411	353700106435701	73-08-30	0915	--	17	--	--	--	900
16N.02E.18.214	353750106455401	73-05-24	1230	--	8	--	--	--	320
16N.02E.20.332	353552106453301	73-05-24	1015	130	86	<15	1	<1	5800
16N.02E.29.142	353529106450701	73-08-30	0930	--	69	--	--	--	8200
16N.02E.30.313	353510106463501	73-09-05	0940	--	5	--	--	--	1200
16N.03E.29.344	353454106384701	73-06-08	1015	--	15	--	--	--	50
17N.01E.13.322	354209106471801	73-08-31	1230	--	0	--	--	--	40
17N.02E.06.221	354409106455201	73-11-02	1230	--	0	--	--	--	210
17N.02E.21.144	354113106441401	73-10-05	1130	--	68	--	--	--	1300
	354113106441001	73-10-26	1200	--	4	--	--	--	1100
17N.02E.29.311	354019106455301	73-08-21	1610	--	67	--	--	--	380
17N.02E.36.433	353916106404701	73-06-06	1435	--	1	--	--	--	60
17N.03E.16.244	354213106372601	73-10-02	1530	--	5	--	--	--	20
17N.04E.29.133	354030106325701	73-08-28	1315	--	1	--	--	--	10
18N.01E.01.321	354902106471401	73-10-30	1100	--	0	--	--	--	60
18N.01E.13.234	354726106465301	73-11-30	1415	--	2	--	--	--	10
18N.01E.24.443	354610106464501	73-11-30	1330	--	0	--	--	--	10
18N.02E.12.340	354808106405001	73-06-21	1500	--	5	--	--	--	180

DATE OF SAMPLE	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)	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)
73-05-24	--	--	--	--	--	--	30	--	--	70	--	--
73-05-25	--	--	--	--	--	--	90	--	--	80	--	--
73-08-30	--	--	--	--	--	--	540	--	890	750	--	--
73-05-24	--	--	--	--	--	--	400	--	--	210	--	--
73-05-24	<11	<1	1	<15	<25	<65	1500	<3	>2800	340	9	<2
73-08-30	--	--	--	--	--	--	50	--	6700	1300	--	--
73-09-05	--	--	--	--	--	--	80	--	1100	630	--	--
73-06-08	--	--	--	--	--	--	20	--	--	0	--	--
73-08-31	--	--	--	--	--	--	--	--	50	--	--	--
73-11-02	--	--	--	--	--	--	60	--	140	250	--	--
73-10-05	--	--	--	--	--	--	90	--	1500	80	--	--
73-10-26	--	--	--	--	--	--	60	--	200	10	--	--
73-08-21	--	--	--	--	--	--	140	--	--	80	--	--
73-06-06	--	--	--	--	--	--	450	--	--	380	--	--
73-10-02	--	--	--	--	--	--	20	--	10	8	--	--
73-08-28	--	--	--	--	--	--	10	--	10	0	--	--
73-10-30	--	--	--	--	--	--	10	--	60	10	--	--
73-11-30	--	--	--	--	--	--	20	--	20	0	--	--
73-11-30	--	--	--	--	--	--	80	--	30	0	--	--
73-06-21	--	--	--	--	--	--	9	--	--	20	--	--

DATE OF SAMPLE	DIS- SOLVED SILVER (AG) (UG/L) (01075)	DIS- SOLVED STRON- TIUM (SR) (UG/L) (01080)	DIS- SOLVED TIN (SN) (UG/L) (01100)	DIS- SOLVED TAN- 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)
73-05-24	--	--	--	--	--	--	--
73-05-25	--	--	--	--	--	--	--
73-08-30	--	--	--	--	--	--	--
73-05-24	--	--	--	--	--	--	--
73-05-24	<1	6000	<65	1	<40	<22	8
73-08-30	--	--	--	--	--	--	--
73-09-05	--	--	--	--	--	--	--
73-06-08	--	--	--	--	--	--	--
73-08-31	--	--	--	--	--	--	--
73-11-02	--	--	--	--	--	--	--
73-10-05	--	--	--	--	--	--	--
73-10-26	--	--	--	--	--	--	--
73-08-21	--	--	--	--	--	--	--
73-06-06	--	--	--	--	--	--	--
73-10-02	--	--	--	--	--	--	--
73-08-28	--	--	--	--	--	--	--
73-10-30	--	--	--	--	--	--	--
73-11-30	--	--	--	--	--	--	--
73-11-30	--	--	--	--	--	--	--
73-06-21	--	--	--	--	--	--	--



## SANDOVAL COUNTY--Continued

LOCAL IDENT- I- FICR	STATION	NUMBER	DATE OF SAMPLE	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 (BL) (UG/L) (01010)	DIS- SOLVED BISMUTH (BI) (UG/L) (01015)	DIS- SOLVED BORON (B) (UG/L) (01020)
18N.02E.34.232	354508106423201	73-09-27	1100	--	150	--	--	--	--	1200
18N.03E.04.321	354912106373601	73-03-14	1300	20	--	<6	<1	<3	--	43
18N.03E.06.321	354816106404901	73-07-13	1345	--	4	--	--	--	--	140
18N.03E.22.412	354646106361301	73-09-18	1710	--	1	--	--	--	--	20
19N.03E.17.431	355226106383101	73-08-14	1230	--	0	--	--	--	--	640
		73-08-14	1240	--	--	--	--	--	--	--
19N.03E.20.331	355130106390201	73-05-31	1525	--	0	--	--	--	--	70
19N.03E.28.143	355058106374201	73-03-15	1410	42	--	<10	<2	<5	--	160
19N.03E.29.342	355049106388901	73-06-29	1500	--	8	--	--	--	--	490
19N.03E.29.413	355048106382401	73-07-03	1130	--	6	--	--	--	--	750
19N.03E.32.324	354952106383401	73-05-25	1335	--	4	--	--	--	--	4000
19N.03E.32.331	354949106385701	73-09-24	1500	--	9	--	--	--	--	4300
	354949106385601	73-10-24	0800	--	63	--	--	--	--	2400
20N.02E.27.222	355634106421401	73-02-13	1215	46	--	15	<1	<2	--	13
		73-05-22	1545	--	4	--	--	--	--	20
20N.03E.29.123	355623106383601	73-05-16	1610	--	3	--	--	--	--	40

DATE OF SAMPLE	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)	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)
73-09-27	--	--	--	--	--	--	30	--	1400	0	--	--
73-03-14	<42	<3	<3	<1	<2	<3	<3	<3	600	<2	18	<3
73-07-13	--	--	--	--	--	--	30	--	--	10	--	--
73-09-18	--	--	--	--	--	--	110	--	0	0	--	--
73-08-14	--	--	--	--	--	--	980	--	140	350	--	--
73-08-14	--	--	--	--	--	--	--	--	140	--	--	--
73-05-31	--	--	--	--	--	--	140	--	--	0	--	--
73-03-15	<65	<5	<5	<1	<2	<5	<5	<5	1000	<3	35	<5
73-06-29	--	--	--	--	--	--	10	--	--	0	--	--
73-07-03	--	--	--	--	--	--	100	--	--	20	--	--
73-05-25	--	--	--	--	--	--	20	--	--	0	--	--
73-09-24	--	--	--	--	--	--	30	--	2200	0	--	--
73-10-24	--	--	--	--	--	--	430	--	2100	880	--	--
73-02-13	<27	<2	<2	<1	<1	<2	21	<2	<10	<2	<1	<2
73-05-22	--	--	--	--	--	--	260	--	--	0	--	--
73-05-16	--	--	--	--	--	--	160	--	--	0	--	--

DATE OF SAMPLE	DIS- SOLVED SILVER (AG) (UG/L) (01075)	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)
73-09-27	--	--	--	--	--	--	--
73-03-14	<1	28	<3	<3	4.0	<190	<6
73-07-13	--	--	--	--	--	--	--
73-09-18	--	--	--	--	--	--	--
73-08-14	--	--	--	--	--	--	--
73-08-14	--	--	--	--	--	--	--
73-05-31	--	--	--	--	--	--	--
73-03-15	<1	40	<5	<5	<5	<300	<10
73-06-29	--	--	--	--	--	--	--
73-07-03	--	--	--	--	--	--	--
73-05-25	--	--	--	--	--	--	--
73-09-24	--	--	--	--	--	--	--
73-10-24	--	--	--	--	--	--	--
73-02-13	<1	56	<2	<2	<2.0	<120	<4
73-05-22	--	--	--	--	--	--	--
73-05-16	--	--	--	--	--	--	--



## QUALITY OF GROUND WATER DATA FOR NEW MEXICO

## SAN JUAN COUNTY

LOCAL IDENT- I- FIER	STATION	NUMBER	DATE OF SAMPLE	TIME	GEO- LOGIC UNIT	ELEV. OF LAND SURFACE DATUM (FT. ABOVE MSL) (72000)	TOTAL DEPTH OF HOLE (FT. BELOW LSD) (72001)	DEPTH BELOW LAND SURFACE (FT) (72019)	DIS- SOLVED SILICA (SI02) (MG/L) (00955)	DIS- SOLVED IRON (FE) (UG/L) (01046)
23N.14W.03.130	361526108192201	73-09-24	1430	221WSRC	7546	5200	702	43	10	

DATE OF SAMPLE	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)	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)
73-09-24	16	39	.5	250	2.5	166	0	490	17	1.0	.03	.14

DATE OF SAMPLE	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)
73-09-24	925	99	0	11	1390	8.1	61.0

LOCAL IDENT- 1- FIER	STATION	NUMBER	DATE OF SAMPLE	TIME	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED MAN- GANESE (MN) (UG/L) (01056)
23N.14W.03.130	361528108192201	73-09-24	1430	10	16	

DATE OF SAMPLE	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 KA-226 (RADON METHOD) (PC/L) (09511)	DIS- SOLVED URANIUM (U) (UG/L) (80020)
73-09-24	<.3	<.4	3.9	<.4	4.8	<.4	.24	.07

## SANTA FE COUNTY

LOCAL IDENT- IFIER	STATION	NUMBER	DATE OF SAMPLE	TIME	GEO- LOGIC UNIT	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)
17N.08E.01.2124	354444106024401	73-12-20	1600	112SNTF	23	20	0	51	6.6	

DATE OF SAMPLE	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)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	DIS- SOLVED ORTHO PHOS- PHORUS (P) (MG/L) (00671)
73-12-20	23	2.6	160	0	22	8.2	.5	13	.05

DATE OF SAMPLE	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)
73-12-20	274	150	23	.8	423	7.8

## QUALITY OF GROUND WATER DATA FOR NEW MEXICO

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## TAOS COUNTY

LOCAL IDENT- IFIER	STATION	NUMBER	DATE OF SAMPLE	TIME	GEO- LOGIC UNIT	DEPTH (FT) (00003)	INSTAN- TANEOUS FLOW RATE (GPM) (00059)	TOTAL DEPTH OF HOLE (FT. BELOW LSD) (72001)	PUMP OR FLOW PERIOD PRIOR TO SAM- PLING (MIN) (72004)	TOTAL DEPTH OF WELL (FT) (72008)
MARTINEZ GODI GR	362731105362201		73-11-15	1500	110AVMB	450	500	450	330	450
25N.13E.08.211	362531105343201		73-12-12	1800	112SNTFU	--	--	--	--	--
30N.13E.18.122	365047105354601		73-11-14	1030	110AVMB	500	3.0	500	60	500
30N.13E.31.111	364759105360701		73-11-21	1800	110AVMB	--	--	500	--	--

DATE OF SAMPLE	DEPTH TO TOP OF SAMPLE INTER- VAL (FT) (72015)	DEPTH TO BOT- TOM OF SAMPLE INTER- VAL (FT) (72016)	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)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)
73-11-15	100	450	24	40	10	23	4.6	10	.8	101	0	10
73-12-12	--	--	21	30	10	25	3.8	10	.8	109	0	7.6
73-11-14	100	500	16	280	60	13	3.3	4.4	.6	62	0	2.7
73-11-21	100	500	25	170	30	13	2.8	7.1	.7	64	0	2.8

DATE OF SAMPLE	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED NITRIE PLUS NITRAIE (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 TOLUENTS) (MG/L) (70301)	HARD- NESS (CA, MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AD- SORP- TION RATIO (00931)
73-11-15	2.3	.3	.64	.07	124	128	76	0	.5
73-12-12	.9	.1	.18	.00	127	124	78	0	.5
73-11-14	.6	.2	.37	.04	72	73	46	0	.3
73-11-21	1.4	.4	.30	.08	77	87	44	0	.5

DATE OF SAMPLE	SPL- CLIC CON- DUCT- ANCE (MICRO- MHUS) (00095)	PH (UNITS) (00400)	TOTAL ORGANIC CARBON (C) (MG/L) (00680)	DIS- SOLVED BORON (B) (UG/L) (01020)
73-11-15	194	7.8	4.5	10
73-12-12	192	7.8	.0	1
73-11-14	108	8.4	4.4	0
73-11-21	109	7.7	1.0	7

LOCAL IDENT- IFIER	STATION	NUMBER	DATE OF SAMPLE	TIME	DIS- SOLVED ARSENIC (AS) (UG/L) (01000)	DIS- SOLVED BARIUM (BA) (UG/L) (01005)	DIS- SOLVED BORON (B) (UG/L) (01020)	DIS- SOLVED CAU- MIUM (CU) (UG/L) (01025)	HEXA- VALENT CHRO- MIUM (CR6) (UG/L) (01032)	DIS- SOLVED COPPER (CU) (UG/L) (01040)
MARTINEZ GODI GR	362731105362201		73-11-15	1500	3	0	10	1	0	2
25N.13E.08.211	362531105343201		73-12-12	1800	1	0	1	0	0	1
30N.13E.18.122	365047105354601		73-11-14	1030	3	0	0	1	0	0
30N.13E.31.111	364759105360701		73-11-21	1800	2	0	7	0	0	0

DATE OF SAMPLE	TOTAL IRON (FE) (UG/L) (01045)	DIS- SOLVED IRON (FE) (UG/L) (01046)	TOTAL LEAD (PB) (UG/L) (01051)	DIS- SOLVED LEAD (PB) (UG/L) (01049)	DIS- SOLVED MAN- GANESE (MN) (UG/L) (01056)	TOTAL MERCURY (HG) (UG/L) (71900)	DIS- SOLVED MOLYB- DENUM (MO) (UG/L) (01060)	DIS- SOLVED SILVER (AG) (UG/L) (01075)	DIS- SOLVED SELE- NIUM (SE) (UG/L) (01145)	DIS- SOLVED ZINC (ZN) (UG/L) (01090)
73-11-15	180	40	<100	3	10	.0	1	0	6	10
73-12-12	80	30	<100	2	10	.0	--	0	2	30
73-11-14	10000	280	<100	20	60	.0	--	0	3	0
73-11-21	350	170	<100	5	30	.0	2	0	2	0

## QUALITY OF GROUND WATER DATA FOR NEW MEXICO

## TORRANCE COUNTY

LOCAL IDENT- I- FIER	STATION	NUMBER	DATE OF SAMPLE	TIME	GEO- LOGIC UNIT	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)
MANZANO GRANT	343845106204601	73-06-12	1530	325MDR	15	9	<4	110	8.9	

DATE OF SAMPLE	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)	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)	TOTAL NITRITE PLUS NITRATE (MG/L) (00630)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L) (00631)	AMMONIA NITRO- GEN (N) (MG/L) (00610)
73-06-12	7.7	.7	336	0	37	5.2	.3	.04	.00	.04	.04	.00

DATE OF SAMPLE	TOTAL 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)	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)
73-06-12	.17	.21	.01	.01	370	351	310	36	.2

DATE OF SAMPLE	SPL- CLIF- CON- DUCTI- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	DIS- SOLVED BORON (B) (UG/L) (01020)
73-06-12	590	7.4	11.5	20

LOCAL IDENT- I- FIER	STATION	NUMBER	DATE OF SAMPLE	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 CAU- MIUM (CD) (UG/L) (01025)
MANZANO GRANT	343845106204601	73-06-12	1530	14	60	<3	<8	20	<8	

DATE OF SAMPLE	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)	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)	TOTAL MERCURY (HG) (UG/L) (71900)	DIS- SOLVED MOLYB- DENUM (MO) (UG/L) (01060)	DIS- SOLVED NICKEL (NI) (UG/L) (01065)
73-06-12	<2	<5	2	<4	<8	9	<8	2	<4	.1	<3	<4

DATE OF SAMPLE	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- TANIUM (TI) (UG/L) (01150)	DIS- SOLVED VANA- DIUM (V) (UG/L) (01085)	DIS- SOLVED ZINC (ZN) (UG/L) (01090)	DIS- SOLVED ZIR- CONIUM (ZK) (UG/L) (01160)
73-06-12	<1	3	260	<8	<7	<4.0	6	<12

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