SELECTED CLIMATOLOGICAL AND HYDROLOGIC DATA, RATON BASIN, HUERFANO AND LAS ANIMAS COUNTIES, COLORADO, AND COLFAX COUNTY, NEW MEXICO

By Arthur L. Geldon and P. O. Abbott

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For readers who prefer to use SI (International System) units rather than English units, the conversion factors for the terms used in this report are listed below:

Multiply English unit	*By*	*To obtain SI unit*
acre	2.54	centimeter
acre-foot (acre-ft)	1.233×10^{-3}	cubic hectometer
cubic foot (ft^3)	2.832×10^{-2}	cubic meter
cubic foot per second (ft^3/s)	28.32	liter per second
cubic foot per second (ft^3/s)	2.832×10^{-2}	cubic meter per second
foot (ft)	0.3048	meter
gallon (gal)	3.785	liter
gallon per minute (gal/min)	6.309×10^{-2}	liter per second
gallon per minute (gal/min)	6.309×10^{-5}	cubic meter per second
inch (in.)	2.54	centimeter
mile (mi)	1.609	kilometer
square mile (mi^2)	2.59	square kilometer
degree Fahrenheit (°F)	5/9(°F-32)	degree Celsius

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ABSTRACT

The hydrology of the coal-bearing Raton Basin of Colorado and New Mexico recently was investigated by the U.S. Geological Survey. Some of the data collected during this investigation are presented in this report. The data in this report were collected from 1977 to 1982, mainly in the watersheds of the Apishapa and Purgatoire Rivers; information from the Cucharas, Canadian, and Vermejo River watersheds also is included. The report contains records of precipitation, temperature, relative humidity, evaporation, and wind movement at U.S. Geological Survey and U.S. Army Corps of Engineers meteorological stations, records of soil water collected by the U.S. Geological Survey, records of stream discharge and quality at U.S. Geological Survey gaging stations and miscellaneous sites, and a variety of ground-water data. The ground-water data includes records of 231 wells, springs, and mines, including 87 chemical analyses of the water, recorded water levels in 29 observation wells, results of 125 aquifer tests, and 87 logs of wells and test holes.

INTRODUCTION

The Raton Basin, in Colorado and New Mexico, is a structurally low area on the western edge of the Great Plains. Economic interest in the area's coal resources, situated in the western half of the Raton Basin (approximately west of a line connecting the cities of Walsenburg and Trinidad, Colo., and Raton, N. Mex.), has stimulated several hydrologic investigations (fig. 1). Some of the data used in Abbott and others (1983) and a water-supply paper by Geldon that is in preparation are presented in this report.

HYDROLOGIC SETTING

The Raton Basin contains the headwaters of the Huerfano, Cucharas, Apishapa, Purgatoire, Canadian, Vermejo, and Cimarron Rivers. The climate ranges from semiarid on the plains comprising the eastern part of the region to temperate in the plateaus and mountains comprising the western part of the region. Precipitation ranges from less than 10 in. east of Walsenburg, Colo., to more than 40 in. in the Sangre de Cristo Mountains and Spanish Peaks (U.S. Department of Commerce, Weather Bureau, 1967).

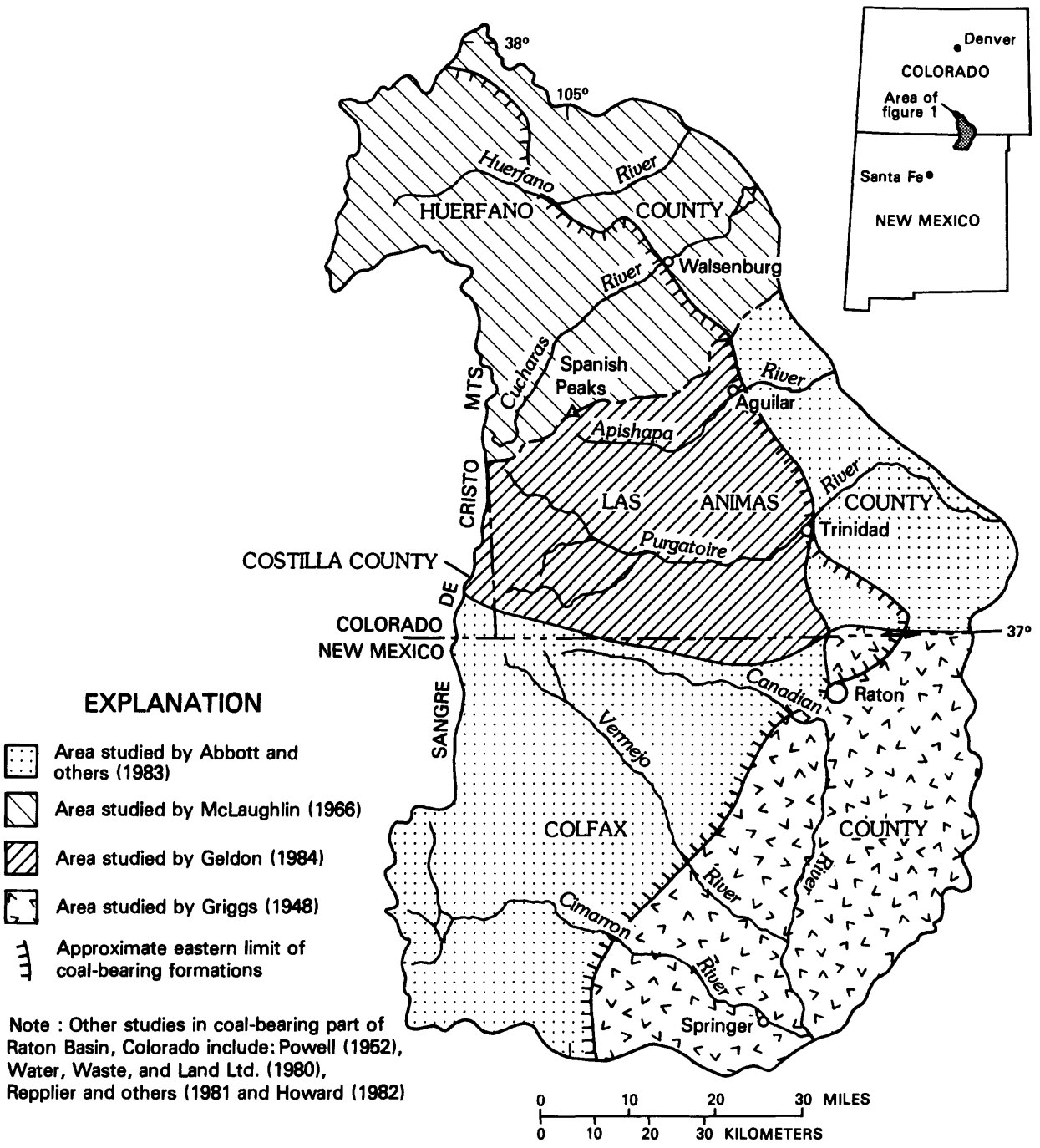

Figure 1.--Areas of hydrologic investigation in the Raton Basin.

Virtually all geologic formations store and transmit water. The principal aquifers, listed in table 1, are formations or members of formations comprised mainly of sandstone, conglomerate, limestone, basalt, and unconsolidated material (alluvium and tuff).

The quality of water is generally poor in the eastern part of the basin and good in the western part, and it is locally affected by topography, coal mines, agriculture (irrigation and livestock), and changes in bedrock composition. In the eastern part of the area, sulfate- and chloride-type waters with more than 1,000 milligrams per liter (mg/L) of dissolved solids predominate. In the western part of the area, bicarbonate-type water, with 400 to 1,000 mg/L of dissolved solids predominates. Water is used principally for municipal supplies, rural residences, irrigation, livestock, and coal mining.

DESCRIPTION OF DATA

This report presents selected climatological and hydrologic data collected in the Raton Basin. The data pertains mainly to the coal-bearing parts of the Apishapa and Purgatoire River drainages (west of a line conncting Aguilar and Trinidad, Colo.), but the report also includes data from the Cucharas, Canadian, and Vermejo River watersheds.

Most of the data in this report was collected from observation networks run by Federal and State agencies and private mining companies; the report also includes previously unpublished or not readily available data from other sites. Observation networks in the Raton Basin are operated by the U.S. Geological Survey (climate, streams, and ground water), U.S. Army Corps of Engineers (reservoir storage and climate), U.S. Soil Conservation Service (climate), National Oceanic and Atmospheric Administration (climate), Colorado Division of Water Resources (streams), CF&I Steel Corporation (streams and ground water), and Kaiser Steel Corporation (streams and ground water). Network sites are listed in table 2 and shown in figures 2 to 4.

Some of the information obtained from these observation networks that is regularly published elsewhere is excluded from this report because of spatial limitations. This report does not contain precipitation and temperature data collected by the National Oceanic and Atmospheric Administration and its predecessor agencies, the Environmental Science Service Administration (1965-1970) and the U.S. Weather Bureau (until 1965). This information is published in the series Climatological Data-Colorado and Climatological Data-New Mexico (monthly since before 1900). Also excluded from the report are snow-survey measurements by the U.S. Soil Conservation Service. This information is published in Summary of Snow Survey Measurements for Colorado and New Mexico (Washichek and others, 1972, 1978) and in the series Water Supply Outlook for Colorado and New Mexico (U.S. Soil Conservation Service, monthly since 1977). Records of streamflow and quality collected at many of the sites shown in figure 3, and especially records prior to the 1978 water year, are not in this report. The excluded information is available, however, in many data reports, primarily U.S. Geological Survey Water-Supply Papers 1311 (1955), 1731 (1964), 1921 (1969), and 2121 (1974), and in the series Water Resources Data for Colorado and Water Resources Data for New Mexico (published annually by the U.S.

Table 1.--*Hydrologic description of formations in the study area*

[from Abbott and others, 1983]

Map symbol	Age	Formation	Unit or member	Thickness (feet)	Physical characters	Measured or reported yield (gallons per minute)
Qa	Quaternary	Alluvium	Streams	0-50	Sand and gravel in channels.	1-150, along small streams. 1-540, along large streams.
			Pediment	0-20	Sand and gravel on mesas.	1-75, to springs.
Qt	Quaternary	Talus and landslides	Talus		Fragmented rock on mesa slopes.	1-20, to springs.
			Landslides		Heterogeneous debris.	Unknown, probably negligible to small.
QTv	Quaternary and Tertiary	Volcanic rocks		0-300	Fractured porous basalt and interflow zones.	1-80, to springs.
Ti	Tertiary	Intrusive rocks			Granitic to diabasic stocks, laccoliths, dikes, and sills.	Negligible to small.
Tdf	Tertiary	Devils Hole		0-1,300	Conglomerate and tuff.	1-450, mostly to springs.
		Farasita		0-1,200	Conglomerate.	Unknown, probably small to large.
Th	Tertiary	Huerfano		0-2,000	Shale with sandstone near base.	Unknown, probably negligible to small.
Tkcp	Tertiary and Cretaceous	Cuchara		0-5,000	Sandstone with shale layers.	1-75, to wells and springs.
		Poison Canyon		0-2,500	Sandstone and conglomerate with shale layers.	1-30, north of Apishapa River; 1-8, south of river.
Tkrvt	Tertiary and Cretaceous	Raton	Upper	0-600	Sandstone and siltstone.	0.5-35, to wells and springs.
			Middle	0-1,250	Sandstone and coal lenses interlayered with shale.	0.5-35, to wells and springs.
			Lower	0-400	Sandstone, siltstone, and conglomerate with shale layers.	Unknown, probably small to moderate.
		Vermejo		0-550	Sandstone and coal lenses interlayered with shale.	Small.
		Trinidad		0-310	Tightly cemented sandstone.	0.5-5, to wells.
Ku	Cretaceous	Pierre		0-2,300	Shale.	1-20, to wells.
		Niobrara	Smoky Hill	0-930	Calcareous shale.	1-40, to wells.
			Fort Hays	0-70	Limestone.	1-10, to wells and springs.
		Carlile	Upper	0-80	Sandstone, limestone, shale.	1-10, to wells and springs.
			Lower	0-260	Shale.	Negligible.
		Greenhorn		0-35	Limestone and shale.	1-2, to wells.
		Graneros		0-235	Shale.	Negligible.
		Dakota		50-200	Intricately jointed sandstone.	0.5-1,200, to wells.
		Purgatoire	Kiowa	10-30	Shale and thin-bedded sandstone.	Negligible to small.
			Cheyenne	50-135	Massive sandstone.	1-10, to wells.
JPu	Jurassic to Pennsylvanian	Undivided			Sandstone, shale, siltstone, limestone.	1-200, little used.
pCu	Precambrian	Undivided			Igneous and metamorphic rocks.	Negligible to small.

Table 2.--*Data sites in the Apishapa and Purgatoire River drainages and selected sites elsewhere in the Raton Basin*

[Site Operator: NOAA=National Oceanic and Atmospheric Administration; COE=U.S. Army Corps of Engineers; USGS=U.S. Geological Survey; CDWR=Colorado Division of Water Resources; SCS=U.S. Soil Conservation Service; CF&I=CF&I Steel Corporation; KSC=Kaiser Steel Corporation]

Map number	Site	Latitude	Longitude	Elevation (feet)	Site operator	Years of record	Information obtained
				CLIMATE			
C-1	Walsenburg----------	37°38'	104°47'	6,150	NOAA	1934-present--------	Precipitation and temperature.
C-2	North Lake----------	37°13'	105°03'	8,800	NOAA	Precip. 1890-1981; Temp. 1959-81-----	Do.
C-3	Trinidad------------	37°10'	104°29'	6,030	NOAA	1878-87, 1898-1907, 1910-present------	Do.
C-4	Trinidad River------	37°10'	104°31'	5,990	NOAA	1979-present--------	Precipitation.
C-5	Trinidad FAA Airport (formerly Hoehne).	37°15'	104°20'	5,746	NOAA	1897-1918, 1937-present.	Precipitation and temperature.
C-6	Wooton Ranch--------	37°00'	104°29'	7,575	NOAA	1979-present--------	Precipitation.
C-7	Lake Maloya---------	36°59'	104°22'	7,400	NOAA	Precip. 1945-present Temp. 1951-present.	Precipitation and temperature.
C-8	Raton Filter Plant--	36°55'	104°26'	6,920	NOAA	1954-present--------	Do.
C-9	Trinidad Dam--------	37°09'00"	104°33'20"	6,310	COE	1978-present--------	Temperature, relative humidity, pan evaporation, wind movement, and precipitation.
C-10	Apishapa (formerly Cucharas Pass)----	37°20'	105°04'	10,000	SCS	1962-present--------	Snow depth and water equivalent.
C-11	Bourbon-------------	37°12'	105°08'	9.800	SCS	1956-present--------	Do.
C-12	Cucharas Creek------	37°20'	105°06'	9,700	SCS	1974-present--------	Do.
C-13	Culebra-------------	37°10'	105°12'	10,000	SCS	1940-present--------	Do.
C-14	La Veta-------------	37°36'	105°13'	9,300	SCS	1938-present--------	Do.
C-15	Whiskey Creek-------	37°13'	105°07'	10,200	SCS	1979-present--------	Do.
C-16	Blue Lakes----------	37°20'	105°07'	9,300	SCS	1962-74-------------	Do.
C-17	Sarcillo Canyon-----	37°10'37"	104°47'59"	6,980	USGS	1977-81-------------	Temperature and relative humidity.
C-18	Upper Molino Canyon, MO-D&B-3----------	37°11'11"	104°49'48"	7,440	USGS	1979-81-------------	Precipitation.
C-19	Lower Molino Canyon, MO-D&B-1----------	37°07'56"	104°48'35"	6,730	USGS	1978-81-------------	Do.
C-20	Mulligan Canyon-----	37°12'36"	104°39'38"	6,765	USGS	1977-80-------------	Temperature and relative humidity.
C-21	Upper Carpios Canyon, C-D&B-3------	37°10'25"	104°35'28"	6,540	USGS	1978-81-------------	Precipitation.
C-22	Lower Carpios Canyon, C-D&B-4------	37°09'13"	104°34'11"	6,250	USGS	1979-81-------------	Do.
				SOIL WATER			
M-1	Mulligan Canyon, MU-1, 68 inches---	37°12'50"	104°39'56"	6,800	USGS	1979-81-------------	Soil water.
M-2	Mulligan Canyon, MU-2, 62 inches---	37°12'40"	104°39'30"	6,800	USGS	1979-81-------------	Do.
M-3	Mulligan Canyon, MU-3, 71 inches---	37°12'40"	104°39'30"	6,800	USGS	1979-81-------------	Do.
M-4	Mulligan Canyon, MU-4, 23 inches---	37°12'40"	104°39'30"	6,800	USGS	1979-81-------------	Do.
M-5	Carpios Canyon, C-5, 68 inches---------	37°09'13"	104°34'02"	6,300	USGS	1979-81-------------	Do.
M-6	Carpios Canyon, C-6, 78 inches---------	37°10'10"	104°34'45"	6,300	USGS	1979-81-------------	Do.
M-7	Carpios Canyon, C-7, 42 inches---------	37°10'25"	104°35'21"	6,600	USGS	1979-81-------------	Do.
M-8	Carpios Canyon, C-8, 50 inches---------	37°10'25"	104°35'21"	6,600	USGS	1979-81-------------	Do.
M-9	Carpios Canyon, C-9, 48 inches---------	37°10'10"	104°34'49"	6,500	USGS	1979-81-------------	Do.
M-10	Molino Canyon, MO-10, 56 inches--	37°07'56"	104°48'35"	6,800	USGS	1979-81-------------	Do.

Table 2.--*Data sites in the Apishapa and Purgatoire River drainages and selected sites elsewhere in the Raton Basin*--Continued

Map number	Site	Latitude	Longitude	Elevation (feet)	Site operator	Years of record	Information obtained
				SOIL WATER--Continued			
M-11	Mulligan Canyon, MU-11, 46 inches--	37°14'55"	104°39'09"	7,400	USGS	1979-81----------	Soil water.
M-12	Mulligan Canyon, MU-12, 37 inches--	37°14'53"	104°39'07"	7,400	USGS	1979-81----------	Do.
M-13	Mulligan Canyon, MU-13, 64 inches--	37°13'26"	104°39'33"	7,200	USGS	1979-81----------	Do.
M-14	Sarcillo Canyon, S-9, 107 inches---	37°10'37"	104°47'59"	7,000	USGS	1979-81----------	Do.
M-15	Molino Canyon, MO-15, 30 inches--	37°08'25"	104°49'05"	6,900	USGS	1979-81----------	Do.
M-16	Molino Canyon, MO-16, 60 inches--	39°11'11"	104°49'48"	7,500	USGS	1979-81----------	Do.
				SURFACE WATER			
S-1	Cucharas River near La Veta, Colo-----	37°25'12"	105°03'08"	7,781	USGS	1934-present--------	Discharge.
S-2	Apishapa River at Aguilar, Colo.	37°24'01"	104°38'29"	6,335	USGS	1938-39, 1978-81----	Discharge, chemical quality, and sediment.
S-3	Middle Fork Purgatoire River at Stonewall, Colo.	37°09'10"	105°00'45"	7,590	USGS	1978-81----------	Do.
S-4	Molino Canyon near Weston, Colo------	37°07'56"	104°48'24"	6,730	USGS	1978-81, seasonal---	Do.
S-5	Sarcillo Canyon near Segundo, Colo-----	37°07'26"	104°45'49"	6,565	USGS	1978-81, seasonal---	Do.
S-6	Purgatoire River at Madrid, Colo.	37°07'26"	104°38'20"	6,262	USGS, CDWR.	1972-present--------	Do.
S-7	Mulligan Canyon near Boncarbo, Colo----	37°12'37"	104°39'37"	6,765	USGS	1978-81, seasonal---	Do.
S-8	Reilly Canyon at Cokedale, Colo.	37°08'43"	104°37'07"	6,290	USGS	1978-79, 1981, seasonal.	Do.
S-9	Long Canyon Creek near Madrid, Colo-	37°06'53"	104°36'17"	6,259	USGS	1972-present--------	Discharge.
S-10	Carpios Canyon near Jansen, Colo.	37°09'13"	104°34'11"	6,250	USGS	1978-81, seasonal---	Discharge, chemical quality and sediment.
S-11	Trinidad Lake near Trinidad, Colo----	37°08'27"	104°33'03"	6,074	COE	1977-present--------	Reservoir storage.
S-12	Purgatoire River below Trinidad Lake, Colo.	37°08'37"	104°32'49"	6,074	USGS	1976-present--------	Discharge, sediment.
S-13	Purgatoire River at Trinidad, Colo.	37°10'15"	104°30'31"	5,980	CDWR	1895-99, 1905-12, 1915-present.	Discharge.
S-14	Vermejo River near Dawson, N Mex.	36°40'50"	104°47'08"	6,365	USGS	1915-present--------	Discharge, chemical quality and sediment.
S-15	Canadian River near Hebron, N Mex-----	36°47'14"	104°27'42"	6,248	USGS	1946-present--------	Discharge, chemical quality.
S-16	Purgatoire River above Allen Mine, Colo.	37°09'	105°00'	7,580	CF&I	1979-present--------	Chemical quality.
S-17	Purgatoire River above Allen Mine tailings, Colo.	37°09'	104°58'	7,450	CF&I	1979-present--------	Do.
S-18	Purgatoire River below Allen Mine tailings, Colo.	---------	----------		CF&I	1979-present--------	Do.
S-19	Purgatoire River near well A11-1, Colo.	37°09'	104°58'	7,447	CF&I	1980-present--------	Do.
S-20	Purgatoire River near well A12-1, Colo.	37°09'	104°58'	7,440	CF&I	1980-present--------	Do.

Table 2.--*Data sites in the Apishapa and Purgatoire River drainages and selected sites elsewhere in the Raton Basin*--Continued

Map number	Site	Latitude	Longitude	Elevation (feet)	Site operator	Years of record	Information obtained
				SURFACE WATER--Continued			
S-21	Purgatoire River below Allen Mine, Colo.	37°10'	104°57'	7,340	CF&I	1979-present--------	Chemical quality.
S-22	Purgatoire River above Maxwell Mine, Colo.	37°09'	104°55'	7,110	CF&I	1979-present--------	Do.
S-23	Purgatoire River near well A13-3, Colo.	37°09'	104°55'	7,105	CF&I	1980-present--------	Do.
S-24	Purgatoire River below Maxwell Mine, Colo.	37°09'	104°54'	7,030	CF&I	1979-present--------	Do.
S-25	West Fork Chimney Canyon, N Mex-----	36°52'54"	104°52'04"	7,860	KSC	1980-present--------	Discharge, chemical quality.
S-26	Upper York Canyon, Y-1, N Mex--------	---------	----------	-----	KSC	1980-present--------	Chemical quality.
S-27	Upper York Canyon, Y-2, N Mex--------	---------	----------	-----	KSC	1980-present--------	Do.
S-28	York Canyon, YC-1, N Mex------------	36°53'48"	104°56'15"	7,590	KSC	1980-present--------	Discharge, chemical quality.
S-29	York Canyon, YC-2, N Mex------------	36°53'00"	104°55'53"	7,480	KSC	1980-present--------	Discharge.
S-30	York Canyon, YC-3, N Mex------------	36°51'06"	104°54'40"	7,275	KSC	1980-present--------	Do.
S-31	York Canyon, YC-4, N Mex------------	36°51'00"	104°54'42"	7,270	KSC	1980-present--------	Discharge, chemical quality.
S-32	York Canyon, YC-C, N Mex------------	36°52'05"	104°55'20"	7,390	KSC	1979-present--------	Crest stage, chemical quality.
S-33	Road Canyon, RC-C, N Mex------------	36°52'06"	104°55'12"	7,390	KSC	1979-present--------	Crest stage.
S-34	Road Canyon, RC-4, N Mex------------	36°52'11"	104°55'07"	7,400	KSC	1980-present--------	Discharge, chemical quality.
S-35	Road Canyon, RC-3, N Mex------------	36°52'26"	104°55'12"	7,430	KSC	1980-present--------	Discharge.
S-36	Road Canyon, RC-2, N Mex------------	36°53'49"	104°54'45"	7,630	KSC	1980-present--------	Discharge, chemical quality.
S-37	Road Canyon, RC-1, N Mex------------	36°54'17"	104°54'20"	7,750	KSC	1980-present--------	Do.
S-38	Vermejo River, VR-1, N Mex------------	---------	----------	-----	KSC	1980-present--------	Chemical quality.
S-39	Vermejo River, VR-2, N Mex------------	---------	----------	-----	KSC	1980-present--------	Do.
S-40	Vermejo River tributary, VT-1A, N Mex.	36°51'37"	104°55'56"	7,380	KSC	1980-present--------	Discharge.
S-41	Vermejo River tributary, VT-1B, N Mex.	36°50'58	104°55'51	7,240	KSC	1980-present--------	Discharge, chemical quality.
S-42	Vermejo River tributary, VT-2, N Mex.	36°51'33"	104°56'58"	7,280	KSC	1980-present--------	Discharge.
S-43	Salyers Canyon, SC-1, N Mex-------	36°53'50"	104°53'10"	7,940	KSC	1980-present--------	Discharge, chemical quality.
S-44	Salyers Canyon, SC-2, N Mex-------	36°52'08"	104°53'17"	7,635	KSC	1980-present--------	Do.
S-45	Canadian River below Potato Canyon Mine, N Mex.	---------	----------	-----	KSC	1980-present--------	Chemical quality.
S-46	Potato Canyon, PC-2, N Mex------------	---------	----------	-----	KSC	1980-present--------	Do.
S-47	Potato Canyon, PCM-6, N Mex------	---------	----------	-----	KSC	1980-present--------	Do.
S-48	Potato Canyon, PCM-8, N Mex------	---------	----------	-----	KSC	1980-present--------	Do.

Table 2.--*Data sites in the Apishapa and Purgatoire River drainages and selected sites elsewhere in the Raton Basin*--Continued

Map number	Site	Latitude	Longitude	Elevation (feet)	Site operator	Years of record	Information obtained
				GROUND WATER			
G-1	SC02506725BCD (Williams well)---	36°52'08"	104°53'17"	7,635	USGS	1951-83----------	Water level.
G-2	SC02706736ACB (Faris well)------	37°39'22"	104°50'14"	6,282	USGS	1949-83----------	Do.
G-3	SC02706805DAD (Thorn well)------	37°43'39"	105°01'04"	6,430	USGS	1951-83----------	Do.
G-4	SC02806724DAA (Niggerhead shaft)	37°35'39"	104°50'01"	6,334	USGS	1951-83----------	Do.
G-5	SC02906626DBC (USGS well MO-2)--	37°29'22"	104°44'58"	6,860	USGS	1980-83----------	Do.
G-6	SC02906719ACA (Woodring well)---	37°30'48"	104°55'47"	7,019	USGS	1950-83----------	Do.
G-7	SC03006601CCD (USGS well MO-6)--	37°27'25"	104°44'16"	7,000	USGS	1980-83----------	Do.
G-8	SC03006616ADC (USGS well MO-7)--	37°26'03"	104°47'01"	7,030	USGS	1980-83----------	Do.
G-9	SC03106516ACB (USGS well MO-9)--	37°20'53"	104°38'55"	7,320	USGS	1980-83----------	Do.
G-10	SC03206616CDB (USGS well MO-11)-	37°17'00"	104°47'24"	7,510	USGS	1980-81----------	Do.
G-11	SC03206620CDC1 (Vanderwall well)-	37°14'14"	104°48'22"	7,480	USGS	1982-83----------	Do.
G-12	SC03206716CCC (USGS well MO-14)-	37°15'07"	104°53'58"	7,750	USGS	1980-81----------	Do.
G-13	SC03306420DAB (Falduto well)----	37°09'23"	104°34'50"	6,340	USGS	1983----------	Do.
G-14	SC03306421CDB (Furu well)-------	37°09'09"	104°34'42"	6,265	USGS	1982-83----------	Do.
G-15	SC03306502CBB (USGS well 78-3)--	37°12'00"	104°38'56"	6,730	USGS	1980-81----------	Do.
G-16	SC03306510DDB2 (Boday well)------	37°10'55"	104°39'12"	6,610	USGS	1982----------	Do.
G-17	SC03306535ADD (USGS well 78-4)--	37°07'46"	104°37'47"	6,240	USGS	1980-81----------	Do.
G-18	SC03306603CDA (Vigil well)------	37°11'43"	104°46'03"	7,220	USGS	1982-83----------	Do.
G-19	SC03306621BAD (Mestas well)-----	37°09'45"	104°47'05"	6,850	USGS	1983----------	Do.
G-20	SC03306704DDD (USGS well 78-1)--	37°11'40"	104°53'03"	7,280	USGS	1980-81----------	Do.
G-21	SC03306728BCD (CF&I well LA-264)------	37°08'36"	104°53'57"	7,092	CF&I	1980-present--------	Water level, chemical quality.
G-22	SC03306728BCD2 (CF&I well AL-4-2)	37°08'39"	104°53'55"	7,052	CF&I	1980-present--------	Do.
G-23	SC03306729ABA (CF&I well AL-221A)-----	37°09'00"	104°54'19"	7,100	CF&I	1980-present--------	Do.
G-24	SC03306729BAD (CF&I well AL-3-3)	37°08'56"	104°54'36"	7,105	CF&I	1980-present--------	Do.
G-25	SC03306729BDA (CF&I well LA-218A)-----	37°08'48"	104°54'40"	7,213	CF&I	1980-present--------	Water level.
G-26	SC03306729CAA (Maxwell Mine shaft---	37°08'32"	104°54'38"	7,300	CF&I	1980-present--------	Discharge, chemical quality.
G-27	SC03306811BDB (West well)-------	37°11'18"	104°58'09"	7,595	USGS	1982-83----------	Water level.
G-28	SC03306822CCB (Allen Mine shaft)	37°09'09"	104°59'28"	7,600	CF&I	1980-present--------	Discharge, chemical quality.
G-29	SC03306823BDC (Allen Mine tailings-----	37°09'28"	104°38'06"	7,460	CF&I	1980-present--------	Chemical quality.
G-30	SC03306823BDC2 (CF&I well AL 1-2)	37°09'28"	104°58'16"	7,447	CF&I	1980-present--------	Water level.
G-31	SC03306823BDD (CF&I well AL 2-1)	37°09'27"	104°58'09"	7,440	CF&I	1980-present--------	Water level, chemical quality.

Table 2.--*Data sites in the Apishapa and Purgatoire River drainages and selected sites elsewhere in the Raton Basin*--Continued

Map number	Site	Latitude	Longitude	Elevation (feet)	Site operator	Years of record	Information obtained
				GROUND WATER--Continued			
G-32	SC03306823CAB (CF&I well AL 1-1)	37°09'24"	104°58'19"	7,447	CF&I	1980-present--------	Do.
G-33	NA03001903C1 (KSC well M-6)----	36°51'45"	104°54'32"	7,499	KSC	1978-present--------	Water level.
G-34	NA03001903C2 (KSC well M-7)----	36°51'49"	104°54'42"	7,620	KSC	1978-present--------	Do.
G-35	NA03001904C1 (KSC well M-9)----	36°51'57"	104°55'48"	7,550	KSC	1978-present--------	Do.
G-36	NA03001904C2 (KSC well M-10)---	36°51'57"	104°55'49"	7,549	KSC	1978-present--------	Water level, chemical quality.
G-37	NA030001904D1 (KSC well M-12)---	36°51'56"	104°55'12"	7,365	KSC	1978-present--------	Water level.
G-38	NA03001904D2 (KSC well MA-3)---	36°51'51"	104°55'13"	7,364	KSC	1978-present--------	Water level, chemical quality.
G-39	NA03001907A (KSC well MA-7)---	36°51'31"	104°56'47"	7,286	KSC	1978-present--------	Water level.
G-40	NA03001908D (KSC well MA-8)---	36°51'00"	104°35'50"	7,243	KSC	1978-present--------	Water level, chemical quality.
G-41	NA03001910B1 (KSC well MA-4)---	36°51'04"	104°54'42"	7,280	KSC	1978-present--------	Do.
G-42	NA03001910B2 (KSC well MA-5)---	36°51'05"	104°54'33"	7,298	KSC	1978-present--------	Do.
G-43	NA03002112B (KSC well P-14)---	36°52'	104°55'	7,617	KSC	1980-present--------	Do.
G-44	NA03101017C (KSC well M-16)---	36°55'14"	104°36'51"	8,103	KSC	1980-present--------	Do.
G-45	NA03101922C1 (KSC well M-13)---	36°54'10"	104°54'25"	7,743	KSC	1979-present--------	Do.
G-46	NA03101922C2 (KSC well M-14)---	36°54'11"	104°54'25"	7,743	KSC	1979-present--------	Do.
G-47	NA03101922C3 (KSC well M-15)---	36°54'11"	104°54'24"	7,743	KSC	1979-present--------	Do.
G-48	NA03101922C4 (KSC well MA-9)---	36°54'10"	104°54'24"	7,738	KSC	1979-present--------	Do.
G-49	NA03101926B (KSC well MA-6)---	36°52'10"	104°53'22"	7,760	KSC	1978-present--------	Water level.
G-50	NA03101927C (KSC well MA-2)---	36°53'26"	104°54'50"	7,588	KSC	1978-present--------	Do.
G-51	NA03101928D1 (KSC well M-1)----	36°53'27"	104°54'54"	7,598	KSC	1978-present--------	Do.
G-52	NA03101928D2 (KSC well M-2)----	36°53'27"	104°54'53"	7,597	KSC	1978-present--------	Do.
G-53	NA03101928D3 (KSC well M-3)----	36°53'28"	104°54'52"	7,597	KSC	1978-present--------	Water level, chemical quality.
G-54	NA03001904 (York Canyon Mine)	---------	----------	-----	KSC	1978-present--------	Chemical quality.
G-55	NA03101932D (KSC well MA-1)---	36°53'01"	104°56'00"	7,503	KSC	1978-present--------	Water level, chemical quality.
G-56	NA03101933C (KSC well MA-10---	36°52'50"	104°55'42"	7,465	KSC	1980-present--------	Do.
G-57	NA03101935A1 (KSC well M-8)----	36°53'08"	104°53'15"	7,842	KSC	1978-present--------	Do.
G-58	NA03101935A2 (KSC well M-11)---	36°53'09"	104°53'15"	7,831	KSC	1978-present--------	Water level.
G-59	NA03101935C1 (KSC well M-4)----	36°52'22"	104°53'20"	7,676	KSC	1978-present--------	Water level, chemical quality.
G-60	NA03101935C2 (KSC well M-5)----	36°52'21"	104°53'20"	7,677	KSC	1978-present--------	Do.
G-61	NA03102136A (KSC well P-15)---	36°52'52"	104°39'00"	7,324	KSC	1980-present--------	Do.
G-62	NA03102227A (KSC well P-4)----	36°53'50"	104°34'59"	7,321	KSC	1980-present--------	Do.

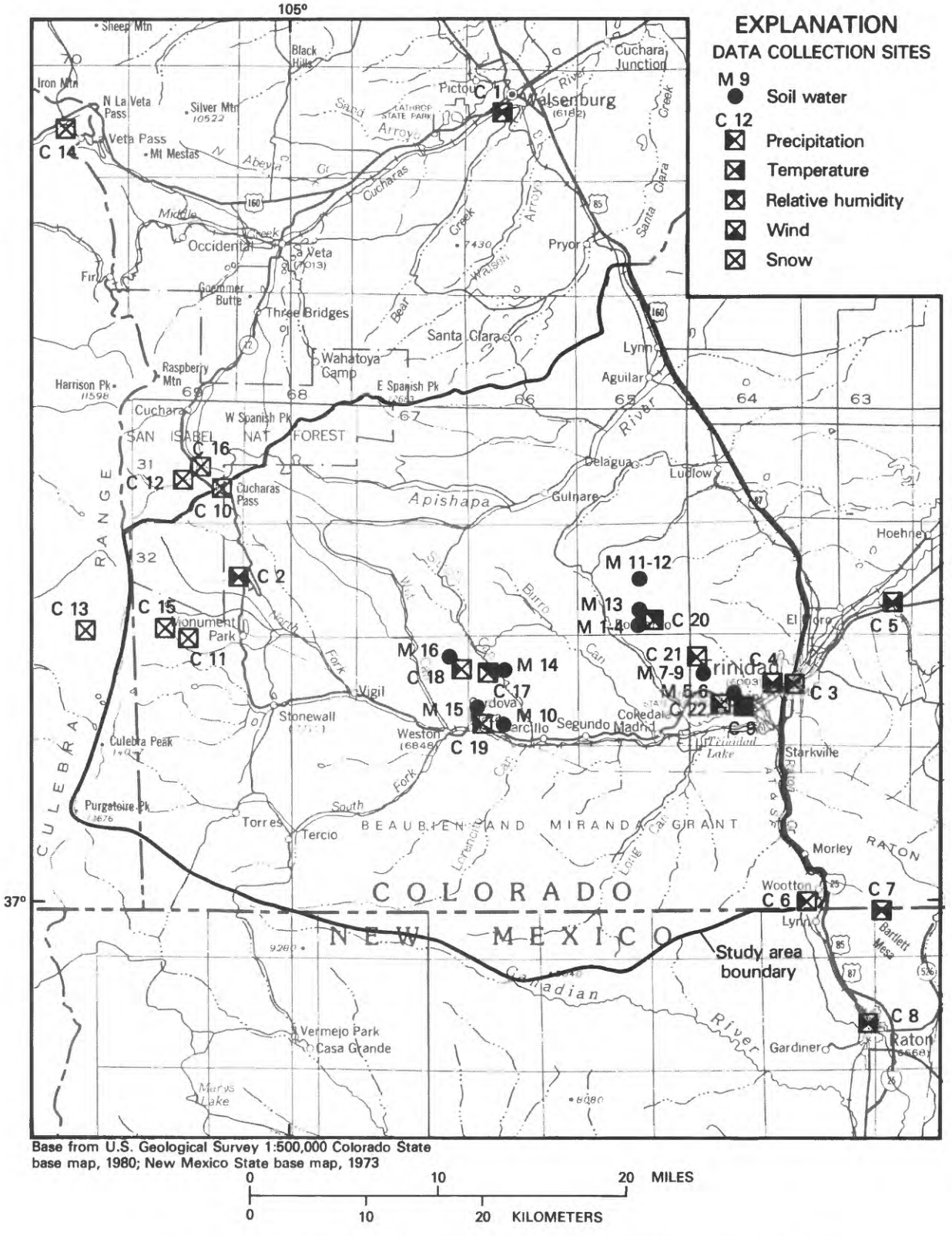

Figure 2.--Climate and soil-water data-collection sites.

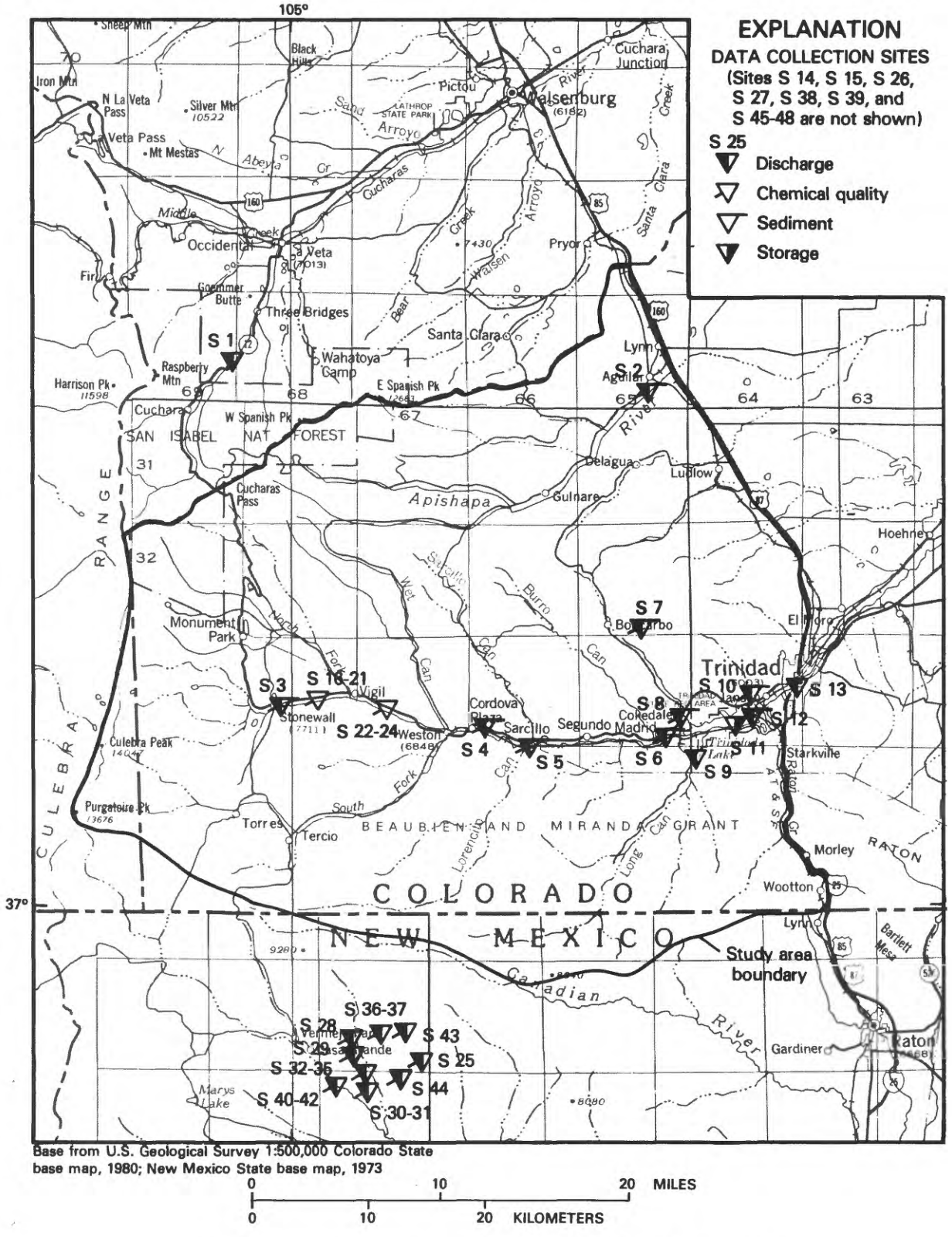

Figure 3.--Surface-water data-collection sites.

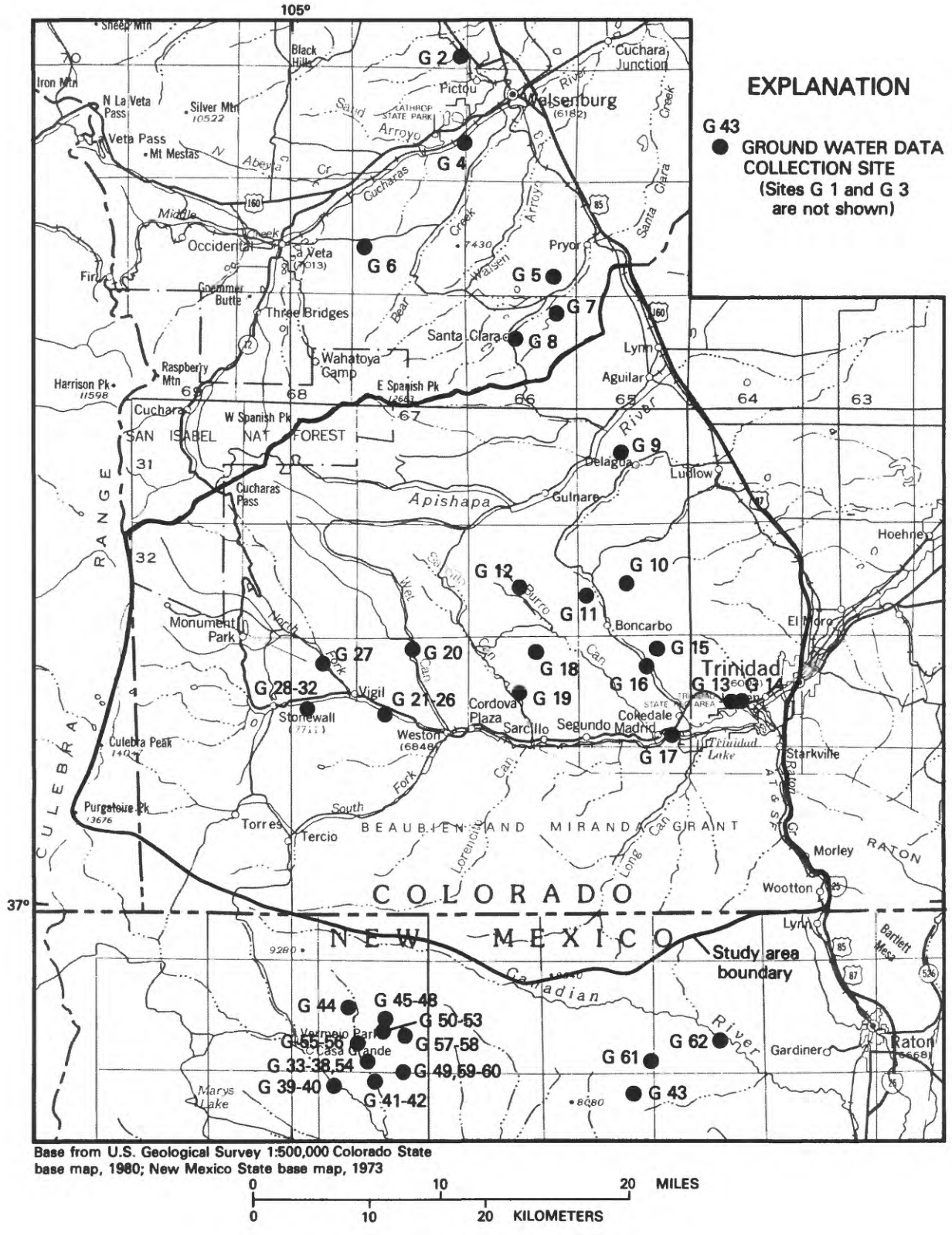

Figure 4.--Ground-water data-collection sites.

Geological Survey since 1961). Finally, only 29 of 50 ground-water-level records are included. Some water-level records are found in Major and others (1975) and in Water Resources Data for Colorado (U.S. Geological Survey, since 1975).

In addition to observation-network data, this report also includes streamflow measurements at miscellaneous sites along the Purgatoire River and several tributaries collected during seepage runs and a variety of ground-water data. The ground-water data include records of 231 wells, springs, and mine sites in the Apishapa and Purgatoire River drainages inventoried by the U.S. Geological Survey from 1978 to 1982 (including 87 chemical analyses of the water), results of 125 aquifer tests in the Apishapa, Purgatoire, and adjacent drainages, and 87 representative logs of wells and test holes.

SYSTEM OF NUMBERING WELLS

The well locations in this report are given numbers based on the U.S. Bureau of Land Management system of land subdivision and show the location of the wells by quadrant, township, range, section, and position within the section. A graphic illustration of this method of well location is shown in figure 5. The first letter of the location number indicates which principal meridian governs the area in which the well is located; S indicates the sixth principal meridian and N indicates the New Mexico principal meridian. The second letter indicates the quadrant in which the well is located. Four quadrants are formed by the intersection of the base line and the principal meridian; A indicates the northeast quadrant, B the northwest, C the southwest, and D the southeast. The first number indicates the township; the second, the range; and the third, the section in which the well is located. The letters following the section number indicate the location of the well within the section. The first letter denotes the quarter section; the second the quarter-quarter section; and the third, the quarter-quarter-quarter section. The letters are assigned within the section in a counterclockwise direction, beginning with A in the northeast quarter. Letters are assigned within each quarter section and within each quarter-quarter section in the same manner. Where two or more locations are within the smallest subdivision, consecutive numbers, beginning with 1, are added in the order in which the wells are inventoried. In the example given in figure 5, SC00304921CCB indicates a well in the NW¼SW¼SW¼ sec. 21, T. 03 S., R. 49 W.

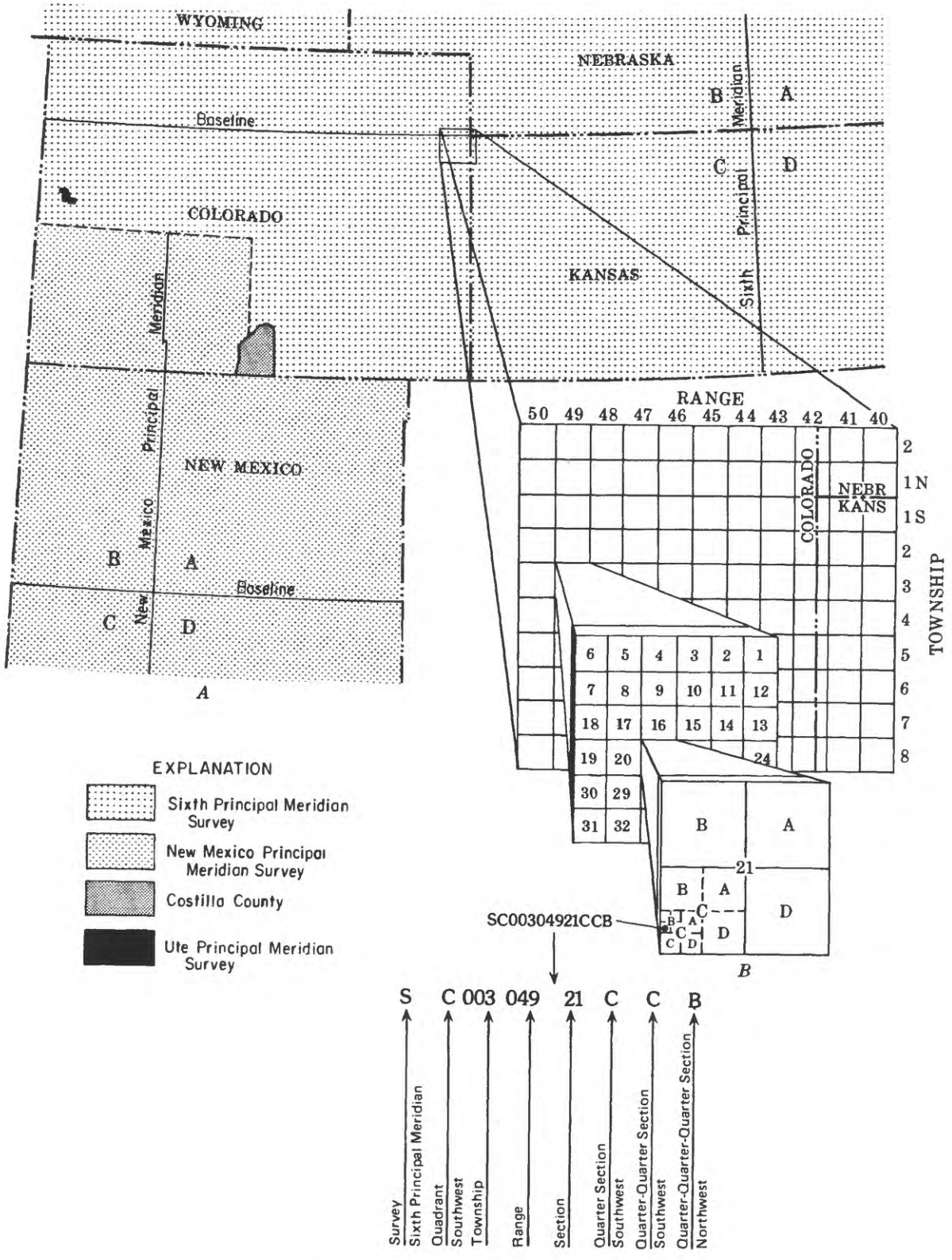

Figure 5.--System of numbering wells.

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[1]The National Oceanic and Atmospheric Administration was known as the Environmental Science Service Administration from 1965 to 1970.

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[2]These report series were entitled, "Surface water records of Colorado," and "Surface water records of New Mexico" until 1965.

[3]These report series were entitled, "Climatological data: Colorado section" and "Climatological data: New Mexico section," until 1948.

CLIMATOLOGICAL DATA

Table 3.--*Daily precipitation, in inches, at Carpios Canyon C-D&B-3 station*

WATER YEAR 1979

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	.00	.00	.00	.00	.04	.00	.27	.72	.06	.03
2	---	---	.00	.08	.00	.00	.06	.00	.02	.20	.00	.04
3	---	---	.20	.00	.00	.24	.03	.00	.09	.00	.00	.04
4	---	---	.03	.00	.00	.17	.46	.00	.00	.00	.00	.00
5	---	---	.00	.00	.00	.00	.00	.00	.00	.42	.00	.00
6	---	---	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
7	---	---	.00	.00	.00	.00	.00	.00	.08	.00	.00	.00
8	---	---	.00	.00	.00	.00	.00	.00	.36	.00	1.25	.00
9	---	---	.31	.00	.00	.05	.00	.16	.10	.00	.30	.00
10	---	---	.00	.00	.00	.27	.00	.17	.00	.00	.05	.00
11	---	---	.00	.00	.00	.00	.00	.10	.00	.00	.00	.00
12	---	---	.00	.00	.00	.00	.00	.00	.00	.00	.20	.00
13	---	---	.00	.05	.00	.00	.00	.00	.00	.00	---	.55
14	---	---	.00	.20	.00	.00	.00	.00	.00	.00	---	.69
15	---	.00	.00	.00	.00	.00	.00	.00	.00	.03	---	.04
16	---	.00	.00	.00	.00	.00	.00	.00	.00	.00	---	.00
17	---	.00	.00	.00	.00	.00	.00	.00	.04	.28	---	.04
18	---	.00	.00	.05	.00	.00	.00	.00	.00	.00	---	.00
19	---	.00	.00	.00	.20	.00	.00	.13	.00	.00	---	.31
20	---	.00	.00	.14	.00	.00	.00	.76	.00	.00	---	.00
21	---	.00	.00	.00	.00	.02	.00	.56	.00	.07	---	.06
22	---	.00	.00	.00	.00	.09	.00	.00	.00	.24	---	.00
23	---	.00	.00	.00	.00	.33	.00	.00	.07	.00	---	.00
24	---	.02	.05	.25	.00	.00	.00	.00	.03	.10	.00	.00
25	---	.07	.00	.00	.00	.00	.00	.65	.00	.00	.00	.03
26	---	.00	.00	.00	.00	.00	.00	.00	.00	.00	.17	.00
27	---	.03	.00	.05	.07	.00	.00	.00	.00	.00	.00	.04
28	---	.00	.00	.00	.00	.00	.00	.10	.00	.00	.00	.00
29	---	.00	.00	.00		.00	.27	.26	.00	.19	.00	.01
30	---	.00	.00	.00		.00	.00	.57	.00	.10	.00	.00
31	---		.00	.00		.00		.07		1.15	.00	
TOTAL	---	---	.59	.82	.07	.87	.80	3.53	1.07	3.40	----	1.40

Table 3.--*Daily precipitation, in inches, at Carpias Canyon C-D&B-3 station*--Continued

WATER YEAR 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	---	---	.00	.00	.35	.33	.00	.00	.01	.00
2	.00	.00	---	---	.00	.00	.11	.07	.00	.46	---	.01
3	.00	.00	---	.00	.00	.00	.00	.04	.00	.35	---	.00
4	.00	.00	---	.00	.00	.30	.00	.62	.00	.20	---	.04
5	.00	.00	---	.21	.00	.00	.00	.06	.00	.01	---	.01
6	.00	.32	---	.00	.00	.20	.00	.00	.00	.01	.00	.00
7	.00	.16	---	.00	.07	.00	.00	.19	.00	.01	.00	.04
8	.00	.00	---	.00	.00	.00	.00	.00	.15	.00	.49	.02
9	.00	.00	---	.00	.00	.00	.00	.00	.00	.00	.03	.75
10	.00	.35	---	.00	.00	.00	.00	.00	.00	.00	.00	.10
11	.00	.04	---	.00	.00	.00	.69	.00	.00	.00	.00	.01
12	.00	---	---	.00	.00	.00	.06	.00	.00	.00	.00	.01
13	.00	---	---	.00	.00	.00	.00	.00	.00	.11	.00	.00
14	.00	---	---	.00	.00	.00	.00	.08	.00	.00	.44	.22
15	.00	---	---	.00	.00	.00	.00	.98	.00	.01	.01	.01
16	.00	---	---	.00	.00	.37	.00	.03	.00	.01	.00	.00
17	.00	---	---	.00	.00	.03	.00	.00	.00	.00	.10	.00
18	.07	---	---	.24	.24	.00	.00	.00	.00	.00	.00	.04
19	.00	---	---	.11	.11	.00	.00	.00	.00	.04	.00	.00
20	.00	---	---	.00	.00	.02	.00	.00	.00	.00	.01	.01
21	.11	---	---	.05	.05	.03	.00	.00	.00	.00	.00	.00
22	.12	---	---	.05	.05	.15	.00	.45	.00	.00	.01	.00
23	.00	---	---	.00	.00	.50	.65	.00	.00	.00	.00	.00
24	.00	---	---	.00	.00	.00	2.06	.00	.00	.21	.01	.00
25	.00	---	---	.00	.00	.00	.05	.00	.00	.00	.10	.00
26	.00	---	---	.00	.00	.03	.00	.00	.00	.02	.26	.00
27	.00	---	---	.00	.00	.13	.00	.00	.00	.01	.02	.00
28	.00	---	---	.00	.00	.00	.00	.00	.00	.10	.01	.11
29	.50	---	---	.00	.00	.00	.00	.00	.00	.03	.01	.00
30	.45	---	---	.00		.00	.81	.00	.01	.01	.01	.00
31	.00		---	.00		.20		.00		.00	.01	
TOTAL	**1.25**	**---**	**---**	**---**	**.52**	**1.46**	**4.78**	**2.85**	**.16**	**1.29**	**---**	**1.14**

Table 3.--*Daily precipitation, in inches, at Carpios Canyon C-D&B-3 station*--Continued

WATER YEAR 1981

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.05	.00	.03	.07	.01	.08	.01
2	.00	.00	.00	.00	.02	.00	.00	.00	.65	.19	.54	.04
3	.00	.00	.00	.00	.00	.31	.00	.00	.07	1.46	.02	.29
4	.00	.00	.00	.00	.00	.24	.10	.00	.01	.17	.00	.01
5	.00	.00	.00	.00	.00	.00	.24	.03	.01	.01	.01	.01
6	.00	.00	.00	.00	.00	.00	.00	.02	.01	.01	.63	.85
7	.00	.00	.00	.00	.00	.09	.00	.00	.02	.01	.55	.69
8	.00	.00	.05	.00	.00	.00	.00	.05	.02	.01	.01	.01
9	.00	.00	.00	.00	.00	.00	.00	.06	.02	.01	2.96	.04
10	.00	.00	.00	.00	.08	.16	.00	.00	.01	.24	.64	.01
11	.00	.00	.00	.00	.00	.53	.00	.00	.01	.01	1.04	.01
12	.00	.00	.00	.00	.00	.00	.00	.00	.01	.41	.25	.01
13	.00	.10	.00	.00	.00	.00	.00	.00	.01	.03	.02	.03
14	.00	.27	.00	.00	.00	.00	.00	.42	.01	.05	.03	.01
15	.05	.05	.00	.00	.00	.00	.00	.12	.00	.07	.09	.00
16	.00	.21	.00	.00	.00	.00	.00	.00	.01	.14	.02	.14
17	.00	.00	.00	.00	.00	.02	.00	.01	.01	.41	.01	.01
18	.00	.00	.00	.00	.00	.16	.13	.00	.00	.18	.00	.01
19	.00	.00	.00	.00	.00	.02	.03	.00	.00	.03	.03	.01
20	.00	.00	.00	.00	.00	.20	.00	.00	.00	.02	.03	.01
21	.00	.00	.00	.00	.30	.20	.00	.00	.00	.01	.04	.00
22	.00	.00	.00	.00	.00	.00	.11	.00	.02	.00	.00	.01
23	.00	.04	.00	.00	.00	.00	.00	.00	.03	.00	.00	.01
24	.00	.05	.00	.00	.00	.22	.00	.07	.39	.00	.00	.01
25	.00	.00	.00	.00	.00	.08	.00	.00	.00	.00	.00	.00
26	.00	.15	.00	.00	.00	.00	.00	.00	.00	1.71	.09	.01
27	.07	.00	.00	.00	.00	.00	.00	.00	.00	.02	.02	.00
28	.00	.00	.00	.00	.00	.05	.02	.00	.26	.03	.00	.01
29	.00	.00	.00	.00		.03	.00	1.58	.05	.01	.00	.01
30	.00	.00	.00	.00		.00	.00	.26	.01	.10	.00	.01
31	.00		.00	.06		.00		.21		.01	.00	
TOTAL	.12	.87	.05	.06	.40	2.16	.63	2.86	1.71	5.36	7.11	2.15

Table 4.--*Daily precipitation, in inches, at Carpios Canyon C-D&B-4 station*

DAY	WATER YEARS 1980-81			WATER YEARS 1981-82						
	AUG	SEP	OCT	APR	MAY	JUN	JUL	AUG	SEP	OCT
1	---	.00	.01	---	.05	.02	.01	.52	.01	.00
2	---	.01	.01	---	.00	1.32	.01	.66	.00	.00
3	---	.01	.00	---	.00	.00	1.82	.01	.43	.00
4	---	.00	.01	---	.00	.00	.74	.01	.01	.00
5	---	.00	.03	---	.10	.01	.00	.01	.01	.00
6	.01	.01	---	---	.00	.00	.00	.81	.53	.00
7	.00	.00	---	---	.02	.01	.00	.48	.60	.00
8	.58	.07	---	---	.02	.00	.00	.02	.02	.00
9	.00	1.15	---	---	.02	.01	.01	1.40	.02	.00
10	.00	.10	---	.00	.00	.01	.37	.89	.12	.00
11	.00	.00	---	.00	.00	.00	.08	1.59	.05	.00
12	.00	.00	---	.00	.00	.01	.03	.31	.05	.00
13	.00	.00	---	.00	.12	.00	.26	.00	.11	.00
14	.32	.72	---	.00	.36	.00	.01	.01	.01	.01
15	.00	.00	---	.18	.08	.00	.01	.17	.00	---
16	.01	.03	---	.00	.00	.00	.08	1.21	.16	---
17	.00	.00	---	.00	.29	.00	.29	.27	.00	---
18	.00	.00	---	.00	.00	.01	.26	.03	.01	---
19	.00	.00	---	.00	.02	.00	.05	.00	.00	---
20	.00	.01	---	.00	.00	.03	.01	.00	.00	---
21	.00	.00	---	.00	.00	.00	.00	.00	.00	---
22	.00	.00	---	.13	.01	.00	.01	.00	.01	---
23	.01	.00	---	.00	.00	.02	.01	.01	.00	---
24	.00	.01	---	.00	.05	.20	.03	.02	.01	---
25	.03	.01	---	.00	.01	.00	.00	.01	.00	---
26	.12	.00	---	.00	.01	.00	2.45	.13	.00	---
27	.00	.00	---	.03	.00	.00	.07	.00	.01	---
28	.01	.01	---	.00	.03	.00	.02	.00	.00	---
29	.00	.00	---	.00	2.23	.08	.00	.01	.00	---
30	.00	.01	---	.00	.20	.00	.09	.00	.00	---
31	.01		---		.23		.02	.00		---
TOTAL	---	2.15	---	---	3.85	.39	6.74	8.58	2.17	---

Table 5.--*Daily precipitation, in inches, at Molino Canyon MO-D&B-3 station*

WATER YEAR 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	.02	.00	.00	.00	.00	.30	.14	.00	.01	.17	.00
2	---	.00	.00	.01	.00	.00	.25	.01	.01	.42	.64	.00
3	---	.00	.00	.00	.00	.00	.01	.04	.00	.00	.00	.00
4	---	.00	.00	.00	.00	.02	.00	.09	.00	.00	.00	.00
5	---	.00	.00	.00	.00	.00	.00	.08	.00	.00	.00	.01
6	---	.00	.01	.00	.00	.00	.00	.01	.01	.00	.00	.07
7	---	.00	.01	.00	.09	.00	.00	.26	.00	.00	.74	.00
8	---	.03	.00	.00	.00	.00	.00	.02	.12	.01	.20	.21
9	.00	.37	.00	.00	.00	.00	.00	.00	.13	.00	.01	.68
10	.00	.18	.00	.00	.00	.00	.00	.00	.08	.04	.00	.10
11	.00	.01	.00	.00	.00	.00	.41	.00	.00	.00	.00	.01
12	.00	.04	.03	.00	.00	.00	.05	.00	.00	.00	.00	.00
13	.00	.00	.00	.00	.00	.00	.00	.00	.00	.54	.00	.00
14	.00	.00	.00	.00	.00	.00	.00	.20	.00	.00	.45	.27
15	.00	.00	.00	.27	.00	.00	.00	1.29	.00	.10	.00	.00
16	.00	.00	.00	.02	.00	.20	.00	.05	.00	.00	.00	.00
17	.00	.00	.00	.01	.00	.03	.00	.02	.00	.00	.00	.01
18	.00	.00	.00	.13	.10	.02	.00	.00	.00	.00	.00	.00
19	.00	.20	.00	.01	.01	.00	.00	.00	.00	.00	.00	.00
20	.00	.27	.00	.00	.01	.00	.00	.00	.00	.00	.00	.00
21	.09	.00	.00	.02	.00	.00	.00	.01	.00	.12	.00	.00
22	.05	.00	.00	.04	.01	.35	.00	.03	.00	.00	.00	.00
23	.00	.00	.04	.00	.00	.20	.00	.00	.00	.01	.00	.00
24	.00	.00	.01	.00	.01	.03	1.45	.00	.00	.00	.01	.00
25	.00	.00	.01	.00	.00	.00	.39	.00	.00	.00	.01	.00
26	.00	.00	.01	.00	.00	.07	.00	.00	.00	.07	.09	.00
27	.00	.24	.29	.00	.00	.15	.00	.00	.00	.01	.00	.00
28	.00	.00	.02	.00	.00	.08	.00	.00	.00	.00	.00	.00
29	.22	.00	.02	.00	.00	.05	.11	.00	.00	.08	.00	.00
30	.25	.00	.01	.01		.01	.56	.00	.00	.00	.07	.00
31	.03		.01	.00		.16		.00		---	.00	
TOTAL	---	**1.36**	**.47**	**.52**	**.23**	**1.37**	**3.53**	**2.25**	**.35**	---	**2.39**	**1.36**

Table 5.--*Daily precipitation, in inches, at Molino Canyon MO-D&B-3 station*--Continued

WATER YEARS 1981-82

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT
1	.00	.00	.00	.00	.05	.00	.00	.07	.07	.00	.00	.04	.00
2	.00	.00	.00	.00	.00	.00	.00	.00	.00	.07	.00	.01	.02
3	.00	.00	.00	.00	.00	.10	.00	.00	.05	1.30	.00	.62	.00
4	.00	.00	.00	.00	.00	.05	.08	.00	.00	.00	.52	.05	.00
5	.00	.00	.00	.00	.00	.00	.02	.20	.23	.00	.25	.00	.00
6	.00	.00	.00	.00	.00	.00	.00	.00	.02	.00	.45	.39	.00
7	.00	.00	.00	.00	.00	.04	.00	.00	.00	.00	1.21	.85	.00
8	.00	.00	.12	.00	.00	.02	.00	.05	.00	.00	.11	.00	.00
9	.00	.00	.02	.00	.00	.06	.00	.03	.00	.00	1.42	.25	.00
10	.00	.00	.00	.00	.07	.24	.00	.00	.00	.00	2.78	.01	.00
11	.00	.00	.00	.00	.00	.46	.00	.00	.00	.06	1.86	.51	.00
12	.00	.00	.00	.00	.00	.02	.00	.00	.00	.00	.13	.00	.00
13	.00	.08	.00	.00	.00	.02	.02	.03	.00	.00	.01	.28	.00
14	.00	.31	.00	.00	.00	.01	.05	.29	.00	.03	.00	.00	---
15	.15	.06	.00	.00	.00	.00	.00	.25	.00	.10	.14	.15	---
16	.00	.03	.00	.00	.00	.00	.00	.00	.00	.15	.06	.16	---
17	.00	.01	.00	.00	.00	.29	.00	.00	.00	.06	.74	.00	---
18	.00	.00	.00	.00	.00	.01	.02	.00	.00	.90	.01	.01	---
19	.00	.00	.00	.00	.00	.01	.00	.00	.00	.00	.00	.00	---
20	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	---
21	.00	.00	.00	.00	.11	.09	.00	.01	.00	.01	.71	.00	---
22	.00	.00	.00	.00	.00	.00	.07	.00	.51	.00	.00	.11	---
23	.00	.01	.00	.00	.00	.00	.00	.25	.00	.00	.00	.00	---
24	.00	.05	.00	.00	.00	.05	.00	.11	.00	.00	.03	.00	---
25	.00	.00	.00	.00	.00	.04	.00	.02	.00	.19	.01	.00	---
26	.00	.05	.00	.00	.00	.00	.00	.03	.00	2.42	.13	.00	---
27	.00	.00	.00	.00	.00	.00	.00	.00	.20	.11	1.07	.00	---
28	.00	.00	.00	.00	.00	.00	.00	.01	.69	.08	.14	.00	---
29	.00	.00	.00	.00		.00	.00	1.25	.15	.00	.37	.00	---
30	.00	.00	.00	.03		.00	.00	.24	.01	.00	.00	.00	---
31	.00		.00	.03		.00		.03		.04	.03		---
TOTAL	**.15**	**.60**	**.14**	**.06**	**.23**	**1.51**	**.26**	**2.87**	**1.92**	**5.52**	**12.18**	**3.45**	---

Table 6.--*Daily precipitation, in inches, at Molino Canyon MO-D&B-1 station*

WATER YEAR 1979

DAY	APR	MAY	JUN	JUL	AUG	SEP
1	---	.00	.05	.03	.00	.00
2	---	.00	.00	.00	.00	.00
3	---	.03	.00	.07	.00	.00
4	---	.00	.00	.00	.00	.00
5	---	.00	.00	.02	.00	.00
6	---	.00	.00	.00	.00	.00
7	---	.00	.36	.00	.00	.00
8	---	.00	.45	.00	.00	.00
9	---	.20	.00	.00	.02	.00
10	---	.09	.00	.00	.03	.00
11	---	.15	.00	.00	.11	.00
12	---	.00	.00	.00	.05	.14
13	.00	.00	.00	.00	.52	.51
14	.00	.00	.00	.51	---	.39
15	.00	.00	.00	.02	---	.03
16	.00	.00	.00	.07	---	.00
17	.00	.00	.00	.46	---	.00
18	.00	.00	.00	.57	---	.00
19	.00	.00	.00	.00	---	.00
20	.00	.65	.00	.00	---	.00
21	.00	.00	.00	.00	---	.21
22	.00	.16	.00	.03	---	.00
23	.00	.11	.38	.00	---	.00
24	.00	.43	.32	.18	.00	.00
25	.00	.61	.00	.02	.04	.00
26	.00	.00	.00	.48	.18	.00
27	.00	.00	.00	.05	.00	.00
28	.00	.14	.00	.00	.00	.00
29	.15	.00	.04	.00	.00	.00
30	.02	.52	.00	.00	.00	.00
31		.10		1.65	.00	
TOTAL	---	3.19	1.60	4.16	---	1.28

Table 6.--*Daily precipitation, in inches, at Molino Canyon MO-D&B-1 station*--Continued

WATER YEAR 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	---	.00	.00	.00	.45	.10	.00	.27	.30	.00
2	.00	.00	---	.00	.00	.00	.15	.00	.02	.02	.31	.00
3	.00	.00	---	.00	.00	.00	.00	.04	.01	.00	.04	.00
4	.00	.00	---	.00	.00	.02	.00	.40	.01	.00	.00	.00
5	.00	.00	.00	.00	.00	.00	.00	.06	.01	.00	.00	.00
6	.00	.00	.00	.00	.00	.00	.00	.01	.00	.00	.00	.00
7	.00	.00	.00	.00	.00	.00	.00	.19	.00	.00	.00	.00
8	.00	.04	.00	.00	.00	.00	.00	.01	.25	.00	.56	.04
9	.00	.36	.00	.00	.00	.00	.00	.00	.03	.00	.02	.65
10	.00	.00	.00	.00	.00	.00	.03	.00	.05	.01	.00	.03
11	.00	.03	.06	.00	.00	.00	.53	.00	.03	.02	.00	.00
12	.00	.00	.00	.00	.00	.00	.06	.00	.00	.01	.00	.00
13	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	.00	.00	.00	.00	.00	.00	.00	.40	.00	.08	.37	.00
15	.00	.00	.00	.28	.00	.00	.00	---	.00	.00	.03	.00
16	.00	.00	.00	.00	.00	.30	.00	---	.00	.02	.00	.00
17	.00	.00	.00	.00	.00	.19	.00	---	.00	.00	.00	.00
18	.22	.00	.00	.25	.28	.00	.00	---	.00	.02	.01	.00
19	.00	.39	.00	.14	.00	.00	.00	---	.00	.00	.01	.00
20	.00	.08	.00	.01	.00	.00	.00	---	.00	.01	.00	.00
21	.22	.00	.00	.04	.00	.00	.00	---	.00	.00	.00	.00
22	.00	.00	.00	.01	.00	.40	.00	---	.00	.00	.00	.00
23	.00	.00	.05	.00	.00	.05	.50	---	.00	.00	.00	.00
24	.00	.00	.00	.00	.00	.00	1.45	---	.00	.02	.00	.00
25	.00	.00	.00	.00	.00	.00	.48	---	.00	.00	.00	.00
26	.00	.33	.00	.00	.00	.08	.00	---	.00	.01	.62	.00
27	.00	.40	.28	.00	.00	.20	.00	---	.00	.00	.03	.00
28	.00	.00	.00	.00	.00	.03	.00	---	.00	.00	.00	.00
29	.63	---	.02	.00	.00	.01	.08	---	.04	.00	.00	.00
30	.08	---	.00	.00		.00	.71	.01	.00	.04	.00	.00
31	.00		.00	.00		.10		.00		.00	.00	
TOTAL	1.15	---	---	.73	.28	1.38	4.44	---	.45	.53	2.30	.72

Table 6.--*Daily precipitation, in inches, at Molino Canyon MO-D&B-1 station*--Continued

WATER YEAR 1981-82

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT
1	.00	.00	.00	.00	.00	.00	.00	---	.20	.29	.10	.02	.04
2	.00	.00	.00	.00	.00	.00	.00	---	.00	.02	.00	.00	.01
3	.00	.00	.00	.00	.00	.15	.00	---	.04	.00	.00	.79	.01
4	.00	.00	.00	.00	.00	.08	.04	---	.01	.00	.90	.00	.00
5	.00	.00	.00	.00	.00	.00	.00	---	.00	.00	.14	.02	.00
6	.00	.00	.00	.00	.00	.00	.00	---	.02	.00	.46	.17	.00
7	.00	.00	.00	.00	.00	.05	---	---	.00	.00	1.42	.77	.00
8	.00	.00	.00	.00	.00	.00	---	---	.00	.00	.30	.00	.00
9	.00	.00	.05	.00	.14	.02	---	---	.00	.00	1.68	.07	.00
10	.00	.00	.00	.00	.00	.47	---	---	.00	.00	1.02	.13	.00
11	.00	.00	.00	.00	.00	.50	---	---	.00	.00	1.64	1.10	.00
12	.00	.00	.00	.00	.00	.00	---	---	.00	.00	.21	.01	.01
13	.00	.12	.00	.00	.00	.13	---	.04	.00	.00	.04	.05	---
14	.00	.36	.00	.00	.00	.01	---	.46	.01	.09	.00	.01	---
15	.15	.08	.00	.00	.00	.00	---	.29	.00	.00	.24	.02	---
16	.00	.02	.00	.00	.00	.00	---	.02	.00	.04	.55	.29	---
17	.00	.00	.00	.00	.00	.02	---	.00	.01	.01	.11	.00	---
18	.00	.00	.00	.00	.00	.30	---	.00	.00	.02	.01	.04	---
19	.00	.00	.00	.00	.00	.01	---	.01	.00	.00	.00	.04	---
20	.00	.00	.00	.00	.24	.01	---	.00	.01	.01	.02	.00	---
21	.00	.00	.00	.00	.12	.01	---	.01	.00	.01	.02	.00	---
22	.00	.00	.00	.00	.00	.00	---	.00	.13	.01	.08	.06	---
23	.00	.00	.00	.00	.00	---	---	.24	.00	.01	.01	.00	---
24	.00	.00	.00	.00	.00	.20	---	.02	.02	.00	.00	.00	---
25	.00	.00	.00	.00	.00	.02	---	.00	.00	.05	.00	.00	---
26	.00	.05	.00	.00	.00	.00	---	.00	.00	1.69	.12	.00	---
27	.00	.00	.00	.00	.00	.00	---	.02	.00	.12	1.65	.00	---
28	.00	.00	.00	.00	.00	.03	---	.00	.00	.00	.03	.00	---
29	.00	.00	.00	.00		.00	---	1.43	.03	.03	.04	.00	---
30	.00	.00	.00	.00		.00	---	.11	.00	.00	.00	.01	---
31	.00		.00	.00		.00	---	.04		.02	.03		---
TOTAL	**.15**	**.63**	**.05**	**.00**	**.50**	---	---	---	**.48**	**2.42**	**10.82**	**3.52**	---

Table 7.--*Daily precipitation at Trinidad Dam, in inches*

[Data are for 24-hour period immediately preceding 8:00 a.m. on indicated day]

WATER YEAR 1978

DAY	JUN	JUL	AUG	SEP
1	0.08	0.25	0.22	0.27
2	.02	.00	.00	.00
3	.00	.00	.33	.00
4	.00	.00	.14	.00
5	.15	.00	.00	.00
6	.15	.00	.00	.00
7	.00	.00	.00	.00
8	.13	.00	.02	.00
9	.00	.19	.00	.00
10	.00	.17	.00	.00
11	.00	.46	.08	.00
12	.00	.02	.00	.00
13	.00	.00	.23	.00
14	.00	.00	.01	.00
15	.00	.00	.00	.00
16	.00	.00	.00	.00
17	.00	.00	.00	.00
18	.13	.00	.00	.00
19	.00	.00	.00	.00
20	.00	.00	.00	.00
21	.00	.56	.00	.00
22	.00	.00	.00	.00
23	.00	.17	.00	.00
24	.00	.00	.10	.00
25	.00	.00	.00	.15
26	.00	.00	.24	.02
27	.00	.00	.00	.00
28	2.59	.00	.00	.00
29	.29	.00	.00	.00
30	.06	.10	.00	.00
31	____	.00	.00	____
TOTAL	3.60	1.92	1.37	.44

Table 7.--*Daily precipitation at Trinidad Dam, in inches*--Continued

WATER YEAR 1979

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.06	0.00	0.00	0.02	0.00	0.12	0.01	0.51	0.00
2	.00	.00	.06	.00	.00	.00	.08	.03	.15	.16	.00	.00
3	.00	.00	.23	.00	.00	.53	.37	.12	.00	.00	.00	.00
4	.00	.13	.00	.00	.00	.00	.03	.02	.00	.00	.00	.00
5	.00	.00	.00	.00	.00	.00	.00	.00	.02	.03	.00	.00
6	.00	.00	.21	.00	.00	.00	.00	.00	.00	.00	.00	.00
7	.00	.00	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00
8	.00	.00	.01	.00	.00	.00	.00	.00	.32	.00	.00	.00
9	.00	.00	.00	.00	.00	.23	.00	.00	.44	.00	.00	.00
10	.00	.00	.00	.00	.00	.20	.00	.46	.14	.00	.43	.00
11	.00	.10	.00	.00	.00	.00	.00	.20	.00	.00	.04	.00
12	.00	.00	.00	.00	.00	.00	.00	.03	.00	.00	.00	.00
13	.00	.00	.00	.39	.00	.00	.00	.00	.00	.00	.00	.02
14	.00	.02	.00	.00	.00	.00	.00	.00	.00	.21	2.00	.97
15	.00	.10	.00	.00	.00	.00	.00	.00	.00	.00	1.27	.25
16	.00	.00	.00	.00	.00	.00	.00	.00	.00	.04	.04	.00
17	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
18	.00	.00	.00	.03	.00	.00	.00	.00	.00	.73	.03	.00
19	.00	.00	.00	.00	.00	.00	.00	.00	.00	.12	.21	.00
20	.00	.00	.00	.21	.00	.00	.00	.13	.00	.00	.00	.00
21	.00	.00	.00	.00	.00	.01	.00	1.19	.00	.00	.00	.06
22	.38	.00	.00	.00	.00	.06	.00	.00	.00	.22	.00	.00
23	.26	.00	.00	.39	.00	.10	.09	.00	.00	.04	.02	.00
24	.00	.00	.10	.00	.00	.00	.00	.06	.06	.00	.02	.00
25	.00	.04	.00	.00	.00	.00	.00	.21	.06	.09	.00	.00
26	.07	.00	.00	.08	.00	.00	.00	.97	.36	.00	.07	.00
27	.00	.04	.00	.08	.00	.00	.00	.02	.00	.00	.18	.00
28	.00	.00	.00	.00	.11	.00	.00	.00	.00	.00	.00	.00
29	.00	.00	.00	.01		.00	.00	.17	.00	.00	.00	.00
30	.00	.00	.00	.00		.00	.28	.02	.00	.16	.02	.00
31	.00		.01	.00		.00		.99		.00	.00	
TOTAL	.71	.43	.67	1.25	.11	1.13	.87	4.62	1.67	1.81	4.84	1.30

Table 7.--*Daily precipitation at Trinidad Dam, in inches*--Continued

WATER YEAR 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	---	---	---	---	---	0.22	0.85	0.00	0.00	0.00	0.00
2	.00	---	---	---	---	---	.33	.22	.00	.00	.00	.00
3	.00	---	---	---	---	---	.03	.03	.00	.02	.33	.00
4	.00	---	---	---	---	---	.00	.35	.00	.00	.00	.00
5	.00	---	---	---	---	---	.00	.42	.00	.00	.00	.00
6	.00	---	---	---	---	---	.00	.08	.00	.00	.00	.00
7	.00	---	---	---	---	---	.00	.00	.00	.00	.00	.00
8	.00	---	---	---	---	---	.00	.12	.00	.00	.00	.00
9	.00	---	---	---	---	---	.00	.05	.12	.00	.63	1.19
10	.00	---	---	---	---	---	.00	.00	.01	.00	.00	.37
11	.00	---	---	---	---	---	.18	.00	.00	.00	.00	.00
12	.00	---	---	---	---	---	.53	.00	.00	.00	.00	.00
13	.00	---	---	---	---	---	.00	.00	.00	.00	.00	.00
14	.00	---	---	---	---	---	.00	.00	.00	.02	.01	.00
15	.00	---	---	---	---	---	.00	.14	.00	.00	.19	.56
16	.00	---	---	---	---	---	.00	1.24	.00	.00	.00	.00
17	.00	---	---	---	---	---	.00	.04	.00	.00	.00	.00
18	.04	---	---	---	---	---	.00	.01	.00	.00	.00	.00
19	.00	---	---	---	---	---	.00	.00	.00	.00	.00	.00
20	.00	---	---	---	---	---	.00	.00	.00	.00	.00	.00
21	.05	---	---	---	---	---	.00	.00	.00	.00	.00	.00
22	.29	---	---	---	---	---	.00	.00	.00	.00	.00	.00
23	.00	---	---	---	---	---	.00	.78	.00	.00	.00	.00
24	.00	---	---	---	---	---	.93	.00	.00	.01	.00	.00
25	.00	---	---	---	---	---	1.83	.00	.00	.00	.00	.00
26	.00	---	---	---	---	---	.00	.00	.00	.03	.02	.00
27	.00	---	---	---	---	---	.00	.00	.00	.00	.48	.00
28	.00	---	---	---	---	---	.00	.00	.00	.14	.00	.00
29	.00	---	---	---	---	---	.00	.00	.00	.00	.00	.00
30	.89	---	---	---		---	.02	.00	.00	.00	.00	.00
31	.08		---	---		---		.00		.02	.00	
TOTAL	1.35	---	---	---	---	---	4.07	4.33	.13	.24	1.65	2.12

Table 7.--*Daily precipitation at Trinidad Dam, in inches*--Continued

WATER YEAR 1981

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.11	0.07	0.00	0.00	0.20	0.01	0.00	0.00
2	.00	.00	.00	.00	.03	.01	.00	.05	.03	.01	.33	.00
3	.00	.00	.00	.00	.00	.00	.00	.00	.98	1.32	.40	.00
4	.00	.00	.00	.00	.00	.53	.06	.00	.04	.63	.00	.40
5	.00	.00	.00	.00	.00	.01	.26	.03	.00	.00	.00	.02
6	.00	.00	.00	.00	.00	.00	.00	.08	.00	.00	.00	.00
7	.00	.00	.00	.00	.00	.06	.00	.00	.00	.00	.92	.80
8	.00	.00	.01	.00	.00	.05	.00	.00	.00	.00	.01	.02
9	.00	.00	.11	.00	.00	.00	.00	.03	.00	.00	.00	.00
10	.00	.00	.02	.00	.01	.00	.00	.04	.00	.00	1.08	.00
11	.00	.00	.00	.00	.05	.76	.00	.00	.00	.20	1.05	.08
12	.00	.00	.00	.00	.00	.05	.00	.00	.00	.06	1.39	.04
13	.00	.00	.00	.00	.00	.00	.00	.10	.00	.01	.07	.25
14	.00	.32	.00	.00	.00	.00	.00	.01	.00	.28	.00	.13
15	.06	.08	.00	.00	.00	.00	.01	.22	.00	.02	.00	.00
16	.04	.06	.00	.00	.00	.00	.00	.07	.00	.00	.13	.05
17	.00	.20	.00	.01	.00	.00	.00	.00	.00	.10	.65	.08
18	.00	.00	.00	.00	.00	.17	.00	.21	.00	.18	.22	.00
19	.00	.00	.01	.00	.00	.00	.11	.02	.00	.14	.00	.00
20	.00	.00	.00	.00	.00	.00	.01	.00	.00	.02	.00	.00
21	.00	.00	.00	.00	.23	.00	.00	.00	.00	.00	.00	.00
22	.00	.00	.00	.00	.02	.13	.00	.00	.00	.00	.00	.00
23	.00	.04	.00	.00	.00	.00	.15	.00	.04	.00	.00	.00
24	.00	.00	.00	.00	.00	.00	.00	.01	.00	.00	.00	.00
25	.00	.04	.00	.00	.00	.21	.00	.00	.15	.00	.00	.02
26	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
27	.00	.14	.00	.00	.00	.00	.00	.03	.00	1.53	.10	.00
28	.07	.00	.00	.00	.00	.00	.00	.00	.00	.01	.00	.00
29	.00	.00	.00	.00		.08	.05	.02	.06	.01	.00	.00
30	.00	.00	.00	.00		.00	.00	1.93	.09	.00	.00	.00
31	.00		.00	.00		.00		.03		.08	.00	
TOTAL	.17	.88	.15	.01	.45	2.13	.65	2.88	1.59	4.61	6.35	1.89

Table 8.--*Daily maximum and minimum temperature at Sarcillo Canyon, in degrees Celsius*

WATER YEARS 1978-79

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	AUGUST		SEPTEMBER		OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	31.0	13.5	30.5	9.0	26.5	1.5	16.5	1.0	11.5	-8.0	---	---	---	---	12.0	-4.0
2	29.0	13.0	31.5	8.0	19.5	3.5	19.5	-3.0	-7.5	-12.0	4.5	---	---	---	9.0	-6.5
3	23.0	8.0	29.0	7.0	21.0	5.0	9.5	1.5	-3.5	-12.0	5.5	-11.0	---	---	-1.0	-12.0
4	31.0	10.0	---	---	22.0	-1.0	---	---	11.0	-12.0	9.5	-12.0	---	---	6.0	-12.0
5	31.0	11.0	32.0	8.0	---	---	9.5	-1.5	11.0	-12.0	5.0	-12.0	8.5	-10.5	10.0	-11.5
6	28.5	10.0	30.5	9.0	20.5	-4.5	10.5	-6.0	-10.0	-12.0	-1.5	-12.0	4.0	-12.0	13.5	-6.0
7	30.5	9.5	29.0	13.0	22.0	-1.0	19.0	-5.0	-12.0	-12.0	-7.0	-12.0	7.0	-12.0	16.5	-4.0
8	29.0	10.5	29.5	6.5	21.0	-1.0	23.5	-3.0	-11.0	---	4.0	-12.0	4.0	-5.0	16.5	-1.5
9	29.0	11.5	30.5	6.5	23.0	1.5	23.0	-1.5	---	---	---	-12.0	10.0	-5.5	-0.5	-5.0
10	29.5	8.5	31.0	8.0	21.5	-1.5	4.0	-1.5	---	---	---	---	10.0	-5.5	9.0	-12.0
11	31.5	8.0	28.0	13.0	25.0	-1.0	2.5	-7.0	13.0	---	---	---	8.5	-3.5	17.0	-8.0
12	26.0	8.5	26.5	5.5	26.0	2.0	7.0	-3.0	14.5	-10.5	---	---	8.0	-4.0	15.5	-5.5
13	24.5	8.0	25.5	5.0	11.5	.5	10.0	-5.0	4.5	-10.5	---	---	10.0	-4.5	18.5	-4.5
14	28.0	8.0	31.5	5.0	19.0	-4.5	-1.0	-6.0	11.0	-11.0	---	---	19.0	.5	10.5	-7.0
15	27.0	9.0	28.0	5.5	21.0	-2.0	4.5	-10.5	13.0	-10.5	---	---	9.0	-4.0	14.5	-3.5
16	---	---	28.0	5.0	22.0	-3.0	10.5	-10.5	3.0	-11.5	---	---	5.5	-8.0	14.5	-5.0
17	---	---	19.5	6.5	21.5	-1.0	9.5	-10.0	11.0	-10.0	---	---	6.5	-9.0	13.5	-4.0
18	---	---	23.5	5.0	14.5	.0	12.0	-9.0	13.0	-1.5	---	---	11.0	-10.5	14.0	-5.5
19	---	---	16.5	3.0	23.0	-3.0	15.0	-10.5	9.5	-3.5	---	---	12.0	-8.0	13.0	---
20	---	---	11.5	3.0	22.5	-1.0	9.5	-10.5	-1.0	-11.0	---	---	8.5	-2.0	14.5	---
21	---	---	17.0	-3.0	14.0	6.0	10.0	-7.0	8.5	-11.0	---	---	9.5	-6.0	23.0	---
22	---	---	22.0	-3.0	5.5	-3.0	9.5	-3.0	8.5	-8.5	---	---	4.5	-9.0	2.0	-4.0
23	---	---	26.0	1.0	10.0	-3.0	11.0	.5	1.0	-9.0	---	---	5.0	-9.0	6.5	-7.0
24	---	---	17.0	9.0	17.0	-1.0	6.0	-3.0	10.0	---	---	---	6.0	---	11.0	-9.0
25	---	---	14.5	8.5	8.0	-5.0	9.5	-0.5	3.0	-10.5	---	---	13.5	-11.0	13.5	-5.0
26	---	---	23.0	3.5	14.5	-9.0	4.0	-9.0	2.5	-12.0	---	---	16.0	-4.0	11.5	-6.0
27	---	---	23.0	3.5	18.0	-4.5	2.5	-11.0	9.5	-7.0	---	---	1.0	-8.5	14.0	-5.0
28	---	---	25.5	1.5	21.0	-4.0	9.5	-11.0	4.5	-3.5	---	---	12.0	-12.0	15.0	3.0
29	---	---	24.0	4.5	21.5	-3.0	8.5	-8.0	5.5	-10.0	---	---			8.5	-1.0
30	---	---	23.0	1.0	9.0	-3.0	6.0	-8.0	---	---	---	---			11.5	-5.0
31	---	---			17.0	---			---	---	---	---			9.5	-1.5
MONTH	31.5	8.0	32.0	-3.0	26.5	-9.0	23.5	-11.0	14.5	-12.0	9.5	-12.0	19.0	-12.0	23.0	-12.0

Table 8.--*Daily maximum and minimum temperature at Sarcillo Canyon, in degrees Celsius*--Continued

WATER YEAR 1979

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	3.0	-6.0	19.0	1.5	13.5	5.0	28.5	9.5	28.0	8.0	29.0	6.0
2	4.5	-9.0	18.5	-1.0	17.0	5.0	29.0	7.0	27.0	9.5	28.0	7.0
3	-0.5	-7.0	3.5	-1.0	22.5	3.5	29.0	10.5	29.5	7.0	30.0	6.5
4	9.0	-10.5	17.0	-0.5	23.5	4.5	26.0	8.0	31.0	9.5	30.0	5.5
5	16.5	-6.0	25.5	.0	22.5	9.0	24.5	10.5	30.0	6.5	30.5	6.0
6	18.5	-5.5	23.0	11.5	24.5	4.5	26.0	5.5	33.0	7.0	28.5	7.0
7	19.5	-1.0	21.5	5.0	21.0	9.0	28.5	7.0	33.0	8.0	29.5	6.0
8	18.0	-3.0	19.5	1.5	9.5	4.5	31.0	7.0	30.5	8.0	29.5	5.5
9	10.5	-3.5	3.5	-3.5	11.0	3.5	30.0	8.5	28.0	8.0	30.5	6.0
10	9.0	-1.5	1.0	-5.5	20.5	.0	32.0	8.0	19.0	11.0	30.0	6.0
11	8.5	-2.0	11.0	-8.5	25.0	2.5	31.0	4.5	25.5	9.0	23.5	8.5
12	5.0	-9.0	13.5	-2.0	28.5	5.5	31.5	7.0	28.5	6.5	19.0	6.5
13	14.0	-10.0	19.5	-3.0	29.5	6.0	31.5	6.5	25.5	6.0	21.0	5.5
14	18.5	-3.0	22.0	.0	28.0	6.5	31.0	9.5	14.5	9.5	6.5	1.0
15	22.0	-1.0	23.0	1.0	27.0	9.5	26.5	10.0	19.5	9.0	19.0	.0
16	22.0	-1.5	21.5	4.5	26.0	6.0	26.0	9.0	20.0	9.5	23.5	-1.0
17	20.0	1.0	16.5	3.0	25.0	8.5	25.0	9.0	21.5	8.5	21.0	1.5
18	21.0	4.5	24.0	1.0	24.5	5.0	24.5	8.5	19.5	6.5	20.5	3.5
19	17.0	3.5	23.5	3.5	19.5	8.0	19.5	5.5	21.0	4.5	24.0	2.0
20	16.0	1.0	14.0	2.5	25.5	1.0	25.5	8.0	20.5	4.0	20.0	3.5
21	19.5	1.0	16.0	4.5	28.0	3.5	28.0	8.5	24.5	3.5	16.5	3.5
22	20.5	-1.0	21.5	3.5	28.0	8.0	28.0	10.0	24.5	8.0	23.0	2.0
23	21.5	.5	19.0	3.5	23.5	8.0	23.5	9.0	21.0	8.5	26.0	3.5
24	22.0	3.0	19.0	4.0	21.0	6.0	21.0	13.0	24.0	6.0	27.0	3.0
25	10.0	1.5	18.5	6.5	27.0	5.0	27.0	11.5	23.5	6.0	25.0	4.0
26	16.5	.0	18.5	4.5	29.0	6.0	29.0	10.5	24.0	8.5	24.5	3.5
27	16.0	-0.5	22.0	3.5	29.5	7.0	29.5	9.0	24.5	6.0	24.5	4.0
28	17.5	-3.0	23.5	4.5	26.5	9.5	26.5	10.0	29.0	6.5	25.0	2.0
29	14.5	-2.0	23.0	5.5	28.0	9.0	24.0	10.0	26.5	6.0	26.5	3.5
30	15.5	-2.0	11.5	3.0	31.0	7.0	31.0	9.0	26.0	6.0	27.0	3.0
31			7.0	2.5			---	9.0	26.5	6.5		
MONTH	22.0	-10.5	25.5	-8.5	31.0	.0	32.0	4.5	33.0	3.5	30.5	-1.0

Table 8.--*Daily maximum and minimum temperature at Sarcillo Canyon, in degrees Celsius*--Continued

DAY	WATER YEAR 1980											
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	21.5	5.0	2.0	-12.0	6.0	-12.0	9.0	-6.5	12.5	-9.5	3.5	-12.0
2	24.0	1.5	8.0	-11.0	11.0	-12.0	1.0	-11.0	11.5	-7.0	15.5	-11.0
3	15.0	1.0	15.0	-10.5	13.5	-3.5	8.0	-12.0	14.5	-7.0	13.0	-0.5
4	22.0	-3.0	14.5	-3.5	16.5	-5.5	---	---	13.0	-1.5	8.0	-1.0
5	24.5	2.0	9.5	-5.0	15.0	-8.0	---	---	11.5	-6.0	13.5	-7.0
6	26.5	-1.0	11.5	-5.0	13.0	-9.0	---	---	13.5	-6.0	12.0	5.0
7	28.5	2.0	15.0	-3.0	8.5	-5.5	---	---	-1.0	-11.5	6.0	-5.0
8	27.0	1.5	9.0	-1.0	9.5	-5.0	---	---	-4.0	-12.0	12.0	-10.5
9	13.0	.0	5.0	-2.0	15.0	-6.0	---	---	6.5	-12.0	12.0	-8.5
10	25.5	-3.0	5.5	-10.0	19.0	-7.0	---	---	12.0	-12.0	17.0	-7.0
11	28.5	1.0	6.0	-12.0	6.5	-9.0	---	---	5.5	-11.0	10.5	-1.5
12	22.0	4.5	5.5	-11.5	8.5	-11.5	---	---	8.0	-11.0	6.0	-8.0
13	19.0	-2.0	6.0	-11.0	3.5	-12.0	---	---	11.0	-5.0	16.0	-11.0
14	23.0	2.0	10.0	-10.0	13.0	-12.0	---	---	13.5	-4.0	17.0	-5.0
15	23.5	1.5	12.0	-9.5	13.5	-8.5	5.0	-6.0	9.5	-6.0	16.5	-1.5
16	19.0	1.0	16.0	-9.5	1.0	-11.0	7.0	-7.5	5.0	-7.5	---	---
17	18.5	-3.5	17.0	-7.0	16.0	-11.0	7.5	-4.5	13.0	-6.0	---	---
18	17.0	1.5	8.5	-4.0	18.5	-9.5	8.5	-9.0	13.0	-2.5	---	---
19	31.0	4.5	8.5	-4.5	14.0	-10.5	-4.0	-11.5	12.0	-1.5	---	---
20	19.0	10.5	4.0	-10.0	14.5	-9.0	9.5	-11.5	6.5	-0.5	---	---
21	12.5	-6.5	-3.5	-12.0	11.0	-7.5	9.0	-12.0	9.0	-2.0	---	---
22	14.5	-9.5	4.0	-12.0	5.0	-5.0	2.0	-12.0	9.5	-5.0	---	---
23	20.5	-3.5	8.5	-12.0	-1.0	-12.0	11.5	-8.0	8.0	-7.5	---	---
24	22.0	-2.0	7.0	---	11.0	---	15.0	---	8.0	---	---	---
25	24.0	-1.0	4.0	-4.0	15.0	-2.0	9.0	-12.0	---	-11.5	---	---
26	23.5	1.0	8.5	-6.5	11.5	-2.5	-6.5	-12.0	---	---	---	---
27	15.5	-1.5	1.0	-12.0	11.5	-5.5	7.5	-12.0	21.0	-1.5	---	---
28	20.0	-4.5	-1.5	-12.0	-3.0	-12.0	-7.5	-12.0	20.5	-5.0	---	---
29	12.0	-5.0	1.0	-12.0	7.0	-12.0	12.0	-12.0	10.0	-12.0	---	---
30	-3.0	-12.0	4.5	-12.0	5.5	-12.0	-0.5	-11.0			---	---
31	1.0	-12.0			11.0	-12.0	8.5	-11.0			---	---
MONTH	31.0	-12.0	17.0	-12.0	19.0	-12.0	15.0	-12.0	21.0	-12.0	17.0	-12.0

Table 8.--*Daily maximum and minimum temperature at Sarcillo Canyon, in degrees Celsius*--Continued

WATER YEARS 1980-81

DAY	AUGUST MAX	AUGUST MIN	SEPTEMBER MAX	SEPTEMBER MIN	OCTOBER MAX	OCTOBER MIN	NOVEMBER MAX	NOVEMBER MIN	DECEMBER MAX	DECEMBER MIN	JANUARY MAX	JANUARY MIN	FEBRUARY MAX	FEBRUARY MIN	MARCH MAX	MARCH MIN
1	---	---	---	---	25.0	1.5	---	---	---	---	12.0	-8.0	-3.0	-12.0	9.5	-7.0
2	---	---	---	---	19.0	-1.5	---	---	---	---	16.0	-9.0	6.0	-12.0	10.5	-8.0
3	---	---	---	---	24.0	-3.0	---	---	---	---	15.5	-7.5	10.0	-12.0	5.5	-2.0
4	---	---	---	---	26.5	-1.5	---	---	---	---	12.0	-9.0	5.0	-12.0	1.0	-10.0
5	---	---	---	---	24.5	-0.5	---	---	---	---	13.0	-4.0	7.0	-12.0	10.0	-11.5
6	---	---	---	---	22.0	1.5	---	---	---	---	8.0	-9.5	9.5	-12.0	10.0	-7.5
7	---	---	---	---	26.5	-2.0	---	---	---	---	16.0	-12.0	7.5	-12.0	-1.0	-6.0
8	27.0	9.0	---	---	26.0	.0	---	---	---	---	12.0	-10.5	10.0	-12.0	3.0	-7.0
9	27.5	9.5	---	---	27.0	-0.5	---	---	---	---	9.5	-10.0	8.0	-6.0	3.0	-9.5
10	30.0	9.0	---	---	18.0	.0	---	---	---	---	12.0	-12.0	.0	-12.0	8.0	-9.5
11	27.5	9.5	---	---	24.5	-3.5	---	---	---	---	8.5	-12.0	8.0	-12.0	5.5	-2.0
12	29.5	7.0	---	---	26.0	.5	---	---	---	---	14.5	-12.0	8.5	-11.0	11.5	-9.0
13	30.0	7.0	---	---	21.5	2.0	---	---	---	---	10.0	-12.0	14.5	-12.0	8.5	-7.0
14	24.5	12.0	---	---	22.5	.0	---	---	---	---	10.0	-12.0	19.0	-11.0	6.0	-6.5
15	25.0	9.0	---	---	13.0	.0	---	---	---	---	7.0	-12.0	17.0	-5.0	12.0	-5.0
16	26.5	5.5	---	---	9.0	-5.0	---	---	---	---	-3.0	-12.0	18.0	-8.5	14.0	-7.5
17	27.0	7.0	28.5	2.0	10.0	-7.0	---	---	---	---	7.0	-12.0	20.5	-7.5	6.0	-3.1
18	29.0	6.5	29.5	1.5	13.0	-4.5	---	---	17.5	---	8.0	-11.0	16.5	-6.0	5.0	-6.0
19	28.0	10.0	28.5	5.5	16.0	-8.0	---	---	-4.0	-8.0	7.5	-8.0	19.0	-4.0	13.5	-9.0
20	28.5	4.5	25.5	7.0	18.0	-7.0	---	---	12.0	-11.0	5.0	-12.0	18.5	-6.0	12.0	.0
21	28.0	5.0	26.0	4.0	20.0	-6.0	---	---	12.5	-8.0	8.5	-12.0	1.0	-12.0	4.0	-3.0
22	29.0	7.0	18.0	.5	18.5	-6.0	---	---	12.5	-7.0	16.0	-12.0	9.5	-12.0	10.5	-7.0
23	28.5	8.0	23.0	-0.5	6.0	-11.0	---	---	8.0	-10.5	19.5	-9.0	17.0	-9.0	15.5	-6.0
24	28.0	7.0	25.0	.0	19.0	---	---	---	7.0	---	14.0	-5.0	17.0	-8.0	15.0	-4.0
25	28.5	7.5	19.0	-0.5	18.0	-8.0	---	---	17.0	-4.0	6.5	-11.0	18.5	-7.5	14.0	-7.5
26	25.0	9.5	22.0	2.5	12.0	-4.5	---	---	19.5	-4.0	6.5	-12.0	14.5	-4.0	18.0	-2.0
27	23.5	8.0	25.5	1.0	.5	-7.0	---	---	24.5	-3.5	11.5	-12.0	11.0	-4.0	16.0	-3.0
28	28.5	4.0	26.5	1.0	1.0	-11.5	---	---	14.0	-2.0	14.0	-8.0	12.0	-9.5	7.0	-5.0
29	24.0	5.0	24.5	1.5	13.5	-12.0	---	---	12.5	-10.0	8.0	-11.0			14.0	-7.0
30	25.5	8.5	29.5	.0	---	---	---	---	20.0	-9.5	11.0	-12.0			14.0	-7.0
31	26.5	6.0			---	---			16.5	-7.5	.0	-12.0			10.5	-6.5
MONTH	30.0	4.0	29.5	-0.5	27.0	-12.0	---	---	24.5	-11.0	19.5	-12.0	20.5	-12.0	18.0	-11.5

Table 8.--*Daily maximum and minimum temperature at Sarcillo Canyon, in degrees Celsius*--Continued

WATER YEAR 1981

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY	
1	17.0	-5.5	21.0	4.5	20.0	5.5	26.0	11.0
2	19.0	-2.0	24.5	3.0	24.5	3.5	25.0	10.5
3	7.5	-1.5	23.0	7.0	23.5	6.0	25.0	13.5
4	5.5	-5.0	19.0	6.0	21.5	4.5	25.5	11.0
5	16.0	-12.0	14.0	3.5	23.5	8.0	28.0	9.0
6	18.0	-5.0	19.0	3.5	28.5	10.0	32.0	9.0
7	17.5	-3.0	18.5	-0.5	30.5	7.0	30.0	11.5
8	17.0	-2.0	17.0	1.0	33.5	9.5	26.5	10.5
9	21.0	-3.0	7.0	-2.5	33.5	11.0	27.5	9.0
10	23.0	.5	19.5	-5.0	29.5	14.5	29.5	10.0
11	20.5	.0	21.5	-1.5	33.0	9.0	31.5	11.0
12	22.0	-2.0	19.5	-0.5	32.0	14.5	30.5	10.5
13	17.0	2.0	9.0	1.0	29.0	8.5	29.0	11.0
14	9.5	-1.0	22.5	-3.5	26.5	7.5	29.5	11.5
15	18.0	-2.0	16.0	2.5	19.0	5.0	28.5	13.0
16	21.0	3.0	16.0	.5	26.0	.0	27.0	9.5
17	25.0	-1.0	14.5	.0	28.5	8.0	26.0	10.5
18	15.5	.0	13.0	2.5	25.0	5.5	26.0	10.0
19	19.0	.0	19.0	1.5	33.0	4.0	30.0	8.5
20	19.5	2.0	18.5	5.0	34.0	8.5	33.5	8.0
21	21.0	-2.5	18.0	4.5	36.5	11.5	33.0	8.5
22	14.0	-2.5	20.5	6.0	32.0	9.5	33.0	9.0
23	19.5	-4.0	18.0	.5	30.5	10.0	---	---
24	24.0	-2.0	17.0	4.0	31.0	10.0	---	---
25	27.0	---	23.0	1.5	31.0	8.0	---	---
26	25.0	---	24.5	-4.0	32.5	9.0	---	---
27	24.0	---	28.0	7.5	32.0	9.0	---	---
28	18.0	---	20.5	7.0	27.0	8.5	---	---
29	29.5	---	21.0	4.0	17.0	10.0	---	---
30	27.5	---	18.0	4.5	25.5	10.0	---	---
31			21.5	2.5			---	---
MONTH	29.5	-12.0	28.0	-5.0	36.5	.0	33.5	8.0

Table 9.--*Daily maximum and minimum temperature at Mulligan Canyon, in degrees Celsius*

WATER YEARS 1978-79

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	AUGUST		SEPTEMBER		OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	---	5.5	24.0	2.0	28.5	2.5	---	---	14.5	-5.5	---	---	---	---	14.0	-4.1
2	---	2.0	25.0	2.5	19.0	2.5	---	---	---	---	---	---	---	---	10.5	-7.0
3	---	3.5	22.0	1.5	20.0	5.0	---	---	---	---	---	---	---	---	-2.0	-12.0
4	---	4.5	---	---	25.0	-2.0	---	---	14.0	-12.0	---	---	---	---	5.0	-12.0
5	---	6.5	26.0	3.5	---	---	---	---	13.0	-12.0	1.0	-12.0	---	-12.0	9.5	-11.1
6	---	2.5	24.0	4.5	20.0	-4.0	---	---	---	---	-3.5	-12.0	2.0	-12.0	14.0	-5.5
7	---	4.5	22.0	8.0	22.5	.0	---	---	---	---	-9.0	-12.0	9.0	-12.0	17.0	-3.5
8	---	5.0	22.5	1.5	24.0	-1.0	---	---	---	---	4.0	-12.0	1.0	-10.0	19.0	-2.0
9	---	2.0	24.0	1.5	22.0	2.0	---	---	---	---	4.5	-12.0	12.0	-5.0	-1.0	-10.1
10	---	2.0	24.5	2.5	24.0	-1.0	---	---	---	---	---	---	12.0	-4.0	7.0	-12.0
11	---	2.0	23.5	11.5	26.0	-1.0	---	---	---	---	---	---	13.5	-3.0	10.0	-7.0
12	---	2.0	21.5	-1.0	23.0	2.0	---	---	---	---	---	---	14.0	.5	18.0	-4.5
13	---	2.0	23.0	-1.0	11.5	1.0	---	---	---	-11.0	---	---	23.5	-1.0	12.0	-5.1
14	---	4.0	28.0	2.0	19.5	-4.5	---	---	12.0	-12.0	---	---	19.5	2.0	11.5	-7.0
15	---	---	29.0	6.5	21.5	-1.0	4.0	-8.0	11.5	-11.0	---	---	7.5	-5.0	14.0	-3.0
16	---	---	28.5	5.0	25.0	-0.5	8.0	-10.0	.5	-11.5	---	---	4.5	-8.5	14.0	-3.0
17	22.0	---	21.5	6.5	24.0	.0	9.0	-10.0	9.0	-8.5	---	---	9.0	-9.0	13.0	-11.1
18	16.0	---	25.0	6.5	15.0	1.0	12.0	-9.0	12.5	-3.0	---	---	11.0	-10.0	12.5	-7.1
19	25.5	---	15.0	3.0	24.0	-2.0	14.0	-10.0	9.0	-6.0	---	---	13.0	-7.0	9.0	-2.5
20	24.5	---	10.5	2.5	24.5	.0	7.0	-10.0	-1.5	-11.5	---	---	10.0	-6.0	8.5	1.0
21	24.0	---	17.0	-4.0	15.5	6.5	10.0	-6.0	8.0	-12.0	---	---	10.5	-5.5	11.5	-3.0
22	24.5	---	21.5	-1.0	6.5	-2.0	11.5	-2.5	5.5	-12.0	---	---	5.5	-7.5	2.5	-3.0
23	24.0	---	26.0	2.0	11.0	-2.0	13.0	-3.0	1.5	-12.0	---	---	4.5	-10.0	6.5	-5.0
24	21.5	---	20.0	9.0	17.0	.0	7.0	-1.0	10.0	---	---	---	6.0	---	13.0	-8.0
25	24.0	---	15.5	6.0	10.0	-7.0	11.0	-8.5	3.0	-11.5	---	---	11.5	-11.0	16.0	-4.0
26	24.5	---	24.0	2.5	10.0	-8.5	3.0	-9.5	.5	-12.0	---	---	16.0	-4.5	11.5	-3.0
27	19.5	---	23.0	3.5	---	---	1.5	-11.5	9.0	-12.0	---	---	1.5	-9.0	16.5	-3.5
28	17.0	---	26.5	3.0	---	---	11.0	-11.5	5.5	-8.0	---	---	12.0	-10.0	17.5	4.5
29	20.5	---	22.0	4.1	---	---	9.0	-9.0	-1.0	-12.0	---	---			11.0	.1
30	22.5	---	22.0	1.0	---	---	9.0	-9.5	---	---	---	---			12.5	-5.5
31	---	---			---	---			---	---	---	---			11.0	.9
MONTH	25.5	2.0	29.0	-4.0	28.5	-8.5	14.0	-11.5	14.5	-12.0	4.5	-12.0	23.5	-12.0	19.0	-12.4

Table 9.--*Daily maximum and minimum temperature at Mulligan Canyon, in degrees Celsius*--Continued

WATER YEAR 1979

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	2.5	-3.5	21.5	4.5	14.0	6.5	31.5	8.0	30.5	9.0	29.0	8.0
2	5.0	-10.0	18.0	.5	18.0	5.0	32.0	7.0	30.0	10.5	29.0	9.0
3	.0	-9.0	4.0	.5	23.0	7.0	31.0	12.0	31.5	10.0	30.5	8.0
4	11.0	-10.0	18.0	1.0	24.5	6.5	29.0	11.0	33.0	11.0	31.0	8.0
5	17.0	-3.0	27.0	1.0	25.0	8.5	26.0	12.0	32.5	9.0	31.5	7.0
6	21.0	-3.0	26.0	10.0	27.0	7.5	28.5	8.0	34.0	10.5	29.0	10.0
7	22.0	.0	24.5	5.0	22.0	7.5	33.0	10.0	34.5	9.0	30.5	9.0
8	19.0	-1.0	22.5	1.0	10.0	6.0	35.0	8.0	33.0	10.0	31.0	8.0
9	12.5	-1.0	5.5	-2.5	12.5	2.0	32.0	11.0	29.5	11.0	32.5	9.0
10	11.5	-1.0	1.5	-3.0	21.5	1.0	35.5	12.0	19.5	13.5	32.5	8.0
11	10.0	---	13.0	-4.5	16.5	5.5	35.5	9.0	23.5	12.0	24.0	10.0
12	5.0	-7.0	15.0	.0	19.5	7.0	34.0	10.5	29.0	10.0	19.5	7.5
13	18.0	-8.0	22.5	-1.5	36.5	8.0	35.0	12.5	28.0	10.0	21.5	8.0
14	22.0	-2.0	24.0	2.0	30.5	8.0	33.5	12.5	---	12.0	9.5	3.5
15	25.5	.0	24.0	3.5	29.0	10.5	28.0	13.0	22.0	12.0	20.5	1.5
16	24.5	1.0	24.5	7.0	29.0	8.0	29.0	11.5	18.0	13.0	24.0	1.0
17	23.0	5.0	19.0	5.5	28.0	7.5	27.5	11.5	26.0	8.0	23.0	3.5
18	24.0	7.5	27.0	2.5	27.5	5.0	27.0	10.0	28.0	8.5	21.5	5.0
19	20.5	1.5	24.0	5.5	23.0	7.0	26.5	8.0	28.5	5.0	25.0	3.0
20	17.0	3.0	16.5	4.0	28.5	3.0	29.0	8.0	27.5	5.0	22.5	4.0
21	20.5	3.5	18.0	5.0	31.0	6.0	30.5	10.0	27.5	5.0	23.0	5.0
22	22.0	.0	23.0	4.0	30.0	9.0	29.0	12.0	27.0	9.0	23.5	6.0
23	24.5	4.0	19.5	5.0	24.0	11.0	31.0	11.5	24.0	10.5	21.5	4.0
24	25.0	3.0	19.0	9.0	24.0	7.0	31.0	16.0	27.0	8.0	24.0	5.0
25	10.5	5.0	21.0	9.0	30.0	7.0	29.0	13.5	25.0	8.5	24.0	5.0
26	20.0	2.0	20.0	6.5	31.5	9.0	32.5	12.0	24.0	11.0	26.0	5.0
27	16.5	2.0	---	---	32.0	9.0	33.5	10.5	27.0	8.0	24.0	4.0
28	18.5	1.0	---	---	28.5	10.0	33.0	11.5	30.5	9.0	26.0	2.0
29	15.0	-2.0	---	---	29.5	8.0	30.0	11.0	28.0	8.5	27.0	3.0
30	16.0	-0.5	---	---	33.0	8.0	30.0	10.0	27.0	8.5	28.0	3.0
31			8.5	3.0			27.0	9.5	29.5	9.0		
MONTH	25.5	-10.0	27.0	-4.5	36.5	1.0	35.5	7.0	34.5	5.0	32.5	1.0

Table 9.--*Daily maximum and minimum temperature at Mulligan Canyon, in degrees Celsius*--Continued

WATER YEAR 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	26.0	5.0	2.0	-11.0	6.0	-12.0	10.5	-6.5	13.0	-10.5	---	---
2	33.0	1.0	7.0	-12.0	15.0	-12.0	.5	-11.0	12.0	-7.5	---	---
3	18.5	.0	15.5	-9.0	14.5	-3.5	7.5	-12.0	15.0	-7.0	---	---
4	26.5	-3.0	15.5	-4.5	20.0	-4.0	11.0	---	12.0	-3.0	---	---
5	24.5	1.0	9.5	-7.0	11.0	-7.5	14.5	-4.0	8.5	-5.5	---	---
6	26.5	.5	10.0	-3.5	15.5	-9.0	11.0	-11.5	13.0	-8.0	---	---
7	29.0	2.5	16.0	-2.5	9.0	-5.5	6.0	-12.0	-2.0	-10.5	---	---
8	28.5	3.0	9.5	-1.0	10.0	-3.5	8.0	-10.5	-7.0	-12.0	---	---
9	12.0	-0.5	3.5	-4.0	15.0	-5.5	9.5	-10.0	4.5	-12.0	---	---
10	27.0	-3.5	3.0	-8.0	20.5	-6.5	8.5	3.0	12.0	-12.0	---	---
11	28.5	2.0	6.0	-10.0	7.0	-9.0	3.5	-9.0	3.5	-11.0	---	---
12	22.0	5.0	7.5	-12.0	10.5	-12.0	14.5	-9.0	9.0	-12.0	---	---
13	19.0	1.0	9.5	-11.0	3.0	-11.0	15.0	-3.0	11.0	-8.0	14.5	---
14	25.0	3.0	12.5	-9.5	13.0	-12.0	16.5	-2.5	14.5	-4.0	17.0	-5.5
15	24.0	.0	16.5	-10.0	16.5	-8.5	5.0	-1.5	6.0	-8.0	17.0	-3.5
16	21.0	2.0	18.5	-9.0	.5	-12.0	6.0	-6.5	3.0	-9.0	7.0	-8.0
17	19.0	-2.5	10.5	-7.0	16.5	-11.0	9.0	-8.0	12.5	-7.5	8.0	-12.0
18	19.5	1.5	9.5	-4.5	19.5	-7.5	7.0	-5.0	15.0	-4.0	13.0	-10.5
19	22.0	2.5	1.5	-5.5	15.0	-9.0	-6.5	-9.0	13.0	-2.0	12.5	-6.0
20	21.0	7.5	-0.5	-10.0	15.5	-8.0	7.5	-11.5	8.5	-3.0	11.0	-3.5
21	15.0	5.0	3.0	-12.0	11.0	-9.0	7.5	-12.0	10.0	-4.0	17.5	-7.0
22	13.0	.5	3.0	-12.0	7.0	-8.5	.5	-12.0	11.0	-6.5	4.0	-3.0
23	20.0	.5	7.5	-12.0	-1.5	-12.0	10.5	-12.0	8.5	-9.0	-1.0	-7.5
24	22.0	-2.0	9.0	---	11.0	---	17.0	-9.0	9.0	---	6.0	---
25	24.0	-0.5	6.5	-6.0	15.5	-2.0	6.0	-12.0	12.5	-12.0	7.5	-5.0
26	25.5	.5	10.0	-6.0	3.0	-2.5	-10.0	-12.0	15.0	-7.0	7.0	-7.5
27	16.0	-1.0	6.0	-12.0	-1.0	-5.5	8.0	-12.0	21.0	-6.0	.5	-3.5
28	20.0	-4.5	2.0	-12.0	-6.0	-12.0	-11.0	-12.0	20.0	-5.5	.0	-7.0
29	14.0	-4.5	4.0	-12.0	5.5	-12.0	-10.0	-12.0			2.5	-10.0
30	-3.5	-8.5	4.0	-12.0	3.5	-12.0	-2.0	-11.0			12.0	-9.5
31	.0	-12.0			12.5	-12.0	7.5	-11.0			7.0	-6.0
MONTH	33.0	-12.0	18.5	-12.0	20.5	-12.0	17.0	-12.0	21.0	-12.0	17.5	-12.0

Table 9.--*Daily maximum and minimum temperature at Mulligan Canyon, in degrees Celsius*--Continued

WATER YEAR 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST	
1	2.0	-12.0	6.0	.0	24.0	1.5	28.0	9.0	32.0	10.0
2	1.5	-9.5	12.5	.0	24.0	.0	27.0	11.5	27.5	10.0
3	4.5	-9.5	16.5	-1.0	28.0	2.0	31.0	8.0	30.0	9.0
4	11.0	-8.0	17.0	2.0	29.0	3.0	33.0	9.0	30.5	9.0
5	17.0	-3.5	14.0	4.5	29.0	3.0	33.0	8.0	29.0	7.5
6	15.0	-1.0	19.0	3.0	30.5	4.0	33.5	10.0	---	---
7	9.0	-4.0	12.0	4.0	21.0	6.0	31.0	9.5	---	---
8	13.0	-9.0	14.5	4.5	17.5	10.0	32.5	9.0	---	---
9	15.0	-8.0	19.5	3.0	20.0	10.0	32.0	11.0	---	---
10	19.0	-3.0	21.0	5.5	22.0	8.0	32.0	12.0	---	---
11	-0.5	-4.0	18.5	3.0	29.5	7.0	34.0	10.0	---	---
12	.5	-6.5	14.0	1.0	30.0	8.0	31.5	9.0	---	---
13	5.0	-8.5	14.5	-1.0	31.0	7.0	30.0	11.0	---	---
14	15.0	-10.0	16.0	4.0	31.5	6.0	29.5	10.0	---	---
15	19.0	-3.5	7.0	1.0	29.0	3.5	32.5	10.0	---	---
16	14.0	-2.5	10.5	.5	22.5	6.5	32.0	9.0	---	---
17	16.5	-6.0	12.5	-0.5	27.5	8.0	34.0	11.0	---	---
18	23.0	-5.0	16.5	1.0	31.5	9.0	28.5	10.0	---	---
19	23.5	-3.0	20.0	3.0	29.0	8.0	30.0	11.0	---	---
20	24.0	-3.5	21.5	4.0	30.5	5.5	31.0	11.0	---	---
21	23.0	.0	23.0	4.5	29.5	8.5	29.0	9.0	---	---
22	21.0	1.5	25.0	6.0	29.5	7.5	30.0	8.0	---	---
23	19.0	.0	24.5	6.0	33.5	6.5	30.5	6.0	---	---
24	3.0	-2.0	24.0	3.0	33.0	9.0	32.0	8.0	---	---
25	3.0	-5.0	21.5	7.0	33.5	9.0	29.5	8.0	---	---
26	9.0	-7.0	22.5	2.5	34.5	8.0	31.0	10.0	---	---
27	15.0	-1.5	23.5	1.0	33.5	9.5	31.0	9.0	---	---
28	18.5	2.0	24.0	5.5	33.5	9.0	30.0	9.0	---	---
29	20.0	3.0	21.0	3.0	32.5	10.0	33.0	8.0	---	---
30	13.5	.0	23.0	-1.0	33.0	9.5	31.0	10.0	---	---
31			24.5	3.0			30.0	10.0	---	---
MONTH	24.0	-12.0	25.0	-1.0	34.5	.0	34.0	6.0	32.0	7.5

Table 10.--*Daily maximum and minimum temperature at Trinidad Dam, in degrees Fahrenheit*

[Data are for 24-hour period immediately preceding 8:00 a.m. on indicated day]

WATER YEAR 1978

DAY	JUNE		JULY		AUG		SEPT	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	65	46	80	50	85	51	82	50
2	56	43	85	50	86	53	83	49
3	62	48	87	56	75	51	85	49
4	70	48	90	63	67	47	82	48
5	70	47	91	53	72	47	86	49
6	66	39	90	54	79	49	87	53
7	65	42	90	61	86	54	84	58
8	70	41	87	61	80	49	82	53
9	72	45	92	59	81	49	82	47
10	87	47	79	56	81	50	85	50
11	89	52	89	59	88	49	88	51
12	88	56	89	54	90	52	85	43
13	79	58	89	55	90	55	90	43
14	85	52	82	58	88	56	80	43
15	91	62	91	54	87	48	85	45
16	92	61	92	59	85	51	88	45
17	92	56	89	59	92	63	85	48
18	82	53	93	63	91	57	81	57
19	80	58	90	61	81	48	81	43
20	90	54	92	59	72	54	61	41
21	77	53	83	60	86	55	53	34
22	92	55	85	55	87	58	65	34
23	95	59	77	53	86	52	74	38
24	93	53	80	53	87	55	80	47
25	95	63	85	52	84	56	69	49
26	94	52	90	55	80	48	64	43
27	87	59	88	57	85	48	75	41
28	76	36	90	61	85	48	74	43
29	79	53	94	51	76	52	82	44
30	77	54	87	51	75	48	72	40
31			82	58	79	52		

Table 10.--*Daily maximum and minimum temperatures at Trinidad Dam, in degrees Fahrenheit*--Continued

WATER YEAR 1979

DAY	OCT		NOV		DEC		JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	73	41	66	34	51	22	7	-3	31	8	52	21	54	28	63	39	46	37	90	58	80	51	86	49
2	85	42	64	33	60	16	4	-10	40	7	58	34	38	19	70	41	58	44	87	49	85	54	83	50
3	68	43	67	35	18	1	41	8	38	13	53	18	41	25	63	31	65	42	86	55	84	54	84	51
4	69	35	55	43	27	2	48	7	38	4	30	5	30	15	37	31	74	46	84	52	88	53	85	52
5	77	31	62	33	58	28	42	5	34	2	39	7	52	21	62	36	77	51	82	56	90	53	87	49
6	67	31	49	23	57	9	23	5	44	12	49	13	62	29	80	52	76	46	78	50	89	57	87	51
7	68	32	49	25	17	-4	27	8	38	9	55	25	72	37	80	42	81	52	82	53	93	55	86	50
8	73	38	67	30	9	-3	15	0	49	21	61	30	73	34	78	35	71	42	87	53	94	57	86	51
0	78	39	79	35	8	-14	45	11	32	14	65	25	61	34	78	38	48	40	92	51	91	56	87	47
10	73	37	78	29	43	-3	44	11	25	19	30	10	55	34	41	27	53	35	88	56	88	57	89	50
11	76	39	38	21	42	4	36	19	52	25	43	16	52	32	36	22	69	42	92	54	66	55	87	52
12	79	40	35	20	52	18	59	28	61	22	63	26	49	28	55	26	78	47	93	56	77	56	74	51
13	75	38	49	32	63	19	56	2	59	33	65	29	44	20	57	32	84	49	92	63	85	51	60	46
14	55	29	51	20	36	17	27	-3	73	31	53	23	65	30	72	39	89	52	93	56	81	53	70	41
15	68	29	33	19	56	21	43	0	70	31	53	29	72	34	75	43	88	57	88	58	58	50	48	37
16	71	35	33	20	51	13	48	30	45	13	58	33	78	37	76	47	85	54	81	54	72	52	66	38
17	78	37	48	16	38	14	53	20	32	14	59	34	77	48	78	50	87	54	83	54	75	53	73	40
18	78	37	48	19	54	30	48	32	50	16	57	24	73	47	78	46	83	55	81	53	74	49	73	41
19	59	34	56	22	61	42	51	24	52	23	54	25	77	46	80	39	82	51	80	50	70	45	69	42
20	76	34	57	22	57	21	45	22	58	27	49	32	71	38	69	41	74	40	78	50	75	43	74	43
21	78	39	48	21	35	14	37	13	53	22	46	33	63	41	62	43	84	48	82	55	76	44	70	45
22	61	44	49	27	54	16	50	20	53	29	55	26	69	43	60	41	89	53	89	55	82	47	65	42
23	46	28	58	35	43	20	48	-7	44	11	38	24	70	47	71	43	85	50	85	54	80	51	78	43
24	51	30	56	32	41	5	29	0	45	15	42	19	78	39	67	47	75	53	87	57	75	52	81	45
25	66	39	47	35	54	14	48	24	42	14	53	19	76	41	68	49	77	46	85	57	79	51	80	45
26	43	22	55	19	41	11	32	12	53	19	62	32	49	39	69	49	86	53	84	57	78	53	81	42
27	62	22	37	19	37	21	19	-7	62	27	50	31	66	36	66	43	89	54	88	55	75	40	82	44
28	67	29	34	15	57	34	22	-13	36	20	65	47	62	37	74	45	90	58	90	59	78	51	77	40
29	73	32	56	23	49	13	20	2			60	38	66	31	78	47	84	54	92	58	87	48	78	42
30	77	33	50	21	19	5	28	-14			55	26	60	33	77	44	84	52	85	53	85	51	79	45
31	49	28			12	5	12	-10			54	34			54	36			85	52	82	56		

Table 10.--*Daily maximum and minimum temperatures at Trinidad Dam, in degrees Fahrenheit*--Continued

WATER YEAR 1980

DAY	OCT		NOV		DEC		JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	84	47	--	--	--	--	--	--	--	--	--	--	48	13	59	31	78	44	94	56	89	56	84	45
2	69	41	--	--	--	--	--	--	--	--	--	--	39	20	44	32	78	39	82	56	98	61	82	47
3	83	40	--	--	--	--	--	--	--	--	--	--	32	18	55	33	77	46	82	51	85	54	89	52
4	58	32	--	--	--	--	--	--	--	--	--	--	38	20	63	37	84	50	90	57	88	52	89	50
5	72	34	--	--	--	--	--	--	--	--	--	--	53	28	63	42	85	43	93	55	88	51	78	52
6	76	39	--	--	--	--	--	--	--	--	--	--	65	38	60	41	88	50	92	62	88	55	83	54
7	79	42	--	--	--	--	--	--	--	--	--	--	62	28	67	39	90	52	94	59	90	61	80	52
8	84	43	--	--	--	--	--	--	--	--	--	--	51	22	57	42	72	54	90	56	92	59	85	53
9	83	35	--	--	--	--	--	--	--	--	--	--	58	21	58	44	65	49	92	53	86	59	82	50
10	54	31	--	--	--	--	--	--	--	--	--	--	61	30	70	49	72	50	95	61	86	55	53	42
11	78	32	--	--	--	--	--	--	--	--	--	--	69	29	71	49	74	51	95	55	89	59	67	51
12	83	43	--	--	--	--	--	--	--	--	--	--	33	23	67	38	85	52	95	55	83	57	81	47
13	68	39	--	--	--	--	--	--	--	--	--	--	34	23	60	32	88	53	90	58	84	54	79	44
14	68	43	--	--	--	--	--	--	--	--	--	--	43	19	60	40	89	50	89	55	95	55	78	46
15	77	39	--	--	--	--	--	--	--	--	--	--	60	29	62	43	89	50	89	55	77	53	77	48
16	75	39	--	--	--	--	--	--	--	--	--	--	68	34	46	35	85	50	93	55	85	50	82	49
17	70	32	--	--	--	--	--	--	--	--	--	--	58	25	51	36	74	53	91	58	86	50	75	46
18	77	33	--	--	--	--	--	--	--	--	--	--	63	28	55	33	82	54	95	59	82	56	80	45
19	70	48	--	--	--	--	--	--	--	--	--	--	72	34	60	38	92	53	88	68	89	59	83	46
20	72	47	--	--	--	--	--	--	--	--	--	--	75	38	69	41	87	49	92	61	87	50	88	54
21	71	37	--	--	--	--	--	--	--	--	--	--	77	41	71	44	88	54	89	51	85	48	81	56
22	38	21	--	--	--	--	--	--	--	--	--	--	77	44	73	48	87	52	86	59	84	50	84	41
23	56	21	--	--	--	--	--	--	--	--	--	--	72	39	78	51	87	52	90	51	87	59	64	44
24	68	31	--	--	--	--	--	--	--	--	--	--	70	33	78	49	95	58	91	53	87	58	75	39
25	71	36	--	--	--	--	--	--	--	--	--	--	41	28	75	48	94	55	92	55	87	57	70	39
26	74	37	--	--	--	--	--	--	--	--	--	--	39	26	73	48	93	55	88	53	84	57	63	42
27	80	38	--	--	--	--	--	--	--	--	--	--	45	26	76	40	96	58	88	54	76	54	80	43
28	60	29	--	--	--	--	--	--	--	--	--	--	57	27	77	49	95	55	90	58	73	47	77	43
29	69	30	--	--	--	--	--	--	--	--	--	--	66	38	77	48	91	59	89	58	86	48	79	45
30	61	25	--	--	--	--	--	--			--	--	70	40	74	37	92	64	95	57	82	51	76	41
31	28	8			--	--	--	--			--	--			75	43			90	57	85	48		

Table 10.--*Daily maximum and minimum temperatures at Trinidad Dam, in degrees Fahrenheit*--Continued

WATER YEAR 1981

DAY	OCT		NOV		DEC		JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	83	42	70	29	62	32	60	22	36	3	56	23	56	28	80	47	75	45	80	58	88	59	80	51
2	73	37	70	27	60	21	54	22	30	-1	54	23	62	41	73	52	70	42	84	56	86	55	77	49
3	63	35	75	29	63	26	61	22	39	-1	51	27	70	39	77	51	76	45	81	53	85	54	86	51
4	74	36	58	29	65	29	60	23	43	10	45	28	52	27	78	47	74	45	82	55	85	57	72	52
5	78	39	67	31	66	37	52	24	50	9	36	14	47	13	64	42	72	48	80	52	85	55	73	55
6	78	41	72	33	62	26	59	20	39	12	47	17	59	21	61	42	78	54	85	54	89	57	73	51
7	72	38	76	35	57	24	44	17	56	11	52	27	79	45	72	39	86	52	89	60	81	53	77	51
8	78	38	75	35	34	20	61	18	43	12	30	20	69	34	72	40	90	52	90	57	81	53	61	45
9	75	40	78	32	29	12	53	18	54	20	45	21	64	29	69	35	95	59	82	52	78	53	69	46
10	78	38	73	33	29	11	45	17	44	-5	48	24	74	40	49	26	95	59	81	57	71	52	77	48
11	60	32	80	31	57	16	52	14	14	-15	47	26	77	40	70	29	84	58	85	57	72	53	80	47
12	74	34	74	36	61	25	45	13	49	13	37	29	74	35	76	36	91	63	90	56	63	54	76	46
13	78	42	72	34	64	27	59	17	46	15	52	24	74	38	72	32	91	62	89	56	68	52	76	44
14	73	37	60	20	46	22	52	13	58	18	53	26	68	33	53	31	95	52	85	56	79	52	76	44
15	74	37	28	21	57	28	46	12	68	21	47	26	55	34	73	42	85	44	86	59	81	54	75	45
16	61	37	35	19	61	29	45	12	63	25	55	24	62	39	65	40	65	39	84	53	72	53	74	49
17	54	27	23	6	67	28	28	12	62	27	62	28	74	38	67	35	79	46	82	55	74	49	55	46
18	57	25	39	7	79	34	40	18	69	28	48	24	77	39	62	40	88	49	80	56	72	46	62	39
19	55	24	41	12	65	23	47	21	65	28	40	21	61	36	55	36	74	48	79	50	78	48	74	39
20	60	25	42	14	26	14	46	13	67	35	57	24	67	46	64	37	94	52	88	54	80	51	81	45
21	66	26	41	16	46	17	40	9	79	24	59	33	69	45	65	42	92	58	91	55	83	50	82	46
22	69	28	50	16	54	23	49	11	36	11	43	24	75	42	77	48	98	56	95	55	82	54	80	47
23	67	27	56	18	62	31	61	18	48	13	50	27	59	31	74	38	88	58	93	60	80	47	83	48
24	50	15	33	25	53	19	63	26	63	23	59	28	67	36	67	43	91	51	88	63	82	49	74	48
25	65	12	29	13	39	18	62	17	68	26	60	28	75	40	68	40	91	52	88	52	74	50	76	44
26	64	26	32	12	68	31	49	10	65	27	57	31	81	42	75	43	87	57	86	57	83	52	80	45
27	61	32	38	3	69	31	50	10	63	31	68	38	81	46	79	50	90	63	71	54	83	49	74	42
28	51	22	38	8	72	32	51	12	55	25	65	34	76	43	85	50	91	61	81	52	70	46	78	44
29	36	7	63	27	58	27	59	19			45	24	64	39	71	46	88	58	80	56	80	47	83	51
30	54	19	60	35	53	21	53	14			59	33	81	43	71	46	69	53	84	51	87	50	83	50
31	65	27			70	26	54	16			64	19			62	46			89	54	87	53		

Table 11.--*Daily dry- and wet-bulb temperatures at Trinidad Dam, in degrees Fahrenheit*

[Data are for 8:00 a.m. on indicated day]

WATER YEAR 1978

DAY	JUN		JUL		AUG		SEP	
	DRY	WET	DRY	WET	DRY	WET	DRY	WET
1	49	48	59	54	56	52	52	47
2	45	44	71	59	56	50	52	45
3	55	50	62	55	55	52	53	46
4	56	50	76	56	49	47	49	43
5	52	49	56	46	52	49	53	47
6	42	42	66	55	54	48	59	52
7	50	44	62	55	57	50	60	49
8	46	45	71	58	53	50	55	49
9	54	48	67	56	52	49	51	45
10	60	49	59	56	54	48	52	44
11	60	46	65	55	52	49	67	48
12	59	50	62	55	57	49	45	38
13	62	54	50	53	57	52	45	37
14	58	49	60	55	59	51	45	37
15	73	53	60	53	50	43	55	45
16	73	49	68	56	62	50	49	38
17	71	49	64	55	72	50	57	48
18	59	55	67	55	48	48	63	45
19	66	57	68	57	54	47	44	35
20	54	47	62	55	60	53	41	35
21	54	58	66	55	58	51	35	32
22	62	45	55	52	62	53	39	35
23	66	47	57	55	55	48	47	43
24	62	46	59	55	57	51	56	48
25	78	55	55	49	56	51	50	49
26	62	47	61	50	52	50	45	44
27	60	54	64	52	52	45	44	39
28	53	34	63	53	52	47	44	41
29	61	--	50	60	54	50	51	41
30	55	53	59	58	52	48	42	38
31			61	57	56	51		

Table 11.--*Daily dry- and wet-bulb temperatures at Trinidad Dam, in degrees Fahrenheit*--Continued

WATER YEAR 1979

DAY	OCT		NOV		DEC		JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP	
	DRY	WET	DRY	WET	DRY	WET	DRY	WET	DRY	WET	DRY	WET	DRY	WET	DRY	WET	DRY	WET	DRY	WET	DRY	WET	DRY	WET
1	43	37	41	39	28	27	-1	-1	14	12	38	30	30	29	43	40	45	44	66	55	55	53	50	43
2	43	35	36	33	16	16	-3	-3	8	7	38	31	23	22	44	41	48	47	55	51	59	53	55	47
3	44	39	46	41	5	--	21	20	17	17	19	18	26	25	32	32	49	45	59	50	56	50	52	45
4	37	32	48	46	13	13	11	10	9	8	8	7	22	20	35	33	51	46	55	52	64	52	56	46
5	33	27	38	33	49	36	5	5	3	2	18	17	35	30	45	40	57	52	58	54	63	48	52	45
6	32	31	32	28	9	9	12	10	15	12	25	24	37	32	55	40	53	48	59	51	67	54	54	46
7	40	36	30	28	-1	--	8	8	13	12	30	29	53	41	45	37	60	53	58	51	60	50	52	47
8	40	33	42	32	-3	-3	4	0	21	20	35	30	43	37	40	37	42	42	56	50	61	52	53	47
9	42	34	37	31	-3	--	12	11	16	15	26	25	43	37	38	38	47	44	58	48	60	51	61	52
10	39	31	34	31	11	11	13	12	25	22	15	14	40	36	27	26	42	39	64	54	59	57	52	46
11	40	30	21	20	7	7	25	23	34	27	37	30	35	32	26	26	49	45	60	47	60	56	54	50
12	45	34	32	31	20	19	28	26	39	29	31	30	34	32	39	37	53	47	65	51	60	53	54	47
13	38	31	38	31	21	20	6	5	34	29	33	32	31	28	40	35	56	49	68	55	53	49	48	49
14	32	30	20	20	22	20	4	4	56	35	30	30	42	34	44	36	60	48	65	56	57	55	41	40
15	36	29	24	23	24	23	33	30	37	32	35	32	54	39	47	40	63	51	70	59	53	52	40	39
16	46	37	21	20	14	13	36	32	13	12	35	32	48	37	58	46	64	50	58	55	59	54	40	37
17	41	35	20	19	33	29	22	20	28	27	37	34	51	45	51	45	66	49	59	55	56	53	44	40
18	38	32	29	29	49	40	34	32	24	20	32	31	54	47	56	43	66	46	57	55	51	49	44	40
19	35	31	29	29	43	36	24	22	28	25	31	30	57	42	50	41	54	39	55	53	48	46	43	40
20	39	32	23	23	23	22	22	21	34	32	37	34	40	37	46	44	48	40	54	51	46	44	45	41
21	58	47	27	26	17	16	20	20	33	31	39	38	47	42	43	43	55	42	60	55	47	43	48	47
22	44	44	45	39	19	18	34	32	31	30	35	25	52	46	47	43	60	45	60	54	52	48	44	41
23	32	30	39	32	31	25	-6	-7	20	19	26	25	55	45	48	46	54	49	56	53	55	53	41	40
24	44	41	37	30	15	11	7	7	21	20	26	24	54	41	52	49	58	54	63	58	55	50	47	40
25	39	33	36	36	20	18	25	24	19	18	32	26	41	38	51	48	55	51	59	57	53	50	47	43
26	23	22	23	21	11	10	12	12	31	30	34	32	48	42	53	51	61	52	63	59	55	53	44	39
27	30	28	20	20	26	25	-3	-2	34	32	37	32	38	35	50	45	59	51	60	54	51	49	46	39
28	32	28	20	19	39	37	2	1	21	20	54	40	57	42	54	49	65	62	66	56	54	50	42	39
29	35	29	24	23	15	14	15	14			45	32	36	34	53	50	62	55	67	56	54	44	48	40
30	45	35	23	21	8	8	-14	-13			34	32	39	38	45	41	66	52	58	52	56	50	47	39
31	34	31			6	6	-8	-7			38	33			38	38			56	52	61	53		

Table 11.--*Daily dry- and wet-bulb temperatures at Trinidad Dam, in degrees Fahrenheit*--Continued

WATER YEAR 1980

DAY	OCT		NOV		DEC		JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP	
	DRY	WET	DRY	WET	DRY	WET	DRY	WET	DRY	WET	DRY	WET	DRY	WET	DRY	WET	DRY	WET	DRY	WET	DRY	WET	DRY	WET
1	48	39	--	--	--	--	--	--	--	--	--	--	21	20	33	32	48	39	60	47	62	54	47	44
2	42	36	--	--	--	--	--	--	--	--	--	--	25	25	40	40	47	36	65	59	64	57	52	44
3	40	36	--	--	--	--	--	--	--	--	--	--	20	20	41	39	58	43	56	52	60	56	55	46
4	34	31	--	--	--	--	--	--	--	--	--	--	28	27	43	41	65	44	72	55	57	56	56	48
5	41	33	--	--	--	--	--	--	--	--	--	--	46	37	46	45	56	42	62	49	55	48	54	48
6	42	34	--	--	--	--	--	--	--	--	--	--	50	37	43	41	57	42	69	54	63	55	62	54
7	47	36	--	--	--	--	--	--	--	--	--	--	48	34	43	42	56	47	71	57	63	57	53	53
8	46	35	--	--	--	--	--	--	--	--	--	--	29	28	47	44	55	51	61	52	64	56	55	51
9	35	34	--	--	--	--	--	--	--	--	--	--	32	28	50	45	50	49	64	53	65	57	50	50
10	33	29	--	--	--	--	--	--	--	--	--	--	41	32	55	42	56	55	66	57	59	53	51	47
11	44	34	--	--	--	--	--	--	--	--	--	--	31	31	53	40	61	55	63	53	63	56	55	50
12	48	38	--	--	--	--	--	--	--	--	--	--	27	25	43	32	57	48	59	52	60	54	50	43
13	43	40	--	--	--	--	--	--	--	--	--	--	30	30	40	36	69	49	68	54	56	52	46	45
14	47	40	--	--	--	--	--	--	--	--	--	--	29	29	44	39	62	46	61	53	61	57	57	53
15	40	34	--	--	--	--	--	--	--	--	--	--	37	31	44	43	60	44	62	53	54	53	49	48
16	44	34	--	--	--	--	--	--	--	--	--	--	44	36	37	36	59	54	59	48	54	46	54	46
17	33	31	--	--	--	--	--	--	--	--	--	--	35	30	46	42	59	55	70	58	56	49	48	44
18	49	42	--	--	--	--	--	--	--	--	--	--	39	32	41	38	60	54	69	55	60	53	47	40
19	58	41	--	--	--	--	--	--	--	--	--	--	57	40	43	42	55	45	70	46	65	54	63	49
20	61	47	--	--	--	--	--	--	--	--	--	--	60	42	45	42	55	50	66	55	51	42	56	47
21	37	36	--	--	--	--	--	--	--	--	--	--	55	40	48	44	60	53	60	52	50	43	60	45
22	22	21	--	--	--	--	--	--	--	--	--	--	54	43	52	45	64	50	63	57	60	53	44	39
23	31	28	--	--	--	--	--	--	--	--	--	--	55	45	57	49	58	47	54	48	65	58	48	42
24	37	33	--	--	--	--	--	--	--	--	--	--	36	35	62	45	61	47	58	52	62	53	40	35
25	37	34	--	--	--	--	--	--	--	--	--	--	33	32	57	40	62	49	59	53	58	53	42	39
26	39	33	--	--	--	--	--	--	--	--	--	--	34	31	55	40	60	48	58	54	60	56	49	43
27	41	37	--	--	--	--	--	--	--	--	--	--	28	28	55	45	65	53	63	55	54	53	45	42
28	30	28	--	--	--	--	--	--	--	--	--	--	39	37	55	50	64	49	60	55	49	47	46	41
29	40	32	--	--	--	--	--	--	--	--	--	--	44	40	54	41	65	53	64	53	53	44	49	41
30	26	25	--	--	--	--	--	--			--	--	42	40	44	35	71	53	60	50	61	48	42	35
31	9	8			--	--	--	--			--	--			57	48			62	54	52	47		

Table 11.--*Daily dry- and wet-bulb temperatures at Trinidad Dam, in degrees Fahrenheit*--Continued

WATER YEAR 1981

DAY	OCT		NOV		DEC		JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP	
	DRY	WET	DRY	WET	DRY	WET	DRY	WET	DRY	WET	DRY	WET	DRY	WET	DRY	WET	DRY	WET	DRY	WET	DRY	WET	DRY	WET
1	48	37	35	28	44	33	23	23	15	15	34	32	40	29	51	48	49	47	62	58	63	57	53	50
2	39	35	36	28	26	25	24	24	0	0	32	32	51	37	55	48	49	41	60	55	60	56	51	48
3	36	33	33	32	45	34	25	25	11	11	40	38	43	33	53	48	50	47	61	60	58	55	59	52
4	40	34	32	32	38	30	26	26	18	18	29	29	32	30	48	45	49	46	60	58	62	59	57	54
5	42	33	35	30	47	35	32	28	13	13	18	18	21	21	43	41	55	53	57	52	59	54	58	55
6	43	37	37	30	27	26	21	21	27	27	37	32	47	34	50	46	58	54	60	54	61	56	54	51
7	39	33	44	35	30	29	18	18	13	13	27	27	53	39	47	40	58	49	66	58	55	54	51	51
8	41	34	47	34	23	23	20	20	21	21	28	28	40	36	43	41	47	45	65	55	59	55	47	46
9	40	34	40	33	14	14	28	20	24	24	24	24	46	39	37	33	66	49	57	51	59	52	48	47
10	39	34	35	28	16	16	18	18	-5	-5	27	27	50	37	31	30	63	58	64	55	56	55	49	48
11	34	29	42	31	26	26	15	15	14	14	31	31	58	40	46	38	64	57	62	58	55	54	49	46
12	43	35	52	39	29	29	17	17	21	21	32	32	39	30	43	37	67	58	61	56	55	55	48	46
13	52	42	35	34	30	29	19	19	19	19	28	28	52	44	38	38	71	50	59	54	58	54	48	46
14	37	32	22	22	25	25	14	14	21	21	33	33	37	33	42	38	54	48	60	55	55	51	46	43
15	46	42	24	24	29	29	13	13	37	28	32	32	40	35	52	43	45	39	62	58	59	55	50	48
16	40	31	19	19	28	28	18	18	40	32	29	29	56	43	45	40	48	40	57	53	54	53	50	50
17	29	29	7	7	36	30	13	13	31	31	43	32	50	40	49	39	51	45	57	55	50	50	49	47
18	28	27	13	13	48	35	26	26	29	29	24	24	50	46	41	39	56	47	62	59	50	49	40	39
19	26	26	14	14	25	25	24	24	36	28	25	25	46	42	38	36	52	45	55	53	51	48	44	37
20	27	27	19	19	17	17	14	14	54	37	49	37	48	47	47	40	62	47	60	49	55	52	46	44
21	29	29	17	17	25	25	12	12	24	24	40	31	57	44	55	45	59	49	61	51	54	50	49	44
22	29	29	19	19	42	32	18	18	14	14	30	30	49	40	53	40	61	55	60	49	59	55	48	45
23	29	29	27	27	41	32	27	27	25	25	33	32	39	37	44	37	65	55	71	55	49	47	53	49
24	16	16	26	25	21	21	38	28	29	29	31	29	49	40	45	43	63	51	68	57	58	52	51	46
25	27	27	14	14	32	29	10	10	29	29	32	31	54	41	45	41	50	53	57	53	53	40	45	44
26	50	35	20	20	32	28	11	11	44	33	41	34	50	39	52	46	67	55	59	54	54	49	48	42
27	34	29	8	8	33	30	12	12	32	32	49	38	55	42	58	47	67	59	59	53	50	48	44	40
28	23	23	33	30	36	31	21	21	29	29	38	32	50	46	56	52	63	55	56	54	48	46	58	49
29	20	20	36	32	29	29	32	27			33	30	44	40	51	46	59	57	59	56	51	48	52	46
30	30	29	50	35	27	27	19	19			46	37	47	41	47	46	59	55	55	51	53	50	51	46
31	35	32			29	29	26	26			37	27			50	47			58	53	61	52		

Table 12.--*Daily relative humidity at Sarcillo Canyon, in percent*

WATER YEARS 1978-79

DAY	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	42.0	77.0	59.0	---	---	47.0	85.0	59.0	91.0	56.0	52.0	50.0
2	---	46.0	66.0	81.0	---	---	71.0	85.0	75.0	74.0	51.0	51.0	57.0
3	---	61.0	86.0	74.0	56.0	---	78.0	94.0	96.0	61.0	56.0	53.0	55.0
4	---	---	---	48.0	64.0	---	66.0	58.0	60.0	61.0	56.0	43.0	60.0
5	---	---	70.0	71.0	78.0	---	59.0	52.0	41.0	67.0	61.0	43.0	52.0
6	---	57.0	61.0	81.0	84.0	---	43.0	54.0	19.0	57.0	56.0	55.0	64.0
7	---	55.0	59.0	77.0	84.0	---	63.0	39.0	30.0	69.0	55.0	49.0	61.0
8	---	39.0	43.0	---	41.0	85.0	59.0	58.0	45.0	97.0	41.0	53.0	58.0
9	---	35.0	40.0	---	---	64.0	94.0	86.0	97.0	84.0	37.0	76.0	61.0
10	---	44.0	80.0	---	---	67.0	71.0	62.0	91.0	64.0	41.0	90.0	61.0
11	---	37.0	90.0	---	---	37.0	52.0	74.0	72.0	59.0	36.0	70.0	75.0
12	---	39.0	78.0	53.0	---	57.0	54.0	79.0	54.0	56.0	41.0	72.0	95.0
13	---	66.0	50.0	---	---	43.0	49.0	46.0	40.0	44.0	43.0	74.0	86.0
14	---	62.0	94.0	56.0	---	31.0	61.0	37.0	38.0	43.0	52.0	96.0	96.0
15	---	45.0	95.0	59.0	---	74.0	60.0	35.0	55.0	46.0	64.0	80.0	73.0
16	40.0	43.0	68.0	85.0	---	86.0	61.0	44.0	52.0	46.0	74.0	79.0	59.0
17	50.0	45.0	62.0	77.0	---	53.0	59.0	57.0	65.0	31.0	74.0	80.0	61.0
18	39.0	57.0	58.0	62.0	---	55.0	69.0	47.0	54.0	30.0	70.0	84.0	62.0
19	46.0	57.0	60.0	46.0	---	51.0	78.0	36.0	84.0	42.0	62.0	64.0	66.0
20	54.0	45.0	87.0	49.0	---	51.0	85.0	52.0	91.0	40.0	56.0	55.0	58.0
21	64.0	76.0	69.0	46.0	---	72.0	70.0	59.0	79.0	35.0	61.0	48.0	89.0
22	67.0	96.0	41.0	53.0	---	47.0	79.0	54.0	54.0	40.0	46.0	54.0	63.0
23	53.0	82.0	44.0	64.0	---	72.0	78.0	45.0	82.0	80.0	44.0	96.0	51.0
24	64.0	67.0	87.0	62.0	---	65.0	52.0	36.0	84.0	71.0	63.0	63.0	57.0
25	53.0	77.0	64.0	78.0	---	51.0	46.0	82.0	84.0	50.0	68.0	49.0	55.0
26	55.0	69.0	86.0	67.0	---	50.0	65.0	43.0	73.0	46.0	65.0	78.0	49.0
27	46.0	58.0	84.0	40.0	---	97.0	40.0	72.0	55.0	49.0	57.0	62.0	63.0
28	50.0	51.0	49.0	53.0	---	59.0	33.0	52.0	71.0	56.0	55.0	48.0	58.0
29	43.0	46.0	50.0	58.0	---		39.0	75.0	48.0	58.0	55.0	57.0	49.0
30	60.0	73.0	57.0	84.0	---		53.0	69.0	84.0	49.0	54.0	53.0	51.0
31		67.0		88.0	---		70.0		99.0		74.0	54.0	
MEAN	---	---	---	---	---	---	61.4	58.9	65.2	56.5	55.7	63.9	63.2

Table 12.--*Daily relative humidity at Sarcillo Canyon, in percent*--Continued

WATER YEAR 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	52.0	87.0	66.0	69.0	53.0	75.0	---	---	---	---	---	---
2	51.0	69.0	57.0	94.0	66.0	43.0	---	---	---	---	---	---
3	67.0	61.0	68.0	---	55.0	49.0	---	---	---	---	---	---
4	59.0	57.0	59.0	---	68.0	70.0	---	---	---	---	---	---
5	42.0	79.0	57.0	---	77.0	46.0	---	---	---	---	---	---
6	47.0	77.0	75.0	---	67.0	40.0	---	---	---	---	---	---
7	41.0	71.0	72.0	---	92.0	55.0	---	---	---	---	---	---
8	44.0	87.0	82.0	---	86.0	48.0	---	---	---	---	44.0	---
9	74.0	91.0	79.0	---	64.0	40.0	---	---	---	---	38.0	---
10	47.0	90.0	50.0	---	59.0	33.0	---	---	---	---	30.0	---
11	38.0	85.0	91.0	---	73.0	52.0	---	---	---	---	38.0	---
12	50.0	84.0	71.0	---	55.0	52.0	---	---	---	---	34.0	---
13	67.0	72.0	73.0	---	50.0	40.0	---	---	---	---	32.0	---
14	49.0	77.0	63.0	---	---	22.0	---	---	---	---	55.0	---
15	43.0	62.0	52.0	---	81.0	16.0	---	---	---	---	37.0	---
16	50.0	64.0	76.0	89.0	95.0	---	---	---	---	---	24.0	---
17	67.0	56.0	60.0	75.0	63.0	---	---	---	---	---	29.0	24.0
18	67.0	67.0	51.0	86.0	69.0	---	---	---	---	---	26.0	21.0
19	41.0	76.0	57.0	95.0	48.0	---	---	---	---	---	21.0	19.0
20	39.0	83.0	57.0	84.0	50.0	---	---	---	---	---	18.0	21.0
21	91.0	82.0	72.0	69.0	52.0	---	---	---	---	---	25.0	18.0
22	69.0	67.0	73.0	81.0	55.0	---	---	---	---	---	25.0	33.0
23	61.0	65.0	97.0	65.0	71.0	---	---	---	---	---	29.0	26.0
24	64.0	76.0	69.0	48.0	61.0	---	---	---	---	---	35.0	30.0
25	56.0	60.0	51.0	72.0	---	---	---	---	---	---	38.0	41.0
26	37.0	55.0	89.0	86.0	---	---	---	---	---	---	43.0	41.0
27	64.0	80.0	91.0	51.0	---	---	---	---	---	---	40.0	29.0
28	79.0	75.0	87.0	91.0	47.0	---	---	---	---	---	21.0	22.0
29	79.0	67.0	78.0	58.0	79.0	---	---	---	---	---	20.0	23.0
30	88.0	57.0	78.0	73.0		---	---	---	---	---	22.0	21.0
31	81.0		58.0	67.0		---		---		---	---	
MEAN	58.2	72.6	69.6	---	---	---	---	---	---	---	---	---

Table 12.--*Daily relative humidity at Sarcillo Canyon, in percent*--Continued

WATER YEARS 1981-82

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT
1	25.0	---	---	56.0	---	60.0	28.0	59.0	61.0	59.0	54.0	---	62.0
2	37.0	---	---	50.0	---	60.0	26.0	41.0	46.0	63.0	48.0	---	---
3	26.0	---	---	48.0	49.0	80.0	47.0	41.0	54.0	68.0	49.0	---	---
4	22.0	---	---	56.0	58.0	70.0	64.0	58.0	57.0	50.0	56.0	---	---
5	23.0	---	---	56.0	33.0	58.0	42.0	73.0	55.0	48.0	60.0	63.0	---
6	32.0	---	---	69.0	53.0	60.0	29.0	51.0	52.0	46.0	72.0	60.0	---
7	28.0	---	---	50.0	34.0	75.0	29.0	40.0	39.0	50.0	73.0	77.0	---
8	23.0	---	---	52.0	45.0	70.0	42.0	14.0	27.0	46.0	69.0	68.0	---
9	21.0	---	---	53.0	---	74.0	34.0	63.0	27.0	55.0	74.0	64.0	---
10	29.0	---	---	55.0	41.0	75.0	24.0	45.0	51.0	55.0	76.0	55.0	48.0
11	28.0	---	---	63.0	55.0	79.0	23.0	36.0	43.0	56.0	82.0	58.0	39.0
12	22.0	---	---	40.0	46.0	57.0	28.0	41.0	31.0	48.0	73.0	56.0	40.0
13	25.0	---	---	36.0	30.0	71.0	61.0	50.0	24.0	43.0	56.0	67.0	---
14	27.0	---	---	56.0	36.0	71.0	68.0	61.0	37.0	49.0	54.0	52.0	---
15	30.0	---	---	56.0	46.0	48.0	52.0	61.0	46.0	50.0	68.0	62.0	---
16	21.0	---	---	81.0	43.0	46.0	33.0	47.0	36.0	61.0	69.0	85.0	---
17	17.0	---	---	69.0	35.0	39.0	29.0	51.0	25.0	72.0	70.0	65.0	---
18	19.0	---	---	59.0	30.0	73.0	58.0	63.0	39.0	70.0	61.0	51.0	---
19	21.0	---	72.0	48.0	39.0	49.0	57.0	53.0	25.0	43.0	52.0	40.0	---
20	18.0	---	58.0	54.0	66.0	35.0	39.0	50.0	26.0	33.0	52.0	41.0	---
21	15.0	---	53.0	34.0	49.0	66.0	22.0	28.0	29.0	30.0	49.0	50.0	---
22	19.0	---	36.0	35.0	46.0	66.0	58.0	27.0	43.0	32.0	57.0	62.0	---
23	36.0	---	53.0	32.0	31.0	49.0	38.0	50.0	37.0	43.0	48.0	55.0	---
24	13.0	---	56.0	25.0	30.0	60.0	33.0	60.0	45.0	45.0	47.0	56.0	---
25	9.0	---	32.0	30.0	37.0	45.0	26.0	45.0	46.0	56.0	---	36.0	---
26	19.0	---	40.0	42.0	42.0	35.0	22.0	33.0	35.0	74.0	---	46.0	---
27	43.0	---	44.0	40.0	64.0	34.0	31.0	25.0	43.0	57.0	---	42.0	---
28	42.0	---	51.0	48.0	---	52.0	59.0	48.0	56.0	60.0	---	44.0	---
29	25.0	---	65.0	40.0		37.0	32.0	63.0	74.0	48.0	---	44.0	---
30	---	---	31.0	53.0		33.0	36.0	68.0	61.0	46.0	---	51.0	---
31	---		45.0	49.0		26.0		53.0		49.0	---		---
MEAN	---	---	---	49.5	---	56.5	32.0	49.6	42.3	51.8	---	---	---

Table 13.--*Daily relative humidity at Mulligan Canyon, in percent*

WATER YEARS 1978-79

DAY	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	50.0	38.0	---	57.0	---	---	39.0	91.0	59.0	81.0	48.0	49.0	44.0
2	---	46.0	41.0	---	80.0	---	---	57.0	81.0	72.0	71.0	35.0	45.0	52.0
3	---	---	58.0	---	---	---	---	69.0	83.0	92.0	64.0	47.0	48.0	50.0
4	---	---	---	---	---	---	---	55.0	56.0	56.0	54.0	53.0	39.0	54.0
5	---	57.0	---	---	---	---	---	54.0	55.0	39.0	58.0	57.0	41.0	47.0
6	---	53.0	53.0	---	---	---	69.0	60.0	51.0	16.0	52.0	48.0	48.0	55.0
7	---	42.0	55.0	---	---	---	56.0	68.0	37.0	29.0	70.0	43.0	43.0	60.0
8	---	53.0	36.0	---	---	---	67.0	69.0	57.0	43.0	86.0	37.0	55.0	56.0
9	---	31.0	31.0	---	---	---	48.1	86.0	75.0	90.0	73.0	38.0	84.0	54.0
10	---	48.0	44.0	---	---	---	56.1	66.0	59.0	84.0	51.0	35.0	83.0	51.0
11	---	32.1	34.0	---	---	---	71.0	49.0	69.0	54.0	53.0	26.0	64.0	63.0
12	---	45.0	42.0	---	---	---	58.0	44.0	79.0	62.0	49.0	38.0	52.0	83.0
13	---	47.0	66.0	---	---	---	43.0	60.0	38.0	38.0	43.0	42.0	67.0	78.0
14	---	42.0	52.0	---	58.0	---	32.0	56.0	34.0	35.0	39.0	61.0	87.0	90.0
15	---	46.0	38.0	90.0	58.0	---	79.0	59.0	31.0	48.0	48.0	66.0	76.0	69.0
16	---	40.0	45.0	61.0	71.0	---	80.0	64.0	45.0	43.0	39.0	58.0	81.0	57.0
17	---	52.0	43.0	68.0	70.0	---	53.0	60.0	57.0	55.0	30.0	50.0	58.0	62.0
18	47.0	35.0	59.0	63.0	52.0	---	57.0	65.0	35.0	44.0	30.0	59.0	52.0	61.0
19	63.0	44.0	56.0	75.0	43.0	---	45.0	51.0	30.0	50.0	45.0	52.0	51.0	63.0
20	55.0	64.0	43.0	81.0	55.0	---	47.0	74.0	52.0	84.0	40.0	44.0	52.0	51.0
21	59.0	60.0	82.0	80.0	46.0	---	52.0	61.0	54.0	76.0	36.0	55.0	40.0	69.0
22	56.0	63.0	95.0	43.0	59.0	---	38.0	73.0	46.0	50.0	49.0	59.0	48.0	73.0
23	54.0	53.0	81.0	48.0	53.0	---	66.0	78.0	43.0	70.0	75.0	42.0	67.0	57.0
24	61.0	68.0	61.0	72.0	60.0	---	66.0	50.0	31.0	71.0	66.0	68.0	55.0	52.0
25	78.0	78.0	84.0	63.0	77.0	---	45.0	46.0	77.0	77.0	43.0	60.0	68.0	58.0
26	53.0	54.0	---	82.0	66.0	---	41.0	72.0	44.0	71.0	39.0	45.0	71.0	44.0
27	41.0	49.0	---	75.0	44.0	---	84.0	37.0	61.0	---	40.0	52.0	56.0	59.0
28	49.0	51.0	---	42.0	47.0	---	54.0	32.0	49.0	---	49.0	47.0	43.0	54.0
29	60.0	46.0	---	57.0	79.0	---		38.0	78.0	---	45.0	59.0	50.0	48.0
30	57.0	57.0	---	53.0	81.0	---		49.0	63.0	---	44.0	48.0	48.0	46.0
31	51.0		---		---	---		67.0		38.0		67.0	39.0	
MEAN	---	---	---	---	---	---	---	58.3	55.2	---	52.1	49.6	56.8	58.7

Table 13.--*Daily relative humidity at Mulligan Canyon, in percent*--Continued

WATER YEAR 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG
1	51.0	80.0	61.0	71.0	55.0	---	78.0	57.0	15.0	38.0	32.0
2	49.0	58.0	57.0	93.0	71.0	---	89.0	57.0	24.0	47.0	51.0
3	64.0	58.0	66.0	65.0	61.0	---	79.0	47.0	17.0	29.0	33.0
4	56.0	75.0	56.0	73.0	---	---	72.0	54.0	18.0	28.0	25.0
5	40.0	72.0	59.0	53.0	72.0	---	55.0	63.0	18.0	30.0	---
6	42.0	68.0	68.0	54.0	65.0	---	46.0	47.0	18.0	26.0	---
7	38.0	82.0	63.0	67.0	91.0	---	39.0	54.0	39.0	29.0	---
8	42.0	84.0	73.0	67.0	80.0	---	46.0	56.0	55.0	27.0	---
9	69.0	84.0	72.0	63.0	54.0	---	49.0	18.0	52.0	30.0	---
10	46.0	79.0	47.0	47.0	53.0	---	43.0	17.0	52.0	40.0	---
11	37.0	78.0	83.0	71.0	69.0	---	94.0	33.0	29.0	32.0	---
12	52.0	72.0	67.0	61.0	53.0	---	71.0	20.0	20.0	25.0	---
13	60.0	77.0	61.0	60.0	46.0	---	57.0	31.0	11.0	28.0	---
14	44.0	61.0	55.0	73.0	69.0	37.0	56.0	45.0	12.0	53.0	---
15	46.0	57.0	49.0	97.0	98.0	32.0	52.0	62.0	17.0	31.0	---
16	56.0	51.0	68.0	86.0	94.0	82.0	57.0	56.0	40.0	38.0	---
17	68.0	62.0	55.0	74.0	75.0	71.0	52.0	53.0	43.0	27.0	---
18	64.0	73.0	42.0	79.0	59.0	50.0	47.0	42.0	19.0	36.0	---
19	37.0	76.0	50.0	94.0	52.0	57.0	44.0	35.0	27.0	28.0	---
20	43.0	79.0	57.0	83.0	45.0	69.0	46.0	33.0	25.0	33.0	---
21	88.0	62.0	70.0	70.0	56.0	42.0	48.0	30.0	27.0	38.0	---
22	74.0	64.0	72.0	77.0	61.0	73.0	56.0	35.0	24.0	41.0	---
23	57.0	56.0	88.0	61.0	68.0	87.0	39.0	18.0	15.0	35.0	---
24	57.0	54.0	65.0	59.0	58.0	71.0	66.0	12.0	19.0	27.0	---
25	55.0	47.0	59.0	76.0	42.0	61.0	56.0	5.0	25.0	38.0	---
26	37.0	78.0	73.0	83.0	47.0	59.0	47.0	15.0	25.0	33.0	---
27	58.0	63.0	91.0	61.0	44.0	92.0	38.0	29.0	24.0	31.0	---
28	58.0	60.0	83.0	82.0	---	85.0	37.0	20.0	27.0	34.0	---
29	72.0	56.0	75.0	56.0		81.0	38.0	12.0	34.0	24.0	---
30	87.0	---	77.0	73.0		55.0	51.0	24.0	27.0	48.0	---
31	71.0		61.0	82.0		71.0		24.0		40.0	---
MEAN	55.4	---	65.3	71.2	---	---	54.9	35.6	26.6	33.7	---

Table 14.--*Daily evaporation at Trinidad Dam, in inches*

[Data are for 24-hour period immediately preceding 8:00 a.m. on indicated day]

WATER YEAR 1978

DAY	JUN	JUL	AUG	SEP
1	0.07	0.05	0.12	0.24
2	.00	.35	.30	.37
3	.15	.60	.29	.35
4	.28	.62	.00	.23
5	.00	.60	.19	.35
6	.13	.54	.32	.43
7	.17	.56	.35	.50
8	.12	.51	.23	.60
9	.25	.32	.30	.39
10	.45	.05	.37	.33
11	.67	.29	.24	.52
12	.30	.32	.32	.52
13	.45	.33	.08	.41
14	.40	.30	.45	.33
15	.60	.30	.58	.30
16	.70	.47	.45	.45
17	.69	.30	.58	.30
18	.26	.50	.61	.45
19	.39	.43	.38	.48
20	.63	.45	.35	.30
21	.30	.30	.41	.17
22	.51	.25	.38	.30
23	.62	.10	.30	.30
24	.41	.30	.21	.25
25	.60	.42	.24	.11
26	.71	.33	.19	.09
27	.42	.45	.45	.26
28	.00	.49	.30	.30
29	.24	.49	.30	.30
30	.18	.24	.21	.26
31		.30	.30	
TOTAL	10.70	11.56	9.80	10.19

Table 14.--*Daily evaporation at Trinidad Dam, in inches*--Continued

WATER YEAR 1979

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.37	0.11	0	--	--	--	0.10	0.15	0.04	0.36	0.22	0.43
2	.30	.11	0	--	--	--	.08	.17	.06	.31	.39	.38
3	.25	.11	0	--	--	--	.37	.11	.19	.36	.30	.30
4	.30	.11	0	--	--	--	.03	.02	.30	.30	.51	.33
5	.30	.11	0	--	--	--	.13	.24	.27	.29	.49	.30
6	.20	.11	0	--	--	--	.20	.46	.25	.30	.42	.40
7	.22	.11	0	--	--	--	.29	.67	.40	.30	.62	.30
8	.22	.11	0	--	--	--	.36	.40	.22	.37	.53	.29
9	.26	.11	0	--	--	--	.22	.41	.06	.37	.51	.33
10	.28	.11	0	--	--	--	.12	----	.09	.41	.21	.38
11	.27	.11	0	--	--	--	.14	----	.29	.51	.03	.36
12	.28	.11	0	--	--	--	.09	.13	.33	.58	.30	.17
13	.26	.11	0	--	--	--	.02	.22	.38	.66	.38	.08
14	.15	.11	0	--	--	--	.28	.30	.45	.51	.28	.37
15	.22	.11	0	--	--	--	.34	.30	.53	.30	.12	.00
16	.25	.11	0	--	--	--	.36	.26	.41	.27	.17	.20
17	.37	.11	0	--	--	--	.28	.40	.51	.28	.18	.20
18	.24	.11	0	--	--	--	.26	.24	.54	.51	.13	.21
19	.19	.11	0	--	--	--	.48	.36	.63	.27	.08	.21
20	.21	.11	0	--	--	0.08	.41	.22	.52	.29	.28	.23
21	.30	.11	0	--	--	.10	.29	1.14	.39	.40	.26	.24
22	.02	.11	0	--	--	.13	.29	.13	.50	.31	.30	.17
23	.08	.11	0	--	--	.00	.21	.25	.35	.19	.23	.24
24	.00	.11	0	--	--	.15	.33	.12	.21	.41	.24	.27
25	.21	.11	0	--	--	.15	.30	.19	.17	.30	.30	.27
26	.09	.11	0	--	--	.15	.06	.27	.48	.35	.17	.28
27	.16	.11	0	--	--	.11	.25	.16	.40	.34	.12	.27
28	.16	.11	0	--	--	.33	.20	.24	.36	.30	.27	.19
29	.16	.11	0	--		.36	.23	.25	.37	.34	.36	.26
30	.16	.11	0	--		.33	.08	.24	.31	.29	.23	.30
31	.16		0	--		.15		.19		.34	.36	
TOTAL	6.64	3.30	0	--	--	--	6.80	--	10.01	11.12	8.99	7.96

Table 14.--*Daily evaporation at Trinidad Dam, in inches*--Continued

WATER YEAR 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.29	--	--	--	--	--	0.15	0.12	0.52	0.66	0.34	0.40
2	.27	--	--	--	--	--	.21	.00	.49	.30	.32	.37
3	.29	--	--	--	--	--	.21	.07	.45	.22	.26	.45
4	.21	--	--	--	--	--	.21	.22	.55	.33	.30	.42
5	.24	--	--	--	--	--	.21	.15	.56	.49	.38	.30
6	.30	--	--	--	--	--	.21	.12	.58	.58	.27	.39
7	.29	--	--	--	--	--	.21	.12	.57	.34	.33	.28
8	.29	--	--	--	--	--	.21	.06	.23	.44	.40	.35
9	.30	--	--	--	--	--	.18	.12	.10	.45	.34	.23
10	.12	--	--	--	--	--	.20	.49	.13	.45	.30	.00
11	.23	--	--	--	--	--	.26	.37	.18	.40	.34	.13
12	.30	--	--	--	--	--	.03	.21	.45	.45	.36	.25
13	.24	--	--	--	--	--	.10	.37	.52	.54	.43	.29
14	.23	--	--	--	--	--	.16	.21	.60	.40	.37	.27
15	.25	--	--	--	--	--	.20	.14	.63	.30	.09	.28
16	.26	--	--	--	--	--	.24	.04	.46	.43	.39	.27
17	.19	--	--	--	--	--	.21	.10	.25	.45	.41	.21
18	.15	--	--	--	--	--	.25	.06	.31	.57	.37	.25
19	.24	--	--	--	--	--	.27	.18	.54	.40	.43	.37
20	.24	--	--	--	--	--	.32	.20	.45	.41	.45	.47
21	.34	--	--	--	--	--	.30	.30	.41	.33	.43	.36
22	----	--	--	--	--	--	.42	.29	.41	.35	.40	.43
23	.16	--	--	--	--	--	.30	.48	.47	.23	.38	.24
24	.16	--	--	--	--	--	.26	.45	.59	.30	.53	.27
25	.16	--	--	--	--	--	.00	.55	.43	.33	.45	.22
26	.16	--	--	--	--	--	.00	.50	.33	.33	.20	.18
27	.16	--	--	--	--	--	.12	.50	.56	.36	.25	.22
28	.16	--	--	--	--	--	.15	.41	.55	.39	.21	.24
29	.16	--	--	--	--	--	.21	.50	.45	.36	.38	.24
30	.16	--	--	--		--	.16	.50	.44	.52	.30	.30
31	.16							.50		.27	.37	
TOTAL	--	--	--	--	--	--	5.96	8.33	13.21	12.38	10.78	8.68

Table 14.--*Daily evaporation at Trinidad Dam, in inches*--Continued

WATER YEAR 1981

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.37	0.16	0.07	0.08	0.11	0.15	0.15	0.31	0.20	0.21	0.26	0.25
2	.27	.11	.07	.08	.11	.15	.36	.35	.16	.27	.19	.26
3	.15	.11	.07	.08	.11	.15	.45	.39	.62	.22	.30	.30
4	.24	.11	.07	.08	.11	.15	.21	.34	.19	.30	.25	.16
5	.28	.11	.07	.08	.00	.15	.08	.20	.23	.29	.30	.24
6	.25	.11	.07	.08	.00	.15	.24	.11	.29	.30	.31	.25
7	.24	.11	.07	.08	.00	.15	.38	.34	.36	.40	.41	.19
8	.25	.11	.07	.08	.00	.15	.38	.43	.50	.34	.23	.10
9	.25	.11	.07	.08	.00	.15	.21	.37	.49	.41	.21	.13
10	.27	.11	.07	.08	.00	.15	.41	.14	.50	.33	.17	.16
11	.21	.11	.07	.08	.00	.15	.40	.36	.40	.32	.17	.24
12	.27	.11	.07	.08	.00	.15	.40	.39	.50	.31	.09	.21
13	.21	.11	.07	.08	.00	.15	.29	.30	.60	.32	.14	.23
14	.25	.11	.07	.08	.00	.15	.20	.11	.64	.34	.27	.17
15	.22	.11	.07	.08	.00	.15	.16	.41	.43	.28	.25	.23
16	.22	.11	.07	.08	.00	.15	.29	.19	.32	.36	.07	.20
17	.19	.11	.07	.08	.11	.15	.30	.30	.59	.23	.28	.00
18	.17	.11	.07	.08	.11	.15	.32	.10	.39	.15	.16	.15
19	.15	.11	.07	.08	.11	.15	.13	.17	.35	.23	.25	.23
20	.11	.11	.07	.08	.11	.15	.18	.25	.48	.36	.25	.25
21	.21	.11	.07	.08	.11	.15	.36	.40	.45	.45	.27	.29
22	.20	.11	.07	.08	.11	.15	.40	.44	.46	.52	.21	.25
23	.20	.11	.07	.08	.11	.15	.17	.35	.46	.31	.23	.23
24	.16	.11	.07	.08	.11	.15	.28	.18	.45	.30	.30	.15
25	.16	.11	.07	.08	.11	.15	.31	.16	.32	.33	.30	.19
26	.16	.11	.07	.08	.11	.15	.32	.22	.32	.27	.35	.30
27	.16	.11	.07	.08	.11	.15	.46	.25	.70	.48	.25	.33
28	.16	.11	.07	.08	.11	.15	.30	.39	.51	.27	.19	.30
29	.16	.11	.07	.08		.15	.12	.17	.21	.26	.18	.30
30	.16	.11	.07	.08		.15	.33	.28	.11	.32	.28	.31
31	.16		.07	.08		.15		.15		.29	.33	
TOTAL	6.46	3.35	2.17	2.48	1.76	4.65	8.59	8.55	12.23	9.77	7.45	6.60

Table 15.--*Daily wind movement at Trinidad Dam, in miles*

[Data are for 24-hour period immediately preceding 8:00 a.m. on indicated day]

WATER YEAR 1979

DAY	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	123	112	46	91	91	112
2	---	66	85	59	90	92	91
3	---	50	74	77	73	103	103
4	---	85	46	103	73	153	86
5	---	101	103	108	74	91	105
6	---	106	192	86	98	103	85
7	---	132	258	103	109	188	107
8	---	127	187	93	108	119	95
9	---	124	180	57	74	141	126
10	---	148	72	83	83	85	112
11	---	156	51	100	115	66	96
12	---	89	75	95	93	138	80
13	---	91	97	100	237	138	86
14	---	111	97	102	85	58	98
15	---	105	94	133	99	100	43
16	---	116	104	108	78	92	84
17	---	162	211	147	115	150	84
18	---	191	135	142	79	64	70
19	---	205	98	239	77	81	82
20	---	156	82	183	80	96	132
21	160	150	85	94	138	97	82
22	143	188	78	105	74	71	138
23	91	141	82	88	104	62	99
24	78	104	91	75	73	84	80
25	99	99	150	136	78	71	79
26	79	66	69	95	113	109	101
27	104	81	77	107	108	90	93
28	234	138	103	93	82	90	88
29	251	103	89	92	125	78	93
30	219	112	95	128	95	96	102
31	136		73		93	140	
TOTAL	---	3,626	3,355	3,177	3,014	3,137	2,832

Table 15.--*Daily wind movement at Trinidad Dam, in miles*--Continued

WATER YEAR 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	91	--	--	--	--	--	---	62	164	142	108	102
2	102	--	--	--	--	--	85	22	175	103	89	138
3	95	--	--	--	--	--	67	78	138	51	76	136
4	94	--	--	--	--	--	96	92	186	87	143	146
5	107	--	--	--	--	--	117	62	159	123	112	55
6	111	--	--	--	--	--	212	81	158	134	109	145
7	103	--	--	--	--	--	182	84	163	91	136	157
8	105	--	--	--	--	--	151	69	71	113	142	138
9	89	--	--	--	--	--	82	112	112	94	112	94
10	97	--	--	--	--	--	92	220	107	96	125	45
11	87	--	--	--	--	--	114	188	117	107	89	108
12	98	--	--	--	--	--	78	127	159	77	148	87
13	89	--	--	--	--	--	100	207	135	138	190	97
14	162	--	--	--	--	--	101	157	146	134	86	141
15	88	--	--	--	--	--	117	106	174	77	57	84
16	90	--	--	--	--	--	88	73	90	89	181	73
17	90	--	--	--	--	--	106	68	94	114	86	85
18	139	--	--	--	--	--	109	78	96	116	72	110
19	157	--	--	--	--	--	107	79	115	112	146	107
20	202	--	--	--	--	--	107	85	129	123	32	147
21	217	--	--	--	--	--	111	72	102	72	162	93
22	51	--	--	--	--	--	146	103	111	107	136	139
23	281	--	--	--	--	--	118	127	89	125	211	107
24	5	--	--	--	--	--	126	154	127	75	236	82
25	2	--	--	--	--	--	100	254	119	119	151	76
26	115	--	--	--	--	--	95	187	106	79	62	142
27	114	--	--	--	--	--	77	160	117	98	89	203
28	87	--	--	--	--	--	93	192	112	107	111	91
29	122	--	--	--	--	--	83	176	85	117	103	87
30	147	--	--	--		--	116	187	105	135	117	104
31	98	__	--	--	__	--	____	194	____	77	134	____
TOTAL	3,435	--	--	--	--	--	---	3,846	3,761	3,232	3,751	3,319

Table 15.--*Daily wind movement at Trinidad Dam, in miles*--Continued

WATER YEAR 1981

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	108	218	85	--	--	--	---	80	87	98	75	69
2	89	118	143	--	--	--	176	151	87	140	53	95
3	91	79	118	--	--	--	158	164	87	70	100	80
4	105	97	73	--	--	--	165	114	98	72	89	76
5	104	113	188	--	--	--	64	78	62	87	100	141
6	88	118	133	--	--	--	121	106	81	79	96	165
7	85	101	105	--	--	--	156	148	77	98	91	63
8	91	118	67	--	--	--	186	144	116	106	61	63
9	97	132	69	--	--	--	88	153	92	91	70	65
10	80	124	106	--	--	--	138	118	96	117	70	33
11	109	133	124	--	--	--	143	99	124	130	52	123
12	99	72	112	--	--	--	136	158	132	96	42	105
13	81	170	67	--	--	--	137	130	145	108	70	78
14	103	69	94	--	--	--	72	76	98	84	117	92
15	133	45	106	--	--	--	154	132	180	85	65	65
16	203	46	106	--	--	--	134	83	84	87	64	77
17	178	44	112	--	--	--	109	136	160	79	62	47
18	99	111	97	--	--	--	101	60	88	52	80	69
19	80	114	---	--	--	--	71	86	94	71	85	86
20	91	106	---	--	--	--	66	151	91	93	67	93
21	113	109	---	--	--	--	143	242	78	92	83	80
22	99	155	---	--	--	--	152	193	85	101	81	82
23	91	86	---	--	--	--	93	125	131	77	66	108
24	83	104	---	--	--	--	83	76	112	97	101	103
25	104	72	---	--	--	--	105	89	93	75	96	69
26	129	89	---	--	--	--	75	78	91	109	82	138
27	146	113	---	--	--	--	133	66	156	83	88	134
28	65	92	---	--	--	--	136	86	128	74	89	102
29	86	79	---	--		--	58	83	78	114	97	102
30	112	108	---	--		--	85	77	57	97	92	96
31	14							93		79	94	
TOTAL	3,155	3,135	---	--	--	--	---	3,575	3,088	2,841	2,478	2,699

HYDROLOGIC DATA

Surface-Water Data

Table 16.--*Daily discharge at station 07118500 Apishapa River at Aguilar, Colo.*

LOCATION.--Lat 37°24'00", long 104°38'29", in SE¼SW¼ sec.26, T.30 S., R.65 W., Las Animas County, Hydrologic Unit 11020007, on right bank 10 ft (3.0 m) downstream from county bridge on Aguilar Road, 0.8 mi (1.3 km) southeast of Aguilar, and 0.7 mi (1.1 km) upstream from Gonzales Canyon.

DRAINAGE AREA.--147 mi² (381 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--March 1938 to September 1939, June 1978 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,340 ft (1,932 m), from topographic map. Mar. 3, 1938 to Sept. 30, 1939, nonrecording gage at site 1.3 mi (2.1 km) upstream at different datum.

REMARKS.--Records good except those above 80 ft³/s (2.27 m³/s), which are fair. Several diversions for irrigation above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,200 ft³/s (147 m³/s) Aug. 10, 1938, gage height, 14.32 ft (4.365 m) from floodmarks, from rating curve extended above 25 ft³/s (0.71 m³/s) on basis of slope-area measurements at gage heights, 12.96 ft (3.950 m) and 14.32 ft (4.365 m); no flow many days each year.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in Aug. 1930 reached a stage of 20.73 ft (6.319 m), at site and datum in use in 1938, from information by local residents. Discharge not determined. For discussion of this flood, see WSP 997.

EXTREMES FOR 1978.--Maximum discharge, 1,140 ft³/s (32.3 m³/s) at 1930 Aug. 3, gage height, 7.48 ft (2.280 m); only peak above base of 500 ft³/s (14.2 m³/s), during period June to September; no flow for most of period.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1									---	3.5	.00	.00
2									---	.00	4.8	.00
3									---	.00	43	.00
4									---	.00	6.0	.00
5									---	.00	.00	.00
6									---	.00	.00	.00
7									---	.00	.00	.00
8									---	.00	.00	.00
9									.00	.69	.00	.00
10									.00	.48	.00	.00
11									.00	.00	.00	.00
12									.00	.00	.00	.00
13									.00	.00	.00	.00
14									.00	.00	.00	.00
15									.00	.00	.00	.00
16									.00	.00	.00	.00
17									.00	.00	.00	.00
18									.00	.00	.00	.00
19									.00	.00	.00	.00
20									.00	.00	.00	.00
21									.00	.00	.00	.00
22									.00	.00	.00	.00
23									.00	.00	.00	.00
24									.00	.00	.00	.00
25									.00	.00	.00	.00
26									.00	.00	.00	.00
27									.00	.00	.00	.00
28									.00	.00	.00	.00
29									.00	.00	.00	.00
30									6.7	.00	.00	.00
31									---	.00	.00	---
TOTAL									---	4.67	53.80	.00
MEAN									---	.15	1.74	.000
MAX									---	3.5	43	.00
MIN									---	.00	.00	.00
AC-FT									---	9.3	107	.00

Table 16.--*Daily discharge at station 07118500 Apishapa River at Aguilar, Colo*--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	.00	.03	.00	33	1.7
2	.00	.00	.00	.00	.00	.00	.00	.00	2.0	.00	2.2	.22
3	.00	.00	.00	.00	.00	.00	.00	.00	3.3	.00	.02	.40
4	.00	.00	.00	.00	.00	.00	.00	.00	2.8	.00	.00	.18
5	.00	.00	.00	.00	.00	.00	.00	.00	2.0	.00	.00	.14
6	.00	.00	.00	.00	.00	.00	.00	.00	.82	.00	.00	.14
7	.00	.00	.00	.00	.00	.00	.00	.00	.01	.00	.00	.14
8	.00	.00	.00	.00	.00	.00	.00	.00	.35	.00	.00	.14
9	.00	.00	.00	.00	.00	.00	.00	.00	4.2	.00	.00	.14
10	.00	.00	.00	.00	.00	.00	.00	.00	4.5	.00	.00	.14
11	.00	.00	.00	.00	.00	.00	.00	.00	3.4	.00	.00	.14
12	.00	.00	.00	.00	.00	.00	.00	.00	1.1	.00	50	.14
13	.00	.00	.00	.00	.00	.00	.00	.00	.01	.00	20	1.5
14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	157	29
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	72	7.9
16	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	65	.64
17	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	58	.64
18	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	81	.64
19	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	35	.64
20	.00	.00	.00	.00	.00	.00	.00	.96	.00	.00	27	.64
21	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	24	.72
22	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	19	.28
23	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	35	.28
24	.00	.00	.00	.00	.00	.00	.00	.00	.00	.92	20	.22
25	.00	.00	.00	.00	.00	.00	.00	.13	.00	60	18	.22
26	.00	.00	.00	.00	.00	.00	.00	12	.00	28	52	.22
27	.00	.00	.00	.00	.00	.00	.00	8.5	.00	.00	34	.34
28	.00	.00	.00	.00	.00	.00	.00	.91	.00	.00	22	.22
29	.00	.00	.00	.00	---	.00	.00	.01	.00	.00	17	.22
30	.00	.00	.00	.00	---	.00	.00	.12	.00	.00	13	.22
31	.00	---	.00	.00	---	.00	---	1.2	---	146	7.0	---
TOTAL	.00	.00	.00	.00	.00	.00	.00	23.83	24.52	234.92	861.22	48.16
MEAN	.000	.000	.000	.000	.000	.000	.000	.77	.82	7.58	27.8	1.61
MAX	.00	.00	.00	.00	.00	.00	.00	12	4.5	146	157	29
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.14
AC-FT	.00	.00	.00	.00	.00	.00	.00	47	49	466	1710	96

WTR YR 1979 TOTAL 1192.65 MEAN 3.27 MAX 157 MIN .00 AC-FT 2370

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.19	.12	1.2	1.5	.78	2.4	.94	165	59	2.0	1.6	1.0
2	.21	.15	1.6	1.7	1.1	2.6	1.8	149	58	1.9	1.6	1.0
3	.24	.19	2.0	.72	.84	2.8	1.8	138	55	1.8	1.4	.89
4	.20	.25	2.1	.35	.72	2.8	1.9	132	55	3.2	1.3	.90
5	.23	.27	2.0	.40	.50	2.2	1.9	142	54	4.0	1.5	.90
6	.26	.25	1.4	.78	.40	2.0	1.9	150	54	3.6	1.4	.81
7	.29	.23	.55	.92	.45	1.9	2.0	161	50	4.3	1.2	.89
8	.29	.19	.50	1.2	.31	1.8	1.9	132	48	3.8	1.2	1.0
9	.30	.17	.45	1.0	.72	1.8	1.7	123	54	3.2	1.2	1.8
10	.34	.14	.60	1.6	.92	1.7	1.8	128	55	2.0	1.3	.83
11	.37	.23	1.1	1.3	1.2	1.7	2.0	122	54	1.7	1.3	.93
12	.33	1.2	1.7	1.1	1.2	1.4	2.0	116	45	1.6	1.4	.95
13	.23	1.6	1.0	1.6	1.8	1.1	2.0	108	39	1.5	1.4	.73
14	.18	1.6	.69	1.1	1.5	.58	2.0	99	33	1.5	3.1	.79
15	.16	1.6	.76	.29	1.3	.45	2.2	123	26	1.5	1.6	.92
16	.13	1.6	.73	.19	.97	.54	1.8	139	21	1.6	1.2	.86
17	.13	1.7	1.4	.60	1.7	.78	.93	122	25	1.6	1.1	.70
18	.13	1.9	1.1	1.2	1.8	.66	1.8	111	23	1.6	1.1	.79
19	.14	1.9	.74	1.1	1.1	.40	.80	97	18	1.6	1.1	.83
20	.13	1.6	.77	1.2	1.5	.37	.14	90	15	1.6	1.2	.78
21	.15	1.4	.80	1.2	1.5	.37	.74	97	11	1.4	1.3	.72
22	.11	1.2	.79	1.2	1.4	.20	1.1	102	10	14	1.3	.65
23	.12	1.2	.78	.92	1.3	.73	1.5	103	8.8	1.4	1.2	.57
24	.12	1.2	.71	1.1	1.4	1.7	33	96	3.7	1.3	1.2	.53
25	.13	1.7	.78	1.5	2.0	1.4	100	88	1.8	1.1	1.2	.52
26	.15	1.6	1.2	1.0	1.7	.70	20	79	1.7	1.1	1.2	.53
27	.26	1.2	2.0	1.1	2.0	.74	29	71	1.6	1.2	1.2	.55
28	.30	.72	1.7	.84	2.3	.65	44	69	1.7	1.2	.92	.57
29	.34	.55	1.2	1.0	2.2	.57	54	67	1.8	1.3	.85	.60
30	.34	.66	1.2	1.0	---	.67	98	64	1.9	1.4	.90	.61
31	.31	---	1.2	2.0	---	.48	---	61	---	1.5	.96	---
TOTAL	6.81	28.32	34.75	32.71	36.61	38.19	414.65	3444	885.0	72.5	40.43	24.15
MEAN	.22	.94	1.12	1.06	1.26	1.23	13.8	111	29.5	2.34	1.30	.81
MAX	.37	1.9	2.1	2.0	2.3	2.8	100	165	59	14	3.1	1.8
MIN	.11	.12	.45	.19	.31	.20	.14	61	1.6	1.1	.85	.52
AC-FT	14	56	69	65	73	76	822	6830	1760	144	80	48

CAL YR 1979 TOTAL 1262.53 MEAN 3.46 MAX 157 MIN .00 AC-FT 2500
WTR YR 1980 TOTAL 5058.12 MEAN 13.8 MAX 165 MIN .11 AC-FT 10030

Table 16.--*Daily discharge at station 07118500 Apishapa River at Aguilar, Colo*--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.60	.37	1.6	1.2	.77	.93	.24	.10	.62	.34	1.4	10
2	.55	.34	1.5	.80	.75	1.1	.23	.10	.36	.36	1.3	9.8
3	.55	.32	1.5	.23	.75	1.3	.16	.09	.41	82	1.2	9.3
4	.55	.31	1.6	.22	.78	1.5	.12	.09	.26	63	1.2	17
5	.55	.31	1.6	.23	.81	1.3	.12	.10	.26	17	1.1	6.1
6	.45	.32	1.6	.24	.95	1.4	.05	.11	.28	4.1	20	2.5
7	.45	.29	1.6	.24	.94	1.4	.05	.05	.30	.56	12	19
8	.45	.28	1.6	.25	1.1	1.5	.05	.05	.33	.55	3.6	15
9	.45	.27	.85	.26	.96	1.0	.04	.06	.34	.55	3.5	15
10	.44	.27	1.0	.46	.90	.40	.05	.06	.35	3.0	59	12
11	.43	.27	1.4	.31	.90	.41	.05	.06	.41	.93	95	9.4
12	.42	.27	1.5	.31	.96	.40	.05	.06	.47	.59	186	9.4
13	.41	.27	1.7	.39	1.5	.41	.05	.07	.55	.60	106	11
14	.41	.26	1.6	.36	1.7	.30	.05	.07	.56	.61	67	9.5
15	.40	.65	1.2	.49	1.9	.28	.06	.08	.54	.73	57	8.5
16	.40	1.3	1.3	.63	1.6	.26	.07	.08	.49	2.5	65	9.4
17	.44	1.1	1.3	.80	1.6	.25	.07	.08	.48	1.1	115	7.8
18	.47	1.1	1.3	.51	1.5	.29	.06	.09	.51	18	86	7.2
19	.45	1.2	1.3	.39	1.5	.25	.07	.09	.56	38	64	6.6
20	.42	1.2	1.1	.35	1.5	.21	.08	.10	.58	9.7	48	5.9
21	.41	1.4	.98	.45	1.6	.24	.08	.05	.59	2.3	49	3.6
22	.45	1.5	1.2	.36	1.2	.18	.08	.05	.61	1.2	40	2.7
23	.45	1.6	1.5	.16	1.2	.16	.06	.06	.61	.96	35	2.6
24	.38	1.6	.96	.44	1.4	.16	.07	.06	2.6	.90	27	2.6
25	.40	1.1	1.3	.61	1.1	.13	.07	.06	.45	22	22	2.6
26	.46	1.3	1.6	.70	1.4	.13	.08	.07	.34	12	13	2.9
27	.44	1.4	1.5	.70	1.3	.11	.08	.07	.33	2.6	10	1.7
28	.41	1.6	1.5	.70	.97	.19	.09	.08	.34	1.3	13	1.6
29	.40	1.6	1.5	.70	---	.21	.09	.12	.35	1.2	14	1.6
30	.39	1.6	1.2	.70	---	.21	.10	12	.34	1.2	13	1.5
31	.41	---	1.4	.74	---	.24	---	3.2	---	2.1	11	---
TOTAL	13.89	25.40	42.79	14.93	33.54	16.85	2.52	17.41	15.22	291.98	1240.3	225.8
MEAN	.45	.85	1.38	.48	1.20	.54	.084	.56	.51	9.42	40.0	7.53
MAX	.60	1.6	1.7	1.2	1.9	1.5	.24	12	2.6	82	186	19
MIN	.38	.26	.85	.16	.75	.11	.04	.05	.26	.34	1.1	1.5
AC-FT	28	50	85	30	67	33	5.0	35	30	579	2460	448

CAL YR 1980	TOTAL	5070.32	MEAN 13.9	MAX 165	MIN .14	AC-FT	10060	
WTR YR 1981	TOTAL	1940.63	MEAN 5.32	MAX 186	MIN .04	AC-FT	3850	

Table 17.--*Daily discharge at station 07124050 Middle Fork Purgatoire River at Stonewall, Colo.*

LOCATION.--Lat 37°09'10", long 105°00'45", Las Animas County, Hydrologic Unit 11020010, Maxwell Grant, on right bank, 0.3 mi (0.5 km) east of Stonewall, 0.6 mi (1.0 km) upstream from Crooked Creek, and 7 mi (11 km) northeast of Torres.

DRAINAGE AREA.--52.1 mi² (134.9 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1978 to September 1981 (discontinued).

GAGE.--Water-stage recorder. Altitude of gage is 7,710 ft (2,350 m), from topographic map. Prior to June 14, 1978 at present site at datum 2.70 ft (0.82 m) lower.

REMARKS.--Records good except those for winter period and those above 150 ft³/s (4.2 m³/s), which are fair. Some diversions for irrigation above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 522 ft³/s (14.8 m³/s) Sept. 7, 1981, gage height, 6.65 ft (2.027 m), from rating curve extended above 120 ft³/s (3.4 m³/s); minimum daily, 2.8 ft³/s (0.79 m³/s) Mar. 17, 18, 1979.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1								---	38	62	14	7.5
2								---	38	55	13	7.5
3								---	43	49	16	7.0
4								---	44	41	19	7.0
5								---	41	37	18	7.0
6								---	42	33	15	6.5
7								---	34	26	14	6.5
8								---	30	24	14	6.0
9								12	32	29	13	6.0
10								13	39	35	13	5.7
11								13	40	28	13	5.1
12								14	42	26	11	4.8
13								14	45	25	10	4.8
14								17	60	26	9.5	4.8
15								19	72	27	8.0	4.1
16								23	74	26	8.5	3.8
17								24	66	25	8.5	3.8
18								29	63	25	8.5	4.1
19								26	65	23	9.0	4.1
20								21	67	20	9.0	4.4
21								21	67	17	8.5	5.1
22								17	67	17	9.0	5.1
23								19	58	17	9.0	4.8
24								29	55	18	9.0	4.4
25								30	56	16	9.0	5.4
26								30	56	16	8.5	7.0
27								30	62	17	8.5	5.1
28								28	62	14	8.5	4.8
29								26	57	13	8.0	4.4
30								26	72	16	8.0	4.4
31								31	---	16	8.0	---
TOTAL								---	1587	819	338.0	161.0
MEAN								---	52.9	26.4	10.9	5.37
MAX								---	74	62	19	7.5
MIN								---	30	13	8.0	3.8
AC-FT								---	3150	1620	670	319

Table 17.--*Daily discharge at station 07124050 Middle Fork Purgatoire River at Stonewall, Colo*--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.1	4.1	5.5	3.5	4.5	3.8	3.8	7.0	66	85	24	14
2	3.8	4.1	5.0	3.5	4.4	3.4	3.8	7.5	64	78	22	14
3	3.9	4.8	4.5	4.0	4.4	3.4	3.8	9.0	64	71	21	13
4	4.4	6.0	4.5	4.2	4.4	3.5	3.7	9.0	65	64	19	13
5	4.1	5.1	4.5	4.1	4.4	3.6	3.6	5.7	68	63	17	12
6	4.1	4.4	4.0	3.8	4.4	3.7	3.8	6.4	73	60	17	12
7	4.1	4.1	3.8	3.6	4.4	3.8	3.8	8.5	78	55	17	13
8	3.8	4.4	3.5	3.6	4.4	3.8	4.4	13	90	52	17	12
9	3.8	4.8	4.5	4.0	4.4	3.6	4.8	15	77	49	17	12
10	3.8	4.8	5.2	4.5	4.3	3.6	4.8	13	64	46	21	11
11	3.6	4.8	5.4	5.0	4.3	4.0	4.1	11	63	42	23	12
12	3.4	5.1	5.4	5.0	4.2	3.8	3.6	12	68	39	21	12
13	3.4	4.1	5.0	4.5	4.1	3.8	3.6	12	74	37	23	15
14	3.4	4.8	4.5	4.4	4.1	3.8	4.1	12	84	37	85	20
15	3.4	4.5	4.2	5.5	4.3	3.4	4.1	13	85	45	100	17
16	3.4	4.5	4.0	4.8	4.4	3.6	4.8	14	91	45	62	15
17	3.4	4.5	4.0	4.7	4.3	2.8	5.1	20	78	40	45	13
18	3.4	5.0	4.5	4.8	4.3	2.8	5.7	21	79	40	39	12
19	3.4	5.0	4.8	5.1	4.2	3.1	6.0	23	73	36	35	11
20	3.4	5.0	4.0	5.4	4.4	3.4	5.7	28	66	32	30	11
21	5.4	5.0	3.9	5.8	4.5	3.6	5.7	37	62	30	27	12
22	6.4	5.1	3.8	6.0	4.5	3.6	5.7	32	63	30	24	12
23	4.8	4.8	3.7	5.8	4.4	3.6	6.4	36	65	30	24	10
24	4.4	4.4	4.0	5.8	4.3	3.8	6.0	44	77	29	22	9.5
25	4.8	4.8	3.9	5.8	4.3	3.4	5.7	48	79	29	21	9.0
26	4.8	4.5	3.8	5.6	4.1	3.6	5.4	64	78	30	21	8.0
27	4.8	4.5	4.0	5.5	3.8	3.6	5.4	64	79	31	24	8.0
28	4.8	4.5	4.2	5.2	3.4	3.6	6.7	66	80	30	19	7.5
29	4.4	5.0	4.2	5.4	---	3.8	6.4	78	82	29	20	7.0
30	4.1	5.0	4.0	4.8	---	4.1	6.7	80	80	28	19	7.0
31	4.1	---	4.0	4.8	---	4.1	---	71	---	27	16	---
TOTAL	126.8	141.5	134.3	148.5	119.9	111.5	147.2	880.1	2215	1339	892	354.0
MEAN	4.09	4.72	4.33	4.79	4.28	3.60	4.91	28.4	73.8	43.2	28.8	11.8
MAX	6.4	6.0	5.5	6.0	4.5	4.1	6.7	80	91	85	100	20
MIN	3.4	4.1	3.5	3.5	3.4	2.8	3.6	5.7	62	27	16	7.0
AC-FT	252	281	266	295	238	221	292	1750	4390	2660	1770	702

WTR YR 1979 TOTAL 6609.8 MEAN 18.1 MAX 100 MIN 2.8 AC-FT 13110

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.0	8.8	7.2	4.0	4.3	4.5	20	52	75	94	21	9.7
2	6.7	9.4	7.2	4.0	4.8	4.5	8.2	51	74	94	23	9.6
3	7.0	11	7.1	4.0	4.3	4.5	6.7	48	72	82	22	9.2
4	7.1	9.3	7.0	4.0	4.0	4.5	6.4	55	78	74	21	8.0
5	6.1	9.2	7.1	4.1	4.1	4.5	7.5	60	80	68	18	8.0
6	5.7	9.2	7.7	4.8	5.3	4.0	7.0	74	83	65	18	8.5
7	5.6	9.4	6.5	4.1	4.7	4.0	7.3	72	80	65	18	9.5
8	5.6	8.7	6.4	3.5	4.0	4.0	7.1	75	86	65	20	9.8
9	5.6	8.8	6.3	3.1	4.0	4.0	6.1	64	109	59	25	17
10	5.7	8.2	6.5	2.9	4.5	4.0	5.2	58	137	64	22	20
11	5.9	8.6	6.2	4.1	5.0	4.0	5.2	56	138	76	22	19
12	6.0	7.8	7.0	4.4	5.0	4.0	5.8	54	139	60	22	17
13	6.3	9.6	7.0	5.4	5.0	4.0	5.9	49	158	55	20	16
14	6.5	10	7.2	5.3	4.5	4.0	7.6	47	130	53	23	16
15	6.5	9.8	7.2	5.9	4.0	4.0	6.3	52	117	52	24	14
16	6.6	9.5	7.2	5.1	4.0	4.5	6.5	57	114	48	19	13
17	6.8	9.2	7.5	6.4	4.5	4.5	6.6	62	106	43	17	11
18	8.0	8.0	7.5	4.1	4.5	4.5	9.1	63	113	38	15	8.2
19	8.1	7.9	7.6	6.0	4.5	4.5	12	62	118	31	14	8.1
20	7.0	7.5	7.1	5.4	4.8	4.0	13	66	114	27	14	8.0
21	7.5	7.7	7.3	5.2	5.9	4.0	13	72	107	24	13	8.1
22	9.1	7.7	7.2	5.0	4.6	4.0	17	80	100	27	13	8.2
23	9.4	7.8	7.0	4.5	5.3	4.5	18	84	100	28	13	8.7
24	9.3	8.2	7.0	4.4	5.0	5.0	18	87	106	27	13	8.8
25	8.8	9.1	6.3	4.3	4.5	4.5	21	80	108	24	17	8.1
26	7.8	9.6	6.3	4.0	4.5	5.0	17	72	104	22	14	7.6
27	7.0	8.6	7.1	3.5	4.5	5.5	21	69	99	22	12	6.9
28	6.8	8.5	5.3	3.5	4.5	5.0	33	68	100	22	11	6.5
29	6.6	7.8	4.7	3.5	4.5	5.9	50	67	98	21	10	6.0
30	6.5	7.3	4.5	4.0	---	6.1	52	68	95	18	10	5.8
31	8.5	---	4.2	4.0	---	4.9	---	70	---	21	9.8	---
TOTAL	217.1	262.2	207.4	136.5	133.1	138.9	419.5	1994	3138	1469	533.8	314.3
MEAN	7.00	8.74	6.69	4.40	4.59	4.48	14.0	64.3	105	47.4	17.2	10.5
MAX	9.4	11	7.7	6.4	5.9	6.1	52	87	158	94	25	20
MIN	5.6	7.3	4.2	2.9	4.0	4.0	5.2	47	72	18	9.8	5.8
AC-FT	431	520	411	271	264	276	832	3960	6220	2910	1060	623

CAL YR 1979 TOTAL 6893.9 MEAN 18.9 MAX 100 MIN 2.8 AC-FT 13670
WTR YR 1980 TOTAL 8963.8 MEAN 24.5 MAX 158 MIN 2.9 AC-FT 17780

NOTE.--NO GAGE-HEIGHT RECORD FEB. 25 TO MAR. 28.

Table 17.--*Daily discharge at station 07124050 Middle Fork Purgatoire River at Stonewall, Colo*--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.7	5.6	5.8	5.1	5.5	3.8	4.5	15	18	19	15	29
2	5.6	5.5	6.2	6.2	6.0	3.8	4.1	16	14	18	15	25
3	5.6	5.5	5.8	4.8	7.0	3.9	3.8	18	15	59	17	28
4	5.6	5.4	5.4	5.5	7.0	4.0	3.6	16	16	25	17	31
5	5.6	5.7	5.2	5.4	7.0	5.6	5.3	16	16	19	15	26
6	5.6	5.7	5.2	3.6	6.0	4.1	4.1	16	23	17	19	24
7	5.5	5.6	5.0	3.5	5.5	4.1	3.8	15	28	17	19	127
8	5.2	5.3	4.4	3.5	5.0	4.9	3.8	13	28	18	25	47
9	5.5	5.0	4.4	3.5	4.5	5.0	4.1	12	30	16	22	44
10	5.4	5.3	4.4	4.0	3.5	6.0	4.4	11	30	15	28	45
11	5.3	5.3	5.0	4.5	3.5	7.6	5.0	8.9	28	18	74	50
12	4.9	5.2	5.0	5.0	3.5	5.3	4.4	8.4	29	22	77	63
13	3.9	5.0	5.0	5.0	3.4	5.1	4.8	8.5	25	20	47	57
14	3.9	5.2	5.5	5.0	4.0	6.4	5.0	8.6	22	17	39	57
15	8.1	5.2	5.9	6.0	4.5	5.8	4.8	8.6	19	17	40	52
16	5.7	5.1	5.7	7.0	5.0	5.5	4.1	8.5	15	16	41	52
17	5.8	5.0	5.7	7.0	6.5	4.5	4.1	8.0	17	30	42	51
18	5.9	5.0	6.1	7.0	5.5	4.6	4.4	7.6	19	21	45	47
19	5.9	5.0	5.4	7.0	4.4	6.3	3.8	7.9	23	17	41	41
20	5.9	5.0	5.4	7.0	4.2	5.8	4.1	8.2	22	15	37	41
21	5.8	5.0	5.4	7.0	4.2	5.5	4.1	8.3	22	14	36	39
22	5.8	5.5	5.7	7.0	8.0	5.0	4.4	7.8	22	16	36	37
23	5.9	6.0	4.7	7.0	6.2	4.7	4.6	6.7	22	15	32	36
24	6.3	6.4	4.7	6.7	5.6	4.6	4.8	6.7	21	14	30	34
25	6.0	6.0	5.3	6.5	4.5	4.8	6.4	5.4	19	13	29	32
26	6.0	6.0	4.4	6.0	4.0	4.8	8.2	6.2	20	18	29	30
27	5.9	6.0	4.4	6.0	4.0	4.7	8.9	7.6	19	19	44	30
28	5.8	6.0	4.7	6.0	4.0	4.7	8.8	11	20	16	36	29
29	5.8	6.0	4.8	6.0	---	4.4	9.0	14	22	14	33	26
30	5.9	6.0	5.2	6.0	---	4.4	12	17	39	14	29	25
31	5.7	---	5.2	5.7	---	4.8	---	14	---	14	27	---
TOTAL	175.5	164.5	161.0	175.5	142.0	154.5	157.2	335.9	663	583	1036	1255
MEAN	5.66	5.48	5.19	5.66	5.07	4.98	5.24	10.8	22.1	18.8	33.4	41.8
MAX	8.1	6.4	6.2	7.0	8.0	7.6	12	18	39	59	77	127
MIN	3.9	5.0	4.4	3.5	3.4	3.8	3.6	5.4	14	13	15	24
AC-FT	348	326	319	348	282	306	312	666	1320	1160	2050	2490

CAL YR 1980 TOTAL 8778.1 MEAN 24.0 MAX 158 MIN 2.9 AC-FT 17410
WTR YR 1981 TOTAL 5003.1 MEAN 13.7 MAX 127 MIN 3.4 AC-FT 9920

Table 18.--*Daily discharge at station 07124120 Sarcillo Canyon near Segundo, Colo.*

LOCATION.-Lat 37°07'26", long 104°45'49", in NW¼SE¼ sec.34, T.33 S., R.66 W., Las Animas County, Hydrologic Unit 11020010, on right bank about 300 ft (91.4 m) upstream from State Highway 12 bridge, 1.5 mi (2.4 km) west of Segundo, and 500 ft (152 m) upstream from mouth.

DRAINAGE AREA.--35.3 mi² (91.4 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1978 to September 1981 (since October 1979, seasonal record only) (discontinued).

GAGE.--Water-stage recorder and super critical-flow flume. Altitude of gage is 6,600 ft (2,012 m), from topographic map.

REMARKS.--Records fair. No diversions above station. Recording rain gage and other weather monitoring gages upstream from station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,800 ft³/s (334 m³/s) Aug. 10, 1981, gage height, 12.3 ft (3.749 m), from floodmarks, from rating curve extended above 45 ft³/s (1.27 m³/s), on basis of slope-area measurement at gage height 6.72 ft (2.93 m), and three area-velocity computations of peak flow through a bridge; minimum daily, 0.01 ft³/s (0.001 m³/s) June 28, July 9, 10, 1979, May 8, June 8-10, 1981.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1									---	.07	.23	.07
2									---	.05	8.2	.05
3									---	.05	1.2	.07
4									---	.05	.24	.05
5									---	.05	.05	.05
6									.05	.05	.05	.05
7									.07	.05	.05	.05
8									.12	.05	.05	.05
9									.09	.31	.05	.05
10									.07	23	.07	.05
11									.07	.42	.07	.05
12									.07	3.5	.07	.05
13									.07	.09	.07	.05
14									.07	.07	.07	.05
15									.05	.05	.07	.05
16									.05	.05	.07	.05
17									.05	.05	.07	.05
18									.05	.05	.07	.05
19									.05	.05	.07	.05
20									.05	4.7	.07	.05
21									.03	1.2	.07	.05
22									.03	.56	.07	.07
23									.03	.07	.05	.07
24									.03	.05	.07	.09
25									.03	.05	2.2	.09
26									.03	.05	.41	.09
27									39	.05	.05	.09
28									4.5	.05	.05	.09
29									.23	.05	.05	.09
30									.14	.16	.05	.07
31									---	3.6	.26	---
TOTAL									---	38.65	14.22	1.84
MEAN									---	1.25	.46	.061
MAX									---	23	8.2	.09
MIN									---	.05	.05	.05
AC-FT									---	77	28	3.6

Table 18.--*Daily discharge at station 07124120 Sarcillo Canyon near Segundo, Colo*--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.09	.07	.12	.02	.03	.12	.09	.07	.28	.09	2.0	.09
2	.09	.07	.09	.02	.03	.12	.07	.05	.69	.07	.24	.09
3	.09	.09	.12	.03	.03	.10	.12	.03	.20	.42	.12	.09
4	.09	.12	.12	.03	.03	.09	.05	.03	.09	.09	.09	.09
5	.09	.12	.12	.03	.04	.09	.05	.03	.09	.07	.12	.09
6	.07	.09	.09	.03	.05	.10	.05	.03	.09	.05	.20	.12
7	.07	.09	.05	.03	.05	.12	.03	.03	1.6	.03	.20	.12
8	.07	.09	.03	.03	.07	.12	.03	.03	.64	.03	.20	.12
9	.07	.09	.03	.04	.09	.10	.03	.12	.28	.01	.37	.12
10	.07	.09	.04	.03	.09	.10	.03	.12	.16	.01	.42	.16
11	.07	.12	.05	.04	.12	.12	.03	.05	.12	.03	.47	.16
12	.07	.12	.09	.04	.12	.12	.03	.05	.09	.07	.42	.24
13	.07	.12	.09	.03	.14	.09	.03	.05	.07	.07	.42	57
14	.09	.09	.09	.03	.14	.09	.04	.03	.07	9.9	42	7.8
15	.09	.16	.09	.04	.12	.09	.04	.03	.07	13	24	.16
16	.09	.16	.07	.04	.10	.09	.04	.07	.05	.34	.99	.07
17	.09	.16	.07	.04	.10	.09	.04	.05	.05	65	.62	.07
18	.12	.16	.07	.04	.10	.09	.03	.05	.05	125	.52	.07
19	.12	.20	.07	.04	.12	.09	.03	.07	.05	5.1	.37	.07
20	.12	.20	.05	.04	.12	.09	.05	.20	.05	.28	.28	.07
21	.16	.20	.05	.04	.12	.16	.05	.16	.05	.20	.32	.07
22	.24	.20	.05	.04	.12	.16	.05	.16	.05	.20	.24	.07
23	.16	.20	.05	.02	.10	.12	.05	.16	3.7	.16	.28	.07
24	.12	.20	.05	.02	.10	.12	.05	.39	.40	.42	.20	.07
25	.12	.16	.05	.03	.10	.12	.07	.32	.16	.85	264	.07
26	.09	.16	.04	.03	.12	.12	.09	.47	.09	.24	8.6	.07
27	.07	.16	.05	.03	.12	.14	.07	.16	.07	.16	.24	.07
28	.07	.16	.05	.02	.12	.16	.07	.23	.01	.16	.16	.07
29	.07	.16	.05	.02	---	.12	.09	.16	.03	.50	.12	.07
30	.07	.12	.03	.02	---	.09	.09	1.2	.03	.20	.12	.07
31	.07	---	.03	.02	---	.09	---	.24	---	119	.12	---
TOTAL	2.97	4.13	2.05	.96	2.59	3.42	1.59	4.84	9.38	341.75	348.45	67.50
MEAN	.096	.14	.066	.031	.093	.11	.053	.16	.31	11.0	11.2	2.25
MAX	.24	.20	.12	.04	.14	.16	.12	1.2	3.7	125	264	57
MIN	.07	.07	.03	.02	.03	.09	.03	.03	.01	.01	.09	.07
AC-FT	5.9	8.2	4.1	1.9	5.1	6.8	3.2	9.6	19	678	691	134

WTR YR 1979 TOTAL 789.63 MEAN 2.16 MAX 264 MIN .01 AC-FT 1570

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.10						---	6.8	3.0	.68	.54	.20
2	.09						---	5.3	2.8	.78	.54	.26
3	.03						---	4.1	2.5	.73	.50	.27
4	.06						---	3.4	2.4	.66	.40	.21
5	.07						---	3.0	2.2	.49	.35	.28
6	.10						---	2.3	2.1	.34	.30	.25
7	.14						---	2.5	1.9	.34	.25	.32
8	.19						---	2.4	2.2	.23	.34	.19
9	.19						---	1.5	2.8	.10	.34	.38
10	.15						---	1.2	2.5	.33	.25	.27
11	.16						---	1.1	2.3	.39	.24	.30
12	.20						---	.86	1.7	.42	.29	.24
13	.36						---	.77	1.4	.40	.26	.19
14	.34						---	1.0	1.2	.37	5.2	.12
15	.33						---	13	1.2	.23	.45	.13
16	.25						---	15	1.2	.37	.26	.09
17	.29						---	10	1.3	.40	.29	.12
18	.40						.12	7.8	1.1	.34	.27	.14
19	.36						.19	6.7	.96	.44	.25	.18
20	.40						.25	6.5	.89	.44	.20	.15
21	.33						.19	6.2	.92	.41	.18	.12
22	.16						.07	5.9	1.0	.39	.19	.20
23	.21						.24	5.6	1.0	.37	.23	.13
24	.23						1.5	4.9	1.0	.35	.20	.09
25	.23						2.7	4.6	1.0	.34	.12	.12
26	.22						3.8	4.3	1.1	.28	.15	.08
27	.21						4.0	4.0	1.1	.24	.34	.04
28	.21						4.4	3.8	1.1	.23	.24	.08
29	.22						3.6	3.5	.81	.22	.30	.10
30	.41						3.6	3.4	.57	.39	.27	.07
31	.32						---	3.3	---	1.0	.16	---
TOTAL	6.96						---	144.73	47.25	12.70	13.90	5.32
MEAN	.22						---	4.67	1.58	.41	.45	.18
MAX	.41						---	15	3.0	1.0	5.2	.38
MIN	.03						---	.77	.57	.10	.12	.04
AC-FT	14						---	287	94	25	28	11

Table 18.--*Daily discharge at station 07124120 Sarcillo Canyon near Segundo, Colo*--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1							.07	.11	.06	.20	1.8	2.3
2							.05	.07	.05	2.2	.63	2.0
3							.03	.07	.03	38	.41	17
4							.07	.07	.02	1.1	31	3.9
5							.05	.10	.02	.29	1.4	2.4
6							.09	.05	.03	.17	.63	3.8
7							.09	.02	.04	.17	11	26
8							.05	.01	.01	.16	34	3.5
9							.09	.05	.01	.07	291	2.9
10							.07	.04	.01	.06	490	2.8
11							.07	.04	.03	.12	138	264
12							.09	.03	.03	.26	94	5.2
13							.07	.03	.03	.23	9.5	21
14							.12	.68	.03	.25	8.2	6.3
15							.12	.23	.03	.36	8.0	4.3
16							.12	.16	.03	.43	158	4.3
17							.12	.09	.03	.24	11	3.6
18							.12	.09	.03	230	8.0	2.9
19							.16	.09	.03	.63	6.9	2.8
20							.16	.07	.03	.20	6.6	2.8
21							.16	.03	.03	.10	84	3.5
22							.16	.03	.03	.05	6.3	3.0
23							.12	.03	.03	.12	2.9	2.5
24							.12	.09	.08	.09	2.6	2.0
25							.09	.09	.09	.07	2.4	1.7
26							.09	.07	.09	96	2.3	1.4
27							.07	.07	12	1.1	220	1.2
28							.05	.07	4.9	.43	7.2	1.0
29							.04	.42	.19	.41	4.2	.80
30							.05	.41	.28	.40	3.5	.70
31							---	.06	---	.40	2.6	---
TOTAL							2.76	3.47	18.30	374.31	1648.07	401.60
MEAN							.092	.11	.61	12.1	53.2	13.4
MAX							.16	.68	12	230	490	264
MIN							.03	.01	.01	.05	.41	.70
AC-FT							5.5	6.9	36	742	3270	797

Table 19.--*Daily discharge at station 07124200 Purgatoire River at Madrid, Colo.*

LOCATION.--Lat 37°07'46", long 104°38'20", in SW¼NE¼ sec.35, T.33 S., R.65 W., Las Animas County, Hydrologic Unit 11020010, on left bank 70 ft (21 m) downstream from county bridge, 0.3 mi (0.5 km) northeast of Madrid, and 1.0 mi (1.6 km) downstream from Burro Canyon.

DRAINAGE AREA.--550 mi² (1,420 km²), approximately.

WATER DISCHARGE RECORDS

PERIOD OF RECORD.--March 1972 to current year (1981).

GAGE.--Water-stage recorder. Datum of gage is 6,261.61 ft (1,908.539 m) National Geodetic Vertical Datum of 1929 (U.S. Army, Corps of Engineers bench mark).

REMARKS.--Records good except those for winter period, which are fair. Diversions for irrigation of about 6,000 acres (24.3 km²) above station.

AVERAGE DISCHARGE.--9 years, 55.3 ft³/s (1.566 m³/s), 40,060 acre-ft/yr (49.4 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 14,300 ft³/s (405 m³/s) July 20, 1976, gage height, 12.80 ft (3.901 m), from floodmarks, from rating curve extended above 300 ft³/s (8.5 m³/s), on basis of drift-timed measurement of peak flow; minimum daily, 3.0 ft³/s (0.085 m³/s) Feb. 23 to Mar. 2, 1977.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	13	11	10	18	9.2	14	29	108	280	104	26
2	13	13	15	9.6	15	9.1	16	43	103	235	390	17
3	16	13	15	10	16	9.1	15	34	111	215	156	15
4	20	13	15	15	24	11	14	45	122	197	90	14
5	21	13	13	12	14	15	14	41	130	174	48	12
6	23	12	11	12	14	11	15	47	147	160	32	12
7	27	28	12	12	10	12	14	38	120	142	300	11
8	26	43	12	10	8.9	11	14	41	121	136	73	11
9	23	19	11	10	8.6	13	16	41	129	134	50	10
10	19	14	12	10	10	13	18	34	140	640	53	10
11	17	18	15	10	9.1	14	20	39	154	140	56	9.5
12	17	21	13	10	8.4	14	18	48	145	129	71	9.5
13	17	19	11	10	4.5	13	18	52	155	126	68	9.0
14	16	20	13	9.1	5.0	12	17	71	176	103	48	8.5
15	16	18	13	18	6.5	10	18	92	240	100	39	8.4
16	16	17	10	17	7.3	9.6	18	77	282	90	35	8.0
17	15	16	8.0	16	5.2	13	21	67	244	84	24	7.6
18	15	16	14	12	7.1	13	21	100	223	66	21	7.7
19	14	14	13	12	12	14	20	96	202	53	22	7.8
20	14	14	16	12	12	14	20	94	222	110	24	8.0
21	13	12	12	12	13	13	18	78	228	68	23	9.2
22	14	17	12	18	17	13	17	58	204	92	23	10
23	15	15	13	19	13	15	16	53	164	84	27	10
24	15	14	15	19	12	15	15	81	151	76	32	9.3
25	14	17	10	20	12	13	16	93	152	66	319	10
26	14	15	11	22	11	12	17	94	151	66	153	15
27	14	14	12	25	11	11	20	68	440	87	107	14
28	14	14	14	30	9.2	12	22	59	340	76	82	11
29	13	14	13	27	---	13	23	59	202	66	60	10
30	13	14	14	25	---	13	24	65	262	79	68	9.0
31	13	---	13	20	---	13	---	90	---	124	64	---
TOTAL	510	500	392.0	473.7	313.8	383.0	529	1927	5568	4198	2662	329.5
MEAN	16.5	16.7	12.6	15.3	11.2	12.4	17.6	62.2	186	135	85.9	11.0
MAX	27	43	16	30	24	15	24	100	440	640	390	26
MIN	13	12	8.0	9.1	4.5	9.1	14	29	103	53	21	7.6
AC-FT	1010	992	778	940	622	760	1050	3820	11040	8330	5280	654

CAL YR 1977 TOTAL 9714.4 MEAN 26.6 MAX 200 MIN 3.0 AC-FT 19270
WTR YR 1978 TOTAL 17786.0 MEAN 48.7 MAX 640 MIN 4.5 AC-FT 35280

Table 19.--*Daily discharge at station 07124200 Purgatoire River at Madrid, Colo*--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.6	14	16	8.0	8.0	10	9.8	25	312	262	114	54
2	8.4	14	13	9.0	9.0	9.7	10	23	288	273	73	48
3	8.7	14	10	10	10	11	11	25	280	259	68	48
4	9.2	18	13	10	11	8.8	10	27	276	248	60	42
5	9.0	20	14	8.0	11	9.5	9.8	25	284	231	56	41
6	7.6	17	12	8.0	12	11	9.6	22	288	225	53	35
7	9.8	16	10	8.0	12	11	9.1	23	300	211	50	34
8	9.8	15	9.0	9.0	12	10	8.9	26	328	196	58	31
9	9.4	15	9.0	9.0	13	11	11	36	372	186	60	29
10	9.8	14	10	9.0	13	11	12	47	344	170	66	31
11	9.6	15	13	9.0	15	10	12	40	316	155	182	27
12	9.4	17	19	12	18	10	11	37	296	132	196	33
13	8.8	17	25	12	23	10	10	28	308	122	93	247
14	9.9	14	25	9.0	30	9.6	10	22	324	192	1410	211
15	11	14	25	9.0	27	9.5	10	22	332	170	940	99
16	10	15	30	10	26	9.5	10	25	352	220	308	81
17	10	15	30	12	24	9.3	12	36	356	440	163	68
18	10	20	28	10	21	9.6	12	62	332	580	240	61
19	11	17	25	8.5	20	9.3	14	71	280	174	152	55
20	10	12	22	8.4	20	9.4	16	85	231	122	122	46
21	11	14	19	8.0	13	10	17	126	196	109	112	47
22	23	16	19	8.0	12	11	18	113	186	107	101	64
23	18	14	19	8.0	8.8	10	19	305	218	111	96	51
24	14	14	17	8.0	8.8	10	21	282	290	142	93	46
25	15	16	16	10	9.6	8.8	23	252	273	141	164	43
26	16	15	16	9.0	12	8.8	23	308	245	131	108	41
27	15	15	18	8.0	11	8.8	23	304	245	133	103	39
28	14	13	18	8.0	10	8.1	23	304	252	125	78	34
29	14	16	12	8.0	---	8.2	24	328	256	154	70	31
30	14	17	9.0	8.0	---	9.0	27	400	259	117	73	30
31	14	---	8.0	8.0	---	9.3	---	348	---	710	62	---
TOTAL	358.0	463	529.0	278.9	420.2	301.2	436.2	3777	8619	6548	5524	1747
MEAN	11.5	15.4	17.1	9.00	15.0	9.72	14.5	122	287	211	178	58.2
MAX	23	20	30	12	30	11	27	400	372	710	1410	247
MIN	7.6	12	8.0	8.0	8.0	8.1	8.9	22	186	107	50	27
AC-FT	710	918	1050	553	833	597	865	7490	17100	12990	10960	3470

CAL YR 1978 TOTAL 17734.0 MEAN 48.6 MAX 640 MIN 4.5 AC-FT 35180
WTR YR 1979 TOTAL 29001.5 MEAN 79.5 MAX 1410 MIN 7.6 AC-FT 57520

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29	23	18	28	25	21	17	438	383	298	48	19
2	28	21	20	28	31	18	30	421	382	304	55	19
3	22	21	26	25	40	19	21	454	340	262	62	18
4	21	27	30	25	38	20	24	481	301	235	58	17
5	22	27	30	30	30	18	28	409	314	211	54	23
6	22	27	30	31	22	17	32	531	341	196	52	18
7	22	25	26	26	24	17	33	478	324	194	64	21
8	21	26	23	25	26	15	27	563	327	188	74	21
9	21	29	19	23	22	15	24	439	579	167	111	44
10	22	38	18	26	32	16	23	357	641	154	70	62
11	22	28	20	27	37	16	28	320	606	165	59	62
12	20	30	22	29	37	16	34	282	593	139	54	45
13	19	24	23	27	28	14	25	238	572	127	47	38
14	19	25	23	25	24	14	30	211	553	137	54	41
15	19	27	28	22	25	15	36	360	519	128	74	40
16	19	27	24	21	34	15	33	560	486	110	44	31
17	19	32	25	17	33	16	42	545	443	105	46	27
18	19	36	27	18	26	15	55	444	447	92	45	23
19	21	31	21	19	27	16	62	346	449	91	38	22
20	21	36	20	23	30	16	76	315	427	80	35	20
21	19	22	21	21	22	15	84	328	391	79	30	19
22	25	21	24	24	20	14	85	379	359	80	27	19
23	25	22	25	27	19	23	102	453	343	91	27	20
24	26	23	22	27	19	16	124	526	338	77	29	19
25	22	26	27	24	19	20	145	529	345	73	40	19
26	19	29	26	21	25	18	150	461	341	70	43	19
27	16	29	25	20	22	19	148	418	326	62	94	19
28	16	22	24	20	21	21	182	393	324	54	30	19
29	16	20	23	20	21	18	225	367	297	53	23	19
30	22	19	26	20	---	18	236	388	292	51	21	19
31	45	---	27	23	---	19	---	363	---	77	20	---
TOTAL	679	793	743	742	779	530	2161	12797	12383	4150	1528	802
MEAN	21.9	26.4	24.0	23.9	26.9	17.1	72.0	413	413	134	49.3	26.7
MAX	45	38	30	31	40	23	236	563	641	304	111	62
MIN	16	19	18	17	19	14	17	211	292	51	20	17
AC-FT	1350	1570	1470	1470	1550	1050	4290	25380	24560	8230	3030	1590

CAL YR 1979 TOTAL 29866.5 MEAN 81.8 MAX 1410 MIN 8.0 AC-FT 59240
WTR YR 1980 TOTAL 38087.0 MEAN 104 MAX 641 MIN 14 AC-FT 75550

Table 19.--*Daily discharge at station 07124200 Purgatoire River at Madrid, Colo*--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	21	21	10	4.4	11	11	37	34	139	53	101
2	14	21	19	10	8.0	11	11	46	34	82	63	92
3	15	21	21	14	12	12	10	37	26	463	66	265
4	15	21	20	11	12	13	12	42	32	152	132	149
5	15	20	20	14	10	9.7	11	36	31	82	61	95
6	15	19	18	14	9.6	12	9.9	42	49	64	135	98
7	15	19	18	9.2	9.2	11	10	23	79	43	441	1640
8	14	19	18	10	11	11	9.7	17	91	70	557	374
9	13	18	10	11	12	10	9.7	17	75	50	348	247
10	13	18	16	14	6.8	11	9.7	22	75	97	1310	233
11	13	18	28	16	10	16	9.7	18	70	102	1230	764
12	14	18	30	17	12	14	10	15	69	306	1500	336
13	14	18	29	14	14	14	10	15	59	125	443	228
14	13	22	21	13	14	13	11	16	51	82	243	207
15	15	23	21	13	14	12	13	18	50	71	165	190
16	23	20	22	12	14	12	12	18	41	71	403	196
17	20	15	20	12	13	13	11	15	30	144	412	190
18	19	18	18	12	12	13	11	10	34	271	300	174
19	19	35	16	12	12	12	12	9.3	34	95	261	165
20	19	41	17	12	12	12	12	13	37	58	170	156
21	19	41	19	12	12	13	11	12	33	58	201	145
22	19	41	26	12	9.2	12	12	12	32	49	269	137
23	19	30	16	12	11	11	13	14	36	50	173	134
24	19	22	10	12	12	12	13	19	34	45	139	119
25	17	20	18	12	11	13	13	19	35	41	122	105
26	18	19	14	12	11	11	14	17	31	437	94	97
27	20	30	12	12	10	12	15	16	88	125	578	87
28	21	48	11	12	11	12	19	20	140	106	362	84
29	20	39	12	12	---	13	21	62	57	67	168	78
30	22	24	10	8.8	---	12	24	109	105	44	117	71
31	21	---	10	8.4	---	11	---	59	---	38	94	---
TOTAL	528	739	561	375.4	309.2	374.7	370.7	825.3	1592	3627	10610	6957
MEAN	17.0	24.6	18.1	12.1	11.0	12.1	12.4	26.6	53.1	117	342	232
MAX	23	48	30	17	14	16	24	109	140	463	1500	1640
MIN	13	15	10	8.4	4.4	9.7	9.7	9.3	26	38	53	71
AC-FT	1050	1470	1110	745	613	743	735	1640	3160	7190	21040	13800

CAL YR 1980 TOTAL 37700.0 MEAN 103 MAX 641 MIN 10 AC-FT 74780
WTR YR 1981 TOTAL 26869.3 MEAN 73.6 MAX 1640 MIN 4.4 AC-FT 53300

Table 20.--*Daily discharge at station 07124300 Long Canyon Creek near Madrid, Colo.*

LOCATION.--Lat 37°06'53", long 104°36'17", in SE¼NW¼ sec.6, T.34 S., R.64 W., Las Animas County, Hydrologic Unit 11020010, on left bank 700 ft (210 m) upstream from private bridge, 1.4 mi (2.3 km) upstream from Oso Canyon, 2.2 mi (3.5 km) southeast of Madrid, and 2.3 mi (3.7 km) upstream from mouth.

DRAINAGE AREA.--100 mi² (260 km²), approximately.

PERIOD OF RECORD.--March 1972 to current year (1981).

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 6,259.09 ft (1,907.771 m), National Geodetic Vertical Datum of 1929.

REMARKS.--Records good. No diversion above station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--9 years, 2.94 ft³/s (0.083 m³/s), 2,130 acre-ft/yr (2.62 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,140 ft³/s (70.2 m³/s) July 17, 1979, gage height, 7.37 ft (2.097 m), from floodmarks, from rating curve extended above 1,000 ft³/s (28 m³/s), on basis of slope-area measurements at gage heights 6.88 ft (2.097 m), and 7.37 ft (2.246 m); no flow Feb. 22 to May 22, 1979.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.05	.13	.07	.04	.11	.09	.05	.09	.05	12	3.3	.04
2	.05	.09	.07	.04	.11	.09	.08	.11	.05	.13	74	.04
3	.04	.09	.07	.05	.11	.09	.08	.15	.05	.07	66	.03
4	.05	.09	.07	.05	.11	.11	.08	.17	.05	.05	3.4	.03
5	.05	.09	.07	.04	.11	.09	.08	.15	.09	.05	.13	.03
6	.07	.09	.07	.04	.11	.09	.08	.17	2.8	.05	.11	.03
7	.07	.11	.07	.04	.11	.11	.08	.19	.21	.04	.13	.01
8	.07	.11	.07	.04	.11	.09	.08	.19	.17	5.5	.15	.01
9	.07	.11	.07	.04	.09	.11	.08	.17	.15	.30	.13	.03
10	.05	.09	.07	.04	.11	.11	.08	.15	.13	4.7	.09	.03
11	.07	.09	.05	.05	.11	.13	.08	.15	.11	.21	.11	.03
12	.07	.09	.05	.05	.09	.13	.07	.13	.09	.11	6.8	.03
13	.07	.09	.05	.04	.11	.13	.07	.13	.07	.09	3.3	.03
14	.07	.09	.05	.05	.09	.13	.07	.11	.09	.09	.11	.04
15	.07	.09	.05	.05	.09	.09	.07	.11	.09	.04	.05	.03
16	.07	.09	.05	.05	.09	.09	.07	.11	.07	.09	.05	.03
17	.07	.09	.04	.07	.09	.09	.07	.09	.07	.09	.04	.03
18	.07	.11	.04	.05	.11	.09	.07	.09	.07	.09	.04	.04
19	.07	.09	.04	.07	.09	.09	.07	.09	.07	.07	.04	.04
20	.07	.09	.03	.07	.07	.09	.07	.10	.05	.07	.04	.04
21	.07	.09	.05	.07	.09	.05	.07	.11	.05	.09	.04	.03
22	.07	.09	.07	.07	.11	.05	.09	.11	.05	.09	.04	.03
23	.09	.09	.07	.07	.11	.05	.09	.09	.05	.09	.04	.03
24	.07	.07	.05	.07	.11	.05	.09	.09	.04	.07	.04	.02
25	.09	.07	.04	.07	.11	.05	.09	.07	.04	.07	11	.02
26	.09	.07	.04	.07	.11	.07	.09	.07	.04	.05	9.0	.02
27	.09	.07	.04	.07	.11	.05	.09	.07	15	.05	.06	.03
28	.09	.07	.05	.07	.11	.07	.09	.07	.24	.05	.04	.03
29	.11	.07	.04	.09	---	.07	.09	.07	.17	.05	.04	.03
30	.11	.07	.04	.11	---	.05	.09	.07	11	3.6	.04	.03
31	.09	---	.04	.11	---	.05	---	.05	---	.17	.04	---
TOTAL	2.24	2.68	1.68	1.84	2.88	2.65	2.36	3.52	31.21	28.27	178.10	.89
MEAN	.072	.089	.054	.059	.10	.085	.079	.11	1.04	.91	5.75	.030
MAX	.11	.13	.07	.11	.11	.13	.09	.19	15	12	74	.04
MIN	.04	.07	.03	.04	.07	.05	.05	.05	.04	.04	.04	.01
AC-FT	4.4	5.3	3.3	3.6	5.7	5.3	4.7	7.0	62	56	353	1.8

CAL YR 1977 TOTAL 217.82 MEAN .60 MAX 42 MIN .03 AC-FT 432
WTR YR 1978 TOTAL 258.32 MEAN .71 MAX 74 MIN .01 AC-FT 512

Table 20.--*Daily discharge at station 07124300 Long Canyon Creek near Madrid, Colo*--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.02	.02	.02	.03	.00	.00	.00	.00	.45	.13	4.1	.06
2	.02	.02	.02	.03	.00	.00	.00	.00	.13	.13	.19	.06
3	.02	.03	.03	.03	.00	.00	.00	.00	.03	.13	.06	.06
4	.02	.03	.03	.03	.01	.00	.00	.00	.03	.13	.03	.06
5	.01	.03	.03	.02	.01	.00	.00	.00	.03	3.9	.06	.03
6	.01	.03	.03	.01	.01	.00	.00	.00	.02	.53	.03	.02
7	.01	.03	.03	.01	.01	.00	.00	.00	.02	.45	.02	.06
8	.01	.03	.03	.01	.01	.00	.00	.00	.03	.37	.02	.06
9	.01	.02	.02	.01	.01	.00	.00	.00	1.6	.24	.01	.06
10	.01	.02	.02	.01	.01	.00	.00	.00	.13	.24	.03	.06
11	.01	.02	.02	.01	.01	.00	.00	.00	.04	.24	.02	.06
12	.01	.02	.02	.01	.01	.00	.00	.00	.03	.13	.02	.06
13	.01	.02	.02	.01	.02	.00	.00	.00	.03	.04	.02	24
14	.01	.02	.02	.01	.02	.00	.00	.00	.03	.04	64	5.5
15	.01	.02	.02	.01	.02	.00	.00	.00	.03	.38	30	.30
16	.03	.02	.02	.01	.02	.00	.00	.00	.03	.24	1.8	.19
17	.02	.02	.02	.01	.02	.00	.00	.00	.04	234	.19	.19
18	.02	.02	.02	.01	.01	.00	.00	.00	.04	50	65	.19
19	.02	.02	.02	.01	.01	.00	.00	.00	.04	.21	1.5	.11
20	.02	.01	.02	.01	.01	.00	.00	.00	.13	.15	.03	.11
21	.02	.01	.03	.01	.01	.00	.00	.00	.13	.19	.03	.11
22	.03	.02	.04	.01	.00	.00	.00	.00	.04	.27	.06	.11
23	.02	.02	.04	.01	.00	.00	.00	2.5	7.2	.17	.19	.11
24	.02	.02	.04	.01	.00	.00	.00	1.2	14	9.9	.19	.11
25	.02	.02	.04	.01	.00	.00	.00	.40	.75	7.1	.11	.11
26	.02	.02	.05	.01	.00	.00	.00	5.6	.24	1.5	.11	.10
27	.01	.02	.03	.01	.00	.00	.00	.03	.13	1.1	.11	.06
28	.02	.02	.03	.00	.00	.00	.00	.02	.13	.33	.19	.06
29	.02	.02	.03	.00	---	.00	.00	.02	.13	4.2	5.5	.06
30	.02	.02	.03	.00	---	.00	.00	17	.13	.45	2.6	.06
31	.02	---	.03	.00	---	.00	---	3.4	---	254	.11	---
TOTAL	.52	.64	.85	.36	.23	.00	.00	30.17	25.79	570.89	176.33	32.13
MEAN	.017	.021	.027	.012	.008	.000	.000	.97	.86	18.4	5.69	1.07
MAX	.03	.03	.05	.03	.02	.00	.00	17	14	254	65	24
MIN	.01	.01	.02	.00	.00	.00	.00	.00	.02	.04	.01	.02
AC-FT	1.0	1.3	1.7	.7	.5	.00	.00	60	51	1130	350	64

CAL YR 1978 TOTAL 253.73 MEAN .70 MAX 74 MIN .01 AC-FT 503
WTR YR 1979 TOTAL 837.91 MEAN 2.30 MAX 254 MIN .00 AC-FT 1660

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.07	.07	.06	.07	.05	.06	.08	160	2.5	.80	.48	.30
2	.07	.06	.10	.05	.07	.07	.11	90	2.6	.95	.48	.30
3	.07	.06	.09	.03	.08	.07	.13	60	1.7	1.2	.70	.30
4	.07	.06	.03	.03	.08	.07	.12	50	1.7	1.1	.48	.30
5	.07	.06	.03	.03	.09	.06	.11	40	1.6	1.2	.48	.30
6	.07	.06	.03	.03	.11	.07	.09	30	1.8	.71	18	.30
7	.07	.06	.03	.03	.07	.07	.08	25	1.5	.52	2.6	.30
8	.07	.06	.03	.03	.08	.07	.08	50	2.1	.75	89	.30
9	.07	.06	.03	.03	.12	.07	.08	40	2.3	.44	22	10
10	.07	.06	.05	.03	.06	.07	.07	35	2.3	.50	3.5	2.2
11	.07	.06	.03	.04	.07	.03	.09	30	2.4	.50	1.8	.70
12	.07	.03	.03	.04	.08	.03	.09	25	1.5	.43	1.2	.48
13	.07	.03	.03	.07	.07	.05	.09	20	1.2	.43	.94	.48
14	.07	.03	.03	.07	.07	.11	.09	20	1.4	.50	3.1	1.8
15	.07	.03	.03	.07	.07	.09	.09	300	1.5	.46	2.6	19
16	.07	.03	.03	.07	.05	.07	.08	150	1.5	.28	1.2	3.1
17	.07	.03	.03	.07	.06	.05	.08	40	1.5	.25	.94	2.2
18	.07	.03	.07	.07	.07	.05	.08	20	1.3	.39	.94	1.2
19	.07	.03	.11	.07	.11	.05	.08	15	1.2	.57	.70	.94
20	.07	.03	.11	.07	.07	.05	.08	12	1.4	.30	.70	.70
21	.07	.03	.11	.07	.09	.05	.07	10	1.6	.30	.70	.48
22	.07	.03	.09	.07	.13	.05	.07	15	1.6	22	.48	.30
23	.07	.03	.07	.10	.13	.05	.07	12	1.6	7.0	.48	.30
24	.08	.03	.07	.04	.08	.05	3.5	10	1.9	2.2	.48	.30
25	.09	.03	.07	.03	.07	.05	6.2	8.0	1.9	1.8	.48	.30
26	.09	.03	.07	.03	.09	.05	8.2	6.0	1.5	1.2	.94	.30
27	.06	.03	.07	.05	.11	.05	9.1	5.0	1.4	.94	.70	.30
28	.06	.03	.07	.03	.06	.05	70	4.5	.85	.70	.70	.48
29	.06	.03	.07	.03	.07	.05	151	4.0	1.4	.70	.48	.48
30	.09	.03	.07	.03	---	.05	120	2.8	.94	.59	.48	.48
31	.06	---	.07	.04	---	.07	---	2.5	---	.48	.45	---
TOTAL	2.20	1.24	1.81	1.52	2.36	1.83	370.01	1291.8	49.69	50.19	158.21	48.92
MEAN	.071	.041	.058	.049	.081	.059	12.3	41.7	1.66	1.62	5.10	1.63
MAX	.09	.07	.11	.10	.13	.11	151	300	2.6	22	89	19
MIN	.06	.03	.03	.03	.05	.03	.07	2.5	.85	.25	.45	.30
AC-FT	4.4	2.5	3.6	3.0	4.7	3.6	734	2560	99	100	314	97

CAL YR 1979 TOTAL 841.15 MEAN 2.30 MAX 254 MIN .00 AC-FT 1670
WTR YR 1980 TOTAL 1979.78 MEAN 5.41 MAX 300 MIN .03 AC-FT 3930

Table 20.--*Daily discharge at station 07124300 Long Canyon Creek near Madrid, Colo*--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.48	.19	.30	.30	.20	.11	.11	.11	7.2	11	1.9	7.2
2	.48	.19	.30	.30	.18	.11	.11	.11	.70	1.2	9.0	4.5
3	.48	.19	.30	.30	.20	.11	.11	.11	.30	2.6	7.2	37
4	.48	.19	.30	.21	.20	.11	.11	.11	.30	.70	6.0	29
5	.48	.19	.30	.20	.20	.11	.11	.11	.30	.30	1.5	53
6	.48	.19	.30	.20	.20	.11	.11	.11	.25	.11	5.0	27
7	.48	.19	.30	.20	.12	.11	.11	.11	.14	.03	17	362
8	.38	.19	.30	.20	.10	.11	.11	.11	.11	.03	2.7	103
9	.30	.30	.30	.20	.10	.11	.11	.11	.10	.03	12	132
10	.30	.30	.30	.20	.08	.11	.11	.11	.06	.03	100	70
11	.30	.30	.30	.20	.08	.11	.11	.11	.06	.03	258	36
12	.30	.30	.30	.13	.08	.11	.11	.11	.06	.03	262	38
13	.30	.30	.30	.11	.11	.11	.11	.11	.06	.03	57	25
14	.30	.30	.30	.11	.11	.11	.11	.13	.06	.03	15	12
15	.30	.30	.30	.11	.11	.11	.11	.19	.06	.03	7.8	8.4
16	.27	.30	.30	.11	.11	.11	.11	.17	.06	.03	29	7.8
17	.19	.24	.30	.11	.11	.11	.11	.11	.06	47	22	8.4
18	.19	.24	.30	.11	.11	.11	.11	.11	.06	2.0	13	7.2
19	.19	.19	.30	.11	.11	.11	.11	.11	.06	.19	9.6	7.2
20	.19	.19	.30	.15	.11	.07	.11	.11	.06	.06	7.2	6.0
21	.19	.19	.30	.23	.11	.07	.11	.06	.06	.03	6.0	4.0
22	.19	.19	.30	.19	.11	.07	.11	.06	.05	.02	6.0	4.5
23	.19	.19	.30	.20	.11	.07	.11	.06	.03	.02	6.6	4.0
24	.19	.19	.30	.20	.11	.07	.11	.06	.03	.02	12	4.0
25	.19	.19	.30	.20	.11	.07	.11	.06	.03	.02	11	4.0
26	.19	.19	.30	.20	.11	.07	.11	.06	.03	162	9.1	3.6
27	.19	.19	.30	.11	.11	.07	.11	.06	.03	7.8	56	4.1
28	.19	.19	.30	.11	.11	.07	.11	.03	.03	21	79	4.1
29	.19	.19	.30	.11	---	.07	.11	4.4	.03	3.8	69	2.5
30	.19	.30	.30	.16	---	.11	.11	1.4	31	.19	40	2.3
31	.19	---	.30	.20	---	.11	---	16	---	.11	12	---
TOTAL	8.96	6.79	9.30	5.47	3.50	3.01	3.30	24.61	41.38	260.47	1149.6	1017.8
MEAN	.29	.23	.30	.18	.13	.097	.11	.79	1.38	8.40	37.1	33.9
MAX	.48	.30	.30	.30	.20	.11	.11	16	31	162	262	362
MIN	.19	.19	.30	.11	.08	.07	.11	.03	.03	.02	1.5	2.3
AC-FT	18	13	18	11	6.9	6.0	6.5	49	82	517	2280	2020

CAL YR 1980	TOTAL	1999.58	MEAN 5.46	MAX 300	MIN .03	AC-FT 3970
WTR YR 1981	TOTAL	2534.19	MEAN 6.94	MAX 362	MIN .02	AC-FT 5030

Table 21.--*Daily storage at station 07124400 Trinidad Lake near Trinidad, Colo.*

LOCATION.--Lat 37°08'27", long 104°33'03", in NE¼SW¼ sec.27, T.33 S., R.64 W., Las Animas County, Hydrologic Unit 11020010, in valve house near center of dam on Purgatoire River and 3.2 mi (5.1 km) southwest of courthouse in Trinidad.

DRAINAGE AREA.--672 mi² (1,740 km²).

PERIOD OF RECORD.--August 1977 to current year (1981).

REVISED RECORDS.--WDR-CO-78-1: 1977(M).

GAGE.--Water-stage recorder. Datum of gage is, National Geodetic Vertical Datum of 1929 (levels by U.S. Army, Corps of Engineers).

REMARKS.--Reservoir is formed by a rock and earthfill dam completed in 1977. Storage began Aug. 19, 1977. Total capacity, 158,500 acre-ft (195 hm³), at elevation 6,276.0 ft (1,912.92 m). Elevation of high crest of spillway, 6,258 ft (1,907.44 m), with capacity of 117,400 acre-ft (145 hm³). Elevation of notch crest in spillway is 6,243.0 ft (1,902.87 m), capacity, 89,170 acre-ft (110 hm³). Permanent pool is 4,500 acre-ft (5.55 hm³) at elevation 6,143.0 ft (1,872.39 m). Elevation of outlet invert is 6,095.0 ft (1,857.76 m). Reservoir is used for flood control, storage for irrigation, and to help control sedimentation. Figures given are total contents.

COOPERATION.--Capacity tables were furnished by U.S. Army, Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily contents, 58,069 acre-ft (71.6 hm³) June 26, 1980, elevation, 6,222.37 ft (1,896.578 m); no contents prior to Aug. 19, 1977.

CONTENTS, IN ACRE-FEET, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1140	682	588	587	583	581	553	524	502	3940	2940	2460
2	1130	688	592	576	574	572	552	538	474	4080	3110	2430
3	1140	677	609	574	574	548	549	515	492	4200	3210	2400
4	1140	649	612	584	595	550	546	502	498	4200	2890	2380
5	1150	638	610	599	594	564	553	491	530	4130	2720	2340
6	1150	637	604	608	597	566	560	506	775	4010	2720	2320
7	1150	659	605	604	582	556	558	489	956	3830	2760	2280
8	1150	691	605	591	573	549	557	494	1160	3680	2760	2270
9	1130	666	600	590	566	550	561	502	1290	3560	2750	2250
10	1120	640	600	594	572	558	557	488	1420	4350	2710	2240
11	1130	645	618	612	577	571	538	496	1590	4430	2680	2220
12	1140	653	626	602	580	556	530	513	1670	4360	2720	2190
13	1130	657	607	577	574	544	527	506	1710	4290	2680	2160
14	1120	656	602	570	573	543	529	516	1750	4190	2640	2150
15	1120	648	606	579	578	543	535	526	1750	4110	2580	2150
16	1120	636	592	587	579	540	540	492	1710	4030	2560	2150
17	1130	635	581	593	573	554	533	461	1630	3860	2550	2140
18	1130	638	587	588	560	564	528	495	1560	3710	2510	2140
19	1110	638	593	577	568	568	527	473	1540	3570	2510	2120
20	1090	635	588	582	568	566	528	498	1560	3620	2510	2130
21	1060	621	577	597	579	561	529	473	1590	3450	2510	2140
22	1040	609	576	586	600	558	525	447	1590	3350	2510	2140
23	1020	604	593	573	599	558	519	460	1560	3220	2510	2140
24	997	599	609	570	589	558	519	489	1490	3120	2500	2130
25	964	611	595	569	584	558	529	488	1450	3060	2720	2120
26	927	612	582	575	580	553	529	478	1440	3010	2570	2130
27	871	604	583	587	581	546	527	451	2580	2960	2560	2130
28	864	603	592	578	579	554	523	443	3070	2950	2530	2120
29	800	605	608	579	---	565	523	444	3340	2920	2490	2110
30	738	607	608	580	---	570	520	470	3630	2910	2490	2110
31	676	---	596	589	---	561	---	496	---	3000	2490	---
MAX	1150	691	626	612	600	581	561	538	3630	4430	3210	2460
MIN	676	599	576	569	560	540	519	443	474	2910	2490	2110

WTR YR 1978 MAX 4430 MIN 443

Table 21.--*Daily storage at station 07124400 Trinidad Lake near Trinidad, Colo*--Continued

CONTENTS, IN ACRE-FEET, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2100	1840	1820	1790	1810	1810	1780	1760	3440	11900	13600	14260
2	2100	1840	1820	1790	1810	1810	1780	1750	3950	11950	13520	14360
3	2100	1840	1800	1800	1810	1810	1790	1740	4220	12090	13370	14440
4	2100	1850	1800	1810	1810	1800	1780	1750	4550	12150	13160	14460
5	2100	1850	1810	1820	1810	1800	1780	1740	4930	12190	13000	14440
6	2100	1840	1810	1830	1810	1820	1780	1720	5310	12220	12900	14420
7	2090	1830	1810	1830	1800	1840	1770	1710	5750	12250	12690	14320
8	2040	1830	1810	1830	1810	1830	1760	1720	6290	12260	12420	14140
9	1970	1830	1810	1820	1810	1820	1760	1740	6890	12260	12240	13970
10	1970	1820	1810	1810	1810	1810	1770	1760	7380	12190	12130	13750
11	1970	1820	1820	1800	1810	1810	1770	1730	7840	12080	12120	13500
12	1950	1830	1830	1810	1810	1800	1770	1720	8300	11920	12130	13240
13	1920	1830	1840	1810	1820	1800	1770	1700	8760	11820	12030	13060
14	1890	1820	1840	1820	1840	1800	1760	1690	9280	11900	13800	12980
15	1870	1820	1840	1820	1820	1800	1760	1690	9840	11980	15240	12810
16	1850	1820	1830	1820	1810	1800	1750	1700	10450	11930	15760	12920
17	1850	1820	1820	1820	1800	1800	1750	1720	11030	12500	16100	12990
18	1840	1830	1830	1820	1810	1800	1760	1750	11240	13210	16610	13070
19	1840	1830	1850	1820	1820	1800	1750	1740	11180	13300	16940	13120
20	1850	1830	1820	1810	1830	1800	1760	1750	11070	13190	16910	13140
21	1850	1830	1810	1800	1830	1810	1770	1730	11020	13090	17130	13140
22	1870	1830	1800	1810	1820	1810	1780	1700	11030	12970	17210	13170
23	1870	1820	1800	1810	1800	1800	1780	2000	11110	12860	17240	13190
24	1850	1820	1800	1810	1800	1800	1770	2050	11320	12790	17240	13200
25	1840	1820	1810	1810	1810	1800	1770	1920	11510	12770	17400	13200
26	1850	1810	1810	1820	1820	1790	1770	1840	11600	12650	17510	13230
27	1860	1810	1820	1820	1820	1800	1750	1810	11690	12550	17690	13270
28	1860	1810	1830	1820	1820	1800	1740	1760	11760	12400	17820	13310
29	1860	1810	1820	1820	---	1790	1750	1740	11800	12320	17940	13330
30	1850	1820	1800	1820	---	1780	1760	2270	11830	12140	18030	13330
31	1840	---	1800	1810	---	1780	---	2880	---	13500	18170	---
MAX	2100	1850	1850	1830	1840	1840	1790	2880	11830	13500	18170	18460
MIN	1840	1810	1800	1790	1800	1780	1740	1690	3440	11820	12030	17240

WTR YR 1979 MAX 18460 MIN 1690

CONTENTS, IN ACRE-FEET, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18310	18430	19400	20450	21410	21930	22600	27900	54530	57830	50850	42620
2	18280	18480	19440	20480	21470	21960	22650	29080	54770	57890	50580	42330
3	18220	18530	19500	20510	21510	21990	22690	30180	54730	57850	50290	42040
4	18170	18570	19570	20550	21550	22010	22730	31300	54620	57740	49940	41740
5	18110	18610	19640	20610	21600	22050	22790	32250	54640	57650	49630	41460
6	18060	18660	19680	20640	21600	22070	22830	33310	54710	57580	49330	41210
7	18010	18710	19740	20640	21610	22070	22860	34280	54740	57580	49030	40970
8	17920	18750	19770	20680	21630	22080	22900	35400	54830	57550	48810	40680
9	17870	18810	19820	20720	21640	22110	22940	36360	55170	57490	48710	40660
10	17840	18870	19860	20770	21680	22130	22980	37140	55450	57330	48610	40620
11	17800	18920	19870	20750	21700	22150	23020	37870	55730	57220	48230	40560
12	17750	18960	19910	20770	21740	22160	23060	38460	55040	57020	47930	40540
13	17700	18990	19930	20820	21690	22180	23100	38970	56420	56780	47660	40510
14	17700	19040	19950	20860	21580	22220	23140	39420	56770	56620	47410	40610
15	17720	19060	19990	20910	21560	22240	23200	40360	57030	56410	47180	40630
16	17750	19080	20000	20950	21590	22240	23240	42170	57240	56060	46860	40610
17	17780	19110	20030	20980	21620	22270	23290	43660	57370	55740	46560	40590
18	17820	19160	20070	21030	21670	22300	23360	44800	57530	55390	46260	40580
19	17870	19230	20080	21050	21700	22310	23440	45520	57660	55030	45920	40540
20	17910	19260	20090	21080	21740	22350	23510	46270	57790	54670	45620	40490
21	17930	19280	20100	21100	21770	22350	23570	47140	57850	54300	45390	40440
22	17980	19320	20140	21140	21790	22340	23640	48180	57910	53990	45130	40390
23	18040	19340	20170	21180	21800	22370	23680	49170	57920	53720	44890	40380
24	18080	19380	20190	21200	21820	22380	23930	50120	57920	53400	44670	40350
25	18190	19430	20230	21240	21850	22400	24120	50990	57920	53100	44440	40330
26	18190	19420	20270	21230	21870	22410	24320	51780	58060	52800	45260	40310
27	18220	19380	20320	21230	21900	22460	24580	52430	58040	52500	44080	40310
28	18250	19360	20350	21240	21930	22490	24970	53030	58010	52150	43800	40300
29	18290	19360	20360	21300	21920	22510	25770	53580	57940	51810	43520	40290
30	18350	19370	20390	21330	---	22560	26520	53950	57870	51470	43230	40280
31	18380	---	20420	21370	---	22590	---	54250	---	51200	42930	---
MAX	18380	19430	20420	21370	21930	22590	26520	54250	58060	57890	50850	42620
MIN	17700	18430	19400	20450	21410	21930	22600	27900	54530	51200	42930	40280

WTR YR 1980 MAX 58060 MIN 17700

Table 21.--*Daily storage at station 07124400 Trinidad Lake near Trinidad, Colo*--Continued

CONTENTS, IN ACRE-FEET, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	40200	39800	40600	41400	42000	42500	43400	39100	31700	26900	27600	43500
2	40200	39800	40700	41500	42000	42600	43400	38800	31600	26700	26600	43400
3	40100	39900	40700	41500	42100	42600	43400	38500	31800	27500	27500	43500
4	40000	39900	40700	41500	42100	42600	43400	38200	31600	27900	27600	43600
5	39900	40000	40700	41500	42100	42700	43500	37900	31800	28100	27500	43600
6	39900	40000	40700	41600	42100	42700	43500	37600	31900	28200	27600	43500
7	39800	40000	40700	41600	42100	42700	43500	37300	31900	28300	28200	46400
8	39700	40100	40800	41600	42200	42700	43500	37000	32000	28300	29200	46600
9	39600	40100	40800	41600	42200	42800	43500	36700	31800	28400	30400	46100
10	39500	40100	40800	41600	42100	42800	43600	36400	31500	28500	33900	45400
11	39400	40200	40800	41700	42100	42900	43600	36100	31300	28500	37300	45100
12	39400	40200	40800	41700	42200	42900	43600	35800	31000	28800	40200	44200
13	39400	40200	40900	41700	42200	43000	43600	35500	30900	28800	40000	43100
14	39300	40200	40900	41700	42200	43000	43600	35200	30600	28800	39100	42600
15	39300	40100	41000	41700	42300	43000	43500	34900	30400	28600	38000	42500
16	39400	40100	41000	41700	42300	43100	43300	34600	30100	28300	37400	42500
17	39400	40100	41000	41800	42300	43100	43200	34400	29800	28300	37600	42400
18	39400	40100	47100	41800	42300	43100	43000	34100	29600	28700	38000	42400
19	39400	40200	47100	41800	42300	43100	42800	33800	29300	28600	38500	42400
20	39500	40200	47100	41800	42400	43200	42600	33500	29000	28400	38900	42400
21	39500	40200	47100	41800	42400	43200	42300	33200	28800	28200	39300	42400
22	39500	40300	41200	41900	42400	43200	42000	32900	28500	28000	39700	42500
23	39500	40300	41200	41900	42400	43200	41700	32600	28300	27700	40000	42500
24	39600	40300	41200	41900	42400	43300	41300	32400	28000	27500	40300	42500
25	39600	40400	41300	41900	42500	43300	41000	32100	27800	27300	40500	42500
26	39600	40400	41300	41900	42500	43300	40700	31900	27500	28500	40700	42400
27	39600	40400	41300	42000	42500	43300	40400	31600	27400	28800	41800	42300
28	39700	40500	41300	42000	42500	43300	40000	31400	27300	29100	42600	42300
29	39700	40600	41400	42000	---	43400	39700	31400	27100	28600	43000	42300
30	39800	40600	41400	42000	---	43400	39400	31500	26900	27800	43400	42300
31	39800	---	41400	42000	---	43400	---	31600	---	27700	43500	---
MAX	40200	40600	47100	42000	42500	43400	43600	39100	32000	29100	43500	46600
MIN	39300	39800	40600	41400	42000	42500	39400	31400	26900	26700	26600	42300

WTR YR 1981 MAX 47100 MIN 26600

Table 22.--*Chemical quality at station 07118500 Apishapa River at Aguilar, Colo.*

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)
JUN										
11...	1510	2.9	270	8.0	23.5	100	11	29	7.1	17
AUG										
15...	1512	78	240	7.9	21.5	--	--	--	--	--

DATE	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)
JUN										
11...	.7	2.3	110	0	90	34	2.8	.3	9.0	156
AUG										
15...	--	--	90	--	74	--	--	--	--	--

DATE	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	BORON, DIS-SOLVED (UG/L AS B)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)
JUN									
11...	.21	1.24	.09	.00	--	40	--	--	1700
AUG									
15...	--	--	--	--	3	--	0	50	48000

DATE	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MOLYB-DENUM, TOTAL RECOV-ERABLE (UG/L AS MO)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)
JUN									
11...	110	--	80	40	--	--	--	--	--
AUG									
15...	--	27	1300	--	.9	3	27	2	140

Table 22.--*Chemical quality at station 07118500 Apishapa River at Aguilar, Colo*--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)
JAN											
15...	1500	.24	790	8.0	7.5	9.4	280	0	76	21	68
APR											
30...	1615	69	315	8.2	9.5	9.6	110	13	31	8.2	16
MAY											
01...	1200	151	270	8.1	5.5	--	--	--	--	--	--
07...	1640	147	255	--	10.0	--	--	--	--	--	--
JUL											
22...	0535	77	775	--	15.0	--	--	--	--	--	--
22...	0550	74	430	--	13.0	--	--	--	--	--	--
22...	0915	21	340	--	14.0	--	--	--	--	--	--

DATE	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY FIELD (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)
JAN											
15...	1.8	2.2	300	120	5.7	.3	12	488	.66	.32	.46
APR											
30...	.7	2.2	98	37	2.9	.3	11	170	.23	31.7	.45
MAY											
01...	--	--	89	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--	--
JUL											
22...	--	--	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--	--	--

DATE	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	BORON, DIS-SOLVED (UG/L AS B)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)
JAN										
15...	.00	150	0	--	--	20	--	--	--	--
APR										
30...	.10	9300	50	2	1	30	1	0	--	--
MAY										
01...	--	15000	--	4	--	--	1	--	--	--
07...	--	7100	--	2	--	--	0	--	0	16
JUL										
22...	--	70000	--	16	--	--	3	--	53	93
22...	--	76000	--	21	--	--	3	--	8	67
22...	--	35000	--	8	--	--	1	--	32	51

DATE	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY DIS-SOLVED (UG/L AS HG)
JAN										
15...	--	--	130	<10	4	1	20	20	--	--
APR										
30...	36	3	48000	130	26	2	1300	30	.3	.1
MAY										
01...	190	--	94000	--	50	--	2700	--	.4	--
07...	27	--	32000	--	16	--	960	--	.1	--
JUL										
22...	360	--	400000	--	240	--	16000	--	.5	--
22...	320	--	380000	--	230	--	14000	--	.7	--
22...	140	--	140000	--	160	--	3900	--	.3	--

DATE	MOLYB-DENUM, TOTAL RECOV-ERABLE (UG/L AS MO)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)
JAN										
15...	--	--	--	--	--	--	10	<3	--	--
APR										
30...	1	2	32	1	2	1	160	20	31	8.2
MAY										
01...	1	--	68	--	4	--	320	--	80	--
07...	0	--	23	--	2	--	310	--	--	--
JUL										
22...	1	--	250	--	5	--	1500	--	--	--
22...	1	--	210	--	4	--	1400	--	--	--
22...	0	--	76	--	3	--	550	--	--	--

Table 22.--*Chemical quality at station 07118500 Apishapa River at Aguilar, Colo*--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)
MAR										
18...	1245	.66	936	7.1	14.0	11.0	290	76	24	96
MAY										
13...	1625	.07	--	--	--	--	--	--	--	--
30...	0700	7.5	--	--	10.0	--	--	--	--	--
30...	1000	3.3	--	--	12.0	--	--	--	--	--
30...	1230	18	--	--	15.0	--	--	--	--	--
JUL										
03...	0750	13	645	--	16.0	--	--	--	--	--
03...	0815	107	390	--	16.0	--	--	--	--	--
03...	2115	96	168	--	17.0	--	--	--	--	--
18...	2020	261	251	--	16.0	--	--	--	--	--
18...	2105	100	252	--	15.5	--	--	--	--	--
18...	2210	76	236	--	15.5	--	--	--	--	--
AUG										
06...	1900	655	--	--	16.0	--	--	--	--	--
06...	2000	217	--	--	15.5	--	--	--	--	--
10...	0930	20	--	--	13.7	--	--	--	--	--
10...	1315	17	--	7.6	17.8	--	120	33	8.3	21
10...	1735	79	--	--	16.0	--	--	--	--	--
10...	1835	428	--	--	14.5	--	--	--	--	--
10...	1910	140	--	--	14.5	--	--	--	--	--
21...	1015	49	--	--	14.0	--	--	--	--	--
25...	1055	.62	--	--	--	--	--	--	--	--

DATE	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)
MAR										
18...	2.5	1.8	190	8.2	.3	9.1	592	.81	1.1	.11
MAY										
13...	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--
JUL										
03...	--	--	--	--	--	--	--	--	--	--
03...	--	--	--	--	--	--	--	--	--	--
03...	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--
AUG										
06...	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--
10...	.9	3.1	48	3.8	.6	9.5	197	.27	9.2	--
10...	--	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--

Table 22.--*Chemical quality at station 07118500 Apishapa River at Aguilar, Colo*--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	BORON, DIS-SOLVED (UG/L AS B)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)
MAR										
18...	.000	100	0	1	1	0	0	<1	--	--
MAY										
13...	--	--	--	--	--	--	--	--	--	--
30...	--	10000	--	1	--	--	1	--	19	8
30...	--	6700	--	0	--	--	1	--	20	5
30...	--	27000	--	4	--	--	1	--	11	21
JUL										
03...	--	360000	--	34	--	--	3	--	180	280
03...	--	270000	--	66	--	--	1	--	150	150
03...	--	100000	--	8	--	--	0	--	120	80
18...	--	360000	--	40	--	--	2	--	140	390
18...	--	350000	--	20	--	--	3	--	180	360
18...	--	350000	--	40	--	--	2	--	120	180
AUG										
06...	--	330000	--	43	--	--	5	--	450	400
06...	--	370000	--	37	--	--	6	--	700	720
10...	--	80000	--	5	--	--	0	--	25	63
10...	--	--	--	--	--	3700	--	--	--	--
10...	--	210000	--	21	--	--	3	--	450	340
10...	--	240000	--	7	--	--	3	--	600	97
10...	--	190000	--	7	--	--	3	--	450	170
21...	--	20000	--	2	--	--	0	--	23	9
25...	--	--	--	--	--	--	--	--	--	--

DATE	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY DIS-SOLVED (UG/L AS HG)
MAR										
18...	1	1	150	10	1	0	30	20	3.0	.0
MAY										
13...	--	--	--	--	--	--	--	--	--	--
30...	21	--	17000	--	17	--	820	--	.2	--
30...	15	--	11000	--	10	--	490	--	.2	--
30...	47	--	45000	--	41	--	2000	--	.2	--
JUL										
03...	750	--	470000	--	350	--	22000	--	.7	--
03...	400	--	360000	--	160	--	12000	--	.6	--
03...	180	--	170000	--	130	--	4700	--	.5	--
18...	1100	--	640000	--	400	--	26000	--	1.8	--
18...	1100	--	630000	--	380	--	26000	--	1.6	--
18...	440	--	380000	--	140	--	11000	--	.6	--
AUG										
06...	1000	--	620000	--	680	--	22000	--	2.9	--
06...	950	--	580000	--	62	--	24000	--	2.2	--
10...	110	--	110000	--	57	--	2400	--	.3	--
10...	--	--	74000	300	--	--	1500	14	--	--
10...	700	--	570000	--	670	--	18000	--	1.7	--
10...	650	--	460000	--	200	--	13000	--	1.3	--
10...	450	--	340000	--	170	--	9900	--	1.4	--
21...	18	--	16000	--	7	--	420	--	.1	--
25...	--	--	--	--	--	--	--	--	--	--

DATE	MOLYB-DENUM, TOTAL RECOV-ERABLE (UG/L AS MO)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)
MAR										
18...	2	<10	2	0	1	1	10	4	12	10
MAY										
13...	--	--	--	--	--	--	--	--	--	--
30...	2	--	11	--	1	--	70	--	--	--
30...	2	--	8	--	1	--	40	--	--	--
30...	2	--	31	--	2	--	190	--	--	--
JUL										
03...	5	--	430	--	0	--	2000	--	--	--
03...	5	--	230	--	0	--	1300	--	--	--
03...	10	--	100	--	0	--	6500	--	--	--
18...	1	--	660	--	0	--	2700	--	--	--
18...	2	--	640	--	0	--	2500	--	--	--
18...	1	--	260	--	0	--	1400	--	--	--
AUG										
06...	4	--	590	--	28	--	2800	--	--	--
06...	1	--	840	--	29	--	3000	--	--	--
10...	2	--	30	--	3	--	410	--	--	--
10...	--	--	--	--	--	--	--	--	--	--
10...	2	--	470	--	16	--	2300	--	--	--
10...	1	--	370	--	14	--	2000	--	--	--
10...	3	--	260	--	7	--	1600	--	--	--
21...	3	--	6	--	1	--	90	--	--	--
25...	--	--	--	--	--	--	--	--	--	--

Table 23.--*Chemical quality at station 07124050 Middle Fork Purgatoire Rver at Stonewall, Colo.*

WATER-QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
JUN										
07...	1700	30	265	7.6	12.0	7.7	86	0	23	6.9
JUL										
25...	1200	15	300	8.4	16.0	--	140	32	42	8.2
SEP										
14...	0945	4.9	300	8.4	9.0	8.4	140	33	44	7.2

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
JUN									
07...	16	.8	2.7	150	--	120	29	2.1	.5
JUL									
25...	6.3	.2	1.8	130	0	110	39	1.4	.2
SEP									
14...	6.3	.2	1.1	130	0	110	35	1.2	.2

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	BORON, DIS-SOLVED (UG/L AS B)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
JUN									
07...	6.3	163	.22	13.2	.54	.02	10	80	10
JUL									
25...	8.1	172	.23	7.11	.07	--	40	100	20
SEP									
14...	7.9	167	.23	2.21	.08	.00	0	20	10

Table 23.--*Chemical quality at station 07124050 Middle Fork Purgatoire River at Stonewall, Colo*--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
OCT										
11...	1600	3.3	330	7.9	14.0	7.8	150	36	45	9.3
NOV										
30...	1130	5.9	370	7.6	.5	10.8	140	40	42	8.2
MAY										
02...	1230	7.7	215	7.4	11.5	8.1	100	13	33	5.1
29...	1813	77	125	--	11.5	--	57	11	19	2.3
AUG										
22...	1321	26	220	8.0	13.0	--	97	17	30	5.3

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)
OCT										
11...	9.0	.3	1.2	140	0	110	53	1.4	.3	8.0
NOV										
30...	7.4	.3	1.1	120	0	98	47	1.3	.2	7.9
MAY										
02...	3.9	.2	1.0	110	0	90	20	.8	.2	6.4
29...	2.1	.1	1.0	56	--	46	11	.7	.2	6.1
AUG										
22...	4.5	.2	.9	--	--	80	29	.6	.2	6.5

DATE	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	BORON, DIS-SOLVED (UG/L AS B)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)
OCT										
11...	197	1.80	.04	.00	90	40	0	0	40	2
NOV										
30...	175	2.81	.14	.00	--	--	--	--	30	--
MAY										
02...	125	2.62	.04	.01	180	10	--	--	10	--
29...	71	14.9	.15	.01	1300	40	0	0	20	0
AUG										
22...	126	8.85	.13	.00	190	0	--	--	10	--

DATE	CADMIUM DIS-SOLVED (UG/L AS CD)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)
OCT										
11...	2	4	0	100	20	3	0	10	10	.0
NOV										
30...	--	--	--	1100	20	--	--	30	9	--
MAY										
02...	--	--	--	160	20	19	0	20	0	--
29...	0	7	1	1400	30	40	0	70	0	.3
AUG										
22...	--	--	--	180	30	0	0	20	10	--

DATE	MERCURY DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, TOTAL RECOV-ERABLE (UG/L AS MO)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C)
OCT										
11...	.0	1	0	1	2	0	0	20	0	.4
NOV										
30...	--	--	--	--	--	--	--	--	--	--
MAY										
02...	--	--	--	--	--	--	--	10	10	--
29...	.2	0		7	0	0	0	20	10	--
AUG										
22...	--	--	--	--	--	--	--	0	<3	--

Table 23.--*Chemical quality at station 07124050 Middle Fork Purgatoire River at Stonewall, Colo*--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)
DEC											
13...	1200	7.1	415	8.4	.0	--	180	7	51	12	20
JAN											
15...	1103	4.8	350	8.3	1.0	10.4	160	41	48	10	10
MAY											
08...	1540	70	335	--	--	--	--	--	--	--	--
JUL											
23...	1545	25	255	8.1	15.0	7.6	110	9	33	5.8	4.8

DATE	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY FIELD (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)
DEC											
13...	.7	1.4	170	55	2.4	.4	7.6	253	.34	4.86	.19
JAN											
15...	.3	1.7	120	61	2.3	.3	8.1	214	.29	2.78	.14
MAY											
08...	--	--	--	--	--	--	--	--	--	--	--
JUL											
23...	.2	1.3	97	28	.9	.2	7.2	141	.19	9.45	.00

DATE	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	BORON, DIS-SOLVED (UG/L AS B)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)
DEC											
13...	--	--	.00	--	--	--	--	20	--	--	--
JAN											
15...	--	--	.04	120	0	1	1	10	1	<1	--
MAY											
08...	--	--	--	770	--	1	--	--	0	--	0
JUL											
23...	.48	.05	.00	160	10	0	1	5	0	<1	2

DATE	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY DIS-SOLVED (UG/L AS HG)
DEC											
13...	--	--	--	20	40	--	--	20	10	--	--
JAN											
15...	--	4	0	100	20	4	1	60	50	.9	.6
MAY											
08...	3	8	--	1400	--	2	--	70	--	.4	--
JUL											
23...	3	4	1	250	30	3	0	20	4	.1	.0

DATE	MOLYB-DENUM, TOTAL RECOV-ERABLE (UG/L AS MO)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)
DEC										
13...	--	--	--	--	--	--	--	--	--	--
JAN										
15...	0	<10	1	7	0	0	20	<3	1.6	2.5
MAY										
08...	0	--	8	--	0	--	150	--	14	12
JUL										
23...	1	<10	5	4	0	0	10	<3	--	--

Table 23.--*Chemical quality at station 07124050 Middle Fork Purgatoire River at Stonewall, Colo*--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	SPE-CIFIC CON-DUCT-ANCE LAB (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)
MAR											
17...	1230	3.8	353	379	7.7	5.5	9.6	170	50	11	12
AUG											
11...	1745	106	230	--	--	12.5	--	--	--	--	--

DATE	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)
MAR											
17...	.4	1.3	120	62	1.8	.2	7.8	219	.30	2.3	.08
AUG											
11...	--	--	--	--	--	--	--	--	--	--	--

DATE	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	BORON, DIS-SOLVED (UG/L AS B)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)
MAR										
17...	.000	70	0	0	1	0	0	<1	--	--
AUG										
11...	--	100000	--	3	--	--	0	--	160	28

DATE	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY DIS-SOLVED (UG/L AS HG)
MAR										
17...	2	1	70	20	4	4	20	20	.1	.0
AUG										
11...	130	--	43000	--	47	--	260	--	.2	--

DATE	MOLYB-DENUM, TOTAL RECOV-ERABLE (UG/L AS MO)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)
MAR										
17...	2	<10	1	0	0	0	0	10	6.2	4.4
AUG										
11...	2	--	54	--	3	--	240	--	--	--

Table 24.--*Chemical quality at station 07124120 Sarcillo Canyon near Segundo, Colo.*

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	ALKA-LINITY FIELD (MG/L AS CACO3)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)
MAY											
01...	1730	8.1	500	8.4	12.5	160	22000	2	2	--	--
08...	1315	2.2	620	--	14.0	--	4400	2	0	0	11

DATE	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MOLYB-DENUM, TOTAL RECOV-ERABLE (UG/L AS MO)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)
MAY										
01...	170	95000	60	2000	.4	0	66	3	680	34
08...	30	21000	11	400	.1	0	19	5	110	--

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	SPE-CIFIC CON-DUCT-ANCE LAB (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)
MAR											
17...	1345	.02	743	742	7.7	9.0	8.5	240	62	21	65
AUG											
01...	1820	--	--	--	--	--	--	--	--	--	--
04...	1600	--	--	--	--	--	--	--	--	--	--
07...	2005	--	--	--	--	--	--	--	--	--	--
07...	2020	32	--	--	--	--	--	--	--	--	--
10...	1715	1100	--	--	--	--	--	--	--	--	--
10...	1856	--	--	--	--	--	--	--	--	--	--
21...	1640	1900	--	418	--	--	--	--	--	--	--
21...	1720	1050	--	383	--	--	--	--	--	--	--
27...	1800	1500	--	9500	--	--	--	--	--	--	--
27...	1830	2400	--	179	--	--	--	--	--	--	--
SEP											
11...	1700	2000	--	346	--	--	--	--	--	--	--
11...	1720	1500	--	330	--	--	--	--	--	--	--
11...	1750	660	--	306	--	--	--	--	--	--	--
13...	1737	58	--	456	--	--	--	--	--	--	--
13...	1750	94	--	438	--	--	--	--	--	--	--
13...	1820	160	--	366	--	--	--	--	--	--	--

DATE	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)
MAR											
17...	1.8	2.7	210	160	11	.4	7.2	460	.63	.02	.90
AUG											
01...	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--	--	--
SEP											
11...	--	--	--	--	--	--	--	--	--	--	--
11...	--	--	--	--	--	--	--	--	--	--	--
11...	--	--	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--	--

Table 24.--*Chemical quality at station 07124120 Sarcillo Canyon near Segundo, Colo*--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	BORON, DIS-SOLVED (UG/L AS B)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)
MAR										
17...	.000	0	0	0	1	20	2	<1	--	--
AUG										
01...	--	100000	--	8	--	--	1	--	340	110
04...	--	500000	--	14	--	--	5	--	650	330
07...	--	100000	--	15	--	--	3	--	600	230
07...	--	250000	--	13	--	--	2	--	260	170
10...	--	630000	--	30	--	--	9	--	700	610
10...	--	500000	--	42	--	--	6	--	300	360
21...	--	380000	--	20	--	--	6	--	900	430
21...	--	330000	--	15	--	--	7	--	900	370
27...	--	340000	--	11	--	--	2	--	80	310
27...	--	300000	--	11	--	--	6	--	120	300
SEP										
11...	--	240000	--	12	--	--	3	--	56	250
11...	--	290000	--	9	--	--	5	--	60	340
11...	--	260000	--	11	--	--	4	--	60	240
13...	--	160000	--	12	--	--	2	--	96	130
13...	--	120000	--	5	--	--	1	--	82	100
13...	--	210000	--	6	--	--	3	--	60	180

DATE	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY DIS-SOLVED (UG/L AS HG)
MAR										
17...	1	1	280	<10	2	0	10	3	.1	.0
AUG										
01...	400	--	280000	--	300	--	6300	--	.7	--
04...	1300	--	600000	--	800	--	18000	--	2.0	--
07...	800	--	450000	--	800	--	13000	--	1.6	--
07...	750	--	410000	--	500	--	10000	--	1.6	--
10...	1600	--	720000	--	1200	--	40000	--	2.3	--
10...	1100	--	660000	--	800	--	26000	--	1.4	--
21...	1200	--	650000	--	600	--	28000	--	410	--
21...	1100	--	640000	--	340	--	21000	--	1.3	--
27...	1100	--	300000	--	420	--	22000	--	2.0	--
27...	1000	--	590000	--	410	--	22000	--	3.2	--
SEP										
11...	800	--	490000	--	300	--	16000	--	2.0	--
11...	1100	--	530000	--	390	--	19000	--	1.4	--
11...	900	--	570000	--	290	--	15000	--	1.6	--
13...	450	--	270000	--	140	--	8100	--	.8	--
13...	400	--	250000	--	110	--	6400	--	1.2	--
13...	600	--	380000	--	190	--	11000	--	1.0	--

DATE	MOLYB-DENUM, TOTAL RECOV-ERABLE (UG/L AS MO)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)
MAR										
17...	4	<10	1	0	5	7	10	20	3.4	3.2
AUG										
01...	3	--	210	--	7	--	1200	--	--	--
04...	2	--	610	--	25	--	3100	--	--	--
07...	1	--	430	--	13	--	2200	--	--	--
07...	1	--	330	--	10	--	1900	--	--	--
10...	1	--	1000	--	35	--	4200	--	--	--
10...	1	--	670	--	25	--	2900	--	--	--
21...	1	--	730	--	27	--	3200	--	--	--
21...	0	--	620	--	23	--	2700	--	--	--
27...	1	--	600	--	19	--	2900	--	--	--
27...	0	--	600	--	22	--	2700	--	--	--
SEP										
11...	2	--	440	--	18	--	2100	--	--	--
11...	2	--	550	--	14	--	2800	--	--	--
11...	4	--	130	--	12	--	2200	--	--	--
13...	2	--	230	--	8	--	1200	--	--	--
13...	2	--	180	--	6	--	1100	--	--	--
13...	2	--	310	--	10	--	1600	--	--	--

Table 25.--*Chemical quality at station 07124200 Purgatoire River at Madrid, Colo.*

WATER-QUALITY DATA, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
JUN										
06...	1600	156	151	7.8	11.0	8.3	72	9	24	3.0
JUL										
13...	1600	109	280	8.0	22.0	--	140	14	40	9.1
SEP										
15...	0830	8.4	460	8.4	10.5	8.5	190	12	54	14

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
JUN									
06...	2.3	.1	1.1	77	--	63	14	.5	.1
JUL									
13...	7.8	.3	2.1	150	0	120	24	1.3	.4
SEP									
15...	20	.6	2.2	220	0	180	47	2.5	.4

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	BORON, DIS-SOLVED (UG/L AS B)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
JUN									
06...	6.7	90	.12	37.9	.17	.00	10	30	10
JUL									
13...	9.2	169	.23	49.7	.21	.01	20	40	10
SEP									
15...	6.9	250	.35	5.81	.09	.00	8	20	20

Table 25.--*Chemical quality at station 07124200 Purgatoire River at Madrid, Colo*--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
OCT										
04...	1435	9.4	450	7.9	20.5	E7.1	180	12	49	13
NOV										
29...	1700	21	440	7.8	2.5	10.6	170	10	50	12
MAY										
01...	1605	26	320	8.4	15.5	7.2	140	16	40	9.5
22...	1625	117	225	7.6	16.5	7.5	110	24	35	6.6
AUG										
14...	1123	310	270	7.8	15.5	--	--	--	--	--
15...	1202	1510	205	8.0	15.0	--	--	--	--	--

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)
OCT										
04...	22	.7	2.5	200	0	160	48	2.6	.5	6.5
NOV										
29...	23	.8	1.7	200	0	160	53	2.6	.3	7.0
MAY										
01...	14	.5	1.7	150	0	120	33	1.8	.4	6.1
22...	6.6	.3	1.8	110	0	90	20	1.2	.4	7.2
AUG										
14...	--	--	--	100	--	82	--	--	--	--
15...	--	--	--	95	--	78	--	--	--	--

DATE	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	BORON, DIS-SOLVED (UG/L AS B)
OCT										
04...	243	.33	6.19	.01	.01	120	20	0	0	30
NOV										
29...	249	.34	14.1	.12	.00	--	--	--	--	30
MAY										
01...	181	.25	12.7	.09	.01	1300	10	--	--	20
22...	134	.18	42.3	.13	.03	--	--	--	--	10
AUG										
14...	--	--	--	--	--	--	--	9	--	--
15...	--	--	--	--	--	--	--	9	--	--

DATE	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
OCT										
04...	0	1	40	2	120	20	2	3	10	0
NOV										
29...	--	--	--	--	2000	20	--	--	110	10
MAY										
01...	--	--	--	--	1800	30	49	0	70	0
22...	--	--	--	--	26000	30	--	--	720	0
AUG										
14...	2	--	280	--	170000	--	130	--	4600	--
15...	1	--	460	--	300000	--	190	--	7400	--

DATE	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, TOTAL RECOV-ERABLE (UG/L AS MO)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)
OCT										
04...	.0	.0	3	1	2	0	1	1	20	10
NOV										
29...	--	--	--	--	--	--	--	--	--	--
MAY										
01...	--	--	--	--	--	--	--	--	30	10
22...	--	--	--	--	--	--	--	--	--	--
AUG										
14...	1.3	--	0	--	130	--	4	--	610	--
15...	1.1	--	0	--	150	--	5	--	1100	--

Table 25.--*Chemical quality at station 07124200 Purgatoire River at Madrid, Colo*--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)
DEC											
11...	1235	21	399	8.5	.0	--	180	52	53	12	12
JAN											
14...	1510	25	400	8.5	5.5	9.7	160	3	47	11	21
MAY											
01...	1515	448	330	8.2	6.5	--	--	--	--	--	--
08...	1155	559	295	--	8.0	--	--	--	--	--	--
JUL											
23...	1300	82	355	8.0	22.0	6.9	150	0	44	9.3	13

DATE	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY FIELD (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)
DEC											
11...	.4	1.3	130	72	1.5	.2	8.5	240	.33	13.6	.19
JAN											
14...	.7	1.7	160	53	2.7	.4	7.5	242	.33	16.5	.38
MAY											
01...	--	--	98	--	--	--	--	--	--	--	--
08...	--	--	--	--	--	--	--	--	--	--	--
JUL											
23...	.5	2.3	150	36	2.3	.4	8.6	207	.28	45.8	.14

DATE	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	BORON, DIS-SOLVED (UG/L AS B)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)
DEC											
11...	--	--	.00	--	--	--	--	20	--	--	--
JAN											
14...	--	--	.01	1200	0	1	1	--	0	2	--
MAY											
01...	--	--	--	24000	--	3	--	--	1	--	--
08...	--	--	--	7400	--	2	--	--	1	--	0
JUL											
23...	1.30	.19	.00	1400	20	1	1	10	0	<1	2

DATE	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY DIS-SOLVED (UG/L AS HG)
DEC											
11...	--	--	--	20	20	--	--	20	10	--	--
JAN											
14...	--	8	0	1300	<10	8	0	30	6	.1	.1
MAY											
01...	--	130	--	96000	--	59	--	2200	--	.4	--
08...	32	75	--	72000	--	37	--	2000	--	.2	--
JUL											
23...	5	13	2	8000	60	8	0	190	2	.1	.0

DATE	MOLYB-DENUM, TOTAL RECOV-ERABLE (UG/L AS MO)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)
DEC										
11...	--	--	--	--	--	--	--	--	--	--
JAN										
14...	0	0	3	0	1	1	20	<3	6.4	4.0
MAY										
01...	0	--	65	--	4	--	310	--	65	--
08...	0	--	50	--	4	--	240	--	--	--
JUL										
23...	0	<10	5	4	1	1	30	<3	14	--

Table 25.--*Chemical quality at station 07124200 Purgatoire River at Madrid, Colo*--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	SPE-CIFIC CON-DUCT-ANCE LAB (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO
MAR												
17...	1500	15	463	470	8.0	10.5	9.3	180	52	13	26	.8
JUL												
28...	1907	54	--	369	--	--	--	--	--	--	--	--

DATE	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)
MAR											
17...	1.7	160	69	3.7	.3	4.8	267	.36	10.8	.10	.000
JUL											
28...	--	--	--	--	--	--	--	--	--	--	--

DATE	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	BORON, DIS-SOLVED (UG/L AS B)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)
MAR										
17...	200	10	1	1	0	0	<1	--	--	2
JUL										
28...	250000	--	10	--	--	1	--	230	120	350
AUG										
04...	400000	--	15	--	--	4	--	400	230	900
10...	500000	--	4	--	--	8	--	750	410	100

DATE	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, TOTAL RECOV-ERABLE (UG/L AS MO)
MAR										
17...	1	330	30	2	2	30	10	.1	.0	2
JUL										
28...	--	270000	--	300	--	6700	--	.6	--	1
AUG										
04...	--	420000	--	800	--	13000	--	1.3	--	3
10...	--	650000	--	1000	--	28000	--	2.0	--	1

DATE	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)
MAR									
17...	<10	1	1	1	1	10	10	7.5	3.2
JUL									
28...	--	220	--	9	--	1300	--	--	--
AUG									
04...	--	460	--	20	--	2400	--	--	--
10...	--	770	--	44	--	3300	--	--	--

Table 26.--*Chemical quality in Purgatoire River above Allen Mine, Colo.*

[µmhos=micromhos per centimeter at 25°Celsius; mg/L=milligram per liter; µg/L=microgram per liter]

Date	Specific conductance (µmhos)	pH	$CaCO_3$ hardness (mg/L)	Calcium, dissolved (mg/L)	Magnesium, dissolved (mg/L)	Sodium dissolved (mg/L)	Sodium adsorption ratio	Potassium, dissolved (mg/L)	$CaCO_3$ alkalinity (mg/L)	Bicarbonate, dissolved (mg/L)
04-19-79	256	8.1	95	33	5.5	4.6	0.2	1.0	100	122
12-14-79	595	8.2	212	65	14	13	.4	1.5	179	219
01-16-80	511	8.1	153	52	10	8.8	.3	1.1	145	177
02-20-80	480	7.9	192	58	15	14	.4	2.3	143	175
07-07-80	170	7.9	98.9	32	4.5	4.2	.2	.95	62.8	101

Date	Carbonate, dissolved (mg/L)	Sulfate, dissolved (mg/L)	Chloride, dissolved (mg/L)	Fluoride, dissolved (mg/L)	Dissolved solids (mg/L)	Suspended solids (mg/L)	Nitrogen NO_2+NO_3 dissolved (mg/L)	Silica, dissolved (mg/L)	Boron, dissolved (µg/L)
04-19-79	--	22	1.9	0.2	126	--	--	--	80
12-14-79	0	76	2.0	.3	242	--	--	--	56
01-16-80	0	50	3.7	.2	240	8	--	--	<10
02-20-80	0	83	3.4	.1	264	57	--	--	47
07-07-80	0	12	2.3	.6	135	21	--	--	--

Date	Boron, total (µg/L)	Iron, dissolved (µg/L)	Iron, total (µg/L)	Manganese, dissolved (µg/L)	Manganese, total (µg/L)	Selenium, dissolved (µg/L)	Selenium, total (µg/L)	Zinc, dissolved (µg/L)	Zinc, total (µg/L)	Oil and grease (mg/L)
04-19-79	--	<20	---	<10	--	--	--	---	---	--
12-14-79	--	---	140	---	20	<1	--	<10	<10	--
01-16-80	--	---	220	---	30	--	--	<10	20	--
02-20-80	--	---	170	---	20	<3	--	---	12	--
07-07-80	40	<20	430	<9	18	--	2	<10	<10	2

Table 27.--*Chemical quality in Purgatoire River below Allen Mine, Colo.*

[µmhos=micromhos per centimeter at 25°Celsius; mg/L=milligram per liter; µg/L=microgram per liter]

Date	Specific conductance (µmhos)	pH	$CaCO_3$ hardness (mg/L)	Calcium, dissolved (mg/L)	Magnesium, dissolved (mg/L)	Sodium dissolved (mg/L)	Sodium adsorption ratio	Potassium, dissolved (mg/L)	$CaCO_3$ alkalinity (mg/L)	Bicarbonate, dissolved (mg/L)
04-19-79	397	8.5	95	35	6.3	49	2.0	1.2	161	190
12-14-79	616	8.2	176	58	12	32	1.0	3.4	198	242
01-16-80	527	8.2	167	53	11	11	.4	1.1	150	183
02-20-80	480	8.2	181	57	14	19	.6	2.4	158	192
07-07-80	190	8.0	97.3	31	4.6	2.9	.1	.95	84.9	103

Date	Carbonate, dissolved (mg/L)	Sulfate, dissolved (mg/L)	Chloride, dissolved (mg/L)	Fluoride, dissolved (mg/L)	Dissolved solids (mg/L)	Suspended solids (mg/L)	Nitrogen NO_2+NO_3 dissolved (mg/L)	Silica, dissolved (mg/L)	Boron, dissolved (µg/L)
04-19-79	--	44	3.0	0.4	236	--	0.60	6.4	<30
12-14-79	0	70	3.0	.3	258	--	----	---	78
01-16-80	0	55	1.8	.2	236	2	----	---	<10
02-20-80	0	74	3.9	.2	196	48	----	---	<13
07-07-80	0	11	2.4	.5	103	16	----	---	---

Date	Boron, total (µg/L)	Iron, dissolved (µg/L)	Iron, total (µg/L)	Manganese, dissolved (µg/L)	Manganese, total (µg/L)	Selenium, dissolved (µg/L)	Selenium, total (µg/L)	Zinc, dissolved (µg/L)	Zinc, total (µg/L)	Oil and grease (mg/L)
04-19-79	--	<20	---	<10	--	--	--	---	---	--
12-14-79	--	---	170	---	40	<1	--	<10	<10	--
01-16-80	--	---	210	---	30	--	--	<10	10	--
02-20-80	--	---	160	---	80	<3	--	---	3	--
07-07-80	30	<20	410	<9	22	--	<2	<10	<10	4

Table 28.--*Chemical quality in Purgatoire River above Maxwell Mine, Colo.*

[µmhos=micromhos per centimeter at 25°Celsius; mg/L=milligram per liter; µg/L=microgram per liter]

Date	Specific conductance (µmhos)	pH	$CaCO_3$ hardness (mg/L)	Calcium, dissolved (mg/L)	Magnesium, dissolved (mg/L)	Sodium dissolved (mg/L)	Sodium adsorption ratio	Potassium, dissolved (mg/L)	$CaCO_3$ alkalinity (mg/L)	Bicarbonate, dissolved (mg/L)
04-19-79	315	8.3	120	38	8.4	8.1	0.3	1.1	118	144
12-14-79	570	8.2	187	60	12	19	0.6	1.9	189	230
01-16-80	529	8.2	152	53	10	13	.4	2.2	159	194
02-20-80	420	8.3	161	53	12	17	.5	1.9	164	200
07-07-80	180	8.0	109	35	5.3	3.2	.1	.87	101	124

Date	Carbonate, dissolved (mg/L)	Sulfate, dissolved (mg/L)	Chloride, dissolved (mg/L)	Fluoride, dissolved (mg/L)	Dissolved solids (mg/L)	Suspended solids (mg/L)	Nitrogen NO_2+NO_3 dissolved (mg/L)	Silica, dissolved (mg/L)	Boron, dissolved (µg/L)
04-19-79	--	28	2.4	0.2	166	---	0.05	6.4	44
12-14-79	0	60	2.8	.4	282	---	----	---	60
01-16-80	0	49	1.6	.2	300	200	----	---	<10
02-20-80	0	55	3.9	.4	196	48	----	---	20
07-07-80	0	11	2.1	.5	127	30	----	---	---

Date	Boron, total (µg/L)	Iron, dissolved (µg/L)	Iron, total (µg/L)	Manganese, dissolved (µg/L)	Manganese, total (µg/L)	Selenium, dissolved (µg/L)	Selenium, total (µg/L)	Zinc, dissolved (µg/L)	Zinc, total (µg/L)	Oil and grease (mg/L)
04-19-79	--	<20	-----	<10	---	--	--	---	---	--
12-14-79	--	---	110	---	20	<1	--	<10	20	--
01-16-80	--	---	7,230	---	140	--	--	<10	30	--
02-20-80	--	---	330	---	30	<3	---	---	<2	--
07-07-80	<20	<20	630	<9	22	--	<2	<10	<10	4

Table 29.--*Chemical quality in Purgatoire River below Maxwell Mine, Colo.*

[µmhos=micromhos per centimeter at 25°Celsius; mg/L=milligram per liter; µg/L=microgram per liter]

Date	Specific conductance (µmhos)	pH	$CaCO_3$ hardness (mg/L)	Calcium, dissolved (mg/L)	Magnesium, dissolved (mg/L)	Sodium dissolved (mg/L)	Sodium adsorption ratio	Potassium, dissolved (mg/L)	$CaCO_3$ alkalinity (mg/L)	Bicarbonate, dissolved (mg/L)
04-19-79	324	8.2	120	41	8.9	11	0.4	1.1	128	156
12-14-79	574	8.2	135	59	12	19	0.6	1.3	191	233
01-16-80	529	8.1	161	51	10	13	.4	1.5	155	188
02-20-80	440	8.2	163	54	12	17	.5	2.1	162	198
07-07-80	180	8.0	106	34	5.3	2.9	.1	.95	100	117

Date	Carbonate, dissolved (mg/L)	Sulfate, dissolved (mg/L)	Chloride, dissolved (mg/L)	Fluoride, dissolved (mg/L)	Dissolved solids (mg/L)	Suspended solids (mg/L)	Nitrogen NO_2+NO_3 dissolved (mg/L)	Silica, dissolved (mg/L)	Boron, dissolved (µg/L)
04-19-79	--	30	2.4	0.2	174	--	0.08	6.4	<30
12-14-79	0	56	2.4	.3	294	--	----	---	94
01-16-80	0	45	1.6	.3	306	61	----	---	<10
02-20-80	0	54	3.4	.2	380	32	----	---	<13
07-07-80	0	9.4	2.5	.5	125	34	----	---	---

Date	Boron, total (µg/L)	Iron, dissolved (µg/L)	Iron, total (µg/L)	Manganese, dissolved (µg/L)	Manganese, total (µg/L)	Selenium, dissolved (µg/L)	Selenium, total (µg/L)	Zinc, dissolved (µg/L)	Zinc, total (µg/L)	Oil and grease (mg/L)
04-19-79	---	<20	-----	<10	--	--	--	---	---	--
12-14-79	---	---	130	---	20	<1	--	<10	30	--
01-16-80	---	---	1,410	---	50	--	--	<10	50	--
02-20-80	---	---	290	---	40	<3	---	---	<2	--
07-07-80	<20	<20	780	<9	40	--	<2	<20	<10	2

Table 30.--*Sediment at station 07118500 Apishapa River at Aguilar, Colo.*

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		APRIL			MAY			JUNE	
1	.00			.00	---	---	.03	---	.00
2	.00			.00	---	---	2.0	---	.50
3	.00			.00	---	---	3.3	---	1.0
4	.00			.00	---	---	2.8	---	.65
5	.00			.00	---	---	2.0	77	.42
6	.00			.00	---	---	.82	---	.05
7	.00			.00	---	---	.01	---	.00
8	.00			.00	---	---	.35	736	.66
9	.00			.00	---	---	4.2	---	3.0
10	.00			.00	---	---	4.5	160	1.9
11	.00			.00	---	---	3.4	127	2.1
12	.00			.00	---	---	1.1	---	.10
13	.00			.00	---	---	.01	---	---
14	.00			.00	---	---	.00	---	---
15	.00			.00	---	---	.00	---	---
16	.00			.00	---	---	.00	---	---
17	.00			.00	---	---	.00	---	---
18	.00			.00	---	---	.00	---	---
19	.00			.00	---	---	.00	---	---
20	.00			.96	---	75	.00	---	---
21	.00			.00	---	---	.00	---	---
22	.00			.00	---	---	.00	---	---
23	.00			.00	---	---	.00	---	---
24	.00			.00	---	---	.00	---	---
25	.00			.13	---	.02	.00	---	---
26	.00			12	1920	62	.00	---	---
27	.00			8.5	---	10	.00	---	---
28	.00			.91	---	.15	.00	---	---
29	.00			.01	---	.00	.00	---	---
30	.00			.12	---	.01	.00	---	---
31	---			1.2	---	.10	---	---	---
TOTAL	0.00			73.83	---	147.28	24.52	---	10.38
		JULY			AUGUST			SEPTEMBER	
1	.00	---	---	33	5330	1020	1.7	---	.64
2	.00	---	---	2.2	---	.90	.22	---	.02
3	.00	---	---	.02	---	.00	.40	---	.06
4	.00	---	---	.00	---	---	.18	---	.02
5	.00	---	---	.00	---	---	.14	---	.01
6	.00	---	---	.00	---	---	.14	---	.01
7	.00	---	---	.00	---	---	.14	---	.01
8	.00	---	---	.00	---	---	.14	---	.01
9	.00	---	---	.00	---	---	.14	---	.01
10	.00	---	---	.00	---	---	.14	---	.01
11	.00	---	---	.00	---	---	.14	---	.01
12	.00	---	---	50	---	3000	.14	---	.01
13	.00	---	---	20	3150	294	1.5	---	35
14	.00	---	---	157	16400	17100	29	5140	502
15	.00	---	---	72	1940	384	7.9	---	3.0
16	.00	---	---	65	---	180	.64	---	.15
17	.00	---	---	58	1500	999	.64	---	.15
18	.00	---	---	81	3940	1090	.64	---	.15
19	.00	---	---	35	---	70	.64	---	.15
20	.00	---	---	2.	550	40	.64	---	.15
21	.00	---	---	24	---	25	.72	---	.20
22	.00	---	---	19	---	15	.28	---	.02
23	.00	---	---	35	3960	1260	.28	---	.02
24	.92	1330	98	20	---	45	.22	---	.02
25	60	9460	8590	18	600	29	.22	---	.02
26	28	3460	418	52	6640	2290	.22	---	.02
27	.00	---	---	34	---	230	.34	---	.03
28	.00	---	---	22	1170	69	.22	---	.02
29	.00	---	---	17	---	50	.22	---	.02
30	.00	---	---	13	---	30	.22	---	.02
31	146	15700	43800	7.0	---	10	---	---	---
TOTAL	234.92	---	52906	861.22	---	28230.90	48.16	---	541.96
YEAR	1192.65		81836.52						

Table 30.--*Sediment at station 07118500 Apishapa River at Aguilar, Colo*--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		APRIL			MAY			JUNE	
1	.94	---	.35	165	6130	2760	59	656	245
2	1.8	---	.83	149	3060	1230	58	520	192
3	1.8	---	.78	138	---	768	55	525	188
4	1.9	---	.80	132	---	767	55	595	212
5	1.9	---	.73	142	3340	1310	54	578	202
6	1.9	---	.69	150	2390	957	54	601	212
7	2.0	---	.73	161	3100	1430	50	---	150
8	1.9	---	.80	132	9690	2940	48	---	119
9	1.7	---	.75	123	4640	1200	54	711	254
10	1.8	201	.86	128	---	870	55	571	204
11	2.0	---	.97	122	---	469	54	523	178
12	2.0	---	.99	116	1100	336	45	---	187
13	2.0	---	.94	108	---	306	39	264	73
14	2.0	---	.97	99	---	296	33	---	33
15	2.2	---	1.2	123	3820	1820	26	---	26
16	1.8	---	.84	139	6060	2460	21	120	24
17	.93	---	.31	122	3090	2120	25	180	38
18	1.8	165	.68	111	---	1540	23	---	25
19	.80	---	.26	97	2420	1360	18	---	15
20	.14	---	.02	90	2860	1520	15	---	10
21	.74	112	.15	97	4040	2280	11	---	10
22	1.1	---	.32	102	3550	2080	10	---	5.0
23	1.5	---	.43	103	3060	1810	8.8	---	5.0
24	33	---	2510	96	2390	1340	3.7	---	3.0
25	100	---	3640	88	1570	822	1.8	---	3.0
26	20	1410	82	79	1100	528	1.7	---	1.0
27	29	2870	277	71	1210	524	1.6	---	1.0
28	44	2090	266	69	1260	526	1.7	---	.00
29	54	1640	245	67	1230	511	1.8	---	.00
30	98	4010	1470	64	1110	456	1.9	---	.00
31	---	---	---	61	730	280	---	---	---

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		JULY			AUGUST			SEPTEMBER	
1	2.0	---	.10	1.6		.00	1.0		.00
2	1.9	---	.10	1.6		.00	1.0		.00
3	1.8	---	.05	1.4		.00	.89		.00
4	3.2	---	.70	1.3		.00	.90		.00
5	4.0	---	.40	1.5		.00	.90		.00
6	3.6	---	.35	1.4		.00	.81		.00
7	4.3	---	.85	1.2		.00	.89		.00
8	3.8	67	.73	1.2		.00	1.0		.10
9	3.2	---	.30	1.2		.00	1.8		1.4
10	2.0	---	.10	1.3		.00	.83		.00
11	1.7	---	.00	1.3		.00	.93		.00
12	1.6	---	.00	1.4		.00	.95		.00
13	1.5	---	.00	1.4		.00	.73		.00
14	1.5	---	.00	3.1		5.4	.79		.00
15	1.5	---	.00	1.6		.10	.92		.00
16	1.6	---	.00	1.2		.00	.86		.00
17	1.6	---	.00	1.1		.00	.70		.00
18	1.6	---	.00	1.1		.00	.79		.00
19	1.6	---	.00	1.1		.00	.83		.00
20	1.6	---	.00	1.2		.00	.78		.00
21	1.4	---	.00	1.3		.00	.72		.00
22	14	3430	289	1.3		.00	.65		.00
23	1.4	---	50	1.2		.00	.57		.00
24	1.3	---	5.0	1.2		.00	.53		.00
25	1.1	---	1.0	1.2		.00	.52		.00
26	1.1	---	.00	1.2		.00	.53		.00
27	1.2	---	.00	1.2		.10	.55		.00
28	1.2	---	.00	.92		.00	.57		.00
29	1.3	---	.00	.85		.00	.60		.00
30	1.4	---	.00	.90		.00	.61		.00
31	1.5	---	.00	.96		.00	---		
TOTAL	72.5	---	348.68	40.43		5.60	24.15		1.50
YEAR	5058.12		49092.18						

Table 30.--*Sediment at station 07118500 Apishapa River at Aguilar, Colo*--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		APRIL			MAY			JUNE	
1	.24	---	.03	.10	17	.01	.62	---	.69
2	.23	---	.03	.10	---	.01	.36	---	.05
3	.16	---	.02	.09	---	.01	.41	---	.10
4	.12	---	.01	.09	27	.01	.26	---	.01
5	.12	---	.01	.10	---	.01	.26	---	.01
6	.05	---	.01	.11	24	.01	.28	---	.01
7	.05	---	.01	.05	17	.00	.30	---	.01
8	.05	---	.01	.05	---	.00	.33	---	.01
9	.04	---	.00	.06	18	.00	.34	---	.01
10	.05	---	.00	.06	---	.00	.35	---	.01
11	.05	---	.00	.06	19	.00	.41	---	.02
12	.05	---	.00	.06	---	.00	.47	---	.02
13	.05	---	.00	.07	14	.00	.55	---	.02
14	.05	---	.00	.07	21	.00	.56	---	.02
15	.06	---	.01	.08	---	.00	.54	---	.02
16	.07	---	.01	.08	18	.00	.49	---	.02
17	.07	---	.01	.08	---	.00	.48	---	.02
18	.06	---	.01	.09	13	.00	.51	---	.02
19	.07	---	.01	.09	19	.00	.56	---	.02
20	.08	---	.01	.10	---	.00	.58	---	.02
21	.08	---	.01	.05	18	.00	.59	---	.02
22	.08	---	.01	.05	16	.00	.61	---	.02
23	.06	34	.01	.06	---	.00	.61	---	.02
24	.07	25	.01	.06	---	.00	2.6	---	6.0
25	.07	71	.01	.06	22	.00	.45	---	.06
26	.08	---	.01	.07	19	.00	.34	---	.05
27	.08	56	.01	.07	---	.00	.33	---	.05
28	.09	---	.01	.08	---	.00	.34	---	.05
29	.09	43	.01	.12	---	.01	.35	60	.06
30	.10	---	.01	12	535	23	.34	41	.04
31	---	---	---	3.2	81	.70	---	---	---

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		JULY			AUGUST			SEPTEMBER	
1	.34	---	.06	1.4	---	.20	10		1.5
2	.36	103	.10	1.3	---	.15	9.8		1.3
3	82	17400	6430	1.2	---	.13	9.3		1.0
4	63	---	3870	1.2	---	.13	17		2.7
5	17	1250	66	1.1	---	.12	8.1		1.7
6	4.1	371	5.1	20	14700	5860	2.5		.35
7	.56	---	.15	12	12600	1820	19		25
8	.55	91	.14	3.6	514	9.2	15		3.2
9	.55	---	.13	3.5	---	27	15		2.5
10	3.0	358	8.8	59	14800	4750	12		1.5
11	.93	275	.75	95	9220	2490	9.4		1.0
12	.59	---	.20	186	28100	14900	9.4		1.5
13	.60	52	.08	106	10400	3110	11		2.0
14	.61	---	.09	67	3750	699	9.5		1.5
15	.73	---	.10	57	---	230	8.5		1.1
16	2.5	---	19	65	7400	2160	9.4		1.3
17	1.1	85	.25	115	11400	3530	7.8		.80
18	18	8940	2620	86	4340	1050	7.2		.60
19	38	3880	446	64	---	260	6.6		.50
20	9.7	262	7.1	48	---	130	5.9		.50
21	2.3	---	1.2	49	808	108	3.6		.20
22	1.2	87	.28	40	---	44	2.7		.20
23	.96	---	.13	35	---	23	2.6		.20
24	.90	21	.05	27	---	15	2.6		.10
25	22	---	2110	22	177	11	2.6		.10
26	12	---	310	13	---	5.5	2.9		.10
27	2.6	300	2.1	10	---	3.5	1.7		.10
28	1.3	---	.50	13	---	4.0	1.6		.10
29	1.2	---	.30	14	---	3.5	1.6		.10
30	1.2	---	.15	13	---	2.5	1.5		.10
31	2.1	---	2.2	11	---	2.0	---		
TOTAL	291.98	---	15900.96	1240.3	---	41247.93	225.8		52.85
YEAR	1940.63		57233.28						

Table 31.--*Sediment at station 07124050 Middle Fork Purgatoire River at Stonewall, Colo.*

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		APRIL			MAY			JUNE	
1	3.8	---	.06	7.0	24	---	66	---	12
2	3.8	---	.07	7.5	24	---	64	---	11
3	3.8	---	.06	9.0	23	---	64	---	11
4	3.7	---	.24	9.0	26	---	65	---	12
5	3.6	31	---	5.7	24	---	68	---	13
6	3.8	---	.14	6.4	24	---	73	---	18
7	3.8	---	.11	8.5	25	---	78	---	22
8	4.4	---	.11	13	38	---	90	---	42
9	4.8	---	.12	15	30	---	77	---	23
10	4.8	---	.12	13	29	---	64	---	11
11	4.1	---	.09	11	42	---	63	---	10
12	3.6	---	.07	12	34	---	68	---	14
13	3.6	---	.08	12	15	---	74	---	18
14	4.1	---	.10	12	26	---	84	123	---
15	4.1	---	.09	13	23	---	85	---	30
16	4.8	---	.13	14	33	---	91	---	45
17	5.1	---	.16	20	54	---	78	---	25
18	5.7	16	---	21	70	---	79	---	26
19	6.0	24	---	23	72	---	73	95	---
20	5.7	29	---	28	80	---	66	---	13
21	5.7	30	---	37	---	8.3	62	---	9.7
22	5.7	30	---	32	---	3.6	63	---	9.9
23	6.4	34	---	36	---	5.3	65	---	11
24	6.0	35	---	44	---	8.0	77	---	20
25	5.7	28	---	48	---	8.3	79	---	24
26	5.4	25	---	64	---	18	78	---	21
27	5.4	20	---	64	---	18	79	---	23
28	6.7	22	---	66	---	19	80	---	25
29	6.4	21	---	78	128	---	82	---	27
30	6.7	23	---	80	---	28	80	---	25
31	---	---	---	71	96	---	---	---	---
		JULY			AUGUST			SEPTEMBER	
1	85	---	30	24	---	1.4	14	---	.32
2	78	---	22	22	---	1.1	14	---	.28
3	71	---	15	21	---	1.0	13	---	.21
4	64	---	11	19	---	.87	13	---	.20
5	63	---	11	17	---	.69	12	---	.16
6	60	---	9.1	17	---	.69	12	---	.16
7	55	---	7.0	17	---	.69	13	---	.18
8	52	---	6.0	17	---	.69	12	---	.15
9	49	---	5.4	17	---	.69	12	---	.13
10	46	---	4.3	21	---	.96	11	---	.10
11	42	31	---	23	---	1.1	12	---	.10
12	39	---	3.3	21	---	.96	12	4	---
13	37	---	2.6	23	---	1.8	15	---	.28
14	37	---	2.5	85	---	49	20	---	.81
15	45	---	5.1	100	---	52	17	---	.46
16	45	---	5.5	62	---	14	15	---	.32
17	40	---	4.6	45	---	5.2	13	---	.19
18	40	---	4.5	39	---	4.2	12	---	.12
19	36	---	3.6	35	---	3.1	11	---	.08
20	32	---	2.8	30	---	2.3	11	---	.07
21	30	---	2.3	27	---	1.7	12	---	.11
22	30	---	2.2	24	20	---	12	---	.11
23	30	---	2.3	24	---	1.2	10	---	.06
24	29	---	2.1	22	---	1.0	9.5	---	.05
25	29	---	2.1	21	---	.85	9.0	---	.04
26	30	---	2.3	21	---	.85	8.0	---	.03
27	31	---	2.4	24	---	1.1	8.0	---	.03
28	30	---	2.3	19	---	.72	7.5	---	.02
29	29	---	2.0	20	---	.76	7.0	---	.02
30	28	---	1.9	19	---	.72	7.0	---	.02
31	27	---	1.8	16	---	.43	---	---	---
TOTAL	1339	---	179.0	892	---	151.77	354.0	---	4.81
YEAR	6609.8		1005.43						

Table 31.--*Sediment at station 07124050 Middle Fork Purgatoire River at Stonewall, Colo*--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		APRIL			MAY			JUNE	
1	4.5	---	.10	15	---	.35	18	---	.95
2	4.1	---	.10	16	---	.40	14	---	.55
3	3.8	---	.10	18	---	.45	15	---	.60
4	3.6	---	.05	16	---	.45	16	---	.50
5	5.3	---	.10	16	---	.45	16	---	.45
6	4.1	---	.10	16	---	.45	23	---	.75
7	3.8	8	.10	15	---	.40	28	---	1.1
8	3.8	---	.10	13	---	.35	28	---	1.1
9	4.1	---	.10	12	---	.35	30	---	1.2
10	4.4	---	.10	11	---	.30	30	---	.95
11	5.0	---	.10	8.9	11	.26	28	---	.85
12	4.4	---	.10	8.4	---	.25	29	---	.80
13	4.8	---	.10	8.5	---	.25	25	---	.65
14	5.0	---	.10	8.6	---	.25	22	---	.60
15	4.8	---	.10	8.6	---	.25	19	---	.50
16	4.1	---	.10	8.5	---	.25	15	---	.40
17	4.1	---	.05	8.0	---	.25	17	10	.46
18	4.4	---	.05	7.6	---	.20	19	22	1.1
19	3.8	---	.05	7.9	---	.25	23	39	2.4
20	4.1	---	.05	8.2	---	.25	22	41	2.4
21	4.1	6	.05	8.3	---	.25	22	---	2.3
22	4.4	---	.05	7.8	---	.25	22	---	1.8
23	4.6	---	.05	6.7	---	.20	22	---	1.5
24	4.8	---	.05	6.7	---	.20	21	---	1.1
25	6.4	---	.10	5.4	---	.15	19	---	1.0
26	8.2	---	.15	6.2	---	.20	20	---	.95
27	8.9	---	.15	7.6	---	.25	19	---	.80
28	8.8	---	.15	11	---	.35	20	---	.75
29	9.0	---	.20	14	---	.55	22	---	.85
30	12	---	.25	17	---	.70	39	102	11
31	---	---	---	14	---	.55	---	---	---
		JULY			AUGUST			SEPTEMBER	
1	19	42	2.3	15	7	.28	29		1.6
2	18	33	1.6	15	7	.28	25		1.0
3	59	714	196	17	---	.35	28		2.3
4	25	---	17	17	---	.45	31		1.2
5	19	---	10	15	---	.40	26		1.0
6	17	---	6.9	19	---	.55	24		1.3
7	17	---	4.6	19	---	.60	127		1160
8	18	---	4.6	25	30	2.4	47		13
9	16	---	3.9	22	24	1.5	44		4.2
10	15	90	3.6	28	308	38	45		3.2
11	18	27	1.3	74	1580	414	50		23
12	22	26	1.5	77	430	108	63		5.8
13	20	35	1.9	47	---	4.9	57		3.8
14	17	8	.35	39	---	3.2	57		3.1
15	17	15	.70	40	---	2.7	52		2.1
16	16	15	.64	41	---	2.2	52		2.1
17	30	25	2.1	42	---	1.7	51		1.7
18	21	22	1.2	45	---	4.8	47		1.5
19	17	16	.76	41	---	1.1	41		1.3
20	15	11	.44	37	---	1.0	41		1.1
21	14	13	.49	36	---	.75	39		1.1
22	16	18	.77	36	---	.75	37		.80
23	15	9	.36	32	---	.50	36		.75
24	14	8	.30	30	---	.50	34		.55
25	13	11	.39	29	---	.45	32		.50
26	18	15	.75	29	---	.80	30		.50
27	19	10	.51	44	---	48	30		.50
28	16	12	.52	36	---	4.9	29		.45
29	14	8	.30	33	---	3.6	26		.40
30	14	11	.42	29	---	2.3	25		.40
31	14	7	.26	27	---	1.6	---		
TOTAL	583	---	266.46	1036	---	652.56	1255		1240.25
YEAR	5003.1		2212.64						

Table 32.--*Sediment at station 07124120 Sarcillo Canyon near Segundo, Colo.*

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		APRIL			MAY			JUNE	
1	---		.00	6.8	7150	144	3.0		.50
2	---		.00	5.3	---	35	2.8		.30
3	---		.00	4.1	---	11	2.5		.30
4	---		.00	3.4	---	8.7	2.4		.30
5	---		.00	3.0	---	10	2.2		.30
6	---		.00	2.3	---	4.8	2.1		.20
7	---		.00	2.5	---	9.7	1.9		.20
8	---		.00	2.4	---	9.0	2.2		.20
9	---		.00	1.5	---	1.7	2.8		.20
10	---		.00	1.2	---	1.5	2.5		.10
11	---		.00	1.1	---	1.3	2.3		.10
12	---		.00	.86	---	1.4	1.7		.10
13	---		.00	.77	---	1.2	1.4		.10
14	---		.00	1.0	---	2.4	1.2		.10
15	---		.00	13	---	412	1.2		.10
16	---		.00	15	---	171	1.2		.10
17	---		.00	10	---	29	1.3		.10
18	.12		.00	7.8	---	15	1.1		.05
19	.19		.00	6.7	---	12	.96		.05
20	.25		.00	6.5	---	11	.89		.05
21	.19		.00	6.2	---	7.6	.92		.05
22	.07		.00	5.9	---	3.8	1.0		.05
23	.24		1.0	5.6	---	4.2	1.0		.05
24	1.5		8.1	4.9	---	3.1	1.0		.05
25	2.7		16	4.6	---	2.2	1.0		.05
26	3.8		54	4.3	---	2.0	1.1		.05
27	4.0		53	4.0	---	1.0	1.1		.05
28	4.4		29	3.8	---	1.0	1.1		.05
29	3.6		18	3.5	---	.50	.81		.05
30	3.6		33	3.4	---	.50	.57		.05
31	---			3.3	---	.50	---		
		JULY			AUGUST			SEPTEMBER	
1	.68		1.8	.54		.39	.20		.00
2	.78		.07	.54		5.0	.26		.00
3	.73		.05	.50		.50	.27		.00
4	.66		.05	.40		.10	.21		.00
5	.49		.05	.35		.00	.28		.00
6	.34		.05	.30		.00	.25		.00
7	.34		.05	.25		.00	.32		.00
8	.23		.05	.34		.72	.19		.00
9	.10		.05	.34		.00	.38		.00
10	.33		.05	.25		.00	.27		.00
11	.39		.05	.24		.00	.30		.00
12	.42		.05	.29		.00	.24		.00
13	.40		.00	.26		.00	.19		.00
14	.37		.00	5.2		400	.12		.00
15	.23		.00	.45		.56	.13		.00
16	.37		.00	.26		.10	.09		.00
17	.40		.00	.29		.00	.12		.00
18	.34		.00	.27		.00	.14		.00
19	.44		.00	.25		.00	.18		.00
20	.44		.00	.20		.00	.15		.00
21	.41		.00	.18		.00	.12		.00
22	.39		.00	.19		.00	.20		.00
23	.37		.00	.23		.00	.13		.00
24	.35		.00	.20		.00	.09		.00
25	.34		.00	.12		.00	.12		.00
26	.28		.00	.15		.06	.08		.00
27	.24		.00	.34		.07	.04		.00
28	.23		.00	.24		.00	.08		.00
29	.22		.00	.30		.00	.10		.00
30	.39		.00	.27		.00	.07		.00
31	1.0		45	.16		.00	---		
TOTAL	12.70		47.37	13.90		407.50	5.32		0.00
YEAR	255.52		1589.02						

Table 32.--*Sediment at station 07124120 Sarcillo Canyon near Segundo, Colo*--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		APRIL			MAY			JUNE	
1	.07		.00	.11		.00	.06		.00
2	.05		.00	.07		.00	.05		.00
3	.03		.00	.07		.00	.03		.00
4	.07		.00	.07		.00	.02		.00
5	.05		.00	.10		.00	.02		.00
6	.09		.00	.05		.00	.03		.00
7	.09		.00	.02		.00	.04		.00
8	.05		.00	.01		.00	.01		.00
9	.09		.00	.05		.00	.01		.00
10	.07		.00	.04		.00	.01		.00
11	.07		.00	.04		.00	.03		.00
12	.09		.00	.03		.00	.03		.00
13	.07		.00	.03		.00	.03		.00
14	.12		.00	.68		22	.03		.00
15	.12		.00	.23		.39	.03		.00
16	.12		.00	.16		.10	.03		.00
17	.12		.00	.09		.00	.03		.00
18	.12		.00	.09		.00	.03		.00
19	.16		.00	.09		.00	.03		.00
20	.16		.00	.07		.00	.03		.00
21	.16		.00	.03		.00	.03		.00
22	.16		.00	.03		.00	.03		.00
23	.12		.00	.03		.00	.03		.00
24	.12		.00	.09		.00	.08		.00
25	.09		.00	.09		.00	.09		.00
26	.09		.00	.07		.00	.09		.00
27	.07		.00	.07		.00	12		1990
28	.05		.00	.07		.00	4.9		494
29	.04		.00	.42		1.6	.19		1.0
30	.05		.00	.41		1.1	.28		.50
31	---			.06		.00	---		
		JULY			AUGUST			SEPTEMBER	
1	.20		.30	1.8	---	47	2.3		1.0
2	2.2		241	.63	---	25	2.0		.35
3	38		5490	.41	---	1.0	17		872
4	1.1		9.8	31	6250	5130	3.9		3.6
5	.29		.50	1.4	---	19	2.4		.59
6	.17		.10	.63	---	9.6	3.8		62
7	.17		.00	11	7460	996	26		941
8	.16		.00	34	---	5810	3.5		3.5
9	.07		.00	291	8840	52600	2.9		2.0
10	.06		.00	490	19200	140000	2.8		1.0
11	.12		.00	138	12300	12200	264		44900
12	.26		.22	94	---	7430	5.2		6.9
13	.23		.00	9.5	---	14	21		1040
14	.25		.00	8.2	---	3.7	6.3		15
15	.36		1.4	8.0	---	5.9	4.3		3.0
16	.43		.39	158	4580	27400	4.3		1.0
17	.24		.10	11	---	205	3.6		.50
18	230		48000	8.0	---	16	2.9		.20
19	.63		4.6	6.9	---	6.0	2.8		.10
20	.20		.50	6.6	---	2.8	2.8		.00
21	.10		.00	84	3920	7130	3.5		.00
22	.05		.00	6.3	---	17	3.0		.00
23	.12		.00	2.9	---	5.0	2.5		.00
24	.09		.00	2.6	---	2.0	2.0		.00
25	.07		.00	2.4	---	1.0	1.7		.00
26	96		18200	2.3	---	.5	1.4		.00
27	1.1		10	220	---	71200	1.2		.00
28	.43		1.0	7.2	---	23	1.0		.00
29	.41		.50	4.2	---	40	.80		.00
30	.40		.30	3.5	---	2.6	.70		.00
31	.40		.10	2.6	---	1.5	---		
TOTAL	374.31		71960.81	1648.07	---	330343.6	401.60		47853.74
YEAR	2448.51		452668.84						

Table 33.--*Sediment at station 07124200 Purgatoire River at Madrid, Colo.*

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		OCTOBER			NOVEMBER			DECEMBER	
1	8.6	---	.50	14	---	1.5	16	---	7.0
2	8.4	---	.50	14	---	1.5	13	---	6.0
3	8.7	---	.50	14	---	1.5	10	---	4.5
4	9.2	---	.50	18	---	2.5	13	---	6.0
5	9.0	---	.50	20	---	3.0	14	---	6.5
6	7.6	---	.40	17	---	2.0	12	---	5.5
7	9.8	---	.50	16	---	2.0	10	---	4.5
8	9.8	---	.50	15	---	2.0	9.0	---	4.0
9	9.4	---	.50	15	---	2.0	9.0	---	4.0
10	9.8	---	.50	14	---	2.0	10	---	4.5
11	9.6	---	.50	15	---	2.0	13	---	6.0
12	9.4	22	.56	17	---	3.0	19	---	15
13	8.8	17	.40	17	---	3.0	25	---	25
14	9.9	21	.56	14	50	1.9	25	---	25
15	11	17	.50	14	---	2.0	25	---	25
16	10	22	.59	15	---	2.5	30	---	35
17	10	24	.65	15	---	2.5	30	---	35
18	10	42	1.1	20	---	3.5	28	432	33
19	11	30	.89	17	---	3.0	25	209	14
20	10	31	.84	12	---	2.5	22	---	10
21	11	93	2.8	14	94	3.6	19	---	9.0
22	23	227	.00	15	91	3.9	19	---	9.0
23	18	54	2.6	14	124	4.7	19	---	9.0
24	14	---	2.0	14	110	4.2	17	---	7.5
25	15	52	2.1	16	50	2.2	16	---	7.0
26	16	---	2.0	15	---	3.0	16	---	7.0
27	15	---	2.0	15	---	8.0	18	---	8.5
28	14	---	1.5	13	333	12	18	---	8.5
29	14	---	1.5	16	118	5.1	12	---	5.5
30	14	---	1.5	17	153	7.0	9.0	---	5.0
31	14	---	1.5	---	---	---	8.0	---	5.0

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		JANUARY			FEBRUARY			MARCH	
1	8.0		5.0	8.0	---	5.0	10	---	.80
2	9.0		5.0	9.0	---	5.0	9.7	---	.80
3	10		5.0	10	---	5.0	11	---	.90
4	10		5.0	11	---	5.0	8.8	---	.70
5	8.0		5.0	11	---	5.0	9.5	---	.75
6	8.0		5.0	12	---	5.5	11	---	.90
7	8.0		5.0	12	---	5.5	11	---	.90
8	9.0		5.0	12	---	5.5	10	---	.80
9	9.0		5.0	13	---	6.0	11	---	.90
10	9.0		5.0	13	---	6.0	11	---	.90
11	9.0		5.0	15	---	10	10	---	.70
12	12		5.0	18	---	15	10	---	.70
13	12		5.0	23	---	20	10	21	.57
14	9.0		5.0	30	---	35	9.6	38	.98
15	9.0		5.0	27	---	30	9.5	24	.62
16	10		5.0	26	---	30	9.5	20	.51
17	12		5.0	24	---	25	9.3	20	.50
18	10		5.0	21	---	20	9.6	17	.44
19	8.5		5.0	20	---	20	9.3	16	.40
20	8.4		5.0	20	---	20	9.4	18	.46
21	8.0		5.0	13	653	23	10	18	.49
22	8.0		5.0	12	219	7.1	11	16	.48
23	8.0		5.0	8.8	---	3.5	10	14	.38
24	8.0		5.0	8.8	---	2.5	10	16	.43
25	10		5.0	9.6	---	1.5	8.8	16	.38
26	9.0		5.0	12	---	1.5	8.8	14	.33
27	8.0		5.0	11	---	.90	8.8	16	.38
28	8.0		5.0	10	---	.80	8.1	18	.39
29	8.0		5.0	---	---	---	8.2	18	.40
30	8.0		5.0	---	---	---	9.0	18	.44
31	8.0		5.0	---	---	---	9.3	18	.45

Table 33.--*Sediment at station 07124200 Purgatoire River at Madrid, Colo*--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

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)
		APRIL			MAY			JUNE	
1	9.8	20	.53	25	104	7.0	312	1990	1680
2	10	24	.65	23	57	3.5	288	---	1480
3	11	15	.45	25	51	3.4	280	---	1360
4	10	26	.70	27	86	5.8	276	---	1270
5	9.8	20	.53	25	107	7.2	284	---	1300
6	9.6	20	.52	22	76	4.5	288	---	1240
7	9.1	14	.34	23	66	4.1	300	---	1300
8	8.9	16	.38	26	84	5.9	328	1610	1430
9	11	15	.45	36	586	57	372	2820	2830
10	12	18	.58	47	1180	150	344	---	1020
11	12	17	.55	40	460	50	316	776	662
12	11	16	.48	37	258	26	296	737	589
13	10	18	.49	28	94	7.1	308	932	775
14	10	11	.30	22	64	3.8	324	1030	901
15	10	14	.38	22	55	3.3	332	1270	1140
16	10	14	.38	25	76	5.1	352	1340	1270
17	12	23	.75	36	166	16	356	---	769
18	12	31	1.0	62	1770	290	332	763	684
19	14	64	2.4	71	1370	268	280	527	398
20	16	102	4.4	85	1240	263	231	253	158
21	17	68	3.1	126	3650	1270	196	164	87
22	18	58	2.8	113	1580	474	186	190	95
23	19	66	3.4	305	11100	52600	218	1880	1890
24	21	113	6.4	282	11800	18500	290	3430	3970
25	23	127	7.9	252	9990	11600	273	1560	1320
26	23	114	7.1	308	---	5990	245	1100	728
27	23	86	5.3	304	---	1150	245	1010	668
28	23	70	4.3	304	---	1310	252	994	676
29	24	80	5.2	328	1900	1680	256	822	568
30	27	99	7.2	400	11600	30200	259	---	629
31	---	---	---	348	4640	6280	---	---	---

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)
		JULY			AUGUST			SEPTEMBER	
1	262	1260	891	114	2780	1080	54	---	16
2	273	1230	907	73	622	123	48	---	10
3	259	1220	853	68	315	58	48	70	9.1
4	248	---	803	60	---	32	42	---	7.0
5	231	538	336	56	---	15	41	65	7.2
6	225	291	177	53	105	15	35	77	7.3
7	211	---	148	50	118	16	34	77	7.1
8	196	---	127	58	159	25	31	85	7.1
9	186	201	101	60	146	24	29	82	6.4
10	170	204	94	66	223	40	31	81	6.8
11	155	192	80	162	---	13100	27	65	4.7
12	132	157	56	196	---	10600	33	62	5.5
13	122	104	34	93	8970	2850	247	7200	16600
14	192	---	11400	1410	23500	177000	211	8380	6030
15	170	7370	8020	940	11200	30600	99	---	500
16	220	8120	17400	308	2320	2060	81	---	100
17	440	16600	66600	163	754	332	68	117	21
18	580	20900	75700	240	---	4360	61	73	12
19	174	5530	3520	152	---	398	55	80	12
20	122	734	241	122	346	114	46	59	7.3
21	109	---	147	112	295	89	47	61	7.7
22	107	---	87	101	243	66	64	78	---
23	111	242	72	96	204	53	51	---	9.0
24	142	2970	3790	93	341	86	46	61	13
25	141	4470	1800	164	4200	5060	43	59	8.1
26	131	3100	1220	108	4140	1480	41	44	5.5
27	133	1780	679	103	3280	1060	39	---	3.0
28	125	---	200	78	340	72	34	---	1.5
29	154	---	1630	70	267	50	31	7	.59
30	117	648	205	73	211	42	30	5	.40
31	710	7320	58800	62	135	23	---	---	---
TOTAL	6548	---	255918	5524	---	250923	1747	---	23425.29
YEAR	29001.5		696437.12						

Table 33.--*Sediment at station 07124200 Purgatoire River at Madrid, Colo*--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		OCTOBER			NOVEMBER			DECEMBER	
1	29	---	.24	23	---	2.6	18	---	5.2
2	28	3	.23	21	---	2.1	20	---	8.1
3	22	---	.30	21	---	2.1	26	---	15
4	21	16	.91	27	---	3.0	30	---	21
5	22	29	1.7	27	42	3.0	30	---	25
6	22	---	1.8	27	---	3.0	30	---	30
7	22	---	2.4	25	---	2.8	26	420	29
8	21	51	2.9	26	---	2.5	23	---	23
9	21	60	3.4	29	---	2.4	19	---	11
10	22	---	1.8	38	---	4.3	18	134	6.5
11	22	12	.71	28	---	3.1	20	71	3.8
12	20	---	.81	30	---	3.8	22	208	13
13	19	---	.77	24	---	3.0	23	144	9.0
14	19	20	1.0	25	---	3.5	23	---	12
15	19	15	.77	27	---	3.8	28	---	20
16	19	---	.77	27	---	4.5	24	308	20
17	19	---	.62	32	---	6.3	25	213	14
18	19	---	.51	36	---	8.1	27	241	18
19	21	---	.57	31	85	7.1	21	127	7.2
20	21	---	.57	36	---	7.6	20	162	8.8
21	19	---	.51	22	72	4.3	21	---	7.5
22	25	---	2.0	21	---	8.8	24	---	6.9
23	25	47	3.2	22	318	19	25	---	7.2
24	26	---	2.5	23	286	18	22	---	5.7
25	22	28	1.7	26	---	20	27	---	7.0
26	19	32	1.6	29	292	29	26	---	6.0
27	18	---	.88	29	---	22	25	---	8.6
28	16	9	.39	22	---	15	24	---	6.9
29	16	---	.43	20	---	11	23	---	5.9
30	22	---	1.5	19	---	8.0	26	---	6.7
31	45	---	---	---	---	---	27	---	6.2

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		JANUARY			FEBRUARY			MARCH	
1	28	---	5.9	25	---	8.8	21	---	2.9
2	28	77	5.8	31	---	12	18	49	2.4
3	25	---	4.6	40	---	16	19	25	1.3
4	25	57	4.0	38	---	16	20	---	2.1
5	30	---	14	30	---	13	18	48	2.4
6	31	---	8.7	22	169	10	17	---	1.8
7	26	84	5.9	24	---	9.4	17	31	1.4
8	25	85	5.8	26	---	6.8	15	---	1.6
9	23	---	5.2	22	---	2.9	15	---	2.0
10	26	---	7.3	32	---	4.2	16	65	2.8
11	27	116	8.5	37	53	5.3	16	27	1.2
12	29	---	9.0	37	---	7.8	16	16	.71
13	27	---	9.1	28	---	4.4	14	---	.73
14	25	131	8.8	24	50	3.3	14	---	.92
15	22	---	6.1	25	---	3.3	15	---	.98
16	21	90	5.1	34	---	4.5	15	---	1.2
17	17	---	4.2	33	---	4.3	16	---	2.1
18	18	---	4.5	26	---	3.7	15	85	3.5
19	19	---	4.7	27	58	4.2	16	---	4.2
20	23	---	5.7	30	44	3.6	16	0	4.2
21	21	112	6.4	22	55	3.3	15	---	3.5
22	24	268	17	20	---	3.1	14	---	3.3
23	27	211	15	19	---	3.5	23	---	12
24	27	---	13	19	---	4.5	16	123	5.3
25	24	---	9.9	19	108	5.5	20	---	5.2
26	21	---	7.5	25	183	12	18	81	3.9
27	20	---	6.6	22	---	8.6	19	106	5.4
28	20	---	6.1	21	79	4.5	21	95	5.4
29	20	---	6.1	21	---	2.1	18	---	3.8
30	20	---	6.1	---	---	---	18	---	3.3
31	23	---	7.6	---	---	---	19	---	2.5

Table 33.--*Sediment at station 07124200 Purgatoire River at Madrid, Colo*--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		APRIL			MAY			JUNE	
1	17	46	2.1	438	5100	5130	383	---	310
2	30	179	14	421	4660	5060	382	288	297
3	21	76	4.3	454	4890	6170	340	262	241
4	24	---	5.5	481	5130	6480	301	285	232
5	28	---	7.2	409	2640	2820	314	290	246
6	32	---	9.6	531	5630	7770	341	350	322
7	33	152	14	478	3380	4120	324	---	306
8	27	100	6.5	563	4340	6360	327	---	353
9	24	83	5.4	439	1990	2330	579	1610	2280
10	23	69	4.3	357	1670	1570	641	1700	2690
11	28	92	6.9	320	1090	928	606	1790	2720
12	34	---	9.2	282	692	517	593	1550	2330
13	25	---	7.2	238	453	286	572	1150	1680
14	30	124	10	211	397	220	553	---	1340
15	36	158	15	360	1910	3000	519	---	981
16	33	47	7.8	560	4310	7340	486	507	665
17	42	139	16	545	1600	2260	443	438	524
18	55	136	20	444	---	1650	447	434	524
19	62	---	26	346	1250	1170	449	319	387
20	76	---	45	315	837	712	427	370	427
21	84	---	61	328	868	769	391	---	317
22	85	332	76	374	995	1020	359	---	242
23	102	792	218	453	1220	1490	343	182	169
24	124	1160	388	526	---	1420	338	168	153
25	145	744	291	529	---	1140	345	217	202
26	150	---	324	461	---	747	341	185	175
27	148	---	400	418	510	576	326	153	135
28	182	1740	855	393	556	590	324	---	122
29	225	1700	1030	367	602	597	297	---	104
30	236	2950	1880	388	410	430	292	119	94
31	---	---	---	363	---	343	---	---	---
		JULY			AUGUST			SEPTEMBER	
1	298	2450	2290	48	133	17	19	---	1.4
2	304	495	399	55	---	13	19	22	1.1
3	262	162	115	62	---	11	18	11	.54
4	235	---	78	58	---	8.0	17	697	82
5	211	---	51	54	44	6.4	23	5790	425
6	196	---	33	52	23	3.2	18	---	9.7
7	194	51	27	64	4000	798	21	65	3.7
8	188	51	26	74	3990	2160	21	96	5.4
9	167	39	17	111	---	1020	44	307	37
10	154	134	61	70	---	24	62	209	35
11	165	188	94	59	104	17	62	109	18
12	139	---	22	54	76	11	45	41	5.0
13	127	---	14	47	82	10	38	---	2.8
14	137	2340	1260	54	6260	2090	41	---	296
15	128	---	104	74	3630	1160	40	1950	210
16	110	---	27	44	---	59	31	43	3.6
17	105	25	7.1	46	---	12	27	19	1.4
18	92	29	7.2	45	46	5.5	23	28	1.7
19	91	---	6.2	38	53	5.4	22	30	1.8
20	80	---	4.9	35	37	3.5	20	19	1.0
21	79	19	4.0	30	38	3.1	19	---	1.0
22	80	---	4.7	27	29	2.1	19	---	1.0
23	91	58	14	27	---	2.0	20	19	1.0
24	77	31	6.4	29	---	2.0	19	19	.97
25	73	40	7.8	40	25	2.7	19	19	.97
26	70	---	6.8	43	27	3.2	19	19	.97
27	62	---	6.0	94	9900	3920	19	19	.97
28	54	32	4.6	30	688	42	19	17	.87
29	53	32	4.6	23	76	4.8	19	---	.85
30	51	29	4.0	21	---	3.2	19	---	.85
31	77	4960	2650	20	---	2.0	---	---	---
TOTAL	4150	---	7361.3	1528	---	11421.1	802	---	1151.59
YEAR	38087		122440.22						

Table 33.--*Sediment at station 07124200 Purgatoire River at Madrid, Colo*--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		OCTOBER			NOVEMBER			DECEMBER	
1	15	20	.81	21	---	.85	21	14	.79
2	14	12	.45	21	---	.90	19	20	1.0
3	15	19	.77	21	18	1.0	21	18	1.0
4	15	15	.89	21	14	.79	20	13	.70
5	15	9	.53	20	12	.65	20	13	.70
6	15	12	.69	19	18	.92	18	---	.55
7	15	11	.65	19	11	.56	18	---	.50
8	14	---	.50	19	---	.50	18	10	.49
9	13	5	.18	18	---	.50	10	---	.30
10	13	---	.18	18	10	.49	16	---	.75
11	13	---	.18	18	5	.24	28	---	2.9
12	14	5	.19	18	7	.34	30	---	3.4
13	14	---	.19	18	3	.15	29	---	2.2
14	13	---	.18	22	---	.40	21	---	1.2
15	15	16	.65	23	---	.40	21	---	1.2
16	23	18	1.1	20	---	.35	22	---	.85
17	20	---	.90	15	---	.30	20	10	.59
18	19	---	.85	18	20	.97	18	8	.43
19	19	---	.80	35	---	3.2	16	---	.30
20	19	15	.77	41	---	6.0	17	---	.40
21	19	14	.72	41	---	6.0	19	---	.55
22	19	16	.82	41	---	5.3	26	17	1.2
23	19	15	.77	30	42	3.4	16	---	.65
24	19	10	51	22	17	1.0	10	---	.35
25	17	---	.40	20	---	.75	18	11	53
26	18	8	.39	19	---	.50	14	25	.94
27	20	8	.43	30	---	2.2	12	15	.49
28	21	14	.79	48	---	5.3	11	8	.24
29	20	10	.54	39	---	3.6	12	---	.35
30	22	14	.83	24	---	1.3	10	14	.38
31	21	14	.79	---	---	---	10	7	.19

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		JANUARY			FEBRUARY			MARCH	
1	10	---	.20	4.4	---	.25	11	4	.12
2	10	---	.20	8.0	25	.54	11	22	.65
3	14	---	.40	12	26	.84	12	14	.45
4	11	---	.25	12	---	.75	13	19	.67
5	14	---	.30	10	---	.50	9.7	10	.26
6	14	---	.30	9.6	---	.30	12	10	.32
7	9.2	---	.15	9.2	6	.15	11	---	.30
8	10	---	.20	11	24	.71	11	---	.40
9	11	---	.20	12	21	.68	10	30	.81
10	14	---	.40	6.8	---	.35	11	17	.50
11	16	---	1.2	10	58	1.6	16	40	1.7
12	17	---	2.2	12	---	2.6	14	40	1.5
13	14	---	1.6	14	122	4.6	14	35	1.3
14	13	40	1.4	14	---	3.0	13	---	.90
15	13	18	.63	14	---	2.3	12	---	.50
16	12	---	.60	14	35	1.3	12	6	.19
17	12	---	.70	13	37	1.3	13	36	1.3
18	12	---	.90	12	20	.65	13	28	.98
19	12	---	1.1	12	14	.45	12	25	.81
20	12	---	1.4	12	12	.39	12	15	.49
21	12	45	1.6	12	---	.40	13	13	.69
22	12	---	1.4	9.2	---	.30	12	13	.42
23	12	---	1.4	11	14	.42	11	7	.21
24	12	---	1.4	12	16	.52	12	10	.32
25	12	---	1.4	11	9	.27	13	25	.88
26	12	45	1.6	11	---	.24	11	22	.65
27	12	---	1.2	10	11	.30	12	22	.71
28	12	---	.95	11	9	.27	12	14	.45
29	12	---	.60	---	---	---	13	---	.80
30	8.8	11	.26	---	---	---	12	25	.81
31	8.4	22	.50	---	---	---	11	20	.59

Table 33.--*Sediment at station 07124200 Purgatoire River at Madrid, Colo*--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY). WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		APRIL			MAY			JUNE	
1	11	---	.60	37	83	7.7	34	1390	123
2	11	20	.61	46	---	10	34	189	15
3	10	27	.73	37	61	5.6	26	121	6.5
4	12	---	.85	42	67	8.0	32	96	5.5
5	11	21	.62	36	52	3.8	31	94	5.3
6	9.9	25	.67	42	54	6.6	49	178	18
7	10	24	.65	23	32	1.7	79	261	55
8	9.7	28	.73	17	18	.83	91	216	52
9	9.7	31	.81	17	21	.94	75	152	30
10	9.7	27	.71	22	28	1.5	75	132	7.8
11	9.7	23	.60	18	29	1.4	70	91	5.0
12	10	---	.70	15	25	1.0	69	58	3.0
13	10	42	1.1	15	17	.70	59	29	1.4
14	11	42	1.2	16	20	.79	51	22	.90
15	13	33	1.2	18	28	1.3	50	13	.50
16	12	47	1.5	18	---	1.5	41	8	.24
17	11	33	.98	15	29	1.2	30	20	1.1
18	11	---	.95	10	24	.68	34	18	1.0
19	12	---	1.2	9.3	21	.51	34	18	1.4
20	12	41	1.3	13	33	1.1	37	15	.92
21	11	25	.74	12	26	.87	33	15	.86
22	12	28	.91	12	24	.81	32	17	.96
23	13	17	.60	14	27	1.0	36	27	1.6
24	13	18	.63	19	45	2.1	34	30	1.8
25	13	15	.53	19	42	2.0	35	25	1.5
26	14	---	.95	17	31	1.4	31	19	1.1
27	15	38	1.5	16	27	1.1	88	14800	17000
28	19	45	2.3	20	28	1.4	140	39400	47800
29	21	23	1.3	62	280	97	57	770	115
30	24	49	3.2	109	810	264	105	7130	9450
31	---	---	---	59	453	117	---	---	---
		JULY			AUGUST			SEPTEMBER	
1	139	6380	3380	53	4720	2300	101		40
2	82	3600	897	63	3460	2590	92		30
3	463	33200	66800	66	850	314	265		11600
4	152	8160	4280	132	9720	14600	149		1640
5	82	138	31	61	2100	545	95		500
6	64	73	12	135	2990	15100	98		1730
7	43	73	5.4	441	17900	38400	1640		143000
8	70	304	57	557	18100	63500	374		1920
9	50	87	8.6	348	16600	59300	247		1990
10	97	10600	10400	1310	25400	316000	233		377
11	102	4100	1930	1230	19800	88500	764		32900
12	306	16900	39200	1500	22900	96000	336		2840
13	125	4530	2020	443	---	3210	228		91
14	82	433	112	243	---	910	207		85
15	71	176	37	165	---	200	190		70
16	71	371	84	403	---	41700	196		60
17	144	1110	674	412	---	59500	190		50
18	271	17000	34200	300	4910	6050	174		40
19	95	4030	1190	261	---	2180	165		30
20	58	398	68	170	414	267	156		30
21	58	179	32	201	7200	7520	145		30
22	49	133	18	269	---	2820	137		25
23	50	104	14	173	---	360	134		25
24	45	82	10	139	---	150	119		20
25	41	58	6.4	122	---	120	105		20
26	437	18300	84000	94	---	89	97		15
27	125	2750	1300	578	---	62300	87		15
28	106	8000	3300	362	---	37800	84		10
29	67	1330	241	168	---	1530	78		10
30	44	261	31	117	---	160	71		5.0
31	38	114	12	94	---	46	---		
TOTAL	3627	---	254350.4	10610	---	924061	6957		199198.0
YEAR	28869.3		1453161.37						

Table 34.--*Selected rainfall-runoff events at Molino Canyon near Weston, Colo.*

LOCATION.--Lat 37°07'56", long 104°48'35", in NE¼NW¼ sec. 32, T. 33 S., R. 66 W., Las Animas County, Hydrologic Unit 10020010, on right bank 600 ft (180 m) upstream from State Highway 12, 800 ft (240 m) upstream from mouth, and 2.2 mi (3.5 km) east of Weston.

DRAINAGE AREA.--4.23 mi² (10.96 km²).

Discharge July 2-4, 1981, at station 07124100 Molino Canyon near Weston, Colo., in cubic feet per second

DATE	TIME	DISCHARGE	DATE	TIME	DISCHARGE	DATE	TIME	DISCHARGE
7-02	1330	0.2	7-02	1740	0.2	7-03	0335	14
7-02	1335	10	7-02	1745	0.2	7-03	0340	20
7-02	1340	20	7-02	1750	0.2	7-03	0345	27
7-02	1345	30	7-02	1755	0.2	7-03	0350	28
7-02	1350	25	7-02	1800	0.2	7-03	0355	28
7-02	1355	19	7-02	1805	0.2	7-03	0400	29
7-02	1400	14	7-02	1810	0.2	7-03	0405	31
7-02	1405	11	7-02	1815	0.2	7-03	0410	33
7-02	1410	8.5	7-02	1820	0.2	7-03	0415	35
7-02	1415	5.8	7-02	1825	0.1	7-03	0420	29
7-02	1420	4.9	7-02	1830	0.1	7-03	0425	24
7-02	1425	3.9	7-02	1835	0.1	7-03	0430	18
7-02	1430	3.4	7-02	1840	0.1	7-03	0435	15
7-02	1435	3.9	7-02	1845	0.1	7-03	0440	13
7-02	1440	4.8	7-02	1850	0.1	7-03	0445	10
7-02	1445	5.7	7-02	1855	0.1	7-03	0450	9.2
7-02	1450	4.8	7-02	1900	0.1	7-03	0455	8.3
7-02	1455	3.9	7-02	1905	0.1	7-03	0500	7.5
7-02	1500	3.0	7-02	1910	0.1	7-03	0505	7.3
7-02	1505	2.7	7-02	1915	0.1	7-03	0510	7.0
7-02	1510	2.4				7-03	0515	6.8
7-02	1515	2.1				7-03	0520	7.0
7-02	1520	2.0	7-03	0115	3.2	7-03	0525	7.1
7-02	1525	1.9	7-03	0120	11	7-03	0530	7.3
7-02	1530	1.8	7-03	0125	20	7-03	0535	7.5
7-02	1535	1.6	7-03	0130	28	7-03	0540	7.7
7-02	1540	1.4	7-03	0135	23	7-03	0545	7.9
7-02	1545	1.2	7-03	0140	17	7-03	0550	7.5
7-02	1550	1.1	7-03	0145	12	7-03	0555	7.1
7-02	1555	0.9	7-03	0150	10	7-03	0600	6.7
7-02	1600	0.8	7-03	0155	8.7	7-03	0605	5.9
7-02	1605	0.7	7-03	0200	7.0	7-03	0610	5.2
7-02	1610	0.6	7-03	0205	5.9	7-03	0615	4.4
7-02	1615	0.5	7-03	0210	4.9	7-03	0620	4.1
7-02	1620	0.4	7-03	0215	3.8	7-03	0625	3.7
7-02	1625	0.4	7-03	0220	3.6	7-03	0630	3.4
7-02	1630	0.3	7-03	0225	3.3	7-03	0635	3.1
7-02	1635	0.3	7-03	0230	3.1	7-03	0640	2.7
7-02	1640	0.3	7-03	0235	3.0	7-03	0645	2.4
7-02	1645	0.3	7-03	0240	2.8	7-03	0650	2.2
7-02	1650	0.3	7-03	0245	2.7	7-03	0655	2.0
7-02	1655	0.3	7-03	0250	2.5	7-03	0700	1.8
7-02	1700	0.3	7-03	0255	2.2	7-03	0705	1.8
7-02	1705	0.3	7-03	0300	2.0	7-03	0710	1.7
7-02	1710	0.2	7-03	0305	1.9	7-03	0715	1.7
7-02	1715	0.2	7-03	0310	1.9	7-03	0720	1.6
7-02	1720	0.2	7-03	0315	1.8	7-03	0725	1.4
7-02	1725	0.2	7-03	0320	3.5	7-03	0730	1.3
7-02	1730	0.2	7-03	0325	5.2	7-03	0735	1.2
7-02	1735	0.2	7-03	0330	6.9	7-03	0740	1.0

Table 34.--*Selected rainfall-runoff events at Molino Canyon near Weston, Colo.*--Continued

Discharge July 2-4, 1981, at station 07124100 Molino Canyon near Weston, Colo., in cubic feet per second--Continued

DATE	TIME	DISCHARGE	DATE	TIME	DISCHARGE	DATE	TIME	DISCHARGE
7-03	0745	0.9	7-03	1155	0.1	7-03	1955	8.6
7-03	0750	0.9	7-03	1200	0.1	7-03	2000	8.0
7-03	0755	0.8	7-03	1205	0.1	7-03	2005	7.4
7-03	0800	0.8	7-03	1210	0.1	7-03	2010	6.8
7-03	0805	0.8	7-03	1215	0.1	7-03	2015	6.2
7-03	0810	0.8	7-03	1220	0.1	7-03	2020	5.6
7-03	0815	0.8	7-03	1225	0.1	7-03	2025	5.0
7-03	0820	0.8	7-03	1230	0.1	7-03	2030	4.4
7-03	0825	0.8				7-03	2035	4.1
7-03	0830	0.8	7-03	1630	0.1	7-03	2040	3.8
7-03	0835	0.8	7-03	1635	0.1	7-03	2045	3.6
7-03	0840	0.8	7-03	1640	0.1	7-03	2050	3.3
7-03	0845	0.7	7-03	1645	0.2	7-03	2055	3.0
7-03	0850	0.6	7-03	1650	0.2	7-03	2100	2.7
7-03	0855	0.5	7-03	1655	0.2	7-03	2105	2.6
7-03	0900	0.4	7-03	1700	0.3	7-03	2110	2.4
7-03	0905	0.4	7-03	1705	0.3	7-03	2115	2.3
7-03	0910	0.3	7-03	1710	0.3	7-03	2120	2.2
7-03	0915	0.3	7-03	1715	0.8	7-03	2125	2.0
7-03	0920	0.3	7-03	1720	1.5	7-03	2130	1.9
7-03	0925	0.3	7-03	1725	2.8	7-03	2135	1.8
7-03	0930	0.3	7-03	1730	4.4	7-03	2140	1.7
7-03	0935	0.3	7-03	1735	6.1	7-03	2145	1.6
7-03	0940	0.2	7-03	1740	15	7-03	2150	1.6
7-03	0945	0.2	7-03	1745	25	7-03	2155	1.5
7-03	0950	0.2	7-03	1750	39	7-03	2200	1.4
7-03	0955	0.2	7-03	1755	57	7-03	2205	1.3
7-03	1000	0.2	7-03	1800	177	7-03	2210	1.3
7-03	1005	0.2	7-03	1805	142	7-03	2215	1.2
7-03	1010	0.2	7-03	1810	237	7-03	2220	1.2
7-03	1015	0.2	7-03	1815	167	7-03	2225	1.1
7-03	1020	0.2	7-03	1820	117	7-03	2230	1.0
7-03	1025	0.2	7-03	1825	109	7-03	2235	1.0
7-03	1030	0.2	7-03	1830	102	7-03	2240	0.9
7-03	1035	0.2	7-03	1835	96	7-03	2245	0.9
7-03	1040	0.2	7-03	1840	74	7-03	2250	0.8
7-03	1045	0.2	7-03	1845	58	7-03	2255	0.8
7-03	1050	0.2	7-03	1850	47	7-03	2300	0.7
7-03	1055	0.2	7-03	1855	39	7-03	2305	0.7
7-03	1100	0.2	7-03	1900	31	7-03	2310	0.7
7-03	1105	0.2	7-03	1905	28	7-03	2315	0.7
7-03	1110	0.2	7-03	1910	25	7-03	2320	0.7
7-03	1115	0.2	7-03	1915	22	7-03	2325	0.7
7-03	1120	0.1	7-03	1920	18	7-03	2330	0.6
7-03	1125	0.1	7-03	1925	15	7-03	2335	0.6
7-03	1130	0.1	7-03	1930	12	7-03	2340	0.6
7-03	1135	0.1	7-03	1935	11	7-03	2345	0.6
7-03	1140	0.1	7-03	1940	11	7-03	2350	0.6
7-03	1145	0.1	7-03	1945	10	7-03	2355	0.6
7-03	1150	0.1	7-03	1950	9.3	7-03	2400	0.6

Table 34.--*Selected rainfall-runoff events at Molino Canyon near Weston, Colo.*--Continued

Discharge July 2-4, 1981, at station 07124100 Molino Canyon near Weston, Colo., in cubic feet per second--Continued

DATE	TIME	DISCHARGE	DATE	TIME	DISCHARGE	DATE	TIME	DISCHARGE
			7-04	0215	0.4	7-04	0510	0.3
			7-04	0220	0.4	7-04	0515	0.3
7-04	0005	0.6	7-04	0225	0.4	7-04	0520	0.2
7-04	0010	0.6	7-04	0230	0.4	7-04	0525	0.2
7-04	0015	0.6	7-04	0235	0.4	7-04	0530	0.2
7-04	0020	0.6	7-04	0240	0.4	7-04	0535	0.2
7-04	0025	0.6	7-04	0245	0.4	7-04	0540	0.2
7-04	0030	0.6	7-04	0250	0.4	7-04	0545	0.2
7-04	0035	0.6	7-04	0255	0.4	7-04	0550	0.2
7-04	0040	0.6	7-04	0300	0.4	7-04	0555	0.2
7-04	0045	0.5	7-04	0305	0.4	7-04	0600	0.2
7-04	0050	0.5	7-04	0310	0.4	7-04	0605	0.2
7-04	0055	0.5	7-04	0315	0.4	7-04	0610	0.2
7-04	0100	0.5	7-04	0320	0.4	7-04	0615	0.2
7-04	0105	0.5	7-04	0325	0.4	7-04	0620	0.2
7-04	0110	0.5	7-04	0330	0.4	7-04	0625	0.2
7-04	0115	0.5	7-04	0335	0.4	7-04	0630	0.2
7-04	0120	0.5	7-04	0340	0.4	7-04	0635	0.2
7-04	0125	0.5	7-04	0345	0.4	7-04	0640	0.2
7-04	0130	0.5	7-04	0350	0.3	7-04	0645	0.2
7-04	0135	0.5	7-04	0355	0.3	7-04	0650	0.1
7-04	0140	0.5				7-04	0655	0.1
7-04	0145	0.5	7-04	0440	0.3	7-04	0700	0.1
7-04	0150	0.5	7-04	0445	0.3	7-04	0705	0.1
7-04	0155	0.5	7-04	0450	0.3	7-04	0710	0.1
7-04	0200	0.5	7-04	0455	0.3	7-04	0715	0.1
7-04	0205	0.5	7-04	0500	0.3	7-04	0720	0.1
7-04	0210	0.5	7-04	0505	0.3	7-04	0725	0.1

Table 34.--*Selected rainfall-runoff events at Molino Canyon near Weston, Colo.*--Continued

Rainfall July 3-4, 1981, at station 07124100 MO-C&B-1 precipitation station, in inches

DATE	TIME	RAINFALL	DATE	TIME	RAINFALL	DATE	TIME	RAINFALL
7-03	2400	0.60				7-04	0020	0.60
			7-04	0005	0.60	7-04	0025	0.60
			7-04	0010	0.60			
			7-04	0015	0.60			

STORM TOTAL = 3.60

DURATION	5 MIN	15 MIN	30 MIN	1 HR
TIME	2355	2355	2355	2355
DEPTH	0.60	1.80	3.60	3.60
INTENSITY	7.20	7.20	7.20	3.60

Table 34.--*Selected rainfall-runoff events at Molino Canyon near Weston, Colo.*--Continued

Rainfall July 2-3, 1981, at station 371111104494801 MO-C&B-3 precipitation station, in inches

DATE	TIME	RAINFALL	DATE	TIME	RAINFALL	DATE	TIME	RAINFALL
7-02	1350	0.01	7-03	0115	0.01	7-03	0435	0.01
7-02	1355	0.01	7-03	0130	0.01	7-03	0445	0.01
7-02	1415	0.01	7-03	0140	0.01	7-03	0455	0.01
7-02	1800	0.01	7-03	0215	0.01	7-03	0500	0.01
7-02	1805	0.01	7-03	0240	0.01	7-03	0520	0.01
7-02	2350	0.01	7-03	0250	0.01	7-03	0530	0.01
7-02	2355	0.01	7-03	0310	0.01	7-03	0535	0.01
7-02	2400	0.01	7-03	0315	0.01	7-03	0540	0.02
			7-03	0325	0.01	7-03	0545	0.02
			7-03	0330	0.01	7-03	0550	0.02
7-03	0005	0.01	7-03	0345	0.01	7-03	0600	0.01
7-03	0030	0.01	7-03	0350	0.01	7-03	0610	0.01
7-03	0045	0.01	7-03	0355	0.02	7-03	1715	0.22
7-03	0050	0.12	7-03	0400	0.01	7-03	1720	0.22
7-03	0055	0.09	7-03	0405	0.01	7-03	1725	0.14
7-03	0100	0.04	7-03	0410	0.01	7-03	1730	0.05
7-03	0105	0.01	7-03	0415	0.01	7-03	1735	0.02
7-03	0110	0.01	7-03	0420	0.01	7-03	1830	0.01

STORM TOTAL = 1.38

DURATION	5 MIN	15 MIN	30 MIN	1 HR
TIME	1710	1710	1710	1710
DEPTH	0.22	0.58	0.65	0.66
INTENSITY	2.64	2.32	1.30	0.66

Table 34.--*Selected rainfall-runoff events at Molino Canyon near Weston, Colo.*--Continued

Discharge July 26, 1981, at station 07124100 Molino Canyon near Weston, Colo., in cubic feet per second

DATE	TIME	DISCHARGE	DATE	TIME	DISCHARGE	DATE	TIME	DISCHARGE
7-26	1230	7.2	7-26	1410	7.7	7-26	1555	1.0
7-26	1235	25	7-26	1415	7.1	7-26	1600	0.8
7-26	1240	44	7-26	1420	6.4	7-26	1605	0.8
7-26	1245	62	7-26	1425	5.7	7-26	1610	0.7
7-26	1250	77	7-26	1430	5.0	7-26	1615	0.7
7-26	1255	92	7-26	1435	4.8	7-26	1620	0.6
7-26	1300	107	7-26	1440	4.5	7-26	1625	0.6
7-26	1305	94	7-26	1445	4.3	7-26	1630	0.5
7-26	1310	82	7-26	1450	4.0	7-26	1635	0.4
7-26	1315	69	7-26	1455	3.6	7-26	1640	0.3
7-26	1320	59	7-26	1500	3.3	7-26	1645	0.2
7-26	1325	49	7-26	1505	3.1	7-26	1650	0.2
7-26	1330	39	7-26	1510	2.9	7-26	1655	0.1
7-26	1335	30	7-26	1515	2.7	7-26	1700	0.1
7-26	1340	22	7-26	1520	2.4	7-26	1705	0.1
7-26	1345	13	7-26	1525	2.0	7-26	1710	0.1
7-26	1350	12	7-26	1530	1.7	7-26	1715	0.1
7-26	1355	10	7-26	1535	1.6	7-26	1720	0.1
7-26	1400	9.0	7-26	1540	1.6	7-26	1725	0.1
7-26	1405	8.0	7-26	1545	1.5	7-26	1730	0.1
			7-26	1550	1.3			

Table 34.--*Selected rainfall-runoff events at Molino Canyon near Weston, Colo.*--Continued

Rainfall July 26, 1981, at station 07124100 MO-D&B-1 precipitation station, in inches

DATE	TIME	RAINFALL	DATE	TIME	RAINFALL	DATE	TIME	RAINFALL
7-26	1145	0.11	7-26	1530	0.16	7-26	1705	0.01
7-26	1150	0.02	7-26	1535	0.04	7-26	1710	0.02
7-26	1155	0.01	7-26	1540	0.07	7-26	1720	0.02
7-26	1350	0.02	7-26	1545	0.04	7-26	1735	0.01
7-26	1355	0.13	7-26	1550	0.03	7-26	1815	0.01
7-26	1400	0.04	7-26	1555	0.04	7-26	1820	0.01
7-26	1435	0.03	7-26	1600	0.09	7-26	1850	0.01
7-26	1440	0.09	7-26	1605	0.12	7-26	1855	0.02
7-26	1445	0.01	7-26	1610	0.04	7-26	1900	0.02
7-26	1450	0.01	7-26	1615	0.04	7-26	1905	0.03
7-26	1515	0.03	7-26	1620	0.06	7-26	1910	0.02
7-26	1520	0.05	7-26	1625	0.01	7-26	1915	0.01
7-26	1525	0.19	7-26	1700	0.01	7-26	1925	0.01

STORM TOTAL = 1.69

DURATION	5 MIN	15 MIN	30 MIN	1 HR
TIME	1520	1515	1515	1520
DEPTH	0.19	0.40	0.55	0.92
INTENSITY	2.28	1.60	1.10	0.92

Table 34.--*Selected rainfall-runoff events at Molino Canyon near Weston, Colo.*--Continued

Rainfall July 26, 1981, at station 371111104494801 MO-D&B-3 precipitation station, in inches

DATE	TIME	RAINFALL	DATE	TIME	RAINFALL	DATE	TIME	RAINFALL
7-26	0530	0.01	7-26	1455	0.14	7-26	1710	0.02
7-26	1140	0.17	7-26	1500	0.32	7-26	1715	0.01
7-26	1145	0.36	7-26	1505	0.36	7-26	1750	0.01
7-26	1150	0.12	7-26	1510	0.25	7-26	1820	0.01
7-26	1155	0.01	7-26	1515	0.24	7-26	1830	0.01
7-26	1325	0.02	7-26	1525	0.01	7-26	1850	0.01
7-26	1330	0.03	7-26	1555	0.01	7-26	1855	0.01
7-26	1335	0.02	7-26	1605	0.01	7-26	1900	0.02
7-26	1345	0.01	7-26	1610	0.01	7-26	1905	0.03
7-26	1350	0.01	7-26	1615	0.03	7-26	1910	0.02
7-26	1445	0.04	7-26	1620	0.01	7-26	1915	0.02
7-26	1450	0.02	7-26	1655	0.01	7-26	1925	0.01
			7-26	1705	0.01			

STORM TOTAL = 2.41

DURATION	5 MIN	15 MIN	30 MIN	1 HR
TIME	1140	1455	1445	1440
DEPTH	0.36	0.93	1.33	1.38
INTENSITY	4.32	3.72	2.66	1.38

Table 34.--*Selected rainfall-runoff events at Molino Canyon near Weston, Colo.*--Continued

Discharge August 4, 1981, at station 07124100 Molino Canyon near Weston, Colo., in cubic feet per second

DATE	TIME	DISCHARGE	DATE	TIME	DISCHARGE	DATE	TIME	DISCHARGE
8-04	1445	323	8-04	1715	7.7	8-04	1950	0.5
8-04	1450	280	8-04	1720	6.9	8-04	1955	0.4
8-04	1455	238	8-04	1725	6.0	8-04	2000	0.4
8-04	1500	195	8-04	1730	5.2	8-04	2005	0.4
8-04	1505	161	8-04	1735	4.6	8-04	2010	0.3
8-04	1510	126	8-04	1740	4.1	8-04	2015	0.3
8-04	1515	92	8-04	1745	3.5	8-04	2020	0.3
8-04	1520	80	8-04	1750	3.1	8-04	2025	0.3
8-04	1525	69	8-04	1755	2.8	8-04	2030	0.3
8-04	1530	57	8-04	1800	2.4	8-04	2035	0.3
8-04	1535	52	8-04	1805	2.3	8-04	2040	0.3
8-04	1540	47	8-04	1810	2.1	8-04	2045	0.3
8-04	1545	42	8-04	1815	2.0	8-04	2050	0.3
8-04	1550	38	8-04	1820	1.9	8-04	2055	0.2
8-04	1555	35	8-04	1825	1.9	8-04	2100	0.2
8-04	1600	31	8-04	1830	1.8	8-04	2105	0.2
8-04	1605	29	8-04	1835	1.6	8-04	2110	0.2
8-04	1610	27	8-04	1840	1.3	8-04	2115	0.2
8-04	1615	25	8-04	1845	1.1	8-04	2120	0.2
8-04	1620	22	8-04	1850	1.1	8-04	2125	0.1
8-04	1625	19	8-04	1855	1.0	8-04	2130	0.1
8-04	1630	16	8-04	1900	1.0	8-04	2135	0.1
8-04	1635	15	8-04	1905	0.9	8-04	2140	0.1
8-04	1640	13	8-04	1910	0.8	8-04	2145	0.1
8-04	1645	12	8-04	1915	0.7	8-04	2150	0.1
8-04	1650	11	8-04	1920	0.7	8-04	2155	0.1
8-04	1655	11	8-04	1925	0.6	8-04	2200	0.1
8-04	1700	10	8-04	1930	0.6	8-04	2205	0.1
8-04	1705	9.2	8-04	1935	0.6	8-04	2210	0.1
8-04	1710	8.5	8-04	1940	0.5	8-04	2215	0.1
			8-04	1945	0.5			

Table 34.--*Selected rainfall-runoff events at Molino Canyon near Weston, Colo.*--Continued

Rainfall August 4, 1981, at station 07124100 MO-D&B-1 precipitation station, in inches

DATE	TIME	RAINFALL	DATE	TIME	RAINFALL	DATE	TIME	RAINFALL
8-04	0050	0.01	8-04	1435	0.06	8-04	1455	0.17
8-04	1425	0.04	8-04	1440	0.03	8-04	1500	0.11
8-04	1430	0.10	8-04	1445	0.16	8-04	1505	0.02
			8-04	1450	0.20			

STORM TOTAL = 0.90

DURATION	5 MIN	15 MIN	30 MIN	1 HR
TIME	1445	1440	1430	1420
DEPTH	0.20	0.53	0.73	0.89
INTENSITY	2.40	2.12	1.46	0.89

Table 34.--*Selected rainfall-runoff events at Molino Canyon near Weston, Colo.*--Continued

Rainfall August 4, 1981, at station 371111104494801 MO-D&B-3 precipitation station, in inches

DATE	TIME	RAINFALL	DATE	TIME	RAINFALL	DATE	TIME	RAINFALL
8-04	1355	0.02	8-04	1410	0.15	8-04	1425	0.03
8-04	1400	0.02	8-04	1415	0.05	8-04	1430	0.10
8-04	1405	0.08	8-04	1420	0.03	8-04	1435	0.04

STORM TOTAL = 0.52

DURATION	5 MIN	15 MIN	30 MIN	1 HR
TIME	1405	1400	1400	1350
DEPTH	0.15	0.28	0.44	0.52
INTENSITY	1.80	1.12	0.88	0.52

Table 34.--*Selected rainfall-runoff events at Molino Canyon near Weston, Colo.*--Continued

Discharge August 5, 1981, at station 07124100 Molino Canyon near Weston, Colo., in cubic feet per second

DATE	TIME	DISCHARGE	DATE	TIME	DISCHARGE	DATE	TIME	DISCHARGE
8-05	1550	1.6	8-05	1705	7.6	8-05	1825	1.1
8-05	1555	28	8-05	1710	6.8	8-05	1830	0.8
8-05	1600	55	8-05	1715	5.9	8-05	1835	0.5
8-05	1605	81	8-05	1720	5.1	8-05	1840	0.4
8-05	1610	57	8-05	1725	4.3	8-05	1845	0.3
8-05	1615	52	8-05	1730	3.6	8-05	1850	0.2
8-05	1620	38	8-05	1735	2.8	8-05	1855	0.2
8-05	1625	30	8-05	1740	2.4	8-05	1900	0.1
8-05	1630	22	8-05	1745	2.0	8-05	1905	0.1
8-05	1635	14	8-05	1750	1.6	8-05	1910	0.1
8-05	1640	12	8-05	1755	1.6	8-05	1915	0.1
8-05	1645	11	8-05	1800	1.5	8-05	1920	0.1
8-05	1650	9.1	8-05	1805	1.5	8-05	1925	0.1
8-05	1655	8.6	8-05	1810	1.5	8-05	1930	0.1
8-05	1700	8.1	8-05	1815	1.4	8-05	1935	0.1
			8-05	1820	1.4			

Table 34.--*Selected rainfall-runoff events at Molino Canyon near Weston, Colo.*--Continued

Rainfall August 5, 1981, at station 07124100 MO-D&B-1 precipitation station, in inches

DATE	TIME	RAINFALL	DATE	TIME	RAINFALL	DATE	TIME	RAINFALL
8-05	1525	0.01	8-05	1550	0.02	8-05	1605	0.02
8-05	1545	0.02	8-05	1555	0.03	8-05	1615	0.01
			8-05	1600	0.03			

STORM TOTAL = 0.14

DURATION	5 MIN	15 MIN	30 MIN	1 HR
TIME	1550	1545	1540	1520
DEPTH	0.03	0.08	0.12	0.14
INTENSITY	0.36	0.32	0.24	0.14

Table 34.--*Selected rainfall-runoff events at Molino Canyon near Weston, Colo.*--Continued

Rainfall August 5, 1981, at station 371111104494801 MO-D&B-3 precipitation station, in inches

DATE	TIME	RAINFALL	DATE	TIME	RAINFALL	DATE	TIME	RAINFALL
8-05	1535	0.04	8-05	1550	0.01	8-05	1650	0.01
8-05	1540	0.05	8-05	1625	0.02	8-05	1655	0.02
8-05	1545	0.01	8-05	1630	0.02	8-05	1700	0.01
			8-05	1640	0.02			
			8-05	1645	0.01			

STORM TOTAL = 0.25

DURATION	5 MIN	15 MIN	30 MIN	1 HR
TIME	1535	1530	1530	1530
DEPTH	0.05	0.10	0.11	0.15
INTENSITY	0.60	0.40	0.22	0.15

Table 34.--*Selected rainfall-runoff events at Molino Canyon near Weston, Colo.*--Continued

Discharge August 10-11, 1981, at station 07124100 Molino Canyon near Weston, Colo., in cubic feet per second

DATE	TIME	DISCHARGE	DATE	TIME	DISCHARGE	DATE	TIME	DISCHARGE
8-10	1600	0.5	8-10	2010	20	8-11	0010	5.1
8-10	1605	61	8-10	2015	19	8-11	0015	5.0
8-10	1610	121	8-10	2020	18	8-11	0020	4.9
8-10	1615	181	8-10	2025	17	8-11	0025	4.7
8-10	1620	606	8-10	2030	16	8-11	0030	4.6
8-10	1625	1031	8-10	2035	15	8-11	0035	4.5
8-10	1630	1456	8-10	2040	15	8-11	0040	4.4
8-10	1635	1878	8-10	2045	14	8-11	0045	4.3
8-10	1640	2299	8-10	2050	14	8-11	0050	4.2
8-10	1645	2721	8-10	2055	14	8-11	0055	4.1
8-10	1650	3514	8-10	2100	14	8-11	0100	4.0
8-10	1655	4307	8-10	2105	14	8-11	0105	3.9
8-10	1700	5100	8-10	2110	13	8-11	0110	3.9
8-10	1705	3880	8-10	2115	13	8-11	0115	3.8
8-10	1710	2660	8-10	2120	13	8-11	0120	3.7
8-10	1715	1440	8-10	2125	12	8-11	0125	3.7
8-10	1720	1271	8-10	2130	12	8-11	0130	3.6
8-10	1725	1103	8-10	2135	12	8-11	0135	3.5
8-10	1730	934	8-10	2140	11	8-11	0140	3.5
8-10	1735	830	8-10	2145	11	8-11	0145	3.4
8-10	1740	726	8-10	2150	10	8-11	0150	3.3
8-10	1745	622	8-10	2155	9.6	8-11	0155	3.3
8-10	1750	551	8-10	2200	8.9	8-11	0200	3.2
8-10	1755	481	8-10	2205	8.8	8-11	0205	3.1
8-10	1800	410	8-10	2210	8.8	8-11	0210	2.9
8-10	1805	348	8-10	2215	8.7	8-11	0215	2.8
8-10	1810	286	8-10	2220	8.6	8-11	0220	2.7
8-10	1815	224	8-10	2225	8.6	8-11	0225	2.5
8-10	1820	199	8-10	2230	8.5	8-11	0230	2.4
8-10	1825	175	8-10	2235	8.2	8-11	0235	2.4
8-10	1830	150	8-10	2240	7.8	8-11	0240	2.3
8-10	1835	127	8-10	2245	7.5	8-11	0245	2.3
8-10	1840	104	8-10	2250	7.3	8-11	0250	2.3
8-10	1845	81	8-10	2255	7.1	8-11	0255	2.2
8-10	1850	71	8-10	2300	6.9	8-11	0300	2.2
8-10	1855	61	8-10	2305	6.7	8-11	0305	2.2
8-10	1900	51	8-10	2310	6.6	8-11	0310	2.1
8-10	1905	45	8-10	2315	6.4	8-11	0315	2.1
8-10	1910	38	8-10	2320	6.3	8-11	0320	2.1
8-10	1915	32	8-10	2325	6.2	8-11	0325	2.0
8-10	1920	29	8-10	2330	6.1	8-11	0330	2.0
8-10	1925	27	8-10	2335	6.1	8-11	0335	1.9
8-10	1930	24	8-10	2340	6.0	8-11	0340	1.8
8-10	1935	23	8-10	2345	6.0	8-11	0345	1.7
8-10	1940	23	8-10	2350	5.8	8-11	0350	1.6
8-10	1945	22	8-10	2355	5.6	8-11	0355	1.5
8-10	1950	22	8-10	2400	5.4	8-11	0400	1.4
8-10	1955	21				8-11	0405	1.4
8-10	2000	21				8-11	0410	1.3
8-10	2005	20	8-11	0005	5.3	8-11	0415	1.2

Table 34.--*Selected rainfall-runoff events at Molino Canyon near Weston, Colo.*--Continued

Discharge August 10-11, 1981, at station 07124100 Molino Canyon near Weston, Colo., in cubic feet per second--Continued

DATE	TIME	DISCHARGE	DATE	TIME	DISCHARGE	DATE	TIME	DISCHARGE
8-11	0420	1.2	8-11	0545	0.6	8-11	0710	0.3
8-11	0425	1.2	8-11	0550	0.5	8-11	0715	0.2
8-11	0430	1.1	8-11	0555	0.5	8-11	0720	0.2
8-11	0435	1.1	8-11	0600	0.4	8-11	0725	0.2
8-11	0440	1.1	8-11	0605	0.4	8-11	0730	0.2
8-11	0445	1.0	8-11	0610	0.4	8-11	0735	0.2
8-11	0450	1.0	8-11	0615	0.4	8-11	0740	0.2
8-11	0455	1.0	8-11	0620	0.3	8-11	0745	0.2
8-11	0500	1.0	8-11	0625	0.3	8-11	0750	0.2
8-11	0505	1.0	8-11	0630	0.3	8-11	0755	0.2
8-11	0510	0.9	8-11	0635	0.3	8-11	0800	0.2
8-11	0515	0.9	8-11	0640	0.3	8-11	0805	0.2
8-11	0520	0.9	8-11	0645	0.3	8-11	0810	0.2
8-11	0525	0.8	8-11	0650	0.3	8-11	0815	0.2
8-11	0530	0.8	8-11	0655	0.3	8-11	0820	0.1
8-11	0535	0.7	8-11	0700	0.3	8-11	0825	0.1
8-11	0540	0.7	8-11	0705	0.3	8-11	0830	0.1

Table 34.--*Selected rainfall-runoff events at Molino Canyon near Weston, Colo.*--Continued

Rainfall August 10-11, 1981, at station 07124100 MO-D&B-1 precipitation station, in inches

DATE	TIME	RAINFALL	DATE	TIME	RAINFALL	DATE	TIME	RAINFALL
8-10	1535	0.01	8-10	2210	0.01	8-11	2000	0.01
8-10	1540	0.01	8-10	2215	0.01	8-11	2010	0.01
8-10	1545	0.01	8-10	2220	0.01	8-11	2015	0.01
8-10	1550	0.01	8-10	2225	0.01	8-11	2020	0.01
8-10	1555	0.01	8-10	2230	0.01	8-11	2025	0.01
8-10	1600	0.01	8-10	2235	0.01	8-11	2030	0.02
8-10	1605	0.02	8-10	2250	0.01	8-11	2035	0.02
8-10	1610	0.03	8-10	2305	0.01	8-11	2040	0.02
8-10	1615	0.02	8-10	2315	0.01	8-11	2045	0.02
8-10	1620	0.02	8-10	2325	0.01	8-11	2050	0.02
8-10	1625	0.08	8-10	2340	0.01	8-11	2055	0.01
8-10	1630	0.15				8-11	2100	0.01
8-10	1635	0.08				8-11	2105	0.01
8-10	1640	0.08	8-11	0115	0.01	8-11	2110	0.01
8-10	1645	0.03	8-11	0145	0.01	8-11	2115	0.01
8-10	1650	0.02	8-11	0150	0.01	8-11	2125	0.01
8-10	1655	0.01	8-11	0155	0.02	8-11	2130	0.01
8-10	1700	0.02	8-11	0200	0.01	8-11	2135	0.02
8-10	1705	0.01	8-11	0205	0.01	8-11	2140	0.01
8-10	1710	0.01	8-11	0215	0.01	8-11	2145	0.02
8-10	1715	0.01	8-11	0220	0.01	8-11	2150	0.02
8-10	1725	0.01	8-11	0230	0.01	8-11	2200	0.01
8-10	1730	0.01	8-11	0255	0.01	8-11	2205	0.01
8-10	1735	0.01	8-11	0805	0.01	8-11	2210	0.03
8-10	1755	0.01	8-11	0825	0.01	8-11	2215	0.02
8-10	1800	0.01	8-11	0830	0.02	8-11	2220	0.02
8-10	1805	0.01	8-11	1705	0.34	8-11	2225	0.03
8-10	1810	0.01	8-11	1710	0.10	8-11	2230	0.03
8-10	1815	0.01	8-11	1715	0.01	8-11	2235	0.01
8-10	1820	0.02	8-11	1835	0.02	8-11	2240	0.02
8-10	1825	0.02	8-11	1840	0.01	8-11	2245	0.02
8-10	1830	0.02	8-11	1845	0.01	8-11	2250	0.02
8-10	1835	0.01	8-11	1850	0.02	8-11	2255	0.03
8-10	1845	0.01	8-11	1855	0.03	8-11	2340	0.02
8-10	2015	0.01	8-11	1900	0.03	8-11	2305	0.04
8-10	2105	0.01	8-11	1905	0.06	8-11	2310	0.02
8-10	2135	0.01	8-11	1910	0.02	8-11	2315	0.03
8-10	2140	0.01	8-11	1920	0.02	8-11	2320	0.03
8-10	2145	0.01	8-11	1925	0.01	8-11	2325	0.02
8-10	2155	0.02	8-11	1930	0.01	8-11	2330	0.02
8-10	2200	0.02	8-11	1935	0.01	8-11	2335	0.01
8-10	2205	0.01	8-11	1940	0.01	8-11	2345	0.01
			8-11	1950	0.01			
			8-11	1955	0.01			

STORM TOTAL = 2.64

DURATION	5 MIN	15 MIN	30 MIN	1 HR
TIME	1700	1700	1700	1600
DEPTH	0.34	0.45	0.45	0.56
INTENSITY	4.08	1.80	0.90	0.56

Table 34.--*Selected rainfall-runoff events at Molino Canyon near Weston, Colo.*--Continued

Rainfall August 10-11, 1981, at station 3711111044494801 MO-D&B-3 precipitation station, in inches

DATE	TIME	RAINFALL	DATE	TIME	RAINFALL	DATE	TIME	RAINFALL
8-10	1515	0.02	8-11	0215	0.02	8-11	2040	0.01
8-10	1520	0.01	8-11	0220	0.01	8-11	2045	0.01
8-10	1525	0.03	8-11	0225	0.01	8-11	2050	0.02
8-10	1530	0.04	8-11	0230	0.01	8-11	2055	0.03
8-10	1535	0.14	8-11	0235	0.01	8-11	2100	0.01
8-10	1540	0.12	8-11	0315	0.01	8-11	2105	0.02
8-10	1545	0.10	8-11	1725	0.21	8-11	2110	0.01
8-10	1550	0.22	8-11	1730	0.10	8-11	2125	0.01
8-10	1555	0.45	8-11	1735	0.05	8-11	2135	0.01
8-10	1600	0.40	8-11	1740	0.02	8-11	2140	0.01
8-10	1605	0.28	8-11	1745	0.01	8-11	2145	0.01
8-10	1610	0.24	8-11	1750	0.02	8-11	2150	0.01
8-10	1615	0.10	8-11	1755	0.02	8-11	2155	0.02
8-10	1620	0.04	8-11	1800	0.01	8-11	2200	0.01
8-10	1625	0.03	8-11	1805	0.01	8-11	2205	0.01
8-10	1630	0.01	8-11	1810	0.01	8-11	2210	0.02
8-10	1635	0.01	8-11	1815	0.01	8-11	2215	0.02
8-10	1640	0.02	8-11	1820	0.02	8-11	2220	0.02
8-10	1645	0.03	8-11	1825	0.03	8-11	2225	0.03
8-10	1650	0.02	8-11	1830	0.04	8-11	2230	0.02
8-10	1655	0.02	8-11	1835	0.11	8-11	2235	0.01
8-10	1700	0.02	8-11	1840	0.07	8-11	2240	0.01
8-10	1705	0.01	8-11	1845	0.06	8-11	2245	0.01
8-10	1715	0.01	8-11	1850	0.01	8-11	2250	0.01
8-10	1725	0.01	8-11	1925	0.02	8-11	2255	0.02
8-10	1745	0.01	8-11	1930	0.02	8-11	2300	0.02
8-10	1755	0.01	8-11	1935	0.01	8-11	2305	0.03
8-10	1805	0.01	8-11	1940	0.01	8-11	2310	0.02
8-10	1810	0.01	8-11	1945	0.01	8-11	2315	0.02
			8-11	1950	0.01	8-11	2320	0.03
			8-11	1955	0.02	8-11	2325	0.02
8-11	0005	0.01	8-11	2000	0.02	8-11	2330	0.03
8-11	0150	0.01	8-11	2005	0.02	8-11	2335	0.02
8-11	0155	0.02	8-11	2010	0.01	8-11	2340	0.01
8-11	0200	0.01	8-11	2015	0.01	8-11	2345	0.01
8-11	0205	0.01	8-11	2020	0.01	8-11	2350	0.01
8-11	0210	0.01	8-11	2025	0.01	8-11	2400	0.01
			8-11	2035	0.01			

STORM TOTAL = 4.16

DURATION	5 MIN	15 MIN	30 MIN	1 HR
TIME	1550	1550	1540	1520
DEPTH	0.45	1.13	1.69	2.16
INTENSITY	5.40	4.52	3.38	2.16

Table 35.--*Selected rainfall-runoff events at Carpios Canyon near Jansen, Colo.*

LOCATION.--Lat 37°09'13", long 104°34'02", in NE¼SW¼ sec. 21, T. 33 S., R. 64 W., Las Animas County, Hydrologic Unit 11020010, on right bank, 0.3 mi (0.5 km) upstream from State Highway 12, 0.6 mi (1.0 km) upstream from mouth, at Trinidad Lake, and 1.8 mi (2.9 km) west of Jansen.

DRAINAGE AREA.--4.57 mi^2 (11.84 km^2).

Discharge July 2, 1980, at station 07124350 Carpios Canyon near Jansen, Colo., in cubic feet per second

DATE	TIME	DISCHARGE	DATE	TIME	DISCHARGE	DATE	TIME	DISCHARGE
7-02	1500	18	7-02	1620	3.4	7-02	1745	0.6
7-02	1505	16	7-02	1625	3.1	7-02	1750	0.6
7-02	1510	15	7-02	1630	2.7	7-02	1755	0.6
7-02	1515	13	7-02	1635	2.5	7-02	1840	0.5
7-02	1520	12	7-02	1640	2.2	7-02	1805	0.4
7-02	1525	10	7-02	1645	2.0	7-02	1810	0.4
7-02	1530	8.9	7-02	1650	1.8	7-02	1815	0.4
7-02	1535	8.2	7-02	1655	1.5	7-02	1820	0.3
7-02	1540	7.6	7-02	1700	1.3	7-02	1825	0.2
7-02	1545	6.9	7-02	1705	1.2	7-02	1830	0.2
7-02	1550	6.2	7-02	1710	1.1	7-02	1835	0.2
7-02	1555	5.6	7-02	1715	1.0	7-02	1840	0.2
7-02	1600	1.9	7-02	1720	1.0	7-02	1845	0.2
7-02	1605	1.5	7-02	1725	0.9	7-02	1850	0.1
7-02	1610	1.2	7-02	1730	0.8	7-02	1855	0.1
7-02	1615	3.8	7-02	1735	0.8	7-02	1900	0.1
			7-02	1740	0.7			

Table 35.--*Selected rainfall-runoff events at Carpios Canyon near Jansen, Colo.*--Continued

Rainfall July 2, 1980, at station 371025104352801 C-D&B-3 precipitation station, in inches

DATE	TIME	RAINFALL	DATE	TIME	RAINFALL	DATE	TIME	RAINFALL
7-02	1420	0.04	7-02	1425	0.36	7-02	1430	0.06

STORM TOTAL = 0.46

DURATION	5 MIN	15 MIN	30 MIN	1 HR
TIME	1420	1415	1415	1415
DEPTH	0.36	0.46	0.46	0.46
INTENSITY	4.32	1.84	0.92	0.46

Table 35.--*Selected rainfall-runoff events at Carpios Canyon near Jansen, Colo.*--Continued

Discharge August 17-18, 1984, at station 07124350 Carpios Canyon near Jansen, Colo., in cubic feet per second

DATE	TIME	DISCHARGE	DATE	TIME	DISCHARGE	DATE	TIME	DISCHARGE
8-17	2300	4.4	8-18	0015	0.2	8-18	0140	0.1
8-17	2305	3.4	8-18	0020	0.2	8-18	0145	0.1
8-17	2310	2.5	8-18	0025	0.1	8-18	0150	0.1
8-17	2315	1.6	8-18	0030	0.1	8-18	0155	0.1
8-17	2320	0.6	8-18	0035	0.1	8-18	0200	0.1
8-17	2325	0.6	8-18	0040	0.1	8-18	0205	0.1
8-17	2330	0.6	8-18	0045	0.1	8-18	0210	0.1
8-17	2335	0.6	8-18	0050	0.1	8-18	0215	0.1
8-17	2340	0.6	8-18	0055	0.1	8-18	0220	0.1
8-17	2345	0.6	8-18	0100	0.1	8-18	0225	0.1
8-17	2350	0.6	8-18	0105	0.1	8-18	0230	0.1
8-17	2355	0.6	8-18	0110	0.1	8-18	0235	0.1
8-17	2400	0.6	8-18	0115	0.1	8-18	0240	0.1
			8-18	0120	0.1	8-18	0245	0.1
			8-18	0125	0.1	8-18	0250	0.1
8-18	0005	0.5	8-18	0130	0.1	8-18	0255	0.1
8-18	0010	0.3	8-18	0135	0.1	8-18	0300	0.1

Table 35.--*Selected rainfall-runoff events at Carpios Canyon near Jansen, Colo.*--Continued

Rainfall August 17, 1980, at station 07124350 C-D&B-4 precipitation station, in inches

DATE	TIME	RAINFALL	DATE	TIME	RAINFALL	DATE	TIME	RAINFALL
			8-17	2400	0.60			

STORM TOTAL = 0.60

DURATION	5 MIN	15 MIN	30 MIN	1 HR
TIME	2355			
DEPTH	0.60	0.0	0.0	0.0
INTENSITY	7.20	0.0	0.0	0.0

Table 35.--*Selected rainfall-runoff events at Carpios Canyon near Jansen, Colo.*--Continued

Rainfall August 17, 1980, at station 37102510435280 C-D&B-3 precipitation station, in inches

DATE	TIME	RAINFALL	DATE	TIME	RAINFALL	DATE	TIME	RAINFALL
8-17	1025	0.01	8-17	1510	0.02	8-17	1525	0.02
			8-17	1515	0.03			
			8-17	1520	0.02			

STORM TOTAL = 0.10

DURATION	5 MIN	15 MIN	30 MIN	1 HR
TIME	1510	1505	1505	1505
DEPTH	0.03	0.07	0.09	0.09
INTENSITY	0.36	0.28	0.18	0.09

Table 35.--*Selected rainfall-runoff events at Carpios Canyon near Jansen, Colo.*--Continued

Discharge June 2-3, 1981, at station 07124350 Carpios Canyon near Jansen, Colo., in cubic feet per second

DATE	TIME	DISCHARGE	DATE	TIME	DISCHARGE	DATE	TIME	DISCHARGE
6-02	1800	68	6-02	2040	4.4	6-02	2300	0.6
6-02	1805	74	6-02	2045	4.0	6-02	2305	0.6
6-02	1810	80	6-02	2050	3.5	6-02	2310	0.6
6-02	1815	86	6-02	2055	3.1	6-02	2315	0.5
6-02	1820	91	6-02	2100	2.7	6-02	2320	0.5
6-02	1825	91	6-02	2105	2.5	6-02	2325	0.5
6-02	1830	103	6-02	2110	2.4	6-02	2330	0.5
6-02	1835	90	6-02	2115	2.2	6-02	2335	0.4
6-02	1840	77	6-02	2120	2.0	6-02	2340	0.3
6-02	1845	64	6-02	2125	1.9	6-02	2345	0.2
6-02	1850	52	6-02	2130	1.7	6-02	2350	0.1
6-02	1855	39	6-02	2135	1.6	6-02	2355	0.1
6-02	1900	26	6-02	2140	1.6	6-02	2400	0.1
6-02	1905	24	6-02	2145	1.5			
6-02	1910	22	6-02	2150	1.4			
6-02	1915	20	6-02	2155	1.4	6-03	0005	0.1
6-02	1920	18	6-02	2200	1.3	6-03	0010	0.1
6-02	1925	16	6-02	2205	1.2	6-03	0015	0.1
6-02	1930	8.4	6-02	2210	1.1	6-03	0020	0.1
6-02	1935	7.9	6-02	2215	1.0	6-03	0025	0.1
6-02	1940	7.3	6-02	2220	0.9	6-03	0030	0.1
6-02	1945	6.8	6-02	2225	0.8	6-03	0035	0.1
6-02	1950	6.3	6-02	2230	0.7	6-03	0040	0.1
6-02	1955	5.7	6-02	2235	0.7	6-03	0045	0.1
			6-02	2240	0.7	6-03	0050	0.1
6-02	2030	5.2	6-02	2245	0.7	6-03	0055	0.1
6-02	2035	4.8	6-02	2250	0.6	6-03	0100	0.1
			6-02	2255	0.6			

Table 35.--*Selected rainfall-runoff events at Carpios Canyon near Jansen, Colo.*--Continued

Rainfall June 2-3, 1981, at station 07124350 C-D&B-4 precipitation station, in inches

DATE	TIME	RAINFALL	DATE	TIME	RAINFALL	DATE	TIME	RAINFALL
6-02	0115	0.01	6-02	1740	0.16			
6-02	1720	0.01	6-02	1745	0.02			
6-02	1725	0.02	6-02	1750	0.23	6-03	1355	0.01
6-02	1730	0.04	6-02	1755	0.30	6-03	1430	0.01
6-02	1735	0.07	6-02	1800	0.50	6-03	1500	0.01
			6-02	1805	0.02			
			6-02	1855	0.01			

STORM TOTAL = 1.42

DURATION	5 MIN	15 MIN	30 MIN	1 HR
TIME	1755	1745	1730	1715
DEPTH	0.50	1.03	1.28	1.37
INTENSITY	6.00	4.12	2.56	1.37

Table 35.--*Selected rainfall-runoff events at Carpios Canyon near Jansen, Colo.*--Continued

Rainfall June 2-3, 1981, at station 37102510435280 C-D&B-3 precipitation station, in inches

DATE	TIME	RAINFALL	DATE	TIME	RAINFALL	DATE	TIME	RAINFALL
6-02	0855	0.01	6-02	1755	0.02	6-03	0910	0.01
6-02	1725	0.13	6-02	1800	0.01	6-03	1415	0.01
6-02	1730	0.15	6-02	1805	0.01	6-03	1425	0.01
6-02	1735	0.10	6-02	1810	0.01	6-03	1440	0.01
6-02	1740	0.09	6-02	1820	0.01	6-03	1505	0.01
6-02	1745	0.07	6-02	1840	0.01	6-03	1515	0.01
6-02	1750	0.03				6-03	1545	0.01

STORM TOTAL = 0.72

DURATION	5 MIN	15 MIN	30 MIN	1 HR
TIME	1725	1720	1720	1720
DEPTH	0.15	0.38	0.57	0.63
INTENSITY	1.80	1.52	1.14	0.63

Table 35.--*Selected rainfall-runoff events at Carpios Canyon near Jansen, Colo.*--Continued

Discharge July 3-4, 1981, at station 07124350 Carpios Canyon near Jansen, Colo., in cubic feet per second

DATE	TIME	DISCHARGE	DATE	TIME	DISCHARGE	DATE	TIME	DISCHARGE
7-03	0030	0.1	7-03	0440	0.1	7-03	0850	2.0
7-03	0035	0.1	7-03	0445	0.1	7-03	0855	1.8
7-03	0040	0.1	7-03	0450	0.1	7-03	0900	1.6
7-03	0045	0.1	7-03	0455	0.1	7-03	0905	1.5
7-03	0050	0.1	7-03	0500	0.1	7-03	0910	1.3
7-03	0055	0.1	7-03	0505	10	7-03	0915	1.2
7-03	0100	0.1	7-03	0510	21	7-03	0920	1.1
7-03	0105	0.1	7-03	0515	31	7-03	0925	0.9
7-03	0110	0.1	7-03	0520	42	7-03	0930	0.8
7-03	0115	0.1	7-03	0525	52	7-03	0935	0.8
7-03	0120	0.1	7-03	0530	62	7-03	0940	0.7
7-03	0125	0.1	7-03	0535	73	7-03	0945	0.6
7-03	0130	0.1	7-03	0540	83	7-03	0950	0.6
7-03	0135	0.1	7-03	0545	74	7-03	0955	0.6
7-03	0140	0.1	7-03	0550	64	7-03	1000	0.5
7-03	0145	0.1	7-03	0555	55	7-03	1005	0.4
7-03	0150	0.1	7-03	0600	46	7-03	1010	0.4
7-03	0155	0.1	7-03	0605	41	7-03	1015	0.3
7-03	0200	0.1	7-03	0610	36	7-03	1020	0.2
7-03	0205	0.1	7-03	0615	32	7-03	1025	0.2
7-03	0210	0.1	7-03	0620	27	7-03	1030	0.1
7-03	0215	0.1	7-03	0625	22			
7-03	0220	0.1	7-03	0630	17			
7-03	0225	0.1	7-03	0635	16	7-04	0005	8.1
7-03	0230	0.1	7-03	0640	14	7-04	0010	28
7-03	0235	0.1	7-03	0645	13	7-04	0015	48
7-03	0240	0.1	7-03	0650	11	7-04	0020	69
7-03	0245	0.1	7-03	0655	9.8	7-04	0025	89
7-03	0250	0.1	7-03	0700	8.4	7-04	0030	129
7-03	0255	0.1	7-03	0705	8.0	7-04	0035	116
7-03	0300	0.1	7-03	0710	7.7	7-04	0040	102
7-03	0305	0.1	7-03	0715	7.3	7-04	0045	89
7-03	0310	0.1	7-03	0720	6.9	7-04	0050	76
7-03	0315	0.1	7-03	0725	6.6	7-04	0055	62
7-03	0320	0.1	7-03	0730	6.2	7-04	0100	49
7-03	0325	0.1	7-03	0735	5.7	7-04	0105	44
7-03	0330	0.1	7-03	0740	5.2	7-04	0110	38
7-03	0335	0.1	7-03	0745	4.8	7-04	0115	33
7-03	0340	0.1	7-03	0750	4.3	7-04	0120	28
7-03	0345	0.1	7-03	0755	3.8	7-04	0125	22
7-03	0350	0.1	7-03	0800	3.3	7-04	0130	17
7-03	0355	0.1	7-03	0805	3.2	7-04	0135	16
7-03	0400	0.1	7-03	0810	3.1	7-04	0140	15
7-03	0405	0.1	7-03	0815	3.0	7-04	0145	14
7-03	0410	0.1	7-03	0820	2.9	7-04	0150	12
7-03	0415	0.1	7-03	0825	2.8	7-04	0155	11
7-03	0420	0.1	7-03	0830	2.7	7-04	0200	10
7-03	0425	0.1	7-03	0835	2.5	7-04	0205	9.3
7-03	0430	0.1	7-03	0840	2.3	7-04	0210	8.6
7-03	0435	0.1	7-03	0845	2.2	7-04	0215	7.9

Table 35.--*Selected rainfall-runoff events at Carpios Canyon near Jansen, Colo.*--Continued

Discharge July 3-4, 1981, at station 07124350 Carpios Canyon near Jansen, Colo., in cubic feet per second--Continued

DATE	TIME	DISCHARGE	DATE	TIME	DISCHARGE	DATE	TIME	DISCHARGE
7-04	0220	7.2	7-04	0415	1.2	7-04	0610	0.5
7-04	0225	6.5	7-04	0420	1.1	7-04	0615	0.4
7-04	0230	5.8	7-04	0425	1.1	7-04	0620	0.4
7-04	0235	5.5	7-04	0430	1.0	7-04	0625	0.4
7-04	0240	5.2	7-04	0435	1.0	7-04	0630	0.4
7-04	0245	4.9	7-04	0440	0.9	7-04	0635	0.4
7-04	0250	4.6	7-04	0445	0.8	7-04	0640	0.4
7-04	0255	4.3	7-04	0450	0.8	7-04	0645	0.4
7-04	0300	4.0	7-04	0455	0.8	7-04	0650	0.4
7-04	0305	3.8	7-04	0500	0.7	7-04	0655	0.4
7-04	0310	3.5	7-04	0505	0.7	7-04	0700	0.4
7-04	0315	3.2	7-04	0510	0.6	7-04	0705	0.4
7-04	0320	3.0	7-04	0515	0.6	7-04	0710	0.4
7-04	0325	2.8	7-04	0520	0.6	7-04	0715	0.4
7-04	0330	2.5	7-04	0525	0.5	7-04	0720	0.3
7-04	0335	2.3	7-04	0530	0.5	7-04	0725	0.3
7-04	0340	2.1	7-04	0535	0.5	7-04	0730	0.3
7-04	0345	2.0	7-04	0540	0.5	7-04	0735	0.3
7-04	0350	1.8	7-04	0545	0.5	7-04	0740	0.3
7-04	0355	1.6	7-04	0550	0.5	7-04	0745	0.3
7-04	0400	1.4	7-04	0555	0.5	7-04	0750	0.3
7-04	0405	1.3	7-04	0600	0.5	7-04	0755	0.3
7-04	0410	1.3	7-04	0605	0.5	7-04	0800	0.3

Table 35.--*Selected rainfall-runoff events at Carpios Canyon near Jansen, Colo.*--Continued

Rainfall July 3-4, 1981, at station 07124350 C-D&B-4 precipitation station, in inches

DATE	TIME	RAINFALL	DATE	TIME	RAINFALL	DATE	TIME	RAINFALL
7-03	0005	0.01	7-03	0225	0.01	7-03	0520	0.02
7-03	0010	0.01	7-03	0240	0.01	7-03	0525	0.01
7-03	0020	0.01	7-03	0300	0.01	7-03	0530	0.01
7-03	0035	0.01	7-03	0310	0.01	7-03	0535	0.01
7-03	0045	0.01	7-03	0340	0.01	7-03	0615	0.01
7-03	0100	0.02	7-03	0350	0.01	7-03	1720	0.01
7-03	0105	0.02	7-03	0400	0.01	7-03	2330	0.20
7-03	0110	0.02	7-03	0405	0.01	7-03	2335	0.03
7-03	0115	0.11	7-03	0410	0.06	7-03	2340	0.03
7-03	0120	0.06	7-03	0415	0.09	7-03	2345	0.01
7-03	0125	0.02	7-03	0420	0.04	7-03	2350	0.17
7-03	0130	0.01	7-03	0425	0.02	7-03	2355	0.09
7-03	0140	0.01	7-03	0430	0.02			
7-03	0145	0.01	7-03	0435	0.13			
7-03	0150	0.01	7-03	0440	0.04	7-04	0005	0.19
7-03	0155	0.02	7-03	0445	0.02	7-04	0010	0.14
7-03	0200	0.03	7-03	0450	0.06	7-04	0015	0.04
7-03	0205	0.03	7-03	0455	0.03	7-04	0020	0.03
7-03	0210	0.04	7-03	0500	0.02	7-04	0025	0.05
7-03	0215	0.07	7-03	0505	0.03	7-04	0030	0.01
7-03	0220	0.01	7-03	0510	0.02	7-04	0120	0.01
			7-03	0515	0.02			

STORM TOTAL = 2.29

DURATION	5 MIN	15 MIN	30 MIN	1 HR
TIME	2325	2400	2345	2325
DEPTH	0.20	0.37	0.63	0.98
INTENSITY	2.40	1.48	1.26	0.98

Table 35.--*Selected rainfall-runoff events at Carpios Canyon near Jansen, Colo.*--Continued

Rainfall July 3-4, 1981, at station 37102510435280 C-D&B-3 precipitation station, in inches

DATE	TIME	RAINFALL	DATE	TIME	RAINFALL	DATE	TIME	RAINFALL
7-03	0005	0.01	7-03	0340	0.01	7-03	0525	0.01
7-03	0030	0.01	7-03	0350	0.01	7-03	0535	0.01
7-03	0050	0.01	7-03	0400	0.05	7-03	0555	0.01
7-03	0140	0.01	7-03	0405	0.13	7-03	0945	0.01
7-03	0150	0.01	7-03	0410	0.15	7-03	2330	0.01
7-03	0155	0.01	7-03	0415	0.06	7-03	2335	0.03
7-03	0200	0.01	7-03	0420	0.06	7-03	2340	0.05
7-03	0205	0.01	7-03	0425	0.06	7-03	2345	0.07
7-03	0210	0.01	7-03	0430	0.05	7-03	2350	0.15
7-03	0215	0.01	7-03	0435	0.03	7-03	2355	0.08
7-03	0220	0.01	7-03	0440	0.05			
7-03	0225	0.01	7-03	0445	0.04			
7-03	0235	0.01	7-03	0450	0.02	7-04	0005	0.03
7-03	0240	0.01	7-03	0455	0.02	7-04	0010	0.07
7-03	0245	0.01	7-03	0500	0.02	7-04	0015	0.03
7-03	0255	0.02	7-03	0505	0.01	7-04	0020	0.01
7-03	0300	0.01	7-03	0510	0.02	7-04	0025	0.01
7-03	0315	0.01	7-03	0515	0.02	7-04	0315	0.01
7-03	0335	0.01	7-03	0520	0.02	7-04	0930	0.01

STORM TOTAL = 1.63

DURATION	5 MIN	15 MIN	30 MIN	1 HR
TIME	0405	0400	0355	0355
DEPTH	0.15	0.34	0.51	0.72
INTENSITY	1.80	1.36	1.02	0.72

Table 35.--*Selected rainfall-runoff events at Carpios Canyon near Jansen, Colo.*--Continued

Discharge July 17, 1981, at station 07124350 Carpios Canyon near Jansen, Colo., in cubic feet per second

DATE	TIME	DISCHARGE	DATE	TIME	DISCHARGE	DATE	TIME	DISCHARGE
7-17	1500	0.2	7-17	1640	11	7-17	1825	0.3
7-17	1505	0.2	7-17	1645	9.9	7-17	1830	0.8
7-17	1510	0.2	7-17	1650	8.6	7-17	1835	0.7
7-17	1515	0.2	7-17	1655	7.5	7-17	1840	0.6
7-17	1520	0.2	7-17	1700	6.2	7-17	1845	0.6
7-17	1525	12	7-17	1705	5.8	7-17	1850	0.5
7-17	1530	0.2	7-17	1710	5.2	7-17	1855	0.4
7-17	1535	24	7-17	1715	4.6	7-17	1900	0.4
7-17	1540	47	7-17	1720	4.1	7-17	1905	0.3
7-17	1545	44	7-17	1725	3.8	7-17	1910	0.2
7-17	1550	42	7-17	1730	3.6	7-17	1915	0.2
7-17	1555	39	7-17	1735	3.3	7-17	1920	0.1
7-17	1600	36	7-17	1740	3.0	7-17	1925	0.1
7-17	1605	31	7-17	1745	2.8	7-17	1930	0.1
7-17	1610	26	7-17	1750	2.6	7-17	1935	0.1
7-17	1615	22	7-17	1755	2.4	7-17	1940	0.1
7-17	1620	17	7-17	1800	2.2	7-17	1945	0.1
7-17	1625	16	7-17	1805	1.9	7-17	1950	0.1
7-17	1630	14	7-17	1810	1.6	7-17	1955	0.1
7-17	1635	12	7-17	1815	1.2	7-17	2000	0.1
			7-17	1820	0.9			

Table 35.--*Selected rainfall-runoff events at Carpios Canyon near Jansen, Colo.*--Continued

Rainfall July 17, 1981, at station 07124350 C-D&B-4 precipitation station, in inches

DATE	TIME	RAINFALL	DATE	TIME	RAINFALL	DATE	TIME	RAINFALL
7-17	0505	0.01	7-17	1340	0.03	7-17	1405	0.02
7-17	1325	0.01	7-17	1345	0.04	7-17	1410	0.01
7-17	1335	0.01	7-17	1350	0.03	7-17	1415	0.01
			7-17	1355	0.01			
			7-17	1400	0.11			

STORM TOTAL = 0.29

DURATION	5 MIN	15 MIN	30 MIN	1 HR
TIME	1355	1345	1335	1320
DEPTH	0.11	0.15	0.24	0.28
INTENSITY	1.32	0.60	0.48	0.28

Table 35.--*Selected rainfall-runoff events at Carpios Canyon near Jansen, Colo.*--Continued

Rainfall July 17, 1981, at station 37102510435280 C-D&B-3 precipitation station, in inches

DATE	TIME	RAINFALL	DATE	TIME	RAINFALL	DATE	TIME	RAINFALL
7-17	0025	0.01	7-17	1055	0.10	7-17	1355	0.19
7-17	0720	0.01	7-17	1100	0.05	7-17	1435	0.01
7-17	1050	0.01	7-17	1105	0.02	7-17	1720	0.01
			7-17	1110	0.01			

STORM TOTAL = 0.41

DURATION	5 MIN	15 MIN	30 MIN	1 HR
TIME	1350	1350	1045	1350
DEPTH	0.18	0.18	0.19	0.19
INTENSITY	2.16	0.72	0.38	0.19

Table 35.--*Selected rainfall-runoff events at Carpios Canyon near Jansen, Colo.*--Continued

Discharge July 26-27, 1981, at station 07124350 Carpios Canyon near Jansen, Colo., in cubic feet per second

DATE	TIME	DISCHARGE	DATE	TIME	DISCHARGE	DATE	TIME	DISCHARGE
7-26	1200	6.3	7-26	1635	663	7-26	2045	3.5
7-26	1205	11	7-26	1640	438	7-26	2050	3.5
7-26	1210	15	7-26	1645	212	7-26	2055	3.2
7-26	1215	19	7-26	1650	196	7-26	2100	3.0
7-26	1220	18	7-26	1655	180	7-26	2105	7.8
7-26	1225	16	7-26	1700	164	7-26	2110	2.6
7-26	1230	16	7-26	1705	139	7-26	2115	2.4
7-26	1235	15	7-26	1710	114	7-26	2120	2.4
7-26	1240	14	7-26	1715	89	7-26	2125	2.3
7-26	1245	13	7-26	1720	78	7-26	2130	2.3
7-26	1250	12	7-26	1725	68	7-26	2135	2.2
7-26	1255	11	7-26	1730	57	7-26	2140	2.1
7-26	1300	9.7	7-26	1735	50	7-26	2145	2.0
7-26	1305	9.3	7-26	1740	44	7-26	2150	1.8
7-26	1310	8.7	7-26	1745	37	7-26	2155	1.7
7-26	1315	8.1	7-26	1750	31	7-26	2200	1.5
7-26	1320	7.4	7-26	1755	26	7-26	2205	1.4
7-26	1325	6.8	7-26	1800	20	7-26	2210	1.4
7-26	1330	6.1	7-26	1805	18	7-26	2215	1.3
7-26	1335	5.9	7-26	1810	17	7-26	2220	1.3
7-26	1340	5.7	7-26	1815	15	7-26	2225	1.2
7-26	1345	5.6	7-26	1820	13	7-26	2230	1.2
7-26	1350	5.4	7-26	1825	10	7-26	2235	1.2
7-26	1355	5.3	7-26	1830	7.9	7-26	2240	1.1
7-26	1400	5.1	7-26	1835	9.9	7-26	2245	1.1
7-26	1405	4.8	7-26	1840	12	7-26	2250	1.0
7-26	1410	4.6	7-26	1845	14	7-26	2255	0.9
7-26	1415	4.3	7-26	1850	13	7-26	2300	0.9
7-26	1420	4.1	7-26	1855	13	7-26	2305	0.7
7-26	1425	4.0	7-26	1900	12	7-26	2310	0.7
7-26	1430	3.8	7-26	1905	11	7-26	2315	0.6
7-26	1435	3.7	7-26	1910	10	7-26	2320	0.6
7-26	1440	3.6	7-26	1915	9.0	7-26	2325	0.5
7-26	1445	3.5	7-26	1920	8.7	7-26	2330	0.5
7-26	1450	3.5	7-26	1925	8.5	7-26	2335	0.5
7-26	1455	3.4	7-26	1930	8.2	7-26	2340	0.5
7-26	1500	56	7-26	1935	7.4	7-26	2345	0.5
7-26	1505	962	7-26	1940	6.7	7-26	2350	0.5
7-26	1510	1867	7-26	1945	5.9	7-26	2355	0.5
7-26	1515	2773	7-26	1950	5.7	7-26	2400	0.7
7-26	1520	2145	7-26	1955	5.6			
7-26	1525	1517	7-26	2000	5.4			
7-26	1530	2.6	7-26	2005	5.1	7-27	0005	0.7
7-26	1535	2.5	7-26	2010	4.7	7-27	0010	0.6
7-26	1540	2.5	7-26	2015	4.4	7-27	0015	0.6
7-26	1545	2.4	7-26	2020	4.2	7-27	0020	0.6
7-26	1550	2.4	7-26	2025	4.1	7-27	0025	0.6
7-26	1555	2.4	7-26	2030	3.9	7-27	0030	0.6
			7-26	2035	3.8	7-27	0035	0.6
7-26	1630	889	7-26	2040	3.6	7-27	0040	0.6

Table 35.--*Selected rainfall-runoff events at Carpios Canyon near Jansen, Colo.*--Continued

Discharge July 26-27, 1981, at station 07124350 Carpios Canyon near Jansen, Colo., in cubic feet per second--Continued

DATE	TIME	DISCHARGE	DATE	TIME	DISCHARGE	DATE	TIME	DISCHARGE
7-27	0045	0.6	7-27	0210	0.2	7-27	0340	0.1
7-27	0050	0.6	7-27	0215	0.2	7-27	0345	0.1
7-27	0055	0.6	7-27	0220	0.2	7-27	0350	0.1
7-27	0100	0.6	7-27	0225	0.2	7-27	0355	0.1
7-27	0105	0.6	7-27	0230	0.2	7-27	0400	0.1
7-27	0110	0.6	7-27	0235	0.2	7-27	0405	0.1
7-27	0115	0.5	7-27	0240	0.2	7-27	0410	0.1
7-27	0120	0.5	7-27	0245	0.2	7-27	0415	0.1
7-27	0125	0.5	7-27	0250	0.2	7-27	0420	0.1
7-27	0130	0.4	7-27	0255	0.2	7-27	0425	0.1
7-27	0135	0.4	7-27	0300	0.2	7-27	0430	0.1
7-27	0140	0.4	7-27	0305	0.2	7-27	0435	0.1
7-27	0145	0.4	7-27	0310	0.2	7-27	0440	0.1
7-27	0150	0.4	7-27	0315	0.1	7-27	0445	0.1
7-27	0155	0.3	7-27	0320	0.1	7-27	0450	0.1
7-27	0200	0.3	7-27	0325	0.1	7-27	0455	0.1
7-27	0205	0.3	7-27	0330	0.1	7-27	0500	0.1
			7-27	0335	0.1			

Table 35.--*Selected rainfall-runoff events at Carpios Canyon near Jansen, Colo.*--Continued

Rainfall July 26-27, 1981, at station 07124350 C-D&B-4 precipitation station, in inches

DATE	TIME	RAINFALL	DATE	TIME	RAINFALL	DATE	TIME	RAINFALL
7-26	1205	0.01	7-26	1445	0.03	7-26	1740	0.01
7-26	1210	0.24	7-26	1455	0.01	7-26	1910	0.01
7-26	1215	0.54	7-26	1605	0.30	7-26	1925	0.01
7-26	1220	0.23	7-26	1610	0.23	7-26	1935	0.01
7-26	1225	0.03	7-26	1615	0.12	7-26	1940	0.01
7-26	1245	0.01	7-26	1620	0.01	7-26	1955	0.01
7-26	1415	0.01	7-26	1625	0.03			
7-26	1420	0.02	7-26	1635	0.04			
7-26	1425	0.09	7-26	1640	0.03	7-27	1455	0.01
7-26	1430	0.11	7-26	1645	0.09	7-27	1540	0.05
7-26	1435	0.06	7-26	1650	0.09	7-27	2020	0.01
			7-26	1655	0.05			
			7-26	1700	0.01			

STORM TOTAL = 2.52

DURATION	5 MIN	15 MIN	30 MIN	1 HR
TIME	1210	1205	1200	1200
DEPTH	0.54	1.01	1.05	1.06
INTENSITY	6.48	4.04	2.10	1.06

Table 35.--*Selected rainfall-runoff events at Carpios Canyon near Jansen, Colo.*--Continued

Rainfall July 26-27, 1981, at station 37102510435280 C-D&B-3 precipitation station, in inches

DATE	TIME	RAINFALL	DATE	TIME	RAINFALL	DATE	TIME	RAINFALL
7-26	0910	0.01	7-26	1550	0.08	7-26	1700	0.02
7-26	1220	0.01	7-26	1555	0.34	7-26	1710	0.01
7-26	1415	0.02	7-26	1600	0.23	7-26	1855	0.01
7-26	1420	0.04	7-26	1605	0.09	7-26	1915	0.01
7-26	1425	0.10	7-26	1610	0.15	7-26	1925	0.02
7-26	1430	0.04	7-26	1615	0.19	7-26	1935	0.01
7-26	1435	0.04	7-26	1620	0.03	7-26	1945	0.01
7-26	1440	0.03	7-26	1625	0.04			
7-26	1445	0.01	7-26	1630	0.03			
7-26	1450	0.01	7-26	1640	0.01	7-27	0800	0.01
7-26	1455	0.01	7-26	1645	0.04	7-27	1445	0.01
			7-26	1655	0.03			

STORM TOTAL = 1.69

DURATION	5 MIN	15 MIN	30 MIN	1 HR
TIME	1550	1550	1545	1545
DEPTH	0.34	0.66	1.08	1.23
INTENSITY	4.08	2.64	2.16	1.23

Table 35.--*Selected rainfall-runoff events at Carpios Canyon near Jansen, Colo.*--Continued

Discharge August 2-3, 1981, at station 07124350 Carpios Canyon near Jansen, Colo., in cubic feet per second

DATE	TIME	DISCHARGE	DATE	TIME	DISCHARGE	DATE	TIME	DISCHARGE
8-02	2140	0.1	8-03	0135	1.8	8-03	0540	0.4
8-02	2145	2.4	8-03	0140	1.7	8-03	0545	0.4
8-02	2150	4.8	8-03	0145	1.7	8-03	0550	0.4
8-02	2155	7.1	8-03	0150	1.6	8-03	0555	0.3
8-02	2200	9.4	8-03	0155	1.6	8-03	0600	0.3
8-02	2205	42	8-03	0200	1.6	8-03	0605	0.3
8-02	2210	75	8-03	0205	1.6	8-03	0610	0.2
8-02	2215	107	8-03	0210	1.6	8-03	0615	0.2
8-02	2220	140	8-03	0215	1.5	8-03	0620	0.2
8-02	2225	127	8-03	0220	1.5	8-03	0625	0.2
8-02	2230	114	8-03	0225	1.5	8-03	0630	0.2
8-02	2235	100	8-03	0230	1.4	8-03	0635	0.1
8-02	2240	87	8-03	0235	1.4	8-03	0640	0.1
8-02	2245	80	8-03	0240	1.4	8-03	0645	0.1
8-02	2250	73	8-03	0245	1.4	8-03	0650	0.1
8-02	2255	66	8-03	0250	1.3	8-03	0655	0.1
8-02	2300	59	8-03	0255	1.2	8-03	0700	0.1
8-02	2305	52	8-03	0300	1.1	8-03	0705	0.1
8-02	2310	44	8-03	0305	1.0	8-03	0710	0.1
8-02	2315	36	8-03	0310	1.0	8-03	0715	0.1
8-02	2320	29	8-03	0315	1.0	8-03	0720	0.1
8-02	2325	26	8-03	0320	0.9	8-03	0725	0.1
8-02	2330	22	8-03	0325	0.9	8-03	0730	0.1
8-02	2335	18	8-03	0330	0.8	8-03	0735	0.1
8-02	2340	15	8-03	0335	0.8	8-03	0740	0.1
8-02	2345	14	8-03	0340	0.8	8-03	0745	0.1
8-02	2350	12	8-03	0345	0.8	8-03	0750	0.1
8-02	2355	10	8-03	0350	0.8	8-03	0755	0.1
8-02	2400	9.3	8-03	0355	0.7	8-03	0800	0.1
			8-03	0400	0.7	8-03	0805	0.1
			8-03	0405	0.7	8-03	0810	0.1
8-03	0005	8.7	8-03	0410	0.6	8-03	0815	0.1
8-03	0010	8.2	8-03	0415	0.6	8-03	0820	0.1
8-03	0015	7.6	8-03	0420	0.6	8-03	0825	0.1
8-03	0020	7.0	8-03	0425	0.6	8-03	0830	0.1
8-03	0025	6.6	8-03	0430	0.6	8-03	0835	0.1
8-03	0030	6.2	8-03	0435	0.6	8-03	0840	0.1
8-03	0035	5.7	8-03	0440	0.6	8-03	0845	0.1
8-03	0040	5.3	8-03	0445	0.6	8-03	0850	0.1
8-03	0045	5.0	8-03	0450	0.6	8-03	0855	0.1
8-03	0050	4.8	8-03	0455	0.5	8-03	0900	0.1
8-03	0055	4.5	8-03	0500	0.5	8-03	0905	0.1
8-03	0100	4.2	8-03	0505	0.5	8-03	0910	0.1
8-03	0105	3.7	8-03	0510	0.5	8-03	0915	0.1
8-03	0110	3.2	8-03	0515	0.5	8-03	0920	0.1
8-03	0115	2.8	8-03	0520	0.5	8-03	0925	0.1
8-03	0120	2.3	8-03	0525	0.5	8-03	0930	0.1
8-03	0125	2.2	8-03	0530	0.5	8-03	0935	0.1
8-03	0130	2.0	8-03	0535	0.4	8-03	0940	0.1

Table 35.--*Selected rainfall-runoff events at Carpios Canyon near Jansen, Colo.*--Continued

Rainfall August 2-3, 1981, at station 07124350 C-D&B-4 precipitation station, in inches

DATE	TIME	RAINFALL	DATE	TIME	RAINFALL	DATE	TIME	RAINFALL
8-02	0200	0.01	8-02	2220	0.12	8-02	2255	0.01
8-02	2200	0.01	8-02	2225	0.04	8-02	2305	0.01
8-02	2205	0.02	8-02	2230	0.03			
8-02	2210	0.11	8-02	2235	0.01			
8-02	2215	0.28	8-02	2250	0.01	8-03	0530	0.01

STORM TOTAL = 0.67

DURATION	5 MIN	15 MIN	30 MIN	1 HR
TIME	2210	2205	2200	2155
DEPTH	0.28	0.51	0.60	0.64
INTENSITY	3.36	2.04	1.20	0.64

Table 35.--*Selected rainfall-runoff events at Carpios Canyon near Jansen, Colo.*--Continued

Rainfall August 2-3, 1981, at station 37102510435280 C-D&B-3 precipitation station, in inches

DATE	TIME	RAINFALL	DATE	TIME	RAINFALL	DATE	TIME	RAINFALL
8-02	0525	0.01	8-02	2210	0.08	8-02	2315	0.01
8-02	0945	0.01	8-02	2215	0.02			
8-02	2155	0.10	8-02	2220	0.03			
8-02	2200	0.09	8-02	2225	0.03	8-03	0050	0.01
8-02	2205	0.14	8-02	2230	0.01	8-03	1020	0.01
			8-02	2245	0.01			

STORM TOTAL = 0.56

DURATION	5 MIN	15 MIN	30 MIN	1 HR
TIME	2200	2150	2150	2150
DEPTH	0.14	0.33	0.46	0.51
INTENSITY	1.68	1.32	0.92	0.51

Table 35.--*Selected rainfall-runoff events at Carpios Canyon near Jansen, Colo.*--Continued

Discharge August 6-7, 1981 at station 07124350 Carpios Canyon near Jansen, Colo., in cubic feet per second

DATE	TIME	DISCHARGE	DATE	TIME	DISCHARGE	DATE	TIME	DISCHARGE
8-06	1940	0.9	8-06	2350	0.6	8-07	0350	20
8-06	1945	3.4	8-06	2355	0.6	8-07	0355	19
8-06	1950	6.0	8-06	2400	0.6			
8-06	1955	8.5				8-07	0430	10
8-06	2000	11				8-07	0435	9.5
8-06	2005	42	8-07	0005	0.6	8-07	0440	9.0
8-06	2010	74	8-07	0010	0.6	8-07	0445	8.4
8-06	2015	106	8-07	0015	0.6	8-07	0450	7.8
8-06	2020	137	8-07	0020	0.6	8-07	0455	7.2
8-06	2025	115	8-07	0025	0.6	8-07	0500	6.6
8-06	2030	94	8-07	0030	0.6	8-07	0505	6.5
8-06	2035	73	8-07	0035	0.6	8-07	0510	6.4
8-06	2040	52	8-07	0040	0.6	8-07	0515	6.4
8-06	2045	45	8-07	0045	0.6	8-07	0520	6.3
8-06	2050	38	8-07	0050	0.6	8-07	0525	6.0
8-06	2055	32	8-07	0055	0.5	8-07	0530	5.6
8-06	2100	25	8-07	0100	0.5	8-07	0535	5.2
8-06	2105	22	8-07	0105	0.5	8-07	0540	4.9
8-06	2110	18	8-07	0110	0.4	8-07	0545	4.7
8-06	2115	15	8-07	0115	0.4	8-07	0550	4.5
8-06	2120	12	8-07	0120	0.4	8-07	0555	4.3
8-06	2125	10	8-07	0125	0.4	8-07	0600	4.1
8-06	2130	9.0	8-07	0130	0.4	8-07	0605	3.8
8-06	2135	7.5	8-07	0135	0.4	8-07	0610	3.4
8-06	2140	6.0	8-07	0140	0.4	8-07	0615	3.0
8-06	2145	5.7	8-07	0145	0.4	8-07	0620	2.7
8-06	2150	5.4	8-07	0150	0.4	8-07	0625	2.6
8-06	2155	5.2	8-07	0155	0.4	8-07	0630	2.6
8-06	2200	4.9	8-07	0200	0.4	8-07	0635	2.6
8-06	2205	4.5	8-07	0205	0.7	8-07	0640	2.5
8-06	2210	5.0	8-07	0210	1.0	8-07	0645	2.3
8-06	2215	3.6	8-07	0215	1.2	8-07	0650	2.0
8-06	2220	3.2	8-07	0220	1.5	8-07	0655	1.8
8-06	2225	2.8	8-07	0225	13	8-07	0700	1.6
8-06	2230	2.5	8-07	0230	25	8-07	0705	1.5
8-06	2235	2.2	8-07	0235	37	8-07	0710	1.4
8-06	2240	1.8	8-07	0240	49	8-07	0715	1.4
8-06	2245	1.8	8-07	0245	72	8-07	0720	1.3
8-06	2250	1.7	8-07	0250	95	8-07	0725	1.2
8-06	2255	1.6	8-07	0255	118	8-07	0730	1.2
8-06	2300	1.6	8-07	0300	141	8-07	0735	1.1
8-06	2305	1.4	8-07	0305	118	8-07	0740	1.0
8-06	2310	1.3	8-07	0310	94	8-07	0745	1.0
8-06	2315	1.2	8-07	0315	71	8-07	0750	0.9
8-06	2320	1.0	8-07	0320	48	8-07	0755	0.8
8-06	2325	0.9	8-07	0325	42	8-07	0810	0.8
8-06	2330	0.8	8-07	0330	36	8-07	0845	0.8
8-06	2335	0.8	8-07	0335	30	8-07	0810	0.7
8-06	2340	0.7	8-07	0340	24	8-07	0815	0.6
8-06	2345	0.7	8-07	0345	22	8-07	0820	0.6

Table 35.--*Selected rainfall-runoff events at Carpios Canyon near Jansen, Colo.*--Continued

Discharge August 6-7, 1981, at station 07124350 Carpios Canyon near Jansen, Colo., in cubic feet per second--Continued

DATE	TIME	DISCHARGE	DATE	TIME	DISCHARGE	DATE	TIME	DISCHARGE
8-07	0825	0.6	8-07	1000	0.3	8-07	1825	23
8-07	0830	0.6	8-07	1005	0.3	8-07	1830	34
8-07	0835	0.6	8-07	1010	0.2	8-07	1835	107
8-07	0840	0.6	8-07	1015	0.2	8-07	1840	180
8-07	0845	0.6	8-07	1020	0.2	8-07	1845	253
8-07	0850	0.6	8-07	1025	0.2	8-07	1850	554
8-07	0855	0.5	8-07	1030	0.2	8-07	1855	854
8-07	0900	0.5	8-07	1035	0.1	8-07	1900	1155
8-07	0905	0.5	8-07	1040	0.1	8-07	1905	1843
8-07	0910	0.4	8-07	1045	0.1	8-07	1910	3572
8-07	0915	0.4	8-07	1050	0.1	8-07	1915	5300
8-07	0920	0.4	8-07	1055	0.1	8-07	1920	3598
8-07	0925	0.4	8-07	1100	0.1	8-07	1925	1896
8-07	0930	0.4	8-07	1105	0.1	8-07	1930	194
8-07	0935	0.4	8-07	1110	0.1	8-07	1935	169
8-07	0940	0.4	8-07	1115	0.1	8-07	1940	144
8-07	0945	0.4	8-07	1120	0.1	8-07	1945	119
8-07	0950	0.4				8-07	1950	113
8-07	0955	0.3	8-07	1815	0.3	8-07	1955	106
			8-07	1820	12			

Table 35.--*Selected rainfall-runoff events at Carpios Canyon near Jansen, Colo.*--Continued

Rainfall August 6-7, 1981, at station 07124350 C-D&B-4 precipitation station, in inches

DATE	TIME	RAINFALL	DATE	TIME	RAINFALL	DATE	TIME	RAINFALL
8-06	1700	0.01				8-07	0320	0.02
8-06	1925	0.01				8-07	0325	0.01
8-06	1940	0.01	8-07	0215	0.04	8-07	0330	0.01
8-06	1955	0.06	8-07	0220	0.07	8-07	0335	0.02
8-06	2000	0.29	8-07	0225	0.09	8-07	0340	0.01
8-06	2005	0.14	8-07	0230	0.05	8-07	0345	0.01
8-06	2010	0.19	8-07	0235	0.05	8-07	0350	0.02
8-06	2015	0.06	8-07	0240	0.02	8-07	0355	0.01
8-06	2020	0.03	8-07	0245	0.01	8-07	0400	0.01
8-06	2120	0.01	8-07	0300	0.01	8-07	0420	0.01
			8-07	0315	0.01			

STORM TOTAL = 1.29

DURATION	5 MIN	15 MIN	30 MIN	1 HR
TIME	1955	1955	1950	1920
DEPTH	0.29	0.62	0.77	0.79
INTENSITY	3.48	2.48	1.54	0.79

Table 35.--*Selected rainfall-runoff events at Carpios Canyon near Jansen, Colo.*--Continued

Rainfall August 6-7, 1981, at station 37102510435280 C-D&B-3 precipitation station, in inches

DATE	TIME	RAINFALL	DATE	TIME	RAINFALL	DATE	TIME	RAINFALL
8-06	0855	0.01				8-07	0325	0.01
8-06	1955	0.08	8-07	0200	0.01	8-07	0330	0.01
8-06	2000	0.27	8-07	0215	0.05	8-07	0335	0.01
8-06	2005	0.17	8-07	0220	0.13	8-07	0340	0.02
8-06	2010	0.02	8-07	0225	0.11	8-07	0345	0.01
8-06	2015	0.03	8-07	0230	0.06	8-07	0350	0.01
8-06	2020	0.02	8-07	0235	0.02	8-07	0355	0.01
8-06	2025	0.01	8-07	0240	0.01	8-07	0400	0.01
8-06	2035	0.01	8-07	0245	0.01	8-07	0405	0.01
8-06	2115	0.01	8-07	0250	0.01	8-07	0735	0.01
			8-07	0315	0.01	8-07	1045	0.01
			8-07	0320	0.01			

STORM TOTAL = 1.18

DURATION	5 MIN	15 MIN	30 MIN	1 HR
TIME	1955	1950	1950	1950
DEPTH	0.27	0.52	0.59	0.61
INTENSITY	3.24	2.08	1.18	0.61

Table 35.--*Selected rainfall-runoff events at Carpios Canyon near Jansen, Colo.*--Continued

Discharge August 9-13, 1981, at station 07124350 Carpios Canyon near Jansen, Colo., in cubic feet per second

DATE	TIME	DISCHARGE	DATE	TIME	DISCHARGE	DATE	TIME	DISCHARGE
8-09	2000	100				8-10	0410	24
8-09	2005	96	8-10	0005	44	8-10	0415	23
8-09	2010	93	8-10	0010	43	8-10	0420	23
8-09	2015	89	8-10	0015	42	8-10	0425	22
8-09	2020	87	8-10	0020	42	8-10	0430	22
8-09	2025	84	8-10	0025	41	8-10	0435	22
8-09	2030	82	8-10	0030	40	8-10	0440	21
8-09	2035	80	8-10	0035	39	8-10	0445	21
8-09	2040	79	8-10	0040	39	8-10	0450	20
8-09	2045	77	8-10	0045	38	8-10	0455	20
8-09	2050	75	8-10	0050	38	8-10	0500	20
8-09	2055	74	8-10	0055	38	8-10	0505	20
8-09	2100	72	8-10	0100	37	8-10	0510	19
8-09	2105	71	8-10	0105	37	8-10	0515	18
8-09	2110	70	8-10	0110	36	8-10	0520	18
8-09	2115	65	8-10	0115	36	8-10	0525	18
8-09	2120	68	8-10	0120	36	8-10	0530	17
8-09	2125	68	8-10	0125	36	8-10	0535	16
8-09	2130	67	8-10	0130	35	8-10	0540	16
8-09	2135	66	8-10	0135	34	8-10	0545	16
8-09	2140	66	8-10	0140	34	8-10	0550	16
8-09	2145	65	8-10	0145	34	8-10	0555	15
8-09	2150	64	8-10	0150	33	8-10	0600	15
8-09	2155	63	8-10	0155	32	8-10	0605	15
8-09	2200	62	8-10	0200	32	8-10	0610	14
8-09	2205	61	8-10	0205	32	8-10	0615	14
8-09	2210	61	8-10	0210	32	8-10	0620	14
8-09	2215	60	8-10	0215	31	8-10	0625	14
8-09	2220	59	8-10	0220	31	8-10	0630	14
8-09	2225	58	8-10	0225	30	8-10	0635	13
8-09	2230	57	8-10	0230	30	8-10	0640	13
8-09	2235	57	8-10	0235	30	8-10	0645	13
8-09	2240	56	8-10	0240	29	8-10	0650	12
8-09	2245	56	8-10	0245	29	8-10	0655	12
8-09	2250	55	8-10	0250	28	8-10	0700	12
8-09	2255	55	8-10	0255	28	8-10	0705	12
8-09	2300	54	8-10	0300	28	8-10	0710	11
8-09	2305	53	8-10	0305	28	8-10	0715	10
8-09	2310	53	8-10	0310	27	8-10	0720	10
8-09	2315	52	8-10	0315	26	8-10	0725	9.7
8-09	2320	52	8-10	0320	26	8-10	0730	9.5
8-09	2325	51	8-10	0325	26	8-10	0735	9.3
8-09	2330	51	8-10	0330	26	8-10	0740	9.0
8-09	2335	50	8-10	0335	25	8-10	0745	8.6
8-09	2340	50	8-10	0340	25	8-10	0750	8.2
8-09	2345	49	8-10	0345	25	8-10	0755	7.8
8-09	2350	47	8-10	0350	24	8-10	0800	7.4
8-09	2355	46	8-10	0355	24	8-10	0805	7.2
8-09	2400	44	8-10	0400	24	8-10	0810	7.0
			8-10	0405	24	8-10	0815	6.8

Table 35.--*Selected rainfall-runoff events at Carpios Canyon near Jansen, Colo.*--Continued

Discharge August 9-13, 1981, at station 07124350 Carpios Canyon near Jansen, Colo., in cubic feet per second--Continued

DATE	TIME	DISCHARGE	DATE	TIME	DISCHARGE	DATE	TIME	DISCHARGE
8-10	0820	6.6	8-10	1230	3.3	8-10	1640	1.6
8-10	0825	6.4	8-10	1235	3.2	8-10	1645	1.7
8-10	0830	6.2	8-10	1240	3.2	8-10	1650	1.8
8-10	0835	6.0	8-10	1245	3.2	8-10	1655	1.9
8-10	0840	5.8	8-10	1250	3.1	8-10	1700	2.0
8-10	0845	5.7	8-10	1255	3.0	8-10	1705	3.0
8-10	0850	5.6	8-10	1300	3.0	8-10	1710	3.9
8-10	0855	5.6	8-10	1305	3.0	8-10	1715	4.3
8-10	0900	5.5	8-10	1310	2.9	8-10	1720	5.3
8-10	0905	5.4	8-10	1315	2.8	8-10	1725	6.4
8-10	0910	5.4	8-10	1320	2.8	8-10	1730	7.1
8-10	0915	5.4	8-10	1325	2.8	8-10	1735	7.6
8-10	0920	5.3	8-10	1330	2.7	8-10	1740	8.2
8-10	0925	5.2	8-10	1335	2.6	8-10	1745	15
8-10	0930	5.2	8-10	1340	2.6	8-10	1750	21
8-10	0935	5.1	8-10	1345	2.6	8-10	1755	28
8-10	0940	5.0	8-10	1350	2.6	8-10	1800	34
8-10	0945	5.0	8-10	1355	2.5	8-10	1805	42
8-10	0950	4.9	8-10	1400	2.5	8-10	1810	50
8-10	0955	4.8	8-10	1405	2.4	8-10	1815	58
8-10	1000	4.8	8-10	1410	2.4	8-10	1820	66
8-10	1005	4.8	8-10	1415	2.4	8-10	1825	75
8-10	1010	4.7	8-10	1420	2.3	8-10	1830	84
8-10	1015	4.6	8-10	1425	2.2	8-10	1835	93
8-10	1020	4.6	8-10	1430	2.2	8-10	1840	102
8-10	1025	4.6	8-10	1435	2.2	8-10	1845	101
8-10	1030	4.5	8-10	1440	2.1	8-10	1850	100
8-10	1035	4.4	8-10	1445	2.1	8-10	1855	100
8-10	1040	4.4	8-10	1450	2.0	8-10	1900	99
8-10	1045	4.3	8-10	1455	2.0	8-10	1905	98
8-10	1050	4.2	8-10	1500	2.0	8-10	1910	96
8-10	1055	4.2	8-10	1505	2.0	8-10	1915	95
8-10	1100	4.1	8-10	1510	1.9	8-10	1920	94
8-10	1105	4.0	8-10	1515	1.8	8-10	1925	93
8-10	1110	4.0	8-10	1520	1.8	8-10	1930	92
8-10	1115	4.0	8-10	1525	1.8	8-10	1935	92
8-10	1120	3.9	8-10	1530	1.8	8-10	1940	91
8-10	1125	3.8	8-10	1535	1.7	8-10	1945	87
8-10	1130	3.8	8-10	1540	1.7	8-10	1950	83
8-10	1135	3.8	8-10	1545	1.7	8-10	1955	79
8-10	1140	3.7	8-10	1550	1.6	8-10	2000	75
8-10	1145	3.6	8-10	1555	1.6	8-10	2005	71
8-10	1150	3.6	8-10	1600	1.6	8-10	2010	67
8-10	1155	3.6	8-10	1605	1.6	8-10	2015	63
8-10	1200	3.5	8-10	1610	1.6	8-10	2020	59
8-10	1205	3.5	8-10	1615	1.5	8-10	2025	56
8-10	1210	3.4	8-10	1620	1.5	8-10	2030	52
8-10	1215	3.4	8-10	1625	1.5	8-10	2035	49
8-10	1220	3.4	8-10	1630	1.6	8-10	2040	46
8-10	1225	3.4	8-10	1635	1.6	8-10	2045	42

Table 35.--*Selected rainfall-runoff events at Carpios Canyon near Jansen, Colo.*--Continued

Discharge August 9-13, 1981, at station 07124350 Carpios Canyon near Jansen, Colo., in cubic feet per second--Continued

DATE	TIME	DISCHARGE	DATE	TIME	DISCHARGE	DATE	TIME	DISCHARGE
8-10	2050	37	8-11	0050	1.6	8-11	0500	0.9
8-10	2055	32	8-11	0055	1.6	8-11	0505	0.9
8-10	2100	29	8-11	0100	1.6	8-11	0510	0.9
8-10	2105	24	8-11	0105	1.6	8-11	0515	0.9
8-10	2110	21	8-11	0110	1.5	8-11	0520	0.9
8-10	2115	18	8-11	0115	1.4	8-11	0525	0.9
8-10	2120	14	8-11	0120	1.4	8-11	0530	0.8
8-10	2125	11	8-11	0125	1.4	8-11	0535	0.8
8-10	2130	8.6	8-11	0130	1.3	8-11	0540	0.8
8-10	2135	5.9	8-11	0135	1.2	8-11	0545	0.8
8-10	2140	4.2	8-11	0140	1.2	8-11	0550	0.8
8-10	2145	4.0	8-11	0145	1.2	8-11	0555	0.8
8-10	2150	3.7	8-11	0150	1.2	8-11	0600	0.8
8-10	2155	3.4	8-11	0155	1.1	8-11	0605	0.8
8-10	2200	3.2	8-11	0200	1.1	8-11	0610	0.7
8-10	2205	3.1	8-11	0205	1.1	8-11	0615	0.7
8-10	2210	3.0	8-11	0210	1.0	8-11	0620	0.7
8-10	2215	2.9	8-11	0215	1.0	8-11	0625	0.7
8-10	2220	2.8	8-11	0220	1.0	8-11	0630	0.7
8-10	2225	2.8	8-11	0225	1.0	8-11	0635	0.7
8-10	2230	2.7	8-11	0230	1.0	8-11	0640	0.7
8-10	2235	2.6	8-11	0235	0.9	8-11	0645	0.7
8-10	2240	2.6	8-11	0240	0.9	8-11	0650	0.6
8-10	2245	2.5	8-11	0245	0.9	8-11	0655	0.6
8-10	2250	2.4	8-11	0250	0.9	8-11	0700	0.6
8-10	2255	2.4	8-11	0255	0.9	8-11	0705	0.6
8-10	2300	2.3	8-11	0300	0.9	8-11	0710	0.6
8-10	2305	2.2	8-11	0305	0.9	8-11	0715	0.6
8-10	2310	2.1	8-11	0310	0.8	8-11	0720	0.6
8-10	2315	2.1	8-11	0315	0.8	8-11	0725	0.6
8-10	2320	2.0	8-11	0320	0.8	8-11	0730	0.6
8-10	2325	2.0	8-11	0325	0.8	8-11	0735	0.6
8-10	2330	1.9	8-11	0330	0.8	8-11	0740	0.6
8-10	2335	1.8	8-11	0335	0.8	8-11	0745	0.6
8-10	2340	1.8	8-11	0340	0.8	8-11	0750	0.6
8-10	2345	1.8	8-11	0345	0.8	8-11	0755	0.6
8-10	2350	1.8	8-11	0350	0.8	8-11	0800	0.6
8-10	2355	1.8	8-11	0355	0.8	8-11	0805	0.6
8-10	2400	1.8	8-11	0400	0.8	8-11	0810	0.6
			8-11	0405	0.8	8-11	0815	0.5
			8-11	0410	0.9	8-11	0820	0.5
8-11	0005	1.8	8-11	0415	1.0	8-11	0825	0.5
8-11	0010	1.8	8-11	0420	1.0	8-11	0830	0.5
8-11	0015	1.8	8-11	0425	1.0	8-11	0835	0.5
8-11	0020	1.8	8-11	0430	1.0	8-11	0840	0.5
8-11	0025	1.8	8-11	0435	1.0	8-11	0845	0.6
8-11	0030	1.8	8-11	0440	1.0	8-11	0850	0.8
8-11	0035	1.7	8-11	0445	1.0	8-11	0855	1.0
8-11	0040	1.7	8-11	0450	1.0	8-11	0900	1.1
8-11	0045	1.7	8-11	0455	0.9	8-11	0905	1.1

Table 35.--*Selected rainfall-runoff events at Carpios Canyon near Jansen, Colo.*--Continued

Discharge August 9-13, 1981, at station 07124350 Carpios Canyon near Jansen, Colo., in cubic feet per second--Continued

DATE	TIME	DISCHARGE	DATE	TIME	DISCHARGE	DATE	TIME	DISCHARGE
8-11	0910	1.1	8-11	1320	0.6	8-11	1730	0.4
8-11	0915	1.1	8-11	1325	0.6	8-11	1735	0.4
8-11	0920	1.1	8-11	1330	0.6	8-11	1740	0.4
8-11	0925	1.1	8-11	1335	0.6	8-11	1745	0.4
8-11	0930	1.0	8-11	1340	0.6	8-11	1750	0.4
8-11	0935	1.0	8-11	1345	0.6	8-11	1755	0.4
8-11	0940	1.0	8-11	1350	0.6	8-11	1800	0.4
8-11	0945	1.0	8-11	1355	0.6	8-11	1805	0.4
8-11	0950	1.0	8-11	1400	0.6	8-11	1810	0.4
8-11	0955	0.9	8-11	1405	0.6	8-11	1815	0.3
8-11	1000	0.9	8-11	1410	0.6	8-11	1820	0.3
8-11	1005	0.9	8-11	1415	0.5	8-11	1825	0.3
8-11	1010	0.8	8-11	1420	0.5	8-11	1830	0.3
8-11	1015	0.8	8-11	1425	0.5	8-11	1835	0.3
8-11	1020	0.8	8-11	1430	0.5	8-11	1840	0.3
8-11	1025	0.8	8-11	1435	0.5	8-11	1845	0.3
8-11	1030	0.8	8-11	1440	0.5	8-11	1850	0.3
8-11	1035	0.7	8-11	1445	0.5	8-11	1855	0.3
8-11	1040	0.7	8-11	1450	0.5	8-11	1900	0.3
8-11	1045	0.7	8-11	1455	0.5	8-11	1905	0.3
8-11	1050	0.7	8-11	1500	0.5	8-11	1910	0.3
8-11	1055	0.7	8-11	1505	0.5	8-11	1915	0.3
8-11	1100	0.7	8-11	1510	0.5	8-11	1920	0.3
8-11	1105	0.7	8-11	1515	0.5	8-11	1925	0.3
8-11	1110	0.7	8-11	1520	0.5	8-11	1930	0.3
8-11	1115	0.7	8-11	1525	0.5	8-11	1935	0.3
8-11	1120	0.7	8-11	1530	0.4	8-11	1940	0.3
8-11	1125	0.7	8-11	1535	0.4	8-11	1945	2.7
8-11	1130	0.7	8-11	1540	0.4	8-11	1950	5.1
8-11	1135	0.7	8-11	1545	0.4	8-11	1955	7.5
8-11	1140	0.7	8-11	1550	0.4	8-11	2000	9.9
8-11	1145	0.7	8-11	1555	0.4	8-11	2005	16
8-11	1150	0.6	8-11	1600	0.4	8-11	2010	22
8-11	1155	0.6	8-11	1605	0.4	8-11	2015	28
8-11	1200	0.6	8-11	1610	0.4	8-11	2020	34
8-11	1205	0.6	8-11	1615	0.4	8-11	2025	46
8-11	1210	0.6	8-11	1620	0.4	8-11	2030	58
8-11	1215	0.6	8-11	1625	0.4	8-11	2035	71
8-11	1220	0.6	8-11	1630	0.4	8-11	2040	83
8-11	1225	0.6	8-11	1635	0.4	8-11	2045	97
8-11	1230	0.6	8-11	1640	0.4	8-11	2050	111
8-11	1235	0.6	8-11	1645	0.4	8-11	2055	125
8-11	1240	0.6	8-11	1650	0.4	8-11	2100	139
8-11	1245	0.6	8-11	1655	0.4	8-11	2105	146
8-11	1250	0.6	8-11	1700	0.4	8-11	2110	154
8-11	1255	0.6	8-11	1705	0.4	8-11	2115	161
8-11	1300	0.6	8-11	1710	0.4	8-11	2120	168
8-11	1305	0.6	8-11	1715	0.4	8-11	2125	180
8-11	1310	0.6	8-11	1720	0.4	8-11	2130	192
8-11	1315	0.6	8-11	1725	0.4	8-11	2135	204

Table 35.--*Selected rainfall-runoff events at Carpios Canyon near Jansen, Colo.*--Continued

Discharge August 9-13, 1981, at station 07124350 Carpios Canyon near Jansen, Colo., in cubic feet per second--Continued

DATE	TIME	DISCHARGE	DATE	TIME	DISCHARGE	DATE	TIME	DISCHARGE
8-11	2140	216	8-12	0140	113	8-12	0550	11
8-11	2145	219	8-12	0145	110	8-12	0555	10
8-11	2150	222	8-12	0150	108	8-12	0600	10
8-11	2155	224	8-12	0155	105	8-12	0605	9.8
8-11	2200	227	8-12	0200	102	8-12	0610	9.6
8-11	2205	231	8-12	0205	100	8-12	0615	9.5
8-11	2210	235	8-12	0210	98	8-12	0620	9.3
8-11	2215	239	8-12	0215	95	8-12	0625	9.0
8-11	2220	243	8-12	0220	93	8-12	0630	8.6
8-11	2225	244	8-12	0225	90	8-12	0635	8.3
8-11	2230	244	8-12	0230	88	8-12	0640	8.0
8-11	2235	245	8-12	0235	86	8-12	0645	7.7
8-11	2240	246	8-12	0240	83	8-12	0650	7.5
8-11	2245	234	8-12	0245	81	8-12	0655	7.2
8-11	2250	222	8-12	0250	79	8-12	0700	6.9
8-11	2255	210	8-12	0255	77	8-12	0705	6.7
8-11	2300	198	8-12	0300	75	8-12	0710	6.4
8-11	2305	190	8-12	0305	73	8-12	0715	6.2
8-11	2310	182	8-12	0310	70	8-12	0720	6.0
8-11	2315	175	8-12	0315	68	8-12	0725	5.8
8-11	2320	167	8-12	0320	66	8-12	0730	5.7
8-11	2325	164	8-12	0325	64	8-12	0735	5.6
8-11	2330	162	8-12	0330	62	8-12	0740	5.4
8-11	2335	159	8-12	0335	61	8-12	0745	5.2
8-11	2340	156	8-12	0340	59	8-12	0750	5.1
8-11	2345	151	8-12	0345	56	8-12	0755	4.8
8-11	2350	146	8-12	0350	54	8-12	0840	4.6
8-11	2355	142	8-12	0355	51	8-12	0845	4.5
8-11	2400	137	8-12	0400	48	8-12	0810	4.4
			8-12	0405	45	8-12	0815	4.3
			8-12	0410	42	8-12	0820	4.2
8-12	0005	136	8-12	0415	40	8-12	0825	4.0
8-12	0010	134	8-12	0420	37	8-12	0830	3.9
8-12	0015	132	8-12	0425	35	8-12	0835	3.8
8-12	0020	131	8-12	0430	32	8-12	0810	3.7
8-12	0025	130	8-12	0435	30	8-12	0845	3.6
8-12	0030	129	8-12	0440	28	8-12	0850	3.6
8-12	0035	128	8-12	0445	26	8-12	0855	3.5
8-12	0040	127	8-12	0450	25	8-12	0940	3.5
8-12	0045	124	8-12	0455	24	8-12	0945	3.5
8-12	0050	122	8-12	0500	22	8-12	0910	3.5
8-12	0055	120	8-12	0505	20	8-12	0915	3.5
8-12	0100	117	8-12	0510	19	8-12	0920	3.5
8-12	0105	116	8-12	0515	18	8-12	0925	3.5
8-12	0110	116	8-12	0520	16	8-12	0930	3.5
8-12	0115	116	8-12	0525	15	8-12	0935	3.5
8-12	0120	114	8-12	0530	14	8-12	0940	3.5
8-12	0125	114	8-12	0535	13	8-12	0945	3.5
8-12	0130	114	8-12	0540	12	8-12	0950	3.4
8-12	0135	113	8-12	0545	12	8-12	0955	3.4

Table 35.--*Selected rainfall-runoff events at Carpios Canyon near Jansen, Colo.*--Continued

Discharge August 9-13, 1981, at station 07124350 Carpios Canyon near Jansen, Colo., in cubic feet per second--Continued

DATE	TIME	DISCHARGE	DATE	TIME	DISCHARGE	DATE	TIME	DISCHARGE
8-12	1000	3.4	8-12	1410	2.3	8-12	1820	0.3
8-12	1005	3.4	8-12	1415	2.2	8-12	1825	0.3
8-12	1010	3.4	8-12	1420	2.2	8-12	1830	0.3
8-12	1015	3.4	8-12	1425	2.2	8-12	1835	0.3
8-12	1020	3.4	8-12	1430	2.1	8-12	1840	0.3
8-12	1025	3.4	8-12	1435	2.0	8-12	1845	0.3
8-12	1030	3.4	8-12	1440	2.0	8-12	1850	0.2
8-12	1035	3.4	8-12	1445	1.9	8-12	1855	0.2
8-12	1040	3.4	8-12	1450	1.8	8-12	1900	0.2
8-12	1045	3.4	8-12	1455	1.7	8-12	1905	0.2
8-12	1050	3.4	8-12	1500	1.6	8-12	1910	0.2
8-12	1055	3.4	8-12	1505	1.6	8-12	1915	0.2
8-12	1100	3.0	8-12	1510	1.5	8-12	1920	0.2
8-12	1105	3.4	8-12	1515	1.4	8-12	1925	0.2
8-12	1110	3.4	8-12	1520	1.4	8-12	1930	0.2
8-12	1115	3.5	8-12	1525	1.3	8-12	1935	0.2
8-12	1120	3.5	8-12	1530	1.2	8-12	1940	0.2
8-12	1125	3.5	8-12	1535	1.2	8-12	1945	0.2
8-12	1130	3.5	8-12	1540	1.1	8-12	1950	0.2
8-12	1135	3.5	8-12	1545	1.0	8-12	1955	0.3
8-12	1140	3.5	8-12	1550	1.0	8-12	2000	0.3
8-12	1145	3.5	8-12	1555	1.0	8-12	2005	0.3
8-12	1150	3.5	8-12	1600	0.9	8-12	2010	0.2
8-12	1155	3.5	8-12	1605	0.9	8-12	2015	0.2
8-12	1200	3.5	8-12	1610	0.8	8-12	2020	0.2
8-12	1205	3.5	8-12	1615	0.8	8-12	2025	0.2
8-12	1210	3.5	8-12	1620	0.8	8-12	2030	0.2
8-12	1215	3.4	8-12	1625	0.8	8-12	2035	0.2
8-12	1220	3.4	8-12	1630	0.7	8-12	2040	0.2
8-12	1225	3.4	8-12	1635	0.6	8-12	2045	0.2
8-12	1230	3.4	8-12	1640	0.6	8-12	2050	0.2
8-12	1235	3.3	8-12	1645	0.6	8-12	2055	0.2
8-12	1240	3.3	8-12	1650	0.6	8-12	2100	0.2
8-12	1245	3.3	8-12	1655	0.6	8-12	2105	0.3
8-12	1250	3.2	8-12	1700	0.6	8-12	2110	0.4
8-12	1255	3.2	8-12	1705	0.6	8-12	2115	0.5
8-12	1300	3.2	8-12	1710	0.6	8-12	2120	0.6
8-12	1305	3.2	8-12	1715	0.6	8-12	2125	0.6
8-12	1310	3.1	8-12	1720	0.6	8-12	2130	0.6
8-12	1315	3.0	8-12	1725	0.6	8-12	2135	0.7
8-12	1320	3.0	8-12	1730	0.6	8-12	2140	0.7
8-12	1325	2.9	8-12	1735	0.5	8-12	2145	0.7
8-12	1330	2.8	8-12	1740	0.5	8-12	2150	0.8
8-12	1335	2.7	8-12	1745	0.5	8-12	2155	0.8
8-12	1340	2.6	8-12	1750	0.4	8-12	2200	0.8
8-12	1345	2.6	8-12	1755	0.4	8-12	2205	0.8
8-12	1350	2.5	8-12	1800	0.4	8-12	2210	0.8
8-12	1355	2.4	8-12	1805	0.4	8-12	2215	0.7
8-12	1400	2.4	8-12	1810	0.4	8-12	2220	0.7
8-12	1405	2.4	8-12	1815	0.3	8-12	2225	0.7

Table 35.--*Selected rainfall-runoff events at Carpios Canyon near Jansen, Colo.*--Continued

Discharge August 9-13, 1981, at station 07124350 Carpios Canyon near Jansen, Colo., in cubic feet per second--Continued

DATE	TIME	DISCHARGE	DATE	TIME	DISCHARGE	DATE	TIME	DISCHARGE
8-12	2230	0.6	8-13	0005	0.3	8-13	0200	0.1
8-12	2235	0.6	8-13	0010	0.2	8-13	0205	0.1
8-12	2240	0.6	8-13	0015	0.2	8-13	0210	0.1
8-12	2245	0.6	8-13	0020	0.2	8-13	0215	0.1
8-12	2250	0.6	8-13	0025	0.2	8-13	0220	0.1
8-12	2255	0.5	8-13	0030	0.2	8-13	0225	0.1
8-12	2300	0.5	8-13	0035	0.2	8-13	0230	0.1
8-12	2305	0.5	8-13	0040	0.2	8-13	0235	0.1
8-12	2310	0.5	8-13	0045	0.2	8-13	0240	0.1
8-12	2315	0.5	8-13	0050	0.2	8-13	0245	0.1
8-12	2320	0.5	8-13	0055	0.1	8-13	0250	0.1
8-12	2325	0.5	8-13	0100	0.1	8-13	0255	0.1
8-12	2330	0.4	8-13	0105	0.1	8-13	0300	0.1
8-12	2335	0.4	8-13	0110	0.1	8-13	0305	0.1
8-12	2340	0.4	8-13	0115	0.1	8-13	0310	0.1
8-12	2345	0.4	8-13	0120	0.1	8-13	0315	0.1
8-12	2350	0.4	8-13	0125	0.1	8-13	0320	0.1
8-12	2355	0.3	8-13	0130	0.1	8-13	0325	0.1
8-12	2400	0.3	8-13	0135	0.1	8-13	0330	0.1
			8-13	0140	0.1	8-13	0335	0.1
			8-13	0145	0.1	8-13	0340	0.1
			8-13	0150	0.1			
			8-13	0155	0.1			

Table 35.--*Selected rainfall-runoff events at Carpios Canyon near Jansen, Colo.*--Continued

Rainfall August 9-13, 1981, at station 37102510435280 C-D&B-3 precipitation station, in inches

DATE	TIME	RAINFALL	DATE	TIME	RAINFALL	DATE	TIME	RAINFALL
8-09	0825	0.01	8-10	1750	0.03	8-11	2050	0.02
8-09	0845	0.01	8-10	1755	0.02	8-11	2055	0.07
8-09	0850	0.01	8-10	1800	0.02	8-11	2100	0.03
8-09	0855	0.01	8-10	1805	0.03	8-11	2105	0.02
8-09	0900	0.02	8-10	1810	0.02	8-11	2110	0.02
8-09	0905	0.02	8-10	1815	0.01	8-11	2115	0.02
8-09	0910	0.01	8-10	1825	0.01	8-11	2120	0.01
8-09	0915	0.01	8-10	1830	0.01	8-11	2125	0.02
8-09	0925	0.01	8-10	1840	0.02	8-11	2130	0.02
8-09	0930	0.03	8-10	1845	0.03	8-11	2135	0.02
8-09	0935	0.02	8-10	1850	0.03	8-11	2140	0.03
8-09	0945	0.01	8-10	1855	0.03	8-11	2145	0.01
8-09	1140	0.01	8-10	1900	0.01	8-11	2150	0.02
8-09	1810	0.08	8-10	1905	0.01	8-11	2155	0.03
8-09	1815	0.31	8-10	1910	0.01	8-11	2200	0.06
8-09	1820	0.75	8-10	1925	0.01	8-11	2205	0.05
8-09	1825	0.62	8-10	1950	0.01	8-11	2210	0.01
8-09	1830	0.38	8-10	2005	0.01	8-11	2215	0.01
8-09	1835	0.17	8-10	2025	0.01	8-11	2220	0.01
8-09	1840	0.08	8-10	2040	0.01	8-11	2225	0.01
8-09	1845	0.05	8-10	2055	0.01	8-11	2230	0.01
8-09	1850	0.06	8-10	2100	0.01	8-11	2235	0.02
8-09	1855	0.04	8-10	2105	0.01	8-11	2240	0.02
8-09	1900	0.04	8-10	2110	0.01	8-11	2245	0.01
8-09	1905	0.03	8-10	2125	0.01	8-11	2250	0.02
8-09	1910	0.03	8-10	2210	0.01	8-11	2300	0.01
8-09	1915	0.03	8-10	2300	0.01	8-11	2310	0.01
8-09	1920	0.01	8-10	2345	0.01	8-11	2320	0.01
8-09	1925	0.02				8-11	2325	0.01
8-09	1930	0.02				8-11	2335	0.02
8-09	1935	0.01	8-11	0030	0.01	8-11	2340	0.01
8-09	1945	0.01	8-11	0215	0.01	8-11	2345	0.01
8-09	1950	0.01	8-11	0230	0.01	8-11	2350	0.01
8-09	1955	0.01	8-11	0245	0.01	8-11	2355	0.01
8-09	2000	0.01	8-11	0315	0.01	8-11	2400	0.01
8-09	2150	0.01	8-11	0800	0.01			
			8-11	1200	0.01			
			8-11	1700	0.01	8-12	0005	0.01
8-10	0940	0.01	8-11	1950	0.01	8-12	0030	0.01
8-10	1210	0.01	8-11	1955	0.03	8-12	0035	0.01
8-10	1640	0.01	8-11	2000	0.01	8-12	0125	0.01
8-10	1655	0.01	8-11	2005	0.01	8-12	0135	0.01
8-10	1700	0.01	8-11	2010	0.05	8-12	0145	0.01
8-10	1715	0.01	8-11	2015	0.01	8-12	0245	0.01
8-10	1720	0.01	8-11	2020	0.01	8-12	0220	0.01
8-10	1725	0.01	8-11	2025	0.02	8-12	0230	0.01
8-10	1730	0.02	8-11	2030	0.04	8-12	0245	0.01
8-10	1735	0.05	8-11	2035	0.06	8-12	0310	0.01
8-10	1740	0.02	8-11	2040	0.03	8-12	0755	0.01
8-10	1745	0.05	8-11	2045	0.01	8-12	0930	0.01

Table 35.--*Selected rainfall-runoff events at Carpios Canyon near Jansen, Colo.*--Continued

Rainfall August 9-12, 1981, at station 07124350 C-D&B-4 precipitation station, in inches--Continued

DATE	TIME	RAINFALL	DATE	TIME	RAINFALL	DATE	TIME	RAINFALL
8-12	0805	0.01	8-12	0835	0.01	8-12	0915	0.01
8-12	0815	0.01	8-12	0840	0.01	8-12	0930	0.01
8-12	0820	0.01	8-12	0845	0.01	8-12	2030	0.01
8-12	0825	0.01	8-12	0905	0.01	8-12	2130	0.01
			8-12	0910	0.01			

STORM TOTAL = 14.18

DURATION	5 MIN	15 MIN	30 MIN	1 HR
TIME	1830	1825	1815	1805
DEPTH	.41	.95	1.10	1.21
INTENSITY	4.92	3.80	2.20	1.21

Table 35.--*Selected rainfall-runoff events at Carpios Canyon near Jansen, Colo.*--Continued

Rainfall August 9-12, 1981, at station 07124350 C-D&B-4 precipitation station, in inches

DATE	TIME	RAINFALL	DATE	TIME	RAINFALL	DATE	TIME	RAINFALL
8-09	0820	0.01	8-10	1900	0.02	8-11	2120	0.02
8-09	0830	0.01	8-10	1905	0.01	8-11	2125	0.04
8-09	0840	0.01	8-10	1910	0.01	8-11	2130	0.03
8-09	0845	0.01	8-10	1925	0.01	8-11	2135	0.02
8-09	0850	0.01	8-10	1940	0.01	8-11	2140	0.01
8-09	0900	0.01	8-10	2005	0.01	8-11	2145	0.07
8-09	0905	0.02	8-10	2010	0.01	8-11	2150	0.01
8-09	0910	0.02	8-10	2020	0.01	8-11	2155	0.05
8-09	0915	0.01	8-10	2050	0.01	8-11	2210	0.05
8-09	0925	0.01	8-10	2100	0.02	8-11	2215	0.05
8-09	0930	0.01	8-10	2105	0.01	8-11	2210	0.02
8-09	0935	0.02	8-10	2110	0.01	8-11	2215	0.04
8-09	1805	0.01	8-10	2115	0.01	8-11	2220	0.04
8-09	1810	0.02	8-10	2120	0.01	8-11	2225	0.06
8-09	1815	0.07	8-10	2140	0.01	8-11	2230	0.02
8-09	1820	0.08	8-10	2155	0.01	8-11	2235	0.03
8-09	1825	0.30	8-10	2335	0.01	8-11	2240	0.01
8-09	1830	0.41	8-10	2400	0.01	8-11	2245	0.02
8-09	1835	0.24				8-11	2250	0.01
8-09	1840	0.06				8-11	2255	0.01
8-09	1845	0.01				8-11	2345	0.01
8-09	1900	0.01	8-11	0200	0.01	8-11	2310	0.01
8-09	1950	0.01	8-11	0220	0.01	8-11	2315	0.02
8-09	1955	0.01	8-11	0225	0.01	8-11	2320	0.01
8-09	2000	0.02	8-11	0245	0.01	8-11	2325	0.02
			8-11	0755	0.01	8-11	2330	0.02
			8-11	0850	0.01	8-11	2335	0.01
8-10	1630	0.01	8-11	1625	0.01	8-11	2340	0.02
8-10	1640	0.01	8-11	1645	0.03	8-11	2345	0.02
8-10	1710	0.01	8-11	1650	0.02	8-11	2350	0.01
8-10	1715	0.01	8-11	1940	0.01			
8-10	1720	0.01	8-11	1945	0.01			
8-10	1725	0.02	8-11	1950	0.02	8-12	0010	0.01
8-10	1735	0.06	8-11	1955	0.09	8-12	0035	0.01
8-10	1740	0.05	8-11	2000	0.05	8-12	0050	0.01
8-10	1745	0.04	8-11	2005	0.02	8-12	0105	0.01
8-10	1750	0.04	8-11	2010	0.01	8-12	0115	0.01
8-10	1755	0.04	8-11	2015	0.01	8-12	0120	0.01
8-10	1800	0.07	8-11	2020	0.05	8-12	0125	0.01
8-10	1805	0.03	8-11	2025	0.05	8-12	0145	0.01
8-10	1810	0.06	8-11	2030	0.03	8-12	0210	0.01
8-10	1815	0.03	8-11	2035	0.04	8-12	0220	0.01
8-10	1820	0.03	8-11	2040	0.05	8-12	0230	0.01
8-10	1825	0.02	8-11	2045	0.02	8-12	0235	0.01
8-10	1830	0.04	8-11	2050	0.04	8-12	0250	0.01
8-10	1835	0.04	8-11	2055	0.05	8-12	0305	0.01
8-10	1840	0.02	8-11	2100	0.03	8-12	0655	0.01
8-10	1845	0.02	8-11	2105	0.01	8-12	0735	0.01
8-10	1850	0.02	8-11	2110	0.02	8-12	0745	0.01
8-10	1855	0.01	8-11	2115	0.02			

Table 35.--*Selected rainfall-runoff events at Carpios Canyon near Jansen, Colo.*--Continued

Rainfall August 9-13, 1981, at station 37102510435280 C-D&B-3 precipitation station, in inches--Continued

DATE	TIME	RAINFALL	DATE	TIME	RAINFALL	DATE	TIME	RAINFALL
8-12	0840	0.01	8-12	1305	0.01			
8-12	0905	0.01	8-12	1950	0.03			
8-12	0930	0.01	8-12	1955	0.01	8-13	0940	0.01
8-12	1050	0.01	8-12	2000	0.01	8-13	1145	0.01
			8-12	2005	0.01			
			8-12	2015	0.01			

STORM TOTAL = 4.92

DURATION	5 MIN	15 MIN	30 MIN	1 HR
TIME	1815	1815	1805	1805
DEPTH	0.75	1.75	2.31	2.61
INTENSITY	9.00	7.00	4.62	2.61

Table 36.--*Measurements of streamflow and specific conductance at miscellaneous sites along the Purgatoire River, November 17 and 18, 1982*

[µmhos/cm=micromhos per centimeter at 25°C; °C=degrees Celsius; information in parentheses are estimates; a minus sign in front of a discharge indicates a loss from the Purgatoire River]

Site number	Name	Latitude	Longitude	Time	Discharge (cubic foot per second)	Specific conductance (µmhos/cm)	Water temperature (°C)	Remarks
			November 17, 1982					
1	Middle Fork Purgatoire River near Stonewall.	37°09'13"	105°00'12"	1042	12.0	285	1	
2	Storz Pond intake near Stonewall	37°09'14"	105°00'04"	1035	-.004	285		
3	Storz Pond outlet near Stonewall	37°09'14"	104°59'55"	1120	.54	480	4	
4	Allen Mine east portal near Stonewall.	37°09'32"	104°57'46"	1015	.004	1,620		
5	Allen Mine sewage plant near Stonewall.	37°09'32"	104°57'44"	1010	.005	370		
6	Vialpando ditch intake near Stonewall.	37°09'39"	104°57'09"	1100	-.40	(335)		
7	Middle Park Purgatoire River below Allen Mine near Stonewall.	37°09'34"	104°57'09"	1215	12.1	335		
8	North Fork Purgatoire River at Vigil.	37°09'34"	104°57'09"	1151	12.9	265	4	
9	Chacon ditch return at Vigil----	37°09'37"	104°56'33"	1206	(.1)	-----		
10	Purgatoire River below Vigil----	37°09'26"	104°55'43"	1302	25.8	325	5	
11	Purgatoire River above Maxwell Mine near Weston.	37°09'00"	104°54'40"	1222	30.0	325	5	
12	Maxwell Mine pond intake near Weston.	37°08'59"	104°54'39"	1321	-1.63	325	5	
13	Maxwell Mine pond outlet near Weston.	37°08'55"	104°54'30"	(1330)	(1.6)	300		
14	Ciruela Canyon near Weston------	37°08'43"	104°53'52"	1410	.0008	940	9	
15	Purgatoire River below Maxwell Mine near Weston.	37°08'24"	104°52'44"	1506	30.3	325	5	
16	Purgatoire River above Wet Canyon at Weston.	37°07'55"	104°50'51"	1412	28.0	325		
17	Wet Canyon at Weston----------	37°07'55"	104°50'48"	1322	.61	680		
18	South Fork Purgatoire River at Weston.	37°07'46"	104°50'46"	1522	12.6	365		
19	Purgatoire River below Weston---	37°07'56"	104°49'51"	1637	38.8	---		
20	Molino Canyon near Medina Plaza-	37°07'50"	104°48'25"	(1400)	(.016)	(1,950)		No flow at mouth.
21	Purgatoire River below Molino Canyon near Medina Plaza.	37°07'40"	104°48'08"	1438	37.3	350	6	
			November 18, 1982					
22	Purgatoire River at Medina Plaza	37°07'30"	104°47'10"	1014	37.4	365	5	
23	Lorencito Canyon near Sarcillo--	37°07'12"	104°46'14"	1126	1.28	545	12	
24	Purgatoire River below Lorencito Canyon near Sarcillo.	37°07'13"	104°46'13"	1220	40.3	---	8	
25	Sarcillo Canyon at Sarcillo-----	37°07'24"	104°45'43"	0955	.54	650	8	
26	Purgatoire River below Sarcillo Canyon near Sarcillo.	37°07'25"	104°45'41"	1032	33.8	370	5	
27	Unnamed draw west of Segundo----	37°07'25"	104°44'28"	0955	.004	2,115		No flow at mouth.
28	Purgatoire River at Segundo-----	37°07'15"	104°44'00"	1035	35.5	390		
29	Unnamed draw west of Valdez-----	37°07'28"	104°42'43"	1200	.002	(2,100)		No flow at mouth.
30	Purgatoire River at Valdez------	37°07'24"	104°42'29"	1400	37.2	375	10	
31	Unnamed draw at Valdez----------	37°07'24"	104°42'27"	1310	.083	4,290	16	
32	Purgatoire River below Valdez---	37°07'32"	104°42'05"	1138	36.4	382	8	
33	Purgatoire River above Burro Canyon near Valdez.	37°07'37"	104°40'05"	1300	37.2	392		
34	Burro Canyon near Madrid--------	37°07'27"	104°38'53"	1355	.14	1,110		
35	Purgatoire River at Madrid------	37°07'46"	104°38'20"	1424	35.9	390	10	

Table 36.--*Measurements of streamflow and specific conductance at miscellaneous sites along the Purgatoire River, November 17 and 18, 1982*--Continued

Time	Stage (feet)	Discharge (ft^3/s)
	Purgatoire River at Madrid	
	November 17, 1982	
1015	1.82	41.7
1100	1.81	39.8
1245	1.80	37.9
1545	1.79	36.5
1700	1.79	36.5
1030	1.79	36.5
1550	1.79	36.5

Table 37.--*Measurements of streamflow and specific conductance at miscellaneous sites along tributaries of the Purgatoire River, June to August, 1981*

[μmhos/cm=micromhos per centimeter at 25°C; °C=degrees Celsius; information in parentheses are estimates]

Site number	Name	Latitude	Longitude	Date	Time	Discharge (cubic foot per second)	Specific conductance (μmhos/cm)	Water temperature (°C)	Remarks
				Wet Canyon					
1	Upper Wet Spring near Weston.	37°14'05"	104°53'31"	08/04/81	1600	0.16	850	26	
2	Wet Canyon above San Pablo Canyon near Weston.	37°13'13"	104°53'09"	08/04/81	1530	.10	-----	----	
3	Wet Canyon below San Pablo Canyon near Weston.	37°11'52"	104°52'47"	08/04/81	1430	.091	770	19.5	
4	Hidden Spring near Weston--	37°11'50"	104°52'40"	08/04/81	1500	.078	800	12	
5	Rock Crack Spring near Weston.	37°11'07"	104°52'46"	07/07/81	1500	.019	580	11	
6	Wet Canyon above Weston----	37°08'20"	104°51'14"	08/05/81	1130	.21	600	13	
				Sarcillo Canyon					
1	Outhouse Spring at Segundo-	37°12'08"	104°49'29"	08/04/81	1130	.003	1,490	17	
2	Garcia Spring near Segundo-	37°11'06"	104°48'40"	07/01/81	1600	.015	(560)	----	Specific conductance is that of water in well SC03306607AAC.
3	Tokar Spring near Segundo--	37°10'46"	104°48'10"	07/01/81	1500	.004	830	14	Specific conductance, temperature measured 08/04/81, at 0.006 ft^3/s.
4	Sarcillo Canyon below Tokar Spring near Segundo.	37°10'33"	104°48'12"	07/01/81	1430	.022	(735)	----	Specific conductance is weighted average of above inflows.
5	Sarcillo Canyon at Segundo-	37°07'44"	104°46'02"	07/23/81	----	.24	650	8	Specific conductance, temperature measured 11/18/82, at 0.54 ft^3/s.
				Burro Canyon					
1	Upper Burro Spring near Boncarbo.	37°14'15"	104°45'07"	06/24/81	1700	.002	560	13.5	Specific conductance and temperature measured 07/22/81.
2	Trujillo Spring near Boncarbo.	37°12'15"	104°44'50"	06/24/81	1500	.022	670	12.5	Specific conductance and temperature measured 07/22/81.
3	Burro Canyon at Pricco Mine near Boncarbo.	37°11'45"	104°43'24"	06/25/81	1100	.020	560	17	Specific conductance and temperature measured 07/22/81.
4	Jacks Mine discharge near Boncarbo.	37°22'40"	104°42'52"	07/22/81	1100	.0002	2,800	27	
5	Burro Canyon near Madrid---	37°09'50"	104°41'02"	06/24/81	0930	.063	1,000	17	Specific conductance and temperature measured 07/22/81.
6	Burro Canyon above Madrid--	37°09'23"	104°40'29"	06/24/81	0900	.012	-----	----	
				Reilly Canyon					
1	Upper Reilly Canyon Springs near Boncarbo.	37°14'12"	104°42'01"	07/21/81	----	(.004)	(570)	----	Specific conductance is that of water in well SC03206519BCA
2	Chinaman Canyon Spring near Boncarbo.	37°09'50"	104°43'00"	07/21/81	1700	.040	540	26	Discharge measured 06/18/81.
3	Reilly Canyon below Boncarbo.	37°12'02"	104°40'30"	07/21/81	1630	.013	-----	----	
4	Reilly Canyon above Cokedale.	37°11'21"	104°39'28"	07/21/81	1515	.0009	-----	----	
5	Midway School Spring near Cokedale.	37°11'20"	104°39'28"	07/21/81	1500	.0002	1,210	19	
6	Reilly Canyon below Cokedale.	37°08'23"	104°36'45"	07/21/81	1400	.050	1,125	29	
				Berwind Canyon					
1	Upper Road Canyon Spring near Ludlow.	37°16'34"	104°40'36"	08/06/81	1200	.017	570	20	
2	Bear Canyon Spring near near Ludlow.	37°16'15"	104°38'52"	08/06/81	1300	.009	1,580	15.5	
3	Berwind Spring near Ludlow-	37°17'14"	104°38'02"	08/06/81	1000	.061	945	12	
4	Berwind Canyon near Ludlow-	37°18'54"	104°36'27"	08/06/81	0930	.015	1,500	19	

Soil-Water Data

Table 38.--*Soil water at selected sites, Purgatoire River drainage*

Site	Date (M-D-Y)	Percent soil water at indicated depth, in feet															
		0.5	1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0	8.5
C-14	04/11/79	24	23	20	20	22	22	21	21									
	06/28/79	23	24	21	20	21	21	20										
	10/23/79	20	22	19	19	21	21	20										
	04/23/80	26	25	21	20	22	21	21										
	06/17/80	22	25	26	26	27	27	27										
	07/30/80	19	22	20	20	22	22	22										
	09/16/80	19	21	19	19	21	21	20										
	10/20/80	13	16	16	18	20												
	01/27/81	19	21	19	19	21	21	20										
	04/02/81	23	22	19	19	21	21	20										
	05/08/81	21	22	20	19	21	21	20										
	06/23/81	19	22	19	19	22	21	21										
	07/20/81	20	22	19	19	22	21	21										
C-5	04/11/79	16	14	15	15	14	14	14	14	15	16							
	06/28/79	12	14	15	14	14	13	13	14	15	17							
	10/23/79	12	13	15	14	14	13	13	14	15	17							
	04/23/80	20	20	17	16	15	15	15	15	16	17							
	06/17/80	15	16	18	19	20	19	18	15	16	17							
	07/30/80	13	15	16	16	16	15	14	15	16	17							
	09/16/80	15	13	15	14	14	13	13	13	15	17							
	10/20/80	12	12	13	15	14	14	13	13	13	15							
	01/27/81	13	13	15	14	14	13	13	13	15	16							
	04/02/81	19	15	15	14	14	13	13	13	17	16							
	05/07/81	13	14	15	15	14	13	13	13	15	16							
	06/23/81	13	14	15	15	14	13	13	14	15	17							
	07/20/81	13	14	15	15	14	13	13	14	15	17							
C-6	04/11/79	21	19	17	16	16	17	18	18	19	20	19						
	06/28/79	18	19	17	16	16	17	18	18	19	20	19						
	10/23/79	16	17	17	16	16	17	18	18	19	19	19						
	04/23/80	22	21	18	17	17	18	18	18	19	20	19						
	06/17/80	18	20	22	22	23	24	23	21	20	20	19						
	07/30/80	16	18	18	17	18	20	21	21	20	20	20						
	09/16/80	19	18	17	16	16	18	18	19	20	20	19						
	10/20/80	16	17	17	16	16	17	18	18	19	20	19						
	01/27/81	17	17	17	16	16	17	18	18	19	19	19						
	04/02/81	21	19	17	16	16	17	18	18	19	20	19						
	05/07/81	17	18	17	16	16	17	18	18	19	20	19						
	06/23/81	17	18	17	16	17	18	18	18	20	20	19						
	07/20/81	18	18	17	16	16	18	18	18	20	20	19						
C-7	04/11/79	22	21	16	14	16	17											
	06/28/79	19	20	15	13	16	17											
	10/23/79	20	21	16	14	16	17											
	04/23/80	24	21	17	15	16	18											
	06/17/80	19	22	19	20	23	24											
	07/30/80	20	21	17	16	17	18											
	09/16/80	19	19	15	13	15	17											
	10/20/80	17	19	15	13	15	17											
	01/27/81	18	18	15	17	15	17											
	04/02/81	22	19	15	13	15	17											
	05/08/81	20	20	15	13	15	17											
	06/23/81	18	20	15	17	16	17											
	07/20/81	19	20	15	14	16	17											
C-8	04/12/79	20	21	20	20													
	06/28/79	19	24	21	21													
	10/23/79	16	21	20	20													
	04/23/80	24	25	21	21													
	06/17/80	18	24	26	27													

Table 38.--*Soil water at selected sites, Purgatoire River drainage*--Continued

Site	Date (M-D-Y)	Percent soil water at indicated depth, in feet															
		0.5	1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0	8.5
C-8	07/30/80	17	21	21	22													
	09/16/80	17	21	20	21													
	10/20/80	16	16	20	20													
	01/27/81	16	21	20	20													
	04/02/81	21	21	20	20													
	05/08/81	17	21	20	20													
	06/23/81	16	22	21	21													
	07/20/81	20	22	21	21													
MO-10	04/12/79	15	13	12	12	12	12	13	13									
	06/18/79	15	15	16	17	18	19	19	20									
	06/27/79	14	14	13	12	12	12	13	14									
	09/13/79	15	16	14	12	12	12	13	14									
	10/22/79	13	13	13	12	12	12	13	14									
	04/23/80	22	21	19	15	14	15	15	15									
MO-15	04/12/79	15	18	18	18													
	06/27/79	17	19	18	17													
	09/13/79	15	19	18	17													
	10/22/79	14	19	18	17													
	04/23/80	22	24	20	18													
	06/18/80	14	19	20	20													
	07/31/80	12	17	18	18													
	19/17/80	16	19	16	18	17												
	10/21/80	12	17	17	17	18												
	01/28/81	12	17	17	17													
	04/03/81	17	18	17	17													
	05/07/81	13	18	18	18													
	06/24/81	12	17	18	17													
	07/21/81	13	17	18	17													
MO-16	04/12/79	16	16	15	15	15	14	14	14	14	14							
	06/27/79	18	19	17	15	15	15	15	14	14	14							
	09/13/79	18	18	16	15	15	14	15	14	14	14							
	10/22/79	17	17	16	15	15	14	14	14	14	14							
	04/23/80	24	23	22	18	16	16	16	16	15	15							
	06/18/80	18	20	20	21	22	21	21	21	18	15							
	07/31/80	16	17	16	17	17	17	18	18	16	15							
	09/17/80	16	16	15	16	16	16	16	15	15	14	14						
	10/21/80	16	16	15	15	15	15	15	15	14	14	14						
	01/28/81	16	16	15	15	15	15	15	15	14	14	14						
	04/03/81	19	16	15	15	15	15	15	15	14	14							
	05/08/81	17	16	15	15	16	15	15	15	14	14							
	06/24/81	16	16	15	15	15	15	15	15	14	14							
	07/21/81	18	17	15	15	15	15	15	15	14	14							
MU-1	04/11/79	20	17	17														
	06/27/79	16	16	16														
	10/23/79	15	15	15														
	06/18/80	17	18	18														
	07/30/80	16	16	17														
	09/16/80	16	16	16														
	10/21/80	14	15	16														
	01/28/81	16	16	16														
	04/02/81	21	17	17														
	05/07/81	16	16	16														
	06/23/81	15	16	16														
	07/20/81	17	17	16														

Table 38.--*Soil water at selected sites, Purgatoire River drainage*--Continued

Site	Date (M-D-Y)	Percent soil water at indicated depth, in feet															
		0.5	1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0	8.5
MU-11	04/11/79	28	22	20	23	24	24											
	06/27/79	23	21	20	23	23	22											
	09/13/79	21	19	19	22	22	22											
	10/22/79	20	19	19	22	22	22											
	04/22/80	27	26	26	27	25	23											
	06/18/80	22	23	25	27	27	27											
	07/31/80	20	19	19	23	23	25											
	09/16/80	22	20	19	22	23	23											
	10/20/80	19	19	19	22	23	22											
	01/27/81	22	19	18	21	22	22											
	04/02/81	27	26	20	22	23	22											
	05/07/81	22	21	20	22	23	22											
	06/23/81	20	19	20	22	23	22											
	07/20/81	21	20	19	22	23	22											
MU-12	04/11/79	24	22	22	23	23												
	06/27/79	23	24	24	24	23												
	09/13/79	21	23	24	23	23												
	10/22/79	19	21	21	23	22												
	04/22/80	27	27	25	24	23												
	06/18/80	22	24	26	28	27												
	07/16/80	22	22	22	24	23												
	07/31/80	19	21	22	24	24												
	10/20/80	18	20	21	22	22												
	01/27/81	18	20	21	22	22												
	04/02/81	22	21	21	22	22												
	05/07/81	19	21	21	23	23												
	06/23/81	20	22	23	24	23												
	07/20/81	22	23	23	24	23												
MU-13	04/11/79	19	16	16	18	19	19	19	18	17								
	06/27/79	16	17	17	19	20	19	19	18	17								
	10/22/79	13	16	16	19	19	19	19	17	17								
	04/22/80	23	23	19	20	21	20	20	19	18								
	06/18/80	16	20	23	26	26	25	26	23	19								
	07/30/80	14	17	18	21	23	23	23	21	19								
	09/16/80	19	16	16	19	20	20	21	19	18								
	01/27/81	13	16	16	20	20	20	19	17	17								
	04/02/81	20	17	17	19	20	20	20	19	17								
	05/07/81	15	17	17	19	20	20	20	18	17								
	06/23/81	14	16	17	19	20	20	20	19	17								
	07/20/81	17	18	17	19	20	20	20	19	18								
	10/21/81	13	16	16	18	20	20	20	19	17								
MU-2	04/11/79	19	19	19	17	15	15	16	16	17								
	06/27/79	14	19	18	16	15	14	15	16	16								
	10/23/79	13	18	18	15	14	14	15	15	15								
	06/18/80	15	21	24	23	22	22	22	22	21								
	07/30/80	14	19	19	17	17	17	17	18	19								
	09/16/80	13	18	18	16	15	15	16	16	16								
	01/28/81	13	17	17	15	14	14	14	15	15								
	04/02/81	20	19	18	16	14	22	15	15	16								
	05.07/81	14	18	18	16	14	14	15	16	16								
	06/23/81	13	18	18	16	14	14	15	15	16								
	07/20/81	17	20	18	16	14	14	15	16	16								
	10/21/81	12	17	17	15	14	14	15	15	16								

Table 38.--*Soil water at selected sites, Purgatoire River drainage*--Continued

Site	Date (M-D-Y)	Percent soil water at indicated depth, in feet																
		0.5	1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0	8.5
MU-3	04/12/79	17	16	16	17	18	18	17	16	16	17	16						
	06/27/79	17	17	16	16	17	16	16	15	16	16	15						
	10/23/79	13	14	15	16	17	16	15	15	15	15	15						
	06/18/80	17	21	23	25	25	23	19	16	16	17	16						
	07/30/80	14	16	17	19	21	21	18	16	16	16	16						
	09/16/80	14	15	16	17	18	17	16	15	15	16	15						
	10/21/80	13	15	15	16	17	16	15	15	15	15	15						
	01/28/81	13	14	15	16	17	16	15	15	15	15	15						
	04/02/81	17	15	15	16	16	17	16	15	15	15	15						
	05/07/81	14	15	16	16	17	16	15	15	15	16	15						
	06/23/81	13	15	16	16	17	16	16	15	15	16	15						
	07/20/81	14	15	16	16	17	16	16	15	15	16	15						
MU-4	04/12/79	16	15															
	07/02/79	18	19															
	10/23 79	14	15															
	06/18/80	17	18															
	07/30/80	15	16															
	09/16/80	14	15															
	10/21/80	13	15															
	01/27/81	13	14															
	04/02/81	14	14															
	05/07/81	13	14															
	06/23/81	14	15															
	07/20/81	15	16															
S-9	04/12/79	13	11	11	11	13	15	12	12	11	11	10	12	15	16	16	16	
	06/27/79	11	12	11	12	14	15	12	12	11	11	11	14	16	16	16	16	
	09/13/79	9	10	11	11	14	14	12	12	11	11	11	14	16	16	16	16	
	10/22/79	9	10	10	11	14	15	12	12	11	11	11	14	16	16	16	16	
	04/23/80	18	18	18	15	15	16	14	14	13	13	13	14	17	17	17	17	
	06/18/80	11	13	15	17	21	22	19	18	18	16	14	14	16	16	16	17	
	09/17/80	10	10	11	11	14	16	14	14	13	12	11	13	16	16	16	16	16
	10/21/80	9	10	11	11	14	15	13	13	13	12	11	13	16	16	16	16	16
	01/28/81	9	10	11	11	14	15	13	13	12	12	13	16	16	16	16		
	04/03/81	14	11	11	11	14	15	13	13	12	12	11	13	16	16	16	16	
	05/08/81	11	11	11	11	14	15	13	13	12	11	11	13	16	16	16	16	
	06/24/81	9	10	11	11	14	15	13	12	12	12	11	13	16	16	16	16	
	07/21/81	10	11	11	11	14	15	13	12	12	12	11	13	16	16	16	16	
	07/31/81	9	11	11	12	15	19	17	16	16	15	14	15	16	16	16	16	

Ground-Water Data

Table 39.--*Inventoried wells, springs, and mines in the Apishapa and Purgatoire River drainages*

Type of site: W=well; S=spring; X=exploration hole; T=mine shaft. Principal aquifer: 111VLFL=valley fill; 124CCHR=Cuchara; 125PSNC=Poison Canyon; 125RTON=Raton; 211VRMJ=Vermejo; 211TRDD=Trinidad; 211PIRR=Pierre. Discharge: F=flowing. Use of site: W=withdrawal; O=observation; U=unused; Z=destroyed; P=oil or gas; M=mine. Use of water: C=commercial; D=dewater; H=domestic; I=irrigation; P=public supply; S=stock; U=unused.

LOCAL NUMBER	SITE-ID	OWNER	TYPE OF SITE	NAME OF SPRING	DATE COMPLETED	DEPTH OF WELL (FEET)
SC03006526DBC	372407104381001	--	W	--	--	--
SC03006632CCA	372311104493501	--	W	--	--	45.00
SC03106401CCC1	372254104304901	--	W	--	--	32.05
SC03106409ABC	372154104362201	--	W	--	--	50.00
SC03106420ABB1	372019104350001	--	W	--	--	77.30
SC03106421BAB	372015104340501	FATUR, JOHN	W	--	04/10/1961	252.00
SC03106425ABC1	371915104303401	--	W	--	--	60.80
SC03106430CBC	371854104362701	--	S	LOWER ROAD	--	--
SC03106502BAD1	372252104382301	--	W	--	--	--
SC03106505CCB	372216104420501	MISEC, FRED	W	--	--	75.00
SC03106514CCB1	372035104385501	--	W	--	--	--
SC03106516ACB	372053104403001	USGS	W	--	06/14/1978	835.00
SC03106601CBB	372226104442001	--	W	--	--	--
SC03106602BDD1	372249104451401	--	W	--	--	--
SC03106612DDA1	372119104432401	--	W	--	--	--
SC03106623BCB	372000104452701	--	W	--	--	--
SC03106624ACC	371954104435201	--	W	--	--	68.00
SC03106627CDB1	371844104461001	--	W	--	--	105.00
SC03106629ADB	371906104475301	MICEK	W	--	--	82.00
SC03106630BBA	371918104493501	BRUNELLI	W	--	--	65.00
SC03106717ADA	372052104541001	--	W	--	--	121.23
SC03106719BBD	372009104560401	--	W	--	--	12.05
SC03106720DBD	371940104542601	--	W	--	--	--
SC03106721ABD	372011104531801	--	W	--	--	61.22
SC03106729BAA	371923104545301	--	W	--	--	59.35
SC03106729BDB	371908104544601	--	W	--	--	56.50
SC03106731DAD	371850104551301	--	W	--	--	66.80
SC03106731ACC	371810104554001	--	W	--	--	52.07
SC03106825BAC	371815104570001	--	W	--	--	80.00
SC03106836CDD	371742104571301	--	W	--	--	16.60
SC03206402CCC1	371655104322001	--	W	--	--	35.00
SC03206431CCD1	371232104365801	--	W	--	--	300.00
SC03206431DDA	371240104353701	--	W	--	--	256.00
SC03206502CCA1	371658104384601	--	W	--	--	--
SC03206502DAA	371714104380201	--	S	BERWIND	--	--
SC03206503CCC1	371650104400201	--	W	--	--	211.00
SC03206503DAC	371704104391801	LIZARDI, EDWARD	W	--	--	110.00
SC03206505DDB1	371659104412201	--	W	--	--	--
SC03206508CCD	371602104420101	THOMAS, CARL	W	--	06/ /1979	107.00
SC03206509ACB	371634104403601	--	S	UPPER ROAD	--	--

Table 39.--*Inventoried wells, springs, and mines in the Apishapa and Purgatoire River drainages*--Continued

CASING DIAMETER (INCHES)	DEPTH TO FIRST OPENING (FEET)	PRINCIPAL AQUIFER	ALTITUDE OF LAND SURFACE (FEET)	DATE WATER LEVEL MEASURED	WATER LEVEL (FEET)		DATE DISCHARGE MEASURED	DISCHARGE (GALLONS PER MINUTE)	DRAWDOWN	PUMPING PERIOD (HOURS)	USE OF SITE	USE OF WATER
--	--	211PIRR	6345	05/08/1978	21.73	Z	--	--	--	--	W	S
--	--	111VLFL	7330	--	--		--	--	--	--	W	H,S
--	--	211PIRR	6015	05/03/1978	22.92	P	--	--	--	--	W	S
--	--	211PIRR	6134	05/03/1978	32.09		--	--	--	--	W	S
--	--	211PIRR	6266	05/03/1978	43.93		--	--	--	--	W	S
6.50	34	211PIRR	6250	05/02/1978	57.30		--	--	--	--	W	C
--	--	211PIRR	6005	05/03/1978	35.70	Z	--	--	--	--	W	S
--	--	111VLFL	6380	--	--		08/06/1981	6.6 CF	--	--	--	U
--	--	211TRDD	6660	05/08/1978	14.64		--	--	--	--	W	S
--	--	125RTON	6610	05/04/1978	20.14		--	--	--	--	W	I
--	--	111VLFL	6620	05/04/1978	21.60	P	--	--	--	--	W	H
3	490	125RTON	7320	06/20/1978	230.00		--	--	--	--	O	U
--	--	125RTON	6790	05/04/1978	34.57		--	--	--	--	U	U
--	--	125PSNC	6895	05/15/1978	31.42		--	--	--	--	W	S
--	--	125PSNC	6850	05/12/1978	33.50	P	--	--	--	--	W	H
--	--	125PSNC	6946	05/22/1978	39.36		--	--	--	--	W	S
--	--	125RTON	6810	05/04/1978	27.67	R	--	--	--	--	W	H
--	--	125PSNC	6990	05/09/1978	34.98	P	--	--	--	--	W	S
--	--	125PSNC	7214	05/10/1978	42.42	P	--	--	--	--	W	D
--	--	125PSNC	7214	05/10/1978	12.05	P	--	--	--	--	W	S
--	--	124CCHR	8640	05/22/1978	83.10		--	--	--	--	W	S
--	--	111VLFL	8580	05/22/1978	5.86		--	--	--	--	W	S
--	--	111VLFL	8114	05/22/1978	6.50		--	--	--	--	W	S
--	--	125PSNC	8140	05/22/1978	9.95	P	--	--	--	--	W	S
--	--	125PSNC	8190	05/22/1978	25.36		--	--	--	--	W	S
--	--	125PSNC	8250	05/22/1978	35.53		--	--	--	--	U	U
--	--	125PSNC	8195	05/22/1978	31.20		--	--	--	--	W	S
--	--	125PSNC	8320	05/21/1978	21.75		--	--	--	--	W	S
--	--	125PSNC	8640	05/22/1978	29.12	R	--	--	--	--	W	S
--	--	111VLFL	8470	05/22/1978	12.15		--	--	--	--	U	U
--	--	211PIRR	6220	05/02/1978	28.29	R	--	--	--	--	W	H
--	--	125RTON	6853	04/27/1978	50.17	R	--	--	--	--	W	S
6	--	125RTON	6780	06/17/1981	16.50		--	--	--	--	W	S
--	--	125RTON	6800	05/04/1978	16.33	P	--	--	--	--	W	H
--	--	125RTON	6710	--	--		08/06/1981	28 V F	--	--	--	U
--	--	125RTON	7040	05/04/1978	24.48		--	--	--	--	U	U
7	--	125RTON	6970	08/06/1981	99.20		--	--	--	--	W	H
--	--	125RTON	7310	05/04/1978	15.10	R	--	--	--	--	W	H
6.50	20	125RTON	7280	08/05/1981	89.70		--	15	--	--	W	H
--	--	111VLFL	7040	--	--		08/06/1981	7.5 VF	--	--	--	U

Table 39.--*Inventoried wells, springs, and mines in the Apishapa and Purgatoire River drainages*--Continued

LOCAL NUMBER	SITE-ID	OWNER	TYPE OF SITE	NAME OF SPRING	DATE COMPLETED	DEPTH OF WELL (FEET)
SC03206509BBC1	371637104410501	--	W	--	--	80.00
SC03206510DCC	371603104393001	TAMBURELLI, ANTHONY	W	--	1975	195.00
SC03206510DCC2	371602104392901	TAMBURELLI, ANTHONY H	W	--	--	--
SC03206511CBD	371615104385201	--	S	BEAR CANYON	--	--
SC03206518CAC	371517104430001	--	W	--	--	--
SC03206519AAC	371457104422701	--	S	UPPER REILLY	--	--
SC03206519BCA	371449104430501	LASSITER, RICK	W	--	--	100.00
SC03206529HBA1	371402104415501	--	W	--	--	50.10
SC03206529CBB	371341104420801	WHITE, ALICE	W	--	--	130.00
SC03206530BAC	371400104430001	--	S	CHINAMAN CN	--	--
SC03206530CDC	371323104440101	--	W	--	--	89.00
SC03206532CAA	371249104414301	--	S	BONCARBO MINE	--	--
SC03206532CAC	371240104415201	--	W	--	--	98.50
SC03206532DBB	371251104414001	KOSOVICH, JOHN	S	MADMAN	--	--
SC03206534CAA	371250104393501	TAMBURELLI	S	TAMBURELLI	--	--
SC03206534CAA2	371247104393601	TAMBURELLI, CHUCK	W	--	--	31.00
SC03206534CAD	371243104393801	TAMBURELLI, CHUCK	W	--	09/25/1977	150.00
SC03206601CDB	371658104440901	--	W	--	--	--
SC03206603DDC	371651104454501	--	W	--	--	--
SC03206608BAA	371642104482001	--	W	--	--	--
SC03206609AAA	371647104463701	--	W	--	--	--
SC03206613BBD1	371543104441301	--	W	--	--	--
SC03206616CDB1	371700104472401	USGS	W	--	05/10/1978	825.00
SC03206620CDC1	371414104482201	VANDERWALL, CAROL	W	--	03/ /1981	169.00
SC03206620CDC2	371414104482401	VANDERWALL, CAROL	W	--	05/ /1981	69.00
SC03206620CDD	371413104481701	VANDERWALL, CAROL	W	--	07/28/1975	200.00
SC03206621ACD	371440104461801	--	W	--	--	8.70
SC03206621CCD	371417104472901	HARRIS, THOMAS	W	--	--	--
SC03206621DCC	371415104470101	--	S	UPPER BURRO	--	--
SC03206622DAD	371427104452901	--	W	--	--	65.70
SC03206625ADC	371351104432901	LANGONI, JOSEPHINE	W	--	05/16/1980	268.00
SC03206626ABC	371403104445001	STOKES, GERALD	W	--	05/31/1977	504.00
SC03206626CCA	371325104451701	RICHARDSON, EDWARD B	W	--	03/30/1975	120.00
SC03206626DBD	371338104444701	RAY, GERALD	W	--	--	35.00
SC03206626DCA	371327104444401	--	W	--	--	200.00
SC03206627BBD	371404104462401	--	W	--	--	--
SC03206627BDC	371346104460801	SCADDEN, HENRY	W	--	--	20.00
SC03206629CAB	371343104482001	--	W	--	--	123.32
SC03206631DAC	371244104474201	--	W	--	--	97.00
SC03206632ACC	371258104480501	--	W	--	--	88.00

Table 39.--*Inventoried wells, springs, and mines in the Apishapa and Purgatoire River drainages*--Continued

CASING DIAMETER (INCHES)	DEPTH TO FIRST OPENING (FEET)	PRINCIPAL AQUIFER	ALTITUDE OF LAND SURFACE (FEET)	DATE WATER LEVEL MEASURED	WATER LEVEL (FEET)		DATE DISCHARGE MEASURED	DISCHARGE (GALLONS PER MINUTE)	DRAWDOWN	PUMPING PERIOD (HOURS)	USE OF SITE	USE OF WATER
--	--	125RTON	7160	05/04/1978	40.28	T	--	--	--	--	W	H
--	--	125RTON	7090	08/06/1981	42.80		1975	35	--	--	W	H
--	--	125RTON	7060	--	--		--	--	--	--	U	U
--	--	111VLFL	6935	--	--		08/06/1981	4.0 VF	--	--	--	U
--	--	125RTON	7190	05/04/1978	33.60		--	--	--	--	W	S
--	--	111VLFL	7090	--	--		--	--	--	--	--	U
7	17	125RTON	7190	--	--		09/26/1974	3.5 B	--	3.0	W	H
--	--	125RTON	7000	04/28/1978	34.89		--	--	--	--	W	S
6.62	15	125RTON	6980	12/17/1974	19.00		12/17/1974	5.0 B	--	3.0	W	H
--	--	111VLFL	7110	--	--		06/23/1981	18 V F	--	--	--	U
--	--	125RTON	7117	04/28/1978	21.12	P	--	--	--	--	W	S
--	--	125RTON	6900	--	--		--	--	--	--	U	U
6	--	125RTON	6900	05/08/1978	14.30		--	--	--	--	W	S
--	--	111VLFL	6860	--	--		--	--	--	--	--	U
--	--	111VLFL	6795	--	--		--	--	--	--	--	S
--	--	111VLFL	6785	05/02/1978	16.18		--	--	--	--	U	U
7	23	125RTON	6770	05/02/1978	31.16		09/25/1977	6.0 B	--	3.0	W	H
--	--	125PSNC	7388	05/04/1978	32.04		--	--	--	--	W	S
--	--	125PSNC	7290	05/22/1978	53.46		--	--	--	--	W	S
--	--	125PSNC	7510	05/22/1978	36.80		--	--	--	--	U	U
--	--	125PSNC	7340	05/22/1978	44.47		--	--	--	--	W	S
--	--	111VLFL	7320	05/04/1978	53.50	R	--	--	--	--	U	U
3	--	125RTON	7510	05/12/1978	277.41		--	--	--	--	O	U
6.60	--	125PSNC	7480	06/24/1981	51.80		--	--	--	--	O	U
6.62	39	125PSNC	7490	06/24/1981	47.50		12/05/1982	15 B	--	3.0	W	H
7	32	125PSNC	7470	06/24/1981	50.20		07/28/1975	1.0 B	--	12.0	W	H
--	--	111VLFL	7360.00	05/20/1978	6.62	P	--	--	--	--	W	S
6.60	--	125PSNC	7335	06/24/1981	27.60		--	--	--	--	W	H
--	--	111VLFL	7280	--	--		06/24/1981	1.0 VF	--	--	--	U
--	--	125PSNC	7385	05/21/1978	55.34		--	--	--	--	W	S
6.62	19	125RTON	7210	06/18/1981	127.60		05/15/1980	10 B	--	4.0	W	H
6.62	22	125RTON	7330	06/25/1981	88.60		05/31/1977	2.5 B	162.00	3.0	W	H
--	5	125PSNC	7260	04/08/1975	38.00		04/08/1975	1.5	27.00	0.5	W	H
--	--	111VLFL	7240	06/25/1981	17.20		--	--	--	--	W	H
7	--	125PSNC	7210	06/25/1981	22.20		--	--	--	--	U	U
--	--	111VLFL	7260	06/25/1981	16.50		--	--	--	--	U	U
--	--	111VLFL	7205	05/20/1978	17.78	P	--	--	--	--	W	S
--	--	125PSNC	7570	05/21/1978	42.60	P	--	--	--	--	W	S
--	--	111VLFL	7346	05/18/1978	38.99	P	--	--	--	--	W	S
5.50	--	111VLFL	7410	06/30/1981	20.90		--	--	--	--	U	U

Table 39.--*Inventoried wells, springs, and mines in the Apishapa and Purgatoire River drainages*--Continued

LOCAL NUMBER	SITE-ID	OWNER	TYPE OF SITE	NAME OF SPRING	DATE COMPLETED	DEPTH OF WELL (FEET)
SC0320 6633DAB	371251104450601	--	W	--	--	--
SC0320 6635BBD	371311104451901	RICHARDSON, EDWARD B	W	--	07/27/1973	100.00
SC0320 6635DBB	371241104445001	TRUJILLO, JOSEPH B	S	TRUJILLO	--	--
SC03206635DBB2	371251104445701	TRUJILLO, JOSEPH B	W	--	1959	30.00
SC0320 6636AAC	371310104432701	WARD, WALTER W	W	--	04/25/1977	392.00
SC0320 6707CBB	371620104561001	MILLRE, MARJORIE	W	--	--	48.40
SC0320 6714DDC	371509104510101	MCDONALD, WILLIAM	S	MCDONALD	--	--
SC03206716CCC1	371507104535801	USGS	W	--	05/17/1978	1180.00
SC0320 6718ADA	371544104554801	--	S	DOUBLE POND	--	--
SC0320 6718BAB	371556104555601	--	W	--	1981	--
SC03206721ACC1	371441104532401	MCDONALD, WILLIAM	W	--	--	--
SC0320 6721BBB	371501104540001	--	W	--	--	--
SC0320 6721BCD	371445104535501	WOOD	W	--	07/ /1980	175.00
SC0320 6721BDB	371446104535001	--	S	SEISMIC	--	--
SC0320 6722CDA	371424104523401	MCDONALD, WILLIAM	W	--	--	140.00
SC0320 6722DBA	371433104522001	--	W	--	--	80.00
SC0320 6724DBB	371433104521301	MCDONALD, WILLIAM	W	--	--	23.00
SC0320 6724DBC	371431104521501	MCDONALD, WILLIAM	S	L.MCDONALD	--	--
SC0320 6725DCC	371322104501601	GIVENS, KENNETH	W	--	1977	140.00
SC0320 6725DCD	371323104500701	PACHOREK, TONY	W	--	--	--
SC0320 6726ACB	371354104511801	MCDONALD, WILLIAM	W	--	--	78.00
SC0320 6726CBA	371340104515001	--	W	--	--	74.00
SC0320 6728ABC	371405104533101	--	S	UPPER WET	--	--
SC0320 6728DAC	371335104531601	ROBERTS, LANA	W	--	1979	66.00
SC0320 6729BBD1	371404104545901	LATHEM, HUGH	W	--	--	250.00
SC0320 6729BBD2	371405104550201	LATHEM, HUGH T	W	--	05/28/1981	170.00
SC0320 6732BDB	371306104544801	--	S	HOLE	--	--
SC0320 6735ADA	371301104505801	MCDONALD, WILLIAM	W	--	--	--
SC0320 6736DDB	371237104473501	--	W	--	--	15.00
SC0320 6802ADA	371725104592101	--	W	--	--	94.80
SC0320 6802BCB	371653104585401	--	W	--	--	--
SC0320 6811ACD	371629104574301	--	W	--	--	79.36
SC0320 6811DBB	371619104575501	--	W	--	--	43.70
SC0320 6813ACD	371537104563601	--	W	--	--	47.80
SC0320 6824ACC	371440104564301	--	S	SAN PABLO	--	--
SC0320 6826CCD	371323104582001	WEST	W	--	--	--
SC0320 6835BDD	371300104580701	WEST, RUTH C	S	LOGGING CN	--	--
SC03206835BDD2	371258104575601	WEST	W	--	--	--
SC0320 6925DDA	371330105025501	HARDY, JOHN	W	--	--	10.20
SC0320 6409BCC	371111104342801	SURNER, JANE	W	--	--	20.00

Table 39.--*Inventoried wells, springs, and mines in the Apishapa and Purgatoire River drainages*--Continued

CASING DIAMETER (INCHES)	DEPTH TO FIRST OPENING (FEET)	PRINCIPAL AQUIFER	ALTITUDE OF LAND SURFACE (FEET)	DATE WATER LEVEL MEASURED	WATER LEVEL (FEET)		DATE DISCHARGE MEASURED	DISCHARGE (GALLONS PER MINUTE)	DRAWDOWN	PUMPING PERIOD (HOURS)	USE OF SITE	USE OF WATER
--	--	125PSNC	7330	05/18/1978	42.24	P	--	--	--	--	W	S
6	15	125RTON	7195	06/25/1981	27.60		09/08/1974	8.0 B	38.00	1.0	W	H
--	--	111VLFL	7095	--	--		06/24/1981	10 V F	--	--	--	I
--	--	125RTON	7105	06/24/1981	22.10		--	--	--	--	W	H
6.60	18	125RTON	7195	06/24/1981	69.70		08/03/1977	10 B	--	3.0	W	H
--	--	125PSNC	8010	05/21/1978	27.87		--	--	--	--	W	S
--	--	111VLFL	7575	--	--		--	--	--	--	--	S
3	400	125PSNC	7750	05/18/1978	70.16	Z	--	--	--	--	O	U
--	--	111VLFL	7960	--	--		--	--	--	--	--	S
7	--	125PSNC	8010	07/08/1981	22.40		--	--	--	--	U	U
7	--	111VLFL	7648	05/29/1978	24.11	Z	--	--	--	--	W	S
--	--	125PSNC	7710	05/21/1978	34.70		--	--	--	--	W	S
6	--	125PSNC	7700	07/09/1981	70.70		07/09/1981	1.5	--	--	W	H
--	--	111VLFL	7675	--	--		--	--	--	--	--	U
5	--	125PSNC	7628	07/01/1981	42.60		07/01/1981	0.90	--	--	W	S
--	--	125PSNC	7590	05/19/1978	45.34	P	--	--	--	--	W	S
--	--	111VLFL	7470	05/18/1978	6.94	P	--	--	--	--	W	S
--	--	111VLFL	7465	--	--		--	--	--	--	--	S
6.50	--	125PSNC	7380	07/01/1981	104.50		07/01/1981	1.0	--	--	W	H
--	--	111VLFL	7335	07/01/1981	27.00		07/01/1981	3.5 V	--	--	W	S
6.50	30	111VLFL	7480	07/01/1981	29.90		03/10/1972	60 B	15.00	3.0	W	H
--	--	125PSNC	7534	05/21/1978	42.70	T	--	--	--	--	W	S
--	--	111VLFL	7570	--	--		08/04/1981	71 C F	--	--	--	U
--	--	125PSNC	7520	07/09/1981	14.63		--	--	--	--	W	H
7	--	125PSNC	7820	07/09/1981	138.00		--	--	--	--	U	U
6.62	21	125PSNC	7840	07/09/1981	125.20		05/28/1981	1.0 B	0.00	2.0	W	H
--	--	111VLFL	7600	--	--		--	--	--	--	--	U
--	--	111VLFL	7355	07/01/1981	26.00		07/01/1981	2.4	--	--	W	S
--	--	111VLFL	7256	05/18/1978	10.08		--	--	--	--	W	S
--	--	124CCHR	8530	05/21/1978	24.24		--	--	--	--	W	S
--	--	124CCHR	8605	05/21/1978	17.21		--	--	--	--	W	S
--	--	125PSNC	8380	05/21/1978	35.82		--	--	--	--	W	S
--	--	111VLFL	8340	--	--		--	--	--	--	W	S
--	--	125PSNC	8160	05/21/1978	32.74		--	--	--	--	W	S
--	--	111VLFL	7960	--	--		--	--	--	--	--	U
8.50	--	125PSNC	7960	07/16/1981	17.85		--	--	--	--	W	S
--	--	125PSNC	7875	--	--		08/03/1981	7.0 ZF	--	--	--	U
--	--	125PSNC	7852	05/29/1978	3.84		--	--	--	--	W	S
--	--	111VLFL	8690	09/27/1951	3.38		--	--	--	--	U	U
--	--	111VLFL	6480	06/17/1981	15.05		--	--	--	--	W	H

Table 39.--*Inventoried wells, springs, and mines in the Apishapa and Purgatoire River drainages*--Continued

LOCAL NUMBER	SITE-ID	OWNER	TYPE OF SITE	NAME OF SPRING	DATE COMPLETED	DEPTH OF WELL (FEET)
SC03306417BCA	371027104352801	PARAVECHIO	W	--	--	--
SC03306420ACC1	370929104350301	FALDUTO, RICHARD	W	--	09/29/1967	75.00
SC03306420ACC2	370931104350401	FALDUTO, RICHARD	W	--	--	18.50
SC03306420DAB	370923104345001	FALDUTO, RICHARD	W	--	04/10/1972	139.00
SC03306421CCA	370938104342401	FURU, HENRY	W	--	--	110.50
SC03306421CDB	370939104341201	FURU, HENRY	W	--	11/ /1979	87.00
SC03306421DCC	370902104335601	FURU, HENRY	W	--	--	267.00
SC03306422CBC	370913104332501	SANDLIN, R E	W	--	09/22/1973	195.00
SC03306427BDB	370842104332101	US ARMY COE	X	--	08/07/1945	132.60
SC03306427CAD	370823104331201	US ARMY COE	X	--	07/27/1945	122.00
SC03306429CDD	370837104351201	USBR	X	--	06/09/1937	115.00
SC03306431BBB	370801104364401	--	W	--	--	--
SC03306432ACB	370753104350601	USBR	X	--	06/09/1937	150.00
SC03306502CBB	371203104385601	USGS	W	--	06/14/1978	906.00
SC03306502CBB1	371203104385801	MARTINEZ, ALBERT	W	--	--	120.00
SC03306505AAC1	371219104411801	MARTINEZ, GEORGE	W	--	--	625.00
SC03306506CDD	371140104425201	--	S	JACKS MINE	--	--
SC03306507DBA	371103104423401	TAYLOR, WARREN	W	--	--	50.00
SC03306508CBD	371058104415801	TAYLOR, WARREN	W	--	1940	--
SC03306510AAC1	371130104390801	--	W	--	--	101.00
SC03306510ACB1	371120104392801	--	S	MIDWAYSCHOOL	--	--
SC03306510BDD	371112104393201	SHANNON, ROBERT	W	--	1946	190.00
SC03306510DDB1	371055104382201	HAMMEL, RUTH C	W	--	06/03/1971	95.00
SC03306510DDB2	371055104391201	BODAY, ALEX	W	--	08/07/1979	170.00
SC03306510DDC	371050104391101	BODAY, ALEX	W	--	12/31/1973	105.00
SC03306515AAD1	371033104390301	--	W	--	--	40.00
SC03306521BBB	370950104410201	--	S	DIKE	--	--
SC03306521DBB	370923104402901	--	S	GRASSY SEEP	--	--
SC03306523CBD1	370919104381201	MARTINEZ, ALFRED	W	--	--	30.00
SC03306525DAD	370823104364501	--	S	LOWER REILLY	--	--
SC03306525DBC	370823104371501	MARTINEZ, ALBERT	W	--	1953	--
SC03306525DDC	370813104412201	MARQUEZ, GENE	W	--	--	--
SC03306531DAC	370733104422201	MONTOYA, SAM	W	--	1960	26.00
SC03306532ADC	370714104412101	MARQUEZ, GENE	W	--	--	17.00
SC03306532CBD	370735104420101	VIGIL, PHIL	W	--	--	14.00
SC03306533CAB	370741104405001	MONTOYA, VICK	W	--	--	40.00
SC03306533CBB	370740104410501	SANDOVAL, BERNICE	W	--	--	33.00
SC03306534CAC	370733104394201	VIGIL, MANUEL C	W	--	--	120.00
SC03306534CDA	370727104393801	VIGIL, MANUEL	W	--	1920	35.00
SC03306535ABA	370806104381401	LUJAN, ROGER	W	--	1921	12.00

Table 39.--*Inventoried wells, springs, and mines in the Apishapa and Purgatoire River drainages*--Continued

CASING DIAMETER (INCHES)	DEPTH TO FIRST OPENING (FEET)	PRINCIPAL AQUIFER	ALTITUDE OF LAND SURFACE (FEET)	DATE WATER LEVEL MEASURED	WATER LEVEL (FEET)		DATE DISCHARGE MEASURED	DISCHARGE (GALLONS PER MINUTE)	DRAWDOWN	PUMPING PERIOD (HOURS)	USE OF SITE	USE OF WATER
--	--	111VLFL	6540	06/16/1981	12.30		--	--	--	--	W	S
--	--	211VRMJ	6380	09/29/1967	19.00		--	--	--	--	W	H
--	9	211VRMJ	6400	06/17/1981	11.60		--	--	--	--	W	S
4	14	211VRMJ	6340	06/17/1981	10.57		--	--	--	--	U	U
7	--	211TRDD	6280	06/16/1981	33.10		--	--	--	--	W	H
7	--	211TRDD	6265	06/16/1981	19.70		--	--	--	--	O	U
--	9	211TRDD	6445	06/19/1981	197.20		--	--	--	--	U	U
7	12	211TRDD	6315	09/22/1973	72.00		09/22/1973	0.50 B	--	4.0	W	S
--	--	211TRDD	6222	--	--		--	--	--	--	Z	U
--	--	211TRDD	6184	--	--		--	--	--	--	Z	U
3.50	43	211VRMJ	6155	06/09/1937	13.00		--	--	--	--	Z	U
--	--	111VLFL	6270	06/17/1981	16.50		--	--	--	--	W	S
3.50	69	211VRMJ	6270	06/09/1937	108.00		--	--	--	--	Z	U
3	640	125RTON	6730	06/18/1978	24.87	Z	--	--	--	--	O	U
--	--	125RTON	6730	05/02/1978	25.02		--	--	--	--	W	S
--	--	125RTON	6842	05/08/1978	70.20	P	--	--	--	--	W	H
--	--	125RTON	6840	--	--		07/21/1981	0.10 VF	--	--	--	U
--	--	111VLFL	6800	05/09/1978	30.55	P	--	--	--	--	W	D
--	--	111VLFL	6750	06/24/1981	17.50		--	--	--	--	U	U
--	--	125RTON	6650	05/02/1978	31.43	P	--	--	--	--	W	S
--	--	125RTON	6625	--	--		07/20/1981	0.10 EF	--	--	--	U
--	--	125RTON	6680	--	--		--	--	--	--	W	H
7	5	125RTON	6600	--	--		06/03/1971	6.0 B	57.00	3.0	W	C
6.62	19	125RTON	6610	07/23/1981	34.75		08/07/1979	3.0 B	--	1.0	U	U
5.50	15	125RTON	6620	12/07/1973	42.00		12/07/1973	3.5 B	--	3.0	W	H
--	--	111VLFL	6590	05/02/1978	18.06		--	--	--	--	O	U
--	--	111VLFL	6595	--	--		06/24/1981	29 C F	--	--	--	U
--	--	111VLFL	6560	--	--		06/24/1981	5.0 ZF	--	--	--	U
--	--	125RTON	6600	05/02/1978	23.02		--	--	--	--	U	U
--	--	111VLFL	6260	--	--		07/20/1981	23 C F	--	--	--	U
--	--	125RTON	6375	06/18/1981	12.60		--	--	--	--	W	S
--	--	111VLFL	6530	07/13/1981	9.65		--	--	--	--	U	U
--	--	111VLFL	6460	07/13/1981	18.35		--	--	--	--	U	U
--	--	111VLFL	6425	07/13/1981	9.40		--	--	--	--	U	U
--	--	111VLFL	6445	--	--		--	--	--	--	W	S
--	--	125RTON	6410	07/13/1981	20.35		--	--	--	--	U	U
--	--	125RTON	6425	07/14/1981	25.45		--	--	--	--	U	U
--	--	125RTON	6360	07/23/1981	28.80		--	--	--	--	U	U
--	--	111VLFL	6350	07/23/1981	18.11		--	--	--	--	U	U
--	--	111VLFL	6305	07/14/1981	7.85		--	--	--	--	W	I

Table 39.--*Inventoried wells, springs, and mines in the Apishapa and Purgatoire River drainages*--Continued

LOCAL NUMBER	SITE-ID	OWNER	TYPE OF SITE	NAME OF SPRING	DATE COMPLETED	DEPTH OF WELL (FEET)
SC0330 6535ADD	370746104374701	USGS, WRD	W	--	06/15/1978	310.00
SC0330 6535CAA	370737104382801	CHAVEZ, ALLEC	W	--	--	60.00
SC0330 6601DAA	371159104431801	--	W	--	--	--
SC0330 6601DDA	371145104432401	--	S	PRICCO MINE	--	--
SC0330 6602BCD	371201104451801	DAVIS, MARIE	W	--	--	85.00
SC0330 6602CCB	371145104452701	GROUBERT, BONNIE	W	--	1976	140.00
SC0330 6603CDA	371143104460301	VIGIL, LEROY	W	--	1978	--
SC0330 6603DBC	371149104455901	VIGIL, LEROY	W	--	1978	130.00
SC0330 6603DCB	371144104460101	VIGIL, LEROY	W	--	03/12/1973	100.00
SC0330 6604CDB	371145104471401	BALLOUN, GEORGE R	W	--	10/16/1973	380.00
SC0330 6604DDD	371135104463301	WYATT, BURL D	W	--	03/02/1973	110.00
SC0330 6605BCD	371232104483001	EARLS, TRAVIS H	W	--	09/29/1971	110.00
SC0330 6605DBC	371154104480201	TEEGARDEN, FORREST R	W	--	08/11/1973	98.00
SC0330 6605DBD	371150104475901	CROCKETT, DAVE	W	--	04/25/1972	150.00
SC0330 6605DDB	371142104474901	--	S	UPPER HORN	--	--
SC0330 6606BDB	371208104492901	--	S	OUTHOUSE	--	--
SC0330 6607AAC	371128104485401	GOLDWATER, JOHNNIE	W	--	10/21/1972	160.00
SC0330 6607DAD	371133104484201	GARCIA, GEORGE	W	--	09/19/1972	175.00
SC0330 6608BAC	371123104481701	DUFFY, JIM	W	--	04/29/1979	250.00
SC0330 6608CAC	371057104482401	SHULL, ROBERT A	W	--	--	135.00
SC0330 6608CBB	371156104484001	GARCIA, GEORGE	S	GARCIA	--	--
SC0330 6608CDD	371046104481001	TOKAR, JOHN	S	TOKAR	--	--
SC0330 6610ABB	371134104455201	--	W	--	--	16.00
SC0330 6610BBC	371129104462801	SUNSTROM, JUNO	W	--	08/15/1972	112.00
SC0330 6614BDC	371020104450701	WEST, RUTH C	S	SMITH CANYON	--	--
SC0330 6616CBD	371011104472301	HASENACK, MARVIN	W	--	--	20.00
SC0330 6617ABD	371035104475501	TOKAR, JOHN	W	--	--	27.00
SC0330 6617ADB	371030104474801	MESTAS	W	--	--	--
SC0330 6617BAD	371033104481001	TOKAR, JOHN	W	--	--	--
SC0330 6618BCC	371021104494201	MINEHART, JOHN	W	--	--	177.00
SC0330 6618CAC	371008104492901	--	S	U. MOLINO	--	--
SC0330 6618CDD	370950104491701	--	S	MOLINO CN	--	--
SC0330 6620BDB	370933104481501	--	W	--	--	--
SC0330 6621ABD	370940104465601	MESTAS	W	--	--	28.00
SC0330 6621BAD	370945104470501	MESTAS	W	--	--	63.90
SC0330 6623ABD	370940104444001	WEST, RUTH C	W	--	--	165.00
SC0330 6630DDB	370816104485301	PARSONS, ROBERT	W	--	--	--
SC0330 6631BBA	370803104494101	FERNANDEZ, GILBERT	W	--	1979	140.00
SC0330 6632BAC	370759104475301	TRINIDAD, CITY OF	W	--	08/09/1980	1449.00
SC0330 6632BBA	370801104483101	TRINIDAD, CITY OF	W	--	06/20/1980	1449.00

Table 39.--*Inventoried wells, springs, and mines in the Apishapa and Purgatoire River drainages*--Continued

CASING DIAMETER (INCHES)	DEPTH TO FIRST OPENING (FEET)	PRINCIPAL AQUIFER	ALTITUDE OF LAND SURFACE (FEET)	DATE WATER LEVEL MEASURED	WATER LEVEL (FEET)		DATE DISCHARGE MEASURED	DISCHARGE (GALLONS PER MINUTE)	DRAWDOWN	PUMPING PERIOD (HOURS)	USE OF SITE	USE OF WATER
3	260	211TRDD	6240	06/18/1978	4.32	Z	05/12/1979	8.0 Z	--	22.2	O	U
6	--	211VRMJ	6285	--	--		--	--	--	--	U	U
--	--	125RTON	6890	06/24/1981	46.50		--	--	--	--	U	U
--	--	111VLFL	6860	--	--		06/25/1981	9.0 VF	--	--	--	U
--	--	125RTON	7205	--	--		--	--	--	--	W	H
7	--	125RTON	7350	06/25/1981	116.33		06/25/1981	1.5	--	--	W	H
5	--	125RTON	7220	06/30/1981	25.25		--	--	--	--	O	U
6	--	125RTON	7230	06/30/1981	38.00		1978	1.0	--	--	W	S
6.25	20	125RTON	7210	03/12/1973	20.00		03/12/1973	9.0	70.00	3.0	W	H
7	15	125RTON	7290	10/18/1973	270.00		10/20/1973	6.0 B	90.00	4.0	W	H
7	11	125RTON	7240	06/30/1981	45.60		03/02/1973	7.5 B	47.00	--	W	H
7	6	125RTON	7315	09/29/1971	45.00		09/29/1971	3.0 B	65.00	3.0	W	H
7	14	125RTON	7245	06/30/1981	21.10		08/11/1973	22	51.00	3.0	U	U
7	10	125RTON	7245	04/25/1972	20.00		04/25/1972	0.75 B	125.00	2.0	W	H
--	--	111VLFL	7205	--	--		--	--	--	--	--	U
--	--	111VLFL	7205	--	--		08/04/1981	1.4 VF	--	--	--	U
7	10	125RTON	7190	08/05/1981	84.70		10/21/1972	2.3 B	82.00	3.0	W	H
7	14	125RTON	7100	07/01/1981	23.10		09/19/1972	3.5 B	139.00	3.0	W	H
7	11	125RTON	7210	06/30/1981	90.50		04/29/1979	0.75	92.00	4.0	W	H
--	--	125RTON	7000	--	--		--	--	--	--	W	H
--	--	111VLFL	7035	--	--		07/01/1981	8.0 F	--	--	--	U
--	--	125RTON	6980	--	--		07/01/1981	1.7 VF	--	--	--	S
--	--	111VLFL	7170	05/21/1978	12.09		--	--	--	--	W	S
7	1	125RTON	7240	08/16/1972	48.00		08/16/1972	5.5 B	54.00	2.0	W	H
--	--	125RTON	7160	--	--		07/17/1981	0.80 VF	--	--	--	S
--	--	111VLFL	6870	07/01/1981	18.15		--	--	--	--	W	H
30	--	111VLFL	6955	07/01/1981	11.10		--	--	--	--	W	H
8	--	111VLFL	6923	05/19/1978	15.48		--	--	--	--	W	S
6	--	125RTON	6940	07/01/1981	15.80		--	--	--	--	U	U
7	--	125PSNC	7440	07/02/1981	110.80		--	--	--	--	W	H
--	--	111VLFL	7240	--	--		--	--	--	--	--	U
--	--	125RTON	7185	--	--		07/02/1981	0.40 VF	--	--	--	S
--	--	111VLFL	7138	05/21/1978	16.14	T	--	--	--	--	W	S
--	--	111VLFL	6810	05/18/1978	13.57		--	--	--	--	W	S
6	--	125RTON	6850	07/01/1981	58.50		--	--	--	--	U	U
7	--	125RTON	6945	07/17/1981	145.90		--	--	--	--	W	S
--	--	125RTON	6839	05/21/1978	24.88		--	--	--	--	W	S
7	--	125RTON	6810	07/14/1981	26.50		1970	0.12	--	--	U	U
8	154	125RTON	6750	08/09/1980	62.00		06/02/1981	3.7	--	--	P	U
8	154	125RTON	6780	07/01/1980	39.00		06/02/1981	1.9 V	--	--	P	U

Table 39.--*Inventoried wells, springs, and mines in the Apishapa and Purgatoire River drainages*--Continued

LOCAL NUMBER	SITE-ID	OWNER	TYPE OF SITE	NAME OF SPRING	DATE COMPLETED	DEPTH OF WELL (FEET)
SC0330 6632HBD	370758104483101	TRINIDAD, CITY OF	W	--	06/20/1980	1605.00
SC0330 6634ACC	370744104460201	--	S	L. SARCILLO	--	--
SC0330 6635BCA	370748104451601	--	W	--	--	168.00
SC0330 6635DCC	370719104444601	ORTEGA, CORRINE	W	--	--	40.00
SC0330 6636DBA	370734104434001	BEEBE, JOHN	W	--	1971	100.00
SC0330 6636DBB	370737104434601	BEEBE, JOHN	W	--	1971	100.00
SC0330 6702ABB	371227104512001	--	W	--	--	34.00
SC0330 6703BCC	371206104525801	THORNTON, RAYMOND	W	--	01/ /1980	62.00
SC0330 6703CAC	371150104524001	--	S	HIDDEN	--	--
SC0330 6703CBD	371152104524701	--	S	BRIDGE	--	--
SC0330 6703CCC	371129104530101	ROBINSON, AL	W	--	04/29/1973	100.00
SC0330 6703DCB	371146104522101	ROBINSON, STEVE	W	--	--	106.00
SC0330 6704ADA	371213104530901	THORNTON, RAYMOND D	W	--	07/03/1980	65.00
SC0330 6704ADD	371206104530401	THORNTON, RAYMOND	W	--	12/25/1979	180.00
SC0330 6704CAB	371202104535001	NELSON	W	--	10/ /1980	200.00
SC0330 6704DDD	371140104530302	ROBINSON, ALBERT	W	--	05/29/1978	1780.00
SC0330 6707ACD	371118104553401	P V RANCH	W	--	--	--
SC0330 6708BBB	371133104550201	--	W	--	--	87.25
SC0330 6710BDC	371112104524601	--	S	MIDDLE WET	--	--
SC0330 6710CAB	371108104524501	--	S	ROCK CRACK	--	--
SC0330 6711BBD	371124104514701	PARSONS, BERNARD	W	--	06/24/1981	140.00
SC0330 6713BCD	371020104503801	--	W	--	--	13.00
SC0330 6715BBD	371036104525001	ROBINSON, ALBERT	W	--	1958	110.00
SC0330 6718DDB	371001104552701	--	S	SPURTING	--	--
SC0330 6719BCC	370932104561301	CHAVEZ, FLOYD	W	--	1889	30.00
SC0330 6719DBA	370829104575501	--	W	--	--	139.74
SC0330 6721CCA	370912104550501	CHAVEZ, GEORGE	W	--	--	23.50
SC0330 6722DAA	370925104515701	CFI	S	LOWER WET	--	--
SC0330 6726ACD	370820104511301	--	S	WESTON	--	--
SC0330 6728BCD	370836104535701	CF AND I	X	--	1980	297.00
SC0330 6728BCD2	370839104535501	CF AND I	X	--	--	--
SC0330 6729ABA	370901104541901	CF AND I	X	--	1980	372.00
SC0330 6729BAB	370901104544601	MARTINEZ, ANDY	W	--	1953	7.00
SC0330 6729BAD	370856104543601	C F AND I	X	--	1980	10.50
SC0330 6729BDA	370848104544001	CF AND I	X	--	1980	453.00
SC0330 6729CAA	370832104543801	CF AND I	T	--	1978	--
SC0330 6735AAD	370752104505701	VIGIL, LOUIS	W	--	--	8.90
SC0330 6736ADA	370754104495001	PARSONS, BERNARD	W	--	1951	20.00
SC0330 6802BDB	371215104580501	WEST	W	--	1975	--
SC0330 6803DAC	371147104584001	WEST, RUTH C	W	--	--	500.00

Table 39.--*Inventoried wells, springs, and mines in the Apishapa and Purgatoire River drainages*--Continued

CASING DIAMETER (INCHES)	DEPTH TO FIRST OPENING (FEET)	PRINCIPAL AQUIFER	ALTITUDE OF LAND SURFACE (FEET)	DATE WATER LEVEL MEASURED	WATER LEVEL (FEET)		DATE DISCHARGE MEASURED	DISCHARGE (GALLONS PER MINUTE)	DRAWDOWN	PUMPING PERIOD (HOURS)	USE OF SITE	USE OF WATER
8.62	149	125RTON	6780	06/20/1980	75.00		06/02/1981	1.8 V	--	--	P	U
--	--	111VLFL	6635	--	--		07/23/1981	109 C F	--	--	--	U
7	--	125RTON	6650	07/13/1980	44.10		--	--	--	--	W	S
8.50	--	111VLFL	6535	07/14/1981	7.55		--	--	--	--	W	I
--	--	125RTON	6540	--	--		1971	4.0 B	--	1.0	W	I
7	--	125RTON	6520	07/13/1981	16.60		1971	14 B	--	--	W	S
--	--	125PSNC	7461	05/21/1978	21.27	P	--	--	--	--	W	S
6	--	125PSNC	7370	07/09/1981	14.50		--	--	--	--	W	H
--	--	125RTON	7320	--	--		08/04/1981	35 C F	--	--	--	U
--	--	111VLFL	7320	--	--		07/08/1981	41 C F	--	--	--	U
7	20	125RTON	7280	04/29/1973	14.00		04/29/1973	8.5 B	76.00	3.0	W	H
8	--	125PSNC	7420	07/09/1981	60.20		--	--	--	--	W	H
6.62	20	125PSNC	7370	07/03/1981	21.65		07/03/1981	8.0 B	0.00	2.0	U	U
7	19	125PSNC	7440	07/08/1981	78.17		12/27/1979	5.0 B	50.00	1.0	W	H
7	--	125PSNC	7750	07/09/1981	174.30		07/09/1981	0.50	--	--	W	H
3	1500	125RTON	7280	06/07/1978	278.64	Z	--	--	--	--	O	U
7	--	125PSNC	7600	08/05/1981	48.40		--	--	--	--	W	H,S,R
--	--	125PSNC	7672	05/29/1978	68.61	P	--	--	--	--	W	S
--	--	111VLFL	7200	--	--		07/07/1981	76 C F	--	--	--	U
--	--	125RTON	7200	--	--		07/07/1981	8.5 CF	--	--	--	U
7	19	125PSNC	7435	07/07/1981	40.15		06/24/1981	5.0 B	0.00	2.0	U	U
--	--	125PSNC	7444	05/21/1978	12.75	P	--	--	--	--	W	S
7	--	111VLFL	7160	07/07/1981	21.25		07/07/1981	3.5	--	--	W	N
--	--	111VLFL	7340	--	--		08/05/1981	0.47 VF	--	--	--	U
--	--	111VLFL	7265	07/15/1981	2.40		--	--	--	--	W	H
6	--	125RTON	7290	05/29/1978	102.38		--	--	--	--	W	S
--	--	111VLFL	7200	09/28/1951	18.80		--	--	--	--	U	U
--	--	111VLFL	6995	--	--		08/05/1981	95 C F	--	--	--	U
--	--	111VLFL	6875	--	--		--	--	--	--	--	U
4	62	125RTON	7092	1980	41.34		1980	15 E	9.59	2.0	O	U
4	--	111VLFL	7052	--	--		07/02/1980	30	--	--	O	U
4	319	125RTON	7100	1980	124.59		--	--	--	--	O	U
--	--	111VLFL	7115	07/14/1981	5.55		--	--	--	--	W	H,I
4	0	111VLFL	7105	07/02/1980	1.86		--	--	--	--	O	U
4	421	125RTON	7213.45	1980	275.13		--	--	--	--	O	U
--	--	125RTON	7300	--	--		--	--	--	--	M	U
--	--	111VLFL	6880	10/10/1951	5.72		--	--	--	--	U	U
6	--	111VLFL	6790	07/15/1981	3.10		--	--	--	--	W	S
5	--	125RTON	7710	05/29/1978	31.27		--	--	--	--	W	S
4	17	125RTON	7720	07/23/1981	11.80		--	--	--	--	W	S

Table 39.--*Inventoried wells, springs, and mines in the Apishapa and Purgatoire River drainages*--Continued

LOCAL NUMBER	SITE-ID	OWNER	TYPE OF SITE	NAME OF SPRING	DATE COMPLETED	DEPTH OF WELL (FEET)
SC0330680 5ACC	371105105005501	--	W	--	--	11.00
SC0330681 1BDB	371118104580901	WEST, RUTH C	W	--	1975	280.00
SC0330681 2BDA	371122104565701	SILVA, JULIA	W	--	1951	80.00
SC0330681 3BDC	371019104570401	VIALPANDO	W	--	--	24.00
SC0330681 4ADA	371037104572301	HURTADO	W	--	--	15.10
SC0330681 4CAD	371007104580101	--	W	--	--	17.30
SC0330681 9DCD	370941105021301	--	W	--	--	29.25
SC0330682 0DDA	370914105004401	BARRON, STANELY	W	--	--	18.00
SC0330682 1CCA	370910105002401	CHAVEZ, GEORGE	W	--	1951	4.20
SC0330682 1DBD	370920104594901	STORZRANCH	W	--	--	75.00
SC0330682 2CCB	370939104592800	C F AND I	T	--	1951	--
SC0330682 3BDC	370928104580601	CF AND I	S	ALLEN TLGS	--	--
SC0330682 3BDC2	370928104581601	CF AND I	X	--	07/02/1980	20.00
SC0330682 3BDD	370927104580901	CF AND I	X	--	1980	--
SC0330682 3CAB	370924104581901	CF AND I	X	--	07/02/1980	21.00
SC0330682 4BAD	370946104565401	VIGIL SCH	W	--	--	103.00
SC0330682 4BCA	370937104570901	VIALPANDO, JOSE I	W	--	1956	11.00
SC0330682 4BDB	370938104570201	VIALPANDO, LEE	W	--	--	10.00
SC0330683 0BAA	370904105022001	SPRADLING, E E	W	--	--	38.00
SC0330683 1BCC	370756105030401	--	W	--	--	50.00
SC0330683 1DAB	370657105032101	--	W	--	--	40.00
SC0340650 6ABA	370712104423201	CF AND I	S	VALDEZ	--	--
SC0340650 7BDC	370613104425901	--	W	--	--	--
SC0340660 4AAD	370736104463401	PARSONS	W	--	--	16.60
SC0340660 7ADB	370601104485701	PARSONS, ROBERT	W	--	--	104.50
SC0340660 9BDD	370602104471701	PARSONS, ROBERT	W	--	--	35.30
SC0340661 2DBD	370648104433401	--	W	--	--	--
SC0340661 4ABD	370522104444101	CF AND I	W	--	--	--
SC0340662 1CBC	370450104473501	PARSONS, ROBERT	W	--	--	--
SC0340662 3BDB	370418104450501	PARSONS, ROBERT	W	--	--	--
SC0340663 0DDC	370347104485101	PARSONS, ROBERT	W	--	--	--
SC0340682 9ADA	370322105010801	CF AND I	W	--	--	35.00
SC0340690 1AAA	370743105030301	--	W	--	--	50.00
SC0340692 6AAA	370345105030801	TORRES, ISAAC	W	--	--	--
SC0340693 6ABB	370802105030601	CF AND I	W	--	--	95.00

Table 39.--*Inventoried wells, springs, and mines in the Apishapa and Purgatoire River drainages*--Continued

CASING DIAMETER (INCHES)	DEPTH TO FIRST OPENING (FEET)	PRINCIPAL AQUIFER	ALTITUDE OF LAND SURFACE (FEET)	DATE WATER LEVEL MEASURED	WATER LEVEL (FEET)		DATE DISCHARGE MEASURED	DISCHARGE (GALLONS PER MINUTE)		DRAWDOWN	PUMPING PERIOD (HOURS)	USE OF SITE	USE OF WATER
--	--	111VLFL	8220	06/05/1978	8.43		--	--		--	--	U	U
4	17	125RTON	7595	07/16/1981	53.90		--	--		--	--	W	S
7	--	125RTON	7635	07/16/1981	43.80		--	--		--	--	W	H
--	--	111VLFL	7410	07/16/1981	13.15		--	--		--	--	U	U
--	--	111VLFL	7480	10/05/1951	13.65		--	--		--	--	U	U
4	--	125RTON	7540	--	--		--	--		--	--	U	U
--	--	111VLFL	7920	06/05/1978	9.12	P	--	--		--	--	W	C
8	--	111VLFL	7700	09/25/1951	3.68		--	--		--	--	U	U
--	--	111VLFL	7660	07/15/1981	1.83		--	--		--	--	W	H
--	--	125RTON	7640	--	--		--	--		--	--	W	S
--	--	125RTON	7600	--	--		--	--		--	--	W	U
--	--	125RTON	7460	--	--		--	--		--	--	--	U
4	1	111VLFL	7447	07/02/1980	6.00		--	--		--	--	O	U
4	--	111VLFL	7440	--	--		--	--		--	--	O	U
4	0	111VLFL	7447	07/02/1980	6.05		--	--		--	--	O	U
6	--	125RTON	7410	08/22/1951	77.65		--	--		--	--	U	U
--	--	111VLFL	7340	07/15/1981	5.55		--	--		--	--	W	H
--	--	111VLFL	7335	07/15/1981	4.00		--	--		--	--	W	H
6	--	111VLFL	7920	--	--		--	--		--	--	U	U
--	--	111VLFL	8180	06/21/1978	17.00		--	--		--	--	U	U
--	--	111VLFL	8340	06/21/1978	19.95		--	--		--	--	U	U
--	--	125RTON	6530	--	--		11/18/1982	37	F F	--	--	--	U
--	--	125RTON	6740	06/28/1978	53.26		--	--		--	--	W	S
--	--	111VLFL	6660	10/02/1951	13.15		--	--		--	--	U	U
--	--	125RTON	6980	05/22/1978	28.02	P	--	--		--	--	W	S
--	--	125RTON	6740	05/22/1978	23.83	P	--	--		--	--	W	S
--	--	125RTON	6820	06/28/1978	19.08	P	--	--		--	--	W	S
--	--	125RTON	7122	06/28/1978	18.35	P	--	--		--	--	W	S
--	--	125RTON	6838	05/22/1978	21.91	P	--	--		--	--	W	S
--	--	125RTON	6710	06/29/1978	17.97		--	--		--	--	O	U
--	--	125RTON	6975	05/22/1978	5.00	P	--	--		--	--	W	S
--	--	111VLFL	7878	06/21/1978	22.10		--	--		--	--	W	S
--	--	111VLFL	8171	06/21/1978	28.79		--	--		--	--	O	U
--	--	111VLFL	8427	06/21/1978	13.16	P	--	--		--	--	W	H
--	--	125RTON	8206	06/21/1978	14.20	P	--	--		--	--	W	H

Table 40.--*Chemical analyses of ground water in the Apishapa and Puragatoire River drainages*

LOCAL IDENTIFIER	STATION NUMBER	DATE OF SAMPLE	TIME	TEMPERATURE (DEG C)	PH (UNITS)	SPECIFIC CONDUCTANCE (UMHOS)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	POTASSIUM, DISSOLVED (MG/L AS K)
SC0300632CCA	372311104493501	79-07-06	1330	9.0	6.7	430	44	16	2.7
SC0310642IBAB	372015104340501	81-08-06	0900	18.0	8.2	6430	5.1	5.2	3.6
SC0310651 6ACB	372053104403001	79-06-07	1138	13.5	6.9	660	12	1.1	3.1
SC0310662 7CDB	371844104461001	79-07-07	1244	17.0	7.0	850	100	22	2.7
SC0310682 5BAC	371914104565901	79-06-18	1530	9.0	6.8	2250	240	58	6.0
SC0320650 2DAA	371714104380201	81-08-06	1000	12.0	7.4	945	91	27	2.6
SC0320651 0DCC	371603104393001	81-08-06	1600	19.5	7.2	710	54	17	3.0
SC0320651 9BCA	371448104430501	81-07-21	1800	12.0	8.2	570	57	16	2.0
SC0320653 0BAC	371400104430001	81-07-21	1700	26.0	8.5	540	66	16	1.6
SC0320553 2CAA	371249104414301	79-07-16	1515	14.5	7.3	3000	86	14	16
SC0320653 4CAD	371243104393801	81-07-21	1600	17.0	7.9	1020	64	24	3.6
SC0320661 6CDB	371700104472401	79-05-17	1630	14.5	6.7	728	23	1.0	1.1
SC0320662 0CDD	371413104481701	81-07-22	1400	16.5	7.3	700	25	.8	1.3
SC0320662 1DCC	371415104470101	81-07-22	1430	13.5	8.0	560	70	16	1.6
SC0320663 5DBB	371240104445001	81-07-22	1300	12.5	7.4	670	80	19	1.2
SC0320663 6AAC	371310104432701	81-07-22	1200	16.5	7.9	2580	13	4.3	4.9
SC0320671 6CCC	371507104535801	79-05-17	1345	12.5	7.2	8259	390	8.9	2.3
SC0320672 5DCC	371322104501601	81-08-07	0900	15.5	7.4	673	5.7	.2	.8
SC0320672 6ACB	371354104511801	81-09-07	1000	11.0	7.0	593	68	14	1.5
SC0320672 8ABC	371405104533101	81-08-04	1600	26.0	8.2	850	99	23	2.2
SC0320672 9BBD2	371405104550201	81-07-29	1300	18.5	7.8	3380	100	1.2	2.0
SC0320681 1DBB	371619104575501	79-07-10	1300	12.5	6.6	495	62	11	1.6
SC0320683 5BDD	371300104580701	81-08-03	1700	15.0	7.3	466	46	13	2.2
SC0320692 5DDA	371330105025501	51-09-27	1200	9.4	7.6	306	55	7.0	—
SC0330642 0ACC2	370931104350401	81-08-28	1030	15.0	6.9	1730	90	33	6.4
SC0330642 1CCA	370908104342401	81-07-21	1200	18.0	8.6	1090	2.3	.2	1.2
SC0330642 1CDB	370909104341201	81-07-21	1300	14.5	7.3	1050	62	17	3.6
SC0330650 2CBB	371200104385601	79-05-15	1200	17.0	7.2	820	39	19	1.1
SC0330650 5AAC	371218104411801	79-06-23	1330	14.0	7.2	2300	120	50	4.6
SC0330650 6CDD	371140104425201	81-07-22	1100	27.0	9.2	2800	7.6	9.8	7.0
SC0330651 0ACB1	371120104392801	81-07-21	1500	19.0	8.0	1430	70	32	4.0
SC0330651 0BDD	371112104393201	81-07-21	1530	17.0	8.1	2260	27	20	4.5
SC0330651 0DDB1	371055104382201	79-06-27	1630	16.5	8.2	1600	1.8	.4	3.7
SC0330651 0DDC	371050104391101	81-07-23	0900	17.0	8.2	1970	5.5	.5	2.1
SC0330652 1BBB	370950104410201	81-07-22	0930	17.0	8.2	1180	70	38	3.4
SC0330652 5DAD	370823104364501	81-07-21	1400	29.0	8.4	1320	68	29	7.1
SC0330653 2CBD	370735104420101	51-01-25	1200	8.3	—	1250	80	57	—
SC0330653 5ADD	370746104374701	79-05-12	1000	13.0	7.4	5500	14	85	1.4
SC0330653 5CAA	370737104382801	51-10-11	1200	11.1	7.7	1920	57	25	—
SC0330660 2BCD	371201104451801	81-07-22	1600	15.0	7.8	567	8.2	.6	1.7

Table 40.--*Chemical analyses of ground water in the Apishapa and Puragatoire River drainages*--Continued

LOCAL IDENTIFIER	DATE OF SAMPLE	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM DISSOLVED (MG/L AS NA)	SODIUM BICARBONATE FET-FLD (MG/L AS HCO3)	ALKALINITY LAB (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	SILICA, DISSOLVED (MG/L AS SIO2)
SC03006632CCA	79-07-06	17	20	--	180	33	3.9	.2	.87	12
SC03106421BAB	81-08-06	1500	--	--	1290	1.0	1500	2.1	.12	16
SC03106516ACB	79-06-07	140	--	--	250	62	6.2	.3	.54	5.7
SC03106627CDB	79-07-07	43	46	--	320	75	4.1	.4	4.3	9.1
SC03106825BAC	79-06-18	71	77	--	200	87	190	.3	120	14
SC03206502DAA	81-08-06	72	--	--	230	260	10	.5	1.6	12
SC03206510DCC	81-08-06	64	--	--	300	43	6.8	.5	.12	10
SC03206519BCA	81-07-21	33	--	--	180	82	7.0	.2	.12	9.1
SC03206530BAC	81-07-21	41	--	--	200	64	7.3	.3	3.2	11
SC03206532CAA	79-07-16	1800	1800	--	2470	1700	30	.7	.18	7.8
SC03206534CAD	81-07-21	130	--	--	340	160	24	.3	.41	12
SC03206616CDB	79-05-17	140	--	--	230	--	58	2.3	.11	8.0
SC03206620CDD	81-07-22	130	--	--	170	16	120	2.8	.18	8.5
SC03206621DCC	81-07-22	36	--	--	200	76	15	.0	1.7	10
SC03206635DBB	81-07-22	49	--	--	270	87	11	.4	1.0	9.3
SC03206636AAC	81-07-22	640	--	--	1420	4.0	21	1.6	.03	11
SC03206716CCC	79-05-17	1300	1300	--	240	11	2600	1.5	.13	7.9
SC03206725DCC	81-08-07	150	--	--	230	1.0	64	2.9	.12	7.4
SC03206726ACB	81-08-07	36	--	--	170	96	5.6	.5	5.6	12
SC03206728ABC	81-08-04	52	--	--	220	200	12	.5	2.5	11
SC03206729BBD2	81-07-29	530	--	--	41	4.0	1100	2.7	.09	7.7
SC03206811DBB	79-07-10	29	--	--	160	82	6.1	.6	.04	15
SC03206835BDD	81-08-03	27	--	--	120	100	7.0	.5	.40	18
SC03206925DDA	51-09-27	--	8.4	201	--	8.2	4.0	.2	.50	17
SC03306420ACC2	81-08-28	220	--	--	330	250	160	.4	15	11
SC03306421CCA	81-07-21	260	--	--	480	63	14	.5	.09	10
SC03306421CDB	81-07-21	140	--	--	380	150	12	.3	.00	11
SC03306502CBB	79-05-15	110	110	--	260	110	8.3	.6	.40	8.2
SC03306505AAC	79-06-23	340	340	--	590	570	15	1.0	3.4	8.4
SC03306506CDD	81-07-22	720	--	--	1180	390	21	1.4	.24	3.1
SC03306510ACB1	81-07-21	200	--	--	340	400	11	.5	.40	11
SC03306510BDD	81-07-21	490	--	--	930	270	23	2.7	.09	9.5
SC03306510DDB1	79-06-27	400	400	--	760	27	26	3.6	.01	8.7
SC03306510DDC	81-07-23	500	--	--	1060	7.0	14	3.0	.09	8.9
SC03306521BBB	81-07-22	140	--	--	310	280	20	.6	.95	11
SC03306525DAD	81-07-21	190	--	--	280	390	16	.5	.86	12
SC03306532CBD	51-01-25	--	136	438	--	306	22	1.4	.23	13
SC03306535ADD	79-05-12	1100	1100	--	1220	15	690	1.7	3.4	8.6
SC03306535CAA	51-10-11	--	396	676	--	501	19	.3	.20	9.2
SC03306602BCD	81-07-22	120	--	--	250	5.0	11	2.6	.09	8.8

Table 40.--*Chemical analyses of ground water in the Apishapa and Puragatoire River drainages*--Continued

LOCAL IDENTIFIER	DATE OF SAMPLE	BORON, DISSOLVED (UG/L AS B)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, DISSOLVED (UG/L AS MN)	ZINC, DISSOLVED (UG/L AS ZN)	SELENIUM, DISSOLVED (UG/L AS SE)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)
SC03006632CCA	79-07-06	20	20	3	20	2	241
SC03106421BAB	81-08-06	860	50	10	60	0	3810
SC03106516ACB	79-06-07	30	640	20	50	0	384
SC03106627CDB	79-07-07	60	20	10	960	4	469
SC03106825BAC	79-06-18	80	1100	30	1400	8	1320
SC03206502DAA	81-08-06	10	30	6	<3	5	621
SC03206510DCC	81-08-06	10	210	110	13	0	380
SC03206519BCA	81-07-21	10	140	4	1600	9	317
SC03206530BAC	81-07-21	20	330	58	58	9	342
SC03206532CAA	79-07-16	50	750	240	30	<1	5140
SC03206534CAD	81-07-21	20	25	12	62	2	624
SC03206616CDB	79-05-17	30	60	60	20	1	417
SC03206620CDD	81-07-22	10	33	45	61	0	410
SC03206621DCC	81-07-22	20	40	4	50	5	353
SC03206635DBB	81-07-22	10	31	11	120	6	424
SC03206636AAC	81-07-22	50	140	10	50	0	1550
SC03206716CCC	79-05-17	40	90	340	40	0	4490
SC03206725DCC	81-08-07	10	<10	14	50	0	371
SC03206726ACB	81-08-07	20	63	<1	31	6	361
SC03206728ABC	81-08-04	30	<10	34	<3	6	543
SC03206729BBD2	81-07-29	10	20	60	110	0	1770
SC03206811DBB	79-07-10	30	2300	340	20	0	307
SC03206835BDD	81-08-03	20	790	14	<3	4	289
SC03206925DDA	51-09-27	—	--	—	—	—	199
SC03306420ACC2	81-08-28	30	46	38	110	5	1040
SC03306421CCA	81-07-21	40	15	5	5	0	640
SC03306421CDB	81-07-21	40	46	130	54	0	625
SC03306502CBB	79-05-15	40	400	200	40	<1	455
SC03306505AAC	79-06-23	20	30	40	380	13	1480
SC03306506CDD	81-07-22	1500	640	20	30	1	1870
SC03306510ACB1	81-07-21	30	13	2	7	2	935
SC03306510BDD	81-07-21	10	160	10	20	0	1410
SC03306510DDB1	79-06-27	20	230	10	50	<1	929
SC03306510DDC	81-07-23	20	38	8	130	0	1180
SC03306521BBB	81-07-22	30	38	2	11	13	754
SC03306525DAD	81-07-21	60	<10	10	13	4	885
SC03306532CBD	51-01-25	—	--	—	—	--	854
SC03306535ADD	79-05-12	380	480	40	50	1	2670
SC03306535CAA	51-10-11	—	--	—	—	—	1340
SC03306602BCD	81-07-22	10	280	26	210	0	309

Table 40.--*Chemical analyses of ground water in the Apishapa and Puragatoire River drainages*--Continued

LOCAL IDENTIFIER	STATION NUMBER	DATE OF SAMPLE	TIME	TEMPERATURE (DEG C)	PH (UNITS)	SPECIFIC CONDUCTANCE (UMHOS)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	POTASSIUM, DISSOLVED (MG/L AS K)
SC0330660 5DBD	371150104475901	81-08-04	1100	14.5	7.8	610	41	6.6	1.6
SC0330660 7AAC	371128104485401	81-08-05	--	14.5	7.7	560	6.7	.6	2.1
SC0330660 8CAC	371057104482401	79-07-16	1315	14.5	6.8	760	68	19	2.3
SC0330660 8CDD	371046104481001	81-08-04	0930	14.0	7.5	830	82	24	2.3
SC0330661 4BDC	371020104450701	81-07-17	1400	20.0	7.5	564	54	20	1.9
SC0330661 8CDD	370950104491701	81-07-02	1300	13.5	7.6	552	55	18	1.7
SC0330662 1ABD	370940104465601	81-08-04	1200	20.5	8.0	650	55	18	2.1
SC0330663 2BBA	370801104483101	81-06-02	0900	25.5	7.6	1950	3.6	.1	1.5
SC0330663 4ACC	370744104460201	81-03-17	1200	9.0	7.7	743	62	21	2.7
SC0330663 5DCC	370719104444601	81-08-03	1230	15.5	7.2	4020	180	160	8.8
SC0330663 6DBB	370737104434601	79-07-10	1540	15.0	6.8	2800	180	100	6.9
SC0330670 3CAC	371150104524001	81-08-04	1500	12.0	7.5	800	81	20	2.3
SC0330670 3CCC	371129104530101	81-08-04	1400	15.0	7.8	560	17	3.5	1.6
SC0330670 4ADA	371213104530901	81-08-28	1200	14.0	7.6	522	54	13	2.2
SC0330670 4DDD	371140104530301	79-05-14	1700	12.0	9.3	1580	1.9	.2	1.1
SC0330671 0CAB	371108104524501	79-08-03	--	12.0	--	710	69	20	3.2
		81-07-07	1500	11.0	7.8	727	81	21	2.5
SC0330672 0CCA	370912104550501	51-09-28	1200	13.9	7.4	498	62	22	--
SC0330672 2DAA	370925104515701	81-08-05	1130	13.0	8.2	666	71	18	2.1
SC0330672 6ACD	370820104511301	79-06-18	1300	12.0	7.3	677	59	20	2.9
SC0330672 8BCD	370836104535701	80-07-03	1100	--	8.2	1100	3.3	1.4	2.3
SC0330672 8BCD2	370839104535501	80-07-02	1500	--	7.4	280	38	7.6	1.1
SC0330672 9ABA	370900104541901	80-07-02	1200	--	8.8	1000	1.8	.7	2.1
SC0330672 9BAD	370856104543601	80-07-02	1630	--	7.4	480	75	16	2.5
SC0330672 9CAA	370832104543801	79-04-19	1200	--	7.8	1390	2.9	1.2	3.4
		80-01-16	1200	--	7.2	1850	81	11	70
		80-04-22	1325	--	8.2	280	36	6.8	1.0
SC0330673 5AAD	370752104505701	51-10-10	1200	11.1	7.6	374	56	12	--
SC0330673 6ADA	370754104495001	79-07-10	1440	16.0	6.9	1060	84	51	5.7
		81-08-03	1330	18.5	8.0	1060	86	53	4.9
SC0330681 1BDB	371118104580901	81-08-03	1530	12.0	7.6	530	38	9.8	2.5
SC0330681 4ADA	371037104572301	51-10-05	1200	10.0	7.3	864	100	37	--
SC0330682 1CCA	370910105002401	81-08-03	1430	16.0	7.3	485	73	15	1.5
SC0330682 1DBD	370920104594901	79-07-10	1630	14.0	7.0	765	31	6.3	4.9
SC0330682 2CCB	370909104592800	77-03-31	1000	12.0	8.2	900	26	11	6.2
		79-04-19	1200	--	8.5	1400	15	5.1	5.2
		80-01-16	1200	--	8.4	1270	10	2.9	4.8
		80-04-22	1145	--	8.2	260	36	5.4	1.0
		80-07-07	1220	14.0	8.0	--	15	4.6	4.6
SC0330682 3BDC	370928104580601	80-05-23	1200	--	8.0	--	36	23	16

Table 40.--*Chemical analyses of ground water in the Apishapa and Puragatoire River drainages*--Continued

LOCAL IDENTIFIER	DATE OF SAMPLE	SODIUM, DISSOLVED (MG/L AS NA)	SODIUM+POTASSIUM DISSOLVED (MG/L AS NA)	BICARBONATE FET-FLD (MG/L AS HCO3)	ALKALINITY LAB (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	SILICA, DISSOLVED (MG/L AS SIO2)
SC0330660 5DBD	81-08-04	78	--	--	240	53	10	2.2	.62	8.9
SC0330660 7AAC	81-08-05	120	--	--	260	5.0	13	.9	.19	8.0
SC0330660 8CAC	79-07-16	55	57	--	320	62	9.6	.5	.75	10
SC0330660 8CDD	81-08-04	73	--	--	280	160	12	.5	.72	9.5
SC0330661 4BDC	81-07-17	33	--	--	230	37	13	.3	2.8	10
SC0330661 8CDD	81-07-02	32	--	--	230	36	17	.2	.65	10
SC0330662 1ABD	81-08-04	56	--	--	220	100	9.2	.5	1.0	11
SC03306632BBA	81-06-02	480	--	--	1040	1.0	21	4.3	1.0	17
SC0330663 4ACC	81-03-17	65	--	--	210	160	11	.4	.90	7.2
SC0330663 5DCC	81-08-03	610	--	--	830	1500	55	.5	4.4	9.3
SC03306636DBB	79-07-10	270	280	--	420	570	100	.4	77	9.6
SC0330670 3CAC	81-08-04	48	--	--	190	190	11	.5	.78	11
SC0330670 3CCC	81-08-04	110	--	--	260	7.0	12	.5	.12	9.4
SC0330670 4ADA	81-08-28	33	--	--	140	100	6.8	.3	.39	11
SC0330670 4DDD	79-05-14	370	--	915	750	8.7	8.4	6.1	.15	9.0
SC0330671 0CAB	79-08-03	62	--	--	230	150	9.7	.5	.86	11
	81-07-07	46	--	--	190	170	23	.4	.71	9.2
SC0330672 0CCA	51-09-28	--	22	294	--	39	5.0	.2	.20	13
SC0330672 2DAA	81-08-05	44	--	--	210	130	9.8	.5	.82	10
SC0330672 6ACD	79-06-18	67	--	--	240	120	7.9	.5	1.9	9.6
SC0330672 8BCD	80-07-03	294	--	749	615	88	16	2.4	--	--
SC0330672 8BCD2	80-07-02	24	--	174	143	5.0	6.8	.3	--	--
SC0330672 9ABA	80-07-02	251	--	606	596	15	15	2.8	--	--
SC0330672 9BAD	80-07-02	27	--	336	275	21	10	.6	--	--
SC0330672 9CAA	79-04-19	310	--	703	577	11	33	3.8	.54	11
	80-01-16	340	--	913	750	143	110	3.8	--	--
	80-04-22	6.5	--	142	117	25	2.5	.2	--	--
SC0330673 5AAD	51-10-10	--	17	226	--	27	3.5	.2	.10	9.5
SC0330673 6ADA	79-07-10	71	77	--	420	140	7.8	.9	2.1	16
	81-08-03	79	--	--	430	130	6.3	.7	1.5	17
SC0330681 1BDB	81-08-03	63	--	--	260	1.0	5.5	.5	.29	12
SC0330681 4ADA	51-10-05	--	43	250	--	158	74	.1	8.4	9.5
SC0330682 1CCA	81-08-03	9.8	--	--	220	32	2.3	.5	.14	12
SC0330682 1DBD	79-07-10	140	--	--	370	35	13	.5	.20	9.3
SC0330682 2CCB	77-03-31	190	--	487	--	100	5.4	1.1	4.3	7.4
	79-04-19	320	--	610	511	190	9.1	1.3	4.6	6.4
	80-01-16	280	--	619	521	145	6.0	1.2	--	--
	80-04-22	4.3	--	131	108	23	1.8	.2	--	--
	80-07-07	234	--	528	434	158	7.1	3.5	--	--
SC0330682 3BDC	80-05-23	1028	--	827	772	1023	11	.4	--	--

Table 40.--*Chemical analyses of ground water in the Apishapa and Puragatoire River drainages*--Continued

LOCAL IDENTIFIER	DATE OF SAMPLE	BORON, DISSOLVED (UG/L AS B)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, DISSOLVED (UG/L AS MN)	ZINC, DISSOLVED (UG/L AS ZN)	SELENIUM, DISSOLVED (UG/L AS SE)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)
SC03306605DBD	81-08-04	10	<10	80	23	2	348
SC03306607AAC	81-08-05	7	40	4	290	0	314
SC03306608CAC	79-07-16	20	20	1	30	0	422
SC03306608CDD	81-08-04	20	<10	<1	6	5	535
SC03306614BDC	81-07-17	20	60	2	10	5	320
SC03306618CDD	81-07-02	190	20	3	20	3	311
SC03306621ABD	81-08-04	10	<10	38	5200	3	394
SC03306632BBA	81-06-02	100	550	20	5	0	1160
SC03306634ACC	81-03-17	20	<10	3	20	7	460
SC03306635DCC	81-08-03	40	130	750	2800	12	3050
SC03306636DBB	79-07-10	40	20	20	70	4	1880
SC03306703CAC	81-08-04	10	200	6	14	4	482
SC03306703CCC	81-08-04	4	<10	10	<3	0	318
SC03306704ADA	81-08-28	30	12	4	140	1	306
SC03306704DDD	79-05-14	70	340	0	20	0	858
SC03306710CAB	79-08-03	30	20	<1	<3	0	467
	81-07-07	220	20	2	7	5	471
SC03306720CCA	51-09-28	--	--	--	--	--	308
SC03306722DAA	81-08-05	20	<10	8	12	5	415
SC03306726ACD	79-06-18	30	20	10	6	3	440
SC03306728BCD	80-07-03	--	<20	<9	<10	--	846
SC03306728BCD2	80-07-02	--	<20	220	<10	--	223
SC03306729ABA	80-07-02	--	30	<9	30	--	775
SC03306729BAD	80-07-02	--	<20	2060	<10	--	404
SC03306729CAA	79-04-19	44	<20	<10	--	<1	725
	80-01-16	55	--	--	70	--	1740
	80-04-22	--	--	--	--	<3	174
SC03306735AAD	51-10-10	--	--	--	--	--	237
SC03306736ADA	79-07-10	60	280	10	60	4	639
	81-08-03	40	<10	<1	16	5	642
SC03306811BDB	81-08-03	0	77	28	270	0	290
SC03306814ADA	51-10-05	--	--	--	--	--	553
SC03306821CCA	81-08-03	10	470	760	24	0	280
SC03306821DBD	79-07-10	20	790	240	80	0	455
SC03306822CCB	77-03-31	30	60	20	30	20	607
	79-04-19	44	<20	<10	--	<1	873
	80-01-16	<10	--	--	<10	--	850
	80-04-22	--	--	--	--	<3	232
	80-07-07	--	<20	<9	30	--	807
SC03306823BDC	80-05-23	240	700	--	--	5	2600

Table 40.--*Chemical analyses of ground water in the Apishapa and Puragatoire River drainages*--Continued

LOCAL IDENTIFIER	STATION NUMBER	DATE OF SAMPLE	TIME	TEMPERATURE (DEG C)	PH (UNITS)	SPECIFIC CONDUCTANCE (UMHOS)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	POTASSIUM, DISSOLVED (MG/L AS K)
SC03306823BDD	370927104580901	80-07-02	1200	--	7.4	1200	55	13	6.5
SC03306823CAB	370924104581901	80-07-02	1800	--	7.3	540	87	13	2.5
SC03306824BAD	370946104565401	51-09-27	1200	12.8	7.1	1950	171	99	--
SC03306824BCA	370937104570901	81-08-03	1400	15.0	7.1	400	61	8.4	.9
SC03306830BAA	370904105022001	51-09-27	1200	12.8	7.5	345	65	7.4	--
SC03406506ABA	370712104423201	82-11-23	1000	8.5	8.5	4450	13	14	5.9
SC03406604AAD	370706104463401	51-10-10	1200	11.1	7.5	725	72	33	--

LOCAL IDENTIFIER	DATE OF SAMPLE	SODIUM, DISSOLVED (MG/L AS NA)	SODIUM+POTASSIUM DISSOLVED (MG/L AS NA)	BICARBONATE FET-FLD (MG/L AS HCO3)	ALKALINITY LAB (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	SILICA, DISSOLVED (MG/L AS SIO2)
SC03306823BDD	80-07-02	244	--	636	522	198	14	.2	--	--
SC03306823CAB	80-07-02	43	--	227	186	124	12	.2	--	--
SC03306824BAD	51-09-27	--	175	768	--	544	25	.0	3.6	16
SC03306824BCA	81-08-03	12	--	--	--	31	1.1	.3	.54	11
SC03306830BAA	51-09-27	--	3.0	208	--	22	2.0	.2	.50	9.7
SC03406506ABA	82-11-23	1200	--	--	2290	300	22	1.3	.14	6.7
SC03406604AAD	51-10-10	--	43	488	--	1.2	9.0	.8	1.2	17

LOCAL IDENTIFIER	DATE OF SAMPLE	BORON, DISSOLVED (UG/L AS B)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, DISSOLVED (UG/L AS MN)	ZINC, DISSOLVED (UG/L AS ZN)	SELENIUM, DISSOLVED (UG/L AS SE)	SUM OF CONSTITUENTS, DISSOLVED (MG/L)
SC03306823BDD	80-07-02	--	<20	183	130	--	951
SC03306823CAB	80-07-02	--	20	<9	<20	--	602
SC03306824BAD	51-09-27	--	--	--	--	--	1410
SC03306824BCA	81-08-03	360	<10	<1	15	0	--
SC03306830BAA	51-09-27	--	--	--	--	--	212
SC03406506ABA	82-11-23	--	110	10	--	--	2940
SC03406604AAD	51-10-10	--	--	--	--	--	418

Table 41.--*Hydraulic properties of aquifers in Las Animas County and nearby areas*

Location	Tested thickness (feet)	Specific capacity (gallon per minute per foot)	Transmissivity (square feet per day)	Hydraulic conductivity (feet per day)	Type of test	Duration of pumping or bailing (hours)	Method of analysis	Source of information	Remarks
ALLUVIUM									
Huerfano County, Colorado									
26-67-31ccb	2.5	23	4,680	187	Pumping-------	11.5	Distance-drawdown (Cooper and Jacob, 1946).	Wilson (1965)--------	Huerfano River alluvium; specific yield=0.04.
Las Animas County, Colorado									
30-65-33dad	6.5	15	5.8	.89	Pumping-------	24	Specific capacity (Lohman, 1972).	Colorado Division of Water Resources, State Engineer files.	Apishapa River alluvium: sand and gravel.
30-65-33dad	5	5.0	.78	.16	Pumping-------	48			Apishapa River alluvium: gravel.
30-65-33dda	3	29	13	4.3	Pumping-------	24			Apishapa River alluvium: sand and gravel.
31-66-21bba	5	1.67	.13	.026	Bailed--------	1	Specific capacity-transmissivity, (unpublished data).	Colorado Division of Water Resources, State Engineer files.	Mitotes Canyon alluvium: sand.
32-67-01ddd	24	.83	.041	.002	Bailed--------	1			Jarosa Canyon alluvium: sand.
32-67-26acb	15	4.0	.56	.037	Bailed--------	3			Sarcillo Canyon alluvium: coarse sand.
33-67-28bcd2	----	------	--------	1,880	Pumping-------	----	Specific capacity (Lohman, 1972).		Purgatoire River alluvium
33-67-29bad	2.1	------	4.2	2	Slug injection		Falling head (Van Bavel and Kirkham, 1948).	Water Waste and Land, Ltd. (1980).	Purgatoire River alluvium: gravel.
33-68-23bdc	8.5	------	.14	.016	Slug injection				Purgatoire River alluvium: sand and gravel.
33-68-23cab	11.7	------	.16	.014	Slug injection				Purgatoire River alluvium: gravel.
Colfax County, New Mexico									
31-19-32d	21	------	17	.79	Slug injection		Falling head (Ferris and others, 1962).	Kaiser Steel Corp. unpublished data.	York Canyon alluvium.
31-19-27c	27	------	21	.79	Slug injection				York Canyon alluvium.
30-19-04d	7	------	570	82	Slug injection				York Canyon alluvium.
30-19-10b	18	------	97	5.37	Slug injection				York Canyon alluvium.
30-19-10b	19	------	43	2.23	Slug injection				York Canyon alluvium.
31-19-26b	20	------	84	4.25	Slug injection				Salyers Canyon alluvium.
CUCHARA-POISON CANYON AQUIFER									
Las Animas County, Colorado									
30-66-25bc	----	.074	4.1	---------	Bailed--------	3	Specific capacity-transmissivity curve, in Robson (1983).	Colorado Division of Water Resources; State Engineer files.	
30-66-33da	----	3.33	575	---------	Bailed--------	3			
31-66-09da	----	.074	4.1	---------	Bailed--------	3			
31-66-11bc	----	.057	2.95	---------	Bailed--------	3			
31-66-11bc	----	.008	.24	---------	Bailed--------	3			
31-66-29adc	5	.038	1.75	.35	Bailed--------	1			Sandstone.
31-66-29dcc	30	.14	9.5	.32	Bailed--------	1			Sandstone.
31-66-32cb	----	.28	24	---------	Bailed--------	3			
31-67-01ad	----	.066	3.6	---------	Bailed--------	3			
31-67-23ddb	4	.10	6.1	1.52	Bailed--------	1			Shale.
31-67-25da	17	.43	41	2.41	Bailed--------	1			Sandstone.
32-65-17bc	47	1.0	123	2.02	Bailed--------	1.75			Sandstone.
32-66-06bdd	11	1.25	164	15	Bailed--------	3			Shale and thin layers of sandstone.
32-66-10ad	65	.072	4.0	.062	Bailed--------	1			Mostly sandstone.
32-66-20cdd	----	.007	.20	---------	Bailed--------	4			
32-66-26cca	----	.056	2.9	---------	Bailed--------	.5			
32-66-28cd	----	.11	7.0	---------	Bailed--------	2			
32-66-30ca	----	.023	.92	---------	Bailed--------	3			
32-67-02cc	----	.85	100	---------	Bailed--------	3			
32-67-24baa	----	.069	3.8	---------	Bailed--------	2			
33-66-18db	----	.055	2.8	---------	Bailed--------	3			
33-67-04add	----	.10	61	---------	Bailed--------	1			

Table 41.--*Hydraulic properties of aquifers in Las Animas County and nearby areas*--Continued

Location	Tested thickness (feet)	Specific capacity (gallon per minute per foot)	Transmissivity (square feet per day)	Hydraulic conductivity (feet per day)	Type of test	Duration of pumping or bailing (hours)	Method of analysis	Source of information	Remarks
				RATON AQUIFER					
				Huerfano County, Colorado					
29-66-26dbc	238.5	------	28	0.12	Slug removal--		Recovery (Cooper and others, 1967).	U.S. Geological Survey unpublished data.	Mostly sandstone.
30-66-01ccd	198.6	------	56	.028	Slug removal--				Sandstone with shale and coal.
30-66-16adc	162	------	3.74	.023	Slug removal--				Sandstone with shale and coal.
				Las Animas County, Colorado					
31-65-16acb	220.2	------	.48	.002	Slug removal--				Sandstone with shale and coal.
31-65-18bb	-----	0.040	1.85	-------	Bailed--------	1	Specific capacity-transmissivity curve, in Robson (1983).	Colorado Division of Water Resources; State Engineer files.	
31-65-18ca	-----	.13	8.7	-------	Bailed--------	2			
31-65-27cb	-----	.41	38	-------	Bailed--------	3			
31-66-24ac	-----	.60	63	-------	Bailed--------	2			
32-65-14db	-----	.92	110	-------	Bailed--------	3			
32-65-19bca	-----	.067	4.4	-------	Bailed--------	3			
32-65-21ca	-----	.008	.24	-------	Bailed--------	3			
32-65-29cb	-----	.35	33	-------	Bailed--------	2			
32-65-29cbb	-----	.045	2.2	-------	Bailed--------	3			
32-65-32db	-----	.42	40	-------	Bailed--------	3			
32-65-33cb	-----	.030	1.3	-------	Bailed--------	3			
32-65-34cad	-----	.054	2.75	-------	Bailed--------	3			
32-66-16cdb	-----	------	.019	-------	Slug removal--		Recovery (Cooper and others, 1967).	U.S. Geological Survey.	
32-66-25adc	-----	.17	12	-------	Bailed--------	4	Specific capacity-transmissivity curve, in Robson (1983).	Colorado Division of Water Resources; State Engineer files.	
32-66-25cc	-----	.007	.20	-------	Bailed--------	3			
32-66-26abc	-----	.015	.53	-------	Bailed--------	3			
32-66-35bbd	-----	.21	16	-------	Bailed--------	1			
32-66-36aac	-----	.11	7.0	-------	Bailed--------	3			
32-66-36aa	-----	.015	.53	-------	Bailed--------	2			
32-66-36ad	-----	.51	52	-------	Bailed--------	4			
32-66-36ba	-----	.078	5.2	-------	Bailed--------	3			
32-66-36bb	-----	.11	7.0	-------	Bailed--------	2			
32-66-36db	-----	.018	.67	-------	Bailed--------	4			
33-64-22cbc	60	.004	.10	.002	Bailed--------	4			Trinidad Sandstone.
33-64-29cdd	19	------	3.96	.21	Pressure------		Water intake (U.S. Water and Power Resources Service, 1981).	U.S. Bureau of Reclamation unpublished data.	Sandstone.
	22	------	3.43	.16	Pressure------				Coal and carbonaceous shale.
	10	------	11	1.06	Pressure------				Siltstone and shale.
33-64-32acb	42.5	------	16	.38	Pressure------				Sandstone and siltstone.
	34	------	18	.54	Pressure------				Coal and carbonaceous shale.
	38.5	------	0	0	Pressure------				Shale and siltstone.
33-65-02cbb	165.7	.058	1.47	.009	Slug removal--		Recovery (Cooper and others, 1967).	U.S. Geological Survey.	Sandstone, shale and coal.
33-65-10ddb	-----	.10	6.1	-------	Bailed--------	3	Specific capacity-transmissivity curve, in Robson (1983).	Colorado Division of Water Resources; State Engineer files.	
33-65-34cd	-----	.004	.10	-------	Bailed--------	2			
33-65-35add	50	------	1.75	.035	Pumping-------		Recovery (Ferris and others, 1962).	U.S. Geological Survey.	Trinidad Sandstone.
33-66-03ab	-----	.12	7.8	-------	Bailed--------	3	Specific capacity-transmissivity curve, in Robson (1983).	Colorado Division of Water Resources; State Engineer files.	
33-66-03dcb	-----	.13	8.7	-------	Bailed--------	3			
33-66-04cc	-----	.057	2.95	-------	Bailed--------	3			
33-66-04cdb	-----	.067	4.4	-------	Bailed--------	3			
33-66-04ddd	-----	.16	11	-------	Bailed--------	3			
33-66-05bcd	-----	.046	2.25	-------	Bailed--------	3			
33-66-05ca	-----	.039	1.8	-------	Bailed--------	3			
33-66-05cb	-----	.008	.24	-------	Bailed--------	3			
33-66-05abc	-----	.43	41	-------	Bailed--------	3			

Table 41.--*Hydraulic properties of aquifers in Las Animas County and nearby areas*--Continued

Location	Tested thickness (feet)	Specific capacity (gallon per minute per foot)	Transmissivity (square feet per day)	Hydraulic conductivity (feet per day)	Type of test	Duration of pumping or bailing (hours)	Method of analysis	Source of information	Remarks
RATON-VERMEJO-TRINIDAD AQUIFER--Continued									
Las Animas County, Colorado--Continued									
33-66-05dbd	-----	0.006	0.16	-------	Bailed--------	2			
33-66-05dd	-----	.096	5.8	-------	Bailed--------	3			
33-66-05dd	-----	.37	34	-------	Bailed--------	3			
33-66-07aac	-----	.027	1.15	-------	Bailed--------	3			
33-66-07dad	-----	.025	1.05	-------	Bailed--------	3			
33-66-08ab	-----	.30	26	-------	Bailed--------	3			
33-66-08ac	-----	.036	1.65	-------	Bailed--------	3			
33-66-08ac	-----	.63	68	-------	Bailed--------	3			
33-66-08ac	-----	1.07	134	-------	Bailed--------	3			
33-66-08bac	-----	.008	.24	-------	Bailed--------	4			
33-66-08ba	-----	.018	.67	-------	Bailed--------	3	Specific capacity-transmissivity curve in Robson (1983).	Colorado Division of Water Resources; State Engineer Office.	
33-66-08ba	-----	.23	24	-------	Bailed--------	3			
33-66-08ba	-----	.22	17	-------	Bailed--------	2			
33-66-08cb	-----	.17	12	-------	Bailed--------	3			
33-66-08dc	-----	.32	28	-------	Bailed--------	3			
33-66-09aa	-----	.09	5.4	-------	Bailed--------	3			
33-66-09ab	-----	.004	.10	-------	Bailed--------	2			
33-66-09ba	-----	.044	2.1	-------	Bailed--------	3			
33-66-09bb	-----	1.55	2.5	-------	Bailed--------	3			
33-66-09bb	-----	1.30	174	-------	Bailed--------	3			
33-66-09bd	-----	.026	1.1	-------	Bailed--------	3			
33-66-10bbc	10	.10	6.1	0.61	Bailed--------	2			
33-66-35cc	-----	.062	3.3	-------	Bailed--------	3			
33-67-03ccc	-----	.11	7.0	-------	Bailed--------	3			
33-67-04ddd	125	------	2.50	.02	Slug removal--		Recovery (Cooper and others, 1967).	U.S. Geological Survey.	Sandstone and shale.
33-67-28bcd	2	1.56	91	45	Pumping-------	2.5	Drawdown (Ferris and others, 1962).	Water, Waste and Land, Ltd. (1980).	Fractured siltstone.
33-67-29aab	9	------	1.98	.22	Slug removal--		Recovery (Cooper and others, 1967).		Coal.
33-67-29bad	10	------	.56	.06	Slug removal--				Coal.
33-68-26cb	-----	.71	79	-------	Bailed--------	2	Specific capacity-transmissivity curve, in Robson (1983).	Colorado Division of Water Resources; State Engineer files.	
Colfax County, New Mexico									
30-19-04c	16	------	0.94	0.06	Slug injection		Falling head (Ferris and others, 1962).	Kaiser Steel Corp. unpublished data.	Sandstone.
31-19-28d	8	------	.56	.07	Slug injection				Coal.
31-19-28d	7	------	.027	.004	Slug injection				Sandstone.
31-19-35c	22	------	.66	.03	Slug injection				Sandstone.
31-19-35c	11	------	30	2.66	Slug injection				Sandstone.
30-19-03c	18	------	.48	.027	Slug injection				Sandstone and coal.
30-19-03c	12	------	1.86	.16	Slug injection				Sandstone.
31-19-35a	5	------	28	5.66	Pumping-------	---	Recovery (Ferris and others, 1962).		Coal.
30-19-04c	22	------	3.72	.17	Slug injection		Falling head (Ferris and others, 1962).		Sandstone.

Table 42.--*Water levels in selected observation wells in the central Raton Basin*

ALLUVIUM

Well SC02506725BCD — Site number 375140104503701

ALTITUDE OF LAND SURFACE: 5,981 FEET.
HIGHEST WATER LEVEL: 9.65 FEET BELOW LAND SURFACE DATUM MAR. 18, 1959.
LOWEST WATER LEVEL: 18.75 FEET BELOW LAND SURFACE DATUM OCT. 19, 1954.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

Date M-D-Y	Water level	Date M-D-Y	Water level	Date M-D-Y	Water level	Date M-D-Y	Water level
09/13/51	15.96	05/19/53	16.12	06/23/55	16.68	03/25/66	12.17
10/16/51	16.2	06/23/53	16.49	11/23/55	17.32	11/09/66	14.65
11/13/51	15.9	07/21/53	16.8	02/27/56	16.22	03/24/67	15.09
12/12/51	15.74	08/18/53	17.07	03/31/56	16.34	11/15/67	13.18
01/16/52	15.7	09/29/53	17.7	11/13/56	17.52	03/20/68	13.89
		10/22/53	17.64			03/21/69	10.42
02/13/52	15.73	01/21/54	17.12	03/11/58	11.06	04/08/70	10.67
03/13/52	15.75	02/18/54	16.82	12/02/58	10.35	03/18/71	10.48
04/16/52	15.72	03/17/54	17.12	03/18/59	9.65	05/15/72	10.57
05/22/52	15.28	04/20/54	17	11/03/59	12.18	04/03/73	11.81
06/18/52	14.53	05/20/54	16.48	03/29/60	9.67	04/24/74	10.75
07/08/52	14.49	06/14/54	16.89	10/25/60	11.54	01/10/75	12.65
08/12/52	16.3	07/16/54	17.73	10/11/61	11.22	02/14/76	11.75
09/18/52	16.14	08/20/54	18.16	03/26/62	11.16	02/10/77	12.80
10/15/52	16.1	10/19/54	18.75	10/30/62	11.14	05/21/79	12.63
11/18/52	15.97	12/22/54	17.47	03/31/63	11.08	05/07/80	11.93
12/29/52	16.07	01/20/55	18.17	11/05/63	13.30	04/23/81	12.58
01/19/53	16.18	03/01/55	17.92	04/08/64	14.75	04/26/82	10.63
02/18/53	16.25	03/26/55	17.99	11/16/64	16.48	04/25/83	10.10
03/18/53	16.34	04/25/55	18.00	03/27/65	15.31		
04/21/53	16.45	05/23/55	17.79				

Well NA03001904D2(MA-3) — Site number 365151104551301

ALTITUDE OF LAND SURFACE: 7,363.71 FEET.
HIGHEST WATER LEVEL: 17.10 FEET BELOW LAND SURFACE DATUM AUG. 15, 1980.
LOWEST WATER LEVEL: 23.83 FEET BELOW LAND SURFACE DATUM APR. 23, 1980.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

Date M-D-Y	Water level	Date M-D-Y	Water level	Date M-D-Y	Water level
11/10/78	18.4	12/17/79	22.54	12/15/80	22.12
01/10/79	22.05	02/15/80	23.57	01/15/81	21.86
02/12/79	22.7	03/19/80	23.63	02/16/81	22.01
03/09/79	23.2	04/23/80	23.83	03/11/81	21.78
04/18/79	22.4	05/13/80	22.2	04/15/81	22.00
05/22/79	23.27	06/19/80	22.72	05/12/81	22.04
06/13/79	21.87	07/14/80	21.10	06/12/81	22.40
08/16/79	21.7	08/15/80	17.10	07/13/81	21.64
09/17/79	21.97	09/15/80	32.36	08/11/81	21.63
10/16/79	22.15	10/15/80	21.82	09/14/81	18.92
11/09/79	21.99	11/11/80	20.44	10/14/81	19.12

Table 42.--*Water levels in selected observation wells in the central Raton Basin*--Continued

Well NA03001907A (MA-7) Site number 365131104564701

ALTITUDE OF LAND SURFACE: 7,285.83 FEET.
HIGHEST WATER LEVEL: 9.65 FEET BELOW LAND SURFACE DATUM AUG. 11, 1981
LOWEST WATER LEVEL: 16.64 FEET BELOW LAND SURFACE DATUM DEC. 17, 1979.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

Date M-D-Y	Water level	Date M-D-Y	Water level	Date M-D-Y	Water level
11/10/78	16.45	12/17/79	16.64	11/14/80	15.28
01/10/79	15.9	01/15/80	15.47	12/15/80	15.32
02/12/79	15.8	02/15/80	15.55	01/15/81	15.10
03/09/79	16.6	03/19/80	15.52	02/16/81	15.10
04/18/79	15.9	04/23/80	15.51	03/11/81	15.20
05/22/79	15.5	05/13/80	13.80	04/15/81	15.40
06/13/79	14.81	06/19/80	14.96	05/12/81	15.34
08/17/79	11.4	07/14/80	15.32	06/12/81	15.35
09/17/79	15.37	08/15/80	15.50	07/13/81	14.65
10/16/79	15.87	09/15/80	15.42	08/11/81	9.65
11/19/79	15.67	10/15/80	15.53	09/14/81	12.01
				10/14/81	13.48

Well NA03001908D (MA-8) Site number 365100104555001

ALTITUDE OF LAND SURFACE: 7,243.04 FEET.
HIGHEST WATER LEVEL: 10.34 FEET BELOW LAND SURFACE DATUM OCT. 14, 1981.
LOWEST WATER LEVEL: 13.97 FEET BELOW LAND SURFACE DATUM OCT. 16, 1979.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

Date M-D-Y	Water level	Date M-D-Y	Water level	Date M-D-Y	Water level
11/10/78	13.91	12/17/79	12.93	11/14/80	13.69
01/10/79	13.20	01/15/80	13.21	12/15/80	13.16
02/12/79	13.45	02/15/80	12.82	01/15/80	12.99
03/09/79	12.75	03/19/80	13.12	02/16/81	13.06
04/18/79	12.75	04/23/80	12.97	03/11/81	12.91
05/22/79	13.33	05/13/80	12.20	04/15/81	12.76
06/13/79	12.29	06/19/80	13.25	05/12/81	12.87
08/17/79	13.50	07/14/80	13.25	06/12/81	12.99
09/17/79	13.36	08/15/80	13.47	07/13/81	12.39
10/16/79	13.97	10/15/80	13.69	08/11/81	12.44
11/19/79	12.47	10/15/80	13.71	09/14/81	10.43
				10/14/81	10.34

Table 42.--*Water levels in selected observation wells in the central Raton Basin*--Continued

Well NA03001910B1 (MA-4) Site number 365104104544201

ALTITUDE OF LAND SURFACE: 7,280.11 FEET.
HIGHEST WATER LEVEL: 9.86 FEET BELOW LAND SURFACE DATUM AUG. 11, 1981.
LOWEST WATER LEVEL: 14.29 FEET BELOW LAND SURFACE DATUM NOV. 19, 1979.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

Date M-D-Y	Water level	Date M-D-Y	Water level	Date M-D-Y	Water level
		12/17/79	12.50	11/14/80	11.28
01/10/79	13.19	01/15/80	11.46	12/15/80	11.66
02/12/79	13.1	02/15/80	12.47	01/15/81	11.12
03/09/79	13.1	03/19/80	12.61	02/16/81	11.54
04/18/79	13.0	04/23/80	12.84	03/11/81	11.50
05/22/79	12.87	05/13/80	12.62	04/15/81	12.28
06/13/79	12.9	06/19/80	12.27	05/12/81	11.45
07/20/79	12.7	07/14/80	12.34	06/12/81	11.54
08/17/79	12.6	08/15/80	12.36	07/13/81	10.83
09/17/79	12.63	09/15/80	12.28	08/11/81	9.86
10/16/79	13.01	10/15/80	12.32	09/14/81	10.04
11/19/79	14.29			10/14/81	10.64

Well NA03001910B2 (MA-5) Site number 365105104543301

ALTITUDE OF LAND SURFACE: 7,298.24 FEET.
HIGHEST WATER LEVEL: 8.68 FEET BELOW LAND SURFACE DATUM FEB. 16, 1981.
LOWEST WATER LEVEL: 11.62 FEET BELOW LAND SURFACE DATUM DEC. 15, 1980.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

Date M-D-Y	Water level	Date M-D-Y	Water level	Date M-D-Y	Water level
		12/17/79	10.44	11/14/80	10.43
01/10/79	10.84	01/15/80	9.66	12/15/80	11.62
02/12/79	8.7	02/15/80	9.87	01/15/81	10.52
03/09/79	9.2	03/19/80	10.10	02/16/81	8.68
04/18/79	10.3	04/23/80	10.68	03/11/81	9.64
05/22/79	9.97	05/13/80	10.12	04/15/81	10.16
06/13/79	10.19	06/19/80	10.60	05/12/81	10.81
07/20/79	10.85	07/14/80	10.46	06/12/81	10.90
08/16/79	10.4	08/15/80	10.70		
09/17/79	10.94	09/15/80	11.29		
10/16/79	11.45	10/15/80	11.32		
11/19/79	10.69				

Table 42.--*Water levels in selected observation wells in the central Raton Basin*--Continued

Well NA03101927C (MA-2) Site number 365326104545001

ALTITUDE OF LAND SURFACE: 7,587.56 FEET.
HIGHEST WATER LEVEL: 8.55 FEET BELOW LAND SURFACE DATUM JUNE 19, 1980.
LOWEST WATER LEVEL: 20.2 FEET BELOW LAND SURFACE DATUM APR. 18, 1979.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

Date M-D-Y	Water level	Date M-D-Y	Water level	Date M-D-Y	Water level
		12/17/79	16.65	11/14/80	14.81
01/10/79	17.90	01/15/80	16.95	12/15/80	15.71
02/12/79	16.4	02/15/80	17.04	01/15/81	15.49
03/09/79	17.0	03/19/80	16.76	02/16/81	15.97
04/18/79	20.2	04/23/80	16.64	03/11/81	15.84
05/22/79	16.13	05/13/80	10.19	04/15/80	15.69
06/13/79	15.07	06/19/80	8.55	05/12/81	16.77
07/20/79	15.66	07/14/80	12.83	06/12/81	15.98
08/16/79	14.0	08/15/80	14.21	07/13/81	13.87
09/17/79	16.01	09/15/80	15.41	08/11/81	13.16
10/16/79	16.65	10/15/80	15.35	09/14/81	11.52
11/19/79	15.05			10/14/81	13.06

Well NA03101932D (MA-1) Site number 365301104560001

ALTITUDE OF LAND SURFACE: 7,502.86 FEET.
HIGHEST WATER LEVEL: 8.09 FEET BELOW LAND SURFACE DATUM SEP. 14, 1981.
LOWEST WATER LEVEL: 16.6 FEET BELOW LAND SURFACE DATUM FEB. 12, 1979.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

Date M-D-Y	Water level	Date M-D-Y	Water level	Date M-D-Y	Water level
11/10/78	9.7	12/17/79	15.28	11/14/80	17.28
01/10/79	15.64	01/15/80	15.35	12/15/80	14.82
02/12/79	16.6	02/15/80	15.45	01/15/81	14.91
03/09/79	16.6	03/19/80	15.44	02/16/81	15.11
04/18/79	15.7	04/23/80	15.41	03/11/81	14.74
05/22/79	14.65	05/13/80	11.10	04/15/81	14.74
06/13/79	13.55	06/19/80	10.52	05/12/81	14.72
07/20/79	13.82	07/14/80	10.82	06/12/81	14.77
08/16/79	13.1	08/15/80	12.48	07/13/81	13.05
09/17/79	13.3	09/15/80	14.65	08/11/81	8.49
10/16/79	14.77	10/15/80	14.84	09/14/81	8.09
11/19/79	15.20			10/14/81	8.53

Table 42.--*Water levels in selected observation wells in the central Raton Basin*--Continued

CUCHARA-POISON CANYON AQUIFER

POISON CANYON FORMATION

Well SC02906719ACA Site number 373448104554701

ALTITUDE OF LAND SURFACE: 7,019 FEET.
HIGHEST WATER LEVEL: 35.05 FEET BELOW LAND SURFACE DATUM MAY 20, 1954; JUNE 15, 1954.
LOWEST WATER LEVEL: 38.41 FEET BELOW LAND SURFACE DATUM MAR. 15, 1972.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

Date M-D-Y	Water level	Date M-D-Y	Water level	Date M-D-Y	Water level	Date M-Y-D	Water level
07/25/50	36.7	03/31/56	37.14	03/31/63	37.32	03/18/71	37.52
05/20/54	35.05	11/14/56	37.55	11/05/63	37.43	03/15/72	38.41
06/15/54	35.05	03/11/57	37.49	04/16/64	37.30	04/24/74	37.89
07/25/54	35.70	03/12/58	37.3	11/16/64	37.06	05/07/75	38.18
12/23/54	37.93	12/03/58	37.70	03/27/65	36.91	02/10/76	38.21
01/21/55	37.52	03/18/59	37.52	11/17/65	37.30	02/10/77	39.33
03/02/55	37.30	11/13/59	37.57	03/25/66	37.21	05/ /79	38.20
03/26/55	37.27	03/29/60	36.52	11/08/66	37.28	05/09/80	38.00
03/25/55	37.04	10/25/60	37.64	03/24/67	37.24	04/23/81	38.19
06/24/55	36.85	04/10/61	36.35	11/15/67	37.36	04/28/62	38.23
11/24/55	37.06	10/11/61	37.14	03/20/68	37.14	04/25/83	37.17
01/17/56	37.05	03/27/62	37.17	03/21/69	37.12		
02/28/56	37.15	10/30/62	37.64	04/08/70	37.03		

Well SC03206620CDC1 Site number 371414104482201

ALTITUDE OF LAND SURFACE: 7,480 FEET.
HIGHEST WATER LEVEL: 49.52 FEET BELOW LAND SURFACE DATUM APR. 25, 1983.
LOWEST WATER LEVEL: 51.80 FEET BELOW LAND SURFACE DATUM JUNE 24, 1981.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

Date M-D-Y	Water level	Date M-D-Y	Water level	Date M-D-Y	Water level
06/24/81	51.80	04/27/82	50.30	04/25/83	49.52

Table 42.--*Water levels in selected observation wells in the central Raton Basin*--Continued

RATON-VERMEJO-TRINIDAD AQUIFER

RATON FORMATION

Well SC02906626DBC1 Site number 372922104445801

ALTITUDE OF LAND SURFACE: 6,860 FEET.
HIGHEST WATER LEVEL: 217.80 FEET BELOW LAND SURFACE DATUM MAY 9, 1980.
LOWEST WATER LEVEL: 276.70 FEET BELOW LAND SURFACE DATUM APR. 23, 1981.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

Date M-D-Y	Water level	Date M-D-Y	Water level	Date M-D-Y	Water level	Date M-D-Y	Water level
05/09/80	217.80	04/23/81	276.70	04/26/82	275.00	04/26/83	272.90

Well SC03006616ADC1 Site number 372603104470101

ALTITUDE OF LAND SURFACE: 7,030 FEET.
HIGHEST WATER LEVEL: 207.80 FEET BELOW LAND SURFACE DATUM APR. 26, 1983.
LOWEST WATER LEVEL: 213.40 FEET BELOW LAND SURFACE DATUM MAY 9, 1980.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

Date M-D-Y	Water level	Date M-D-Y	Water level	Date M-D-Y	Water level	Date M-D-Y	Water level
05/09/80	213.40	04/23/81	209.50	04/26/82	213.30	04/26/83	207.80

Well SC03306811BDB Site number 371118104580901

ALTITUDE OF LAND SURFACE: 7,595 FEET.
HIGHEST WATER LEVEL: 52.00 FEET BELOW LAND SURFACE DATUM APR. 27, 1982.
LOWEST WATER LEVEL: 53.90 FEET BELOW LAND SURFACE DATUM JULY 16, 1981.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

Date M-D-Y	Water level	Date M-D-Y	Water level	Date M-D-Y	Water level
07/16/81	53.90	04/27/82	52.00	04/25/83	52.52

Table 42.--*Water levels in selected observation wells in the central Raton Basin*--Continued

Well NA03001903C1 (M-6) Site number 365145104543201

ALTITUDE OF LAND SURFACE 7,498.78 FEET.
HIGHEST WATER LEVEL 36.39 FEET BELOW LAND SURFACE DATUM OCT. 14, 1981.
LOWEST WATER LEVEL 42.96 FEET BELOW LAND SURFACE DATUM JUNE 12, 1981.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

Date M-D-Y	Water level	Date M-D-Y	Water level	Date M-D-Y	Water level
		12/17/79	40.18	11/14/80	41.09
01/10/79	41.8	01/15/80	40.83	12/15/80	42.31
02/12/79	42.0	02/15/80	41.39	01/15/81	41.75
03/09/79	41.98	03/19/80	42.00	02/16/81	42.23
04/18/79	42.9	04/23/80	42.59	03/11/81	42.21
05/22/79	42.3	05/13/80	42.4	04/15/81	42.41
06/13/79	41.93	06/19/80	39.11	05/12/81	42.19
08/16/79	39.70	07/14/80	39.51	06/12/81	42.96
09/17/79	38.54	08/15/80	39.69	07/13/81	41.80
10/16/79	38.61	10/15/80	40.61	08/11/81	42.90
11/19/79	39.17			09/14/81	38.81
				10/14/81	36.39

Well NA03001903C2 (M-7) Site number 365149104544201

ALTITUDE OF LAND SURFACE 7,619.8 FEET.
HIGHEST WATER LEVEL 153.78 FEET BELOW LAND SURFACE DATUM JULY 14, 1980.
LOWEST WATER LEVEL 157.86 FEET BELOW LAND SURFACE DATUM DEC. 15, 1980.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

Date M-D-Y	Water level	Date M-D-Y	Water level	Date M-D-Y	Water level
		12/17/79	153.81	11/14/80	154.56
01/10/79	153.87	01/15/80	153.84	12/15/80	157.86
02/12/79	153.92	02/15/80	153.94	01/15/81	157.82
03/09/79	154.37	03/19/80	153.89	02/16/81	157.48
04/18/79	154.22	04/23/80	153.92	03/11/81	157.03
05/22/79	153.92	05/13/80	153.84	04/15/81	156.62
06/13/79	153.97	06/19/80	153.82	05/12/81	156.42
08/16/80	154.31	07/14/80	153.78	06/12/81	156.57
09/17/79	154.77	08/15/80	153.94	07/13/81	156.78
10/16/79	155.29	09/15/80	155.68	08/11/81	156.43
11/19/79	153.98	10/15/80	154.18	09/14/81	156.62
				10/14/81	157.32

Table 42.--*Water levels in selected observation wells in the central Raton Basin*--Continued

Well NA03001904C1 (M-9) Site number 365157104554801

ALTITUDE OF LAND SURFACE 7,549.67 FEET.
HIGHEST WATER LEVEL 67.0 FEET BELOW LAND SURFACE DATUM FEB. 12, 1979.
LOWEST WATER LEVEL 68.91 FEET BELOW LAND SURFACE DATUM APR. 15, 1981.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

Date M-D-Y	Water level	Date M-D-Y	Water level	Date M-D-Y	Water level
		12/17/79	67.74	11/14/80	67.60
01/10/79	67.93	01/15/80	67.75	12/15/80	-----
02/12/79	67.0	02/15/80	67.89	01/15/81	-----
03/09/79	67.4	03/19/80	67.80	02/16/81	-----
04/18/79	67.9	04/23/80	67.81	03/11/81	68.30
05/22/79	67.87	05/13/80	67.84	04/15/81	68.91
06/13/79	67.9	06/19/80	67.15	05/12/81	68.28
08/17/79	67.9	07/14/80	67.34	06/12/81	68.25
09/17/79	68.32	08/15/80	67.60		
10/16/79	68.45	09/15/80	67.66		
11/19/79	67.72	10/15/80	67.50		

Well NA03001904C2 (M-10) Site number 365157104554901

ALTITUDE OF LAND SURFACE 7,549.44 FEET.
HIGHEST WATER LEVEL 97.97 FEET BELOW LAND SURFACE DATUM SEPT. 14, 1981.
LOWEST WATER LEVEL 102.42 FEET BELOW LAND SURFACE DATUM DEC. 15, 1980.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

Date M-D-Y	Water level	Date M-D-Y	Water level	Date M-D-Y	Water level
11/10/78	98.87	12/17/79	101.39	11/14/80	101.28
01/10/79	101.1	01/15/80	101.17	12/15/80	102.42
02/12/79	101.2	02/15/80	101.45	01/15/81	101.27
03/09/79	101.4	03/19/80	101.36	02/16/81	101.32
04/18/79	101.21	04/23/80	101.32	03/11/81	101.18
05/22/79	101.21	05/13/80	101.4	04/15/81	101.18
06/13/79	101.3	06/19/80	100.74	05/12/81	101.14
08/16/79	101.4	07/14/80	101.66	06/12/81	101.21
09/17/79	101.4	08/15/80	102.06	07/13/81	101.59
10/16/79	102.16	09/15/80	102.16	08/11/81	101.83
11/19/79	101.10	10/15/80	102.16	09/14/81	97.97
				10/14/81	100.16

Table 42.--*Water levels in selected observation wells in the central Raton Basin*--Continued

Well NA03101922C1 (M-13) Site number 365410104542501

ALTITUDE OF LAND SURFACE: 7,742.85 FEET.
HIGHEST WATER LEVEL: 61.06 FEET BELOW LAND SURFACE DATUM JUNE 13, 1979.
LOWEST WATER LEVEL: 72.43 FEET BELOW LAND SURFACE DATUM JULY 13, 1981.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

Date M-D-Y	Water level	Date M-D-Y	Water level	Date M-D-Y	Water level
		12/17/79	71.46	11/14/80	69.66
		01/15/80	70.46	12/15/80	71.29
		02/15/80	70.98	01/15/81	71.78
		03/19/80	70.75	02/16/81	72.04
04/18/79	62.8	04/23/80	72.10	03/11/81	71.52
05/22/79	61.32	05/13/80	72.38	04/15/81	71.66
06/13/79	61.06	06/19/80	70.98	05/12/81	71.36
08/17/79	62.66	07/14/80	71.71	06/12/81	72.30
09/17/79	65.55	08/15/80	71.64	07/13/81	72.43
10/16/79	67.41	09/15/80	69.80	08/11/81	72.15
11/19/79	69.88	10/15/80	70.18	09/14/81	71.23
				10/14/81	71.37

Well NA03101922C2 (M-14) Site number 365411104542501

ALTITUDE OF LAND SURFACE: 7,742.73 FEET.
HIGHEST WATER LEVEL: 131.94 FEET BELOW LAND SURFACE DATUM JUNE 19, 1980.
LOWEST WATER LEVEL: 136.9 FEET BELOW LAND SURFACE DATUM JULY 20, 1979 and AUG. 17, 1979.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

Date M-D-Y	Water level	Date M-D-Y	Water level	Date M-D-Y	Water level
		12/17/79	133.13	11/14/80	132.86
		01/15/80	133.07	12/15/80	134.66
		02/15/80	133.23	01/15/81	134.58
04/18/79	136.8	03/19/80	133.08	02/16/81	134.62
05/22/79	136.74	04/23/80	132.95	03/11/81	134.82
06/13/79	136.71	05/13/80	131.96	04/15/81	134.68
07/20/79	136.9	06/19/80	131.99	05/12/81	134.67
08/17/79	136.9	07/14/80	132.38	06/12/81	135.04
09/17/79	135.48	08/15/80	132.08	07/13/81	135.05
10/16/79	134.36	09/15/80	133.32	08/11/81	137.03
11/19/79	133.52	10/15/80	133.36	09/14/81	135.28
				10/14/81	134.97

Table 42.--*Water levels in selected observation wells in the central Raton Basin*--Continued

Well NA0310922C3 (M-15) Site number 365411104542401

ALTITUDE OF LAND SURFACE: 7,743.19 FEET.
HIGHEST WATER LEVEL: 39.76 FEET BELOW LAND SURFACE DATUM SEPT. 14, 1981.
LOWEST WATER LEVEL: 45.81 FEET BELOW LAND SURFACE DATUM FEB. 15, 1980.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

Date M-D-Y	Water level	Date M-D-Y	Water level	Date M-D-Y	Water level
		12/17/79	43.62	11/14/80	42.83
		01/15/80	44.36	12/15/80	42.85
		02/15/80	45.81	01/15/81	42.73
04/18/79	42.0	03/19/80	44.85	02/16/81	42.89
05/22/79	41.31	04/23/80	45.35	03/11/81	42.53
06/13/79	40.8	05/13/80	43.71	04/15/81	42.03
07/20/79	40.6	06/19/80	41.99	05/12/81	41.65
08/17/79	41.0	07/14/80	42.08	06/12/81	40.95
09/17/79	40.98	08/15/80	42.45	07/13/81	41.14
10/16/79	42.00	09/15/80	44.27	08/11/81	40.34
11/19/79	42.05	10/15/80	43.59	09/14/81	39.76
				10/14/81	39.89

Well NA03101928D1 (M-1) Site number 365327104545401

ALTITUDE OF LAND SURFACE: 7,597.85 FEET.
HIGHEST WATER LEVEL: 24.56 FEET BELOW LAND SURFACE DATUM JAN. 10, 1979.
LOWEST WATER LEVEL: 64.09 FEET BELOW LAND SURFACE DATUM OCT. 14, 1981.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

Date M-D-Y	Water level	Date M-D-Y	Water level	Date M-D-Y	Water level
		12/17/79	52.23	11/14/80	59.18
01/10/79	24.56	01/15/80	53.36	12/15/80	63.16
02/12/79	29.1	02/15/80	54.49	01/15/81	63.39
03/09/79	29.5	03/19/80	55.63	02/16/81	63.70
04/18/79	34.0	04/23/80	56.70	03/11/81	63.46
05/22/79	39.65	05/13/80	57.28	04/15/81	63.36
06/13/79	41.44	06/19/80	57.80	05/12/81	63.30
07/20/79	44.13	07/14/80	57.98	06/12/81	63.21
08/16/79	41.38	08/15/80	58.60	07/13/81	63.57
09/17/79	47.98	09/15/80	59.00	08/11/81	63.80
10/16/79	49.93	10/15/80	59.60	09/14/81	64.01
11/19/79	51.14			10/14/81	64.09

Table 42.--*Water levels in selected observation wells in the central Raton Basin*--Continued

Well NA0310192803 (M-3) Site number 365328104545201

ALTITUDE OF LAND SURFACE: 7,596.97 FEET.
HIGHEST WATER LEVEL: 41.00 FEET BELOW LAND SURFACE DATUM SEPT. 15, 1980.
LOWEST WATER LEVEL: 56.51 FEET BELOW LAND SURFACE DATUM APR. 23, 1980.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

Date M-D-Y	Water level	Date M-D-Y	Water level	Date M-D-Y	Water level
11/10/78	44.1	12/17/79	51.05	11/14/80	41.04
01/10/79	42.6	01/15/80	55.78	12.15.80	42.06
02/12/79	42.6	02/15/80	54.67	01/15/81	43.19
03/09/79	42.7	03/19/80	55.75	02/16/81	43.06
04/18/79	44.0	04/23/80	56.51	03/11/81	43.17
05/22/79	43.7	05/13/80	47.59	04/15/81	43.40
06/13/79	43.62	06/19/80	33.12	05/12/81	43.99
07/20/79	43.5	07/14/80	37.70	06/12/81	45.11
08/16/79	43.7	08/15/80	39.66	07/13/81	45.75
09/17/79	43.80	09/15/80	41.00	08/11/81	42.45
10/16/79	48.35	10/15/80	41.60	09/14/81	43.39
11/19/79	50.44			10/14/81	43.46

Well NA03101935A1 (M-8) Site number 365308104531501

ALTITUDE OF LAND SURFACE: 7,841.55 FEET.
HIGHEST WATER LEVEL: 291.8 FEET BELOW LAND SURFACE DATUM FEB. 12, 1979.
LOWEST WATER LEVEL: 302.16. FEET BELOW LAND SURFACE DATUM FEB. 16, 1981.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

Date M-D-Y	Water level	Date M-D-Y	Water level	Date M-D-Y	Water level
		12/17/79	296.63	11/14/80	298.03
01/10/79	294.43	01/15/80	------	12/15/80	298.04
02/12/79	291.8	02/15/80	295.37	01/15/81	298.02
03/09/79	295.3	03/19/79	296.48	02/16/81	302.16
04/18/79	295.8	04/23/80	296.47	03/11/81	298.10
05/22/79	292.96	05/13/80	296.37	14/15/81	298.16
06/13/79	292.91	06/19/80	295.46	05/12/81	297.72
08/17/79	293.7	07/14/80	296.16	06/12/81	298.08
09/17/79	298.25	08/15/80	295.54	07/13/81	298.33
10/16/79	------	09/15/80	297.56	08/11/81	298.14
11/19/79	------	10/15/80	297.88	09/14/81	298.57
				10/14/81	295.84

Table 42.--*Water levels in selected observation wells in the central Raton Basin*--Continued

Well NA03101935AZ (MA-11) Site number 365309104531501

ALTITUDE OF LAND SURFACE: 7,830.69 FEET.
HIGHEST WATER LEVEL: 7.15 FEET BELOW LAND SURFACE DATUM MAY 13, 1980.
LOWEST WATER LEVEL: 14.6 FEET BELOW LAND SURFACE DATUM FEB. 12, 1979.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

Date M-D-Y	Water level	Date M-D-Y	Water level	Date M-D-Y	Water level
		12/17/79	14.21	11/14/80	12.65
01/10/79	14.40	01/15/80	14.15	12/15/80	11.77
02/12/79	14.6	02/15/80	14.15	01/15/81	11.57
03/09/79	13.8	03/19/80	13.94	02/16/81	11.79
04/18/79	13.4	04/23/80	13.66	03/11/81	11.93
05/22/79	12.84	05/13/80	7.15	04/15/81	11.55
06/13/79	12.39	06/19/80	7.30	05/12/81	11.97
08/17/79	12.50	07/14/80	8.46	06/12/81	12.30
09/17/79	13.68	08/15/80	9.95	07/13/81	12.05
10/16/79	13.89	09/15/80	11.03	08/11/81	11.24
11/19/79	14.4	10/15/80	11.79	09/14/81	9.32
				10/14/81	7.71

Well NA03101935C1 (M-4) Site number 365222104532001

ALTITUDE OF LAND SURFACE: 7,675.52 FEET.
HIGHEST WATER LEVEL: 15.73 FEET BELOW LAND SURFACE DATUM JUNE 19, 1980.
LOWEST WATER LEVEL: 15.73 FEET BELOW LAND SURFACE DATUM FEB.16, 1981.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

Date M-D-Y	Water level	Date M-D-Y	Water level	Date M-D-Y	Water level
		12/17/79	35.04	11/14/80	30.47
01/10/79	32.78	01/15/80	34.96	12/15/80	30.27
02/12/79	33.1	02/15/80	35.29	01/15/81	32.31
03/09/79	32.8	03/19/80	35.75	02/16/81	36.65
04/18/79	33.4	04/23/80	36.41	03/11/81	34.31
05/22/79	34.25	05/13/80	35.77	04/15/81	34.41
06/13/79	33.80	06/19/80	15.73	05/12/81	33.88
08/17/79	33.9	07/14/80	28.11	06/12/81	33.99
09/17/79	32.36	08/15/80	29.29	07/13/81	34.29
10/16/79	33.5	09/15/80	29.67	08/11/81	34.01
11/19/79	34.03	10/15/80	32.71	09/14/81	30.54
				10/14/81	27.52

Table 42.--*Water levels in selected observation wells in the central Raton Basin*--Continued

Well NA03101935C2 (M-5) Site number 365221104532001

ALTITUDE OF LAND SURFACE: 7,676.6 FEET.
HIGHEST WATER LEVEL: 9.65 FEET BELOW LAND SURFACE DATUM JUNE 19, 1981.
LOWEST WATER LEVEL: 39.93 FEET BELOW LAND SURFACE DATUM MAR. 19, 1980.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

Date M-D-Y	Water level	Date M-D-Y	Water level	Date M-D-Y	Water level
11/10/78	32.87	12/17/79	39.35	11/14/80	34.41
01/10/79	35.82	01/15/80	39.48	12/15/80	34.85
02/12/79	37.17	02/15/80	39.50	01/15/81	36.59
03/09/79	37.27	03/19/80	39.93	02/16/81	36.65
04/18/79	37.67	04/23/80	39.89	03/11/81	36.99
05/22/79	34.02	05/13/80	39.08	04/15/81	37.23
06/13/79	38.30	06/19/80	29.07	05/12/81	37.07
08/17/79	38.17	07/14/80	32.87	06/12/81	37.49
09/17/79	38.22	08/15/80	33.77	07/13/81	37.89
10/16/79	37.57	09/15/80	34.21	08/11/81	37.90
11/19/79	38.80	10/15/80	34.87	09/14/81	35.24
				10/14/81	33.67

TRINIDAD SANDSTONE

Well SC02706736ACB Site number 373922104501401

ALTITUDE OF LAND SURFACE: 6,282 FEET.
HIGHEST WATER LEVEL: 41.33 FEET BELOW LAND SURFACE DATUM MAY 7, 1980.
LOWEST WATER LEVEL: 48.67 FEET BELOW LAND SURFACE DATUM APR. 26, 1955.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

Date M-D-Y	Water level	Date M-D-Y	Water level	Date M-D-Y	Water level	Date M-D-Y	Water level
08/25/49	43.04	01/16/51	46.08	12/13/51	46.5	09/18/52	46.75
02/07/50	44.15	02/19/51	46.25	01/16/52	46.57	10/16/52	46.87
03/16/50	44.38	03/15/51	46.39	02/14/52	46.68	11/18/52	46.42
04/12/50	44.54	04/17/51	46.39	03/13/52	47.1	12/29/52	47.17
05/03/50	44.64	05/17/51	46.52	04/17/52	46.72	01/19/53	46.53
06/14/50	46.22	06/18/51	46.8	05/21/52	46.55	02/20/53	46.82
07/11/50	46.65	07/19/51	47.12	06/19/52	46.64	03/19/53	46.84
08/29/50	45.31	09/13/51	46.64	07/09/52	46.65	04/21/53	46.94
11/20/50	45.87	10/16/51	46.78	08/12/52	46.87	05/20/53	47.3
12/14/50	45.76	11/14/51	46.56				

Table 42.--*Water levels in selected observation wells in the central Raton Basin*--Continued

TRINIDAD SANDSTONE--Continued

Well SC02706736ACB--Continued Site number 373922104501401--Continued

Date M-D-Y	Water level	Date M-D-Y	Water level	Date M-D-Y	Water level	Date M-D-Y	Water level
06/24/53	48.15	12/22/54	47.66	03/19/59	43.82	11/09/66	45.24
07/22/53	47.27	01/21/55	49.21	11/03/59	44.36	03/24/67	44.75
08/19/53	47.26	03/02/55	47.76	03/29/60	43.35	11/15/67	45.27
10/01/53	47.38	03/26/55	47.74	10/25/60	43.60	03/20/68	45.02
10/23/53	47.1	04/26/55	48.67	04/11/61	43.23	03/21/69	45.49
01/21/54	47.32	05/23/55	48.25	10/11/61	42.95	04/08/70	44.78
02/19/54	47.26	06/23/55	48.18	03/26/62	42.90	03/18/71	45.41
03/17/54	47.62	11/23/55	46.95	10/30/62	43.03	03/15/72	45.89
04/20/54	47.43	01/17/56	46.68	03/31/63	43.54	04/03/73	44.89
05/20/54	47.58	02/28/56	46.88	11/05/63	44.58	04/24/74	44.39
06/15/54	47.59	03/30/56	47.45	04/07/64	44.41	01/10/75	42.54
07/16/54	47.82	11/13/56	47.97	11/16/64	44.82	02/10/78	45.28
08/20/54	47.89	03/11/57	46.24	03/27/65	45.64	05/21/79	42.29
09/27/54	48.15	03/11/58	44.66	11/17/65	46.24	05/07/80	41.33
10/19/54	47.58	12/02/58	44.94	03/25/66	45.24		

Well SC03306421CDB Site number 370909104341201

ALTITUDE OF LAND SURFACE: 6,265 FEET.
HIGHEST WATER LEVEL: 16.50 FEET BELOW LAND SURFACE DATUM APR. 26, 1983.
LOWEST WATER LEVEL: 20.33 FEET BELOW LAND SURFACE DATUM APR. 28, 1982.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

Date M-D-Y	Water level	Date M-D-Y	Water level	Date M-D-Y	Water level
06/16/81	19.70	04/28/82	20.33	04/26/83	16.50

Well SC03306535ADD Site number 370746104374701

ALTITUDE OF LAND SURFACE: 6,240 FEET.
HIGHEST WATER LEVEL: 4.32 FEET BELOW LAND SURFACE DATUM JUNE 18, 1978.
LOWEST WATER LEVEL: 18.88 FEET BELOW LAND SURFACE DATUM MAY 12, 1979.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

Date M-D-Y	Water level	Date M-D-Y	Water level	Date M-D-Y	Water level
06/18/78	4.32	05/12/79	18.88	05/08/80	14.96

Table 43.--*Representative logs of wells and testholes in the Apishapa and Purgatoire River drainages*

	Thickness (feet)	Depth (feet)
ALLUVIAL AQUIFER		
30-65-33 dad - completed 8/15/67 for City of Aguilar, elevation 6,224.4 ft		
Apishapa River alluvium:		
Topsoil: brown	15	15
Clay: brown	1	16
Clay: dark gray	1	17
Sand and gravel: silty	3	20
Sand and gravel: water at 20 ft	6.5	26.5
Trinidad Sandstone		
Sandstone: yellow	3	29.5
30-65-33 dda - completed 8/23/67 for City of Aguilar, elevation 6228.4 ft		
Apishapa River alluvium:		
Topsoil: brown	15	15
Sand and gravel: silty	6	21
Sand and gravel: water 21-28 ft	7	28
Clay: yellow	10	38
Trinidad Sandstone:		
Sandstone: yellow	<1	38
30-66-32 cca - completed 9/1/34 for L. B. Sporleder, elevation 7,324 ft		
Mauricio Canyon Alluvium:		
Loam: sandy	40	40
Sand and gravel	20	60
31-65-18 bbd - completed 5/15/66 for Frank Slavic, elevation 6,780 ft		
Trujillo Creek alluvium:		
Topsoil	2	12
Boulders, sand, gravel: water at 12 ft	12	24
Raton Formation:		
Shale	6	30
Coal	3	33
Shale	17	50

Table 43.--*Representative logs of wells and test holes in the Apishapa and Purgatoire River drainages*--Continued

	Thickness (feet)	Depth (feet)
31-66-21 bba - completed 5/24/65 for Walter Brunelli, elevation 7,114 ft		
Mitotes Canyon Alluvium:		
Topsoil	19	19
Sand: water at 19 ft	25	44
32-66-27 acb - completed 3/10/72 for Merrit McDonald, elevation 7,480 ft		
Sarcillo Canyon alluvium:		
Sandy soil	28	28
Sand: coarse, water at 28-47 ft	17	45
Poison Canyon Formation:		
Sandstone	33	78
32-68-30 bb - completed 1951 for Colorado Water Conservation Board, elevation 8,598.4 ft, Line 7		
North Fork Purgatoire River alluvium:		
Sand: fine to medium, clayey, red	6.4	6.4
Boulder	.4	6.8
Sand: fine to coarse, clayey, red	1.2	8
Sand and gravel: medium to coarse, with some boulders and clay	3	11
Boulders	2.2	13.2
Morrison (?) Formation		
Sandstone: fine-grained, red	9.4	22.6
32-68-30 bb_2 - completed 1951 for Colorado Water Conservation Board, elevation 8,607.9 ft		
North Fork Purgatoire River allvuium:		
Clay: brown	5	5
Clay: red and green, with gravel	7.5	12.5
Gravel: very coarse, sandy, with cobbles and red clay	3.5	16
Morrison (?) Formation		
Sandstone: fine-grained, red	6.5	22.5

Table 43.--*Representative logs of wells and test holes in the Apishapa and Purgatoire River drainages*--Continued

	Thickness (feet)	Depth (feet)
33-64-27 cad - completed 7/27-45 for U.S. Army Corps of Engineers, elevation 6,184.2 ft, Piedmont dam site		
Purgatoire River alluvium:		
Sandy clay and caliche	6.0	6.0
Sand and gravel	9.0	15.0
Trinidad sandstone:		
Sandstone: brownish gray, weathered and fractured	42.2	51.2
Sandstone: gray, fractured to unbroken, shale partings	60.8	112.0
Sandstone: gray, shaley	10.0	122.0
33-64-27 cba_2 - completed 7/30/45 for U.S. Army Corp of Engineers, elevation 6,096.1 ft, Piedmont Dam site		
Purgatoire River alluvium:		
Silt	1.0	1.0
Sand and gravel	17.0	18.0
Trinidad Sandstone:		
Sandstone: gray, very fractured	3.2	21.2
Sandstone and Shaley sandstone: gray	8.9	30.1
33-64-27 cba - completed 7/20/45 for U.S. Army Corps of Engineers, elevation 6,109.1 ft, Piedmont Dam site		
Purgatoire River alluvium:		
Ash	6.0	6.0
Clay: sandy	8.0	14.0
Sand and gravel: with sandy clay	5.0	19.0
Sand and gravel	10.5	29.5
Trinidad Sandstone:		
Shaley sandstone: gray; gas bubbles and trace of oil at 50 ft	42.2	52.7
Conglomeratic sandstone: shale fragments in sandstone matrix	28.6	81.3

Table 43.--*Representative logs of wells and test holes in the Apishapa and Purgatoire River drainages*--Continued

	Thickness (feet)	Depth (feet)
33-64-29 cdd - completed 6/9/37 for U.S. Bureau of Reclamation, elevation 6,155 ft, Sopris Dam site		
Purgatoire River alluvium:		
Sand and gravel	15.0	15.0
Vermejo Formation		
Shale: gray, sandy	10.0	25.0
Shale: gray	5.0	30.0
Shale: gray, sandy	5.0	35.0
Sandstone: gray, with coal seams	5.5	40.5
Coal	1.0	41.5
Shale: 2-inch coal seam at 43 ft	1.5	43.0
Sandstone: fine-grained	11.0	54.0
Coal and carbonaceous shale	31.0	85.0
Sandstone: with coal seams 97.5-100.5 ft	15.5	100.5
Sandstone and shale	2.3	102.8
Sandstone	4.2	107
Trinidad Sandstone		
Sandstone	8.0	115.0
33-64-32 abc_1 - completed 6/10/37 for U.S. Bureau of Reclamation, elevation 6,240 ft, Sopris Dam site		
Purgatoire River alluvium:		
Sand and gravel: coarser below 31 ft	41.0	41.0
Vermejo Formation:		
Sandstone: brown	5.2	46.2
Sandstone: gray, fine-grained, with carbonaceous inclusions	15.8	62.0
Carbonaceous shale	9.0	71.0
Sandy shale	1.0	72.0
Shale	6.0	78.0
Sandy shale	2.0	80.0
Sandstone: gray, fine-grained	9.0	89.0
Coal	2.0	91.0
33-64-32 abc_2 - Completed 6/9/37 for U.S. Bureau of Reclamation, elevation 6,270 ft, Sopris Dam site		
Purgatoire River alluvium:		
Soil and fine sand	18.0	18.0
Clay: sandy	2.0	20.0
Sand and gravel	5.0	25.0

Table 43.--*Representative logs of wells and test holes in the Apishapa and Purgatoire River drainages*--Continued

	Thickness (feet)	Depth (feet)
33-64-32 abc_2 (continued)		
Vermejo Formation:		
Sandstone: fine-grained	1.0	26.0
Carbonaceous shale and lignite	23.0	49.0
Shale: gray, sandy at 58 ft	10.0	59.0
Sandstone and sandy shale	5.0	64.0
Coal	2.0	66.0
Sandy shale	10.0	76.0
Sandstone: gray, coal inclusions at 89 ft	16.4	92.4
Sandy shale: gray, locally carbonaceous	19.6	112
Sandstone: shaley 114-120 ft	11.0	123
Coal	2.0	125
Carbonaceous shale	10.0	135
Shaley sandstone	2.0	137
Sandstone	7.0	144
Carbonaceous shale and coal	6.0	150
33-65-35 ad_1 - completed 1951 for Colorado Water Conservation Board, elevation 6,269.2 ft, Line 2		
Purgatoire River alluvium:		
Sand and gravel: very fine to very coarse, with cobbles, water at 4.5 ft	5	5
Sand: fine to coarse, with gravel	6	11
Raton Formation:		
Shale: carbonaceous, dark blue	1	12
Sandstone: bluish-gray	6	18
33-65-35 ad_2 - completed 1951 for Colorado Water Conservation Board, elevation 6,269.3 ft, Line 2		
Purgatoire River alluvium:		
Sand and gravel: fine to coarse, with few cobbles, water at 4.5 ft	9	9
Raton Formation:		
Shale: carbonaceous, dark blue	.5	9.5
Sandstone	8	17.5

Table 43.--*Representative logs of wells and test holes in the Apishapa and Purgatoire River drainages*--Continued

	Thickness (feet)	Depth (feet)
33-65-35 ad_3 - completed 1951 for Colorado Water Conservation Board, elevation 6,269.5 ft, Line 2		
Purgatoire River alluvium:		
Sand and gravel: very fine to coarse, with some boulders, water at 4.5 ft	6	6
Sand: very fine to very coarse, with a little gravel and cobbles	10.5	16.5
Raton Formation:		
Sandstone: gray	5.5	22
33-66-34 cc - completed 1951 for Colorado Water Conservation Board, elevation 6,608.2 ft, Line 3		
Purgatoire River alluvium:		
Sand and gravel: fine to coarse, with some cobbles, water at 1.5 ft	9	9
Boulder	.5	9.5
Sand: very fine to coarse	.5	10
Raton Formation:		
Shale: carbonaceous, brown	5	15
33-66-33 dd - completed 1951 for Colorado Water Conservation Board, elevation 6,608.4 ft, Line 3		
Purgatoire River alluvium:		
Clay: brown, sandy, water at 1.5 ft	3.5	3.5
Sand and gravel: very fine to coarse, with some cobbles	8	11.5
Raton Formation:		
Shale: blue	6.5	18
Sandstone: fine-grained, tan	2	20
34-66-04 aa - completed 1951 for Colorado Water Conservation Board, elevation 6,613.5 ft, Line 3		
Purgatoire River alluvium:		
Clay: brown, sandy, water at 6.5 ft	10	10
Sand and gravel: very fine to coarse, with some small cobbles	2.5	12.5
Raton Formation:		
Shale: carbonaceous, gray	6.5	19

Table 43.--*Representative logs of wells and test holes in the Apishapa and Purgatoire River drainages*--Continued

	Thickness (feet)	Depth (feet)
33-67-29 bad - completed 7/2/80 for CF&I Steel Corporation, elevation 7,105 ft		
Purgatoire River alluvium:		
Topsoil	2.5	2.5
Gravel	5.0	7.5
Clay: gray	.5	8.0
Raton Formation:		
Shale: weathered	2.0	10.0
33-67-36 aa_1 - completed 1951 for Colorado Water Conservation Board, elevation 6,798.0 ft, Line 5		
Purgatoire River alluvium:		
Sand: fine to medium, clayey, brown	12.5	12.5
Gravel: sandy, cobbly, water at 15.5 ft	7.3	19.8
Raton Formation:		
Coal: with sandstone partings	5.7	25
33-67-36 aa_2 - completed 1951 for Colorado Water Conservation Board, elevation 6,784.8 ft, Line 5		
Purgatoire River alluvium:		
Sand: medium-grained, gravelly, water at 3 ft	4.5	4.5
Sand: fine to coarse grained, gravelly	4	8.5
Raton Formation:		
Shale: blue, with thin coal layers	6.5	15
33-67-36 ada - completed 1951 for Colorado Water Conservation Board, elevation 6,801.4 ft, Line 5		
Purgatoire River alluvium:		
Clay: Sandy, with a little gravel	14.5	14.5
Sand and gravel: fine to coarse, water at 20 ft	5.5	20
Gravel: coarse, with sand and clay	4	24
Raton Formation:		
Shale: dark blue	3.5	27.5

Table 43.--*Representative logs of wells and test holes in the Apishapa and Purgatoire River drainages*--Continued

	Thickness (feet)	Depth (feet)
33-68-04 aa - completed 1951 for Colorado Water Conservation Board, elevation 7,795.5 ft, Line 6		
North Fork Purgatoire River alluvium:		
Sand: very fine, to gravel, fine, with some cobbles, water at 5 ft	17.7	17.7
Raton Formation:		
Sandstone: tan	4.8	22.5
33-67-29 bb_1 - completed 1951 for Colorado Water Conservation Board, elevation 7,142.3 ft, Line 1		
Purgatoire River alluvium:		
Clay: slightly sandy, water at 1.5 ft	3	3
Sand and gravel: fine to very coarse, with some cobbles	5.5	8.5
Raton Formation:		
Shale: carbonaceous	1	9.5
Sandstone	5.5	15
33-67-29 bb_2 - completed 1951 for Colorado Water Conservation Board, elevation 7,151.6 ft, Line 1		
Purgatoire River alluvium:		
Sand: fine, clayey	5	5
Sand: fine, with gravel	2.5	7.5
Sand and gravel: very fine to coarse, with cobbles, water at 10 ft	4.5	12
Raton Formation:		
Shale: carbonaceous, dark gray	8	20
33-67-29 bb_3 - completed 1951 for Colorado Water Conservation Board, elevation 7,151.1 ft, Line 1		
Purgatoire River alluvium:		
Sand: fine, clayey, grown	7	7
Sand and gravel: fine to coarse, with cobbles and clay, water at 9.5 ft	9.7	16.7
Raton Formation:		
Shale: dark gray	5.8	22.5

Table 43.--*Representative logs of wells and test holes in the Apishapa and Purgatoire River drainages*--Continued

	Thickness (feet)	Depth (feet)
33-68-13 dc_1 - completed 1951 for Colorado Water Conservation Board, elevation 7,355.8 ft, Line 4		
North Fork Purgatoire River alluvium:		
Clay: slightly sandy, brown	6.	6.5
Sand: fine to coarse, gravel, water at 10 ft	6	12.5
Boulders	2.5	15
Gravel: fine to coarse, sandy	2.5	17.5
Raton Formation:		
Sandstone	9	26.5
33-68-13 dc2 - completed 1951 for Colorado Water Conservation Board, elevation 7,351.8 ft, Line 4		
North Fork Purgatoire River alluvium:		
Clay: slightly sandy, brown	3.8	3.8
Sand and gravel: fine to coarse, cobbly, water at 6 ft	6	9.8
Raton Formation:		
Sandstone: fine-grained brown	10.2	20
33-68-23 bdc - completed 7/2/80 for CF&I Steel Corporation, elevation 7,447 ft		
Purgatoire River alluvium:		
Topsoil	4	4
Gravel and yellow clay	2	6
Sand	2	8
Gravel	1	9
Sand and gravel: yellow	2	11
Boulder: granitic	1	12
Sand: red, with gravel	4	16
Clay: yellow, overlying shale of Raton Formation	4	20
33-68-23 cab - completed 7/2/80 for CF&I Steel Corporation, elevation 7,447 ft		
Purgatoire River alluvium:		
Topsoil	2	2
Gravel and soil	4	4
Gravel	13	19
Raton Formation:		
Sandstone	1	20
Shale: weathered	1	21

Table 43.--*Representative logs of wells and test holes in the Apishapa and Purgatoire River drainages*--Continued

	Thickness (feet)	Depth (feet)
CUCHARA-POISON CANYON AQUIFER		
31-66-29 adc - completed 10/1/66 for Grace B. Thompson, elevation 7,240 ft		
Apishapa River alluvium:	4	4
Poison Canyon Formation:		
Sandstone: yellow	16	20
Sandstone: white	30	50
Sandstone: white, soft, water at 50-55 ft	5	55
Sandstone	25	80
Sandstone: coarse-grained	7.8	60.8
Shale: sandy	4.1	64.9
Sandstone: medium-grained	21.7	86.6
Shale: sandy, dark gray	37.8	124.4
Sandstone: medium- to fine-grained	20.8	145.2
Shale: dark gray	2.0	147.2
Sandstone: light gray to dark, fine to medium-grained	28.2	175.4
Sandstone: light gray to dark, fine-grained	19.4	194.8
Shale: sandy	2.5	197.3
Sandstone: dark, fine-grained	1.3	198.6
Sandstone: light, medium- to coarse-grained	55.8	254.4
Shale: sandy, dark gray	1.2	255.6
Sandstone: dark gray, fine-grained	5.2	260.8
Shale: dark, sandy	1.0	270.8
Sandstone: dark, fine-grained	4.0	274.8
Shale: soft gray, fractured	23.1	297.9
Shale: sandy, dark gray	31.2	329.1
Sandstone: fine-grained, dark	3.0	332.1
Sandstone: medium-grained, light gray	44.8	376.9
Sandstone: fine-grained, dark to light, with shale parting at 379.2 ft	20.1	397.0
Raton Formation		
Shale: soft, dark gray	13.2	410.2

(The remainder of this log is included in the Raton-Vermejo-Trinidad section)

Table 43.--*Representative logs of wells and test holes in the Apishapa and Purgatoire River drainages*--Continued

	Thickness (feet)	Depth (feet)
31-66-29 dcc - completed 5/2/65 for Grace Thompson, elevation 7,240 ft		
Apishapa River alluvium:	17	17
Poison Canyon Formation:		
Sandstone	38	55
Shale	5	60
Sandstone: white, water at 60 ft	30	90
31-67-23 ddb - completed 7/15/65 for Charles Healey, elevation 7,680 ft		
Apishapa tributary alluvium:	26	26
Poison Canyon Formation:		
Sandstone: yellow, hard	5	31
Shale: white, hard, seep at 50 ft	53	84
Shale: gray, soft, water 84-88 ft	4	88
Shale: soft to hard	12	100
31-67-25 dab - completed 4/30/67 for Cleo Jack, elevation 7,740 ft		
Pediment alluvium:		
Topsoil	18	18
Sand: dry	20	38
Boulders: dry	4	42
Tertiary dike		
Diabase (?); described as hard and green	11	53
Poison Canyon Formation		
Shale: gray	3	56
Sandstone: white, 2 gal/min	23	79
Sandstone: white, soft	4	83
Sandstone: white, hard	3	86
Sandstone: white, soft, 13 gal/min	4	90
Shale: hard	10	100

Table 43.--*Representative logs of wells and test holes in the Apishapa and Purgatoire River drainages*--Continued

	Thickness (feet)	Depth (feet)
32-65-07 cba - completed 10/14/59 for CF&I Corporation, elevation 7,530.4 ft		
Colluvium:		
Topsoil and decomposed rock	43.0	43.0
Poison Canyon Formation:		
Sandstone: medium-grained	6.0	49.0
Conglomerate	4.0	53.0
Sandstone: coarse-grained	7.8	60.8
Shale: sandy	4.1	64.9
Sandstone: medium-grained	21.7	86.6
Shale: sandy, dark gray	37.8	124.4
Sandstone: medium to fine-grained	20.8	145.2
Shale: dark gray	2.0	147.2
Sandstone: light to dark gray, fine- to medium-grained	28.2	175.4
Sandstone: light to dark gray, fine-grained	19.4	194.8
Shale: sandy	2.5	197.3
Sandstone: dark, fine-grained	1.3	198.6
Sandstone: light, medium- to coarse-grained	55.8	254.4
Shale: sandy, dark gray	1.2	255.6
Sandstone: dark gray, fine-grained	5.2	260.8
Sandstone: fine- to medium-grained	9.0	269.8
Shale: dark, sandy	1.0	270.8
Sandstone: dark, fine-grained	4.0	274.8
Shale: soft gray, fractured	23.1	297.9
Shale: sandy, dark gray	31.2	329.1
Sandstone: fine-grained, dark	3.0	332.1
Sandstone: medium-grained, light gray	44.8	376.9
Sandstone: fine-grained, dark to light with shale parting at 379.2	20.1	397.0
Raton Formation		
Shale: soft, dark gray	13.2	410.2
(The remainder of this log is included in the Raton-Vermejo-Trinidad section)		
32-65-17 bc - completed 8/25/73 for Vivian Stanton		
Reilly Canyon alluvium:	16	16
Poison Canyon Formation:		
Sandstone: brown, soft	16	32
Sandstone: white	16	48
Sandstone: with shale partings	12	60
Shale: gray	8	68
Sandstone: blue, hard, water at 68 ft	47	115
Sandstone: white	10	125

Table 43.--*Representative logs of wells and test holes in the Apishapa and Purgatoire River drainages*--Continued

	Thickness (feet)	Depth (feet)
32-66-06 bdd - completed 6/6/66 for Amador Ulifarri, elevation, 7,320 ft		
Jarosa Canyon Alluvium:		
Black earth and sand beds: water at 15 ft	31	31
Poison Canyon Formation:		
Sandstone: white, hard	4	35
Shale: with thin sandstone layers, 2 gal/min	6	41
Sandstone: white, hard	9	50
Shale: with thin sandstone layers, 3 gal/min	5	55
Sandstone: white, hard	5	60
32-66-10 adb - completed 6/2/65 for Bob Mathers, elevation 7,360 ft		
Frio Canyon Alluvium:		
Earth and sand: 0.5 gal/min	25	25
Boulders: sandstone	5	30
Poison Canyon Formation:		
Sandstone: white, hard, 0.5 gal/min	44	74
Sandstone: brown, 3.5 gal/min	2	76
Sandstone: with thin shale layers, 0.5 gal/min	19	95
Tertiary dike (?)		
Very hard, red rock	5	100
32-66-16 cdb - completed 5/12/78 for Mobil Oil Corporation, left open as USGS observation hole, elevation 7,510 ft		
Burro Canyon alluvium:		
Silty to sandy	5	5
Clayey	5	10
Silty to sandy	5	15
Poison Canyon Formation:		
Sandstone: light brown to buff, fine- to medium-grained, friable to firm, micaceous	10	52
Sandstone: medium gray, fine- to medium-grained, friable to firm, slightly conglomeratic, micaceous	20	45
Sandstone: medium-grained	15	60
Sandstone and shale: shale is medium gray to light green, silty in places	45	105

Table 43.--*Representative logs of wells and test holes in the Apishapa and Purgatoire River drainages*--Continued

	Thickness (feet)	Depth (feet)
32-66-16 cdb--(Continued)		
Poison Canyon Formation--(Continued)		
Sandstone: gray, slightly conglomeratic	40	145
Sandstone and shale	13	158
Sandstone: gray, fine-grained	34	192
Sandstone and shale: 77% sandstone, 25% shale	18	210
Sandstone: gray, fine-grained, friable to firm, shale partings 240-280 ft and 302-315 ft	105	315
Sandstone: gray to green, fine-grained	5	320
Sandstone: gray to brown, fine-grained, friable	12	332
Sandstone: gray, fine-grained, friable to firm	23	355
Shale: gray, firm	5	360
Sandstone: gray, fine-grained, friable to firm, shale partings 395-405 ft	120	480
Shale: dark gray, carbonaceous, silty	5	485
Sandstone: gray, fine-grained, friable	65	550
Raton Formation		
Shale: gray silty	6	556
Sandstone: gray, fine- to medium-grained, friable to firm	5	561
Siltstone: medium to dark gray	4	565
Sandstone: gray, fine- to medium-grained, friable to firm	15	580
Siltstone: medium to dark gray	7	587
Sandstone: brown, fine to medium-grained, conglomeratic	33	620
Siltstone: gray, hard	7	627
Sandstone: gray, fine- to medium-grained, friable to firm, shale partings 650-680 ft	53	680
Siltstone: medium gray, firm to moderately hard	5	685
Sandstone: gray, fine- to medium-grained, friable to firm	35	720
Coal: waxy to vitreous, blocky fracture	2	722
Shale: dark gray, carbonaceous	6	728
Coal: waxy to vitreous, blocky fracture	2	730
Sandstone: with shale partings and coal laminae at 754 and 775 ft	30	760
Shale: medium gray, silty	50	810
Coal: waxy to vitreous, blocky fracture	5	815
Shale: medium gray, silty	15	830

Table 43.--*Representative logs of wells and test holes in the Apishapa and Purgatoire River drainages*--Continued

	Thickness (feet)	Depth (feet)
32-66-22 da - completed 11/17/80 for Allen E. Hanson		
Burro Canyon alluvium:	4	4
Poison Canyon Formation:		
Sandstone: brown	22	26
Sandstone: gray, water at 72 ft	48	74
Shale: gray	3	77
Sandstone: gray, with shale partings	52	129
Sandstone: gray	21	150
32-66034 ad - completed 9/30/73 for Charles Barnes		
Colluvium:	1.5	1.5
Poison Canyon Formation:		
Sandstone: brown	14.5	16
Sandstone: blue	3	19
Sandstone: white	8	27
Shale: blue	3	30
Sandstone: blue	15	45
Shale: blue, water at 55 ft	11	56
Sandstone: white	16	72
Shale: gray	3	75
32-67-11 dba - completed 6/26/66 for August Valentine, elevation 8,080 ft		
Trujillo Creek alluvium:		
Earth and sand: dry	40	40
Sand: dry	5	45
Poison Canyon Formation:		
Sandstone: white, hard	11	56
Sandstone and shale: thin beds, 4 gal/min	14	70
Sandstone: white, hard	2	72
Sandstone and shale: thin beds, 21 gal/min	8	80
Sandstone: white, hard	2	82
Shale	5	87
Sandstone: white, coarse-grained	<1	87

Table 43.--*Representative logs of wells and test holes in the Apishapa and Purgatoire River drainages*--Continued

	Thickness (feet)	Depth (feet)
32-67-16 ccc - completed 5/17/78 for Mobil Oil Corporation, left open as USGS observation well, elevation 7,750 ft		
Wet Canyon alluvium:		
Topsoil: brown, silty to sandy	3	3
Sand: brown to buff, fine- to coarse-grained	11	14
Clayey sand: brown	21	35
Gravel: subangular	5	40
Poison Canyon Formation:		
Sandstone: gray, medium- coarse-grained, slightly conglomeratic, friable to firm	25	65
Shale: gray, soft, grades to siltstone	17	82
Sandstone: gray-white, conglomeratic, friable to firm	22	104
Shale: light green to gray	3	107
Sandstone: gray-white, conglomeratic	36	143
Shale: green, silty, soft to firm	17	160
Sandstone: gray-white, conglomeratic	140	300
Shale: grayish green, firm	20	320
Sandstone: gray-white, conglomeratic	60	380
Shale and siltstone: gray to grayish green	27	407
Coal: dull to vitreous	2	409
Shale and siltsone	31	440
Sandstone: gray-white, conglomeratic	165	605
Raton Formation:		
Sandstone: gray to grayish green, fine- to medium-grained, friable, with siltstone partings	475	1,080
Shale: medium-dark gray, silty	23	1,103
Coal: waxy to vitreous, blocky	2	1,108
Shale: medium to dark gray, silty	12	1,120
Coal: waxy to vitreous, blocky	2	1,122
Shale: medium to dark gray, locally carbonaceous	28	1,150
Sandstone: grayish green, fine- to medium-grained, friable	10	1,160
Shale: medium gray	20	1,180

Table 43.--*Representative logs of wells and test holes in the Apishapa and Purgatoire River drainages*--Continued

	Thickness (feet)	Depth (feet)
32-67-29 bbd - completed 5/28/81 for Hugh Lathem, elevation 7,840 ft		
Alluvium:	5	5
Poison Canyon Formation:		
Sandstone: brown	27	32
Shale: sandy, brown	2	34
Sandstone: gray	77	111
Sandstone: gray, with shale partings	37	148
Sandstone: gray, water at 160 ft	22	170
33-67-11 bbd - completed 6/24/81 for Bernard Parsons, elevation 7,435 ft		
Colluvium:	2	2
Poison Canyon Formation:		
Sandstone: brown	6	8
Sandstone: gray	24	32
Sandstone: gray, with shale partings	24	56
Sandstone: gray	8	64
Sandstone: gray, with shale partings	5	69
Sandstone: gray	22	91
Sandstone: gray, with shale partings	8	99
Sandstone: gray, water at 131 ft	41	140
RATON-VERMEJO-TRINIDAD AQUIFER		
31-65-16 acb - completed 6/14/78 for Mobil Oil Corporation, left open as USGS observation well, elevation 7,320 ft		
Alluvium:		
Silty and clayey sand: light brown	7	7
Poison Canyon Formation:		
Sandstone: buff, conglomerate	13	20
Sandstone: bluish gray, fine-grained, with shale and siltstone partings	45	65
Sandstone: light gray, conglomeratic, water at 60 ft	10	75

Table 43.--*Representative logs of wells and test holes in the Apishapa and Purgatoire River drainages*--Continued

	Thickness (feet)	Depth (feet)
31-65-16 acb--(Continued)		
Raton Formation:		
Sandstone, siltstone, and shale: gray	155	230
Coal: black to brown, vitreous, blocky	2	232
Sandstone, siltstone, and shale	18	250
Coal	2	252
Sandstone, siltstone, and shale	23	275
Shale	10	285
Sandstone, siltstone, and shale	5	290
Sandstone: gray, fine-grained micaceous, with coal laminae at 315 ft	30	320
Sandstone, siltstone, and shale: coal at 325 ft	65	385
Coal: with partings	2	387
Sandstone, siltstone and shale: coal at 425, 435, 450, and 475 ft	113	500
Sandstone: gray, fine- to medium-grained, friable	27	527
Coal: dull to vitreous, platy to blocky, shale parting	8	535
Sandstone and shale: 75% sandstone, 25% shale	44	579
Coal: platy, impure	2	581
Sandstone and shale	49	630
Coal: vitreous, blocky	3	633
Shale: dark gray, carbonaceous	12	645
Sandstone: medium gray, medium- to fine-grained	20	665
Sandstone and shale: with coal at 670 and 690 ft	40	705
Sandstone: medium gray, medium- to fine-grained	10	715
Sandstone and shale	8	723
Coal: black to brown, split by 2 ft of shale	6	729
Sandstone and shale: with coal at 740 and 750 ft	31	760
Shale: medium gray, silty	25	785
Sandstone and shale: with coal at 790 ft	15	800
Shale: medium gray, silty	25	825
Sandstone and shale	20	845
Coal: Competent, small blocky fractures	3	848
Sandstone and shale	11	859

Table 43.--*Representative logs of wells and test holes in the Apishapa and Purgatoire River drainages*--Continued

	Thickness (feet)	Depth (feet)
32-64-19 dbd - completed 6/6/74 for Mobil Oil Corporation, elevation 7,360 ft		
No sample:	40	40
Raton Formation:		
Shale: gray, locally carbonaceous or sandy	96	136
Sandstone: gray, fine-grained	12	148
Shale: with sandstone laminae	15	163
Sandstone: gray	11	174
Shale: gray, with trace coal	38	212
Sandstone: gray, shale partings	14	226
Shale: gray, silty, brittle	23	249
Sandstone: white, fine-grained	26	275
Shale: dark gray to brown, carbonaceous	22	297
Shale: dark gray	9	306
Sandstone: gray, fine-grained, angular inclusions	10	316
Shale: gray	5	321
Coal	2	323
Shale: gray, carbonaceous	10	333
Coal	1.5	334.5
Shale	5.5	340
Sandstone	5	345
Shale: gray	10	355
Sandstone: gray, fine, angular inclusions	5	360
Shale: gray, sand laminae	10	370
32-64-32 bda - completed 6/10/74 for Mobil Oil Corporation, elevation 7,235 ft		
Colluvium:		
Clay: yellow, sandy	11	11
Raton Formation:		
Shale: gray to brown, silty to sandy	67	78
Shale: med. gray, carbonaceous	10	88
Coal	1	89
Shale: medium to dark gray, slightly carbonaceous	17	106
Sandstone: gray to blue gray, fine-grained	11	117
Shale: blue gray, sandstone laminae	15	132
Shale: blue gray, silty, trace coal	15	147
Shale: dark gay, carbonaceous, trace coal	26	173
Sandstone: gray to grayish brown, fine-grained	16	189
Shale: dark gray to brown, carbonaceous	36	225
Sandstone: brown to gray, fine-grained	20	245

Table 43.--*Representative logs of wells and test holes in the Apishapa and Purgatoire River drainages*--Continued

	Thickness (feet)	Depth (feet)
32-64-32 bda--(Continued)		
Raton Formation--(Continued)		
Shale: dark gray, carbonaceous	32.5	277.5
Coal	1.5	279
Shale	1	280
Coal	1.5	281.5
Shale: dark gray, sand laminae	20.5	302
32-65-03 cda - completed 5/29/59 for Mobil Oil Corporation, elevation 7,114.2 ft		
No sample	40.0	40.0
Raton Formation:		
Shale: gray, soft, weathered	20	60
Sandstone: gray, fine-grained, grades to shale	19.5	79.5
Shale: carbonaceous and coal	2.1	81.6
Shale: sandy, grading to sandstone	6.2	87.8
Shale: carbonaceous and impure coal	2.8	90.6
Shale: sandy	17.8	108.4
Coal: impure, carbonaceous shale at 109.7 ft	1.6	110.0
Shale: sandy	22.8	132.8
Shale: dark gray to carbonaceous	4.3	137.1
Shale: sandy	25.1	162.2
Sandstone: fine-grained	6.2	168.4
Shale: carbonaceous, coal laminae	36.4	204.8
Shale: sandy, hard, coal at 210 and 214 ft	9.3	214.1
Sandstone: fine-grained	6.0	220.1
Sandstone: coarse-grained	2.3	222.4
Shale: gray, sandy	3.5	225.9
Sandstone: fine- to medium-grained	10.3	236.2
Coal	1.4	237.6
Shale: gray to black, carbonaceous	7.3	244.9
Shale: gray, sandy, locally carbonaceous	51.8	296.7
Sandstone: medium-grained, coal and shale laminae	13.1	309.8
Shale: gray	1.4	311.2
Sandstone: gray, shale laminae, medium-grained	2.3	313.5
Shale: carbonaceous, coal laminae	5.9	319.4
Coal	1.0	320.4
Sandstone: medium-grained, fractured	3.1	323.5
Shale: sandy	3.8	327.3
Shale: black	2.4	329.7
Sill	10.3	340.0
Shale: black	2.7	342.7
Sandstone: dark, fine-grained	2.0	344.7
Shale: gray	13.6	358.3

Table 43.--*Representative logs of wells and test holes in the Apishapa and Purgatoire River drainages*--Continued

	Thickness (feet)	Depth (feet)
32-65-03 cda--(Continued)		
Raton Formation--(Continued)		
Sandstone: medium-grained shale partings	4.0	362.3
Shale: carbonaceous, sandstone laminae	4.0	366.3
Shale: gray, soft	10.0	379.5
Sandstone and shale: gray	4.7	384.2
Shale, carbonaceous, and coal, impure	1.1	385.3
Shale: gray, sandstone laminae	2.1	387.4
Sandstone: dark gray, medium-grained shale partings	9.6	397.0
Shale: carbonaceous, coal laminae	2.6	399.6
Coal: impure, sandstone parting	3.7	403.3
Shale, sandstone, and coal	4.7	408.0
Shale: gray to black, sandy	29.9	437.9
Sandstone: gray, fine-grained	1.8	439.7
Shale: gray to black	6.0	445.7
Sandstone: dark gray, fine-grained	2.0	447.7
Coal: impure	1.5	449.2
Shale: dark gray, sandy	2.3	451.5
Sandstone: gray, medium-grained, shale partings	12.0	463.5
Shale: gray, sandy, sandstone laminae	11.2	474.7
Sandstone: gray, fine- to medium-grained	13.8	488.5
Coal: sandstone parting	2.0	490.5
Shale: gray to dark gray, sandy to carbonaceous	21.9	512.4
Sandstone: gray, medium-grained, coal laminae	9.8	522.2
Shale: sandy, coal laminae	12.2	534.4
Sandstone: shale partings	7.0	541.4
Coal	2.4	543.8
Sandstone: fractured	10.1	553.9
Shale: sandy to carbonaceous, coal laminae	11.4	565.3
Coal: shale parting	2.8	568.1
Shale: sandy to carbonaceous, coal laminae	86.0	654.1
Sandstone: gray, fine-grained	1.5	655.6
Shale: dark gray, coal laminae	4.7	660.3
Sandstone: gray, fine-grained, shale laminae	7.3	667.6
Shale: gray to black, soft	4.5	672.1
Coal and shale	1.9	674.0
Sandstone: dark gray, fine-grained, shale laminae	4.3	678.3
Shale: dark gray, soft	2.4	680.7
Sandstone: gray to white, fine-grained	13.5	694.2
Shale: gray to dark gray, sandy, coal laminae	5.8	700.0

Table 43.--*Representative logs of wells and test holes in the Apishapa and Purgatoire River drainages*--Continued

	Thickness (feet)	Depth (feet)
32-65-07 cba - completed 12/4/58 for CF&I Corporation, elevation 7,530.4 ft		
Colluvium:	43.0	43.0
Poison Canyon Formation: (See description in Cuchara-Poison Canyon section)	354.0	397.0
Raton Formation:		
Shale: dark gray, soft	13.2	410.2
Sandstone: dark, fine-grained	13.4	423.6
Shale: dark gray, sand laminae	11.8	435.4
Sandstone: gray, fine-grained	9.8	455.0
Shale: dark gray, sandy	9.8	455.0
Sandstone: gray, fine-grained, with 3 ft of shale	22.4	477.4
Shale: dark gray, sandy in lower 2 ft	7.4	484.8
Conglomerate	2.0	486.8
Sandstone: fine-grained	3.2	490.0
Shale: dark gray, sandy	21.4	511.4
Sandstone: dark gray, fine-grained	10.0	521.4
Shale: sandy	6.0	527.4
Sandstone: fine-grained, shale partings	3.0	530.4
Shale: gray, sandy, soft	14.0	544.4
Sandstone: gray, fine-grained	5.0	549.4
Shale: dark gray, sandy	16.0	565.4
Sandstone: gray to brown, fine- to coarse-grained	22.4	587.8
Shale: dark gray, sandy	7.6	595.4
Sandstone: fine-grained	4.0	599.4
Shale: gray, sandy	25.0	624.4
Sandstone: fine-grained, shale partings	9.6	634.0
Shale and sandstone	7.6	641.6
Shale: gray, impure coal at 658 ft	17.5	659.1
Shale: sandy, and sandstone	21.0	680.1
Shale: mostly sandy, and sandstone	23.8	703.9
Sandstone: gray, fine- to medium-grained, with coal and shale	21.4	725.3
Shale: sandy	2.0	727.3
Coal and shale	3.5	730.8
Sandstone: gray, fractured	4.4	735.2
Shale: dark gray	16.7	751.9
Sandstone: fine-grained	3.7	755.6
Shale: sandy to carbonaceous, coal laminae	64.2	829.8
Coal	2.1	831.9
Shale: sandy to carbonaceous, coal laminae	9.0	840.9
Sandstone: fine-grained, shale partings	8.3	849.2
Shale: carbonaceous, coal laminae	5.9	855.1

Table 43.--*Representative logs of wells and test holes in the Apishapa and Purgatoire River drainages*--Continued

	Thickness (feet)	Depth (feet)
32-65-07 cba--(Continued):		
Raton Formation--(Continued):		
Sandstone: fine- to medium-grained, shale partings	5.1	860.2
Shale: sandy to carbonaceous, sandstone and coal laminae	52.1	912.3
Coal	2.3	914.6
Shale: carbonaceous to sandy	14.6	929.2
Sandstone: fine-grained, shale partings	6.4	935.6
Shale: gray, coal and sandstone laminae	21.0	956.6
Sandstone: fine-grained, shale partings	5.4	962.0
Shale: sandy to carbonaceous, coal laminae	24.9	986.9
Sandstone: fine- to medium-grained, shale partings	28.7	1,015.6
Shale: sandy to carbonaceous	6.3	1,021.9
Sandstone: gray, fine-grained	5.6	1,027.5
Shale: carbonaceous to sandy, coal laminae	16.9	1,044.4
Coal	1.3	1,045.7
Shale: sandy	9.8	1,055.5
Sandstone: dark gray to white, fine- to medium-grained	16.9	1,072.4
Shale: carbonaceous, coal and sandstone laminae	11.6	1,084.0
Coal: shale parting	5.8	1,089.8
Shale: dark gray to black, sandy to carbonaceous	15.4	1,105.2
Coal: impure	1.0	1,106.2
Sandstone: medium-grained, shale partings	12.8	1,119.0
Coal: shale partings	3.1	1,122.1
Shale: carbonaceous, coal laminae	4.3	1,126.4
Sandstone: fine- to medium-grained	5.0	1,131.4
32-65-09 ddd - completed 7/22/59 for CF&I Corporation, elevation 7,335 ft		
Colluvium:		
Topsoil and gravel	40.0	40.0
Raton Formation:		
Shale: gray, sandy	20.0	60.0
Sandstone: white, medium-grained, coal partings	10.0	70.0
Shale: gray, sandy, soft	8.0	78.0
Sandstone: gray, medium-grained, fractured	3.4	81.4
Shale: gray, sandy	2.6	84.0
Sandstone: gray, medium-grained, coal partings	11.0	95.0
Shale: dark gray, sandy, sandstone 109.5-111.5 ft	50.8	145.8

Table 43.--*Representative logs of wells and test holes in the Apishapa and Purgatoire River drainages*--Continued

	Thickness (feet)	Depth (feet)
32-65-09--(Continued):		
Raton formation--(Continued):		
Shale: carbonaceous, coal laminae	11.8	157.6
Sandstone: gray, fine-grained	4.7	162.3
Shale: gray	5.0	167.3
Sandstone: gray, fine-grained	4.1	171.4
Shale: gray, sandy, coal laminae	13.4	184.8
Sandstone: gray, fine- to medium-grained	7.8	192.6
Shale: gray to black, coal and sandstone partings	48.6	241.2
Sandstone: gray, fine- to medium-grained, coal partings	13.8	255.0
Shale: gray, sandy	10.4	265.4
Sandstone: gray, fine-grained, shale partings	20.4	285.8
Shale: dark gray, sandy	8.5	294.3
Sandstone: gray, fine- to medium-grained, shale partings	2.8	297.1
Shale: sandy to carbonaceous, coal laminae	12.2	309.3
Sandstone: gray, fine-grained	6.5	315.8
Shale: carbonaceous, coal laminae	12.7	328.5
Sandstone: gray, fine- to medium-grained	19.7	348.2
Shale: gray, soft	4.2	352.4
Coal: impure, shale parting	2.5	354.9
Shale: sandy to carbonaceous	18.5	373.4
Sandstone: gray, medium-grained, shale partings	13.6	387.0
Coal and shale	1.8	388.8
Sandstone grading to sandy shale	11.2	400.0
Shale: sandy to carbonaceous	53.6	453.6
Coal: shale partings	2.0	455.6
Shale: gray to black, carbonaceous, shale partings	44.6	500.2
Sandstone: white, medium-grained, fractured	13.5	513.7
Shale: gray, sandy to soft	14.0	527.7
Sandstone: gray to white, fine- to medium-grained, shale partings	14.0	541.7
Shale: carbonaceous	8.6	550.3
Coal: impure, shale partings	2.2	552.5
Shale: dark gray, carbonaceous to sandy	11.6	564.1
Sandstone: gray to white, medium-grained	21.3	585.4
Shale, carbonaceous, and sandstone	1.1	586.5
Lava sill and coke	9.5	596.0
Shale: gray, sandy	5.0	601.0
Sandstone: gray, fine-grained	16.0	617.0
Shale: sandy to carbonaceous, sandstone and coal partings	18.9	635.9
Coal: 1 ft thick shale partings	4.4	640.3

Table 43.--*Representative logs of wells and test holes in the Apishapa and Purgatoire River drainages*--Continued

	Thickness (feet)	Depth (feet)
32-65-09 ddd--(Continued):		
Raton Formation--(Continued):		
Shale: sandy to carbonaceous, sandstone and coal partings	70.5	710.8
Coal: sandstone parting	1.6	712.4
Shale: sandy to carbonaceous, coal partings	23.0	735.4
Sandstone: gray, fine- to medium-grained	8.7	744.1
Shale: gray, carbonaceous to sandy	16.9	761.0
Sandstone: gray, fine- to medium-grained	10.8	771.8
Shale: gray	32.4	804.2
Coal:	5.2	809.4
Shale: dark gray	5.9	815.3
Sandstone: white to gray, fine- to medium-grained	11.6	826.9
Shale: carbonaceous, coal laminae	55.1	872.0
Coal: sandstone and shale laminae	1.8	873.8
Shale: gray, coal laminae	4.0	877.8
Sandstone: gray, fine-grained, shale partings	14.5	892.3
Shale: carbonaceous	4.1	896.4
Coal: shale partings	1.8	898.2
Shale: gray, sandy	11.8	910.0
32-65-14 abd - completed 12/31/57 for CF&I Corporation, elevation 7,056 ft		
No sample	40.0	40.0
Raton Formation:		
Shale: gray, weathered	5.4	45.5
Sandstone: shale partings	12.7	58.1
Shale: carbonaceous to sandy, coal laminae	19.2	77.3
Sandstone: shale partings	36.2	113.5
Shale: gray to black	2.6	116.1
Sill and coke	2.4	118.5
Shale: carbonaceous	1.3	119.8
Coal	3.1	122.9
Shale: sandy	13.8	136.7
Sandstone: fine-grained	6.1	142.8
Shale: carbonaceous to sandy	15.1	157.9
Sandstone: dark	2.3	160.2
Coal: shale and sandstone partings	4.6	164.8
Shale: carbonaceous, coal partings, sandy 192-205 ft	42.1	206.9
Coal	1.2	208.1

Table 43.--*Representative logs of wells and test holes in the Apishapa and Purgatoire River drainages*--Continued

	Thickness (feet)	Depth (feet)
32-65-14 abd--(Continued):		
Raton Formation--(Continued):		
Sandstone and sandy shale	14.0	222.1
Coal: sandstone parting	1.9	224.0
Shale: gray, sandy	13.3	237.3
Sandstone	4.9	242.2
Shale: carbonaceous to sandy at 246 ft	31.1	273.3
Sandstone	3.4	276.7
Shale: black	14.1	290.8
Sandstone	36.1	326.9
Shale: sandy to carbonaceous	6.3	333.2
Coal	4.1	337.3
Shale: sandy to carbonaceous	51.0	388.3
Coal	1.3	389.6
Shale: black	3.8	393.4
Sandstone: shale partings to 405 ft	28.1	421.5
Shale: sandy to carbonaceous	33.9	455.4
32-65-24 cab - completed 1/28/58 for CF&I Steel Corporation, elevation 7,172 ft		
No sample:	23.0	23.0
Raton Formation:		
Sandstone	21.7	44.7
Shale: carbonaceous to sandy, coal and shale partings	14.4	222.1
Sandstone: shale partings	14.2	236.3
Shale: carbonaceous	3.3	239.6
Coal: shale partings	5.2	244.8
Shale: carbonaceous to sandy	35.5	280.3
Sandstone: shale partings, coarse-grained in lower 1.3 ft	14.5	294.8
Shale: carbonaceous, coal laminae	21.5	316.3
Coal	1.3	317.6
Shale: sandy to carbonaceous	20.2	337.8
Sandstone: shale partings	8.8	346.6
Shale: carbonaceous	2.6	349.2
Coal: sandstone partings	2.4	351.6
Shale: carbonaceous to sandy	8.2	359.8
Sandstone: dark gray, fine-grained, shale partings	7.5	367.3
Shale: sandy to carbonaceous, coal partings	12.2	379.5

Table 43.--*Representative logs of wells and test holes in the Apishapa and Purgatoire River drainages*--Continued

	Thickness (feet)	Depth (feet)
32-65-24 cab--(Continued):		
Raton Formation--(Continued):		
Coal: impure, shale partings	6.8	386.3
Shale: gray to black	6.7	393.0
Sandstone: gray to white, fine-grained, shale partings	41.0	434.0
Shale: sandy to carbonaceous, coal partings intruded by 1.1 ft-thick sill	18.5	452.5
Sandstone: gray, medium-grained, shale partings	7.9	460.4
Shale: sandy to carbonaceous, coal laminae	12.8	473.2
Coal: shale partings	1.7	474.9
Shale: carbonaceous	32.5	507.4
Coal: shale partings	1.9	509.3
Shale: carbonaceous	5.0	514.3
Sandstone: fine-grained, shale partings	17.0	531.3
Shale: gray, intruded and baked by sill	15.9	547.2
Sandstone: shale partings	10.0	557.2
Shale: gray to dark, sandy	24.7	581.9
Sandstone: gray, shale partings	9.0	590.9
Shale: dark gray to gray, sandy at 597 ft	9.1	600.0
32-65-25 aaa - completed 12/6/57 for CF&I Steel Corporation, elevation 7,273 ft		
No sample:	22.0	22.0
Raton Formation:		
Shale: gray, partly sandy	78.8	100.8
Coal: impure	2.3	103.1
Shale: dark gray	15.6	118.7
Sandstone: shale partings	29.0	147.7
Shale	7.1	154.8
Sandstone: fine-grained	11.8	166.6
Shale: gray, partly sandy	122.4	289.0
Coal: shale partings	1.2	290.2
Shale: carbonaceous, coal partings	56.8	347.0
Shale: carbonaceous to sandy, coal at 419 ft	101.6	448.6
Coal: shale partings	1.4	450.0
Shale: sandy to carbonaceous, coal laminae	94.5	544.5
Sandstone	7.6	552.1
Shale: gray, sandy	10.3	562.4
Coal: shale and sandstone laminae	3.1	565.5
Shale: carbonaceous to sandy, coal at 597 ft	68.3	633.8
Sandstone: gray	13.5	647.3
Shale: carbonaceous, coal laminae	18.5	665.8

Table 43.--*Representative logs of wells and test holes in the Apishapa and Purgatoire River drainages*--Continued

	Thickness (feet)	Depth (feet)
32-65-25 aaa--(Continued):		
Raton Formation--(Continued):		
Shale: carbonaceous to sandy, with sandstone layers and coal laminae	117.5	783.3
Coal	1.1	784.4
Sandstone: gray, shale partings	21.3	805.7
Shale: carbonaceous to sandy at 826 ft	41.4	847.1
Sandstone	7.7	854.8
Vermejo Formation		
Shale: carbonaceous	18.8	999.0
Sandstone	12.7	1,011.7
Igneous sill	2.1	1,013.8
Sandstone	11.6	1,025.4
Shale	20.6	1,046.0
No sample	4.0	1,050.0
Sandstone: fine to coarse gravel	19.2	1,069.2
Coke	2.7	1,071.9
Shale: dark gray, sandy to carbonaceous, impure coal	43.3	1,115.2
Sandstone	28.6	1,143.8
Shale: carbonaceous, coal laminae	8.8	1,152.6
Trinidad Sandstone		
Sandstone: intruded by 1 ft-thick sill at 1,196 ft	63.4	1,216.0
32-65-26 dbb - completed 6/10/71 for CONSOL, elevation 7,060 ft		
Raton Formation		
Shale	3	3
Sandstone	6	3
Shale	33	42
Sandstone	7	49
Shale: 0.8 ft thick coal seam at 52 ft	14	63
Siltstone	17	80
Shale: 0.3 ft thick coal seam at 99 ft	34	114
Siltstone	4	118
Shale	4	122
Coal	1.2	123.2
Shale	19.8	143

Table 43.--*Representative logs of wells and test holes in the Apishapa and Purgatoire River drainages*--Continued

	Thickness (feet)	Depth (feet)
32-65-26 dbb--(Continued):		
Raton Formation--(Continued):		
Siltstone	10	153
Shale	8	161
Siltstone	12	173
Sandstone	2	175
Shale: 0.2 ft thick coal seam at 175 ft	4	179
Siltstone	14	193
Shale: 0.8 ft of coal at 193 ft; 0.3 ft of coal at 207 ft	28	221
Coal	2.2	223.2
Shale	5.5	228.7
Siltstone	4.5	233.2
Sandstone	19.8	253
Siltstone	10.5	263.5
Shale: 0.6 ft of coal at 265 ft	9	272.5
Sandstone: 1 ft thick shale bed at 274 ft	6.5	279
Shale and coke	6	285
Siltstone	12.5	303
Shale: 0.6 ft of coal at 336 ft	45	348
Coal: shale parting	2.7	350.7
Shale	18.3	369
Coal: shale partings	1.7	370.7
Sandstone	12.5	383.2
Shale	32.8	416
Sandstone, shale, and coal	3.5	419.5
Sandstone	2.5	422
Coke	1.0	423
Shale	5	428
Coal: shale parting	2.9	430.9
Shale	3.5	434.4
Coal and shale	2.9	437.3
Shale	9.9	447.2
Coal	2.1	449.3
Shale	4	453.3
Siltstone	4	457.3
Shale: 0.7 ft of coal at 462 ft; 0.3 ft of coal at 470 ft	13	470.3
Siltstone	5.4	475.7
Shale: 0.3 ft of coal at 479.5 ft	14.3	490
Siltstone	10	500
Shale: 0.2 ft of coal at 509 ft	11.5	511.5
Coal: shale parting	1.3	512.8
Shale	6.7	519.5
Siltstone	8	527.5

Table 43.--*Representative logs of wells and test holes in the Apishapa and Purgatoire River drainages*--Continued

	Thickness (feet)	Depth (feet)
32-65-26 dbb--(Continued):		
Raton Formation--(Continued):		
Shale	12.8	540.3
Coal	1.7	542
Sandstone: with shale at 551 to 553 ft	25	567
Shale: with siltstone at 574 to 575.5 ft	12	579
Sandstone	4	583
Siltstone: with shale and sandstone laminae	22.5	605.5
Shale and coke	6.5	612
Siltstone: 1 ft of sandstone at top	9.5	621.5
Shale	4	625.5
Siltstone	5.5	631
Shale	4	635
Siltstone	18	653
Shale: 0.2 ft of coal at 667 ft	16	669
Sandstone	34	703
Shale: 0.1 ft of coke at 709.4 ft	6.5	709.5
Siltstone	12	721.5
Shale	17	738.5
Coal	1.1	739.6
Siltstone	33.9	773.5
Sandstone	15.5	789
Shale	2.5	791.5
Sandstone	3.5	795
Siltstone	18	813
Sandstone: siltstone 824 to 825.5 ft	18.5	831.5
Shale: coal, siltstone, and shale partings at 836 to 842 ft	26	857.5
Siltstone	9	866.5
Shale: 0.5 ft of coal at 878 ft; 0.1 ft of coal at 881 ft	38.5	905
Sandstone: siltstone 919.5 to 923 ft	44	949
Shale and siltstone	14	963
Sandstone	3	966
Shale	16.5	982.5
Siltstone	8.5	991
Sandstone: coke laminae 1,003 to 1,011 ft	20.5	1,011.5
Shale	1.5	1,013

Table 43.--*Representative logs of wells and test holes in the Apishapa and Purgatoire River drainages*--Continued

	Thickness (feet)	Depth (feet)
32-66-36 bc - completed 11/9/75 for Evan Zimmerman		
Alluvium	7	7
Raton Formation:		
Sandstone: brown	9	16
Shale: gray	3	19
Sandstone: shale partings	13	32
Sandstone: gray	19	51
Shale: gray	7	58
Sandstone: gray	5	63
Shale: gray	9	72
Sandstone: shale partings	9	81
Sandstone: bluish gray	29	110
Shale: gray	9	119
Shale: sandy, sandstone beds	14	133
Sandstone: gray, water at 140 ft	14	147
Shale: gray, sandy	4	151
Sandstone: gray	9	160
33-64-22 cbc - completed 9/22/73 for Charles D. Choate, presently owned by R. E. Sandlin, elevation 6,315 ft		
Colluvium	2	2
Trinidad Sandstone		
Sandstone: white, hard, water at 78 ft	136	138
Pierre Shale:		
Sandstone and shale: gray	57	195
33-64-bcd - completed 7/23/45 for U.S. Army Corps of Engineers, elevation 6,120 ft, Piedmont Dam site		
Trinidad Sandstone:		
Sandstone: gray, shaley	2.5	2.5
Sandstone: gray, fractured 2.5 to 4.5 ft	18.1	20.6
Sandstone: gray, shaley, shale partings, 32.0 to 55.9 ft	71.8	92.4

Table 43.--*Representative logs of wells and test holes in the Apishapa and Purgatoire River drainages*--Continued

	Thickness (feet)	Depth (feet)
33-64-27 bdb - completed 8/7/45 for U.S. Army Corps of Engineers, elevation 6,221.6 ft, Piedmont Dam site		
Colluvium:	0.5	0.5
Trinidad Sandstone:		
Shale	1.5	2.0
Sandstone: gray to brown at 37.4 to 54.2 ft, 77.9 to 85.9 ft, and 92.6 to 94.0 ft	92.0	94.0
Sandstone: shaley, shale at 97.8 ft	4.3	98.3
Sandstone: gray, shale partings, 116.7 to 122.7 ft	34.4	122.7
Sandstone: shaley	9.9	132.6
33-64-27 cad, 33-64-27 cba1, 33-64-27 cba2 — See descriptions of Trinidad Sandstone in the Alluvial Aquifer section		
33-64-29-cda1 - completed 6/17/37 for U.S. Bureau of Reclamation, elevation 6,346.5 ft, Sopris Dam site		
Colluvium:		
Loose sandstone slabs and soil	2	2
Raton Formation:		
Sandstone: gray, shaley near base	4	6
Shale and sandstone: gray, 1 to 3-ft beds, slightly permeable to impermeable	24	30
Shale, carbonaceous, and coal, slightly permeable	9	39
Sandstone and sandy shale	5	44
Shale, sandy in last foot	6	50
Sandstone: buff and gray, fine-grained, no sample 51 to 54 ft	13	63
No sample except small nubbin resembling baked shale, permeable	4	67
Shale: carbonaceous	4	71
No sample	6	77
Shale, carbonaceous, and coal, permeable	10	87
Shale: sandy layers	3	90
Sandstone: impermeable	4	94
No sample	3	97
Sandstone: quartzitic, 5 gal/min under loopsi	2	99

Table 43.--*Representative logs of wells and test holes in the Apishapa and Purgatoire River drainages*--Continued

	Thickness (feet)	Depth (feet)
33-64-29 cda1--(Continued):		
Vermejo Formation		
Shale: carbonaceous, contains coal, 100 to 107 ft	13	112
Sandstone:	1	113
Shale: carbonaceous	1	114
Sandstone: gray, shale parting at 127 ft	21	135
Shale, carbonaceous, and coal	6	141
Shale: sandy layers, and permeable	9	150
Sandstone: gray, impermeable	20	170
Shale: sandy, impermeable	7	177
Sandstone: gray and buff, impermeable	19	196
Coal	4	200
33-64-29 cda2 - completed 6/11/37 for U.S. Bureau of Reclamation, elevation 6,163 ft, Sopris Dam site		
Alluvium:		
Sand and gravel	20	20
Vermejo Formation:		
Shale, carbonaceous, and coal	5	25
Shale, sandy, and sandstone	4	29
Shale, carbonaceous, and coal, impermeable	12	41
Sandstone and shale: slightly permeable	13	54
Shale, carbonaceous, and coal, impermeable	16	70
33-64-29 cdd, 33-64-32 abc, 33-64-32 abc2	See descriptions of Vermejo Formation in the Alluvial Aquifer section	
33-64-32 baa - completed 6/7/37 for U.S. Bureau of Reclamation, elevation 6,154 ft, Sopris Dam site		
Alluvium:		
Sand and gravel	10	10
Vermejo Formation:		
Shale: carbonaceous to noncarbonaceous at 17 ft	10	20
Sandstone: gray, fine-grained, permeable	9.5	29.5
Coal	1.2	30.7
Shale: carbonaceous	3.8	34.5
Sandstone: gray, fine-grained, permeable	12.5	47
Coal	.7	47.7
Shale: gray, somewhat permeable	8.6	56.3
Sandstone: coal at bottom	3.2	59.5
Coal and carbonaceous shale: permeable	3.2	62.7

Table 43.--*Representative logs of wells and test holes in the Apishapa and Purgatoire River drainages*--Continued

	Thickness (feet)	Depth (feet)
33-65-02 cbb - completed 6/14/78 for U.S. Geological Survey, elevation 6,730 ft		
Phelps Canyon alluvium:	20	25
Raton Formation:		
Siltstone: black, sandy, carbonaceous at 35 ft	15	40
Sandstone: arkosic, fine-grained	5	45
Siltstone: carbonaceous to sandy at 50 ft	15	60
Sandstone: white, fine-grained, quartzitic	10	70
Shale: green	15	85
Shale: silty, carbonaceous at top and bottom, sandstone laminae	65	150
Sandstone: white, fine-grained quartzitic	10	160
Shale, silty, and siltstone: sandstone laminae	20	180
Shale: carbonaceous, coal laminae	25	205
Sandstone: white, fine-grained, quartzitic	5	210
Sandstone: white, and shale, dark gray	10	220
Shale: carbonaceous, coal laminae	5	225
Sandstone, white, and siltstone	55	280
Shale and siltstone: coal seam at 287.5 ft	15	295
Sandstone: silty	5	300
Shale, sandy, and siltstone, gray	30	330
Sandstone: gray, medium-grained	10	340
Siltstone: shale and sandstone interbeds	20	360
Sandstone: white to gray, siltstone interbeds	35	395
Shale: gray, siltstone interbeds	10	405
Sandstone: silty	5	410
Shale and siltstone: sandstone laminae	70	480
Sandstone: white, fine-grained, arkosic	20	500
Shale: gray, silty	15	515
Sandstone: fine-grained	15	530
Siltstone: sandy, sand laminae	20	550
Shale: gray	35	585
Sandstone: fine-grained to silty at 595 ft	80	665
Sandstone: white, fine-grained, angular	20	685
Vermejo Formation:		
Siltstone: sandy, shale at 713 ft	30	715
Coal: siltstone laminae	5	720
Siltstone	10	730
Coal	5	735
Sandstone: silty to fine-grained at 755 ft, shale partings	35	770
Shale: carbonaceous	5	775
Sandstone: shale interbeds	25	800
Shale: carbonaceous, coal partings	5	805
Sandstone: with shale interbeds	20	825
Shale: carbonaceous, coal partings	5	830

Table 43.--*Representative logs of wells and test holes in the Apishapa and Purgatoire River drainages*--Continued

	Thickness (feet)	Depth (feet)
33-65-02 cbb--(Continued):		
Trinidad Sandstone:		
Sandstone: white to gray, well cemented, angular grains of quartz, feldspar, and mica, partings of medium to dark gray shale, coal laminae at 875 ft	70	900
33-65-10 ddb - completed 8/7/79 for Alex Boday, elevation 6,610 ft		
Reilly Canyon alluvium:	6	6
Raton Formation		
Sandstone: brown	10	16
Shale: gray	12	28
Sandstone: gray	8	36
Shale: gray	6	42
Sandstone: gray	10	52
Shale: gray	3	55
Sandstone: gray	6	61
Shale: gray	17	78
Sandstone: gray, water at 79 ft	12	90
Shale: gray, sandy	10	100
Sandstone: gray	6	106
Shale: gray	2	108
Sandstone: gray	62	170
33-65-10 ddc - completed 12/1/73 for Alex Boday, elevation 6,620 ft		
Reilly Canyon alluvium:	4	4
Raton Formation:		
Shale: gray	2	6
Sandstone: brown to white at 21 ft	48	54
Shale: gray	7	61
Coal	3	64
Sandstone: white, water at 65 ft	11	75
Sandstone: blue	15	90
Shale: blue	15	105

Table 43.--*Representative logs of wells and test holes in the Apishapa and Purgatoire River drainages*--Continued

	Thickness (feet)	Depth (feet)
33-65-15 acc - completed 4/10/71 for CONSOL, elevation 6,670 ft		
Raton Formation:		
Siltstone	16	16
Coal	1.3	17.3
Siltstone	1.2	18.5
Sandstone: shale partings at 20 ft	32	50.5
Shale	20.2	70.7
Sandstone	13.3	84
Shale	6.5	90.5
Sandstone	4	94.5
Shale: 0.7 ft of coal at 95.5 ft	14.5	109
Sandstone	5.5	114.5
Siltstone	2.5	117
Coal: shale parting and coke in upper 0.7 ft	1.5	118.5
Shale: 0.4 ft of coal at bottom	18.5	137
Sandstone	3.7	140.7
Shale	5.3	146
Siltstone and sandstone	7	153
Shale	13.7	166.7
Coal	2.3	169
Shale	3	172
Siltstone	5	177
Shale: 0.5 ft of coal at 193 ft	21	198
Siltstone: sandstone 203 to 204.5 ft	9	207
Shale and coal	2	209
Sandstone	4.5	213.5
Shale: coal and siltstone partings	16	229.5
Coal	2.25	231.75
Shale: 0.4 ft of coal at 239 ft; 0.9 ft of coal at 264 ft	35.75	267.5
Sandstone	4.2	271.7
Shale: 0.7 ft of coal at bottom	8.3	280
Sandstone: shale partings	15.7	295.7
Shale	3.3	299
Sandstone	2.5	301.5
Shale	3	304.5
Sandstone: coal and shale partings	36.5	341
Siltstone	4.5	345.5
Sandstone	2	347.5
Shale	15.5	363
Siltstone	4.5	367.5
Sandstone	4	371.5
Shale	3	374.5
Sandstone	24.5	399

Table 43.--*Representative logs of wells and test holes in the Apishapa and Purgatoire River drainages*--Continued

	Thickness (feet)	Depth (feet)
33-65-15 acc--(Continued):		
Raton Formation--(Continued):		
Shale and coal	2.5	401.5
Sandstone and siltstone	8	409.5
Shale, siltstone, and sandstone: 1 to 4-ft beds	40.5	450
Sandstone	13	463
Siltstone and sandstone	7	470
Shale and siltstone	6	476
Shale: 0.6 ft of coal at 486 ft	11.5	487.5
Sandstone and shale: 2- to 6-ft beds	21	508.5
Shale: 1- to 2-ft thick sandstone interbeds	32.5	541
Sandstone	4	545
Shale	8	553
Sandstone	10	563
Shale and sandstone	12	575
Sandstone	25	600
Shale	25	625
Sandstone	14	639
Shale	29.5	668.5
Coal: 0.5 ft of shale near bottom	6	674.5
Shale	5.5	680
Siltstone and sandstone	3.5	683.5
Shale	26.5	710
Siltstone	8	718
Sandstone: 0.3 ft of coal at 736 ft	31	749
Shale: coal and siltstone interbeds	9	758
Sandstone: shale partings at 773 ft	38	796
Vermejo Formation:		
Shale	10.5	806.5
Coal	1.4	807.9
Shale: 0.5 ft of coal at 890 ft	8.1	816
Sandstone: siltstone and coal laminae	17	833
Shale: siltstone laminae	14	847
Coal	1.1	848.1
Siltstone	3.5	851.6
Sandstone	13.4	865
Shale and Coal	3	868
Siltstone	3	871
Coal	2.8	873.8
Shale and siltstone	5.2	879
Sandstone	8	897
Coal	1.5	898.5
Sandstone and siltstone	11.5	910
Trinidad Sandstone:		
Sandstone	90	1,000

Table 43.--*Representative logs of wells and test holes in the Apishapa and Purgatoire River drainages*--Continued

	Thickness (feet)	Depth (feet)
33-65-16 ccd - completed 5/20/78 for Mobil Oil Corporation, elevation 6,620 ft		
Burro Canyon alluvium		
Sand: dark brown to gray, medium- to coarse-grained, silty	10	10
Raton Formation		
Sandstone: brown, fine- to medium-grained, friable to firm	25	35
Sandstone: conglomeratic, water-bearing	5	40
Sandstone	10	50
Coal: dull-vitreous, platy to blocky, shale partings	2	52
Shale: gray, carbonaceous, coal partings	54	106
Coal: vitreous to waxy, blocky to conchoidal	4	110
Shale: gray, carbonaceous, coal partings	24	134
Coal: vitreous to waxy, blocky to conchoidal	3	137
Shale: dark gray to black	2	139
Coal	2	141
Shale	6	147
Coal	4	151
Shale and coal	2	153
Shale: gray, carbonaceous, coal partings	12	165
Shale, siltstone, and sandstone	15	180
Coal: black to brown, platy to blocky, dull to shiny	3	183
Sandstone: gray, fine- to coarse-grained	39	222
Coal: black, dull to shiny	1.5	223.5
Sandstone: gray, fine-grained, shaley	36.5	260
Coal: waxy to vitreous, blocky, platy, and conchoidal	2.5	262.5
Shale: carbonaceous	1.5	264
Coal:	2	266
Shale: gray, locally carbonaceous or silty	36	302
Coal	1.5	303.5
Shale: gray, silty to carbonaceous, siltstone laminae	56.5	360
Sandstone: gray to brown, medium-grained	35	395
Siltstone and shale: gray, locally carbonaceous	100	495
Sandstone: gray to brown, medium-grained, shale partings, 515 to 525 ft	43	538
Coal: black, blocky to platy	1.5	539.5
Shale: gray, locally carbonaceous, siltstone partings, gas at 550 ft	62.5	602
Coal: waxy to vitreous, blocky to conchoidal	3.5	605.5

Table 43.--*Representative logs of wells and test holes in the Apishapa and Purgatoire River drainages*--Continued

	Thickness (feet)	Depth (feet)
33-65-16 ccd--(Continued):		
Raton Formation--(Continued):		
Sandstone and shale	44.5	650
Coal	2	652
Sandstone and shale	68	720
Coal: gas	1	721
Shale: with sandstone beds	6	727
Coal	2	729
Shale: gray, carbonaceous	13	742
Coal	2.5	744.5
Shale: 1 ft thick coAl beds at 754, 773, and 787 ft	62.5	807
Coal	3	810
Shale: 1-ft thick coal bed at 820 ft	20	830
Sandstone: gray to brown, medium- to coarse-grained	30	860
33-65-18 acc - completed 5/6/71 for CONSOL, elevation 7,140 ft		
Raton Formation:		
Shale: siltstone layer near bottom	7	7
Sandstone	5.5	12.5
Shale	3.5	16
Sandstone	13	20
Shale: sandstone 39 to 40.5 ft	19	48
Sandstone	11	59
Shale	11	70
Siltstone: sandstone in last 0.5 ft	3.9	73.9
Coal	1.1	75
Sandstone	8	137
Shale: 0.8 ft of coal at top	12.5	149.5
Sandstone	18	167.5
Shale: sandstone and siltstone beds	15.5	183
Sandstone	3	186
Siltstone: 0.97 ft of coal at top	7	193
Shale: coal seams at 195, 200, and 204 ft	27	220
Sandstone: coal and shale partings, 221 to 222 ft	12.5	232.5
Coal	.2	232.7
Sandstone	10.3	243
Siltstone	5	248
Sandstone	20	268
Shale: 0.58 ft of coal at 302 ft	42	310
Siltstone and shale	12	322
Shale	6	328

Table 43.--*Representative logs of wells and test holes in the Apishapa and Purgatoire River drainages*--Continued

	Thickness (feet)	Depth (feet)
33-65-18 ac--(Continued):		
Raton Formation--(Continued):		
Coal	1.3	329.3
Shale: siltstone and coal partings	15.2	344.5
Sandstone	8.5	353
Shale: 0.6 ft of coal at 355 ft	6	359
Sandstone and shale	14	373
Sandstone	13	386
Shale	19	405
Coal: shale partings	2.0	407
Siltstone	4.5	411.5
Shale: 0.56 ft of coal at 414 ft	9.5	421
Siltstone	4	425
Shale: 0.6- to 0.8-ft thick coal seams at 427, 435, and 461 ft	38	463
Coal	2.0	465
Sandstone	34.5	499.5
Siltstone	3.5	503
Coal	1.3	504.3
Shale, siltstone, and sandstone	8.7	513
Shale: sandstone, 525 to 527 ft	23	536
Siltstone: 1 ft of sandstone at top, 1 ft of shale at base	8	544
Coal	2.0	546
Shale: sandstone and siltstone beds	37	583
Sandstone	12	595
Siltstone: 1.5 ft of shale at top	8	603
Shale	8	611
Coal	1.2	612.2
Shale	11.3	633.5
Coke, shale, and sandstone	7.5	641
Sandstone: shale parting	8	649
Shale	30.5	679.5
Sandstone	3.5	683
Shale: sandstone and coke laminae	16	699
Siltstone	12	711
Shale: 0.4 ft of coal at 723 ft	49	760
Coal and shale	3	763
Siltstone	4	767
Shale: sandstone 777 to 778 ft	13	780
Sandstone	6.5	786.5
Shale: 0.6 ft of coal at 790 ft	16.5	803
Sandstone	6	809

Table 43.--*Representative logs of wells and test holes in the Apishapa and Purgatoire River drainages*--Continued

	Thickness (feet)	Depth (feet)
33-65-18 ac--(Continued):		
Raton Formation--(Continued):		
Shale: coal laminae	28.5	837.5
Coal	1.4	838.9
Shale	2.1	841
Sandstone	4	845
Siltstone	8	853
Shale: coal laminae near bottom	13	866
Siltstone	5	871
Sandstone	8	879
Shale: siltstone and sandstone laminae	39	918
Shale, sandstone, and siltstone	69	987
Shale	13	1,000
Sandstone	13	1,013
Shale: siltstone and sandstone laminae	70	1,083
Sandstone	15	1,098
Shale	34	1,132
Siltstone and shale	13.5	1,145.5
Sandstone	10	1,155.5
Shale and sandstone	9	1,164.5
Shale: sandstone and siltstone laminae	38.5	1,203
Siltstone	5.5	1,208.5
Sandstone: shale parting	18.5	1,227
Siltstone	12	1,239
Sandstone, siltstone, and shale	8	1,247
Sandstone: siltstone in lower 2 ft	22	1,269
Shale	8	1,277
33-65-20 caa - completed 8/17/56 for CF&I Corporation, elevation 6,835 ft		
Alluvium	20	20
Raton Formation:		
Shale: gray to black, coal laminae	39.9	59.9
Sandstone: shale partings	34.4	94.3
Shale: gray to black, sandy at 127 ft	36.8	131.1
Sandstone: shale partings	2.3	135.4
Shale: gray to black, coal laminae	17.9	153.3
Basalt sill	2.5	155.8
Shale: sandy	9.6	165.4
Basalt sill	1.1	166.5
Shale: black	2.7	169.2

Table 43.--*Representative logs of wells and test holes in the Apishapa and Purgatoire River drainages*--Continued

	Thickness (feet)	Depth (feet)
Basalt sill, coke, baked shale	3.0	172.2
Shale: gray, sandy	25.7	197.9
Basalt sill, coke, and black shale	11.3	209.2
Sandstone: gray, shale partings	12.3	221.5
Shale: sandy	4.9	226.4
Sandstone: gray, shale partings	16.7	243.1
Shale: gray, sandy, coal laminae	14.9	258.0
Sandstone: gray, shale partings, grading to coarse	28.2	286.2
Shale	8.2	294.4
Coal: shale partings	1.6	296.0
Shale: sandy to clayey, coal laminae	100.7	396.7
Sandstone: shale laminae	21.1	417.8
Shale: carbonaceous to sandy at 418.3 ft	10.4	428.2
Sandstone: shale laminae	13.4	441.6
Shale: carbonaceous to sandy, coal partings	19.7	461.3
Sandstone: gray, shale partings	13.8	475.1
Shale: sandy, gray	22.0	497.1
Shale: carbonaceous to sandy, coal partings	39.2	536.3
Shale, carbonaceous, and coal	1.9	538.1
Shale: sandy, sandstone partings	35.2	573.3
Shale: black	3.8	577.1
Sandstone: gray	3.9	581.0
Shale: black to gray, carbonaceous to sandy	19.0	600.0
33-65-29 bd - completed 7/25/56 for CF&I Steel Corporation, elevation 6,614 ft		
Valdez Canyon alluvium:		
Top soil and clay	28.0	28.0
Raton Formation:		
Shale	7.9	35.9
Sandstone: white, coarse-grained	20.8	56.7
Shale: gray to black at 68 ft	12.3	69.0
Sandstone: gray, shale partings	4.8	73.8
Shale: gray to black at 78.3 ft	5.0	78.8
Coal	1.5	80.3
Shale: gray	1.7	82.0
Sandstone: gray, shale partings and chips	41.0	123.0
Shale: sandy to clayey at 132.5 ft	16.5	139.5
Coal: shale parting	2.8	142.3
Shale: dark gray to black	4.9	147.1
Coal	1.3	148.4
Shale: carbonaceous to clayey at 149.5 ft	27.6	176.0
Shale: carbonaceous, and coal	1.3	177.3

Table 43.--*Representative logs of wells and test holes in the Apishapa and Purgatoire River drainages*--Continued

	Thickness (feet)	Depth (feet)
33-65-29 bd--(Continued):		
Raton Formation--(Continued):		
Sandstone: gray, shale partings	20.1	197.4
Shale: gray, sandy	9.4	206.8
Sandstone: gray, shale partings	7.6	214.4
Shale: gray, sandy, impure coal in upper feet	12.2	226.6
Sandstone: gray, coarse-grained, shale partings	36.8	263.4
Shale: sandy to clayey	6.0	269.4
Shale, carbonaceous, and coal; sandstone partings	5.9	275.3
Shale: sandy to clayey	35.1	310.4
Coal and shale	1.6	312.0
Shale: gray, sandy	8.3	320.3
Sandstone: shale partings	4.8	325.1
Shale: gray, sandy	7.1	332.2
Sandstone: shale parting	26.7	358.9
Shale: gray, clayey to sandy at 370 ft, coal parting	28.9	387.8
Sandstone: gray, shale partings	11.1	398.9
Shale: clayey to sandy, carbonaceous shale and coal partings	126.1	525.0
Sandstone: shale parting	23.8	548.8
Conglomerate	2.5	551.3
Vermejo Formation:		
Shale: dark gray to black, clayey, sandy, and carbonaceous coal partings	147.5	698.8
Sandstone: gray, medium- to coarse-grained, shale partings and chips	18.5	717.3
Shale: carbonaceous, clayey, sandy	9.8	727.1
Coal: Shale partings	1.9	729.0
Shale: carbonaceous to clayey	35.5	764.5
Coal: impure	3.3	767.8
Sandstone:	8.8	776.6
Shale, carbonaceous, and coal	1.7	778.3
Sandstone: gray, shale partings	26.5	804.8
Shale, carbonaceous, and coal	3.0	807.8
Sandstone: gray, shale partings and chips	33.0	840.8
Shale: dark gray, sandy, coal partings	36.9	867.7
Trinidad Sandstone:		
Sandstone: shale partings in top 3 ft	40.8	908.5

Table 43.--*Representative logs of wells and test holes in the Apishapa and Purgatoire River drainages*--Continued

	Thickness (feet)	Depth (feet)
33-65-30 db - completed 9/1/56 for CF&I Corporation, elevation 6,655 ft		
No sample	19.0	19.0
Tertiary sill:		
Basalt: 0.4 ft of coke	5.3	24.3
Raton Formation:		
Shale: sandy	10.5	34.8
Sandstone	10.2	45.0
Basalt sill	2.0	47.0
Shale: clayey to sandy	65.6	112.5
Shale, carbonaceous, and coal	1.7	114.2
Shale: gray, sandy partings	36.4	150.6
Shale: carbonaceous, coal laminae	16.5	167.1
Shale: sandy	13.9	181.0
Sandstone	30.9	211.9
Coal: shale and sandstone partings	6.0	217.9
Shale: sandy to carbonaceous at 220 ft	9.1	227.0
Sandstone	10.0	237.0
Shale: carbonaceous	6.8	243.8
Coal: shale partings	1.0	244.8
Sandstone: shale partings	6.7	251.5
Shale: sandy	10.9	262.4
Sandstone	18.7	281.1
Shale: carbonaceous, sandy shale, sandstone, and coal partings	11.9	293.0
Sandstone	5.0	298.0
Shale: black, sandy	30.0	328.0
33-66-05 ac - completed 11/11/80 for Lloyd Swanstrom		
Raton Formation:		
Sandstone: brown to gray at 8 ft	24	24
Shale: bluish gray, sandy	5	29
Sandstone: bluish gray, shale partings 35 to 75 ft	46	75
Sandstone: gray, water at 97 ft	27	102

Table 43.--*Representative logs of wells and test holes in the Apishapa and Purgatoire River drainages*--Continued

	Thickness (feet)	Depth (feet)
33-66-15 bab - completed 6/24/74 for Mobil Oil Corporation, elevation 7,020 ft		
Horn Spring Canyon alluvium:		
Sandy soil: brown	13	13
Sandy and gravel: brown	5	18
Raton Formation:		
Sandstone: brown	10	28
Siltstone: gray	13	41
Shale: gray, silty to carbonaceous	57	98
Siltstone: gray	10	108
Shale: gray	8	116
Coal	2	118
Shale: gray, coal laminae	29	147
Sandstone, gray, fine-grained, friable	33	180
Shale: gray, silty to clayey at 189 ft	21	201
Siltstone: gray	11	212
Shale: gray, clayey to silty at 213 ft	11	223
Sandstone: gray, fine-grained	28	251
Shale: dark gray, coal and sandstone partings	72	323
Coal	2	325
Sandstone: brown, fine-grained, shale partings	22	347
Shale: dark gray, silty shale and coal partings	79	426
Coal	5	431
Shale: dark gray, coal laminae	29	460
33-66-19 cba - completed 11/27/73 for Mobil Oil Corporation, elevation 7,050 ft		
Molino Canyon alluvium	15	15
Raton Formation		
Shale: gray, sandy to carbonaceous, coal	15	30
Sandstone: gray	5	35
Shale: gray, some coal	5	40
Sandstone, gray	10	50
Shale: dark gray to gray, sandy at 75 ft	35	85
Coal and shale	5	90
Shale: gray, sandy	10	100
Sandstone: gray	15	115
Shale: dark gray	25	140
Sandstone: gray	5	145
Shale: gray, sandy, some carbonaceous shale	50	195
Sandstone: gray to brown, some coal at 210 to 215 ft	20	215

Table 43.--*Representative logs of wells and test holes in the Apishapa and Purgatoire River drainages*--Continued

	Thickness (feet)	Depth (feet)
33-66-19 cba--(Continued):		
Raton Formation--(Continued):		
Shale and sandstone	35	250
Shale, carbonaceous, a little coal	25	275
Sandstone and some shale	25	300
Shale and some coal	10	310
Shale and sandstone: some coal at 340 to 350 ft	40	350
Shale: black, a little coal	170	520
33-66-20 adb - completed 7/1/74 for Mobil Oil Corporation, elevation 7,120 ft		
Sarcillo Canyon alluvium:		
Sandy soil: reddish brown	5	5
Sandy, gravelly soil: yellow brown	16	21
Raton Formation:		
Sandstone: gray, silty	3	24
Shale	9	33
Sandstone: gray	10	43
Shale: gray, silty, coal in last foot	12	55
Siltstone	5	60
Shale: dark gray to gray, carbonaceous, silty, and clayey	57	117
Sandstone: gray, fine-grained	4	121
Shale and siltstone	22	143
Coke	2	145
Shale: gray to brown	40	185
Siltstone: gray	5	190
Shale: silty to carbonaceous at 200 ft	16	206
Siltstone: gray, sandy	6	212
Shale: gray	4	216
Sandstone: gray, fine-grained	11	227
Shale: clayey to silty at 236 ft	14	241
Siltstone: gray	14	255
Shale: gray	6	261
Coal	2	263
Shale: gray, coal laminae	17	280
Siltstone: gray	5	285
Sandstone: gray, fine-grained	16	301
Shale: dark gray	16	327
Coal	2	329
Shale: silty to clayey	73	402
Siltstone: gray, coke laminae at top and bottom	9	411

Table 43.--*Representative logs of wells and test holes in the Apishapa and Purgatoire River drainages*--Continued

	Thickness (feet)	Depth (feet)
33-66-20 adb--(Continued):		
Raton Formation--(Continued):		
Shale: dark gray	6	417
Siltstone: grayish brown	9	426
Shale: gray to dark gray, clayey to silty	87	513
Coal	5	518
Shale: dark gray to gray: clayey to sandy	82	600
33-66-21 bad - completed 7/1/81 for Mobil Oil Corporation, elevation 6,850 ft		
Raton Formation:		
Shale: brown, weathered	10	20
Sandstone: gray	15	35
Shale: gray to black, sandy, carbonaceous, and clayey	60	95
Shale, sandy, and sandstone: gray	5	100
Shale: gray to black, sandy to clayey, sandstone and coal partings	80	180
Sandstone: gray	10	190
Shale: gray, sandy	4	194
Coal	2	196
Shale: sandy, carbonaceous, and clayey	94	290
Coal	4	294
Shale: dark gray	16	310
Sandstone: gray	10	320
Shale: sandy, clayey, and carbonaceous	45	365
Sandstone: gray	15	380
Coal and carbonaceous shale	5	385
Shale: gray to black, sandy	75	460
33-66-28 caa - completed 6/28/74 for Mobil Oil Corporation, elevation 7,120 ft		
Raton Formation:		
Sandstone: brown to grayish brown	7	7
Shale: yellow brown, silty and sandy	5	12
Sandstone: grayish brown, shaley	15	27
Shale: gray to dark gray, silty to carbonaceous	27	54
Sandstone: bluish gray, fine-grained	14	68
Shale: dark gray	5	73
Siltstone: gray, shale and sandstone partings	19	92
Sandstone: gray to yellowish gray, fine-grained	13	105
Shale: bluish gray, silty and sandy laminae	13	118
Sandstone: brownish yellow	7	125
Shale: silty to carbonaceous at 144 ft	27	152

Table 43.--*Representative logs of wells and test holes in the Apishapa and Purgatoire River drainages*--Continued

	Thickness (feet)	Depth (feet)
33-66-28 caa--(Continued):		
Raton Formation--(Continued):		
Coal: shale partings	5	157
Shale: gray to grayish brown, coal laminae	19	176
Coal	2	178
Shale: gray to brown, silty and carbonaceous partings	57	235
Siltstone: gray	12	247
Sandstone: gray, shale parting, 259 to 262 ft	32	279
Shale: carbonaceous, coal laminae	25	304
Sandstone: gray, fine-grained	10	314
Shale: carbonaceous to clayey and silty, coal laminae	99	413
Sandstone: gray, fine-grained, shale and coal partings	34	447
Coal: shale partings	6.5	453.5
Shale: carbonaceous to silty at 465 ft	27.5	481
33-66-29 ada - completed 6/27/74 for Mobil Oil Corporation, elevation 7,040 ft		
Alluvium:		
Sandy soil: yellow brown	15	15
Raton Formation:		
Sandstone and shale: gray	7	22
Shale: yellow brown, sandstone laminae	17	39
Sandstone: gray, silty	12	51
Shale: gray	5.5	56.5
Coal	2.5	59
Shale: clayey to carbonaceous, sandstone, siltstone, and coal partings	85	144
Siltstone: gray	7	151
Shale: gray, silty and carbonaceous partings	22	173
Sandstone: gray, fine-grained, micaceous	19	192
Shale: coal laminae at 202 to 216 ft	24	216
Siltstone: gray, sandy	10	226
Shale: silty to carbonaceous	34	260
Sandstone: gray, fine-grained, silty, shale partings	43	303
Shale: gray to grayish brown	11	314
Sandstone: gray, fine-grained	28	342
Shale: dark gray, carbonaceous layers	20	362
Coal: contains a 2-ft thick shale parting	8	370
Shale: gray to gray brown and sandy at 380 ft	20	390
Sandstone: gray, fine-grained, coal partings	20	410
Shale: carbonaceous, coal laminae	10	420

Table 43.--*Representative logs of wells and test holes in the Apishapa and Purgatoire River drainages*--Continued

	Thickness (feet)	Depth (feet)
33-67-13 cda - completed 11/17/73 for Mobil Oil Corporation, elevation 7,350 ft		
Molino Canyon alluvium	10	10
Raton Formation:		
Shale: gray, sandy, water at 30 ft	45	55
Sandstone: gray to greenish gray, shaley	15	70
Shale: gray to dark gray	40	110
Coal	2	112
Shale: gray, sandy to carbonaceous	38	150
Coal	1.5	151.5
Shale: gray, sandy	3.5	155
Sandstone: gray, shaley, coal partings	5	160
Shale: gray to dark gray	20	180
Coal and shale	5	185
Shale: gray to black, coal laminae	65	250
Shale: gray, sandy, carbonaceous laminae	40	290
Sandstone: gray	11	301
Coal	4	305
Shale: gray to black	21	326
Coal	2	328
Shale: gray to black	36	364
Coal	2	366
Shale: gray	44	410
Sandstone	27	437
Shale: black, coal laminae at 445 to 450 ft	25	462
Coal	1	463
Shale: gray, sandy	17	480
Sandstone: gray	10	490
Shale: black, coal laminae	15	505
Sandstone: gray	5	510
Shale: dark gray, sandstone partings 525 to 540 ft	30	540
33-67-14 dcc - completed 11/17/73 for Mobil Oil Corporation, elevation 7,300 ft		
Wet Canyon alluvium	10	10
Raton Formation:		
Sandstone: gray	7	17
Shale: gray and sandy to black at 50 ft	40	57
Coal	3	60
Shale: dark gray, sandy	10	70
Sandstone: gray	20	90
Shale: black	10	100

Table 43.--*Representative logs of wells and test holes in the Apishapa and Purgatoire River drainages*--Continued

	Thickness (feet)	Depth (feet)
33-67-14 dcc--(Continued):		
Raton Formation--(Continued):		
Sandstone and shale	5	105
Shale: gray to dark gray, sandy, 112 to 120 ft	36	141
Coal	2	143
Shale: gray	2	145
Sandstone: gray	5	150
Shale: carbonaceous to sandy at 160 ft	20	170
Sandstone: gray	5	175
Shale: carbonaceous to sandy at 180 ft	18	193
Coal	3	196
Shale: black	4	200
Sandstone: gray, shaley	20	220
Coal	2	222
Sandstone: gray, shaley to 250 ft	33	255
Shale: dark gray	12	267
Coal	3	270
Shale: black to gray, sandy, 275 to 300 ft	70	340
Sandstone: gray, shaley	20	360
Shale: dark gray	4	364
Coal	2	366
Shale: dark gray	19	385
Sandstone: gray	11	396
Coal	4	400
Shale: gray to black, sandy at 450 ft	62	462
Coal	2	464
Shale: gray to black, 1-ft thick coal beds at 499 and 523 ft	114	578
Coal	6	584
Shale: black to gray and sandy at 590 ft	16	600
Sandstone: gray, shaley	15	615
Shale: black	35	650
Sandstone: gray, shale partings	5	655
Shale: dark gray, sandy to black at 660 ft	37	692
Coal	1	693
Shale: gray, sandy	22	715
Sandstone: gray, shale layers	20	735
Shale: dark gray	9	744
Coal	3	747
Shale: dark gray	20	767
Coal	1	768
Sandstone: gray, shale layers	7	775
Shale: gray, sandy, sandstone partings	15	790
Sandstone and shale: gray	10	800

Table 43.--*Representative logs of wells and test holes in the Apishapa and Purgatoire River drainages*--Continued

	Thickness (feet)	Depth (feet)
33-67-15 add - completed 11/16/73 for Mobil Oil Corporation, elevation 7,150 ft		
Wet Canyon alluvium	10	10
Alluvium and Raton Formation		
Sandy shale	10	20
Raton Formation:		
Shale: gray	4	24
Coal	1	25
Sandstone: gray	20	45
Shale: gray	4	49
Coal	1.5	50.5
Shale: gray	21.5	72
Coal	3	75
Shale: gray	10	85
Sandstone: gray	20	105
Shale: gray to black	38	143
Coal	3	146
Shale: black to dark gray, sandy, 150 to 155 ft	34	180
Shale and shaly sandstone: gray	9	189
Coal	2	191
Shale: dark gray, clayey to sandy	34	225
Sandstone: gray, shaley	5	230
Coal	3	233
Shale: dark gray to black	22	255
Coal	5	260
Shale: black to gray and sandy at 280 ft	55	315
Coal	2	317
Shale: black and dark gray	33	350
Shale and sandstone	5	355
Shale: black, coal at 357 to 358 ft	10	365
Shale: dark gray, sandy	10	375
Sandstone: gray	5	380
33-67-29 bda - completed 1980 for CF&I Corporation, elevation 7,213 ft		
Purgatoire River alluvium		
No sample	25	25
Gravel and boulders	10	35
No sample	5	40

Table 43.--*Representative logs of wells and test holes in the Apishapa and Purgatoire River drainages*--Continued

	Thickness (feet)	Depth (feet)
33-67-29 bda--(Continued):		
Raton Formation:		
Siltstone: clayey and sandy	6	46
Sandstone: silty, fine-grained, micaceous	25	71
Shale: dark gray	11	82
Sandstone: fine- to medium-grained	15	97
Shale and coal	2.2	99.2
Shale: dark gray to black	29.8	129
Coal	2.6	131.6
Shale: carbonaceous	4.4	136
Sandstone: gray, medium-grained, silty	21	157
Shale: black	2.8	159.8
Coal	2	161.8
Shale: black, carbonaceous	8.8	170
Siltstone and silty sandstone	18	188
Shale: dark gray	7.3	195.3
Coal	4.5	199.8
Shale: dark gray	14.2	214
Sandstone: gray, coarse-grained, arkosic	36	250
Siltstone: dark gray	6	256
Sandstone: gray, medium-grained, coal partings at 258 ft	8.7	264.7
Coal	1.5	266.2
Sandstone: gray, medium-grained	3.8	270
Siltstone: gray, sandy	13.3	283.3
Coal	2.3	285.6
Siltstone	2.4	288
Sandstone: gray, coarse-grained, arkosic	23	311
Siltstone: sandy to carbonaceous, coal laminae	44.8	355.8
Coal	3.1	358.9
Shale	22.1	381
Sandstone: gray, medium-grained, silty	4	385
Shale and siltstone: gray, coal at 398 to 398.3 ft	57	442
Coal	10.3	452.3
Shale and siltstone: coal at 488.5 to 489.9 ft	60.7	513
33-68-03 dac - completed as exploration hole on property owned by Ruth West, elevation 7,720 ft		
North Fork Purgatoire River alluvium	11	11

Table 43.--*Representative logs of wells and test holes in the Apishapa and Purgatoire River drainages*--Continued

	Thickness (feet)	Depth (feet)
33-68-03 dac--(Continued):		
Raton Formation		
Sandstone: buff to brownish gray, weathered	6	17
Shale: gray to buff, weathered, 2 to 3 gal/min at 22 ft	8	25
Shale, silty, and siltstone: sandstone partings, 2 to 3 gal/min at 40 ft	20	45
Sandstone: gray, 2-3 gal/min at 49 ft	4	49
Shale: gray, sandstone parting	18	67
Siltstone: gray	4	71
Sandstone: white, medium- to coarse-grained, feldspathic	23.5	94.5
Shale: gray, silty	18.5	113
Sandstone: gray, locally silty	4.5	117.5
Shale: gray, clayey to silty, siltstone beds, 122 to 128 ft	39.5	157
Sandstone and siltstone	13	170
Shale: gray to black, clayey, silty, and carbonaceous	67	237
Shale, silty, sandstone, and siltstone	19	256
Shale: gray	8	264
Sandstone: white, medium- to coarse-grained	19	283
Shale, gray, locally sandy: siltstone and sandstone interbeds	23	306
Sandstone: gray to white, massive	10	316
Siltstone and sandy shale	12	328
Sandstone: gray to white	18.5	346.5
Shale and siltstone	5.5	352
Sandstone: gray to white	4.5	356.5
Shale: clayey to silty at 387 ft, coal beds at 360 to 367 ft	38.5	395
Siltstone: gray	5	400
Shale, carbonaceous, and coal	3.5	403.5
Siltstone: gray	4.5	408
Sandstone: white, fine-grained, massive	11	419
Shale: gray, silty to sandy at 489 ft	81	500
No record	40	540
Sandstone: coarse-grained	8	548
Shale and siltstone: sandstone partings	20	568
Sandstone, siltstone, and shale	7	575
Sandstone: gray to white, medium-grained	28	603
Shale: gray, silty to sandy, sandstone and siltstone partings	78	681
Sandstone: gray to white, white, fine-grained	5	686

Table 43.--*Representative logs of wells and test holes in the Apishapa and Purgatoire River drainages*--Continued

	Thickness (feet)	Depth (feet)
33-68-03 dac--(Continued):		
Raton Formation--(Continued):		
Shale: clayey to sandy, sandstone and siltstone layers	34	720
Sandstone: gray, fine-grained, locally shaley	7	727
Shale: gray, locally sandy shale and siltstone	12	739
Sandstone: gray to white, fine-grained	4	743
Shale: gray to brown, sandy, sandstone partings	18	761
Shale, silty, and siltstone	19	780
Sandstone: gray, fine-grained	3	783
Shale: gray, clayey, coal laminae	4	787
Sandstone: dirty gray, locally shaley, fine-grained	17	804
Shale and siltstone	6	810
Sandstone: gray to buff, shale partings	14	824
Shale and siltstone: coal at 829 to 830 ft, sandstone partings	106	930
Shale: dark gray to gray and sandy at 941 ft	14	944
Siltstone and sandstone	7	951
Shale: dark gray, clayey, silty sandstone partings	44	995
33-68-11 bdb - completed 1975 as exploration hole on property owned by Ruth West, elevation 7,595 ft		
North Fork Purgatoire River alluvium:		
Boulders: of quartzite and other metamorphic rocks	11	11
Raton Formation:		
Shale: gray, silty, siltstone interbeds	9	20
Sandstone: white, coarse-grained, arkosic	17	37
Shale: dark gray, carbonaceous, silty	8	45
Siltstone, sandstone, and shale	10	55
Sandstone: gray, medium-grained, graywacke	9	64
Shale, carbonaceous to clayey, and sandstone	16	80
Sandstone: gray to white, medium- to coarse-grained, feldspar, 5 to 7 gal/min	5	85
Siltstone: gray	6	91
Sandstone: gray-buff, fine- to medium-grained, shale and coal partings	6	97
Siltstone and silty shale	13	110
Sandstone: gray, medium-grained, coal trash and shale partings	5.5	115.5
Shale: coal at 117 to 118 ft and in scattered laminae	6.5	122

Table 43.--*Representative logs of wells and test holes in the Apishapa and Purgatoire River drainages*--Continued

	Thickness (feet)	Depth (feet)
33-68-11 bdb--(Continued):		
Raton Formation--(Continued)		
Shale, silty, and siltstone	4	126
Sandstone: gray, medium-grained	5	131
Shale: gray, silty to locally carbonaceous	42	173
Siltstone and shale	17	190
Shale: gray	29	219
Siltstone and sandstone: gray	8	227
Shale: gray	6	233
Siltstone and sandstone	5	238
Shale: gray	6	244
Sandstone: silty, medium- to coarse-grained, coal spars	11	255
Shale: gray to black, locally sandy	25	280
34-66-01 bcc - completed 11/30/73 for Mobil Oil Corporation, elevation 6,660 ft		
Alluvium	15	15
Raton Formation:		
Sandstone and shale: brown, weathered	5	20
Shale: gray and sandy to black with coal partings	123.5	143.5
Coal	2	145.5
Shale: dark gray, clayey to sandy	24.5	170
Coal and black shale	5	175
Shale: black, sandstone laminae	7	182
Coal	3	185
Shale: black to dark gray, sandstone partings to 190 ft	15	200
Sandstone: gray, shaley	8	208
Coal	2	210
Shale: gray, sandy with shaley sandstone partings	10	220
Sandstone: gray	20	240

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